



Kiribati Annual Health Bulletin 2015

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

Preface

The Kiribati Annual Health Bulletin is the main comprehensive report which gives health related information in Republic of Kiribati. For efficient and effective delivery of health care; up to date as well as accurate health information is vital for the decision makers. This bulletin also provides information needed for researchers, planners and others who are interested in health sector development.

The bulletin provides information on government health sector and presents information on four major areas, morbidity, mortality, resource availability and provision of services. The information has been revised and brought up to date to reflect, as far as possible, the situation during the year 2015.

I wish to place on record my sincere appreciation to all officials who extended their energy and wisdom generously in providing data pertaining to their respective institutions and programs.

Efforts in data compilation; which was the major task in preparation of this publication; was undertaken by the staff of Health Information Unit of Ministry of Health and Medical Services and was guided by the Consultant on Health Information Systems from the World Health Organization, for which they deserve a very special note of appreciation.

The Medical Records Department of the Ministry of Health and Medical Services is also acknowledged for the great support extended in publishing the Kiribati Annual Health Bulletin 2015.

Dr. Teatao Tiira
Permanent Secretary
Ministry of Health and Medical Services

Table of Contents

	Page
Preface	1
Table of Contents	2
List of Figures	5
Acronyms & Abbreviations	6
Key Health Related Indicators at a glance	7
1. General Information	8
Country Background.....	8
Administrative divisions.....	9
Ethnic groups.....	9
Language.....	9
Religion.....	9
Health situation and trends.....	9
Organization of the Health Sector.....	10
Primary Health Care.....	10
Hospital Care.....	10
Private Health Sector.....	11
Kiribati health system.....	11
2. Key Health Related Indicators with definitions	12
Table 1 Key Health Related Indicators with definitions.....	12
3. Demographic Information	15
4. Health Resources	16
Table 2 Health institutions in Kiribati.....	16
Table 3 Bed strength and location of leading hospitals.....	16
Table 4 In-patient days, Bed days and Bed occupancy rates for TCH.....	17
5. Country Health Manpower	18
Table 5 Health manpower for Kiribati health institutions.....	20
Table 6 Location and staff availability of Health Centers and Village Clinics.....	21
6. Morbidity and mortality statistics for Tungaru Central Hospital (TCH)	23
Table 7 Basic patient statistics for TCH.....	24
Table 8 Indoor Morbidity Statistics for TCH: according to Age, Sex & Ward category.....	24
Table 9 Inpatient Morbidity Statistics for Health Centers and Clinics.....	25
Table 10 Outbreak reporting.....	25

	Page
Table 11 Outpatient Morbidity Statistics for Health Centers and Clinics.....	26
Table 12 Outpatient Morbidity Statistics according to districts.....	27
Table 13 Referrals to Hospitals from Health Centers and Clinics.....	28
Table 14 Leading Causes of Hospitalization for TCH.....	29
Table 15 Indoor Mortality Statistics for TCH: according to Age, Sex & Ward category.....	31
Table 16 Leading Causes of Hospital Inpatient Deaths for TCH (Categorized list).....	33
Table 17 Leading Causes of Hospital Inpatient Deaths for TCH (Expanded list)	34
7. Country mortality statistics.....	36
Table 18 Neonatal deaths according to districts.....	36
Table 19 Infant deaths according to districts.....	37
Table 20 Under 5 year child deaths according to districts.....	38
Table 21 Maternal deaths for Kiribati.....	39
Table 22 Maternal deaths according to districts.....	39
Table 23 Adult deaths due to NCDs according to districts.....	40
Table 24 Leading Causes of Death for Kiribati (Categorized list).....	41
Table 25 Leading Causes of Death for Kiribati (Expanded list).....	43
Table 26 Deaths due to cancer for Kiribati.....	47
Table 27 Ill-defined causes of death for Kiribati.....	48
8. Maternal & Child Health and Family Planning Services.....	49
Table 28 Visits to Island Health Centers and Clinics.....	50
Table 29 PHN Home Visits.....	52
Table 30 Malnutrition among <5yr children according to districts.....	53
Table 31 Malnutrition among <5yr children.....	54
Table 32 Family Planning services.....	56
9. Immunization Services.....	57
Table 33 Immunization Overview (Children <1yr) according to districts.....	58
Table 34 Immunization Overview (Children <1yr).....	60
Table 35 Immunization Overview (Children 1-5yrs)	61
Table 36 Immunization Overview (Children 6-14yrs)	61
Table 37 Immunization Overview (Children >15yrs)	62
Table 38 Immunization Overview for TCH (Children <1yr)	62
10. Birth information: TCH.....	63
Table 39 Birth outcomes according to mode of delivery at TCH.....	63
Table 40 Births outcomes according to type of delivery at TCH.....	63

	Page
11. Birth information: Health Centers and Clinics.....	64
Table 41 Birth outcomes reported from island Health Centers and clinics.....	64
Table 42 Deliveries at Health Centers and clinics.....	65
12. Birth information: District Breakdown.....	65
Table 43 Births according to districts.....	65
13. Country birth information.....	66
Table 44 Births reported from Hospitals and Health Centers.....	66
14. Non Communicable Disease burden.....	67
Table 45 Non Communicable Disease burden in Island Health Centers & Village Clinics....	68
15. Tuberculosis burden.....	69
Table 46 Tuberculosis Reporting.....	70
16. Leprosy burden.....	71
Table 47 Leprosy Reporting.....	71
Notes.....	72

List of Figures

Figure	Description	Page
Figure 1	Map of Republic of Kiribati displaying the groups of islands.....	8
Figure 2	Leading Causes of Hospitalization for TCH.....	30
Figure 3	Indoor mortality statistics according to wards: TCH.....	32
Figure 4	Neonatal deaths according to districts.....	36
Figure 5	Infant deaths according to districts.....	37
Figure 6	Under 5 year deaths according to districts.....	38
Figure 7	Maternal deaths according to districts.....	39
Figure 8	Adult deaths due to NCDs according to districts.....	40
Figure 9	Leading Causes of Death for Kiribati.....	42
Figure 10	Mortality from cancers.....	47
Figure 11	Ill-defined cause(s) of deaths as percentage of total deaths.....	48
Figure 12	PHN home visits (as a percentage)	52
Figure 13	Malnutrition among <5yrs according to districts.....	53
Figure 14	Immunization coverage (Children <1yr) district breakdowns.....	59
Figure 15	Birth outcomes at TCH.....	63
Figure 16	Birth outcomes reported from island Health Centers and clinics.....	64
Figure 17	Births according to districts.....	65
Figure 18	Country birth outcomes.....	66
Figure 19	Tuberculosis case notifications (new & relapsed)	69

Acronyms & Abbreviations

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

Key Health Related Indicators at a glance

Indicator		Year	No.	Rate	Source
Demographic					
Total population		2010	103,058		National Statistics Office
Crude Birth Rate (per 1,000 population)		2015	2,066	20.0	KHIS & MS1
Crude Death Rate (per 1,000 population)		2015	612	5.9	
Life expectancy at birth (years)	Male	2011	70	75.1	Annual Report, MHMS
	Female	2011	80.1		
Land area (Sq. km)		2014	811		World Bank
Health and Nutrition					
Neonatal Mortality Rate (per 1,000 live births)		2015	21	10.2	KHIS & MS1
Infant Mortality Rate (per 1,000 live births)		2015	67	32.4	
Under-five Mortality Rate (per 1,000 live births)		2015	122	59.1	
Maternal Mortality Rate (per 100,000 live births)		2015	4	193.6	
Adult mortality rate from NCDs (30-69 years) (per 10,000 population 30-69 years)		2015	156	45.9	
Mortality rate from road traffic injuries (per 100,000 population)		2015	2	0.2	
Adolescent birth rate for 10-14 years (per 10,000 girls in age group 10-14 years)		2015	2	3.4	
Adolescent birth rate for 15-19 years (per 10,000 girls in age group 15-19 years)		2015	177	331.2	
Contraceptive contacts (all forms) seen at health facilities per 1,000 population		2015	54,747	531.2	MS1
Percentage of pregnant mothers received at least one home visit by PHN		2015	320	15.2	
Access to antenatal care		2015	11,272	5.4	
Percentage of Low Birth Weight		2015	129	6.2	KHIS & MS1
Malnourished children <5 years		2015	795	5.7	MS1
Tuberculosis case notification rate (all forms, per 100,000 population)		2014	434	421.1	
TB treatment success rate		2014	346	79.7	MS1 & TB control program
Number of Leprosy cases (new and relapses)		2015	162		MS1
Acute respiratory infection (ARI) in children treated at Tungaru Central Hospital (TCH)		2015	185	11.3	KHIS
Children immunized against measles		2015	2,671	89.2	MS1
Percentage of Diabetes		2015	14,457	49.7	KHIS & MS1
Percentage of Hypertension		2015	13,640	46.9	
Outpatient consultations per capita		2015	533,358	5.2	MS1
Outpatient consultations per capita for TCH		2015	10,454	0.1	KHIS
Tungaru Central Hospital (patient discharges/week)		2015	4,496	96.1	
Tungaru Central Hospital (bed occupancy)		2015		102.8	
Tungaru Central Hospital (average length-of-stay)		2015		9.5	
Health Resources					
Number of Hospital Beds per 1,000 population		2015	172	1.7	KHIS
Availability of Medical Officers		2015	42	4.7	MHMS Accounts Division
Population per Medical Officer		2015		2,453.8	
Availability of Dental Surgeons		2015	6	0.6	
Population per Dental Surgeon		2015		17,176.3	
Availability of Medical Assistants		2015	39	3.8	
Population per Medical Assistant		2015		2,642.5	
Availability of Nurses		2015	208	20.2	
Population per Nurse		2015		495.5	
Availability of Midwives		2015	105	10.2	
Population per Midwife		2015		981.5	
Number of Pharmacists available		2015	5		
Number of Physiotherapists available		2015	3		
Number of Hospitals		2015	4		KHIS
Number of Health Centers		2015	21		MS1
Number of Village Clinics		2015	81		
Number of Hospital Beds		2015	172		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. They have a total land area of 811 square kilometers and are dispersed over 3.5 million square kilometers. Their spread straddles the equator and the International Date Line (Figure 1).

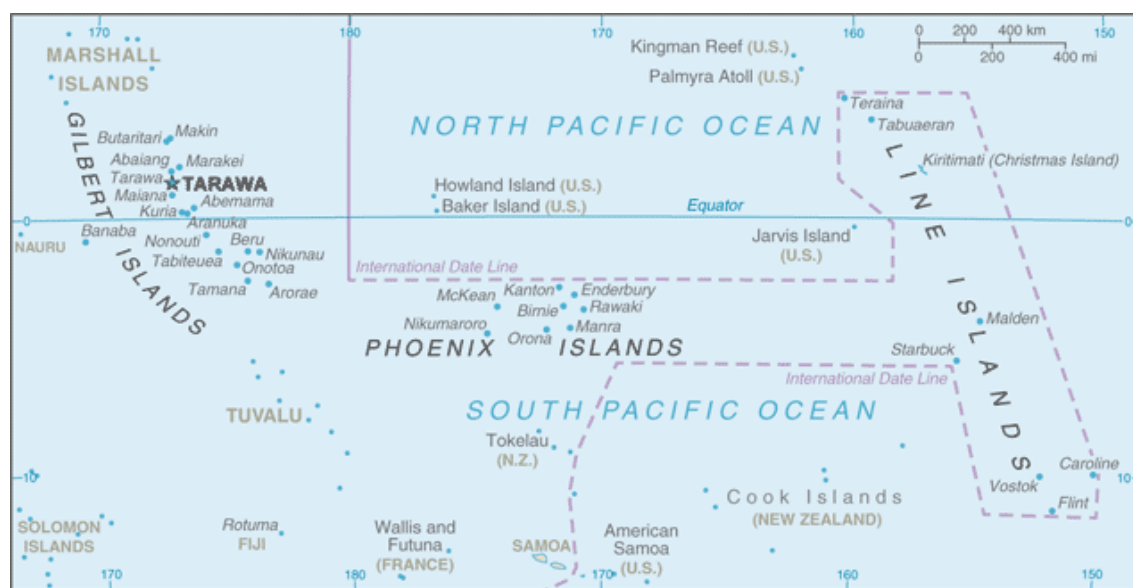


Figure 1: Map of Republic of Kiribati displaying the groups of islands

According to 2010 population and housing census the total population of Kiribati is 103,058 (latest official figure). The vast majority (>90%) of people inhabit the Gilbert Islands, with more than 33% populating an area of about 16 km² on South Tarawa. Until recently, the people of Kiribati mostly lived in villages with populations between 50 and 3,000 on the outer islands. Most houses are made of materials obtained from coconut and pandanus trees. Frequent droughts and infertile soil hinder reliable large-scale agriculture, so the islanders have largely turned to the sea for livelihood and sustenance. Most are outrigger sailors and fishermen. Copra plantations serve as a second source of employment. In recent years large numbers of citizens have moved to the more urban island capital of Tarawa. Increasing urbanisation has raised the population of South Tarawa to 50,182.

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 23 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 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 23 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. Inter-marriage among all ancestral groups, however, has led to a population reasonably homogeneous in appearance and traditions.

Language

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

Religion

Christianity is the major religion, having been introduced by missionaries in the 19th century. The population is predominantly Roman Catholic (56%), although a substantial portion of the population is Kiribati Uniting Church (34%). Many other Protestant denominations, including more evangelical types, are also represented. The Bahá'í faith religion also exists in Kiribati (2.2%), along with Jehovah's Witnesses and The Church of Jesus Christ of Latter-Day Saints (LDS Church) (4.7%).

Health situation and trends

While the country only has a total land area of 811 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, communicable diseases remain a significant disease burden in Kiribati. Overall, life expectancy in Kiribati is low for the Pacific region. In 2011, life expectancy at birth was estimated at 70 for males and 80.1 for females (Ministry of Health and Medical Services, 2011).

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).

Primary Health Care

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

The smallest and lower most facility based primary care service at grass root level is named as village clinics and are manned by a specially trained Public Health Nurse (PHN). They are able to deliver a minimum package of curative and preventive health care. Village clinics are situated in each village and number at present stand at 81.

At island level, health centres provides a higher and wider range of services than a village clinic. They provide both inpatient and outpatient services manned by a Medical Assistant (MA). The MAs either possess a degree in bachelor of nursing or a public health degree. At least one health centre is situated in each inhabited island and at present the number stands at 21.

Hospital Care

In Kiribati, secondary care is provided through four hospitals. TCH is the specialized 126 bedded hospital in the country located in Nowerewere, Tarawa. It provides emergency & outpatient care facilities and in ward facilities in four major specialties namely Internal Medicine, Surgery, Paediatrics and Gynaecology & Obstetrics. In addition a special ward for Tuberculosis patients and a paying ward is also present at TCH. TCH is staffed with medical specialists as well as general medical officers. It also functions as a training centre for Intern Medical Officers (IMO) and for primary health care workers. Southern Kiribati Hospital (SKH) situated in South Tarawa is a 20 bed hospital while Betio Hospital (BH) located in Tabiteuea,

North Island consist of 18 beds. Another 8 bedded facility is located in Kiritimati, Line & Phoenix Islands and is named as London Kiritimati Hospital (LKH).

Private Health Sector

The private health care facilities are not available in Kiribati at present.

Kiribati health system

The government of Kiribati is the main provider of health services in the country. Government health facilities includes the four hospitals, 21 health centres and 81 village clinics. In addition to these health facilities there are six other health care providers that also report to the Health Information Unit (HIU), and include Integrated Management of Children's Illness (IMCI) clinic, Gynaecology clinic, Kiribati Family Health Association (KFHA), Diabetic clinic, Reproductive Health Development and Adolescent Health Development. All health care services are provided free to all Kiribati residents by the government and there is very minimal out-of-pocket spending for health. In 2009, the government spent approximately 16.5% of its total recurrent budget on health, taking the second largest share next to education (MHMS, 2011).

2. Key Health Related Indicators with definitions

Table 1: Key Health Related Indicators with definitions			
#	Indicator and Definition		2015
Demographic			
1.	Total population* <i>2010 census population (National Statistics Office - latest available official figure)</i>		103,058
2.	Crude Birth Rate (per 1,000 population*) <i>Number of live births per year (per 1,000 population)</i>		20.0
3.	Crude Death Rate (per 1,000 population*) <i>Number of deaths per year (per 1,000 population)</i>		5.9
4.	Life Expectancy at Birth (years)** <i>2011 Annual Report MHMS</i>	Male Female	75.1
5.	Land area (km²)*** <i>2014 World Bank Data</i>		811
Health and Nutrition			
6.	Neonatal Mortality Rate <i>Probability of dying between birth and age 28 days (per 1,000 live births)</i>		10.2
7.	Infant Mortality Rate <i>Probability of dying between birth and age 1 year (per 1,000 live births)</i>		32.4
8.	Under-five Mortality Rate <i>Probability of dying by age 5 years (per 1,000 live births)</i>		59.1
9.	Maternal Mortality Rate <i>Probability of a female dying due to a maternal cause (per 100,000 live births)</i>		193.6
10.	Adult mortality rate from NCDs* <i>Probability of dying between age 30-69 years from NCDs in a given year (per 10,000 population age 30-69 years)</i>		45.9
11.	Mortality rate from road traffic injuries* <i>Probability of dying from road traffic injuries in a given year (per 10,000 population)</i>		0.2
12.	Adolescent birth rate for 10-14 years* <i>Probability of giving birth between the age 10-14 years in a given year (per 10,000 girls age 10-14 years)</i>		3.4
13.	Adolescent birth rate for 15-19 years* <i>Probability of giving birth between the age 15-19 years in a given year (per 10,000 girls age 15-19 years)</i>		331.2
14.	Contraceptive use* <i>Total number of contraceptive contacts (all forms) seen at health facilities in one year (per 1,000 population)</i>		531.2
15.	Access to antenatal care <i>The average number of antenatal clinic visits attended per mother in one year</i>		5.4
16.	Percentage of pregnant mothers received at least one home visit by PHN <i>The average number of home visits by PHN per mother in one year</i>		15.2

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

#	Indicator / Definition	2015
17.	Percentage of Low Birth Weight <i>Percentage of having a low birth weight (<2500g) baby (per 100 live births)</i>	6.2
18.	Malnourished children <5 years <i>Percentage of children (aged <5 years) classified as malnourished or severely malnourished in the MS1 Health Facility Monthly Reporting Form</i>	5.7
19.	Tuberculosis case notification rate* <i>The number of bacteriologically confirmed (new and relapse) tuberculosis cases in a given year (per 100,000 population)</i>	421.1
20.	Tuberculosis treatment success rate <i>Percentage of new, bacteriologically confirmed smear-positive tuberculosis cases that were cured or in which a full course of treatment was completed</i>	79.7
21.	Number of Leprosy cases (new and relapses)	162
22.	Acute respiratory infection (ARI) in children treated at Tungaru Central Hospital* <i>Number of children (aged 0-59) months who had 'presumed pneumonia' (moderate or severe ARI) and were taken to Tungaru Central Hospital (per 1,000 population)</i>	11.3
23.	Children immunized against measles* <i>Percent of children (aged <1 year) who have received one dose of measles-containing vaccine in one year</i>	89.2
24.	Diabetes <i>Percent of people presenting to health facilities with diabetes (confirmed or suspected) among all the people presenting to health facilities with NCDs</i>	49.7
25.	Hypertension <i>Percent of people presenting to health facilities with hypertension (confirmed or suspected) among all the people presenting to health facilities with NCDs</i>	46.9
26.	Outpatient consultations per capita* <i>Number of visits for ambulant care, not including immunizations, for the total population (including repeat visits) per capita</i>	5.2
27.	Outpatient consultations per capita for Tungaru Central Hospital* <i>Number of visits to Tungaru Central Hospital for ambulant care, not including immunizations, for the total population (including repeat visits) per capita</i>	0.1
28.	Tungaru Central Hospital (patient discharges) <i>Weekly average number of patients discharged from all TCH wards in a given year</i>	96.1
29.	Tungaru Central Hospital (bed occupancy) <i>Proportion of available acute inpatient beds that have been occupied over one year</i>	102.8
30.	Tungaru Central Hospital (average length-of-stay) <i>Average number of days patients spend in hospital</i>	9.5

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

#	Indicator / Definition	2015
Health Resources		
31.	Number of Hospital Beds per 1,000 population*	1.7
32.	Availability of Medical Officers* <i>Number of Medical Officers in a given year (per 10,000 population)</i>	4.1
33.	Population per Medical Officer* <i>Population: Medical Officer ratio</i>	2,453.8
34.	Availability of Dental Surgeons* <i>Number of Dental Surgeons in a given year (per 10,000 population)</i>	0.6
35.	Population per Dental Surgeon* <i>Population: Dental Surgeon ratio</i>	17,176.3
36.	Availability of Medical Assistants* <i>Number of Medical Assistants in a given year (per 10,000 population)</i>	3.8
37.	Population per Medical Assistant* <i>Population: Medical Assistant ratio</i>	2,642.5
38.	Availability of Nurses* <i>Number of Nurses in a given year (per 10,000 population)</i>	20.2
39.	Population per Nurse* <i>Population: Nurse ratio</i>	495.5
40.	Availability of Midwives* <i>Number of Midwives in a given year (per 10,000 population)</i>	10.2
41.	Population per Midwife* <i>Population: Midwife ratio</i>	981.5
42.	Number of Pharmacists available	5
43.	Number of Physiotherapists available	3
44.	Number of Hospitals	4
45.	Number of Health Centers	21
46.	Number of Village Clinics	81
47.	Number of Hospital Beds	172
*	2010 Census population figures were used to calculate the relevant indicators	
**	2011 Annual Report of MHMS	
***	2014 World Bank report	

3. Demographic Information

Crude Birth Rate: Number of live births per year (per 1,000 population): **20.0**

$\text{CBR} = \frac{\text{Number of live births (2,066)}}{\text{Total population (103,058)}} \times 1,000$		
Methodological/System Issues: <ul style="list-style-type: none"> • 2010 census population (latest official figures available) is used as base population. • Data for 2015 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting especially data from MS1. • Births with unrecorded outcomes were counted as live births. • Fertility data is weak in the country. 		

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

$\text{CDR} = \frac{\text{Number of deaths (612)}}{\text{Total population (103,058)}} \times 1,000$		
Methodological/System Issues: <ul style="list-style-type: none"> • 2010 census population (latest official figures available) is used as base population. • Data for 2015 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting especially data from MS1. • Mortality data is weak in the country. • 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 reporting from TCH would contribute to confirming the total number of deaths. 		

4. Health Resources

Table 2: Health institutions in Kiribati

Type of health facility	No.
Hospitals	4
Island Health Centers	21
Village Clinics/Dispensaries	81
Total number of health institutions	106

Source: KHIS and MS1 as of 31.12.2015

Number of Hospital Beds: 172

Table 3: Bed strength and location of leading hospitals

Hospital	Location	No. of Beds
Tungaru Central Hospital (TCH)	Nawerewere, Tarawa	126
Southern Kiribati Hospital (SKH)	South Tarawa	20
Betio Hospital (BH)	Tabiteuea, North Island	18
London Kiritimati Hospital (LKH)	Kiritimati, Line & Phoenix Islands	08
Total bed strength		172

Source: KHIS as of 31.12.2015

Number of Hospital Beds per 1,000 population: 1.7

Number of Hospital Beds per 1,000 population =	$\frac{\text{Total number of Hospital Beds available (172)}}{\text{Total population (103,058)}} \times 1,000$
Methodological/System Issues: <ul style="list-style-type: none"> 2010 census population (latest official figures available) is used as base population. Data for 2015 has been sourced from the KHIS. 	

TCH Bed Occupancy Rate: Proportion of available acute inpatient beds that have been occupied over one year: **102.8**

TCH Bed Occupancy Rate =	$\frac{\text{Total In-patient Service Days (47,261)}}{\text{Total Bed Days (45,990)}} \times 100$
Methodological/System Issues: <ul style="list-style-type: none"> Data for 2015 has been sourced from the KHIS and is likely to be affected by under-counting. Strengthened reporting and timely completion of data entering from TCH would contribute to more accurate figures. 	

TCH (average length-of-stay): Average number of days patients spend in hospital: **9.5**

TCH Average Length-of-stay =	$\frac{\text{Total In-patient Service Days (47,261)}}{\text{Total number of admissions (4,996)}}$
Methodological/System Issues: <ul style="list-style-type: none"> • Data for 2015 has been sourced from the KHIS and is likely to be affected by under-counting. • 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	8,998	7,665	117.4
TCH-Surgical	9,850	11,315	87.1
TCH-Paediatric	11,880	9,855	120.6
TCH-Obstetric	8,600	7,665	112.2
TCH-Private	3,455	2,920	118.3
TCH-TB	4,478	6,570	68.2
Total	47,261	45,990	102.8

Source: KHIS as of 31.12.2015

5. Country Health Manpower

Availability of Medical Officers: Number of Medical Officers (per 10,000 population): **4.1**

Medical Officers per 10,000 population =	$\frac{\text{Total number of Medical Officers enrolled for the year (42)}}{\text{Total population (103,058)}} \times 10,000$
Methodological/System Issues:	
<ul style="list-style-type: none"> 2010 census population (latest official figures available) is used as base population. Health manpower data for 2015 has been sourced from the accounts division of MHMS. KHIS should be modified to include data on health manpower. 	

Population per Medical Officer: Population: Medical Officer Ratio: **2,453.8**

Population per Medical Officer =	$\frac{\text{Total population for the year (103,058)}}{\text{Total number of Medical Officers enrolled for the year (42)}}$
Methodological/System Issues:	
<ul style="list-style-type: none"> 2010 census population (latest official figures available) is used as base population. Health manpower data for 2015 has been sourced from the accounts division of MHMS. KHIS should be modified to include data on health manpower. 	

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

Dental Surgeons per 10,000 population =	$\frac{\text{Total number of Dental Surgeons enrolled for the year (6)}}{\text{Total population (103,058)}} \times 10,000$
Methodological/System Issues:	
<ul style="list-style-type: none"> 2010 census population (latest official figures available) is used as base population. Health manpower data for 2015 has been sourced from the accounts division of MHMS. KHIS should be modified to include data on health manpower. 	

Population per Dental Surgeon: Population: Dental Surgeon ratio: **17,176.3**

Population per Dental Surgeon =	$\frac{\text{Total population for the year (103,058)}}{\text{Total number of Dental Surgeons enrolled for the year (6)}}$
Methodological/System Issues:	
<ul style="list-style-type: none"> 2010 census population (latest official figures available) is used as base population. Health manpower data for 2015 has been sourced from the accounts division of MHMS. KHIS should be modified to include data on health manpower. 	

Availability of Medical Assistants: Number of Medical Assistants (per 10,000 population): **3.8**

Medical Assistants per 10,000 population =	$\frac{\text{Total number of Medical Assistants enrolled for the year (39)}}{\text{Total population (103,058)}} \times 10,000$
Methodological/System Issues:	
<ul style="list-style-type: none"> • 2010 census population (latest official figures available) is used as base population. • Health manpower data for 2015 has been sourced from the accounts division of MHMS. • KHIS should be modified to include data on health manpower. 	

Population per Medical Assistant: Population: Medical Assistant ratio: **2,642.5**

Population per Medical Assistant =	$\frac{\text{Total population for the year (103,058)}}{\text{Total number of Medical Assistants enrolled for the year (39)}}$
Methodological/System Issues:	
<ul style="list-style-type: none"> • 2010 census population (latest official figures available) is used as base population. • Health manpower data for 2015 has been sourced from the accounts division of MHMS. • KHIS should be modified to include data on health manpower. 	

Availability of Nurses: Number of Nurses (per 10,000 population): **20.2**

Nurses per 10,000 population =	$\frac{\text{Total number of Nurses enrolled for the year (208)}}{\text{Total population (103,058)}} \times 10,000$
Methodological/System Issues:	
<ul style="list-style-type: none"> • 2010 census population (latest official figures available) is used as base population. • Health manpower data for 2015 has been sourced from the accounts division of MHMS. • KHIS should be modified to include data on health manpower. 	

Population per Nurse: Population: Nurse ratio: **495.5**

Population per Nurse =	$\frac{\text{Total population for the year (103,058)}}{\text{Total number of Nurses enrolled for the year (208)}}$
Methodological/System Issues:	
<ul style="list-style-type: none"> • 2010 census population (latest official figures available) is used as base population. • Health manpower data for 2015 has been sourced from the accounts division of MHMS. • KHIS should be modified to include data on health manpower. 	

Availability of Midwives: Number of Midwives (per 10,000 population): **10.2**

Midwives per 10,000 population =	$\frac{\text{Total number of Midwives enrolled for the year (105)}}{\text{Total population (103,058)}} \times 10,000$
Methodological/System Issues:	
<ul style="list-style-type: none"> 2010 census population (latest official figures available) is used as base population. Health manpower data for 2015 has been sourced from the accounts division of MHMS. KHIS should be modified to include data on health manpower. 	

Population per Midwife: Population: Midwife ratio: **981.5**

Population per Midwife =	$\frac{\text{Total population for the year (103,058)}}{\text{Total number of Midwives enrolled for the year (105)}}$
Methodological/System Issues:	
<ul style="list-style-type: none"> 2010 census population (latest official figures available) is used as base population. Health manpower data for 2015 has been sourced from the accounts division of MHMS. KHIS should be modified to include data on health manpower. 	

Table 5: Health manpower for Kiribati health institutions

Hospital	Medical Consultants	MOs	IMOs	Dental Surgeons	MAAs	Nurses	PHN	Pharmacists	Physio's	Total
TCH	8	4	23	5	2	135	0	5	3	185
SKH	3	0	0	0	0	13	0	0	0	16
BH	0	1	0	0	1	31	0	0	0	33
LKH	3	0	0	1	0	18	0	0	0	22
Health Centre	0	0	0	0	35	0	0	0	0	35
Village Clinic	0	0	0	0	0	0	105	0	0	105
Mental Ward	0	0	0	0	1	11	0	0	0	12
Total	14	5	23	6	39	208	105	5	3	408

Source: Accounts division of MHMS

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

Island	Health Centre	Village Clinic	Staff availability	
			MA*	PHN**
Makin	Makin	Anrawa	1	1
		Kiebu	-	1
Butaritari	Butaritari	Kuma	1	2
		Nakiroro	-	1
		Tekanaua	-	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
		Taniau	-	1
		Ribono	-	1
		Tebunginako	-	1
		Koinawa	-	1
		Tanimaiaki (Abaiang)	-	1
		Ubwarano	-	1
		Tuarabu	-	1
Tarawa North	Abaokoro	Tearinibai	1	2
		Buariki (Tarawa North)	-	1
		Taratai	-	1
		Tabiteuea	-	1
		Nabeina	-	1
TUC		Bonriki	1	2
		Temwaiku	1	2
		Bikenibeu East	1	2
		Bikenibeu West	1	2
		Eita	1	2
		Ambo	1	1
		Banraeaba	1	2
		Teaoraereke	1	2
		Nanikai	-	1
		Bairiki	1	5
BTC		Temanoku (BTC)	1	2
		Takoronga	1	2
		Temakin	1	2
Banaba	Banaba	-	1	1
Maiana	Tabontekeekee	Tekaranga	1	1
		Bubutei	-	1
		Tebikera	-	1
		Tanimaeao	-	1

Table 6: (Continued) Location and staff availability of Health Centers & Village Clinics

Island	Health Centre	Village Clinic	Staff availability	
			MA	PHN
Kuria	Kuria	Oneke	1	1
Aranuka	Aranuka	Takaeang	1	1
		Baurua	-	1
Abemama	Kariatebike	Abatiku	1	2
		Tabiang	-	1
		Tekatirirake	-	1
		Baretoa	-	1
		Kabangaki	-	1
Nonouti	Tebobonga	Temotu	1	1
		Teuabu	-	1
		Abamakoro	-	1
		Mataboou	-	1
		Rotimwa	-	1
		Taboiaki	-	1
		Temanoku (Nonouti)	-	1
Tab North	Utiroa	Tanaeang	1	2
		Buota	-	1
		Tenatorua	-	1
		Aiwa	-	1
		Tekabuibui	-	1
		Kabuna	-	1
		Tauma	-	1
Tab South	Buariki	Tewai	1	1
		Taku	-	1
Onotoa	Buraitan	Aiaki	1	1
		Tabuarorae	-	1
		Tekatana	-	1
		Otoae		1
Beru	Temara	Namon	1	2
		Aonnati	-	1
Nikunau	Nikumatang	Muritoa	1	1
		Mwanrunga	-	1
Tamana	Motoia	-	1	1
Arorae	Taribo	-	1	1
Kiritimati		London	2	2
		Banana	-	1
		Poland	-	1
		Tabwakea	-	1
Tabuaeran (Fanning)	Paelau	Napali	1	1
		Aramari	-	1
Teraina (Washington)	Arabata	Mwakeuea	1	1
Kanton	Canton	-	1	-
Total			35	105

Source: Accounts division of MHMS

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: **0.1**

OPD consultations per capita (for TCH) =	$\frac{\text{Total number of outpatient consultations at TCH for the year (10,454)}}{\text{Total population (103,058)}}$
Methodological/System Issues: <ul style="list-style-type: none"> Data for 2015 has been sourced from the KHIS and is likely to be affected by under-counting. 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: **96.1**

TCH (weekly patient discharges) =	$\frac{\text{Total number of discharges for the year from TCH (4,996)}}{\text{Number of weeks per year (52)}}$
Methodological/System Issues: <ul style="list-style-type: none"> Data for 2015 has been sourced from the KHIS and is likely to be affected by under-counting. 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): **11.3**

TCH ARI Moderate/Severe =	$\frac{\text{Total number of ARI cases (0-5 years) seen at TCH (185)}}{\text{Total (0-5 years) population (16,442)}} \times 1,000$
Methodological/System Issues: <ul style="list-style-type: none"> 2010 census population (latest official figures available) is used as base population. Data for 2015 has been sourced from the KHIS and is likely to be affected by under-counting. Morbidity data is aggregated in MS1 and therefore unable to disaggregate into disease groups. Hence unable to separate 0-5 years ARI cases. Morbidity data is weak in the country. 	

Outpatient consultations per capita: Number of visits for ambulant care, not including immunizations, for the total population (including repeat visits) per capita: **5.2**

OPD consultations per capita (all health institutes) =	$\frac{\text{Total number of outpatient consultations for the year (533,358)}}{\text{Total population (103,058)}}$
Methodological/System Issues: <ul style="list-style-type: none"> 2010 census population (latest official figures available) is used as base population. Data for 2015 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting or multiple counting. Morbidity data is weak in the country. 	

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
EOPD Visits	10,454	4,953	5,501	104	74	378	282	500	589	1,841	1,890	2,003	2,527	97	104	30	35
Hospital Admissions	4,996	1,799	3,197	183	133	356	250	166	95	199	1,249	830	1,367	60	93	5	10
OPD Deaths	22	15	07	01	01	03	00	00	00	01	01	08	04	02	01	00	00
Inpatient Deaths	227	119	108	13	17	12	11	3	2	11	11	71	59	6	6	3	2

Source: KHIS as of 31.12.2015

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

Ward Category	Sub Total	Total		Less than 1yr		1-4yrs		5-15yrs		16-29yrs		30-69yrs		70+yrs		Age Unrecorded	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
TCH-Medical	1,063	532	531	-	-	-	-	19	19	105	90	367	363	39	54	2	5
TCH-Obstetric	1,546	-	1,546	-	-	-	-	-	4	-	986	-	556	-	-	-	-
TCH-Paediatric	1,065	633	432	181	129	344	244	107	56	-	-	-	-	-	-	1	3
TCH-Private	297	130	167	2	4	11	6	13	4	3	26	91	104	9	23	1	
TCH-Surgical	914	447	467	-	-	1	-	24	6	73	123	337	321	11	15	1	2
TCH-TB	111	57	54	-	-	-	-	3	6	18	24	35	23	1	1	-	-
Grand Total	4,996	1,799	3,197	183	133	356	250	166	95	199	1,249	830	1,367	60	93	5	10

Source: KHIS as of 31.12.2015

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	280	201	256	274	256	252	158	219	215	261	286	141	2,799
Discharges	237	200	239	272	232	236	157	192	167	223	241	415	2,811
Patient days	785	541	752	752	1,481	911	770	983	793	981	1,110	764	10,623

Source: MS1 as of 31.12.2015

Table 10: Outbreak reporting

Outbreak	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Acute fever with rash	15	3,958	609	10	-	-	-	15	-	-	1	-	4,608
Acute fever without rash	-	2,851	357	140	1	98	16	75	-	12	-	-	3,550
Acute Flaccid Paralysis	-	-	24	-	-	-	-	-	-	-	-	-	24
Whooping Cough	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-
Jaundice	-	-	-	-	-	-	-	-	-	-	-	-	-
Severe Influenza like illness	-	-	-	-	-	1	1	-	55	48	-	-	105
Cholera	-	-	-	-	-	-	-	-	-	-	-	-	-
Severe Diarrhoea	-	-	-	2	8	-	5	23	75	-	2	-	115
Other serious outbreaks	-	590	626	404	227	16	3	95	-	-	-	-	1,961

Source: MS1 as of 31.12.2015

Table 11: Outpatient Morbidity Statistics for Health Centers and Clinics

Illness	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Acute fever with rash	251	3,135	1,057	177	75	51	60	82	97	37	103	33	5,158
Acute fever without rash	1,906	7,999	3,616	1,397	1,011	2,704	1,633	1,241	1,357	1,864	1,220	1,183	27,131
ARI-without Pneumonia	3,792	3,485	4,283	3,844	3,141	5,938	4,752	3,084	3,962	3,980	3,608	3,360	47,229
ARI-with Pneumonia	520	404	640	734	525	541	358	412	625	468	416	486	6,129
Conjunctivitis	1,732	1,618	1,460	1,410	1,384	1,417	1,379	1,377	1,285	1,031	953	985	16,031
Diabetes	66	63	47	49	121	68	80	56	41	39	68	26	724
Diarrhoea	1,249	1,396	1,233	1,146	1,242	1,294	1,301	2,341	2,818	2,052	1,999	1,338	19,409
Dysentery	596	728	697	703	826	876	788	776	733	679	622	593	8,617
Fish poisoning	40	38	47	70	89	64	55	59	95	59	82	48	746
Hypertension	56	45	25	37	109	60	63	39	39	26	85	27	611
Meningitis	23	27	7	16	237	12	12	37	40	48	63	1	523
Mental illness	1	1	2	8	18	10	3	4	4	1	1	2	55
Night blindness	75	81	79	70	75	94	76	103	49	79	58	58	897
Scabies	50	96	230	96	117	98	102	30	81	29,380	28,629	24,126	384,150
STI	58	63	76	70	200	95	107	23	91	53	60	100	1,113
Tinea Corporis	441	393	303	457	481	491	538	582	649	72	70	34	959
Tinea Versicolor	403	415	340	395	433	392	337	301	343	754	649	706	6,444
Worm Infection	184	179	177	165	215	250	294	286	409	344	375	368	4,446
Others	29,180	47,814	40,909	33,036	30,587	36,764	28,312	26,981	28,432	282	290	303	3,034
Total	40,623	67,980	55,228	43,880	40,886	51,219	40,250	37,814	41,150	41,248	39,351	33,777	533,406

Source: MS1 as of 31.12.2015

Table 12: Outpatient Morbidity Statistics according to districts

Illness	District						Total
	Central	Linnix	Northern	South Eastern	South Western	Tarawa & Banaba	
Acute fever with rash	963	178	385	106	213	3,313	5,158
Acute fever without rash	2,036	1,566	3,272	1,934	1,578	16,745	27,131
ARI-without Pneumonia	3,031	2,174	3,862	2,191	2,236	33,735	47,229
ARI-with Pneumonia	819	267	981	263	327	3,472	6,129
Conjunctivitis	840	703	1,303	434	616	12,135	16,031
Diabetes	120	44	125	18	67	350	724
Diarrhoea	821	1,304	1,604	555	837	14,288	19,409
Dysentery	738	515	996	535	652	5,181	8,617
Fish poisoning	61	19	289	17	10	350	746
Hypertension	180	24	128	8	38	233	611
Meningitis	8	18	33	25	23	416	523
Mental illness	9	3	22	2	1	18	55
Night blindness	95	32	126	54	70	520	897
Scabies	76	24	248	50	90	625	1,113
STI	77	56	50	28	31	717	959
Tinea Corporis	473	324	886	174	226	4,361	6,444
Tinea Vesicular	334	120	604	142	196	3,050	4,446
Worm Infection	348	10	441	65	104	2,066	3,034
Others	17,983	35,022	30,553	12,573	18,967	269,052	384,150
Grand Total	29,012	42,403	45,908	19,174	26,282	370,627	533,406

Source: MS1 as of 31.12.2015

Table 13: Referrals to TCH from Health Centers and Clinics

Service	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Makin	2	3	-	-	2	2	6	3	3	5	-	2	28
Butaritari	8	7	4	1	8	7	6	13	15	8	11	11	99
Marakei	5	4	2	4	1	2	3	2	-	5	6	3	37
Abaiang	3	-	4	-	4	1	6	3	7	6	4	1	39
Tarawa North	2	15	5	5	11	5	2	2	4	6	1	2	60
TUC	5	-	7	-	-	-	-	-	-	-	-	-	12
BTC	-	33	18	23	16	29	-	12	18	22	12	3	186
Banaba	2	4	3	1	1	-	2	1	-	2	3	1	20
Maiana	2	6	2	5	10	5	3	3	4	9	9	5	63
Kuria	19	9	5	6	23	7	8	7	9	5	2	7	107
Aranuka	2	1	2	4	8	6	6	4	7	5	4	1	50
Abemama	4	8	6	1	9	7	9	6	5	2	6	7	70
Nonouti	9	1	2	-	1	3	-	4	11	3	4	-	38
Tab North	9	8	7	14	16	13	12	7	8	14	7	3	118
Tab South		1	2	2	6	1	3	5	20	2	-	2	44
Onotoa	4	4	4	5	6	24	3	5	4	5	10	3	77
Beru	-	1	3	-	-	2	2	2	12	3	4	2	31
Nikunau	5	5	2	8	6	30	4	10	3	-	2	2	77
Tamana	1	6	-	-	1	4	3	-	15	-	2	-	32
Arorae	2	3	-	-	2	-	-	-	2	3	-	-	12
Kiritimati	2	1	-	-	-	-	-	-	-	-	-	-	3
Tabuaeran	4	-	4	-	3	-	5	-	7	-	4	-	27
Teraina	-	-	-	-	-	-	10	-	-	-	-	-	10
Kanton	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	90	120	82	79	134	148	93	89	154	105	91	55	1,240

Source: MS1 as of 31.12.2015

Table 14: Leading Causes of Hospitalization for TCH

Rank	ICD 10-3	Cause of Hospitalization	Gender		Total
			Male	Female	
1	O80	Single spontaneous delivery		1,049	1,049
2	E11	Non-insulin-dependent diabetes mellitus	119	95	214
3	R69	Unknown and unspecified causes of morbidity	95	114	209
4	J18	Pneumonia, organism unspecified	106	101	207
5	O82	Single delivery by caesarean section		195	195
6	A09	Diarrhoea and gastroenteritis of presumed infectious origin	94	60	154
7	J21	Acute bronchiolitis	82	41	123
8	A16	Respiratory tuberculosis, bacteriologically or histologically not confirmed	62	44	106
9	P36	Bacterial sepsis of newborn	59	46	105
10	E46	Unspecified protein-energy malnutrition	55	41	96
11	L02	Cutaneous abscess, furuncle and carbuncle	52	38	90
12	J45	Bronchial Asthma	34	35	69
13	L03	Cellulitis	38	23	61
14	I10	Essential (primary) hypertension	26	34	60
15	O47	False labour		57	57
16	A01	Typhoid and paratyphoid fevers	31	23	54
17	I50	Heart failure	20	30	50
18	N93	Other abnormal uterine and vaginal bleeding	1	45	46
19	P07	Disorders related to short gestation and low birth weight, not elsewhere classified	17	26	43
20	D50	Iron deficiency anaemia	4	39	43
21	J90	Pleural effusion, not elsewhere classified	25	18	43
22	D64	Other Anaemias	15	27	42
23	E14	Unspecified diabetes mellitus	24	17	41
24	K75	Other inflammatory liver diseases	34	7	41
25	E43	Unspecified severe protein-energy malnutrition	20	13	33
		Morbidity from all other causes	786	979	1,765
		Grand Total	1,799	3,197	4,996
***	R00-R99	Ill-defined causes hospitalization (pooled)	146	189	335

Source: KHIS as of 31.12.2015

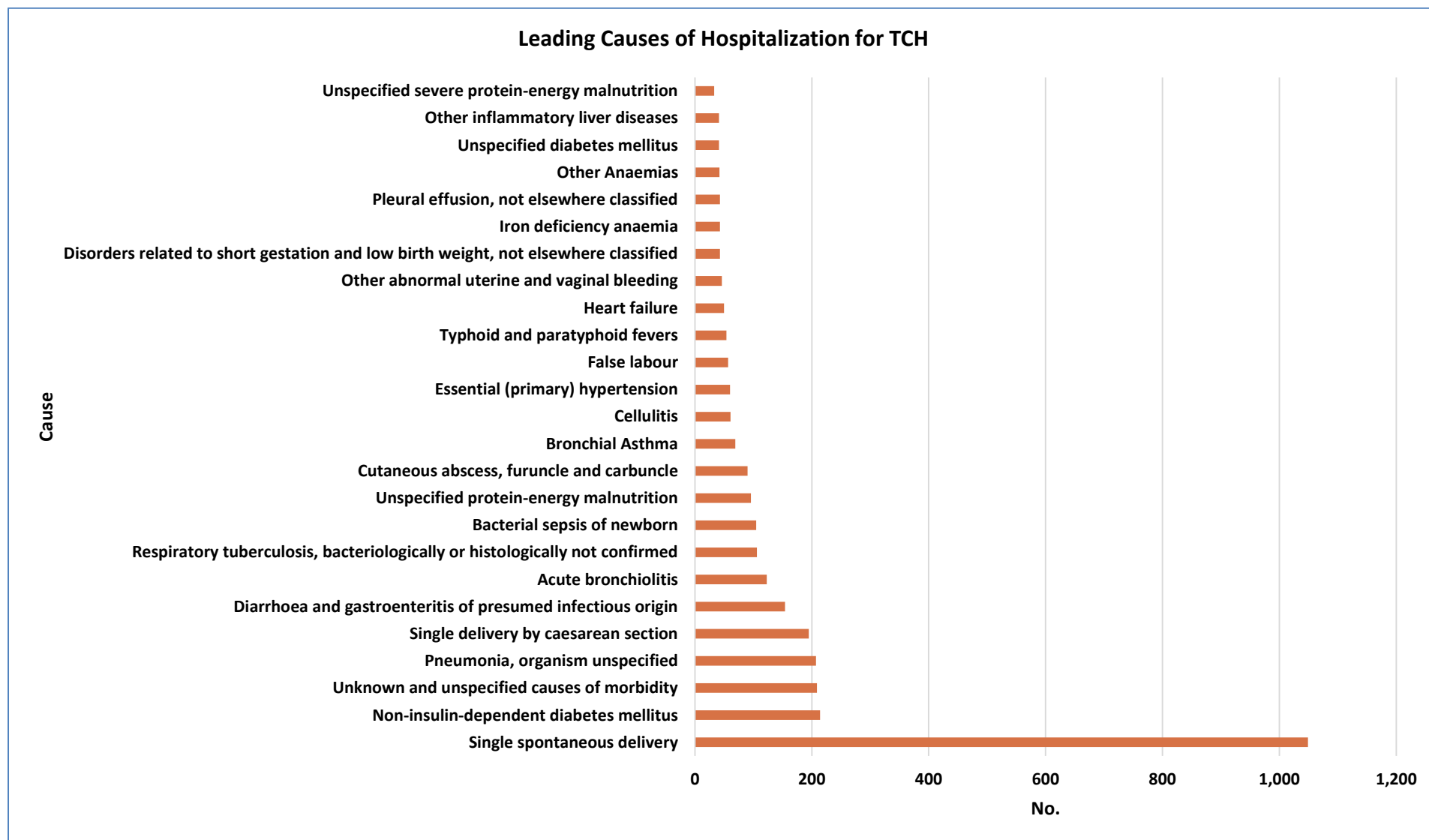


Figure 2: Leading Causes of Hospitalization for TCH

Table 15: 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-Medical	108	59	49	-	-	-	-	2	-	7	10	44	34	4	4	2	1
TCH-Obstetric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TCH-Paediatric	57	27	30	13	17	12	11	1	1	-	-	-	-	-	-	1	1
TCH-Private	19	14	5	-	-	-	-	-	-	-	-	12	5	2	-	-	-
TCH-Surgical	41	19	22	-	-	-	-	-	-	4	1	15	19	-	2	-	-
TCH-TB	2	-	2	-	-	-	-	-	1	-	-	-	1	-	-	-	-
Grand Total	227	119	108	13	17	12	11	3	2	11	11	71	59	6	6	3	2

Source: KHIS as of 31.12.2015 * Derived from data extracted from medical records

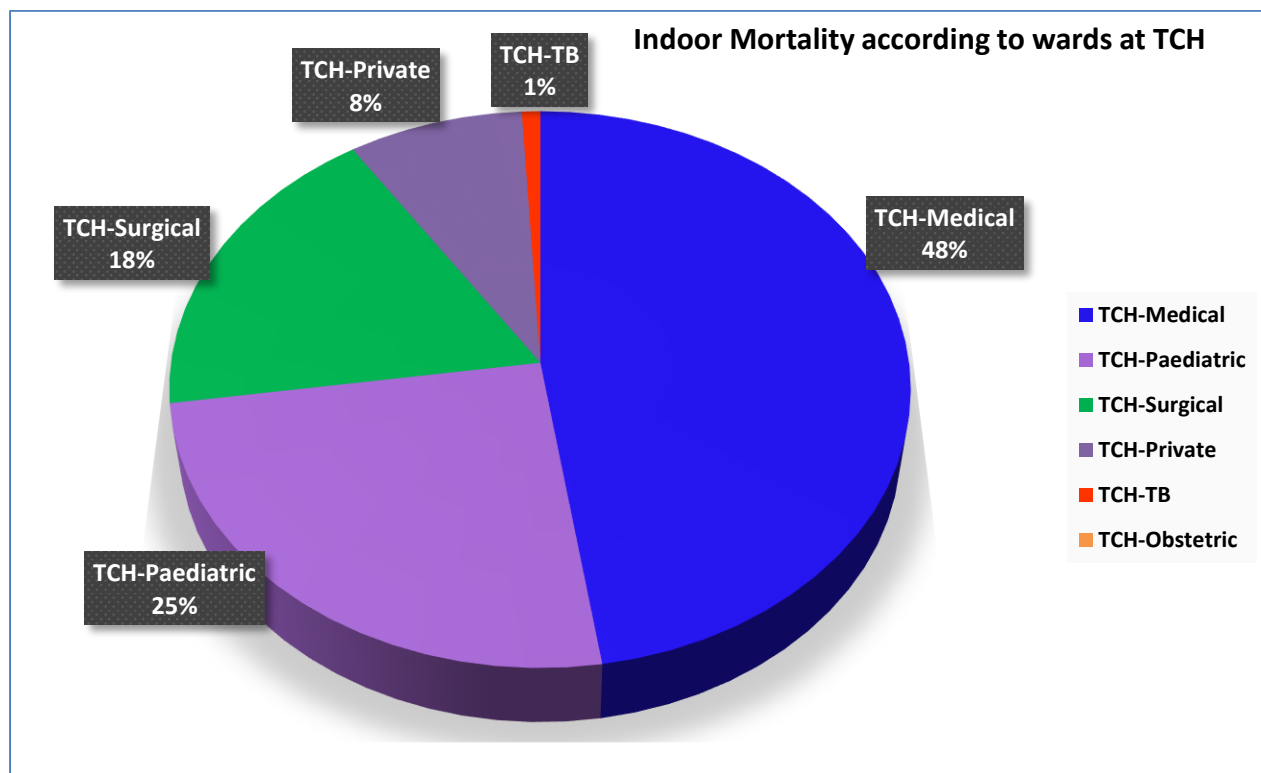


Figure 3: Indoor mortality statistics according to wards: TCH

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

Rank	Cause of Death	Gender		Total
		Male	Female	
1	Other infectious and parasitic diseases (A20-B99)	7	14	21
2	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)	10	11	21
3	Diseases of liver (K70-K77)	15	4	19
4	Other forms of heart disease (I30-I52)	7	11	18
5	Malnutrition (E40-E46)	6	9	15
6	Diabetes mellitus (E10-E14)	8	6	14
7	Cerebrovascular diseases (I60-I69)	6	6	12
8	Certain conditions originating in the perinatal period (P00-P96)	7	5	12
9	Other diseases of respiratory tract (J20-J94)	8	3	11
10	Diseases of the digestive system (K00-K67 & K80-K93)	7	3	10
11	Meningitis & other inflammatory diseases of the central nervous system (G00-G09)	4	4	8
12	Intestinal infectious diseases (A00-A09)	3	4	7
13	Tuberculosis (A15-A19)	5	2	7
14	Influenza and pneumonia (J10-J18)	3	4	7
15	Malignant neoplasms (C00-C97)	1	5	6
16	Metabolic disorders (E70-E90)	4	1	5
17	Hypertensive diseases (I10-I15)	4	1	5
18	Renal failure (N17-N19)		5	5
19	Neoplasms of uncertain or unknown behaviour (D37-D48)	1	3	4
20	Anaemias (D50-D64)	1	3	4
21	Epilepsy and other diseases of the central nervous system (G10-G99)	3		3
22	Ischaemic heart diseases (I20-I25)	2	1	3
23	Congenital malformations, deformations & chromosomal abnormalities (Q00-Q99)	2	1	3
24	Acute & Chronic rheumatic heart diseases (I00-I09)	2		2
25	Injury, poisoning and certain other consequences of external causes (S00-T98)	1	1	2
26	Transport accidents (V01-V99)	2		2
27	Other disorders of kidney and ureter (N25-N29)		1	1
Grand Total		119	108	227

Source: KHIS as of 31.12.2015

* Derived from data extracted from medical records

Table 17: Leading Causes of Hospital Inpatient Deaths* for TCH (Expanded list)

Rank	ICD 10-3	Cause of Death	Gender		Total
			Male	Female	
1	A41	Other Septicaemia	6	11	17
2	E11	Non-insulin-dependent diabetes mellitus	5	5	10
3	E46	Unspecified protein-energy malnutrition	4	5	9
4	K72	Hepatic failure, not elsewhere classified	8	1	9
5	R99	Other ill-defined and unspecified causes of mortality	5	4	9
6	I50	Heart failure	2	5	7
7	J18	Pneumonia, organism unspecified	3	4	7
8	A16	Respiratory tuberculosis, not confirmed bacteriologically or histologically	4	2	6
9	E43	Unspecified severe protein-energy malnutrition	2	4	6
10	G03	Meningitis due to other and unspecified causes	4	2	6
11	I46	Cardiac arrest	3	3	6
12	I64	Stroke, not specified as haemorrhage or infarction	2	4	6
13	R57	Shock, not elsewhere classified	1	5	6
14	J90	Pleural effusion, not elsewhere classified	4	1	5
15	K74	Fibrosis and cirrhosis of liver	4	1	5
16	A09	Diarrhoea and gastroenteritis of presumed infectious origin	2	2	4
17	K76	Other diseases of liver	2	2	4
18	P36	Bacterial sepsis of newborn	2	2	4
19	A01	Typhoid and paratyphoid fevers	1	2	3
20	C50	Malignant neoplasm of Breast	-	3	3
21	D37	Neoplasm of uncertain/unknown behaviour of oral cavity/digestive organs	1	2	3
22	D64	Other Anaemias	1	2	3
23	E86	Volume depletion	3	-	3
24	I10	Essential (primary) hypertension	3	-	3
25	K27	Peptic ulcer, site unspecified	1	2	3
26	N17	Acute renal failure	-	3	3
27	P07	Disorders related to short gestation & LBW, not elsewhere classified	2	1	3
28	P21	Birth asphyxia	2	1	3
29	A39	Meningococcal infection	-	2	2
30	E14	Unspecified diabetes mellitus	1	1	2
31	I37	Pulmonary valve disorders	1	1	2
32	I51	Complications and ill-defined descriptions of heart disease	-	2	2
33	I62	Other non-traumatic intracranial haemorrhage	1	1	2
34	I63	Cerebral infarction	1	1	2
35	J21	Acute bronchiolitis	1	1	2
36	K56	Paralytic ileus and intestinal obstruction without hernia	2	-	2
37	K92	Other diseases of digestive system	2	-	2
38	N19	Unspecified renal failure	-	2	2
39	Q24	Other congenital malformations of heart	1	1	2
40	R18	Ascites	-	2	2
41	A15	Respiratory tuberculosis, bacteriologically and histologically confirmed	1	-	1
42	A35	Obstetrical tetanus	-	1	1
43	B16	Acute hepatitis B	1	-	1
44	C53	Malignant neoplasm of cervix uteri	-	1	1
45	C95	Leukaemia of unspecified cell type	1	-	1
46	C96	Other & unspecified malignant neoplasms of lymphoid, haematopoietic & related tissue	-	1	1
47	D38	Neoplasm of uncertain or unknown behaviour of middle ear & respiratory & intrathoracic organs	-	1	1
48	D52	Folate deficiency anaemia	-	1	1
49	E10	Insulin-dependent diabetes mellitus	1	-	1
50	E13	Other specified diabetes mellitus	1	-	1
51	E84	Cystic fibrosis	-	1	1
52	E87	Other disorders of fluid, electrolyte and acid-base balance	1	-	1

Table 17: (Continued) Leading Causes of Hospital Inpatient Deaths* for TCH (Expanded list)

Rank	ICD 10-3	Cause of Death	Gender		Total
			Male	Female	
53	G00	Bacterial meningitis, not elsewhere classified	-	1	1
54	G04	Encephalitis, myelitis and encephalomyelitis	-	1	1
55	G40	Epilepsy	1	-	1
56	G58	Other mono-neuropathies	1	-	1
57	G61	Hereditary and idiopathic neuropathy	1	-	1
58	I01	Rheumatic fever with heart involvement	1	-	1
59	I09	Other rheumatic heart diseases	1	-	1
60	I11	Hypertensive heart disease	1	-	1
61	I15	Secondary hypertension	-	1	1
62	I21	Acute myocardial infarction	1	-	1
63	I22	Subsequent myocardial infarction	-	1	1
64	I25	Chronic ischaemic heart disease	1	-	1
65	I35	Non-rheumatic aortic valve disorders	1	-	1
66	I61	Intracerebral haemorrhage	1	-	1
67	I67	Other cerebrovascular diseases	1	-	1
68	J39	Other diseases of upper respiratory tract	-	1	1
69	J44	Other chronic obstructive pulmonary disease	1	-	1
70	J81	Pulmonary oedema	1	-	1
71	J98	Other respiratory disorders	1	-	1
72	K37	Unspecified appendicitis	1	-	1
73	K59	Other functional intestinal disorders	-	1	1
74	K62	Other diseases of anus and rectum	1	-	1
75	K75	Other inflammatory liver diseases	1	-	1
76	N28	Other disorders of kidney and ureter, not elsewhere classified	-	1	1
77	P60	Disseminated intravascular coagulation of fetus and newborn	1	-	1
78	P76	Other intestinal obstruction of newborn	-	1	1
79	Q00	Anencephaly and similar malformations	1	-	1
80	R06	Abnormalities of breathing	1	-	1
81	R14	Flatulence and related conditions	1	-	1
82	R22	Localized swelling, mass and lump of skin and subcutaneous tissue	1	-	1
83	R33	Retention of urine	1	-	1
84	S72	Fracture of femur	-	1	1
85	T61	Toxic effect of noxious substances eaten as seafood	1	-	1
86	V27	Motorcycle rider injured in collision with fixed or stationary object	1	-	1
87	V89	Motor or non-motor-vehicle accident, type of vehicle unspecified	1	-	1
Grand Total			119	108	227

Source: KHIS as of 31.12.2015 * Derived from data extracted from medical records

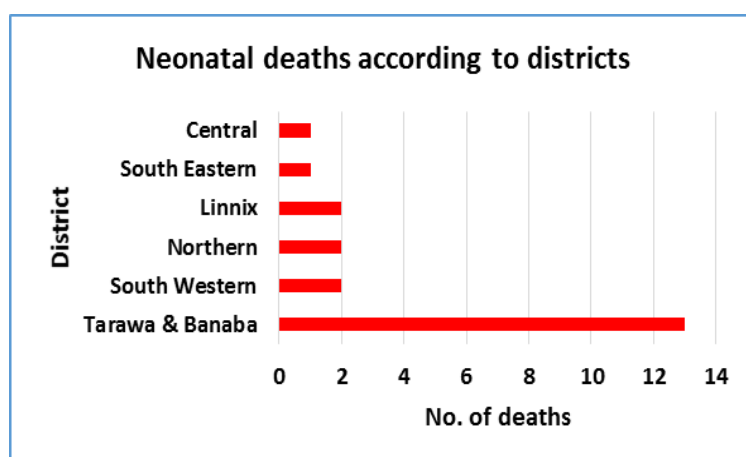
7. Country mortality statistics

Neonatal Mortality Rate: Probability of dying between birth and age 28 days (per 1,000 live births): **10.2**

NMR =	$\frac{\text{Number of deaths of neonates aged 0-28 days (21)}}{\text{Number of live births (2066)}} \times 1,000$
Methodological/System Issues:	
<ul style="list-style-type: none"> Data for 2015 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting especially data from 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 neonatal deaths is under-reported. Mortality and fertility data is weak in the country. 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: Neonatal deaths according to districts*

District	No.
Central	1
Linnix	2
Northern	2
South Eastern	1
South Western	2
Tarawa & Banaba	13
Total	21



Sources: KHIS & MS1 as of 31.12.2015

* Excluding SKH data

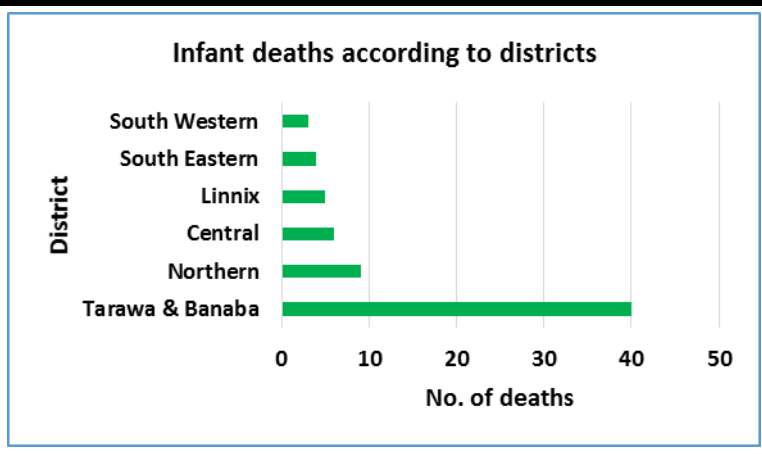
Figure 4: Neonatal deaths according to districts

Infant Mortality Rate: Probability of dying between birth and age 1 year (per 1,000 live births): **32.4**

IMR = $\frac{\text{Number of deaths of infants aged <1 year (67)}}{\text{Number of live births (2066)}} \times 1,000$		
Methodological/System Issues:		
<ul style="list-style-type: none"> • Data for 2015 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting especially data from 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 and fertility data is weak in the country. • 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 19: Infant deaths according to districts*

District	No.
Central	6
Linnix	5
Northern	9
South Eastern	4
South Western	3
Tarawa & Banaba	40
Total	67



Sources: KHIS & MS1 as of 31.12.2015

* Excluding SKH data

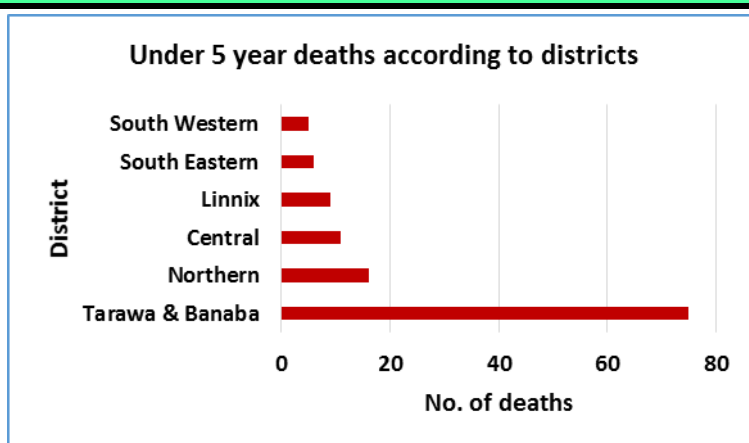
Figure 5: Infant deaths according to districts

Under-five Mortality Rate: Probability of dying by age 5 years (per 1,000 live births): **59.1**

U5MR =	$\frac{\text{Number of deaths of children aged <5 years (122)}}{\text{Number of live births (2066)}} \times 1,000$
Methodological/System Issues:	
<ul style="list-style-type: none"> • Data for 2015 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting especially data from 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 under 5 year deaths is under-reported. • Mortality and fertility data is weak in the country. • 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 20: Under 5 year child deaths according to districts*

District	No.
Central	11
Linnix	9
Northern	16
South Eastern	6
South Western	5
Tarawa & Banaba	75
Total	122



Sources: KHIS & MS1 as of 31.12.2015

* Excluding SKH data

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): **193.6**

MMR =	$\frac{\text{Number of maternal deaths (4)}}{\text{Number of live births (2066)}} \times 100,000$
Methodological/System Issues:	
<ul style="list-style-type: none"> Data for 2015 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting especially data from 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 maternal deaths is under-reported. Mortality and fertility data is weak in the country. 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 21: Maternal deaths for Kiribati

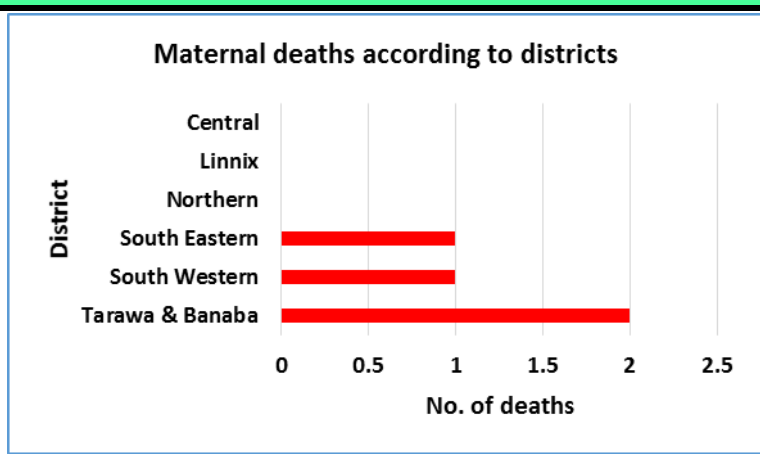
Rank	ICD-10-3	Cause of Death	Total
1	O95	Obstetric death of unspecified cause	3
2	O85	Puerperal sepsis	1
Total Maternal Deaths*			4

Sources: KHIS & MS1 as of 31.12.2015

* Excluding SKH data

Table 22: Maternal deaths according to districts*

District	No.
Central	0
Linnix	0
Northern	0
South Eastern	1
South Western	1
Tarawa & Banaba	2
Total	4



Sources: KHIS & MS1 as of 31.12.2015

* Excluding SKH data

Figure 7: Maternal deaths according to districts

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): **45.9**

Adult mortality rate from NCDs (30-69 years) =	$\frac{\text{Total number of deaths due to NCDs for the year (156)}}{\text{Total population (30-69 years) (34,020)}} \times 10,000$
Methodological/System Issues:	
<ul style="list-style-type: none"> 2010 census population (latest official figures available) is used as base population. Data for 2015 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting especially data from MS1. Certification of cause(s) of death is poor in the country. It is likely that the number of deaths is under-reported. Mortality data is weak in the country. 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 23: Adult deaths due to NCDs according to districts*

District	No.
Central	10
Linnix	13
Northern	20
South Eastern	8
South Western	8
Tarawa & Banaba	97
Total	156

Adult Deaths from NCDs according to districts

District	No. of deaths
South Eastern	8
South Western	8
Central	10
Linnix	13
Northern	20
Tarawa & Banaba	97

Sources: KHIS & MS1 as of 31.12.2015

* Excluding SKH data

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 10,000 population) **0.2**

Mortality rate from Road Traffic Injuries =	$\frac{\text{Total number of deaths due to RTIs for the year (2)}}{\text{Total population (103,058)}} \times 10,000$
Methodological/System Issues:	
<ul style="list-style-type: none"> 2010 census population (latest official figures available) is used as base population. Data for 2015 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting especially data from MS1. Certification of cause(s) of death is poor in the country. It is likely that the number of deaths is under-reported. Mortality data is weak in the country. 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 24: Leading Causes of Death for Kiribati (Categorized list)*

Rank	Cause of Death*	Gender		Total
		Male	Female	
1	Symptoms, signs & abnormal clinical and laboratory findings (R00–R99)	64	58	122
2	Other forms of heart disease (I30–I52)	27	20	47
3	Cerebrovascular diseases (I60–I69)	25	18	43
4	Diseases of liver (K70–K77)	24	16	40
5	Other infectious and parasitic diseases (A20–B99)	15	24	39
6	Diabetes mellitus (E10–E14)	18	15	33
7	Intestinal infectious diseases (A00–A09)	16	13	29
8	Malnutrition (E40–E46)	12	15	27
9	Malignant neoplasms (C00–C97)	9	14	23
10	Ischaemic heart diseases (I20–I25)	17	6	23
11	Influenza and pneumonia (J10–J18)	8	13	21
12	Diseases of the digestive system (K00–K67 & K80–K93)	15	6	21
13	Certain conditions originating in the perinatal period (P00–P96)	13	7	20
14	Other diseases of respiratory tract (J20–J94)	15	3	18
15	Metabolic disorders (E70–E90)	9	8	17
16	Meningitis & other inflammatory diseases of central nervous system (G00–G09)	6	6	12
17	Tuberculosis (A15–A19)	7	2	9
18	Renal failure (N17–N19)	1	8	9
19	Neoplasms of uncertain or unknown behaviour (D37–D48)	2	4	6
20	Anaemias (D50–D64)	2	4	6
21	Epilepsy and other diseases of the central nervous system (G10–G99)	4	2	6
22	Injury, poisoning and certain other consequences of external causes (S00–T98)	2	4	6
23	Hypertensive diseases (I10–I15)	4	1	5
24	Accidental drowning and submersion (W65–W74)	3	1	4
25	Intentional self-harm (X60–X84)	4		4
26	Other obstetric conditions, not elsewhere classified (O95–O99)		3	3
27	Congenital malformations, deformations & chromosomal abnormalities (Q00–Q99)	2	1	3
28	Other disorders of glucose regulation & pancreatic internal secretion (E15–E16)		2	2
29	Acute & Chronic rheumatic heart diseases (I00–I09)	2		2
30	Other diseases of the respiratory system (J95–J99)	1	1	2
31	Non-inflammatory disorders of female genital tract (N80–N98)		2	2
32	Transport accidents (V01–V99)	2		2
33	Other accidental threats to breathing (W75–W84)	1	1	2
34	Other nutritional deficiencies (E50–E64)	1		1
35	Arthropathies (M00–M25)	1		1
36	Other disorders of kidney and ureter (N25–N29)		1	1
37	Complications predominantly related to the puerperium (O85–O92)		1	1
Grand Total		332	280	612

Sources: KHIS & MS1 as of 31.12.2015

* Excluding SKH data

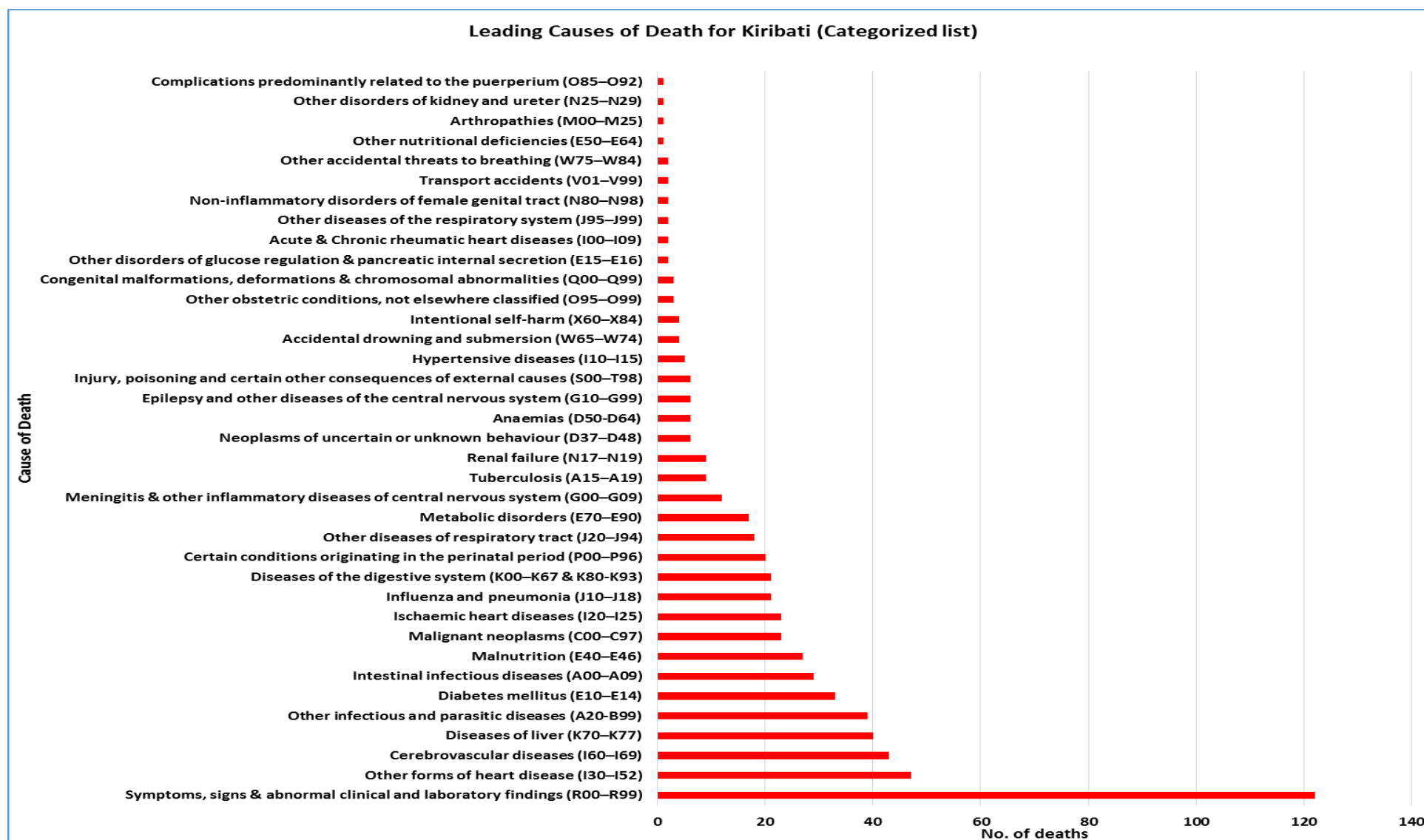


Figure 9: Leading Causes of Death for Kiribati

Table 25: Leading Causes of Death for Kiribati (Expanded list)*

Rank	ICD-10-3	Cause of Death	Gender		Total
			Male	Female	
1	I64	Stroke, not specified as haemorrhage or infarction	21	16	37
2	R99	Other ill-defined and unspecified causes of mortality	20	15	35
3	A41	Other Septicaemia	13	20	33
4	I46	Cardiac arrest	19	10	29
5	A09	Diarrhoea and gastroenteritis of presumed infectious origin	15	10	25
6	I21	Acute myocardial infarction	16	5	21
7	J18	Pneumonia, organism unspecified	8	13	21
8	E14	Unspecified diabetes mellitus	9	10	19
9	E46	Unspecified protein-energy malnutrition	8	10	18
10	E86	Volume depletion	7	7	14
11	K72	Hepatic failure, not elsewhere classified	9	4	13
12	K76	Other diseases of liver	6	7	13
13	E11	Non-insulin-dependent diabetes mellitus	7	5	12
14	K74	Fibrosis and cirrhosis of liver	8	4	12
15	R62	Lack of expected normal physiological development	5	6	11
16	R06	Abnormalities of breathing	8	2	10
17	R54	Senility	3	7	10
18	E43	Unspecified severe protein-energy malnutrition	4	5	9
19	G03	Meningitis due to other and unspecified causes	5	4	9
20	I50	Heart failure	3	6	9
21	R10	Abdominal and pelvic pain	4	5	9
22	A16	Respiratory tuberculosis, not confirmed bacteriologically or histologically	6	2	8
23	K27	Peptic ulcer, site unspecified	5	3	8
24	R63	Symptoms and signs concerning food and fluid intake	2	6	8
25	C50	Malignant neoplasm of Breast		7	7
26	J44	Other chronic obstructive pulmonary disease	7		7
27	P07	Disorders related to short gestation and low birth weight, not elsewhere classified	6	1	7
28	R50	Fever of unknown origin	4	3	7
29	R57	Shock, not elsewhere classified	2	5	7
30	I51	Complications and ill-defined descriptions of heart disease	3	3	6
31	R07	Pain in throat and chest	2	4	6
32	D64	Other Anaemias	2	3	5
33	J90	Pleural effusion, not elsewhere classified	4	1	5
34	K92	Other diseases of digestive system	3	2	5
35	N19	Unspecified renal failure		5	5
36	P36	Bacterial sepsis of newborn	3	2	5
37	A01	Typhoid and paratyphoid fevers	1	3	4
38	G40	Epilepsy	2	2	4
39	N17	Acute renal failure	1	3	4
40	X84	Intentional self-harm by unspecified means	4		4
41	C53	Malignant neoplasm of cervix uteri		3	3

Table 25: (Continued) Leading Causes of Death for Kiribati (Expanded list)*

Rank	ICD-10-3	Cause of Death	Gender		Total
			Male	Female	
42	D37	Neoplasm of uncertain or unknown behaviour of oral cavity and digestive organs	1	2	3
43	I10	Essential (primary) hypertension	3		3
44	K56	Paralytic ileus and intestinal obstruction without hernia	3		3
45	O95	Obstetric death of unspecified cause		3	3
46	P21	Birth asphyxia	2	1	3
47	R11	Nausea and vomiting	1	2	3
48	R18	Ascites	1	2	3
49	R56	Convulsions, not elsewhere classified	2	1	3
50	W74	Unspecified drowning and submersion	2	1	3
51	A39	Meningococcal infection		2	2
52	C14	Malignant neoplasm of other and ill-defined sites in the lip, oral cavity and pharynx		2	2
53	C34	Malignant neoplasm of bronchus and lung	2		2
54	C95	Leukaemia of unspecified cell type	2		2
55	E16	Other disorders of pancreatic internal secretion		2	2
56	E87	Other disorders of fluid, electrolyte and acid-base balance	2		2
57	G04	Encephalitis, myelitis and encephalomyelitis	1	1	2
58	I37	Pulmonary valve disorders	1	1	2
59	I62	Other non-traumatic intracranial haemorrhage	1	1	2
60	I63	Cerebral infarction	1	1	2
61	J21	Acute bronchiolitis	1	1	2
62	J81	Pulmonary oedema	2		2
63	J98	Other respiratory disorders	1	1	2
64	K75	Other inflammatory liver diseases	1	1	2
65	P95	Fetal death of unspecified cause	1	1	2
66	Q24	Other congenital malformations of heart	1	1	2
67	R22	Localized swelling, mass and lump of skin and subcutaneous tissue	2		2
68	T65	Toxic effect of other and unspecified substances		2	2
69	A15	Respiratory tuberculosis, bacteriologically and histologically confirmed	1		1
70	A35	Obstetrical tetanus		1	1
71	B01	Varicella [chickenpox]	1		1
72	B16	Acute hepatitis B	1		1
73	B18	Chronic viral hepatitis		1	1
74	C02	Malignant neoplasm of other and unspecified parts of tongue	1		1
75	C15	Malignant neoplasm of Oesophagus	1		1
76	C22	Malignant neoplasm of liver and intrahepatic bile ducts	1		1
77	C61	Malignant neoplasm of prostate	1		1
78	C69	Malignant neoplasm of eye and adnexa	1		1
79	C79	Secondary malignant neoplasm of other sites		1	1
80	C96	Other and unspecified malignant neoplasms of lymphoid, haematopoietic and related tissue		1	1

Table 25: (Continued) Leading Causes of Death for Kiribati (Expanded list)*

Rank	ICD-10-3	Cause of Death	Gender		Total
			Male	Female	
81	D38	Neoplasm of uncertain or unknown behaviour of middle ear & respiratory and intrathoracic organs		1	1
82	D39	Neoplasm of uncertain or unknown behaviour of female genital organs		1	1
83	D42	Neoplasm of uncertain or unknown behaviour of urinary organs	1		1
84	D52	Folate deficiency anaemia		1	1
85	E10	Insulin-dependent diabetes mellitus	1		1
86	E13	Other specified diabetes mellitus	1		1
87	E51	Thiamine deficiency	1		1
88	E84	Cystic fibrosis		1	1
89	G00	Bacterial meningitis, not elsewhere classified		1	1
90	G58	Other mononeuropathies	1		1
91	G61	Inflammatory polyneuropathy	1		1
92	I01	Rheumatic fever with heart involvement	1		1
93	I09	Other rheumatic heart diseases	1		1
94	I11	Hypertensive heart disease	1		1
95	I15	Secondary hypertension		1	1
96	I22	Subsequent myocardial infarction		1	1
97	I25	Chronic ischaemic heart disease	1		1
98	I35	Non-rheumatic aortic valve disorders	1		1
99	I61	Intracerebral haemorrhage	1		1
100	I67	Other cerebrovascular diseases	1		1
101	J39	Other diseases of upper respiratory tract		1	1
102	J45	Asthma	1		1
103	K37	Unspecified appendicitis	1		1
104	K52	Other non-infective gastroenteritis and colitis	1		1
105	K59	Other functional intestinal disorders		1	1
106	K62	Other diseases of anus and rectum	1		1
107	K65	Peritonitis	1		1
108	M00	Pyogenic arthritis	1		1
109	N28	Other disorders of kidney and ureter, not elsewhere classified		1	1
110	N89	Other non-inflammatory disorders of vagina		1	1
111	N94	Pain and other conditions associated with female genital organs and menstrual cycle		1	1
112	O85	Puerperal sepsis		1	1
113	P60	Disseminated intravascular coagulation of fetus and newborn	1		1
114	P74	Other transitory neonatal electrolyte and metabolic disturbances		1	1
115	P76	Other intestinal obstruction of newborn		1	1
116	Q00	Anencephaly and similar malformations	1		1
117	R09	Other symptoms and signs involving the circulatory and respiratory systems	1		1
118	R14	Flatulence and related conditions	1		1
119	R17	Unspecified jaundice	1		1
120	R33	Retention of urine	1		1

Table 25: (Continued) Leading Causes of Death for Kiribati (Expanded list)*

Rank	ICD-10-3	Cause of Death	Gender		Total
			Male	Female	
121	R40	Somnolence, stupor and coma	1		1
122	R49	Voice disturbances	1		1
123	R53	Malaise and fatigue	1		1
124	R60	Oedema, not elsewhere classified	1		1
125	S06	Intracranial injury	1		1
126	S72	Fracture of femur		1	1
127	T30	Burn and corrosion, body region unspecified		1	1
128	T61	Toxic effect of noxious substances eaten as seafood	1		1
129	V27	Motorcycle rider injured in collision with fixed or stationary object	1		1
130	V89	Motor or non-motor vehicle accident, type of vehicle unspecified	1		1
131	W69	Drowning and submersion while in natural water	1		1
132	W80	Inhalation and ingestion of other objects causing obstruction of respiratory tract	1		1
133	W84	Unspecified threat to breathing		1	1
Grand Total			332	280	612

Sources: KHIS & MS1as of 31.12.2015 *excluding SKH data

Table 26: Deaths due to cancer for Kiribati*

Rank	ICD-10-3	Type of Cancer	Gender		Total
			Male	Female	
1	C50	Malignant neoplasm of breast		7	7
2	C53	Malignant neoplasm of cervix uteri		3	3
3	D37	Neoplasm of uncertain or unknown behaviour of oral cavity and digestive organs	1	2	3
4	C14	Malignant neoplasm of other & ill-defined sites in the lip, oral cavity & pharynx		2	2
5	C34	Malignant neoplasm of bronchus and lung	2		2
6	C95	Leukaemia of unspecified cell type	2		2
7	C02	Malignant neoplasm of other and unspecified parts of tongue	1		1
8	C15	Malignant neoplasm of Oesophagus	1		1
9	C22	Malignant neoplasm of liver and intrahepatic bile ducts	1		1
10	C61	Malignant neoplasm of prostate	1		1
11	C69	Malignant neoplasm of eye and adnexa	1		1
12	C79	Secondary malignant neoplasm of other sites		1	1
13	C96	Other and unspecified malignant neoplasms of lymphoid, haematopoietic and related tissue		1	1
14	D38	Neoplasm of uncertain or unknown behaviour of middle ear & respiratory and intrathoracic organs		1	1
15	D39	Neoplasm of uncertain or unknown behaviour of female genital organs		1	1
16	D42	Neoplasm of uncertain or unknown behaviour of meninges	1		1
Total cancer deaths occurred at a health facility*			11	18	29

Sources: KHIS & MS1 as of 31.12.2015 *excluding SKH data

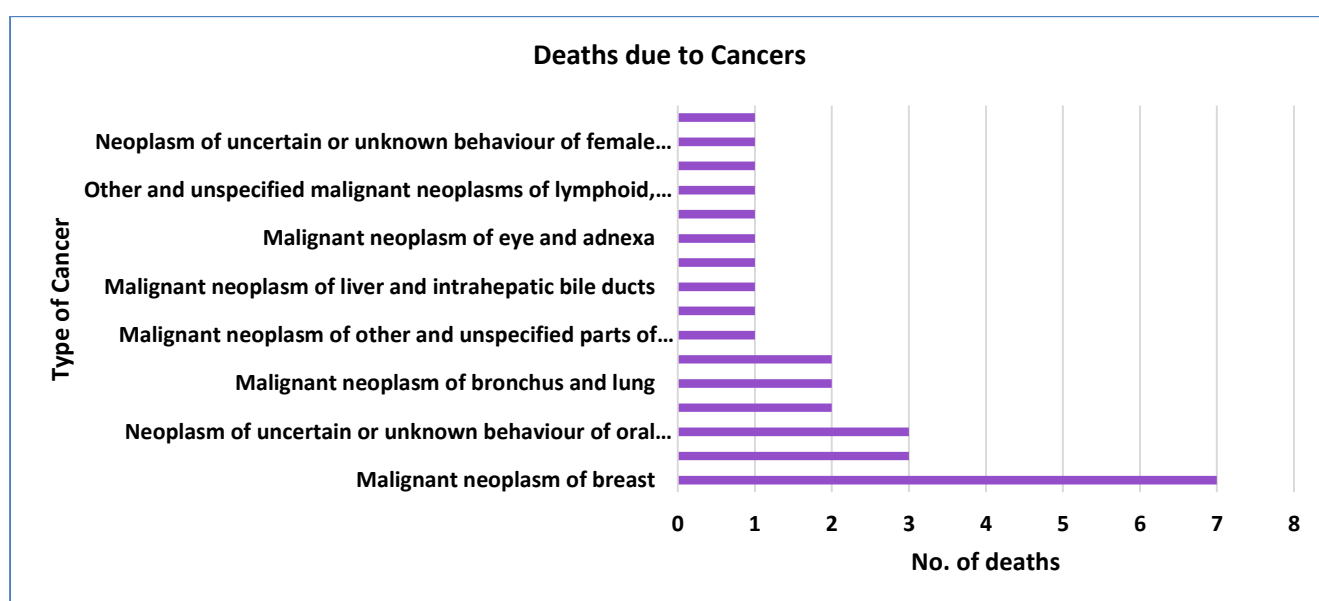
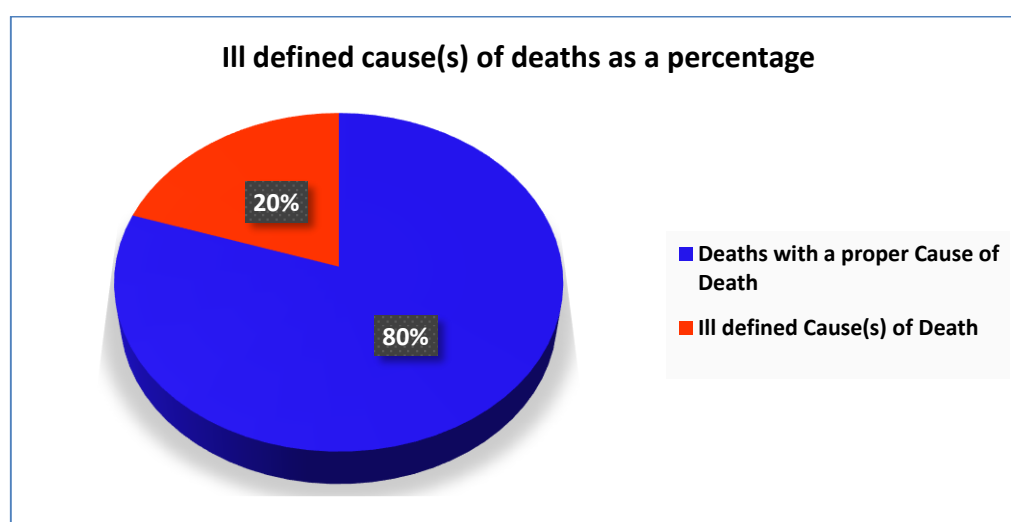
**Figure 10: Mortality from cancers**

Table 27: Ill-defined causes of death for Kiribati*

Rank	ICD-10-3	Ill-defined cause of death	Gender		Total
			Male	Female	
1	R06	Abnormalities of breathing	8	2	10
2	R07	Pain in throat and chest	2	4	6
3	R09	Symptoms & signs involving circulatory & resp. systems	1		1
4	R10	Abdominal and pelvic pain	4	5	9
5	R11	Nausea and vomiting	1	2	3
6	R14	Flatulence and related conditions	1		1
7	R17	Unspecified jaundice	1		1
8	R18	Ascites	1	2	3
9	R22	Localized swelling & lump of skin & subcutaneous tissue	2		2
10	R33	Retention of urine	1		1
11	R40	Somnolence, stupor and coma	1		1
12	R49	Voice disturbances	1		1
13	R50	Fever of unknown origin	4	3	7
14	R53	Malaise and fatigue	1		1
15	R54	Senility	3	7	10
16	R56	Convulsions, not elsewhere classified	2	1	3
17	R57	Shock, not elsewhere classified	2	5	7
18	R60	Oedema, not elsewhere classified	1		1
19	R62	Lack of expected normal physiological development	5	6	11
20	R63	Symptoms and signs concerning food and fluid intake	2	6	8
21	R99	Other ill-defined and unspecified causes of mortality	20	15	35
Total ill-defined deaths occurred at a health facility			64	58	122

Sources: KHIS & MS1 as of 31.12.2015 *excluding SKH data

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

8. Maternal & Child Health and Family Planning Services

Access to antenatal care: The average number of antenatal clinic visits attended per mother in one year: **5.4**

Access to antenatal care =	$\frac{\text{Total number of antenatal visits (first \& revisits) (11,272)}}{\text{Total number of deliveries reported (2,099)}}$
Methodological/System Issues:	
<ul style="list-style-type: none"> • Data for 2015 has been sourced from the MS1 and is likely to be affected by under-counting. • Births with unrecorded outcomes were counted as live births. • It is likely that the number of deliveries is under-reported. • Fertility data is weak in the country. 	

Table 28: Visits to Island Health Centers and Clinics

First Visits	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Antenatal	284	227	225	273	256	269	255	249	253	223	200	213	2,927
Postnatal	161	137	133	127	156	144	176	170	152	162	155	150	1,823
Child Health: <1yr	234	362	219	299	308	303	215	227	223	440	206	212	3,248
Child Health: 1-4yrs	315	521	371	240	494	193	288	349	433	225	145	143	3,717
MCH Aides	45	266	3	234	60	259	299	216	290	263	126	386	2,447
Pap Smears	-	-	-	-	41	2	-	55	1	-	8	18	125
Re-visits													
Antenatal	681	450	491	624	654	811	761	751	903	872	809	538	8,345
Postnatal	24	20	37	43	51	71	66	95	88	82	42	16	635
Child Health: < 1yr	911	803	752	889	998	1,145	1,057	1,118	1,149	1,308	914	1,022	12,066
Child Health: 1-4yrs	1,374	1,413	1,607	1,665	1,617	1,986	1,849	2,018	2,249	2,262	1,958	1,631	21,629
MCH Aides	-	59	46	88	39	123	212	70	56	155	104	51	1,003
Pap Smears	-	-	-	-	10	-	-	16	-	-	-	-	26

Source: MS1 as of 31.12.2015

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: **15.2**

% of pregnant mothers received at least one home visit by PHN =	$\frac{\text{Number of home visits (320)}}{\text{Total number of deliveries reported (2,099)}} \times 100$	
Methodological/System Issues:		
<ul style="list-style-type: none"> • Data for 2015 has been sourced from the MS1 and is likely to be affected by under-counting. • Births with unrecorded outcomes were counted as live births. • It is likely that the number of deliveries is under-reported. • Fertility data is weak in the country. 		

Table 29: PHN Home Visits

Service offered	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Sick patients treated	393	370	343	372	401	518	463	539	450	479	470	431	5,229
Family planning	46	45	41	35	57	63	69	45	54	48	51	30	584
Antenatal	28	35	19	26	27	39	32	29	31	12	34	8	320
Postnatal	31	25	35	33	45	98	57	53	35	42	69	20	543
Child Health: <1yr	210	181	243	327	345	432	309	283	238	238	171	218	3,195
Child Health: 1-4yrs	283	196	304	735	432	334	319	303	373	208	349	303	4,139

Source: MS1 as of 31.12.2015

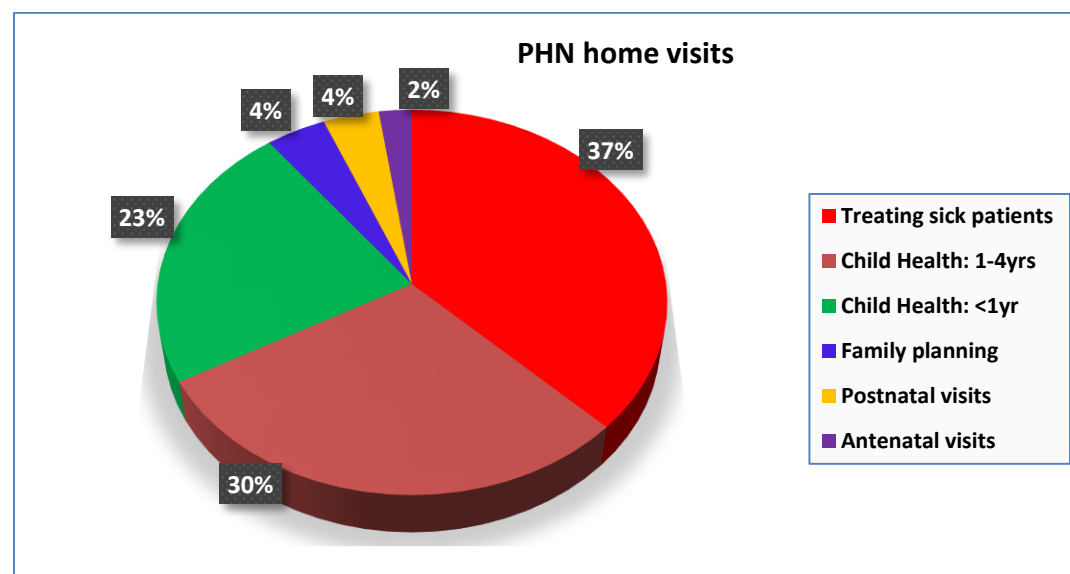


Figure 12: PHN home visits (as a percentage)

Percentage of Low Birth Weight: Percentage of having a low birth weight (<2500g) baby (per 100 live births): **6.2**

Percentage of LBW =	$\frac{\text{Number of Low Birth Weight babies (<2500 gm) (129)}}{\text{Total number of live births (2,066)}} \times 100$
Methodological/System Issues:	
<ul style="list-style-type: none"> Data for 2015 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting. Births with unrecorded outcomes were counted as live births. It is likely that the number of deliveries is under-reported. Fertility data is weak in the country. 	

Malnourished children: Percentage of children (aged <5 years) classified as malnourished or severely malnourished in the MS1 Health Facility Monthly Reporting Form: **5.7**

Percentage of Malnourished Children =	$\frac{\text{Total number of malnourished children <5 years (795)}}{\text{Total population of children (<5 years) (13,992)}} \times 100$
Methodological/System Issues:	
<ul style="list-style-type: none"> 2010 census population (latest official figures available) is used as base population. Data for 2015 has been sourced from the MS1 and is likely to be affected by under-counting. Strengthened reporting and timely completion of data loading to MS1 would contribute to more accurate figures. 	

Table 30: Malnutrition among <5yr children according to districts

District	No.
Central	85
Linnix	56
Northern	278
South Eastern	138
South Western	24
Tarawa & Banaba	214
Total	795

Malnutrition among <5yr children

District	Number of malnourished
South Western	24
Linnix	56
Central	85
South Eastern	138
Tarawa & Banaba	214
Northern	278

Source: MS1 as of 31.12.2015

Figure 13: Malnutrition among <5yrs according to districts

Table 31: Malnutrition among <5yr children

Island	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Makin	-	-	-	-	-	-	1	1	-	1	-	-	3
Butaritari	-	-	-	1	-	2	1	4	3	-	31	2	44
Marakei	1	1	5	11	5	3	7	9	4	58	29	12	145
Abaiang	4	1	4	11	5	13	8	8	15	6	6	5	86
Tarawa North	-	-	1	-	2	2	1	5	2	7	-	-	20
TUC	10	10	11	11	23	19	7	12	12	10	19	21	165
BTC	1	1	2	-	-	-	5	10	4	-	-	6	29
Banaba	-	-	-	-	-	-	-	-	-	-	-	-	-
Maiana	-	-	1	-	1	-	1	1	-	1	-	1	6
Kuria	2	-	4	1	-	-	-	-	-	-	-	39	46
Aranuka	1	-	3	3	1	1	1	-	-	-	-	-	10
Abemama	1	3	1	5	2	3	1	-	4	2	-	1	23
Nonouti	-	-	1	3	2	-	1	-	-	1	1	-	9
Tab North	-	-	4	3	-	3	-	-	-	-	-	1	11
Tab South	-	-	1	-	-	1	-	-	-	-	-	-	2
Onotoa	-	1	-	-	-	-	-	-	-	-	1	-	2
Beru	26	101	-	-	-	-	-	-	-	-	-	-	127
Nikunau	2	2	3	-	1	-	-	1	1	-	-	-	10
Tamana	-	-	-	-	-	-	-	-	-	-	-	-	-
Arorae	-	-	-	-	-	-	1	-	-	-	-	-	1
Kiritimati	-	-	-	1	-	5	8	3	1	-	6	3	27
Tabuaeran (Fanning)	-	1	-	1	-	-	5	8	6	3	1	4	29
Teraina (Washington)	-	-	-	-	-	-	-	-	-	-	-	-	-
Kanton	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	48	121	41	51	42	52	48	62	52	89	94	95	795

Source: MS1 as of 31.12.2015

Contraceptive use: Total number of contraceptive contacts (all forms) seen at health facilities in one year (per 1,000 population): **531.2**

Contraceptive contacts (all forms) seen at health facilities =	<u>Contraceptive contacts (all forms) seen at health facilities (54,747)</u> Total population (103,058)	X 1,000
Methodological/System Issues:		
<ul style="list-style-type: none"> • 2010 census population (latest official figures available) is used as base population. • Data for 2015 has been sourced from the MS1 and is likely to be affected by under-counting and/or multiple-counting. • Strengthened reporting and timely completion of data loading to MS1 would contribute to more accurate figures. 		

Table 32: 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	10	10	9	30	48	29	27	14	19	14	22	20	252
	New clients	-	1	3	-	2	5	2	-	5	5	1	1	25
	Restart	-	-	-	-	-	1	-	-	-	-	-	-	1
	Discontinuers	-	2	2	-	-	-	1	-	-	-	1	-	6
	Lost contact	3	2	1	-	6	6	-	-	2	1	6	2	29
Micro-gynon	Continuers at end of month	1	-	-	1	-	2	-	-	-	-	-	-	4
	Continuers from last month	-	-	-	2		1	-	-	-	-	-	-	3
	New clients	4	9	10	25	40	14	29	14	22	20	21	18	226
	Restart	116	49	107	98	59	124	75	91	134	114	81	77	1,125
	Discontinuers	16	13	25	9	8	24	5	9	15	12	14	17	167
Depo Provera	Lost contact	1	-	1	-	-	-	1	2	-	3	2	-	10
	Continuers at end of month	5	6	3	3	2	2	1	3	-	1	5	2	33
	Continuers from last month	7	2	6	39	5	19	5	6	7	3	4	7	110
	New clients	1	3	1	-	1	2	2	-	-	-	2	1	13
	Restart	2	-	3	-	-	1	-	-	4	5	-	-	15
	Discontinuers	125	48	133	102	56	125	75	96	139	122	96	89	1,206
	Lost contact	921	942	836	990	935	858	868	1,113	1,148	1,200	1,301	1,295	12,407
	Continuers at end of month	84	83	86	156	98	111	89	105	88	110	102	45	1,157
Condoms		3	6	7	7	5	4	7	17	7	5	10	14	92
Ovulation		45	30	28	32	30	26	22	37	30	35	31	23	369
Norplant	Inserted this month	65	64	53	67	64	66	63	52	88	45	87	78	792
	Removed this month	22	14	9	7	30	12	7	10	4	10	9	6	140
IUCD	Inserted this month	20	4	17	24	19	28	1	5	3	4	4	1	130
	Removed this month	955	974	851	1,034	929	855	961	1,196	1,216	1,333	1,297	1,291	12,892
Jedell	Inserted this month	146	92	18,192	640	566	562	291	619	530	28,154	726	1,431	51,949
	Removed this month	16	12	33	21	29	28	20	13	18	19	48	42	299
Vasectomy		-	-	-	1	-	-	-	-	-	1	-	3	5
Tubectomy		-	-	-	1	-	-	-	1	-	2	-	1	5

Source: MS1 as of 31.12.2015

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: **89.2**

Measles Coverage =	$\frac{\text{Number of children aged <1 years receiving the MCV1 in a year (2,671)}}{\text{Total number of children aged <1 years (2,996)}} \times 100$
Methodological/System Issues:	
<ul style="list-style-type: none"> • 2010 census population (latest official figures available) is used as base population. • Data for 2015 has been sourced from the MS1 and is likely to be affected by under-counting and/or multiple-counting. • Strengthened reporting and timely completion of data loading to MS1 would contribute to more accurate figures. 	

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

Vaccine type	District						Grand Total
	Central	Linnix	Northern	South Eastern	South Western	Tarawa & Banaba	
BCG	98	265	236	67	107	1,341	2,114
Failed BCG (no scar)	1	7	14	1	1	10	34
HepB (<24hrs)	88	271	221	58	63	1,295	1,996
HepB (>=24hrs)	4	22	28	1	30	36	121
IPV	126	65	225	100	122	1,009	1,647
MR1	158	249	299	97	179	1,489	2,471
OPV1	150	235	306	106	210	1,521	2,528
OPV2	171	261	286	120	195	1,551	2,584
OPV3	162	256	290	105	185	1,534	2,532
Pentavalent1	153	250	330	110	206	1,556	2,605
Pentavalent2	180	285	324	121	228	1,612	2,750
Pentavalent3	188	324	297	123	245	1,686	2,863
Pneumococcal1	176	245	319	129	219	1,494	2,582
Pneumococcal2	155	232	325	137	223	1,516	2,588
Pneumococcal3	149	210	281	150	189	1,502	2,481
Rota1	140	64	229	86	119	1,005	1,643
Rota2	95	74	138	45	98	725	1,175
Grand Total	2,194	3,315	4,148	1,556	2,619	18,628	32,460

Sources: KHIS and MS1 as of 31.12.2015 *Excluding SKH data

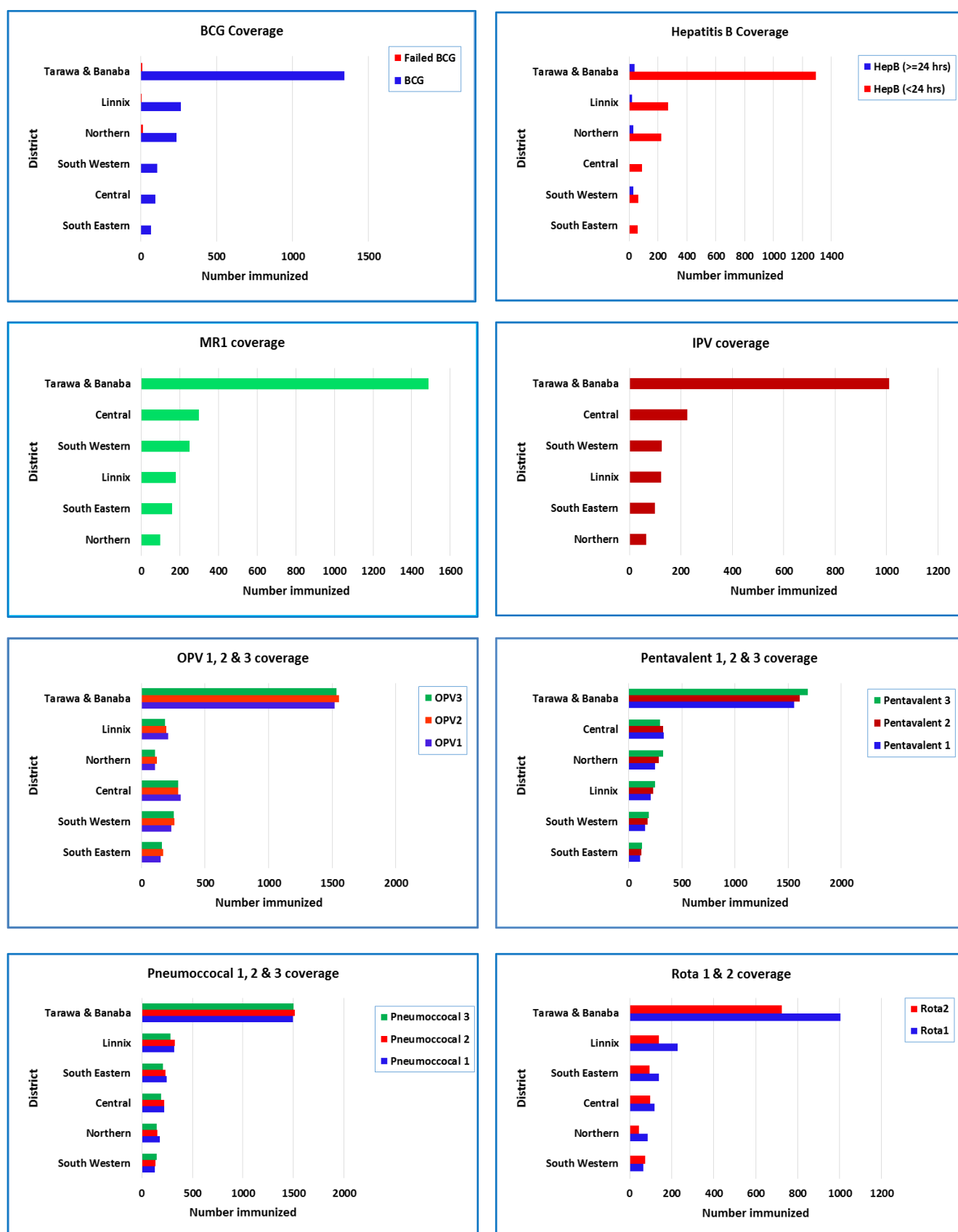


Figure 14: Immunization coverage (Children <1yr): district breakdowns

Table 34: Immunization Overview (Children <1yr)*

Vaccine type	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
HepB (<24hrs)	185	142	176	180	173	167	189	180	162	172	176	94	1,996
HepB (>=24hrs)	15	10	12	13	7	7	9	12	18	10	5	3	121
BCG	197	150	169	210	177	180	223	188	158	179	185	98	2,114
Failed BCG (no scar)	4	6	3	6	-	4	-	4	1	2	1	3	34
Pentavalent1	210	202	197	237	236	213	236	220	229	202	186	237	2,605
Pentavalent2	222	225	177	243	209	263	229	240	233	257	208	243	2,749
Pentavalent3	246	191	199	221	223	275	389	219	249	238	204	206	2,860
IPV	-	-	-	-	-	419	273	206	160	206	190	193	1,647
Rota1	-	-	-	-	-	-	62	659	254	260	209	199	1,643
Rota2	-	-	-	-	-	-	5	23	355	320	249	222	1,174
Pneumococcal1	87	21	194	367	338	231	192	16	303	226	192	215	2,582
Pneumococcal2	59	15	80	238	321	394	217	227	276	292	230	238	2,587
Pneumococcal3	51	22	70	154	240	411	271	250	284	253	251	221	2,478
OPV1	194	213	185	188	248	213	197	205	254	196	200	235	2,528
OPV2	197	215	179	193	207	256	213	195	244	243	193	248	2,583
OPV3	216	181	184	159	202	271	233	192	265	208	213	205	2,529
MR1	167	140	181	200	157	300	186	193	231	229	264	223	2,471

Sources: KHIS and MS1 as of 31.12.2015 *Excluding SKH data

Table 35: Immunization Overview (Children 1-5yrs)

Vaccine type	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Pentavalent1	-	-	-	1	-	-	-	-	-	-	-	-	1
Pentavalent2	-	-	-	2	-	-	-	-	-	-	-	-	2
Pentavalent3	1	-	-	2	-	-	-	-	-	-	-	-	3
IPV	-	-	-	-	-	-	-	-	-	-	-	-	0
Rota1	-	-	-	-	-	-	-	-	-	-	-	-	0
Rota2	-	-	-	-	-	-	-	-	-	-	-	-	0
Pneumococcal1	1	-	2	4	-	-	-	-	-	-	-	-	7
Pneumococcal2	-	-	1	-	-	-	-	-	-	-	-	-	1
Pneumococcal3	-	-	-	-	-	-	-	-	-	-	-	-	0
OPV1	-	-	-	1	-	-	-	-	-	-	-	-	1
OPV2	1	-	-	2	-	-	-	-	-	-	-	-	3
OPV3	6	-	-	2	-	-	-	-	-	-	-	-	8
MR1	16	32	29	20	19	13	3	21	47	-	-	-	200

Source: MS1 as of 31.12.2015

Table 36: Immunization Overview (Children 6-14yrs)

Vaccine type	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
MR2 (All class 1)	2	16	201	10	7	216	157	129	269	207	278	12	1,504
DPT4 (All class 1)	-	-	6	12	19	243	32	27	137	150	239	10	875
TT5 (Form 1 girls)	-	-	37	-	1	-	-	110	87	114	46	-	395

Source: MS1 as of 31.12.2015

Table 37: Immunization Overview (Children >15yrs)

Vaccine type	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
MR2 (All class 1)	-	-	21	-	21	90	58	52	48	84	177	-	551
DPT4 (All class 1)	-	-	10	-	10	111	-	15	104	120	136	42	548
TT5 (Form 1 girls)	29	-	-	5	-	10	-	43	39	33	142	-	301
TT6 (1st pregnancy)	64	90	93	62	58	58	48	61	43	51	53	54	735
TT7 (2nd pregnancy)	40	38	46	40	50	28	38	43	33	37	188	35	616
TT8 (subsequent pregnancy)	54	56	60	36	34	28	57	34	29	37	30	36	491

Source: MS1 as of 31.12.2015

Table 38: 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	111	96	100	93	100	101	118	95	89	99	92	30	1,124
Vaccinated >24hrs after birth	-	1	-	-	-	-	2	1	-	1	-	1	6
Not given	10	15	6	3	7	3	4	6	3	3	4	4	68
Total	121	112	106	96	107	104	124	102	92	103	96	35	1,198
BCG													
Given	112	92	99	93	99	101	118	95	90	100	93	32	1,124
Not given	9	20	7	3	8	3	6	7	2	3	3	3	74
Total	121	112	106	96	107	104	124	102	92	103	96	35	1,198

Source: KHIS as of 31.12.2015

10. Birth information: TCH

Table 39: Birth outcomes according to mode of delivery at TCH

Mode of Delivery	Outcome		Sub Total
	Live birth	Stillbirth	
Normal	1,048	17	1,065
Caesarean Section	123	5	128
Forceps	2	-	2
Other	3	-	3
Grand Total	1,176	22	1,198

Source: KHIS as of 31.12.2015

Table 40: Births outcomes according to type of delivery at TCH

Type of delivery	Outcome		Sub Total
	Live birth	Stillbirth	
Vertex	1,158	20	1,178
Breech	18	2	20
Grand Total	1,176	22	1,198

Source: KHIS as of 31.12.2015

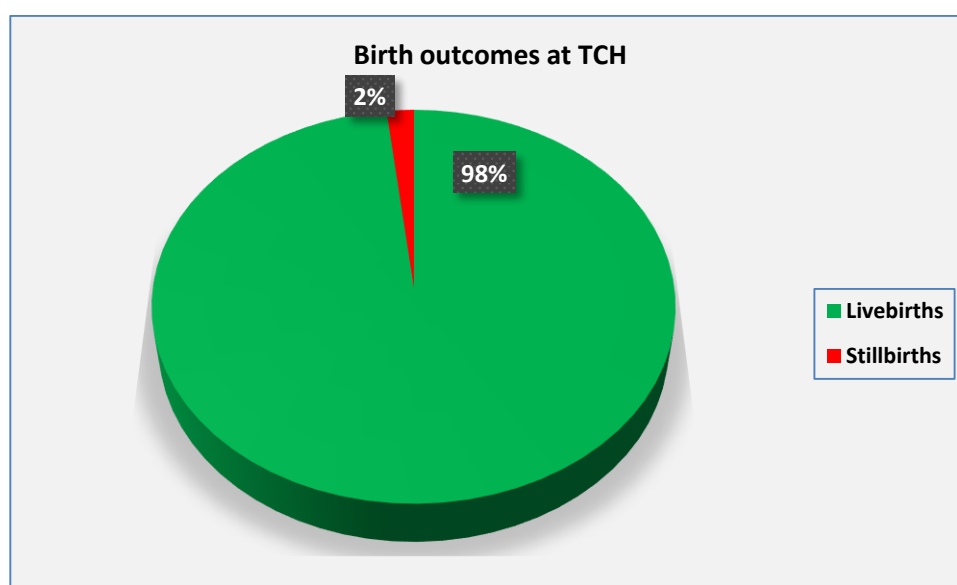


Figure 15: Birth outcomes at TCH

11. Birth information: Health Centers and Clinics

Table 41: Birth outcomes reported from island Health Centers and clinics*

Outcome	Number
Live birth	866
Stillbirth	16
Outcome unrecorded	19
Grand Total	901

**Data extracted from MS1 as at 31.12.2015*

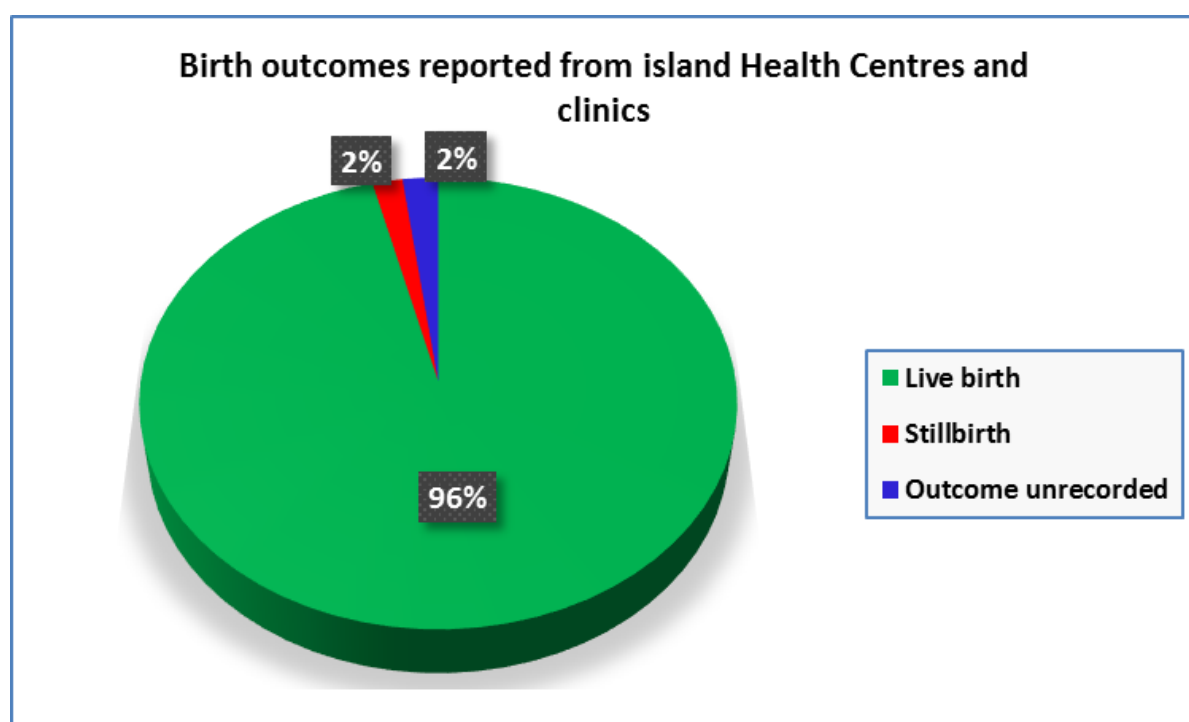


Figure 16: Birth outcomes reported from island Health Centres and clinics

Table 42: Deliveries at Health Centers and clinics

#	Health Centre/clinic	No. of births
1.	Abaiang	114
2.	Abemama	44
3.	Aranuka	18
4.	Arorae	9
5.	Banaba	3
6.	Beru	29
7.	BTC	35
8.	Butaritari	50
9.	Kiritimati	172
10.	Kuria	7
11.	Maiana	21
12.	Makin	35
13.	Marakei	55
14.	Nikunau	15
15.	Nonouti	38
16.	Onotoa	19
17.	Tab North	9
18.	Tab South	18
19.	Tabuaeran (Fanning)	36
20.	Tamana	14
21.	Tarawa North	87
22.	Teraina (Washington)	25
23.	TUC	48
Grand Total		901

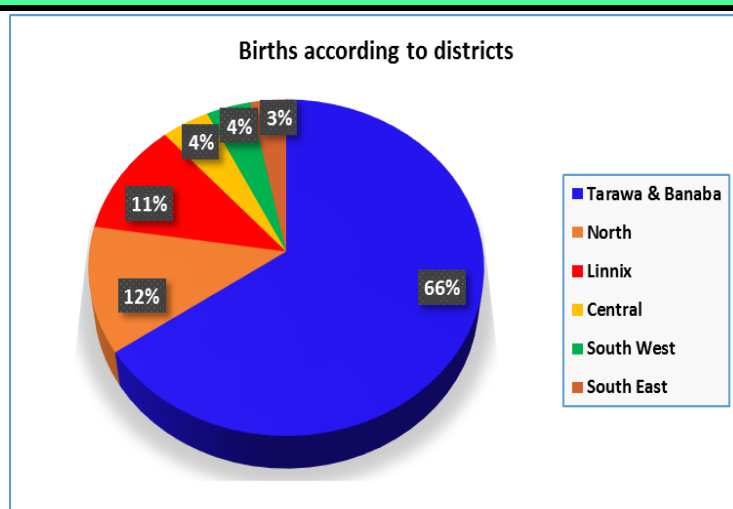
Source: MS1 as at 31.12.2015

12. Birth information: District Breakdown

Table 43: Births according to districts*

District	No. of Births
Central	90
Linnix	233
Northern	254
South Eastern	67
South Western	84
Tarawa & Banaba	1371
Grand Total	2099

Source: KHIS & MS1 as at 31.12.2015
 *excluding SKH data

**Figure 17: Births according to districts**

13. Country birth information

Adolescent birth rate for 10-14 years: Probability of giving birth between the age 10-14 years in a given year (per 10,000 girls age 10-14 years): **3.4**

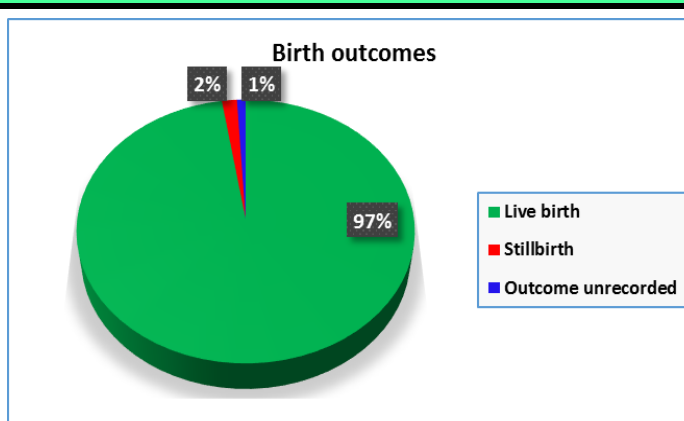
Adolescent birth rate (10-14 years) =	$\frac{\text{Total number of births in age group 10-14 years for the year (2)}}{\text{Total population of girls (10-14 years) (5,968)}} \times 10,000$
Methodological/System Issues:	
<ul style="list-style-type: none"> 2010 census population (latest official figures available) is used as base population. Data for 2015 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting. It is likely that the number of deliveries is under-reported. Fertility data is weak in the country. 	

Adolescent birth rate for 15-19 years: Probability of giving birth between the age 15-19 years in a given year (per 10,000 girls age 15-19 years): **331.2**

Adolescent birth rate (15-19 years) =	$\frac{\text{Total number of births in age group 15-19 years for the year (177)}}{\text{Total population of girls (15-19 years) (5,344)}} \times 10,000$
Methodological/System Issues:	
<ul style="list-style-type: none"> 2010 census population (latest official figures available) is used as base population. Data for 2015 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting. It is likely that the number of deliveries is under-reported. Fertility data is weak in the country. 	

Table 44: Births reported from Hospitals, Health Centers and Clinics*

Outcome	No.
Live birth	2,047
Stillbirth	33
Outcome unrecorded	19
Grand Total	2,099



Sources: KHIS & MS1 as at 31.12.2015
*excluding SKH data

Figure 18: Country birth outcomes

14. Non Communicable Disease (NCD) burden

Diabetes: Percent of people presenting to health facilities with diabetes (confirmed or suspected): **49.7**

$\% \text{ of Diabetes} = \frac{\text{Number of people presenting to health facilities with Diabetes (14,457)}}{\text{Total number of patent visits with NCDs to health facilities (29,072)}} \times 100$	
Methodological/System Issues: <ul style="list-style-type: none"> • Data for 2015 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting and/or multiple counting. • Strengthened reporting and timely completion of data loading to MS1 would contribute to more accurate figures. • Morbidity data is weak in the country. 	

Hypertension: Percent of people presenting to health facilities with hypertension (confirmed or suspected): **46.9**

$\% \text{ of Hypertension} = \frac{\text{Number of people presenting to health facilities with Hypertension (13,640)}}{\text{Total number of patent visits with NCDs to health facilities (29,072)}} \times 100$	
Methodological/System Issues: <ul style="list-style-type: none"> • Data for 2015 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting and/or multiple counting. • Strengthened reporting and timely completion of data loading to MS1 would contribute to more accurate figures. • Morbidity data is weak in the country. 	

Table 45: Non Communicable Disease burden in Island Health Centers and Village Clinics

NCD	Patient registration & visit	Month												Total
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Hypertension	Patients registered	2,141	2,277	2,354	2,391	1,903	1,916	1,637	2,636	1,873	2,668	2,554	2,541	26,891
	1 st Visit + Revisits	788	980	1,011	986	1,136	1,343	1,064	1,368	1,265	1,381	1,295	957	13,574
Diabetes	Patients registered	1,679	1,785	1,839	1,987	1,857	1,867	1,606	2,164	1,801	2,153	2,022	1,996	22,756
	1 st Visit + Revisits	933	1,094	983	1,199	1,128	1,552	1,080	1,478	1,185	1,382	1,269	905	14,188
Mental illnesses	Patients registered	60	69	56	55	69	65	64	64	66	71	63	46	748
	1 st Visit + Revisits	17	18	30	39	36	50	35	30	43	67	35	25	425

Source: MS1 as at 31.12.2015

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): **421.1**

Tuberculosis case notification rate =	$\frac{\text{Number of bacteriologically confirmed (new \& relapse) TB cases (434)}}{\text{Total Population (103,058)}} \times 100,000$
Methodological/System Issues:	
<ul style="list-style-type: none"> • 2010 census population (latest official figures available) is used as base population. • Data for 2014 (latest available) has been sourced from the MS1 and is likely to be affected by under-counting and/or multiple counting. • Strengthened reporting and timely completion of data loading to MS1 would contribute to more accurate figures. • Morbidity data is weak in the country. 	

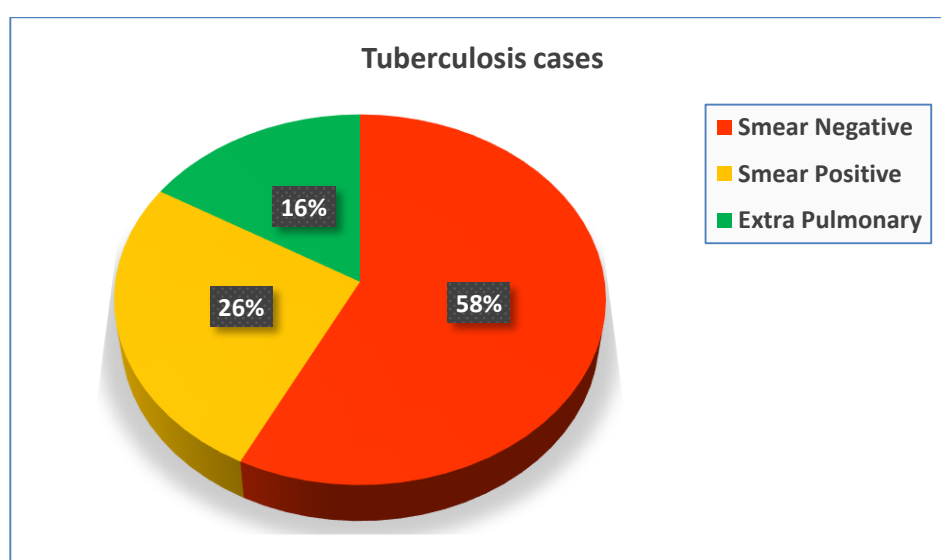


Figure 19: Tuberculosis case notifications (new & relapsed) for 2015

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: **79.7**

Tuberculosis treatment success rate =	$\frac{\text{Treatment completed + cured TB cases (346)}}{\text{Number of (new + relapsed) TB cases registered for the year (434)}} \times 100$
Methodological/System Issues:	
<ul style="list-style-type: none"> • Data on treatment completed/cured TB cases (for 2014) were sourced from National TB control program. • Data for 2014 (latest available) has been sourced from the MS1 and is likely to be affected by under-counting and/or multiple counting. • Strengthened reporting and timely completion of data loading to MS1 would contribute to more accurate figures. • Morbidity data is weak in the country. 	

Table 46: Tuberculosis Reporting

Type	Category	Month												Total
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Smear Positive	New Cases	11	-	14	1	1	8	7	11	8	19	14	10	104
	Retreatment	-	-	-	-	-	3	2	-	2	2	1	-	10
	Defaulted	-	-	-	-	-	-	-	-	1	-	-	-	1
	Fail	-	-	-	-	-	1	-	-	1	1	-	-	3
Smear Negative	New Cases	21	-	27	1	1	26	25	21	27	33	32	28	242
	Retreatment	-	-	-	-	-	1	2	-	2	-	1	1	7
Extra Pulmonary	New Cases	3	-	3	-	-	5	14	4	10	14	7	9	69
	Retreatment	-	-	-	-	-	-	-	-	-	-	1	1	2

Source: MS1 as at 31.12.2015

16. Leprosy burden

Table 47: Leprosy Reporting

Type	Category	Month												Total	
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
MB	Adult	Continuers from last month	7	8	12	13	7	16	14	12	13	13	12	1	128
		New clients	-	-	1	-	1	4	-	-	1	-	-	-	7
		Restart	-	-	-	-	-	-	-	-	1	-	-	-	1
		Discontinuers	-	-	-	-	-	2	-	-	1	-	-	-	3
		Lost contact	-	1	1	3	-	-	-	-	-	-	-	-	5
		Continuers at end of month	-	-	-	-	-	-	1	-	-	-	-	-	1
	Child	Continuers from last month	-	-	-	-	-	-	-	-	-	-	-	-	-
		New clients	7	7	12	10	8	18	13	12	16	13	12	1	129
		Restart	2	1	-	3	3	4	2	1	2	2	2	1	23
		Discontinuers	-	-	-	-	-	-	-	-	-	-	-	-	2
		Lost contact	-	-	-	-	-	-	-	-	-	-	-	-	-
PB	Adult	Continuers from last month	-	-	-	-	-	-	-	-	-	-	-	-	-
		New clients	-	-	-	-	-	-	-	-	-	-	-	-	-
		Restart	-	-	-	-	-	-	-	-	-	-	-	-	-
		Discontinuers	2	1	-	3	3	4	3	1	2	3	2	1	25
		Lost contact	1	1	-	8	4	8	5	4	4	2	4	-	41
		Continuers at end of month	-	-	-	-	-	-	2	-	7	1	5	-	15
	Child	Continuers from last month	-	-	-	-	-	-	-	-	-	-	-	-	-
		New clients	-	-	-	-	-	1	-	-	-	-	-	-	1
		Restart	-	-	-	-	-	1	-	-	-	-	-	-	1
		Discontinuers	-	-	-	-	-	-	1	-	-	-	-	-	1
		Lost contact	-	-	-	-	-	-	-	-	-	-	-	-	-
	Continuers at end of month	1	1	-	8	4	8	6	4	11	3	7	2	55	

Source: MS1 as at 31.12.2015

Notes

[illegible]