

VITAL STATISTICS REPORT OF MALDIVES 2024





VITAL STATISTICS REPORT OF MALDIVES

2019-2021

November 2024

MALDIVES BUREAU OF STATISTICS (MBS)
Ministry of Housing, Land & Urban Development



Maldives Bureau of Statistics (MBS) is the National Statistical Office of the Maldives and we provide the public with reliable and timely statistics and cater to all data demands nationally and internationally.

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FOREWORD - MBS

The release of the First Vital Statistics Report for the Maldives marks an important milestone in the nation's statistical endeavors, presenting a critical resource for understanding the country's demographic landscape. Timely statistics on births, deaths, and causes of death are essential for evaluating the progress of the Maldives in achieving the Sustainable Development Goals (SDGs), the National Health Master Plan, and other ongoing health programs. This report offers, for the first time, a comprehensive overview of key life events—registration, births, deaths, cause of death, marriages, and divorces—meticulously recorded and analyzed to inform our understanding of the dynamics shaping the country's population.

This report, based on data from 2019 to 2021, highlights trends in the completeness of birth and death registrations and provides crucial insights for improving the Civil Registration System in the Maldives.

My deepest gratitude goes to all individuals and organizations who contributed to making this publication possible. Special thanks are due to ESCAP for their invaluable support in capacity building and technical guidance, which was instrumental in realizing this report. This report is accessible to all through our website at www.statisticsmaldives.gov.mv. We are dedicated to providing reliable, objective statistics that empower decision-makers and citizens alike. As we release this report, I am optimistic about the positive impact that robust, detailed vital statistics can have on our nation's development. May this report serve as a valuable foundation for future analyses, and may it inspire further advancements in the collection and use of data to support our national aspirations. The journey continues, as we have lot to achieve by having timely vital statistics made available for Maldives in coming years.

Your valuable feedback is most welcome and will help enhance future editions of the vital statistics reports.



Aishath Hassan
Chief Statistician
Maldives Bureau of Statistics
Ministry of Housing, Land & Urban Development

FOREWORD- MOH

The release of the Vital Statistics Report marks a significant milestone in our commitment to enhancing public health and ensuring data-driven decision-making. This report is the first of its kind and represents a collaborative effort between the Ministry of Health and the Maldives Bureau of Statistics, underscoring the importance of partnership in achieving our health indicators.

In our journey towards better health outcomes, the availability of accurate and timely statistics is crucial. Vital statistics on births, deaths, and their causes provide invaluable insights into the health status of our population, enabling us to address current challenges and anticipate future needs. This report, which covers data from 2019 to 2021, serves as a foundation for evaluating our healthcare initiatives and aligning them with the Sustainable Development Goals (SDGs) and the National Health Master Plan.

The findings in this report reveal key trends in birth and death registrations, offering a clearer picture of health dynamics across various regions and communities. The data includes information on the place of occurrence and maternal demographics, along with comprehensive statistics on marriages and divorces, enriching our understanding of social factors that influence public health.

As we move forward, we are committed to using this report as a tool to ensure that every Maldivian has access to quality healthcare. We envision a future where data-driven decisions empower us to improve health services and foster a healthier society.



Aishath Samiya
Permanent Secretary
Ministry of Health

ACKNOWLEDGEMENTS

This report has been completed as a joint effort of the Ministry of Health (MoH) and Maldives Bureau of Statistics (MBS). The collaborative effort of both teams is commendable and we would like to express our thanks to these dedicated teams.

This report would not have been possible without the hard work of the following officials:

- 1- Report compilation: Ms. Fathimath Shakir - Statistical Officer / Maldives Bureau of Statistics
- 2- Report compilation: Ms. Fathimath Yania - Assistant Statistical Officer / Maldives Bureau of Statistics
- 3- Compilation of time series data- Ms. Fathimath Shifaza - Statistical Officer/ Maldives Bureau of Statistics
- 3- Data compilation: Ms Mariyam Murushida - Health Records Analyst/ Ministry of Health
- 4- Data compilation: Mr. Ahmed Shaheed- Director/ Maldives Bureau of Statistics
- 4- Data review: Ms. Fathimath Shamah - Director/ Medical Information/ Ministry of Health
5. Overall analysis & review: Ms. Fathimath Riyaza - Statistician/ Maldives Bureau of Statistics

Lastly, we are grateful for the technical support provided by the ESCAP CRVS team, through the Bloomberg Philanthropies Data for Health Initiative, including Ms. Petra Nahmias, Ms. Tanja B. Sejersen, Ms. Chloe Mercedes Harvey & Mr. David Rausis. We would also like to express our thanks to our trainer and consultant Ms. Wiraporn Pothisiri (ESCAP) and to Ms. Doris Ma Fat (WHO) who provided expert guidance on mortality and cause of death analysis.

We would also like to take this opportunity to express our gratitude to the Department of National Registration (DNR) for providing data on birth registration in a timely manner.

ACRONYMS AND ABBREVIATIONS

ADK	Abdul Rahman Dhon Kaleyfaanu Hospital
ASFR	Age-specific fertility rate
ASMH	Abdul Samad Memorial Hospital
ASMR	Age-specific mortality rate
CBR	Crude birth rate
CDR	Crude death rate
CoD	Cause of Death
COVID-19	Severe acute respiratory syndrome 2, or SARS-CoV-2.
CRVS	Civil registration and vital statistics
DNR	Department of National Registration
DJA	Department of Judicial Administration
ESCAP	(United Nations) Economic and Social Commission for Asia and the Pacific
GRH	Gan Regional Hospital
ICD	International Classification of Diseases
IGMH	Indira Gandhi Memorial Hospital
IMR	Infant mortality rate
KRH	Kulhudhuffushi Regional Hospital
LGA	Local Government Authority
MBS	Maldives Bureau of Statistics
MCC	Male' City Council
MCCD	Medically Certified Cause of Death
MEMS	Maldives E-court Management System
MHLUD	Ministry of Housing Land and Urban development
MoH	Ministry of health
MMR	Maternal mortality ratio
MPAO	Maldives Pension Administration Office
MRH	Muli Regional Hospital
NARES	National Identity Management System
NCDs	Non- Communicable Diseases

NCIT	National Center of Information Technology
NID	National Identity
NMR	Neonatal mortality rate
SDG	Sustainable Development Goal
STO	State Trading Organization
ToT	Training of Trainers
TFR	Total fertility rate
UNFPA	United Nation Population Fund
UNICEF	United Nations Children's Fund
UN	United Nations
U5MR	Under-5 mortality rate
URH	Ungoofaaruu Regional Hospital
VRS	Vital Registration System
VS	Vital statistics
WHO	World Health Organization

DEFINITIONS

Age-specific fertility rate (ASFR): The annual number of births to women of a particular age group per 1,000 women in that age group.

Age-specific mortality rate (ASMR): A mortality rate limited to a particular age group. The numerator is the number of deaths in that age group; the denominator is the number of persons in that age group in the population.

Atoll: The term atoll is used to refer to each individual atoll separately.

Atolls: Maldives consists of 20 administrative atolls. The term atolls is used to refer to all 20 atolls collectively.

Below replacement level fertility: A fertility rate below approximately 2.1 children born per woman of childbearing age.

Cause of death: 'All those diseases, morbid conditions or injuries which either resulted in or contributed to death and the circumstances of the accident or violence which produced any such injuries'.¹ Symptoms and modes of dying, such as heart failure or respiratory failure, are not considered to be causes of death for statistical purposes (see 'ill-defined cause of death').

Children: uses local definition of children as 0-17 years.

Completeness of registration: The proportion of vital events that are registered. It is the number of registered vital events divided by an estimate of the actual number of vital events that occurred in the same population during a specific period of time.

Crude birth rate (CBR): The number of live births relative to the size of that population during a given period, usually one year. It is expressed as the number of live births per 1,000 population per year.

Crude death rate (CDR): The number of deaths relative to the size of that population during a given period, usually one year. It is expressed as the number of deaths per 1,000 population per year.

Crude marriage rate: The crude marriage rate is the annual number of marriages per 1,000 population.

Crude divorce rate: The crude divorce rate is the annual number of divorces per 1,000 population.

Death: The permanent disappearance of all evidence of life at any time after live birth has taken place (postnatal cessation of vital functions without capability of resuscitation). This definition excludes foetal deaths, which are defined separately.

Dhamanaveshi: Used to be Male' Health Centre. It was rebranded as Dhamana Veshi and reopened in 2013 as an urban healthcare centre.

¹ United Nations (2014). *Principles and recommendations for a vital statistics system. Revision 3. Department of Economic and Social Affairs, Statistics Division Statistical Papers, Series M No. 19/Rev.3, New York.*

Elderly: population 65 years and above.

Foetal death (also referred to as 'stillbirth'): 'Death prior to the complete expulsion or extraction from the mother of a product of conception, irrespective of the duration of pregnancy; the death is indicated by the fact that after such separation the foetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles.'² Note that this definition broadly includes all terminations of pregnancy other than live births, as defined above.

GEMEN: GEMEN is the newly developed online platform to enter all births and deaths that occur in the country. It is also through the GEMEN system births are registered and birth certificate are issued.

Ill-defined cause of death: Any code that cannot or should not be used for the underlying cause of death (generally referring to 'R codes'). For instance, a 'mode of death' such as heart failure or kidney failure, symptoms such as back pain or depression, and risk factors such as high blood pressure are all uninformative, ill-defined codes for public health purposes.

Infant mortality rate (IMR): Probability (expressed as a rate per 1,000 live births) of a child born in a specific year or period dying before reaching the age of 1, if subject to age-specific mortality rates of that period.

Life expectancy at birth: The average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory, or geographic area.

Live birth: 'The complete expulsion or extraction from the 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 live born (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).'

³

Maale: The Capital city of Maldives

Maternal death: 'The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.'

⁴

Maternal mortality ratio (MMR): The number of maternal deaths during a given time period per 100,000 live births during the same time period.

Neonatal mortality rate (NMR): Probability (expressed as a rate per 1,000 live births) of a child born in a specific year or period dying in the first 30 days of life, if subject to age-specific mortality rates of that period.

² United Nations (2014). *Principles and recommendations for a vital statistics system. Revision 3.* Department of Economic and Social Affairs, Statistics Division Statistical Papers, Series M No. 19/Rev.3, New York.

³ United Nations (2014). *Principles and recommendations for a vital statistics system. Revision 3.* Department of Economic and Social Affairs, Statistics Division Statistical Papers, Series M No. 19/Rev.3, New York.

⁴ World Health Organisation (2004). *ICD-10. International Statistical Classification of Diseases and Related Health Problems., Tenth revision, second edition.* Geneva.

NARES: The National Identity Card system for Maldives. NARES system maintains the records of all Maldivians whose birth have been registered. It acts as a population register for the Maldivian nationals (of those residing in the country and living abroad).

Place of occurrence: Place where the live event took place.

Place of usual residence: This is the island where the person has lived for more than one year or intends to live for more than one year. This definition is used in Maldives to define the usual residence of a person in the country.

Sex ratio at birth: The number of male births for a specific area and during a specified period divided by the number of female births for the same area and period. The sex ratio is an important demographic indicator of the distribution of boys and girls at birth.

Total fertility rate (TFR): The sum of age-specific fertility rates for females aged between 15 and 49 years during a specified period, usually one year. It is an estimate of the average number of children a cohort of women would bear if they went through their childbearing years experiencing the same age-specific fertility rates.

Under-5 mortality rate (U5MR): The probability of a child born in a specific year or period dying before reaching the age of 5, if subject to age-specific mortality rates of that period. The under-5 mortality rate as defined here is strictly speaking not a rate (i.e. the number of deaths divided by the number of population at risk during a certain period of time) but a probability of death derived from a life table and expressed as rate per 1,000 live births.

Underlying cause of death: The cause of death to be used for primary statistical tabulation purposes has been designated as the underlying cause of death. The underlying cause of death is defined as '(a) the disease or injury which initiated the train of events leading directly to death, or (b) the circumstances of the accident or violence which produced the fatal injury.'⁵

Youth: uses local definition and refers to population aged 18-35 years.

⁵ United Nations (2014). *Principles and recommendations for a vital statistics system. Revision 3. Department of Economic and Social Affairs, Statistics Division Statistical Papers, Series M No. 19/Rev.3, New York.*

EXECUTIVE SUMMARY

The Maldives Bureau of Statistics aims to strengthen official statistics in Maldives by incorporating administrative data, compiled and generated through GEMEN by the Department of National Registration, Ministry of Health, Local Government Authority and marriage and divorce data compiled by Department of Judicial Administration. This inaugural “Vital Statistics Report of Maldives” provides a comprehensive analysis of vital events in the country over a three-year period from 2019 to 2021. It presents essential insights into birth and death registration completeness, trends, and other relevant information, which are crucial for understanding and addressing issues related to the population dynamics in the Maldives. This has been presented through the six chapters included in this report.

BIRTHS

Maldives has achieved almost 100% completeness in birth registration. Maldives is currently experiencing a decline in births, which decreased from 6211 births in 2020 to 5917 births in 2021. Sex ratio at birth is almost equal, with one boy born for every girl. The crude birth rate has declined over the three-year period and the total fertility rate (TFR) is below replacement level fertility (about 2.1 children per woman).

Table x.1: Summary indicators on birth statistics, 2019- 2021

Indicator	2019	2020	2021
Live births (number)	6,121	6,211	5,917
Males	3,086	3,163	2,954
Females	3,034	3,048	2,963
Not stated	1		
Sex ratio at birth	102	104	100
Completeness in birth registration	98.8%	98.4%	98.8%
Crude birth rate (per 1,000 population) for resident Maldivians	16	16	15
Total fertility rate (births per woman) for resident Maldivians	1.8	1.7	1.8
Resident Maldivian Population	372,739	379,270	385,696

DEATHS

The number of deaths that occurred in the country increased from 1,055 deaths in 2019 to 1,512 deaths in 2021, potentially due to the COVID-19 pandemic. This increase in mortality is reflected in key indicators, leading to higher crude death rates, infant mortality rates and under-five mortality rates for the country. In 2019, no maternal deaths were reported in the country.

Table x 2: Summary indicators on death statistics, 2019-2021

Indicator	2019	2020	2021
Deaths (number)	1,055	1,247	1,512
Males	668	727	902
Females	386	520	610
Unknown	1		
Crude death rate (per 1,000 population) for resident Maldivians	3	3	4
Under-5 mortality rate (per 1,000 live births) for resident Maldivians	8	8	11
Infant Mortality Rate (under 1) (per 1,000 Live Births) for resident Maldivians	5	7	10
Maternal mortality ratio (per 100,000 live births) for resident Maldivians	0	32	51

LEADING CAUSES OF DEATH

The leading cause of death varied over the three years. In 2019, ischemic heart disease was the leading cause of death, later ranking as the third leading cause in subsequent years. Other forms of heart disease also remained a significant cause of mortality. However, in 2021, COVID-related diseases and conditions emerged as the primary cause of death.

Non-communicable diseases such as ischaemic, cerebrovascular and other forms of heart diseases were the top leading causes of mortality in 2019 and 2020.

Overall, the data indicates that heart diseases, respiratory diseases, and cerebrovascular diseases are major health concerns in the Maldives.

Table x 3: Top 5 leading causes of death, 2019-2021

Rank	2019		2020		2021	
	Cause of death	Number	Cause of death	Number	Cause of death	Number
1	Ischaemic heart diseases	11%	Other forms of heart disease	15%	COVID-19	18%
2	Chronic lower respiratory diseases	10%	Cerebrovascular diseases	10%	Other forms of heart disease	11%
3	Other forms of heart disease	9%	Ischaemic heart diseases	9%	Ischaemic heart diseases	8%
4	Cerebrovascular diseases	9%	Chronic lower respiratory diseases	6%	Cerebrovascular diseases	8%
5	Influenza and pneumonia	7%	Influenza and pneumonia	5%	Other bacterial diseases	6%

MARRIAGES AND DIVORCES

In 2021, a total of 5,414 marriages were solemnized, resulting in a crude marriage rate of 14 marriages per thousand people. In 2019, women married young, the majority aged between 18-24 years. However, by 2021, a shift was observed, with more women marrying between the ages of 25 and 39 years. The age of marriage for men remained consistent throughout the years, with most men marrying between 25 and 39 years.

More than half of the marriages were couples getting married for the first time while the remaining are re-marriages; a trend observed as a result of the high divorce rate in the country.

The noticeable increase in the number of divorces was observed between 2020 and 2021. In 2021, the crude divorce rate stood at 8.4 divorces per thousand people, making it the highest divorce rate in the world. Most divorces occurred among individuals aged 25-39, but there was a notable increase in the number of men divorcing aged 40 and over compared to women.

Table x 4: Summary statistics on marriage and divorces, 2019-2021

Indicator	2019	2020	2021
Number of registered marriages	5,069	4,998	5,414
Crude marriage rate (per 1,000 population)	13.6	13.2	14.0
Number of registered divorces	3,550	2,984	3,242
Crude divorce rate (per 1,000 population)	9.5	7.9	8.4

CHAPTER 1: INTRODUCTION AND METHODOLOGY



CHAPTER 1: INTRODUCTION AND METHODOLOGY

1.1 INTRODUCTION

Vital statistics play a crucial role in understanding the demographic and health dynamics of a population. Civil registration is the administrative system used to record vital events to produce vital statistics. Civil registration can be defined as the continuous, permanent, compulsory and universal recording of the occurrence and characteristics of vital events (live births, deaths, foetal deaths, marriages and divorces) and other civil status events pertaining to the population as provided by decree, law or regulation in accordance with the legal requirements in each country (United Nations, 2001).

Vital statistics has significance for policy making and long-term planning. Annual births and deaths provide a clear picture of the population structure and trends, and helps understand the changing population dynamics which is essential for planning healthcare, education and social services.

Timely vital statistics has enabled Maldives to identify public health issues, monitor infant mortality, life expectancy and causes of death. As a result, Maldives has made significant strides in improving the health of its population, designing targeted health interventions and allocating resources to improve public health outcomes.

In response to growing recognition of the important role of reliable and timely statistics on vital events, this report presents a comprehensive analysis of data on births, deaths and causes of death in the Maldives. This report also covers key findings on marriage and divorce in the country. The development of this report was supported by ESCAP as a partner of the Bloomberg Philanthropies Data for Health Initiative, who provided technical support for improving the capacity of national CRVS stakeholders to produce vital statistics, resulting in a vital statistics report based on civil registration data.

1.2 BACKGROUND

A civil registration and vital statistics system is the most comprehensive source of data for mortality, fertility and other important health indicators. The establishment of the civil registration system in Maldives dates back to as early as the 1950s (Usman & Moosa, 2020). Maldives Bureau of Statistics has been publishing counts of births and deaths by locality since 1979. Since the enactment of the Civil Registration Law in 1993, death reporting has improved in the country.

In 1997, the Ministry of Health started publishing key vital and health statistics called ‘Maldives Health Statistics’⁶. This publication presents a comprehensive analysis of key areas such as natality, morbidity, mortality and performance of the public health system.

However, the aforementioned publication pertains mainly to the production and dissemination of health statistics. This annual vital statistics report provides a valuable opportunity to present statistics on births and deaths using civil registration data, allowing for an assessment of the completeness of birth and death registration, as well as a summarized analysis of causes of death by age groups. The data presented in this report on marriage and divorce, also allows for an improved understanding on marriage and the high divorce rate observed in the country. This report aims to provide key statistics, upon which informed decision-making can be made, especially with regards to public health policies and interventions.

1.3 RATIONALE

The civil registration system serves as the primary source of vital statistics. A vital statistics report is essential for health system planning, policy-making and resource allocation. The reliance on vital statistics for monitoring health targets in the country is crucial. This report is indispensable as it assesses the completeness of birth registration and helps identify effective interventions to ensure all births are registered within the legally stipulated time frame. Vital statistics are crucial for producing accurate population estimates and projections. The calculation of life expectancy relies on timely mortality data. These statistics are integral to informing decision-making and monitoring nationally prioritized health indicators (MBS, 2021). Additionally, vital statistics support researchers in conducting epidemiological studies to understand the distribution and determinants of the health of the population.

This report also presents vital events by place of usual residence, the first of its kind and which is crucial for local level policy planning.

1.4 SOURCE OF DATA FOR THE REPORT

The main sources of data used in this report are:

Table 1.1: Main data sources used in the report

Indicator	Data Source
Live births	<p>GEMEN system:</p> <p>All births that occur in the country and births to Maldivians living abroad are entered into the GEMEN system, managed by the Local Government Authority. Entry of birth forms is done by the health facilities. This information is retrieved by the Ministry of Health for vital statistics production.</p> <p>Data on live births is provided by Ministry of Health.</p>
Registered births	<p>National Identity Database (NARES):</p> <p>The process of birth registration and birth certificate issuance is done by island/city councils through the GEMEN portal. Birth certificates can only be issued in Maldives after birth registration has been carried out. During the process of birth certificate issuance, each Maldivian is assigned a National Identity card number which goes into the National Identity Database of Maldivian nationals (NARES).</p> <p>Therefore, the National Identity Database includes all Maldivians whose births have been registered.</p> <p>Data on registered births is provided by the Department of National Registration (DNR) and from GEMEN.</p>
Deaths	<p>GEMEN system:</p> <p>All deaths that occur in the country and deaths of Maldivians occurring abroad are entered into the GEMEN system which is managed by the Local Government Authority. Death certificates are issued by the health facilities. This information is retrieved by Ministry of Health (MoH) for vital statistics production.</p> <p>In Maldives, no death register is maintained. The number of death certificates issued annually are considered the total number of deaths by year and used as a register of deaths.</p> <p>Data on deaths is provide by the Ministry of Health.</p>
Fertility data	<p>Census 2022:</p> <p>Census collects information on live births to women in the previous year (one year prior to census reference time).</p> <p>This information is used to compare TFR from VRS to census records.</p> <p>Census data is obtained from MBS website.</p>

Population data	<p>Maldives Population Projection 2014-2054:</p> <p>The Resident Maldivian population has been used in this report for calculating various indicators. The population data is taken from the Maldives Population Projections 2014-2054.⁷</p>
Cause of death data	<p>GEMEN system:</p> <p>The underlying cause of death for all deaths are entered into the GEMEN. Coding of these deaths is done by MoH staff and cause of death data is provided by the Ministry of Health.</p>
Marriage and divorce data	<p>Statistical Yearbook of Maldives</p> <p>The Department of Judicial Administration maintains records of all marriages and divorces that occur in the country.</p> <p>This information is provided annually to Maldives Bureau of Statistics to be published in the Statistical Yearbook of Maldives.</p> <p>Data on marriages and divorces are obtained from the Statistical Yearbook.</p>

In order to prepare the vital statistics report, all registered births occurring between 2019-2021 were obtained from the Department of National Registration (DNR) in micro format. Data on live births and deaths is provided by the Ministry of Health. The Ministry of Health provided all data needed for the report in tabular formats. The Census dataset was obtained from the MBS website⁸. Data pertaining to marriage and divorce were extracted from the Statistical Yearbook of Maldives.

The data was then processed to produce the vital statistics report. The Maldives Bureau of Statistics (MBS) then led the analysis and production of the report.

⁷ Maldives Population Projection 2014-2054: <https://statisticsmaldives.gov.mv/population-projection-2014-2054/>
⁸ <https://statisticsmaldives.gov.mv/census-data/>

1.4.1 Organisation of the report

The report is organized into seven chapters:

(1) Introduction and background; (2) Maldives civil registration system; (3) Data quality, timeliness, and completeness of registration; (4) Birth statistics; (5) Death statistics; (6) Cause of death and; (7) Marriage and Divorce.

Chapter 1: presents the introduction and general overview of the vital statistics report, objectives, sources of data used and scope of the report.

Chapter 2: describes the Maldives Civil Registration System including its history, legal background, administrative structure, organisation, registration processes, the flows of information, organisation of vital statistics production and dissemination plan, as well as incentives and disincentives for civil registration.

Chapter 3: describes the quality and completeness of civil registration data

Chapter 4: presents disaggregated statistics on births

Chapter 5: outlines disaggregated statistics on deaths

Chapter 6: presents disaggregated statistics by cause of death

Chapter 7: presents summary analysis on marriage and divorce

Finally, the detailed tables are included in Annex 1.

1.5 COUNTRY OVERVIEW

Maldives is an island nation located in the Indian Ocean. It lies southwest of Sri Lanka and India. Maldives consists of 1192 coral islands which form a chain of 82 km in length and 130 km in width, set in a territorial area of 859,000 sq km of the Indian Ocean. The country is composed of 20 administrative atolls with Maale being the Capital City. Maale is located within Kaafu Atoll. Even though Maale is located within Kaafu Atoll, the results presented for Kaafu Atoll excludes Maale. Within each atoll, there are administrative islands and non-administrative islands. Currently there are 187 administrative islands and 168 resorts in the country⁹.

When presenting findings, the following administrative hierarchy is used.

Republic

Maale (includes the 4 wards of Maale, Hulhumaale and Villimaale)

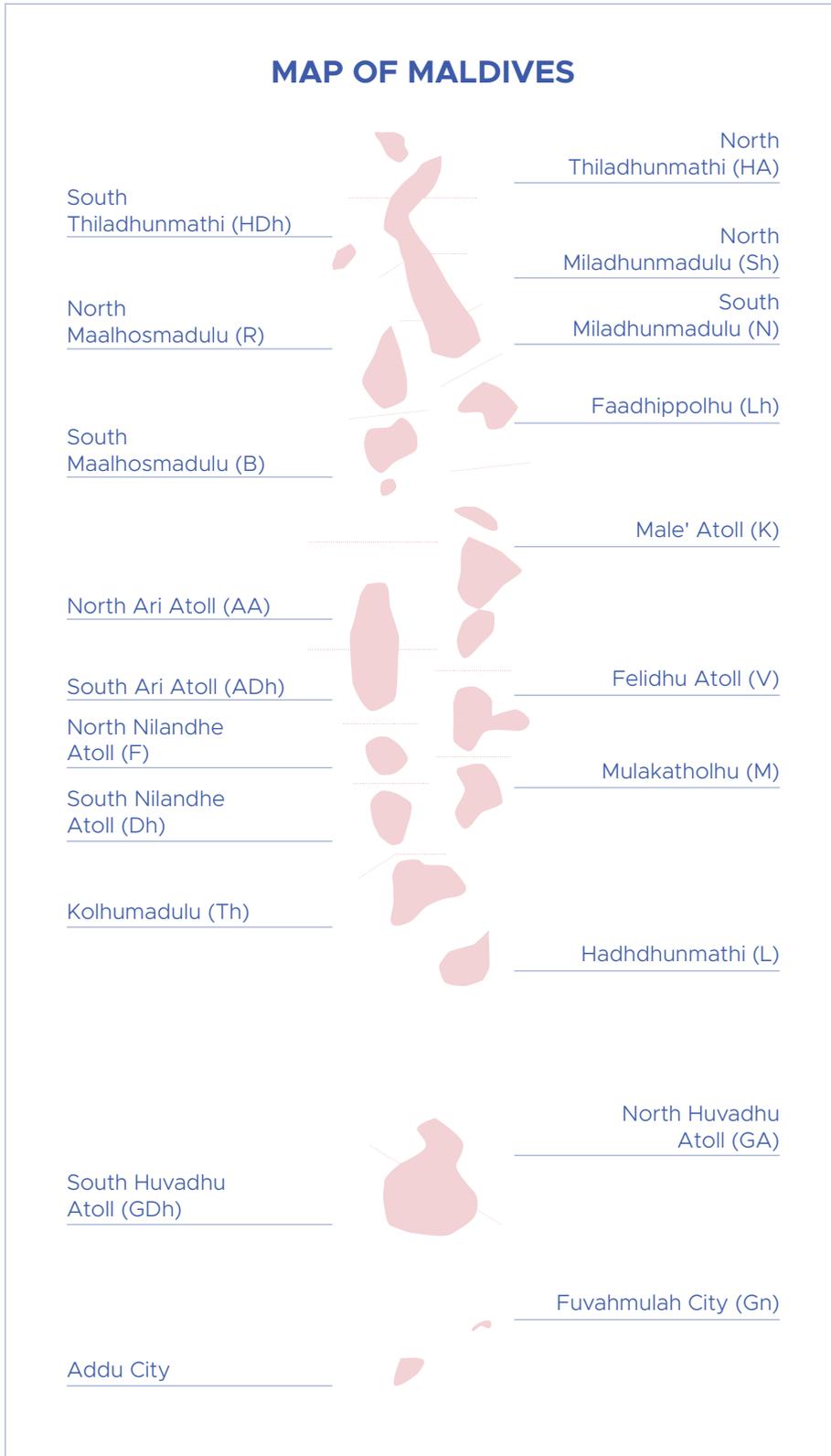
Atolls (includes administrative and non-administrative islands within the 20 atolls)

Atoll (Maldives consist of 20 Administrative atolls. This term is used when referring to each atoll separately.

Eg; HA Atoll, Sh Atoll).

⁹ *Resorts are within non-administrative islands*

The map below illustrates the 20 atolls with their names and abbreviations:



Source: Maldives Population and Housing Census, 2022

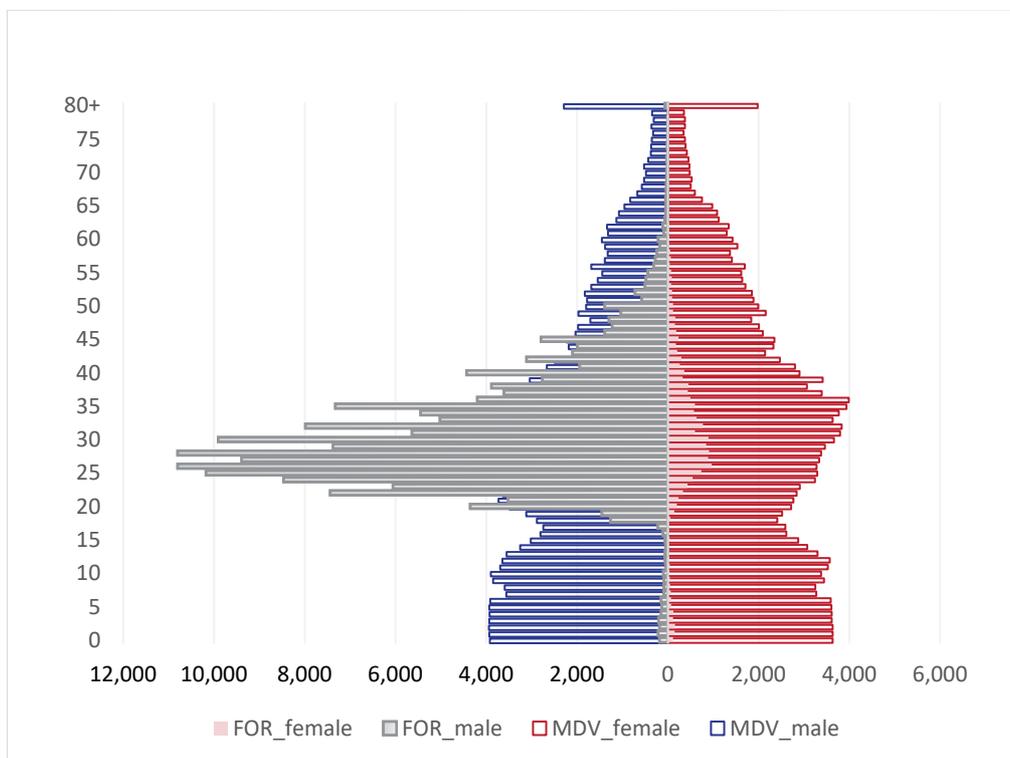
1.6 POPULATION SIZE AND STRUCTURE

Based on projections based on the Census 2014, the estimated population of Maldives was 568,362 people in 2021. This includes 385,696 resident Maldivians, making up 68% of the total population and 182,666 resident foreigners, accounting for 32%. Between 2014 and 2021, the resident Maldivian population has seen a growth of 1.6%, while the foreign population grew by 7.8 % annually.

While the foreign population constitutes a substantial portion of the resident population, foreigners are mainly expatriate workers, who are typically temporary residents. Consequently, the number of births and deaths occurring annually among the foreign population is minimal.

The population pyramid of Maldives gives a snapshot of the population by age distribution and offers insights into future population trends in the country. The current population structure of resident Maldivians indicates a bulge in the working age population which is more pronounced among males, representing a demographic window of opportunity. The foreign population exceeds the local Maldivian in the prime working age. The number of Maldivian children (0-17 years) constitutes 32% of the population, a decrease from the observed figure in 1990 of 53% (MBS, 2024). The decline in the proportion of children is mainly due to declining fertility rates in the country (MBS, 2024) .

Figure 1.1: Population pyramid of Maldives, 2021



CHAPTER 2: THE CIVIL REGISTRATION SYSTEM



CHAPTER 2: THE CIVIL REGISTRATION SYSTEM

The Ministry of Health (MoH), along with the Local Councils and the Department of National Registration (DNR) are the authorities responsible for the CRVS system. While health facilities issue the birth form, birth registration and birth certificate issuance are carried out by Local/City Councils. DNR, under the Ministry of Homeland Security & Technology is mandated to maintain all the records related to the national identity of a Maldivian. The country achieved 100% geographic coverage in birth registration as early as the 1980s and completeness of birth registration is almost 100%. The recently developed digital birth and death registration platform 'GEMEN' has helped streamline registration processes, although not without its own challenges.

2.1 HISTORY

In Maldives, the recording of vital events dates back to as early as 1960. During the 1960s, a list compiled manually by Male' Municipality and atoll/island offices was reported to the Ministry of Health. The government enacted the Civil Registration Law in 1993, which mandated all Maldivians (residing in Maldives & living abroad) to report any live events and at the same time to register these births and deaths. The Act also mandated the Ministry of Health to formulate and implement regulations to operationalize the registration process. With the enactment of the Act, the Ministry of Health was also mandated to record births and deaths including producing vital statistics and coding of deaths. In 1999, a Microsoft Access database was established and birth and death data were entered directly into this system. Cause of death classification was initiated based on the ICD-10 classification system. A special milestone was achieved in 2003 when the Ministry of Health introduced the triplicate copy system of reporting births and deaths. The original copy of the form was given to the parents or the guardian, the second copy retained at island/ city councils and the third copy was sent to the Ministry of Health. This copy was used to input data into the Vital Registration System (VRS) database maintained at the Ministry of Health.

In 2008, an online VRS module was incorporated into the eGov system by the National Centre for Information Technology (NCIT) in collaboration with MoH. Following this, birth and death data began to be entered into this system. Meanwhile, two dedicated trained staff were allocated for coding of cause of death and were based in the Ministry of Health.

In 2010, under the decentralization act, local councils were mandated to keep a record of the birth and death registration at atoll and island level. This initiated changes to the triplicate copy system of reporting births and deaths through birth forms and death certificates. The original copy of the form was given to the parent or guardian. However, the second and third copy was passed on to the island councils who then sent these copies to the atoll and city councils. Atoll and City Councils retained the second copy and the third copy was sent to the Ministry of Health at that time.

In 2011, under a written policy directive from the President's Office, all data entry and coding

processes of births and deaths were moved to the Department of National Registration. However, the analysis, reporting and recording of vital statistics remained at MoH. With this change, MoH had to request for VRS data from the Department of National Registration every time. Upon request, DNR would prepare the dataset which was given to MoH on a CD. Meanwhile, Atolls and City councils had to route the third copy of the birth forms and death certificates to the Department of National Registration, instead of the Ministry of Health. The death coding staff were also moved to DNR from MoH. In 2013, the death coding staff were transferred from DNR to MoH so that coding support could be provided to the health team. Since then, death coding information has been entered into the online system by Ministry of Health while all other information on the birth and death certificates are entered by the DNR team into the online system.

Over the past years, the VRS online system faced issues such as delays and other technical issues. As a result, a new online platform called 'GEMEN' was developed to issue birth forms, enter birth registration information, and issue birth and death certificates. This platform was developed by the Local Government Authority (LGA) and National Centre for Information Technology (NCIT) and was rolled out from June 2020 onwards. With the introduction of GEMEN, health facilities do the entry of birth forms into the system, and birth forms & birth certificate are issued via GEMEN. Similarly, health facilities enter the necessary information needed for the death certificate into the GEMEN and issue death certificates via the portal. MoH can extract data from the GEMEN portal and carry out VRS analysis. Cause of death coding is also done in the GEMEN by the designated staff from MoH and Indira Gandhi Memorial Hospital (IGMH).

1960

Births and deaths reported to Ministry of Health. A compiled list of all births and deaths sent mainly by the Male' Municipality and the atoll and island offices.

1993

Civil Registration law enacted, which mandated that all births and deaths of Maldivians (in Maldives or abroad) need to be reported and registered. The Act also mandated the Ministry of Health to formulate and implement regulations to operationalize this process. Under this Act, the Ministry of Health also mandated the recording of births and deaths, including vital statistics and death coding.

1999

Microsoft Access database established and birth and death data entered into this system. Prior to this, reported birth and death data were entered into Microsoft Excel and later into software known as "PC Edit", which was only used for a year. Cause of death classification initiated based on ICD-10 classification system.

2003

System of reporting through a birth form (foolhuma form) and death certificate (maru form) introduced.

2008

An online vital registration system (VRS) module incorporated into the eGov system by the National Centre for Information Technology in collaboration with the Ministry of Health and birth and death data entered into this system. Two dedicated, trained staff, based in the Ministry of Health (then known as Ministry of Health and Family), allocated for coding of cause of deaths.

2009

Established an online birth and death system.

2010

Under the Decentralization Act, local councils mandated to keep a record of the birth and death registration at the atoll and island level. Triplicate copying of reporting birth and deaths introduced throughout Maldives.

2011

Under a written policy direction from the President's Office, all data entry and coding processing of birth and deaths transferred to the Department of National Registration.

2013

Two death coding staff transferred from the Department of National Registration to the Ministry of Health to extend coding support to staff in the health team.

2015

VRS regulation, which gave specific directions on the reporting mechanism in place, gazetted.

2019

Development of population module in e-council system with digitization of birth and death forms.
Implementation of digitized birth and death forms.

2020

the new Vital Registration System (GEMEN) was rolled out across the country.

2021

Completion of GEMEN roll out across the country.

2022

Development of GEMEN entry dashboard to monitor active usage by Councils
-Ratification of Birth and Death Registration Bill (Law No. 23/2022)

2024

Publication of first Vital Statistics report of Maldives

2.2 LEGAL AND ADMINISTRATIVE ISSUES

Several initiatives have been undertaken in Maldives at policy level to institutionalize civil registration practices. Some of these initiatives include the enactment of the Civil Registration Act in 1993. Under this Act, mandatory functions have been assigned to different authorities, to ensure that a system can be established.

It is in the mandate of the Ministry of Health to store records, conduct analysis and publish vital statistics for the country. Under this mandate, the Ministry of Health had to formulate regulations and guidelines to implement the law.

Following this, Ministry of Health formulated the regulation “Regulation no: 2015/R-179” - VRS regulation, which came into force in September 2015. This regulation includes procedures to be undertaken upon the occurrence of birth and death and actions to be taken for births and deaths taking place out of the country. Additionally, this includes guidelines on recording the birth and death forms. This regulation also includes the responsibilities of each stakeholder (DNR, City Council, Island and Atoll Council) in processing the VRS system of the country.

In December 2022, the President ratified the Birth and Death Registration Bill (Law No. 23/2022). The law specifies guidelines and policies governing the registration of births, the formal declaration of deaths, and the issuing of national identification cards. It also prescribes penalties for breach of the law¹⁰.

The registration of vital events, in the order of registration is as follows:

1- Registration of birth for Maldivians - Birth and Death Registration Act (Act No. 23/2022), Clause 2 states:

“It is mandatory to register all children born to Maldivian nationals within Maldives or abroad by their parents, if not by their guardians”

- Under the law, all children born to Maldivians in Maldives must be registered with the relevant council within 7 days.
- Once the legal guardian of a child submits necessary documents to register birth within 7 days, it is mandatory for councils to register the birth within 7 days of submission of necessary documents.
- Children born to Maldivian nationals living abroad should register the birth of their children within 6 months with the local (Maldivian) authorities upon registration of birth in their respective country.

Birth normally occurs at health facilities. Before the mother gets discharged from the hospital, she is given a printed copy of the ‘birth form’ completed via the GEMEN portal. It is mandatory for parents to submit the birth form together with other documents for birth registration (online) within 7 days in the respective city where the birth occurred.

A fee of MVR 25 is charged to register a birth. There are also fines applicable to renew birth registration forms due to loss or damage.

¹⁰ Penalties are not yet implemented as the required guidelines are not yet endorsed by the President

2- Issuance of birth certificate for Maldivians - Birth and Death Registration Act (Act No. 23/2022), Clause 3 states:

- “All children of Maldivian parentage, irrespective whether born inside or outside Maldives, must apply for a birth certificate within 6 months of birth”.

To issue a birth certificate, it is mandatory for parents to complete birth registration. Birth registration and birth certificate issuance can be dual processes that can be carried out together¹¹.

It is free of cost to issue a birth certificate for the first time. However, there are fines applicable for renewing a birth certificate due to loss or damage. The legally stipulated time frame to get a birth certificate issued is within 6 months of birth. To obtain a birth certificate, parents must apply to the city/island council where the birth occurred.

3- Issuance of National Identity card number for Maldivians - Birth and Death Registration Act (Act No. 23/2022), Clause 2 states:

- “Upon registration of birth and birth certificate issuance, it is mandatory for the Department of National Registration to issue an Identity Card number for all Maldivians”.

During the process of birth certificate issuance, a National Identification Number (NID) is generated for each child. Once the process of birth registration and birth certificate issuance has been completed, parents are expected to register the child in a house. It is only after this process that parents can apply to get a printed NID card.

4- Death registration for Maldivians - Birth and Death Registration Act (Act No. 23/2022), Clause 2 states:

The Birth and Death Registration Bill does not specify a prescribed timeline by which the death of a citizen should be registered. However, the law mandates that all deaths that occur in the country should be registered.

Prior to death registration, a completed Medically Certified Cause of Death (MCCD) form needs to be obtained from a health facility. Without this form, the burial cannot take place. This is a critical step taken in Maldives to ensure the maintenance of 100% death registration and completion of the MCCD form.

5- Registration of birth & death for foreigners - Birth and Death Registration Act (Act No. 23/2022), Clause 2 states:

“In accordance with the law, all children born to foreign nationals in Maldives must be registered with the relevant council within 7 days”

¹¹ In the Maldives, parents can apply for a birth certificate at the same time as birth registration. This process is typically completed together as a single step by the parents.

Similar to Maldivian nationals, all births and deaths that occur among foreign nationals must be processed through the GEMEN module. Births must be registered within 7 days and for foreign deaths, the death certificate must be issued via GEMEN.

The legislation does not exclude registration of any child. As such, the law clearly states:

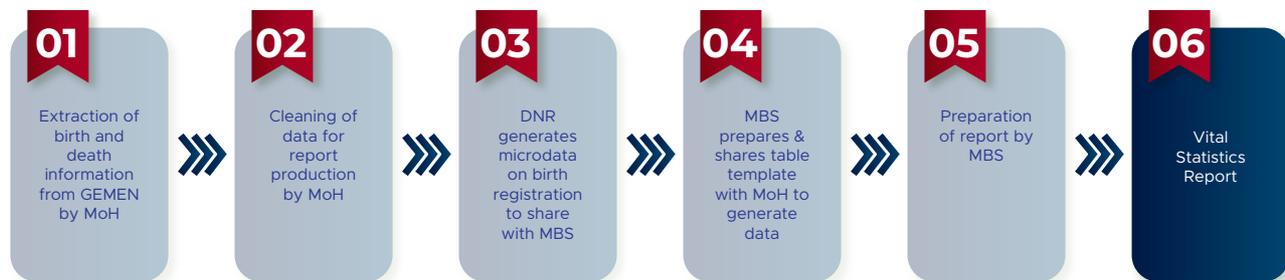
- If a child is born out of wedlock, the child must be registered upon submission of relevant documents for registration.

2.3 ORGANISATIONAL STRUCTURE, REGISTRATION PROCESSES AND INFORMATION FLOWS

As Maldives publishes its first vital statistics report, the diagram below presents the organizational structure of information flow for development of the vital statistics report. The vital statistics report is a joint collaboration between Maldives Bureau of Statistics, the Ministry of Health and the Department of National Registration. Maldives Bureau of Statistics takes the lead in the development of the report content, and requests data from MoH & DNR.

In order to produce the vital statistics needed for the report, MoH extracts data from the GEMEN platform, and conducts the data cleaning process. DNR in the meantime, shares micro data on registered births of Maldivian nationals. Once MBS receives the data from MoH, the core team prepares the report. Data regarding marriages and divorces are obtained from the Statistical Yearbook of Maldives. Finalisation of the report included the process of review and revisions by both organizations before final endorsement.

Figure 1.1: Population pyramid of Maldives, 2021



2.3.1 Health facilities across the country

The Ministry of Health is the primary government department responsible for providing and enhancing healthcare services nationwide. In the Maldives, the healthcare delivery system is organized into a tiered system. At the island level, there are primary health centers, at the atoll level there are higher-level health facilities with specialty care hospitals, and at the urban level, there is a tertiary care facility.

In 2021 there were a total of 192 health facilities, out of which 188 were public and 4 were private health facilities. This is further categorised as tertiary hospitals, other hospitals, regional hospitals/atoll hospitals, Health Centers and Dhamanaveshi¹². These facilities are depicted below

12

Used to be Male' Health Centre. It was rebranded as Dhamana Veshi and reopened in 2013 as an urban healthcare centre.

Table 2.1: Health facilities by tier level

Indicator	2019	2020	2021
Tier 3: Tertiary	National referral hospital (1- IGMH)	Private Hospitals in GMR (2 - ADK, Treetop)	State Trading Organization (STO), private pharmacies, Health suppliers, Health focused civil society organisations, Youth and women's groups
	AEH		
Tier 2: Secondary	Other public hospitals (3-Hulhumale' hospital, Villimale' hospital, Senahiya Military Hospital)	Other Private Hospitals (2- Medica and IMDC)	
	Regional / Atoll hospitals (18- KRH, URH, GRH, ASMH, MRH & Atoll hospitals)		
Tier 1: Primary	Health Centres (164)	Private Clinics	
	Dhamanaveshi		

2.3.2 Registration process for birth

When a birth occurs at a health facility, the doctor issues the birth form (or 'foolhuma form') before the mother gets discharged from the health facility. For births that occur at home or outside a health facility, it is mandatory for parents to report the birth at the nearest health facility, and the process that follows is similar to a birth that occurs at a health facility. The foolhuma form (birth form) is completed via the GEMEN platform and a printed copy of the foolhuma form is given to parents before the mother gets discharged from the health facility.

For birth registration, it is mandatory for parents to submit the birth form together with the "application for birth registry & birth certificate" form within 7 days to the city/island Council on the island where the birth occurred. Currently applications can be submitted online in some Councils and the parent will receive the certificate via email and a hard copy is made available for collection at the respective Council.

This application needs to be submitted together with the ID card of the mother and father, marriage/divorce certificate, household registry and houseowner ID. Before applying for birth registration, the child should be given an approved name (names can be verified from the Male' City Council (MCC) approved name list or the name book of the Ministry of Islamic Affairs).

It takes approximately 3-5 days to register a birth. Once the birth has been registered, the birth registration form and birth certificate are printed through GEMEN and given to the parents.

The business process flow of birth and death registration is presented in Annex 1.

Table 2.2: Health facilities by tier level

The law mandates a parent/guardian to register a birth within 7 days. The birth registration can be completed where the baby was born. Application can also be done online through oneGov website (applicant needs to have an Efaas account).

Documents required for application submission via online include:

- a. Marriage certificate of parents (for newborn registration)
- b. Parents ID card
- c. Passport (if one or both of the parents are foreign)
- d. Foolhumaa form (birth form)
- e. Hospital documents (if the child was born abroad)
- f. Name in Arabic
- g. No-objection letter from the owner of your chosen residence

After successful submission, a notification is sent to the applicant's email address or phone number and the applicant can check the status of the request through the website.

The service fee for registration is MVR25 and once the application has been approved, a notification will be sent via phone/email to make the payment for the process.

Once the application is processed, the certificate will be issued via email.

All applications submitted according to protocol, are processed within 5 days.

2.3.3 Registration process for death

In Maldives, deaths can occur at a health facility, at home or elsewhere¹³. Those who die at home or elsewhere are taken to the nearest health facility to be certified by a doctor before the burial can take place, as a death certificate issued by the health facility is required for burial.

Maldivians who die abroad are also entered into the GEMEN system and this can happen in two ways. First, once a person dies, their body is repatriated back to Maldives, certified by a doctor and the information is entered into the GEMEN system. The registration process then follows the same process as that of a person who died in the country. The second process requires the relatives of the deceased to bring the death certificate to the DNR/City Council, where it is entered into the GEMEN system¹⁴.

¹³ Deaths due to accidents, drowning, etc.

¹⁴ Detail of how death registration takes place is available on: <file:///C:/Users/User/Downloads/ESCAP-2022-RP-Assessment-analysis-redesign-civil-registration-Maldives.pdf>

2.3.4 Registration points across the country

The below table offers a comprehensive overview of the coverage of VRS registration processes in Maldives.

Table 2.3: Key actors involved in registration of vital events and their role

Agency	Role	Coverage
Health Facilities	<p>Birth: 'Birth forms' are given to parents/guardian from the health facility before the mother gets discharged.</p> <p>Deaths: All health facilities issue the death certificate to decedent's family member before the body is handed over to the family for burial.</p>	<p>All health facilities across the country have access to GEMEN and complete the entry of the birth form into the GEMEN portal.</p> <p>All health facilities issue death certificate</p>
City/Island Council	<p>The parent/guardian can report the birth to their usual place of residence with the complete set of application forms for online birth registration. Upon receipt of these documents, the Council staff checks this information in GEMEN and issues birth registration and birth certificate. Normally birth registration and birth certificate issuance is a dual process carried out by the Councils. Process birth and death registrations, and issue birth and death certificates through the GEMEN portal.</p>	<p>Currently all island/city councils in the country carry out birth registration and birth certificate issuance.</p>
Department of National Registration	<p>Council staff request for NID number via NARES for all requests submitted to issue birth certificate.</p> <p>DNR staff issue a National Identification Number, (NID) once the request is made.</p> <p>DNR also issues the printed NID card for Maldivians via NARES for all requests submitted</p>	<p>Central</p> <p>Printed NID card is issued in Maale and in each atoll capital island</p>
Magistrate Courts and Family Court	<p>Registers marriages and divorces. Once an application is submitted for marriage or divorce registration, court staff verify the information and proceed with the registration of the marriage/divorce.</p>	<p>Magistrate court is established on each island and carries out the registration of marriage and divorce</p> <p>In Maale, the Family Court does the registration of marriages and divorces</p>

2.3.5 Penalties for late registration

The Law stipulates penalties for failing to submit the birth form within the given timeframe. According to the law, late registration (after 7 days) incurs a fine upto MVR 10,000 (US\$ 648.51). However, as the required guidelines have not been endorsed, the enforcement of the MVR 10,000 fine is not yet implemented.

As the country is currently in the transition phase to implement the preceding regulation, no late fines are currently taken from the parents.

2.3.6 Transfer of records

All the births and deaths that occur in the country are entered into the GEMEN system. Entry of records is first carried out by health facilities. The registration of birth & issuance of birth certificates is carried out by Councils, using the GEMEN portal.

Access to vital registration records is given to key agencies involved in providing government services. Access to vital registration records have been granted under an MoU signed with these agencies.

The relevant agencies have access to these records in the GEMEN for various purposes:

- DNR uses this information for issuance of the National ID card and removes the deceased from the ID database.
- Maldives Pension Administration Office (MPAO) fetches this information via API to monitor and regulate the old age benefit/allowance provided by the government.
- MoH can extract the data from GEMEN and conducts the data cleaning for vital statistics production.

2.5 MARRIAGE AND DIVORCE IN MALDIVES

Marriage must be solemnized and registered for it to be legally valid in the Maldives. Any marriage that happens in the country can only occur after applying for a marriage and when the court registers it. Solemnization and registration of marriage are regulated under the Family Act 4/2000. The marriage must fulfill the conditions imposed by Islamic Shari'ah Law and marriages will be solemnized via Mauzoon (Solemnor of marriage). Marriage of Maldivians solemnized abroad must also be registered in the Maldives.

When an application is submitted, information is verified, checked against their last marriages, divorces, child maintenance and any other fines levied due to past divorces.

Once the marriage is solemnized, the record is maintained in the system. Since November 2023, the Department of Judicial Administration has rolled out an online platform to digitally manage marriages and divorces that occur across the country. Judicial Administration is mandated with the regulation of marriages and divorces in country, through the Family Court and Magistrate Court established across the country.

Marriage below the age of 18 years is now prohibited (Law No: 19/2019 (Child Rights Protection Act)) in the Maldives. The introduction of the Family Act 4/2000 also initiated a change in how divorce can be administered in the country. Prior to the Act, husbands could divorce their wives through the direct and indirect words of divorce, and then

formally register the divorce. Men were not obligated to obtain court permission to exercise their right to divorce. This helped to minimize the high divorce rate in the country.

With the enactment of the law, husbands must now obtain Court permission prior to exercising their right to divorce. An application must be made to the relevant court, after which, a husband can divorce his wife upon obtaining the approval of the judge. It is against the law for a husband to divorce his wife outside of court without the approval of the judge, and failure to do so results in a fine not exceeding MVR 5000 (USD 324.35)¹⁵.

The Family Court in Maale manages marriages and divorces through Maldives E-court Management System (MEMS). Past records are still maintained in MS Excel sheets, Registry Books and duplicate marriage books. The Magistrate Courts on the islands maintain these records in MS Excel sheets, Registry Books and duplicate marriage books.

A special module for marriage and divorce was introduced to MEMS, with national rollout beginning in 2016. Since November 2023, all courts are connected to this system. However, there is a significant backlog of data that needs to be entered into the system to achieve a complete marriage & divorce register in the country. The Department of Judicial Administration (DJA) is currently in the process of entering historic data, prioritizing the period after 2018.

2.4 ORGANISATION OF VITAL STATISTICS PRODUCTION AND DISSEMINATION

The Ministry of Health extracts birth & death registration data from the GEMEN portal for the production of vital statistics. As an initial step, MoH conducts data cleaning and any issue with the data is reverted to the Department of National Registration to inquire and amend records accordingly.

Once the records have been verified, this dataset is used for statistics generation. MBS prepares the necessary data tabulations needed for the report and MoH generates the specific tables required for the vital statistics report. MBS then compiles and analyses the data to create the final report.

The analysis of marriage and divorce statistics in this report is based on the data published in the Statistical Yearbook of Maldives. Each year, MBS collects the most recent statistics on marriage and divorce from the Department of Judicial Administration. MBS strives to upload the latest statistics online by mid-year.

Once the report was compiled, it was shared with MoH, DNR, LGA & ESCAP for their feedback.

15 Exchange rate, as of 28 Oct 2024

2.5 INCENTIVES AND DISINCENTIVES FOR REGISTRATION

There are various incentives associated with vital event registration in Maldives. With birth registration, a National ID number is issued to each Maldivian.

In Maldives, there are numerous government and private services which can be accessed to those who have a valid National Identity Card.

Incentives for birth registration include:

- Access to free health care: Maldives government provides universal health coverage to Maldivians and this can only be accessed with a valid NID card. This service is also extended to Maldivians living in nearby countries.
- Access to education: To enrol in any school in the country, it is mandatory to have all vaccines completed, birth certificate and NID card issued. The government also provides universal education up to Grade 12 and free degree programmes for Maldivian nationals.
- Access to social benefits: Under the social protection act, there are several benefits that can be claimed by different sub-groups of the population. This includes financial support to single parents, persons living with disabilities and elderly people. People and families with low incomes may also be eligible for government subsidies for utilities. These services are eligible to Maldivians who possess a valid National Identity Card.
- Other services: Many public/private services such as passport issuance, transport license, loans, housing loans, marriage and divorce registration and insurance require Maldivians to submit a valid National Identity card.

Under the Civil Registration Act, all births and deaths need to be registered in the vital registration system. Hence, since there are many incentives as mentioned above, it could be seen as an enabler for timely registration of births.

Although there are many incentives for birth, few can be said about deaths. Other than personal gain (such as acquisition of land, wealth) people rarely submit the documents to register a death with the authorities. Although the Civil Registration Act states the registration of death and the penalties for non-registration, the system needs further re-enforcement to make registration compulsory.

As a result, the government now considers all death certificates issued as a death register and this information is used to de-activate all benefits provided to an individual.

CHAPTER 3: DATA QUALITY, TIMELINESS OF REGISTRATION, AND REGISTRATION COMPLETENESS



CHAPTER 3: DATA QUALITY, TIMELINESS OF REGISTRATION, AND REGISTRATION COMPLETENESS

3.1 DATA QUALITY

The new VRS (GEMEN) platform has been developed with built-in consistency checks, addressing many of the frequent issues previously faced by entry staff at the Ministry of Health and the Department of National Registration. However, as some of the health facilities and councils still face challenges in fully adopting the GEMEN platform, various issues are present in the raw data extracted from GEMEN.

To conduct the analysis, Ministry of Health (MoH) staff extract data from the GEMEN platform and undertake the data cleaning process and quality checks. The main elements of the data quality checks include:

- Check for data accuracy
- Check for data inconsistencies and discrepancies using cross tabulations and trend analysis
- Check for duplicate records, duplicate serial numbers in the data
- Check for reporting completeness and data completeness
- Triangulation with other sources for data completeness
- Poor description/erroneous recording of cause of death

Any issues identified at this stage are referred back to the Department of National Registration, who then collaborate with the respective health facilities or councils to resolve the issues by making necessary amendments in the system. Once these issues are resolved, MoH staff re-verify the data and proceed with generating the vital statistics.

These data quality checks can be time consuming. However, protocols are followed by Ministry of Health (MoH) staff to ensure cleaned data is made available as soon as possible. Recently, MoH has invested in enhancing their capacity for conducting data quality checks in an efficient and timely manner. Some of these trainings include:

- ICD-10 and ICD-11 trainings, including Training of Trainers (ToT), targeting health professionals responsible for medically certifying cause of death
- Medically certified cause of death training on a yearly basis targeting specific health facilities, utilizing health professionals who have undertaken the ToT
- Capacity building in STATA conducted by MBS for MoH staff to fast-track the data cleaning process of birth and death data

3.2 TIMELINESS OF REGISTRATION

3.2.1 Timeliness of birth registration

Under the Birth and Death Registration Act (Act No. 23/2022), all children born to Maldivians in Maldives must be registered with the relevant council within 7 days.

Based on this, this report defines timely, late and delayed registration as follows:

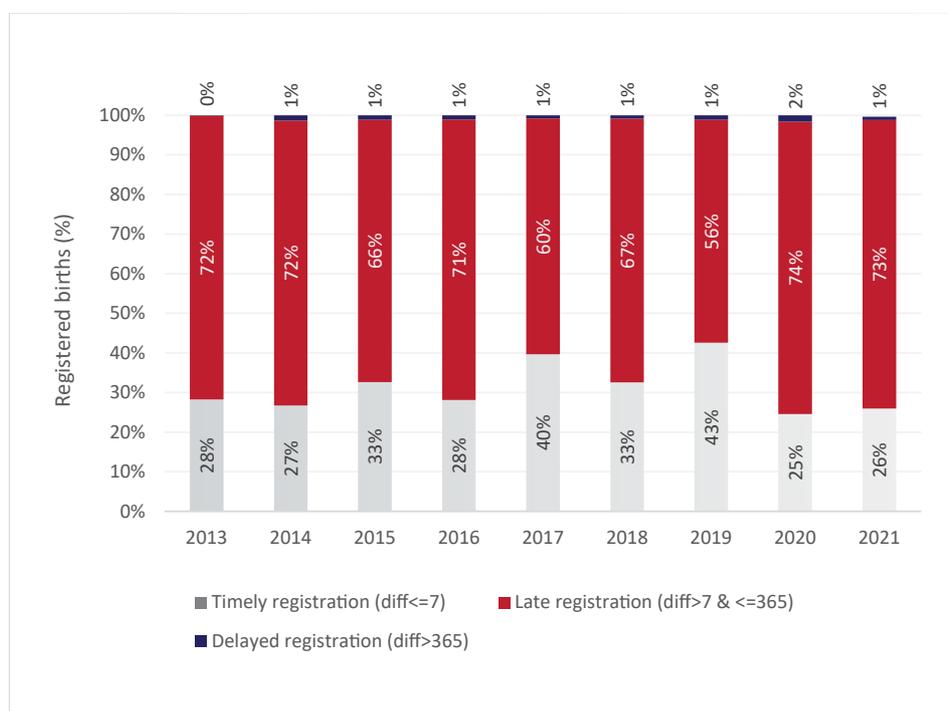
Table x 4: Summary statistics on marriage and divorces, 2019-2021

Registration Indicator	Detail
Timely registration	Births registered within 7 days
Late registration	Births registered between 8-365 days
Delayed registration	Births registered after 365 days

This section highlights the timeliness of birth registration over the past nine years. In 2021, only 26% of births were registered on time, a pattern consistent with previous years. In 2021, 73% of births were registered late (between 8 and 365 days after birth), while delayed registrations (over a year) remained below 1%. Overall, more than 70% of parents tend to register their child after the legally mandated registration period.

The lowest rate of timely registration was recorded in 2020, and this is likely due to the impact of the COVID-19 pandemic.

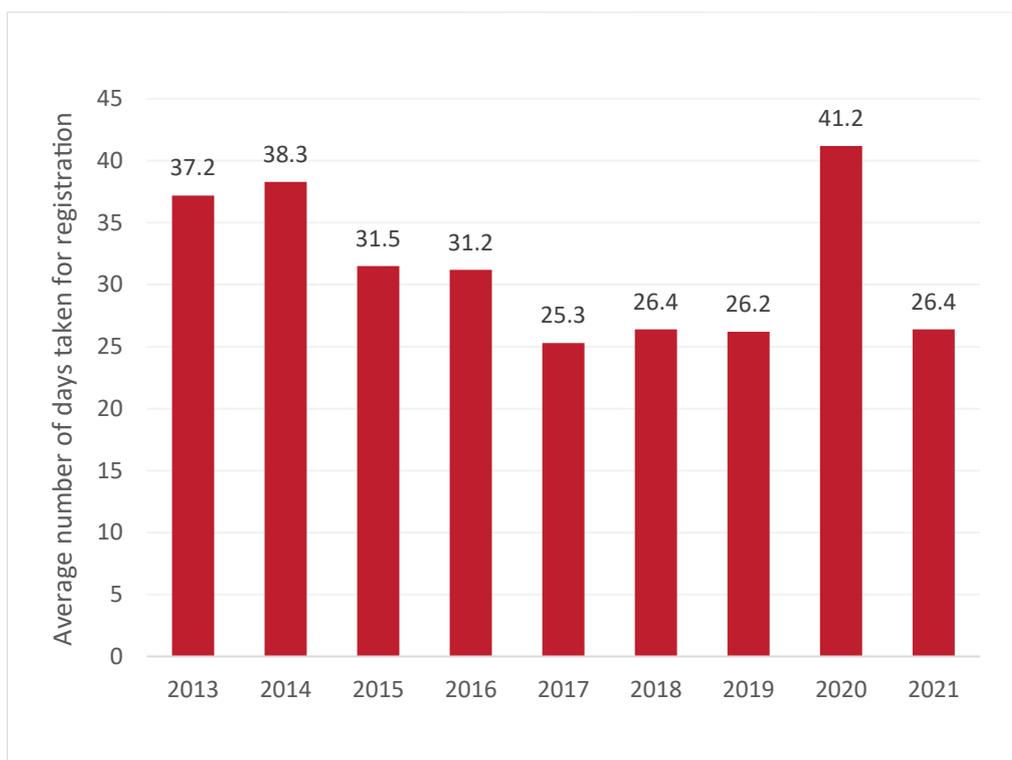
Figure 3.1: Timeliness of registration of live births, 2013-2021



The average time taken to register a birth in 2021 was 26 days, similar to previous years. Although the law mandates parents to register a birth within 7 days, free healthcare for the child is provided under the mother’s name for up to 28 days¹⁶. As a result, many parents tend to delay registration until just before the end of this period to avoid losing free medical care for their child. When the new regulation takes effect, it will be essential to harmonize the legally mandated birth registration period with the healthcare coverage duration to avoid imposing significant fines on families.

The most significant delay in birth registrations occurred in 2020. Due to COVID-19 and the closure of local Councils, the time taken to register a birth that year was nearly double the time it took in 2021.

Figure 3.2: Average number of days taken for birth registration, 2013-2021



¹⁶ With the implementation of the government health insurance scheme (Aasandha) in 2008, newborns receive free health care under the mother’s name until the child is 28 days old. After 28 days, the child can only access free health services after their registration has been completed and NID card number has been issued for the baby.

3.3.2 Timeliness of death registration

Maldives Birth and Death Registration Bill (Law No. 23/2022) does not specify a prescribed timeline by which the death of a citizen should be registered. However, the law mandates the respective authority to maintain a register of deaths.

Since the country does not maintain a separate death registry, all issued death certificates are considered registered by default and are maintained as part of the death register. Once a death certificate is generated via GEMEN, this information is used to update the National Identity System (NARES) by removing the deceased from the records. Hence all deaths recorded during 2019-2021 are considered as registered on time.

3.3 COMPLETENESS OF REGISTRATION

The completeness of vital events can be used to monitor the performance of the civil registration system. It is calculated as:

The completeness of registration of live birth rates can be calculated using the following formula:

$$(1) \text{ Completeness rate for births} = \frac{\text{Number of registered births within the year of occurrence}}{\text{Estimated number of live births within the year}} \times 100$$

In the Maldives, the total number of vital events, such as births and deaths that occur in a year are known. Births are recorded at health facilities¹⁷ and birth forms are directly entered into the GEMEN system. Similarly, birth registration is also conducted through the GEMEN system and once a birth is registered, a National Identity Number is generated for each individual.

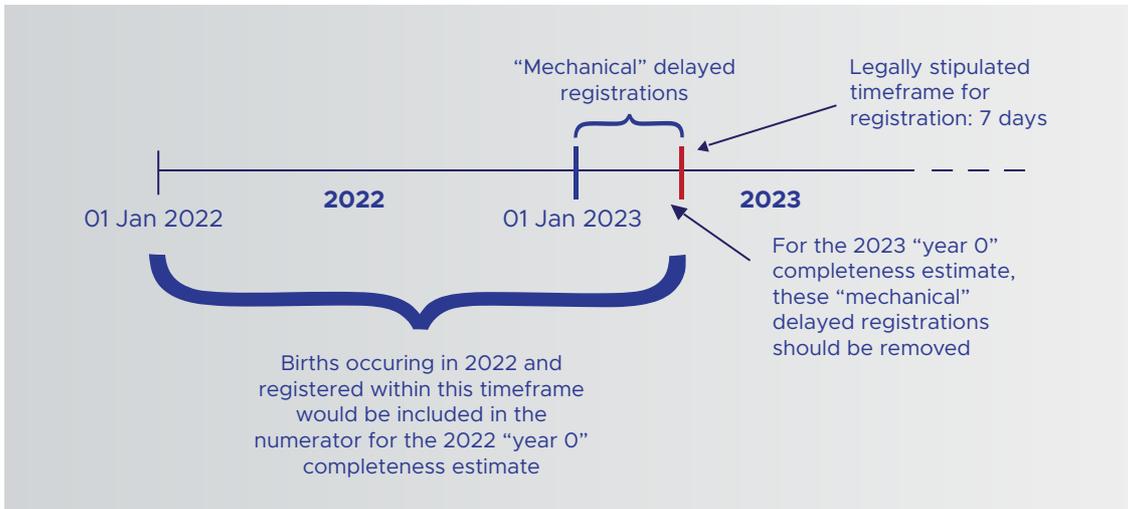
For deaths, death certificates are issued for any death that occurs in the country. An individual can only be buried after submitting the death certificate to the cemetery.

Since both the registered number of vital events and total number of vital events within the year of occurrence is known, for the calculation of completeness, the following data will be used:

Numerator	The number of vital events registered within the year of occurrence
Denominator	Total number of vital events within the year of occurrence instead of estimated figures

17

In Maldives, most births occur at health facilities. For births occurring at home, the baby must also be brought to the health facility.



The completeness of registration in the case of Maldives, is computed by taking the registered events (births and deaths) from the GEMEN as the numerator and live births (births and deaths) from GEMEN as the denominator. The value is multiplied by 100 to express completeness as a percent:

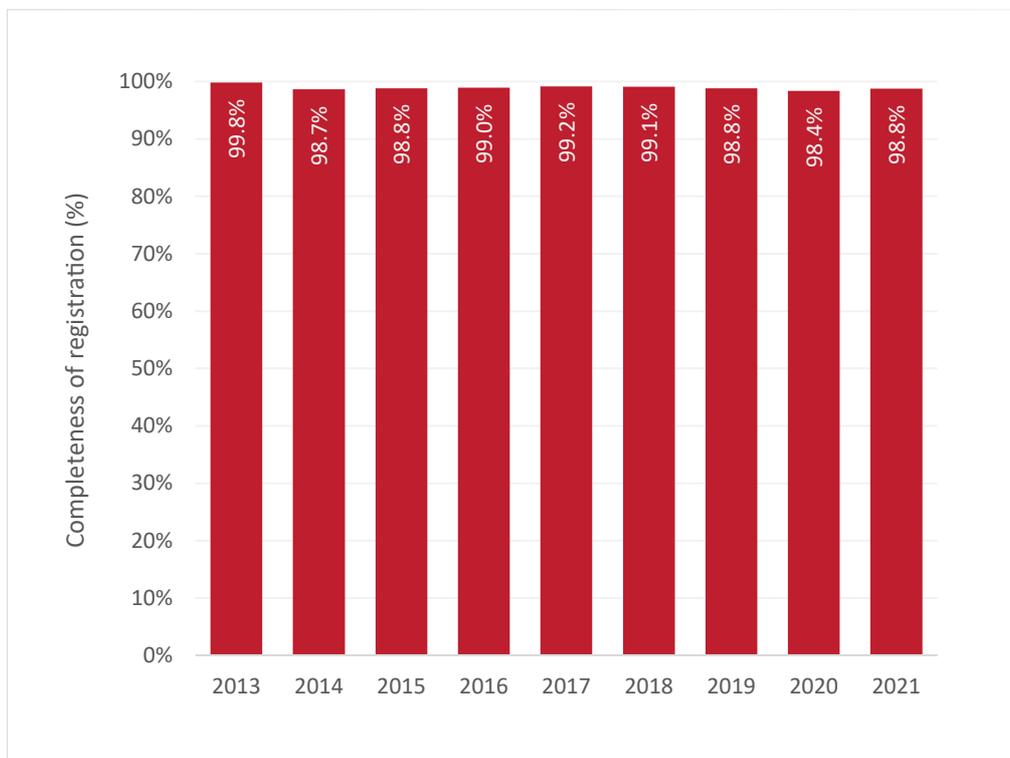
$$Completeness = \frac{\text{Number of vital events registered}}{\text{Total number of vital events}} \times 100$$

Note: Birth registrations in the country include those of Maldivians living abroad, as the law mandates that any child born to a Maldivian must be registered in the country. Currently, there is no field in the NARES system to differentiate between registered births of usual residents and those living abroad. Therefore, for the calculation of completeness and registration, births that occurred to Maldivians, including those living abroad, have been included.

3.3.1 Birth registration completeness

The Maldives has consistently maintained an almost 100% completeness rate in birth registration over recent years. However, there was a slight decrease in this rate in 2020, which may be attributed to the disruption of regular services caused by the COVID-19 pandemic.

Figure 3.3: Birth registration completeness, 2013- 2021



CHAPTER 4: BIRTHS



CHAPTER 4: BIRTHS

Table 4.1 depicts the total live births recorded in the country. Total live births recorded includes births that occurred in the country and births abroad for Maldivian nationals. Births that occurred in the country include births among the resident population (Maldivian and foreigners).

Over the 3- year period, the highest number of total births was reported in 2020, while the lowest number of births was recorded in 2021. Foreign births that occur in the country are minimal, accounting for less than 1% of births in Maldives. The number of live births to Maldivian citizens abroad increased significantly from 32 in 2019 to 97 in 2020, and then decreased to 71 in 2021.

Table 4.1: Total live birth count, 2019-2021

Indicator	2019			2020			2021		
	Total	Maldivian	Foreign	Total	Maldivian	Foreign	Total	Maldivian	Foreign
Total births	6,153	6,125	28	6,308	6,255	53	5,988	5,940	48
Births in Maldives	6,121	6,093	28	6,211	6,158	53	5,917	5,869	48
Male'	4,277	4,253	24	3,152	3,118	34	3,192	3,152	40
Atolls	1,844	1,840	4	3,059	3,040	19	2,725	2,717	8
Births Abroad	32	32		97	97		71	71	

This report focuses on **live births that occurred in Maldives for the period 2019-2021.**

4.1 KEY INDICATORS ON BIRTH

In 2021, there were a total of 5,917 live births in the Maldives, marking a decrease compared to the live births in 2020 (n=6,211). This decline was also reflected in the Crude Birth Rate of Maldivians, which dropped from 13 births per thousand population in 2020 to 10 births per thousand population in 2021.

The sex ratio at birth remained within the normal range, with slightly more boys than girls for 2019 and 2020. In 2021, there were an equal number of girls being born to boys, indicating a balanced sex ratio.

Total fertility rate remains fairly consistent over the three-year period, although it is worth noting that is below replacement level (around 2.1 children per woman).

Table 4.2: Summary statistics on fertility by year of occurrence

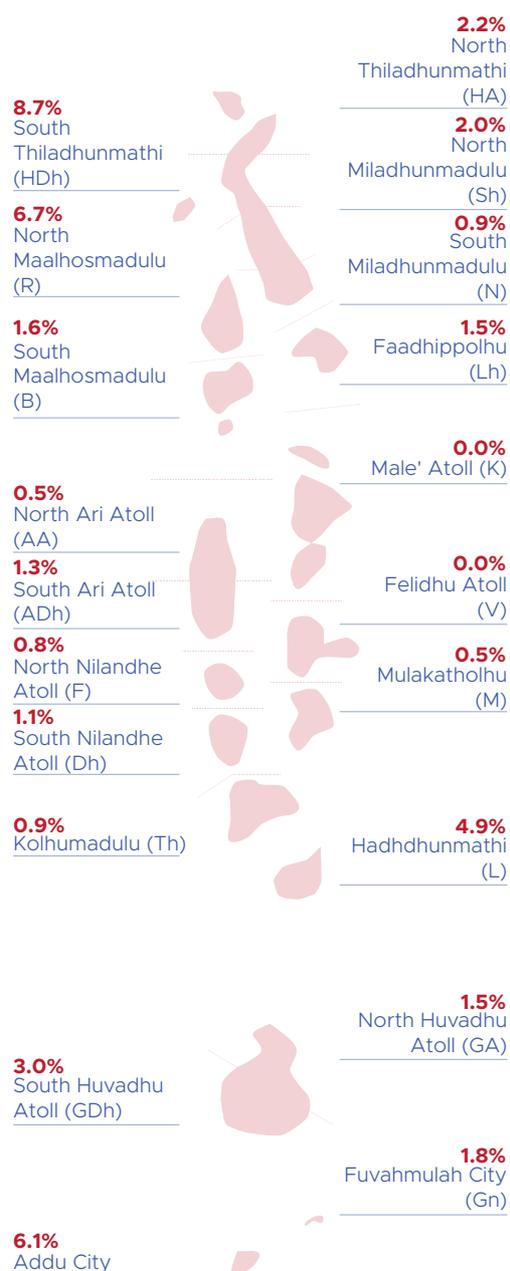
Indicator	2019	2020	2021
Live births (number)	6,121	6,211	5,917
Males	3,086	3,163	2,954
Females	3,034	3,048	2,963
Not stated	1		
Sex ratio at birth	102	104	100
Completeness in birth registration	98.8%	98.4%	98.8%
Crude birth rate (per 1,000 population) for resident Maldivians	16	16	15
Total fertility rate (births per woman) for resident Maldivians	1.8	1.7	1.8
Resident Maldivian Population	372,739	379,270	385,696

4.2 BIRTHS BY PLACE OF OCCURRENCE

In 2021, most of the births took place in the capital city, Maale. Outside of Maale, the highest number of births occurred in South Thiladhunmathi (HDh) Atoll and then in North Maalhosmadulu (R) Atoll, both of which have a regional hospital. The lowest number of births occurred in Male' (K) Atoll, with only 2 births. This might be due to the close proximity to Maale. No birth was recorded for Felidhu (V) Atoll in 2021.

Table 4.3: Live births by place of occurrence and sex of newborn, 2021

Place of occurrence (Atoll)	Number of live births by sex of newborn		
	Both Sexes	Male	Female
Republic	5,917	2,954	2,963
Maale	3,192	1,585	1,607
Atoll	2,725	1,369	1,356
North Thiladhunmathi (HA)	133	67	66
South Thiladhunmathi (HDh)	514	253	261
North Miladhunmadulu (Sh)	118	61	57
South Miladhunmadulu (N)	52	31	21
North Maalhosmadulu (R)	395	184	211
South Maalhosmadulu (B)	97	51	46
Faadhippolhu (Lh)	91	44	47
Male' Atoll (K)	2	1	1
North Ari Atoll (AA)	28	15	13
South Ari Atoll (ADh)	77	36	41
Felidhu Atoll (V)	0	-	-
Mulakatholhu (M)	31	15	16
North Nilandhe Atoll (F)	46	22	24
South Nilandhe Atoll (Dh)	64	36	28
Kolhumadulu (Th)	56	30	26
Hadhdhunmathi (L)	288	156	132
North Huvadhu Atoll (GA)	91	52	39
South Huvadhu Atoll (GDh)	176	86	90
Gnaviyani (Gn)	106	54	52
Addu City (S)	360	175	185



4.2.1 Trends in sex ratio at birth

The sex ratio at birth shows the ratio of newborn boys to girls in the population. Generally speaking, a sex ratio of 105 is considered to be the naturally occurring standard. Whilst not a direct indicator of sex preference, the sex ratio at birth can be used as a way of identifying potential sex preference which could be indicative of prenatal sex selection. In 2021, an equal number of girls and boys born can be observed in Maldives with 100 boys to 100 girls. Between 2019 and 2021, the highest sex ratio was recorded in 2020, with 104 boys to 100 girls.

Across the country, slightly more boys are born in atolls than in Maale in both 2020 and 2021.

Table 4.4: Sex ratio at birth by locality, 2019-2021

Locality	Sex Ratio at birth (Males per 100 female)		
	2019	2020	2021
Republic	102	104	100
Maale	102	102	99
Atolls	100	106	101

SEX RATIO AT BIRTH, 2021 (Males per 100 female)

100
Republic



99
Maale



101
Atolls

4.3 BIRTHS BY PLACE OF OCCURRENCE AND PLACE OF USUAL RESIDENCE OF MOTHER

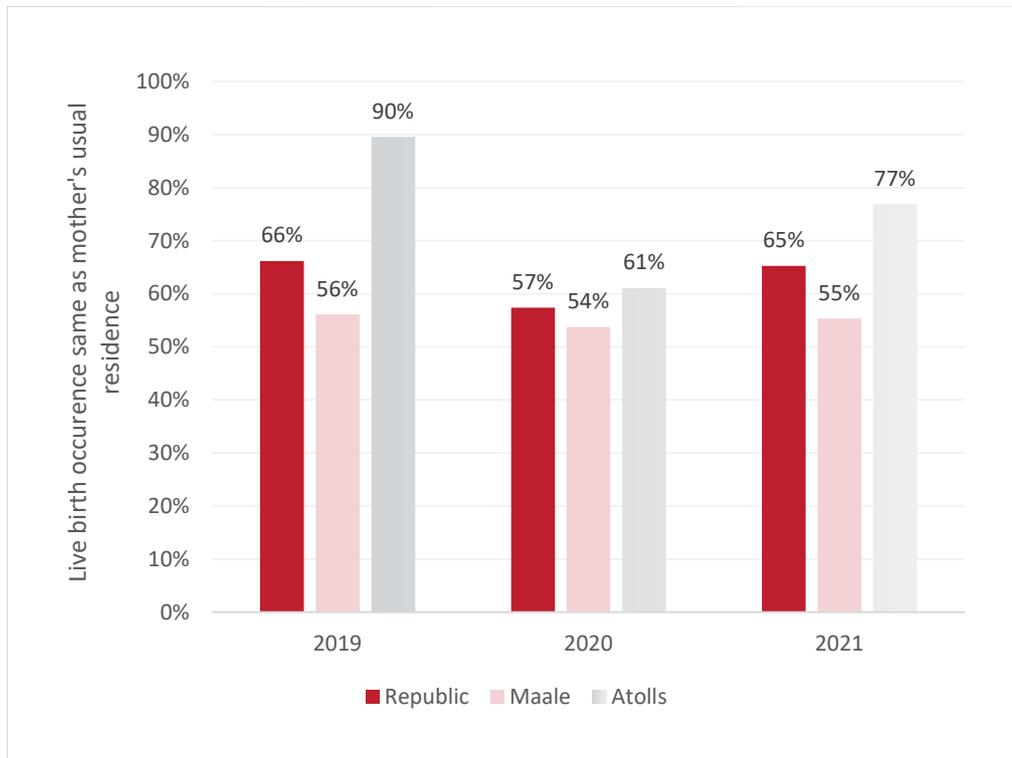
Births by place of delivery and place of usual residence of mother indicates whether women give birth in the same place as their usual residence or whether they travel to a different location for delivery.

At the national level, 66% of mothers gave birth in the place where they usually reside in 2019. This indicates that one in every three women (33%) travel to a different island to give birth. Over the years, a slight reduction is seen in women who give birth in the same place as their place of usual residence.

In 2019, 56% of births in Maale were among women residing in the capital. This meant 44% of mothers from the atolls travelled to Maale for childbirth. This trend remained consistent over the period from 2020 to 2021 and is primarily driven by the availability of tertiary health facilities and superior maternal care services in the capital.

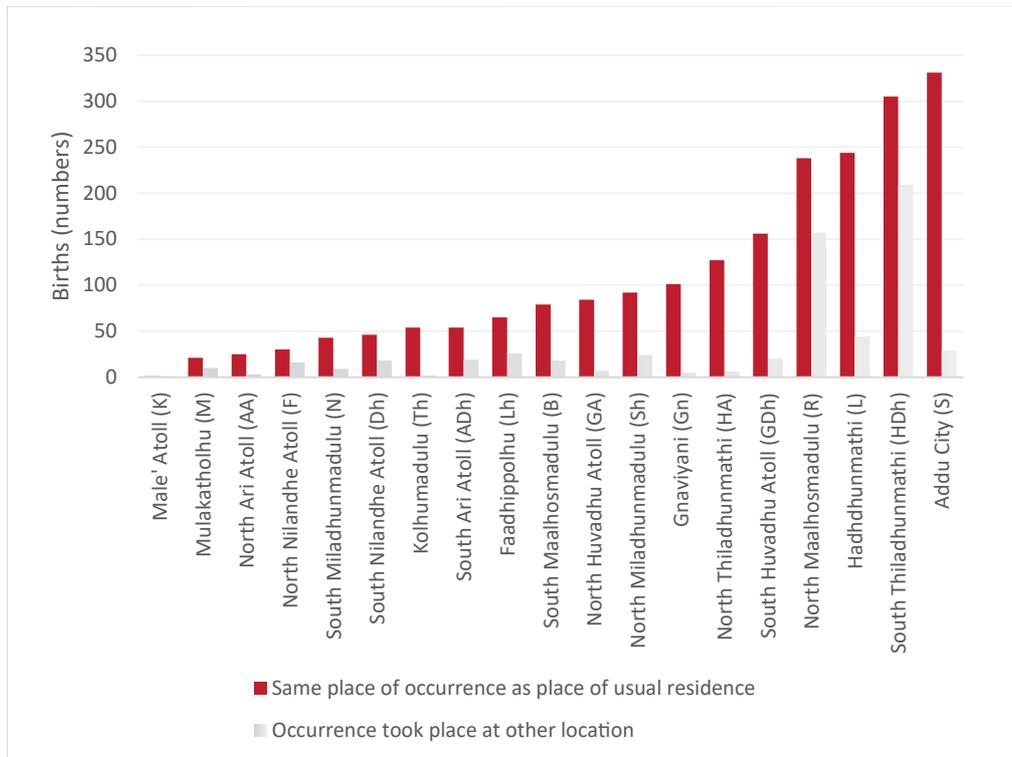
A significant trend can be observed in the atolls over the past 3 years. In 2019, 90% of women gave birth in their place of residence. However, in 2020 there was a drastic reduction, with only 61% of women delivering in their place of usual residence. Despite the travel restrictions due to COVID-19 in 2020, a substantial number of women chose to give birth away from their home island, indicating a preference for locations with better healthcare services, often resulting in deliveries in Maale. In 2021, there was a slight increase in the proportion of women giving birth in their usual place of residence, suggesting some return to pre-pandemic delivery patterns.

Figure 4.1: Percentage of women who gave birth at the same place as their usual residence, 2019-2021



The distribution of births by place of occurrence and place of usual residence of mother, analysed by atoll, showed further insights. In almost all the atolls, most mothers gave birth in the place where they usually reside. However, a significant number of births that occurred away from the mother's home are mostly in North Maalhosmadulu (R) Atoll and South Thiladhunmathi (HDh) Atoll. These atolls experienced an inflow of mothers from other islands seeking delivery services, primarily due to the presence of regional hospitals and easy access due to regular intra-atoll ferry services.

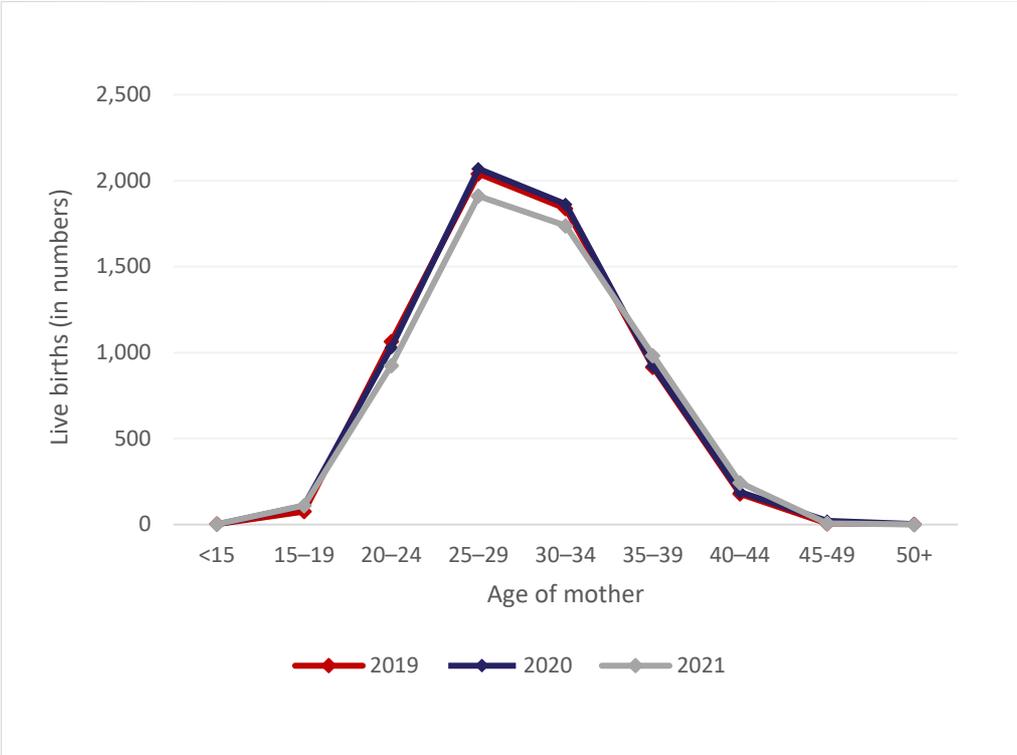
Figure 4.2: Live births by place of occurrence and place of usual residence of mother, 2021



4.4 BIRTHS BY AGE OF MOTHER AND TYPE OF BIRTH

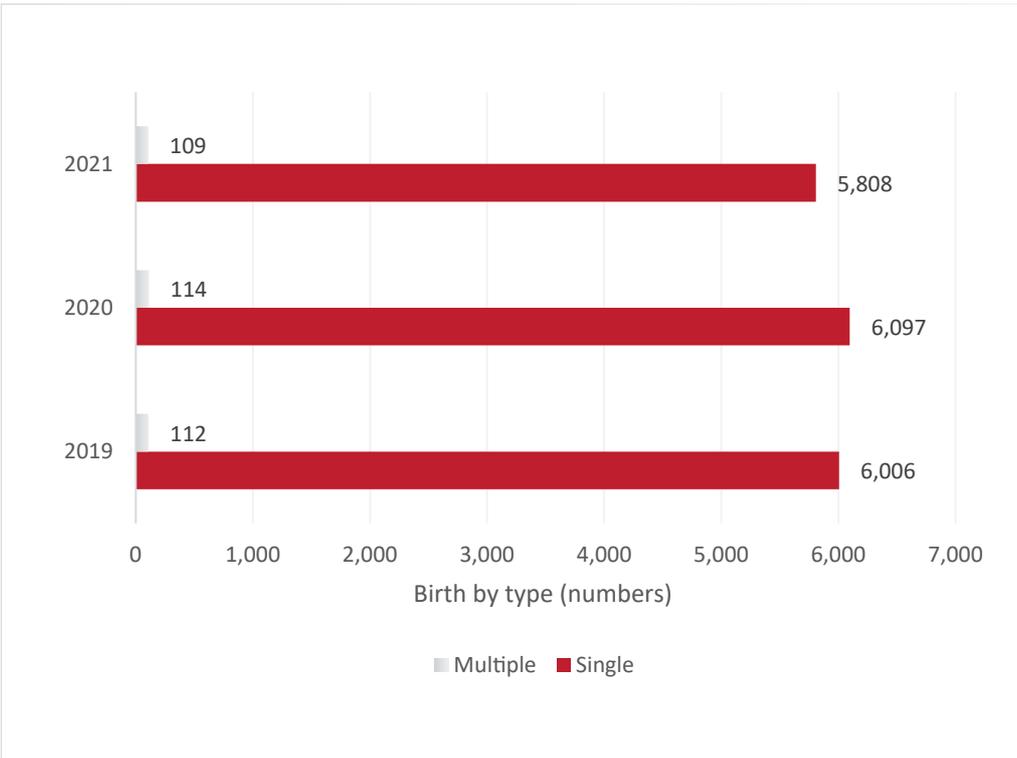
Figure 4.3 shows live births by age of mother. More than 33% of the births that occurred in the country between 2019 and 2021, were among women aged 25-29 years. Around 30% of births in Maldives occur to mothers aged 30-34 years, indicating a significant number of women are having children in their early 30's as well. The number of births to adolescent mothers is relatively low and accounts for 2% of live births over the 2019-2021 time period.

Figure 4.3: Live births by age of mother, 2019-2021



Further analysis showed that the majority of births were singleton births, with multiple births accounting for only 2% of the total births.

Figure 4.4: Live births by type of birth, 2019-2021



The majority of births over the three-year period occurred among married women (approximately 98%), with a slight decrease observed in 2021.

On the other hand, the share of births to never married women increased from 1.0% in 2019 to 1.5% in 2021. In addition, the share of births to divorced women also experienced a slight increase over the same period.

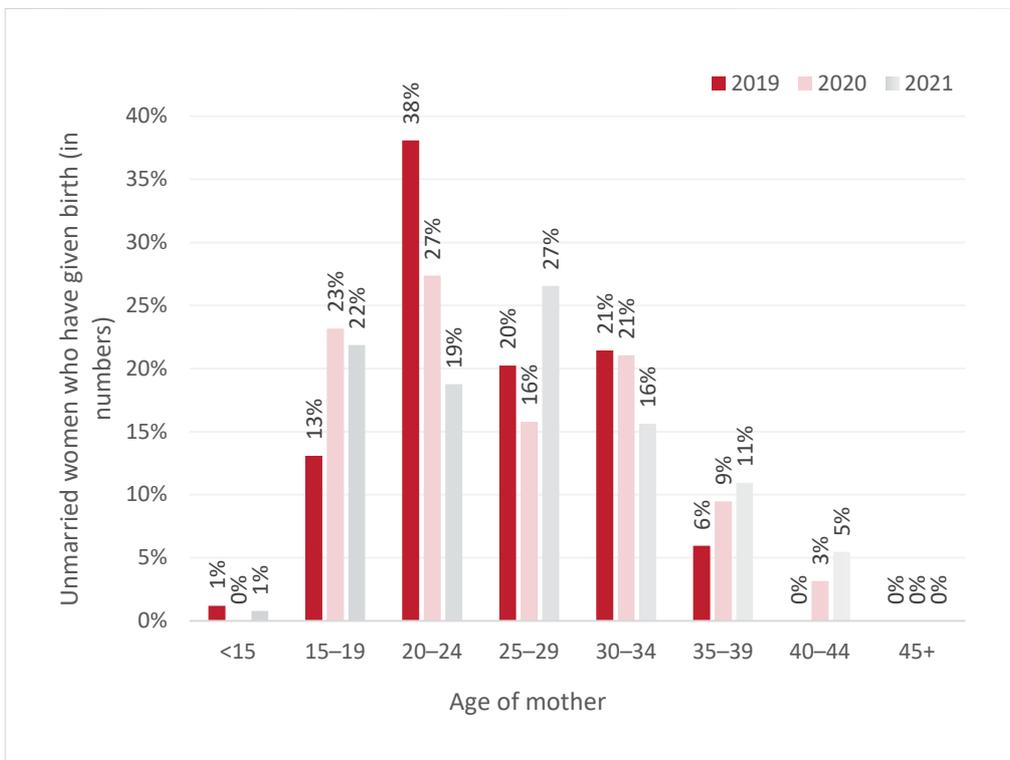
Table 4.5: Live births by age and marital status of mother, 2019-2021

Marital status	Numbers			Percent		
	2019	2020	2021	2019	2020	2021
Never married	61	74	86	1.0%	1.2%	1.5%
Married	6024	6115	5788	98.4%	98.5%	97.8%
Widowed	0	2	7	0.0%	0.0%	0.1%
Divorced	23	20	35	0.4%	0.3%	0.6%
Not Stated	13	0	1	0.2%	0.0%	0.0%
Total	6121	6211	5917	100.0%	100.0%	100.0%

Examining the share of births among unmarried women by age group is crucial, as it provides insights from a social welfare perspective. In this regard, ‘unmarried women’ refer to those who were not married at the time of childbirth, including those who have been never married, are divorced or widowed.

The findings reveal a shift in the age distribution of unmarried women who have given birth over the years. In 2019 and 2020, the majority of births among unmarried women occurred in the 20-24 age group. However, in 2021, most of the unmarried women who gave birth were in their late adolescence and late twenties. The increase in childbirth observed among unmarried women aged 15-19 years highlights the need for targeted interventions to reduce the potential risk of unintended pregnancies.

Figure 4.5: Live births among unmarried women, by age group of the mother, 2019-2021

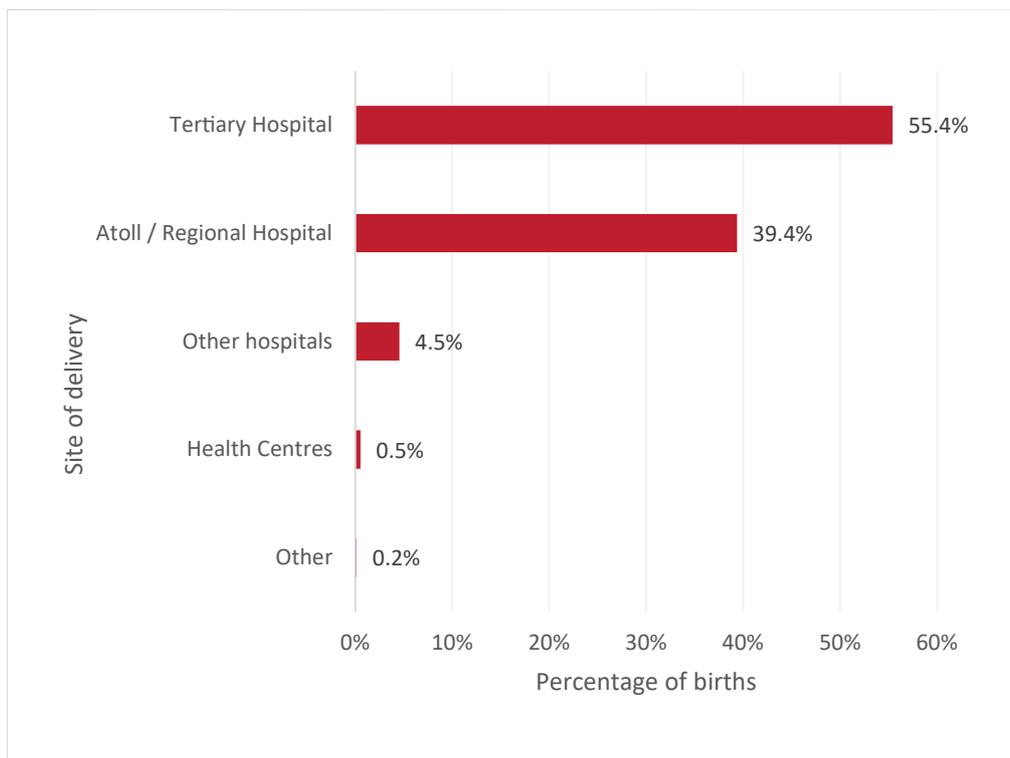


4.5 BIRTHS BY SITE OF DELIVERY AND BIRTH ATTENDANCE

4.5.1 Births by site of delivery

In 2021, over half (55%) of all births took place in tertiary hospitals, while more than a third (39%) occurred in atolls or regional hospitals. Additionally, 5% of births took place in other hospitals, and only 1% of live births were reported to have occurred in health centres.

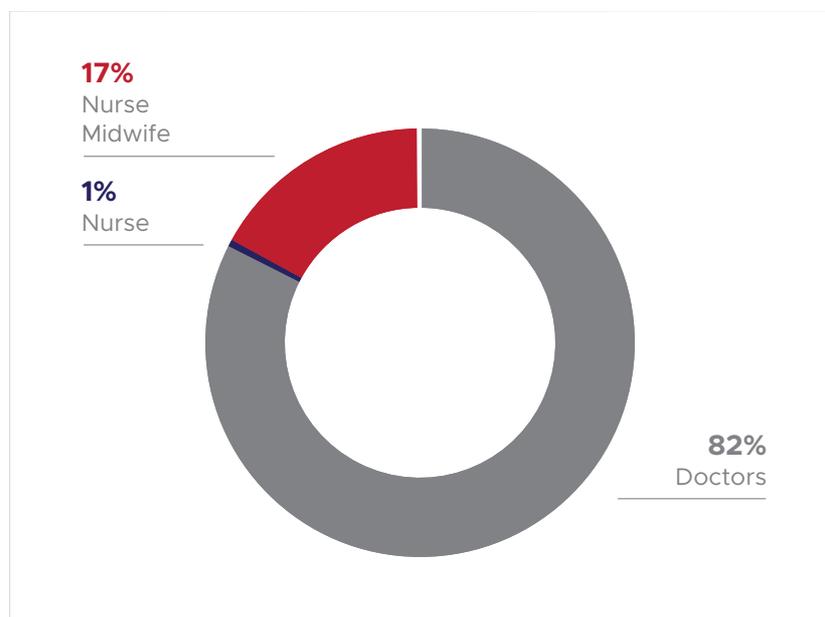
Figure 4.6: Births by site of delivery, 2021



4.5.2 Birth attendance

The proportion of births attended by skilled birth attendants is a crucial indicator for achieving SDG target 3.1 on reducing maternal mortality. In the Maldives, all births were attended by skilled health professionals. Over 82% of the deliveries were overseen by doctors, while 17% of deliveries were attended by nurse midwives, and less than 1% of the births were attended by nurses.

Figure 4.7: Attendance at birth, 2021



4.6 BIRTH WEIGHT

The World Health Organization (WHO) defines low birth weight as the weight of a newborn lower than 2500 grams, while the normal range is categorized as between 2500 to 3999 grams. A high birth weight is defined as more than 4000 grams.

Out of the total births that occurred in 2021, more than 85% were classified as having a normal birth weight. A similar trend was observed in 2019 & 2020. The percentage of births categorized as low birth weight saw a slight increase from 12% to 13% between 2020 and 2021.

For all live births occurring in 2021, the median birth weight was 2880.

Table 4.6: Live birth by birth weight

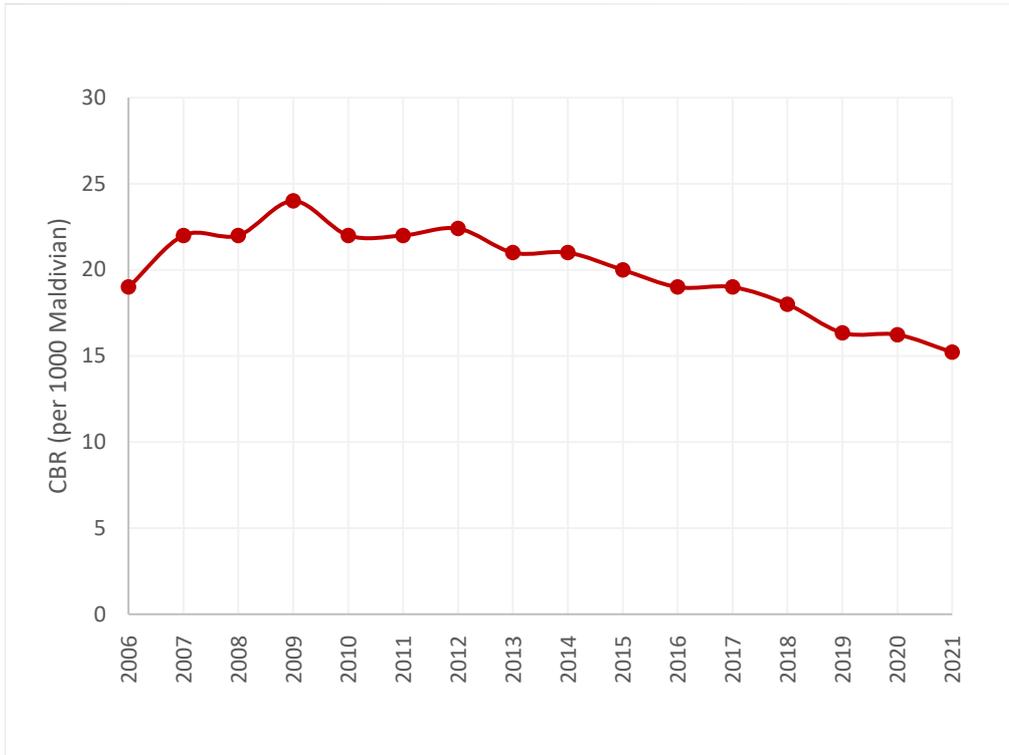
Birth weight (in grams)	2019	2020	2021
Low (<2499 g)	12%	12%	13%
Normal (2500 - 3999 g)	85%	85%	85%
High (4000+ g)	2%	3%	3%
Not Stated	0%	0%	0%
Not Stated	3	-	-
Average birth weight	3,029	3,035	3,018
Total	6121	6211	5917

4.7 CRUDE BIRTH RATE - FOR RESIDENT MALDIVIAN POPULATION ONLY

The crude birth rate (CBR) is the number of live births per 1,000 population over a given period (usually one year).

Over the past 15 years, Maldives has seen a steady decline in the crude birth rate among the Maldivian population. In 2021, the CBR in Maldives reached its lowest point during this period, with 15 births per 1,000 population.

Figure 4.8: Crude Birth Rate, 2006-2021

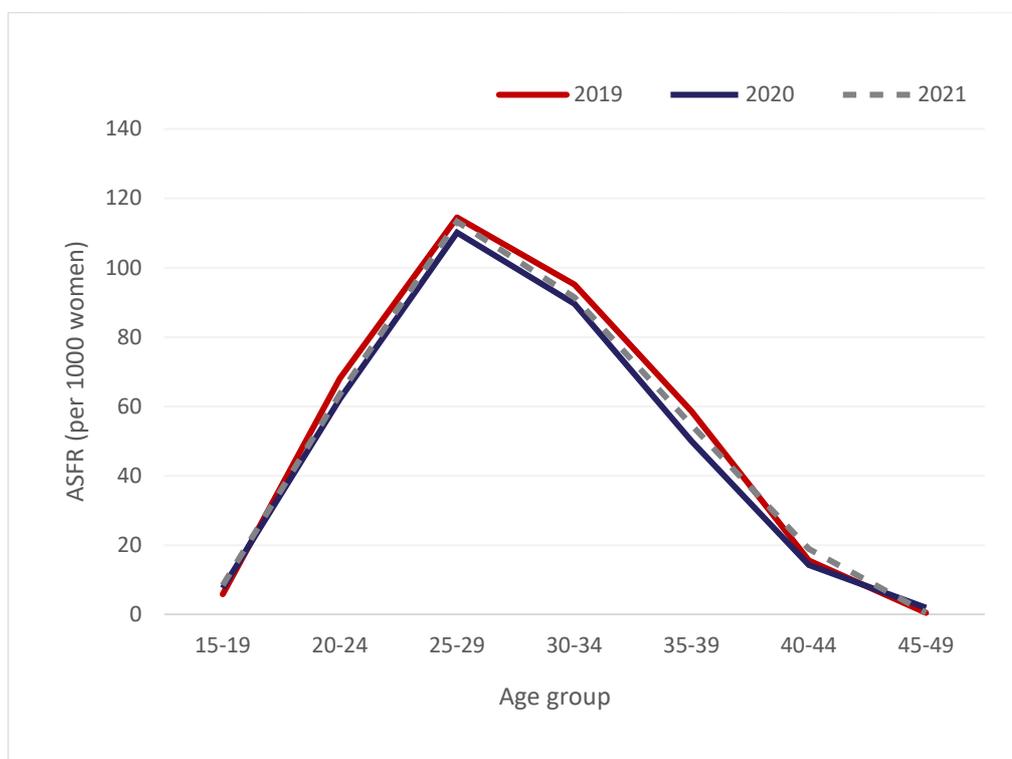


4.7 AGE-SPECIFIC FERTILITY RATES – FOR MALDIVIAN POPULATION ONLY

Fertility rates by mothers' age group, or age-specific fertility rates (ASFRs), are the number of births occurring to mothers of a certain age group per 1,000 women in that age group in a given period (usually one year). It is calculated for women considered to be of reproductive age (15-49 years). ASFRs are crucial for understanding how fertility changes at different life stages and are essential for computing the total fertility rate (TFR). This breakdown allows for the identification of age-specific patterns, such as early or delayed childbearing, and supports the identification of shifting fertility rates over time.

In 2021, the majority of births occurred among women aged 25-29 years, remaining consistent compared to the previous two years.

Figure 4.9: Age Specific Fertility Rate, 2019-2021



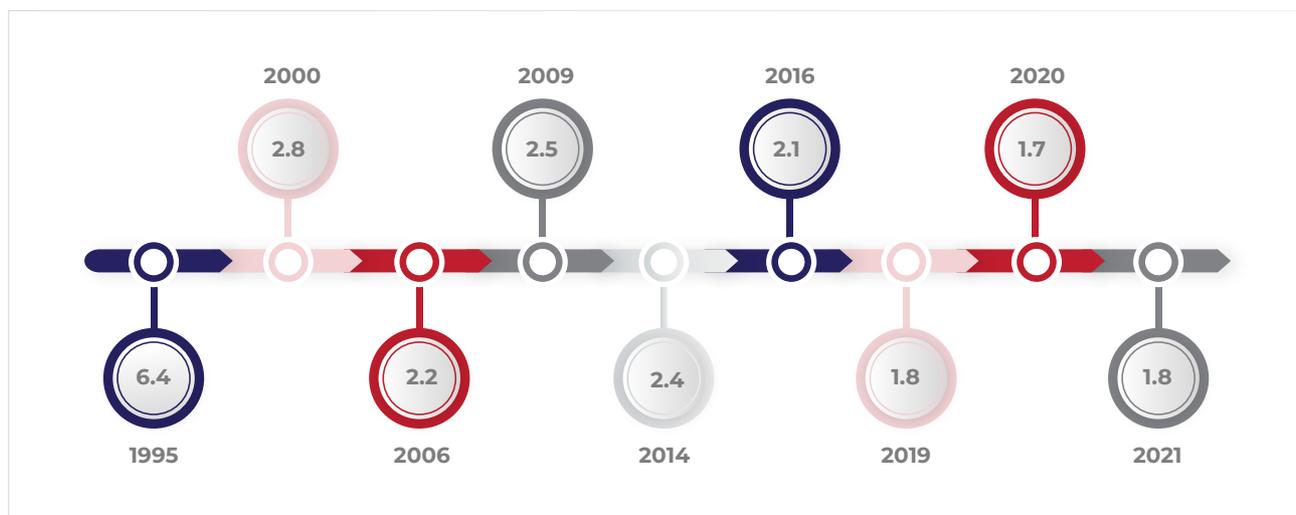
4.8 TOTAL FERTILITY RATE – FOR MALDIVIAN POPULATION ONLY

The total fertility rate (TFR) is the average number of children a woman would give birth to during her lifetime if she were to pass through her childbearing years experiencing present-day age-specific fertility rates.

As shown in Figure 4.10, the total fertility rate (TFR) for the country has declined from 6.4 children per woman in 1995 to 1.8 children per woman in 2021. A TFR estimate of 1.8 signifies that fertility in Maldives has dropped below the replacement level of 2.1 children per woman.

With declining fertility rates, the country is likely to experience population aging in the future, resulting in a smaller proportion of individuals in the younger generation. Until then, the youth population remains substantial, underscoring the importance of maximizing the benefits of the demographic dividend created by this phenomenon.

Figure 4.10: Total Fertility Rate, 1995-2021



CHAPTER 5: DEATHS



CHAPTER 5: DEATHS

5.1 DEATHS IN MALDIVES

The Maldives also maintains records of deaths occurring within the country, as well as those of Maldivians abroad. Table 5.1 provides a breakdown of total deaths by location and nationality. Deaths within the country include those among the resident population (both Maldivians and foreigners).

It is important to note that this report is based on data during the period of the COVID-19 pandemic, and impact of this can be observed in the analysis on deaths and cause of death.

The highest number of total deaths reported over the years occurred in 2021, with the COVID-19 pandemic likely being a major contributing factor. In the same year, foreign nationals accounted for 6% of all deaths in the country.

Table 5.1: Breakdown of total deaths, 2019-2021

Indicator	2019				2020				2021			
	Total	Maldivian	Foreign	Unknown	Total	Maldivian	Foreign	Unknown	Total	Maldivian	Foreign	Unknown
Total deaths	1,132	1,040	91	1	1,280	1,188	80	12	1,552	1,448	93	11
Deaths in Maldives	1,055	963	91	1	1,247	1,156	79	12	1,512	1,408	93	11
Male ¹	725	651	74		692	622	60	10	880	810	59	11
Atolls	329	312	17		555	534	19	2	632	598	34	-
Deaths Abroad	77	77			30	30			39	39		
Unknown					3	2	1	0	1	1	0	0

The analysis presented in this chapter focuses on deaths that occurred in the Maldives, encompassing both resident Maldivians and foreign nationals.

5.2 SUMMARY OF DEATH STATISTICS

Deaths in Maldives include deaths of Maldivians (residents and deaths that occur abroad) and foreign residents in the country. The number of deaths in the country has shown a gradual increase. In 2021, there were 1,512 deaths occurring in Maldives, an increase of 21% compared to 2020 with 1,247 deaths, although the COVID-19 pandemic prevents any underlying trend analysis. Out of the total deaths in 2021, 40% of deaths occurred among females.

The Crude Death Rate (CDR) among Maldivians increased from 3 to 4 deaths per 1,000 population in 2021. Additionally, under-5 mortality saw an increase from 8 in 2019 to 11 deaths per 1,000 live births in 2021. Between 2019 and 2021, the infant mortality rate also increased, reaching 10 deaths per 1,000 live births. There were no maternal deaths reported in 2019. Overall, mortality rates for all key indicators show an increase in 2021 compared to the previous two years, indicating the potential impact of the COVID-19 pandemic.

Completeness of death registration is defined as the number of deaths in a population that are registered, divided by the actual deaths that occurred in the country. Since the country does not maintain a separate death registry, all issued death certificates are considered registered and maintained as part of the death register. Consequently, the completeness of death reporting stands at 100% throughout the three-year period.

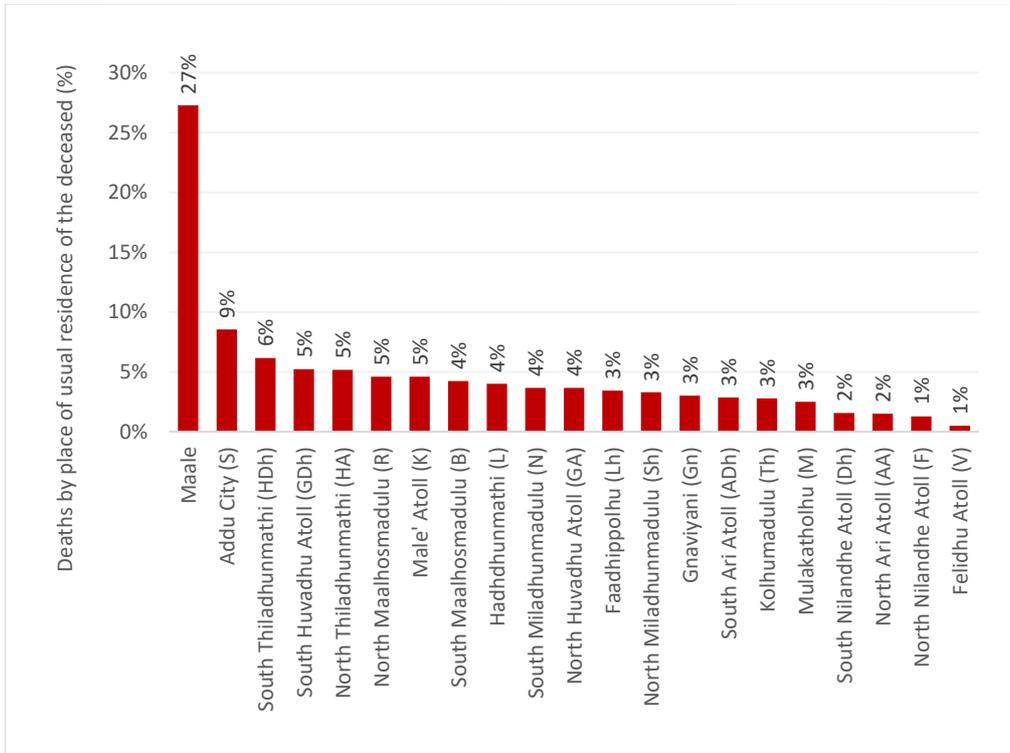
Table 5.2: Summary statistics on mortality by year of occurrence

Indicator	2019	2020	2021
Deaths (number)	1,055	1,247	1,512
Males	668	727	902
Females	386	520	610
Unknown	1		
Registration completeness (%)	100%	100%	100%
Males	100%	100%	100%
Females	100%	100%	100%
Crude death rate (per 1,000 population) for resident Maldivians	3	3	4
Under-5 mortality rate (per 1,000 live births) for resident Maldivians	8	8	11
Infant Mortality Rate (under 1) (per 1,000 Live Births) for resident Maldivians	5	7	10
Maternal mortality ratio (per 100,000 live births) for resident Maldivians	0	32	51

5.3 DEATHS BY PLACE OF USUAL RESIDENCE

The majority of deaths in 2021 occurred among the population residing in the atolls, accounting for 73% of deaths. Approximately 27% of deaths occurred among usual residents of Maale. The distribution of deaths by atolls, revealed that a higher number of deaths occurred among those residing in Addu City(S) and South Thiladhunmathi (HDh) Atoll. These are the most heavily populated atolls after Maale.

Figure 5.1: Deaths by place of usual residence, 2021

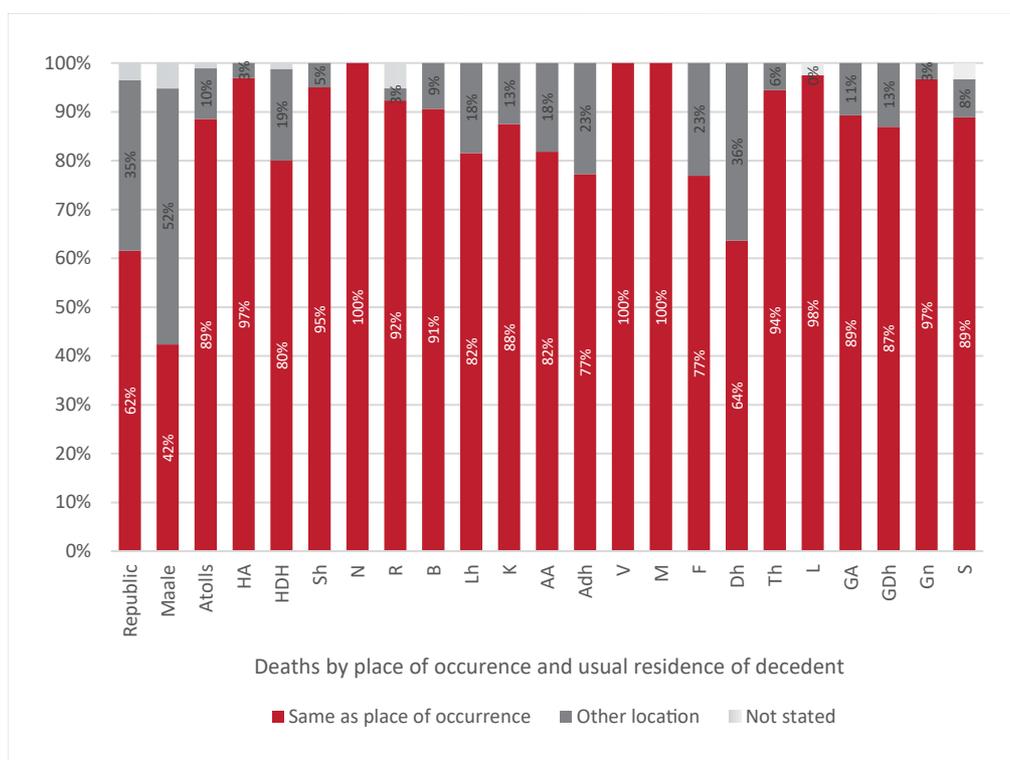


5.4 DEATHS BY PLACE OF OCCURRENCE, PLACE OF USUAL RESIDENCE, AND SEX OF DECEDENT

Deaths categorized by place of occurrence and by the place of usual residence of the deceased showed that more than half of the deaths (62%) occurred at the deceased's usual residence. At the same time, 35% of deaths occurred in locations that differed from the usual place of residence, indicating the mobility of the population in pursuit of better health services at critical times.

More than half of the deaths that occurred in Maale were individuals residing in other islands but present in Maale for medical treatment¹⁸. Among the atolls, South Thiladhunmathi (HDh), South Ari Atoll (ADh), North Nilandhe Atoll (F) and South Nilandhe Atoll (Dh) exhibited a higher incidence of deaths occurring away from usual place of residence, indicating significant inter-atoll mobility for healthcare services.

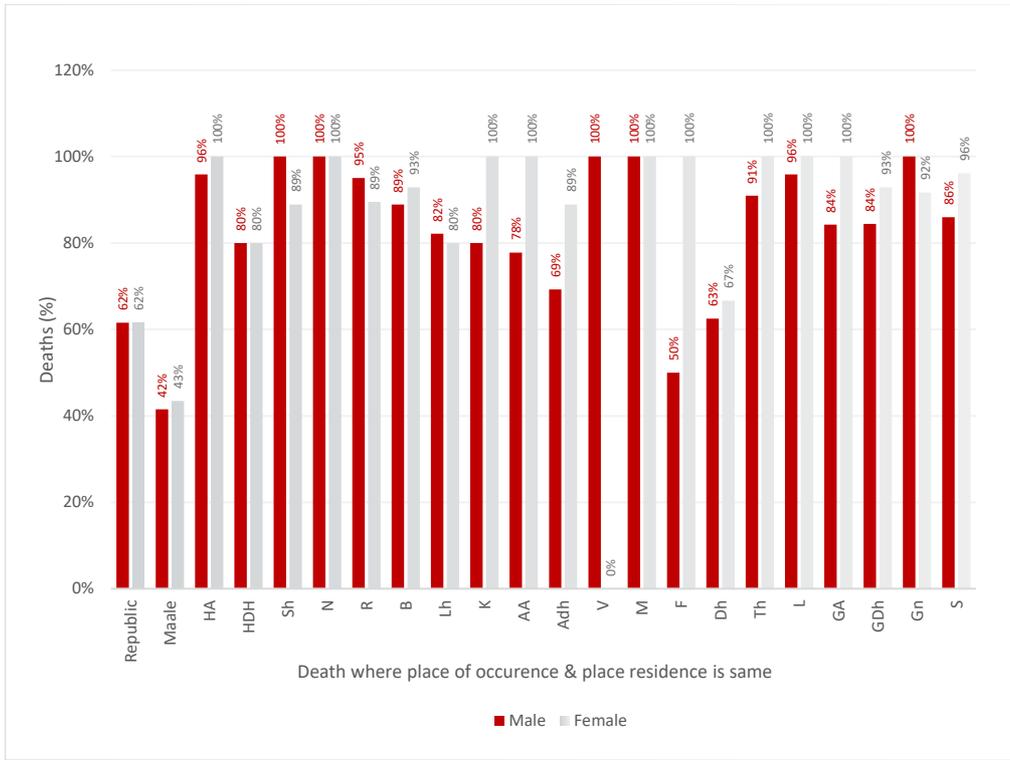
Figure 5.2: Deaths by place of occurrence and place of usual residence of decedent, both sexes, 2021



Similarly, gender differences can be observed by place of death and the deceased's usual residence. Women had a higher incidence of dying on their home island, while men were more likely to die in a location different from their usual residence. This suggests disparities or preference by gender in accessibility to certain types of medical treatment among the population residing in the atolls. Further insights can be gained by linking these findings to the types of diseases prevalent among men and women.

¹⁸ Not all regional hospitals are equipped with the facilities and services provided in the capital city. This results in many patients' beings referred to Maale.

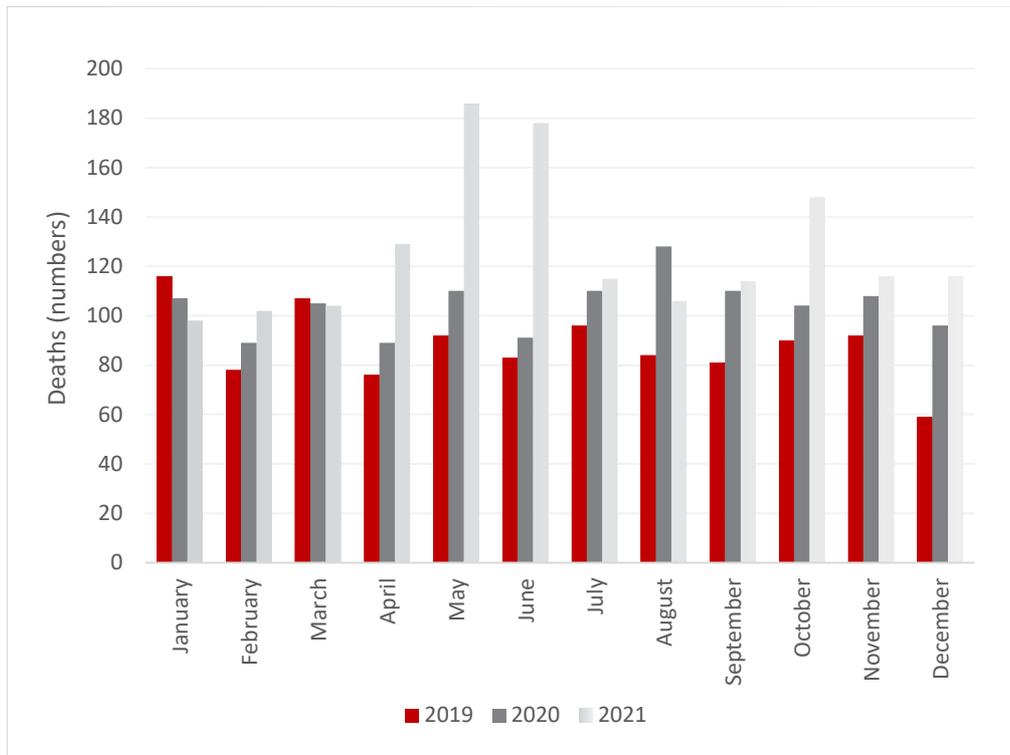
Figure 5.3: Deaths where place of occurrence and place of usual residence of decedent is the same by sex, 2021



5.5 DEATHS BY MONTH OF OCCURRENCE

Over time, the distribution of deaths by month has fluctuated, with peaks occurring in different months each year. In 2019, the highest number of deaths occurred in January and in 2020, the peak shifted to August. In 2021, the majority of deaths were recorded during the months of May to June. Additionally, the month of October in 2021 saw a slight increase in deaths compared to other years, primarily driven by a surge in COVID-19 fatalities caused by the Delta variant.

Figure 5.4: Deaths by month of occurrence

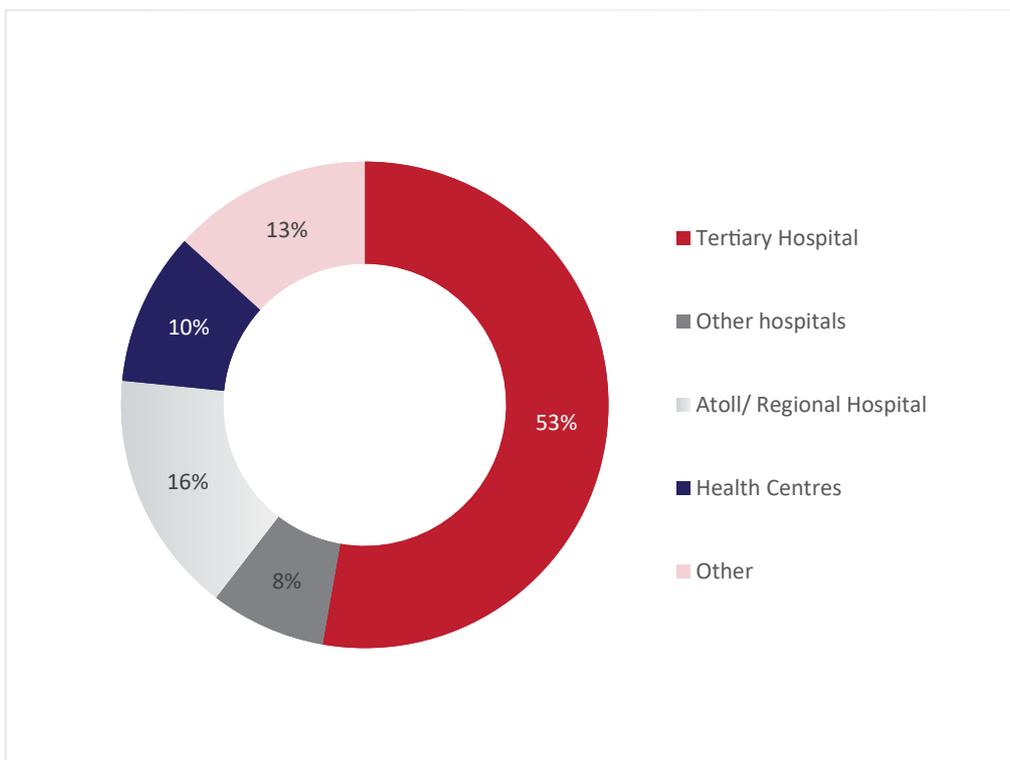


5.6 DEATHS BY PLACE AND SITE OF OCCURRENCE

In 2021, just over half of deaths in the country occurred in tertiary hospitals (53%), primarily due to the concentration of such facilities in Maale and other urban centres. This was followed by deaths occurring in atoll or regional hospitals (16%). One in ten deaths in the country occurred in health centres¹⁹.

Deaths in Maale mainly take place in tertiary hospitals, while in atolls, they take place in regional/atoll hospitals and in health centres.

Figure 5.5: Deaths by site of occurrence, 2021



¹⁹ Health centers are equipped with essential professional services, staffed by medical officers, nurses, community health workers, pharmacists, gynecologists, and pediatricians. Atoll hospitals provide these services as well, along with additional specialist care.

5.7 DEATHS BY PLACE OF USUAL RESIDENCE, AGE AND SEX OF DECEDENT

Figure 5.6 presents the pattern of deaths by age group in the Maldives from 2019 to 2021. Generally, mortality is slightly higher during infancy, low during childhood and stable during adulthood. Deaths gradually increase with age and a rising trend can be observed from age 50 years and above. Compared to previous years, a higher mortality was observed in 2021 for the age group of 55-74 years, likely due to the impact of the COVID-19 pandemic.

Figure 5.6: Number of deaths by age group, 2019-2021

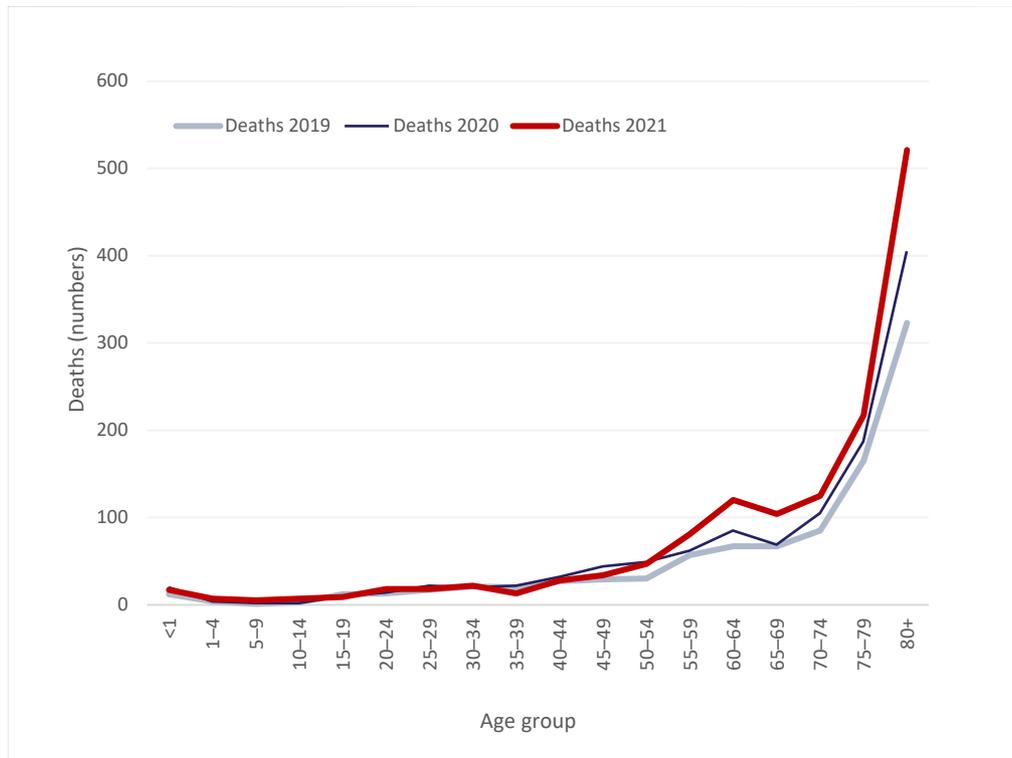
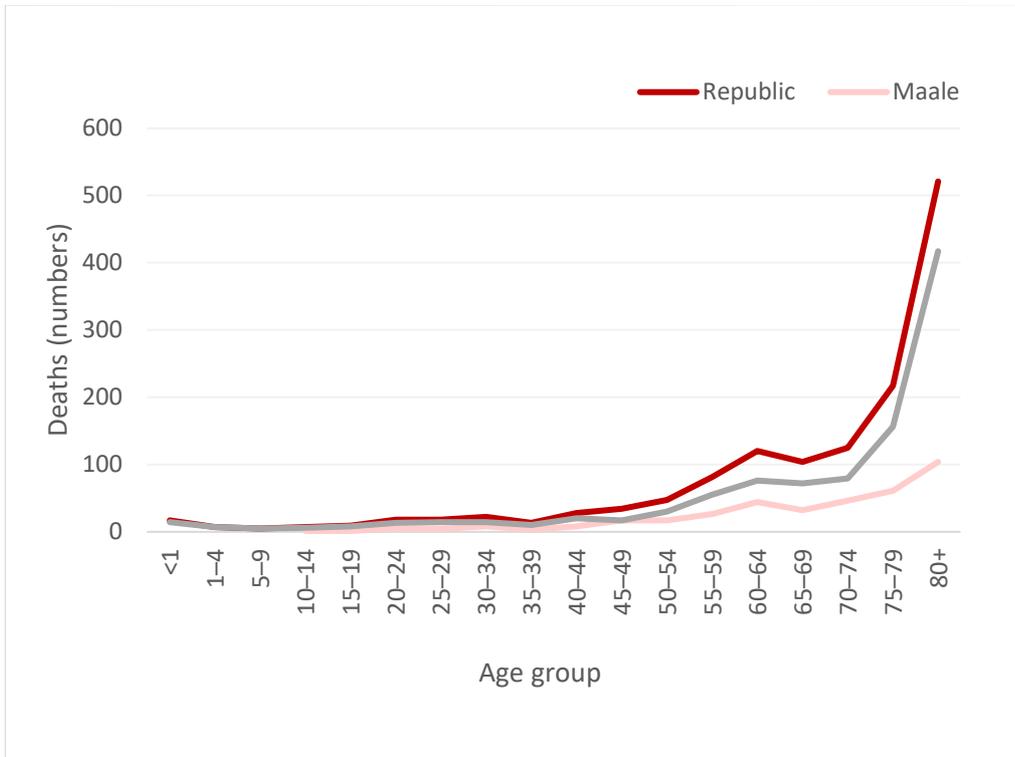


Figure 5.7 illustrates the distribution of deaths by age group and locality for 2021. Mortality is highest among the elderly population across all localities. A significant disparity is observed in the number of deaths occurring beyond the age of 55 between Maale and the atolls, with a higher number of deaths observed in the atolls. This difference underscores the variation in healthcare access and demographic factors between urban and rural areas.

The number of deaths tends to rise noticeably from the age of 50. This trend is more pronounced in the atolls compared to Maale, suggesting the need for further research to understand the underlying factors contributing to this disparity.

Figure 5.7: Deaths by age group and by locality, 2021

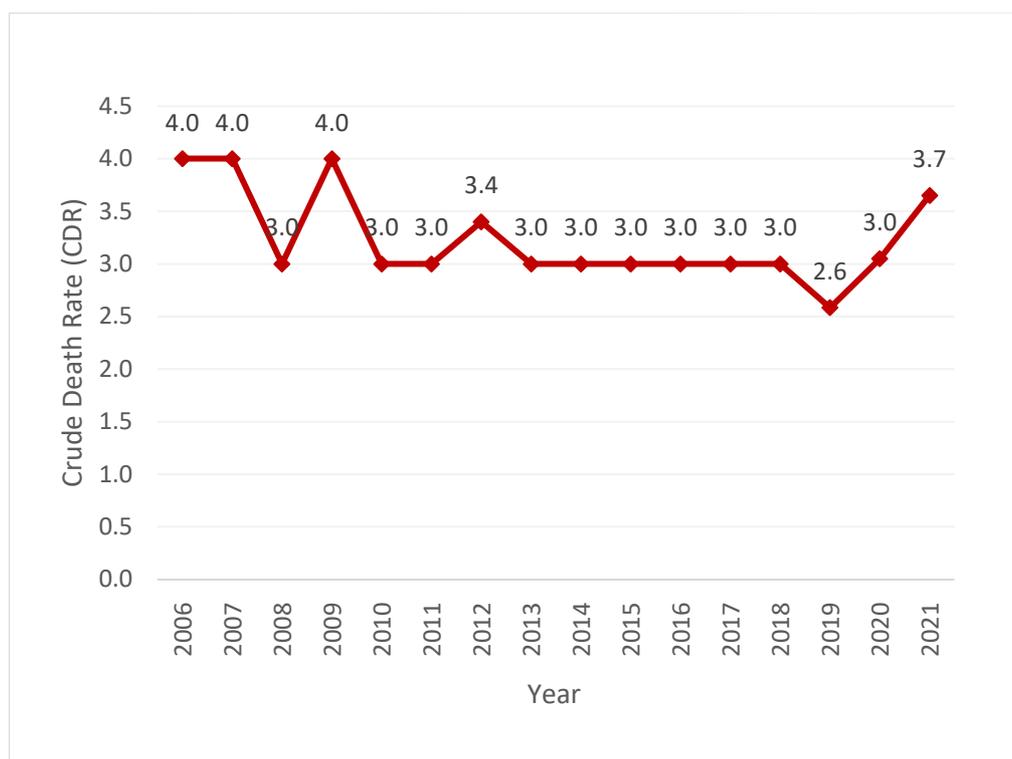


5.8 CRUDE DEATH RATE - RESIDENT MALDIVIAN POPULATION ONLY

As a mortality indicator, the crude death rate (CDR) is the simplest measure of population health status. It is one of the key determinants of population growth.

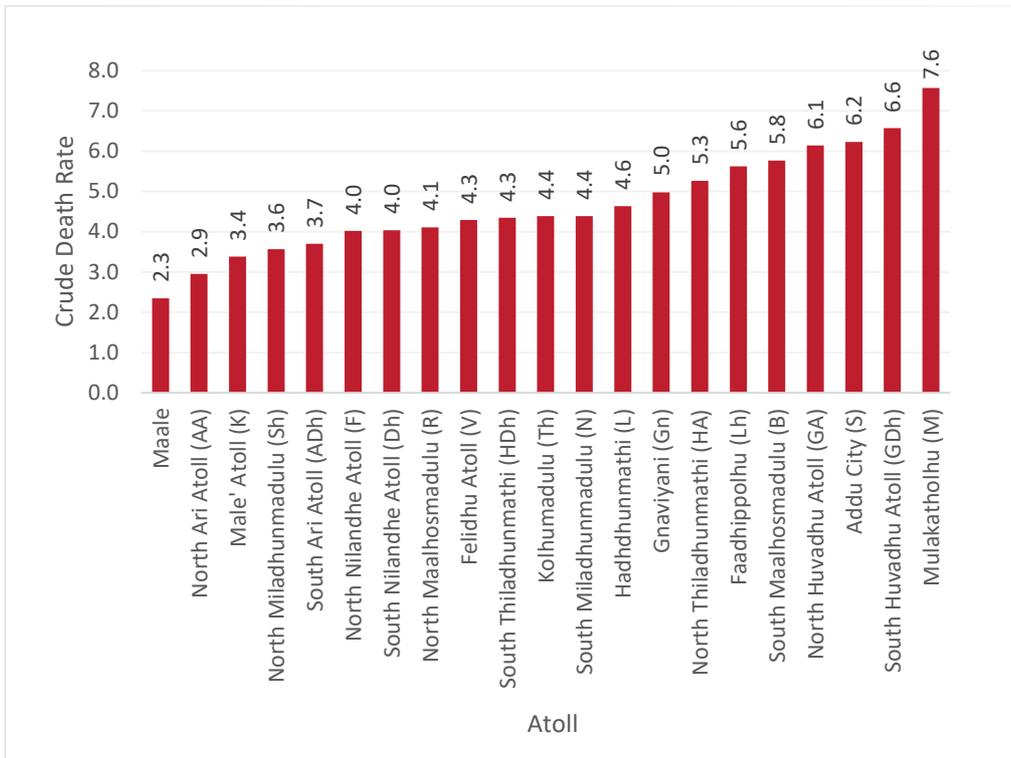
Over time, the Maldives has experienced a decline in the crude death rate, decreasing from 4.0 per thousand population in 2006 to 2.6 per thousand in 2021. Even during the COVID-19 pandemic in 2020-2021, the crude death rate remained low, indicating that no significant excess mortality occurred among the population.

Figure 5.8: Crude death rate for Maldives, 2006-2021



Crude death rate by usual place of residence of the decedent is depicted in Figure 5.9. Across the country, only Maale had a crude death rate below the national average. Mulakatholhu (M) had the highest crude death rate among all the atolls, despite its small population. This might be attributed to the atoll's population dynamics, such as the presence of more elders, however, it is important to interpret the crude death rate with caution as it can be influenced by the age structure of the population. On the other hand, North Ari Atoll (AA) experienced the lowest crude death rate (apart from Maale), possibly due to its close proximity to Maale, where residents may prefer to seek medical treatment from Maale at critical times.

Figure 5.9: Crude death rate (CDR) by place of usual residence of decedent and by atoll, 2021

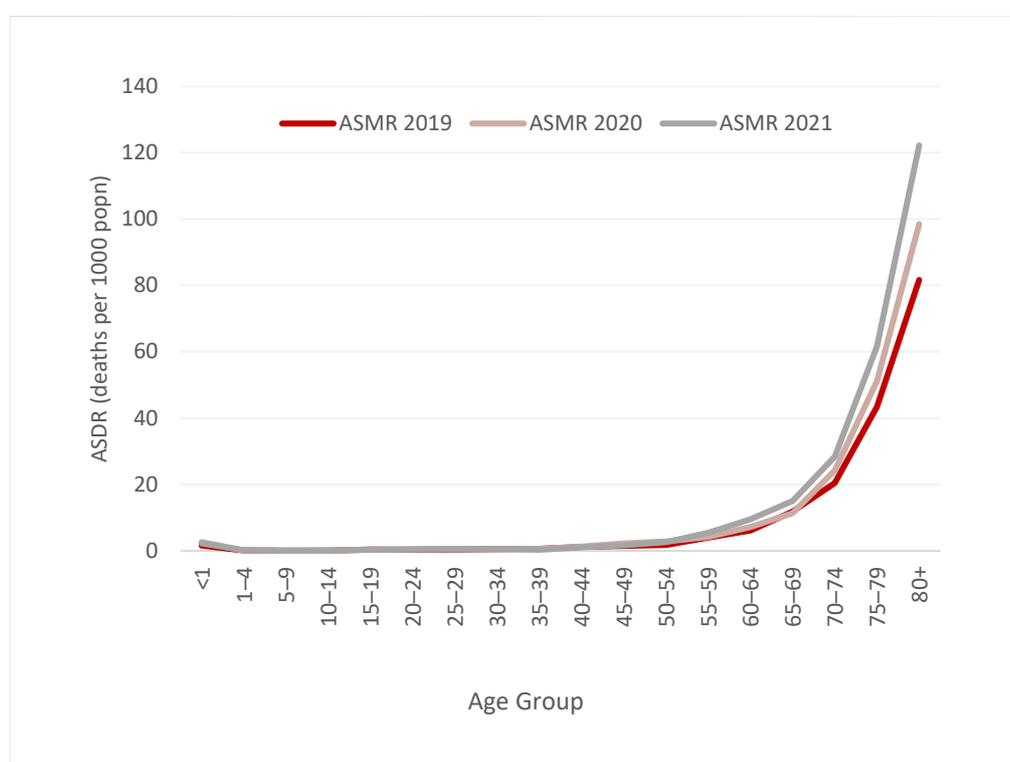


5.9 AGE-SPECIFIC MORTALITY RATES

The age-specific mortality rate (ASMR) is the number of deaths for within a specific age group divided by the total population in that age group, for a specific period and geographical area.

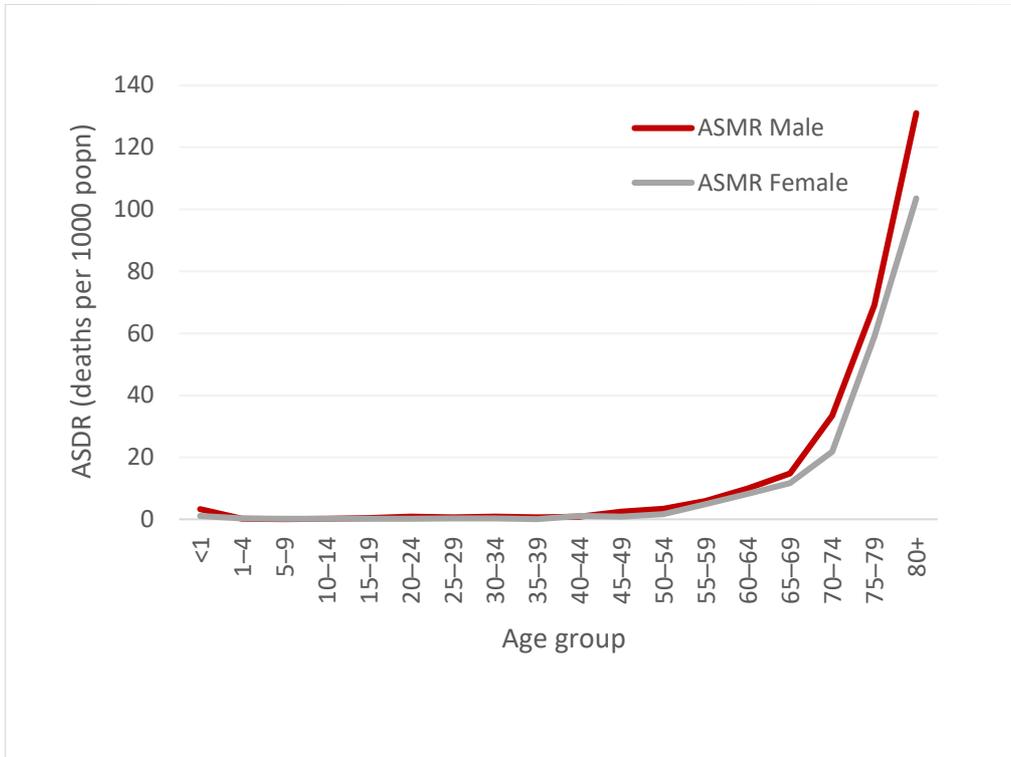
The age distribution of deaths is influenced by the population dynamics of the country. Therefore, ASMR is computed to provide a better understanding of mortality patterns within the population according to the age distribution. According to age-specific mortality rates (ASMRs), the elderly population consistently experiences a higher death rate across the three-year period, with a slight increase in elderly deaths in 2021, potentially attributable to COVID-19. The mortality rate also experiences a small peak during infancy, but is relatively low during childhood and early adulthood.

Figure 5.10: Age Specific Mortality Rates, 2019-2021



The graph below illustrates the age-specific mortality rates by age and sex for the year 2021. From age 65 years and above, the mortality rate for males exceeds that of females. A similar trend is observed in deaths of infants under one year of age. Mortality rates among children and young adults are low, with a prevalence of less than 2 deaths per 1,000 population.

Figure 5.11: Age specific mortality rate by sex, 2021



5.10 INFANT AND CHILD MORTALITY

The neonatal mortality rate (NMR) measures the number of deaths within the first 28 days of life per 1,000 live births over a specified period. The data indicates a gradual increase in neonatal mortality, rising from 4 deaths per 1,000 live births in 2019 to 6 deaths per 1,000 live births in 2021.

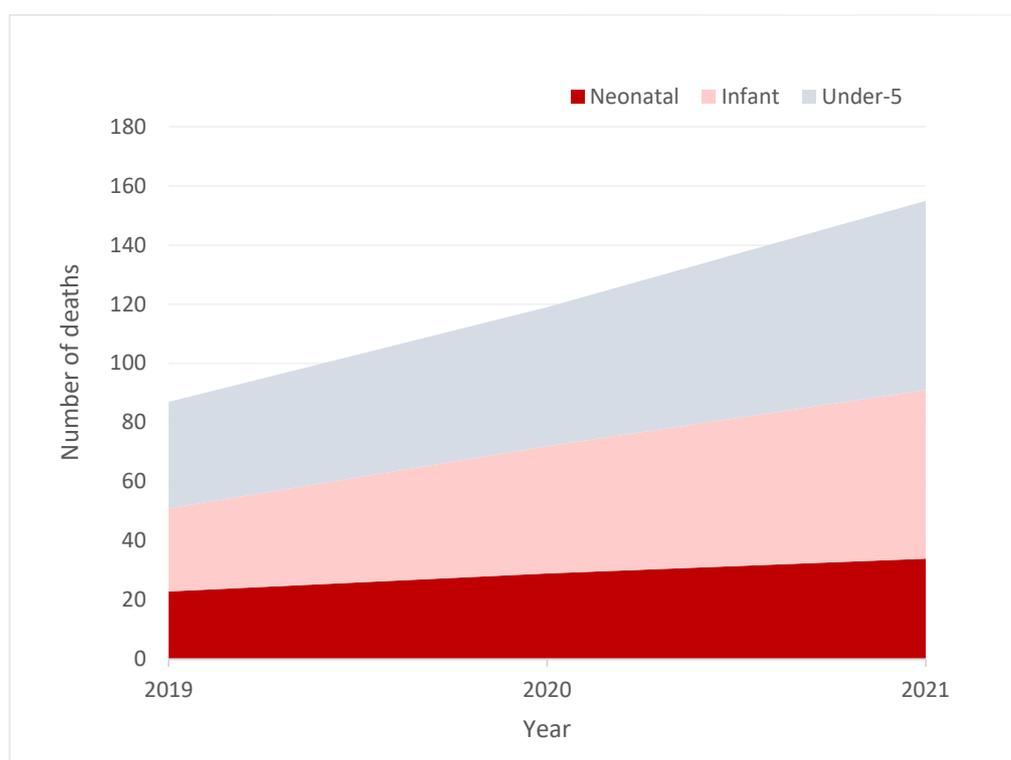
The infant mortality rate (IMR) measures deaths among children under one year of age and the under-5 mortality rate (U5MR) covers deaths among children under 5 years of age; both of which are important indicators of overall population health and well-being.

Table 5.3: Neonatal, Infant and child mortality rate (deaths per 1,000 live births) by year of occurrence, 2019- 2021

Year of occurrence	Neonatal mortality rate	Infant mortality rate	Under-5 mortality rate
2019	3.8	4.6	5.9
2020	4.7	6.9	7.6
2021	5.7	9.6	10.8

The IMR increased from 5 deaths per thousand live births in 2019 to 10 infant deaths per thousand live births in 2021. The U5MR also rose significantly during this period, increasing from 6 to 11 deaths per thousand live births.

Figure 5.12: Neonatal, infant and under five deaths, 2019-2021

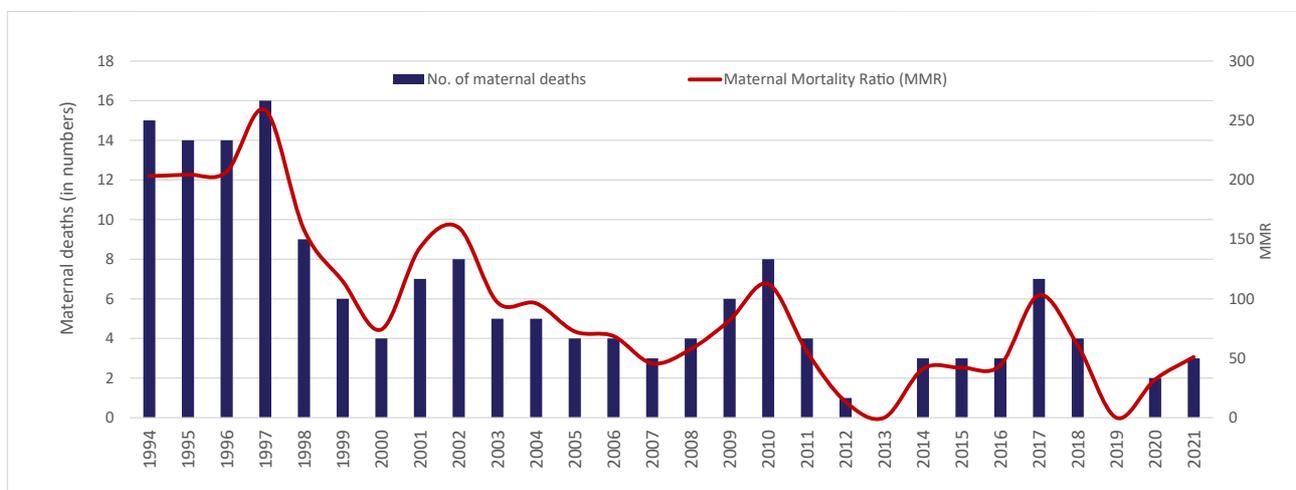


5.11 MATERNAL MORTALITY

A maternal death is defined by WHO as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes. The maternal mortality ratio (MMR) is the ratio of the number of maternal deaths during a given time period per 100,000 live births during the same time period (usually one year).

Given the small population of the Maldives, even a single death can significantly impact the maternal mortality ratio (MMR). Over the years, Maldives has experienced fluctuations in maternal deaths. In 1994, there were 15 maternal deaths, while in 2021, only 3 maternal deaths occurred in the country. No maternal deaths were recorded in 2013 and 2019. In 2021, 3 maternal deaths resulted in an MMR of 51 deaths per 100,000 live births.

Figure 5.13: Maternal deaths and maternal mortality ratio, 2019-2021



CHAPTER 5: CAUSES OF DEATHS



CHAPTER 5: CAUSES OF DEATHS

6.1 DEATHS BY BROAD CAUSE OF DEATH GROUP (GLOBAL BURDEN OF DISEASE)

The leading cause of death is a critical public health indicator for understanding the primary factors leading to mortality within a population. Understanding these causes is essential for developing targeted interventions and allocating public health resources effectively to reduce preventable deaths.

The leading cause of death presented in this chapter is based on 'final underlying cause of death'. Deaths by broad cause of death group is presented here as (details included in Annex):

- 1- Communicable, maternal, perinatal and nutritional conditions
- 2- Non-communicable diseases (NCDs)
- 3- Injuries
- 4- Ill-defined diseases
- 5- Not categorized

In the Maldives, the majority of deaths were attributed to non-communicable diseases (NCDs), accounting for two-thirds of all fatalities. One in every three deaths was due to communicable, maternal, perinatal, and nutritional conditions, with communicable deaths being more prevalent among women than men. A significant number of deaths was coded as ill-defined cause of death.

Table 6.1: Deaths by GBD broad cause of death and by sex, 2021

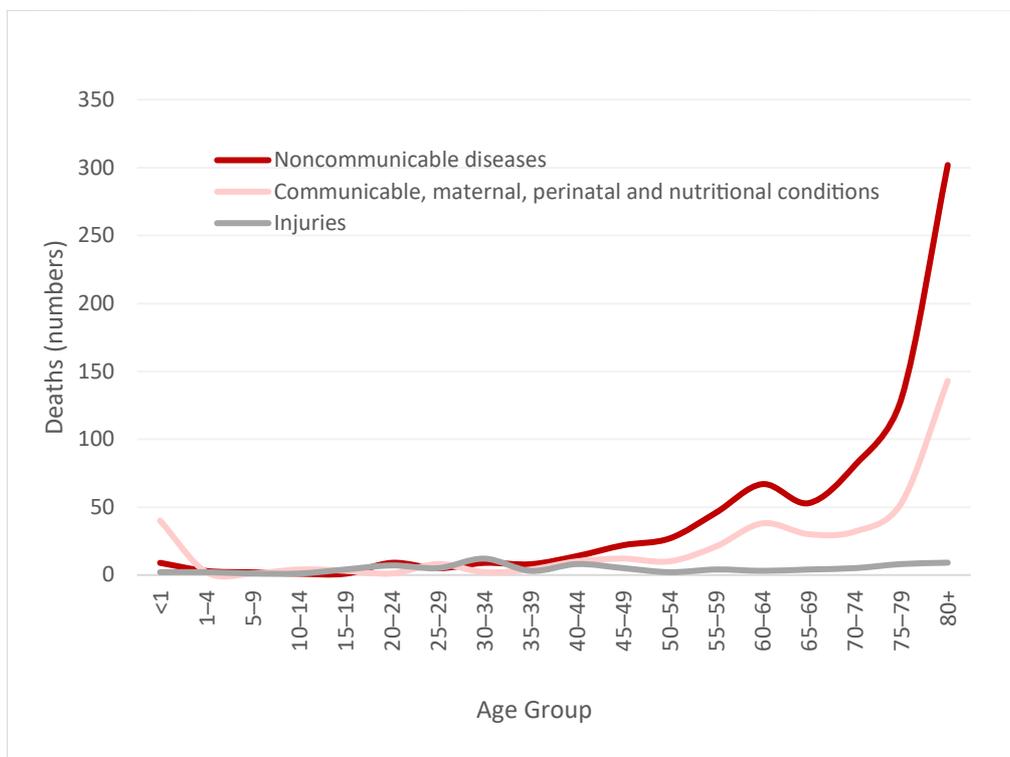
Sex	Number			Percent		
	Both Sexes	Male	Female	Both Sexes	Male	Female
Noncommunicable diseases	791	461	330	61%	61%	61%
Communicable, maternal, perinatal and nutritional conditions	416	230	186	32%	31%	34%
Injuries	85	59	26	7%	8%	5%
Total	1292	750	542	100%	100%	100%

For the purpose of this analysis, deaths recorded with an ill-defined code have been removed and the total deaths which have been used as the denominator, refers to all deaths for which a usable code has been provided. The analysis is based on deaths that occurred in Maldives and excludes deaths by unknown location.

6.2 DEATHS BY BROAD CAUSE OF DEATH (GLOBAL BURDEN OF DISEASE) AND AGE GROUP

Analysis of deaths by broad categories and age group in 2021 showed that with increasing age, the majority of deaths were attributed to non-communicable diseases (NCDs). Among children less than 5 years, most of the deaths were caused by communicable diseases. Within the age group of 30-34 years, injuries account for a higher proportion of deaths than any other cause.

Figure 6.1: Deaths by broad categories and by age group, Both Sexes - 2021



Among males, a significant number of deaths under the age of 5 could be attributed to communicable, maternal, perinatal and nutritional conditions. The number of deaths due to communicable diseases remained low during childhood and adulthood, increasing in older population groups.

The onset of deaths due to non-communicable diseases (NCDs) among males was observed as early as 15 years, continuing to rise with increasing age. NCD-related deaths become particularly prevalent from age 35 onwards among both men and women.

Deaths due to communicable diseases tend to increase with increasing age for men and women.

Deaths due to injuries also peaked during young adulthood, with the highest occurrence among those aged 25-54 years. Deaths due to injuries is more among males except for those aged 75 years and above.

NCDs among women increased sharply after the age of 45 years. Deaths due to injuries was less common among women than men.

Figure 6.2: Percentage of non-communicable deaths out of total deaths by age group and sex, - 2021

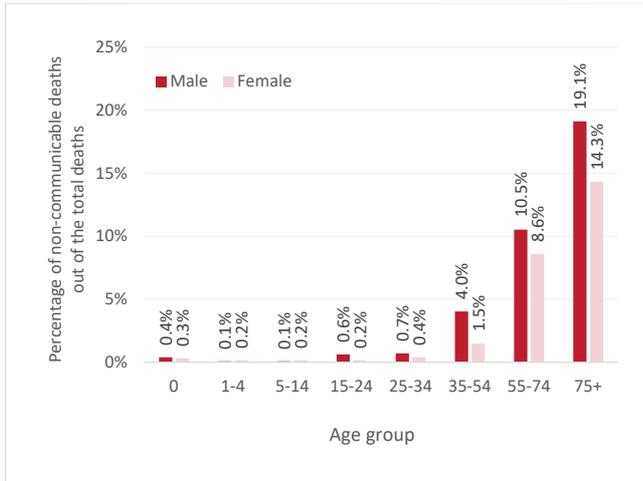


Figure 6.3: Percentage of communicable deaths out of the total deaths by age group and sex, 2021

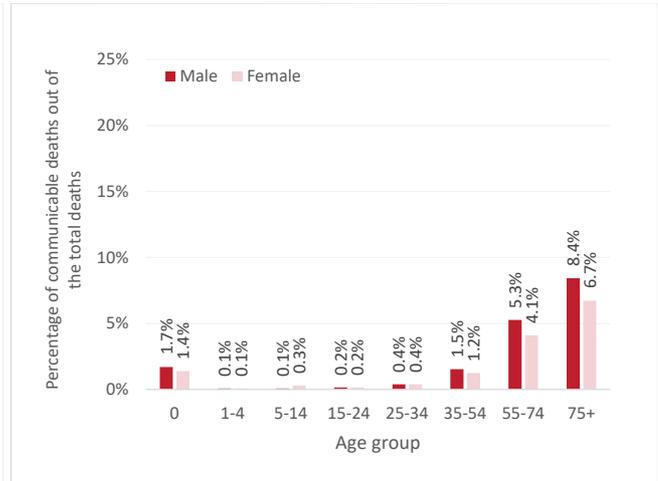
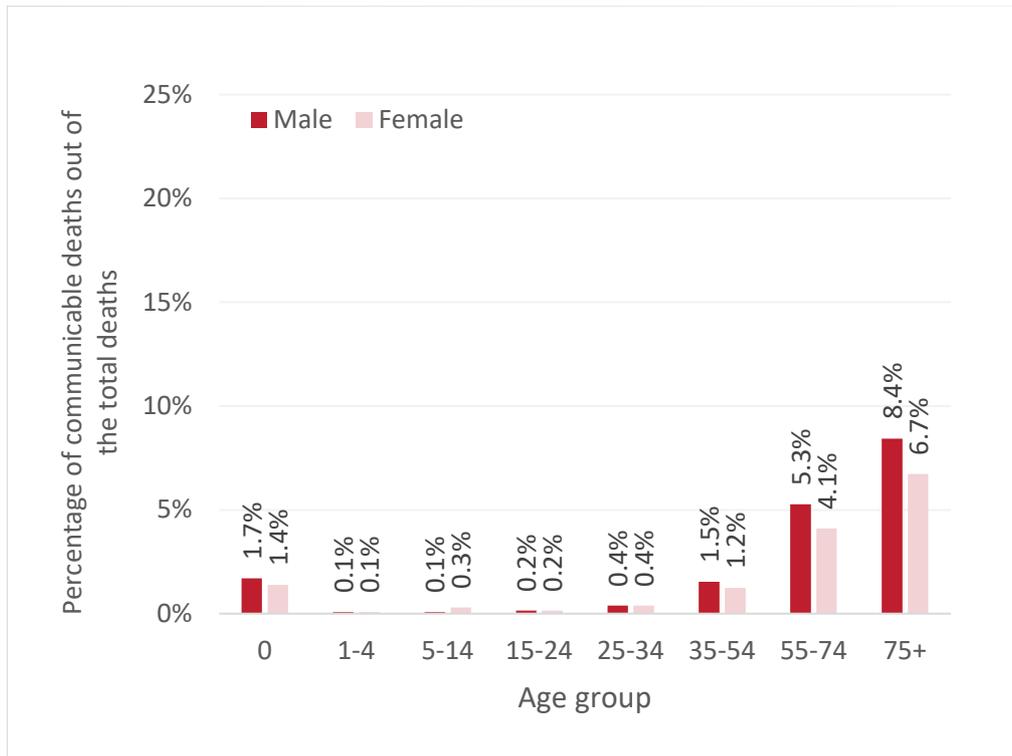


Figure 6.4: Percentage of deaths due to injuries out of the total deaths by age group and sex, 2021



6.3 DEATHS BY BROAD CATEGORY

Deaths classified by broad category showed that diseases due to diseases of the circulatory system accounted for 30% of causes of death over the three-year period. In 2019, deaths due to diseases of the respiratory system accounted for 25% of deaths, while in 2021 they accounted for 13% of deaths. Deaths due to COVID-19 accounted for 5% of deaths in 2020, while in 2021 the share of deaths attributable to COVID-19 increased to 18.2%.

Table 6.2: Underlying cause of death group by ICD-10 chapters

ICD-10 broad category	2019	2020	2021
Diseases of the circulatory system	33.7%	38.1%	30.1%
Diseases of the respiratory system	25.3%	19.2%	13.2%
Neoplasms	10.6%	12.1%	7.7%
Codes for special purposes (Mostly COVID-19 related conditions)	0.0%	4.4%	18.2%
Certain infectious and parasitic diseases	6.7%	5.4%	7.4%
External causes of morbidity and mortality (Accidents, Injuries, and undetermined intent)	4.2%	5.1%	6.4%
Endocrine, nutritional and metabolic diseases	4.1%	3.4%	4.3%
Diseases of the genitourinary system	5.6%	3.2%	3.3%
Certain conditions originating in the perinatal period	2.5%	2.7%	3.0%
Diseases of the nervous system	2.0%	1.7%	2.1%
Diseases of the digestive system	1.8%	1.7%	1.9%
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	1.0%	0.9%	1.2%
Congenital malformations, deformations and chromosomal abnormalities	1.1%	0.8%	0.5%
Injury, poisoning and certain other consequences of external causes	1.1%	0.2%	0.2%
Mental and behavioural disorders	0.1%	0.4%	0.2%
Diseases of the skin and subcutaneous tissue	0.1%	0.3%	0.2%
Pregnancy, childbirth and the puerperium	0.0%	0.2%	0.2%
Diseases of the musculoskeletal system and connective tissue	0.2%	0.3%	0.0%
Grand Total	100.0%	100.0%	100.0%

6.4 LEADING CAUSE OF DEATH

The leading cause of death in 2019 was Ischaemic heart disease which accounted for approximately 11% of deaths in the country. This was followed by respiratory disease conditions (10%) and other forms of heart diseases (9%).

In 2020, the main leading cause of death was other forms of heart disease, accounting for 15% of deaths in the country. This was followed by cerebrovascular disease (10%), which in 2019, was the 4th leading cause of death.

In 2021, the leading cause of death was COVID-19 related disease conditions which accounted for 18% of deaths.

In 2019 & 2020, influenza and pneumonia were ranked as the fifth leading cause of death, but in 2021, this shifted to other bacterial diseases.

Table 6.3: Leading cause of death, 2019-2021

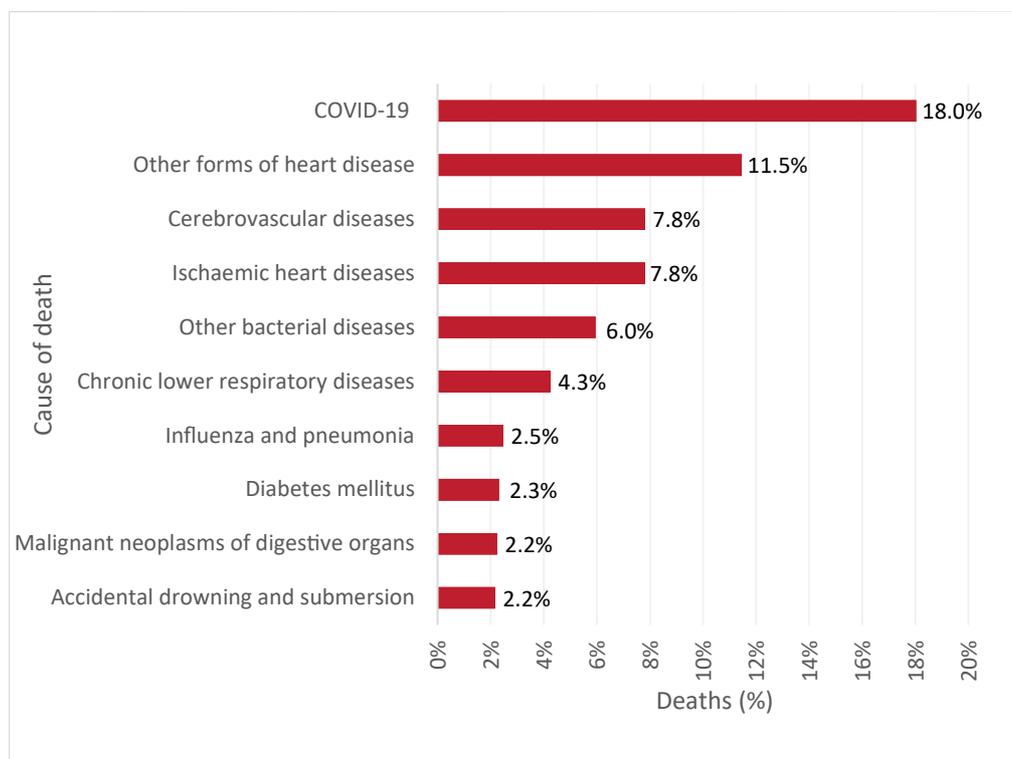
Rank	2019		2020		2021	
	Cause of death	Number	Cause of death	Number	Cause of death	Number
1	Ischaemic heart diseases	11%	Other forms of heart disease	15%	COVID-19	18%
2	Chronic lower respiratory diseases	10%	Cerebrovascular diseases	10%	Other forms of heart disease	11%
3	Other forms of heart disease	9%	Ischaemic heart diseases	9%	Ischaemic heart diseases	8%
4	Cerebrovascular diseases	9%	Chronic lower respiratory diseases	6%	Cerebrovascular diseases	8%
5	Influenza and pneumonia	7%	Influenza and pneumonia	5%	Other bacterial diseases	6%

6.5 TOP 10 CAUSES OF DEATH, BY SEX

In 2021 the top leading cause of disease among both sexes was COVID-19 related disease conditions.

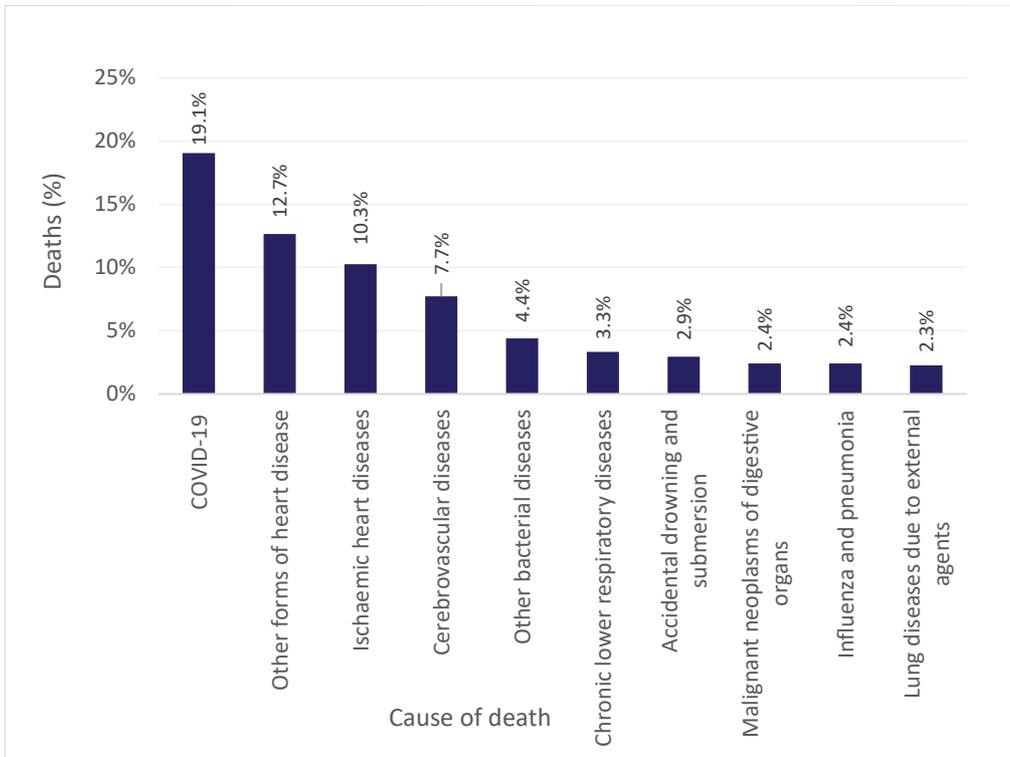
This was followed by other forms of heart disease. Cerebrovascular diseases and ischemic heart diseases ranked as the third and fourth leading causes, respectively. The fifth leading cause of disease in the population was other bacterial infections.

Figure 6.5: Leading cause of death, both sexes - 2021



Among men, the leading cause of death was COVID-19 related disease conditions. This was followed by other forms of heart disease. Accidental drowning and submersion ranked as the seventh leading cause of death among men.

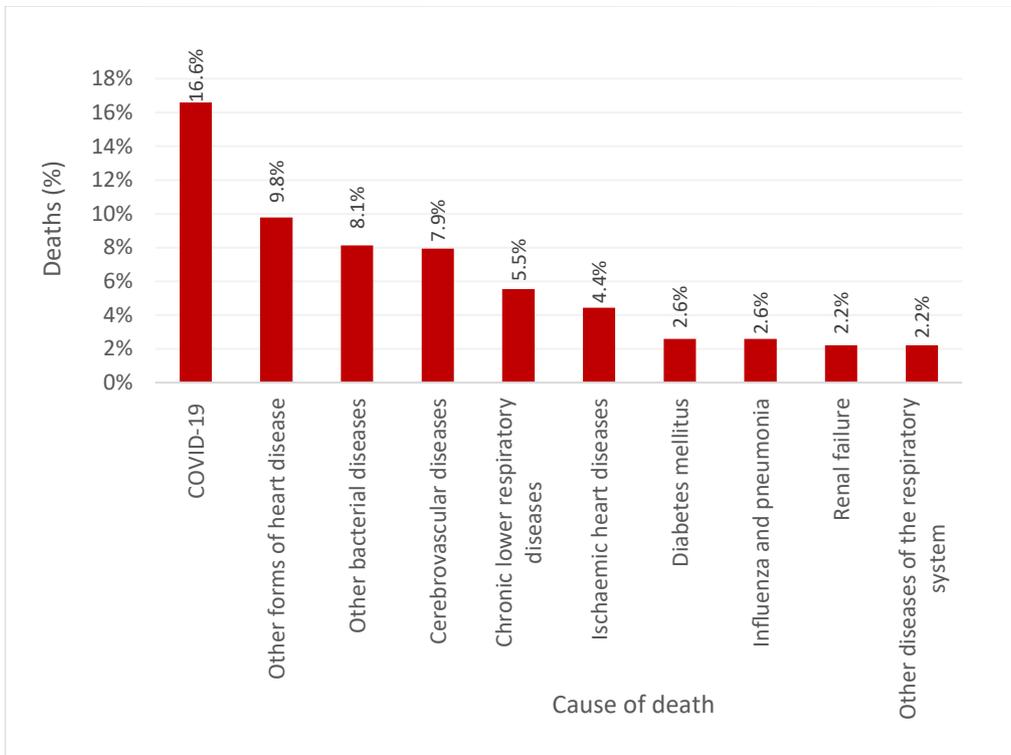
Figure 6.6: Leading cause of death, males -2021



Similar to men, the leading cause of death among women was COVID-19 related disease conditions. The second leading cause of death among women was other forms of heart disease. This was followed by other bacterial diseases.

Among women, diabetic mellitus, influenza and pneumonia constituted the sixth and seventh leading cause of death.

Figure 6.7: Leading cause of death, females - 2021



6.6 LEADING CAUSES OF DEATH BY AGE GROUP AND SEX

6.6.1 Infants and children (0–4 years)

The leading cause of death for both girls and boys less than 5 years was respiratory and cardiovascular disorders specific to the perinatal period. The second leading cause of death was also the same for both sexes, involving COVID-19 related disease conditions.

However, from the third leading cause onwards, the top causes of death differed between boys and girls.

Table 6.4: Top 5 causes of death among children under 5 years, 2021

Top 5 cause of death	Boys	Girls
1	Respiratory and cardiovascular disorders specific to the perinatal period	Respiratory and cardiovascular disorders specific to the perinatal period
2	Disorders related to length of gestation and fetal growth	Disorders related to length of gestation and fetal growth
3	Infections specific to the perinatal period	Haemorrhagic and haematological disorders of fetus and newborn
4	Digestive system disorders of fetus and newborn	Infections specific to the perinatal period
5	Accidental drowning and submersion	Chromosomal abnormalities, not elsewhere classified

6.6.2 Children (5–17 years old)

Among boys aged 5-17 years, the leading cause of death was accidental drowning and submersion, followed by assault and other land transport accidents. In contrast, for girls in the same age group, the leading cause of death was other bacterial diseases. Accidental drowning which accounted for the primary cause of death among boys, ranked as the fifth leading cause among girls.

Table 6.4: Top 5 causes of death among children under 5 years, 2021

Top 5 cause of death	Boys	Girls
1	Accidental drowning and submersion	Other bacterial diseases
2	Assault	COVID-19
3	Other land transport accidents	Glomerular diseases
4	Episodic and paroxysmal disorders	Malignant neoplasms of bone and articular cartilage
5	Other bacterial diseases	Accidental drowning and submersion

6.6.3 Youths and adults (18–64 years old)

Among youths and adults, the leading cause of death for men and women was COVID-19 related disease conditions. Ischemic heart disease was the second leading cause of death among men, while it was cerebrovascular diseases among women. The third leading cause of death for both men and women were recorded as other forms of heart disease.

Table 6.6: Top 5 cause of death among youth & adult (18-64 years), 2021

Top 5 cause of death	Male	Female
1	COVID-19	COVID-19
2	Ischaemic heart diseases	Cerebrovascular diseases
3	Other forms of heart disease	Other forms of heart disease
4	Cerebrovascular diseases	Other bacterial diseases
5	Accidental drowning and submersion	Ischaemic heart diseases

6.6.4 Elderly population (65+ years)

COVID-19 related disease conditions was the leading cause of death among elderly men and women. Following this, the leading cause of death among elderly men and women was characterised by other forms of heart disease. Ischaemic heart disease was the third most common cause of death among men and for women it was other bacterial diseases.

Table 6.7: Top 5 cause of death among elderly population, 2021

Top 5 cause of death	Male	Female
1	COVID-19	COVID-19
2	Other forms of heart disease	Other forms of heart disease
3	Ischaemic heart diseases	Other bacterial diseases
4	Cerebrovascular diseases	Chronic lower respiratory diseases
5	Other bacterial diseases	Cerebrovascular diseases

CHAPTER 7: MARRIAGE AND DIVORCE



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7.1 MARRIAGE & DIVORCE IN MALDIVES

This chapter provides an overview of marriages and divorces among the Maldivian population for the period 2019 to 2021.

A total of 5,069 marriages occurred in 2019. In 2020, this number decreased to 4,998, reflecting a 1.4% reduction. However, 2021 recorded the highest number of marriages over the three-year period, with an 8.3% increase from 2020 to 2021. The crude marriage rate in the country was 13.6 marriages per thousand population in 2019, rising to 14 marriages per thousand in 2021.

While 5,069 marriages occurred in 2019, a total of 3,550 divorces were also registered. The number of divorces decreased in 2020 but rose again to 3,242 in 2021. The crude divorce rate was 9.5 divorces per thousand population in 2019, declining to 8.4 divorces per thousand in 2021. Despite this decrease, the Maldives continues to have the highest divorce rate globally.

Table 7.1: Summary statistics on marriages and divorces, 2019-2021

Indicator	2019	2020	2021
Number of registered marriages	5,069	4,998	5,414
Crude marriage rate (per 1,000 population)	13.6	13.2	14.0
Number of registered divorces	3,550	2,984	3,242
Crude divorce rate (per 1,000 population)	9.5	7.9	8.4

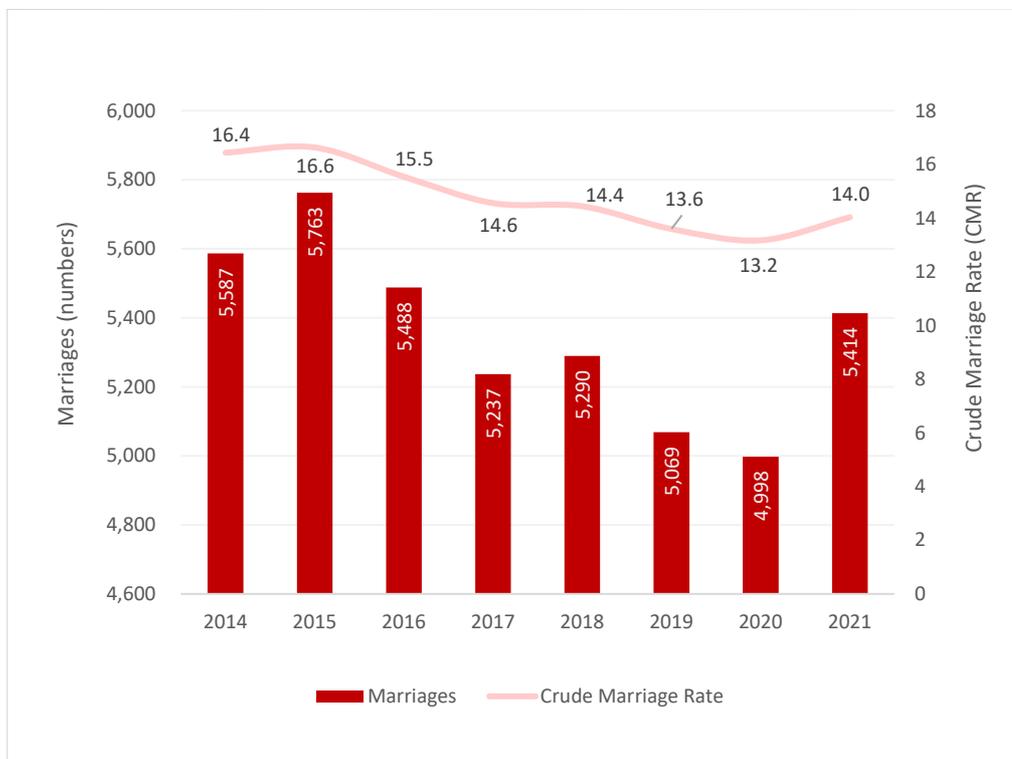
7.1 MARRIAGE

7.1.1 Marriages by year of registration

The Maldives experienced fluctuations in the number of marriages between 2014 and 2021. A peak in marriages was observed in 2015, with 5,763 marriages, followed by a gradual decline. However, by 2021, the number of marriages increased again to 5,414 marriages.

Similarly, the Crude Marriage Rate which was 16.4 marriages per thousand population in 2014, experienced a decline to 13.2 marriages per thousand population in 2020. This decline observed in 2020 could potentially be due to challenges brought about by the outbreak of the COVID-19 pandemic. However, this rate rebounded in 2021, increasing to 14 marriages per thousand population in 2021.

Figure 7.1: Number of Marriages and Crude Marriage Rate (per 1000), 2014- 2021

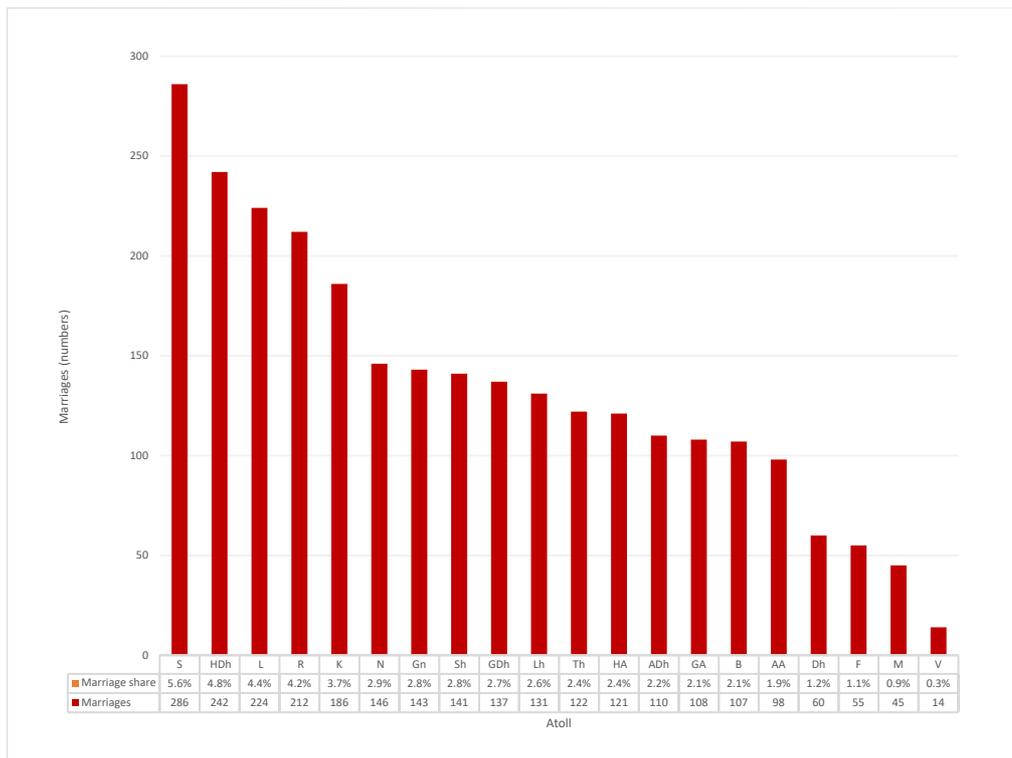


7.1.2 Marriages by place of Registration

Out of the total marriages in 2021, half (2726) were registered in Maale, while the remaining marriages were distributed across the atolls. The majority of these marriages occurred in the most populous atolls such as Addu City (286), HDh (242), Laamu Atoll (224) and Raa Atoll (212). Kaafu Atoll also registered a significant number of marriages.

In contrast, the lowest number of marriages were registered in Vaavu Atoll, which has a population of less than 1,800 people.

Figure 7.2: Marriage by place of registration, 2021



7.1.3 Marriages by age of bride and groom

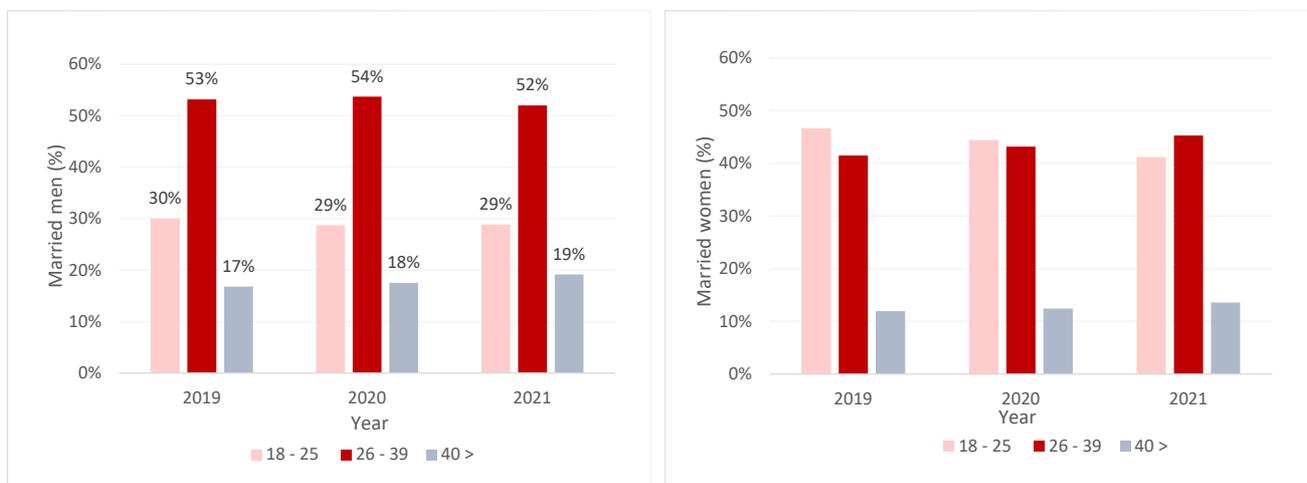
Marriages by the age of the bride and groom were analyzed across three age groups: 18-25 years, 26-39 years, and 40 years and above. These are the age categories for which the Judicial Administration collects marriage and divorce data through the courts .

Over the years, the number of men marrying at a younger age (below 25 years) has declined by 1%. Data shows that over the three-year period, men tend to marry between the ages of 26-39 years, although the number of men marrying at older ages (after age 40 years) has increased slightly.

Across all three years, a significant percentage of women married between the age of 18 and 25 years, with just under half of women marrying during this age group in 2019, decreasing gradually to 41% of women in 2021. During the same period, the percentage of women marrying between the ages of 26-39 years increased slightly, reaching 45% in 2021. Women marrying after the age of 40 years, also showed an increase from 12% in 2019 to 14% in 2021.

This pattern suggests that, on average, men tend to form relationships with younger women. However, further investigation into the age gaps between brides and grooms is necessary to confirm this trend.

Figure 7.3: Percentage of marriages by age of groom, 2019-2021 **Figure 7.4: Percentage of marriages by age of bride, 2019-2021**



7.1.4 Number of times married

More than half of the men and women who married in recent years were marrying for the first time. The remaining marriages were re-marriages. As a result of the high divorce rate in the Maldives, re-marriage has become a common trend in the country. In 2021, one in every five people who married were previously married, and this was observed similarly among both men and women. Additionally, there has been an increase over the years in the number of men and women marrying for the third or fourth time.

Figure 7.5: Percentage of marriages by number of times married amongst ever-married men, males- 2014-2021

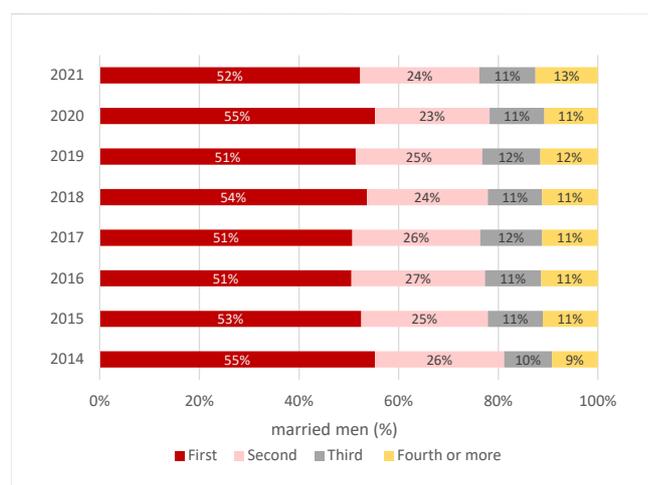
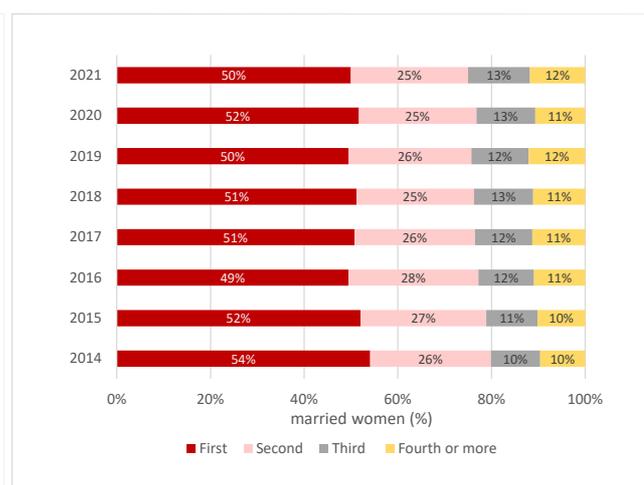


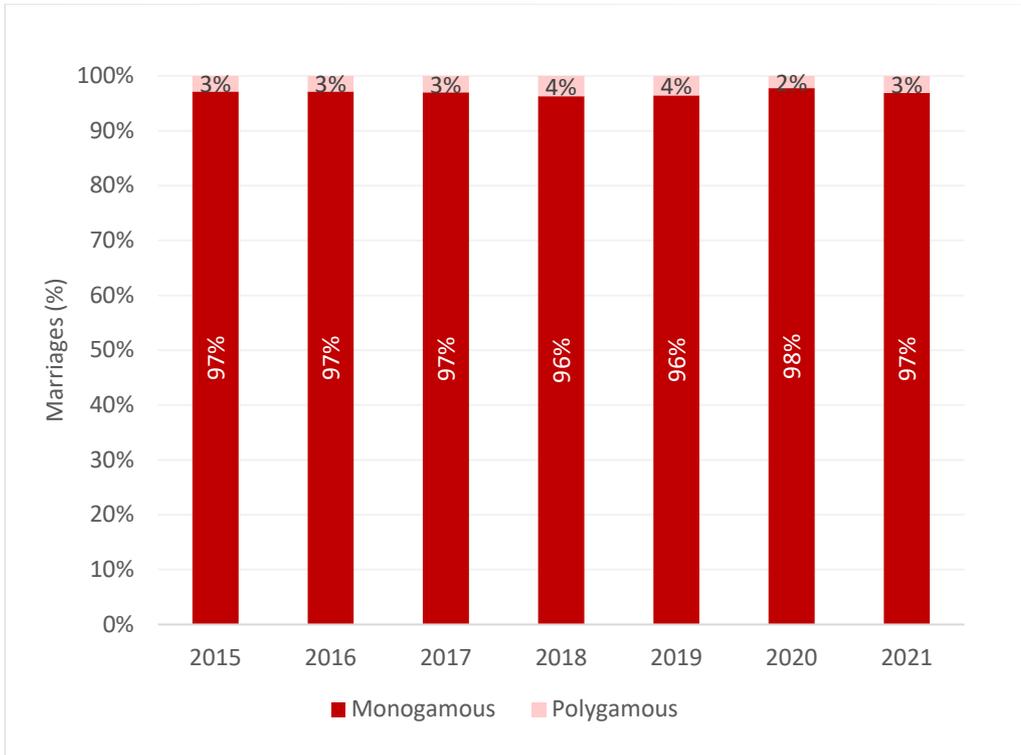
Figure 7.6: Percentage of marriages by number of times married amongst females- 2014-2021



7.1.5 Number of marriages by type

In terms of marriage type, the majority of marriages are monogamous (97%). In 2021, 166 polygamous marriages were registered. The lowest number of polygamous marriages was recorded in 2020.

Figure 7.7: Number of marriages by type, 2015-2021



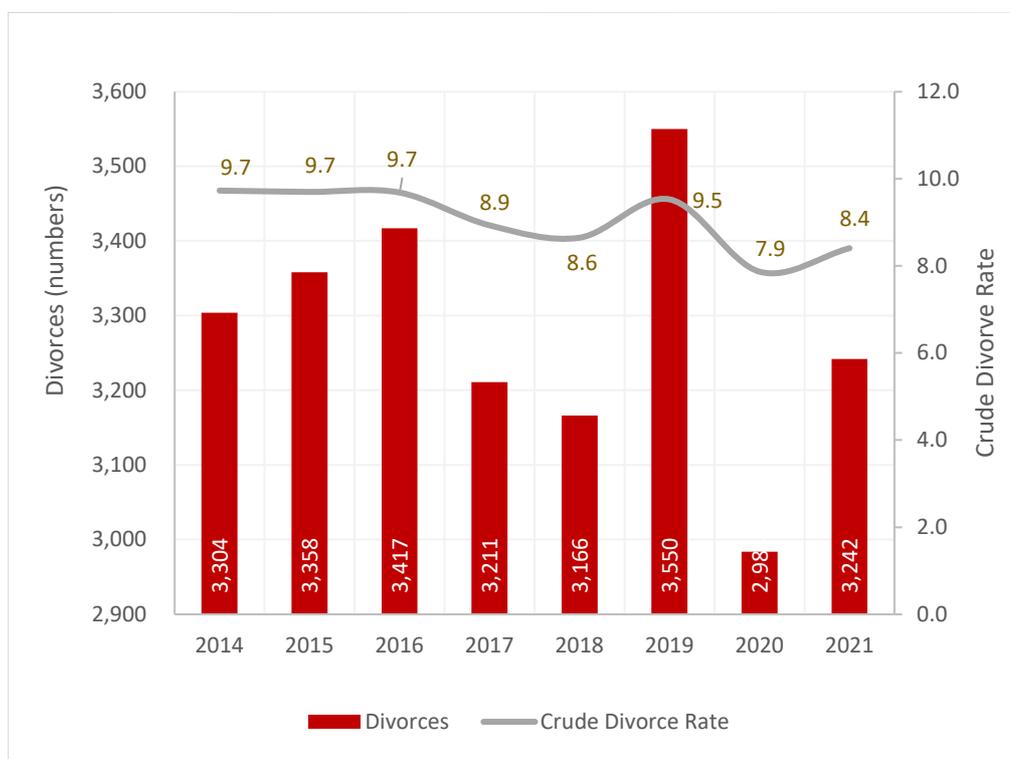
7.2 DIVORCE

7.2.1 Divorces by year of registration

In 2021, a total of 3,242 divorces occurred in the Maldives. The highest number of divorces was recorded in 2019, with 3,550 cases. Over the past eight years, the lowest number of divorces occurred in 2020, likely due to travel restrictions and other challenges induced by the COVID-19 pandemic.

The crude divorce rate varied considerably over the years examined. The highest crude divorce rate during this period was between 2014 and 2016, when it reached 9.7. By 2018, it had fallen to 8.6 per thousand, only to rise again in 2019 to 9.5 per thousand. The lowest crude divorce rate was observed in 2020 at 7.9 per thousand, followed by a slight increase to 8.4 per thousand in 2021. The rise in divorce rates in 2021 may be attributed to the regular resumption of government services following the COVID-19 pandemic.

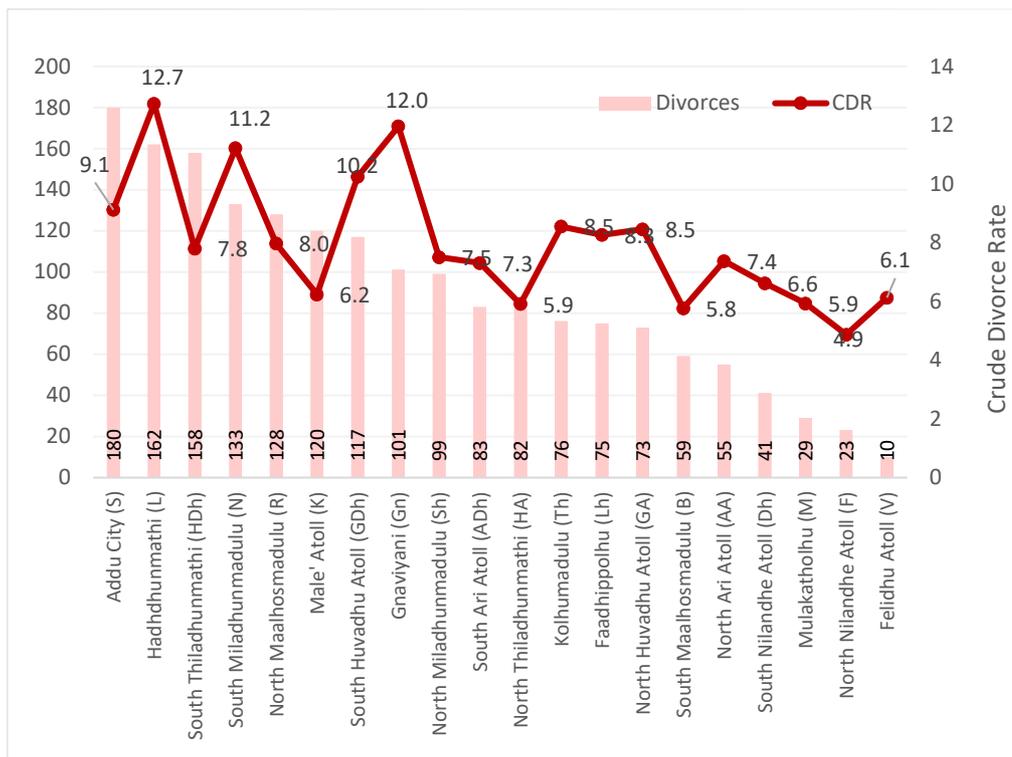
Figure 7.8: Number of divorces and crude divorce rate, 2014-2021



7.2.2 Divorce by place of registration

Out of the total divorces in 2021, the majority of the divorces took place in Maale (1438 divorces, with a crude divorce rate of 8.7). The remainder of the divorces occurred across the 20 atolls. Despite Addu City(S) reporting the highest number of divorces, the crude divorce rate is highest in Hadhdhunmathi (L) Atoll with 12.7 divorces per thousand people, followed by Gnaviyani (Gn) Atoll with 12 divorces per thousand people. On the other hand, while Vaavu Atoll had the lowest occurrence of divorces, the lowest crude divorce rate was recorded in Felidhu Atoll (V) with 4.9 divorces per thousand people.

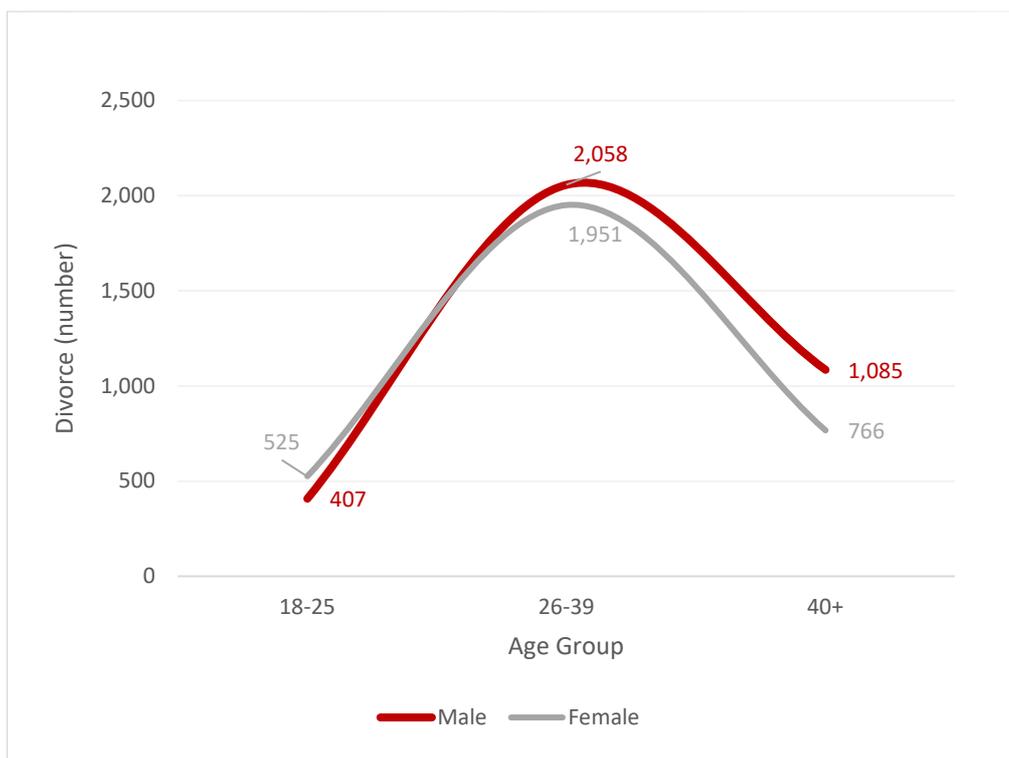
Figure 7.9: Divorces by Atoll and Crude Divorce Rate, 2021



7.2.3 Divorces by age of husband and of wife

more divorces occurred among women than men. On the other hand, with increasing age, more divorces occurred among men in terms of total numbers.

Figure 7.10: Divorces by age group and sex, 2021



REFERENCES

ESCAP. (2020). Assessment, Analysis and Redesign of Civil Registration and Vital Statistics Process-Maldives. Retrieved from <https://repository.unescap.org/handle/20.500.12870/4406?show=full>

MBS. (2019). Maldives Population Projections 2014-2054. Retrieved from <https://statisticsmaldives.gov.mv/population-projection-2014-2054/>

MBS. (2021). National Strategy for the Development of Statistics, 2021-2030. Retrieved from <https://statisticsmaldives.gov.mv/nbs/wp-content/uploads/2021/11/NSDS-Maldives.pdf>

MBS. (2024). Leave No One Behind – Children in Maldives. Retrieved from <https://statisticsmaldives.gov.mv/leave-no-one-behind-children-in-maldives/>

MoH. (2022). Maldives Health Statistics 2020 [Version 2]. Retrieved from <https://health.gov.mv/en/publications/maldives-health-statistics-2020-version-2>

NSB. (2024). Bhutan Vital Statistics Report, 2023. Retrieved from <https://www.nsb.gov.bt/vital-statistics-report-2023/>

UN. (2014). Principles and Recommendations for a Vital Statistical System (Revision 3). Retrieved from <https://unstats.un.org/unsd/demographic/standmeth/principles/m19rev3en.pdf>

Usman, S. K., & Moosa, S. (2020). Evaluation of Civil Registration and Vital Statistics (CRVS) System in the Maldives – Mortality Cause Specific Approach. Retrieved from <http://saruna.mnu.edu.mv/jspui/bitstream/123456789/14770/1/Evaluation%20of%20Civil%20Registration%20and%20Vital%20Statistics%20%28CRVS%29%20system%20in%20the%20Maldives%20%20mortality%20cause%20specific%20approach.pdf>

WHO. (2004). World Health Organization. (2004). ICD-10 : international statistical classification of diseases and related health problems : tenth revision, 2nd ed. World Health Organization. Retrieved from <https://iris.who.int/handle/10665/42980>



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