MALDIVES HEALTH STATISTICS 2021

Ministry of Health
Republic of Maldives

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The publication also drew significant information from the National Vital Registration System (VRS) which is GEMEN. Data sourced from GEMEN system specifically regarding births and deaths, was compiled, cleaned, and organized by Ministry of Health personnel. The collaboration and support from VRS staff at the DNR and the National Centre for Information Technology (NCIT) team were appreciated.

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Health Statistics and Publication Section,
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EXECUTIVE SUMMARY

The release of the eleventh publication of the Maldives Health Statistics book is instrumental in providing accessible and current comprehensive statistics and information across various dimensions of health. The publication is organized into five chapters (in accordance with the figure below), each exploring distinct facets of health-related data.

Chapter 1: Health System- Building Blocks					
Service Delivery	Health Workforce	Health Information Systems	Access to essential medicines	Financing	Governance

Remaining chapters: Health Outcomes			
Natality	Morbidity	Mortality	Public Health

Chapter 1: Health System

This section covers the six fundamental building blocks of a health system, including service delivery, health workforce, health information systems, access to essential medicines, financing, and governance. It examines health services and resources, focusing on patient load, human resources and medical staff in all hospitals and government health facilities. The data representations incorporate geographical location, gender and skill mix for a comprehensive analysis.

Chapter 2: Natality

This chapter delves into fertility rates, offering data on births, birth outcomes, birth weight, birth attendants, and the age of parents sourced from the vital registration system (GEMEN). It also examines life expectancy trends from 1990 to 2015 for both males and females.

Chapter 3: Morbidity

This chapter explores total inpatients through age-sex disaggregation, location and the burden of diseases based on the principal diagnosis of admissions from hospitals and all government health facilities in the Maldives. It highlights the most prevalent conditions leading to admissions.

Chapter 4: Mortality

This chapter utilizes information from the vital registration system (GEMEN) and covers a range of mortality metrics, including crude death rates, under-5 deaths, infant deaths, neonatal deaths, maternal deaths, age-specific mortality and leading causes of death for the year 2021.

This chapter also includes a separate section on "Analysis of Cause of Death". This section provides a detailed examination of age-specific mortality rates, completeness of mortality data, broad classification of deaths and the quality of cause of death data.

Chapter 5: Public Health

This concluding chapter presents programmatic data from the Health Protection Agency, focusing on the Expanded Program on Immunization (EPI), Nutrition program (deworming and vitamin A), Tuberculosis, HIV/AIDS, Sexually Transmitted Diseases and disease surveillance. Additionally, it includes Thalassemia prevalence details from the Maldivian Blood Services.

In essence, this comprehensive compilation serves as a valuable resource for policymakers, researchers and healthcare professionals, providing a profound understanding of the health landscape in the Maldives.

CHAPTER 1- HEALTH SYSTEMS

1 Health Systems

The Maldivian healthcare system encompasses a diverse array of organizations, institutions, resources, and individuals, all working towards the common goal of national health vision. This involves a combination of efforts by both institutional and civil society groups to address the factors that affect health, as well as more direct interventions aimed at improving health outcomes. To achieve this, the system employs a variety of preventive, promotive, curative, and rehabilitative measures, utilizing a pyramid of healthcare facilities that spans both public and private sectors, as well as civil society organizations (CSOs).

Six Core Components in WHO framework of "building blocks":

(i) Service delivery
(ii) Health workforce
(iii) Health information systems
(iv) Access to essential medicines
(v) Financing
(vi) Leadership/governance

This chapter focuses on evaluating the Maldivian health system based on the six building blocks. Each of these building blocks plays a unique role in enhancing the overall strength of the health system. Certain components, such as leadership/governance and health information systems, cut across all the building blocks and serve as the foundation for policymaking and regulation. In terms of key input components, financing and the health workforce are particularly critical. Meanwhile, the availability and geographic distribution of care represent the immediate outputs of the health system, which are influenced by the quality of medicines, medical products, technologies and service facilities (World Health Organization, 2010).

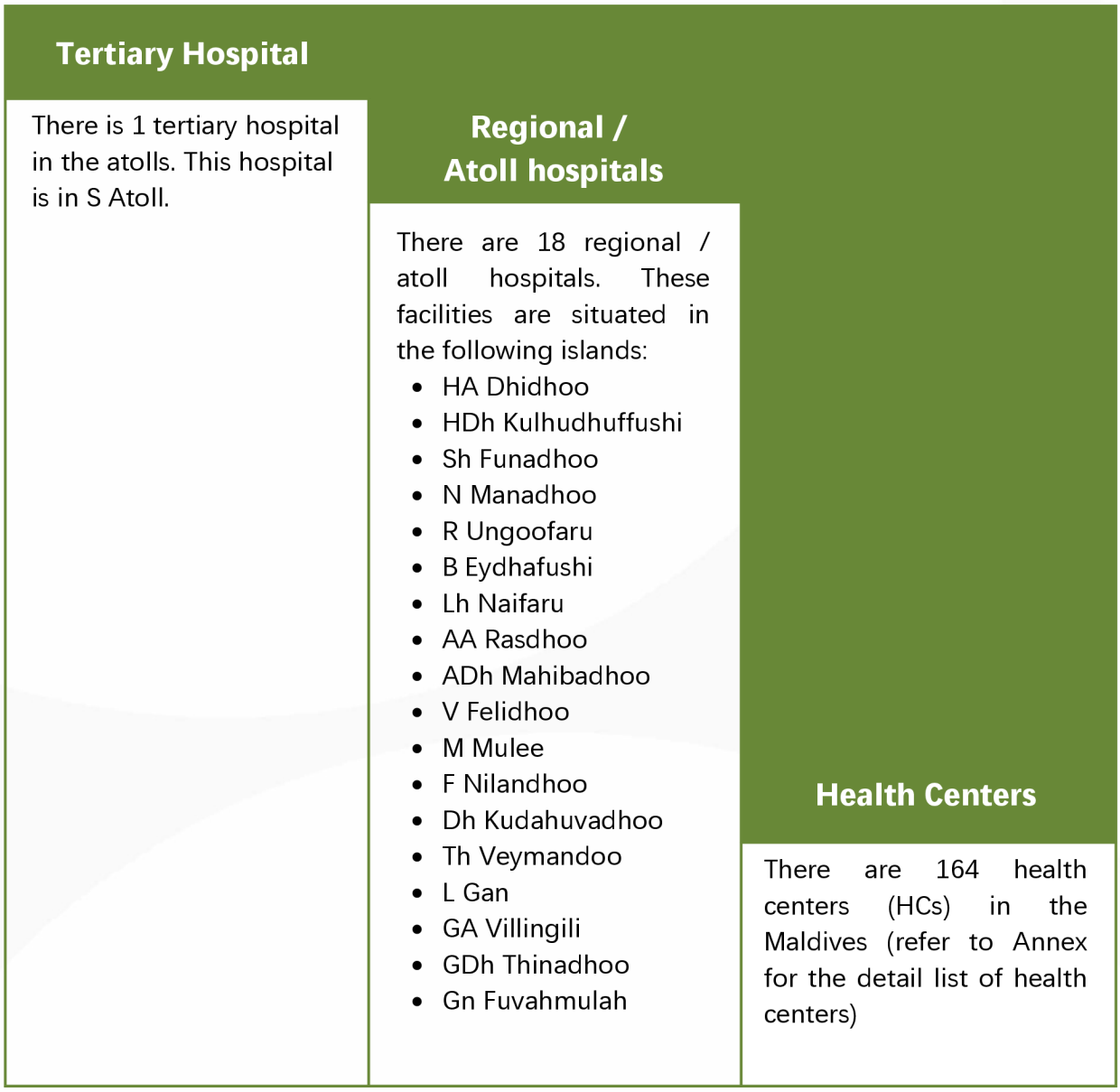
1.1 Service Delivery

The delivery of health services is a critical aspect of any healthcare system. To effectively measure the availability, accessibility, and distribution of such services, a combination of indicators or a composite indicator is required. In this section, we examine various health statistics that shed light on the number of healthcare facilities, outpatient services, beds and specialized services like surgeries that are currently accessible in the Maldives.

1.1.1 Health facilities

This analysis pertains to data obtained from a total of 190 government-run health facilities (excluding 2 small scale clinics), of which 183 are situated across various atolls, with the remainder being in the Greater Male' Region (GMR). In this publication GMR is defined as Male', Hulhumale' and Villimale'.

Figure 1-1: Government health facilities in the atolls, 2021

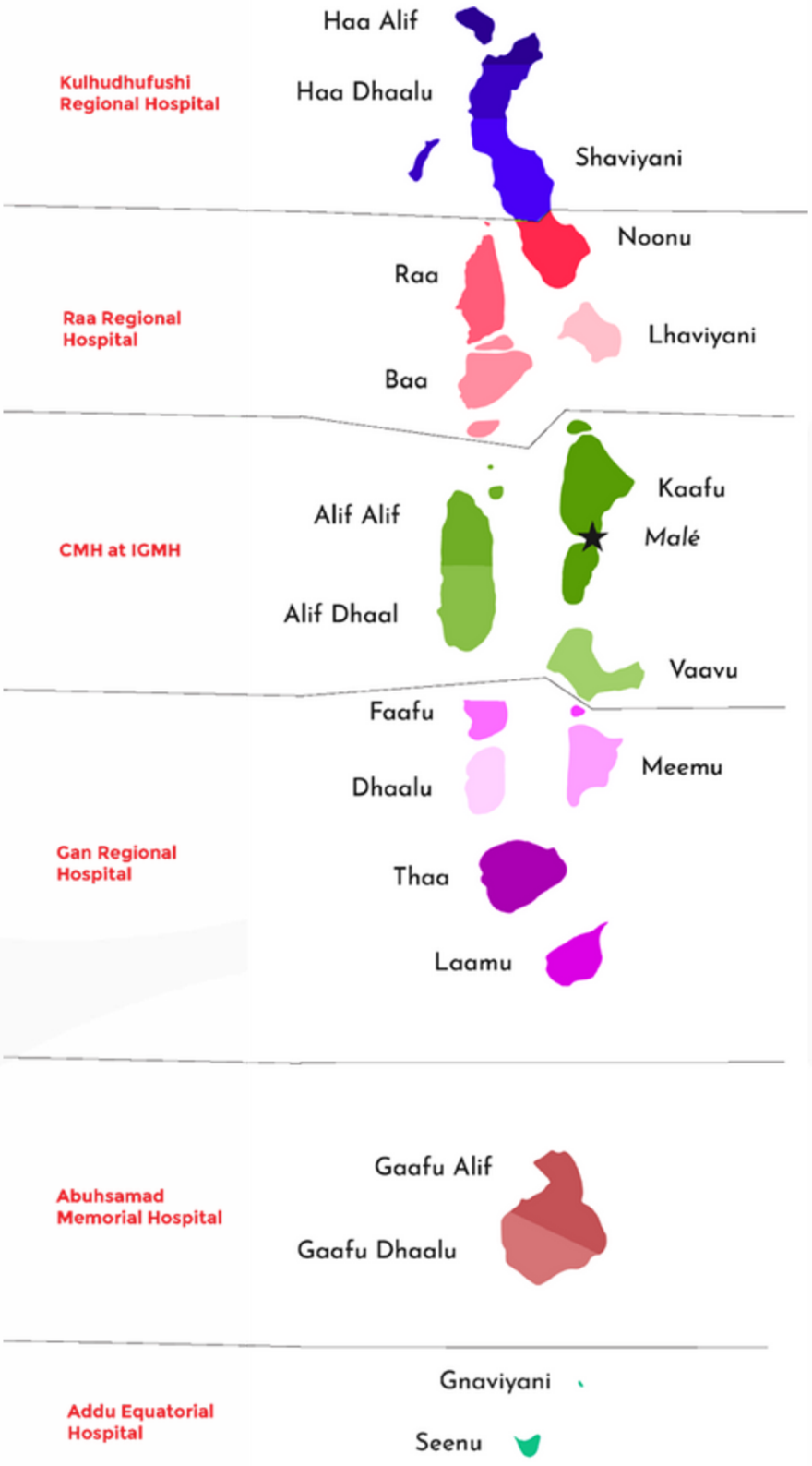


The health policies in Maldives concerning service delivery entail the establishment of a government health facility, such as a hospital or health center, on each inhabited island. The level of service provision at each facility is determined based on factors like population size, patient load, and proximity to the nearest hospital. The table below provides a breakdown of the three tiers of the Maldivian healthcare system disaggregated by government health service providers and business or civil service-based providers.

Table 1-1: Health system entities, 2021

<table>
<tr><th></th><th>Government Health Services</th><th colspan="2">Business and Civil Services</th></tr>
<tr><td rowspan="2">Tier 3: Tertiary</td><td>National referral hospital (1- IGMH)</td><td rowspan="2">Private Hospitals in GMR (2 - ADK, Treetop)</td><td rowspan="5">State Trading Organization (STO), private pharmacies , Health suppliers, Health focused civil society organisations, Youth and women's groups</td></tr>
<tr><td>AEH</td></tr>
<tr><td rowspan="2">Tier 2: Secondary</td><td>Other public hospitals (3-Hulhumale' hospital, Villimale' hospital, Senahiya Military Hospital)</td><td rowspan="2">Other Private Hospitals (2- Medica and IMDC)</td></tr>
<tr><td>Regional / Atoll hospitals (18- KRH, URH, GRH, ASMH, MRH & Atoll hospitals</td></tr>
<tr><td rowspan="2">Tier 1: Primary</td><td>Health Centres (164)</td><td rowspan="2">Private Clinics</td></tr>
<tr><td>Dhamanaveshi</td></tr>
</table>

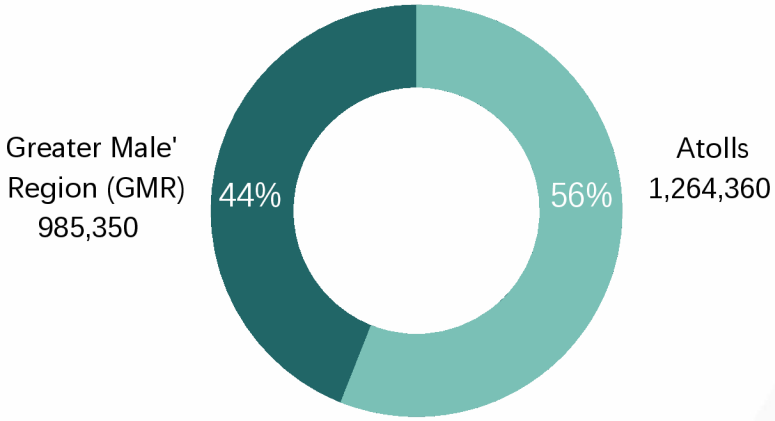
Figure 1-2: Regional and main referral facilities, 2021



1.1.2 Outpatient

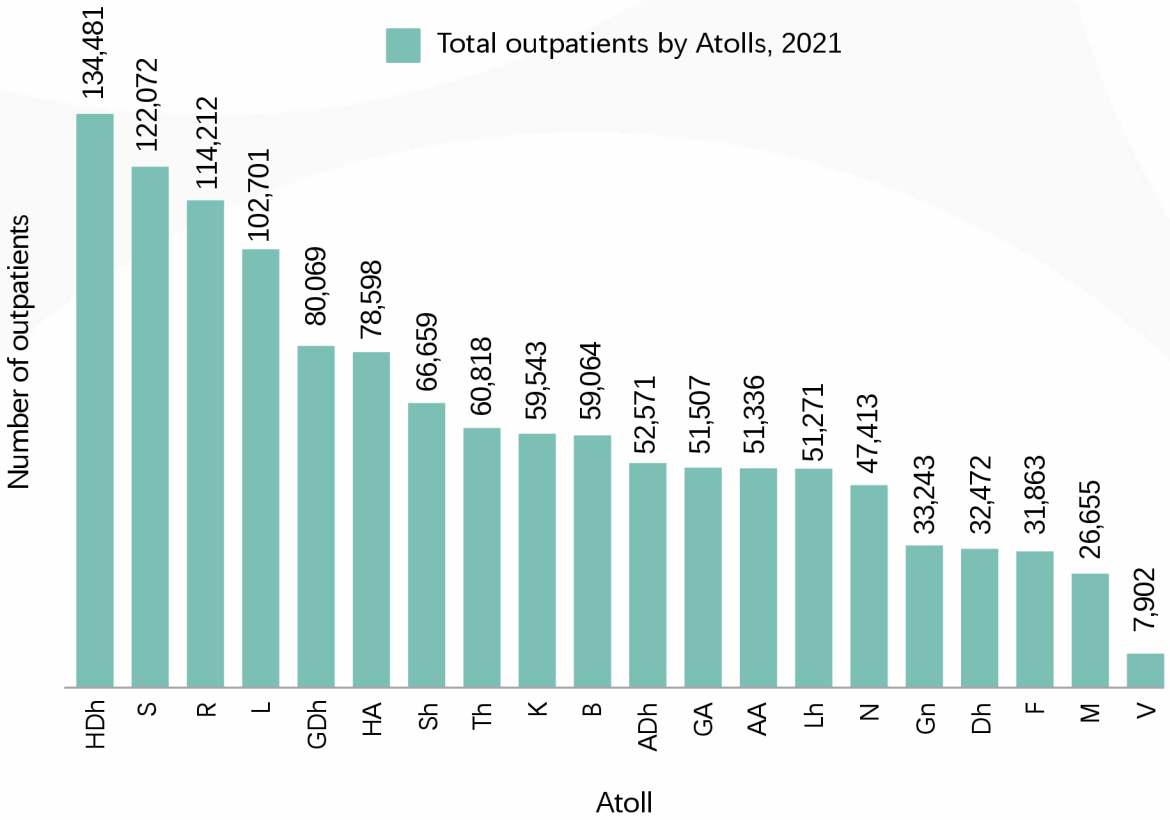
In 2021, a total of 2,249,710 outpatient visits were documented across 183 government health facilities and 4 main private hospitals in the Maldives. It was noteworthy that the majority of these visits, constituting 56%, originated from the Atolls.

Figure 1-3: Total outpatient from GMR & Atolls, 2021



Upon analyzing the breakdown of outpatient visits based on location within the atolls, it is evident that health facilities in HDh Atoll recorded the highest number of outpatients, followed by those in S and R Atoll.

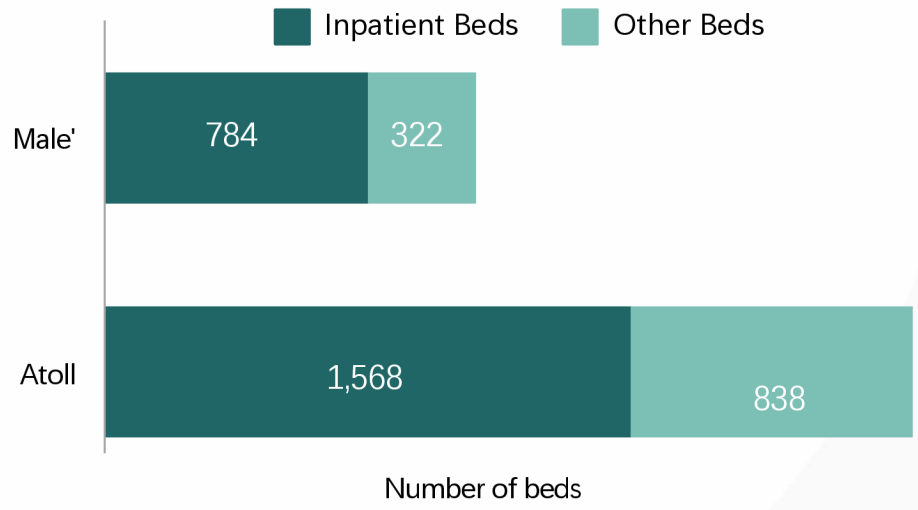
Figure 1-4: Total outpatients by Atolls, 2021



1.1.3 Beds

In the Maldives, the healthcare infrastructure included a total of 3,512 beds, with a specific allocation of 2,352 beds for inpatient care. Among these inpatient beds, 2,406 were distributed across all health facilities in the atolls. In contrast, the GMR had a total of 1,106 inpatient beds, which were distributed across 7 health facilities.

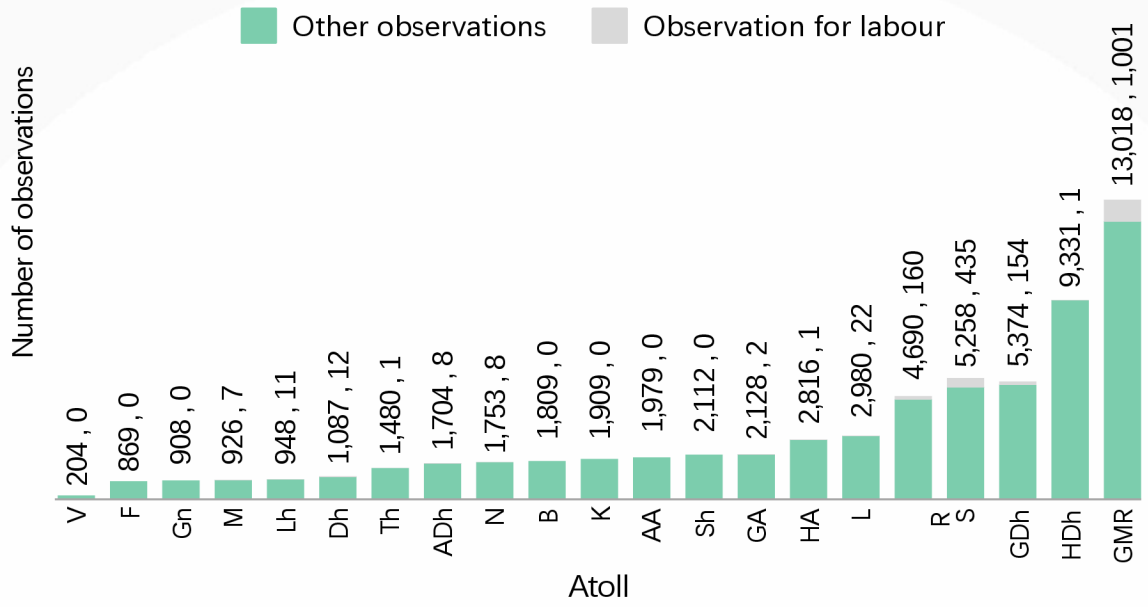
Figure 1-5: Total Beds by GMR and Atolls, 2021



1.1.4 Observation

In this report, observations refer to patients who were under clinical observation for less than 6 hours at health facilities. In 2021, even after excluding the main referral hospital, the highest number of observations was reported in GMR, followed by HDh Atoll and GDh Atoll.

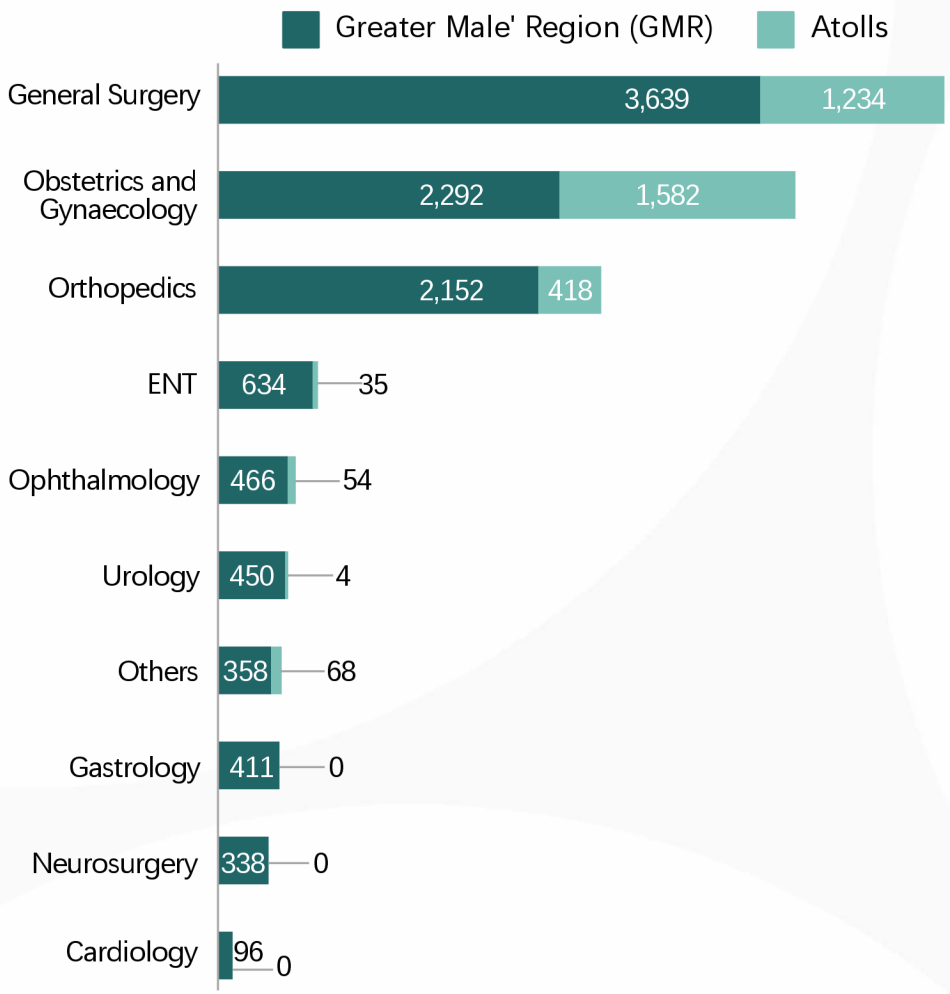
Figure 1-6: Total observation in the Maldives, 2021



1.1.5 Surgeries and other procedures

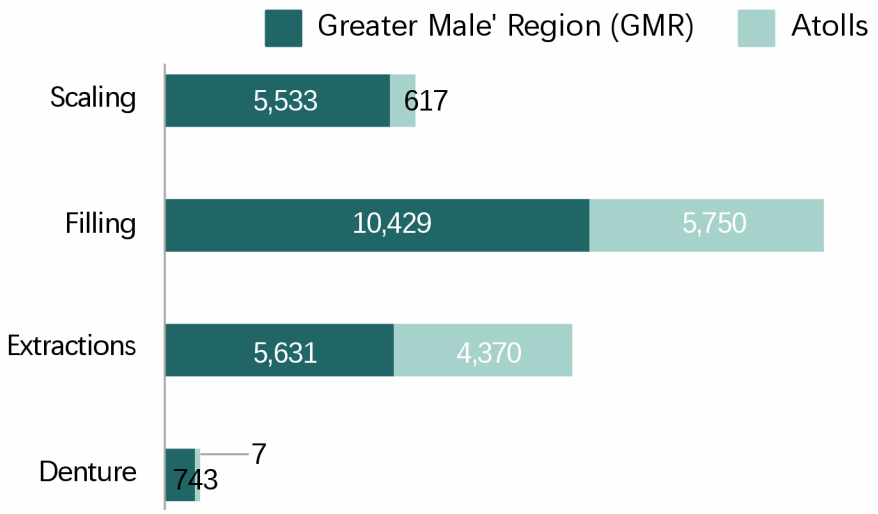
In 2021, the most frequently performed surgeries were general surgeries. Obstetrics and gynaecology surgeries closely followed in second place and orthopedic surgeries ranked third in terms of frequency. It was worth emphasizing that the rate of surgeries conducted in the GMR was notably higher than that in the Atolls.

Figure 1-7: Top 10 surgeries in Maldives, 2021



Dental procedures were the highest among other procedures in 2021

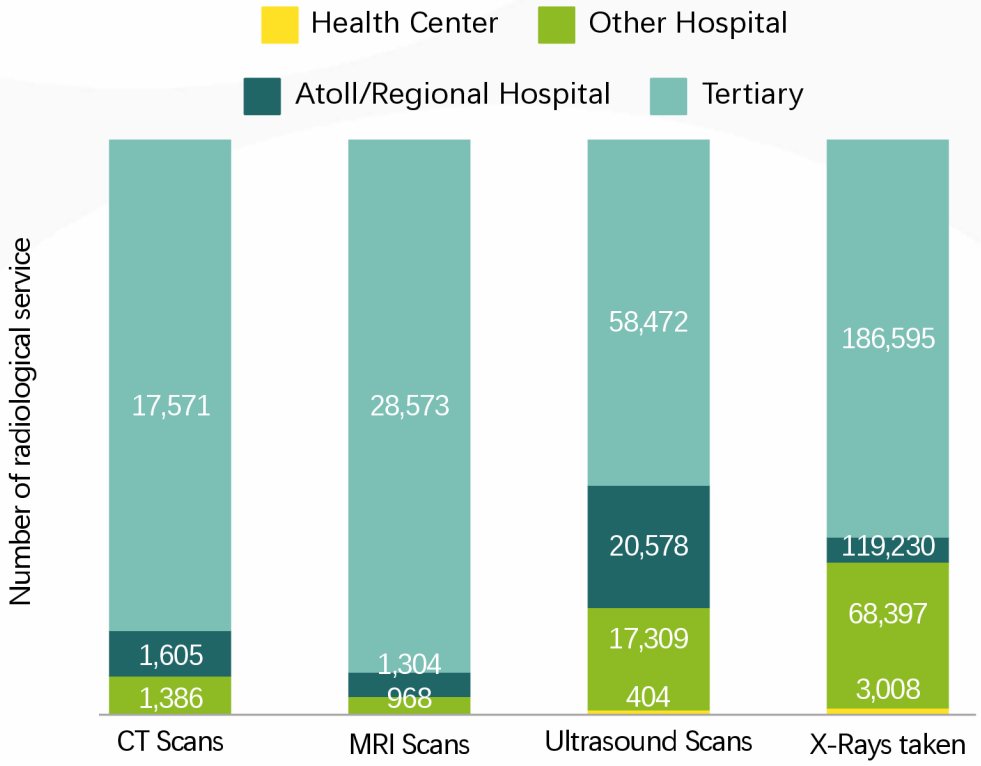
Figure 1-8: Dental procedures in Maldives, 2021



1.1.6 Diagnosis

Different tiers of health facilities offer a range of radiology services. MRI and CT scans were not reported or conducted in health centers. However, ultrasound scans and x-ray services were found to be widely accessible across the majority of health facilities.

Figure 1-9: Radiological Service (in numbers) in Maldives, 2021



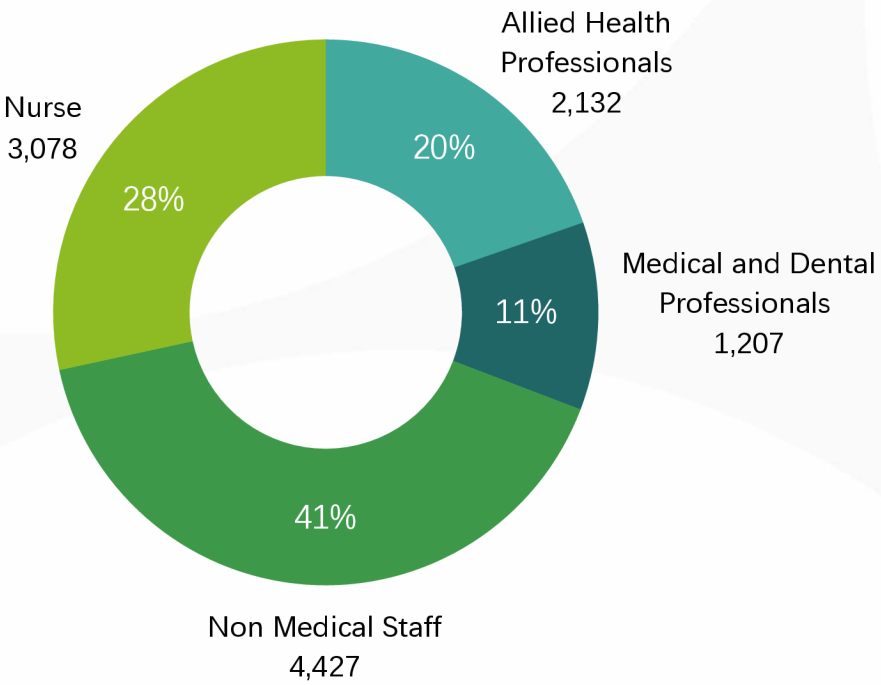
1.2 Health Workforce

What is Health Workforce?

The health workforce can be defined as "all people engaged in actions whose primary intent is to enhance health" (WHO,2018[1])

This section presents the health workforce as of 31 December 2021, based on the World Health Organization (WHO) 2010 guidelines. It covers several aspects, including the profile of the staff, staff categories, sex distribution, geographical representation, nationality and the distribution of staff in professional and higher category posts within the main occupational groups.
Based on the provided data, the health workforce consists of various categories of professionals. Among these categories allied health professionals had the highest number, followed by medical professionals, nurses and non-medical staff.

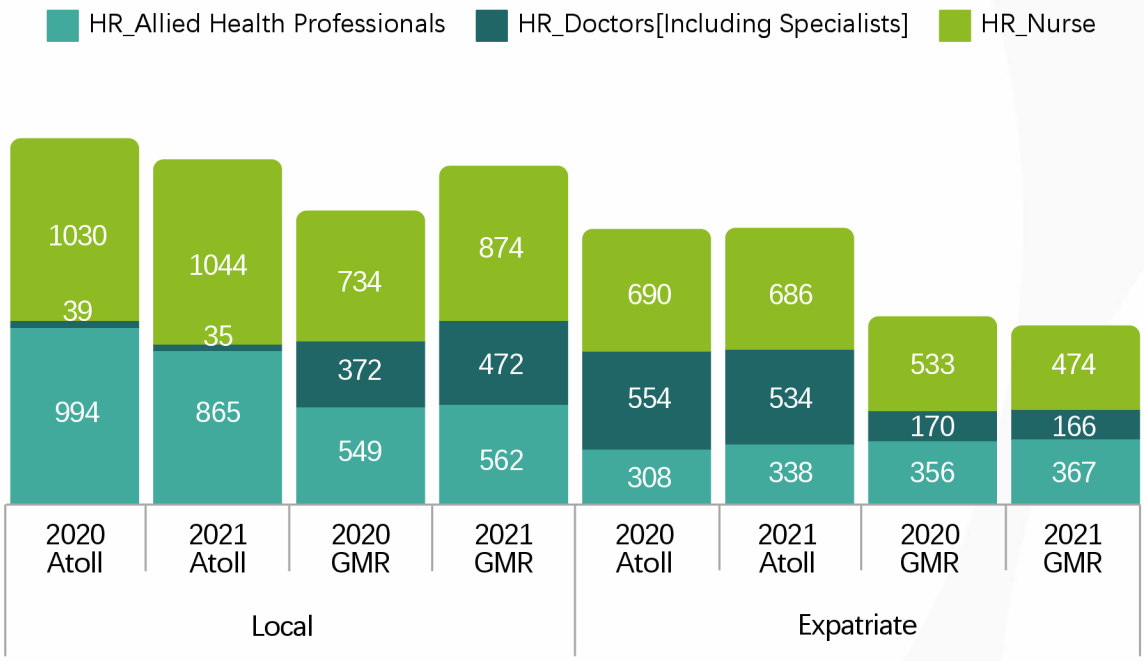
Figure 1-10: Distribution of health professionals, 2021.



When the distribution of local and expatriate health professionals were compared between atolls and GMR, in 2021, 26% of medical and dental professionals in GMR were expatriates, while 94% of medical and dental professional in atolls were expatriates.

[1] WHO, 2018, World Health Organization, Building the primary health care workforce of the 21st century, technical series on primary health care, working paper

Figure 1-11: Distribution of health professionals, 2020 and 2021 by locality, nationality and region (Excluding non-medical staff)

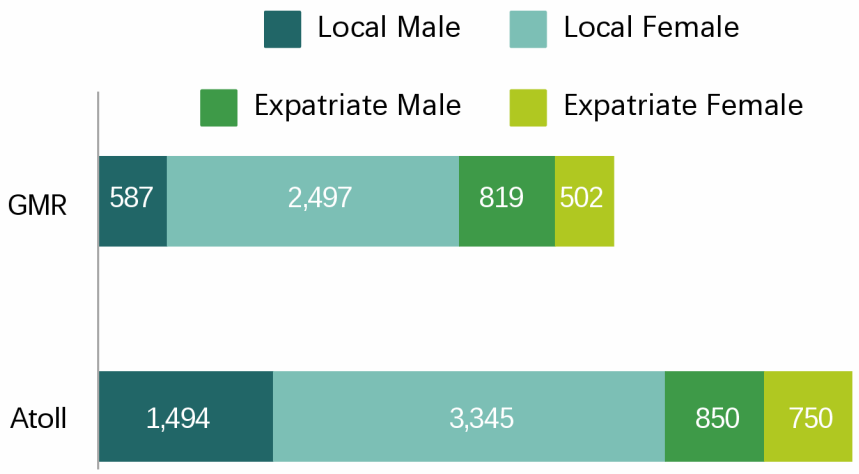


When examining the distribution of these professionals by location, it becomes apparent that approximately 60% of health professionals were located in the atolls. Of this atoll-based workforce, nearly 44% were non-medical staff members.

Table 1-2: Health professionals by category, region, and sex, 2021

Category	Local		Expatriate	
	Male	Female	Male	Female
Atoll	1,494	3,345	850	750
Allied Health Professionals	200	665	259	79
Medical and Dental Professional	16	19	440	94
Non-Medical Staff	1,238	1,657	13	29
Nurse	40	1,004	138	548
GMR	587	2,497	819	502
Allied Health Professionals	77	485	310	57
Medical and Dental Professional	165	307	119	47
Non-Medical Staff	337	839	288	26
Nurse	8	866	102	372
Grand Total	**2,081**	**5,842**	**1,669**	**1,252**

Figure 1-12: Health professional by nationality and location, 2021



The figure above presents the distribution of health professionals based on sex and nationality in two categories: atoll and GMR.

The data indicates that across both atoll and GMR categories, the majority of health professionals were female. This trend was more pronounced among local health professionals, where there was a higher proportion of females in both atoll and GMR areas. In the case of expatriate health professionals, there was a slightly higher number of females in both atoll and GMR areas.

Table 1-3: Health workforce by category, sex, and location, 2021

Category	Atoll		GMR		Total
	Males	Females	Males	Females	
Allied Health Professionals	459	744	387	542	2,132
Community Health Workers	97	112	0	6	215
Counsellors	0	0	0	4	4
Dental Technicians/Assistants	2	5	6	36	49
Dentists	20	8	12	16	56
EEG/EMG Technician	0	0	1	0	1
Environmental and Public Health Workers	0	4	0	0	4
Family Health Workers	44	179	0	0	223
Laboratory Scientists	6	2	1	10	19
Laboratory Technicians/Assistants	111	108	69	173	461
Other Health Workers	7	16	4	14	41
Pathologist	0	0	1	4	5
Pharmacist/Pharmacy Assistant/Dispenser	118	254	224	227	823
Physiotherapists	13	5	19	13	50
Psychologists	0	0	2	6	8
Radiographers	40	12	46	14	112
Social Workers	0	2	0	2	4
Speech Pathologists	0	0	0	8	8
Traditional birth attendants	0	37	0	0	37
Traditional Medicine Practitioners	1	0	0	0	1
HR-Radiologist	0	0	2	9	11
Doctors [Including Specialists]	456	113	284	354	1,207
Anesthesiology	17	3	23	9	52
Cardiologists	1	0	15	1	17

Category	Atoll		GMR		Total
	Males	Females	Males	Females	
Dermatologists	8	2	4	12	26
Emergency Medicine	0	0	1	1	2
Endodontics	0	0	0	2	2
ENT Doctors (Otorhinolaryngologists)	4	2	10	8	24
Genaral Medicine	0	0	1	0	1
General Doctors	300	79	91	227	697
Internal medicine (Physicians)	19	3	35	5	62
Medical Oncologist	0	0	1	0	1
Nephrologist	0	0	1	0	1
Neurosurgeons/Neurologists	0	0	11	0	11
Obstetricians and Gynaecologists	24	9	8	44	85
Occupational Therapist	0	0	1	0	1
Onco Surgery	0	0	1	0	1
Ophthalmologists	3	5	6	10	24
Oral & Maxillo Facial Surgery	0	0	2	0	2
Orthodontistry	0	0	0	1	1
Orthopedic Doctors	17	0	26	2	45
Peadiatric Cardiology	0	0	0	1	1
Pediatricians	29	9	14	20	72
Psychiatrists	6	0	3	3	12
Pulmonologists	0	0	8	0	8
Surgeons	28	1	17	8	54
Urologists	0	0	5	0	5
Non Medical Staff	1,251	1,686	625	865	4,427
Admin & Support Staff	1,157	1,595	589	755	4,096
Health Management	63	10	28	31	132
Medical Assistants	31	81	8	79	199

Category	Atoll		GMR		Total
	Males	Females	Males	Females	
Nurse	178	1,552	110	1,238	3,078
Enrolled Nurse	3	292	4	115	414
Enrolled Nurse Midwife	0	31	0	3	34
Registered Nurse	147	1,016	82	864	2,109
Registered Nurse Midwife	28	213	24	256	521
Grand Total	**2,344**	**4,095**	**1,406**	**2,999**	**10,844**

When examining the breakdown and sex as shown below, it becomes apparent that across all categories, except for medical and dental professionals, there was a higher representation of females (65%). It is also worthy to note that 59% of the health professionals were located across atolls.

Figure 1-13: Health workforce by category and sex 2021

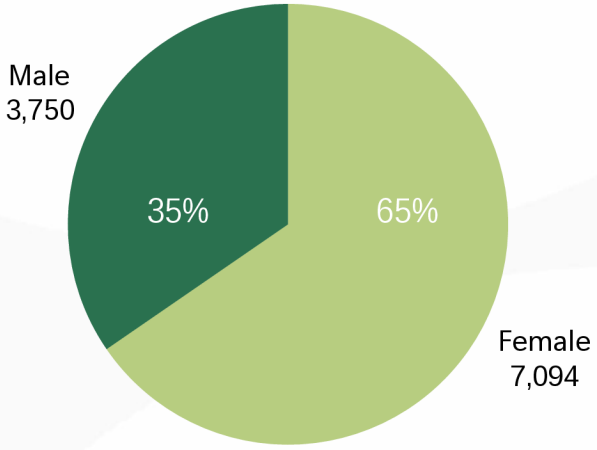
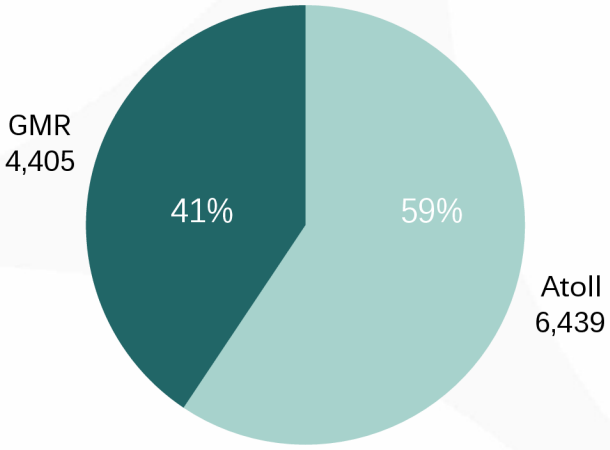
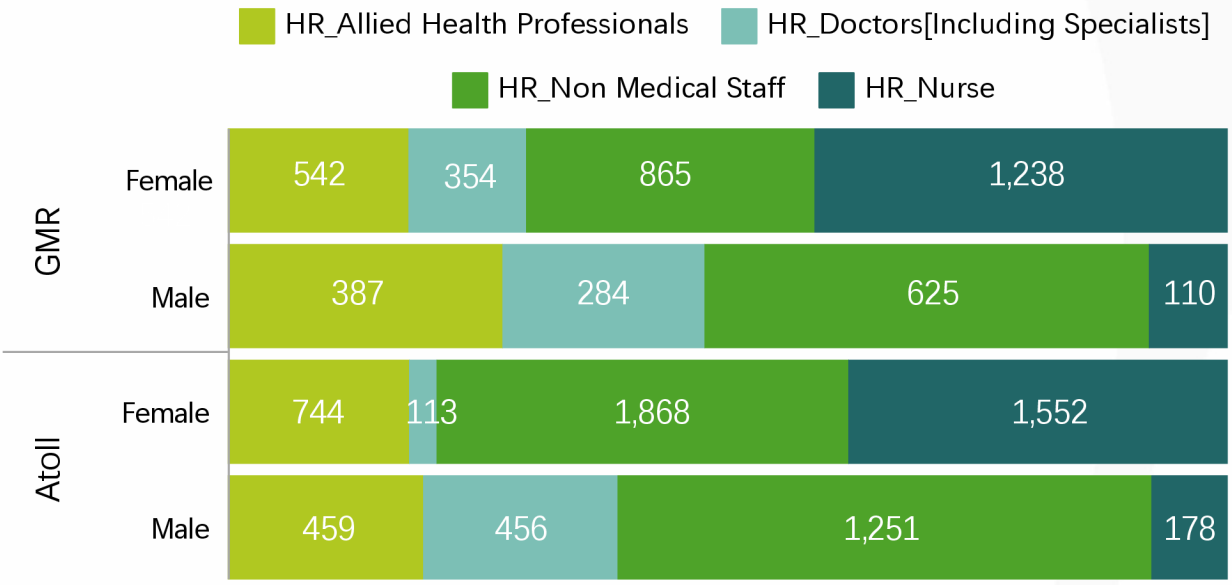


Figure 1-14: Health workforce by category and region 2021



When disaggregated by sex and region, it was evident that among medical and dental professionals a higher number of females were located in GMR compared to atolls.

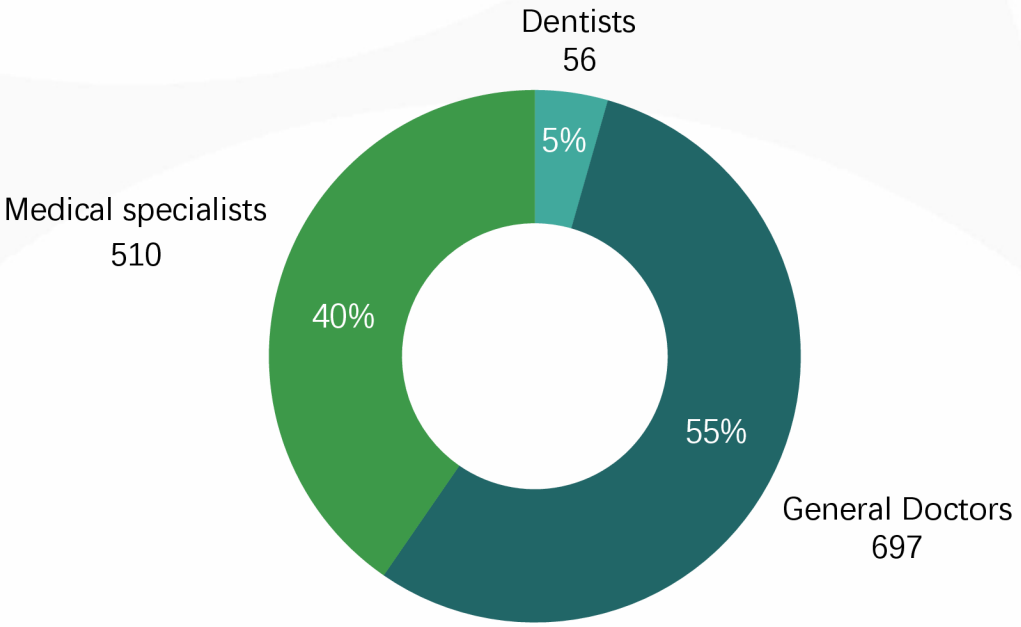
Figure 1-15: Health workforce by category, region and sex 2021



1.2.1 Medical and dental professionals

In the year 2021, there were a total of 1,291 medical and dental professionals practicing, with males comprising 60% of the total. Additionally, 57% of the medical and dental professionals were expatriates, accounting for 737 individuals.

Figure 1-16: Health workforce by category, region and sex 2021



The data above shows that 55% of the total medical and dental professionals were general doctors.

Figure 1-17: Medical and dental professional by region, 2021

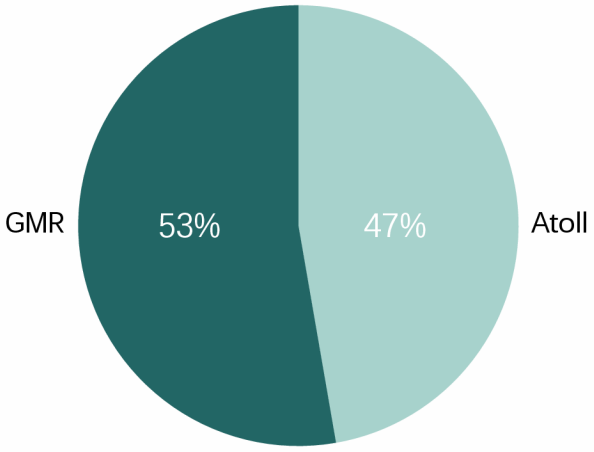
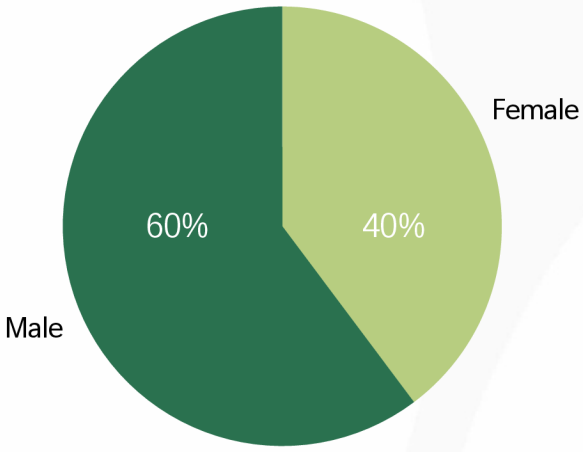


Figure 1-18: Medical and dental professional by sex, 2021



The above data shows that 53% of medical and dental professionals were located in GMR and males constituted 60% of the total.

Table 1-4: Medical and dental professional by sex and region, 2021

Category	Males		Females		Total
	Local	Expatriate	Local	Expatriate	
Atoll	18	460	25	101	604
Dentists	0	20	1	7	28
General Doctors	7	293	14	65	379
Medical specialists	9	147	5	29	190
GMR	164	128	347	48	687
Dentists	3	9	15	1	28
General Doctors	54	37	209	18	318
Medical specialists	111	82	98	29	320
Grand Total	**182**	**588**	**372**	**149**	**1,291**

1.2.2 Nurses

In the year 2021, there were a total of 3,078 practicing nurses, with females comprising 91% (2,790) of the total. Additionally, 38% of the nurses were expatriates, accounting for 1,160 individuals.

Figure 1-19: Nurses by region, 2021

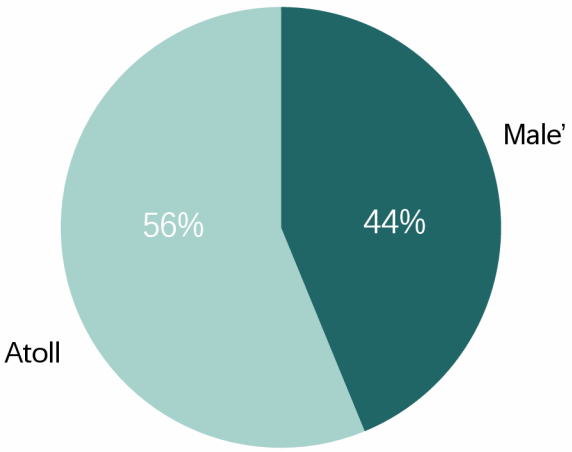
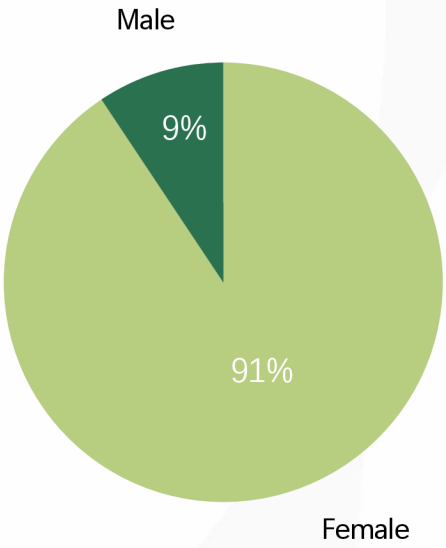


Figure 1-20: Nurses by sex, 2021



The data indicates that 56% of the total nurses were located in the atolls, primarily consisting of local females.

Table 1-5: Nurses by sex, nationality and cadre, 2021

Category	Males		Females		Total
	Local	Expatriate	Local	Expatriate	
Atoll	40	138	1,004	548	1,730
Enrolled Nurse	3	0	288	4	295
Enrolled Nurse Midwife	0	0	28	3	31
Registered Nurse	33	114	629	387	1163
Registered Nurse Midwife	4	24	59	154	241
GMR	8	102	866	372	1,348
Enrolled Nurse	4	0	115	0	119
Enrolled Nurse Midwife	0	0	3	0	3
Registered Nurse	4	78	604	260	946
Registered Nurse Midwife	0	24	144	112	280
Grand Total	**48**	**240**	**1,870**	**920**	**3,078**

1.2.3 Allied health professionals

In the year 2021, there were a total of 2,027 allied health professionals, with females accounting for 60% (1,221) of the total.

Figure 1-21: Allied health professional by region, 2021

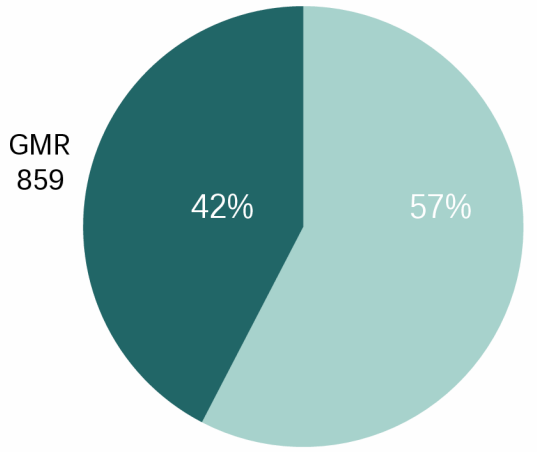
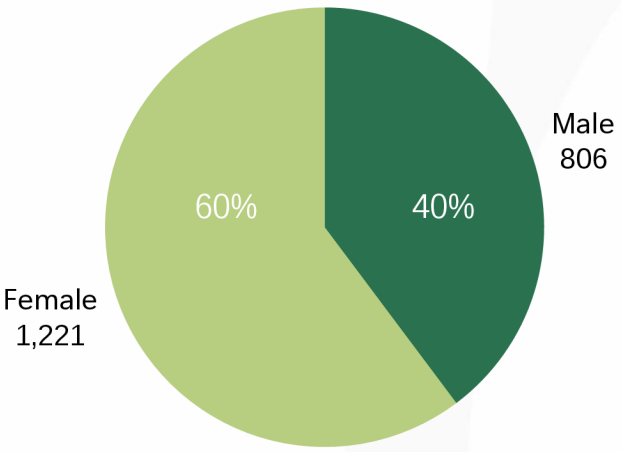


Figure 1-22: Allied health professional by sex, 2021



The data reveals that 58% of the total allied health professionals were located in the atolls, with the majority being local females.

Table 1-6: Allied health professionals by sex, nationality and cadre, 2021

Category	Males		Females		Total
	Local	Expatriate	Local	Expatriate	
Atoll	198	239	659	72	1,168
Community Health Workers	97	0	110	2	209
Counsellors	0	0	0	0	0
EEG/EMG Technician	0	0	0	0	0
Environmental and Public Health Workers	0	0	4	0	4
Family Health Workers	43	1	173	6	223
Laboratory Scientists	2	4	1	1	8
Laboratory Technicians/Assistants	21	90	58	50	219
Other Health Workers	6	1	16	0	23
Pathologist	0	0	0	0	0

Category	Males		Females		Total
	Local	Expatriate	Local	Expatriate	
Pharmacist/Pharmacy Assistant/Dispenser	27	91	254	0	372
Physiotherapists	0	13	1	4	18
Psychologists	0	0	0	0	0
Radiographers	1	39	4	8	52
Social Workers	0	0	2	0	2
Speech Pathologists	0	0	0	0	0
Traditional Birth Attendants	0	0	36	1	37
Traditional Medicine Practitioners	1	0	0	0	1
Radiologist	0	0	0	0	0
GMR	71	298	434	56	859
Community Health Workers	0	0	6	0	6
Counsellors	0	0	3	1	4
EEG/EMG Technician	0	1	0	0	1
Environmental and Public Health Workers	0	0	0	0	0
Family Health Workers	0	0	0	0	0
Laboratory Scientists	0	1	9	1	11
Laboratory Technicians/Assistants	32	37	153	20	242
Other Health Workers	4	0	14	0	18
Pathologist	0	1	2	2	5
Pharmacist/Pharmacy Assistant/Dispenser	24	200	213	14	451
Physiotherapists	3	16	8	5	32
Psychologists	2	0	6	0	8
Radiographers	6	40	6	8	60
Social Workers	0	0	2	0	2
Speech Pathologists	0	0	4	4	8
Traditional Birth Attendants	0	0	0	0	0

Category	Males		Females		Total
	Local	Expatriate	Local	Expatriate	
Traditional Medicine Practitioners	0	0	0	0	0
Radiologist	0	2	8	1	11
Grand Total	**269**	**537**	**1,093**	**128**	**2,027**

1.2.4 Non-medical staff

Non-medical staff refers to individuals involved in healthcare delivery who do not fall into the categories of medical and dental professionals, nursing, or allied health professionals.

Figure 1-23: Non-medical staff by region, 2021

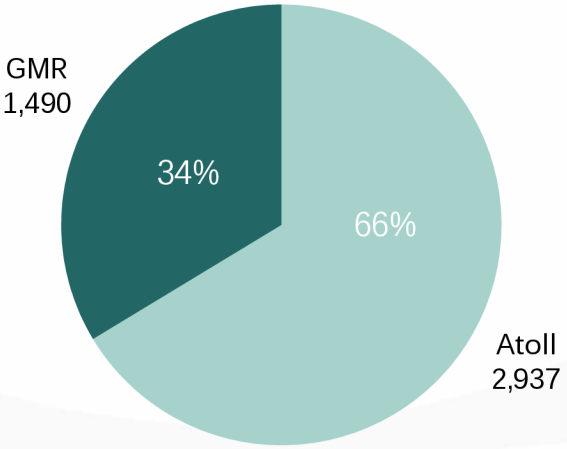
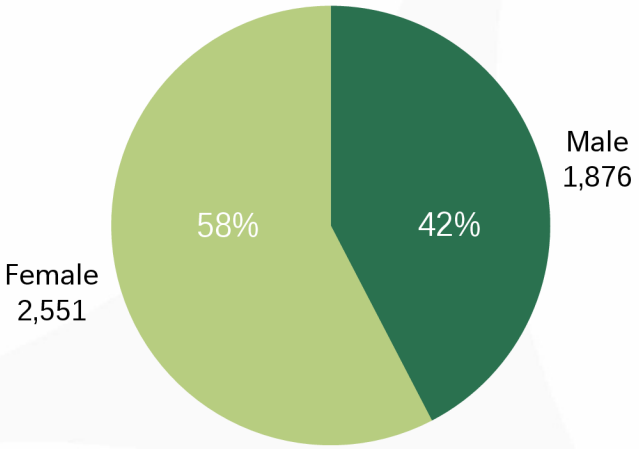


Figure 1-24: Allied health professional by gender, 2021



In 2021, there were a total of 4,427 non-medical staff, with 66% (2,937) located in the atolls. Similar to nurses, a larger proportion of females (58%) were employed as non-medical staff.

Table 1-7: Non-medical staff by sex, nationality and cadre, 2021

Category	Males		Females		Total
	Local	Expatriate	Local	Expatriate	
Atoll	1,238	13	1,657	29	2,937
Admin & Support Staff	1,144	13	1,571	24	2,752
Health Management	63	0	10	0	73
Medical Assistants	31	0	76	5	112
Registered Nurse Midwife	4	24	59	154	241

Category	Males		Females		Total
	Local	Expatriate	Local	Expatriate	
GMR	337	288	839	26	1,490
Admin & Support Staff	304	285	730	25	1,344
Health Management	25	3	30	1	59
Medical Assistants	8	0	79	0	87
Grand Total	**1,575**	**301**	**2,496**	**55**	**4,427**

Please refer to the Annex for a comprehensive list detailing the health workforce categorized by individual atolls, cadres, sex, and nationality.

1.3 Health Information System

The DHIS2 was initially introduced as a statistical software in 2017 through a collaboration between the Ministry of Health (MoH) and the World Health Organization (WHO). DHIS2 was envisioned to support improved data management, analysis, and monitoring and evaluation of essential health indicators, facilitating informed decision-making based on evidence.

The implementation of DHIS2 in Maldives followed a phased approach. Under phase 4, starting from July 2019, DHIS2 was gradually deployed nationwide, encompassing all government health facilities and private hospitals.

The Ministry of Health is dedicated to facilitating the optimal utilization of DHIS2 to enhance the national health information management system of the country. Alongside DHIS2, there are several fragmented health information systems operating independently in the country. In this context, the data utilized in this report was derived from the following systems.

The data used in this report was sourced from the following health information systems:

- DHIS2: This system provides data on the number of outpatients, beds, health workforce, surgeries, and observations.
- GEMEN: The population module of GEMEN captures information on all births and deaths that occur in the country.
- Online/excel based information sheets compiled by various departments of the Ministry of Health: These include surveillance data, pharmacy information, pharmacist records, thalassemia data and public health data.
- Other specific health-related information systems utilized by stakeholders, such as the Aasandha-Vinavi system.

These systems collectively contribute to the availability of comprehensive health data for analysis and reporting purposes.

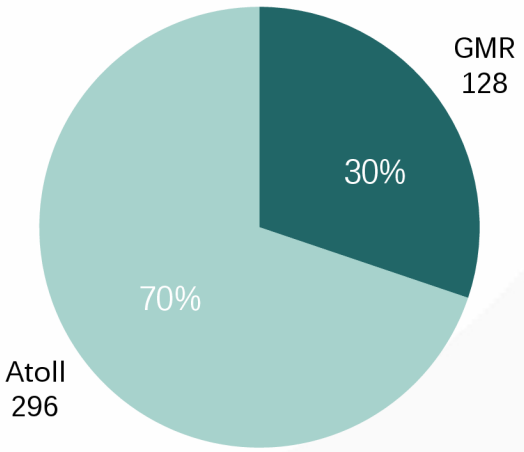
1.4 Access to Medicine

In this chapter, statistics related to medicines, pharmacies and pharmacists were examined to better understand the availability and distribution of essential healthcare resources.

1.4.1 Pharmacies

In 2021, the country had a total of 424 registered pharmacies and an overwhelming majority of them, specifically 296 pharmacies, were located in the atolls. This distribution of pharmacies highlights the importance of healthcare infrastructure in the atolls, ensuring that residents in these regions have access to essential pharmaceutical services.

Figure 1-25: Registered pharmacies by region, 2021



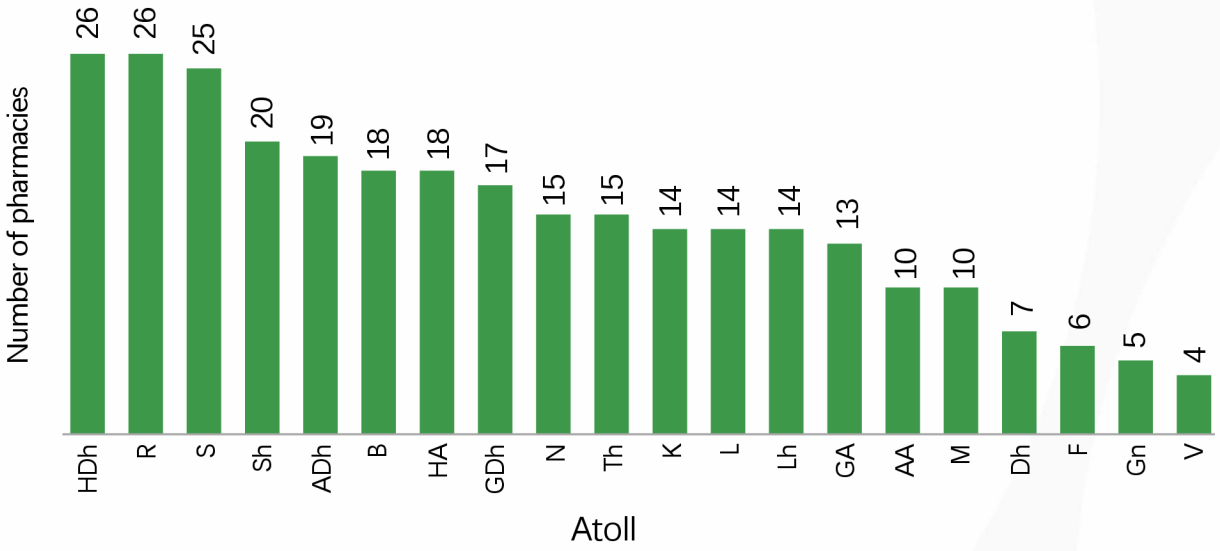
What is Access to Medicine?

Access has been defined as "having medicines continuously available and affordable at public or private health facilities or medicine outlets that are within one hour's walk of the population" (WHO, nd[2])

[2] WHO, nd, https://rho.emro.who.int/Metadata/availability-of-selected-essential-medicines

When examining the distribution of pharmacies within the atolls (excluding the GMR) the highest number of pharmacies were located HDh, R and S atolls.

Figure 1-26: Pharmacies registered in atoll, 2021



1.4.2 Medicine

When examining the importation of medicines into the country, the products categorized under Prednisolone were at the forefront. Prednisolone is typically used to alleviate symptoms such as swelling, redness, itching, and allergic reactions (WebMD, nd[3]). The second most imported category was medicines for addressing Vitamin C Deficiency, followed by drugs for managing fever, pain, and high blood cholesterol. Detailed information on the top 20 imported drugs can be found in the annex, providing insights into the healthcare priorities and pharmaceutical needs of the population.

Figure 1-27: Top 5 indications based on maximum number of drugs imported, 2021

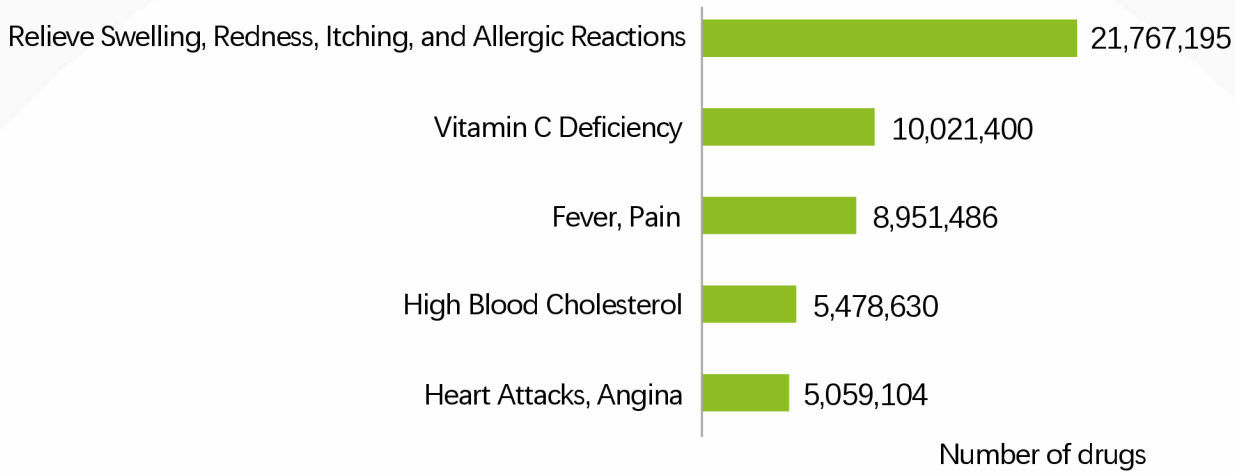


Table 1-8: Top 5 medicine by quantity imported, 2021

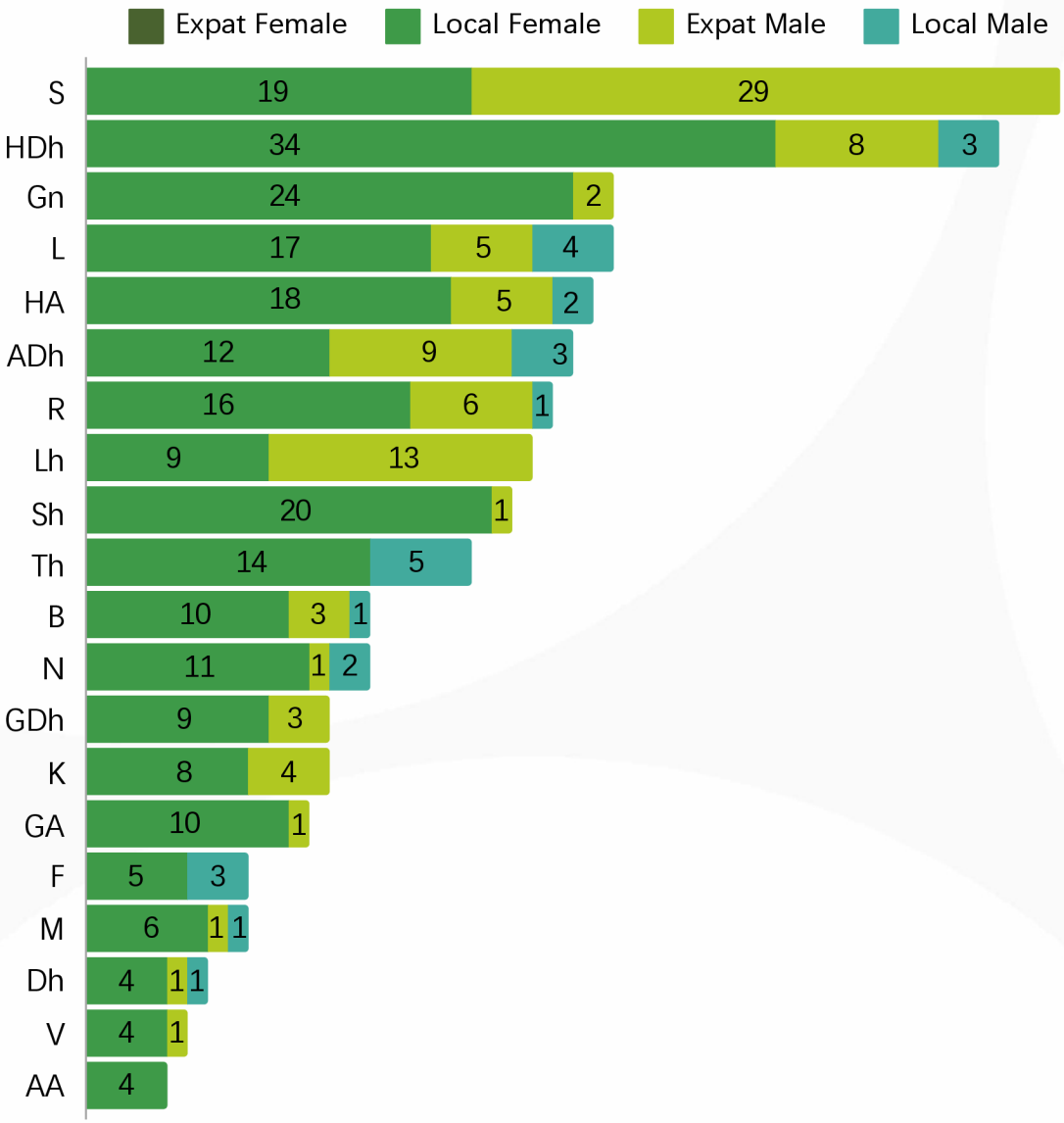
#	Generic Name	Product Name	Dosage Form	Category	Strength	Quantity (Units)	Indication
1	Prednisolone	WYSOLONE	Dispersible Tablet	Immunosuppressive	10 mg	21,767,195	Relieve swelling, redness, itching and allergic reactions
2	Ascorbic Acid	LIMCEE	Tablet	Supplement	500 mg	10,021,400	Vitamin C Deficiency
3	N-Acetyl-P-Aminophenol	PANADOL	Tablet	Antipyretic	500 mg	8,951,486	Fever, Pain
4	Atorvastatin	ATORIN-10	Tablet	Antihyperlipidemic	10 mg	5,478,630	High Blood Cholesterol
5	Acetylsalicylic Acid (Aspirin)	ECOSPRIN 75	Extended-Release Tablet	antiplatelet	75 mg	5,059,104	Heart Attacks, Angina

[3] WebMD, nd, Prednisolone - Uses, Side Effects, and More Common Brand(S): Orapred, Pediapred, Prelone Generic Name(S): prednisolone, https://www.webmd.com/drugs/2/drug-6307-2333/prednisolone-oral/prednisolone-liquid-oral/details

1.4.3 Pharmacy professionals

In Maldives, every inhabited island is equipped with a pharmacy operated by the State Trading Organization (STO), and it is a requirement to have a pharmacy professional present on each of these islands. According to administrative data from the Maldives Food and Drug Authority (MFDA), there were a total of 825 pharmacy professionals practicing in 2021, with the highest numbers found in the S and HDh atolls.

Figure 1-28: Total pharmacy professionals in atolls, 2021



It was worth noting that in comparison to the atolls, the GMR had a higher number of pharmacists, surpassing the combined count of pharmacists in the atolls.

Table 1-9: Total number of pharmacy professionals by origin, gender, location and cadre, 2021

Category	Local		Local Total	Expat		Expat Total	Grand Total
	Female	Male		Female	Male		
Atoll	254	26	280	0	93	93	373
Dispenser	110	15	125	0	2	2	127
Pharmacist	19	2	21	0	91	91	112
Pharmacy Assistant	125	9	134	0	0	0	134
GMR	213	24	237	14	201	215	452
Dispenser	35	3	38	0	0	0	38
Pharmacist	24	3	27	14	201	215	242
Pharmacy Assistant	154	18	172	0	0	0	172
Grand Total	**467**	**50**	**517**	**14**	**294**	**308**	**825**

1.5 Financing

The government's dedication to enhancing healthcare services is clearly demonstrated through its financial commitment to the health sector. Currently, every Maldivian benefits from a universal health insurance scheme that is fully funded by the government. This initiative underscores the government's commitment to ensuring that healthcare services are accessible and inclusive for all its citizens.

1.5.1 Health Expenditure

The table below shows the expenditure incurred by the Ministry of Health in 2021. These figures also reflect the expenditures of all the peripheral health facilities which were directly managed by Ministry of Health in 2021.

Table 1-10: Consolidated Financial Statement of Ministry of Health 2021

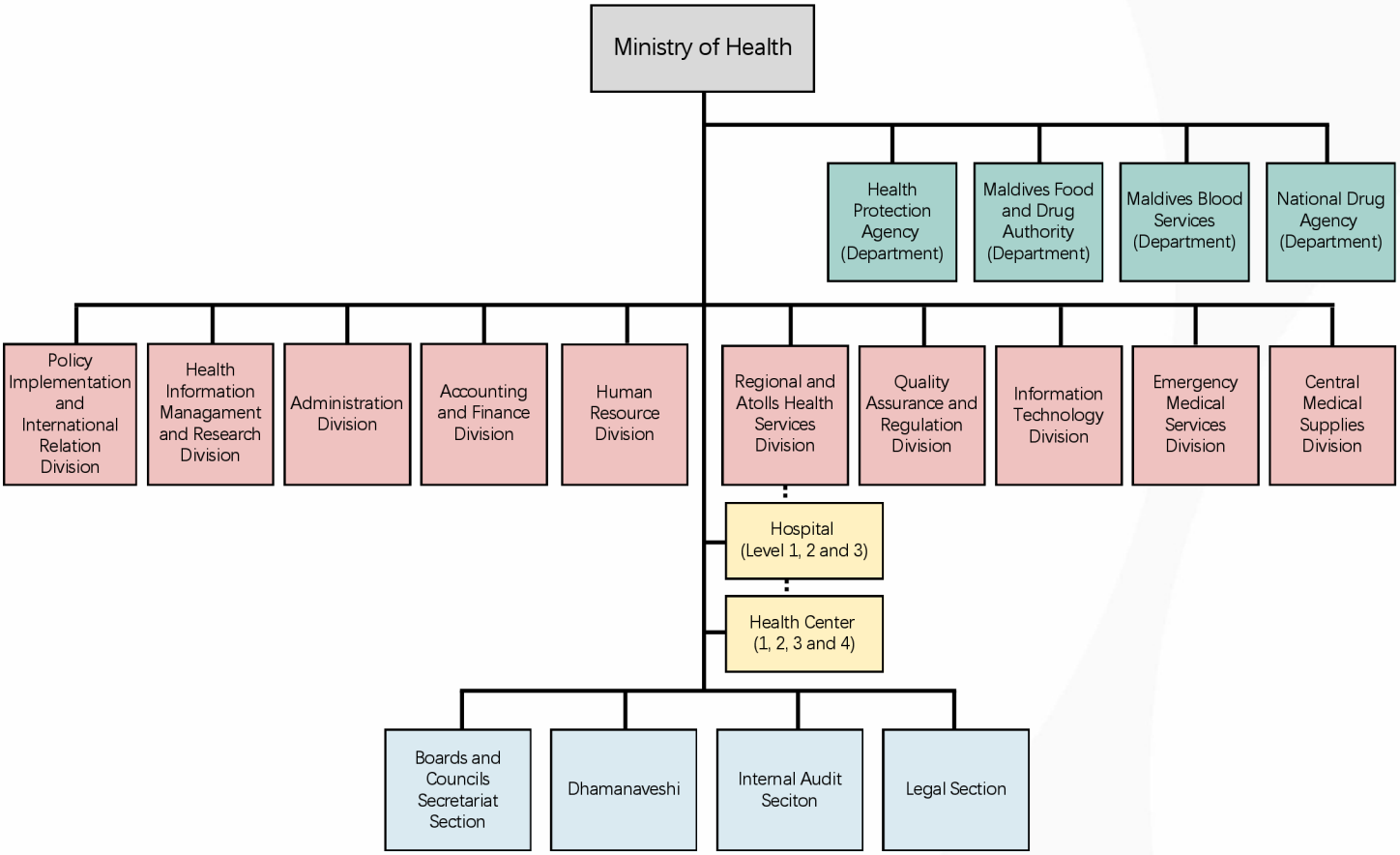
Budget type and expenditure details	Budget type and expenditure details	Recurrent (in MVR million)	Capital (in MVR million)
Ministry of Health budget	Total initial budget	1,596,756,415	318,253,038
	Total Revised / approved budget	2,179,245,164	289,727,899
Expenditure	Total spent	1,798,914,704	171,411,574
	Total remaining	380,330,461	118,316,325
COVID-19 budget	Total Budget	190,000,000	10,000,000
	Total Revised	513,830,457	23,928,972
Expenditure spent on COVID-19	Total spent	391,351,705	22,096,986
	Total remaining	122,478,752	1,831,986

Source: Accounts Division, Ministry of Health

1.6 Governance

The governance and leadership building block forms the foundation of the health system. As outlined by the World Health Organization (WHO) in 2021, leadership and governance encompass the establishment of strategic policy frameworks, coupled with efficient oversight, coalition-building, regulation, system-design focus and accountability. Consequently, the organizational structure of the Ministry of Health serves as a vital connection between policy formulation, health service delivery and the population.

Figure 1-29: Organization Structure of Ministry of Health, 2021[6]



It was worth noting that apart from the health facilities which are directly looked after by the Regional and Atoll Health Services Division of Ministry of Health, there are few hospitals in Atolls and GMR which are governed by separate boards. In such cases, the Ministry of health plays a regulatory role in ensuring the quality of services provided by these facilities.

1.7 Laws

The governance of the health sector is upheld through the implementation of specific laws and regulations. Over the past decade (2010-2020), the Parliament of Maldives enacted and the President ratified six acts (Presidents Office 2021) that pertain to the health sector. These acts serve as the legal framework guiding various aspects of the healthcare system in the country.

[6] https://health.gov.mv/dv/publications/annual-report-2021-ministry-of-health-1

Figure 1-30: Ratified acts and regulations enacted in the last decade implemented by Ministry of Health as of 2021

Public Health Emergency Act (20/2020)
Health Service Act (29/2015)
• Health facility regulation
• Medical record regulation
• National Health Research regulation
• Pharmaceutical Board regulation
• Registration and Licensing committee regulations
Health Professional Act (13/2015)
Under this act in 2021 these regulations were endorsed
• Maldives allied health council registrar regulation
• Maldives Medical and dental council registrar regulation
Thalassemia Control Act (4/2012)
• Thalassemia control regulation
• Thalassemia fund regulation
Public Health Act (7/2012) amended by 6/2021
• Food establishment hygiene regulation
• Port health regulation
• Quarantine and isolation facility regulation
• Public health emergency regulation
• Communicable (contagious) diseases death regulation
• Reporting of disease regulation
• Public health fund implementation regulation
Tobacco Control Act (15/2010)
• Tobacco packaging regulation
• Smoke-free public places regulation
• Tobacco control board regulation

1.8 Annexes

Table 1-11: List of Government Health Facilities by location, 2021

Atoll	Name of public facility
AA	AA. Atoll Hospital
	AA. Bodufulhadhoo Health Centre
	AA. Feridhoo Health Centre
	AA. Himandhoo Health Centre
	AA. Maalhos Health Centre
	AA. Mathiveri Health Centre
	AA. Thoddoo Health Centre
	AA. Ukulhas Health Centre
ADh	Adh. Atoll Hospital
	Adh. Fenfushi Health Centre
	Adh.Dhagethi Heath Centre
	Adh.Dhidhoo Health Centre
	Adh.Dhigurah Health Centre
	Adh.Hangnaameedhoo Health Centre
	Adh.Kuburudhoo Health Centre
	Adh.Maamigili Health centre
	Adh.Mandhoo Health Centre
	Adh.Omadhoo Health Centre
B	Baa Atoll Hospital
	Baa Dharavandhoo Health Centre
	Baa Dhonfanu Health Centre
	Baa Fehendhoo Health Centre
	Baa Fulhadhoo Health Centre
	Baa Goidhoo Health Centre
	Baa Hithaadhoo Health Centre
	Baa Kamadhoo Health Centre
	Baa Kendhoo Health Centre
	Baa Kihaadhoo Health Centre

Atoll	Name of public facility
	Baa Kudarikilu Health Centre
	Baa Maalhos Health Centre
	Baa Thulhaadhoo Health Centre
Dh	Dh. Atoll Hospital
	Dh. Bandidhoo Health Centre
	Dh. Hulhudheli Health Centre
	Dh. Maaenboodhoo HC
	Dh. Meedhoo Health Centre
	Dh. Rinbidhoo Health Centre
F	F. Atoll Hospital
	F. Biledhoo Health Centre
	F. Dharanboodhoo Health Centre
	F. Feeali Health Centre
	F. Magoodhoo Health Centre
GA	Ga. Atoll Hospital
	Ga. Dhevvadhoo Health Centre
	Ga. Kolamaafushi Health Centre
	Ga.Dhaandhoo Health Centre
	Ga.Gemanafushi Health Centre
	Ga.Ka'nduhulhudhoo Health Centre
	Ga.Kodey Health Centre
	Ga.Maamendhoo Heath Centre
	Ga.Nilandhoo Health Centre
GDh	Dr. Abdul Samad Memorial Hospital
	GDh. Faresmaathodaa Health Centre
	GDh. Fiyoaree Health Centre
	GDh. Gahdhoo Health Centre
	GDh. Hoadehdhoo Health Centre
	GDh. Madaveli Health Centre
	GDh. Nadella Health Centre

Atoll	Name of public facility
	GDh. Rathafandhoo Health Centre
	GDh. Vaadhoo Health Centre
GMA	IGMH
	Hulhumale' Hospital
	K.Male' Dhamanaveshi
	Senahiya Military Hospital
	Villigili Hospital
Gn	Gnaviyani Atoll Hospital
HA	HA. Atoll Hospital
	HA. Aaminadhiyo Health Centre
	HA. Baarah Health Centre
	HA. Filladhoo Health Centre
	HA. Hoarafushi Health Centre
	HA. Kelaa Health Centre
	HA. Maarandhoo Health Centre
	HA. Molhadhoo Health Centre
	HA. Muraidhoo Health Centre
	HA. Thakandhoo Health Centre
	HA. Thuraakunu Health Centre
	HA. Uligamu Health Centre
	HA. Utheemu Health Centre
	HA. Vashafaru Health Centre
HDh	HDh. Kulhudhufushi
	HDh. Hirimaradhoo
	HDh. Hanimaadhoo Health Centre
	HDh. kumundhoo
	HDh. kurinbi
	HDh. Makunudhoo
	HDh. Naivaadhoo
	HDh. Nellaidhoo

Atoll	Name of public facility
	HDh. Neykurendhoo
	HDh. Nolhivaran
	HDh. Nolhivaranfaru
	HDh. Vaikaradhoo
	HDh.Finey
K	K.Maafushi Health Centre
	K.Gaafaru Health Centre
	K.Gulhi Health Centre
	K.Guraidhoo Health Centre
	K.Himmafushi Health Centre
	K.Huraa Health Centre
	K.Kaashidhoo Health Centre
	K.Dhiffushi Health Centre
	K.Thulusdhoo Health Centre
L	L. Gan Regional Hospital
	L. Isdhoo Health Centre
	L.Dhanbidhoo Health Centre
	L.Fonadhoo Health Centre
	L.Hithadhoo Health Centre
	L.Kunahandhoo Health Centre
	L.Maabaidhoo Health Centre
	L.Maamendhoo Health Centre
	L.Maavah Health Centre
	L.Mundoo Health Centre
Lh	Lh. Atoll Hospital
	Lh. Hinnavaru Health Centre
	Lh. Kurendhoo Health Centre
	Lh. Olhuvelifushi Health Centre
	Senahiya Nothern
M	M. Mulee Regional Hospital

Atoll	Name of public facility
	M. Kolhufushi Health Centre
	M. Maduvvaree Health Centre
	M. Mulak Health Centre
	M. Dhiggaru Health Centre
	M. Naalaafushi Health Centre
	M. Raimandhoo Health Centre
	M. Veyvah Health Centre
N	Noonu Atoll Hospital
	Noonu Fohdhoo Health Centre
	Noonu Henbadhoo Health Centre
	Noonu Holhudhoo Health Centre
	Noonu Kendhikulhudhoo Health Centre
	Noonu Kudafari Health Centre
	Noonu Landhoo Health Centre
	Noonu Lhohi Health Centre
	Noonu Maafaru Health Centre
	Noonu Maalhendhoo Health Centre
	Noonu Magoodhoo Health Centre
	Noonu Miladhoo Health Centre
	Noonu Velidhoo Health Centre
R	Ungoofaaru Regional Hospital
	R. Angolhitheem Health Centre
	R. Dhuvaafaru Health Centre
	R. Fainu Health Centre
	R. Hulhudhuffaaru Heath Centre
	R. Inguraidhoo Health Centre
	R. Innamaadhoo Health Centre
	R. Kinolhohu Health Centre
	R. Maakurath Health Centre
	R. Madduvari Health Centre

Atoll	Name of public facility
	R. Meedhoo Health Centre
	R. Rasgetheem Health Centre
	R. Rasmaadhoo Health Center
	R. Vaadhoo Health Centre
	R. Alifushi Health Center
S	Addu Equatorial Hospital
	S. Feydhoo Health Centre
	S. Hulhu-meedhoo Health Centre
	S. Maradhoo Health Centre
	Sourthen Child Development Centre
Sh	Sh. Atoll Hospital
	Sh. Bilehfahi Health Centre
	Sh. Feevah Health Centre
	Sh. Feydhoo Health Centre
	Sh. Foakaidhoo Health Centre
	Sh. Goidhoo Health Centre
	Sh. Kanditheemu Health Centre
	Sh. Komandoo Health Centre
	Sh. Lhaimagu Health Centre
	Sh. Maaungoodhoo Health Centre
	Sh. Maroshi Health Centre
	Sh. Milandhoo Health Centre
	Sh. Narudhoo Health Centre
	Sh. Noomaraa Health Centre
Th	Th. Atoll Hospital
	Th. Buruni Health Centre
	Th. Dhiyamigili Health Centre
	Th. Gaadhifushi Health Centre
	Th. Guraidhoo Health Centre
	Th. Hirilandhoo Health Centre

Atoll	Name of public facility
	Th. Kandhoodhoo Health Centre
	Th. Kinbidhoo Health Centre
	Th. Madifushi Health Centre
	Th. Omadhoo Health Centre
	Th. Thimarafushi Health Centre
	Th. Vandhoo Health Centre
	Th. Vilufushi Health Centre
V	Vaavu Atoll Hospital
	Vaavu Fulidhoo Health Centre
	Vaavu Keyodhoo Health Centre
	Vaavu Rakeedhoo Health Centre
	Vaavu thinadhoo Health Centre

Table 1-12: Location and category of all health facilities, 2021

Category	Private	Public	Grand Total
AA	6	8	14
Health Centre	0	7	7
Resort Clinic	6	0	6
Atoll / Regional hospital	0	1	1
ADh	14	10	24
Allopathic Clinic	3	0	3
Health Centre	0	9	9
Resort Clinic	11	0	11
Atoll / Regional hospital	0	1	1
B	10	13	23
Allopathic Clinic	1	0	1
Health Centre	0	12	12
Resort Clinic	9	0	9
Atoll / Regional hospital	0	1	1
Dh	5	6	11
Health Centre	0	5	5
Resort Clinic	5	0	5
Atoll / Regional hospital	0	1	1
F		5	5
Health Centre	0	4	4
Atoll / Regional hospital	0	1	1
GA	6	9	15
Allopathic Clinic	2	0	2
Health Centre	0	8	8
Resort Clinic	4	0	4
Atoll / Regional hospital	0	1	1
GDh	4	9	13
Allopathic Clinic	1	0	1
Health Centre	0	8	8
Resort Clinic	3	0	3
Atoll / Regional hospital	0	1	1

Category	Private	Public	Grand Total
GMA	146	7	153
Allopathic Clinic	113	2	115
Alternative Clinic	6	0	6
GMR Damanaveshi	0	1	1
Resort Clinic	23	0	23
Tertiary Hospital	2	1	3
Other hospital	2	3	5
Gn	2	1	3
Allopathic Clinic	2	0	2
Atoll / Regional hospital	0	1	1
HA	2	14	16
Allopathic Clinic	2	0	2
Health Centre	0	13	13
Atoll / Regional hospital	0	1	1
HDh	2	13	15
Allopathic Clinic	2	0	2
Health Centre	0	12	12
Atoll / Regional hospital	0	1	1
K		9	9
Health Centre	0	9	9
L	2	10	12
Health Centre	0	9	9
Resort Clinic	2	0	2
Atoll / Regional hospital	0	1	1
Lh	6	5	11
Allopathic Clinic	2	1	3
Health Centre	0	3	3
Resort Clinic	4	0	4
Atoll / Regional hospital	0	1	1
M		8	8
Health Centre	0	7	7
Atoll / Regional hospital	0	1	1

Category	Private	Public	Grand Total
N	6	13	19
Health Centre	0	12	12
Resort Clinic	6	0	6
Atoll / Regional hospital	0	1	1
R	13	15	28
Allopathic Clinic	1	0	1
Health Centre	0	14	14
Resort Clinic	12	0	12
Atoll / Regional hospital	0	1	1
S	9	5	14
Allopathic Clinic	8	1	9
Health Centre	0	3	3
Tertiary Hospital	0	1	1
Other hospital	1	0	1
Sh	1	14	15
Health Centre	0	13	13
Resort Clinic	1	0	1
Atoll / Regional hospital	0	1	1
Th	1	13	14
Health Centre	0	12	12
Resort Clinic	1	0	1
Atoll / Regional hospital	0	1	1
V	4	5	9
Health Centre	0	4	4
Resort Clinic	4	0	4
Atoll / Regional hospital	0	1	1
Grand Total	**239**	**192**	**431**

Table 1-13: Health workforce by atoll, gender, origin and category, 2021

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
AA	47	116	29	17	209
Admin & Support Staff	37	69	0	0	106
Anesthesiology	0	0	1	0	1
Community Health Workers	2	5	0	0	7
Enrolled Nurse	0	6	0	0	6
Enrolled Nurse Midwife	0	1	0	0	1
Family Health Workers	3	4	0	0	7
General Doctors	0	0	16	1	17
Health Management	2	0	0	0	2
Laboratory Technicians/Assistants	0	1	3	2	6
Obstetricians and Gynecologists	1	0	0	0	1
Other Health Workers	0	2	0	0	2
Pediatricians	1	0	0	0	1
Pharmacist/Pharmacy Assistant/Dispenser	0	4	0	0	4
Radiographers	0	0	2	0	2
Registered Nurse	0	21	6	7	34
Registered Nurse Midwife	1	2	1	7	11
Traditional birth attendants	0	1	0	0	1
ADh	59	189	26	21	295
Admin & Support Staff	43	88	0	0	131
Anesthesiology	0	0	1	0	1
Community Health Workers	4	12	0	0	16
Enrolled Nurse	0	25	0	0	25
Enrolled Nurse Midwife	0	3	0	0	3
Environmental and Public Health Workers	0	1	0	0	1
Family Health Workers	2	7	0	0	9
General Doctors	0	0	11	4	15

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Health Management	6	3	0	0	9
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Technicians/Assistants	0	3	3	3	9
Pediatricians	0	0	1	0	1
Pharmacist/Pharmacy Assistant/Dispenser	4	12	8	0	24
Registered Nurse	0	26	1	13	40
Registered Nurse Midwife	0	5	0	1	6
Traditional birth attendants	0	4	0	0	4
B	69	181	38	30	318
Admin & Support Staff	57	81	0	0	138
Anesthesiology	0	0	1	0	1
Community Health Workers	8	8	0	0	16
Dentists	0	0	1	0	1
Enrolled Nurse	0	24	0	0	24
Enrolled Nurse Midwife	0	1	0	0	1
Family Health Workers	0	13	0	0	13
General Doctors	1	1	16	1	19
Health Management	2	0	0	0	2
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Technicians/Assistants	0	0	6	3	9
Medical Assistants	0	14	0	0	14
Obstetricians and Gynecologists	0	0	1	0	1
Pediatricians	0	0	2	0	2
Pharmacist/Pharmacy Assistant/Dispenser	1	10	3	0	14
Radiographers	0	0	2	0	2
Registered Nurse	0	23	4	19	46
Registered Nurse Midwife	0	2	0	7	9
Surgeons	0	0	1	0	1

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Traditional birth attendants	0	4	0	0	4
Dh	48	134	21	17	220
Admin & Support Staff	36	59	0	0	95
Anesthesiology	0	0	1	0	1
Community Health Workers	6	5	0	0	11
Dentists	0	0	1	0	1
Enrolled Nurse	0	6	0	0	6
Enrolled Nurse Midwife	0	5	0	0	5
Family Health Workers	2	6	0	0	8
General Doctors	0	1	12	0	13
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Technicians/Assistants	1	5	1	4	11
Medical Assistants	1	11	0	0	12
Obstetricians and Gynecologists	0	0	0	1	1
Orthopedic Doctors	0	0	1	0	1
Pediatricians	0	0	1	0	1
Pharmacist/Pharmacy Assistant/Dispenser	1	4	1	0	6
Radiographers	0	0	1	1	2
Registered Nurse	0	29	1	11	41
Registered Nurse Midwife	0	1	0	0	1
Surgeons	1	0	0	0	1
Traditional birth attendants	0	2	0	0	2
F	55	123	18	13	209
Admin & Support Staff	40	50	0	0	90
Anesthesiology	0	0	0	1	1
Community Health Workers	7	1	0	0	8
Dental Technicians/Assistants	0	1	0	0	1
Dentists	0	0	0	1	1

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Enrolled Nurse	0	14	0	0	14
Family Health Workers	0	9	0	0	9
General Doctors	0	1	9	1	11
Health Management	3	0	0	0	3
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Technicians/Assistants	1	0	3	3	7
Medical Assistants	0	5	0	0	5
Obstetricians and Gynecologists	0	0	0	1	1
Pediatricians	0	0	1	0	1
Pharmacist/Pharmacy Assistant/Dispenser	3	5	0	0	8
Radiographers	0	1	2	0	3
Registered Nurse	1	30	1	4	36
Registered Nurse Midwife	0	4	0	2	6
Surgeons	0	0	1	0	1
Traditional birth attendants	0	2	0	0	2
GA	62	171	41	48	322
Admin & Support Staff	50	89	0	14	153
Anesthesiology	0	0	1	0	1
Community Health Workers	3	4	0	0	7
Dentists	0	0	2	0	2
Enrolled Nurse	0	14	0	0	14
Enrolled Nurse Midwife	0	4	0	0	4
Family Health Workers	0	6	0	0	6
General Doctors	1	1	19	2	23
Health Management	7	0	0	0	7
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Technicians/Assistants	1	3	5	3	12
Obstetricians and Gynecologists	0	0	1	0	1

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Orthopedic Doctors	0	0	1	0	1
Pediatricians	0	0	2	0	2
Pharmacist/Pharmacy Assistant/Dispenser	0	10	1	0	11
Physiotherapists	0	0	1	0	1
Radiographers	0	0	2	0	2
Registered Nurse	0	34	3	21	58
Registered Nurse Midwife	0	3	0	8	11
Surgeons	0	0	2	0	2
Traditional birth attendants	0	3	0	0	3
GDh	54	107	43	45	249
Admin & Support Staff	45	70	0	0	115
Anesthesiology	0	0	1	0	1
Community Health Workers	1	3	0	0	4
Dentists	0	0	1	2	3
Dermatologists	0	0	1	1	2
Enrolled Nurse	0	8	0	0	8
ENT Doctors (Otorhinolaryngologists)	0	0	1	0	1
Family Health Workers	4	2	0	1	7
General Doctors	0	0	16	8	24
Health Management	2	0	0	0	2
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Technicians/Assistants	1	1	7	5	14
Obstetricians and Gynecologists	0	0	2	1	3
Ophthalmologists	0	0	2	0	2
Orthopedic Doctors	1	0	1	0	2
Pediatricians	0	0	1	1	2
Pharmacist/Pharmacy Assistant/Dispenser	0	9	3	0	12
Radiographers	0	0	3	1	4

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Registered Nurse	0	12	1	13	26
Registered Nurse Midwife	0	2	0	12	14
Surgeons	0	0	2	0	2
GMR	587	2,497	819	502	4,405
Admin & Support Staff	304	730	285	25	1,344
Anesthesiology	4	5	19	4	32
Cardiologists	13	1	2	0	16
Community Health Workers	0	6	0	0	6
Counsellors	0	3	0	1	4
Dental Technicians/Assistants	3	36	3	0	42
Dentists	3	15	9	1	28
Dermatologists	4	10	0	2	16
EEG/EMG Technician	0	0	1	0	1
Emergency Medicine	1	1	0	0	2
Endodontics	0	2	0	0	2
Enrolled Nurse	4	115	0	0	119
Enrolled Nurse Midwife	0	3	0	0	3
ENT Doctors (Otorhinolaryngologists)	4	4	6	4	18
General Medicine	1	0	0	0	1
General Doctors	54	209	37	18	318
Health Management	25	30	3	1	59
Internal medicine (Physicians)	27	4	8	1	40
Laboratory Scientists	0	9	1	1	11
Laboratory Technicians/Assistants	32	153	37	20	242
Medical Assistants	8	79	0	0	87
Medical Oncologist	1	0	0	0	1
Nephrologist	1	0	0	0	1
Neurosurgeons/Neurologists	5	0	6	0	11

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Obstetricians and Gynecologists	6	37	2	7	52
Occupational Therapist	0	0	1	0	1
Onco Surgery	1	0	0	0	1
Ophthalmologists	2	6	4	4	16
Oral & Maxillo Facial Surgery	1	0	1	0	2
Orthodontistry	0	1	0	0	1
Orthopedic Doctors	15	2	11	0	28
Other Health Workers	4	14	0	0	18
Pathologist	0	2	1	2	5
Pediatric Cardiology	0	1	0	0	1
Pediatricians	4	17	10	3	34
Pharmacist/Pharmacy Assistant/Dispenser	24	213	200	14	451
Physiotherapists	3	8	16	5	32
Psychiatrists	1	2	2	1	6
Psychologists	2	6	0	0	8
Pulmonologists	6	0	2	0	8
Radiographers	6	6	40	8	60
Registered Nurse	4	604	78	260	946
Registered Nurse Midwife	0	144	24	112	280
Social Workers	0	2	0	0	2
Speech Pathologists	0	4	0	4	8
Surgeons	11	5	6	3	25
Urologists	3	0	2	0	5
Radiologist	0	8	2	1	11
Gn	31	107	18	3	159
Admin & Support Staff	25	28	0	0	53
Anesthesiology	0	0	1	0	1
Community Health Workers	2	2	0	0	4

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Dentists	0	0	1	0	1
Enrolled Nurse	0	12	0	0	12
Enrolled Nurse Midwife	0	1	0	0	1
Family Health Workers	1	2	0	0	3
General Doctors	0	1	5	0	6
Health Management	1	2	0	0	3
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Technicians/Assistants	0	3	1	1	5
Medical Assistants	1	8	0	0	9
Obstetricians and Gynecologists	0	0	1	1	2
Orthopedic Doctors	0	0	2	0	2
Pediatricians	0	0	1	1	2
Pharmacist/Pharmacy Assistant/Dispenser	0	24	2	0	26
Radiographers	1	0	1	0	2
Registered Nurse	0	19	0	0	19
Registered Nurse Midwife	0	5	0	0	5
Surgeons	0	0	2	0	2
HA	111	202	52	51	416
Admin & Support Staff	84	114	0	0	198
Anesthesiology	0	0	0	1	1
Community Health Workers	9	6	0	0	15
Dentists	0	0	1	0	1
Enrolled Nurse	0	8	0	0	8
Family Health Workers	4	11	0	0	15
General Doctors	0	0	20	2	22
Health Management	8	0	0	0	8
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Technicians/Assistants	2	3	7	2	14

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Medical Assistants	1	1	0	0	2
Obstetricians and Gynecologists	0	0	2	1	3
Orthopedic Doctors	0	0	1	0	1
Other Health Workers	0	4	0	0	4
Pediatricians	0	0	1	1	2
Pharmacist/Pharmacy Assistant/Dispenser	2	18	5	0	25
Physiotherapists	0	0	1	0	1
Radiographers	0	1	2	0	3
Registered Nurse	1	30	4	14	49
Registered Nurse Midwife	0	3	6	29	38
Surgeons	0	0	1	1	2
Traditional birth attendants	0	3	0	0	3
HDh	107	235	82	77	501
Admin & Support Staff	78	91	7	2	178
Anesthesiology	0	0	2	0	2
Cardiologists	0	0	1	0	1
Community Health Workers	5	7	0	1	13
Dental Technicians/Assistants	2	1	0	0	3
Dentists	0	1	1	0	2
Dermatologists	0	0	2	0	2
Enrolled Nurse	1	25	0	0	26
ENT Doctors (Otorhinolaryngologists)	0	0	2	0	2
Family Health Workers	4	17	0	4	25
General Doctors	2	0	27	8	37
Health Management	1	0	0	0	1
Internal medicine (Physicians)	1	1	0	0	2
Laboratory Technicians/Assistants	3	7	10	5	25
Medical Assistants	0	0	0	5	5

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Obstetricians and Gynecologists	0	0	3	1	4
Ophthalmologists	0	0	0	2	2
Orthopedic Doctors	0	0	2	0	2
Pediatricians	1	1	1	0	3
Pharmacist/Pharmacy Assistant/Dispenser	3	34	8	0	45
Physiotherapists	0	0	1	2	3
Psychiatrists	0	0	1	0	1
Radiographers	0	0	3	1	4
Registered Nurse	5	45	7	30	87
Registered Nurse Midwife	1	5	2	15	23
Surgeons	0	0	2	0	2
Traditional birth attendants	0	0	0	1	1
K	66	162	27	35	290
Admin & Support Staff	52	97	0	0	149
Community Health Workers	7	5	0	0	12
Dentists	0	0	1	0	1
Dermatologists	0	0	1	0	1
Enrolled Nurse	0	16	0	1	17
Family Health Workers	1	12	0	0	13
General Doctors	1	1	11	1	14
Health Management	3	1	0	0	4
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Scientists	0	0	2	0	2
Laboratory Technicians/Assistants	1	2	1	0	4
Pharmacist/Pharmacy Assistant/Dispenser	0	8	3	0	11
Radiographers	0	0	1	0	1
Registered Nurse	1	18	6	25	50
Registered Nurse Midwife	0	1	0	8	9

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Traditional birth attendants	0	1	0	0	1
L	124	219	64	60	467
Admin & Support Staff	102	100	1	0	203
Anesthesiology	0	0	1	0	1
Community Health Workers	5	7	0	0	12
Dentists	0	0	3	0	3
Dermatologists	0	0	2	0	2
Enrolled Nurse	0	19	0	0	19
Enrolled Nurse Midwife	0	3	0	0	3
ENT Doctors (Otorhinolaryngologists)	0	0	1	0	1
Family Health Workers	5	11	0	0	16
General Doctors	0	2	14	5	21
Health Management	5	0	0	0	5
Laboratory Technicians/Assistants	1	8	9	3	21
Obstetricians and Gynecologists	0	0	1	0	1
Ophthalmologists	0	0	0	1	1
Other Health Workers	0	1	0	0	1
Pediatricians	0	0	2	1	3
Pharmacist/Pharmacy Assistant/Dispenser	4	17	5	0	26
Physiotherapists	0	0	2	1	3
Psychiatrists	0	0	2	0	2
Radiographers	0	0	2	2	4
Registered Nurse	0	48	14	40	102
Registered Nurse Midwife	2	3	2	7	14
Surgeons	0	0	3	0	3
Lh	50	133	40	15	238
Admin & Support Staff	37	80	0	0	117
Community Health Workers	1	3	0	0	4

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Dentists	0	0	1	0	1
Enrolled Nurse	1	6	0	0	7
Enrolled Nurse Midwife	0	1	0	0	1
Family Health Workers	1	4	0	0	5
General Doctors	0	0	8	3	11
Health Management	3	1	0	0	4
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Technicians/Assistants	0	5	2	1	8
Obstetricians and Gynecologists	0	0	1	0	1
Orthopedic Doctors	0	0	2	0	2
Pediatricians	0	0	2	0	2
Pharmacist/Pharmacy Assistant/Dispenser	0	9	13	0	22
Physiotherapists	0	1	0	0	1
Radiographers	0	0	2	0	2
Registered Nurse	7	17	4	4	32
Registered Nurse Midwife	0	3	2	7	12
Surgeons	0	0	2	0	2
Traditional birth attendants	0	3	0	0	3
M	50	97	29	31	207
Admin & Support Staff	38	41	0	1	80
Anesthesiology	0	0	1	0	1
Community Health Workers	5	4	0	0	9
Dentists	0	0	0	1	1
Enrolled Nurse	0	19	0	0	19
Family Health Workers	1	11	0	0	12
General Doctors	0	0	13	0	13
Health Management	3	0	0	0	3
Internal medicine (Physicians)	0	0	0	1	1

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Laboratory Scientists	1	0	0	0	1
Laboratory Technicians/Assistants	0	0	5	1	6
Obstetricians and Gynecologists	0	0	1	0	1
Pediatricians	0	0	1	0	1
Pharmacist/Pharmacy Assistant/Dispenser	1	6	1	0	8
Physiotherapists	0	0	2	0	2
Radiographers	0	0	1	1	2
Registered Nurse	1	12	0	7	20
Registered Nurse Midwife	0	2	3	19	24
Surgeons	0	0	1	0	1
Traditional birth attendants	0	2	0	0	2
N	85	134	37	47	303
Admin & Support Staff	64	68	0	2	134
Anesthesiology	0	0	1	0	1
Community Health Workers	5	9	0	0	14
Dental Technicians/Assistants	0	1	0	0	1
Dentists	0	0	2	0	2
Enrolled Nurse	0	9	0	0	9
Family Health Workers	4	7	0	0	11
General Doctors	0	0	14	6	20
Health Management	6	3	0	0	9
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Technicians/Assistants	3	2	4	0	9
Obstetricians and Gynecologists	0	0	2	0	2
Orthopedic Doctors	0	0	1	0	1
Pediatricians	0	0	2	0	2
Pharmacist/Pharmacy Assistant/Dispenser	2	11	1	0	14
Radiographers	0	0	2	0	2

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Registered Nurse	1	22	5	35	63
Registered Nurse Midwife	0	0	0	4	4
Social Workers	0	2	0	0	2
Surgeons	0	0	2	0	2
R	151	205	88	89	533
Admin & Support Staff	109	80	1	0	190
Anesthesiology	0	0	1	1	2
Community Health Workers	11	12	0	0	23
Dentists	0	0	3	0	3
Dermatologists	0	0	1	1	2
Enrolled Nurse	1	14	0	3	18
Enrolled Nurse Midwife	0	2	0	1	3
ENT Doctors (Otorhinolaryngologists)	0	0	0	1	1
Family Health Workers	3	13	0	0	16
General Doctors	0	0	22	6	28
Health Management	8	0	0	0	8
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Scientists	0	0	1	0	1
Laboratory Technicians/Assistants	0	4	10	7	21
Medical Assistants	5	11	0	0	16
Obstetricians and Gynecologists	0	0	1	0	1
Ophthalmologists	0	0	1	0	1
Orthopedic Doctors	0	0	2	0	2
Pediatricians	0	0	1	2	3
Pharmacist/Pharmacy Assistant/Dispenser	1	16	6	0	23
Physiotherapists	0	0	2	1	3
Psychiatrists	0	0	1	0	1
Radiographers	0	1	3	1	5

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Registered Nurse	13	50	28	62	153
Registered Nurse Midwife	0	0	1	3	4
Surgeons	0	0	2	0	2
Traditional birth attendants	0	2	0	0	2
S	69	369	89	44	571
Admin & Support Staff	61	146	4	1	212
Anesthesiology	0	0	2	0	2
Community Health Workers	3	4	0	0	7
Dental Technicians/Assistants	0	1	0	0	1
Dentists	0	0	0	3	3
Dermatologists	0	0	1	0	1
Enrolled Nurse	0	36	0	0	36
Enrolled Nurse Midwife	0	5	0	0	5
ENT Doctors (Otorhinolaryngologists)	0	1	0	0	1
Family Health Workers	0	12	0	0	12
General Doctors	1	6	17	8	32
Internal medicine (Physicians)	1	0	2	1	4
Laboratory Scientists	1	1	0	0	2
Laboratory Technicians/Assistants	1	3	3	0	7
Obstetricians and Gynecologists	0	0	2	2	4
Ophthalmologists	0	1	0	1	2
Orthopedic Doctors	0	0	1	0	1
Pediatricians	0	1	3	0	4
Pharmacist/Pharmacy Assistant/Dispenser	0	19	29	0	48
Physiotherapists	0	0	4	0	4
Psychiatrists	0	0	2	0	2
Radiographers	0	1	5	0	6
Registered Nurse	0	120	12	25	157

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Registered Nurse Midwife	0	7	0	3	10
Surgeons	1	0	2	0	3
Traditional birth attendants	0	5	0	0	5
Sh	126	218	47	34	425
Admin & Support Staff	108	108	0	0	216
Anesthesiology	0	0	1	0	1
Community Health Workers	8	3	0	0	11
Dental Technicians/Assistants	0	1	0	0	1
Dentists	0	0	1	0	1
Enrolled Nurse	0	15	0	0	15
Enrolled Nurse Midwife	0	1	0	2	3
Family Health Workers	5	16	0	0	21
General Doctors	0	0	18	4	22
Health Management	1	0	0	0	1
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Scientists	0	0	1	1	2
Laboratory Technicians/Assistants	3	3	4	4	14
Obstetricians and Gynecologists	0	0	3	0	3
Orthopedic Doctors	0	0	1	0	1
Other Health Workers	0	2	0	0	2
Pediatricians	0	0	3	1	4
Pharmacist/Pharmacy Assistant/Dispenser	0	20	1	0	21
Radiographers	0	0	2	0	2
Registered Nurse	0	42	9	20	71
Registered Nurse Midwife	0	4	0	2	6
Surgeons	0	0	2	0	2
Traditional birth attendants	0	3	0	0	3
Traditional Medicine Practitioners	1	0	0	0	1

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Th	118	201	46	51	416
Admin & Support Staff	70	80	0	4	154
Anesthesiology	0	0	1	0	1
Community Health Workers	3	10	0	1	14
Dentists	0	0	1	0	1
Enrolled Nurse	0	10	0	0	10
Enrolled Nurse Midwife	0	1	0	0	1
Environmental and Public Health Workers	0	3	0	0	3
Family Health Workers	2	9	1	0	12
General Doctors	1	0	18	4	23
Health Management	1	0	0	0	1
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Technicians/Assistants	3	4	5	2	14
Medical Assistants	23	26	0	0	49
Obstetricians and Gynecologists	0	0	1	1	2
Orthopedic Doctors	0	0	1	0	1
Other Health Workers	6	7	1	0	14
Pediatricians	1	0	1	0	2
Pharmacist/Pharmacy Assistant/Dispenser	5	14	0	0	19
Radiographers	0	0	2	0	2
Registered Nurse	3	29	5	19	56
Registered Nurse Midwife	0	7	7	20	34
Surgeons	0	0	1	0	1
Traditional birth attendants	0	1	0	0	1
V	12	42	15	22	91
Admin & Support Staff	8	32	0	0	40
Community Health Workers	2	0	0	0	2
Enrolled Nurse	0	2	0	0	2

Location / Profession	Local		Expatriate		Total
	Male	Female	Male	Female	
Family Health Workers	1	1	0	1	3
General Doctors	0	0	7	1	8
Health Management	1	0	0	0	1
Internal medicine (Physicians)	0	0	1	0	1
Laboratory Technicians/Assistants	0	1	1	1	3
Obstetricians and Gynecologists	0	0	1	0	1
Pharmacist/Pharmacy Assistant/Dispenser	0	4	1	0	5
Radiographers	0	0	1	1	2
Registered Nurse	0	2	3	18	23
Grand Total	**2,081**	**5,842**	**1,669**	**1,252**	**10,844**

Table 1-14: Health Professionals employed by public or private sector, 2021

Location / Profession	Public	Private	Total
AA	205	4	209
Allied Health Professionals	25	4	29
Community Health Workers	7	0	7
Family Health Workers	7	0	7
Laboratory Technicians/Assistants	6	0	6
Other Health Workers	2	0	2
Pharmacist/Pharmacy Assistant/Dispenser	0	4	4
Radiographers	2	0	2
Traditional birth attendants	1	0	1
Medical and Dental professionals	20	0	20
Anesthesiology	1	0	1
General Doctors	17	0	17
Obstetricians and Gynaecologists	1	0	1
Pediatricians	1	0	1
Non Medical Staff	108	0	108
Admin & Support Staff	106	0	106
Health Management	2	0	2
Nurse	52	0	52
Enrolled Nurse	6	0	6
Enrolled Nurse Midwife	1	0	1
Registered Nurse	34	0	34
Registered Nurse Midwife	11	0	11
ADh	271	24	295
Allied Health Professionals	39	24	63
Community Health Workers	16	0	16
Environmental and Public Health Workers	1	0	1
Family Health Workers	9	0	9
Laboratory Technicians/Assistants	9	0	9
Pharmacist/Pharmacy Assistant/Dispenser	0	24	24
Traditional birth attendants	4	0	4
Medical and Dental professionals	18	0	18
Anesthesiology	1	0	1

Location / Profession	Public	Private	Total
General Doctors	15	0	15
Internal medicine (Physicians)	1	0	1
Pediatricians	1	0	1
Non Medical Staff	140	0	140
Admin & Support Staff	131	0	131
Health Management	9	0	9
Nurse	74	0	74
Enrolled Nurse	25	0	25
Enrolled Nurse Midwife	3	0	3
Registered Nurse	40	0	40
Registered Nurse Midwife	6	0	6
B	304	14	318
Allied Health Professionals	45	14	59
Community Health Workers	16	0	16
Dentists	1	0	1
Family Health Workers	13	0	13
Laboratory Technicians/Assistants	9	0	9
Pharmacist/Pharmacy Assistant/Dispenser	0	14	14
Radiographers	2	0	2
Traditional birth attendants	4	0	4
Medical and Dental professionals	25	0	25
Anesthesiology	1	0	1
General Doctors	19	0	19
Internal medicine (Physicians)	1	0	1
Obstetricians and Gynaecologists	1	0	1
Pediatricians	2	0	2
Surgeons	1	0	1
Non Medical Staff	154	0	154
Admin & Support Staff	138	0	138
Health Management	2	0	2
Medical Assistants	14	0	14
Nurse	80	0	80
Enrolled Nurse	24	0	24

Location / Profession	Public	Private	Total
Enrolled Nurse Midwife	1	0	1
Registered Nurse	46	0	46
Registered Nurse Midwife	9	0	9
Dh	214	6	220
Allied Health Professionals	35	6	41
Community Health Workers	11	0	11
Dentists	1	0	1
Family Health Workers	8	0	8
Laboratory Technicians/Assistants	11	0	11
Pharmacist/Pharmacy Assistant/Dispenser	0	6	6
Radiographers	2	0	2
Traditional birth attendants	2	0	2
Medical and Dental professionals	19	0	19
Anesthesiology	1	0	1
General Doctors	13	0	13
Internal medicine (Physicians)	1	0	1
Obstetricians and Gynaecologists	1	0	1
Orthopedic Doctors	1	0	1
Pediatricians	1	0	1
Surgeons	1	0	1
Non Medical Staff	107	0	107
Admin & Support Staff	95	0	95
Medical Assistants	12	0	12
Nurse	53	0	53
Enrolled Nurse	6	0	6
Enrolled Nurse Midwife	5	0	5
Registered Nurse	41	0	41
Registered Nurse Midwife	1	0	1
F	201	8	209
Allied Health Professionals	31	8	39
Community Health Workers	8	0	8
Dental Technicians/Assistants	1	0	1
Dentists	1	0	1

Location / Profession	Public	Private	Total
Family Health Workers	9	0	9
Laboratory Technicians/Assistants	7	0	7
Pharmacist/Pharmacy Assistant/Dispenser	0	8	8
Radiographers	3	0	3
Traditional birth attendants	2	0	2
Medical and Dental professionals	16	0	16
Anesthesiology	1	0	1
General Doctors	11	0	11
Internal medicine (Physicians)	1	0	1
Obstetricians and Gynaecologists	1	0	1
Pediatricians	1	0	1
Surgeons	1	0	1
Non Medical Staff	98	0	98
Admin & Support Staff	90	0	90
Health Management	3	0	3
Medical Assistants	5	0	5
Nurse	56	0	56
Enrolled Nurse	14	0	14
Registered Nurse	36	0	36
Registered Nurse Midwife	6	0	6
GA	311	11	322
Allied Health Professionals	33	11	44
Community Health Workers	7	0	7
Dentists	2	0	2
Family Health Workers	6	0	6
Laboratory Technicians/Assistants	12	0	12
Pharmacist/Pharmacy Assistant/Dispenser	0	11	11
Physiotherapists	1	0	1
Radiographers	2	0	2
Traditional birth attendants	3	0	3
Medical and Dental professionals	31	0	31
Anesthesiology	1	0	1
General Doctors	23	0	23

Location / Profession	Public	Private	Total
Internal medicine (Physicians)	1	0	1
Obstetricians and Gynaecologists	1	0	1
Orthopedic Doctors	1	0	1
Pediatricians	2	0	2
Surgeons	2	0	2
Non Medical Staff	160	0	160
Admin & Support Staff	153	0	153
Health Management	7	0	7
Nurse	87	0	87
Enrolled Nurse	14	0	14
Enrolled Nurse Midwife	4	0	4
Registered Nurse	58	0	58
Registered Nurse Midwife	11	0	11
GDh	237	12	249
Allied Health Professionals	32	12	44
Community Health Workers	4	0	4
Dentists	3	0	3
Family Health Workers	7	0	7
Laboratory Technicians/Assistants	14	0	14
Pharmacist/Pharmacy Assistant/Dispenser	0	12	12
Radiographers	4	0	4
Medical and Dental professionals	40	0	40
Anesthesiology	1	0	1
Dermatologists	2	0	2
ENT Doctors (Otorhinolaryngologists)	1	0	1
General Doctors	24	0	24
Internal medicine (Physicians)	1	0	1
Obstetricians and Gynaecologists	3	0	3
Ophthalmologists	2	0	2
Orthopedic Doctors	2	0	2
Pediatricians	2	0	2
Surgeons	2	0	2

Location / Profession	Public	Private	Total
Non Medical Staff	117	0	117
Admin & Support Staff	115	0	115
Health Management	2	0	2
Nurse	48	0	48
Enrolled Nurse	8	0	8
Registered Nurse	26	0	26
Registered Nurse Midwife	14	0	14
GMR	2,708	1,697	4,405
Allied Health Professionals	298	631	929
Community Health Workers	6	0	6
Counsellors	4	0	4
Dental Technicians/Assistants	25	17	42
Dentists	18	10	28
EEG/EMG Technician	1	0	1
Laboratory Scientists	11	0	11
Laboratory Technicians/Assistants	131	111	242
Other Health Workers	17	1	18
Pathologist	5	0	5
Pharmacist/Pharmacy Assistant/Dispenser	0	451	451
Physiotherapists	20	12	32
Psychologists	7	1	8
Radiographers	35	25	60
Social Workers	2	0	2
Speech Pathologists	5	3	8
Radiologist	11	0	11
Medical and Dental professionals	437	201	638
Anesthesiology	17	15	32
Cardiologists	7	9	16
Dermatologists	9	7	16
Emergency Medicine	2	0	2
Endodontics	2	0	2
ENT Doctors (Otorhinolaryngologists)	11	7	18
Genaral Medicine	1	0	1

Location / Profession	Public	Private	Total
General Doctors	252	66	318
Internal medicine (Physicians)	27	13	40
Medical Oncologist	1	0	1
Nephrologist	1	0	1
Neurosurgeons/Neurologists	4	7	11
Obstetricians and Gynaecologists	28	24	52
Occupational Therapist	1	0	1
Onco Surgery	1	0	1
Ophthalmologists	10	6	16
Oral & Maxillo Facial Surgery	2	0	2
Orthodontistry	1	0	1
Orthopedic Doctors	15	13	28
Peadiatric Cardiology	1	0	1
Pediatricians	20	14	34
Psychiatrists	6	0	6
Pulmonologists	4	4	8
Surgeons	12	13	25
Urologists	2	3	5
Non Medical Staff	1,007	483	1,490
Admin & Support Staff	917	427	1,344
Health Management	39	20	59
Medical Assistants	51	36	87
Nurse	966	382	1,348
Enrolled Nurse	77	42	119
Enrolled Nurse Midwife	1	2	3
Registered Nurse	783	163	946
Registered Nurse Midwife	105	175	280
Gn	133	26	159
Allied Health Professionals	15	26	41
Community Health Workers	4	0	4
Dentists	1	0	1
Family Health Workers	3	0	3
Laboratory Technicians/Assistants	5	0	5

Location / Profession	Public	Private	Total
Pharmacist/Pharmacy Assistant/Dispenser	0	26	26
Radiographers	2	0	2
Medical and Dental professionals	16	0	16
Anesthesiology	1	0	1
General Doctors	6	0	6
Internal medicine (Physicians)	1	0	1
Obstetricians and Gynaecologists	2	0	2
Orthopedic Doctors	2	0	2
Pediatricians	2	0	2
Surgeons	2	0	2
Non Medical Staff	65	0	65
Admin & Support Staff	53	0	53
Health Management	3	0	3
Medical Assistants	9	0	9
Nurse	37	0	37
Enrolled Nurse	12	0	12
Enrolled Nurse Midwife	1	0	1
Registered Nurse	19	0	19
Registered Nurse Midwife	5	0	5
HA	391	25	416
Allied Health Professionals	56	25	81
Community Health Workers	15	0	15
Dentists	1	0	1
Family Health Workers	15	0	15
Laboratory Technicians/Assistants	14	0	14
Other Health Workers	4	0	4
Pharmacist/Pharmacy Assistant/Dispenser	0	25	25
Physiotherapists	1	0	1
Radiographers	3	0	3
Traditional birth attendants	3	0	3
Medical and Dental professionals	32	0	32
Anesthesiology	1	0	1
General Doctors	22	0	22

Location / Profession	Public	Private	Total
Internal medicine (Physicians)	1	0	1
Obstetricians and Gynaecologists	3	0	3
Orthopedic Doctors	1	0	1
Pediatricians	2	0	2
Surgeons	2	0	2
Non Medical Staff	208	0	208
Admin & Support Staff	198	0	198
Health Management	8	0	8
Medical Assistants	2	0	2
Nurse	95	0	95
Enrolled Nurse	8	0	8
Registered Nurse	49	0	49
Registered Nurse Midwife	38	0	38
HDh	456	45	501
Allied Health Professionals	76	45	121
Community Health Workers	13	0	13
Dental Technicians/Assistants	3	0	3
Dentists	2	0	2
Family Health Workers	25	0	25
Laboratory Technicians/Assistants	25	0	25
Pharmacist/Pharmacy Assistant/Dispenser	0	45	45
Physiotherapists	3	0	3
Radiographers	4	0	4
Traditional birth attendants	1	0	1
Medical and Dental professionals	60	0	60
Anesthesiology	2	0	2
Cardiologists	1	0	1
Dermatologists	2	0	2
ENT Doctors (Otorhinolaryngologists)	2	0	2
General Doctors	37	0	37
Internal medicine (Physicians)	2	0	2
Obstetricians and Gynaecologists	4	0	4
Ophthalmologists	2	0	2

Location / Profession	Public	Private	Total
Orthopedic Doctors	2	0	2
Pediatricians	3	0	3
Psychiatrists	1	0	1
Surgeons	2	0	2
Non Medical Staff	184	0	184
Admin & Support Staff	178	0	178
Health Management	1	0	1
Medical Assistants	5	0	5
Nurse	136	0	136
Enrolled Nurse	26	0	26
Registered Nurse	87	0	87
Registered Nurse Midwife	23	0	23
K	279	11	290
Allied Health Professionals	34	11	45
Community Health Workers	12	0	12
Dentists	1	0	1
Family Health Workers	13	0	13
Laboratory Scientists	2	0	2
Laboratory Technicians/Assistants	4	0	4
Pharmacist/Pharmacy Assistant/Dispenser	0	11	11
Radiographers	1	0	1
Traditional birth attendants	1	0	1
Medical and Dental professionals	16	0	16
Dermatologists	1	0	1
General Doctors	14	0	14
Internal medicine (Physicians)	1	0	1
Non Medical Staff	153	0	153
Admin & Support Staff	149	0	149
Health Management	4	0	4
Nurse	76	0	76
Enrolled Nurse	17	0	17
Registered Nurse	50	0	50
Registered Nurse Midwife	9	0	9

Location / Profession	Public	Private	Total
L	441	26	467
Allied Health Professionals	60	26	86
Community Health Workers	12	0	12
Dentists	3	0	3
Family Health Workers	16	0	16
Laboratory Technicians/Assistants	21	0	21
Other Health Workers	1	0	1
Pharmacist/Pharmacy Assistant/Dispenser	0	26	26
Physiotherapists	3	0	3
Radiographers	4	0	4
Medical and Dental professionals	35	0	35
Anesthesiology	1	0	1
Dermatologists	2	0	2
ENT Doctors (Otorhinolaryngologists)	1	0	1
General Doctors	21	0	21
Obstetricians and Gynaecologists	1	0	1
Ophthalmologists	1	0	1
Pediatricians	3	0	3
Psychiatrists	2	0	2
Surgeons	3	0	3
Non Medical Staff	208	0	208
Admin & Support Staff	203	0	203
Health Management	5	0	5
Nurse	138	0	138
Enrolled Nurse	19	0	19
Enrolled Nurse Midwife	3	0	3
Registered Nurse	102	0	102
Registered Nurse Midwife	14	0	14
Lh	216	22	238
Allied Health Professionals	24	22	46
Community Health Workers	4	0	4
Dentists	1	0	1
Family Health Workers	5	0	5

Location / Profession	Public	Private	Total
Laboratory Technicians/Assistants	8	0	8
Pharmacist/Pharmacy Assistant/Dispenser	0	22	22
Physiotherapists	1	0	1
Radiographers	2	0	2
Traditional birth attendants	3	0	3
Medical and Dental professionals	19	0	19
General Doctors	11	0	11
Internal medicine (Physicians)	1	0	1
Obstetricians and Gynaecologists	1	0	1
Orthopedic Doctors	2	0	2
Pediatricians	2	0	2
Surgeons	2	0	2
Non Medical Staff	121	0	121
Admin & Support Staff	117	0	117
Health Management	4	0	4
Nurse	52	0	52
Enrolled Nurse	7	0	7
Enrolled Nurse Midwife	1	0	1
Registered Nurse	32	0	32
Registered Nurse Midwife	12	0	12
M	199	8	207
Allied Health Professionals	35	8	43
Community Health Workers	9	0	9
Dentists	1	0	1
Family Health Workers	12	0	12
Laboratory Scientists	1	0	1
Laboratory Technicians/Assistants	6	0	6
Pharmacist/Pharmacy Assistant/Dispenser	0	8	8
Physiotherapists	2	0	2
Radiographers	2	0	2
Traditional birth attendants	2	0	2
Medical and Dental professionals	18	0	18
Anesthesiology	1	0	1

Location / Profession	Public	Private	Total
General Doctors	13	0	13
Internal medicine (Physicians)	1	0	1
Obstetricians and Gynaecologists	1	0	1
Pediatricians	1	0	1
Surgeons	1	0	1
Non Medical Staff	83	0	83
Admin & Support Staff	80	0	80
Health Management	3	0	3
Nurse	63	0	63
Enrolled Nurse	19	0	19
Registered Nurse	20	0	20
Registered Nurse Midwife	24	0	24
N	289	14	303
Allied Health Professionals	41	14	55
Community Health Workers	14	0	14
Dental Technicians/Assistants	1	0	1
Dentists	2	0	2
Family Health Workers	11	0	11
Laboratory Technicians/Assistants	9	0	9
Pharmacist/Pharmacy Assistant/Dispenser	0	14	14
Radiographers	2	0	2
Social Workers	2	0	2
Medical and Dental professionals	29	0	29
Anesthesiology	1	0	1
General Doctors	20	0	20
Internal medicine (Physicians)	1	0	1
Obstetricians and Gynaecologists	2	0	2
Orthopedic Doctors	1	0	1
Pediatricians	2	0	2
Surgeons	2	0	2
Non Medical Staff	143	0	143
Admin & Support Staff	134	0	134
Health Management	9	0	9

Location / Profession	Public	Private	Total
Nurse	76	0	76
Enrolled Nurse	9	0	9
Registered Nurse	63	0	63
Registered Nurse Midwife	4	0	4
R	510	23	533
Allied Health Professionals	74	23	97
Community Health Workers	23	0	23
Dentists	3	0	3
Family Health Workers	16	0	16
Laboratory Scientists	1	0	1
Laboratory Technicians/Assistants	21	0	21
Pharmacist/Pharmacy Assistant/Dispenser	0	23	23
Physiotherapists	3	0	3
Radiographers	5	0	5
Traditional birth attendants	2	0	2
Medical and Dental professionals	44	0	44
Anesthesiology	2	0	2
Dermatologists	2	0	2
ENT Doctors (Otorhinolaryngologists)	1	0	1
General Doctors	28	0	28
Internal medicine (Physicians)	1	0	1
Obstetricians and Gynaecologists	1	0	1
Ophthalmologists	1	0	1
Orthopedic Doctors	2	0	2
Pediatricians	3	0	3
Psychiatrists	1	0	1
Surgeons	2	0	2
Non Medical Staff	214	0	214
Admin & Support Staff	190	0	190
Health Management	8	0	8
Medical Assistants	16	0	16
Nurse	178	0	178
Enrolled Nurse	18	0	18

Location / Profession	Public	Private	Total
Enrolled Nurse Midwife	3	0	3
Registered Nurse	153	0	153
Registered Nurse Midwife	4	0	4
S	494	77	571
Allied Health Professionals	39	56	95
Community Health Workers	7	0	7
Dental Technicians/Assistants	0	1	1
Dentists	2	1	3
Family Health Workers	12	0	12
Laboratory Scientists	2	0	2
Laboratory Technicians/Assistants	3	4	7
Pharmacist/Pharmacy Assistant/Dispenser	0	48	48
Physiotherapists	3	1	4
Radiographers	5	1	6
Traditional birth attendants	5	0	5
Medical and Dental professionals	51	5	56
Anesthesiology	1	1	2
Dermatologists	1	0	1
ENT Doctors (Otorhinolaryngologists)	1	0	1
General Doctors	31	1	32
Internal medicine (Physicians)	3	1	4
Obstetricians and Gynaecologists	3	1	4
Ophthalmologists	2	0	2
Orthopedic Doctors	1	0	1
Pediatricians	3	1	4
Psychiatrists	2	0	2
Surgeons	3	0	3
Non Medical Staff	207	5	212
Admin & Support Staff	207	5	212
Nurse	197	11	208
Enrolled Nurse	35	1	36
Enrolled Nurse Midwife	5	0	5
Registered Nurse	148	9	157

Location / Profession	Public	Private	Total
Registered Nurse Midwife	9	1	10
Sh	404	21	425
Allied Health Professionals	58	21	79
Community Health Workers	11	0	11
Dental Technicians/Assistants	1	0	1
Dentists	1	0	1
Family Health Workers	21	0	21
Laboratory Scientists	2	0	2
Laboratory Technicians/Assistants	14	0	14
Other Health Workers	2	0	2
Pharmacist/Pharmacy Assistant/Dispenser	0	21	21
Radiographers	2	0	2
Traditional birth attendants	3	0	3
Traditional Medicine Practitioners	1	0	1
Medical and Dental professionals	34	0	34
Anesthesiology	1	0	1
General Doctors	22	0	22
Internal medicine (Physicians)	1	0	1
Obstetricians and Gynaecologists	3	0	3
Orthopedic Doctors	1	0	1
Pediatricians	4	0	4
Surgeons	2	0	2
Non Medical Staff	217	0	217
Admin & Support Staff	216	0	216
Health Management	1	0	1
Nurse	95	0	95
Enrolled Nurse	15	0	15
Enrolled Nurse Midwife	3	0	3
Registered Nurse	71	0	71
Registered Nurse Midwife	6	0	6
Th	397	19	416
Allied Health Professionals	61	19	80
Community Health Workers	14	0	14

Location / Profession	Public	Private	Total
Dentists	1	0	1
Environmental and Public Health Workers	3	0	3
Family Health Workers	12	0	12
Laboratory Technicians/Assistants	14	0	14
Other Health Workers	14	0	14
Pharmacist/Pharmacy Assistant/Dispenser	0	19	19
Radiographers	2	0	2
Traditional birth attendants	1	0	1
Medical and Dental professionals	31	0	31
Anesthesiology	1	0	1
General Doctors	23	0	23
Internal medicine (Physicians)	1	0	1
Obstetricians and Gynaecologists	2	0	2
Orthopedic Doctors	1	0	1
Pediatricians	2	0	2
Surgeons	1	0	1
Non Medical Staff	204	0	204
Admin & Support Staff	154	0	154
Health Management	1	0	1
Medical Assistants	49	0	49
Nurse	101	0	101
Enrolled Nurse	10	0	10
Enrolled Nurse Midwife	1	0	1
Registered Nurse	56	0	56
Registered Nurse Midwife	34	0	34
V	86	5	91
Allied Health Professionals	10	5	15
Community Health Workers	2	0	2
Family Health Workers	3	0	3
Laboratory Technicians/Assistants	3	0	3
Pharmacist/Pharmacy Assistant/Dispenser	0	5	5
Radiographers	2	0	2

Location / Profession	Public	Private	Total
Medical and Dental professionals	10	0	10
General Doctors	8	0	8
Internal medicine (Physicians)	1	0	1
Obstetricians and Gynaecologists	1	0	1
Non Medical Staff	41	0	41
Admin & Support Staff	40	0	40
Health Management	1	0	1
Nurse	25	0	25
Enrolled Nurse	2	0	2
Registered Nurse	23	0	23
Grand Total	**8,746**	**2,098**	**10,844**

Table 1-15: Top 20 in terms of quantity (units) imported drugs, 2021

#	Generic Name	Product Name	Dosage Form	Category	Strength	Quantity (Units)	Indication
1	Prednisolone	WYSOLONE	Dispersible Tablet	Immunosuppressive	10 mg	21767195	relieve swelling, redness, itching, and allergic reactions
2	Ascorbic Acid	LIMCEE	Tablet	Supplement	500 mg	10021400	Vitamin C Deficiency
3	N-Acetyl-P-Aminophenol	PANADOL	Tablet	Antipyretic	500 mg	8951486	Fever, Pain
4	Atorvastatin	ATORIN-10	Tablet	Antihyperlipidemic	10 mg	5478630	High Blood Cholesterol
5	Acetylsalicylic Acid (Aspirin)	ECOSPRIN 75	Extended-Release Tablet	antiplatelet	75 mg	5059104	Heart Attacks, Angina
6	Domperidone Bp +Pantoprazole Usp	DOMPAN OD	Tablet	Antacid	40 mg	4345900	Acidity, GERD
7	Metformin Hcl Bp	MELMET 500	Tablet	Antidiabetic	500 mg	4338260	Type 2 Diabetes
8	Thiamine Mononitrate Ip + Riboflavine Ip + PyridoxineHydrochloride Ip + Cyanocobalamin Triturate InGelatine Eqv.Cyanocobalamin Ip + Nicotinamide Ip + CalciumPantothenate Ip	NEUROBION FORTE	Tablet	Multivitamin supplement	10 mg + 10 mg + 3 mg + 15 mcg + 45 mg + 50 mg	3899850	Vitamin B Deficiency
9	Pantoprazole	PANTAZ	Tablet	Antacid	40 mg	3600975	GERD
10	Telmisartan	TELMED 40	Tablet	Antihypertensive	40 mg IP	3298380	Hypertension
11	Vildagliptin +Metformin Hcl	GALVUS MET	Tablet (Film Coated)	Antidiabetic	50 mg + 1000 mg	3256500	Type 2 Diabetes
12	Calcium Citrate Usp +Cholecalciferol Usp	MILICAL	Tablet	Mineral	1000 mg(USP) + 200 IU(USP)	2765380	Vitamin D Deficiency

#	Generic Name	Product Name	Dosage Form	Category	Strength	Quantity (Units)	Indication
13	Mefenamic Acid Bp	MEFNAC DS	Tablet	NSAID	500 mg	2609820	Abdominal Pain, dysmenorrhea
14	FerrousGluconate+VitaminC+ Vitamin B12+Thiamine Nitrate+ Riboflavin +VitaminB 6 +CalciumPantothenate +Niacinamide +Calcium Lactate	R.B TONE	Capsules	Supplement	200 mg (BP) + 38 mg(BP)+ 12 4 mcg(BP)+ 3 mg(BP)+2. 5 mg (BP) +1 mg(BP)+ 2.5 mg(BP) + 23 mg(BP) + 150 mg(BP)	2484872	Iron Deficiency
15	Vitamin B1+ VitaminB2+ Vitamin B6+Vitamin B12+Niacinamide+Calcium D -Panthonoate+ FolicAcid+ Vitamin C+Coq10	BECOSULES	Capsules	Multivitamin supplement	50MG+25 MG + 10 MG +15 MCG +100 MG +25 MG +1 MG +150 MG + 5 MG	2483313	Vitamin Deficiency
16	Allopurinol Bp	ZYLORIC	Tablet	Antigout	100 mg	2394040	Gout, Kidney Stones
17	Cetirizine Bp	ALLERCET	Tablet	Antihistamine	10 mg BP	2379400	Cold, Allergies
18	Amlodipine	AMODEP	Tablet	Antihypertensive	5mg	2177094	Hypertension
19	Rosuvastatin	CRESTAT	Tablet	Antihyperlipidemic	10 mg	2096825	High Blood Cholesterol
20	Thiamine Nitrate Bp +Pyridoxine Hcl +Cyanocobalamin Triturate InGelatine Eqv.Cyanocobalamin Bp +Nicotinamide Bp + CalciumPantothenate	NEUROBION FORTE	Tablet	Supplement	10mg + 3mg + 15mcg + 100mg + 50mg	1963530	Vitamin B Deficiency

CHAPTER 2 - NATALITY

2 Natality

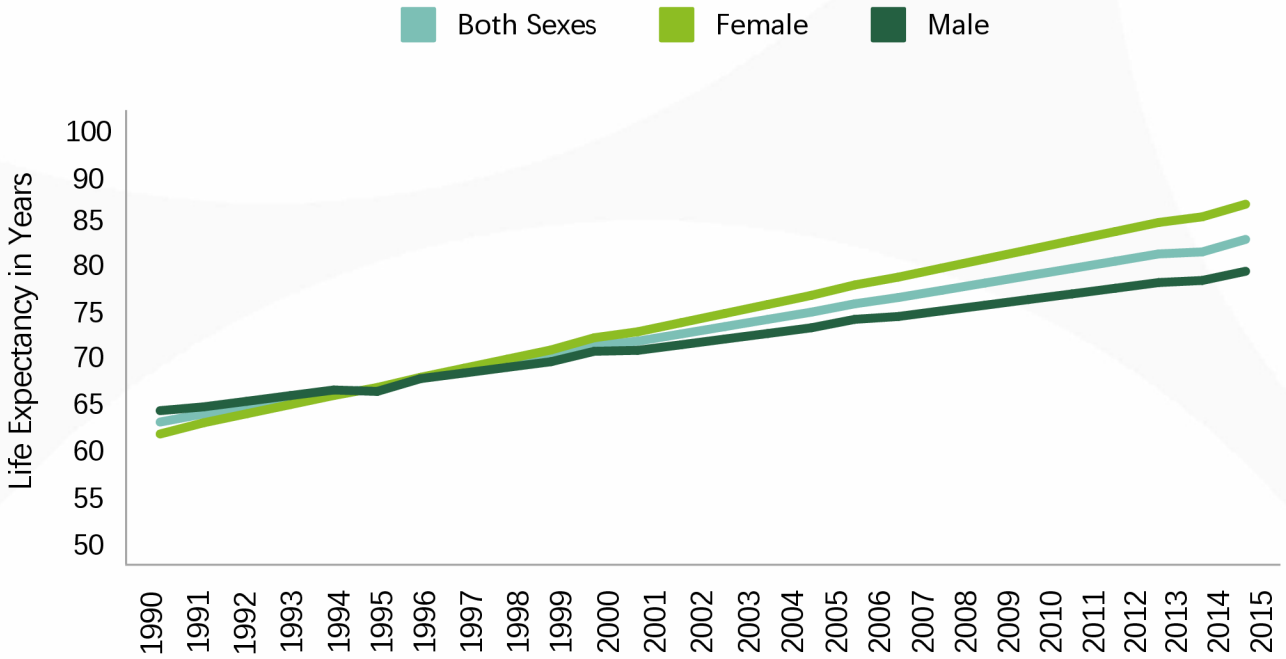
2.1 Life expectancy at birth

According to the new life expectancy series published by Maldives Bureau of Statistics (SYB, 2021[4]), a person born in 2015 is expected to live around 83 years. The expected life expectancy for a girl who was born in 2015 was 87 years while a Maldivian boy who was born in the same year can be expected to live up to 80 years.

Life Expectancy at Birth

Life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life (World Bank, Data Bank[5])

Figure 2-1: Life expectancy at birth, 1990-2015



[4] https://health.gov.mv/dv/publications/annual-report-2021-ministry-of-health-1

[5] https://databank.worldbank.org/metadataglossary/world-development-indicators/series/SP.DYN.LE00.IN

The life expectancy of the Maldivian population by gender has undergone changes overtime. In the 1990s men lived longer than women. However, this trend has changed over the years and starting from 1995, the women live longer than men. At present, a Maldivian girl born in 2015 can be expected to live 7 years longer than a Maldivian boy born in the same year.

2.2 Births

2.2.1 Crude birth rate

Over the past years Maldives has shown mostly a decline in Crude Birth Rate (CBR). From a high CBR of 22 births per 1000 population in 2010, the crude birth rate declined to 16 births per 1000 population in 2021.

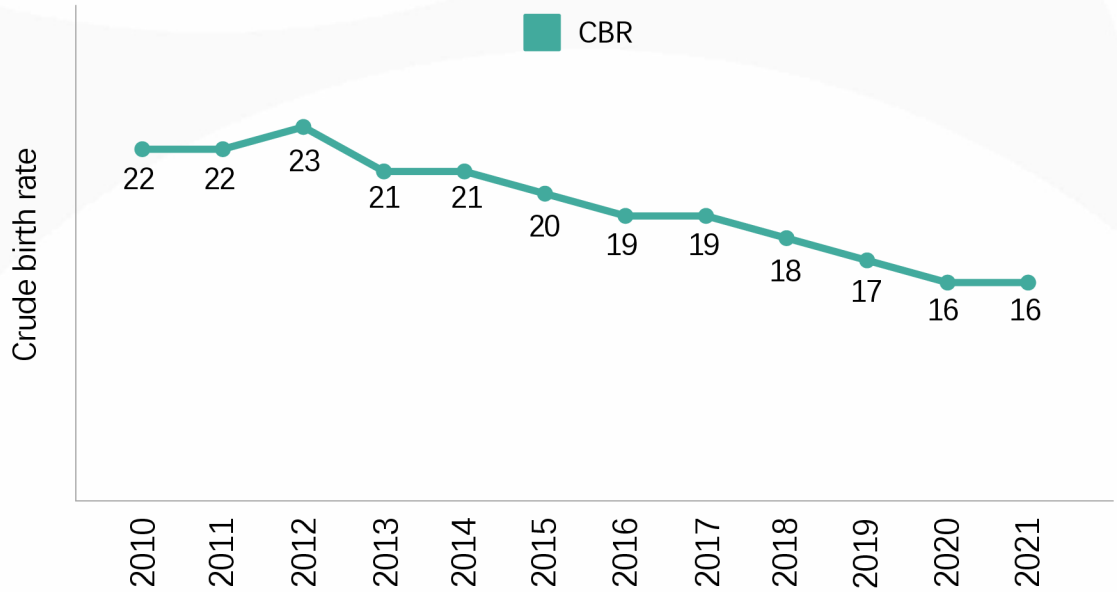
Crude Birth Rate (CBR)

The ratio between the number of live births in a population during a given year and the total mid-year population for the same year, usually multiplied by 1,000 (WHO[6]).

Equation 2-1: Crude Birth Rate

$$CBR = \frac{\textit{Total number of live births in a given year}}{\textit{Mid year population for the same year}} \times 1{,}000$$

Figure 2-2: CBR for 2010- 2021



[6] https://www.who.int/data/gho/indicator-metadata-registry/imr-details/1139

2.2.2 Sex Ratio at Birth

The sex ratio is the ratio of males to females in a given population (WHO, 2021). This measure indicates how many men are there in the population for every 100 females.

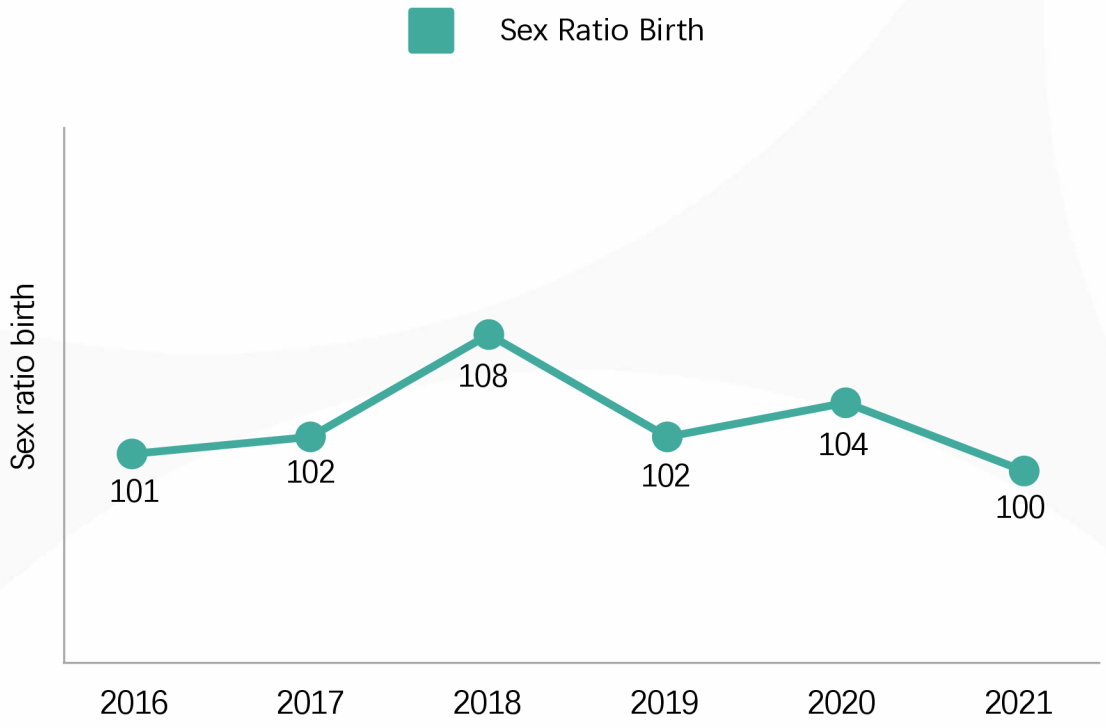
Sex ratios over 100 indicate that there are more boys than girls and sex ratio under 100 indicate that there are more girls than boys being born.

Over the past years, more boys were born compared to girls. However, in 2021, the birth of boys and girls was equivalent as the sex ratio at birth is at 100 percent.

Equation 2-2: Sex ratio

$$\text{Sex ratio} = \frac{\text{Number of male births}}{\text{Number of female births}} \times 100$$

Figure 2-3: Sex ratio at birth, 2016- 2021



2.2.3 Total births

The total births that occur among Maldivian population has mostly declined over the years indicating a decline fertility in the country. The distribution of birth that occurs between GMR and Atolls took a turn due to COVID-19 in 2020. The trend continues in 2021 and 47% of the births took place in the Atolls in the same year.

Table 2-1: Total births by location from 2016-2021

Location	2016	2017	2018	2019	2020	2021
Maldives	6,723	6,681	6,549	6,318	6,428	6,118
GMR	4,369	4,302	4,364	4,359	3,205	3,273
Atolls	2,354	2,379	2,185	1,959	3,223	2,845
Abroad	338	349	259	32	112	119
Grand Total	**7,061**	**7,030**	**6,808**	**6,350**	**6,540**	**6,237**

2.2.3.1 Live births

Out of the total births, 95% accounts as live births in 2021. The number of live births that occur in the country has slightly declined in 2021 when compared to the previous year.

Live Birth

"Live birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered liveborn (all live-born infants should be registered and counted as such, irrespective of gestational age or whether alive or dead at the time of registration, and if they die at any time following birth they should also be registered and counted as deaths)" (unstats.un.org[7]).

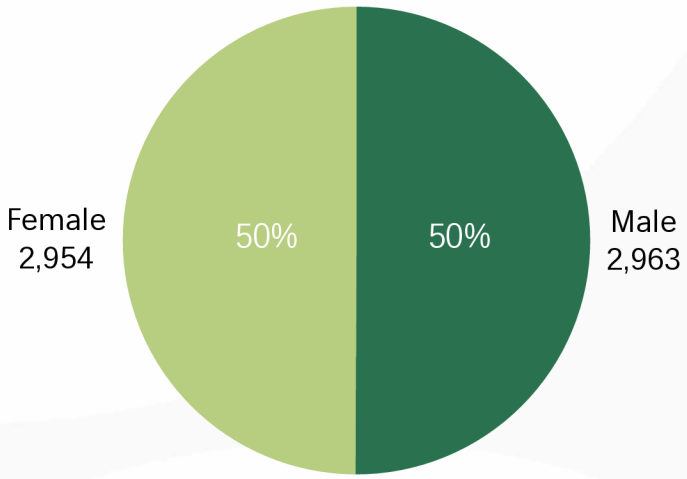
[7] https://unstats.un.org/unsd/demographic/sconcerns/natality/natmethods.htm#A

Table 2-2: Number of live births, 2016-2021

Year	Live births (In numbers)	Live births (In percent)
2016	6,454	91%
2017	6,449	92%
2018	6,327	93%
2019	6,121	96%
2020	6,211	95%
2021	5,917	95%

Among the 5917 live births registered in the country in 2021, the sex distribution of boys and girls were almost the same.

Figure 2-4: Live births in Maldives by sex, 2021



2.2.3.2 Abortions/ miscarriages

Within the last 6 years, the highest rate of abortion was reported in 2016 as 3.2% followed by 3.0% in 2020. In 2021, abortion accounted for 2.6% of the total births.

Abortions/ Miscarriages (country context)

Any fetus of less than 28 weeks of gestation delivered / born without sign of life

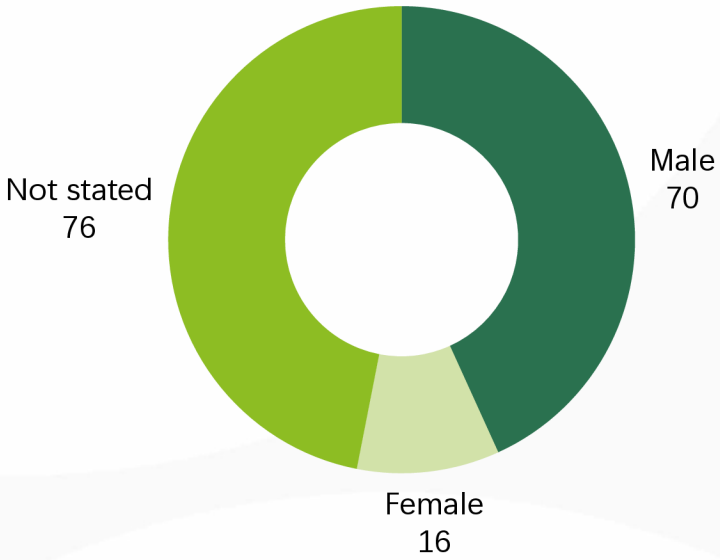
Table 2-3: Number of abortions/ miscarriages, 2016- 2021

Year	In Numbers	In %
2016	228	3.2%
2017	201	2.9%
2018	199	2.9%
2019	158	2.5%
2020	188	2.8%
2021	162	2.6%

Note: This table does not include abortion / miscarriages that occurred abroad

Out of the total miscarriages/ abortions, sex was not determined for majority (47%) of the fetus.

Figure 2-5: Abortions/ miscarriages in Maldives by sex, 2021



2.2.3.3 Stillbirth

In Maldives, stillbirths accounted for less than 1% of the total births. This remained as the trend to be observed over the past 6 years.

Stillbirths

A baby who dies after 28 weeks of pregnancy, but before or during birth, is classified as a stillbirth (WHO [8])

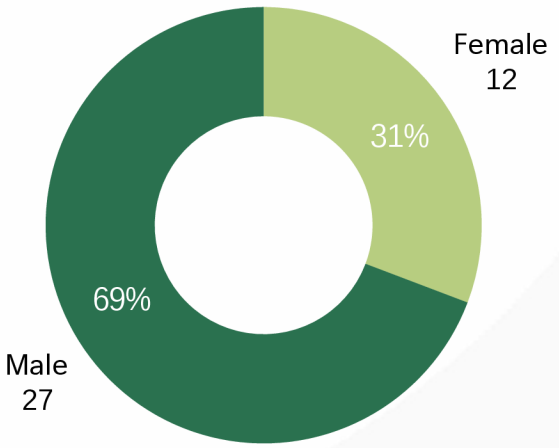
[8] https://www.who.int/health-topics/stillbirth#tab=tab_1

Table 2-4: Number of stillbirths and as a percentage out of total births, 2016-2021

Year	In Numbers	In %
2016	41	0.6%
2017	31	0.4%
2018	23	0.3%
2019	39	0.6%
2020	28	0.4%
2021	39	0.6%

Out of the total stillbirths, the findings indicate there were more males than females.

Figure 2-6: Stillbirths in Maldives by sex, 2021



2.2.4 Geographic Location

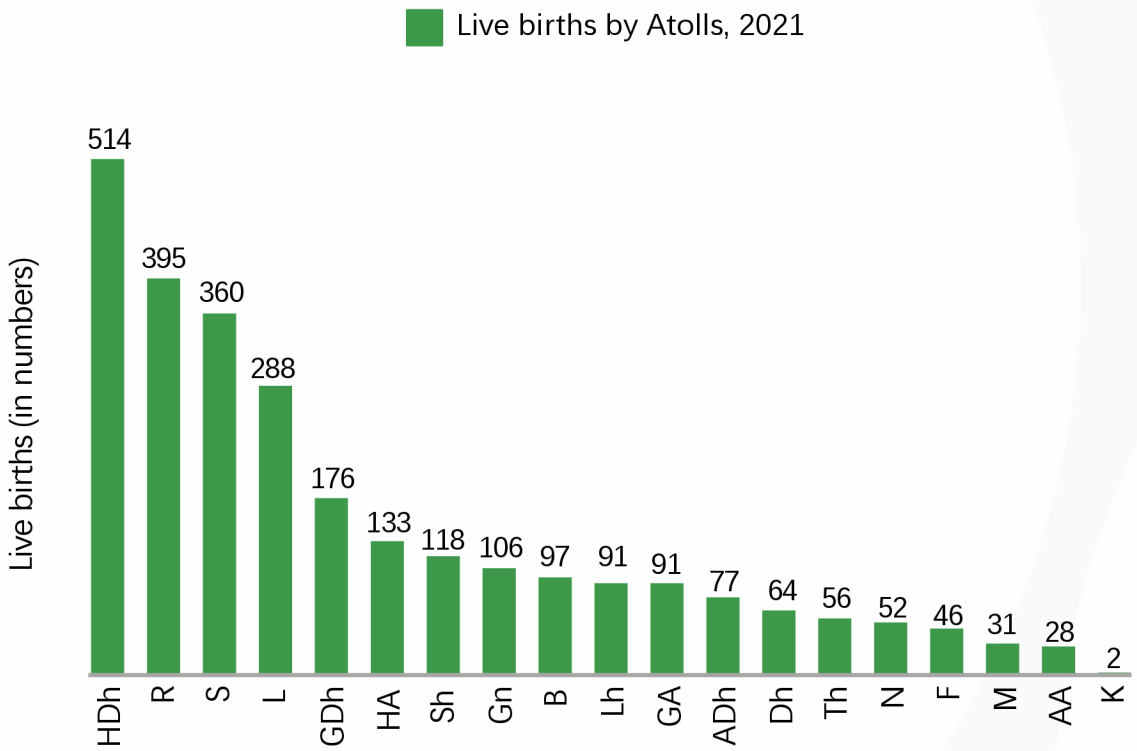
Breakdown of births by location shows that the highest number of deliveries occurred in GMR.

Table 2-5: Births by type and location, 2021

Birth type	Abroad	Atolls	GMR	Total
Abortion	0	102	60	162
Live Birth	71	2725	3192	5988
Stillbirth	1	18	21	40
Not stated	47	0	0	47
Total	**119**	**2845**	**3273**	**6237**

Below figure presents the distribution of births that occurred in the Atolls and excludes the births that took place in GMR and abroad. The highest number of live births occurred in HDh, R and S Atolls.

Figure 2-7: Live births by Atolls, 2021



Note: No births took place in Vaavu Atoll

2.3 Mode of Delivery

Cross examination of all types of births by their mode of delivery showed that more than half of the births were caesareans (53%). This was followed by vaginal deliveries (46%). A similar trend has been observed when only live births are accounted as well.

Table 2-6: Mode of delivery by type of birth, 2021

Delivery Mode	Live births	Abortion	Still birth	Grand Total
Caesarean	3,237	3	17	3,257
Emergency	1,887	3	17	1,907
Elective	1,350	0	0	1,350
Vaginal Delivery	2,679	100	22	2,801
Spontaneous	2,382	96	18	2,496
Assisted	297	4	4	305
Not stated	1	59	0	60
Not stated	1	59	0	60
Grand Total	**5,917**	**162**	**39**	**6,118**

Note: Does not include births that occurred abroad

Figure 2-8: Live births by type of delivery, 2021

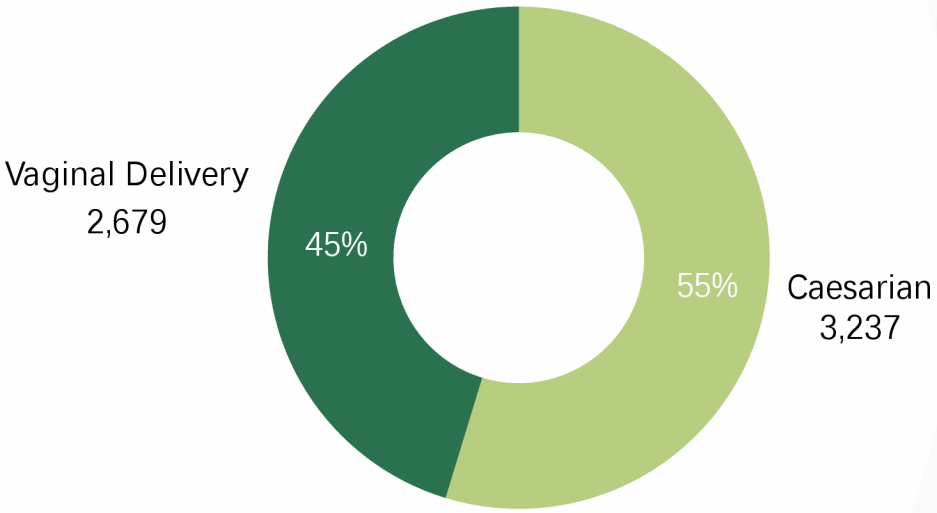
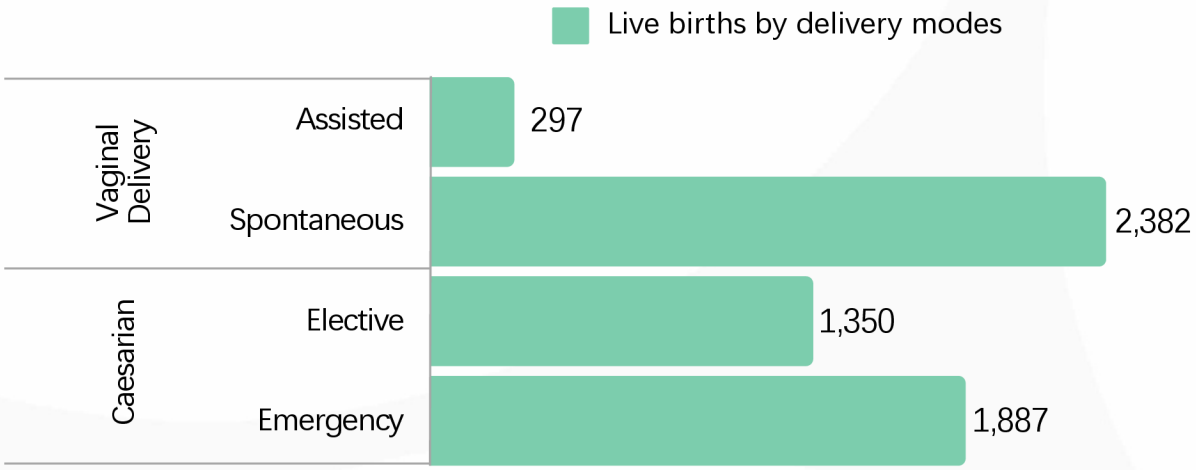


Figure 2-9: Live births by mode of delivery, 2021



2.3.1 By Place/Facility of Birth

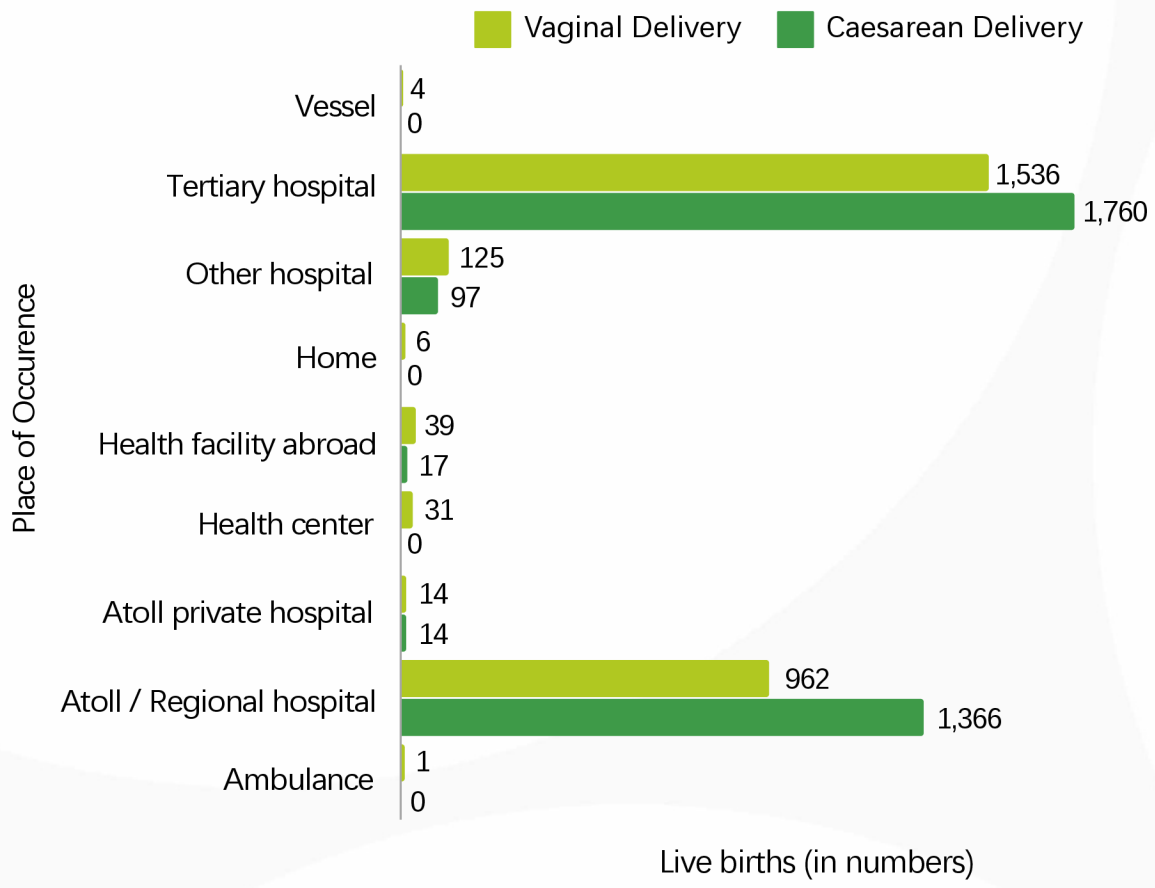
Almost all the births took place at a health facility in the Maldives irrespective of location or the type of delivery.

Table 2-7: Type of delivery by location of delivery, 2020-2021

Location and type of delivery	2020	2021
Health Facility	99.8%	99.7%
Outside a health facility	0.3%	0.2%

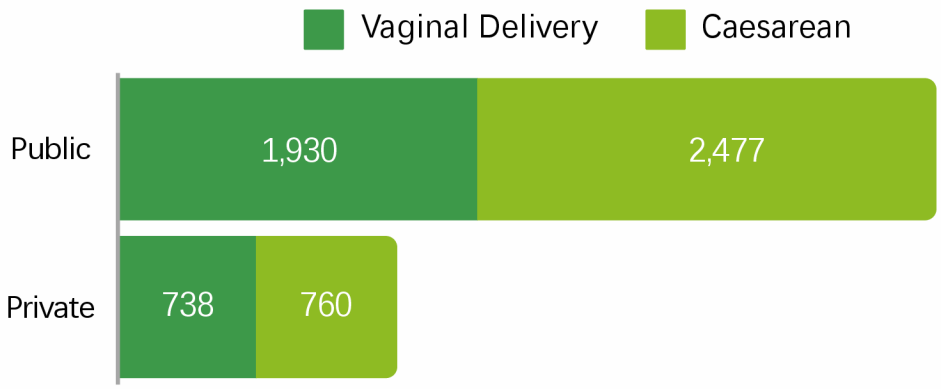
More than half of the live births occurred in tertiary hospitals in the country. This was followed by live births being delivered in regional hospital and atoll hospitals. Few live births took place in health centers and was mostly vaginal deliveries. In all tertiary, regional and atoll hospitals, caesarean took precedent over vaginal deliveries. A total of 11 live births took place outside health facilities.

Figure 2-10: Livebirths occurred in a health facility by location, type of facility and type of delivery in Maldives, 2021



Most of the live births took place in government health facilities and mostly were caesareans (56%). Only a quarter of live births occurred in private health facilities.

Figure 2-11: Livebirths by type of delivery and type of health facility, 2021



Majority of deliveries that occurred in the private health facilities originated from GMR.

Table 2-8: Type of delivery by location of delivery, 2020-2021

Location and type of delivery	Vaginal Delivery	Caesarean	Grand Total
Atolls	1,126	1,593	2,719
Private	14	14	28
Public	1,112	1,579	2,691
GMR	1,542	1,644	3,186
Private	724	746	1,470
Public	818	898	1,716
Total	**2,668**	**3,237**	**5,905**

2.3.2 Birth Attendant

The proportion of births delivered by skilled birth attendants has been recognized as a key indicator in achieving Sustainable Development Goals target 3.1.2.

In Maldives the cadre of birth attendants has undergone changes and today the workforce consists mainly of skilled professionals. On this note, in 2021, almost all the live birth attendants (99.9%) have completed midwifery training.

Figure 2-12: Birth attendants with midwifery training status for live births in Maldives, 2021

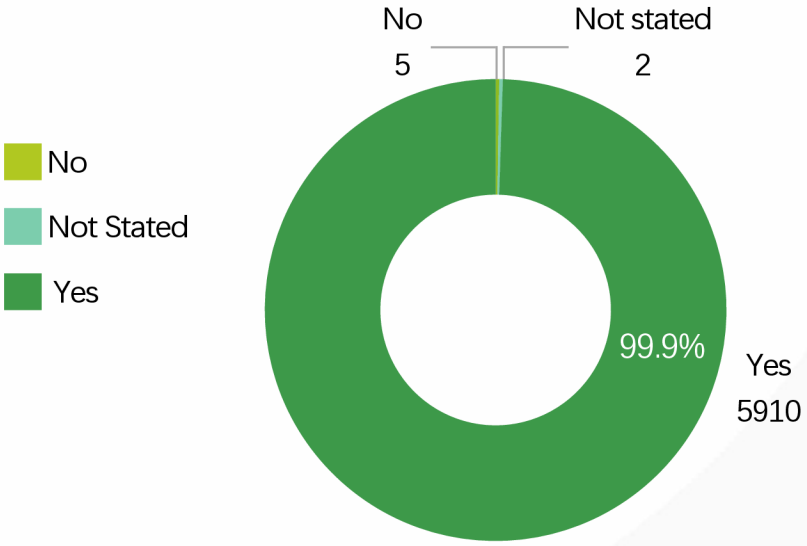
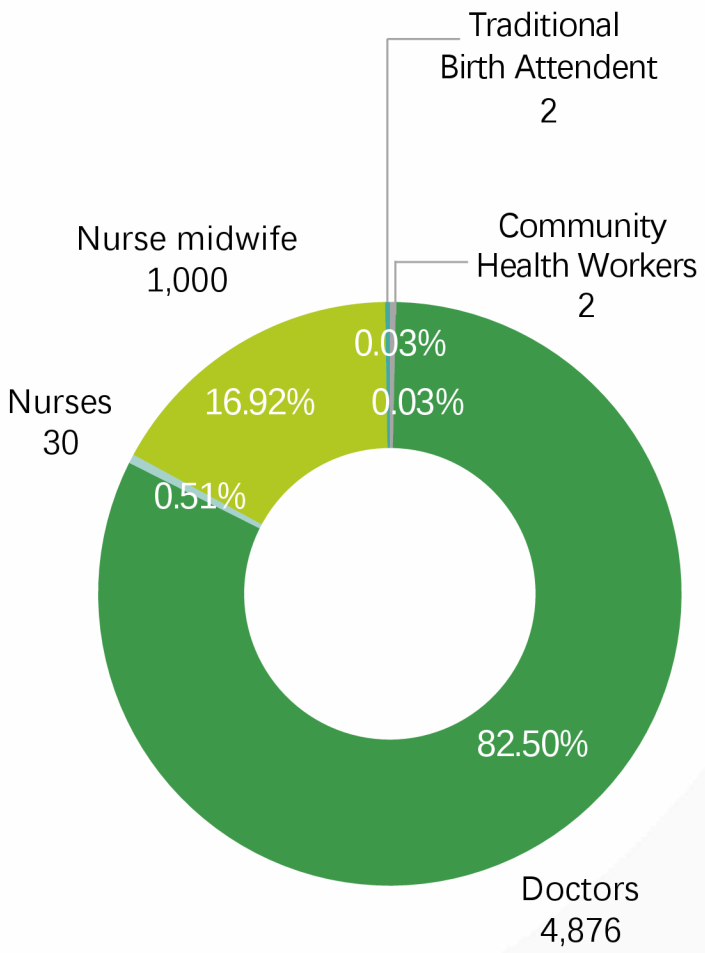


Table 2-9: Percentage of birth attendants who had completed midwifery training, Maldives, 2016- 2021

Year	Percentage
2016	99.8%
2017	99.8%
2018	99.6%
2019	99.8%
2020	99.9%
2021	99.9%

From the total trained birth attendants, most are medical officers and gynecologists (82%). Nurses as midwife consisted of 17% of the total trained birth attendants.

Figure 2-13: Number of live births by trained birth attendants by their vocation, 2021



2.4 Fertility

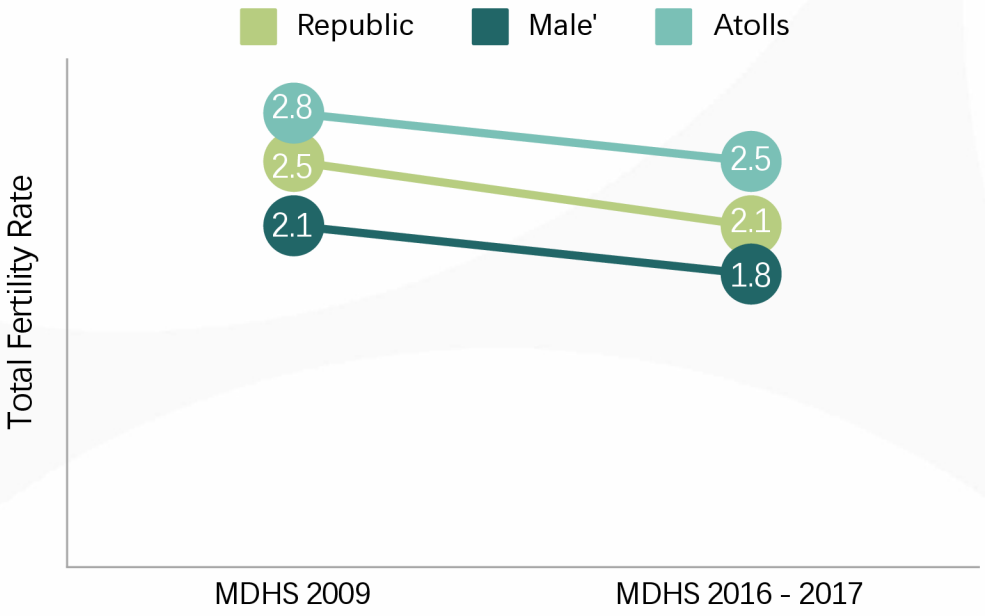
2.4.1 Total Fertility Rate (TFR)

The total fertility rate is the average number of children a hypothetical cohort of women would have at the end of their reproductive period if they were subjected to during their whole lives to the fertility rates of a given period and if they were not subjected to mortality. It is expressed as number of children per woman (WHO[9]). TFR is calculated from Age Specific Fertility Rate (ASFR) and is the sum of all ASFR.

Table 2-10: TFR by location, 2016-17

	Republic	GMR	Atolls
Total Fertility Rate	2.1	1.80	2.5

Figure 2-14: Total fertility rate in Maldives, 2009 & 2016/17



The Maldives Demographic Health survey (MDHS) shows that TFR has been declining in the Maldives in the last 7-8 years. In DHS 2016/17, the TFR for the country was 2.10 which is at below replacement level fertility. The TFR of GMR is lower than Atolls (Ministry of Health (Maldives) and ICF, 2018).

[9] https://www.who.int/data/gho/indicator-metadata-registry/imr-details/123

2.5 Other Risk factors

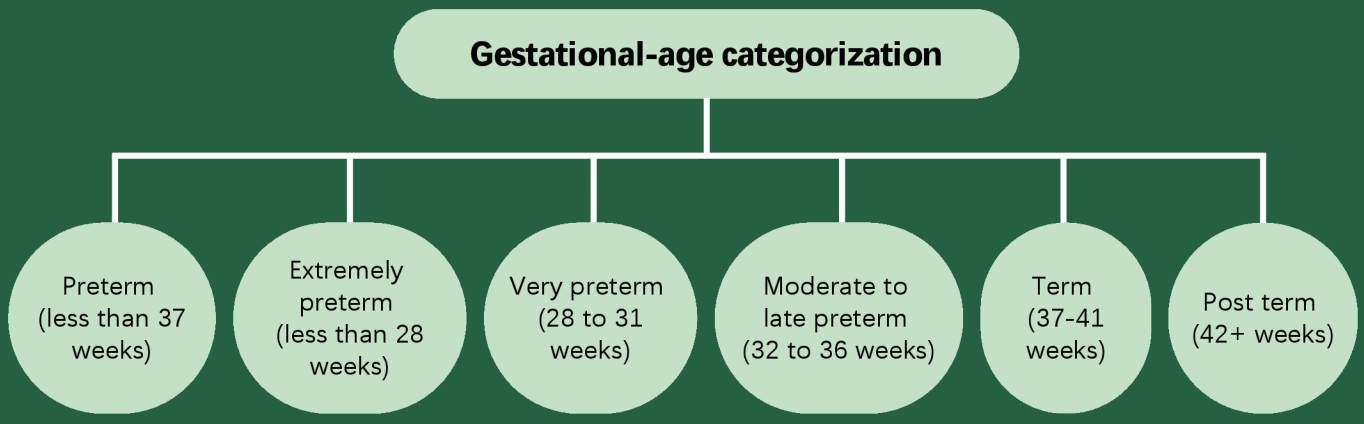
2.5.1 Gestational Age

A normal pregnancy usually ranges between 38 to 42 gestational weeks. The results show that average gestational age for total births was 37 weeks. This varied in relation to birth status (for example, live birth or stillbirth) and multiple pregnancies (for example, twins and triplets). The average gestational age for live births was 38 weeks while stillbirths had an average gestational age of 35 weeks. Abortion/ miscarriages had an average of 13 weeks gestational in 2021.

Table 2-11: Average gestational age by type of birth, 2021

Birth type	Gestational Age in weeks (Mean)
Total births	37.4
Abortions	13.1
Live births	38.1
Stillbirths	34.8

Gestational-Age Categorization

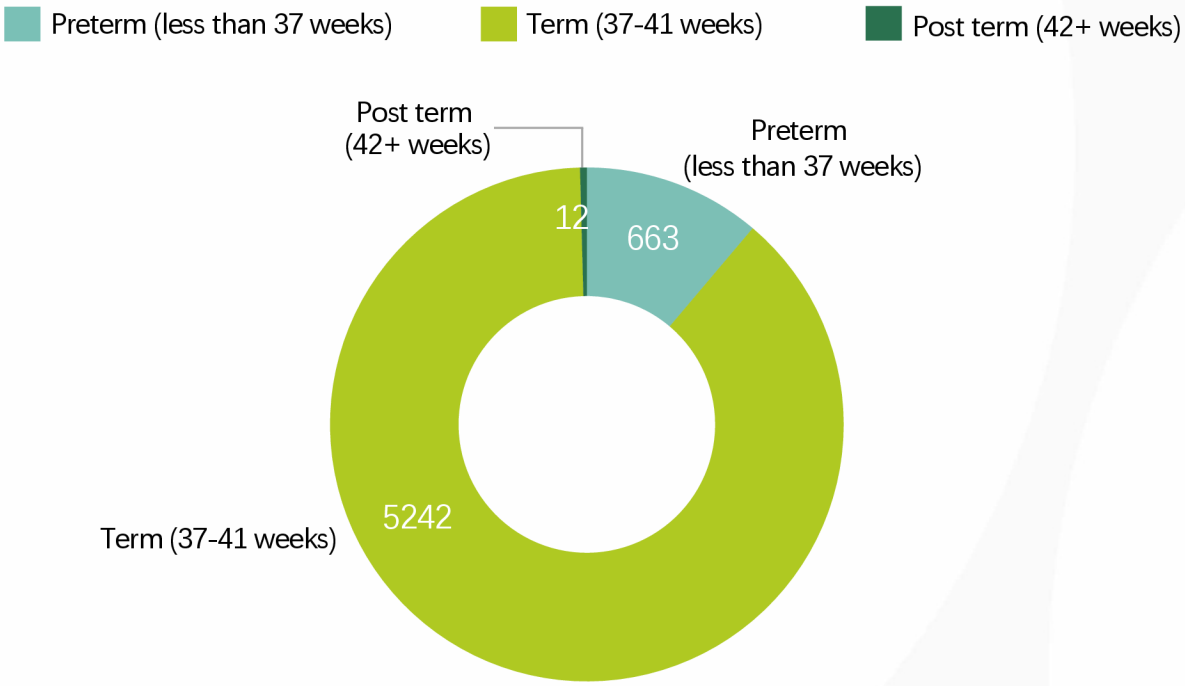


Source: WHO [10].

[10] https://www.who.int/news-room/fact-sheets/detail/preterm-birth#:~:text=extremely%20preterm%20(less%20than%2028,(32%20to%2037%20weeks).

Of all birth outcomes, 89% of the live births were term (37-41 weeks) babies. About 11% of the babies were preterm with less than 37 weeks of gestational age.

Figure 2-15: Live birth distribution according to gestational age of babies, 2021



For live birth delivered via caesarean, most were term (37-41 weeks) babies. The same goes for vaginal delivery. About 240 vaginal deliveries were less than 37-week babies. Stillbirths by vaginal delivery mainly had gestational week of less than 37 weeks.

Table 2-12: Birth outcome by gestational age and delivery type, 2021

Gestational age	Caesarian	Vaginal Delivery	Not Stated	Total
Live birth	3,237	2,679	1	5,917
Preterm (less than 37 weeks)	422	240	1	663
Term (37-41 weeks)	2,807	2,435	0	5,242
Post term (42+ weeks)	8	4	0	12
Abortion	3	100	59	162
Preterm (less than 37 weeks)	3	100	59	162
Stillbirth	17	22	0	39
Preterm (less than 37 weeks)	5	15	0	20
Term (37-41 weeks)	12	6	0	18
Post term (42+ weeks)	0	1	0	1
Total	**3,257**	**2,801**	**60**	**6,118**

2.5.2 Birth Weight

Weight is one indicator of a baby's physical development.Mothers who had multiple births (twins, triplets) had higher incidence of babies born small for gestational age and low birth weight.

The average birth weight was 2970 grams for all types of births. The average birth weight was 3010 grams for live births and is within the normal range of birth weight. The birth weight for stillbirth was 2570 grams which is also within the normal range of birth weight.

Birth weight categorization

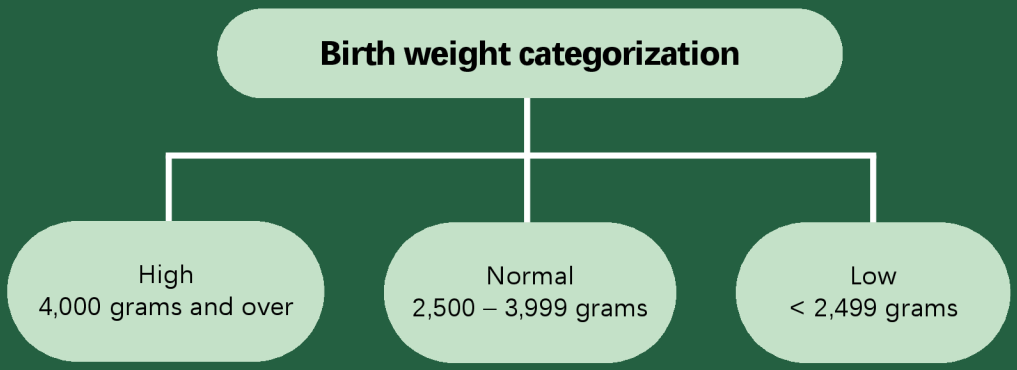
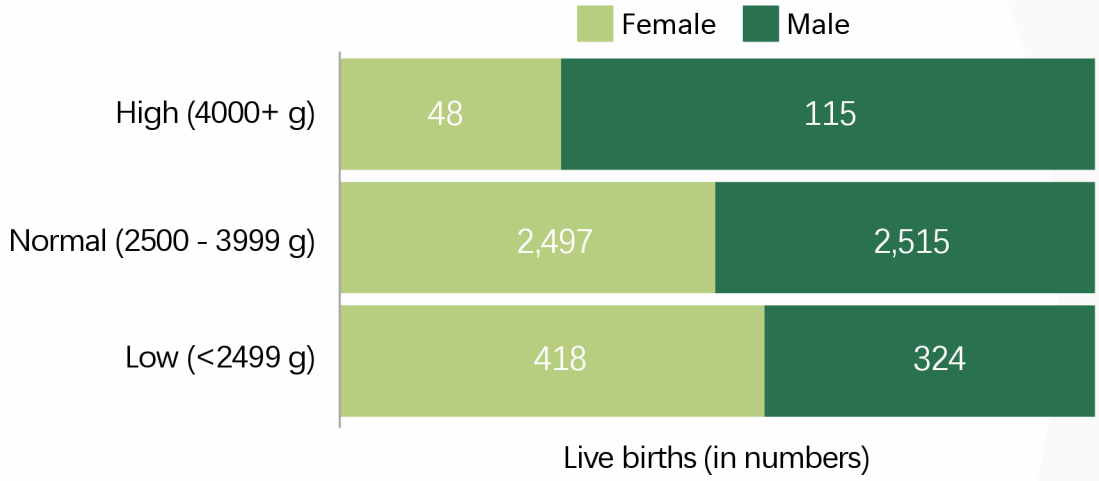


Table 2-13: Average birth weight by type of birth, 2021

Birth type	Average birth weight (grams)
Total births	**2,968.33**
Abortion	170.56
Live births	3,014.83
Stillbirth	2,573.63

Breakdown of birth weight by sex showed that more girls had low birth weight (less than 2499 grams). Male births were characterized as having more of normal and high birth weight.

Figure 2-16: Birth weight by sex, 2021



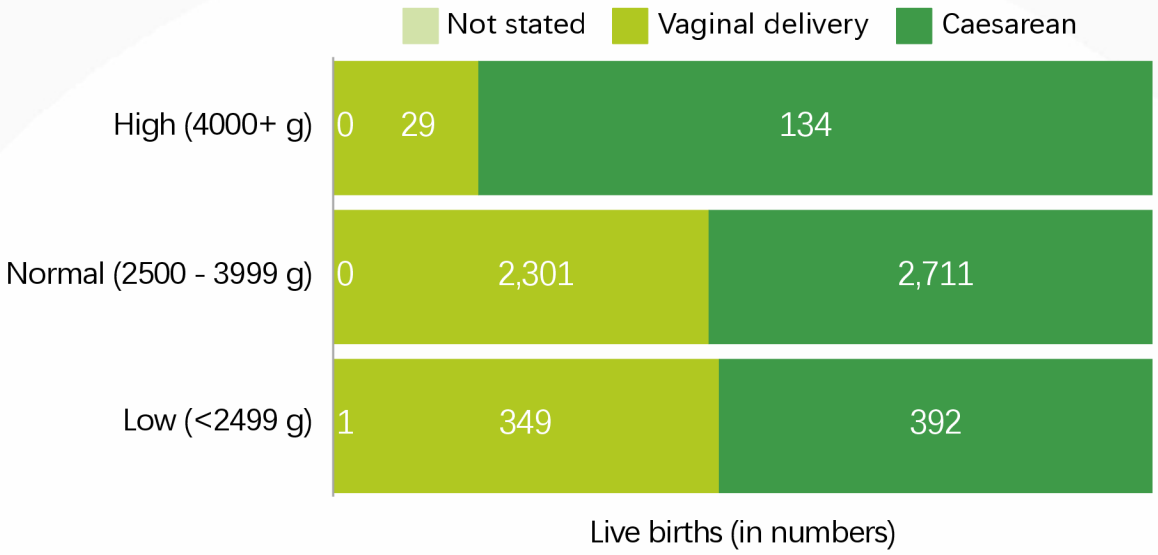
Disaggregation of birth weight by type of birth showed that live births were mostly within the range of normal birth weight (between 2500 to 3900 grams).

Table 2-14: Birth weight (in grams) by birth outcomes in Maldives, 2021

Birth weight (in grams)	Live birth	Abortion	Stillbirth	Total
Low (<2499)	742	93	18	853
Normal (2500 - 3999)	5,012	0	16	5,028
High (4000+)	163	0	5	168
Not stated	0	69	0	69
Total	**5,917**	**162**	**39**	**6,118**

Similarly, more than 82% (134) of all high birth weight babies had a caesarean section.

Figure 2-17: Birth weight by birth outcomes in Maldives, 2021



Out of normal birth weight, most were caesarean (55%). Vaginal deliveries with normal birth weight had 89% of the delivery as spontaneous delivery.

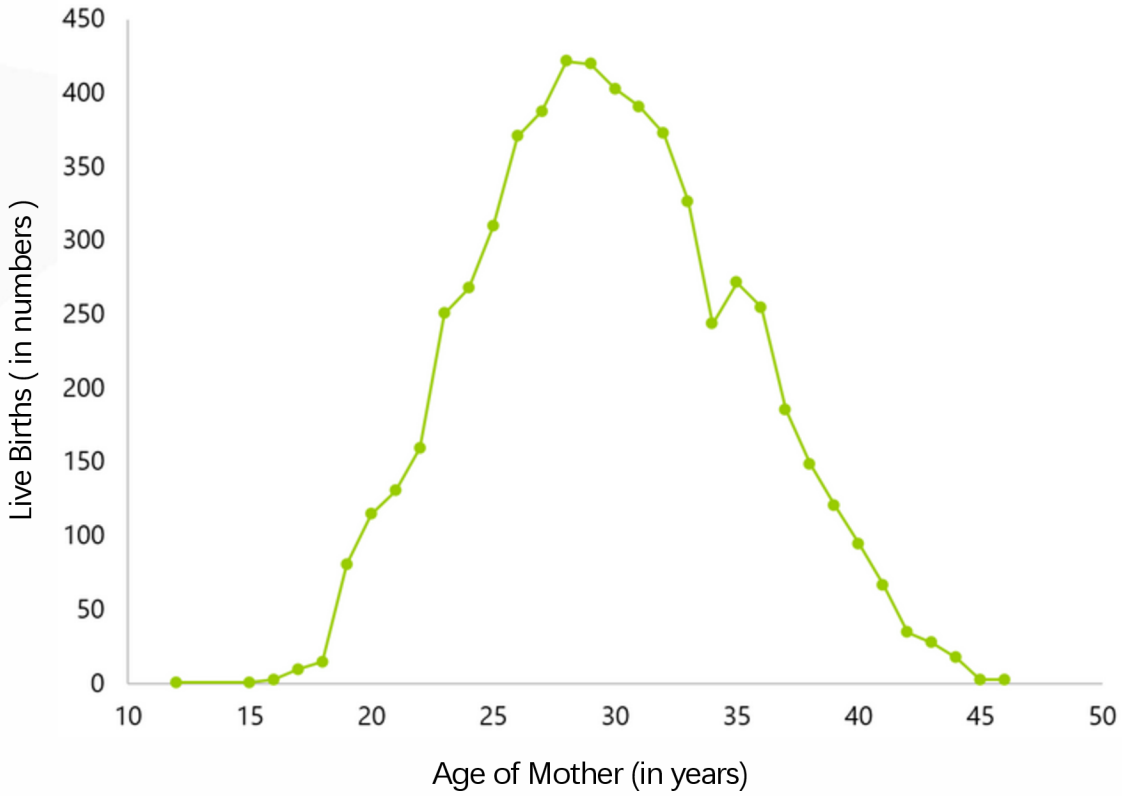
Table 2-15: Live births- birth weight by type of delivery & delivery mode, 2021

Type of delivery & delivery mode	Low (<2499 g)	Normal (2,500 - 3,999 g)	High (4,000+g)	Total
Caesarean	392	2,711	134	3,237
Emergency	303	1,528	56	1,887
Elective	89	1,183	78	1,350
Vaginal Delivery	349	2,301	29	2,679
Spontaneous	320	2,041	21	2,382
Assisted	29	260	8	297
Not Stated	1	0	0	1
Not stated	1	0	0	1
Total	**742**	**5,012**	**163**	**5,917**

2.5.3 Age of Mother

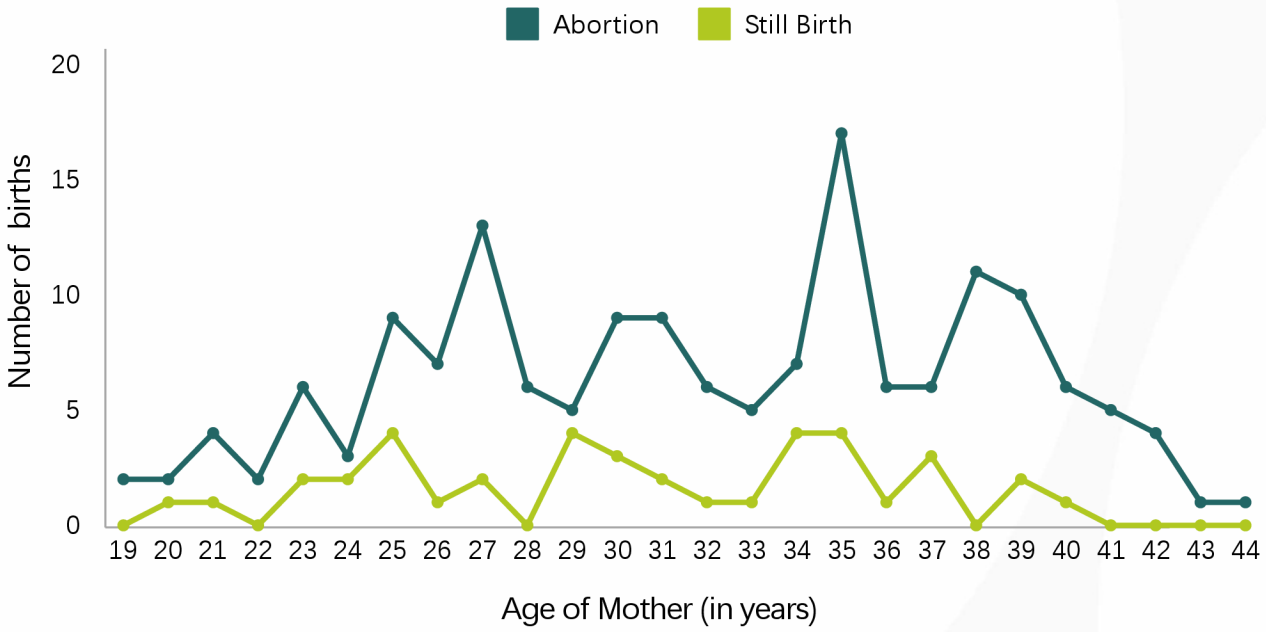
In 2021, the mean maternal age for all live births were 28 years. Teenage pregnancies (maternal age 15-19 years) accounted for 2% (110) of live births.

Figure 2-18: Live births by age of mother, 2021



A glance at stillbirth and abortion by mother's age showed that women in their mid-30s were more likely to face an abortion / miscarriage. There was no significant variation across mothers age for stillbirth.

Figure 2-19: Stillbirth and abortion by mothers age, 2021



Live births by mother's age group showed that most of the births occurred among women in the age group of 25-34years. This has been the prevailing trend for the past 6 years.

Table 2-16: Live birth by mothers age, 2016- 2021

Age of mother	2016	2017	2018	2019	2020	2021	Total
10-14	0	1	0	2	0	1	4
15-19	50	54	33	75	108	110	430
20-24	1,265	1,088	940	1,064	1,034	925	6,316
25-29	2,293	2,242	2,108	2,034	2,068	1,911	12,656
30-34	1,810	1,825	1,905	1,835	1,862	1,738	10,975
35-39	808	931	1,039	913	923	983	5,597
40-44	213	284	280	177	187	243	1,384
45-49	14	22	22	5	20	6	89
50-54	1	2	0	1	2	0	6
Not Stated	0	0	0	1	7	0	12
Total	**6,454**	**6,449**	**6,327**	**6,107**	**6,211**	**5,917**	**37,469**

2.5.4 Age of Father

In 2021, the mean age of fathers is a bit higher than that of mothers at 30 years. Fathers on average were 2 years older than the mothers (mothers mean age =28 years).

Figure 2-20: Live births by age of father, 2021

Table 2-17: Birth type by age of father, 2021

Age of father	Live Birth	Abortion	Stillbirth	Total
10-14	0	0	0	0
15-19	4	0	0	4
20-24	336	10	1	347
25-29	1,438	26	8	1,472
30-34	1,909	42	12	1,963
35-39	1,210	39	8	1,257
40-44	586	22	6	614
45-49	225	12	1	238
50-54	79	7	0	86
55-59	24	0	1	25
60-64	2	0	0	2
65-70	1	0	0	1
Not Stated	103	4	2	109
Total	**5,917**	**162**	**39**	**6,118**

2.6 Annex

Table 2-18: Life expectancy at birth, 1990 – 2015

Year	Life Expectancy e(x)		
	Both Sexes	Female	Male
1990	64.04	62.78	65.24
1991	64.90	63.96	65.64
1992	65.67	64.92	66.23
1993	66.43	65.88	66.83
1994	67.20	66.84	67.42
1995	67.48	67.68	67.27
1996	68.73	68.76	68.62
1997	69.50	69.72	69.21
1998	70.27	70.68	69.81
1999	71.03	71.64	70.40
2000	72.11	72.93	71.50
2001	72.57	73.56	71.60
2002	73.33	74.52	72.19
2003	74.10	75.48	72.79
2004	74.87	76.44	73.38
2005	75.63	77.40	73.98
2006	76.51	78.50	74.87
2007	77.17	79.32	75.17
2008	77.93	80.28	75.77
2009	78.70	81.24	76.36
2010	79.47	82.20	76.96
2011	80.23	83.17	77.55
2012	81.00	84.13	78.15
2013	81.77	85.09	78.75
2014	81.98	85.68	78.97
2015	83.30	87.01	79.94

*Note: * Interpolation has been done to derive life expectancy at birth for inter-censual years*
Source: Maldives Bureau of Statistics

Table 2-19: Age-specific and Total fertility rate by residence from MDHS 2016-17

Age group	GMR	Atolls	Republic
15-19	4	17	10
20-24	53	139	99
25-29	127	141	135
30-34	101	116	110
35-39	58	56	56
40-44	11	19	16
45-49	0	5	3
TFR	**1.8**	**2.5**	**2.1**

Table 2-20: Number of deliveries by type, sex, and location, 2021

Delivery type/ location	Female	Male	Not Stated	Total
Live birth	2,999	2,989	0	5,988
Caesarean	1,601	1,653	0	3,254
Abroad	8	9	0	17
Atolls	782	811	0	1,593
GMA	811	833	0	1,644
Not Stated	8	8	0	16
Abroad	8	7	0	15
GMA	0	1	0	1
Vaginal Delivery	1,390	1,328	0	2,718
Abroad	20	19	0	39
Atolls	574	558	0	1,132
GMA	796	751	0	1547
Abortion	16	70	76	162
Caesarean	0	1	2	3
Atolls	0	1	2	3
Not Stated	1	13	45	59
Atolls	1	7	44	52
GMA	0	6	1	7

Delivery type/ location	Female	Male	Not Stated	Total
Vaginal Delivery	15	56	29	100
Atolls	4	20	23	47
GMA	11	36	6	53
Still birth	12	28	0	40
Caesarean	6	11	0	17
Atolls	1	5	0	6
GMA	5	6	0	11
Not Stated	0	1	0	1
Abroad	0	1	0	1
Vaginal Delivery	6	16	0	22
Atolls	4	8	0	12
GMA	2	8	0	10
Not stated	26	21	0	47
Caesarean	2	1	0	3
Abroad	2	1	0	3
Not Stated	24	19	0	43
Abroad	24	19	0	43
Vaginal Delivery	0	1	0	1
Abroad	0	1	0	1
Total	**3,053**	**3,108**	**76**	**6,237**

Table 2-21: Number of deliveries by type of deliveries and sex, 2021

Delivery type	Female	Male	Not Stated	Total
Live birth	2,999	2,989	0	5,988
Caesarean	1,601	1,653	0	3,254
Caesarean (Elective)	656	705	0	1,361
Caesarean (Emergency)	945	948	0	1,893
Not Stated	8	8	0	16
Not Stated	8	8	0	16

Delivery type/ location	Female	Male	Not Stated	Total
Vaginal Delivery	1,390	1,328	0	2,718
Vaginal (Assisted)	159	147	0	306
Vaginal (Spontaneous)	1,231	1,181	0	2,412
Abortion	16	70	76	162
Caesarean	0	1	2	3
Caesarean (Emergency)	0	1	2	3
Not Stated	1	13	45	59
Not Stated	1	13	45	59
Vaginal Delivery	15	56	29	100
Vaginal (Assisted)	1	2	1	4
Vaginal (Spontaneous)	14	54	28	96
Still birth	12	28	0	40
Caesarean	6	11	0	17
Caesarean (Emergency)	6	11	0	17
Not Stated	0	1	0	1
Not Stated	0	1	0	1
Vaginal Delivery	6	16	0	22
Vaginal (Assisted)	1	3	0	4
Vaginal (Spontaneous)	5	13	0	18
Not stated	26	21	0	47
Caesarean	2	1	0	3
Caesarean (Elective)	2	1	0	3
Not Stated	24	19	0	43
Not Stated	24	19	0	43
Vaginal Delivery	0	1	0	1
Vaginal (Spontaneous)	0	1	0	1
Total	**3,053**	**3,108**	**76**	**6,237**

Table 2-22: Birth outcome by sex and location/Atoll, 2021

Birth outcome/ health facility	Female	Male	Not Stated	Total
Live birth	2,999	2,989	0	5,988
Caesarean	1,601	1,653	0	3,254
AA	5	5	0	10
Abroad	8	9	0	17
ADh	19	16	0	35
B	28	25	0	53
DH	13	23	0	36
F	20	14	0	34
GA	24	25	0	49
GDh	49	43	0	92
GMR	811	833	0	1,644
Gn	33	28	0	61
HA	40	43	0	83
HDh	174	157	0	331
L	66	95	0	161
Lh	28	33	0	61
M	9	7	0	16
N	9	22	0	31
R	107	101	0	208
S	110	117	0	227
Sh	35	39	0	74
Th	13	18	0	31
Not Stated	8	8	0	16
Abroad	8	7	0	15
GMR	0	1	0	1
Vaginal Delivery	1,390	1,328	0	2,718
AA	8	10	0	18
Abroad	20	19	0	39
ADh	22	20	0	42
B	18	26	0	44

Birth outcome/ health facility	Female	Male	Not Stated	Total
DH	15	13	0	28
F	4	8	0	12
GA	15	27	0	42
GDh	41	43	0	84
GMR	796	751	0	1,547
Gn	19	26	0	45
HA	26	24	0	50
HDh	87	96	0	183
K	1	1	0	2
L	66	61	0	127
Lh	19	11	0	30
M	7	8	0	15
N	12	9	0	21
R	104	83	0	187
S	75	58	0	133
Sh	22	22	0	44
Th	13	12	0	25
Abortion	16	70	76	162
Caesarean	0	1	2	3
R	0	0	2	2
S	0	1	0	1
Not Stated	1	13	45	59
F	0	0	8	8
GMR	0	6	1	7
Gn	0	5	2	7
L	0	1	16	17
Lh	1	0	0	1
R	0	0	18	18
S	0	1	0	1
Vaginal Delivery	15	56	29	100
AA	0	1	0	1
B	0	4	13	17

Birth outcome/ health facility	Female	Male	Not Stated	Total
DH	0	1	0	1
GDh	0	1	0	1
GMR	11	36	6	53
Gn	0	5	1	6
HA	0	2	0	2
HDh	0	2	0	2
L	1	0	6	7
Lh	1	0	0	1
R	0	0	2	2
S	1	2	0	3
Sh	0	1	0	1
Th	1	1	1	3
Still birth	12	28	0	40
Caesarean	6	11	0	17
GMR	5	6	0	11
HA	0	1	0	1
HDh	0	3	0	3
L	1	0	0	1
N	0	1	0	1
Not Stated	0	1	0	1
Abroad	0	1	0	1
Vaginal Delivery	6	16	0	22
GMR	2	8	0	10
HA	0	1	0	1
HDh	1	3	0	4
K	0	1	0	1
L	0	1	0	1
Lh	0	1	0	1
N	0	1	0	1
R	1	0	0	1
S	2	0	0	2

Birth outcome/ health facility	Female	Male	Not Stated	Total
Not stated	26	21	0	47
Caesarean	2	1	0	3
Abroad	2	1	0	3
Not Stated	24	19	0	43
Abroad	24	19	0	43
Vaginal Delivery	0	1	0	1
Abroad	0	1	0	1
Total	**3,053**	**3,108**	**76**	**6,237**

CHAPTER 3 - MORBIDITY

3 Morbidity

According to WHO morbidity is the state of being unhealthy for a particular disease or situation[11]. Morbidity data presented in this chapter is based on the number of admissions (inpatients) across the country. Based on administrative records, detailed information is available for 39,183 admissions. Most of this chapter will be based on this value.

Principle diagnosis

The principal diagnosis is considered to be the main cause or reason for the hospitalization. Diagnoses are coded according to the International Classification of Diseases, Tenth version (ICD–10).

3.1 Inpatients in Health Facilities

In this chapter, admission data from 147 facilities has been used. This includes all government health facilities and private hospitals.

WHO IS AN INPATIENT?

World Health Organization defines inpatient as "a patient who has been admitted to the health care facility". Inpatients usually occupy a bed in a health care facility for at least four hours to overnight".

3.1.1 Inpatients by Gender

A total of 39,183 inpatients were admitted across the country. Among these admissions, 96% attributed to Maldivians.

[11] https://www.ncbi.nlm.nih.gov/books/NBK547668/#:~:text=Morbidity%20is%20the%20state%20of,a%20given%20symptom%20or%20quality.

Table 3-1: Inpatients by gender and nationality, 2021

Gender	Foreign	Local	Total
Female	405	22,617	23,022
Male	993	15,166	16,159
Not stated	0	2	2
Total	**1,398**	**37,785**	**39,183**

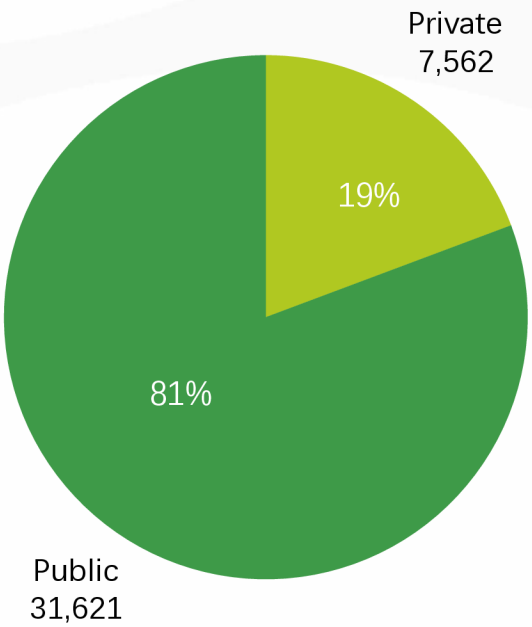
3.1.2 Inpatients by type of facility

Government health facilities remained as the main provider of inpatient care which accounted for 81% (31,621 patients). Most of the inpatients in government health facilities were from atolls (63%).

Table 3-2: Inpatients by location & type of facility, 2021

Type	Atolls	GMR	Total
Private	170	7,392	7,562
Public	19,841	11,780	31,621
Total	**20,011**	**19,172**	**39,183**

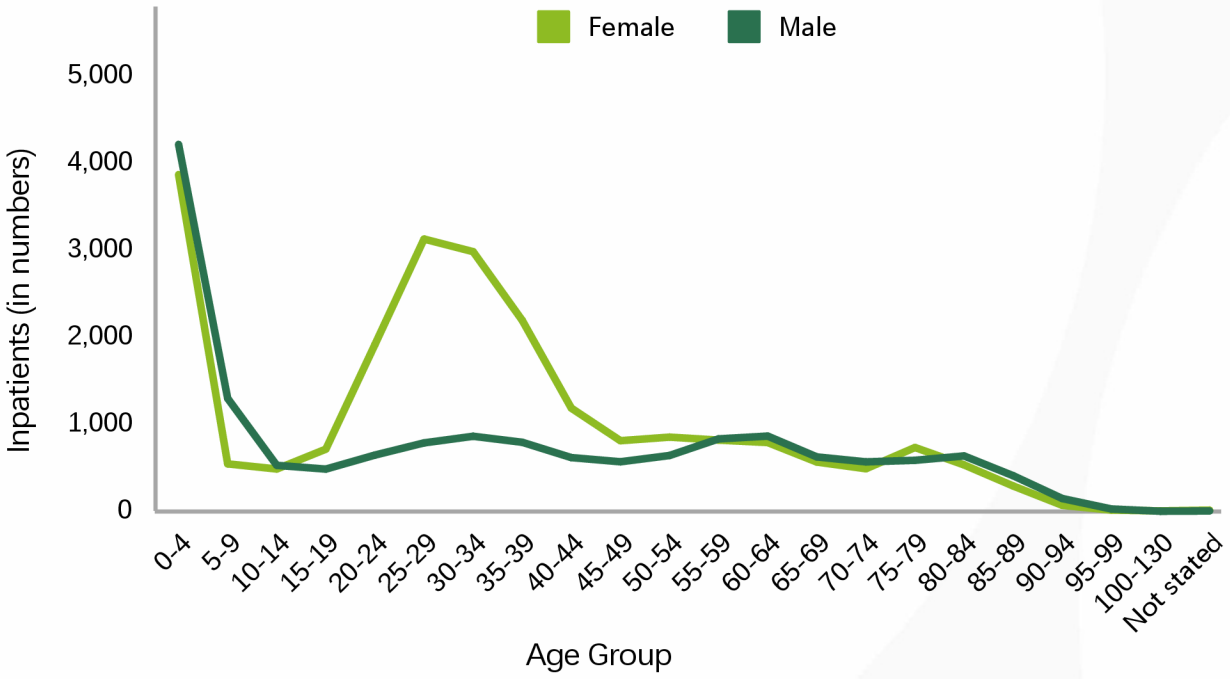
Figure 3-1: Inpatients by type of facility, 2021



3.1.3 Inpatients by Age

Breakdown of inpatients by age group showed that the highest admission was among children below 4 years, followed by women aged 20-49 years.

Figure 3-2: Inpatients by age and gender, 2021



3.1.4 Duration of Admission

Based on the detailed reports available, most of the inpatients in Maldives were admitted for 1 day.

Table 3-3: Inpatients admission by the number of days admitted, 2021

Days	Admissions (in numbers)			
	Female	Male	Not stated	Total
0	2,751	2,284	0	5,035
1	5,390	3,970	0	9,360
2	4,411	2,700	1	7,112
3	3,546	1,936	0	5,482
4	2,201	1,266	0	3,467
5	1,222	845	1	2,068
6 or more	3,499	3,158	0	6,657
Not stated	2	0	0	2
Total	**23,022**	**16,159**	**2**	**39,183**

For communicable diseases, most of the patients were admitted for 1 day and then for more than 6 days. For injuries most of the patients were admitted for 1 day as well. For communicable, maternal, perinatal, and nutritional conditions, most of the inpatients stayed in the hospital for 2 days and then for more than 6 days.

Table 3-4: Number of inpatient days by disease conditions, 2021

Days	Communicable, maternal, perinatal and nutritional conditions	Ill-defined diseases	Injuries	Non-communicable diseases	Not categorized	Not Stated	Total
0	946	1,022	416	2,141	499	11	5,035
1	2,552	1,173	627	3,219	1,776	13	9,360
2	2,707	553	377	2,392	1,076	7	7,112
3	2,352	285	289	1,820	735	1	5,482
4	1,551	169	227	1,252	262	6	3,467
5	865	135	115	799	152	2	2,068
6 or more	2,684	366	502	2,808	295	2	6,657
Not stated	1	0	0	1	0	0	2
Total	**13,658**	**3,703**	**2,553**	**14,432**	**4,795**	**42**	**39,183**

3.1.1.1 Admissions by Month

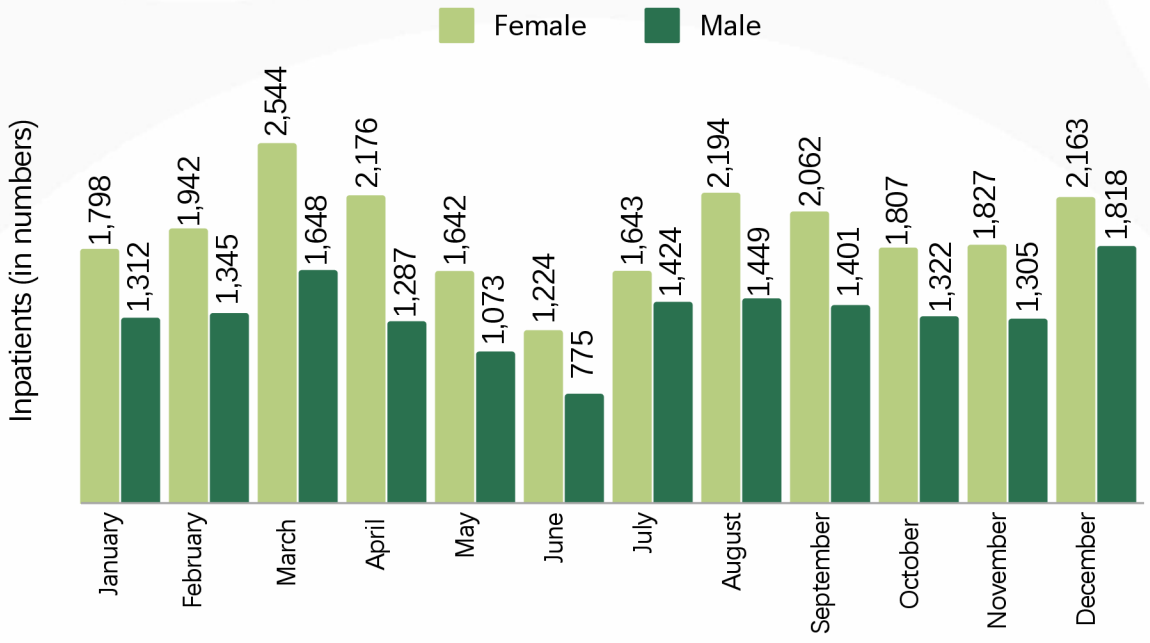
Admissions by month and main burden of disease groups showed that admissions were lowest in May and June. Admissions with regard to communicable, maternal, perinatal and nutritional condition recorded the highest in March and April. Admissions due to non-communicable diseases were high across all months except for May and June.

Table 3-5: Main disease group inpatients by month, 2021

Month	Communicable, maternal, perinatal and nutritional conditions	Ill-defined diseases	Injuries	Non-communicable diseases	Not categorized	Not Stated	Total
January	1,037	286	202	1,248	334	3	3,110
February	1,273	285	207	1,217	305	0	3,287
March	1,687	355	225	1,474	450	1	4,192
April	1,446	274	210	1,164	369	1	3,464
May	1,244	300	122	724	324	1	2,715
June	679	256	100	647	314	3	1,999
July	898	297	160	1,055	657	0	3,067
August	1,085	303	247	1,516	488	4	3,643
September	1,084	300	283	1,451	343	2	3,463
October	1,031	371	245	1,184	297	1	3,129
November	1,059	348	245	1,236	235	9	3,132
December	1,139	328	307	1,516	675	17	3,982
Total	**13,662**	**3,703**	**2,553**	**14,432**	**4,791**	**42**	**39,183**

The data showed that most of the admissions took place in March and December 2021 across the country. Inpatient admissions were lowest in May, June, and July 2021.

Figure 3-3: Inpatients by month and gender, 2021



Note: Gender Not Stated cases has been excluded

3.1.5 Inpatients by Location

Majority of the inpatients were female in both GMR and Atolls.

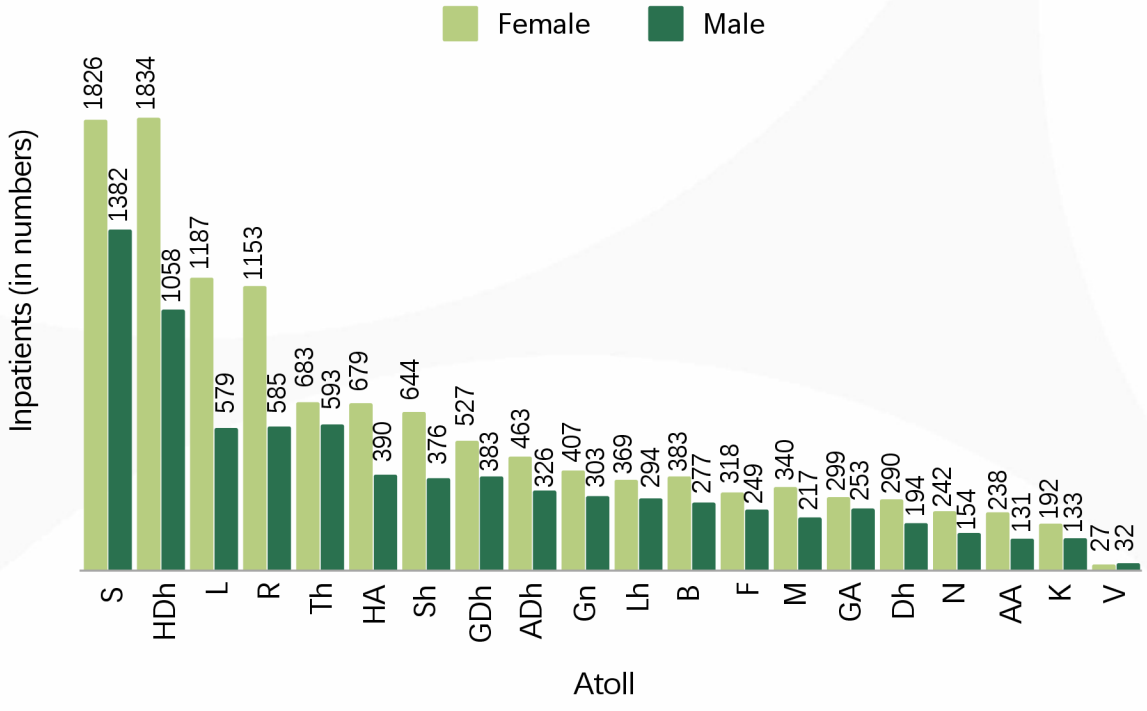
Table 3-6: Inpatients by location and sex, 2021

Sex	Inpatients in numbers			Inpatients in %		
	Atolls	GMR	Total	Atolls	GMR	Total
Female	12,101	10,921	23,022	60%	57%	59%
Male	7,909	8,250	16,159	40%	43%	41%
Not Stated	1	1	2	0%	0%	0%
Total	**20,011**	**19,172**	**39,183**	**100%**	**100%**	**100%**

3.1.1.2 Inpatients by Atolls

Most of the inpatient admissions were from S atoll (excluding GMR) followed by HDh Atoll.

Figure 3-4: Inpatients in the atolls, 2021



3.1.6 Inpatients by Global Burden of Disease Groups

Analysis of inpatient data showed that there were a double burden of diseases in the country. Inpatient treatment was mainly due to non-communicable diseases. This was followed by communicable, maternal, perinatal and nutritional conditions.

Table 3-7: Inpatients by disease categories, 2021

GBD	Atolls	GMR	Total
Communicable, maternal, perinatal and nutritional conditions	6,810	6,848	13,658
Non-communicable diseases	6,325	8,107	14,432
Not categorized	2,787	2,008	4,795
Ill-defined diseases	2,976	727	3,703
Injuries	1,084	1,469	2,553
Not stated	29	13	42
Total	**20,011**	**19,172**	**39,183**

Breakdown of admission by facilities showed that admissions were higher in public facilities compared to private facilities. This was same across all types of disease burdens.

Table 3-8: Inpatients by main disease conditions, sex and type of facility, 2021

	Communicable, maternal, perinatal and nutritional conditions	Ill-defined diseases	Injuries	Non-communicable diseases	Not categorized	Total
Private	2,152	324	462	3,325	1,286	7,549
Female	1,773	147	158	1,821	618	4,517
Male	379	177	304	1,504	668	3,032
Public	11,506	3,379	2,091	11,107	3,509	31,592
Female	8,597	1,849	811	5,812	1,441	18,510
Male	2,908	1,529	1,280	5,295	2,068	13,080
Not Stated	1	1	0	0	0	2
Total	**13,658**	**3,703**	**2,553**	**14,432**	**4,795**	**39,141**

3.2 Burden of Disease across Life Stages

People experience different health problems at different stages in life. The type of diagnosis and health needs differs across life stages.

This chapter presents the leading causes of admission disaggregated by different age groups. Top leading cause of admission among women was maternal conditions. Among men (and apart from not categorized cases) the main cause for admission was due to unintentional injuries.

Table 3-9: Top 5 leading causes of all admissions by sex, 2021

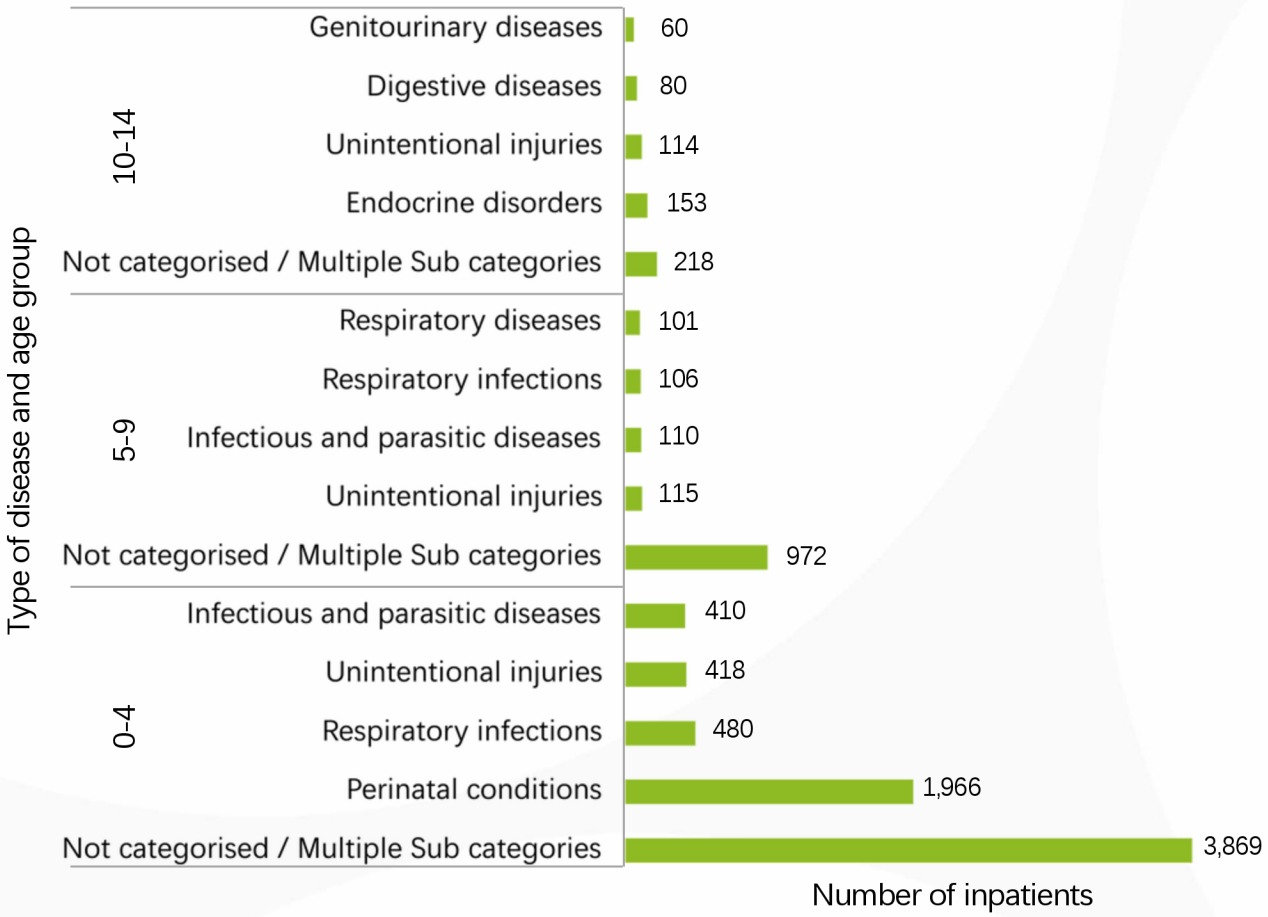
Female	Number
Maternal conditions	6776
Not categorized / Multiple sub-categories	4055
Genitourinary diseases	1567
Digestive diseases	1214
Perinatal conditions	971
Male	
Not categorized / Multiple sub-categories	4443
Unintentional injuries	1575
Cardiovascular diseases	1456
Digestive diseases	1215
Perinatal conditions	997
Both Sexes	
Not categorized / Multiple sub-categories	8498
Maternal conditions	6776
Unintentional injuries	2533
Digestive diseases	2429
Genitourinary diseases	2363

Note: Both Sexes includes gender not reported admissions

3.2.1 Infants and Children (Aged 0-14 Years)

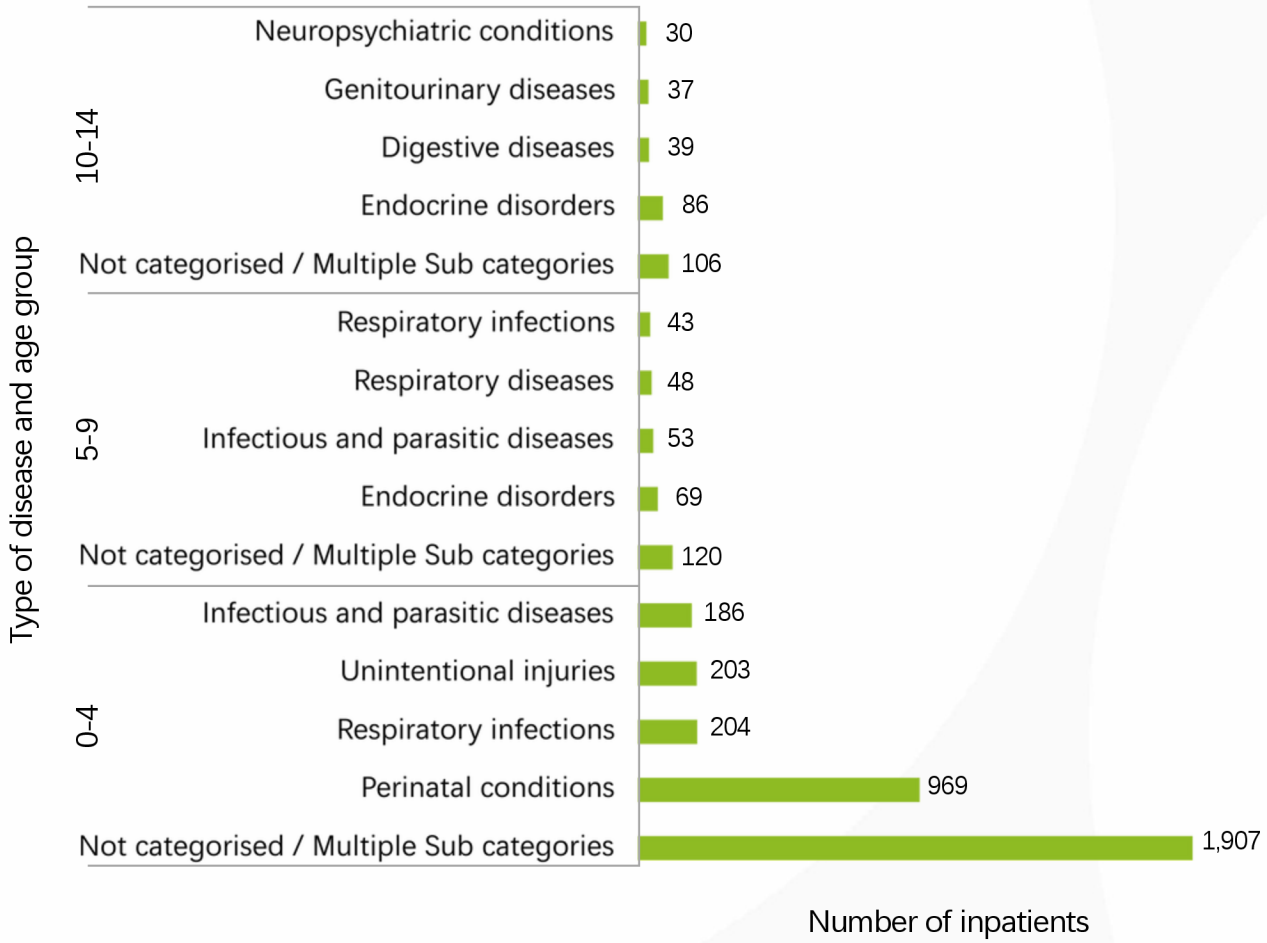
Apart from not-categorized causes, the main cause for admission among children under 5 years was due to perinatal conditions. Children between 5-9 years was mainly admitted due to unintentional injuries.The main reason for admission among children aged 10-14 was endocrine disorders.

Figure 3-5: Top 5 leading causes of all admission for infants and children aged 0-14 years, 2021



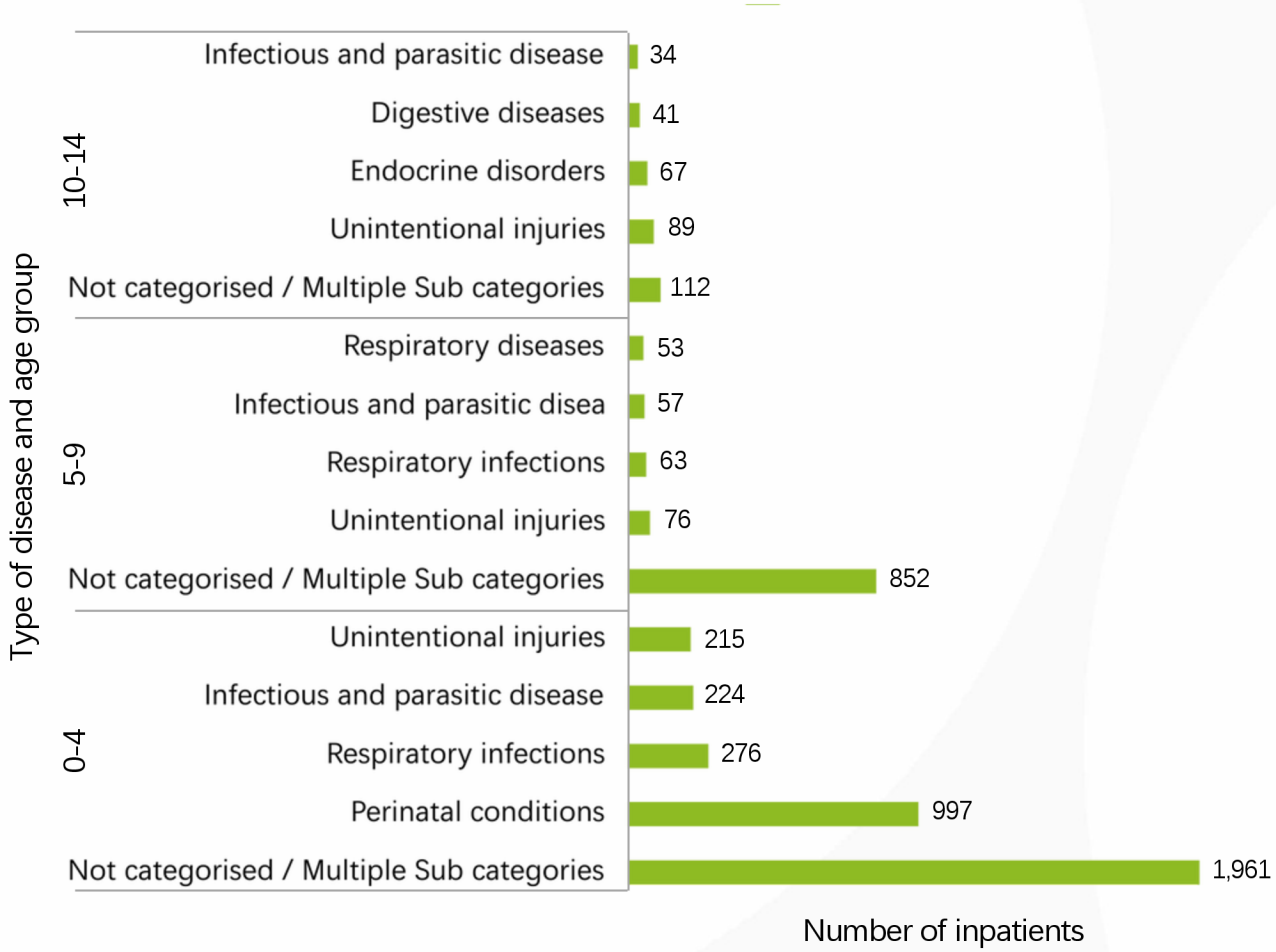
The main cause of admission among girls below 5 years was perinatal conditions followed by respiratory infections. Girls of age 5-9 years got admitted mostly due to endocrine disorders, and infectious and parasitic diseases. Among 10–14-year-old girls the main cause of admission was due to endocrine and digestive diseases.

Figure 3-6: Top 5 leading causes of female admission for infants and children aged 0-14 years, 2021



Apart from uncategorized cause for admissions, inpatient admission among boys below 5 years of age was mainly due to perinatal condition, as similar to girls. This was followed by respiratory infections. For boys aged 5-9 years, admission was mainly due to unintentional injuries and respiratory infections. The main cause for admission among 10–14-year-old boys was also due to unintentional injuries and endocrine disorders.

Figure 3-7: Top 5 leading causes of male admission for infants and children aged 0-14 years, 2021



3.2.2 Young People (Aged 15 – 34 Years)

For young people inpatient admission was mainly characterized by maternal conditions as this group mainly composed of reproductive age women. Among 15–19 year-old, admission due to endocrine disorder was most common (apart from not- categorized causes).

Table 3-10: Top 5 leading causes of all admission for youth population aged 15-34 years, 2021

Age group	Rank	Disease (GBD 1)	Number
15-19	1	Not categorized / Multiple sub-categories	208
	2	Endocrine disorders	147
	3	Maternal conditions	135
	4	Unintentional injuries	125
	5	Genitourinary diseases	99

Age group	Rank	Disease (GBD 1)	Number
20-24	1	Maternal conditions	1,093
	2	Not categorized / Multiple sub-categories	234
	3	Unintentional injuries	206
	4	Genitourinary diseases	158
	5	Digestive diseases	147
25-29	1	Maternal conditions	2,118
	2	Not categorized / Multiple sub-categories	349
	3	Digestive diseases	232
	4	Genitourinary diseases	206
	5	Unintentional injuries	204
30-34	1	Maternal conditions	1,885
	2	Not categorized / Multiple sub-categories	353
	3	Digestive diseases	263
	4	Unintentional injuries	220
	5	Genitourinary diseases	217

Women were mainly admitted for maternal conditions and common across all age groups. Next highest admissions among women were due to genitourinary disease followed by digestive diseases (apart form not categorized).

Table 3-11: Top 5 leading causes of female admission for youth population aged 15-34 years, 2021

Age group	Rank	Disease (GBD 1)	Number
15-19	1	Not categorized / Multiple sub-categories	136
	2	Maternal conditions	135
	3	Genitourinary diseases	78
	4	Endocrine disorders	57
	5	Digestive diseases	55
20-24	1	Maternal conditions	1,093
	2	Not categorized / Multiple sub-categories	152
	3	Genitourinary diseases	128
	4	Digestive diseases	89
	5	Other emerging diseases	80

Age group	Rank	Disease (GBD 1)	Number
25-29	1	Maternal conditions	2,118
	2	Not categorized / Multiple sub-categories	251
	3	Genitourinary diseases	169
	4	Digestive diseases	128
	5	Other emerging diseases	72
30-34	1	Maternal conditions	1,885
	2	Not categorized / Multiple subcategories	236
	3	Genitourinary diseases	173
	4	Digestive diseases	122
	5	Other emerging diseases	90

Among men, admission was mainly due to unintentional injuries among all age groups. This was followed by endocrine disorders among men of 15-24 years and digestive disease among 25–34-year old men.

Table 3-12: Top 5 leading causes of male admission for youth population aged 15-34 years, 2021

Age group	Rank	Disease (GBD 1)	Number
15-19	1	Unintentional injuries	97
	2	Endocrine disorders	90
	3	Not categorized / Multiple subcategories	72
	4	Digestive diseases	42
	5	Musculoskeletal diseases	25
20-24	1	Unintentional injuries	155
	2	Endocrine disorders	84
	3	Not categorized / Multiple sub-categories	82
	4	Digestive diseases	58
	5	Neuropsychiatric conditions	41
25-29	1	Unintentional injuries	158
	2	Digestive diseases	104
	3	Not categorized / Multiple sub-categories	98
	4	Musculoskeletal diseases	56
	5	Neuropsychiatric conditions	55

Age group	Rank	Disease (GBD 1)	Number
30-34	1	Unintentional injuries	157
	2	Digestive diseases	141
	3	Not categorized / Multiple sub-categories	117
	4	Neuropsychiatric conditions	75
	5	Other emerging diseases	52

3.2.3 Adults (Aged 35 -64 Years)

Adults between the age group of 35-44 years had similar reasons for inpatient care as young people. This was mainly due to the reproductive age band that falls into this group. Among adults aged 45-54 years, cardiovascular disease was the main reason for inpatient care (after excluding not categorized). For older adults of 55-64 age band, cardiovascular diseases were the main cause of admission followed by emerging diseases such as COVID-19 (excluding not categorized).

Table 3-13: Top 5 leading causes of all admission for adults aged 35-64 years, 2021

Age group	Rank	Disease (GBD 1)	Number
35-44	1	Maternal conditions	1,499
	2	Not categorized / Multiple sub-categories	494
	3	Digestive diseases	428
	4	Genitourinary diseases	375
	5	Unintentional injuries	344
45-54	1	Not categorized / Multiple sub-categories	409
	2	Cardiovascular diseases	357
	3	Genitourinary diseases	331
	4	Digestive diseases	280
	5	Other emerging diseases	251
55-64	1	Cardiovascular diseases	571
	2	Not categorized / Multiple sub-categories	500
	3	Other emerging diseases	356
	4	Digestive diseases	309
	5	Genitourinary diseases	249

For females of reproductive age group (35-44 years), their main reason for admission was maternal conditions. Among women of 45-54 age group, admission was mainly due to genitourinary diseases. For women aged 55-64, cardiovascular disease was the main reason for admission (after excluding not categorized admissions).

Table 3-14: Top 5 leading causes of female admission for adults aged 35-64 years, 2021

Age group	Rank	Disease (GBD 1)	Number
35-44	1	Maternal conditions	1,499
	2	Not categorized / Multiple sub-categories	294
	3	Genitourinary diseases	285
	4	Digestive diseases	244
	5	Other emerging diseases	173
45-54	1	Genitourinary diseases	267
	2	Not categorized / Multiple sub-categories	240
	3	Digestive diseases	152
	4	Other emerging diseases	141
	5	Cardiovascular diseases	123
55-64	1	Not categorized / Multiple sub-categories	249
	2	Cardiovascular diseases	200
	3	Other emerging diseases	162
	4	Genitourinary diseases	138
	5	Musculoskeletal diseases	138

Among adult men of age group 35-44 years, the main reason for inpatient care was unintentional injuries and digestive disease. Starting from 45 years to 64 years, cardiovascular disease was the predominant reason for which men were getting admitted.

Table 3-15: Top 5 leading causes of male admission for adults aged 35-64 years, 2021

Age group	Rank	Disease (GBD 1)	Number
35-44	1	Unintentional injuries	230
	2	Not categorized / Multiple sub-categories	200
	3	Digestive diseases	184
	4	Cardiovascular diseases	143
	5	Other emerging diseases	129

Age group	Rank	Disease (GBD 1)	Number
45-54	1	Cardiovascular diseases	234
	2	Not categorized / Multiple sub-categories	169
	3	Unintentional injuries	136
	4	Digestive diseases	128
	5	Other emerging diseases	110
55-64	1	Cardiovascular diseases	371
	2	Not categorized / Multiple sub-categories	251
	3	Other emerging diseases	194
	4	Digestive diseases	174
	5	Genitourinary diseases	111

3.2.4 Elderly (Aged 65 Years and Above)

Cardiovascular diseases were the main reason why most of the elderly people got admitted in 2021. This was followed by admissions due to respiratory diseases (apart from not categorized).

Table 3-16: Top 5 leading causes of all admission for elderly aged 65 and above, 2021

Age group	Rank	Disease (GBD 1)	Number
65-74	1	Cardiovascular diseases	409
	2	Not categorized / Multiple sub-categories	306
	3	Respiratory diseases	201
	4	Digestive diseases	189
	5	Genitourinary diseases	163
75-84	1	Cardiovascular diseases	424
	2	Not categorized / Multiple sub-categories	399
	3	Respiratory diseases	270
	4	Endocrine disorders	175
	5	Digestive diseases	172
85+	1	Not categorized / Multiple sub-categories	183
	2	Cardiovascular diseases	150
	3	Respiratory diseases	93
	4	Genitourinary diseases	84
	5	Respiratory infections	83

For elderly females, the main driver for admission was respiratory disease among 65–74 year-olds. Cardiovascular disease prevailed among women 75 years above. The second highest burden of disease among elderly female (75+ years and above) was respiratory disease (excluding not categorized).

Table 3-17: Top 5 leading causes of female admission for elderly aged 65 and above, 2021

Age group	Rank	Disease (GBD 1)	Number
65-74	1	Respiratory diseases	147
	2	Cardiovascular diseases	142
	3	Not categorized / Multiple sub-categories	120
	4	Digestive diseases	77
	5	Endocrine disorders	75
75-84	1	Cardiovascular diseases	190
	2	Not categorized / Multiple sub-categories	175
	3	Respiratory diseases	163
	4	Endocrine disorders	108
	5	Unintentional injuries	99
85+	1	Not categorized / Multiple sub-categories	65
	2	Cardiovascular diseases	54
	3	Respiratory diseases	47
	4	Endocrine disorders	38
	5	Unintentional injuries	35

Among elderly men, cardiovascular disease ranked the top-most reason for admission across all age groups 65 years and above.

Table 3-18: Top 5 leading causes of male admission for elderly aged 65 and above, 2021

Age group	Rank	Disease (GBD 1)	Number
65-74	1	Cardiovascular diseases	267
	2	Not categorized / Multiple sub-categories	186
	3	Digestive diseases	112
	4	Genitourinary diseases	99
	5	Other emerging diseases	89

Age group	Rank	Disease (GBD 1)	Number
75-84	1	Cardiovascular diseases	234
	2	Not categorized / Multiple sub-categories	224
	3	Respiratory diseases	107
	4	Digestive diseases	89
	5	Genitourinary diseases	77
85+	1	Not categorized / Multiple sub-categories	118
	2	Cardiovascular diseases	96
	3	Genitourinary diseases	62
	4	Respiratory infections	49
	5	Respiratory diseases	46

3.3 Inpatients by Main Disease Conditions

Inpatient admission within the country was driven by admission sought due to non-communicable diseases and communicable, maternal, perinatal and nutritional conditions. Men were mostly admitted due to non-communicable diseases while women were admitted mainly due to communicable, maternal, perinatal and nutritional conditions.

Communicable, maternal, perinatal and nutritional conditions were admissions mostly among the age groups between 0-35 years. Admissions due to non-communicable diseases were common across all ages.

Table 3-19: Inpatients by main disease conditions and age groups, 2021

Age	Communicable, maternal, perinatal and nutritional conditions	Ill-defined diseases	Injuries	Non-communicable diseases	Not categorized	Not Stated	Total
0-17	3,469	1,198	718	2,194	3,994	13	11,586
18-35	6,524	789	739	3,297	281	8	11,638
36-53	2,086	596	530	3,216	195	4	6,627
54-71	881	534	280	3,284	226	14	5,219
72-90	650	551	265	2,329	92	3	3,890
90+	50	30	21	99	3	0	203
Not stated	2	5	0	13	0	0	20
Total	13,662	3,703	2,553	14,432	4,791	42	39,183

More people were admitted due to non-communicable diseases compared to communicable, maternal, perinatal and nutritional conditions. Among NCD cases, most admissions were due to digestive disease and genitourinary diseases. For communicable, maternal, perinatal and nutritional conditions, the main cause of admission was due to maternal conditions followed by perinatal conditions. Unintentional injuries caused a higher number of admissions compared to intentional injuries.

Table 3-20: Sub-disease groups of GBD and sex, 2021

Sub-disease groups	Female	Male	Not Stated	Total
Communicable, maternal, perinatal and nutritional conditions	10,370	3,287	1	13,658
Maternal conditions	6,776	0	0	6,776
Perinatal conditions	971	997	0	1,968
Other emerging diseases	926	772	1	1,699
Infectious and parasitic diseases	759	737	0	1,496
Respiratory infections	624	672	0	1,296
Nutritional deficiencies	314	109	0	423
Non communicable diseases	7,633	6,799	0	14,432
Digestive diseases	1,214	1,215	0	2,429
Genitourinary diseases	1,567	796	0	2,363
Cardiovascular diseases	869	1,456	0	2,325
Respiratory diseases	798	565	0	1,363
Endocrine disorders	727	594	0	1,321
Neuropsychiatric conditions	646	519	0	1,165
Musculoskeletal diseases	514	533	0	1,047
Skin diseases	228	322	0	550
Diabetes mellitus	256	241	0	497
Malignant neoplasms	238	198	0	436
Other neoplasms	265	96	0	361
Congenital anomalies	128	118	0	246
Sense organ diseases	111	95	0	206
Oral conditions	72	50	0	122
Not categorized / Multiple sub-categories	0	1	0	1
Injuries	969	1,584	0	2,553
Intentional injuries	11	9	0	20

Sub-disease groups	Female	Male	Not Stated	Total
Unintentional injuries	958	1,575	0	2,533
Ill-defined diseases	1,996	1,706	1	3,703
Not categorized / Multiple sub-categories	1,996	1,706	1	3,703
Not categorized	2,059	2,736	0	4,795
Not Stated	22	20	0	42
Total	**23,049**	**16,132**	**2**	**39,183**

Therefore, the rest of this chapter will focus on the 5 leading causes of admissions due to NCDs and communicable, maternal, perinatal and nutritional conditions in detail.

3.3.1 Communicable, Maternal, Perinatal and Nutritional Conditions

Slight differences were observed in the number of inpatients for communicable, maternal, perinatal and nutritional conditions between GMR and Atolls. Most of these admissions were due to maternal conditions (58% in Atolls and 41% in GMR). More admissions took place in GMR due to other emerging diseases while atolls received more admissions for infectious and parasitic diseases.

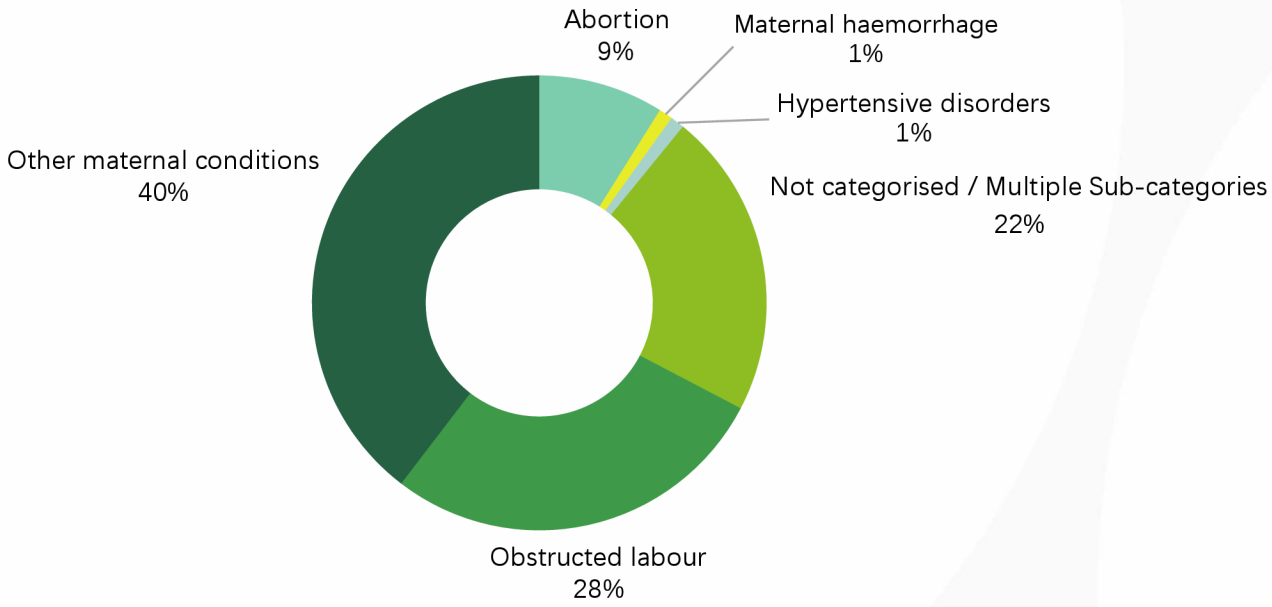
Table 3-21: Communicable, maternal, perinatal and nutritional condition admissions by region, 2021

GBD1	In Numbers			In %		
	Atolls	GMR	Total	Atolls	GMR	Total
Maternal conditions	3,959	2,817	6,776	58%	41%	50%
Perinatal conditions	669	1,299	1,968	10%	19%	14%
Other emerging diseases	248	1,451	1,699	4%	21%	12%
Infectious and parasitic diseases	885	611	1,496	13%	9%	11%
Respiratory infections	837	459	1,296	12%	7%	9%
Nutritional deficiencies	212	211	423	3%	3%	3%
Total	**6,810**	**6,848**	**13,658**	**100%**	**100%**	**100%**

1. Maternal Conditions

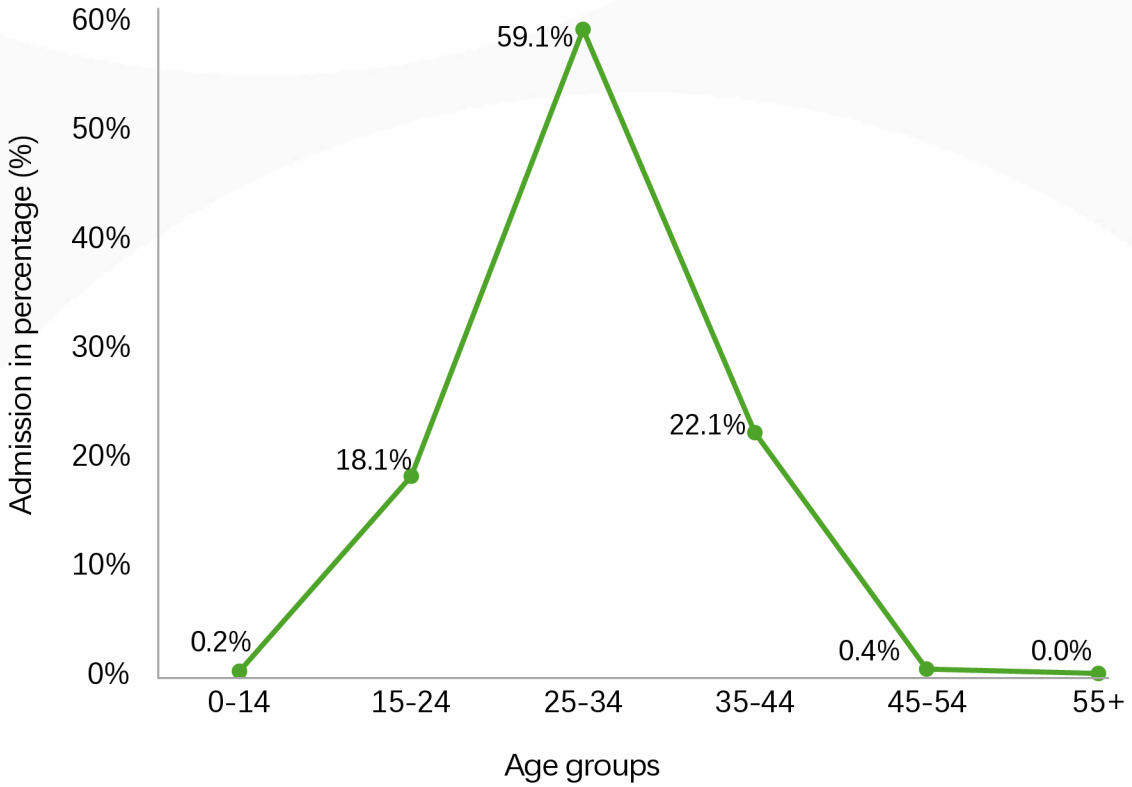
Most of the admissions were due to other maternal conditions. 28% of the women were admitted due to obstructed labor while 9% of the admissions were due to abortion.

Figure 3-8: Admission due to maternal conditions, 2021



Admission due to maternal conditions were higher among women in the reproductive age group, reaching its peak in the age group of 25-34 years.

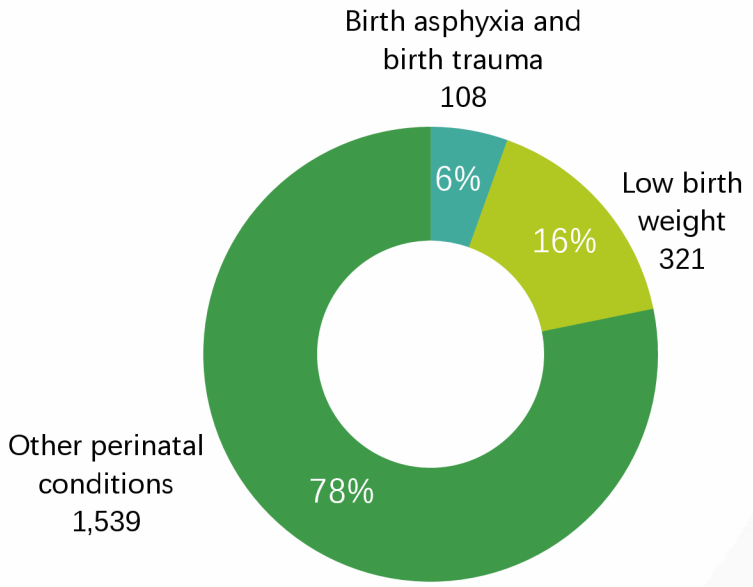
Figure 3-9: Maternal condition admissions by age group, 2021



2. Perinatal Conditions

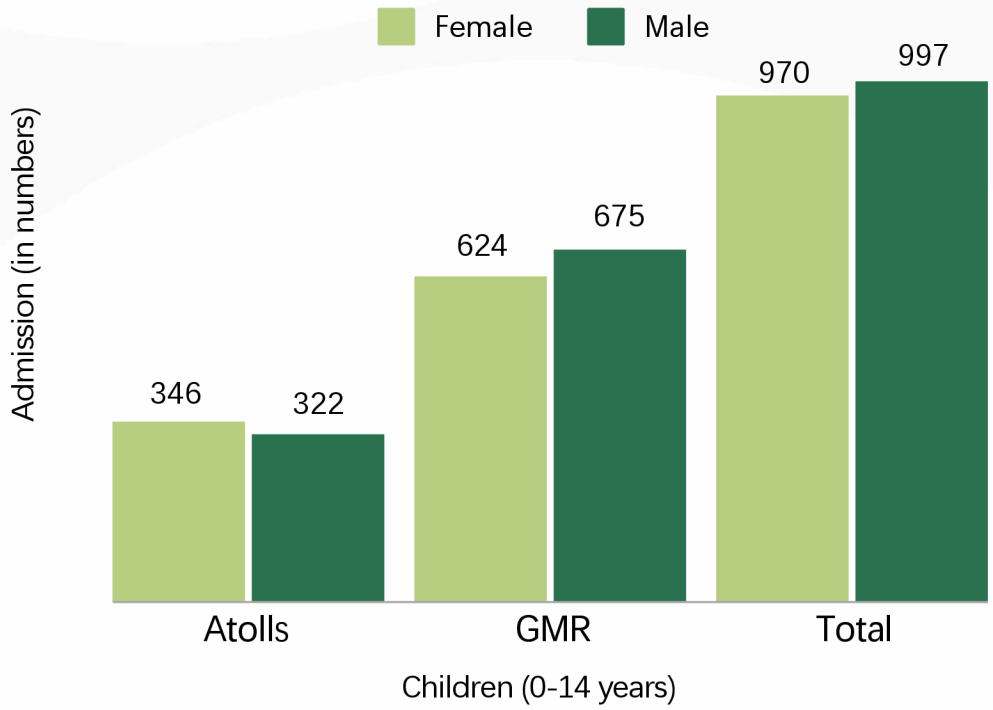
Most of the babies were admitted due to other perinatal conditions (78%). This was followed by issues related to low birth weight which accounted for 16%.

Figure 3-10: Admissions due to perinatal conditions, 2021



Breakdown of admission by sex showed that more boys were admitted compared to girls. Comparison between GMR and atolls showed that more girls were admitted in atolls while more boys were admitted in GMR.

Figure 3-11: Perinatal condition admissions by sex and location, 2021



3. Other Emerging Diseases

Other emerging diseases only had admissions due to COVID -19 related conditions. (1699 cases). More women were admitted due to COVID-19 compared to men. Most of the COVID-19 related admissions were in GMR rather than in the atolls.

Table 3-22: COVID-19 related admissions by gender, 2021

Region	Female	Male	Not Stated	Total
Atolls	106	141	1	248
GMR	820	631	0	1,451
Total	**926**	**772**	**1**	**1,699**

Most of the COVID-19 in-patients were within the age group of 54-71 years and then among the age group of 36-53 years.

Table 3-23: COVID-19 related admission by sex and age group, 2021

Age group	Female	Male	Not Stated	Total
0-17	73	63	0	136
18-35	281	134	0	415
36-53	273	214	0	487
54-71	230	270	0	500
72-90	68	84	1	153
90+	1	7	0	8
Total	**926**	**772**	**1**	**1,699**

4. Infectious and Parasitic Diseases

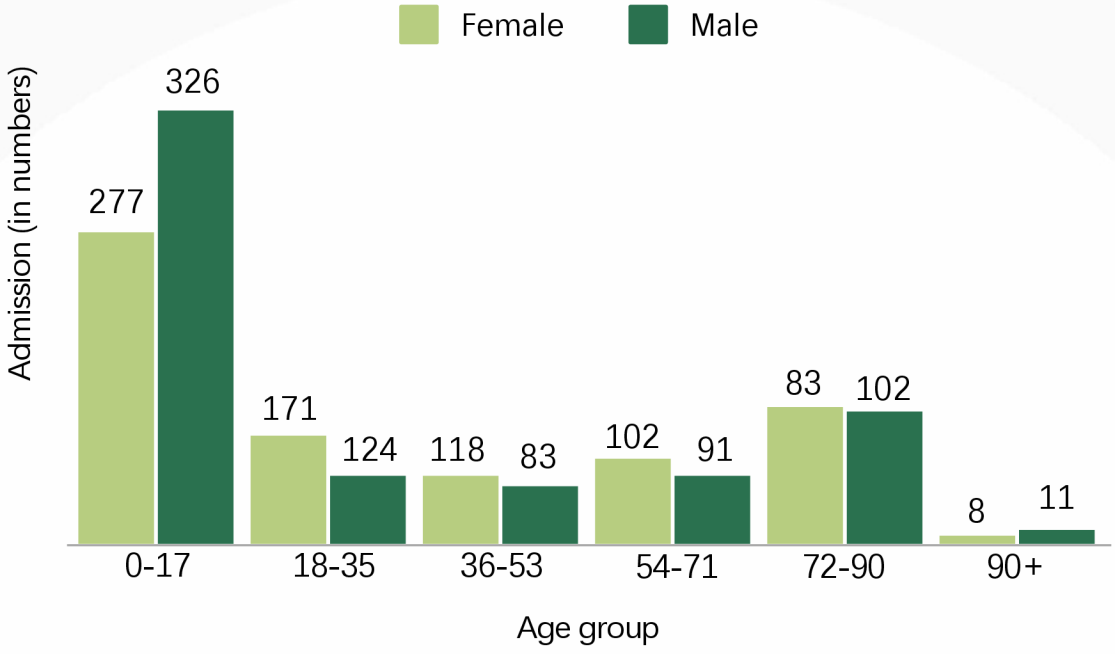
Admissions due to infectious and parasitic diseases were common mostly in the atolls than in GMR. Among infectious and parasitic diseases, the most common causes for admission were other infectious diseases and diarrheal diseases. Admissions due to diarrhoeal disease were more common in atolls than in GMR.

Table 3-24: Admissions due to infectious and parasitic diseases by region, 2021

GBD2	Atolls	GMR	Total
Other infectious diseases	423	448	871
Diarrheal diseases	391	92	483
Dengue	37	22	59
STDs excluding HIV	15	16	31
Tuberculosis	9	21	30
Meningitis	6	6	12
Hepatitis B	3	4	7
Intestinal nematode infections	0	2	2
Childhood-cluster	1	0	1
Total	**885**	**611**	**1,496**

Females were mostly admitted due to infectious and parasitic diseases. Most of the inpatients were children below 18 years.

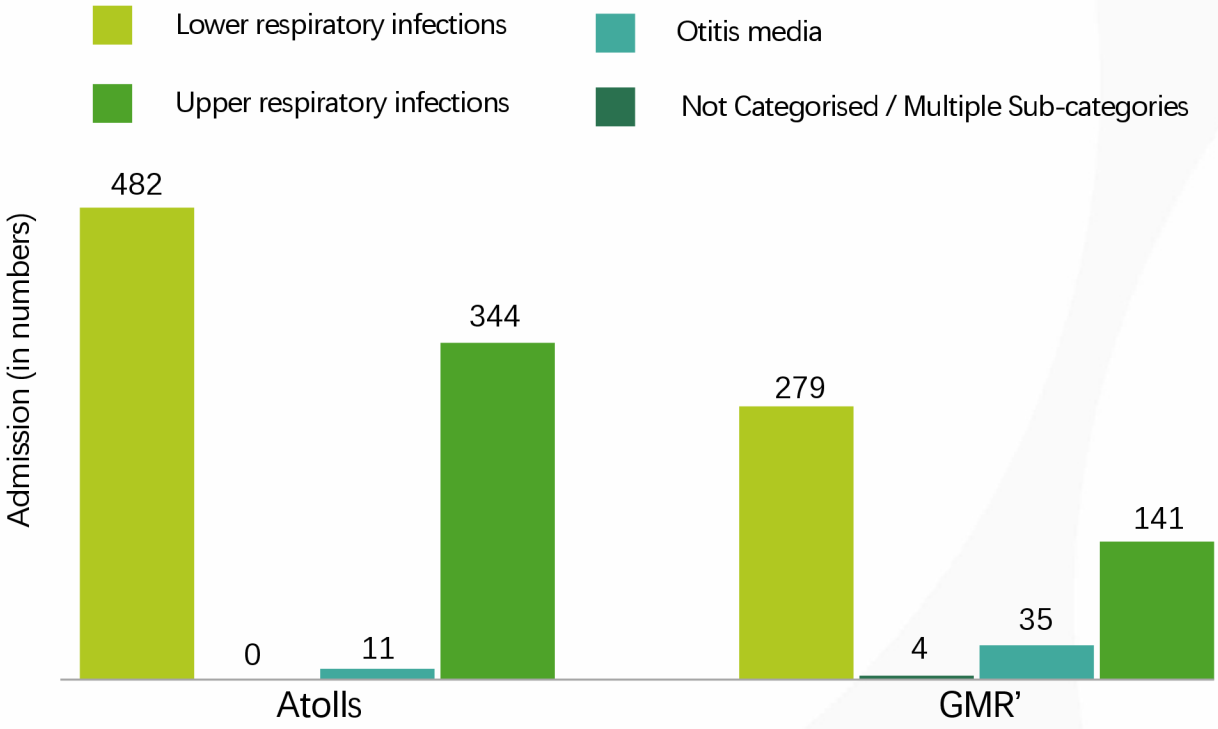
Figure 3-12: Admissions due to infectious and parasitic diseases by sex and age group, 2021



5. Respiratory Infections

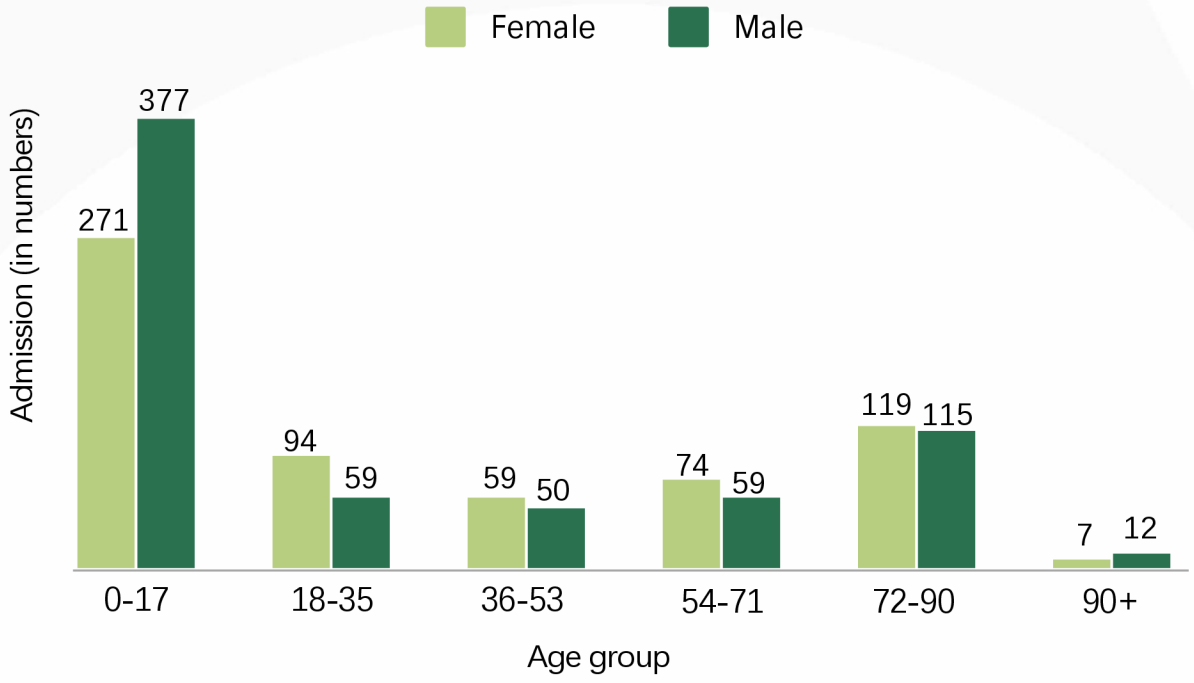
More than half of the respiratory infections were from patients admitted in atolls. Respiratory infection admissions were mainly due to lower respiratory diseases.

Figure 3-13: Admissions due to respiratory infections by region, 2021



More men were admitted due to respiratory infections compared to women. Admissions due to respiratory disease were most common among children less than 18 years.

Figure 3-14: Admission due to respiratory disease by sex and age group, 2021



3.3.2 Non-Communicable Diseases

This section will provide details on the top 5 non-communicable diseases related admissions in 2021.

1. Digestive Diseases

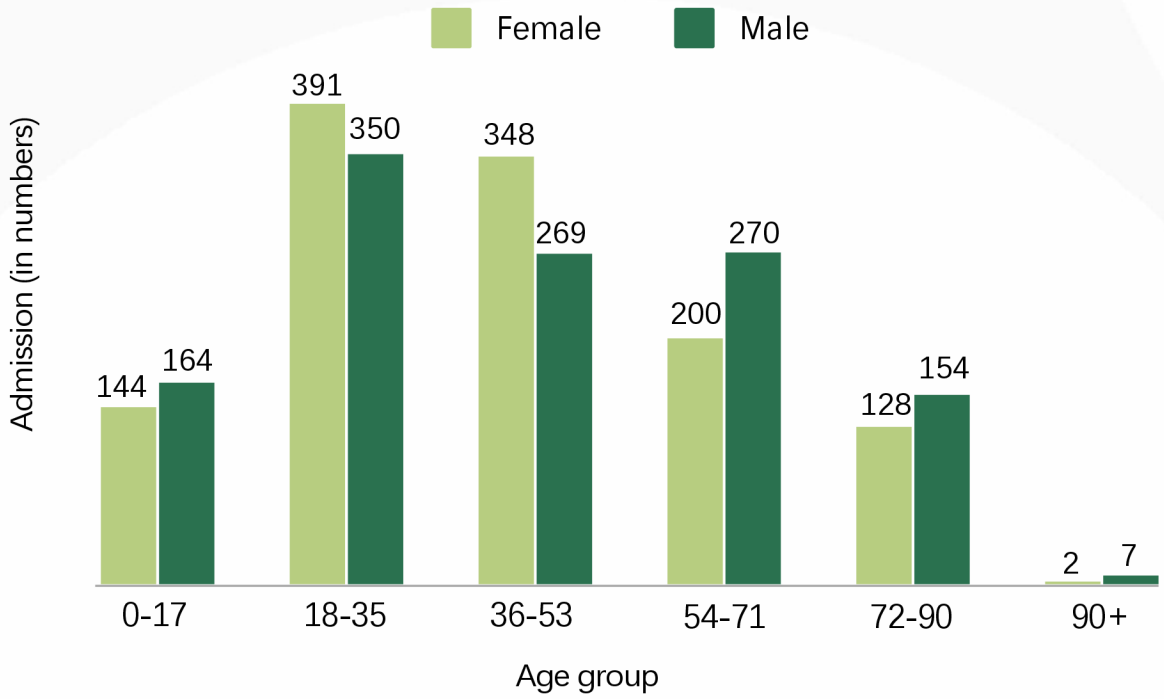
Based on the detailed reports, digestive diseases were the most common cause for admission among NCD cases. Most admissions were due to other digestive diseases (87%) while 11% of the admissions were due to appendicitis. A similar pattern of admissions were seen between GMR and atolls.

Table 3-25: Digestive disease admission by region, 2021

GBD1	In numbers			In %		
	Atolls	GMR	Total	Atolls	GMR	Total
Other digestive diseases	874	1,247	2,121	87%	88%	87%
Appendicitis	108	148	256	11%	10%	11%
Peptic ulcer disease	20	9	29	2%	1%	1%
Cirrhosis of the liver	7	16	23	1%	1%	1%
Total	**1,009**	**1,420**	**2,429**	**100%**	**100%**	**100%**

Equal number of admissions were seen among men and women with regards to digestive diseases. Admissions were highest among age group 18-35 years.

Figure 3-15: Digestive disease admission by sex and age group, 2021



2. Genitourinary Diseases

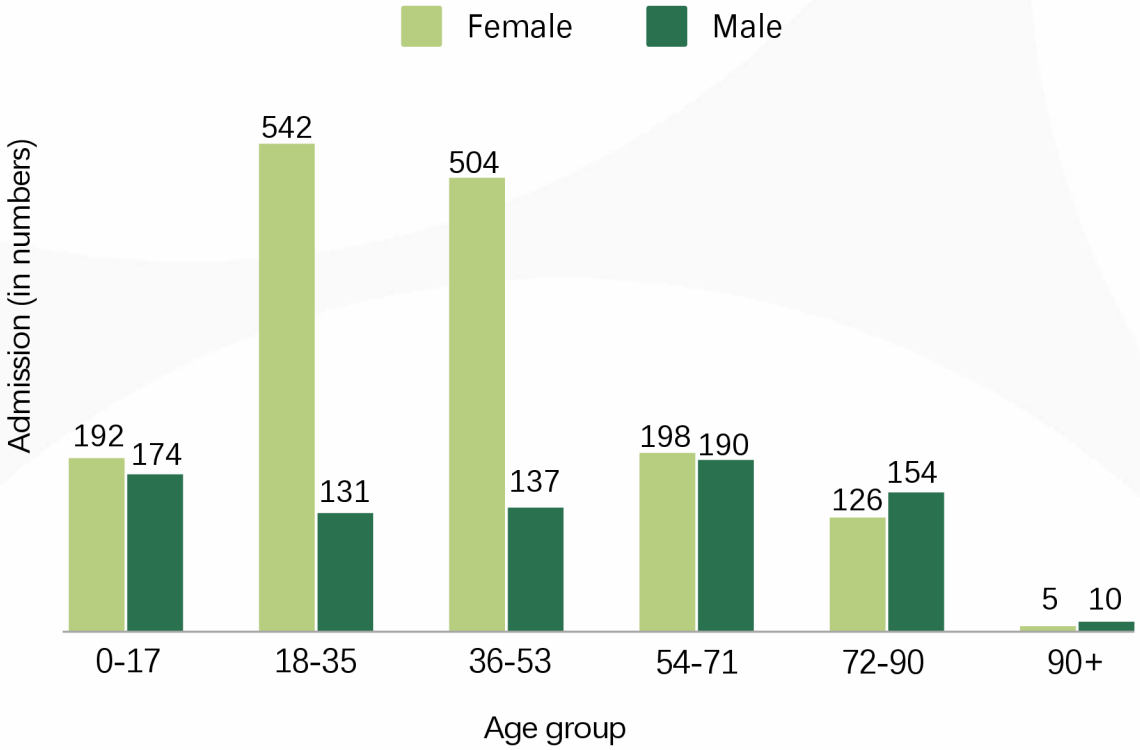
Among NCDs, genitourinary diseases were the second most common cause of admission. Most of the inpatients were from GMR. Most of the admissions were due to other genitourinary diseases while one in every five admission were due to nephritis and nephrosis.

Table 3-26: Genitourinary disease admission by region, 2021

GBD1	In numbers			In %		
	Atolls	GMR	Total	Atolls	GMR	Total
Other genitourinary system diseases	939	923	1,862	84%	74%	79%
Nephritis and nephrosis	168	281	449	15%	22%	19%
Benign prostatic hypertrophy	7	45	52	1%	4%	2%
Total	**1,114**	**1,249**	**2,363**	**100%**	**100%**	**100%**

Mostly women were admitted due to genitourinary diseases.

Figure 3-16: Genitourinary disease admission by sex and age group, 2021



3. Cardiovascular Diseases

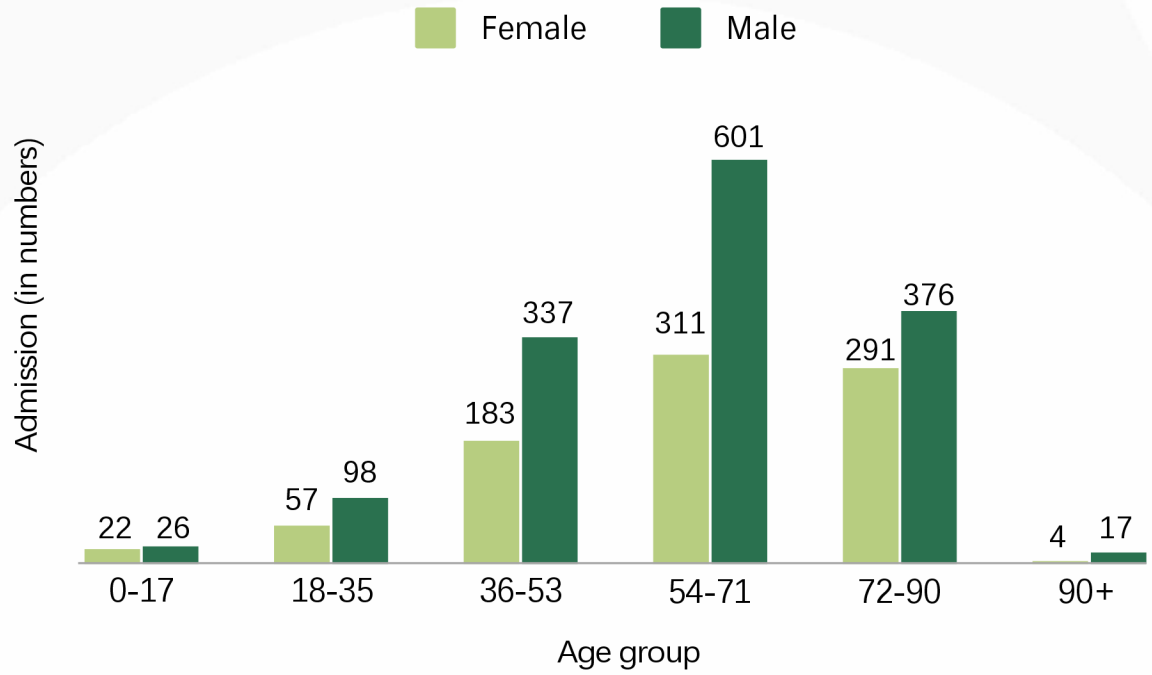
Cardiovascular diseases (CVDs) were the third most common cause of NCDs related admissions. Most of the CVD cases were due to ischemic heart disease followed by admissions due to cerebrovascular diseases. CVD admissions were mostly high in GMR. About 22% of the CVD inpatients were admitted due to hypertensive heart disease.

Table 3-27: CVD disease sub-group admission by region, 2021

GBD1	In numbers			In %		
	Atolls	GMR	Total	Atolls	GMR	Total
Cerebrovascular disease	288	323	611	29%	24%	26%
Hypertensive heart disease	271	251	522	28%	19%	22%
Ischemic heart disease	216	525	741	22%	39%	32%
Other cardiovascular diseases	185	209	394	19%	16%	17%
Inflammatory heart diseases	10	15	25	1%	1%	1%
Not categorized / Multiple sub-categories	6	7	13	1%	1%	1%
Rheumatic heart disease	3	16	19	0%	1%	1%
Total	**979**	**1,346**	**2,325**	**100%**	**100%**	**100%**

Admissions due to cardiovascular disease were mainly among men. The highest number of admissions were seen among 54–71 year-olds in both sexes.

Figure 3-17: CVD admission by sex and age-group, 2021



4. Respiratory Diseases

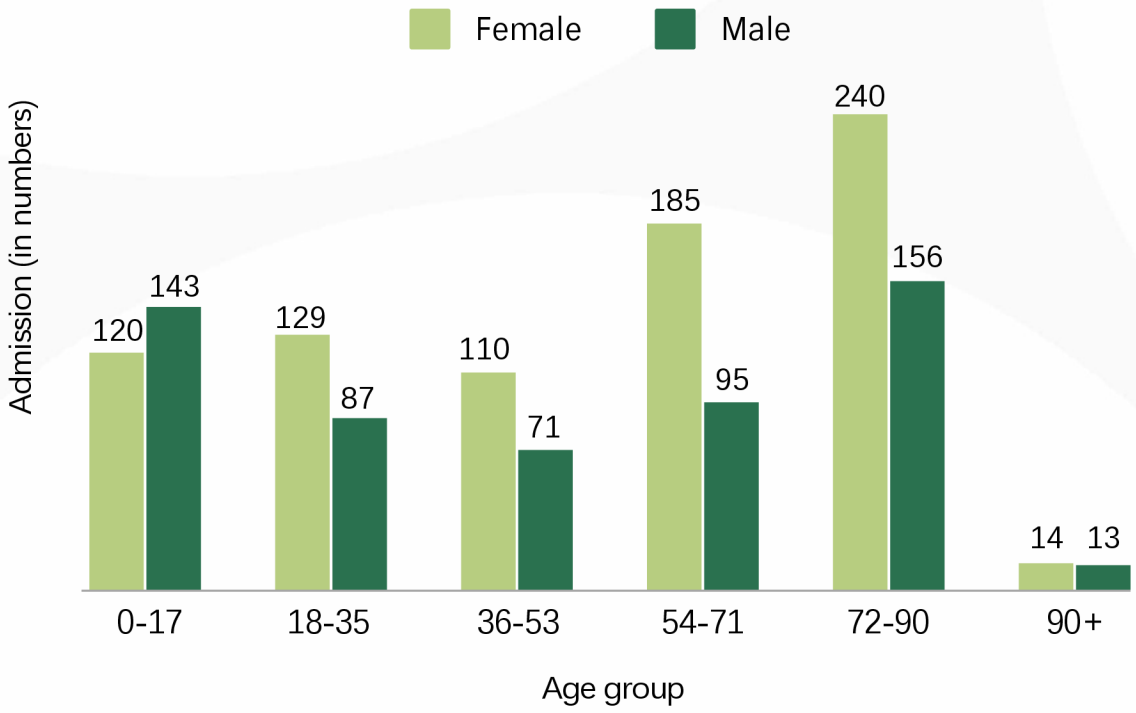
Atolls had the highest number of respiratory disease admissions. Most of the respiratory disease inpatients in the country were admitted due to other respiratory diseases and 32% of the inpatients were admitted due to chronic obstructive pulmonary disease.

Table 3-28: Respiratory disease admission by sub-group and region, 2021

GBD1	In numbers			In %		
	Atolls	GMR	Total	Atolls	GMR	Total
Asthma	210	129	339	30%	19%	25%
Chronic obstructive pulmonary disease	280	154	434	40%	23%	32%
Other respiratory diseases	203	387	590	29%	58%	43%
Total	**693**	**670**	**1,363**	**100%**	**100%**	**100%**

Women outnumbered men in admissions due to respiratory diseases. Elderly aged women had more admissions compared to men.

Figure 3-18: Respiratory disease admission by sex and age group, 2021

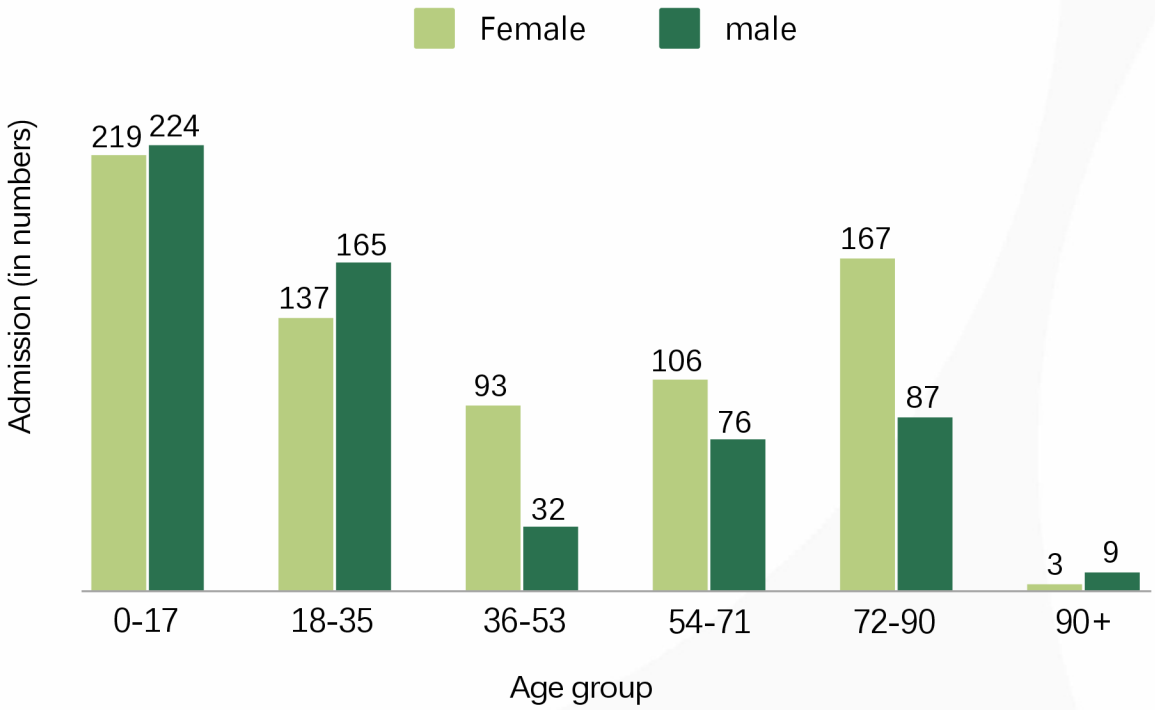


5. Endocrine Disorders

Endocrine disorders were the fifth most common cause of NCDs admissions which mostly affected those living in the atolls (890 cases in atolls vs 431 cases in GMR).

Most of the endocrine disorder inpatients were men. The highest number of admissions were among children and young adults.

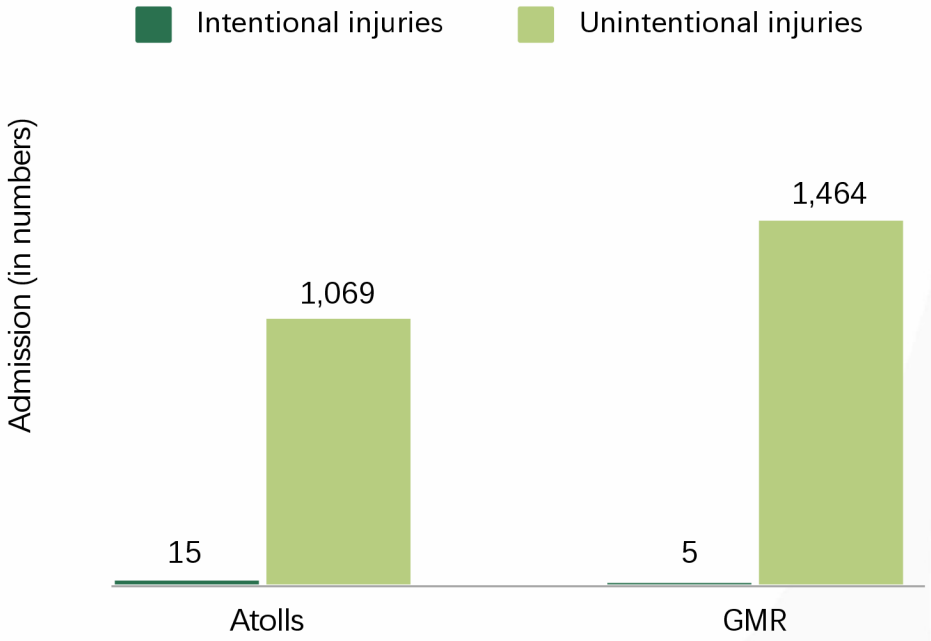
Figure 3-19: Endocrine disorders by sex and age group, 2021



3.3.3 Injuries

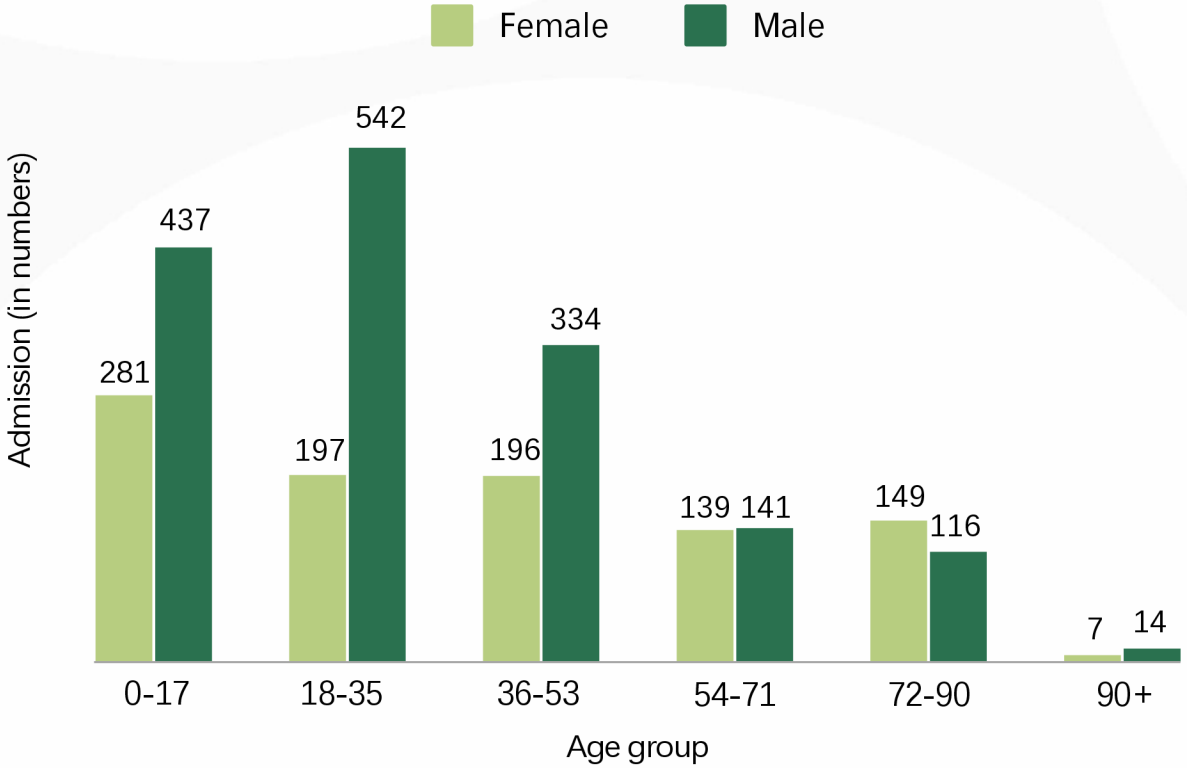
Admissions due to injuries accounted for 7% of the inpatients. People with unintentional injuries were mainly admitted across the country, with most of the admission occurred in GMR.

Figure 3-20: Admissions due to injury by region and sub-group, 2021



More than half of those admitted due to injuries were men. Admissions were highest among the age group of 0-17 years and 18-35 years.

Figure 3-21: Admissions due to injury by sex and age group, 2021



3.4 Annex

Table 3-29: Detail of all admission by sex, age, and region, 2021

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Communicable, maternal, perinatal and nutritional conditions	5,427	1,382	1	6,810	4,943	1,905	0	6,848	13,658
Maternal conditions	3,959	0	0	3,959	2,817	0	0	2,817	6,776
Abortion	347	0	0	347	238	0	0	238	585
0-17	1	0	0	1	1	0	0	1	2
18-35	238	0	0	238	181	0	0	181	419
36-53	107	0	0	107	56	0	0	56	163
54-71	1	0	0	1	0	0	0	0	1
Hypertensive disorders	30	0	0	30	41	0	0	41	71
18-35	18	0	0	18	25	0	0	25	43
36-53	12	0	0	12	16	0	0	16	28
Maternal hemorrhage	20	0	0	20	14	0	0	14	34
18-35	18	0	0	18	9	0	0	9	27
36-53	2	0	0	2	5	0	0	5	7
Maternal sepsis	2	0	0	2	5	0	0	5	7
18-35	1	0	0	1	4	0	0	4	5
36-53	1	0	0	1	1	0	0	1	2
Not categorized / Multiple sub-categories	841	0	0	841	655	0	0	655	1,496
0-17	2	0	0	2	6	0	0	6	8
18-35	716	0	0	716	555	0	0	555	1,271
36-53	123	0	0	123	94	0	0	94	217
Obstructed labor	1,223	0	0	1,223	656	0	0	656	1,879
18-35	1,031	0	0	1,031	537	0	0	537	1,568
36-53	192	0	0	192	118	0	0	118	310
54-71	0	0	0	0	1	0	0	1	1

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Other maternal conditions	1,496	0	0	1,496	1,208	0	0	1,208	2,704
0-17	19	0	0	19	3	0	0	3	22
18-35	1,235	0	0	1,235	993	0	0	993	2,228
36-53	239	0	0	239	211	0	0	211	450
54-71	1	0	0	1	1	0	0	1	2
72-90	1	0	0	1	0	0	0	0	1
Not stated	1	0	0	1	0	0	0	0	1
Perinatal conditions	347	322	0	669	624	675	0	1,299	1,968
Birth asphyxia and birth trauma	18	27	0	45	31	32	0	63	108
0-17	18	27	0	45	31	32	0	63	108
Low birth weight	36	51	0	87	100	134	0	234	321
0-17	36	51	0	87	100	134	0	234	321
Other perinatal conditions	293	244	0	537	493	509	0	1,002	1,539
0-17	292	244	0	536	493	509	0	1,002	1,538
Not stated	1	0	0	1	0	0	0		1
Other emerging diseases	106	141	1	248	820	631	0	1,451	1,699
COVID-19 related conditions	106	141	1	248	820	631	0	1,451	1,699
0-17	9	15	0	24	64	48	0	112	136
18-35	21	16	0	37	260	118	0	378	415
36-53	23	31	0	54	250	183	0	433	487
54-71	32	46	0	78	198	224	0	422	500
72-90	20	26	1	47	48	58	0	106	153
90+	1	7	0	8	0	0	0	0	8
Infectious and parasitic diseases	453	432	0	885	306	305	0	611	1,496
Childhood-cluster diseases	1	0	0	1	0	0	0	0	1
0-17	1	0	0	1	0	0	0	0	1

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Dengue	15	22	0	37	12	10	0	22	59
0-17	5	6	0	11	7	2	0	9	20
18-35	4	9	0	13	3	7	0	10	23
36-53	2	6	0	8	2	0	0	2	10
54-71	1	1	0	2	0	1	0	1	3
72-90	3	0	0	3	0	0	0	0	3
Diarrheal diseases	217	174	0	391	51	41	0	92	483
0-17	75	82	0	157	19	25	0	44	201
18-35	49	31	0	80	14	6	0	20	100
36-53	43	13	0	56	8	8	0	16	72
54-71	29	21	0	50	6	1	0	7	57
72-90	19	26	0	45	4	1	0	5	50
90+	2	1	0	3	0	0	0	0	3
Hepatitis B	1	2	0	3	0	4	0	4	7
0-17	1	0	0	1	0	1	0	1	2
18-35	0	0	0	0	0	1	0	1	1
54-71	0	0	0	0	0	2	0	2	2
90+	0	2	0	2	0	0	0	0	2
Intestinal nematode infections	0	0	0	0	1	1	0	2	2
54-71	0	0	0	0	1		0	1	1
72-90	0	0	0	0	0	1	0	1	1
Meningitis	2	4	0	6	2	4	0	6	12
0-17	1	3	0	4	2	1	0	3	7
18-35	0	0	0	0	0	2	0	2	2
36-53	1	0	0	1	0	0	0	0	1
54-71	0	1	0	1	0	0	0	0	1
72-90	0	0	0	0	0	1	0	1	1
Other infectious diseases	200	223	0	423	217	231	0	448	871
0-17	61	83	0	144	104	121	0	225	369

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
18-35	56	40	0	96	24	20	0	44	140
36-53	31	28	0	59	21	26	0	47	106
54-71	27	28	0	55	33	30	0	63	118
72-90	20	39	0	59	34	32	0	66	125
90+	5	5	0	10	1	2	0	3	13
STDs excluding HIV	13	2	0	15	12	4	0	16	31
0-17	1	0	0	1	0	2	0	2	3
18-35	9	1	0	10	6	1	0	7	17
36-53	2	1	0	3	5	0	0	5	8
54-71	1	0	0	1	0	1	0	1	2
72-90	0	0	0	0	1	0	0	1	1
Tuberculosis	4	5	0	9	11	10	0	21	30
18-35	1	0	0	1	5	6	0	11	12
36-53	1	0	0	1	2	1	0	3	4
54-71	2	4	0	6	2	1	0	3	9
72-90	0	0	0	0	2	2	0	4	4
90+	0	1	0	1	0	0	0	0	1
Respiratory infections	397	440	0	837	227	232	0	459	1,296
Lower respiratory infections	229	253	0	482	141	138	0	279	761
0-17	94	122	0	216	46	63	0	109	325
18-35	16	14	0	30	17	7	0	24	54
36-53	13	21	0	34	17	14	0	31	65
54-71	38	23	0	61	20	21	0	41	102
72-90	63	66	0	129	41	31	0	72	201
90+	5	7	0	12	0	2	0	2	14
Not categorized / Multiple sub-categories	0	0	0	0	1	3	0	4	4
0-17	0	0	0	0	1	1	0	2	2
72-90	0	0	0	0	0	2	0	2	2

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Otitis media	2	9	0	11	21	14	0	35	46
0-17	1	7	0	8	2	2	0	4	12
18-35	0	0	0	0	10	7	0	17	17
36-53	0	0	0	0	7	4	0	11	11
54-71	1	2	0	3	2	1	0	3	6
Upper respiratory infections	166	178	0	344	64	77	0	141	485
0-17	94	135	0	229	33	47	0	80	309
18-35	29	13	0	42	22	18	0	40	82
36-53	17	4	0	21	5	7	0	12	33
54-71	11	8	0	19	2	4	0	6	25
72-90	13	15	0	28	2	1	0	3	31
90+	2	3	0	5	0	0	0	0	5
Nutritional deficiencies	165	47	0	212	149	62	0	211	423
Iron-deficiency anemia	152	39	0	191	137	53	0	190	381
0-17	23	9	0	32	19	12	0	31	63
18-35	48	4	0	52	32	9	0	41	93
36-53	43	8	0	51	51	4	0	55	106
54-71	15	3	0	18	21	11	0	32	50
72-90	22	14	0	36	13	16	0	29	65
90+	1	1	0	2	1	1	0	2	4
Other nutritional disorders	11	8	0	19	10	8	0	18	37
0-17	1	0	0	1	7	5	0	12	13
18-35	4	0	0	4	1	1	0	2	6
36-53	4	1	0	5	1	0	0	1	6
54-71	0	0	0	0	0	1	0	1	1
72-90	2	7	0	9	1	1	0	2	11
Protein-energy malnutrition	2	0	0	2	2	1	0	3	5
0-17	1	0	0	1	2	0	0	2	3

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
18-35	0	0	0	0	0	1	0	1	1
72-90	1	0	0	1	0	0	0	0	1
Non-Communicable Diseases	3,476	2,849	0	6,325	4,157	3,950	0	8,107	14,432
Digestive diseases	523	486	0	1,009	691	729	0	1,420	2,429
Appendicitis	52	56	0	108	60	88	0	148	256
0-17	18	18	0	36	16	25	0	41	77
18-35	22	26	0	48	22	41	0	63	111
36-53	11	8	0	19	14	17	0	31	50
54-71	1	3	0	4	6	5	0	11	15
72-90	0	1	0	1	2	0	0	2	3
Cirrhosis of the liver	3	4	0	7	5	11	0	16	23
0-17	0	1	0	1	0	0	0	0	1
18-35	1	1	0	2	1	0	0	1	3
36-53	1	0	0	1	0	4	0	4	5
54-71	1	1	0	2	3	7	0	10	12
72-90	0	1	0	1	1	0	0	1	2
Other digestive diseases	457	417	0	874	625	622	0	1,247	2,121
0-17	76	73	0	149	33	46	0	79	228
18-35	129	90	0	219	213	187	0	400	619
36-53	114	80	0	194	206	157	0	363	557
54-71	69	86	0	155	118	164	0	282	437
72-90	67	83	0	150	54	66	0	120	270
90+	1	4	0	5	1	2	0	3	8
Not stated	1	1	0	2	0	0	0	0	2
Peptic ulcer disease	11	9	0	20	1	8	0	9	29
0-17	1	1	0	2	0	0	0	0	2
18-35	3	1	0	4	0	4	0	4	8
36-53	1	1	0	2	1	2	0	3	5
54-71	2	3	0	5	0	1	0	1	6

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
72-90	4	2	0	6	0	1	0	1	7
90+	0	1	0	1	0	0	0	0	1
Genitourinary diseases	774	340	0	1,114	793	456	0	1,249	2,363
Benign prostatic hypertrophy	0	7	0	7	0	45	0	45	52
36-53	0	0	0	0	0	1	0	1	1
54-71	0	3	0	3	0	21	0	21	24
72-90	0	4	0	4	0	23	0	23	27
Nephritis and nephrosis	79	89	0	168	150	131	0	281	449
0-17	7	9	0	16	16	14	0	30	46
18-35	8	11	0	19	29	21	0	50	69
36-53	15	10	0	25	46	33	0	79	104
54-71	23	22	0	45	30	35	0	65	110
72-90	24	36	0	60	29	25	0	54	114
90+	2	1	0	3	0	3	0	3	6
Other genitourinary system diseases	695	244	0	939	643	280	0	923	1,862
0-17	105	74	0	179	64	77	0	141	320
18-35	265	40	0	305	240	59	0	299	604
36-53	218	35	0	253	225	58	0	283	536
54-71	58	54	0	112	87	55	0	142	254
72-90	47	37	0	84	26	29	0	55	139
90+	2	4	0	6	1	2	0	3	9
Cardiovascular diseases	393	586	0	979	476	870	0	1,346	2,325
Cerebrovascular disease	105	183	0	288	107	216	0	323	611
0-17	2	2	0	4	4	7	0	11	15
18-35	2	7	0	9	3	11	0	14	23
36-53	17	21	0	38	22	39	0	61	99
54-71	31	69	0	100	36	100	0	136	236

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
72-90	53	79	0	132	42	56	0	98	230
90+	0	5	0	5	0	3	0	3	8
Hypertensive heart disease	146	125	0	271	121	130	0	251	522
0-17	1	2	0	3	1	1	0	2	5
18-35	7	5	0	12	3	1	0	4	16
36-53	33	20	0	53	24	26	0	50	103
54-71	51	48	0	99	52	60	0	112	211
72-90	52	47	0	99	40	41	0	81	180
90+	1	2	0	3	1	1	0	2	5
Not stated	1	1	0	2	0	0	0	0	2
Inflammatory heart diseases	0	10	0	10	7	8	0	15	25
18-35	0	0	0	0	1	2	0	3	3
36-53	0	3	0	3	4	2	0	6	9
54-71	0	4	0	4	2	3	0	5	9
72-90	0	3	0	3	0	1	0	1	4
Ischemic heart disease	52	164	0	216	124	401	0	525	741
0-17	1	2	0	3	0	0	0	0	3
18-35	2	16	0	18	7	19	0	26	44
36-53	4	57	0	61	24	120	0	144	205
54-71	27	51	0	78	63	200	0	263	341
72-90	17	33	0	50	30	62	0	92	142
90+	1	5	0	6	0	0	0	0	6
Not categorized / Multiple subcategories categories	4	2	0	6	4	3	0	7	13
18-35	1	1	0	2	0	0	0	0	2
36-53	1	0	0	1	1	1	0	2	3
54-71	1	0	0	1	1	2	0	3	4

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
72-90	1	1	0	2	2	0	0	2	4
Other cardiovascular diseases	84	101	0	185	102	107	0	209	394
0-17	6	7	0	13	7	5	0	12	25
18-35	13	14	0	27	17	21	0	38	65
36-53	20	21	0	41	25	25	0	50	91
54-71	17	26	0	43	26	36	0	62	105
72-90	27	32	0	59	27	20	0	47	106
90+	1	1	0	2	0	0	0	0	2
Rheumatic heart disease	2	1	0	3	11	5	0	16	19
18-35	0	0	0	0	1	1	0	2	2
36-53	2	0	0	2	6	2	0	8	10
54-71	0	0	0	0	4	2	0	6	6
72-90	0	1	0	1	0	0	0	0	1
Respiratory diseases	398	295	0	693	400	270	0	670	1,363
Asthma	130	80	0	210	76	53	0	129	339
0-17	46	44	0	90	15	29	0	44	134
18-35	24	5	0	29	17	8	0	25	54
36-53	26	16	0	42	26	7	0	33	75
54-71	19	8	0	27	11	6	0	17	44
72-90	12	6	0	18	7	3	0	10	28
90+	3	1	0	4	0	0	0	0	4
Chronic obstructive pulmonary disease	159	121	0	280	110	44	0	154	434
0-17	2	4	0	6	0	0	0	0	6
18-35	4	2	0	6	3	1	0	4	10
36-53	7	9	0	16	5	4	0	9	25
54-71	60	33	0	93	33	11	0	44	137
72-90	81	68	0	149	66	26	0	92	241
90+	5	5	0	10	3	2	0	5	15

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Other respiratory diseases	109	94	0	203	214	173	0	387	590
0-17	10	16	0	26	47	50	0	97	123
18-35	14	16	0	30	67	55	0	122	152
36-53	11	8	0	19	35	27	0	62	81
54-71	27	20	0	47	35	17	0	52	99
72-90	46	30	0	76	28	23	0	51	127
90+	1	4	0	5	2	1	0	3	8
Endocrine disorders	480	410	0	890	247	184	0	431	1,321
Not categorized / Multiple subcategories categories	480	410	0	890	247	184	0	431	1,321
0-17	194	164	0	358	25	60	0	85	443
18-35	93	134	0	227	44	31	0	75	302
36-53	39	6	0	45	54	26	0	80	125
54-71	42	33	0	75	64	43	0	107	182
72-90	107	63	0	170	60	24	0	84	254
90+	3	9	0	12	0	0	0	0	12
Not stated	2	1	0	3	0	0	0	0	3
Neuropsychiatric conditions	333	198	0	531	313	321	0	634	1,165
Alcohol use disorders	0	1	0	1	1	2	0	3	4
0-17	0	0	0	0	1	0	0	1	1
18-35	0	1	0	1	0	0	0	0	1
36-53	0	0	0	0	0	2	0	2	2
Alzheimer and other dementias	2	2	0	4	5	4	0	9	13
18-35	0	1	0	1	0	0	0	0	1
54-71	0	1	0	1	2	1	0	3	4
72-90	2	0	0	2	3	3	0	6	8

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Bipolar disorder	25	6	0	31	14	18	0	32	63
0-17	0	1	0	1	0	0	0	0	1
18-35	11	3	0	14	3	9	0	12	26
36-53	12	2	0	14	8	7	0	15	29
54-71	2	0	0	2	3	1	0	4	6
72-90	0	0	0	0	0	1	0	1	1
Drug use disorders	2	5	0	7	2	14	0	16	23
0-17	0	1	0	1	0	1	0	1	2
18-35	0	2	0	2	2	9	0	11	13
36-53	2	1	0	3	0	3	0	3	6
54-71	0	1	0	1	0	1	0	1	2
Epilepsy	80	65	0	145	45	60	0	105	250
0-17	25	25	0	50	29	31	0	60	110
18-35	31	31	0	62	10	16	0	26	88
36-53	11	3	0	14	3	10	0	13	27
54-71	8	2	0	10	1	2	0	3	13
72-90	5	4	0	9	2	1	0	3	12
Insomnia (primary)	1	1	0	2	0	3	0	3	5
0-17	0	0	0	0	0	1	0	1	1
18-35	0	1	0	1	0	0	0	0	1
72-90	1	0	0	1	0	2	0	2	3
Mental Retardation	1	1	0	2	1	2	0	3	5
18-35	1	1	0	2	0	2	0	2	4
54-71	0	0	0	0	1	0	0	1	1
Migraine	16	5	0	21	7	3	0	10	31
0-17	1	0	0	1	1	0	0	1	2
18-35	10	4	0	14	3	2	0	5	19
36-53	4	1	0	5	1	1	0	2	7
54-71	1	0	0	1	2	0	0	2	3
Multiple sclerosis	6	0	0	6	0	0	0	0	6
36-53	5	0	0	5	0	0	0	0	5
72-90	1	0	0	1	0	0	0	0	1

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Not categorized / Multiple subcategories categories	14	4	0	18	1	0	0	1	19
0-17	2	1	0	3	0	0	0	0	3
18-35	5	1	0	6	0	0	0	0	6
36-53	5	0	0	5	0	0	0	0	5
54-71	1	1	0	2	1	0	0	1	3
72-90	0	1	0	1	0	0	0	0	1
Not stated	1	0	0	1	0	0	0	0	1
Obsessive-compulsive disorder	1	0	0	1	2	0	0	2	3
0-17	0	0	0	0	1	0	0	1	1
18-35	0	0	0	0	1	0	0	1	1
36-53	1	0	0	1	0	0	0	0	1
Other neuropsychiatric disorders	132	78	0	210	188	158	0	346	556
0-17	16	10	0	26	20	25	0	45	71
18-35	35	23	0	58	45	37	0	82	140
36-53	44	12	0	56	53	47	0	100	156
54-71	24	24	0	48	58	36	0	94	142
72-90	9	9	0	18	12	12	0	24	42
90+	2	0	0	2	0	1	0	1	3
Not stated	2	0	0	2	0	0	0	0	2
Panic disorder	3	0	0	3	1	1	0	2	5
18-35	1	0	0	1	1	0	0	1	2
36-53	1	0	0	1	0	1	0	1	2
72-90	1	0	0	1	0	0	0	0	1
Parkinson disease	0	3	0	3	6	2	0	8	11
36-53	0	2	0	2	0	0	0	0	2
54-71	0	1	0	1	2	0	0	2	3
72-90	0	0	0	0	4	2	0	6	6

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Post-traumatic stress disorder	2	0	0	2	1	0	0	1	3
0-17	1	0	0	1	0	0	0	0	1
18-35	1	0	0	1	0	0	0	0	1
36-53	0	0	0	0	1	0	0	1	1
Schizophrenia	22	16	0	38	24	45	0	69	107
0-17	1	1	0	2	0	1	0	1	3
18-35	12	9	0	21	8	25	0	33	54
36-53	6	5	0	11	9	17	0	26	37
54-71	2	1	0	3	6	2	0	8	11
72-90	0	0	0	0	1	0	0	1	1
Not stated	1	0	0	1	0	0	0	0	1
Unipolar depressive disorders	26	11	0	37	15	9	0	24	61
0-17	6	1	0	7	3	0	0	3	10
18-35	12	9	0	21	9	7	0	16	37
36-53	7	0	0	7	1	2	0	3	10
54-71	1	1	0	2	1	0	0	1	3
72-90	0	0	0	0	1	0	0	1	1
Musculoskeletal diseases	163	121	0	284	351	412	0	763	1,047
Back pain	43	30	0	73	20	32	0	52	125
0-17	1	2	0	3	0	1	0	1	4
18-35	11	7	0	18	6	8	0	14	32
36-53	11	12	0	23	1	11	0	12	35
54-71	12	7	0	19	9	9	0	18	37
72-90	7	2	0	9	4	3	0	7	16
Not stated	1	0	0	1	0	0	0	0	1
Gout	0	3	0	3	0	2	0	2	5
36-53	0	2	0	2	0	0	0	-	2
54-71	0	1	0	1	0	2	0	2	3

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Not categorized / Multiple sub-categories	2	0	0	2	0	1	0	1	3
54-71	2	0	0	2	0	0	0	0	2
72-90	0	0	0	0	0	1	0	1	1
Osteoarthritis	10	7	0	17	105	54	0	159	176
18-35	0	0	0	0	1	1	0	2	2
36-53	2	2	0	4	12	1	0	13	17
54-71	6	5	0	11	80	34	0	114	125
72-90	2	0	0	2	12	18	0	30	32
Other musculoskeletal disorders	105	80	0	185	220	321	0	541	726
0-17	6	10	0	16	12	23	0	35	51
18-35	30	19	0	49	44	137	0	181	230
36-53	39	21	0	60	77	84	0	161	221
54-71	17	19	0	36	74	64	0	138	174
72-90	12	9	0	21	13	12	0	25	46
90+	1	1	0	2	0	1	0	1	3
Not stated	0	1	0	1	0	0	0	0	1
Rheumatoid arthritis	3	1	0	4	6	2	0	8	12
36-53	3	0	0	3	1	0	0	1	4
54-71	0	0	0	0	4	2	0	6	6
72-90	0	1	0	1	1	0	0	1	2
Skin diseases	119	145	0	264	109	177	0	286	550
Not categorized / Multiple sub-categories	119	145	0	264	109	177	0	286	550
0-17	30	22	0	52	26	38	0	64	116
18-35	40	34	0	74	54	63	0	117	191
36-53	25	27	0	52	13	31	0	44	96
54-71	8	36	0	44	7	27	0	34	78

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
72-90	16	24	0	40	9	17	0	26	66
90+	0	2	0	2	0	1	0	1	3
Diabetes mellitus	130	124	0	254	126	117	0	243	497
Not categorized / Multiple sub-categories	130	124	0	254	126	117	0	243	497
0-17	13	21	0	34	9	9	0	18	52
18-35	23	30	0	53	14	15	0	29	82
36-53	47	22	0	69	35	29	0	64	133
54-71	33	27	0	60	44	47	0	91	151
72-90	14	24	0	38	24	16	0	40	78
90+	0	0	0	0	0	1	0	1	1
Malignant neoplasms	30	53	0	83	208	145	0	353	436
Bladder cancer	1	2	0	3	4	13	0	17	20
18-35	0	1	0	1	1	0	0	1	2
36-53	0	0	0	0	1	1	0	2	2
54-71	1	0	0	1	2	8	0	10	11
72-90	0	1	0	1	0	4	0	4	5
Breast cancer	6	1	0	7	72	1	0	73	80
0-17	1	0	0	1	1	0	0	1	2
18-35	2	1	0	3	20	1	0	21	24
36-53	1	0	0	1	33	0	0	33	34
54-71	2	0	0	2	17	0	0	17	19
72-90	0	0	0	0	1	0	0	1	1
Cervix uteri cancer	2	0	0	2	3	0	0	3	5
18-35	0	0	0	0	1	0	0	1	1
36-53	1	0	0	1	0	0	0	0	1
54-71	1	0	0	1	0	0	0	0	1
72-90	0	0	0	0	2	0	0	2	2
Colon and rectum cancers	0	0	0	0	18	13	0	31	31
18-35	0	0	0	0	1	1	0	2	2

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
36-53	0	0	0	0	2	1	0	3	3
54-71	0	0	0	0	14	7	0	21	21
72-90	0	0	0	0	1	4	0	5	5
Corpus uteri cancer	0	0	0	0	5	0	0	5	5
36-53	0	0	0	0	4	0	0	4	4
54-71	0	0	0	0	1	0	0	1	1
Leukemia	3	1	0	4	2	4	0	6	10
0-17	0	0	0	0	1	1	0	2	2
36-53	0	0	0	0	1	0	0	1	1
54-71	3	0	0	3	0	3	0	3	6
72-90	0	1	0	1	0	0	0	0	1
Liver cancer	1	0	0	1	6	9	0	15	16
36-53	0	0	0	0	0	1	0	1	1
54-71	0	0	0	0	4	6	0	10	10
72-90	1	0	0	1	2	2	0	4	5
Lymphomas, multiple myeloma	2	4	0	6	8	7	0	15	21
0-17	0	0	0	0	0	1	0	1	1
36-53	0	0	0	0	0	3	0	3	3
54-71	2	0	0	2	4	0	0	4	6
72-90	0	4	0	4	4	3	0	7	11
Melanoma and other skin cancers	1	0	0	1	2	1	0	3	4
0-17	0	0	0	0	1	0	0	1	1
18-35	1	0	0	1	1	0	0	1	2
54-71	0	0	0	0	0	1	0	1	1
Mouth and oropharynx cancers	6	3	0	9	20	14	0	34	43
0-17	0	0	0	0	3	1	0	4	4
18-35	0	0	0	0	0	3	0	3	3
36-53	0	0	0	0	4	3	0	7	7
54-71	0	1	0	1	11	5	0	16	17
72-90	6	2	0	8	2	2	0	4	12

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Not categorized / Multiple sub-categories	0	0	0	0	0	1	0	1	1
54-71	0	0	0	0	0	1	0	1	1
Esophagus cancer	0	2	0	2	1	2	0	3	5
0-17	0	0	0	0	1	0	0	1	1
36-53	0	2	0	2	0	0	0		2
72-90	0	0	0	0	0	2	0	2	2
Other malignant neoplasms	6	13	0	19	46	48	0	94	113
0-17	0	4	0	4	10	12	0	22	26
18-35	1	1	0	2	6	10	0	16	18
36-53	2	1	0	3	11	14	0	25	28
54-71	0	5	0	5	12	8	0	20	25
72-90	3	2	0	5	7	3	0	10	15
90+	0	0	0	0	0	1	0	1	1
Ovary cancer	1	0	0	1	13	0	0	13	14
36-53	0	0	0	0	1	0	0	1	1
54-71	0	0	0	0	10	0	0	10	10
72-90	1	0	0	1	2	0	0	2	3
Pancreas cancer	0	10	0	10	4	2	0	6	16
36-53	0	7	0	7	1	0	0	1	8
54-71	0	0	0	0	1	1	0	2	2
72-90	0	3	0	3	2	1	0	3	6
Prostate cancer	0	8	0	8	0	9	0	9	17
54-71	0	0	0	0	0	6	0	6	6
72-90	0	6	0	6	0	3	0	3	9
90+	0	2	0	2	0	0	0	0	2
Stomach cancer	0	2	0	2	0	3	0	3	5
36-53	0	2	0	2	0	0	0	0	2
54-71	0	0	0	0	0	3	0	3	3

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Trachea, bronchus, lung cancers	1	7	0	8	4	18	0	22	30
36-53	0	2	0	2	0	4	0	4	6
54-71	0	5	0	5	4	9	0	13	18
72-90	1	0	0	1	0	5	0	5	6
Other neoplasms	38	18	0	56	227	78	0	305	361
Not categorized / Multiple sub-categories	38	18	0	56	227	78	0	305	361
0-17	2	3	0	5	15	9	0	24	29
18-35	4	3	0	7	64	16	0	80	87
36-53	23	4	0	27	109	17	0	126	153
54-71	3	4	0	7	28	31	0	59	66
72-90	6	3	0	9	11	5	0	16	25
90+	0	1	0	1	0	0	0	0	1
Congenital anomalies	45	20	0	65	83	98	0	181	246
Anorectal atresia	0	0	0	0	0	2	0	2	2
0-17	0	0	0	0	0	2	0	2	2
Cleft lip	0	0	0	0	1	3	0	4	4
0-17	0	0	0	0	0	3	0	3	3
54-71	0	0	0	0	1	0	0	1	1
Cleft palate	0	0	0	0	4	7	0	11	11
0-17	0	0	0	0	4	6	0	10	10
54-71	0	0	0	0	0	1	0	1	1
Congenital heart anomalies	6	1	0	7	15	4	0	19	26
0-17	4	1	0	5	10	4	0	14	19
18-35	1	0	0	1	4	0	0	4	5
36-53	1	0	0	1	0	0	0		1
54-71	0	0	0	0	1	0	0	1	1
Down syndrome	0	0	0	0	5	1	0	6	6
0-17	0	0	0	0	5	1	0	6	6

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Esophageal atresia	0	0	0	0	0	1	0	1	1
0-17	0	0	0	0	0	1	0	1	1
Other Congenital anomalies	39	19	0	58	58	80	0	138	196
0-17	19	17	0	36	30	74	0	104	140
18-35	12	1	0	13	18	3	0	21	34
36-53	7	0	0	7	8	3	0	11	18
54-71	0	0	0	0	2	0	0	2	2
72-90	0	1	0	1	0	0	0	0	1
90+	1	0	0	1	0	0	0	0	1
Sense organ diseases	37	32	0	69	74	63	0	137	206
Glaucoma	2	1	0	3	5	14	0	19	22
18-35	0	0	0	0	1	2	0	3	3
36-53	0	0	0	0	2	3	0	5	5
54-71	2	1	0	3	1	7	0	8	11
72-90	0	0	0	0	1	2	0	3	3
Hearing loss, adult onset	0	0	0	0	5	1	0	6	6
18-35	0	0	0	0	2	0	0	2	2
36-53	0	0	0	0	2	0	0	2	2
54-71	0	0	0	0	1	1	0	2	2
Other sense organ disorders	35	31	0	66	64	48	0	112	178
0-17	9	4	0	13	18	14	0	32	45
18-35	8	8	0	16	18	15	0	33	49
36-53	7	9	0	16	12	9	0	21	37
54-71	10	4	0	14	12	5	0	17	31
72-90	1	6	0	7	4	5	0	9	16
Oral conditions	13	21	0	34	59	29	0	88	122
Dental caries	1	0	0	1	3	4	0	7	8
0-17	0	0	0	0	1	2	0	3	3
18-35	1	0	0	1	2	1	0	3	4
36-53	0	0	0	0	0	1	0	1	1

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Other oral diseases	12	21	0	33	56	24	0	80	113
0-17	4	11	0	15	19	8	0	27	42
18-35	2	6	0	8	23	11	0	34	42
36-53	0	1	0	1	8	5	0	13	14
54-71	4	2	0	6	5	0	0	5	11
72-90	2	1	0	3	1	0	0	1	4
Periodontal disease	0	0	0	0	0	1	0	1	1
54-71	0	0	0	0	0	1	0	1	1
Not categorized / Multiple sub-categories	0	0	0	0	0	1	0	1	1
Not categorized / Multiple sub-categories	0	0	0	0	0	1	0	1	1
18-35	0	0	0	0	0	1	0	1	1
Injuries	406	678	0	1,084	563	906	0	1,469	2,553
Intentional injuries	7	8	0	15	4	1	0	5	20
Not categorized / Multiple sub-categories	0	6	0	6	0	0	0	0	6
0-17	0	1	0	1	0	0	0	0	1
18-35	0	3	0	3	0	0	0	0	3
36-53	0	1	0	1	0	0	0	0	1
72-90	0	1	0	1	0	0	0	0	1
Poisonings	1	1	0	2	0	0	0	0	2
18-35	1	0	0	1	0	0	0	0	1
36-53	0	1	0	1	0	0	0	0	1
Self-inflicted injuries	6	1	0	7	4	1	0	5	12
0-17	1	0	0	1	1	0	0	1	2
18-35	4	1	0	5	3	1	0	4	9
36-53	1	0	0	1	0	0	0	0	1

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Unintentional injuries	399	670	0	1,069	559	905	0	1,464	2,533
Drownings	1	2	0	3	2	1	0	3	6
0-17	0	1	0	1	2	1	0	3	4
18-35	1	0	0	1	0	0	0	0	1
72-90	0	1	0	1	0	0	0	0	1
Falls	20	47	0	67	1	2	0	3	70
0-17	0	14	0	14	1	1	0	2	16
18-35	3	6	0	9	0	1	0	1	10
36-53	3	7	0	10	0	0	0	0	10
54-71	2	12	0	14	0	0	0	0	14
72-90	10	8	0	18	0	0	0	0	18
90+	2	0	0	2	0	0	0	0	2
Not categorized / Multiple sub-categories	4	8	0	12	0	4	0	4	16
0-17	1		0	1	0	0	0	0	1
18-35	2	3	0	5	0	0	0	0	5
36-53	1	2	0	3	0	2	0	2	5
54-71	0	3	0	3	0	2	0	2	5
Other unintentional injuries	364	571	0	935	555	892	0	1,447	2,382
0-17	75	154	0	229	198	258	0	456	685
18-35	68	175	0	243	112	330	0	442	685
36-53	85	127	0	212	101	180	0	281	493
54-71	60	51	0	111	76	70	0	146	257
72-90	74	55	0	129	65	50	0	115	244
90+	2	9	0	11	3	4	0	7	18
Poisonings	3	2	0	5	1	1	0	2	7
0-17	1	1	0	2	1	0	0	1	3
18-35	1	0	0	1	0	1	0	1	2
36-53	1	1	0	2	0	0	0	0	2

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
Road traffic accidents	7	40	0	47	0	5	0	5	52
0-17	0	4	0	4	0	2	0	2	6
18-35	2	19	0	21	0	2	0	2	23
36-53	4	12	0	16	0	1	0	1	17
54-71	1	3	0	4	0	0	0	0	4
72-90	0	1	0	1	0	0	0	0	1
90+	0	1	0	1	0	0	0	0	1
Ill-defined diseases	1,653	1,323	2,976	0	343	383	1	727	3,703
Not categorized / Multiple sub-categories	1,653	1,323	2,976	0	343	383	1	727	3,703
Not categorized / Multiple sub-categories	1,653	1,323	2,976	0	343	383	1	727	3,703
0-17	494	445	939	0	117	141	1	259	1,198
18-35	460	198	658	0	62	69	0	131	789
36-53	292	171	463	0	69	64	0	133	596
54-71	201	212	413	0	56	65	0	121	534
72-90	191	280	471	0	38	42	0	80	551
90+	11	16	27	0	1	2	0	3	30
Not stated	4	1	5	0	0	0	0	0	5
Not categorized	1,152	1,635	0	2,787	907	1,101	0	2,008	4,795
Not categorized / Multiple sub-categories	1,152	1,635	0	2,787	907	1,101	0	2,008	4,795
Not categorized / Multiple sub-categories	1,152	1,635	0	2,787	907	1,101	0	2,008	4,795
0-17	1,061	1,568	0	2,629	553	816	0	1,369	3,998
18-35	38	16	0	54	160	67	0	227	281
36-53	25	13	0	38	82	75	0	157	195
54-71	17	16	0	33	84	109	0	193	226
72-90	11	22	0	33	28	31	0	59	92

Sub-disease group	Atolls				GMR				Total
	Female	Male	Not stated	Total	Female	Male	Not stated	Total	
90+	0	0	0	0	0	3	0	3	3
Not stated	13	16	0	29	9	4	0	13	42
Not Stated	13	16	0	29	9	4	0	13	42
Not Stated	13	16	0	29	9	4	0	13	42
0-17	3	8	0	11	1	1	0	2	13
18-35	0	4	0	4	3	1	0	4	8
36-53	1	1	0	2	2	0	0	2	4
54-71	7	2	0	9	3	2	0	5	14
72-90	2	1	0	3	0	0	0	0	3
Total	**12,127**	**7,883**	**2,977**	**17,035**	**10,922**	**8,249**	**1**	**19,172**	**39,183**

Table 3-30: Admission by atoll and sex, 2021

Atoll and Sex	Communicable, maternal, perinatal, and nutritional conditions	Ill-defined diseases	Injuries	Noncommunicable diseases	Not categorized	Not Stated	Grand Total
AA	158	90	10	92	19	0	369
Female	111	46	6	64	11	0	238
Male	47	44	4	28	8	0	131
ADh	290	170	36	239	54	0	789
Female	211	98	12	139	3	0	463
Male	79	72	24	100	51	0	326
B	315	56	19	127	143	0	660
Female	232	26	5	76	45	0	384
Male	83	30	14	51	98	0	276
Dh	173	67	18	158	68	0	484
Female	137	32	6	88	27	0	290
Male	36	35	12	70	41	0	194

Atoll and Sex	Communicable, maternal, perinatal, and nutritional conditions	Ill-defined diseases	Injuries	Noncommunicable diseases	Not categorized	Not Stated	Grand Total
F	183	62	42	225	54	1	567
Female	145	32	25	97	18	1	318
Male	38	30	17	128	36	0	249
Ga	202	93	54	190	13	0	552
Female	159	37	13	89	1	0	299
Male	43	56	41	101	12	0	253
GDh	241	133	62	332	142	0	910
Female	189	65	19	169	85	0	527
Male	52	68	43	163	57	0	383
GMR	6,848	727	1,469	8,107	2,008	13	19,172
Female	4,943	343	563	4,157	907	9	10,922
Male	1,905	383	906	3,950	1,101	4	8,249
Not stated	0	1	0	0	0	0	1
Gn	281	35	34	205	156	0	711
Female	229	17	14	108	39	0	407
Male	51	18	20	97	117	0	303
Not stated	1	0	0	0	0	0	1
HA	452	202	66	312	37	0	1,069
Female	367	111	28	169	4	0	679
Male	85	91	38	143	33	0	390
HDh	1,068	257	118	921	528	0	2,892
Female	882	169	40	538	207	0	1,836
Male	186	88	78	383	321	0	1,056
K	118	89	8	110	0	0	325
Female	73	51	2	66	0	0	192
Male	45	38	6	44	0	0	133
L	606	309	108	429	307	7	1,766
Female	506	225	50	268	136	2	1,187
Male	100	84	58	161	171	5	579

Atoll and Sex	Communicable, maternal, perinatal, and nutritional conditions	Ill-defined diseases	Injuries	Noncommunicable diseases	Not categorized	Not Stated	Grand Total
Lh	215	93	46	216	92	1	663
Female	165	45	13	99	46	1	369
Male	50	48	33	117	46	0	294
M	140	140	13	229	35	0	557
Female	105	88	4	127	16	0	340
Male	35	52	9	102	19	0	217
N	65	122	7	177	25	0	396
Female	56	72	0	105	9	0	242
Male	9	50	7	72	16	0	154
R	640	178	47	506	367	0	1,738
Female	574	93	20	277	189	0	1,153
Male	66	85	27	229	178	0	585
S	961	480	293	912	549	13	3,208
Female	784	225	104	483	241	9	1,846
Male	177	255	189	429	308	4	1,362
Sh	341	143	29	372	128	7	1,020
Female	260	78	11	240	56	0	645
Male	81	65	18	132	72	7	375
Th	345	251	67	543	70	0	1,276
Female	228	143	32	263	19	0	685
Male	117	108	35	280	51	0	591
V	16	6	7	30	0	0	59
Female	14	0	2	11	0	0	27
Male	2	6	5	19	0	0	32
Grand Total	**13,658**	**3,703**	**2,553**	**14,432**	**4,795**	**42**	**39,183**

Table 3-31: Admission by disease group and type of health facility, 2021

Disease	Health center	Atoll / regional hospital	Other Hospital	Tertiary	Total
Communicable, maternal, perinatal and nutritional conditions	1,116	4,809	643	7,090	13,658
Infectious and parasitic diseases	445	358	55	638	1,496
Maternal conditions	252	3,128	249	3,147	6,776
Nutritional deficiencies	66	112	91	154	423
Other emerging diseases	25	185	9	1,480	1,699
Perinatal conditions	5	606	174	1,183	1,968
Respiratory infections	323	420	65	488	1,296
Ill-defined diseases	1,644	928	76	1,055	3,703
Not categorized / Multiple sub-categories	1,644	928	76	1055	3,703
Injuries	251	587	115	1,600	2,553
Intentional injuries	7	5	2	6	20
Unintentional injuries	244	582	113	1,594	2,533
Noncommunicable diseases	2,111	3,495	663	8,163	14,432
Cardiovascular diseases	214	638	40	1,433	2,325
Congenital anomalies	4	46	23	173	246
Diabetes mellitus	75	154	18	250	497
Digestive diseases	368	531	130	1,400	2,429
Endocrine disorders	521	338	82	380	1,321
Genitourinary diseases	323	651	113	1,276	2,363
Malignant neoplasms	13	49	26	348	436
Musculoskeletal diseases	89	146	19	793	1,047
Neuropsychiatric conditions	167	285	27	686	1,165

Disease	Health center	Atoll / regional hospital	Other Hospital	Tertiary	Total
Not categorised / Multiple sub-categories	0	0	1	0	1
Oral conditions	3	24	41	54	122
Other neoplasms	7	42	30	282	361
Respiratory diseases	252	377	65	669	1,363
Sense organ diseases	26	31	17	132	206
Skin diseases	49	183	31	287	550
Not categorised	29	2,210	262	2,294	4,795
Not categorised / Multiple sub-categories	29	2,210	262	2,294	4,795
Not Stated	0	16	0	26	42
Not Stated	0	16	0	26	42
Total	**5,151**	**12,045**	**1,759**	**20,228**	**39,183**

CHAPTER 4 - MORTALITY

4 Mortality

In Maldives, death data (mortality data) are obtained from the locally built Vital Statistical system called "GEMEN".

What is Mortality rate?

'Mortality rate is a measure of the frequency of occurrence of death in a defined population during a specified interval[12]'.

This chapter presents the mortality analysis for 2021. In some analysis, comparison has been done with previous years to show trends in mortality. This report includes revised statistics of 2020 and would be different from those published in Maldives Health Statistics 2020. Hence, the results presented in this publication to be considered as the final values for 2020.

In 2021, a total of 1553 deaths were recorded. However, detailed information was not available for one of these deaths. Hence, this record was excluded for detailed analysis provided in this chapter.

4.1 Crude Death Rate (CDR)

The crude death rate is one of the simplest measures of mortality level in a population.

Equation 4.1: Crude Death Rate

$$CDR = \frac{Number\ of\ death\ within\ a\ year}{Total\ mid-year\ population} \times 1{,}000$$

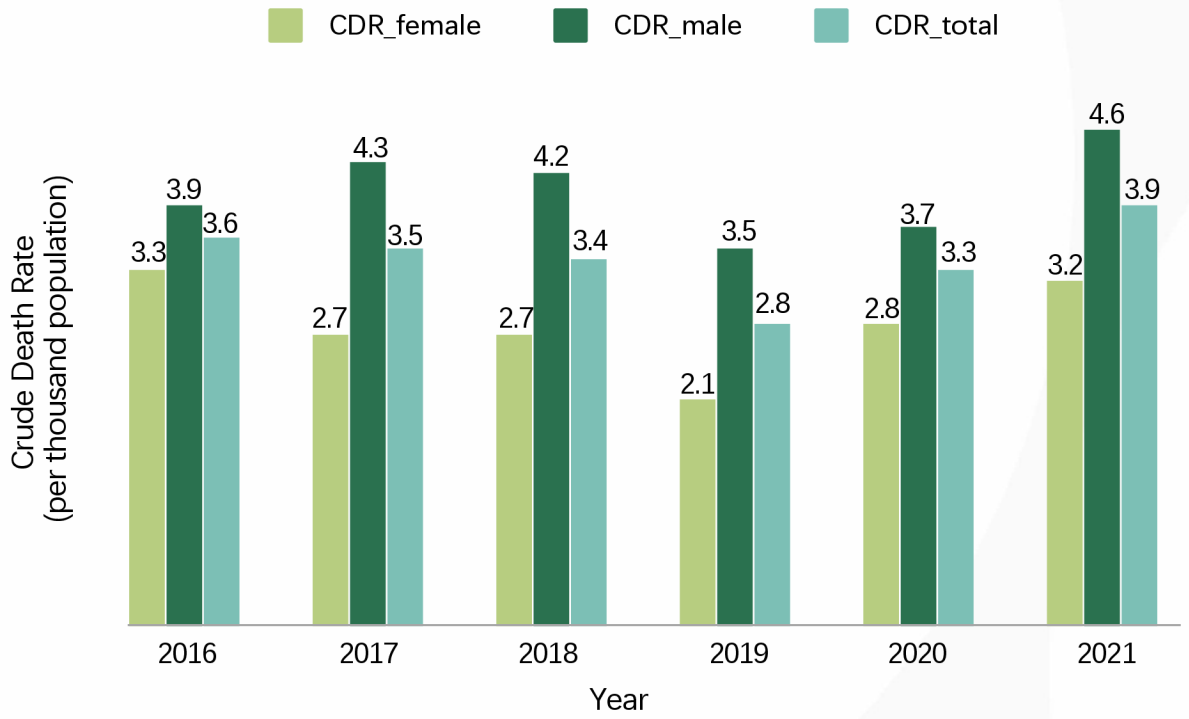
CRUDE DEATH RATE

Number of deaths over a given period divided by the person-years lived by the population over that period. It is expressed as number of deaths per 1,000 population

[12] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6378386/

The crude death rate for 2021 was 4 deaths per 1000 population. CDR showed a slight increase compared to 2020.

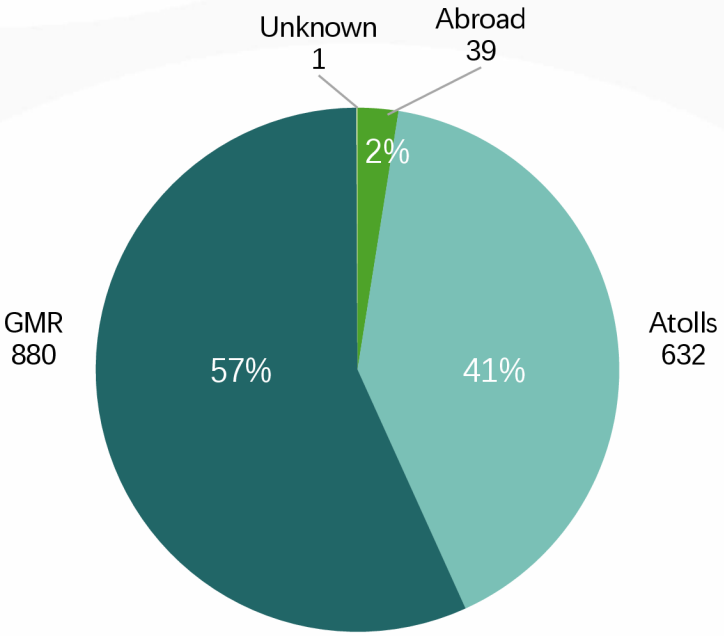
Figure 4-1: Crude Death Rate by gender, 2016- 2021



4.1.1 Deaths by Location

In 2021, most of the deaths occurred in GMR (57%) and 41% of deaths occurred in atolls. About 2% of the deaths took place outside of the country.

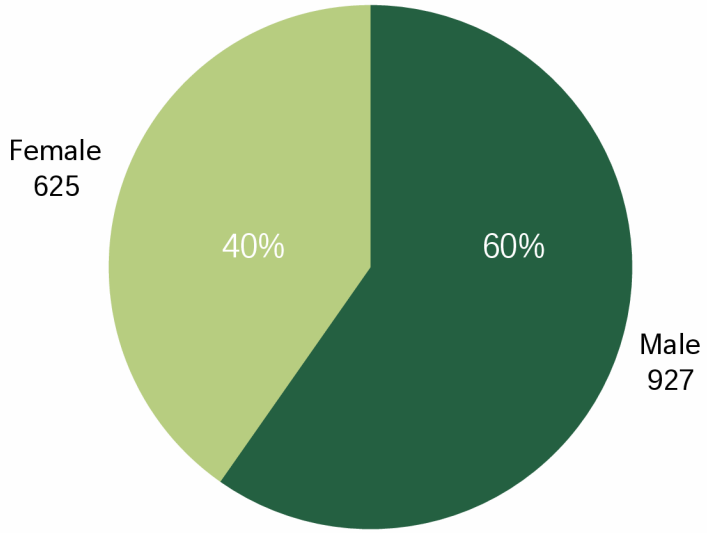
Figure 4-2: Deaths by location, 2021



4.1.2 Deaths by Sex

Breakdown of deaths by sex showed that there were more male deaths (60%) compared to female deaths (40%).

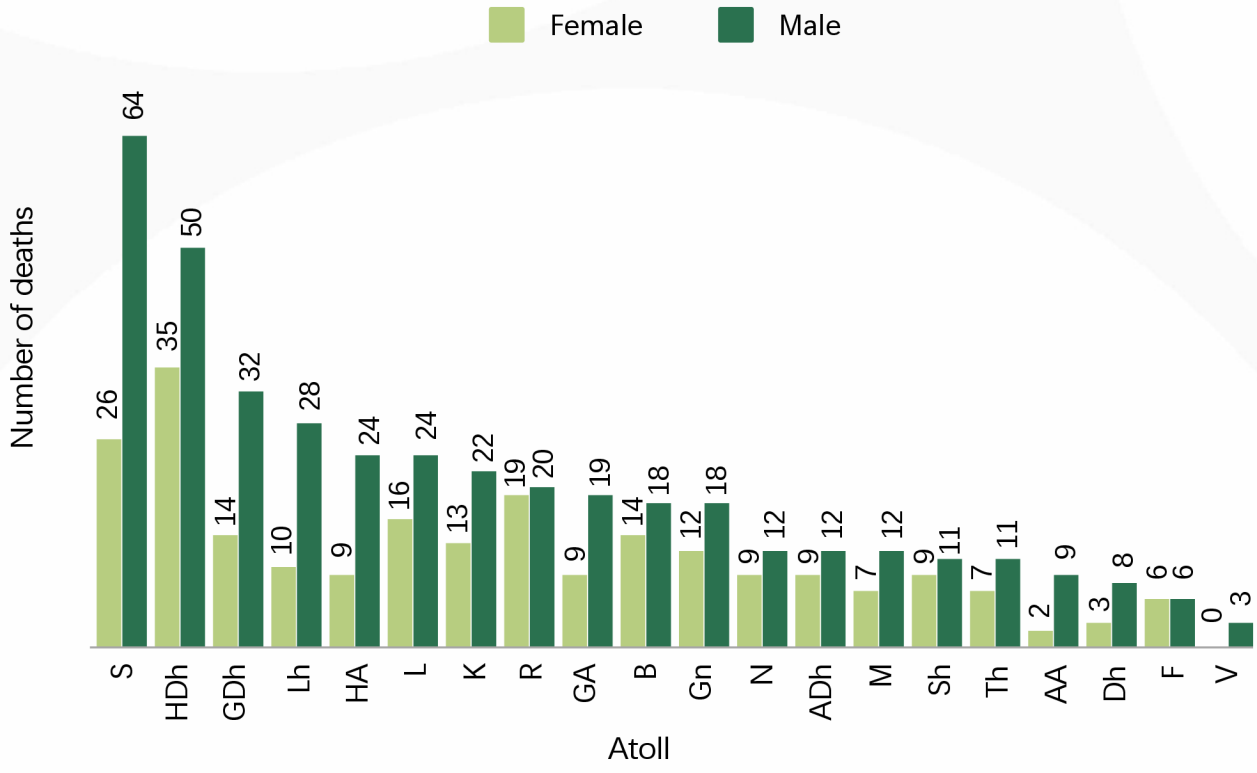
Figure 4-3: Deaths by Sex, 2021



4.1.1.1. Deaths by Atolls

When disaggregated by atolls (excluding GMR and abroad), it was evident that most deaths occurred at S atoll followed by HDh, GDh and Lh atoll.

Figure 4-4: Deaths by atolls and by Sex, 2021



4.1.3 Deaths by Age

Breakdown of deaths by age showed that deaths were high among children below 1 year and among elderly population. Huge contrast was seen in the deaths among elderly men and women within the age band of 70 to 90 where more men had died compared to women.

Figure 4-5: Deaths by age, 2021

4.1.4 Type of Deaths

4.1.4.1 Neonatal Deaths

Neonatal mortality, defined as death within the first 28 days of life, is a core indicator for neonatal health and wellbeing and is becoming a prominent component of overall under-five mortality[13]. Neonatal deaths can be categorized into early neonatal deaths, i.e.; deaths occurring during the first 7 days of life and late neonatal deaths, i.e.; deaths that occur after the 7th day but before the 28th completed day of life.

NEONATAL MORTALITY RATE (NMR)

[NMR] is defined by WHO as "Probability that a child born in a specific year or period will die during the first 28 completed days of life if subject to age-specific mortality rates of that period, expressed per 1000 live births."

[13] https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-019-8118-x

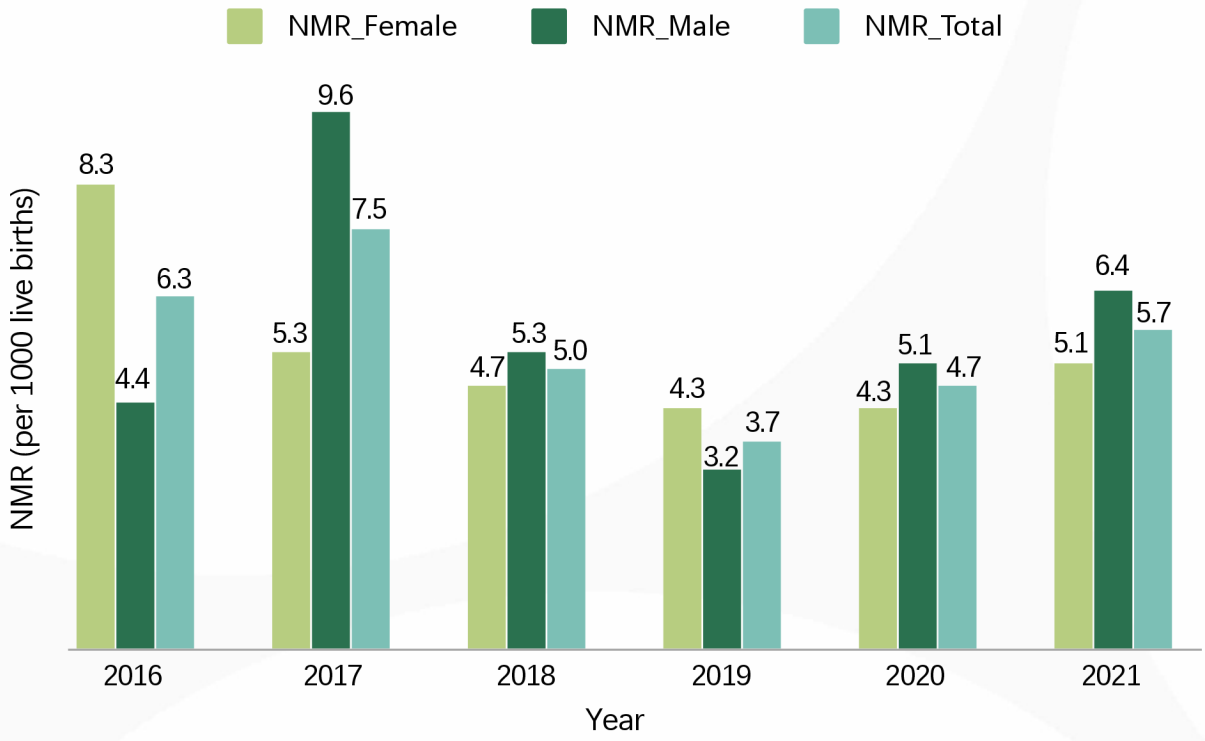
Equation 4.2: Neonatal Mortality Rate

$$NMR = \frac{\text{Number of infant deaths (<28 days)}}{\text{Number of live births}} \times 1{,}000$$

In 2021, a total of 35 deaths were reported as neonatal deaths. Neonatal mortality rate for 2021 was 6 per 1000 live births.

More boys died within 28 days compared to girls. Boys had a higher neonatal mortality rate at 7 deaths per 1000 live male births.

Figure 4-6: Neonatal Mortality Rate: 2016- 2021



4.1.4.2 Post Neonatal Deaths

POST NEONATAL MORTALITY (PNM) RATE

PNM rate is defined by WHO as the probability of dying between 28 days to 364 days of age expressed per 1000 live births.

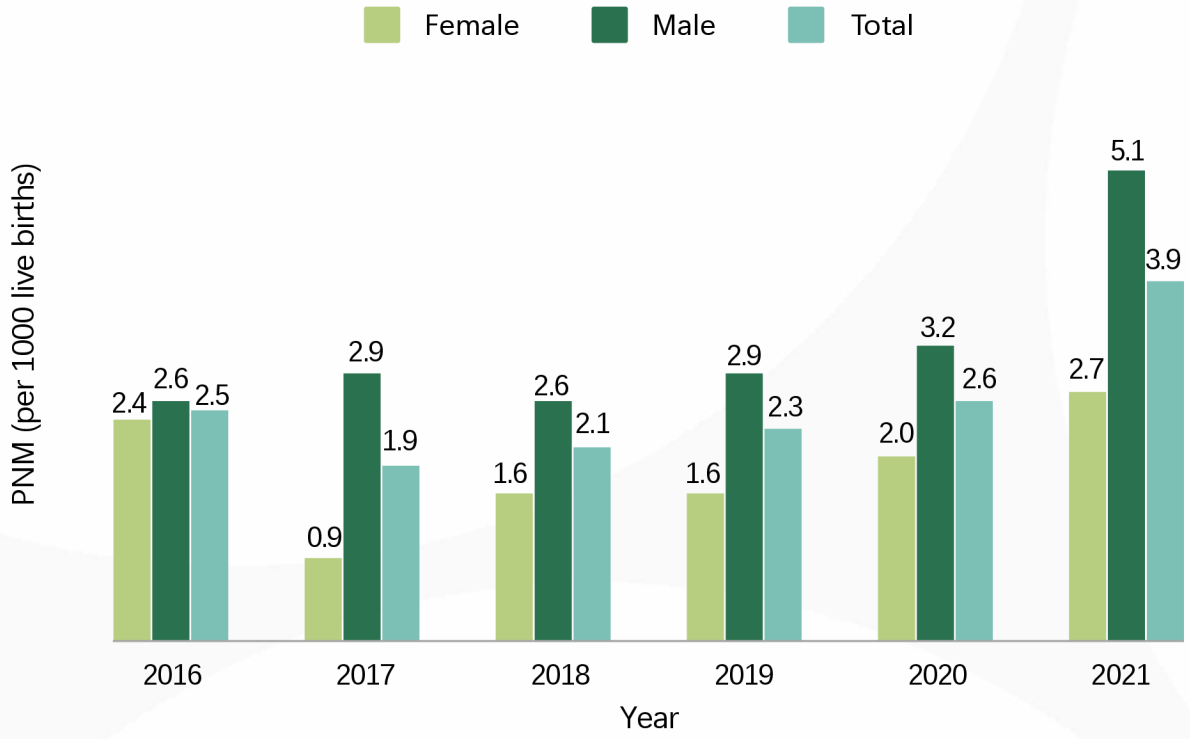
Equation 4.3: Post Neonatal Mortality Rate

$$PNM = \frac{\text{Number of infant deaths (28 – 364 days)}}{\text{Number of live births}} \times 1{,}000$$

In 2021, a total of 23 post-neonatal deaths were recorded. A slightly higher post-neonatal death rate was recorded in 2021 compared to previous 5 years.

Similar to neonatal mortality rate, the post-neonatal mortality rate tends to be slightly higher for males when compared to females.

Figure 4-7: Post neonatal deaths, 2016- 2021



4.1.4.3 Infant Deaths

According to WHO, globally 29 infant deaths per 1000 live births occurred in 2018[14]. The infant mortality rate in Maldives during this time was way below global averages. In 2021, the infant mortality rate was 10 deaths per 1000 live births, recording 9 deaths per 1000 live births less than global averages.

INFANT MORTALITY RATE [IMR]

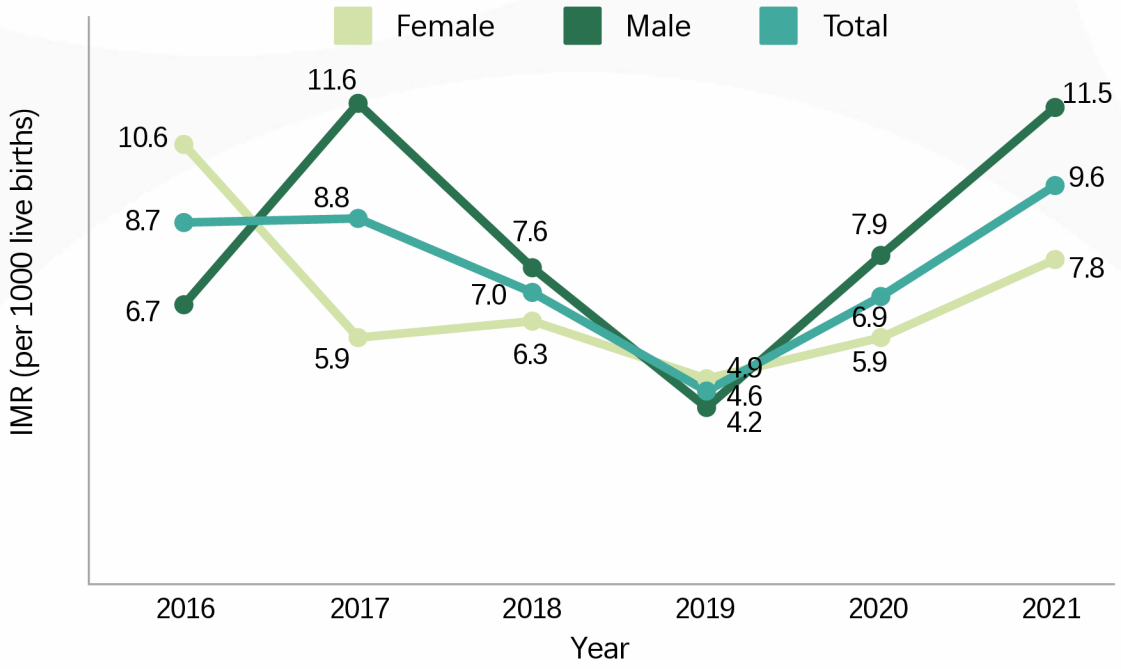
IMR is defined by WHO as "probability of dying between birth and exactly one year of age expressed per 1000 live births".

Equation 4.4: Infant Mortality Rate

$$IMR = \frac{\text{Number of infant deaths (0 - 365 days)}}{\text{Number of live births}} \times 1{,}000$$

Most of the infant deaths were among boys compared to girls. In 2021, the IMR for boys was 12 infant deaths per 1000 live male births while IMR for girls was at 8 infant deaths per 1000 female live births.

Figure 4-8: Infant Mortality Rate, 2016- 2021



[14] https://www.who.int/data/gho/data/themes/topics/indicator-groups/indicator-group-details/GHO/infant-mortality

4.1.4.4 Under 5 Deaths

In 2021, the global under 5 mortality rate (U5MR) was at 38 child deaths per 1000 live births[15]. The Maldives U5MR remained at 11 child deaths per 1000 livebirths indicating that the Maldives U5MR was lower than global average figures. In numbers, a total of 64 children below the age of 5 year died in 2021 in Maldives.

UNDER 5 MORTALITY RATE (U5MR)

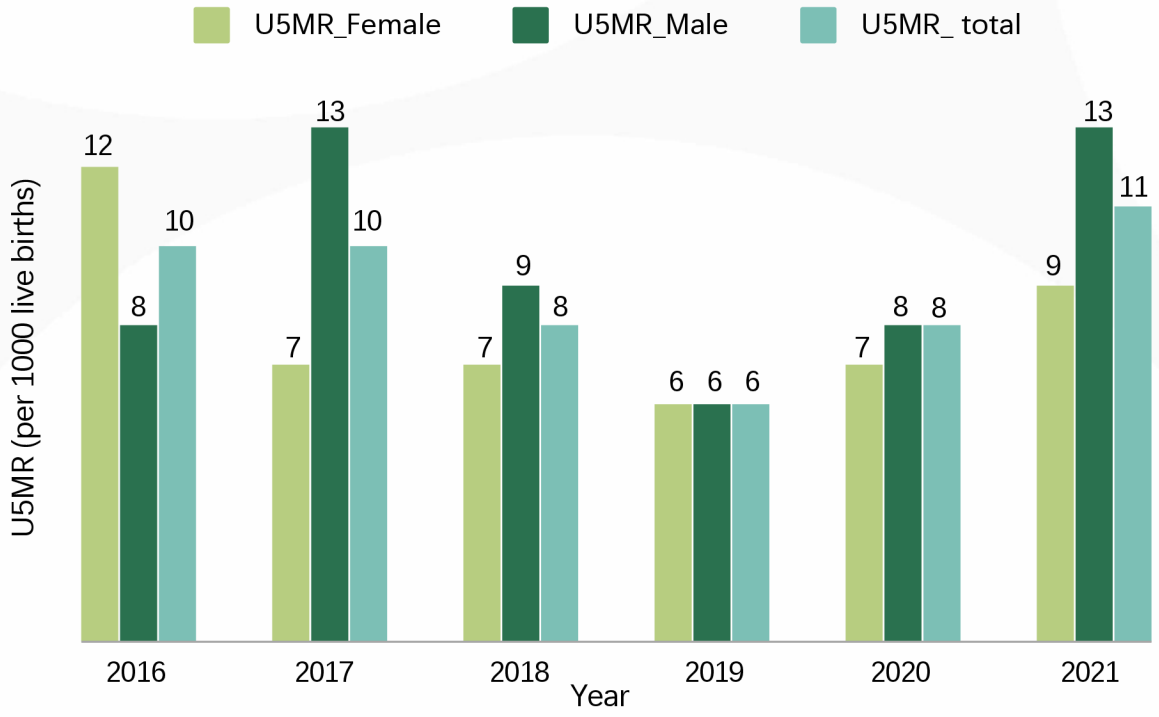
U5MR is defined by WHO as "probability of dying between birth and exactly five years of age expressed per 1,000 live births".

Equation 4.5: Under 5 Mortality Rate

$$U5MR = \frac{\text{Number of deaths (0 days – 5 years)}}{\text{Number of live births}} \times 1{,}000$$

The U5MR for boys was 13 child deaths per 1000 live male births while U5MR for girls was at 9 child deaths per 1000 live female births.

Figure 4-9: Under 5 mortality rate, 2016- 2021



[15] https://data.unicef.org/topic/child-survival/under-five-mortality/.

4.1.4.5 Maternal Deaths

For small countries like Maldives, even one single death can have large impact on Maternal Mortality Ratio (MMR) figures.

MATERNAL MORTALITY RATIO (MMR)

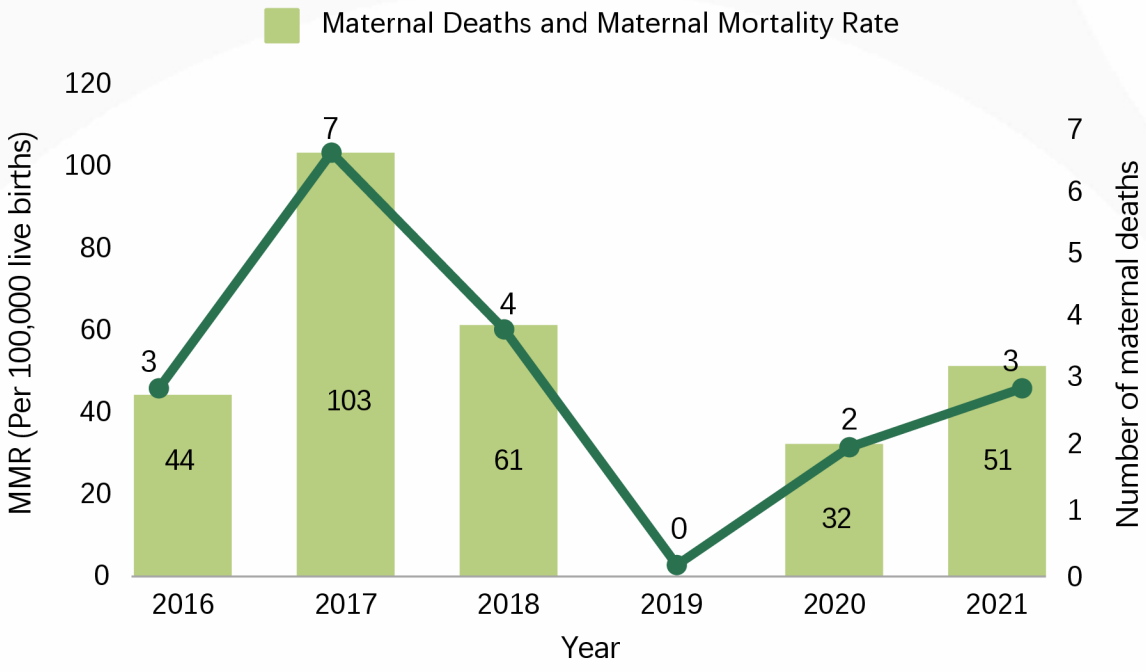
MMR is defined by WHO as "The annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, expressed per 100, 000 live births, for a specified time period"

Equation 4.6: Maternal Mortality ratio

$$MMR = \frac{\text{Number of maternal deaths}}{\text{Number of live births}} \times 100{,}000$$

Maldives saw a decrease in MMR from 81 deaths/100,000 live births in 2009 to 61 maternal deaths /100,000 live births in 2018. In 2019, no maternal death was reported in the country. In 2021, Maldives recorded 3 maternal deaths with an MMR of 32 maternal deaths per 100,000 live births.

Figure 4-10: Maternal deaths and Maternal Mortality Ratio, 2016-2021



4.1.5 Deaths by Global Burden of Disease Groups

Similar to morbidity data, the death data of 2021 showed that there was a double burden of disease in the country, showing that deaths are high were both communicable, maternal, perinatal and nutritional conditions and non -communicable disease categories.

Table 4-1: Maternal deaths and Maternal Mortality Ratio, 2016-2021

GBD Categories	Female	Male	Total
Non-communicable diseases	343	471	814
Communicable, maternal, perinatal and nutritional conditions	187	234	421
All other groups (including Ill-defined diseases)	68	155	223
Injuries	26	60	86
Not Stated	1	6	7
Not categorized	0	1	1
Total	**625**	**927**	**1,552**

According to Table 4.8, among the top leading causes of death, 26% of the deaths were due to cardiovascular diseases. This was followed by deaths due to other emerging diseases (this constituted mainly to COVID-19 related deaths).

Table 4-2: Top leading causes of death based on Global Burden of Disease Categories, 2021

GBD sub-groups	All Female deaths		All Male deaths		All deaths	
	#	%	#	%	#	%
Cardiovascular diseases	140	23%	249	28%	389	26%
Other emerging diseases	90	15%	143	16%	233	15%
Not categorized / Multiple sub-categories	68	11%	152	17%	220	15%
Respiratory diseases	64	10%	69	8%	133	9%
Infectious and parasitic diseases	58	10%	39	4%	97	6%
Malignant neoplasms	45	7%	51	6%	96	6%
Unintentional injuries	23	4%	47	5%	70	5%
Genitourinary diseases	22	4%	20	2%	42	3%
Perinatal conditions	17	3%	22	2%	39	3%

GBD sub-groups	All Female deaths		All Male deaths		All deaths	
	#	%	#	%	#	%
Respiratory infections	16	3%	23	3%	39	3%
Endocrine disorders	15	2%	22	2%	37	2%
Diabetes mellitus	14	2%	16	2%	30	2%
Neuropsychiatric conditions	17	3%	11	1%	28	2%
Digestive diseases	7	1%	16	2%	23	2%
Intentional injuries	3	0%	12	1%	15	1%
Congenital anomalies	3	0%	3	0%	6	0%
Nutritional deficiencies	2	0%	3	0%	5	0%
Maternal conditions	3	0%	0	0%	3	0%
Other neoplasms	0	0%	3	0%	3	0%
Skin diseases	2	0%	1	0%	3	0%
Oral conditions	1	0%	0	0%	1	0%

Disaggregation of deaths by sub-group showed that 20% of the deaths were due to multiple sub-categories. This was followed by COVID-19 related conditions.

Table 4-3: Top 20 leading causes of death based on GBD sub-groups (subgroup 2), 2021

GBD sub-groups	All Female deaths		All Male deaths		All deaths	
	#	%	#	%	#	%
Not categorized / Multiple sub-categories	101	17%	201	22%	302	20%
COVID-19 related conditions	90	15%	143	16%	233	15%
Other cardiovascular diseases	60	10%	97	11%	157	10%
Cerebrovascular disease	43	7%	58	6%	101	7%
Ischemic heart diseases	24	4%	77	9%	101	7%
Other respiratory diseases	37	6%	48	5%	85	6%
Other infectious diseases	47	8%	33	4%	80	5%
Chronic obstructive pulmonary disease	27	4%	18	2%	45	3%
Lower respiratory infections	15	2%	21	2%	36	2%
Other unintentional injuries	16	3%	19	2%	35	2%
Skin diseases	2	0%	1	0%	3	0%

GBD sub-groups	All Female deaths		All Male deaths		All deaths	
	#	%	#	%	#	%
Oral conditions	1	0%	0	0%	1	0%
Nephritis and nephrosis	14	2%	15	2%	29	2%
Drownings	6	1%	22	2%	28	2%
Other digestive diseases	7	1%	16	2%	23	2%
Hypertensive heart disease	9	1%	13	1%	22	1%
Other neuropsychiatric disorders	16	3%	6	1%	22	1%
Other malignant neoplasms	12	2%	6	1%	18	1%
Other perinatal conditions	5	1%	9	1%	14	1%
Trachea, bronchus, lung cancers	4	1%	10	1%	14	1%
Birth asphyxia and birth trauma	7	1%	6	1%	13	1%
Liver cancer	4	1%	8	1%	12	1%

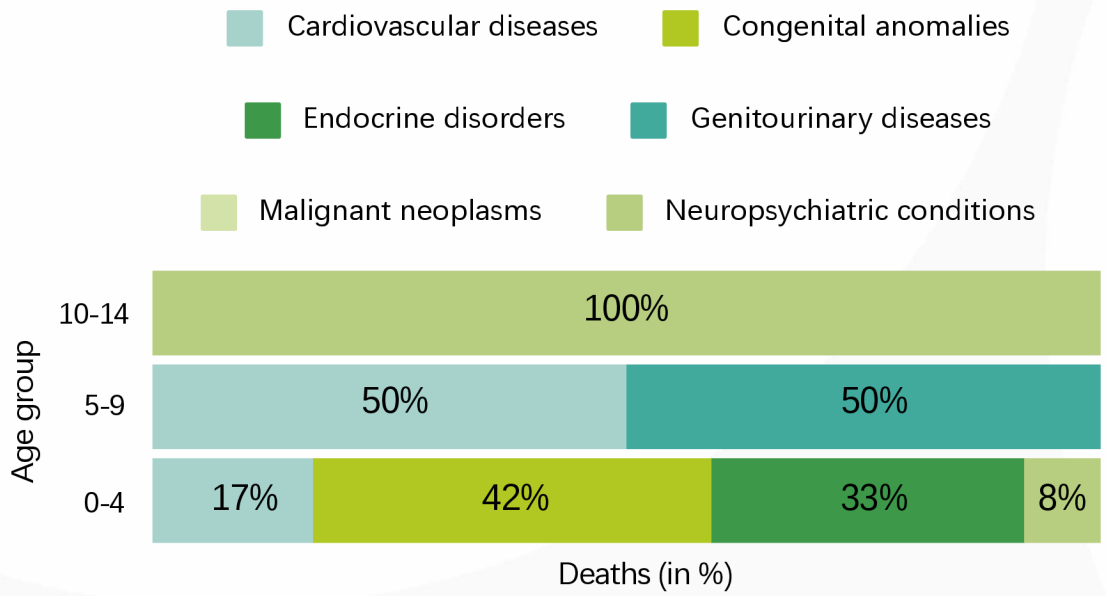
4.2 Mortality across Life Stage

This section includes the leading causes of disease burden in terms of deaths across different age groups by sex and locality.

4.2.1 Infants and Children (Aged 0-14 Years)

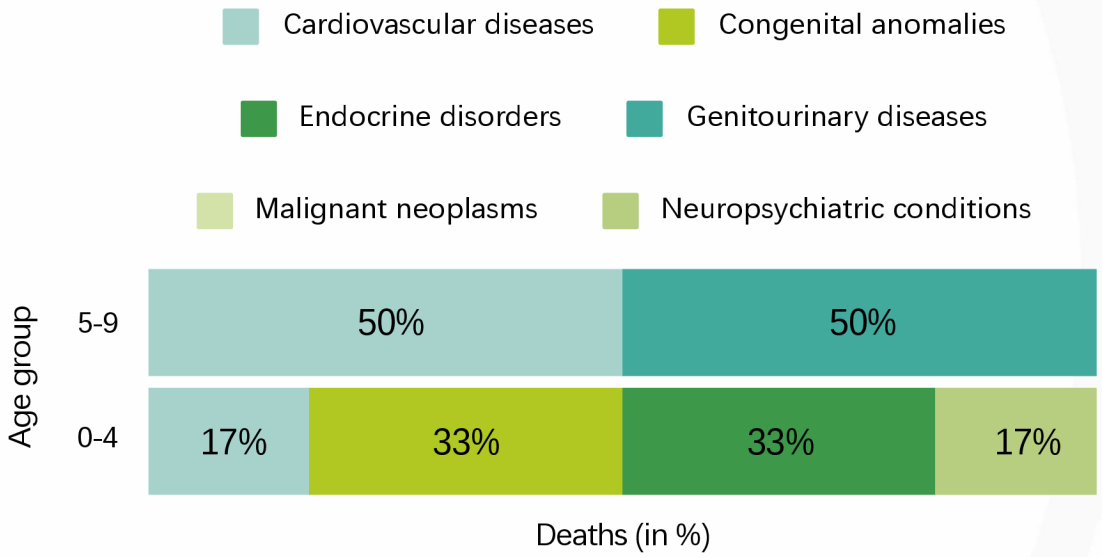
Among children 0-4 years, congenital anomalies were among the main burden of disease. Among children 5-9 years, cardiovascular disease and genitourinary disease was the main cause of death. For children between the age group 10-14 years, only one death was recorded and this was due to a neuropsychiatric condition.

Figure 4-11: Top 5 leading causes of all death for infants and children aged 0-14 years, 2021



For girls aged 0-4 years the highest cause of death was congenital anomalies and endocrine disorders, while for 5 – 9 years of age it was cardiovascular diseases and genitourinary disease. No female death was recorded for the age group of 10-14 years.

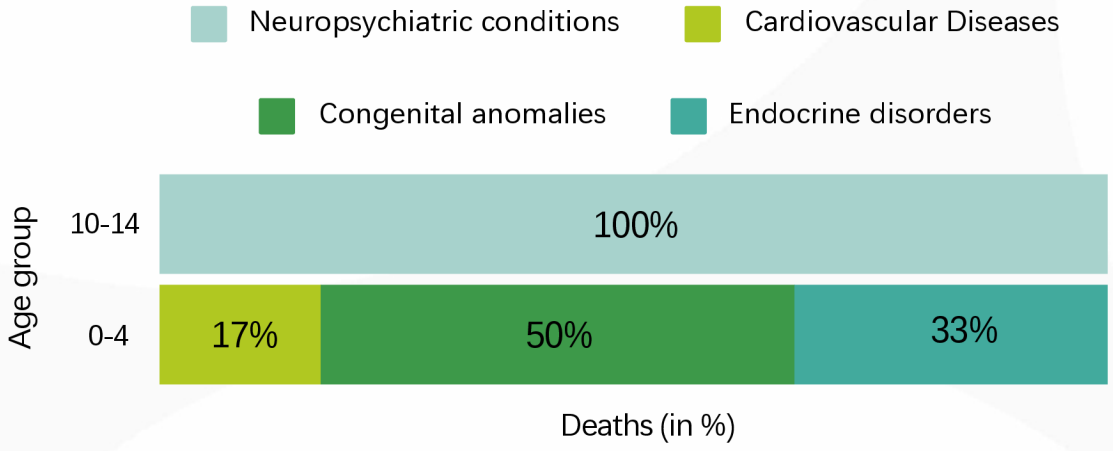
Figure 4-12: Top 5 leading causes of female death for infants and children aged 0-14 years, 2021



Note: No deaths have been reported for females aged 10-14 years

For boys below 5 years, the main cause of death was due to congenital anomalies.

Figure 4-13: Top 5 leading causes of male deaths for infants and children aged 0-14 years, 2021

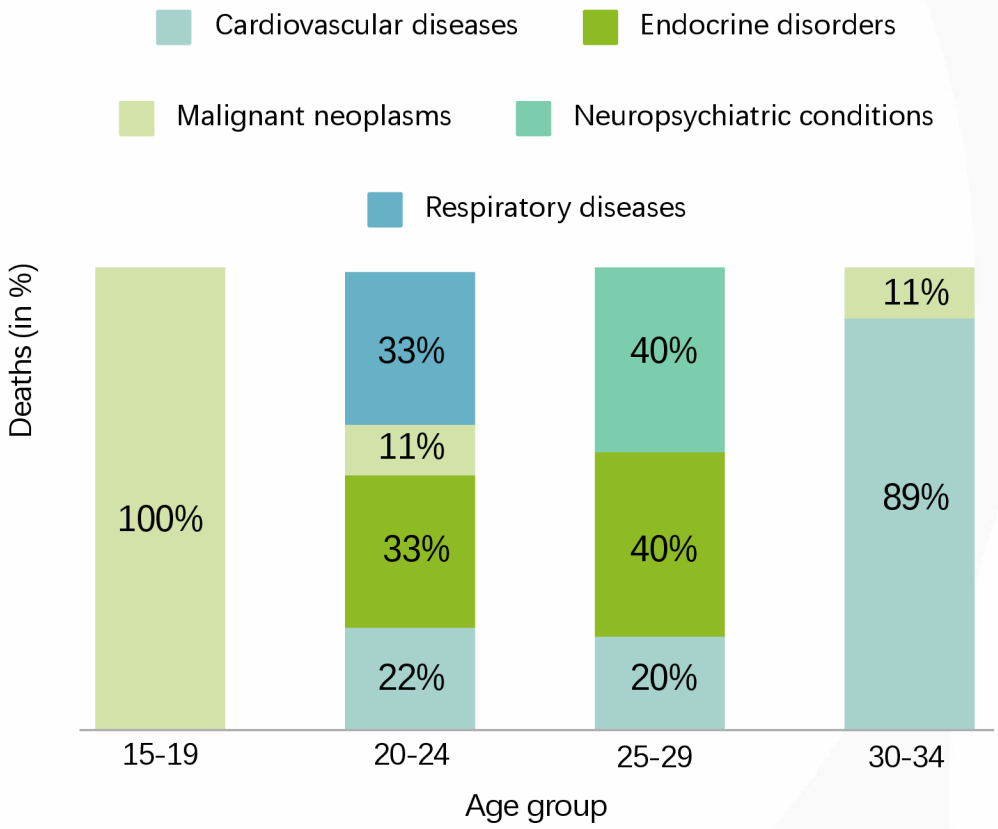


Note: No deaths have been reported for males aged 5-9 years

4.2.2 Young People (Aged 15 – 34 Years)

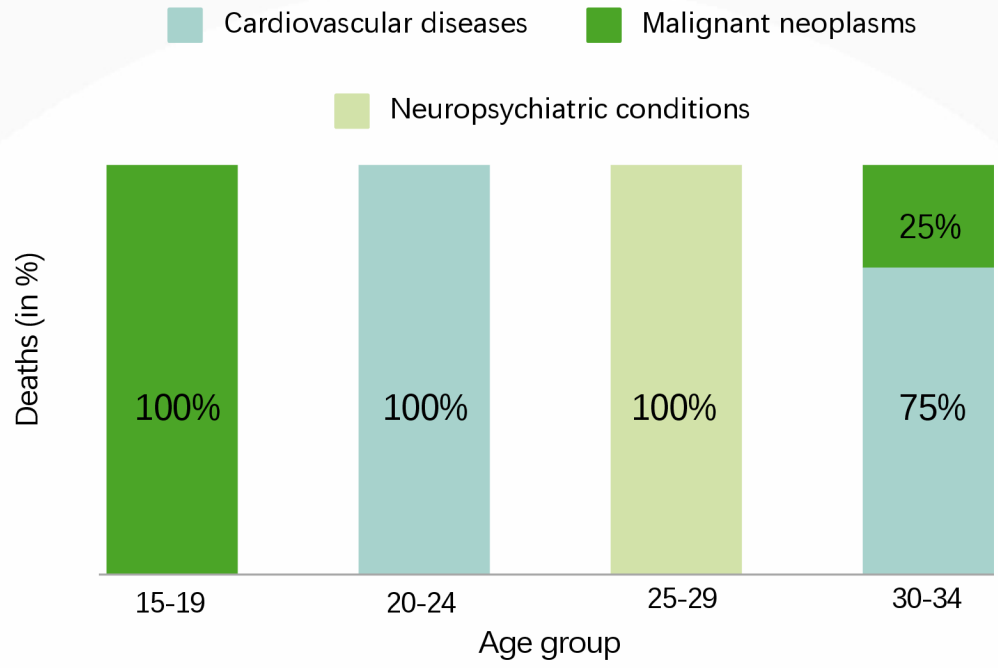
This age group reflects the youth population of the country. Among adolescents (15-19 years), malignant neoplasms (contributing to cancers) were the main cause of death. With increased age, cardiovascular disease became the main cause of death and was predominant among 30-34 years of youth.

Figure 4-14: Top 5 leading causes of all death for youth population aged 15-34 years, 2021



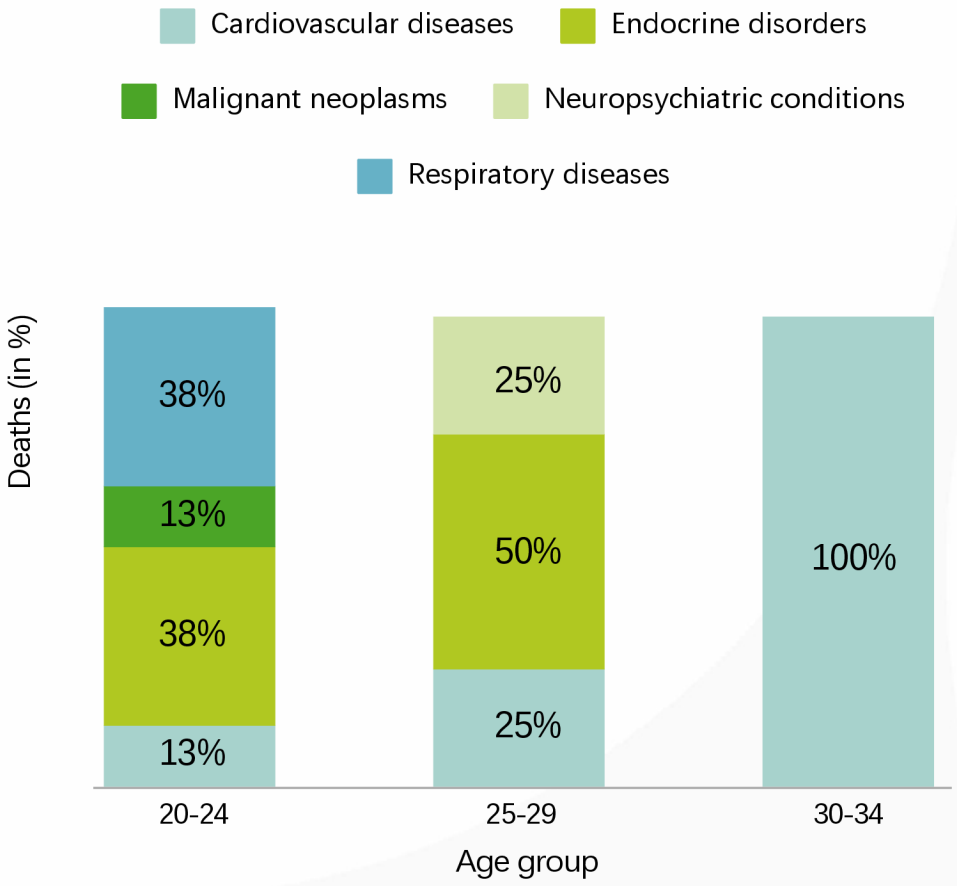
Among female aged 15-19 years, malignant neoplasm was the main cause of death. This was followed by cardiovascular deaths among 20-24 years. Among women of 30-34 years, cardiovascular disease was the main cause of death. Deaths among women 25-29 years was mostly due to neuropsychiatric diseases and endocrine disorders.

Figure 4-15: Top leading causes of female death for youth population aged 15-34 years, 2021



Unlike females, most of the male deaths among 20-24 years were characterized by respiratory disease and endocrine disorders. Endocrine disorder was the main cause of death among young people between the ages of 25-29 years. Deaths due to cardiovascular disease increased with age from 25 years onwards and was highest among 30–34 year-old males.

Figure 4-16: Top 5 leading causes of male death for youth population aged 15-34 years, 2021

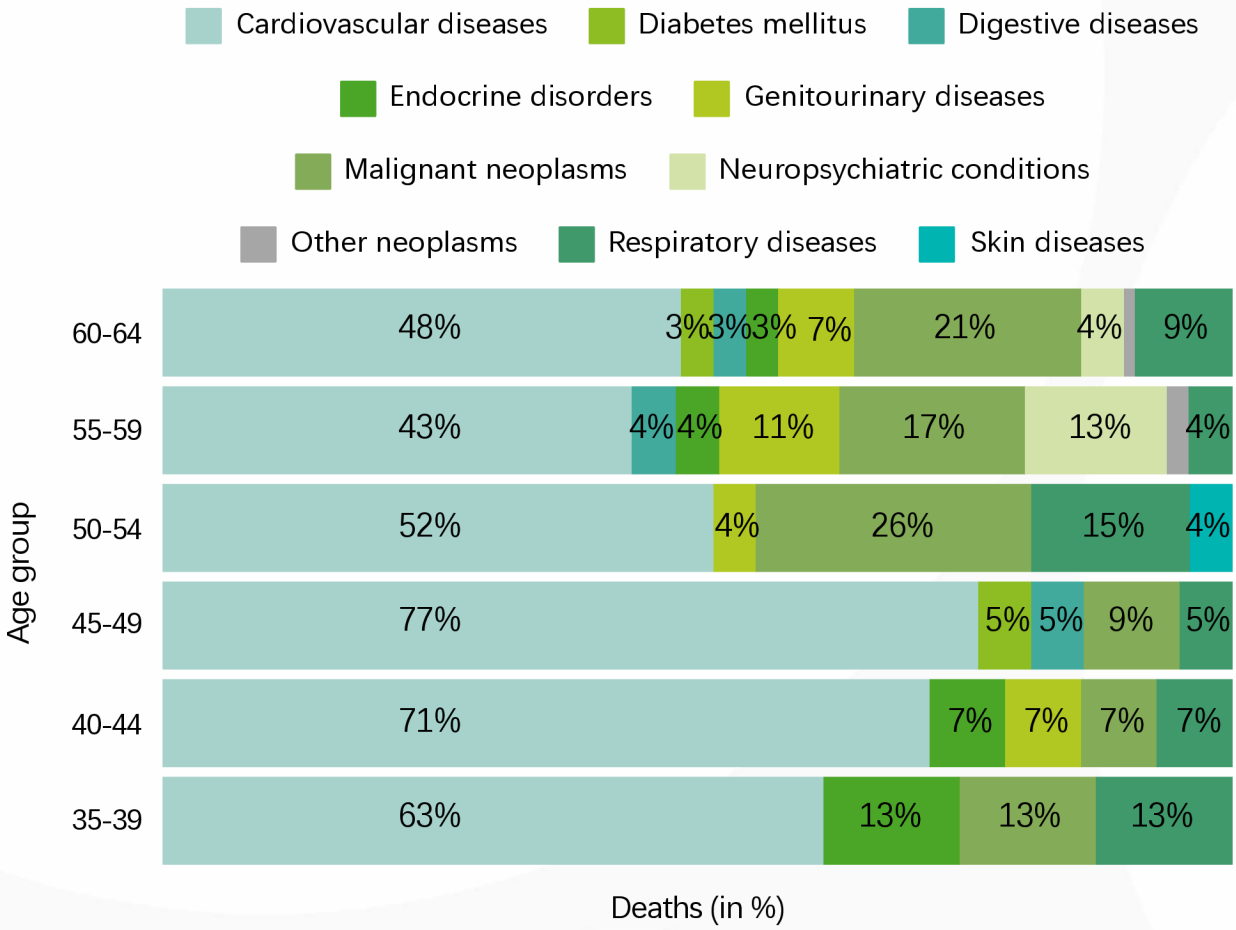


Note: No deaths have been reported for males aged 15-19 years

4.2.3 Adults (Aged 35 - 64 Years)

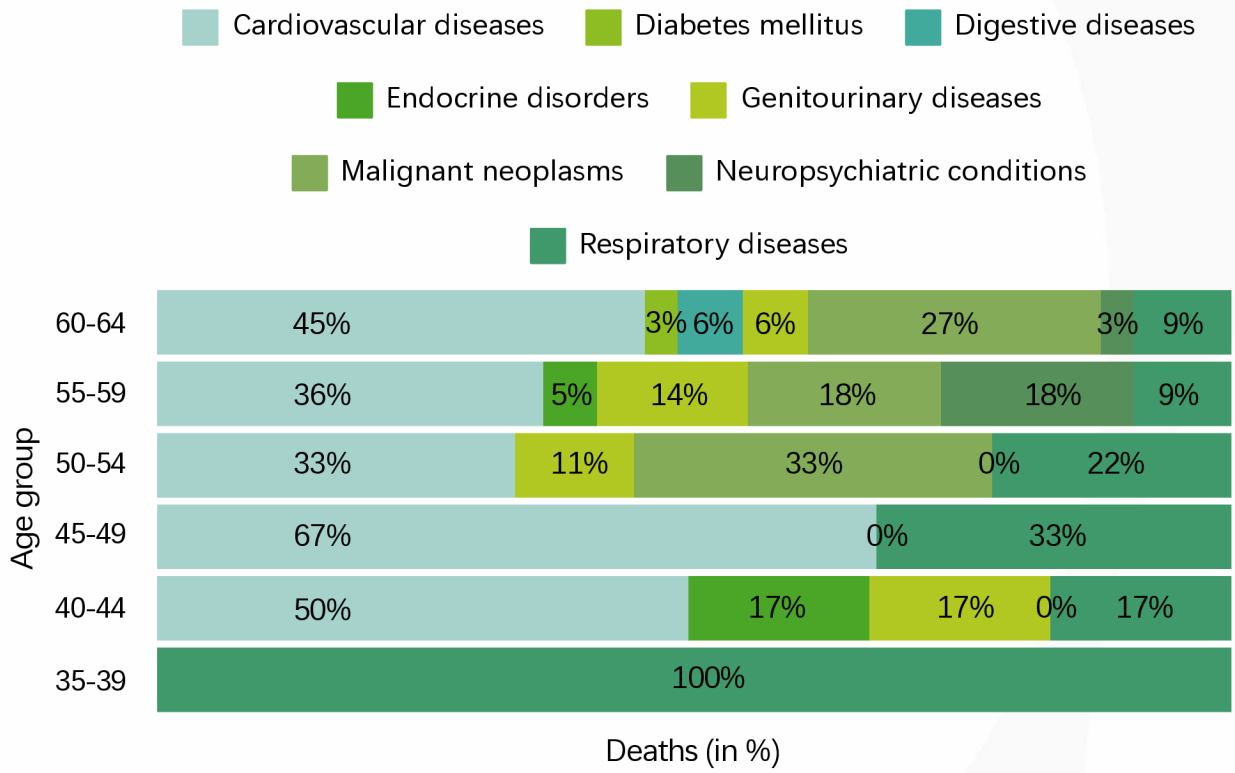
Deaths among adults were mainly due to cardiovascular diseases. This was followed by deaths due to malignant neoplasm.

Figure 4-17: Top 5 leading causes of all death for adults aged 35-64 years, 2021



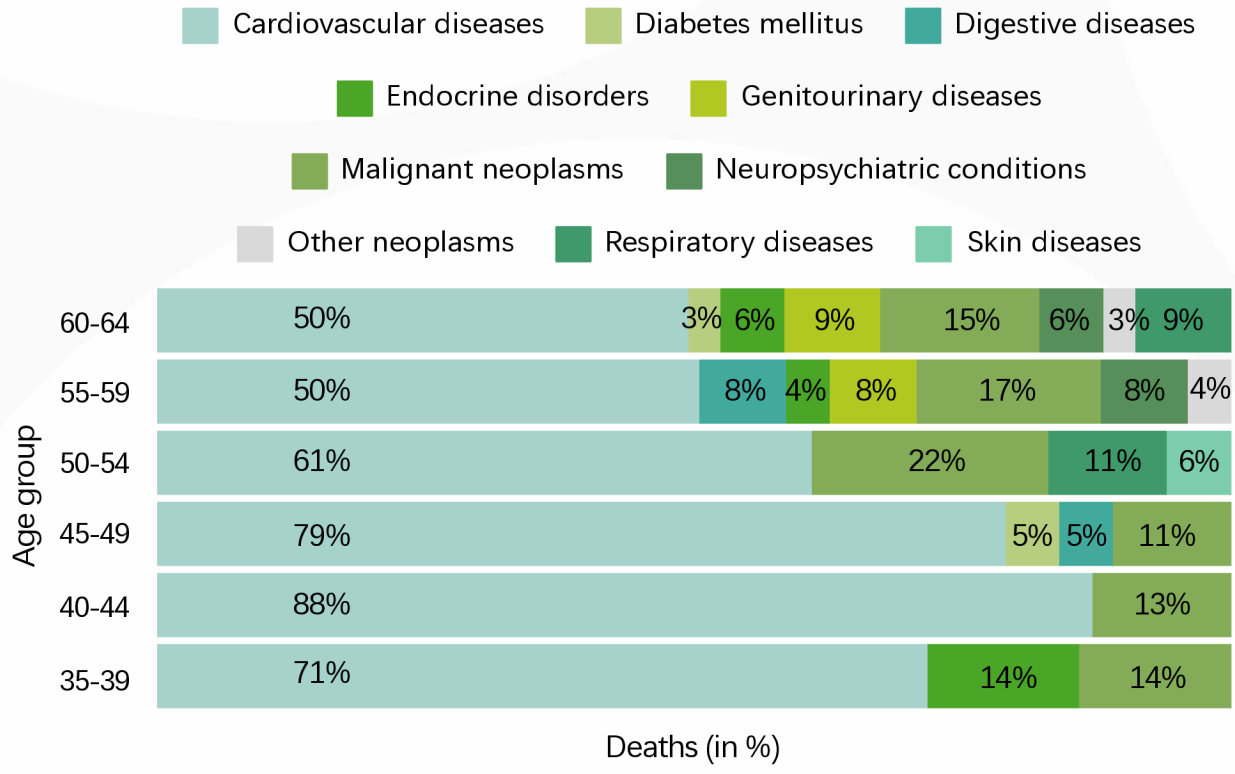
Deaths among women of 35-39 years was only due to respiratory diseases. Women in the age group 40-44 years died mainly due to cardiovascular disease. This was the main prominent cause of death among women aged 45-64 years as well. Apart from this, 1 in 3 people (33%) within the age group of 45-49 years died due to respiratory disease. With Increasing age, malignant neoplasm also had a significant contribution of the cause of death.

Figure 4-18: Top 5 leading causes of female death for adults aged 35-64 years, 2021



For male adults, the main cause of death was similar to women and was due to cardiovascular disease. This was followed by deaths due to malignant neoplasm.

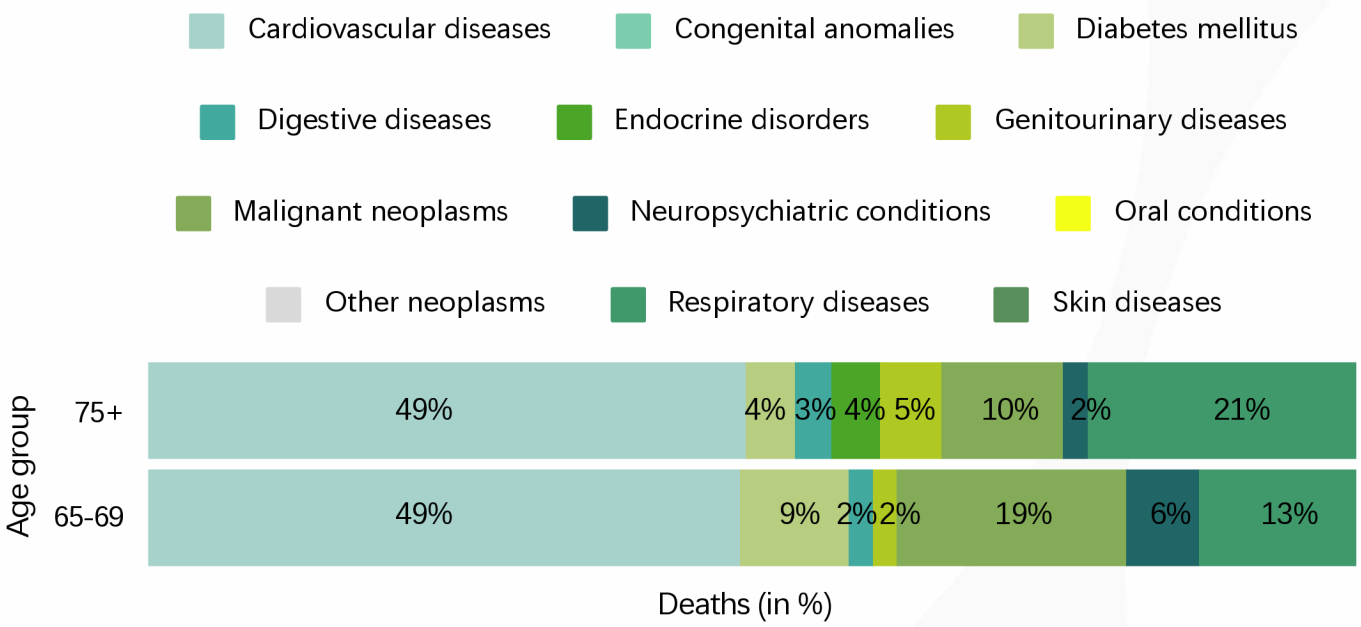
Figure 4-19: Top 5 leading causes of male deaths for adults aged 35-64 years, 2021



4.2.4 Elderly (Aged 65 Years and Above)

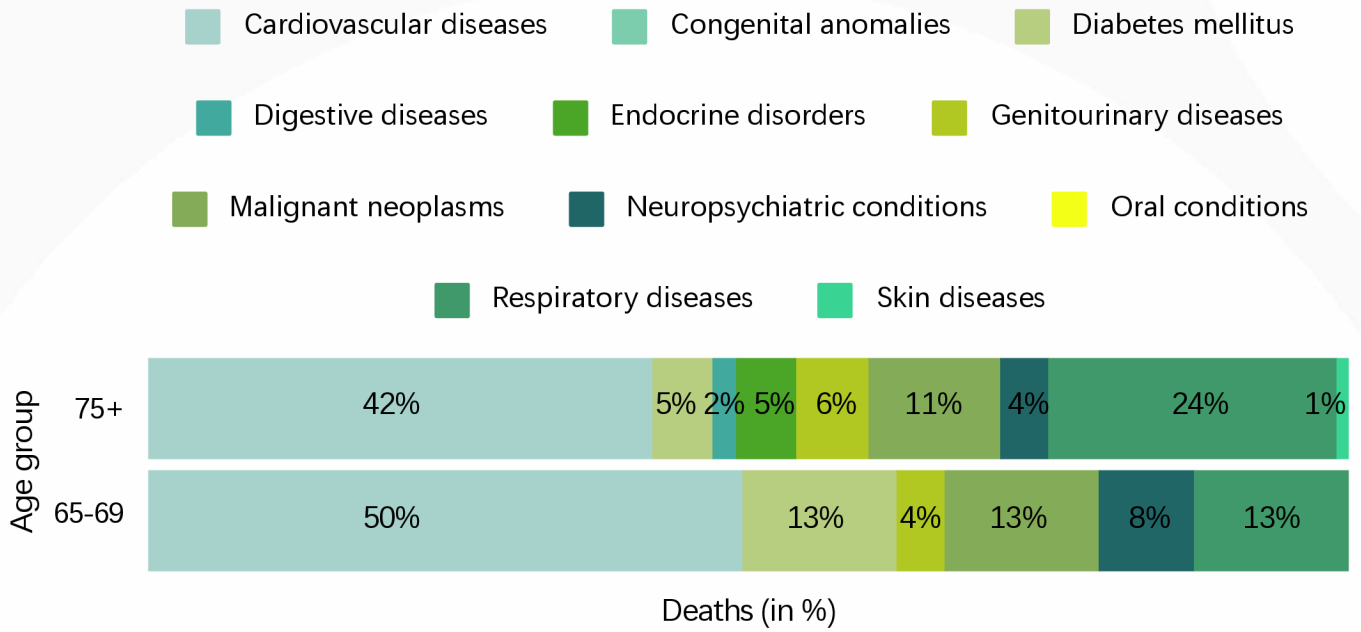
Among elderly in 2021, the highest burden of death in this age group was from cardiovascular diseases. A high proportion of the elderly also died due to malignant neoplasm, respiratory diseases and diabetes mellitus.

Figure 4-20: Top 5 leading causes of all death for elderly aged 65 and above, 2021



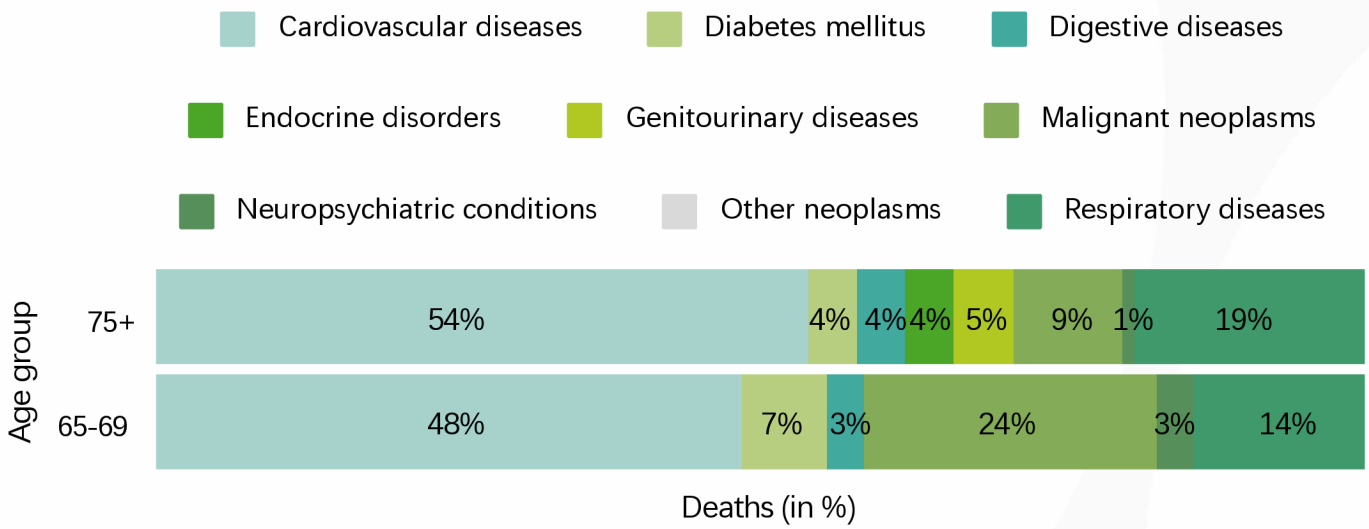
Among elderly women, cardiovascular disease was the main cause of death followed by respiratory diseases. A significant proportion of female also shared the burden of death due to malignant neoplasm and diabetes.

Figure 4-21: Top 5 leading causes of female death for elderly aged 65 and above, 2021



For elderly men, the most common reason for death included cardiovascular disease across all age groups. This was followed by deaths due to malignant neoplasm, respiratory disease and diabetes.

Figure 4-22: Top 5 leading causes of male death for elderly aged 65 and above, 2021



4.3 Deaths by Main Disease Conditions

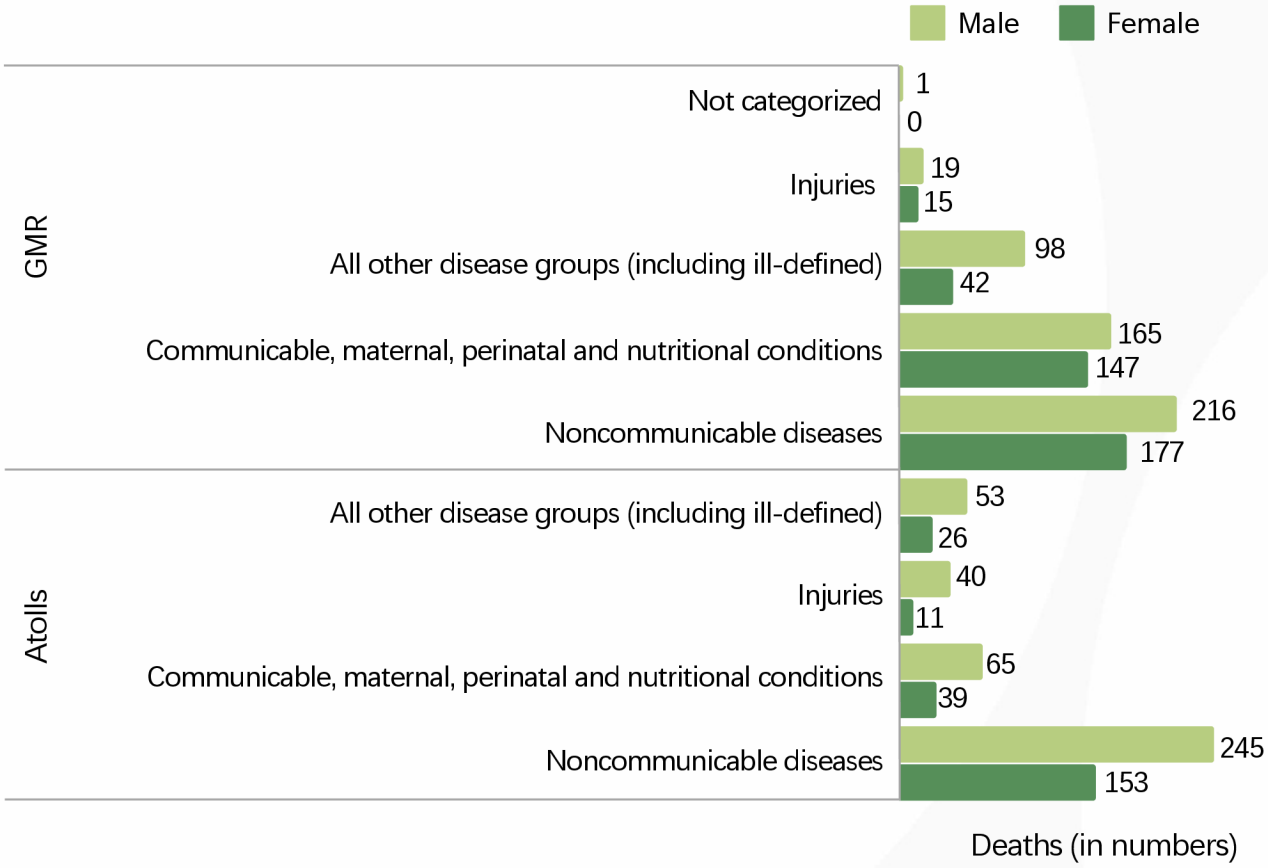
From the total of 1,553 deaths among the Maldives population, 1,513 deaths occurred in the country itself. Out of the deaths that took place in the country, 791 deaths were due to non-communicable disease, 416 were due to communicable, maternal, perinatal and nutritional conditions and 85 deaths were due to injuries. It was also notable that more male deaths were reported in 2021 for all disease groups.

Table 4-4: Deaths by location, disease group and sex, 2021

GBD Categories	Female	Male	Total
Abroad	14	25	39
Noncommunicable diseases	13	10	23
Communicable, maternal, perinatal and nutritional conditions	1	4	5
Injuries	0	1	1
All other disease groups (including ill-defined)	0	4	4
GBD not stated deaths	0	6	6
Atolls	229	403	632
Noncommunicable diseases	153	245	398
Communicable, maternal, perinatal and nutritional conditions	39	65	104
Injuries	11	40	51
All other disease groups (including ill-defined)	26	53	79
GMR	381	499	880
Noncommunicable diseases	177	216	393
Communicable, maternal, perinatal and nutritional conditions	147	165	312
Injuries	15	19	34
All other disease groups (including ill-defined)	42	98	140
Not categorized	0	1	1
Unknown	0	1	1
GBD not stated deaths	0	1	1

** Deaths with unknown location (1) have been excluded in this table*

Figure 4-23: Deaths occurred in Maldives by disease group and sex, 2021



Among children the main deaths were due to communicable, maternal, perinatal and nutritional conditions. The non-communicable diseases generally had the highest number of deaths in all age groups from 18 years of age onwards. The deaths resulting due to non-communicable diseases was more among men compared to women.

Table 4-5: Deaths by main disease conditions, sex and age groups, 2021

GBD Categories	Non-communicable diseases	Communicable, maternal, perinatal and nutritional conditions	Injuries	All other disease groups (including ill-defined)	Not categorized	Total
Female	330	186	26	68	0	610
0-17	9	23	2	2	0	36
18-35	7	7	3	1	0	18
36-53	17	15	5	4	0	41
54-71	91	44	5	16	0	156
72-89	186	90	11	42	0	329
90-107	20	7	0	3	0	30

GBD Categories	Non-communicable diseases	Communicable, maternal, perinatal and nutritional conditions	Injuries	All other disease groups (including ill-defined)	Not categorized	Total
Male	459	228	59	145	1	902
0-17	7	25	7	6	0	45
18-35	18	6	22	16	0	62
36-53	47	18	13	28	0	106
54-71	113	58	8	32	1	212
72-89	237	105	9	52	0	403
90-107	37	16	0	11	0	64
Not Stated	2	2	0	6	0	10

Deaths by calendar months showed a gradual increase in deaths from January to December. May 2021 recorded the highest number of deaths due to communicable, maternal, perinatal and nutritional conditions. The month of October reported the highest number of deaths in non-communicable diseases.

Table 4-6: Main disease group deaths by month, 2021

GBD Categories	Non-communicable diseases	Communicable, maternal, perinatal and nutritional conditions	Injuries	All other disease groups (including ill-defined)	Not categorized	Total
January	62	19	4	13	0	98
February	55	19	10	18	0	102
March	60	27	4	13	0	104
April	77	22	9	21	0	129
May	59	104	4	19	0	186
June	76	73	7	22	0	178
July	61	27	8	19	0	115
August	70	16	6	14	0	106
September	67	20	6	21	0	114
October	83	29	11	24	1	148
November	59	33	7	17	0	116
December	62	27	9	18	0	116
Total	**791**	**416**	**85**	**219**	**1**	**1,512**

Note: Only deaths occurred in Maldives were included

The main cause of death in Maldives for 2021 was due to non-communicable diseases. This figure rises with the redistribution of garbage codes between related categories.

Table 4-7: Deaths by sub-disease groups of GBD and sex, 2021

GBD Categories	Female	Male	Total
Non-communicable diseases	330	461	791
Cardiovascular disease	140	249	389
Respiratory diseases	64	69	133
Malignant neoplasms	45	51	96
Genitourinary diseases	22	20	42
Endocrine disorders	15	22	37
Diabetes mellitus	14	16	30
Neuropsychiatric conditions	17	11	28
Digestive diseases	7	16	23
Congenital anomalies	3	3	6
Other neoplasms	0	3	3
Skin diseases	2	1	3
Oral conditions	1	0	1
Communicable, maternal, perinatal and nutritional conditions	186	230	416
Other emerging diseases	90	143	233
Infectious and parasitic diseases	58	39	97
Perinatal conditions	17	22	39
Respiratory infections	16	23	39
Nutritional deficiency	2	3	5
Maternal conditions	3	0	3
All other disease groups (including ill-defined)	68	151	219
Not categorized	68	151	219
Injuries	26	59	85
Unintentional injuries	23	47	70
Intentional injuries	3	12	15
Not categorized	0	1	1
Not categorized	0	1	1

The following sections focused on the top 5 NCDs, and communicable, maternal, perinatal and nutritional conditions in details.

4.3.1 Non-Communicable Diseases (NCDs)

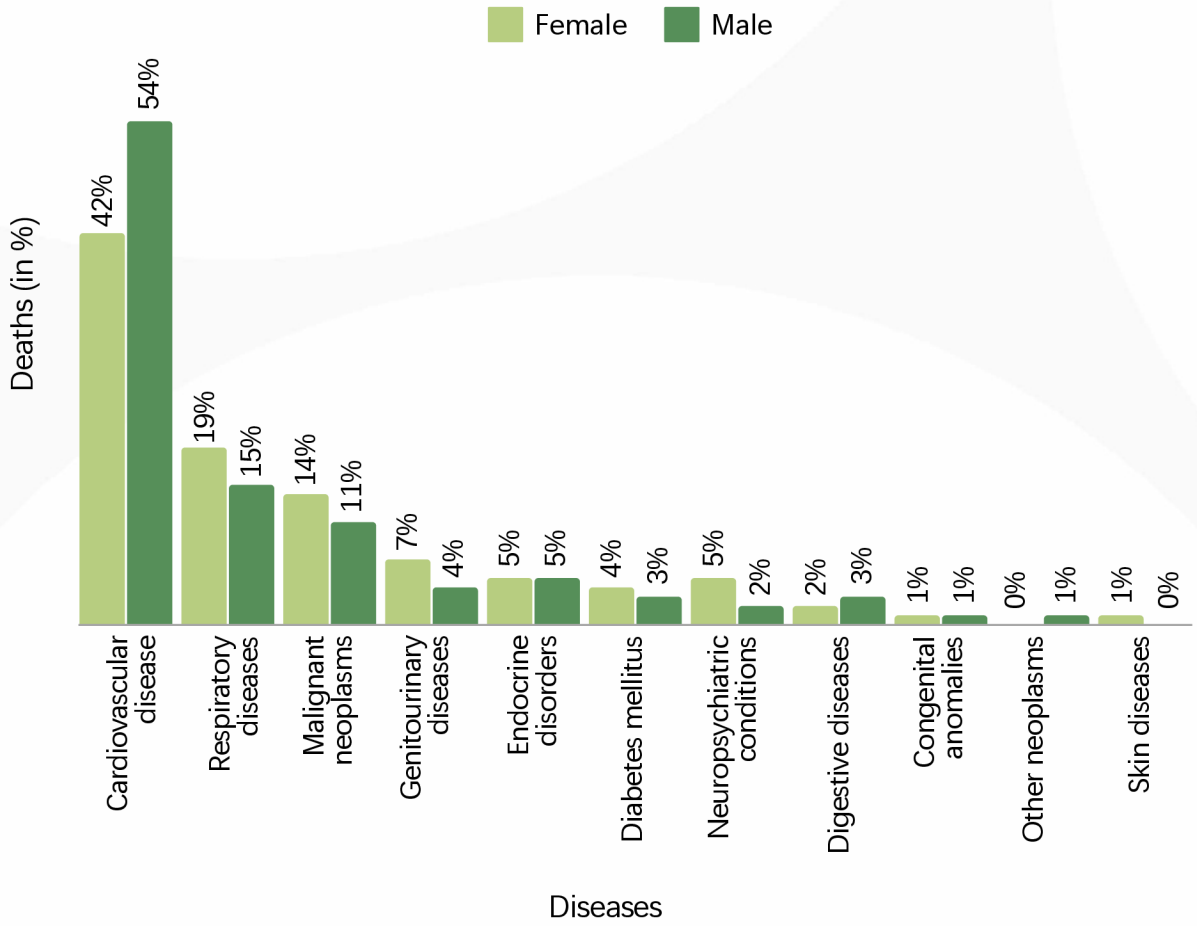
NCDs accounted for 791 deaths in the country (out of 1552 deaths). Out of the NCDs, the top 5 NCDs are summarized below.

Table 4-8: Deaths due to NCDs in numbers by sex, 2021

GBD Categories	Female	Male	Total
Top 5 Non-communicable diseases			
Cardiovascular disease	140	249	389
Respiratory diseases	64	69	133
Malignant neoplasms	45	51	96
Genitourinary diseases	22	20	42
Endocrine disorders	15	22	37

Out of the total NCDs, cardiovascular disease was the top main cause of death for both men and women.

Figure 4-24: Non-communicable diseases in percent, 2021



For different NCD groups, deaths across atolls and GMR varied. In atolls, other cardiovascular diseases were the main cause of death among NCD disease while in GMR, cerebrovascular disease was the main cause of death for NCD deaths.

Table 4-9: Top NCD deaths by location, 2021

Disease sub-groups	Atolls	GMR	Grand Total
Other cardiovascular diseases	121	36	157
Cerebrovascular disease	32	69	101
Ischemic heart disease	47	54	101
Other respiratory disease	42	43	85
Not categorized / Multiple sub-categories	37	36	73
Chronic obstructive pulmonary disease	29	16	45
Nephritis and nephrosis	13	16	29
Other digestive disease	7	16	23
Hypertensive heart disease	19	3	22
Other neuropsychiatric disease	9	13	22
Other malignant neoplasms	3	15	18
Trachea, bronchus, lung cancer	1	13	14
Liver cancer	3	9	12
Other genitourinary system diseases	3	8	11
Prostate cancer	6	4	10
Inflammatory heart diseases heart ..	3	4	7
Pancreas cancer	2	5	7
Lymphomas, multiple..	0	5	5
Mouth and oropharynx..	4	1	5
Breast cancer	0	4	4
Colon and rectum cancer	2	2	4
Other Congenital anomalies	2	2	4
Ovary cancer	0	4	4
Asthma	2	1	3
Cervix uteri cancer	1	2	3
Leukemia	2	1	3
Stomach cancer	2	1	3
Alzheimer and other dementias	1	1	2

Disease sub-groups	Atolls	GMR	Grand Total
Benign prostatic hypertrophy	1	1	2
Bladder cancer	0	2	2
Epilepsy	2	0	2
Parkinson disease	0	2	2
Anencephaly	0	1	1
Congenital heart anomalies	0	1	1
Corpus uteri cancer	0	1	1
Melanoma and other skin cancers	1	0	1
Other oral diseases	1	0	1
Rheumatic heart disease	0	1	1

4.3.1.1 Cardiovascular Diseases (CVDs)

The prominent cause of death among NCDs was cardiovascular diseases (CVDs). CVDs was most common among men (64% of all CVD deaths). Most of these deaths occurred in atolls (57%).

Figure 4-25: CVD deaths by sex, 2021

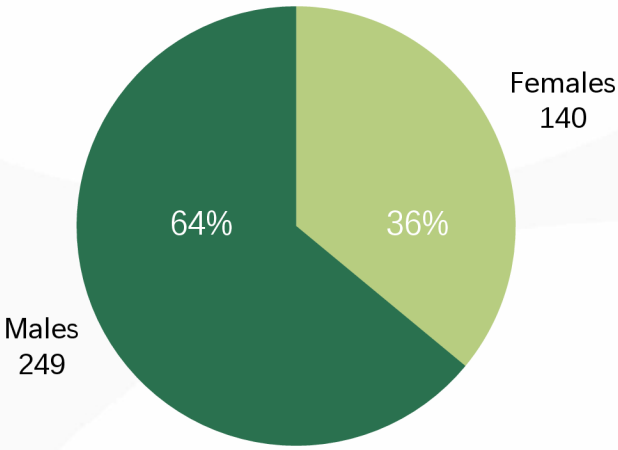
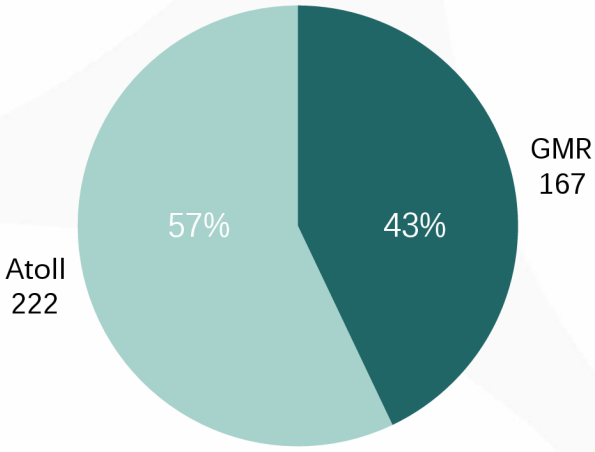
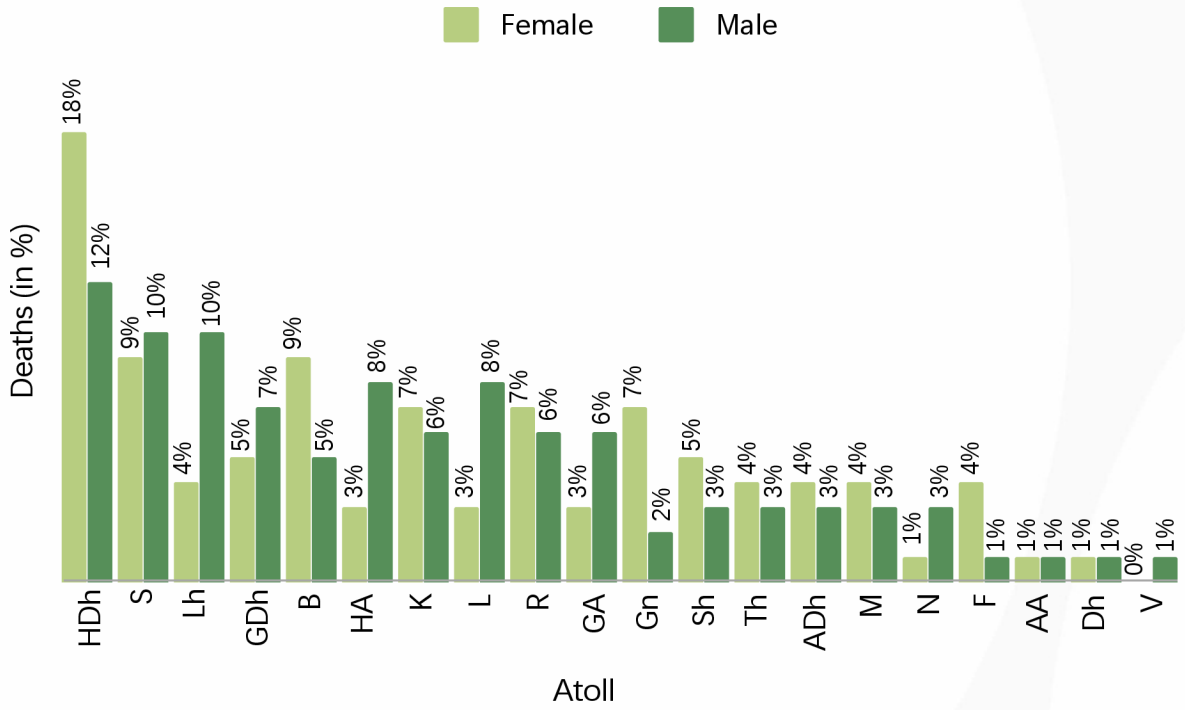


Figure 4-26: CVD deaths by region, 2021



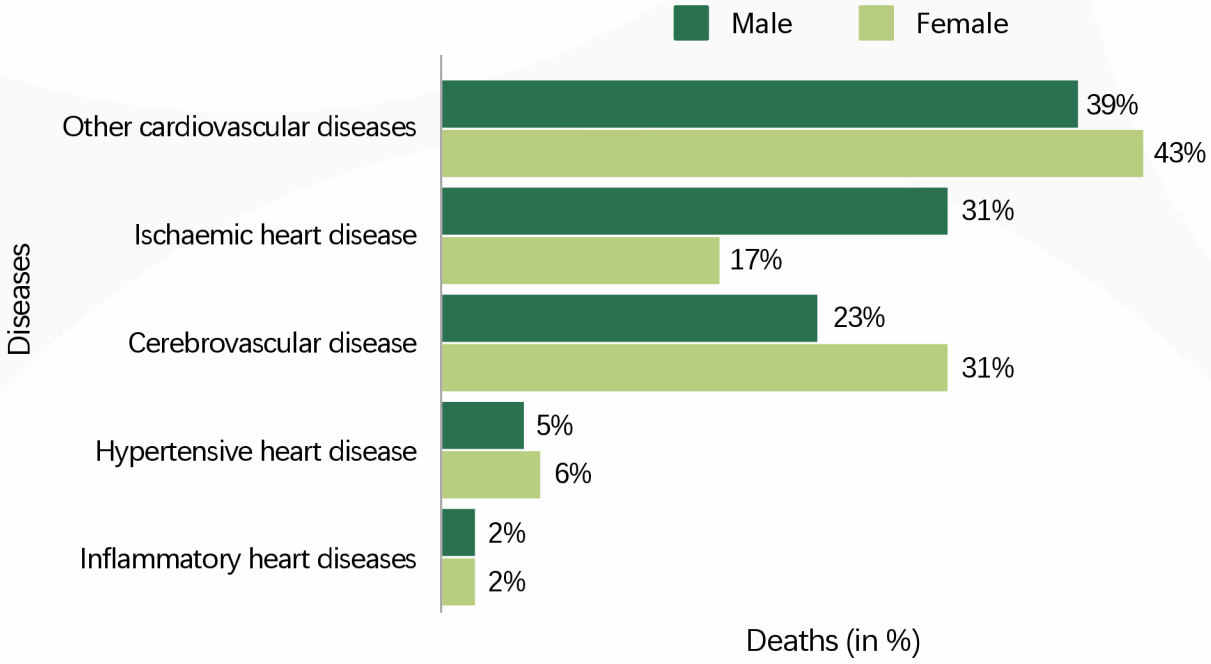
Distribution of CVD deaths by atolls showed that the highest number of deaths occurred in HDh, S and Lh Atoll in 2021.

Figure 4-27: CVD deaths by atolls, 2021



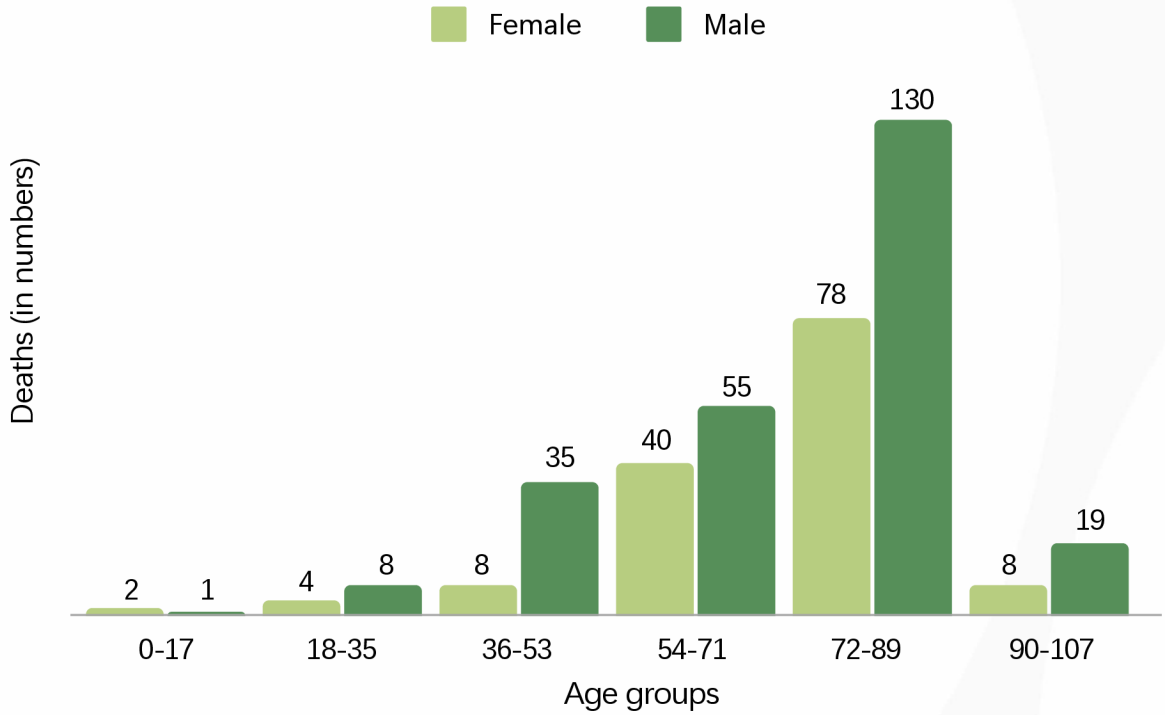
The highest number of deaths from CVDs were reported as other cardiovascular diseases for both men (39%) and women (43%) followed by cerebrovascular diseases for women (31%) and ischemic heart disease for men (31%).

Figure 4-28: Top 5 CVD deaths by sex, 2021



Distribution of CVD deaths by age group showed that most of the deaths occurred among the elderly and in the age band of 72 to 89 years

Figure 4-29: CVD deaths by sex and age groups, 2021



4.3.1.2 Respiratory Diseases

The second most common deaths among NCDs were respiratory diseases. More male deaths were reported (52% of all respiratory deaths). Most of the respiratory deaths were reported from the atolls .

Figure 4-30: Respiratory disease sub-group deaths by sex, 2021

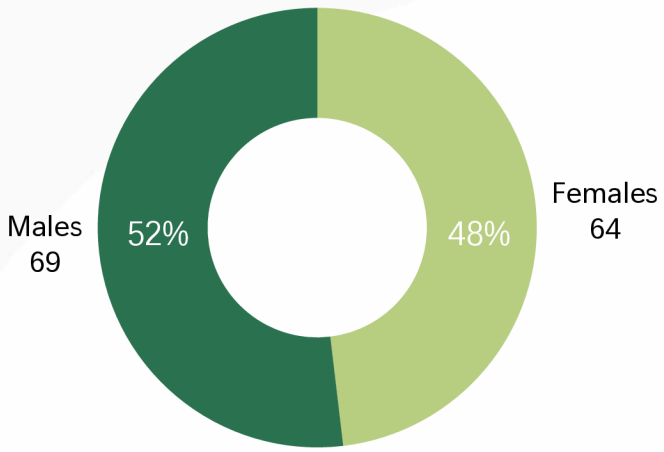
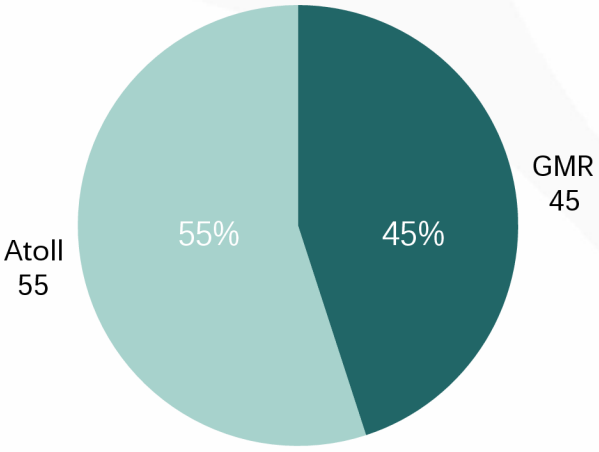
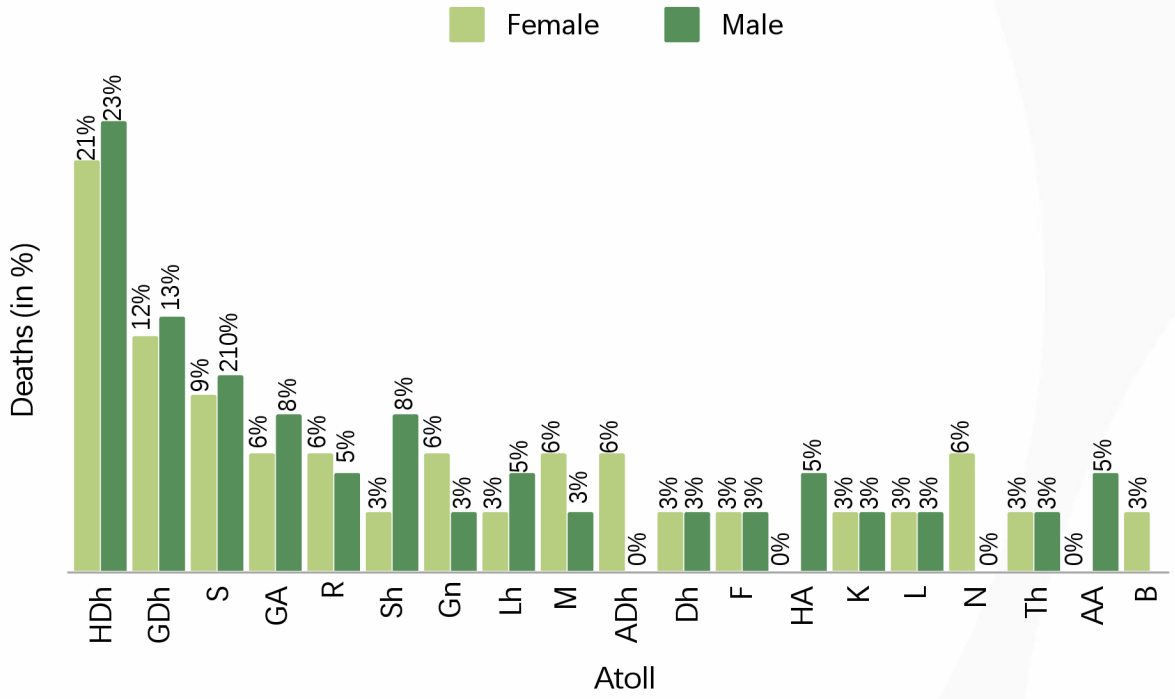


Figure 4-31: Respiratory disease deaths by region, 2021



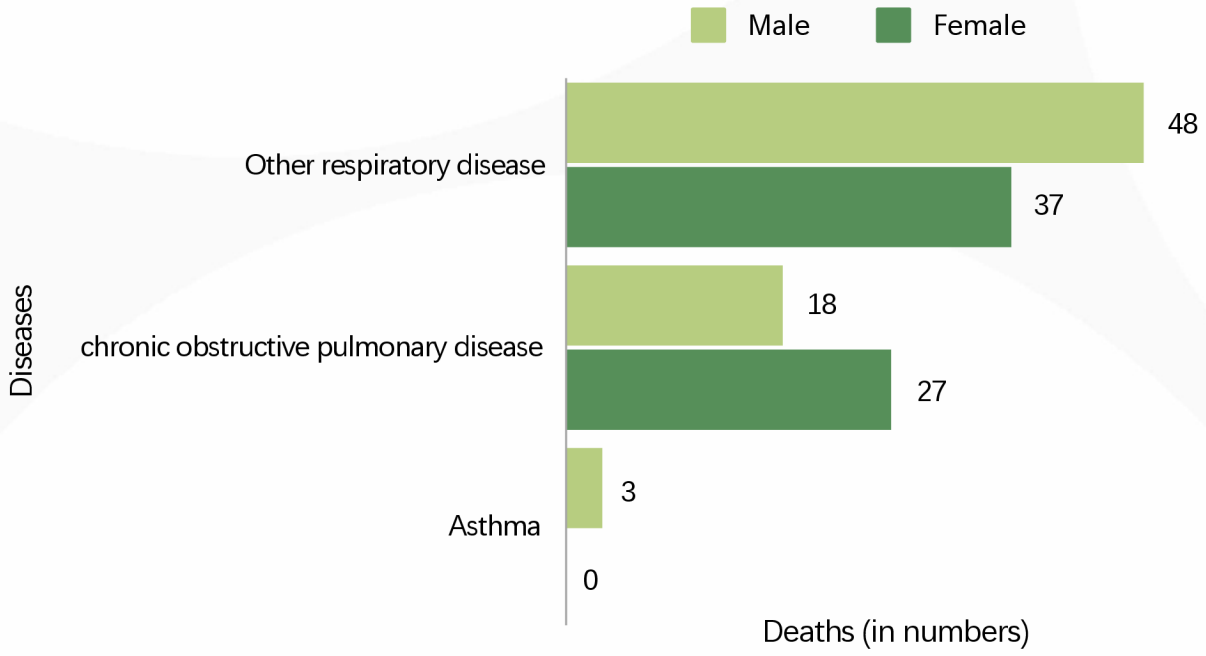
Breakdown of deaths by atolls showed that the highest number of respiratory deaths were reported from HDh, GDh and S in 2021.

Figure 4-32: Respiratory Disease Deaths by sex and atolls, 2021



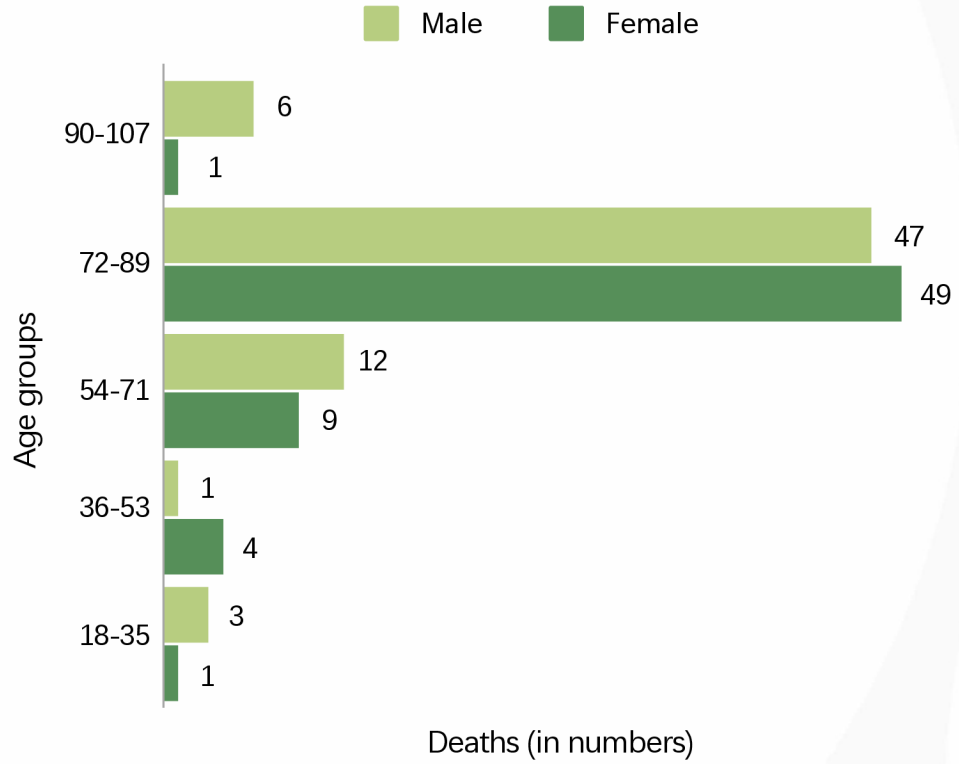
The highest number of deaths from respiratory diseases were other respiratory diseases for both men (48%) and women (37%) followed by chronic obstructive pulmonary disease and asthma.

Figure 4-33: Top respiratory disease deaths by sex, 2021



Similar to cardiovascular disease, respiratory disease deaths were more among elderly and most of these deaths were concentrated between 72-89 age band.

Figure 4-34: Respiratory disease deaths by sex and age groups, 2021



4.3.1.3 Malignant Neoplasms (Cancer)

The third most common cause of death among NCDs were cancers. More male deaths resulted due to this when compared to female. Most of the cancer deaths were reported from GMR (72%).

Figure 4-35: Cancer disease deaths by sex, 2021

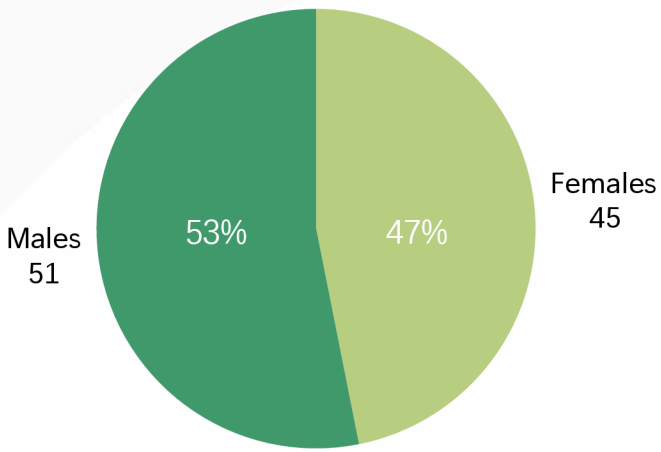
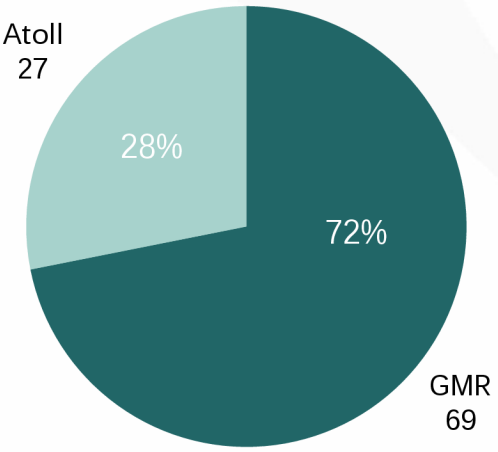
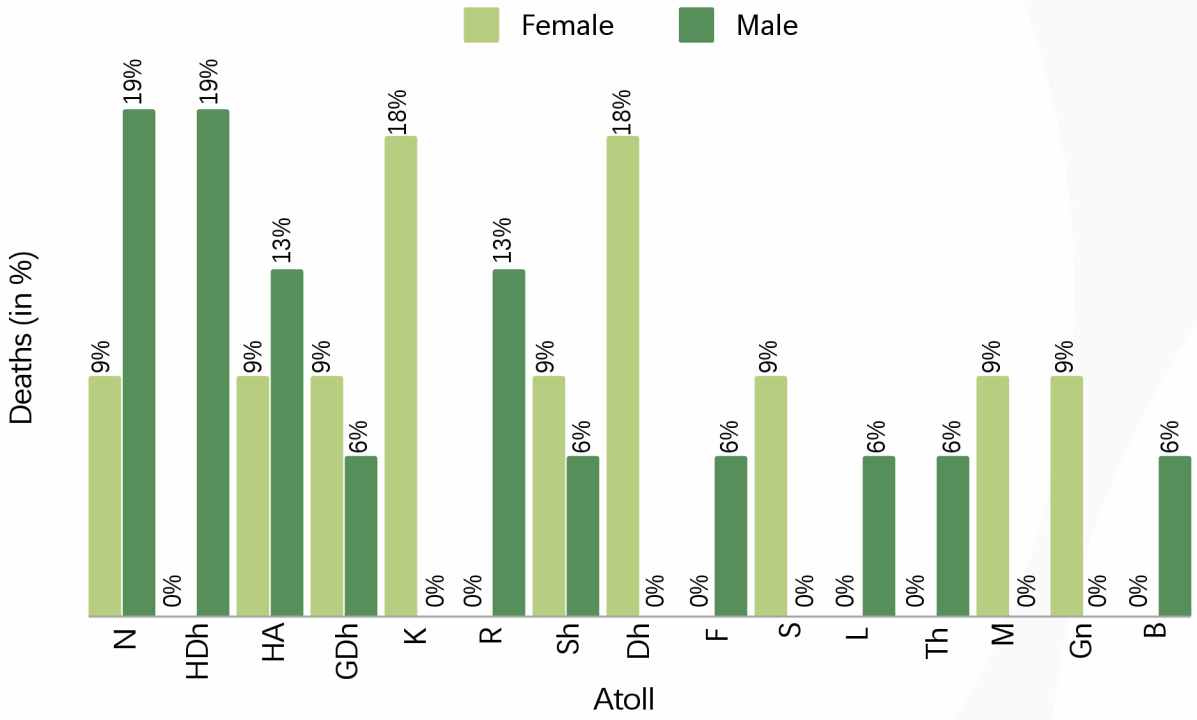


Figure 4-36: Cancer deaths by region, 2021



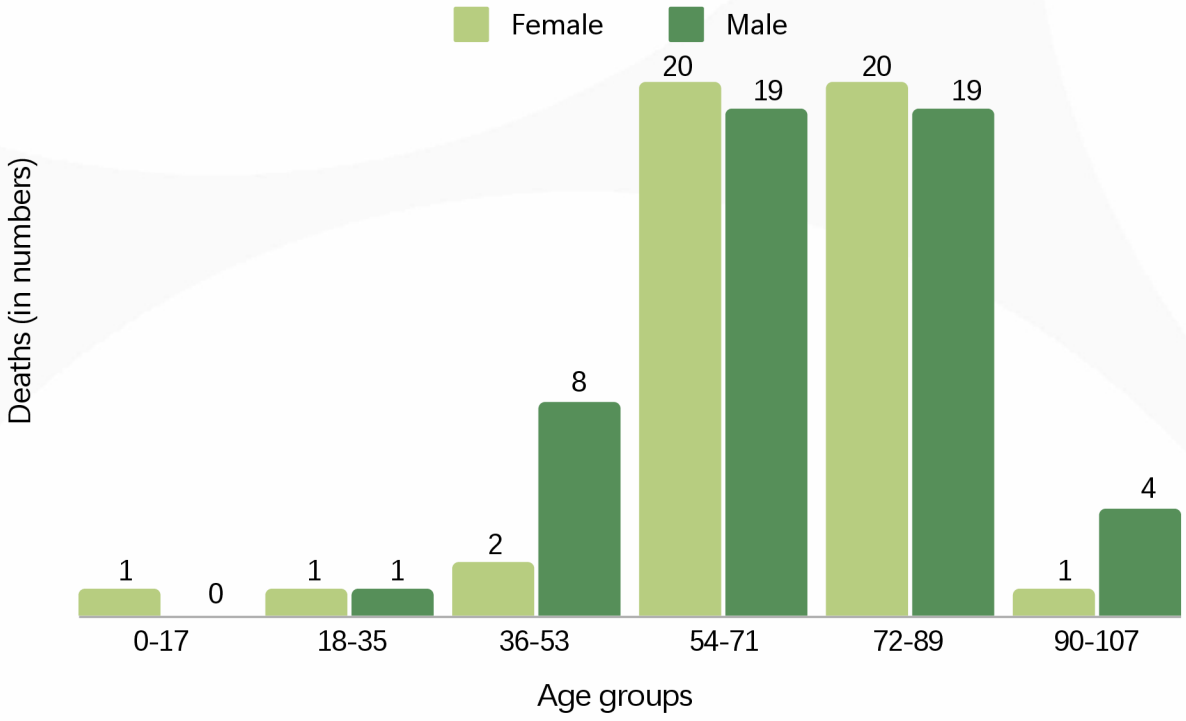
Disaggregating by atolls (excluding GMR and abroad), the highest number of cancer deaths occurred in S, HA and HDh Atoll in 2021.

Figure 4-37: Cancer deaths by atolls and sex, 2021



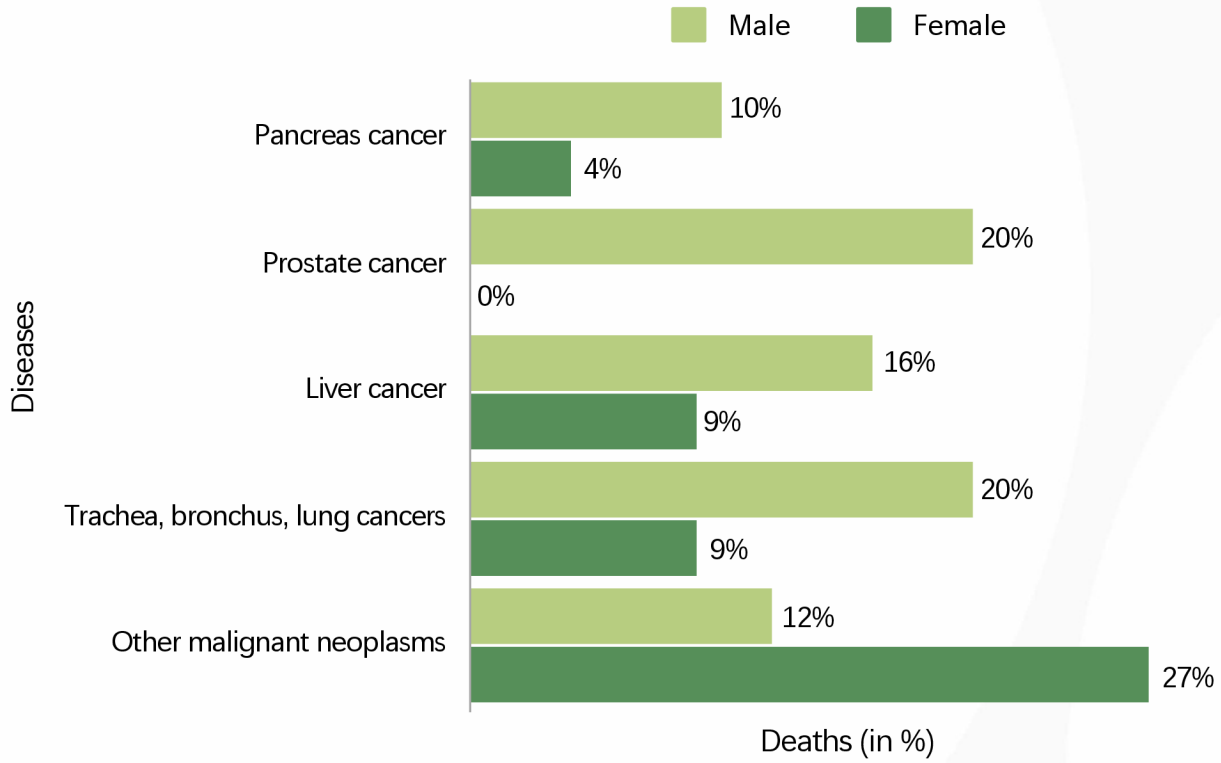
In addition, it can also be seen that cancer deaths were more common among elderly groups. Most of the cancer deaths were concentrated among 54 -89 years old.

Figure 4-38: Cancer deaths by sex and age groups, 2021



The highest number of deaths from cancers were reported as other cancers. Apart from other malignant neoplasms male cancer deaths were higher all categories of cancers.

Figure 4-39: Top 5 cancer related deaths by sex, 2021



4.3.1.4 Genitourinary Diseases

Genitourinary diseases were the fourth most common cause of deaths among NCDs, with more female deaths (with 22 genitourinary disease deaths out of 42 deaths) and 60% of genitourinary disease deaths were reported from GMR.

Figure 4-40: Genitourinary disease deaths by sex, 2021

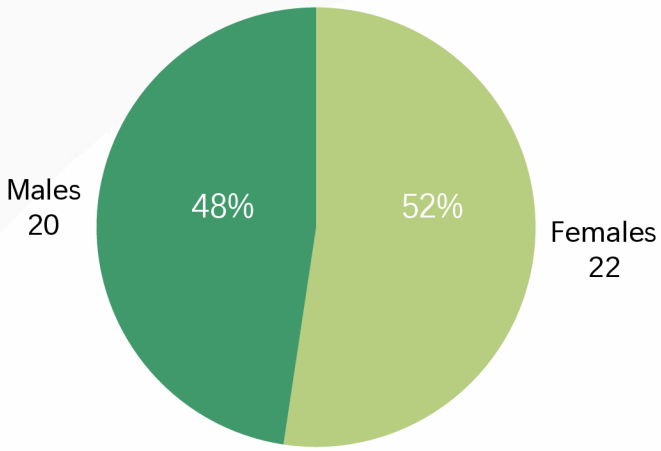
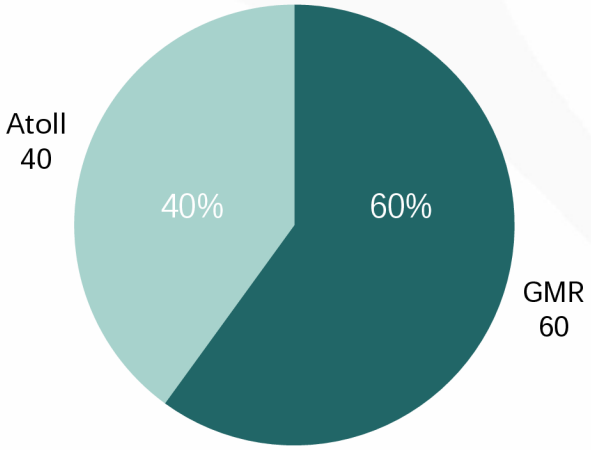
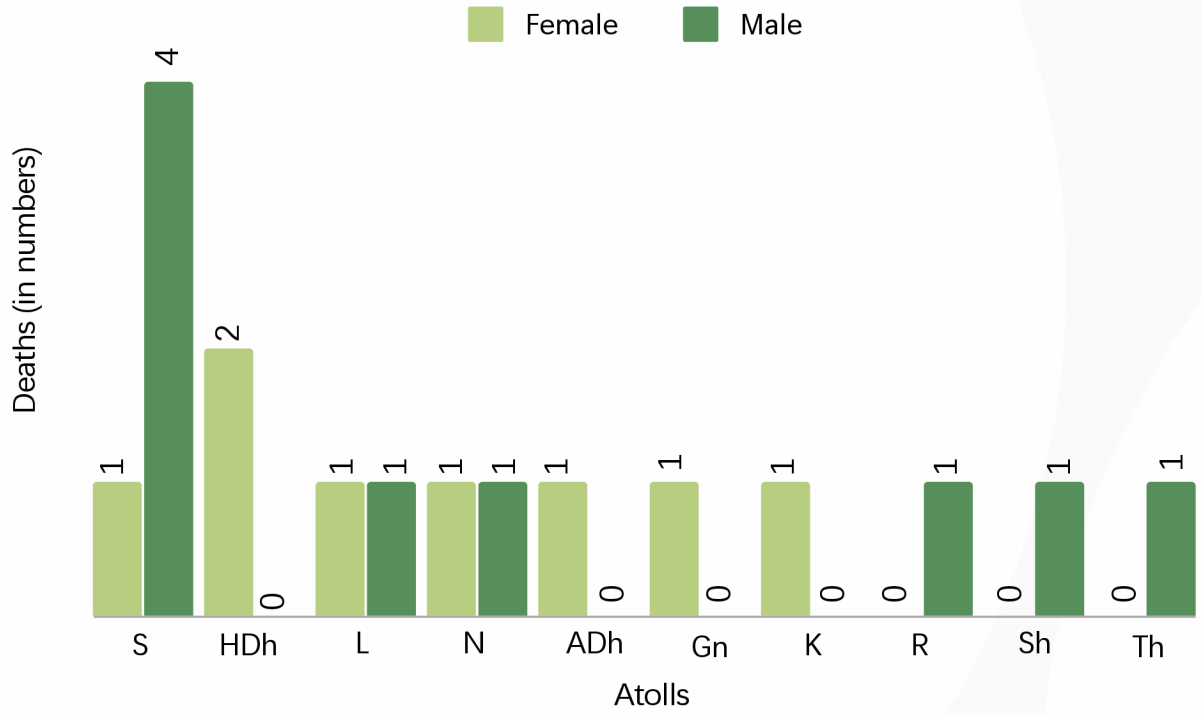


Figure 4-41: Genitourinary disease deaths by region, 2021



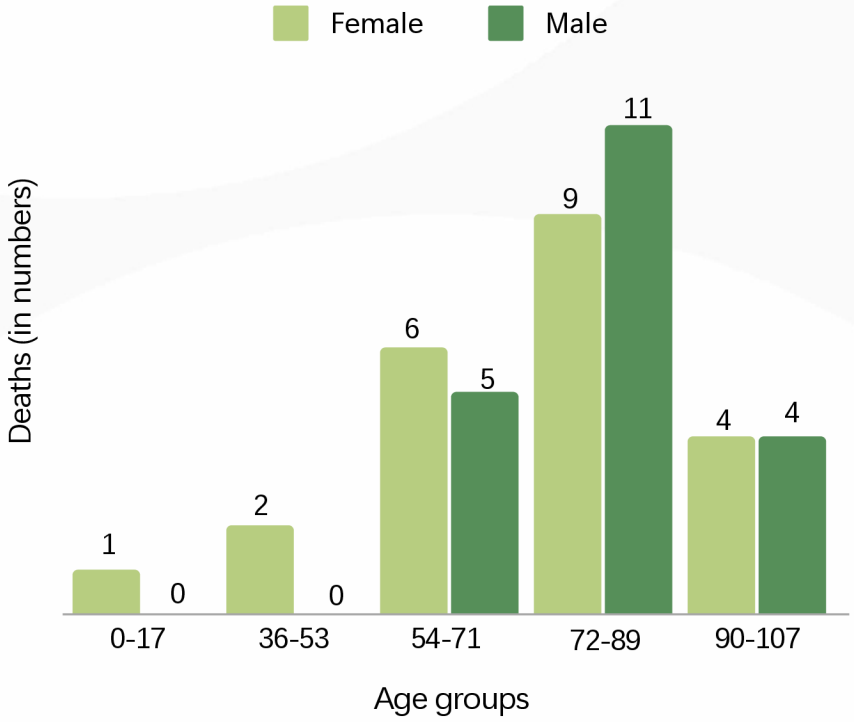
Deaths by genitourinary disease was mostly common in S, HDh, L and N Atoll in 2021 (excluding GMR and abroad).

Figure 4-42: Genitourinary disease deaths by atolls, 2021



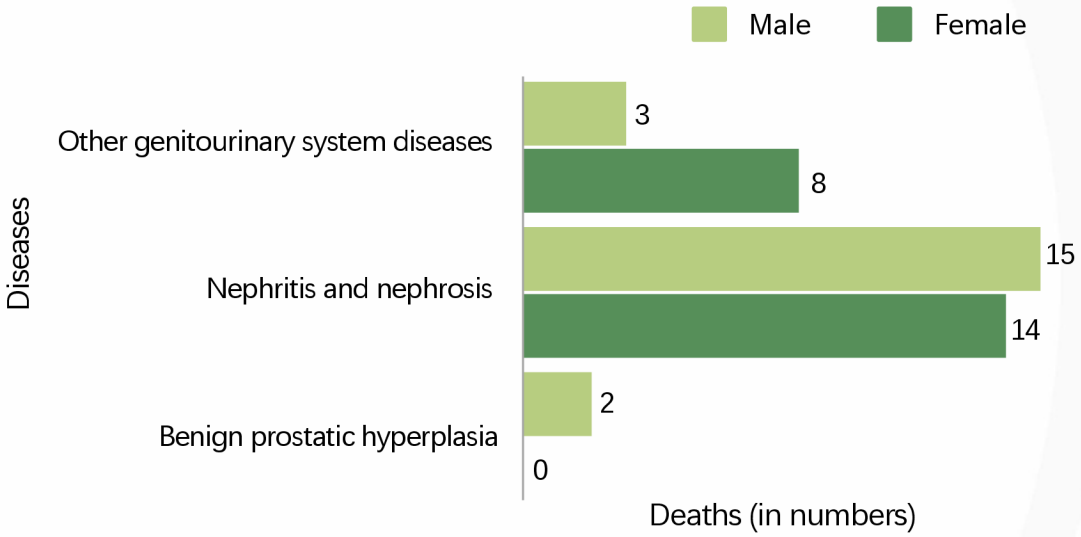
Most of the genitourinary disease deaths were reported for elderly population.

Figure 4-43: Genitourinary disease deaths by age and sex, 2021



Most of the deaths due to genitourinary disease resulted from nephritis and nephrosis (29 deaths). More males died due to this compared to females.

Figure 4-44: Genitourinary disease deaths by sex, 2021



4.3.1.5 Endocrine Disorders

Endocrine disorders were the fifth most common cause of deaths among NCDs, where more male deaths have been reported and 51% of endocrine disorder deaths were reported from atolls.

Figure 4-45: Endocrine disorder deaths by sex, 2021

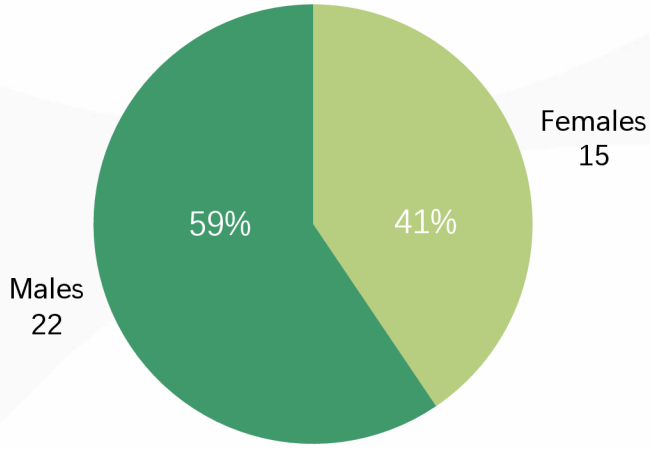
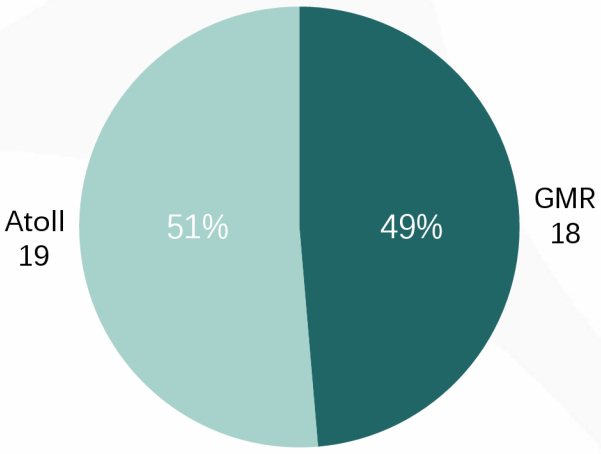
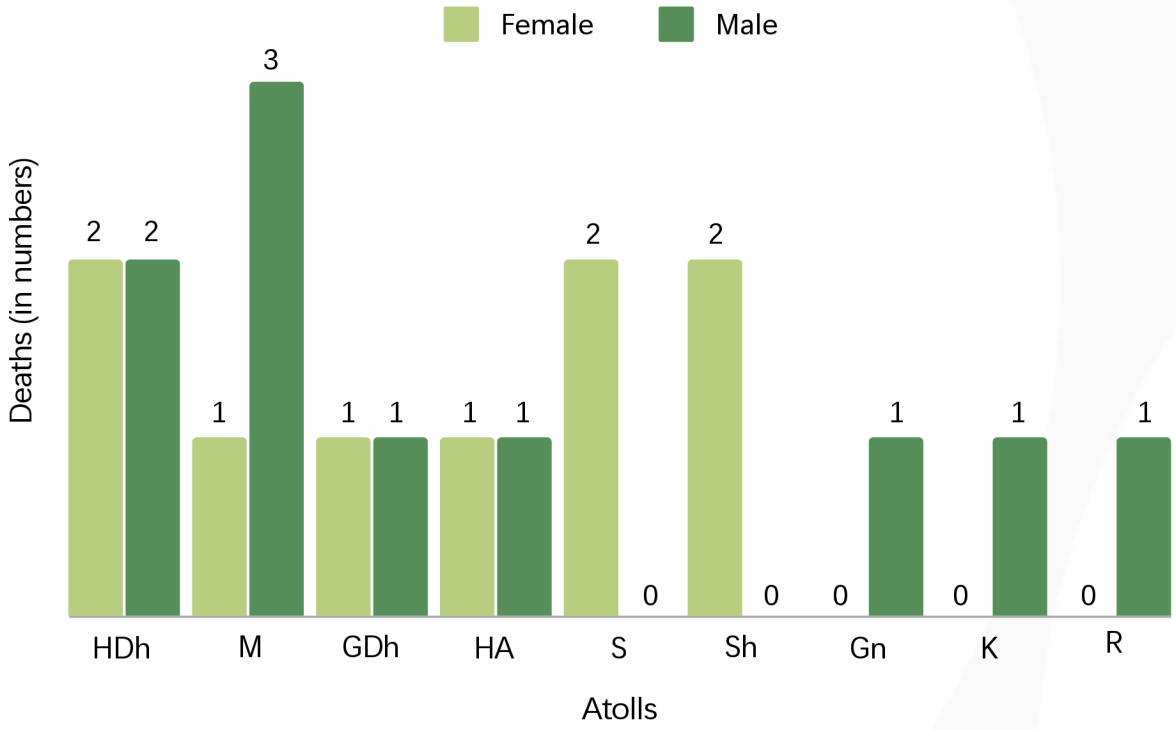


Figure 4-46: Endocrine disorder deaths by region, 2021



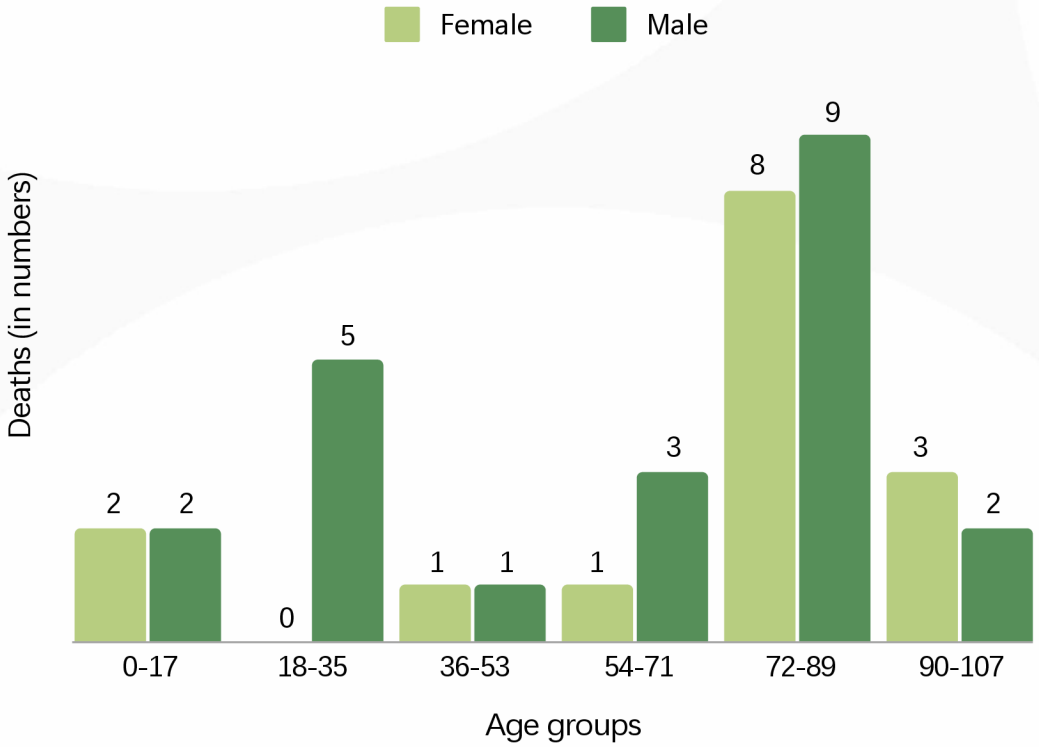
The highest number of deaths due to endocrine disorder occurred in HDh and M atoll in 2021 (excluding GMR and abroad).

Figure 4-47: Endocrine disorders deaths by atolls, 2021



Most of the endocrine disorder deaths occurred among the elderly.

Figure 4-48: Endocrine disorder deaths by sex and age, 2021



4.3.2 Communicable, Maternal, Perinatal and Nutritional Conditions

The highest number of deaths in this category were from other emerging diseases (233) followed by infectious and parasitic diseases (97). In terms of sex, most deaths were among males.

Table 4-10: Communicable, maternal, perinatal and nutritional conditions by sex, 2021

Communicable, maternal, perinatal and nutritional conditions	Female	Male	Total
Other emerging diseases	90	143	233
Infectious and parasitic diseases	58	39	97
Perinatal conditions	17	22	39
Respiratory infections	16	23	39
Nutritional deficiency	2	3	5
Maternal conditions	3	0	3

It can be also noted that the deaths in atolls and GMR differed in this category. Apart from COVID related deaths, GMR also reported significant number of deaths in other perinatal conditions, birth asphyxia and low birth weight.

Table 4-11: Communicable, maternal, perinatal and nutritional conditions deaths by sub-groups and region, 2021

Disease sub-groups	Atolls	GMR	Total
COVID-19 related conditions	51	182	233
Other infectious diseases	21	59	80
Lower respiratory infections	16	20	36
Other perinatal conditions	2	12	14
Birth asphyxia and birth trauma	1	12	13
Low birth weight	2	10	12
Tuberculosis	4	8	12
Iron-deficiency anemia	3	1	4
Diarrheal diseases	0	2	2
Hepatitis B	1	1	2
Not categorized / Multiple sub-categories	0	2	2
Hypertensive disorders	0	1	1

Disease sub-groups	Atolls	GMR	Total
Maternal hemorrhage	0	1	1
Meningitis	0	1	1
Other maternal conditions	1	0	1
Protein-energy malnutrition	1	0	1
Upper respiratory infections	1	0	1
Total	**104**	**312**	**416**

4.3.2.1 Other Emerging Diseases

Other emerging diseases, which include COVID-19 were the most common among communicable, maternal, perinatal and nutritional conditions. In 2021, more males (61%) died from COVID-19 compared to females and 78% of the COVID-19 deaths were reported from GMR.

Figure 4-49: COVID-19 deaths by sex, 2021

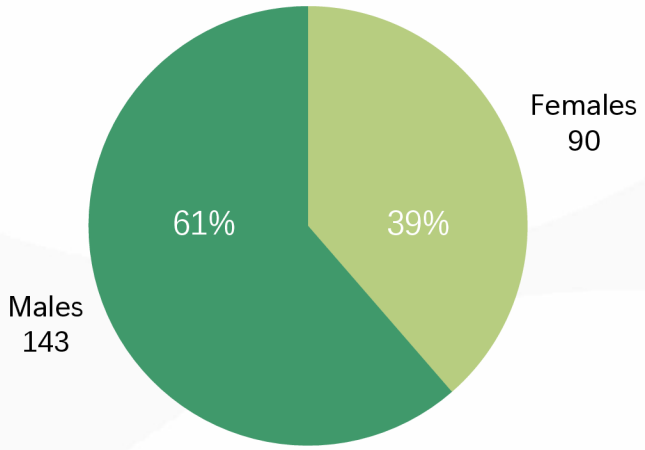
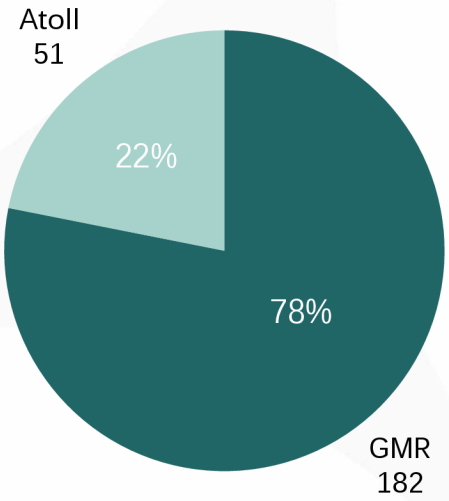


Figure 4-50: COVID-19 deaths by region, 2021



4.3.2.2 Infectious and Parasitic Diseases

Infectious and parasitic diseases were the second most common among communicable, maternal, perinatal and nutritional conditions, with more female deaths (60% of all infectious and parasitic disease deaths) and more deaths (78%) reported from GMR. Disaggregation of parasitic disease deaths by region showed that 27% of the deaths were reported from the atolls.

Figure 4-51: Infectious and parasitic disease deaths by sex, 2021

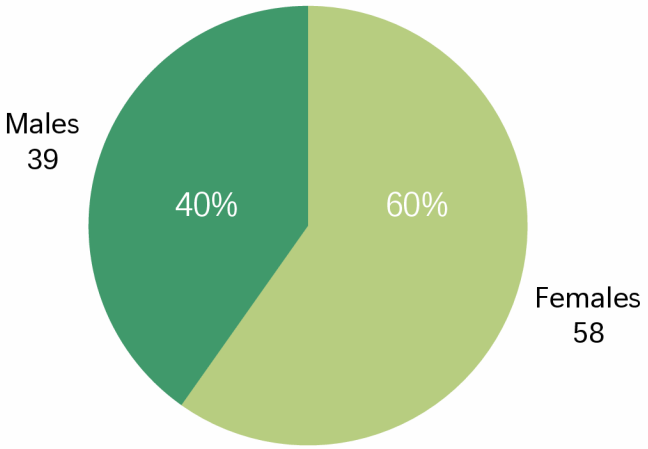
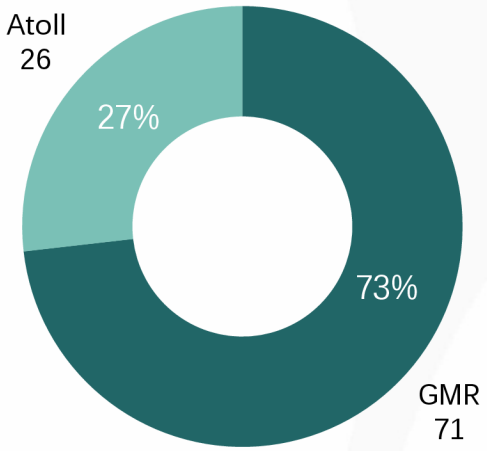


Figure 4-52: Infectious and parasitic disease deaths by region, 2021



4.3.3 Injuries

Injuries as a cause of death were more common among males (69% of all injury deaths). However, deaths due to injuries among females were also significant. In addition to this, 60% of injury deaths were reported from atolls.

Figure 4-53: Injuries related deaths by sex, 2021

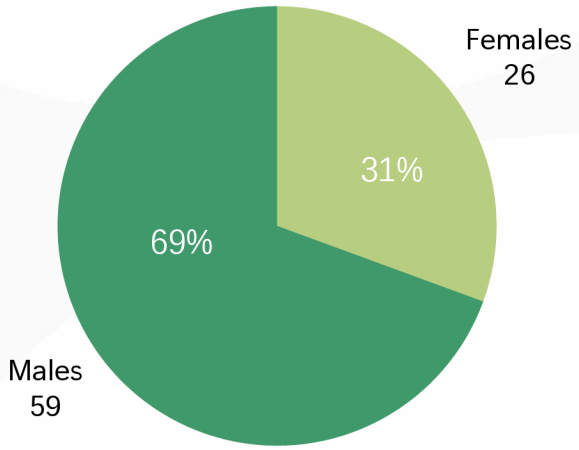
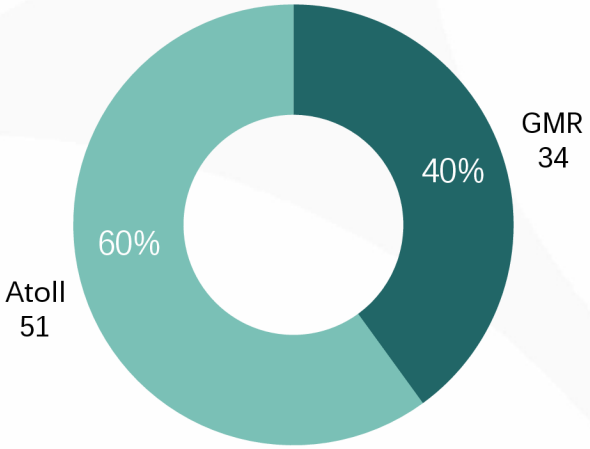


Figure 4-54: Injuries related deaths by region, 2021



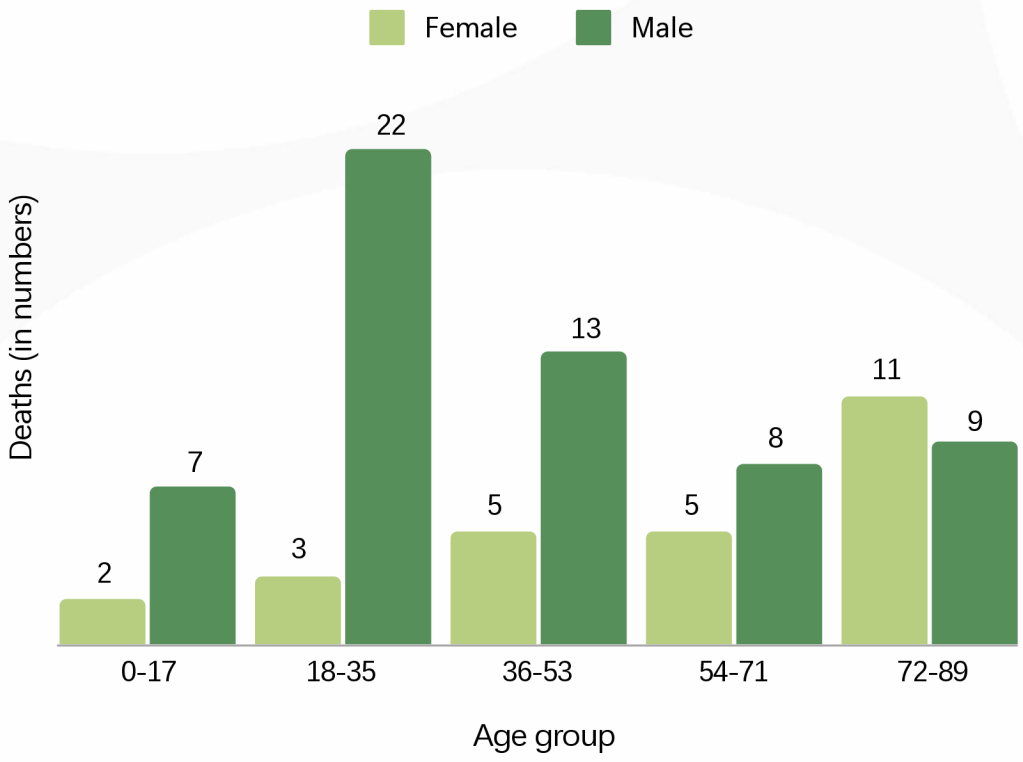
Unintentional injuries were the highest type of injuries reported (70). More females died from unintentional injuries compared to males.

Table 4-12: Injury deaths by sub-categories and sex, 2021

Disease group	Female	Male	Total
Intentional injuries	3	12	15
Not categorized / Multiple sub-categories	1	6	7
Self-inflicted injuries	1	6	7
Poisonings	1	0	1
Unintentional injuries	23	47	70
Other unintentional injuries	16	19	35
Drownings	6	22	28
Road traffic accidents	0	5	5
Falls	1	0	1
Fires	0	1	1
Total	**26**	**59**	**85**

Deaths by injury were more among men across all age groups. Deaths due to injury among men were highest in the age group 18-35 years.

Figure 4-55: Injury deaths by sex and age, 2021



4.4 Annex

Table 4-13: Crude Death Rate (CDR) 2016-2021

Year	Total deaths			Population			CDR		
	Female	Male	Total	Female	Male	Total	Female	Male	CDR
2016	565	707	1272	173,235	179,769	353,005	3	4	4
2017	470	780	1250	176,298	183,310	359,608	3	4	3
2018	482	779	1261	179,319	186,857	366,176	3	4	3
2019	386	668	1054	182,346	190,394	372,739	2	4	3
2020	520	727	1247	185,331	193,940	379,270	3	4	3
2021	610	902	1,512	188,262	197,434	385,696	3	5	4

Note: Excludes deaths occurred abroad, deaths occurred in unknown location (due to these exclusion, the figures in this publication will be different from the figures published previously)
Figures for 2020 revised and presented as final updates

Table 4-14: Neonatal deaths and NMR, 2016- 2021

Year	Neonatal Deaths			Live Births			NMR		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
2016	28	15	43	3,381	3,411	6,792	8	4	6
2017	18	33	51	3,366	3,435	6,801	5	10	7
2018	15	18	33	3,159	3,426	6,585	5	5	5
2019	13	10	23	3,051	3,101	6,152	4	3	4
2020	13	16	29	3,048	3,164	6,211	4	5	5
2021	15	19	34	2,963	2,954	5,917	5	6	6

Note: Excludes deaths occurred abroad, deaths occurred in unknown location (due to these exclusion, the figures in this publication will be different from the figures published previously)
Figures for 2020 revised and presented as final updates

Table 4-15: Post-neonatal deaths and PNM, 2016-2021

Year	Post-Neonatal Deaths			Live Births			PNMR		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
2016	8	9	17	3,381	3,411	6,792	2	3	3
2017	3	10	13	3,366	3,435	6,801	1	3	2
2018	5	9	14	3,159	3,426	6,585	2	3	2
2019	5	9	14	3,051	3,101	6,152	2	3	2
2020	6	10	16	3,048	3,164	6,211	2	3	3
2021	8	15	23	2,963	2,954	5,917	3	5	4

Note: Excludes deaths occurred abroad, deaths occurred in unknown location (due to these exclusion, the figures in this publication will be different from the figures published previously)
Figures for 2020 revised and presented as final updates

Table 4-16: Infant Deaths and IMR, 2016 -2021

Year	Infant deaths			Live Births			IMR		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
2016	36	23	59	3,381	3,411	6,792	11	7	9
2017	20	40	60	3,366	3,435	6,801	6	12	9
2018	20	26	46	3,159	3,426	6,585	6	8	7
2019	15	13	28	3,051	3,101	6,152	5	4	5
2020	18	25	43	3,048	3,164	6,211	6	8	7
2021	23	34	57	2,963	2,954	5,917	8	12	10

Note: Excludes deaths occurred abroad, deaths occurred in unknown location (due to these exclusion, the figures in this publication will be different from the figures published previously)
Figures for 2020 revised and presented as final updates

Table 4-17: Under 5 deaths and U5MR, 2016-2021

Year	Under 5 Deaths			Live Births			Under 5 Mortality Rate		
	Female	Male	Total	Female	Male	Total	Female	Male	U5MR
2016	41	26	67	3,381	3,411	6,792	12	8	10
2017	22	46	68	3,366	3,435	6,801	7	13	10
2018	23	30	53	3,159	3,426	6,585	7	9	8
2019	17	19	36	3,051	3,101	6,152	6	6	6
2020	21	26	47	3,048	3,164	6,211	7	8	8
2021	27	37	64	2,963	2,954	5,917	9	13	11

NNote: Excludes deaths occurred abroad, deaths occurred in unknown location (due to these exclusion, the figures in this publication will be different from the figures published previously)
Figures for 2020 revised and presented as final updates

Table 4-18: Maternal Deaths and Maternal Mortality Ratio / 100,000 live births, 2016 – 2021

Year	Live Births			Maternal Mortality	
	Female	Male	Total	Deaths	MMR
2016	3,381	3,411	6,792	3	44
2017	3,366	3,435	6,801	7	103
2018	3,159	3,426	6,585	4	61
2019	3,051	3,101	6,152	0	0
2020	3,048	3,163	6,211	2	32
2021	2,963	2,954	5,917	3	51

Table 4-19: Deaths by location, disease subgroups, age group and sex, 2021

Location/ Disease sub-groups/Age group	Female	Male	Total
GMR	381	499	880
Communicable, maternal, perinatal and nutritional conditions	147	165	312
Infectious and parasitic diseases	42	29	71
Diarrheal diseases	1	1	2
36-53	1	0	1
54-71	0	1	1
Hepatitis B	0	1	1
54-71	0	1	1
Meningitis	1	0	1
54-71	1	0	1
Other infectious diseases	34	25	59
0-17	5	0	5
18-35	1	1	2
36-53	2	2	4
54-71	6	4	10
72-89	20	17	37
90-107	0	1	1
Tuberculosis	6	2	8
54-71	2	2	4
72-89	3	0	3
90-107	1	0	1
Maternal conditions	2	0	2
Hypertensive disorders	1	0	1
18-35	1	0	1
Maternal hemorrhage	1	0	1
18-35	1	0	1
Nutritional deficiencies	0	1	1
Iron-deficiency anemia	0	1	1
54-71	0	1	1

Location/ Disease sub-groups/Age group	Female	Male	Total
Other emerging diseases	76	106	182
COVID-19 related conditions	76	106	182
0-17	1	0	1
18-35	3	3	6
36-53	8	11	19
54-71	25	40	65
72-89	37	47	84
90-107	2	4	6
Not stated	0	1	1
Perinatal conditions	16	18	34
Birth asphyxia and birth trauma	7	5	12
0-17	7	5	12
Low birth weight	5	5	10
0-17	5	5	10
Other perinatal conditions	4	8	12
0-17	4	8	12
Respiratory infections	11	11	22
Lower respiratory infections	10	10	20
36-53	0	2	2
54-71	2	1	3
72-89	8	6	14
90-107	0	1	1
Not categorized / Multiple sub-categories	1	1	2
0-17	0	1	1
72-89	1	0	1
Noncommunicable diseases	177	216	393
Cardiovascular diseases	66	101	167
Cerebrovascular disease	28	41	69
0-17	1	0	1
18-35	3	1	4
36-53	3	5	8
54-71	9	10	19

Location/ Disease sub-groups/Age group	Female	Male	Total
72-89	12	22	34
90-107	0	3	3
Hypertensive heart disease	3	0	3
72-89	3	0	3
Inflammatory heart diseases	2	2	4
0-17	1	0	1
36-53	1	2	3
Ischemic heart disease	16	38	54
18-35	0	1	1
36-53	0	9	9
54-71	7	11	18
72-89	8	15	23
90-107	1	1	2
Not stated	0	1	1
Other cardiovascular diseases	16	20	36
18-35	1	2	3
36-53	1	2	3
54-71	5	7	12
72-89	9	8	17
90-107	0	1	1
Rheumatic heart disease	1	0	1
54-71	1	0	1
Congenital anomalies	2	2	4
Anencephaly	0	1	1
0-17	0	1	1
Congenital heart anomalies	1	0	1
54-71	1	0	1
Other Congenital anomalies	1	1	2
0-17	1	1	2
Diabetes mellitus	8	5	13
Not categorized / Multiple sub-categories	8	5	13
36-53	0	1	1

Location/ Disease sub-groups/Age group	Female	Male	Total
54-71	4	2	6
72-89	4	2	6
Digestive diseases	6	10	16
Other digestive diseases	6	10	16
36-53	0	1	1
54-71	2	3	5
72-89	4	5	9
Not stated	0	1	1
Endocrine disorders	6	12	18
Not categorized / Multiple sub-categories	6	12	18
0-17	2	0	2
18-35	0	5	5
36-53	1	1	2
54-71	0	2	2
72-89	3	4	7
Genitourinary diseases	14	11	25
Benign prostatic hypertrophy	0	1	1
72-89	0	1	1
Nephritis and nephrosis	8	8	16
36-53	2	0	2
54-71	2	3	5
72-89	3	2	5
90-107	1	3	4
Other genitourinary system diseases	6	2	8
54-71	1	0	1
72-89	4	2	6
90-107	1	0	1
Malignant neoplasms	34	35	69
Bladder cancer	1	1	2
54-71	1	0	1
72-89	0	1	1
Breast cancer	4	0	4

Location/ Disease sub-groups/Age group	Female	Male	Total
18-35	1	0	1
54-71	1	0	1
72-89	2	0	2
Cervix uteri cancer	2	0	2
54-71	1	0	1
72-89	1	0	1
Colon and rectum cancers	1	1	2
54-71	1	1	2
Corpus uteri cancer	1	0	1
72-89	1	0	1
Leukemia	0	1	1
54-71	0	1	1
Liver cancer	2	7	9
36-53	0	2	2
54-71	1	4	5
72-89	1	1	2
Lymphomas, multiple myeloma	3	2	5
36-53	0	1	1
54-71	2	1	3
72-89	1	0	1
Mouth and oropharynx cancers	1	0	1
54-71	1	0	1
Other malignant neoplasms	10	5	15
0-17	1	0	1
18-35	0	1	1
36-53	1	1	2
54-71	5	0	5
72-89	3	3	6
Ovary cancer	4	0	4
36-53	1	0	1
54-71	1	0	1
72-89	2	0	2

Location/ Disease sub-groups/Age group	Female	Male	Total
Pancreas cancer	1	4	5
36-53	0	1	1
54-71	1	1	2
72-89	0	2	2
Prostate cancer	0	4	4
54-71	0	1	1
72-89	0	3	3
Stomach cancer	0	1	1
36-53	0	1	1
Trachea, bronchus, lung cancers	4	9	13
36-53	0	1	1
54-71	3	6	9
72-89	1	2	3
Neuropsychiatric conditions	10	6	16
Alzheimer and other dementias	1	0	1
72-89	1	0	1
Other neuropsychiatric disorders	9	4	13
18-35	1	0	1
54-71	6	3	9
72-89	2	0	2
90-107	0	1	1
Parkinson disease	0	2	2
54-71	0	2	2
Other neoplasms	0	3	3
Not categorized / Multiple sub-categories	0	3	3
54-71	0	2	2
72-89	0	1	1
Respiratory diseases	30	30	60
Asthma	0	1	1
72-89	0	1	1
Chronic obstructive pulmonary disease	13	3	16
36-53	1	0	1

Location/ Disease sub-groups/Age group	Female	Male	Total
54-71	1	2	3
72-89	11	1	12
Other respiratory diseases	17	26	43
18-35	1	2	3
36-53	2	1	3
54-71	5	6	11
72-89	9	17	26
Skin diseases	1	1	2
Not categorized / Multiple sub-categories	1	1	2
54-71	0	1	1
72-89	1	0	1
Injuries	15	19	34
Intentional injuries	2	4	6
Not categorized / Multiple sub-categories	1	3	4
18-35	1	3	4
Self-inflicted injuries	1	1	2
18-35	0	1	1
36-53	1	0	1
Unintentional injuries	13	15	28
Drownings	1	4	5
18-35	1	0	1
36-53	0	2	2
54-71	0	1	1
72-89	0	1	1
Falls	1	0	1
72-89	1	0	1
Fires	0	1	1
18-35	0	1	1
Other unintentional injuries	11	9	20
0-17	0	1	1
18-35	1	3	4
36-53	2	1	3

Location/ Disease sub-groups/Age group	Female	Male	Total
54-71	1	2	3
72-89	7	2	9
Road traffic accidents	0	1	1
18-35	0	1	1
Ill-defined diseases	42	98	140
Not categorized / Multiple sub-categories	42	98	140
Not categorized / Multiple sub-categories	42	98	140
0-17	1	4	5
18-35	1	12	13
36-53	2	26	28
54-71	15	22	37
72-89	23	23	46
90-107	0	5	5
Not stated	0	6	6
Not categorized	0	1	1
Not categorized / Multiple sub-categories	0	1	1
Not categorized / Multiple sub-categories	0	1	1
54-71	0	1	1
HA	9	24	33
Communicable, maternal, perinatal and nutritional conditions	2	2	4
Nutritional deficiencies	1	0	1
Iron-deficiency anemia	1	0	1
72-89	1	0	1
Other emerging diseases	1	2	3
COVID-19 related conditions	1	2	3
54-71	0	1	1
72-89	1	0	1
90-107	0	1	1
Noncommunicable diseases	3	19	22
Cardiovascular diseases	2	12	14
Cerebrovascular disease	1	1	2

Location/ Disease sub-groups/Age group	Female	Male	Total
72-89	1	1	2
Hypertensive heart disease	0	1	1
72-89	0	1	1
Ischemic heart disease	0	3	3
54-71	0	2	2
90-107	0	1	1
Other cardiovascular diseases	1	7	8
36-53	0	2	2
72-89	1	4	5
90-107	0	1	1
Diabetes mellitus	0	1	1
Not categorized / Multiple sub-categories	0	1	1
54-71	0	1	1
Endocrine disorders	1	1	2
Not categorized / Multiple sub-categories	1	1	2
72-89	1	1	2
Malignant neoplasms	0	3	3
Mouth and oropharynx cancers	0	1	1
54-71	0	1	1
Pancreas cancer	0	1	1
72-89	0	1	1
Prostate cancer	0	1	1
90-107	0	1	1
Respiratory diseases	0	2	2
Other respiratory diseases	0	2	2
72-89	0	2	2
Ill-defined diseases	4	3	7
Not categorized / Multiple sub-categories	4	3	7
Not categorized / Multiple sub-categories	4	3	7
36-53	1	0	1
54-71	0	2	2
72-89	3	0	3

Location/ Disease sub-groups/Age group	Female	Male	Total
90-107	0	1	1
HDh	35	50	85
Communicable, maternal, perinatal and nutritional conditions	3	5	8
Infectious and parasitic diseases	2	2	4
Other infectious diseases	2	1	3
36-53	1	0	1
54-71	0	1	1
72-89	1	0	1
Tuberculosis	0	1	1
72-89	0	1	1
Perinatal conditions	1	0	1
Other perinatal conditions	1	0	1
0-17	1	0	1
Respiratory infections	0	3	3
Lower respiratory infections	0	3	3
0-17	0	1	1
72-89	0	1	1
90-107	0	1	1
Noncommunicable diseases	25	35	60
Cardiovascular diseases	13	18	31
Cerebrovascular disease	2	4	6
54-71	1	3	4
72-89	1	1	2
Hypertensive heart disease	1	1	2
72-89	1	1	2
Ischemic heart disease	4	4	8
54-71	1	1	2
72-89	3	3	6
Other cardiovascular diseases	6	9	15
36-53	0	2	2
54-71	2	1	3

Location/ Disease sub-groups/Age group	Female	Male	Total
72-89	4	5	9
90-107	0	1	1
Diabetes mellitus	0	1	1
Not categorized / Multiple sub-categories	0	1	1
54-71	0	1	1
Digestive diseases	0	2	2
Other digestive diseases	0	2	2
54-71	0	1	1
72-89	0	1	1
Endocrine disorders	2	2	4
Not categorized / Multiple sub-categories	2	2	4
0-17	0	1	1
72-89	1	1	2
90-107	1	0	1
Genitourinary diseases	2	0	2
Nephritis and nephrosis	2	0	2
54-71	1	0	1
90-107	1	0	1
Malignant neoplasms	1	2	3
Leukemia	0	1	1
72-89	0	1	1
Liver cancer	1	1	2
54-71	1	1	2
Neuropsychiatric conditions	0	1	1
Other neuropsychiatric disorders	0	1	1
72-89	0	1	1
Respiratory diseases	7	9	16
Chronic obstructive pulmonary disease	3	5	8
54-71	1	1	2
72-89	2	4	6
Other respiratory diseases	4	4	8
54-71	0	2	2

Location/ Disease sub-groups/Age group	Female	Male	Total
Injuries	2	2	4
Unintentional injuries	2	2	4
Other unintentional injuries	2	1	3
36-53	0	1	1
72-89	2	0	2
Road traffic accidents	0	1	1
0-17	0	1	1
Ill-defined diseases	5	8	13
Not categorized / Multiple sub-categories	5	8	13
Not categorized / Multiple sub-categories	5	8	13
0-17	0	1	1
18-35	0	1	1
54-71	0	2	2
72-89	4	4	8
90-107	1	0	1
Sh	9	11	20
Communicable, maternal, perinatal and nutritional conditions	1	0	1
Other emerging diseases	1	0	1
COVID-19 related conditions	1	0	1
54-71	1	0	1
Noncommunicable diseases	8	8	16
Cardiovascular diseases	4	4	8
Cerebrovascular disease	1	0	1
72-89	1	0	1
Other cardiovascular diseases	3	4	7
54-71	1	1	2
72-89	2	2	4
90-107	0	1	1
Endocrine disorders	2	0	2
Not categorized / Multiple sub-categories	2	0	2
72-89	1	0	1

Location/ Disease sub-groups/Age group	Female	Male	Total
90-107	1	0	1
Genitourinary diseases	0	1	1
Benign prostatic hypertrophy	0	1	1
72-89	0	1	1
Malignant neoplasms	1	0	1
Mouth and oropharynx cancers	1	0	1
72-89	1	0	1
Respiratory diseases	1	3	4
Chronic obstructive pulmonary disease	1	1	2
72-89	1	1	2
Other respiratory diseases	0	2	2
72-89	0	2	2
Injuries	0	1	1
Unintentional injuries	0	1	1
Other unintentional injuries	0	1	1
18-35	0	1	1
Ill-defined diseases	0	2	2
Not categorized / Multiple sub-categories	0	2	2
Not categorized / Multiple sub-categories	0	2	2
72-89	0	2	2
N	9	12	21
Communicable, maternal, perinatal and nutritional conditions	1	2	3
Infectious and parasitic diseases	0	1	1
Other infectious diseases	0	1	1
0-17	0	1	1
Nutritional deficiencies	0	1	1
Iron-deficiency anemia	0	1	1
72-89	0	1	1
Other emerging diseases	1	0	1
COVID-19 related conditions	1	0	1
54-71	1	0	1

Location/ Disease sub-groups/Age group	Female	Male	Total
Noncommunicable diseases	8	7	15
Cardiovascular diseases	1	5	6
Cerebrovascular disease	0	2	2
54-71	0	1	1
72-89	0	1	1
Ischemic heart disease	0	1	1
72-89	0	1	1
Other cardiovascular diseases	1	2	3
36-53	0	1	1
72-89	1	1	2
Diabetes mellitus	1	0	1
Not categorized / Multiple sub-categories	1	0	1
90-107	1	0	1
Genitourinary diseases	1	1	2
Nephritis and nephrosis	1	1	2
54-71	1	0	1
90-107	0	1	1
Malignant neoplasms	1	1	2
Colon and rectum cancers	0	1	1
72-89	0	1	1
Mouth and oropharynx cancers	1	0	1
72-89	1	0	1
Neuropsychiatric conditions	1	0	1
Other neuropsychiatric disorders	1	0	1
72-89	1	0	1
Respiratory diseases	2	0	2
Chronic obstructive pulmonary disease	1	0	1
72-89	1	0	1
Other respiratory diseases	1	0	1
72-89	1	0	1
Skin diseases	1	0	1
Not categorized / Multiple sub-categories	1	0	1

Location/ Disease sub-groups/Age group	Female	Male	Total
Ill-defined diseases	0	3	3
Not categorized / Multiple sub-categories	0	3	3
Not categorized / Multiple sub-categories	0	3	3
18-35	0	1	1
72-89	0	2	2
R	19	20	39
Communicable, maternal, perinatal and nutritional conditions	9	3	12
Infectious and parasitic diseases	6	0	6
Hepatitis B	1	0	1
36-53	1	0	1
Other infectious diseases	5	0	5
18-35	1	0	1
54-71	1	0	1
72-89	3	0	3
Other emerging diseases	1	1	2
COVID-19 related conditions	1	1	2
36-53	1	0	1
54-71	0	1	1
Perinatal conditions	0	1	1
Birth asphyxia and birth trauma	0	1	1
0-17	0	1	1
Respiratory infections	2	1	3
Lower respiratory infections	2	1	3
18-35	0	1	1
54-71	1	0	1
72-89	1	0	1
Noncommunicable diseases	9	14	23
Cardiovascular diseases	5	9	14
Hypertensive heart disease	0	2	2
72-89	0	2	2
Ischemic heart disease	0	1	1

Location/ Disease sub-groups/Age group	Female	Male	Total
72-89	0	1	1
Other cardiovascular diseases	5	6	11
36-53	1	0	1
54-71	1	2	3
72-89	2	4	6
90-107	1	0	1
Digestive diseases	0	1	1
Other digestive diseases	0	1	1
72-89	0	1	1
Endocrine disorders	0	1	1
Not categorized / Multiple sub-categories	0	1	1
90-107	0	1	1
Genitourinary diseases	0	1	1
Nephritis and nephrosis	0	1	1
72-89	0	1	1
Malignant neoplasms	2	0	2
Cervix uteri cancer	1	0	1
72-89	1	0	1
Stomach cancer	1	0	1
72-89	1	0	1
Respiratory diseases	2	2	4
Chronic obstructive pulmonary disease	1	1	2
72-89	1	1	2
Other respiratory diseases	1	1	2
36-53	1	0	1
72-89	0	1	1
Injuries	0	1	1
Unintentional injuries	0	1	1
Drownings	0	1	1
0-17	0	1	1
Ill-defined diseases	1	2	3
Not categorized / Multiple sub-categories	1	2	3

Location/ Disease sub-groups/Age group	Female	Male	Total
Not categorized / Multiple sub-categories	1	2	3
72-89	1	2	3
B	14	18	32
Communicable, maternal, perinatal and nutritional conditions	2	3	5
Other emerging diseases	2	3	5
COVID-19 related conditions	2	3	5
72-89	1	3	4
90-107	1	0	1
Noncommunicable diseases	10	10	20
Cardiovascular diseases	7	7	14
Hypertensive heart disease	1	0	1
72-89	1	0	1
Ischemic heart disease	1	2	3
72-89	1	2	3
Other cardiovascular diseases	5	5	10
54-71	2	0	2
72-89	3	5	8
Digestive diseases	1	1	2
Other digestive diseases	1	1	2
72-89	1	1	2
Malignant neoplasms	1	1	2
Liver cancer	1	0	1
90-107	1	0	1
Melanoma and other skin cancers	0	1	1
90-107	0	1	1
Neuropsychiatric conditions	0	1	1
Epilepsy	0	1	1
18-35	0	1	1
Respiratory diseases	1	0	1
Other respiratory diseases	1	0	1
72-89	1	0	1

Location/ Disease sub-groups/Age group	Female	Male	Total
Injuries	0	2	2
Unintentional injuries	0	2	2
Drownings	0	1	1
54-71	0	1	1
Other unintentional injuries	0	1	1
18-35	0	1	1
Ill-defined diseases	2	3	5
Not categorized / Multiple sub-categories	2	3	5
Not categorized / Multiple sub-categories	2	3	5
18-35	0	1	1
72-89	2	2	4
Lh	10	28	38
Communicable, maternal, perinatal and nutritional conditions	4	4	8
Infectious and parasitic diseases	3	0	3
Other infectious diseases	2	0	2
72-89	2	0	2
Tuberculosis	1	0	1
54-71	1	0	1
Other emerging diseases	1	3	4
COVID-19 related conditions	1	3	4
36-53	0	1	1
72-89	0	2	2
90-107	1	0	1
Respiratory infections	0	1	1
Lower respiratory infections	0	1	1
54-71	0	1	1
Noncommunicable diseases	5	20	25
Cardiovascular diseases	3	15	18
Cerebrovascular disease	1	2	3
54-71	1	1	2
72-89	0	1	1

Location/ Disease sub-groups/Age group	Female	Male	Total
Hypertensive heart disease	0	2	2
72-89	0	2	2
Ischemic heart disease	0	2	2
72-89	0	2	2
Other cardiovascular diseases	2	9	11
0-17	0	1	1
36-53	0	1	1
54-71	0	1	1
72-89	1	5	6
90-107	1	1	2
Diabetes mellitus	0	1	1
Not categorized / Multiple sub-categories	0	1	1
72-89	0	1	1
Neuropsychiatric conditions	1	2	3
Alzheimer and other dementias	0	1	1
72-89	0	1	1
Other neuropsychiatric disorders	1	1	2
72-89	1	1	2
Respiratory diseases	1	2	3
Chronic obstructive pulmonary disease	0	2	2
72-89	0	1	1
90-107	0	1	1
Other respiratory diseases	1	0	1
54-71	1	0	1
Injuries	1	3	4
Unintentional injuries	1	3	4
Drownings	0	3	3
36-53	0	2	2
54-71	0	1	1
Other unintentional injuries	1	0	1
54-71	1	0	1

Location/ Disease sub-groups/Age group	Female	Male	Total
Ill-defined diseases	0	1	1
Not categorized / Multiple sub-categories	0	1	1
Not categorized / Multiple sub-categories	0	1	1
54-71	0	1	1
K	13	22	35
Communicable, maternal, perinatal and nutritional conditions	1	4	5
Infectious and parasitic diseases	0	1	1
Tuberculosis	0	1	1
18-35	0	1	1
Nutritional deficiencies	0	1	1
Protein-energy malnutrition	0	1	1
36-53	0	1	1
Other emerging diseases	0	2	2
COVID-19 related conditions	0	2	2
0-17	0	1	1
90-107	0	1	1
Respiratory infections	1	0	1
Lower respiratory infections	1	0	1
72-89	1	0	1
Noncommunicable diseases	7	13	20
Cardiovascular diseases	5	9	14
Cerebrovascular disease	1	2	3
54-71	0	1	1
72-89	0	1	1
90-107	1	0	1
Hypertensive heart disease	0	2	2
72-89	0	2	2
Ischemic heart disease	0	1	1
72-89	0	1	1
Other cardiovascular diseases	4	4	8
54-71	0	1	1

Location/ Disease sub-groups/Age group	Female	Male	Total
72-89	4	2	6
90-107	0	1	1
Diabetes mellitus	0	1	1
Not categorized / Multiple sub-categories	0	1	1
72-89	0	1	1
Endocrine disorders	0	1	1
Not categorized / Multiple sub-categories	0	1	1
72-89	0	1	1
Genitourinary diseases	1	0	1
Nephritis and nephrosis	1	0	1
72-89	1	0	1
Malignant neoplasms	0	1	1
Trachea, bronchus, lung cancers	0	1	1
54-71	0	1	1
Respiratory diseases	1	1	2
Chronic obstructive pulmonary disease	1	0	1
72-89	1	0	1
Other respiratory diseases	0	1	1
72-89	0	1	1
Injuries	4	3	7
Intentional injuries	1	1	2
Poisonings	1	0	1
54-71	1	0	1
Self-inflicted injuries	0	1	1
36-53	0	1	1
Unintentional injuries	3	2	5
Drownings	2	1	3
0-17	1	0	1
54-71	1	0	1
72-89	0	1	1
Other unintentional injuries	1	1	2
18-35	0	1	1

Location/ Disease sub-groups/Age group	Female	Male	Total
72-89	1	0	1
Ill-defined diseases	1	2	3
Not categorized / Multiple sub-categories	1	2	3
Not categorized / Multiple sub-categories	1	2	3
18-35	0	1	1
36-53	1	0	1
54-71	0	1	1
AA	2	9	11
Communicable, maternal, perinatal and nutritional conditions	0	1	1
Other emerging diseases	0	1	1
COVID-19 related conditions	0	1	1
54-71	0	1	1
Noncommunicable diseases	1	4	5
Cardiovascular diseases	1	2	3
Ischemic heart disease	1	1	2
36-53	1	0	1
54-71	0	1	1
Other cardiovascular diseases	0	1	1
36-53	0	1	1
Respiratory diseases	0	2	2
Chronic obstructive pulmonary disease	0	2	2
72-89	0	1	1
90-107	0	1	1
Injuries	1	2	3
Unintentional injuries	1	2	3
Drownings	1	1	2
0-17	1	0	1
54-71	0	1	1
Other unintentional injuries	0	1	1
72-89	0	1	1

Location/ Disease sub-groups/Age group	Female	Male	Total
Ill-defined diseases	0	2	2
Not categorized / Multiple sub-categories	0	2	2
Not categorized / Multiple sub-categories	0	2	3
0-17	0	1	1
36-53	0	1	1
Adh	9	12	21
Communicable, maternal, perinatal and nutritional conditions	0	1	1
Infectious and parasitic diseases	0	1	1
Other infectious diseases	0	1	1
72-89	0	1	1
Noncommunicable diseases	7	4	11
Cardiovascular diseases	3	4	7
Ischemic heart disease	0	4	4
36-53	0	1	1
54-71	0	1	1
72-89	0	2	2
Other cardiovascular diseases	3	0	3
36-53	1	0	1
72-89	2	0	2
Genitourinary diseases	1	0	1
Other genitourinary system diseases	1	0	1
54-71	1	0	1
Neuropsychiatric conditions	1	0	1
Other neuropsychiatric disorders	1	0	1
0-17	1	0	1
Respiratory diseases	2	0	2
Chronic obstructive pulmonary disease	1	0	1
72-89	1	0	1
Other respiratory diseases	1	0	1
72-89	1	0	1

Location/ Disease sub-groups/Age group	Female	Male	Total
Injuries	1	4	5
Intentional injuries	0	1	1
Not categorized / Multiple sub-categories	0	1	1
54-71	0	1	1
Unintentional injuries	1	3	4
Drownings	1	3	4
0-17	0	1	1
18-35	0	1	1
36-53	1	0	1
72-89	0	1	1
Ill-defined diseases	1	3	4
Not categorized / Multiple sub-categories	1	3	4
Not categorized / Multiple sub-categories	1	3	4
72-89	1	2	3
90-107	0	1	1
V	0	3	3
Communicable, maternal, perinatal and nutritional conditions	0	1	1
Respiratory infections	0	1	1
Lower respiratory infections	0	1	1
72-89	0	1	1
Noncommunicable diseases	0	1	1
Cardiovascular diseases	0	1	1
Inflammatory heart diseases	0	1	1
18-35	0	1	1
Ill-defined diseases	0	1	1
Not categorized / Multiple sub-categories	0	1	1
Not categorized / Multiple sub-categories	0	1	1
90-107	0	1	1
M	7	12	19
Communicable, maternal, perinatal, and nutritionalconditions	1	2	3

Location/ Disease sub-groups/Age group	Female	Male	Total
Infectious and parasitic diseases	0	2	2
Other infectious diseases	0	2	2
72-89	0	2	2
Respiratory infections	1	0	1
Lower respiratory infections	1	0	1
72-89	1	0	1
Noncommunicable diseases	6	10	16
Cardiovascular diseases	3	4	7
Cerebrovascular disease	1	0	1
72-89	1	0	1
Hypertensive heart disease	1	1	2
72-89	1	1	2
Inflammatory heart diseases	1	0	1
72-89	1	0	1
Ischemic heart disease	0	2	2
54-71	0	1	1
72-89	0	1	1
Other cardiovascular diseases	0	1	1
72-89	0	1	1
Endocrine disorders	1	3	4
Not categorized / Multiple sub-categories	1	3	4
72-89	1	2	3
90-107	0	1	1
Malignant neoplasms	0	2	2
Other malignant neoplasms	0	1	1
72-89	0	1	1
Prostate cancer	0	1	1
72-89	0	1	1
Respiratory diseases	2	1	3
Asthma	0	1	1
90-107	0	1	1

Location/ Disease sub-groups/Age group	Female	Male	Total
F	6	6	12
Noncommunicable diseases	5	3	8
Cardiovascular diseases	3	1	4
Cerebrovascular disease	1	0	1
54-71	1	0	1
Ischemic heart disease	0	1	1
72-89	0	1	1
Other cardiovascular diseases	2	0	2
72-89	2	0	2
Diabetes mellitus	0	1	1
Not categorized / Multiple sub-categories	0	1	1
72-89	0	1	1
Malignant neoplasms	1	0	1
Other malignant neoplasms	1	0	1
72-89	1	0	1
Respiratory diseases	1	1	2
Other respiratory diseases	1	1	2
72-89	1	1	2
Injuries	0	1	1
Unintentional injuries	0	1	1
Drownings	0	1	1
0-17	0	1	1
Ill-defined diseases	1	2	3
Not categorized / Multiple sub-categories	1	2	3
Not categorized / Multiple sub-categories	1	2	3
54-71	1	1	2
72-89	0	1	1
Dh	3	8	11
Communicable, maternal, perinatal and nutritional conditions	0	1	1
Other emerging diseases	0	1	1
COVID-19 related conditions	0	1	1

Location/ Disease sub-groups/Age group	Female	Male	Total
90-107	0	1	1
Noncommunicable diseases	3	4	7
Cardiovascular diseases	1	2	3
Ischemic heart disease	0	2	2
36-53	0	2	2
Other cardiovascular diseases	1	0	1
54-71	1	0	1
Diabetes mellitus	1	0	1
Not categorized / Multiple sub-categories	1	0	1
72-89	1	0	1
Malignant neoplasms	0	1	1
Mouth and oropharynx cancers	0	1	1
54-71	0	1	1
Respiratory diseases	1	1	2
Chronic obstructive pulmonary disease	1	1	2
72-89	1	0	1
90-107	0	1	1
Injuries	0	3	3
Unintentional injuries	0	3	3
Drownings	0	3	3
18-35	0	2	2
72-89	0	1	1
Th	7	11	18
Communicable, maternal, perinatal and nutritional conditions	2	1	3
Infectious and parasitic diseases	1	0	1
Other infectious diseases	1	0	1
72-89	1	0	1
Other emerging diseases	1	0	1
COVID-19 related conditions	1	0	1
72-89	1	0	1
Respiratory infections	0	1	1

Location/ Disease sub-groups/Age group	Female	Male	Total
Upper respiratory infections	0	1	1
90-107	0	1	1
Noncommunicable diseases	4	8	12
Cardiovascular diseases	3	5	8
Cerebrovascular disease	1	0	1
90-107	1	0	1
Hypertensive heart disease	1	1	2
54-71	1	0	1
72-89	0	1	1
Ischemic heart disease	0	1	1
72-89	0	1	1
Other cardiovascular diseases	1	3	4
18-35	0	2	2
72-89	1	1	2
Genitourinary diseases	0	1	1
Nephritis and nephrosis	0	1	1
72-89	0	1	1
Malignant neoplasms	0	1	1
Prostate cancer	0	1	1
90-107	0	1	1
Respiratory diseases	1	1	2
Chronic obstructive pulmonary disease	1	0	1
72-89	1	0	1
Other respiratory diseases	0	1	1
72-89	0	1	1
Injuries	0	1	1
Intentional injuries	0	1	1
Not categorized / Multiple sub-categories	0	1	1
18-35	0	1	1
Ill-defined diseases	1	1	2
Not categorized / Multiple sub-categories	1	1	2

Location/ Disease sub-groups/Age group	Female	Male	Total
Not categorized / Multiple sub-categories	1	1	2
0-17	1	0	1
72-89	0	1	1
L	16	24	40
Communicable, maternal, perinatal and nutritional conditions	4	5	9
Infectious and parasitic diseases	1	0	1
Other infectious diseases	1	0	1
72-89	1	0	1
Maternal conditions	1	0	1
Other maternal conditions	1	0	1
36-53	1	0	1
Other emerging diseases	2	4	6
COVID-19 related conditions	2	4	6
54-71	2	0	2
72-89	0	3	3
90-107	0	1	1
Perinatal conditions	0	1	1
Low birth weight	0	1	1
0-17	0	1	1
Noncommunicable diseases	7	15	22
Cardiovascular diseases	2	12	14
Cerebrovascular disease	0	1	1
72-89	0	1	1
Ischemic heart disease	0	2	2
36-53	0	2	2
Other cardiovascular diseases	2	9	11
18-35	0	1	1
36-53	0	1	1
54-71	2	1	3
72-89	0	5	5
90-107	0	1	1

Location/ Disease sub-groups/Age group	Female	Male	Total
Diabetes mellitus	1	0	1
Not categorized / Multiple sub-categories	1	0	1
72-89	1	0	1
Genitourinary diseases	1	1	2
Other genitourinary system diseases	1	1	2
54-71	0	1	1
72-89	1	0	1
Malignant neoplasms	1	0	1
Colon and rectum cancers	1	0	1
72-89	1	0	1
Neuropsychiatric conditions	1	1	2
Epilepsy	0	1	1
0-17	0	1	1
Other neuropsychiatric disorders	1	0	1
72-89	1	0	1
Respiratory diseases	1	1	2
Other respiratory diseases	1	1	2
72-89	1	1	2
Injuries	1	1	2
Unintentional injuries	1	1	2
Drownings	1	1	2
18-35	0	1	1
54-71	1	0	1
Ill-defined diseases	4	3	7
Not categorized / Multiple sub-categories	4	3	7
Not categorized / Multiple sub-categories	4	3	7
72-89	2	2	4
90-107	2	1	3
GA	9	19	28
Communicable, maternal, perinatal and nutritional conditions	1	2	3
Other emerging diseases	1	2	3

Location/ Disease sub-groups/Age group	Female	Male	Total
COVID-19 related conditions	1	2	3
54-71	0	1	1
72-89	1	1	2
Noncommunicable diseases	6	13	19
Cardiovascular diseases	2	9	11
Cerebrovascular disease	1	2	3
72-89	1	1	2
90-107	0	1	1
Hypertensive heart disease	0	1	1
72-89	0	1	1
Ischemic heart disease	0	3	3
54-71	0	2	2
90-107	0	1	1
Other cardiovascular diseases	1	3	4
36-53	0	1	1
90-107	1	2	3
Diabetes mellitus	1	1	2
Not categorized / Multiple sub-categories	1	1	2
72-89	1	1	2
Neuropsychiatric conditions	1	0	1
Other neuropsychiatric disorders	1	0	1
72-89	1	0	1
Respiratory diseases	2	3	5
Chronic obstructive pulmonary disease	1	1	2
72-89	1	1	2
Other respiratory diseases	1	2	3
72-89	1	2	3
Injuries	0	3	3
Intentional injuries	0	1	1
Not categorized / Multiple sub-categories	0	1	1
0-17	0	1	1

Location/ Disease sub-groups/Age group	Female	Male	Total
Unintentional injuries	0	2	2
Other unintentional injuries	0	2	2
36-53	0	1	1
72-89	0	1	1
Ill-defined diseases	2	1	3
Not categorized / Multiple sub-categories	2	1	3
Not categorized / Multiple sub-categories	2	1	3
54-71	0	1	1
72-89	2	0	2
GDh	14	32	46
Communicable, maternal, perinatal and nutritional conditions	4	10	14
Infectious and parasitic diseases	3	2	5
Other infectious diseases	2	2	4
36-53	0	1	1
72-89	1	1	2
90-107	1	0	1
Tuberculosis	1	0	1
54-71	1	0	1
Other emerging diseases	1	6	7
COVID-19 related conditions	1	6	7
54-71	0	2	2
72-89	1	3	4
90-107	0	1	1
Perinatal conditions	0	1	1
Other perinatal conditions	0	1	1
0-17	0	1	1
Respiratory infections	0	1	1
Lower respiratory infections	0	1	1
72-89	0	1	1
Noncommunicable diseases	10	18	28
Cardiovascular diseases	4	11	15

Location/ Disease sub-groups/Age group	Female	Male	Total
Cerebrovascular disease	1	2	3
54-71	1	0	1
72-89	0	2	2
Inflammatory heart diseases	0	1	1
72-89	0	1	1
Ischemic heart disease	0	3	3
36-53	0	1	1
72-89	0	2	2
Other cardiovascular diseases	3	5	8
36-53	0	1	1
54-71	1	1	2
72-89	1	3	4
90-107	1	0	1
Endocrine disorders	1	1	2
Not categorized / Multiple sub-categories	1	1	2
0-17	0	1	1
72-89	1	0	1
Malignant neoplasms	0	1	1
Prostate cancer	0	1	1
72-89	0	1	1
Neuropsychiatric conditions	1	0	1
Other neuropsychiatric disorders	1	0	1
90-107	1	0	1
Respiratory diseases	4	5	9
Chronic obstructive pulmonary disease	2	0	2
72-89	2	0	2
Other respiratory diseases	2	5	7
72-89	2	4	6
90-107	0	1	1
Injuries	0	2	2
Unintentional injuries	0	2	2
Drownings	0	1	1

Location/ Disease sub-groups/Age group	Female	Male	Total
18-35	0	1	1
Other unintentional injuries	0	1	1
72-89	0	1	1
Ill-defined diseases	0	2	2
Not categorized / Multiple sub-categories	0	2	2
Not categorized / Multiple sub-categories	0	2	2
72-89	0	1	1
90-107	0	1	1
Gn	12	18	30
Communicable, maternal, perinatal and nutritional conditions	2	2	4
Other emerging diseases	1	1	2
COVID-19 related conditions	1	1	2
72-89	1	0	1
90-107	0	1	1
Respiratory infections	1	1	2
Lower respiratory infections	1	1	2
72-89	1	1	2
Noncommunicable diseases	10	5	15
Cardiovascular diseases	5	3	8
Cerebrovascular disease	2	0	2
72-89	2	0	2
Ischemic heart disease	1	1	2
72-89	1	0	1
90-107	0	1	1
Other cardiovascular diseases	2	2	4
72-89	2	2	4
Endocrine disorders	0	1	1
Not categorized / Multiple sub-categories	0	1	1
54-71	0	1	1
Genitourinary diseases	1	0	1
Nephritis and nephrosis	1	0	1

Location/ Disease sub-groups/Age group	Female	Male	Total
0-17	1	0	1
Malignant neoplasms	2	0	2
Leukemia	1	0	1
54-71	1	0	1
Other malignant neoplasms	1	0	1
72-89	1	0	1
Respiratory diseases	2	1	3
Asthma	0	1	1
18-35	0	1	1
Chronic obstructive pulmonary disease	1	0	1
72-89	1	0	1
Other respiratory diseases	1	0	1
72-89	1	0	1
Injuries	0	3	3
Unintentional injuries	0	3	3
Drownings	0	1	1
0-17	0	1	1
Other unintentional injuries	0	1	1
18-35	0	1	1
Road traffic accidents	0	1	1
18-35	0	1	1
Ill-defined diseases	0	8	8
Not categorized / Multiple sub-categories	0	8	8
Not categorized / Multiple sub-categories	0	8	8
54-71	0	1	1
72-89	0	6	6
90-107	0	1	1
S	26	64	90
Communicable, maternal, perinatal and nutritional conditions	2	16	18
Infectious and parasitic diseases	0	1	1
Other infectious diseases	0	1	1

Location/ Disease sub-groups/Age group	Female	Male	Total
72-89	0	1	1
Nutritional deficiencies	1	0	1
Iron-deficiency anemia	1	0	1
90-107	1	0	1
Other emerging diseases	1	11	12
COVID-19 related conditions	1	11	12
72-89	1	9	10
90-107	0	2	2
Perinatal conditions	0	1	1
Low birth weight	0	1	1
Not stated	0	1	1
Respiratory infections	0	3	3
Lower respiratory infections	0	3	3
72-89	0	3	3
Noncommunicable diseases	19	34	53
Cardiovascular diseases	7	15	22
Cerebrovascular disease	2	1	3
54-71	1	0	1
72-89	1	1	2
Hypertensive heart disease	2	2	4
72-89	1	1	2
90-107	1	1	2
Ischemic heart disease	1	5	6
54-71	0	3	3
72-89	1	1	2
90-107	0	1	1
Other cardiovascular diseases	2	7	9
36-53	0	1	1
54-71	1	2	3
72-89	1	4	5
Congenital anomalies	1	1	2
Other Congenital anomalies	1	1	2

Location/ Disease sub-groups/Age group	Female	Male	Total
0-17	1	1	2
Diabetes mellitus	2	5	7
Not categorized / Multiple sub-categories	2	5	7
54-71	1	3	4
72-89	1	2	3
Digestive diseases	0	2	2
Other digestive diseases	0	2	2
72-89	0	1	1
90-107	0	1	1
Endocrine disorders	2	0	2
Not categorized / Multiple sub-categories	2	0	2
54-71	1	0	1
90-107	1	0	1
Genitourinary diseases	1	4	5
Nephritis and nephrosis	1	4	5
54-71	0	1	1
72-89	0	3	3
90-107	1	0	1
Malignant neoplasms	1	3	4
Pancreas cancer	1	0	1
72-89	1	0	1
Prostate cancer	0	2	2
72-89	0	1	1
90-107	0	1	1
Stomach cancer	0	1	1
36-53	0	1	1
Neuropsychiatric conditions	1	0	1
Other neuropsychiatric disorders	1	0	1
54-71	1	0	1
Oral conditions	1	0	1
Other oral diseases	1	0	1
72-89	1	0	1

Location/ Disease sub-groups/Age group	Female	Male	Total
Respiratory diseases	3	4	7
Chronic obstructive pulmonary disease	0	2	2
54-71	0	1	1
72-89	0	1	1
Other respiratory diseases	3	2	5
54-71	1	0	1
72-89	1	1	2
90-107	1	1	2
Injuries	1	8	9
Intentional injuries	0	4	4
Self-inflicted injuries	0	4	4
18-35	0	1	1
36-53	0	3	3
Unintentional injuries	1	4	5
Drownings	0	1	1
36-53	0	1	1
Other unintentional injuries	1	1	2
36-53	1	1	2
Road traffic accidents	0	2	2
18-35	0	1	1
54-71	0	1	1
Ill-defined diseases	4	6	10
Not categorized / Multiple sub-categories	4	6	10
Not categorized / Multiple sub-categories	4	6	10
36-53	0	1	1
54-71	0	1	1
72-89	4	4	8
Total	**610**	**902**	**1,512**

CHAPTER 5 - PUBLIC HEALTH

5 Public Health

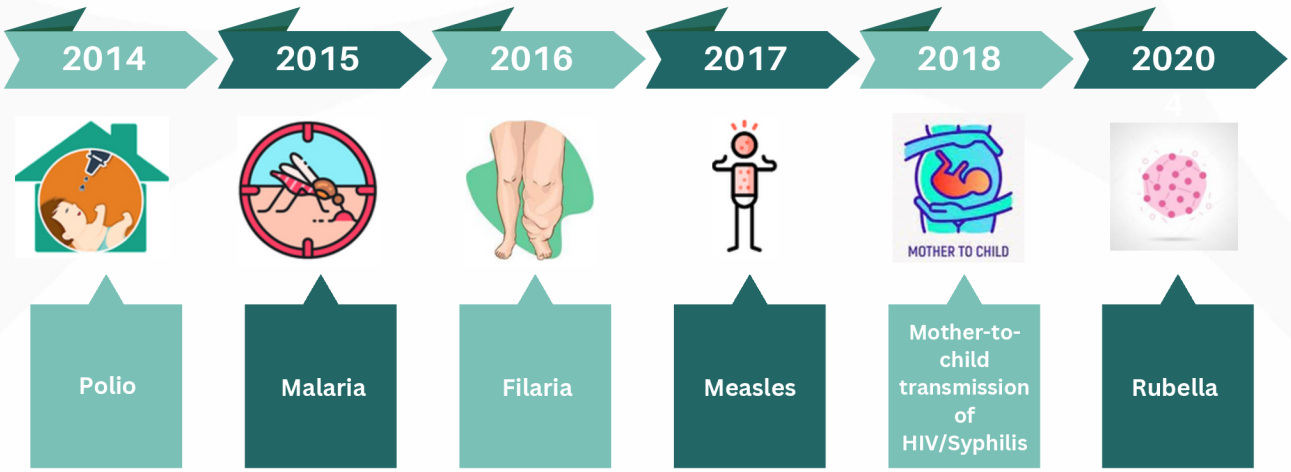
Public health is the discipline that combines the science and art of preventing diseases, extending lifespans and enhancing overall health through coordinated societal efforts (World Health Organization 2021).

In this chapter, we will examine several public health issues relevant to Maldives. The focus will be on presenting data related to preventive measures and health promotion initiatives implemented in the country. These initiatives encompass various areas such as immunization coverage, disease surveillance, HIV screening, sexually transmitted diseases and family planning.

5.1 Disease Elimination

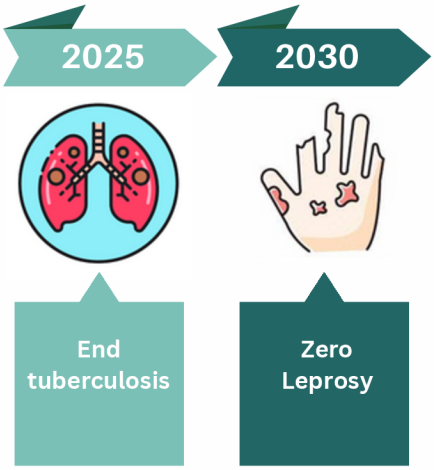
Maldives continues to demonstrate its exceptional track record in disease control and elimination, now achieving the remarkable feat of eliminating mother-to-child transmission of HIV and Syphilis. The nation's commitment to public health is evident in its history of successfully eradicating diseases, including Smallpox, Polio, Maternal and Neonatal Tetanus, Leprosy and more recently, Malaria and Filaria. Measles had been eliminated in 2017 and Rubella in 2020. This accomplishment solidifies Maldives' leading position in disease control and elimination within the Southeast Asia region (UNDP Maldives, 2019[15]).

Figure 5-1: Disease Eliminated



[15] Maldives certified for Elimination of Mother to Child Transmission (EMTCT) of HIV and Syphilis, 15 July 2019, https://maldives.un.org/en/116409-maldives-certified-elimination-mother-child-transmission-emtct-hiv-and-syphilis

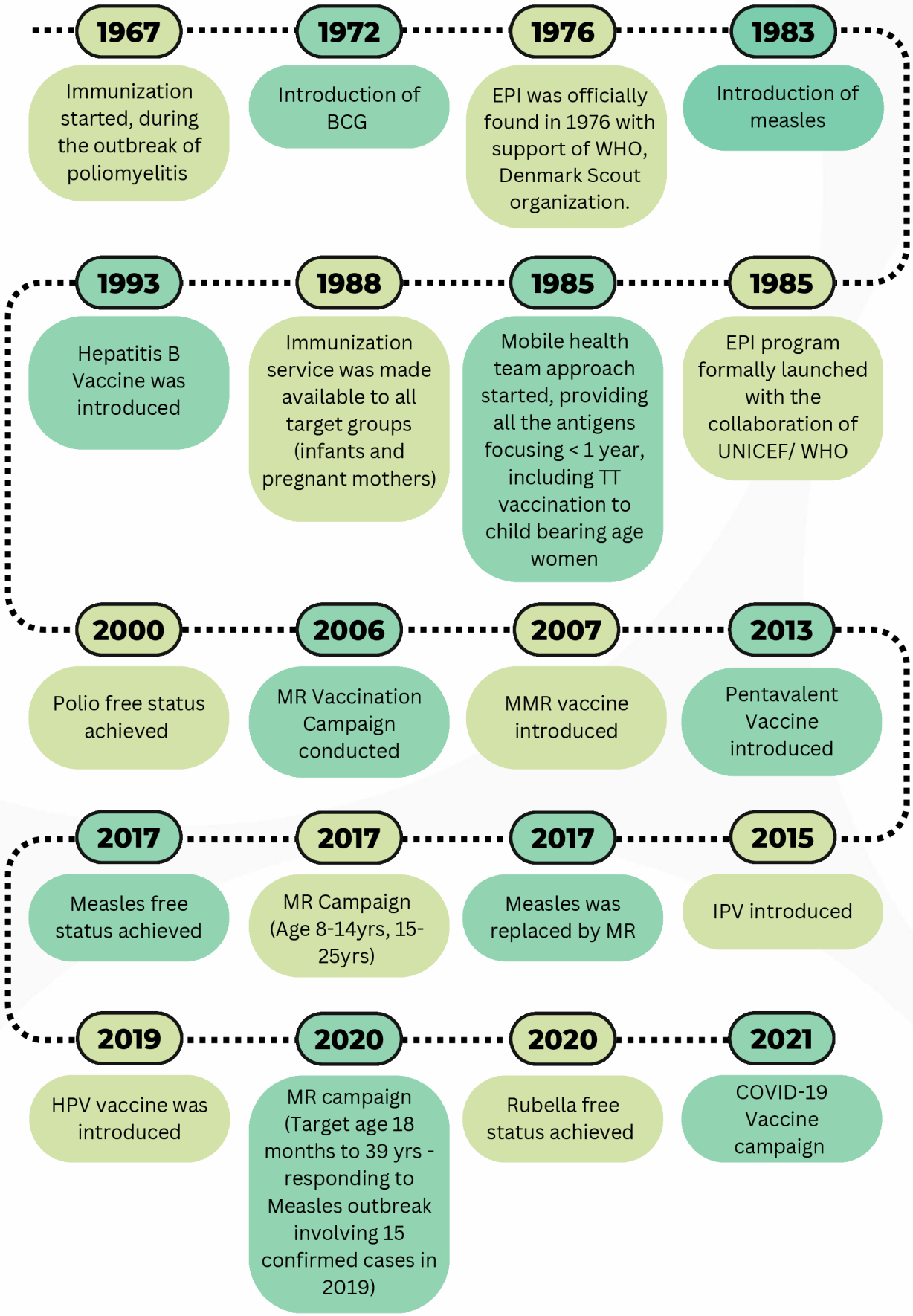
Figure 5-2: Targets for disease elimination



5.2 National immunization Program (NIP)

Since its establishment in 1985, the Maldives has consistently achieved and sustained high immunization coverage for children through routine Immunization. The immunization program is a widely implemented health program globally and has established reliable access to children in the Maldives. This section provides data on the coverage of routine immunization, vitamin A supplementation and deworming as per the existing immunization schedule.

Figure 5-3: History of immunization in the Maldives till 2021



5.2.1 Routine immunization schedule

The immunization program of the Maldives consists of a comprehensive schedule that includes the administration of 12 antigens to children. These vaccines are administered in a specific order to provide protection against targeted diseases.

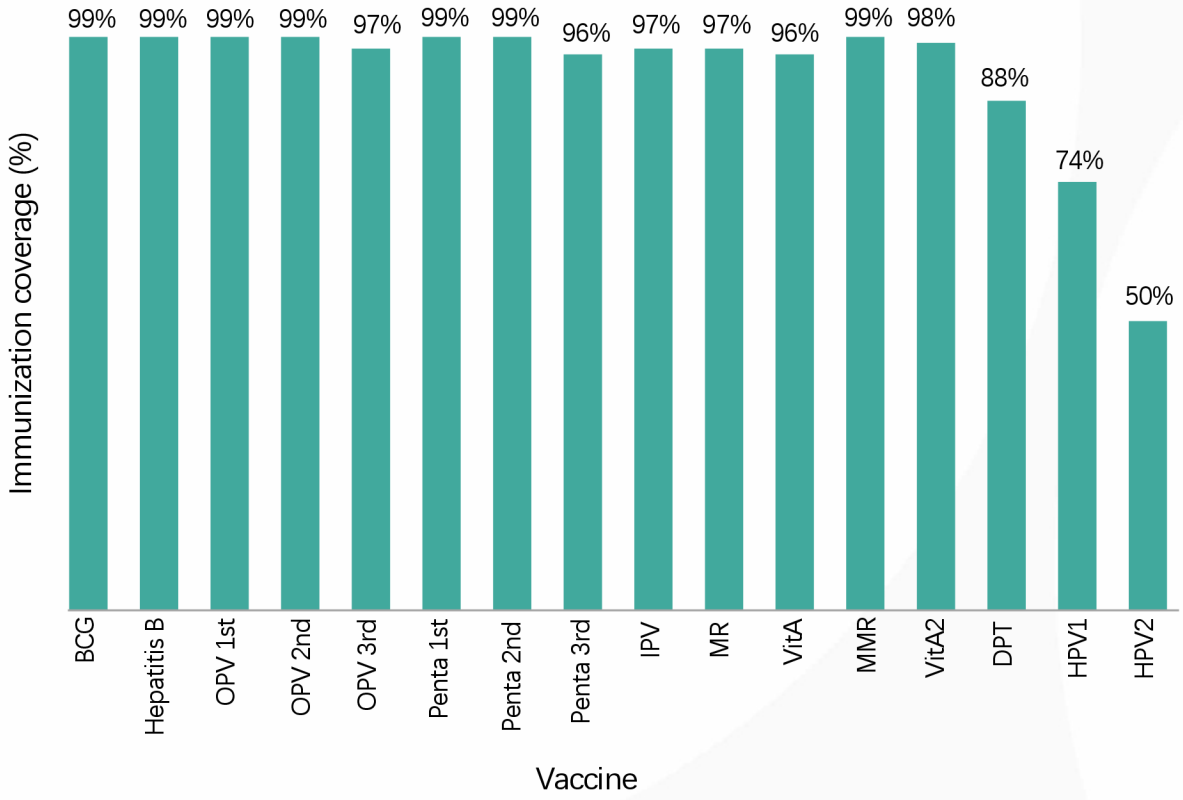
Figure 5-4: Maldives routine child immunization schedule

Vaccine	Disease protected against	Usual site	At Birth	Child in Months					Child in Years		
				2	4	6	9	18	4	10	15
BCG	Tuberculosis	Left upper arm	■								
HepB	Hepatitis B	Thigh	■								
Pentavalent	Diphtheria, Tetanus, Pertussis, Haemophilus & Hepatitis B	Thigh		■	■	■					
BOPV	Polio	By mouth		■	■	■					
IPV	Polio	Thigh				■					
MR	Measles & rubella	Thigh					■				
MMR	Measles, mumps & rubella	Thigh						■			
DPT Booster	Diphtheria, Tetanus, Pertussis (Whooping cough)	Thigh							■		
HPV	Cervical Cancer	Upper arm								■	
Td	Tetanus	Upper arm									■

Definitions: Immunization coverage rate by vaccine for each vaccine in the national schedule is defined by WHO (World Health Organization 2018) as “percentage of the target population that has received the last recommended dose for each vaccine recommended in the national schedule by vaccine. This should include all vaccines within a country’s routine immunization schedule”.

In 2021, Maldives achieved immunization coverage of over 90% for all vaccines, with the exception of DPT, HPV1, and HPV2, which ranged from 88% to 50%.

Figure 5-5: Immunization coverage, 2021

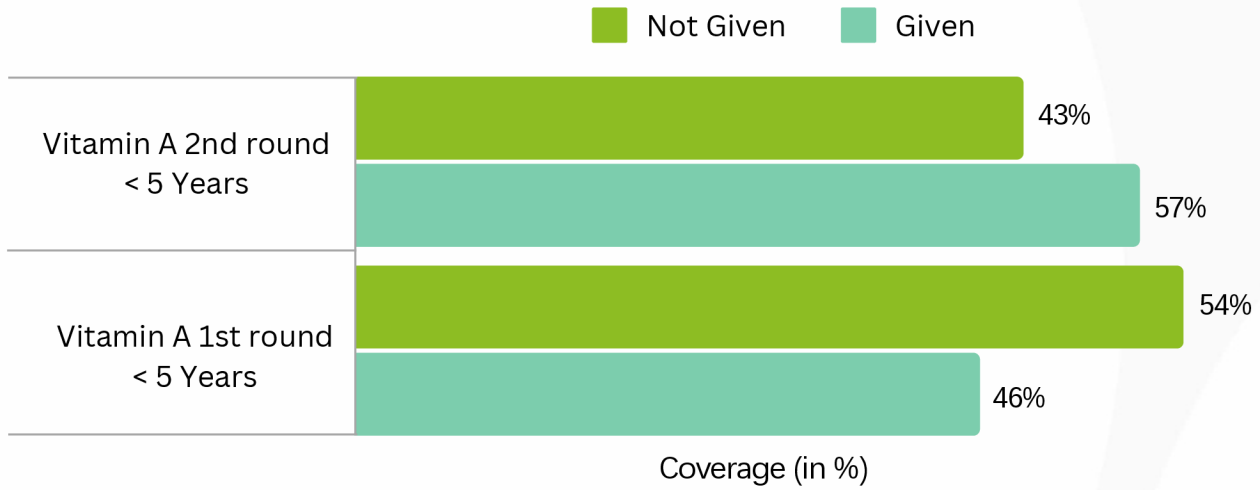


5.2.2 Vitamin A Coverage

The Vitamin A and deworming supplementation program has been implemented since 1999 and is led by the Nutrition Program of the Health Protection Agency (HPA). Vitamin A supplementation is provided to children under 5 years of age through schools and health facilities.

Vitamin A is crucial for a well-functioning immune system and the healthy growth and development of children. Vitamin A deficiency remains the primary cause of preventable childhood blindness and increases the vulnerability to common childhood infections such as measles and diarrheal diseases (World Health Organization, 2018a).

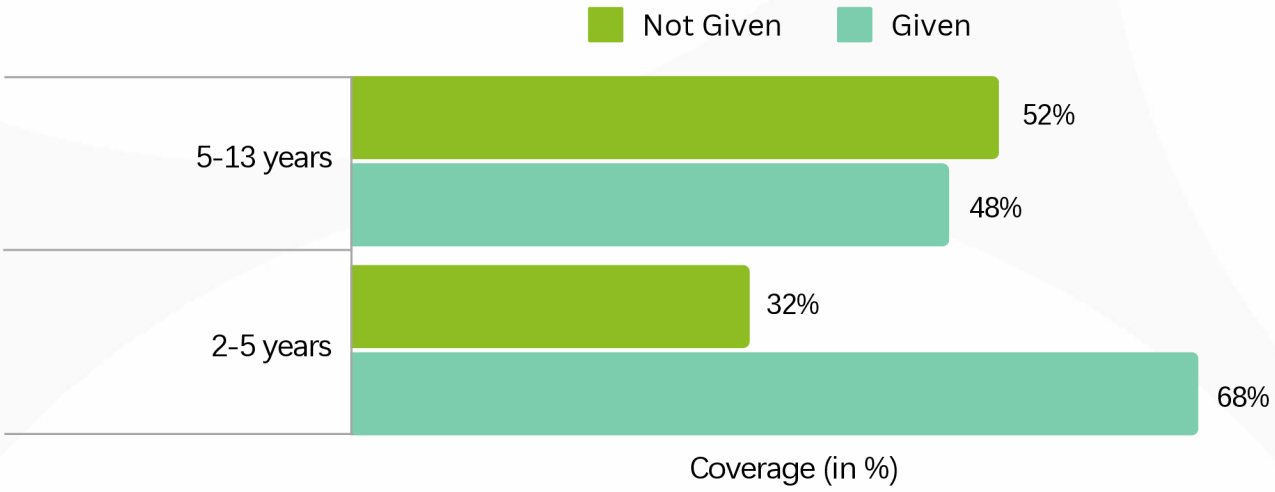
Figure 5-6: Vitamin A coverage for children below 5 years, 2021



5.2.3 Deworming coverage

Soil-transmitted helminths (STHs), or intestinal worms, pose a significant public health concern in regions with tropical climates and inadequate sanitation and hygiene practices. In line with Vitamin A supplementation, deworming medications are also administered to individuals aged 2 to 13 years in the Maldives. Routine monitoring is conducted to ensure age-appropriate and widespread coverage across different geographical areas.

Figure 5-7: Deworming coverage by age groups, 2021



5.3 Surveillance

The Health Protection Agency's communicable disease surveillance program in Maldives is responsible for gathering data on notifiable diseases. This program focuses on early detection and long-term monitoring of diseases to facilitate effective policy decisions. This section presents data for 11 diseases that were monitored in the year 2021.

Figure 5-8: Diseases under surveillance reported by region, 2021

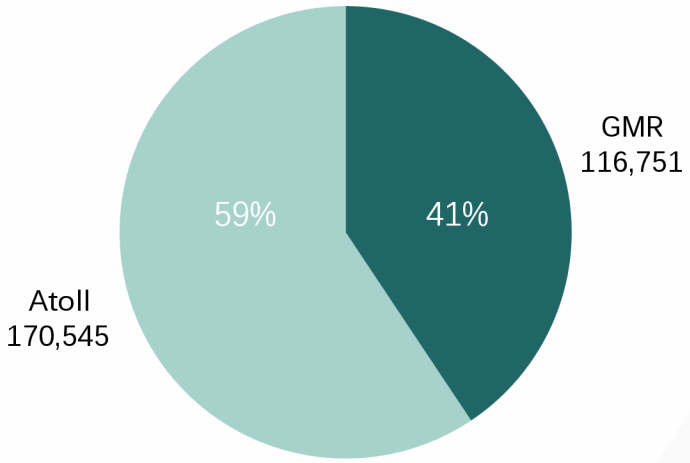


Table 5-1: Number of diseases under surveillance reported by region, 2021

Reported diseases	Atolls	GMR	Total
Acute Respiratory Infection (ARI)	108,417	47,765	156,182
COVID-19	28,742	38,819	67,561
Viral Fever	20,635	18,769	39,404
Acute Gastroenteritis (AGE)	7,244	7,821	15,065
Conjunctivitis	4,977	2,616	7,593
Influenza	163	770	933
Chicken pox	239	154	393
Dengue	110	35	145
Hand-foot-mouth disease (HFMD)	18	2	20
Grand Total	**170,545**	**116,751**	**287,296**

The remainder of this section provides a detailed analysis of the five most prevalent diseases in terms of their distribution across the atolls.

5.3.1 Acute respiratory infections (ARI)

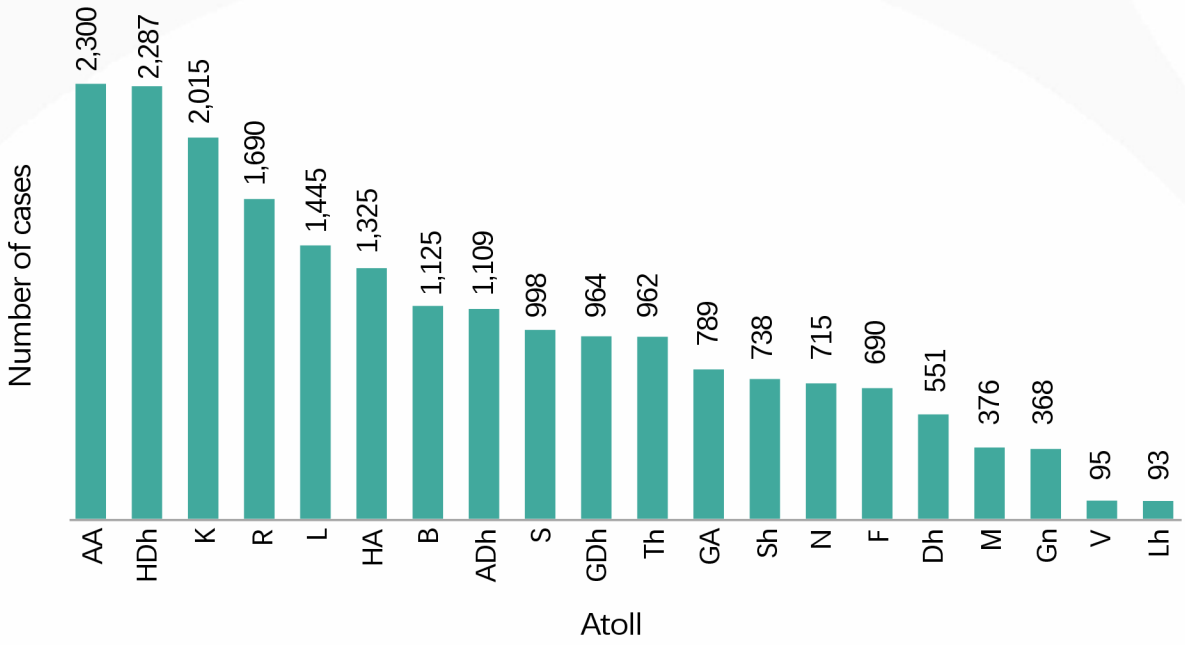
Out of the total 156,182 reported cases of Acute Respiratory Infections (ARIs), GMR accounted for 31% of the infections. When excluding the GMR from the data, it becomes evident that R, S and Lh Atoll had the highest number of ARI cases.

Figure 5-9: ARI cases across atolls, 2021

5.3.2 Viral Fever (VF)

Out of the total 39,404 cases of Viral Fever (VF) reported, GMR accounted for nearly half (48%) of the total cases. When excluding the GMR from the data, it becomes evident that AA, HDh, and K Atoll had the highest number of Viral Fever (VF) cases.

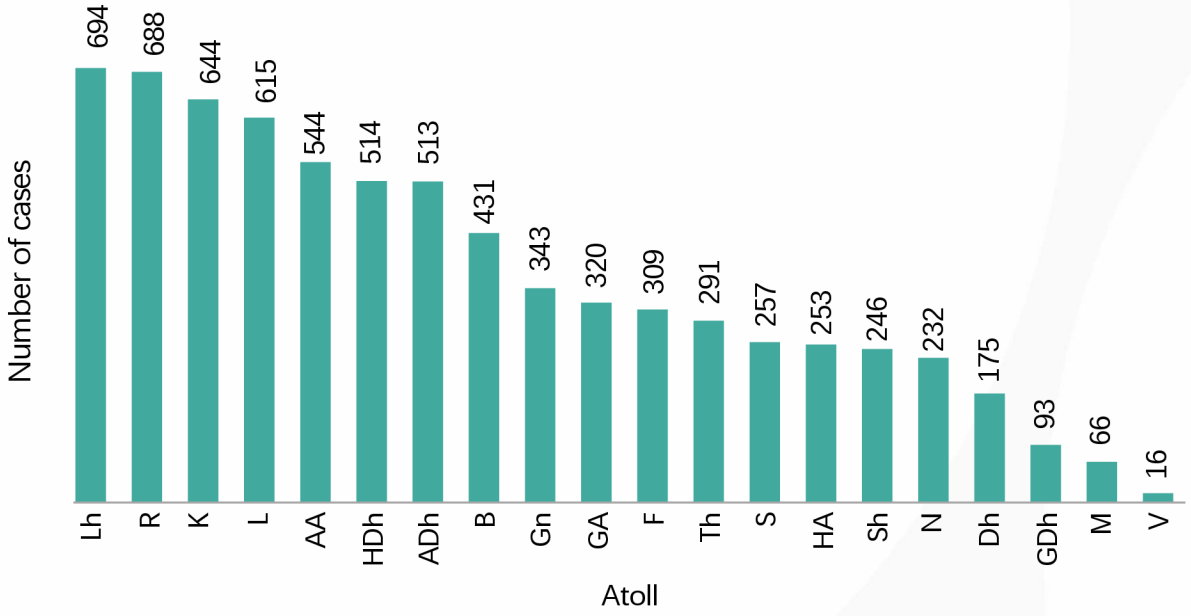
Figure 5-10: Viral Fever cases across atolls, 2021



5.3.3 Acute Gastro-Enteritis (AGE)

Out of the total 15,065 reported cases of Acute Gastroenteritis (AGE), GMR accounted for more than half (52%) of the total cases. When excluding the GMR from the data, it becomes evident that Lh, R, and K Atoll had the highest number of AGE cases.

Figure 5-11: Acute Gastro-Enteritis (AGE) cases across atolls, 2021



5.3.4 Conjunctivitis

Out of the total 7,593 reported cases of conjunctivitis, GMR accounted for more than one-third (34%) of the total cases. When excluding the GMR from the data, it becomes evident that HDh, L, and B Atoll had the highest number of conjunctivitis cases.

Figure 5-12: Conjunctivitis cases across atolls, 2021

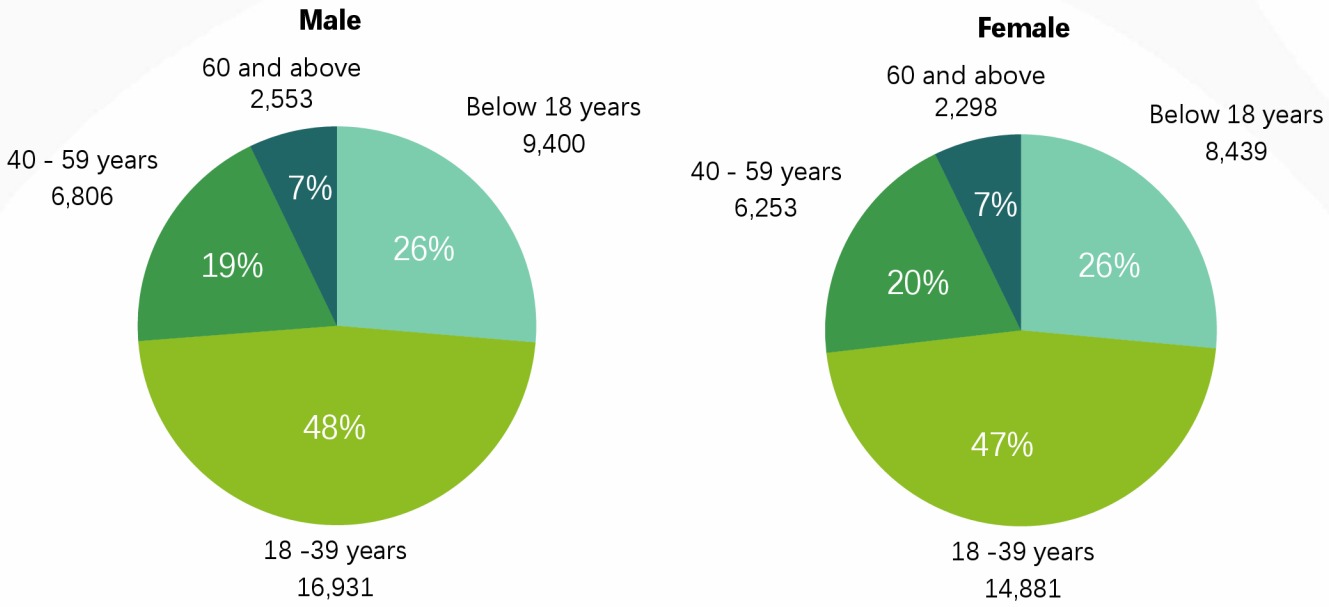
5.3.5 COVID-19

Out of the total 67,561 reported cases of COVID-19, GMR accounted for more than half (57%) of the total cases. When excluding the GMR from the data, it becomes evident that K, S, and Lh Atoll had the highest number of COVID-19 cases.

Figure 5-13: COVID-19 cases across atolls, 2021

The graph reveals the distribution of COVID-19 cases based on sex and age groups. Among males, the highest number of cases were observed in the 18-39 years age group, followed by the below 18 years age group. Similarly, among females, the highest number of cases were recorded in the 18-39 years age group, while the below 18 years age group had the second-highest number of cases. The number of cases decreased gradually in the higher age groups for both males and females.

Figure 5-14: COVID-19 cases by age groups and sex, 2021



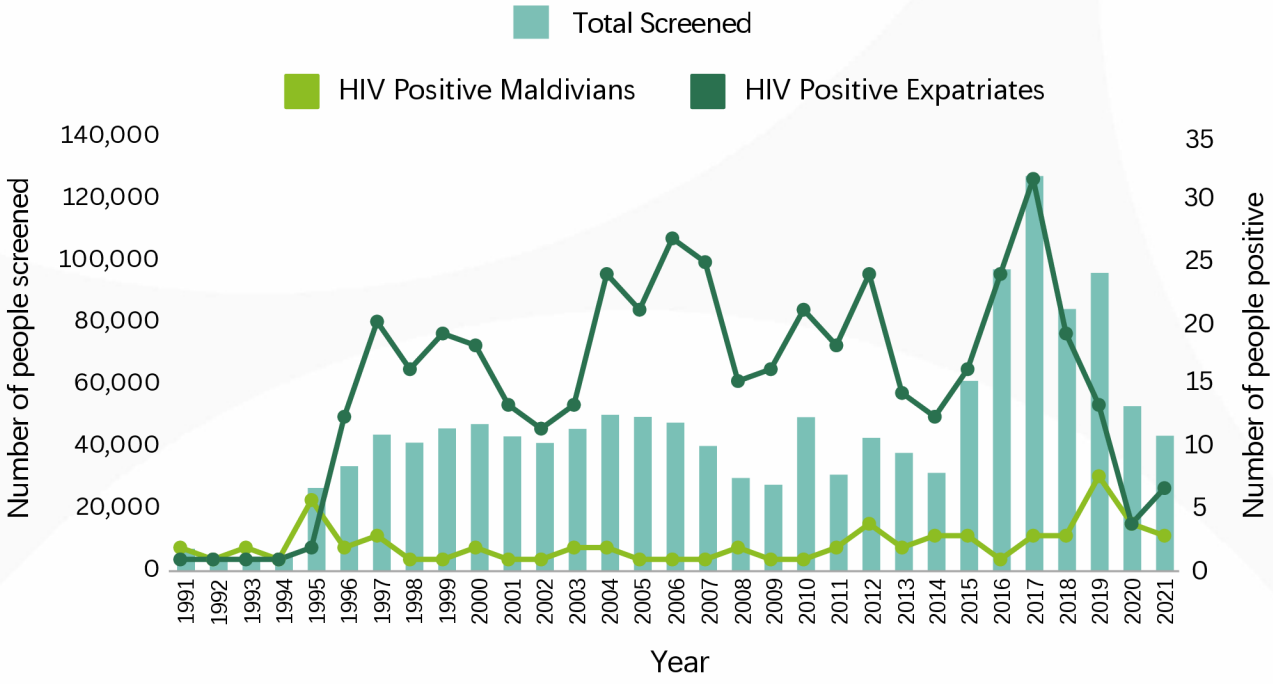
5.4 HIV Screening

HIV, short for Human Immunodeficiency Virus, is a virus that attacks and weakens a person's immune system by targeting vital cells responsible for combating diseases and infections. Presently, there is no known cure for HIV, but with appropriate medical care, the virus can be effectively managed (WHO, 2023[16]).

In the Maldives, HIV screening services encompass both provider-initiated and client-initiated counseling and testing (PICT and CICT). These tests are conducted with the informed and voluntary consent of the clients. Positive HIV screening test results are reported to the National HIV/AIDS program for further confirmatory testing and to facilitate the linkage to treatment and care. Screening services are readily available in hospitals and health centers, and they are accessible to everyone free of charge.

In 2021, a total of 43,517 HIV tests were conducted. Out of these tests, 8 individuals tested positive. Among the positive cases, 2 were Maldivians and rest of the 6 were foreigners.

Figure 5-15: Number of HIV tests and positive cases by local and foreigners over the years, 1991-2021



The data reveals the number of individuals screened for HIV, including both Maldivians and foreigners and highlights the occurrence of HIV positive cases within each year.

[16] WHO, 2023, HIV and AIDS, 13 July, 2023, https://www.who.int/news-room/fact-sheets/detail/hiv-aids

Throughout the years, the number of individuals screened for HIV has varied, ranging from 4,206 in 1992 to a peak of 127,239 in 2017. The majority of those screened were Maldivians, reflecting the focus on HIV awareness and testing among the local population. Meanwhile, the number of expatriates undergoing HIV screening was also recorded.

The graph shows that the number of HIV positive cases fluctuated annually, with some years reporting no positive cases. There were instances where HIV positive cases were identified among both Maldivians and foreigners. The highest number of HIV positive cases in a single year was 34 in 2017 (i.e., 2 locals and 32 foreigners).

It is worth noting that the overall trend indicates a relatively low number of positive cases compared to the total number of individuals screened.

5.5 Sexually Transmitted Infections (STIs)

This section focuses on Sexually Transmitted Infections (STIs), with the National Program at Health Protection Agency[17] responsible for monitoring these infections based on three indicators outlined by the government in 2013. These indicators include Vaginal Discharge Syndrome, Urethral Discharge Syndrome, and Genital Ulcers in both males and females.

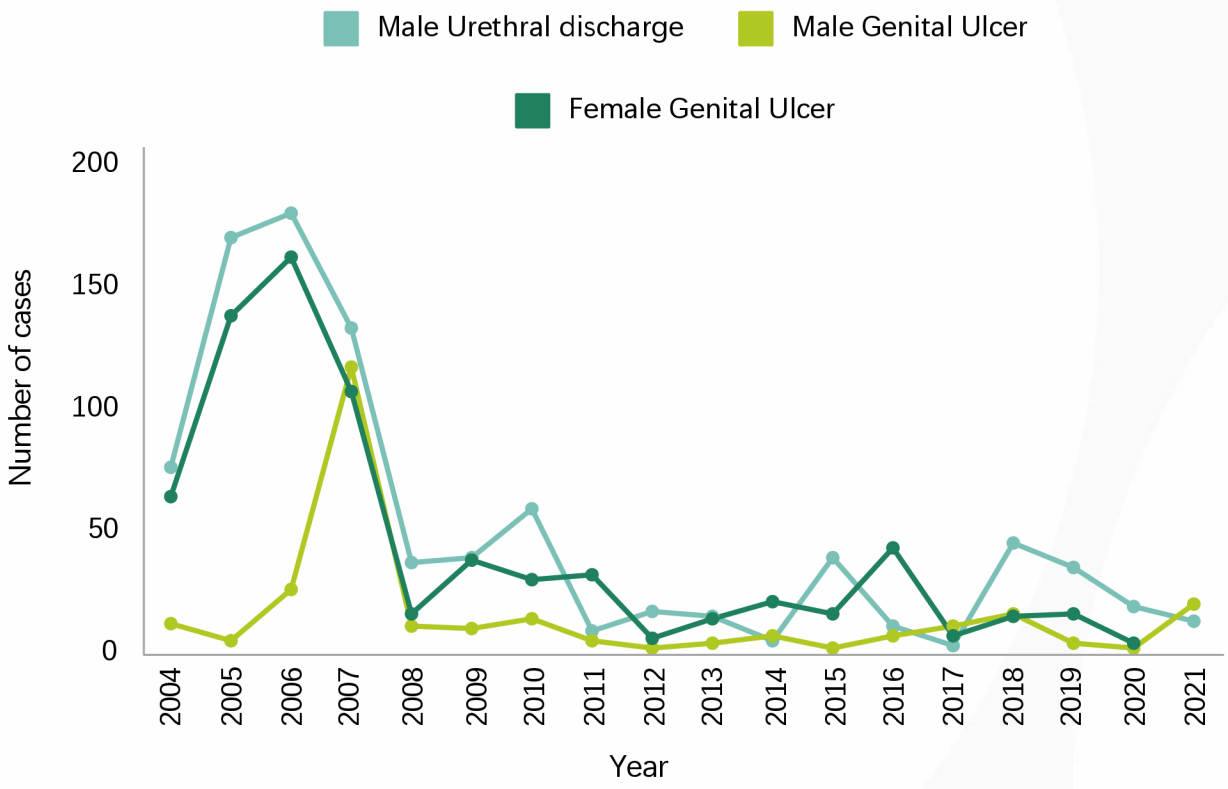
Among the reported STIs in 2021, the highest number was related to Vaginal Discharge Syndrome, with 748 cases reported for females. In contrast, no cases were reported for Urethral Discharge Syndrome in males. The number of reported Genital Ulcers in females was 12, while in males it was 19.

Figure 5-16: Definitions of the STI terms used, 2021

	Syndrome	Criteria for diagnosis
1	Urethral Discharge Syndrome	Urethral discharge in man (with or without dysuria) seen at the urethral meatus, with or without milking or expressing urethra
2	Vaginal Discharge Syndrome	An abnormal vaginal discharge with change in quantity, consistency, color, or odor (with or without vulval burning and itching)
3	Genital Ulcer	An ulcer (visible break in the skin) on penis, scrotum, or rectum in men, and in women on labia, vagina, cervix, and rectum.

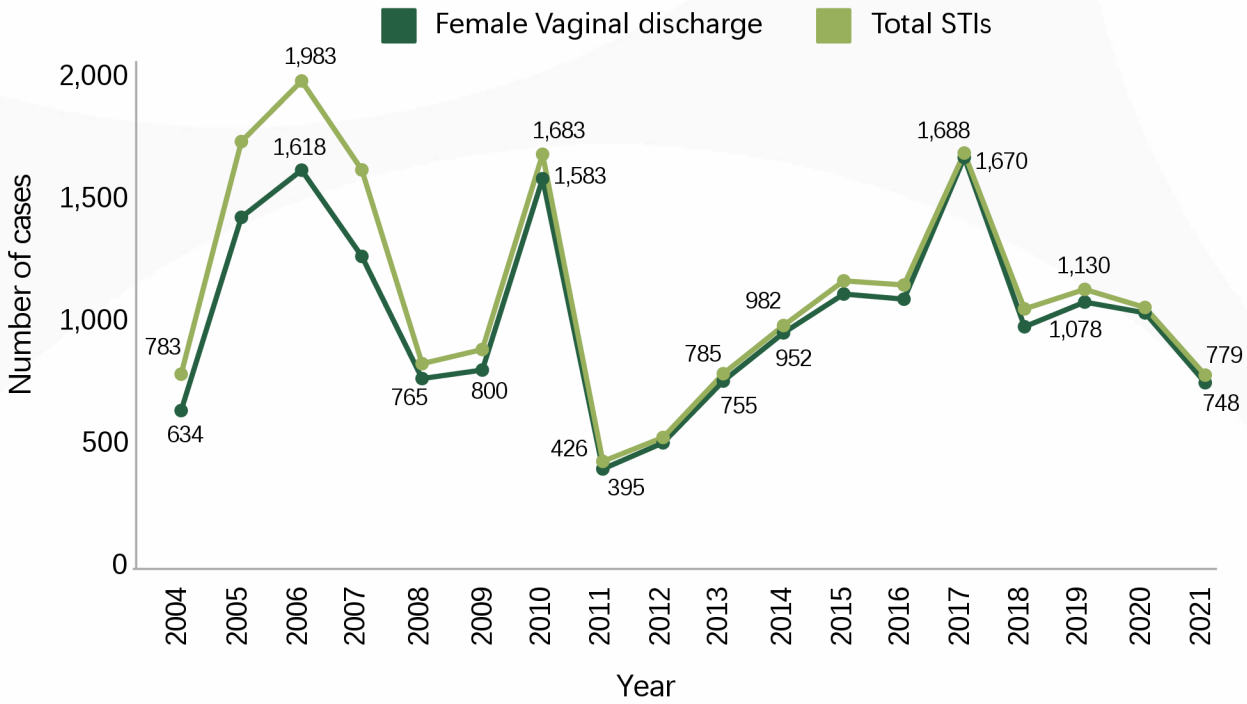
[17] Data source for STI section: National programme- Health Protection Agency (HPA)

Figure 5-17: STIs and type of STIs over the years, 2004-2021



Note: Vaginal discharge syndrome has been excluded from this figure

Figure 5-18: Total STIs and female vaginal discharge over the years-, 2004-2021



The total number of reported STIs fluctuated throughout the years, with a peak of 1,983 cases in 2006 and a low of 426 cases in 2011.

Among males, urethral discharge syndrome emerges as the highest reported STI, with varying numbers of cases recorded each year. The number of reported cases peaked in 2006 (176 cases). However, there has been a notable decline in reported cases in recent years, with no cases reported in 2021.

For females, vaginal discharge syndrome appears as the predominant STI, exhibiting fluctuations in the number of reported cases throughout the years. The peak number of cases occurred in 2017 (1,670 cases). However, there has been a decreasing trend in recent years, with 748 cases reported in 2021.

Both male and female genital ulcers were also recorded as part of the STI data. The number of cases varied each year, with the highest number of male genital ulcers reported in 2007 (116 cases) and the highest number of female genital ulcers reported in 2006 (161 cases).

5.6 Thalassemia

"Inherited autosomal recessive disorders characterized by reduced rate of hemoglobin synthesis due to a defect in α or β-globin chain synthesis". (Chiruka and Darbyshire 2011, p. 353)[18]

In 2021, at the Maldives Blood Services (MBS)[19], the number of registered thalassemic patients stood at 918, with 453 being male and 465 being female, reflecting a nearly equal distribution between sexes. In 2021, there were 22 new cases reported. There were 8 deaths recorded among thalassemia patients in the same year.

Figure 5-19: Number of cases registered at Maldives Blood Service, 2021

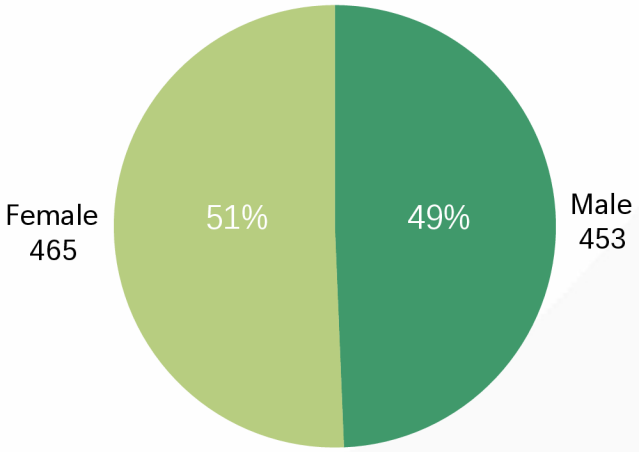


Figure 5-20: Thalassemia new cases by region, 2021

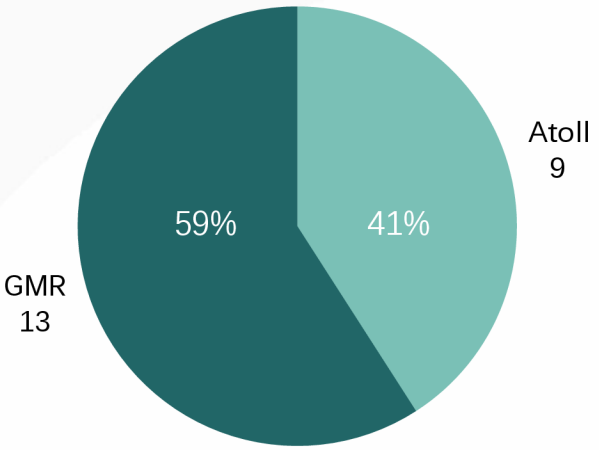
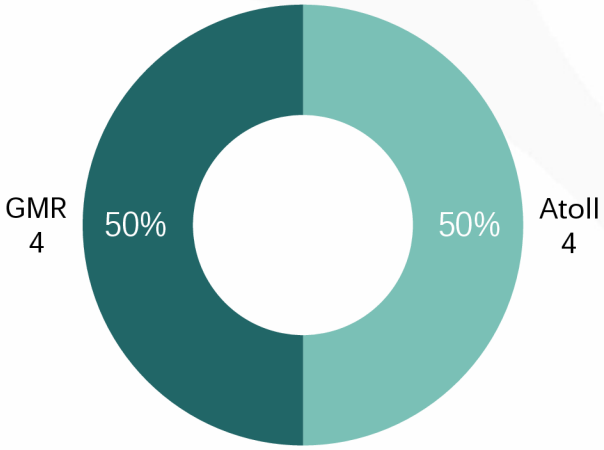


Figure 5-21: Thalassemia deaths by region, 2021

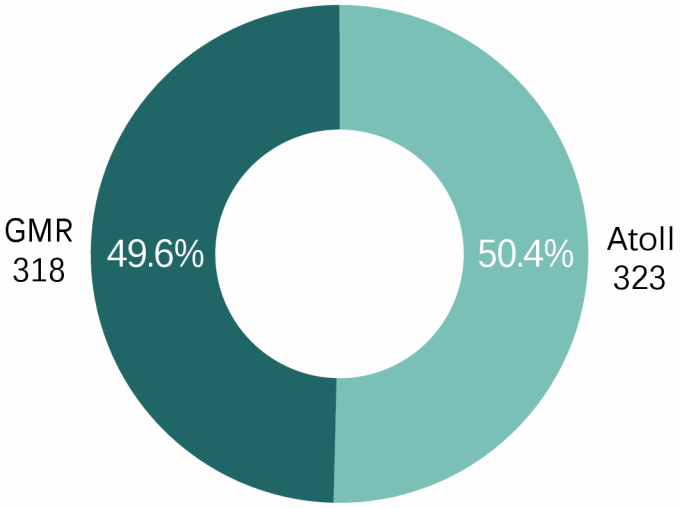


[18] Chiruka S, Darbyshire P. Management of thalassemia. Pediatric Child Health. 2011; 21:353–356. doi: 10.1016/j.paed.2011.02.012.

[19] Data Source: Maldives Blood Service (MBS)

Although 9 new thalassemia cases from atolls were registered at MBS in 2021, it is noteworthy that a total of 323 individuals were receiving treatment in the atolls. In comparison, the GMR had 318 patients undergoing treatment.

Figure 5-22: Number of thalassemic on treatment by region, 2021



5.7 Annexes

Table 5-2: Routine immunization coverage by atolls for the child, 2021

Name of Atoll	BCG	Hepatitis B	OPV			Pentavalent			IPV	Measles /MR	VitA1	MMR	VitA2
			1st	2nd	3rd	1st	2nd	3rd	1st	At 9 m			
	At Birth	At Birth	At 2m	At 4m	At 6m	At 2m	At 4m	At 6m	At 6m		At 9m	At 18m	At 18m
Haa.Alif (HA)	120	120	292	299	283	292	301	288	280	319	322	289	278
Eligible Children	133	133	301	288	288	301	288	288	288	334	0	301	0
Coverage %	90%	90%	97%	104%	98%	97%	105%	100%	97%	96%	0	96%	0
Haa. Dhaal (HDh)	573	574	355	407	387	355	407	387	387	420	420	402	401
Eligible Children	578	578	378	428	390	378	428	390	387	427	0	422	0
Coverage %	99%	99%	94%	95%	99%	94%	95%	99%	100%	98%	0	95%	0
Shaviyani (Sh)	112	113	257	270	282	257	270	283	281	250	250	265	264
Eligible Children	120	120	257	270	283	257	270	283	281	257	0	265	0
Coverage %	93%	94%	100%	100%	100%	100%	100%	100%	100%	97%	0	100%	0
Noonu (N)	54	54	178	215	208	178	215	208	208	273	239	213	212
Eligible Children	68	68	178	215	208	178	215	208	208	273	0	213	0
Coverage %	79%	79%	100%	100%	100%	100%	100%	100%	100%	100%	0	100%	0
Raa (R)	394	394	297	306	306	297	306	306	306	310	310	339	339
Eligible Children	395	395	297	306	306	297	306	306	306	326	0	339	0
Coverage %	100%	100%	100%	100%	100%	100%	100%	100%	100%	95%	0	100%	0
Baa (B)	98	98	183	200	191	183	200	191	194	200	200	166	166
Eligible Children	98	98	183	200	191	183	200	191	191	200	0	166	0
Coverage %	100%	100%	100%	100%	100%	100%	100%	100%	102%	100%	0	100%	0

Name of Atoll	BCG	Hepatitis B	OPV			Pentavalent			IPV	Measles /MR	VitA1	MMR	VitA2
			1st	2nd	3rd	1st	2nd	3rd	1st	At 9 m			
	At Birth	At Birth	At 2m	At 4m	At 6m	At 2m	At 4m	At 6m	At 6m		At 9m	At 18m	At 18m
Lhaviyani (Lh)	95	95	139	132	138	139	132	138	138	156	156	139	142
Eligible Children	95	95	139	132	138	139	132	138	138	157	0	139	0
Coverage %	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	0	100%	0
Kaaf (K)	3	2	219	208	206	219	208	206	207	208	190	192	182
Eligible Children	2	2	219	229	210	219	229	210	207	208	0	192	0
Coverage %	150%	100%	100%	91%	98%	100%	91%	98%	100%	100%	0	100%	0
Alif Alif (AA)	33	33	109	103	118	109	103	118	118	117	117	106	106
Eligible Children	34	34	109	103	123	109	103	123	123	117	0	106	0
Coverage %	97%	97%	100%	100%	96%	100%	100%	96%	96%	100%	0	100%	0
Alif Dhaal (Adh)	105	105	149	135	137	149	135	137	137	138	138	169	169
Eligible Children	106	106	149	135	144	149	135	144	144	138	0	169	0
Coverage %	99%	99%	100%	100%	95%	100%	100%	95%	95%	100%	0	100%	0
Vaav (V)	0	0	20	36	40	20	36	40	40	38	38	32	32
Eligible Children	0	0	20	36	42	20	36	42	42	38	0	32	0
Coverage %	0%	0%	100%	100%	95%	100%	100%	95%	95%	100%	0	100%	0
Meemu (M)	27	27	70	85	81	70	85	81	81	86	86	85	85
Eligible Children	27	27	70	85	84	70	85	84	84	86	0	85	0
Coverage %	100%	100%	100%	100%	96%	100%	100%	96%	96%	100%	0	100%	0

Name of Atoll	BCG	Hepatitis B	OPV			Pentavalent			IPV	Measles /MR	VitA1	MMR	VitA2
			1st	2nd	3rd	1st	2nd	3rd	1st	At 9 m			
	At Birth	At Birth	At 2m	At 4m	At 6m	At 2m	At 4m	At 6m	At 6m		At 9m	At 18m	At 18m
Faaf (F)	41	41	65	80	68	65	80	68	68	85	85	95	95
Eligible Children	40	40	65	80	71	65	80	71	68	85	0	95	0
Coverage %	103%	103%	100%	100%	96%	100%	100%	96%	100%	100%	0	100%	0
Dhaal (Dh)	64	64	85	86	94	85	85	94	94	75	75	95	94
Eligible Children	64	64	85	85	98	85	85	98	98	78	0	95	0
Coverage %	100%	100%	100%	101%	96%	100%	100%	96%	96%	96%	0	100%	0
Thaa (Th)	81	81	172	189	177	172	189	177	177	168	168	159	160
Eligible Children	81	81	172	189	182	172	189	182	182	176	0	159	0
Coverage %	100%	100%	100%	100%	97%	100%	100%	97%	97%	95%	0	100%	0
Laam (L)	270	270	294	287	280	294	287	280	280	294	294	271	271
Eligible Children	270	270	294	287	295	294	287	295	280	290	0	271	0
Coverage %	100%	100%	100%	100%	95%	100%	100%	95%	100%	101%	0	100%	0
Gaaf Alif (GA)	147	147	191	127	148	196	127	146	147	169	170	171	200
Eligible Children	147	147	196	127	154	196	127	154	154	169	0	171	0
Coverage %	100%	100%	97%	100%	96%	100%	100%	95%	95%	100%	0	100%	0
Gaaf Dhaal (Dh)	163	163	193	201	208	191	199	209	204	204	201	218	218
Eligible Children	163	163	191	199	220	191	199	220	220	198	0	218	0
Coverage %	100%	100%	101%	101%	95%	100%	100%	95%	93%	103%	0	100%	0

Name of Atoll	BCG	Hepatitis B	OPV			Pentavalent			IPV	Measles /MR	VitA1	MMR	VitA2
			1st	2nd	3rd	1st	2nd	3rd	1st	At 9 m			
	At Birth	At Birth	At 2m	At 4m	At 6m	At 2m	At 4m	At 6m	At 6m		At 9m	At 18m	At 18m
Gnaviyani (Gn)	121	121	144	148	156	144	148	156	156	143	143	133	133
Eligible Children	123	123	144	148	165	144	148	165	165	147	0	133	0
Coverage %	98%	98%	100%	100%	95%	100%	100%	95%	95%	97%	0	100%	0
Seen (S)	359	359	337	364	341	336	363	336	342	356	356	339	339
Eligible Children	361	361	336	363	355	336	363	355	355	366	0	338	0
Coverage %	99%	99%	100%	100%	96%	100%	100%	95%	96%	97%	0	100%	0
Male'	3,179	3,178	2,164	2,072	2,025	2,163	2,071	2,024	2,023	1,922	1918	2,092	2050
Eligible Children	3,182	3,182	2,163	2,130	2,140	2,163	2,130	2,140	2,130	2,023	0	2,130	0
Coverage %	100%	100%	100%	97%	95%	100%	97%	95%	95%	95%	0	98%	0
Total Vaccine doses	**6,039**	**6,039**	**5,913**	**5,950**	**5,874**	**5,914**	**5,947**	**5,873**	**5,868**	**5,931**	**5,876**	**5,970**	**5936**
Total Eligible Children	**6,087**	**6,087**	**5,946**	**6,035**	**6,087**	**5,946**	**6,035**	**6,087**	**6,051**	**6,093**	**6,093**	**6,039**	**6039**
Total Coverage	**99%**	**99%**	**99%**	**99%**	**97%**	**99%**	**99%**	**96%**	**97%**	**97%**	**96%**	**99%**	**98%**

Table 5-3: National Vaccine Schedule, 2021

	Vaccine ވެކްސިން	Dose ޖަހާ	Route of Injection ވެކްސިން ދޭ ގޮތް	Diseases Preventable ބަލިން ދުރުކުރެވޭ
At birth ފުރަމަ	BCG ބީ.ސީ.ޖީ	0.05ml	Intradermal (Deltoid) ދަނޑުގެ ތެރެއަށް	Tuberculosis (ހުއްޓުން ބަލި)
	Hepatitis B 0 ހެޕަޓައިޓިސް ބ 0	0.5ml	Intramuscular (Lateral Thigh) ކަނޑުއަޅާ	Hepatitis B & Liver Cancer ހެޕަޓައިޓިސް ބ ތަކާ ލިވަރ ކެންސަރ
2 months 2 ވަނަ	bOPV 1 1 ވަނި	2 drops 2 ދިލަ	Mouth އަނގަ	Poliomyelitis ވަނި
	Pentavalent 1 1 ވަނަ ޕެންޓަވެލެންޓް	0.5ml	Intramuscular (Lateral Thigh) ކަނޑުއަޅާ	Diphtheria, Pertussis, Tetanus, Hepatitis B & Hib ގަންނާ، ކަށަ، ހެޕަޓައިޓިސް ބ ތަކާ ހިބް ބަލި
4 months 4 ވަނަ	bOPV 2 2 ވަނި	2 drops 2 ދިލަ	Mouth އަނގަ	Poliomyelitis ވަނި
	Pentavalent 2 2 ވަނަ ޕެންޓަވެލެންޓް	0.5ml	Intramuscular (Lateral Thigh) ކަނޑުއަޅާ	Diphtheria, Pertussis, Tetanus, Hepatitis B & Hib ގަންނާ، ކަށަ، ހެޕަޓައިޓިސް ބ ތަކާ ހިބް ބަލި
6 months 6 ވަނަ	bOPV 3 3 ވަނި	2 drops 2 ދިލަ	Mouth އަނގަ	Poliomyelitis ވަނި
	Pentavalent 3 3 ވަނަ ޕެންޓަވެލެންޓް	0.5ml	Intramuscular (Lateral Thigh) ކަނޑުއަޅާ	Diphtheria, Pertussis, Tetanus, Hepatitis B & Hib ގަންނާ، ކަށަ، ހެޕަޓައިޓިސް ބ ތަކާ ހިބް ބަލި
	IPV ޢިންޖެކްޝަން ވެރިދާ	0.5ml	Intramuscular (Lateral Thigh) ކަނޑުއަޅާ	Poliomyelitis ވަނި
9 months 9 ވަނަ	Rubella, Measles ރުބެލާ، ސުވާ	0.5ml	Subcutaneous (Lateral Thigh) ހަމުގަ ދަނޑުގެ	Rubella and Measles ރުބެލާ ތަކާ ސުވާ
	Vitamin A 1 1 ވަނަ ވިޓަމިން އޭ	100000 IU	Mouth އަނގަ	
18 months 18 ވަނަ	MMR ޕްރ.ސ.ރ	0.5ml	Subcutaneous (Lateral Thigh) ހަމުގަ ދަނޑުގެ	MMR (Measles, Mumps, Rubella) ސުވާ، ގާލާ، ރުބެލާ
	Vitamin A 2 2 ވަނަ ވިޓަމިން އޭ	200000 IU	Mouth އަނގަ	
4 years 4 ހަ.ދ	DPT (ޕ.ކ.ކ)	0.5ml	Intramuscular (Deltoid) ކަނޑުއަޅާ	Diphtheria, Pertussis, Tetanus ގަންނާ، ކަށަ، ހިބް ބަލި
10 years 10 ހަ.ދ	HPV ޔ.ޕ.ވ	0.5ml	Intramuscular (Deltoid) ކަނޑުއަޅާ	Cervical Cancer ގާތުގެ ކެންސަރ (ގާތުގެ ކެންސަ)



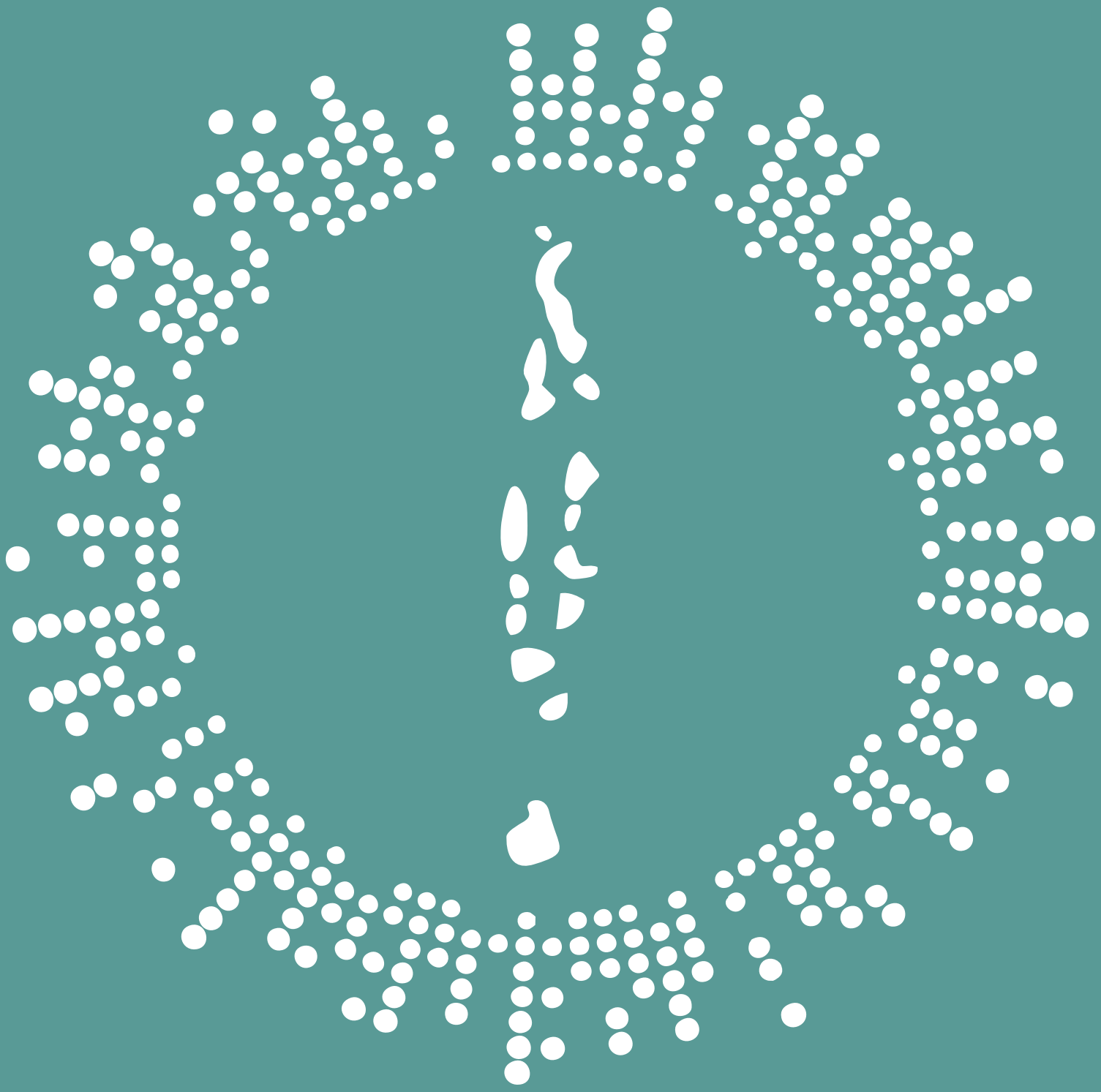


Table 5-4: Vitamin A and Deworming given population by Atoll, 2021

Year 2021	Vitamin A 1st round	Vitamin A 2nd round	Deworming	
Atoll	<5 years	<5 years	2-5 years	5-13 years
HA	983	1138	682	842
HDh	2,791	2,389	2,653	811
Sh	1,024	943	1,294	2,368
N	814	638	929	1,565
R	1,185	1,424	838	3,083
B	943	943	0	0
Lh	641	710	381	1,328
K	591	787	859	1,619
AA	592	503	568	1,618
Adh	501	501	371	1,319
V	88	35	67	136
M	322	301	405	806
F	404	398	306	786
Dh	519	449	420	1,177
Th	164	164	0	0
L	282	283	0	0
GA	185	998	581	1194
GDh	2,574	2,705	1,753	3,059
Gn	421	620	474	1,277
S	347	348	0	0
Male'	2,867	6,085	6,059	11,468
Population (eligible)	**39,353**	**39,353**	**27,403**	**72,173**
Total (Given)	**18,238**	**22,362**	**18,640**	**34,456**

Table 5-5: Surveillance diseases by atoll, 2021

Atolls	Acute Respiratory Infection (ARI)	Viral fever	Acute Gastroenteritis (AGE)	Conjunctivitis	COVID-19	Chickenpox	Dengue	HFMD	Total
GMR	47,765	18,769	7,821	2,616	1,230	154	21	2	1,407
HA	7,685	1,325	253	233	40	18	14	4	76
HDh	7,265	2,287	514	976	29	48	3	6	86
Sh	5,731	738	246	121	44	22	2	0	68
N	4,369	715	232	173	61	8	2	0	71
R	11,025	1,690	688	377	56	16	0	0	72
B	6,025	1,125	431	417	29	4	0	0	33
Lh	7,711	93	694	277	79	3	0	0	82
K	5,798	2,015	644	146	78	8	14	0	100
AA	2,633	2,300	544	193	38	1	14	0	53
ADh	7,515	1,109	513	30	30	14	0	0	44
V	540	95	16	14	6	3	0	0	9
M	2,530	376	66	51	42	11	0	0	53
F	3,504	690	309	77	27	1	0	2	30
Dh	2,845	551	175	157	30	2	2	0	34
Th	6,372	962	291	225	58	11	2	0	71
L	6,511	1,445	615	661	48	9	1	0	58
GA	2,501	789	320	191	51	20	0	0	71
GDh	4,923	964	93	61	70	11	0	4	85
Gn	4,245	368	343	263	83	2	1	0	86
S	8,689	998	257	334	169	27	0	2	198
Total	**156,182**	**39,404**	**15,065**	**7,593**	**2,298**	**393**	**76**	**20**	**2,787**



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