Kiribati Annual Health Bulletin

2019

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

Minister's Foreword

Kam na bane ni mauri!

It is with great pleasure that the Ministry of Health and Medical Services (MHMS) publishes the 5th Kiribati annual health bulletin for 2019. The inaugural issue was released in 2016 for the year of 2015.

The publication of the Annual Health Bulletin is aimed at providing health data on Kiribati for entities such as policy-makers, students/researchers, program managers, and many others, to help inform evidence-based decision-making. This is a comprehensive report that documents population-based health-related information for the Republic of Kiribati. For the efficient and effective delivery of health care services; precise, reliable, and accurate health data, provides one of the key corner-stones. Examples of decision-makers include internal and external stakeholders, such as our United Nations partners, non-government organizations, Government Ministries within Kiribati, and individuals with a keen interest in the nation's health status.

The four major components that form the basis of this bulletin are: morbidity, mortality, resource availability, and the provision of health services. The information has undergone stringent review with the presented data to exemplify the year 2019.

I wish to express my utmost appreciation to all of the officials that have participated in the successful compilation of this important document. A special thanks to the Health Information Unit for performing an excellent job in collating numerous health data from the various sources.

The report illustrates the health challenges that face the people of Kiribati, but it is through these that we are presented with the windows of opportunity. I therefore take this unique opportunity to encourage the application of this report, working ultimately towards the betterment of the health of all Kiribati Nationals.

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Honorable Dr. Tinte Intinteang
Minister for Health and Medical Services

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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 Devise
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	2019	122,604		SPC unpublished data, 2016 revision of PICT projections
Crude Birth Rate (per 1,000 population)	2019	3,280	26.8	KHIS & MS1
Crude Death Rate (per 1,000 population)	2019	719	5.9	
Life expectancy at birth (years) Male	2019	66.3	70.6	WHO, ANACoD 2019
Female	2019	74.6		
Land area (Sq. km)	2015	726		National Statistics Office
Health and Nutrition				
Neonatal Mortality Rate (per 1,000 live births)	2019	35	10.7	KHIS & MS1
Infant Mortality Rate (per 1,000 live births)	2019	96	29.3	
Under-five Mortality Rate (per 1,000 live births)	2019	157	47.9	
Maternal Mortality Rate (per 100,000 live births)	2019	3	91.5	
Adult mortality rate from NCDs (30-69 years) (per 10,000 population 30-69 years)	2019	236	54.0	
Mortality rate from road traffic injuries (per 100,000 population)	2019	6	4.9	
Adolescent birth rate for 10-14 years (per 1,000 girls in age group 10-14 years)	2019	1	0.2	
Adolescent birth rate for 15-19 years (per 1,000 girls in age group 15-19 years)	2019	251	44.0	
Contraceptive contacts (all forms) seen at health facilities per 1,000 Women age 15-49 yrs.	2019	3,367	108.1	MS1
Percentage of pregnant mothers received at least one home visit by PHN	2019	315	9.4	
Access to antenatal care	2019	15,214	4.6	
Percentage of Low Birth Weight	2019	243	7.4	KHIS & MS1
Malnourished children <5 years	2019	453	2.8	MS1
Tuberculosis case notification rate (all forms, per 100,000 population)	2019	416	339.3	
TB treatment success rate	2019	332	81.0	TB control program
Number of Leprosy cases (new and relapses)	2019	144		MS1
Acute respiratory infection (ARI) in children treated at Tungaru Central Hospital (TCH)	2019	216	13.5	KHIS
Children immunized against measles	2019	2,771	84.5	MS1
Diabetes - Occasions of service (per 1000 population)	2019	13,735	112.0	KHIS & MS1
Hypertension - Occasions of service (per 1000 population)	2019	12,200	99.5	
Outpatient consultations per capita	2019	513,014	4.2	MS1
Outpatient consultations per capita for TCH	2019	56,793	0.5	KHIS
Tungaru Central Hospital (patient discharges/week)	201	5,982	115.0	
Tungaru Central Hospital (bed occupancy)	2019		99.7	
Tungaru Central Hospital (average length-of-stay)	2019		6.9	
Health Resources				
Number of Hospital Beds per 1,000 population	2019	255	2.0	KHIS
Availability of Medical Officers	2018	62	5.1	ER 2019
Population per Medical Officer	2018		1,978	
Availability of Dental Surgeons	2019	7	0.6	
Population per Dental Surgeon	2019		17,515	
Availability of Medical Assistants	2019	48	4.0	
Population per Medical Assistant	2019		2,554	
Availability of Nurses	2019	361	35.0	
Population per Nurse	2019		339.6	
Availability of Midwives	2019	54	7.6	
Population per Midwife	2019		2,270.4	
Number of Pharmacists available	2019	6		
Number of Physiotherapists available	2019	5		
Number of Hospitals	2019	4		KHIS
Number of Health Centers	2019	22		MS1
Number of Village Clinics	2019	89		
Number of Hospital Beds	2019	255		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).

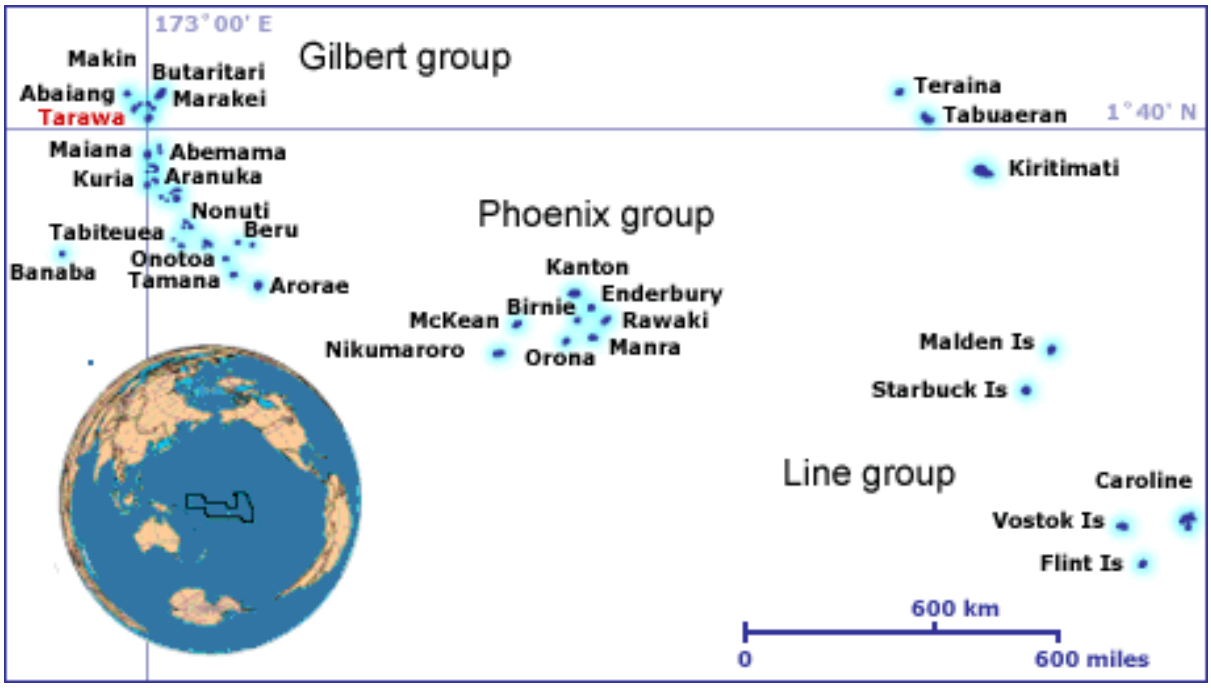


Figure 1: Map of Republic of Kiribati displaying the groups of islands

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^2. 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 14th century, Fijians, Samoans, and Tongans invaded the islands, thus diversifying the ethnic range and introducing Polynesian linguistic traits. Intermarriage 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 19th 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. The life expectancy at birth was estimated at 66.3 for male and 74.6 for female, according to the 2019 health data.

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 Health 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. Health clinics are situated in each village and number at present stand at 87.

At island level, health centres provides a higher and wider range of services than a Health 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; 1 Main referral and 3 district hospitals. TCH as the main referral is the specialized 117 bedded hospital in the country located in Nawerewere, 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. The 3 district hospitals; Southern Kiribati Hospital (SKH) situated in Tabiteuea North is a 90 bed hospital while Betio Hospital (BH) located in Betio, South Tarawa, consist of 30 beds. Another 18 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 86 village clinics. In addition to these health facilities there are 10 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 and Healthy Family Clinic (GBV). All heath care services are provided free to all Kiribati residents by the government and there is very minimal out-of-pocket spending for health. In 2018, the government spent approximately 14.2% of its total recurrent budget on health, a per capita expenditure on Health of AUD $316 for Kiribati.

2. Key Health Related Indicators with definitions

Table 1: Key Health Related Indicators with definitions

#	**Indicator** and *Definition*		**2019**
Demographic			
1.	**Total population*** *2018 Projected population (MHMS,UNICEF)*		**122,604**
2.	**Crude Birth Rate (per 1,000 population*)** *Number of live births per year (per 1,000 population)*		**26.8**
3.	**Crude Death Rate (per 1,000 population*)** *Number of deaths per year (per 1,000 population)*		**5.9**
4.	**Life Expectancy at Birth (years)** *2019 ANACoD. MHMS*	**Male** **Female**	**70.6**
5.	**Land area (km^2)** *2015 Census (National Statistics Office)*		**726**
Health and Nutrition			
6.	**Neonatal Mortality Rate** *Probability of dying between birth and age 28 days (per 1,000 live births)*		**10.7**
7.	**Infant Mortality Rate** *Probability of dying between birth and age 1 year (per 1,000 live births)*		**29.3**
8.	**Under-five Mortality Rate** *Probability of dying by age 5 years (per 1,000 live births)*		**47.9**
9.	**Maternal Mortality Rate** *Probability of a female dying due to a maternal cause (per 100,000 live births)*		**91.5**
10.	**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)*		**54.0**
11.	**Mortality rate from road traffic injuries*** *Probability of dying from road traffic injuries in a given year (per 100,000 population)*		**4.9**
12.	**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)*		**0.2**
13.	**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)*		**44.0**
14.	**Contraceptive contacts*** *Total number of contraceptive contacts (all forms) seen at health facilities in one year (per 1,000 women age 15-49 yrs.)*		**108.1**
15.	**Access to antenatal care** *The average number of antenatal clinic visits attended per mother in one year*		**4.6**
16.	**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*		**9.4**

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

#	**Indicator /** *Definition*	**2019**
17.	**Percentage of Low Birth Weight** *Percentage of having a low birth weight (<2500g) baby (per 100 live births)*	**7.4**
18.	**Malnourished children <5 years** *Percentage of children (aged <5 years) classified as malnourished or severely malnourished in the MS1 Health Facility Monthly Reporting Form*	**2.8**
19.	**Tuberculosis case notification rate*** *The number of bacteriologically confirmed (new and relapse) tuberculosis cases in a given year (per 100,000 population)*	**339.3**
20.	**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*	**81.0**
21.	**Number of Leprosy cases (new and relapses)**	**144**
22.	**Acute respiratory infection (ARI) in children treated at Tungaru Central Hospital*** *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)*	**13.5**
23.	**Children immunized against measles*** *Percent of children (aged <1 year) who have received one dose of measles-containing vaccine in one year*	**84.5**
24.	**Diabetes** *Occasion of service for diabetic cases to facilities, confirmed or suspected (per 1000 population)*	**112.0**
25.	**Hypertension** *Occasion of service for hypertension cases to facilities, confirmed or suspected (per 1000 population)*	**99.7**
26.	**Outpatient consultations per capita*** *Number of visits for ambulant care, not including immunizations, for the total population (including repeat visits) per capita*	**4.2**
27.	**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*	**0.5**
28.	**Tungaru Central Hospital (patient discharges)** *Weekly average number of patients discharged from all TCH wards in a given year*	**11.5.0**
29.	**Tungaru Central Hospital (bed occupancy)** *Proportion of available acute inpatient beds that have been occupied over one year*	**99.7**
30.	**Tungaru Central Hospital (average length-of-stay)** *Average number of days patients spend in hospital*	**6.9**

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

#	**Indicator /** *Definition*	**2019**
Health Resources		
31.	**Number of Hospital Beds per 1,000 population***	**2.0**
32.	**Availability of Medical Officers*** *Number of Medical Officers in a given year (per 10,000 population)*	**5.1**
33.	**Population per Medical Officer*** *Population: Medical Officer ratio*	**1,997.5**
34.	**Availability of Dental Surgeons*** *Number of Dental Surgeons in a given year (per 10,000 population)*	**0.6**
35.	**Population per Dental Surgeon*** *Population: Dental Surgeon ratio*	**17,514.9**
36.	**Availability of Medical Assistants*** *Number of Medical Assistants in a given year (per 10,000 population)*	**3.9**
37.	**Population per Medical Assistant*** *Population: Medical Assistant ratio*	**2,554.3**
38.	**Availability of Nurses*** *Number of Nurses in a given year (per 10,000 population)*	**29.4**
39.	**Population per Nurse*** *Population: Nurse ratio*	**339.6**
40.	**Availability of Midwives*** *Number of Midwives in a given year (per 10,000 population)*	**7.6**
41.	**Population per Midwife*** *Population: Midwife ratio*	**2,270.4**
42.	**Number of Pharmacists available**	**6**
43.	**Number of Physiotherapists available**	**5**
44.	**Number of Hospitals**	**4**
45.	**Number of Health Centers**	**22**
46.	**Number of Village Clinics**	**87**
47.	**Number of Hospital Beds**	**255**

3. Demographic Information

Crude Birth Rate: Number of live births per year (per 1,000 population): **26.8**

CBR =	Number of live births (3,280) / Total population (122,604)	X 1,000

Methodological/System Issues:

- 2019 projected population is used as the base population
- Data for 2018 has been sourced from the KHIS & MS1
- Births with unrecorded outcomes were counted as live births.

Crude Death Rate: Number of deaths per year (per 1,000 population): **5.9**

CDR =	Number of deaths (719) / Total population (122,604)	X 1,000

Methodological/System Issues:

- 2019 projected population is used as the base population
- Data for 2019 has been sourced from the KHIS & MS1
- Mortality data is weak
- 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.
- Strengthened use of Death Certificate at TCH would also contribute to better quality number of deaths and cause of deaths.

4. Health Resources

Table 2: Health institutions in Kiribati

Type of health facility	No.
Hospitals	4
Island Health Centers	22
Village Clinics/Dispensaries	86
Total number of health institutions	**112**

Source: KHIS and MS1 as of 31.12.2019

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	117
Southern Kiribati Hospital (SKH)	Tabiteuea, Southern Island	90
Betio Hospital (BH)	Betio, South Tarawa	30
London Kiritimati Hospital (LKH)	Kiritimati, Line & Phoenix Islands	18
	Total bed strength	**255**

Source: KHIS as of 31.12.2019

Number of Hospital Beds per 1,000 population: 2.1

Number of Hospital Beds per 1,000 population =	$\frac{\text{Total number of Hospital Beds available (255)}}{\text{Total population (122,604)}}$	X 1,000

Methodological/System Issues:

- 2019 projected population is used as base population.
- Data for 2019 has been sourced from the KHIS.

TCH Bed Occupancy Rate: Proportion of available acute inpatient beds that have been occupied over one year: **99.7**

TCH Bed Occupancy Rate =	Total In-patient Service Days (41,499) / Total Bed Days (41,610)	X 100

Methodological/System Issues:

- Data for 2019 has been sourced from the KHIS
- Strengthened reporting and timely completion of data loading to KHIS from TCH would contribute to more accurate figures.

TCH (average length-of-stay): Average number of day's patients spend in hospital: **6.9**

TCH Average Length-of-stay =	Total In-patient Service Days (41,499) / Total number of admissions (5,982)

Methodological/System Issues:

- Data for 2019 has been sourced from the KHIS
- Strengthened reporting and timely completion of data loading to KHIS from TCH would contribute to more accurate figures.

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

Ward	In-patients days	Bed days	Bed occupancy [%]
TCH-Medical	8,207	8,030	102.2
TCH-Surgical	7,224	8,030	90.0
TCH-Paediatric	7,065	9,855	71.7
TCH-Obstetric	14,660	7,665	191.3
TCH-Private	1,787	2,920	61.2
TCH-ICU	2,556	5,110	50.0
Total	**41,499**	**41,610**	**99.7**

Source: KHIS as of 31.12.2019

5. Country Health Manpower

Availability of Medical Officers: Number of Medical Officers (per 10,000 population): **5.1**

Medical Officers per 10,000 population =	Total number of Medical Officers enrolled for the year (62) / Total population (122,604)	X 10,000

Methodological/System Issues:

- 2019 Projected population is used as base population.
- Health manpower data for 2019 has been sourced from the ER 2019, MHMS.

Population per Medical Officer: Population: Medical Officer Ratio: **1,977.5**

Population per Medical Officer =	Total population for the year (122,604) / Total number of Medical Officers enrolled for the year (62)

Methodological/System Issues:

- 2018 Projected population is used as base population.
- Health manpower data for 2017 has been sourced from the Admin division, MHMS.

Availability of Dental Surgeons: Number of Dental Surgeons (per 10,000 population): **0.6**

Dental Surgeons per 10,000 population =	Total number of Dental Surgeons enrolled for the year (7) / Total population (122,604)	X 10,000

Methodological/System Issues:

- 2019 projected population is used as base population.
- Health manpower data for 2019 has been sourced from the ER 2019, MHMS.

Population per Dental Surgeon: Population: Dental Surgeon ratio: **17,514.9**

Population per Dental Surgeon =	Total population for the year 122,604) / Total number of Dental Surgeons enrolled for the year (7)

Methodological/System Issues:

- 2019 Projected population is used as base population.
- Health manpower data for 2019 has been sourced from the ER 2019, MHMS.

Availability of Medical Assistants: Number of Medical Assistants (per 10,000 population): **3.9**

Medical Assistants per 10,000 population =	Total number of Medical Assistants enrolled for the year (48) / Total population (122,604)	X 10,000

Methodological/System Issues:

- 2019 Projected population is used as base population.
- Health manpower data for 2019 has been sourced from the ER 2019, MHMS.

Population per Medical Assistant: Population: Medical Assistant ratio: **2,554.3**

Population per Medical Assistant =	Total population for the year (122,604) / Total number of Medical Assistants enrolled for the year (48)

Methodological/System Issues:

- 2019 Projected population is used as base population.
- Health manpower data for 2019 has been sourced from the ER 2019, MHMS.

Availability of Nurses: Number of Nurses (per 10,000 population): **29.4**

Nurses per 10,000 population =	Total number of Nurses enrolled for the year (361) / Total population (122,604)	X 10,000

Methodological/System Issues:

- 2019 Projected population is used as base population.
- Health manpower data for 2019 has been sourced from the ER 2019, MHMS.

Population per Nurse: Population: Nurse ratio: 339.6

Population per Nurse =	Total population for the year (122,604) / Total number of Nurses enrolled for the year (361)

Methodological/System Issues:

- 2019 Projected population is used as base population.
- Health manpower data for 2019 has been sourced from the ER 2019, MHMS.

Availability of Midwives: Number of Midwives (per 10,000 population): **4.4**

Midwives per 10,000 population =	Total number of Midwives enrolled for the year (54) / Total population (122,604)	X 10,000

Methodological/System Issues:

- 2019 Projected population is used as base population.
- Health manpower data for 2019 has been sourced from the Admin division, MHMS.

Population per Midwife: Population: Midwife ratio: **2,270.4**

Population per Midwife =	Total population for the year (122,604) / Total number of Midwives enrolled for the year (54)

Methodological/System Issues:

- 2019 Projected population is used as base population.
- Health manpower data for 2019 has been sourced from the Admin division, MHMS.

Table 5: Health manpower for Kiribati health institutions

Hospital	Medical Consultants	MOs	IMOs	Dental Surgeons	MAs	Nurses	PHN	Pharmacists	Physio's	Total
TCH	9	29	11	5	6	161		6	4	**231**
SKH		4		1		23				**28**
BH		3				29				**32**
LKH	2	2		1	5	21		1	1	**33**
Health Centre					22					**22**
Village Clinic					14		115			**129**
Mental Ward		2			1	12				**15**
Total	**11**	**40**	**11**	**7**	**48**	**246**	**115**	**7**	**5**	**490**

Source: ER 2019, 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
		Kainaba			1
TUC		Bonriki 3	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
		Bonriki (Bentekota)2			1
BTC		Temanoku (BTC)	1		2
		Takoronga	1		2
		Temakin	1		2
Banaba	Banaba	-	1		1
Maiana	Tabontekeekee	Tekaranga	1		1

Island	Health Centre	Village Clinic	Staff availability		
			MA*	SCH/N	PHN**
		Bubutei			1
		Tebikerai42			1
		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
		Manoku			1
Nonouti	Tebobonga	Temotu	1		1
		Teuabu			1
		Abamakoro			1
		Mataboou			1
		Rotimwa			1
		Taboiaki			
		Temanoku (Nonouti)		1	
Tab North	Utiroa	Tanaeang	1	1	1
		Buota			1
		Tenatorua			1
		Aiwa			1
		Tekabuibui			1
		Kabuna			1
		Tauma			1
		Tekaman2			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

Island	Health Centre	Village Clinic	Staff availability		
			MA*	SCH/N	PHN**
Teraina	Arabata		1		1
Kanton	Canton	-	1		
		Total	**36**	**7**	**108**

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: **0.5**

OPD consultations per capita (for TCH) =	Total number of outpatient consultations at TCH for the year (56,793) / Total population (122,604)

Methodological/System Issues:

- Data for 2019 has been sourced from the KHIS
- Strengthened reporting and timely completion of data loading to KHIS from TCH would contribute to more accurate figures.

TCH (patient discharges): Weekly average number of patients discharged from all TCH wards in a given year: **115.0**

TCH (weekly patient discharges) =	Total number of discharges for the year from TCH (5,982) / Number of weeks per year (52)

Methodological/System Issues:

- Data for 2019 has been sourced from the KHIS.
- Strengthened reporting and timely completion of data loading to KHIS from TCH would contribute to more accurate figures.

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): 1**3.5**

TCH ARI Moderate/Severe =	Total number of ARI cases (0-5 years) seen at TCH 216) / Total (0-5 years) population (15,995)	X 1,000

Methodological/System Issues:

- 2019 projected population is used as base population.
- Data for 2019 has been sourced from the KHIS
- Morbidity data is aggregated in MS1 and therefore unable to disaggregate into disease groups. Hence unable to separate 0-5 years ARI cases.
- This indicator requires a survey to be undertaken.

Outpatient consultations per capita: Number of visits for ambulant care, not including immunizations, for the total population (including repeat visits) per capita: **4.2**

OPD consultations per capita (all health institutes) =	Total number of outpatient consultations for the year (513,014) / Total population (122,604)

Methodological/System Issues:

- 2019 projected population is used as base population.
- Data for 2019 has been sourced from the MS1

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	**23642**	10438	13204	302	286	725	646	961	1218	3640	4745	4638	6079	121	188	51	42
Special Clinics	**33151**	13782	19369	667	599	1029	726	1560	1398	2214	4304	7747	11497	478	714	87	131
EOPD Encounter	**3773**	1589	2184	5	9	326	278	191	175	50	107	927	1445	85	162	5	8
Hospital Admissions	**5982**	1810	4172	308	287	186	149	112	81	183	1804	922	1750	89	101	0	0
EOPD Deaths	**31**	17	14	0	1	2	1	1	0	1	0	7	11	6	0	0	1
Inpatient Deaths	332	164	168	28	27	15	16	3	2	5	9	97	94	16	20	0	0

Source: KHIS as of 31.12.2019

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

Ward 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
TCH-Gynae	**204**		204						5		86		111		2		
TCH-ICU	**163**	40	123			2		2	4	3	44	32	72	1	3		
TCH-Medical	**1057**	546	511					11	7	59	67	436	371	40	66		
TCH-Obstetric	**2348**		2348						9		1509		830				
TCH-Paediatric	**1046**	576	470	306	282	180	144	90	44								
TCH-Private	**268**	100	168	2	6	4	5	1	2	11	35	62	111	20	9		
TCH-Surgical	**791**	493	298					17	6	94	44	357	228	25	20		
TCH-TB	**105**	54	51					1	4	16	19	34	27	3	1		
Grand Total	**5982**	**1809**	**4173**	**308**	**288**	**186**	**149**	**122**	**81**	**183**	**1804**	**921**	**1750**	**89**	**101**		

Source: KHIS as of 31.12.2019

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	291	303	313	287	305	328	273	217	311	306	229	280	3443
Discharges	162	164	204	184	229	213	170	187	258	230	196	203	2400
Patient days	861	744	869	692	940	819	872	720	953	885	889	775	10019

Source: MS1 as of 31.12.2019

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	1772	1527	1474	1927	2140	1757	1578	1901	1358	1931	2376	4526	**24267**
(02) Dysentery	685	613	754	652	740	550	565	555	485	654	619	611	**7483**
(03) ILI - Influenza like illness	6003	6961	2396	2474	8992	6262	4518	4799	3938	2681	2721	4370	**56115**
(04) ARI-Pneumonia	628	451	403	475	373	408	754	866	690	371	442	539	**6400**
(05) Meningitis	6	4	76	66	1	7	1	6	4	2	2	2	**177**
(06) Conjunctivitis	724	615	538	538	654	617	485	575	624	915	852	940	**8077**
(07) STI	6	6	30	34	12	7	13	16	14	13	10	8	**169**
(08) Prolonged Fever	868	1335	526	550	1811	1401	536	734	643	580	492	804	**10280**
(09) Acute fever + rash	9	11	18	24	31	93	31	32	41	9	10	27	**336**
(10) Diabetes	129	105	63	135	132	133	111	121	92	115	112	65	**1313**
(11) Hypertension	120	81	67	128	144	128	131	186	84	114	92	71	**1346**
(12) Mental illness	4	14	9	3	7		3	11	3	2	6	4	**66**
(13) Fish poisoning	33	21	36	41	50	40	57	50	63	58	36	37	**522**
(14) Night blindness	69	63	53	56	53	57	60	66	78	46	59	28	**688**
(15) Tinea Vesicolor	377	327	286	346	476	488	462	480	396	517	537	310	**5002**
(16) Tinea Corporis	579	491	581	586	656	588	642	679	555	705	671	603	**7336**
(17) Worm Infestation	525	527	544	470	654	557	546	535	619	719	648	594	**6938**
(18) Scabies	293	265	103	146	160	210	216	158	292	212	257	276	**2588**
(19) Others	31713	29040	26188	26908	41662	33116	33777	31756	25431	31354	30486	29431	**370862**
Total	**44543**	**42457**	**34145**	**35559**	**58748**	**46419**	**44486**	**43526**	**35410**	**40998**	**40428**	**43246**	**509965**

Source: MS1 as of 31.12.2019

Table 11: Outpatient Morbidity Statistics according to districts

Illness	District						Total
	Northern	Tarawa&Banaba	Central	South West	South East	Linnix	
ILI - Influenza like illness	7537	31811	4593	2849	4780	4413	55983
Diarrhoea	1506	17161	849	1037	723	2737	24013
Prolonged Fever	2003	4546	1015	897	834	826	10121
Conjunctivitis	661	5699	321	420	315	586	8002
Dysentery	572	4082	774	784	360	838	7410
Tinea Corporis	821	4931	438	366	301	407	7264
Worm Infestation	1421	3999	447	445	258	309	6879
ARI-Pneumonia, Severe pneumonia & severe disease	767	3630	810	481	376	328	6392
Tinea Vesicolor	504	3520	263	173	212	286	4958
Scabies	381	1208	114	89	104	670	2566
Hypertension	144	671	184	156	138	30	1323
Diabetes	113	748	129	140	114	55	1299
Night blindness	122	237	100	125	58	36	678
Fish poisoning	105	99	74	69	22	148	517
Acute fever + rash	27	170	22	31	55	31	336
Meningitis	6	116	8	12	3	32	177
STI	51	73	19	8	4	14	169
Mental illness	14	10	7	13	8	14	66
Others	31909	238916	22818	25025	14939	34589	368196
Grand Total	**48664**	**321627**	**32985**	**33120**	**23604**	**46349**	**506349**

Source: MS1 as of 31.12.2019

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	
Abemama	8	9	18	50	13	16	11	11	17	10	16	14	**193**
Butaritari	5	9	17	28	36	11	11	14	7	9	13	9	**169**
BTC	14	32		15		12	24		16	21	19	12	**165**
Tarawa North	10	15	10	8	13	25	10	14	21	13	17	6	**162**
Aranuka	9	22	19	22	8	10	10		10	14	13	8	**145**
Abaiang	10	5	10	10	13	20	8	9	1	23	21	1	**131**
Marakei	3	3	9	8	63	6	2	5	6	6	3	4	**118**
Nonouti	8	2	5	4	12	11	7	10	7	10	6	7	**89**
Onotoa	6	5	8	4	9	8	14	4	8	7	5	8	**86**
Makin	5	2	5		11	5	7	9	3	9	21	7	**84**
Beru	3	13	14	9	7	5	9	2	8	4	3	6	**83**
Maiana	5	5	11	8	7	9	6	8	5	2	5	11	**82**
Kuria	4	3	3	1	8	12	9	10	3	4	9	4	**70**
Tab South		3		3	7	13	3	10	5	4	3	6	**57**
Nikunau	1	10	8	12	5		4	6	3	4	4		**57**
Arorae	5	2		4	7	5	6	4	3	4	3	6	**49**
Tab North	4	5	4	1	4	2	1	2	2	4	6	8	**43**
Tamana	1	3	1	3	1	1			1	1	3	3	**18**
Banaba				4			4			3		2	**13**
Kiritimati		**1**			**1**							**1**	**3**
Grand Total	**101**	**149**	**142**	**194**	**225**	**171**	**146**	**118**	**126**	**152**	**170**	**123**	**1817**

Source: MS1 as of 31.12.2019

Table 13: Leading Causes of Hospitalization for TCH

Rank	ICD 10-3	Cause of Hospitalization	Gender		Total
			Male	Female	
1	O80	Single spontaneous delivery	1	1513	**1514**
2	O82	Single delivery by caesarean section		373	**373**
3	J18	Pneumonia, organism unspecified	94	109	**203**
4	R69	Unknown and unspecified causes of morbidity	50	91	**141**
5	J21	Acute bronchiolitis	72	66	**138**
6	E14	Unspecified diabetes mellitus	62	69	**131**
7	A16	Respiratory tuberculosis, not confirmed bacteriologically or histologically	59	58	**117**
8	A09	Other gastroenteritis and colitis of infectious and unspecified origin	60	45	**105**
9	E11	Non-insulin-dependent diabetes mellitus	53	49	**102**
10	E43	Unspecified severe protein-energy malnutrition	57	43	**100**
11	P36	Bacterial sepsis of newborn	52	45	**97**
12	A41	Other septicaemia	39	55	**94**
13	O60	Preterm labour		87	**87**
14	O99	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium		78	**78**
15	J44	Other chronic obstructive pulmonary disease	38	37	**75**
16	L02	Cutaneous abscess, furuncle and carbuncle	39	30	**69**
17	D64	Other anaemias	25	43	**68**
18	I50	Heart failure	35	32	**67**
19	K75	Other inflammatory liver diseases	53	9	**62**
20	J45	Asthma	20	31	**51**
21	O24	Diabetes mellitus in pregnancy		49	**49**
22	P07	Disorders related to short gestation and low birth weight, not elsewhere classified	20	26	**46**
23	O23	Infections of genitourinary tract in pregnancy		42	**42**
24	J90	Pleural effusion, not elsewhere classified	21	20	**41**
25	O47	False labour		41	**41**
		Pooled from all other causes	959	1132	**2091**
	Grand Total		**1809**	**4173**	**5982**
***	**R00-R99**	**Ill-defined causes hospitalization (pooled)**	**90**	**139**	**229**

Source: KHIS as of 31.12.2019

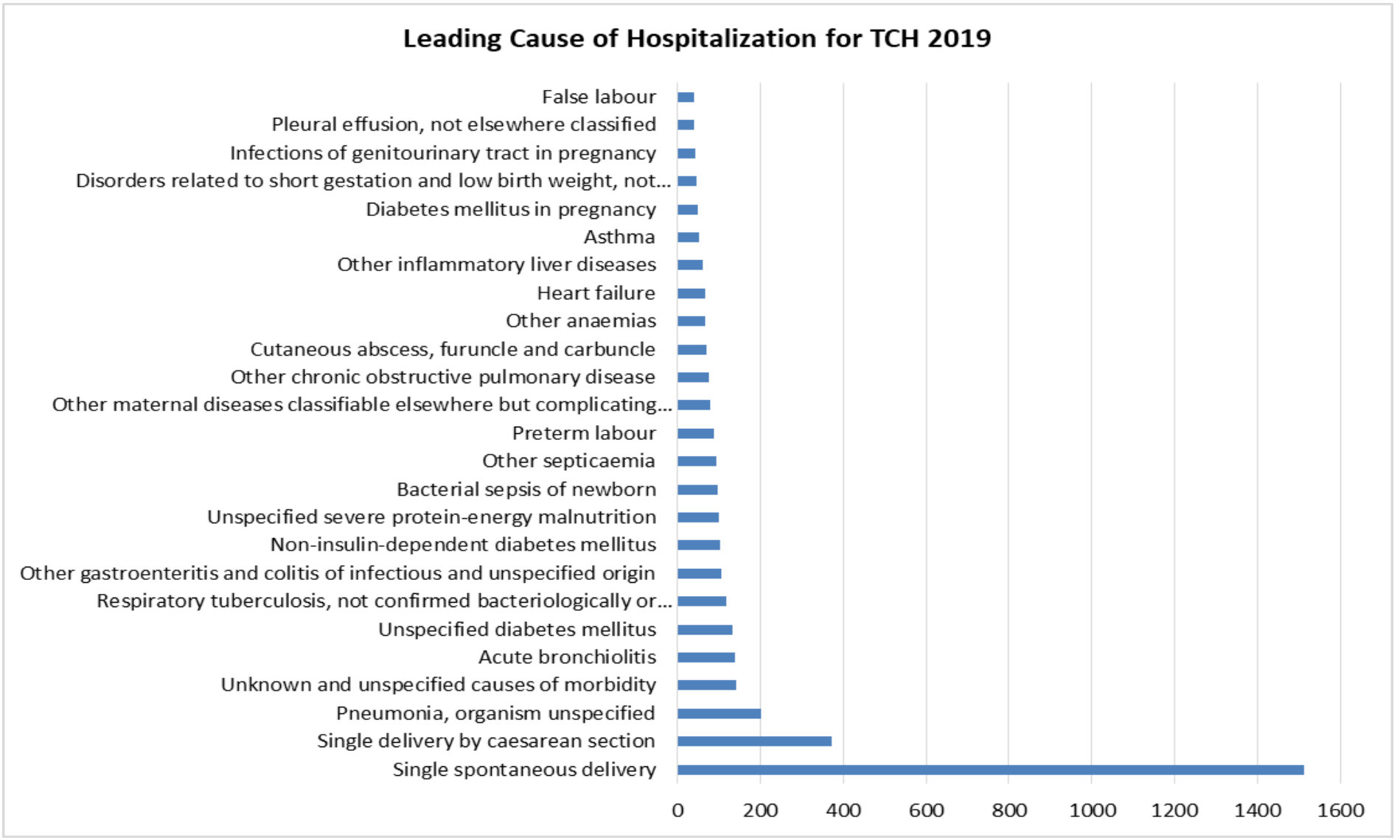


Figure 2: Leading Causes of Hospitalization for TCH

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-ICU	48	21	27							1	3	20	20		3	0	0
TCH-Medical	119	69	50					0	1	2	5	58	36	8	8	0	0
TCH-Paediatric	88	45	43	28	27	15	16	2								0	0
TCH-Private	27	11	16						1	1		5	12	5	3	0	0
TCH-Surgical	45	18	27							1		14	22	3	5	0	0
TCH-TB																0	0
TCH-OB	2		2								1		1			0	0
TCH-Gynae	4		4										3		1	0	0
Grand Total	**332**	**164**	**168**	**28**	**27**	**15**	**16**	**3**	**2**	**5**	**9**	**97**	**94**	**16**	**20**	**0**	**0**

Source: KHIS as of 31.12.2019

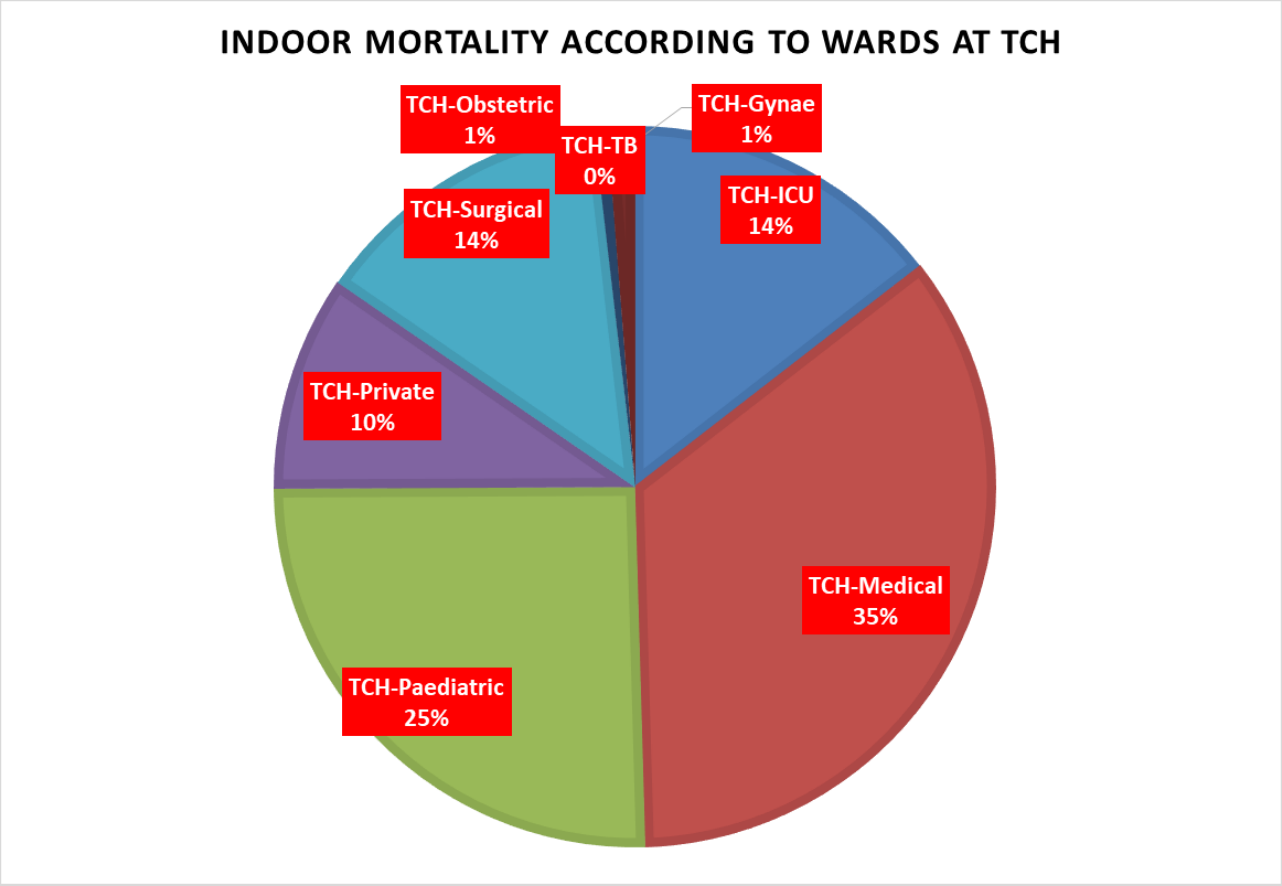


Figure 3: Indoor mortality statistics according to wards: TCH

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

Rank	Cause of Death	Gender		
		Male	Female	Total
1	Non-insulin-dependent diabetes mellitus	15	21	36
2	Other septicaemia	14	13	27
3	Unspecified severe protein-energy malnutrition	10	10	20
4	Other ill-defined and unspecified causes of mortality	6	10	16
5	Bacterial sepsis of newborn	8	3	11
6	Malignant neoplasm of bronchus and lung	6	5	11
7	Pneumonia, organism unspecified	4	6	10
8	Necrotizing enterocolitis of fetus and newborn	5	4	9
9	Other gastroenteritis and colitis of infectious and unspecified origin	3	5	8
10	Stroke, not specified as haemorrhage or infarction	6	1	7
11	Other respiratory conditions originating in the perinatal period	4	2	6
12	Chronic kidney disease	2	4	6
13	Chronic ischaemic heart disease	4	2	6
14	Acute hepatitis B	6		6
15	Unspecified diabetes mellitus		5	5
16	Other chronic obstructive pulmonary disease	4	1	5
17	Fibroblastic disorders	2	3	5
18	Malignant neoplasm of cervix uteri		4	4
19	Fibrosis and cirrhosis of liver	1	4	5
20	Chronic viral hepatitis	3	1	4
21	Respiratory failure, not elsewhere classified	3	1	4
22	Disorders related to short gestation and low birth weight, not elsewhere classified	2	1	3
23	Malignant neoplasm of breast		3	3
24	Meningitis due to other and unspecified causes	2	1	3
25	Other diseases of liver	2	1	3
	Mortality from all other causes (pooled)	52	57	**109**
	Grand Total	**164**	**168**	**332**

Source: KHIS as of 31.12.2019 **** 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	21	36
2	A41	Other septicaemia	14	13	27
3	E43	Unspecified severe protein-energy malnutrition	10	10	20
4	R99	Other ill-defined and unspecified causes of mortality	6	10	16
5	P36	Bacterial sepsis of newborn	8	3	11
6	C34	Malignant neoplasm of bronchus and lung	6	5	11
7	J18	Pneumonia, organism unspecified	4	6	10
8	P77	Necrotizing enterocolitis of fetus and newborn	5	4	**9**
9	A09	Other gastroenteritis and colitis of infectious and unspecified origin	3	5	8
10	I64	Stroke, not specified as haemorrhage or infarction	6	1	7
11	P28	Other respiratory conditions originating in the perinatal period	4	2	6
12	N18	Chronic kidney disease	2	4	6
13	I25	Chronic ischaemic heart disease	4	2	6
14	B16	Acute hepatitis B	6		6
15	E14	Unspecified diabetes mellitus		5	5
16	J44	Other chronic obstructive pulmonary disease	4	1	5
17	M72	Fibroblastic disorders	2	3	5
18	C53	Malignant neoplasm of cervix uteri		4	**4**
19	K74	Fibrosis and cirrhosis of liver	1	4	5
20	B18	Chronic viral hepatitis	3	1	4
21	J96	Respiratory failure, not elsewhere classified	3	1	4
22	P07	Disorders related to short gestation and low birth weight	2	1	3
23	C50	Malignant neoplasm of breast		3	3
24	G03	Meningitis due to other and unspecified causes	2	1	3
25	K76	Other diseases of liver	2	1	3
26	I10	Essential (primary) hypertension		3	3
27	R57	Shock, not elsewhere classified	1	2	3
28	E86	Volume depletion	3		3
29	K92	Other diseases of digestive system	1	2	3
30	J69	Pneumonitis due to solids and liquids	1	2	3
31	I12	Hypertensive renal disease	1	2	3
32	I51	Complications and ill-defined descriptions of heart disease	1	1	2
33	E40	Kwashiorkor	1	1	2
34	G00	Bacterial meningitis, not elsewhere classified		2	2
35	J45	Asthma	1	1	2
36	P21	Birth asphyxia	2		2
37	D65	Disseminated intravascular coagulation [defibrination syndrome]		2	2
38	C85	Other and unspecified types of non-Hodgkin's lymphoma	2		2
39	J80	Adult respiratory distress syndrome	2		2
40	C54	Malignant neoplasm of corpus uteri		2	2
41	G06	Intracranial and intraspinal abscess and granuloma	1	1	2
42	I48	Atrial fibrillation and flutter	1	1	2
43	K63	Other diseases of intestine	1	1	2
44	P23	Congenital pneumonia		2	2
45	G93	Other disorders of brain		2	2
46	I63	Cerebral infarction		2	2
47	K75	Other inflammatory liver diseases	2		2
48	C92	Myeloid leukaemia	1	1	2
49	I09	Other rheumatic heart diseases	2		2
50	C22	Malignant neoplasm of liver and intrahepatic bile ducts	1	1	2
51	I61	Intracerebral haemorrhage	1	1	2

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

Rank	ICD 10-3	Cause of Death	Gender		Total
			Male	Female	
52	N40	Hyperplasia of prostate	1		1
53	E03	Other hypothyroidism		1	1
54	I34	Nonrheumatic mitral valve disorders		1	1
55	C20	Malignant neoplasm of rectum		1	1
56	M60	Myositis	1		1
57	A07	Other protozoal intestinal diseases		1	1
58	P22	Respiratory distress of newborn	1		1
59	I82	Other venous embolism and thrombosis	1		1
60	Q77	Osteochondrodysplasia with defects of growth of tubular bones and spine		1	1
61	I85	Oesophageal varices	1		1
62	X92	Assault by drowning and submersion		1	1
63	C67	Malignant neoplasm of bladder	1		1
64	N12	Tubulo-interstitial nephritis, not specified as acute or chronic		1	1
65	C71	Malignant neoplasm of brain		1	1
66	I21	Acute myocardial infarction	1		1
67	C76	Malignant neoplasm of other and ill-defined sites		1	1
68	I27	Other pulmonary heart diseases		1	1
69	E87	Other disorders of fluid, electrolyte and acid-base balance		1	1
70	I38	Endocarditis, valve unspecified	1		1
71	C78	Secondary malignant neoplasm of respiratory and digestive organs		1	1
72	R18	Ascites	1		1
73	J84	Other interstitial pulmonary diseases	1		1
74	V03	Pedestrian injured in collision with car, pick-up truck or van	1		1
75	C80	alignant neoplasm without specification of site	1		1
76	M45	Ankylosing spondylitis	1		1
77	K37	Unspecified appendicitis	1		1
78	D61	Other aplastic anaemias	1		1
79	K56	Paralytic ileus and intestinal obstruction without hernia		1	1
80	D64	Other anaemias		1	1
81	K59	Other functional intestinal disorders	1		1
82	O16	Unspecified maternal hypertension		1	1
83	K61	Abscess of anal and rectal regions		1	1
84	C16	Malignant neoplasm of stomach	1		1
85	C25	Malignant neoplasm of pancreas	1		1
86	I26	Pulmonary embolism	1		1
87	K71	Toxic liver disease		1	1
88	P29	Cardiovascular disorders originating in the perinatal period		1	1
89	K72	Hepatic failure, not elsewhere classified	1		1
90	P61	Other perinatal haematological disorders	1		1
91	G61	Inflammatory polyneuropathy	1		1
92	Q24	Other congenital malformations of the heart		1	1
93	B19	Unspecified viral hepatitis	1		1
94	R00	Abnormalities of heart beat		1	1
95	H44	Disorders of globe		1	1
96	D70	Agranulocytosis		1	1
97	C95	Leukaemia of unspecified cell type		1	1
99	L02	Cutaneous abscess, furuncle and carbuncle	1		1
100	W74	Unspecified drowning and submersion		1	1
101	L03	Cellulitis		1	1
102	A01	Typhoid and paratyphoid fevers	1		1
103	L89	Decubitus ulcer and pressure area	1		1

Grand Total	**164**	**168**	**332**

Source: KHIS as of 31.12.2019 **** 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): **10.7**

$$NMR = \frac{\text{Number of deaths of neonates aged 0-28 days (35)}}{\text{Number of live births (3,280)}} \times 1{,}000$$

Methodological/System Issues:

- Data for 2019 has been sourced from the KHIS & MS1
- 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 neonatal 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 17: Neonatal deaths according to districts*

District	No.
Northern	2
Central	2
South West	1
South East	0
Linnix	0
Tarawa	30
Total	**35**

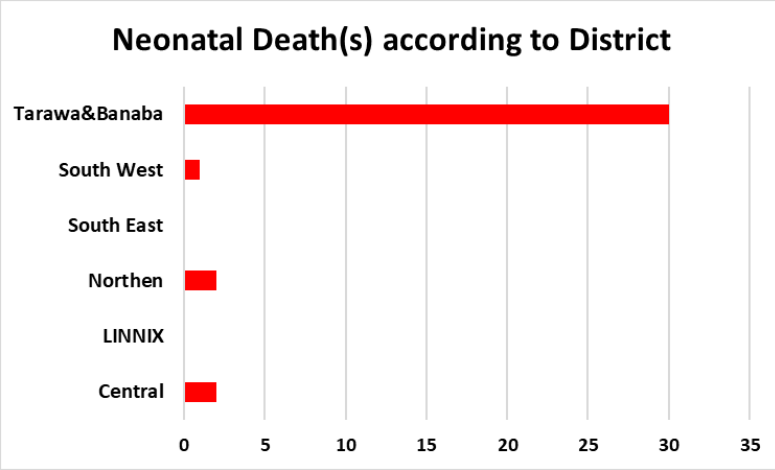


Figure 4: Neonatal deaths according to districts

Sources: KHIS & MS1 as of 31.12.2019

Infant Mortality Rate: Probability of dying between birth and age 1 year (per 1,000 live births): **29.3**

IMR =	Number of deaths of infants aged <1 year (96) / Number of live births (3,280)	X 1,000

Methodological/System Issues:

- Data for 2019 has been sourced from the KHIS & MS1
- 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.
Northern	12
Central	4
South Western	10
South Eastern	4
Linnix	4
Tarawa	62
Total	**96**

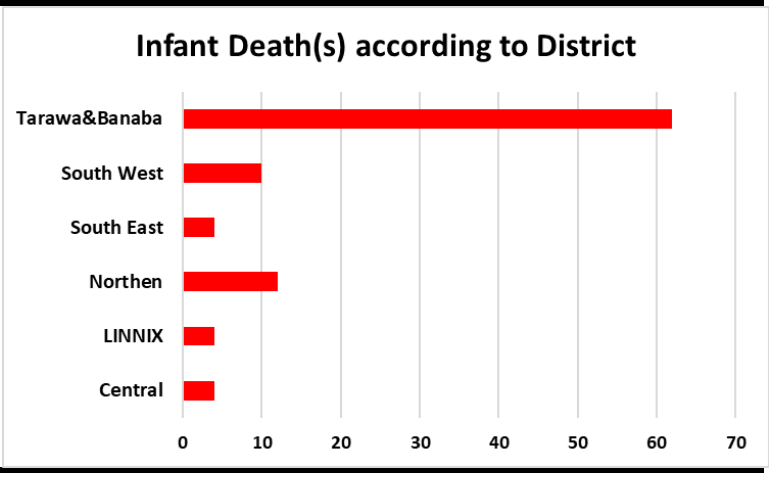


Figure 5: Infant deaths according to districts

Sources: KHIS & MS1 as of 31.12.2019

Under-five Mortality Rate: Probability of dying by age 5 years (per 1,000 live births): **47.9**

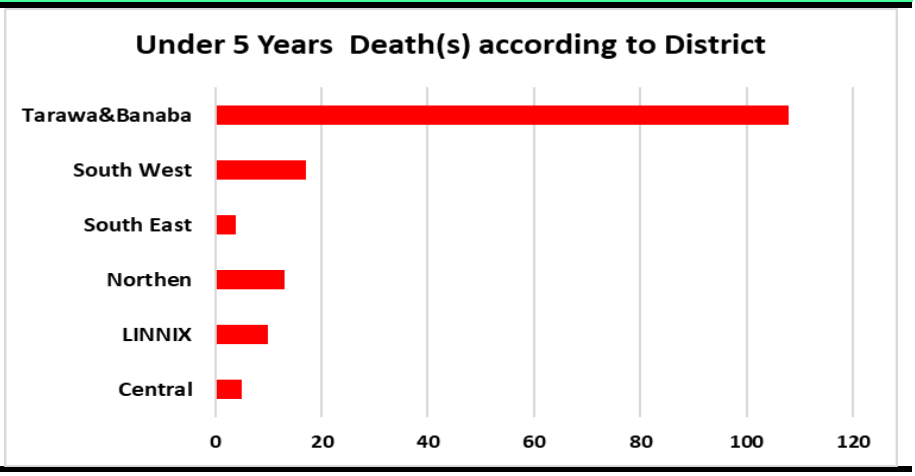
U5MR =	Number of deaths of children aged <5 years (157) / Number of live births (3,280)	X 1,000

Methodological/System Issues:

- Data for 2019 has been sourced from the KHIS & MS1
- 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.
Northern	13
Central	5
South Western	17
South Eastern	4
Linnix	10
Tarawa	108
Total	**157**



Sources: KHIS & MS1 as of 31.12.2019

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): **91.5**

MMR =	Number of maternal deaths (3) / Number of live births (3,280)	X 100,000

Methodological/System Issues:

- Data for 2019 has been sourced from the KHIS & MS1
- Births with unrecorded outcomes were counted as live births.
- Challenges in conducting Maternal Death audits thus resulting in low maternal mortality records
- 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 20: Maternal deaths for Kiribati

Rank	ICD-10-3	Cause of Death	Total
1	O75	Shock during or following labour and delivery	1
2	O16	Unspecified maternal hypertension	1
3	C34	Malignant neoplasm of bronchus and lung	1
		Total Maternal Deaths*	**3**

Sources: KHIS & MS1 as of 31.12.2019

Table 21: Maternal deaths according to districts*

District	No.
Central	0
Linnix	0
Northern	0
South Eastern	
South Western	0
Tarawa & Banaba	3
Total	**3**

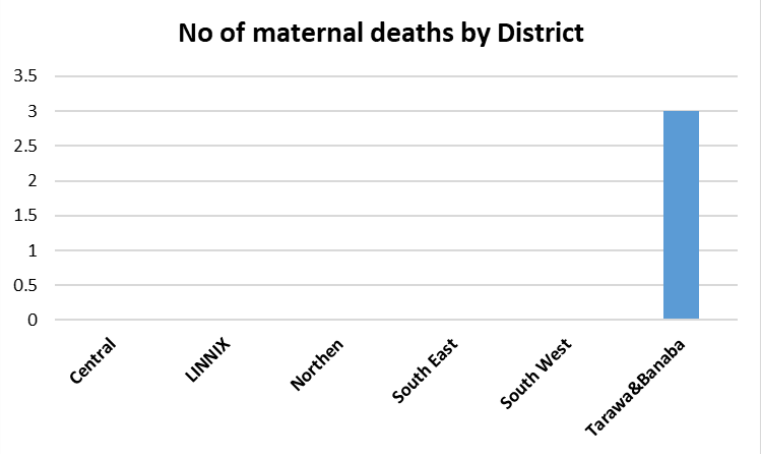


Figure 7: Maternal deaths according to districts

Sources: KHIS & MS1 as of 31.12.2019

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): **54.0**

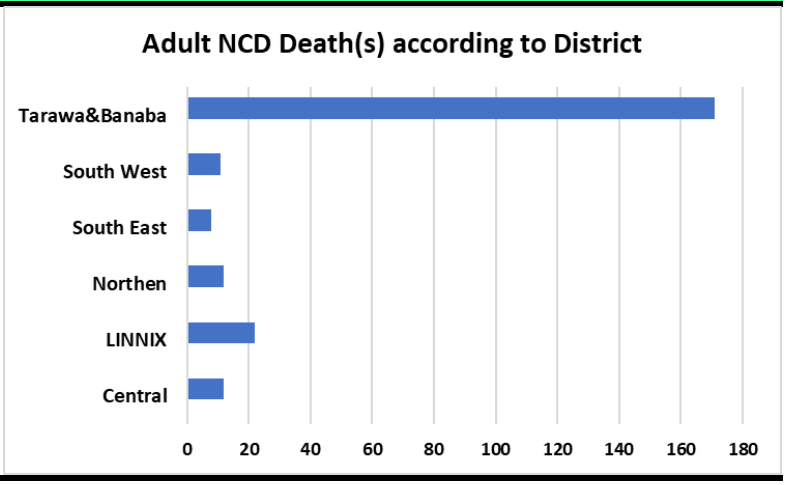
Adult mortality rate from NCDs (30-69 years) =	Total number of deaths due to NCDs for the year (236) / Total population (30-69 years) (43,709)	X 10,000

Methodological/System Issues:

- Data for 2019 has been sourced from the KHIS & MS1
- Certification of cause(s) of death is poor resulting in weak mortality data
- 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 22: Adult deaths due to NCDs according to districts*

District	No.
Central	12
Linnix	22
Northern	12
South Eastern	8
South Western	11
Tarawa & Banaba	171
Total	**236**



Sources: KHIS & MS1 as of 31.12.2019

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) **4.9**

Mortality rate from Road Traffic Injuries =	Total number of deaths due to RTIs for the year (6) / Total population (122,604)	X 100,000

Methodological/System Issues:

- Data for 2019 has been sourced from the KHIS & MS1
- Certification of cause(s) of death is poor resulting in weak mortality data
- 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 23: Leading Causes of Death for Kiribati (Categorized list)*

Rank	Cause of Death*	Gender		Total
		Female	Male	
1	Other ill-defined and unspecified causes of mortality	26	32	58
2	Non-insulin-dependent diabetes mellitus	24	19	43
3	Cardiac arrest	16	23	39
4	Other septicaemia	16	22	38
5	Unspecified severe protein-energy malnutrition	12	15	27
6	Pneumonia, organism unspecified	14	9	23
7	Complications and ill-defined descriptions of heart disease	7	13	20
8	Other gastroenteritis and colitis of infectious and unspecified origin	11	8	19
9	Stroke, not specified as haemorrhage or infarction	6	13	19
10	Malignant neoplasm of bronchus and lung	5	11	16
11	Volume depletion	6	10	16
12	Other chronic obstructive pulmonary disease	3	9	12
13	Fibrosis and cirrhosis of liver	6	6	12
14	Meningitis due to other and unspecified causes	4	7	11
15	Bacterial sepsis of newborn	3	8	11
16	Symptoms and signs concerning food and fluid intake	8	2	10
17	Necrotizing enterocolitis of fetus and newborn	4	5	9
18	Shock, not elsewhere classified	4	5	9
19	Unknown and unspecified causes of morbidity	5	4	9
20	Acute hepatitis B	2	6	8
21	Essential (primary) hypertension	7	1	8
22	Chronic kidney disease	5	3	8
23	Disorders related to short gestation and low birth weight, not elsewhere classified	4	4	8
24	Abdominal and pelvic pain	5	3	8
25	Malignant neoplasm of cervix uteri	7		7
26	Asthma	4	3	7
27	Senility	6	1	7
28	Malignant neoplasm of breast	6		6
29	Other anaemias	5	1	6
30	Unspecified diabetes mellitus	5	1	6
31	Unspecified protein-energy malnutrition	2	4	6
32	Acute myocardial infarction	2	4	6
	Mortality from all other causes (pooled)	90	137	227
	Grand Total	**330**	**389**	**719**

Sources: KHIS & MS1 as of 31.12.2019

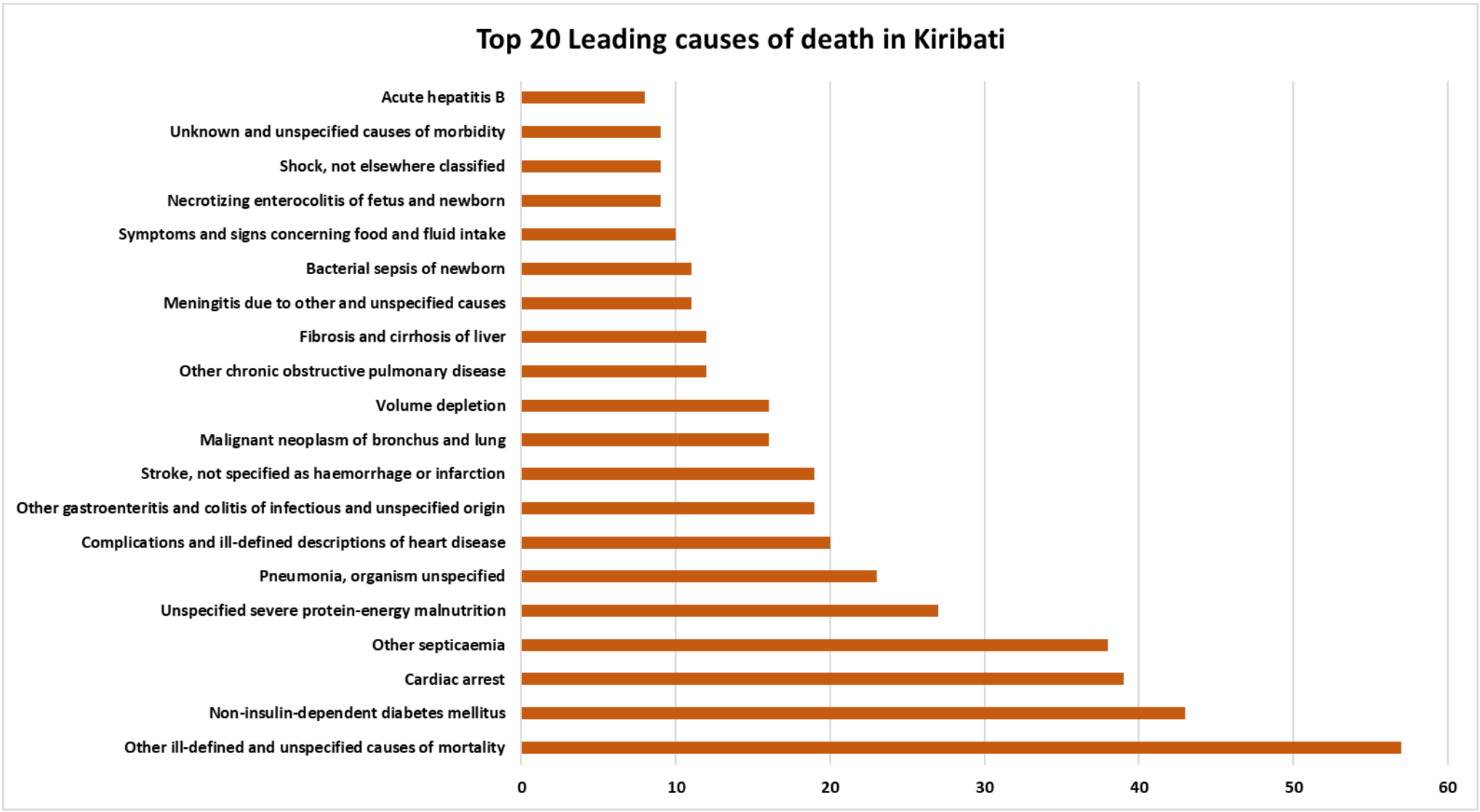


Figure 9: Leading Causes of Death for Kiribati

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

Rank	ICD-10-3	Cause of Death	Gender		Total
			Male	Female	
1	R99	Other ill-defined and unspecified causes of mortality	32	26	58
2	E11	Non-insulin-dependent diabetes mellitus	19	24	43
3	I46	Cardiac arrest	23	16	39
4	A41	Other septicaemia	22	16	38
5	E43	Unspecified severe protein-energy malnutrition	15	12	27
6	J18	Pneumonia, organism unspecified	9	14	23
7	I51	Complications and ill-defined descriptions of heart disease	13	7	20
8	A09	Other gastroenteritis and colitis of infectious and unspecified origin	8	11	19
9	I64	Stroke, not specified as haemorrhage or infarction	13	6	19
10	C34	Malignant neoplasm of bronchus and lung	11	5	16
11	E86	Volume depletion	10	6	16
12	J44	Other chronic obstructive pulmonary disease	9	3	12
13	K74	Fibrosis and cirrhosis of liver	6	6	12
14	G03	Meningitis due to other and unspecified causes	7	4	11
15	P36	Bacterial sepsis of newborn	8	3	11
16	R63	Symptoms and signs concerning food and fluid intake	2	8	10
17	P77	Necrotizing enterocolitis of fetus and newborn	5	4	9
18	R57	Shock, not elsewhere classified	5	4	9
19	R69	Unknown and unspecified causes of morbidity	4	5	9
20	B16	Acute hepatitis B	6	2	8
21	I10	Essential (primary) hypertension	1	7	8
22	N18	Chronic kidney disease	3	5	8
23	P07	Disorders related to short gestation and low birth weight, not elsewhere classified	4	4	8
24	R10	Abdominal and pelvic pain	3	5	8
25	C53	Malignant neoplasm of cervix uteri		7	7
26	J45	Asthma	3	4	7
27	R54	Senility	1	6	7
28	C50	Malignant neoplasm of breast		6	6
29	D64	Other anaemias	1	5	6
30	E14	Unspecified diabetes mellitus	1	5	6
31	E46	Unspecified protein-energy malnutrition	4	2	6
32	I21	Acute myocardial infarction	4	2	6
33	I25	Chronic ischaemic heart disease	4	2	6
34	K76	Other diseases of liver	4	2	6
35	P28	Other respiratory conditions originating in the perinatal period	4	2	6
36	R06	Abnormalities of breathing	2	4	6
37	I63	Cerebral infarction	1	4	5
38	M72	Fibroblastic disorders	2	3	5
39	V89	Motor-or nonmotor-vehicle accident, type of vehicle unspecified	4	1	5
40	X84	Intentional self-harm by unspecified means	5		5
41	B18	Chronic viral hepatitis	3	1	4
42	J96	Respiratory failure, not elsewhere classified	3	1	4

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

Rank	ICD-10-3	Cause of Death	Gender		Total
			Male	Female	
43	K92	Other diseases of digestive system	2	2	4
44	R07	Pain in throat and chest	2	2	4
45	W74	Unspecified drowning and submersion	2	2	4
46	I12	Hypertensive renal disease	1	2	3
47	I61	Intracerebral haemorrhage	2	1	3
48	J69	Pneumonitis due to solids and liquids	1	2	3
49	K27	Peptic ulcer, site unspecified	2	1	3
50	K52	Other noninfective gastroenteritis and colitis	2	1	3
51	K72	Hepatic failure, not elsewhere classified	2	1	3
52	K75	Other inflammatory liver diseases	3		3
53	P22	Respiratory distress of newborn	3		3
54	R56	Convulsions, not elsewhere classified	2	1	3
55	C22	Malignant neoplasm of liver and intrahepatic bile ducts	1	1	2
56	C54	Malignant neoplasm of corpus uteri		2	2
57	C80	alignant neoplasm without specification of site	2		2
58	C85	Other and unspecified types of non-Hodgkin's lymphoma	2		2
59	C92	Myeloid leukaemia	1	1	2
60	D61	Other aplastic anaemias	1	1	2
61	D65	Disseminated intravascular coagulation [defibrination syndrome]		2	2
62	E16	Other disorders of pancreatic internal secretion	1	1	2
63	E40	Kwashiorkor	1	1	2
64	E87	Other disorders of fluid, electrolyte and acid-base balance	1	1	2
65	F50	Eating disorders	2		2
66	G00	Bacterial meningitis, not elsewhere classified		2	2
67	G06	Intracranial and intraspinal abscess and granuloma	1	1	2
68	G40	Epilepsy	2		2
69	G93	Other disorders of brain		2	2
70	I09	Other rheumatic heart diseases	2		2
71	I48	Atrial fibrillation and flutter	1	1	2
72	I50	Heart failure	2		2
73	J80	Adult respiratory distress syndrome	2		2
74	K59	Other functional intestinal disorders	2		2
75	K63	Other diseases of intestine	1	1	2
76	L89	Decubitus ulcer and pressure area	2		2
77	N17	Acute renal failure	1	1	2
78	P21	Birth asphyxia	2		2
79	P23	Congenital pneumonia		2	2
80	R11	Nausea and vomiting	2		2
81	R14	Flatulence and related conditions	1	1	2
82	R50	Fever of other and unknown origin	1	1	2
83	R62	Lack of expected normal physiological development	1	1	2
84	R87	Abnormal findings in specimens from female genital organs	2		2

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

Rank	ICD-10-3	Cause of Death	Gender		Total
			Male	Female	
85	W17	Other fall from one level to another	2		2
86	W80	Inhalation and ingestion of other objects causing obstruction of respiratory tract	1	1	2
87	X70	Intentional self-harm by hanging, strangulation and suffocation	2		2
88	A01	Typhoid and paratyphoid fevers	1		1
89	A07	Other protozoal intestinal diseases		1	1
90	A15	Respiratory tuberculosis, bacteriologically and histologically confirmed	1		1
91	A16	Respiratory tuberculosis, not confirmed bacteriologically or histologically		1	1
92	A18	Tuberculosis of other organs		1	1
93	A90	Dengue fever [classical dengue]	1		1
94	B19	Unspecified viral hepatitis	1		1
95	B37	Candidiasis	1		1
96	C14	Malignant neoplasm of other and ill-defined sites in the lip, oral cavity and pharynx	1		1
97	C16	Malignant neoplasm of stomach	1		1
98	C20	Malignant neoplasm of rectum		1	1
99	C25	Malignant neoplasm of pancreas	1		1
100	C44	Other malignant neoplasms of skin	1		1
101	C67	Malignant neoplasm of bladder	1		1
102	C69	Malignant neoplasm of eye and adnexa	1		1
103	C71	Malignant neoplasm of brain		1	1
104	C76	Malignant neoplasm of other and ill-defined sites		1	1
105	C78	Secondary malignant neoplasm of respiratory and digestive organs		1	1
106	C95	Leukaemia of unspecified cell type		1	1
107	D50	Iron deficiency anaemia		1	1
108	D70	Agranulocytosis		1	1
109	E03	Other hypothyroidism		1	1
110	F12	Mental and behavioural disorders due to use of cannabinoids	1		1
111	G61	Inflammatory polyneuropathy	1		1
112	H44	Disorders of globe		1	1
113	H57	Other disorders of eye and adnexa		1	1
114	I26	Pulmonary embolism	1		1
115	I27	Other pulmonary heart diseases		1	1
116	I34	Nonrheumatic mitral valve disorders		1	1
117	I38	Endocarditis, valve unspecified	1		1
118	I82	Other venous embolism and thrombosis	1		1
119	I85	Oesophageal varices	1		1
120	J21	Acute bronchiolitis	1		1
121	J84	Other interstitial pulmonary diseases	1		1
122	J91	Pleural effusion in conditions classified elsewhere	1		1
123	K26	Duodenal ulcer	1		1
124	K29	Gastritis and duodenitis	1		1
125	K37	Unspecified appendicitis	1		1

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

Rank	ICD-10-3	Cause of Death	Gender		Total
			Male	Female	
126	K56	Paralytic ileus and intestinal obstruction without hernia		1	1
127	K60	Fissure and fistula of anal and rectal regions	1		1
128	K61	Abscess of anal and rectal regions		1	1
129	K71	Toxic liver disease		1	1
130	L02	Cutaneous abscess, furuncle and carbuncle	1		1
131	L03	Cellulitis		1	1
132	M45	Ankylosing spondylitis	1		1
133	M54	Dorsalgia	1		1
134	M60	Myositis	1		1
135	N12	Tubulo-interstitial nephritis, not specified as acute or chronic		1	1
136	N19	Unspecified kidney failure	1		1
137	N39	Other disorders of urinary system		1	1
138	N40	Hyperplasia of prostate	1		1
139	O16	Unspecified maternal hypertension		1	1
140	O75	Other complications of labour and delivery, not elsewhere classified		1	1
141	P29	Cardiovascular disorders originating in the perinatal period		1	1
142	P61	Other perinatal haematological disorders	1		1
143	P92	Feeding problems of newborn	1		1
144	Q24	Other congenital malformations of the heart		1	1
145	Q77	Osteochondrodysplasia with defects of growth of tubular bones and spine		1	1
146	R00	Abnormalities of heart beat		1	1
147	R17	Unspecified jaundice	1		1
148	R18	Ascites	1		1
149	R53	Malaise and fatigue	1		1
150	R60	Oedema, not elsewhere classified		1	1
151	R65	#N/A		1	1
152	V03	Pedestrian injured in collision with car, pick-up truck or van	1		1
153	x46	Accidental poisoning by and exposure to organic solvents and halogenated hydrocarbons and their vapours	1		1
154	X49	Accidental poisoning by and exposure to other and unspecified chemicals and noxious substances	1		1
155	X59	Exposure to unspecified factor	1		1
156	X92	Assault by drowning and submersion		1	1
157	Z55	Problems related to education and literacy		1	1
		Grand Total	**339**	**330**	**719**

Sources: KHIS & MS1as of 31.12.2019

Table 25: Deaths due to cancer for Kiribati*

Rank	ICD-10-3	Type of Cancer	Gender		Total
			Male	Female	
1	C34	Malignant neoplasm of bronchus and lung	11	5	16
2	C53	Malignant neoplasm of cervix uteri		7	7
3	C50	Malignant neoplasm of breast		6	6
4	C22	Malignant neoplasm of liver and intrahepatic bile ducts	1	1	2
4	C54	Malignant neoplasm of corpus uteri		2	2
4	C80	malignant neoplasm without specification of site	2		2
4	C85	Other and unspecified types of non-Hodgkin's lymphoma	2		2
4	C92	Myeloid leukemia	1	1	2
5	C14	Malignant neoplasm of other and ill-defined sites in the lip, oral cavity and pharynx	1		1
5	C16	Malignant neoplasm of stomach	1		1
5	C20	Malignant neoplasm of rectum		1	1
5	C25	Malignant neoplasm of pancreas	1		1
5	C44	Other malignant neoplasms of skin	1		1
5	C67	Malignant neoplasm of bladder	1		1
5	C69	Malignant neoplasm of eye and adnexa	1		1
5	C71	Malignant neoplasm of brain		1	1
5	C76	Malignant neoplasm of other and ill-defined sites		1	1
5	C78	Secondary malignant neoplasm of respiratory and digestive organs		1	1
5	C95	Leukemia of unspecified cell type		1	1
1	C34	Malignant neoplasm of bronchus and lung	11	5	16
		Total cancer deaths occurred at a health facility*	**21**	**37**	**58**

Sources: KHIS & MS1 as of 31.12.2019

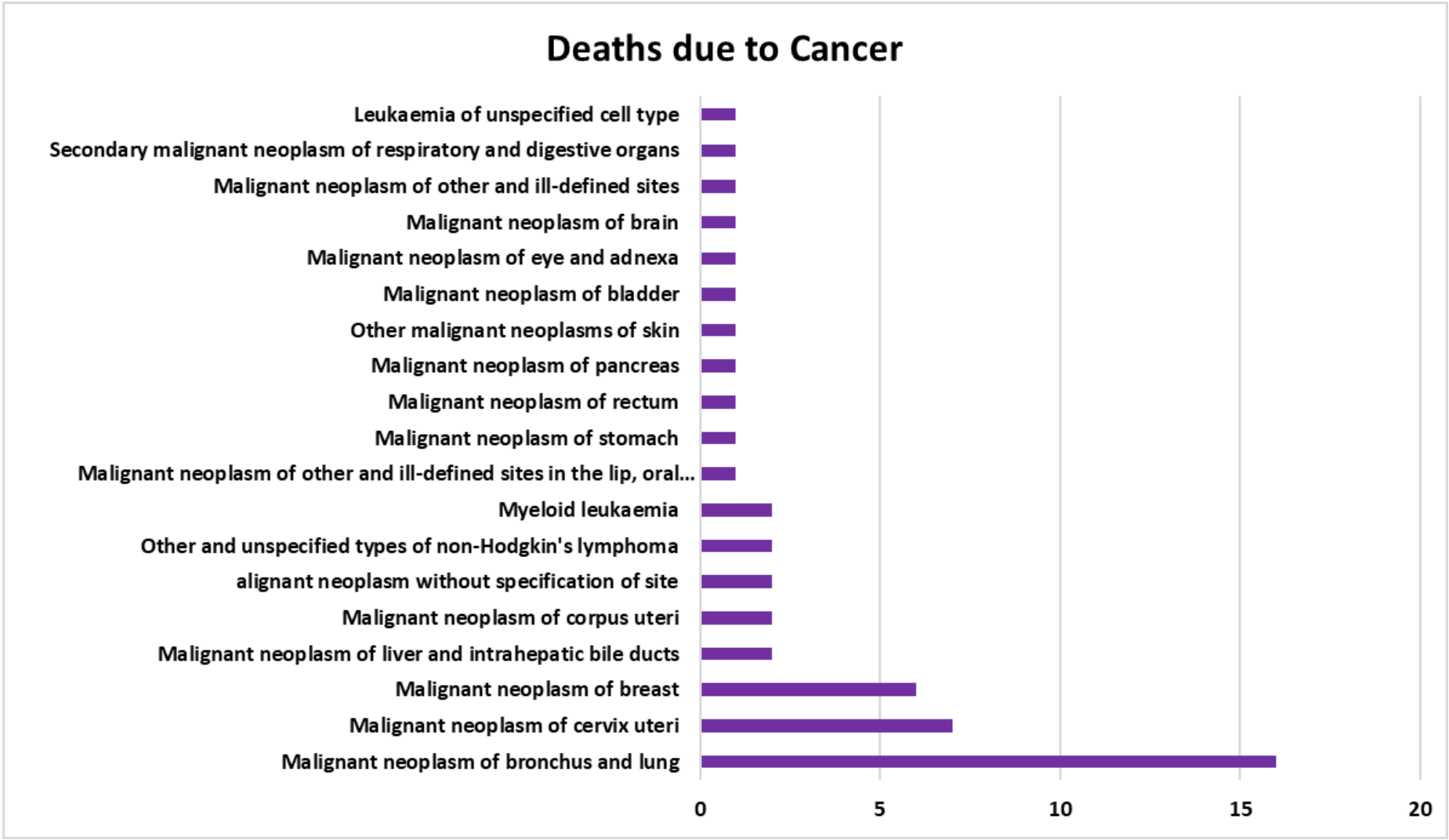


Figure 10: Mortality from cancers

Figure 11:

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	32	26	58
2	R63	Symptoms and signs concerning food and fluid intake	2	8	10
3	R57	Shock, not elsewhere classified	5	4	9
3	R69	Unknown and unspecified causes of morbidity	4	5	9
5	R10	Abdominal and pelvic pain	3	5	8
6	R54	Senility	1	6	7
7	R06	Abnormalities of breathing	2	4	6
8	R07	Pain in throat and chest	2	2	4
9	R56	Convulsions, not elsewhere classified	2	1	3
10	R11	Nausea and vomiting	2		2
10	R14	Flatulence and related conditions	1	1	2
10	R50	Fever of other and unknown origin	1	1	2
10	R62	Lack of expected normal physiological development	1	1	2
10	R87	Abnormal findings in specimens from female genital organs	2		2
15	R00	Abnormalities of heart beat		1	1
15	R17	Unspecified jaundice	1		1
15	R18	Ascites	1		1
15	R53	Malaise and fatigue	1		1
15	R60	Oedema, not elsewhere classified		1	1
15	R65	#N/A		1	1
		Total ill-defined deaths occurred at a health facility	**63**	**67**	**130**

Sources: KHIS & MS1 as of 31.12.2019

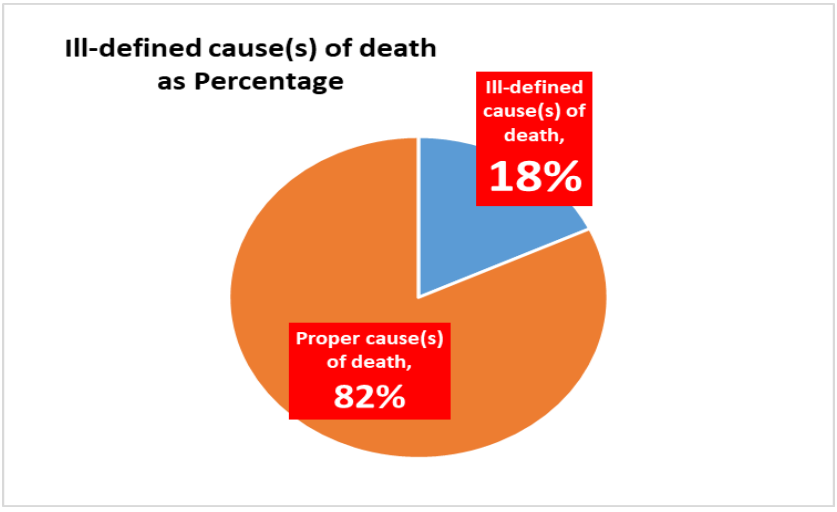


Figure 12: Ill-defined cause(s) of deaths as a percentage of total deaths

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: **4.6**

Access to antenatal care =	Total number of antenatal visits (first & revisits) (15,214) / Total number of deliveries reported (3,339)

Methodological/System Issues:

- Data for 2019 has been sourced from the MS1
- Strengthened and timely reported would contribute to more accurate figures.

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	281	327	268	275	405	294	429	463	467	436	392	356	**4393**
Postnatal	276	258	233	207	220	300	257	226	225	262	233	202	**2899**
Child Health: <1yr	446	357	344	352	335	313	387	379	374	380	329	417	**4413**
Child Health: 1-4yrs	360	258	263	228	344	236	335	247	489	389	301	563	**4013**
MCH Aides	329	341	263	222	302	423	476	272	402	297	360	706	**4393**
Pap Smears	35	44	60	75	188	142	98	140	175	80	202	46	**1285**
Re-visits													
Antenatal 2nd	227	226	236	250	270	254	250	229	299	290	242	191	**2964**
Antenatal 3rd	216	174	189	188	283	311	290	185	168	242	195	312	**2753**
Antenatal 4th	152	143	128	159	143	158	126	132	155	200	193	132	**1821**
Antenatal 4<	207	200	251	229	279	257	157	344	343	380	411	225	**3283**
Postnatal	42	61	51	89	79	48	89	132	81	90	83	121	**966**
Child Health: < 1yr	1095	1164	1058	1019	1138	1131	1102	1227	1105	1380	1042	932	**13393**
Child Health: 1-4yrs	1764	2325	1994	1852	2102	2941	2196	2139	2506	2441	2321	2033	**26614**
MCH Aides	260	282	136	93	123	150	155	200	151	276	323	235	**2384**
Pap Smears	11	4	14	34	11	26	39	70	52	9	62	52	**384**

Source: MS1 as of 31.12.2019

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: **9.4**

% of pregnant mothers received at least one home visit by PHN =	Number of home visits (315) / Total number of deliveries reported (3,339)	X 100

Methodological/System Issues:

- Data for 2019 has been sourced from the MS1
- Strengthened and timely reported would contribute to more accurate figures.

Table 28: PHN Home Visits

Service offered	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Sick patients treated	291	265	251	240	264	365	210	258	329	259	331	262	3325
Family planning	26	28	15	13	19	22	24	34	26	25	12	15	259
Antenatal	31	21	19	22	32	30	24	21	44	22	24	25	315
Postnatal	34	38	34	33	40	46	25	50	65	26	32	17	440
Child Health: <1yr	232	130	85	164	220	166	132	153	219	150	133	223	2007
Child Health: 1-4yrs	147	162	140	302	310	284	247	252	468	362	264	320	3258

Source: MS1 as of 31.12.2019

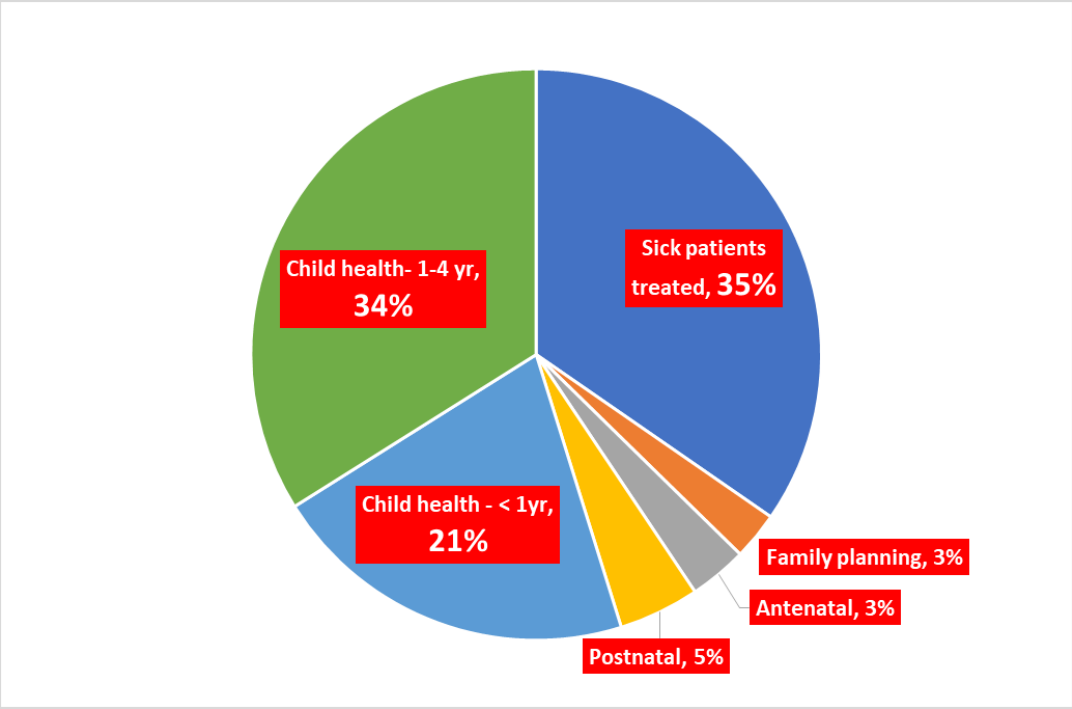


Figure 13: PHN home visits (as a percentage)

Percentage of Low Birth Weight: Percentage of having a low birth weight (<2500g) baby (per 100 live births): **7.4**

Percentage of LBW =	Number of Low Birth Weight babies (<2500 gm) (243) / Total number of live births (3,280)	X 100

Methodological/System Issues:

- Data for 2019 has been sourced from the KHIS & MS1
- Births with unrecorded outcomes were counted as live births.
- Strengthened and timely reported would contribute to more accurate figures.

Malnourished children: Percentage of children (aged <5 years) classified as malnourished or severely malnourished in the MS1 Health Facility Monthly Reporting Form: **2.8**

Percentage of Malnourished Children =	Total number of malnourished children <5 years (453) / Total population of children (<5 years) (15,995)	X 100

Methodological/System Issues:

- 2019 Projected population is used as base population.
- Data for 2019 has been sourced from the MS1
- Strengthened and timely reported would contribute to more accurate figures.

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

District	No.
Central	37
Linnix	7
Northern	118
South Eastern	17
South Western	41
Tarawa & Banaba	233
Total	**453**

Source: MS1 as of 31.12.2019

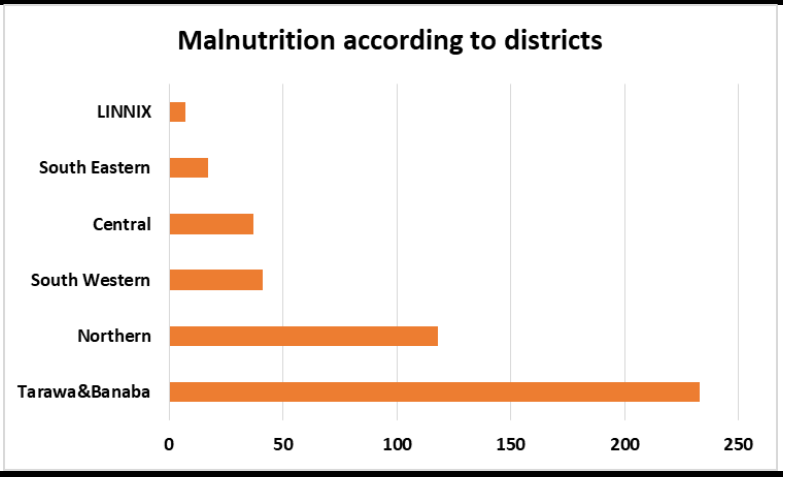


Figure 14: Malnutrition among <5yrs according to districts

Table 30: Malnutrition among <5yr children

Island	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
TUC	8	8	9	3	3	11	7	15	14	11	8	1	98
Tarawa North	6	15		3	3	8	7	5	13	30	4	1	95
Abaiang	18	2	6	2	3	9	2	24	1	3	4	3	77
BTC	10	1	1	1	2			7	10	3	4	1	40
Marakei	8	1	3		4	1	3	2	1			2	25
Onotoa	17	1	2	2		1						2	25
Makin		1			2	2	1	3	2		1	1	13
Kuria	2				5	2		1	1				11
Aranuka	4	1	2	1		1					1	1	11
Beru	6					2			1				9
Tab North			1	2		1				2	1	1	8
Abemama					1	1	2	1	2			1	8
Maiana					1	1	2	1	1	1			7
Nikunau		1	1	1					1	1	1		6
Nonouti	4						1					1	6
Kiritimati								1		2		1	4
Butaritari	1							1		1			3
Tab South											1	1	2
Teraina(Washington)												2	2
Arorae				1	1								2
Tabuaeran(Fanning)										1			1
Grand Total	84	31	25	16	25	40	25	61	47	55	25	19	453

Source: MS1 as of 31.12.2019

Contraceptive use: Total number of contraceptive contacts (all forms) seen at health facilities in one year (per 1,000 population): **108.1**

Contraceptive contacts (all forms) seen at health facilities =	Contraceptive contacts (all forms) seen at health facilities (3,367) Women Age 15 – 49 yrs (31,149)	X 1,000

Methodological/System Issues:

- 2019 projected population is used as base population.
- Data for 2019 has been sourced from the MS1
- All forms of new client and restarts, excluding male condoms (female condom included)
- Strengthened and timely reporting would contribute to more accurate figures.

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	19	15	18	19	22	24	17	18	13	17	15	14	**211**
	New clients	2	2	3	4	2	1	1	2	4	2	2	3	**28**
	Restart	4	1	1		1	1	0	0	0	0	0	1	**9**
	Discontinuers	3		1		2	5	1	1	0	0	3	0	**16**
	Lost contact							0	2	0	1	0	0	**3**
	Continuers at end of month	20	18	17	24	23	21	15	19	16	16	14	20	**223**
Micro-gynon	Continuers from last month	72	62	43	33	37	51	46	54	56	70	40	44	**608**
	New clients	7	5	6	6	8	12	4	7	7	4	2	12	**80**
	Restart		3		3	4	2	2	1	3	1	10	1	**30**
	Discontinuers	18	6	9		4	11	1	3	1	11	3	5	**72**
	Lost contact				0		2	0	3	0	0	0	0	**5**
	Continuers at end of month	59	64	35	39	41	53	45	58	63	60	50	51	**618**
Depo Provera	Continuers from last month	1365	1226	1452	1295	1342	1252	1525	1383	1165	1327	1322	1235	**15889**
	New clients	115	106	104	104	111	105	92	115	82	121	78	61	**1194**
	Restart	64	65	33	44	39	41	43	45	32	32	43	25	**506**
	Discontinuers	226	87	104	77	102	96	131	131	91	85	102	116	**1348**
	Lost contact	61		3	1	44	1	62	25	7	8	5	74	**291**
	Continuers at end of month	1277	1263	1466	1344	1292	1263	1438	1331	1168	1360	1328	1138	**15668**
Condoms for male		332	327	262	291	318	292	16940	7814	75	424	342	378	**27795**
Condoms for female			10			1	3	435	217	18	0	2	0	**686**
Ovulation		18	31	17	15	16	10	10	15	9	12	17	10	**180**
IUCD	Inserted this month						2	0	0	9	1	2	0	**14**
	Removed this month				3		1	0	0	3	0	1	0	**8**
Jedell	Inserted this month	25	44	35	36	34	69	47	63	37	65	35	46	**536**
	Removed this month	23	48	30	41	41	29	25	72	19	37	28	27	**420**
Vasectomy		1			0			1	2	1	0	0	1	**6**
Tubectomy		14	9	11	11	18		3	20	8	4	0	0	**98**

Source: MS1 as of 31.12.2019

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: **84.5**

Measles Coverage =	Number of children aged <1 years receiving the MCV1 in a year (2,771) / Total number of children aged <1 years (3,278)	X 100

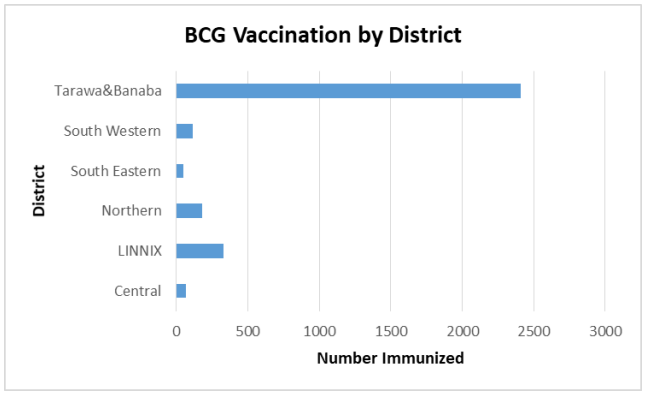
Methodological/System Issues:

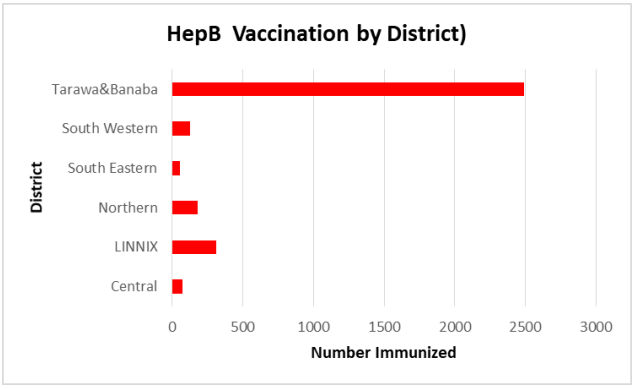
- 2019 projected population is used as base population.
- Data for 2019 has been sourced from the MS1
- Strengthened and timely reporting would contribute to more accurate figures.

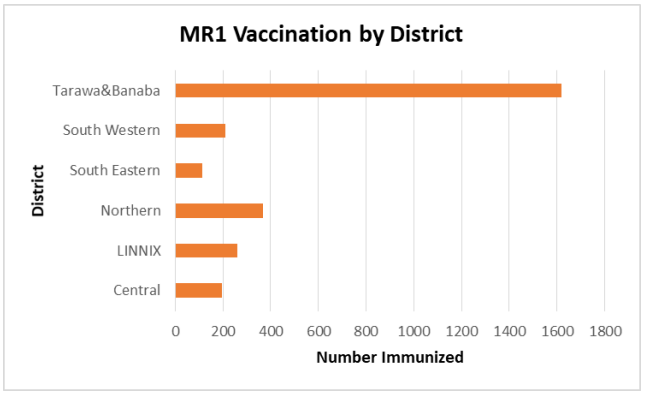
Table 32: Immunization Overview (Children <1yr) according to districts

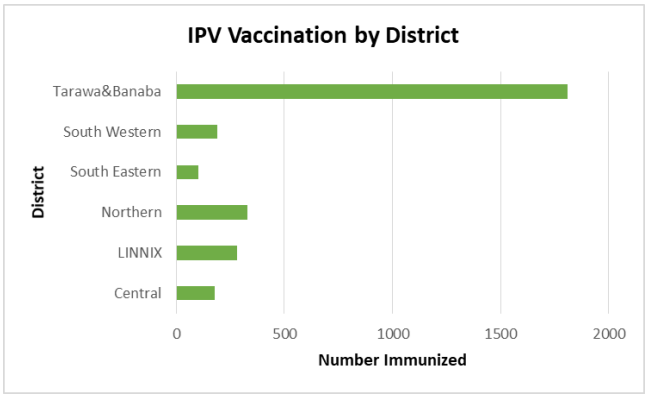
Vaccine type	District						Grand Total
	Central	Linnix	Northern	South Eastern	South Western	Tarawa & Banaba	
BCG	68	330	178	49	116	2411	**3152**
Failed BCG (no scar)	2	5	2	3	2	16	**30**
HepB (<24 hrs)	72	309	181	53	124	2489	**3228**
HepB (>=24 hrs)	2	23	5	2	6	12	**50**
IPV	177	283	327	103	188	1812	**2890**
MR1	197	262	369	114	210	1619	**2771**
OPV1	190	282	282	87	163	1994	**2998**
OPV2	184	269	333	104	178	1865	**2933**
OPV3	183	282	346	112	177	1809	**2909**
PENTAVALENT1	183	291	285	92	181	2003	**3035**
PENTAVALENT2	205	281	333	102	195	1874	**2990**
PENTAVALENT3	192	285	357	115	197	1819	**2965**
PNEUMOCCOCAL1	181	289	291	95	178	1992	**3026**
PNEUMOCCOCAL2	189	284	332	102	191	1875	**2973**
PNEUMOCCOCAL3	187	298	345	111	198	1818	**2957**
ROTA1	175	270	284	88	172	1969	**2958**
ROTA2	180	276	314	97	189	1838	**2894**
Grand Total	2567	4319	4564	1429	2665	29215	**44759**

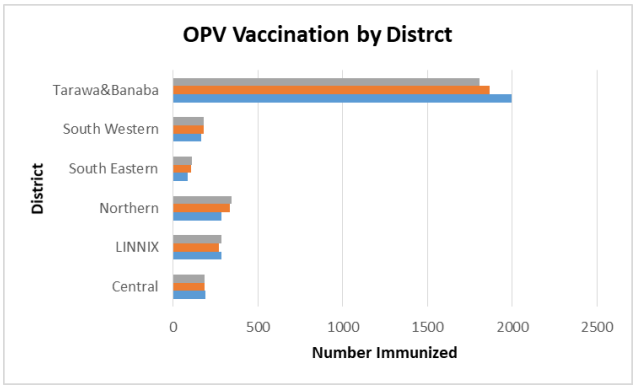
Sources: KHIS and MS1 as of 31.12.2019

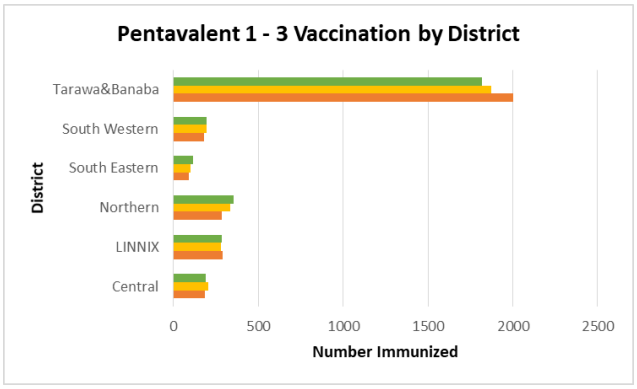


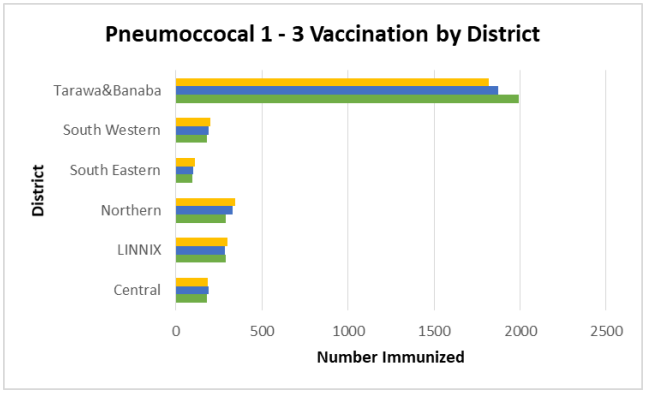












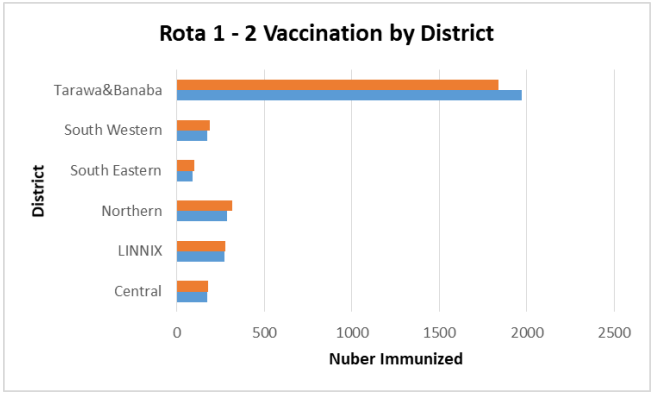


Figure 15: Immunization vaccination (Children <1yr): district breakdowns

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

Vaccine type	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
BCG	303	264	250	247	275	242	254	270	226	243	257	321	**3152**
Failed BCG (no scar)	4	2		2	1	2	2	12	0	1	4	0	**30**
HepB (<24 hrs)	307	258	251	248	271	247	246	265	224	241	255	325	**3138**
HepB (>=24 hrs)	6	8	2	2	5	3	0	9	5	2	4	4	**50**
IPV	276	231	267	255	245	266	202	256	243	289	192	168	**2890**
MR1	226	240	211	224	277	216	182	180	308	259	249	199	**2771**
OPV1	301	284	245	265	241	261	239	267	276	237	215	167	**2998**
OPV2	317	266	268	251	254	214	248	241	283	226	208	157	**2933**
OPV3	285	250	262	257	260	266	206	252	244	280	189	158	**2909**
PENTAVALENT1	295	290	252	266	248	270	241	279	266	251	220	157	**3035**
PENTAVALENT2	301	276	268	259	252	204	265	250	285	251	218	161	**2990**
PENTAVALENT3	297	244	284	267	263	255	205	253	240	291	201	165	**2965**
PNEUMOCCOCAL1	292	287	256	262	248	267	247	277	258	260	216	156	**3026**
PNEUMOCCOCAL2	305	276	271	262	245	215	258	235	285	244	210	167	**2973**
PNEUMOCCOCAL3	291	241	284	259	267	251	205	253	244	289	204	169	**2957**
ROTA1	295	285	254	257	244	265	238	276	262	239	182	161	**2958**
ROTA2	299	274	268	257	246	215	255	250	278	231	181	140	**2894**

Sources: KHIS and MS1 as of 31.12.2019

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

Vaccine type	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
DPT4 (All class 1)	0	209	20	72	19	137	156	64	390	97	380	110	**1654**
MR2 (All class 1)	0	110	69	89	67	38	301	20	247	43	620	348	**1952**
TT5 (Form 1 girls)							18		27				**45**

Source: MS1 as of 31.12.2019

Table 35: Immunization Overview (>15yrs)

Vaccine type	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
TT6 (1st pregnancy)							24	70	109				**203**
TT7 (2nd pregnancy)							26	34	44				**104**
TT8 (subsequent pregnancy)							42	34	91				**167**

Source: MS1 as of 31.12.2019

Table 36: Immunization Overview (Others)

	Category	Sex	Month												Total
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Vit A (prophylaxis)	6 - <= 12 mths		55	114	353	215	199	13	35	143	1	8	16	4	**1156**
	1 - <= 5 yr		285	604	2126	970	1752	139	437	137	27	136	185	194	**6992**
	Mothers P/partum														**0**
Deworming	1 yr	Male	62	47	341	200	595	29	84	118	0	22	55	47	**1600**
		Female	57	13	410	169	455	21	75	256	0	14	18	59	**1547**
	2 - 5 yr	Male	63	282	821	579	758	73	116	426	0	52	91	184	**3445**
		Female	91	230	871	589	755	72	117	473	0	46	85	182	**3511**
	6 - 14 yr	Male	103	585	2548	1204	1413	104	33	348	35	75	116	413	**6977**
		Female	65	573	2637	1074	1549	88	32	350	30	70	94	399	**6961**
	15 - 45 yr	Male		262	233	16	96	0	2	0	0	0	0	16	**625**
		Female	303	1172	3971	2215	4804	109	1	2277	27	54	125	568	**15626**
Exclusive breastfeeding	0 - <= 6 mths		925	791	718	596	685	601	884	824	806	736	698	709	**8973**

Source: MS1 as of 31.12.2019

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	176	152	159	157	162	138	148	175	130	139	152	202	**1890**
Vaccinated >24hrs after birth													
Not given	5	2	3	6	12	14	13	8	2	6	17	7	**95**
Total	181	154	162	163	174	152	161	183	132	145	169	209	**1985**
BCG													
Given	176	152	159	157	162	138	148	175	130	139	152	202	**1890**
Not given	5	2	3	6	12	14	13	8	2	6	17	7	**95**
Total	181	154	162	163	174	152	161	183	132	145	169	209	**1985**

Source: KHIS as of 31.12.2019

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	1537	28	**1565**
Caesarean Section	412	8	**420**
Forceps	0	0	**0**
Other	0	0	**0**
Grand Total	**1949**	**36**	**1985**

Source: KHIS as of 31.12.2019

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

Type of delivery	Outcome		Sub Total
	Live birth	Stillbirth	
Vertex	1932	35	**1967**
Breech	17	0	**17**
Transverse		1	**1**
Grand Total	**1949**	**36**	**1985**

Source: KHIS as of 31.12.2018

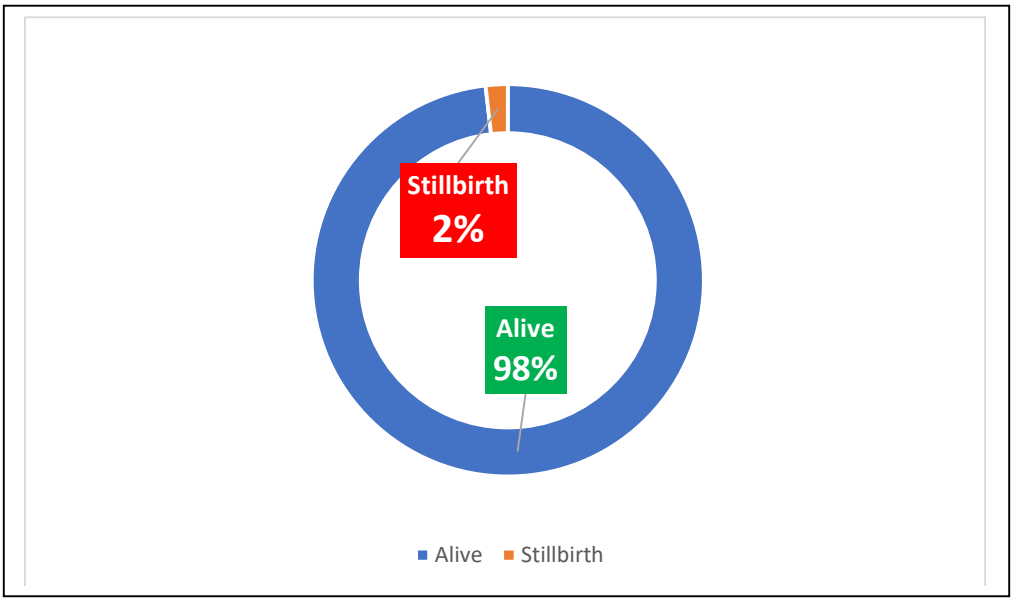


Figure 16: Birth outcome at TCH

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	1,331
Stillbirth	13
DIU	10
Outcome unrecorded	
Grand Total	**1,354**

Data extracted from MS1 as at 31.12.2019

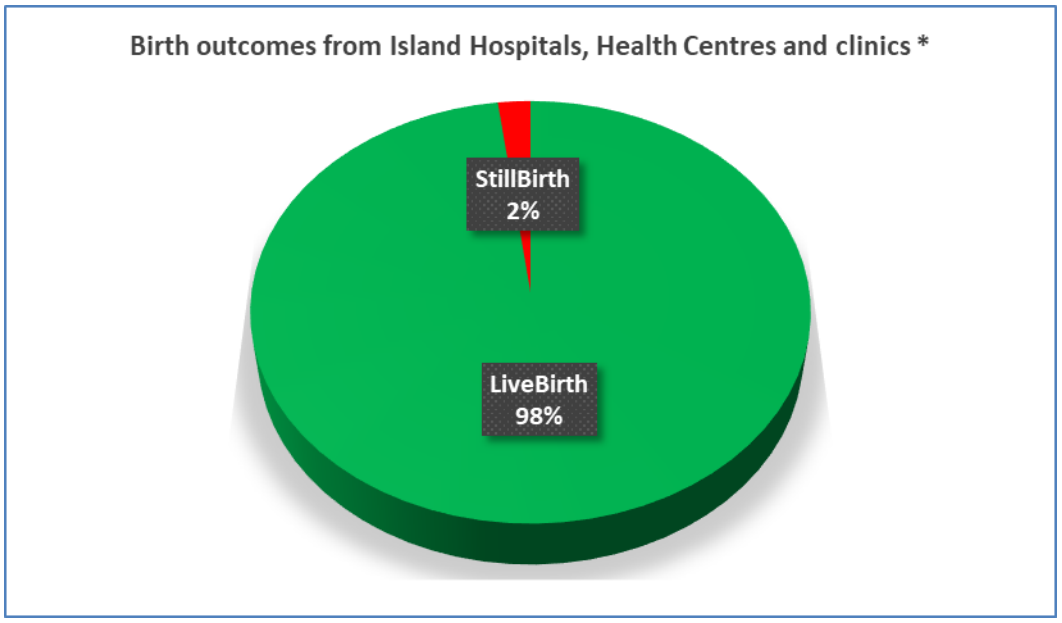


Figure 17: Birth outcomes reported from island Health Centres and clinics *excluding TCH

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

	Total No. of Births		
	HC/Clinics	Hospital	Sub Total
Abaiang	71		**71**
Abemama	37		**37**
Aranuka	11		**11**
Arorae	4		**4**
Banaba	1		**1**
Beru	25		**25**
BTC	22	416	**438**
Butaritari	56		**56**
Kiritimati	15	270	**285**
Kuria	11		**11**
Maiana	26		**26**
Makin	16		**16**
Marakei	48		**48**
Nikunau	21		**21**
Nonouti	35		**35**
Onotoa	22		**22**
Tab North	6	64	**70**
Tab South	3		**3**
Tabuaeran(Fanning)	33		**33**
Tamana	6		**6**
Tarawa North	61		**61**
Teraina(Washington)	37		**37**
TUC	37		**37**
Grand Total	**604**	**750**	**1354**

Source: MS1 as at 31.12.2019

12. Birth information: District Breakdown

Table 42: Births according to districts*

District	No. of Births
Central	85
Linnix	355
Northern	191
South Eastern	56
South Western	130
Tarawa & Banaba	2522
Grand Total	**3,339**

Source: KHIS & MS1 as at 31.12.2019

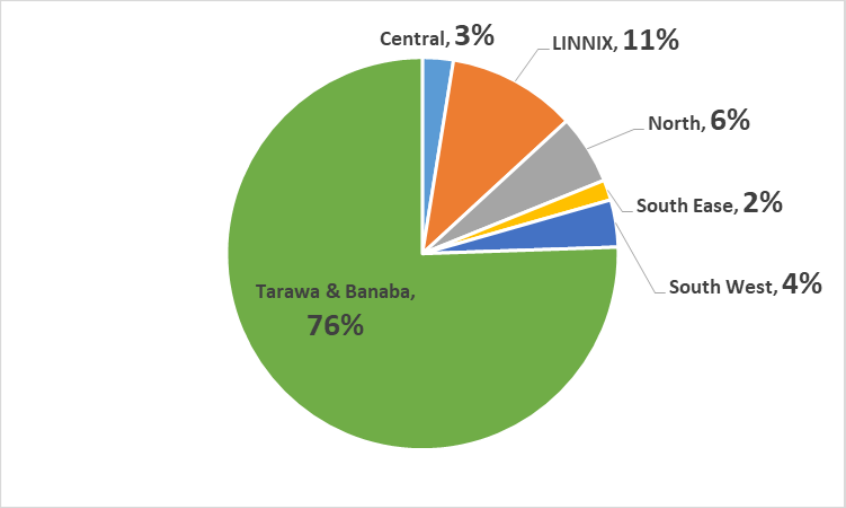


Figure 18: Births according to districts

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): **0.2**

Adolescent birth rate (10-14 years) =	Total number of births in age group 10-14 years for the year (1) / Total population of girls (10-14 years) (5,814)	X 1,000

Methodological/System Issues:

- 2019 Projected population is used as base population.
- Data for 2019 has been sourced from the KHIS & MS1

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): **44.0**

Adolescent birth rate (15-19 years) =	Total number of births in age group 15-19 years for the year (251) / Total population of girls (15-19 years) (5,706)	X 1,000

Methodological/System Issues:

- 2019 Projected population is used as base population.
- Data for 2019 has been sourced from the KHIS & MS1

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

Outcome	No.
Live birth	3,280
Stillbirth	59
Grand Total	**3,339**

Sources: KHIS & MS1 as at 31.12.2019

Figure 19: Country birth outcomes

14. Non- Communicable Disease (NCD) burden

Diabetes: Occasion of service of diabetic cases to health facilities, confirmed or suspected: **112.0**

% of Diabetes =	Number of people presenting to health facilities with Diabetes (13,735) / Total population (122,604)	X 1,000

Methodological/System Issues:

- Data for 2019 has been sourced from the MS1 and is likely to be affected by under-counting and/or multiple counting.
- 1st and revisits for diabetic cases over the total population
- Strengthened and timely reporting of MS1 would contribute to more accurate figures

Hypertension: Occasion of service of hypertension cases to health facilities, confirmed or suspected: **99.5**

% of Hypertension =	Number of people presenting to health facilities with Hypertension (12,200) / Total population (122,604)	X 1,000

Methodological/System Issues:

- Data for 2019 has been sourced from the MS1 and is likely to be affected by under-counting and/or multiple counting.
- 1st and revisits for hypertension cases over the total population
- Strengthened and timely reporting of MS1 would contribute to more accurate figures

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 for male**	981	1010	910	956	955	916	972	950	968	1071	1011	1039	**1039**
	Patients registered for female	1110	1143	1076	1155	1206	1122	1158	1127	1175	1295	1268	1236	**1236**
	1st visit	151	55	52	46	74	72	106	100	54	83	53	52	**898**
	revisits	1060	855	806	932	1079	900	931	917	982	1055	940	845	**11302**
Diabetes	**Patients registered for male**	904	878	815	920	871	921	875	877	884	908	881	920	**920**
	Patients registered for female	1163	1224	1189	1309	1365	1307	1299	1294	1339	1435	1381	1354	**1354**
	1st visit	143	77	59	34	87	57	41	53	50	77	42	56	**776**
	revisits	1015	965	972	1081	1154	1060	1175	1128	1117	1205	1083	1004	**12959**
Mental illnesses	**Patients registered for male**	40	42	45	48	50	49	54	36	49	43	42	46	**46**
	Patients registered for female	24	30	34	34	39	35	46	34	38	33	33	33	**33**
	1st visit	13	7	5		11	1	1	7	6	1	4	0	**56**
	revisits	163	134	28	22	33	40	50	29	25	18	23	20	**585**

Source: MS1 as at 31.12.2019

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): **239.3**

Tuberculosis case notification rate =	Number of bacteriologically confirmed (new & relapse) TB cases (416) / Total Population (122,604)	X 100,000

Methodological/System Issues:

- 2019 Projected population is used as the base population
- Data for 2019 has been sourced form MS1 (from TB reports only)
- Strengthened and timely reporting of MS1 would contribute to more accurate figures

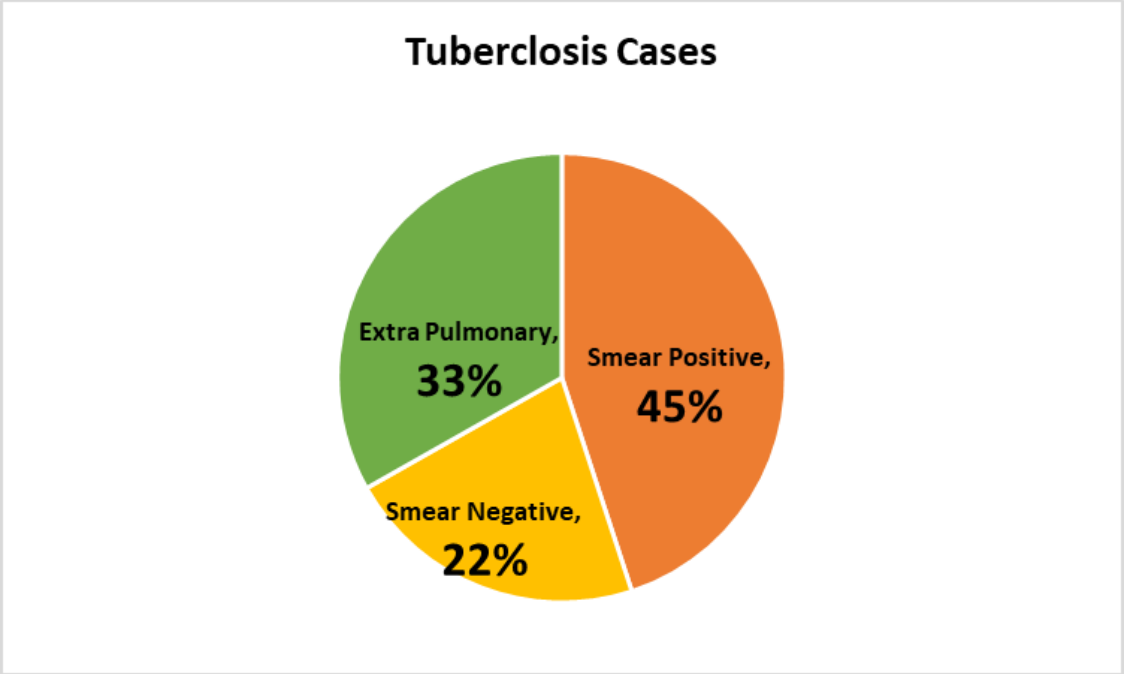


Figure 20: Tuberculosis case notifications (new & relapsed) for 2019

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: **81.0**

Tuberculosis treatment success rate =	Treatment completed + cured TB cases (332) / Number of (new + relapsed) TB cases registered for the year (410)	X 100

Methodological/System Issues:

- There is a one year lag in reporting for TB treatment success rate
- Data on treatment completed/Cured TB Cases (for 2019) were sourced form National Tb control program
- Data for 2019 has been sourced from the MS1 (from TB reports only)
- Strengthened and timely reporting of MS1 would contribute to more accurate figures.

Table 45: Tuberculosis Reporting

Type	Category	Month												Total
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Smear Positive	New Cases	12	19	22	14	15	11	18	20	13	8	14	12	**178**
	Retreatment							2	2	2		2	1	**9**
	Defaulted													
	Fail													
Smear Negative	New Cases	8	10	5	11	8	8	8	8	10	1	4	8	**89**
	Retreatment				1							1		**2**
Extra Pulmonary	New Cases	7	6	4	17	18	14	9	9	19	12	10	8	**133**
	Retreatment				1				1	2			1	**5**

Source: MS1 as at 31.12.2019

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	148	149	153	151	145	141	141	137	134	91	60	60	**1510**
		New clients	1	7	3	7	3	4	4	3	4	4	2	2	**44**
		Restart			1							2	1	2	**6**
		Discontinuers		2			6	6	6	4	3				**27**
		Lost contact		1	2	2						25	2	1	**33**
		Continuers at end of month	149	153	151	145	141	137	137	134	135	60	58	60	**1460**
	Child	Continuers from last month	24	24	23	20	19	19	19	20	24	20	16	16	**244**
		New clients					1	2	2	3	2	0	1	0	**11**
		Restart										1	0	0	**1**
		Discontinuers		1			1								**2**
		Lost contact			1							3	0	3	**7**
		Continuers at end of month	24	23	20	19	19	20	20	23	26	16	17	13	**240**
PB	Adult	Continuers from last month	93	95	94	95	88	95	95	90	96	59	29	29	**958**
		New clients	10	7	2	6	6	2	2	4	6	3	0	2	**50**
		Restart			1							3	0	1	**5**
		Discontinuers	3	8				3	3	5	2				**24**
		Lost contact										31	0	1	**32**
		Continuers at end of month	95	94	95	88	95	90	90	91	100	29	27	27	**921**
	Child	Continuers from last month	54	58	55	57	53	55	55	56	60	23	14	14	**554**
		New clients	6	1	3	1	1	3	3	3	3	1	0	2	**27**
		Restart										0	0	0	**0**
		Discontinuers	1	4				1	1		2				**9**
		Lost contact										10	0	2	**12**
		Continuers at end of month	58	55	152	53	55	56	56	59	61	14	13	12	**644**

Source: MS1 as at 31.12.2019

Births and Deaths trend 2015-2019

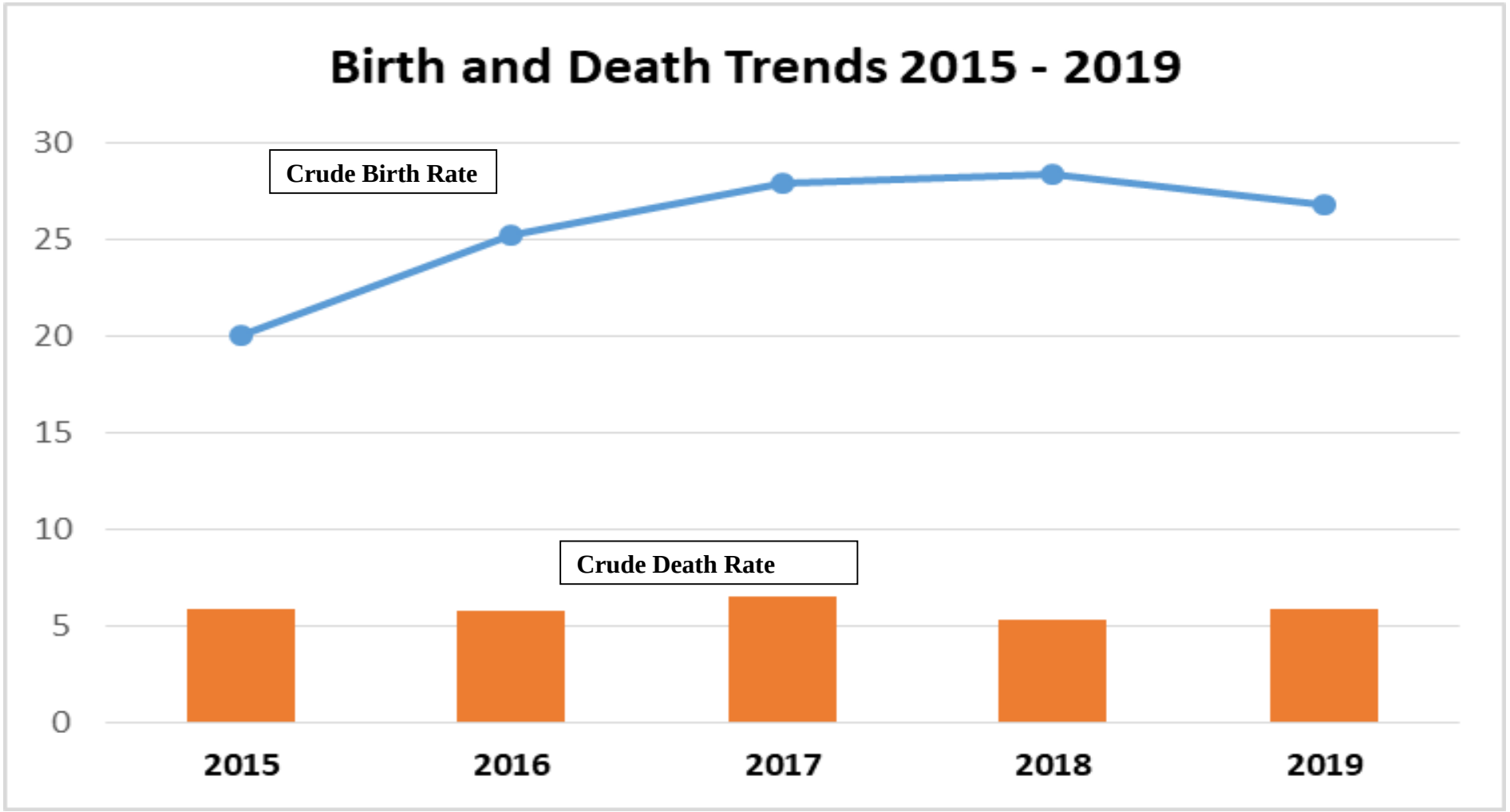


Figure 20: Births and deaths trend 2015 to 2019

Indicator tracker 2015 – 2018

Indicator Tracker	2015	2016	2017	2018	2019	Δ
Total Population	103,058	110,136	110,136	120,139	122,604	⇑
Crude Birth Rate	20	25.2	27.9	28.3	26.8	⇓
Crude Death Rate	5.9	5.8	6.5	5.3	5.9	⇑
Life Expectancy at Birth	75.1	68.9	66.6	69	66.5	⇓
Land Area (klm2)	811	726	726	726	74.8	⇑
Neonatal Mortality Rate	10.2	14	11.1	12.9	10.4	⇓
Infant Mortality Rate	32.4	32.6	26.4	28.3	29.3	⇑
Under-five Mortality Rate	59.1	52.4	44	36.2	47.9	⇑
Maternal Mortality Rate	193.6	179	32.6	117.7	91.5	⇑
Adult mortality rate from NCDs	45.9	43.4	55.9	54.8	54.0	⇓
Mortality rate from road traffic injuries	1.9	1.8	10.9	0.6	4.9	⇑
Adolescent birth rate for 10-14 years	3.4	0	1.8	0.4	0.2	⇓
Adolescent birth rate for 15-19 years	33.1	37	45.2	37.8	44.0	⇑
Contraceptive use	531.2	336	264.6	247.5	108.1	⇓
Access to antenatal care	5.4	3.8	4	4	4.6	⇑
Percentage of pregnant mothers received at least one home visit by PHN	15.2	15.2	10.4	9.3	9.4	⇑
Percentage of Low Birth Weight	6.2	5.6	7.2	7.2	7.4	⇑
Malnourished children <5 years	5.7	6.2	5	3.1	2.8	⇓
Tuberculosis case notification rate	421.1	470	353.2	224.7	339.3	⇑
Tuberculosis treatment success rate	79.7	90	88.9	91.4	81.0	⇓
Number of Leprosy cases (new and relapses)	162	241	200	165	144	⇓
Acute respiratory infection (ARI) in children treated at TCH	11.3	14.4	15.9	12	13.5	⇑
Children immunized against measles	89.2	82.9	92.2	81.4	84.5	⇑
Diabetes - Occasions of Service	129	150	162	120.3	112.0	⇓
Hypertension - Occasions of Service	123	145	147	113.5	99.5	⇓
Outpatient consultations per capita	5.2	4.9	4.8	4.4		⇓
Outpatient consultations per capita for Tungaru Central Hospital (TCH)	0.1	0.1	0.3	0.3	0.5	⇑
Tungaru Central Hospital (weekly patient discharges)	96.1	104.8	104.8	113.8	115	⇑
Tungaru Central Hospital (bed occupancy)	102.8	83.4	85.3	98.9	99.7	⇑
Tungaru Central Hospital (average length-of-stay)	9.5	7.2	6.5	7	6.9	⇓
Number of Hospital Beds per 1,000 population	1.7	1.9	1.9	1.7		⇓
Availability of Medical Officers	4.7	4.7	6	4.9	5.1	⇑
Population per Medical Officer	2,454	2,248	1,669	2,036.30	1,977.5	⇓
Availability of Dental Surgeons	0.6	0.5	0.5	0.5	0.6	⇔
Population per Dental Surgeon	17,176	18,356	18,356	20,023.20	17,514.9	⇓
Availability of Medical Assistants	3.8	3.2	3.7	3.5	3.9	⇑
Population per Medical Assistant	2,463	3,147	2,686	2,860.50	2,554.3	⇓
Availability of Nurses	20.2	31.8	34.8	31	29.4	⇓
Population per Nurse	495.5	315	287.6	323	339.4	⇑
Availability of Midwives	10.2	7	6.8	7.6	4.4	⇓
Population per Midwife	982	1,430	1,469	1,320.20	2,270.4	⇑

Number of Pharmacists available	5	5	5	5	⇔
Number of Physiotherapists available	3	3	3	3	⇔
Number of Hospitals	4	4	4	4	⇔
Number of Health Centers	21	22	22	22	⇔
Number of Village Clinics	81	82	84	85	⇑
Number of Hospital Beds	172	205	205	205	⇔

Monthly reports submitted in 2018

Island	Health Center	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Makin	MAKIN												
	ANRAWA												
	KIEBU												
Butaritari	BUTARITARI												
	KUMA												
	NAKIRORO												
	TEKANANUEA												
	TANIMAIAKI(Butaritari)												
	UKIANGANG												
	BIKATI												
	KEUEA												
Marakei	RAWANNAWI												
	TEKARAKAN												
	BAINUEA												
	TERAWARAWA												
	RAWEAI												
Abaiang	TABURAO												
	NUOTAEA												
	TANIAU												
	RIBONO												
	TEBUNGINAKO												
	KOINAWA												

	TANIMAIAKI(Abaiang)												
	UBWARANO												
	TUARABU												
Tarawa North	ABAOKORO												
	TEARINIBAI												
	BUARIKI (Tarawa.N)												
	TARATAI												
	TABITEUEA												
	NABEINA												
	TABONIBARA												
	NOTOUE												
	KAINABA	**NEW CLINIC**											
TUC	TCH-OPD												
	BONRIKI EAST												
	BUOTA(TUC)												
	BONRIKI												
	TEMWAIKU												
	BIK.E												
	BIK.W												
	EITA												
	AMBO												
	BANRAEABA												
	TEAORAEREKE												
	NANIKAI												
	BAIRIKI												

BTC	BETIO HOSP												
	TEMANOKU(BTC)												
	TAKORONGA												
	TEMAKIN												
Banaba	BANABA												
Maiana	TABONTEKEKE												
	TEKARANGA												
	BUBUTEI												
	TEBIKERAI												
	TANIMAEAO												
Kuria	KURIA												
	ONEKE												
Aranuka	ARANUKA												
	TAKAEANG												
	BAURUA												
Abemama	KARIATEBIKE												
	ABATIKU												
	TABIANG												
	TEKATIRIRAKE												
	BARETOA												
	KABANGAKI												
	TEBWANGA												
	MWANOKU	**NEW CLINIC**											
Nonouti	TEBOBONGA												
	TEMOTU												
	TEUABU												

	ABAMAKORO												
	MATABOOU												
	ROTIMWA												
	TABOIAKI												
	TEMANOKU(Nonouti)												
Tab North	SKH												
	UTIROA												
	TANAEANG												
	BUOTA(Tab.N)												
	TENATORUA												
	AIWA												
	TEKABUIBUI												
	KABUNA												
	TAUMA												
	TEKAMAN												
Tab South	BUARIKI(Tab.S)												
	TEWAI												
	TAKU												
Onotoa	BURAITAN												
	AIAKI												
	TABUARORAE												
	TEKATANA												
	OTOAE												
Beru	TEMARA												
	NAMON												
	AONNATI												

Nikunau	MWANRUNGA												
	MURITOA												
	NIKUMATANG												
Tamana	MOTOIA												
Arorae	TARIBO												
Kiritimati	LONDON HOSP												
	BANANA												
	POLAND												
	TABWAKEA												
	LONDON DISP												
Tabuaeran	PAELAU												
	NAPALI												
	ARAMARI												
Teraina	ARABATA												
Kanton	CANTON												
TCH	TCH-DIABETIC												
	KFHA												
	TCH-GYNAE												
	TCH-TB												
	TCH-ANC												
	TCH-Leprosy												
	TCH-IMCI												
	HEALTHY FAMILY												
	YOUTH FRIENDLY HEALTH SERVICE												
	RH												

	AHD												
	Anaieta Pharmacy												
	Prison												
Total Received		**120**	**119**	**117**	**120**	**121**	**121**	**121**	**119**	**121**	**121**	**121**	**120**
Total Non-received		**8**	**9**	**11**	**8**	**7**	**7**	**7**	**9**	**7**	**7**	**7**	**8**

Notes