



Department of Health Services

Government of Kerala

HEALTH AT A GLANCE

Kerala

2023-24

Prepared by

Health information Cell

Directorate of Health Services





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Preface

The "Health at a Glance" report presents a comprehensive collection of past and present data on key health indicators and services in our state. Using data from 2023-24 and the latest survey reports, it provides a clear picture of Kerala's health status. This report serves as a factual record of health trends and services rather than an analytical study.

The report is structured into different chapters covering the demographic profile of Kerala, maternal and child health, disease patterns, healthcare infrastructure, service utilization, health expenditure and progress toward health-related Sustainable Development Goals. It also includes legacy data from NFHS and SRS survey reports on health indicators. Each section provides an overview of trends and key indicators, offering a snapshot of Kerala's healthcare landscape.

This edition of the report incorporates the latest available data from multiple sources, including the Health Management Information System, the Reproductive and Child Health Portal, the Integrated Health Information Platform, the Central Bureau of Health Intelligence portal, monthly reports submitted from districts, and other relevant administrative databases. Additionally, nationally published surveys such as the Sample Registration System, the National Family Health Survey and the SDG India Index Report have also been utilized.

The preparation of this report has been a collaborative effort, with valuable contributions from health officials, statisticians, and data analysts across various divisions. We extend our gratitude to all those who have played a role in compiling, validating, and reviewing the data to ensure its accuracy and reliability.

We hope that this report will serve as a useful tool for policymakers, healthcare providers, researchers, and stakeholders in shaping evidence-based interventions and policies. As we continue to strengthen our health systems, we welcome feedback and suggestions to further enhance the quality and relevance of future editions.

25-05-2025
THIRUVANANTHAPURAM

DR. REENA K .J
DIRECTOR OF HEALTH SERVICES

ABBREVIATIONS

ALS : Advanced Life Support

ANC : Ante Natal Care

BLS : Basic Life Support

CBHI : Central Bureau of Health Intelligence

CDR : Child Death Review

CHC : Community Health Centre

DH : District Hospital

DHS : Directorate of Health Services

DME : Directorate of Medical Education

DVC : District Vector Control

FHC : Family Health Centre

GH : General Hospital

GSDP : Gross State Domestic Product

HIC : Health Information Cell

HMIS : Health Management Information System

**IDSP : Integrated Disease Surveillance
Programme**

IMI : Intensified Mission Indradhanush

IMR : Infant Mortality Rate

IP : In Patients

IUCD : Intra Uterine Contraceptive Device

KSACS : Kerala State AIDS Control Society

MCH : Medical College Hospital

MMR : Maternal Mortality Ratio

**MPCE : Monthly Per Capita Consumption
Expenditure**

MTP : Medical Termination of Pregnancy

NBCC : New Born Care Corner

NBSU : New Born Stabilization Unit

NFHS : National Family Health Survey

NHM : National Health Mission

NMR : Neonatal Mortality Rate

NSV : Non Scalpel Vasectomy

OOPE : Out Of Pocket Expenditure

OP : Out Patients

**PAIUCD : Post Abortion Intra Uterine
Contraceptive Device**

PAS : Post Abortion Sterelization

PH Lab : Public Health Lab

PHC : Primary Health Centre

**PPIUCD : Postpartum Intra Uterine
Contraceptive Device**

PPS : Postpartum Sterelization

RCH : Reproductive Child Health

JAK : Janakeeya Arogya Kendram

SDG : Sustainable Development Goals

SDH : Sub District Hospital

SNCU : Special New Born Care Unit

SRS : Sample Registration System

TD : Tetanus Diphtheria Vaccine

TFR : Total Fertility Rate

TH : Taluk Hospital

THQH : Taluk Head Quarters Hospital

UCHC : Urban Community Health Centre

UPHC : Urban Primary Health Centre

VIVA : Vilarchayil Ninum Valarchayilek

W&C : Women & Children

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CONTENTS

Sl. No	Title	Page No
1.	PREFACE	I
2.	ABBREVIATIONS	II
3.	CONTRIBUTORS	III
4.	LIST OF TABLES	V
5.	LIST OF GRAPHS	VII
CHAPTER 1	Executive Summary: Health at a Glance	1 – 5
CHAPTER 2	Demographic Profile of Kerala	6 – 10
CHAPTER 3	Healthcare Infrastructure Under DHS	11 – 18
CHAPTER 4	Reproductive, Maternal & Child Health Services	19 – 45
CHAPTER 5	Communicable Diseases & Non Communicable Diseases	46 – 53
CHAPTER 6	Health Care Delivery Under DHS	54 – 60
CHAPTER 7	Trends in Vital Statistics: Insights from SRS (1971-2020)	61 – 69
CHAPTER 8	Performance of Health in NITI AAYOG'S Ranking	70 – 76
CHAPTER 9	NFHS Data Overview : Health Indicators from Rounds 1 to 5	77 – 81
CHAPTER 10	Financial Allocation for Healthcare Under DHS	82 – 83

CONTENTS

Sl. No	Title	Page No
1.	PREFACE	I
2.	ABBREVIATIONS	II
3.	CONTRIBUTORS	III
CHAPTER 1	Executive Summary: Health at a Glance	1 – 5
CHAPTER 2	Demographic Profile of Kerala	6 – 10
CHAPTER 3	Healthcare Infrastructure Under DHS	11 – 18
CHAPTER 4	Reproductive, Maternal & Child Health Services	19 – 45
CHAPTER 5	Communicable Diseases & Non Communicable Diseases	46 – 53
CHAPTER 6	Health Care Delivery Under DHS	54 – 60
CHAPTER 7	Trends in Vital Statistics: Insights from SRS (1971-2020)	61 – 69
CHAPTER 8	Performance of Health in NITI AAYOG'S Ranking	70 – 76
CHAPTER 9	NFHS Data Overview : Health Indicators from Rounds 1 to 5	77 – 81
CHAPTER 10	Financial Allocation for Healthcare Under DHS	82 – 83
4.	LIST OF TABLES	V
5.	LIST OF GRAPHS	VII

LIST OF GRAPHS

Table No	Title	Page No
Chapter 2		
2.3.1	Age Pyramid of Kerala 2011 Vs 2036 (projected)	10
Chapter 4		
4.2.1.1	Number of Pregnant Women Registration in Kerala_HMIS Portal (in lakh)	20
4.2.3.1	Percentage of first trimester ANC Registration trend _ State _ HMIS	21
4.3.1.1	Abortion as a Percentage of Total Pregnancies Registered – Trend Analysis (2014-15 to 2023-24)	23
4.5.1.1	Trend in Total Deliveries in Kerala 2014-15 to 2023-24 in lakh	26
4.5.2.1	Proportion of Institutional Deliveries in Public & Private Hospitals (2014-15 to 2023-24) _ HMIS	28
4.5.2.2	District-wise Proportion of Institutional Deliveries in Public & Private Hospitals (2023-24)_HMIS	28
4.6.1.1	C-Section Rate in Public & Private Hospitals (2014-15 to 2023-24) Based on HMIS Data	29
4.7.1.1	Trend of Maternal Deaths and MMR Kerala (2014-2023-24) as Reported by District Line Lists	30
4.7.3.1	Classification of Maternal Deaths by Time of Death, Place of Death and different age group	31
4.8.1.1	Trend of Live Births by Gender from 2014-15 to 2023-24 (HMIS Data)	33
4.8.2.1	Trends in Newborn Health Indicators: Underweight, Preterm, and Stillbirth Rates (2014-15 to 2023-24)	36
Chapter 6		
6.2.1	Trend of OP and IP 2015-16 to 2023-24 (in lakh)	55

LIST OF TABLES

Table No	Title	Page No
Chapter 2		
2.2.1	District-wise Rural and Urban Households and Population Distribution (2011 Census)	7
2.2.2	District-wise Rural and Urban SC/ST Population Distribution (2011 Census)	8
2.2.3	District-wise Comparison of Population, Decadal Growth, and Child Population: Census 2001 vs. 2011	8
2.2.4	Proportion of 60+ Population Census 2011 Vs 2001	8 – 9
2.3.1	Projected Total Population (000') by Sex as on 1st March - 2011 - 2036	9
2.3.2	Projected Population By Age and Sex As on 01st March : 2011-2036 ('000)	9 – 10
Chapter 3		
3.1	Number of Modern Medicine Institutions Under DHS 2023-24 as on 31.03.2024	12
3.2	Number of Institutions Selected or Converted as Family Health Centres 2023-24 as on 31.03.2024	13
3.3	Number of Other Institutions Under DHS 2023-24	13
3.4	Bed Strength in The Institutions Under DHS by Type of Institution 2023- 24	13 – 14
3.5	Sanctioned bed in DH, GH, W&C, THQH & TH	14
3.6	Bed Population Ratio In The Institutions Under DHS 2023-24	14
3.7	District Wise Number of Icu Beds and Ventilators In The Institutions Under DHS 2023-24	14 – 15
3.8	District Wise Of Blood Banks & Blood Storage Unit In Kerala 2023-24	15
3.9	District Wise Number of Delivery Points In Kerala 2023-24	15
3.10	District Wise Number of Dialysis Units Under DHS 2023-24	16
3.11	District Wise Number of Institutions Having Facilities for Eye Donation 2023 -24 (DHS)	16
3.12	District Wise Number Of New Born Stabilization Units (NBSU) 2023 -24	16 – 17
3.13	District Wise Number of Special New Born Care Units (SNCU) 2023 -24	17
3.14	District Wise Number of New Born Care Corner (NBCC)	17
3.15	Ambulance (On Road) Status Wise Abstract On 31.03.2024	17 – 18
3.16	Vehicle Type Wise Vehicles Detail As On : 31-03-2023	18
Chapter 4		
4.2.2.1	District-Wise Pregnant Women Registration Data for Kerala (2023-24) - HMIS	21
4.2.3.1	Early Registration of (Within 12 Weeks) Pregnant Women_2023-24_District Wise	21
4.2.4.1	Td Immunization Status of Pregnant Women – District-wise (HMIS) 2023-24	22
4.2.5.1	Percentage of pregnant women found anaemic through VIVA testing	22
4.3.1.1	Trends in Spontaneous and Induced Abortions – HMIS (2014-15 to 2023-24)	23
4.3.1.2	Spontaneous & Induced Abortions in Public and Private Hospitals – District-Level (HMIS 2023-24)	23 – 24
4.4.1.1	Male and Female sterilizations reported in HMIS at the state level from 2014-15 to 2023-24	24
4.4.1.2	Male and Female Sterilizations reported in HMIS at the district level for 2023-24	24
4.4.2.1	State-Level IUCD Insertion Data Reported in HMIS (Public and Private Sector) from 2014-15 to 2023-24	25
4.4.2.2	District-Wise IUCD Insertion Data Reported in HMIS for 2023-24	25
4.4.3.1	Distribution of Family Planning Commodities (Public) Reported in HMIS (2014-15 to 2023-24)	25
4.4.3.2	District-Wise Distribution of Family Planning Commodities (Public) Reported in HMIS for 2023-24	25 – 26
4.5.1.1	Trends in Home and Institutional Deliveries (2014-15 to 2023-24)	26
4.5.1.2	District-wise Institutional and Home Deliveries Reported in HMIS (2023-24)	26 – 27
4.5.1.3	District-wise Institutional and Home Deliveries Reported in HMIS 2015-16 to 2023-24	27
4.6.1.1	C-Section Rate in Public & Private Hospitals (2014-15 to 2023-24) Based on HMIS Data	28
4.6.1.2	District Wise C-Section Rate in Public & Private Hospitals 2023-24 Based on HMIS Data	29
4.7.1.1	Trend of Maternal Deaths (2014-15 to 2023-24) as Reported by District Line Lists	29 – 30
4.7.1.2	Trend of MMR Kerala (2014-2023-24) as Reported by District Line Lists	30
4.7.2.1	Maternal Suicides at the State Level from 2014-15 to 2023-24	30
4.7.2.2	Maternal Suicides - District wise	31
4.7.3.1	Month-wise Maternal Deaths at the State Level for the Last Three Years	31
4.7.3.2	Maternal Deaths by Place of Death 2023-24	32
4.7.3.3	Maternal Deaths by Age Group 2023-24	32
4.8.1.1	Trend of Live Births by Gender (Male, Female & Total) from 2014-15 to 2023-24 (HMIS Data)	33
4.8.1.2	District Wise - Live Births by Gender 2023-24 (Based on HMIS Data)	33
4.8.1.3	Trend in Sex Ratio at Birth (2014-15 to 2023-24) Based on HMIS Data	34
4.8.1.4	District Wise - Sex Ratio at Birth 2023-24 Based on HMIS Data	34
4.8.2.1	Proportion of Preterm Newborns (2016-17 to 2023-24) Based on HMIS Data	34
4.8.2.2	District Wise Proportion of Preterm Newborns 2023-24 Based on HMIS Data	35
4.8.2.3	Trend in Stillbirth Rate (2014-15 to 2023-24) Based on HMIS Data	35
4.8.2.4	District-wise Stillbirth Rate by Intrapartum & Antepartum Classification (2023-24)	35
4.8.2.5	Trend of Underweight Newborns (2014-15 to 2023-24) from HMIS Data	36
4.8.3.1	Infant and Child Deaths Reported in Kerala (2014-15 to 2023-24) – Based on Monthly Reports Submitted by Districts	36
4.8.3.2	Number of Neonatal Deaths reported in Kerala - District-wise (2014-15 to 2023-24)	36 – 37
4.8.3.3	Number of Infant Deaths reported in Kerala - District-wise (2014-15 to 2023-24)	37
4.8.3.4	Number of Child Deaths (under 5) reported in Kerala - District-wise (2014-15 to 2023-24)	37
4.8.3.5	Community and District-wise Distribution of Total Child Deaths Reported in Kerala 2023-24	37 – 38
4.8.3.6	. Gender and District-wise Distribution of Total Child Deaths Reported in Kerala 2023-24	38

4.8.3.7	. Categorization of Infant Deaths reported 2023-24	38
4.8.3.8	Total Child Deaths by Place of Occurrence 2023-24	38 – 39
4.8.3.9	Total Deaths by different birthweight strata of infant 2023-24	39
4.8.3.10	Infant and Neonatal Mortality Rates in Kerala (2019-20 to 2023-24) Based on Monthly District Death Reports and HMIS Live Birth Data NMR & IMR district wise	39
4.8.4.1	Cause of Infant & Child Dath (Based on CDR Quarterly report) 2020-21	40
4.8.4.2	Cause of Infant & Child Dath (Based on CDR Quarterly report) 2021-22	40
4.8.4.3	Cause of Infant & Child Dath (Based on CDR Quarterly report) 2022-23	40 – 41
4.8.4.4	Cause of Infant & Child Dath (Based on CDR Quarterly report) 2023-24	41
4.9.1.1	Trend in Full Immunization Coverage(%) of Children (Based on Birth Cohort One Year Prior), 2021-22 to 2023-24	42
4.9.1.2	Antigen-wise Number of Children Administered Vaccines During 2023-24 (Birth Cohort: Previous Year)	42
4.9.1.3	MR2 Vaccine Coverage in 2023-24 (Cohort of Children Born Two Years Prior)	43
4.9.2.1	Intensified Mission Indradhanush - 5.0 Round I report (07-08-2023 to 14-08-2023)	43
4.9.2.2	Intensified Mission Indradhanush - 5.0 Round II report (11-09-2023 to 16-09-2023)	43 – 44
4.9.2.3	Intensified Mission Indradhanush - 5.0 Round III report (09-10-2023 to 16-10-2023)	44
4.9.3.1	Intensified Pulse Polio Immunization Programme (03-03-2024)	44 – 45
Chapter 5		
5.2.1	Trends in Communicable Disease Cases and Deaths in Kerala (2011–2022)	47 – 49
5.2.2	Communicable Disease Cases and Deaths in Kerala – 2023	49
5.2.3	District-wise Communicable Disease Cases and Deaths in Kerala – 2023	49 – 50
5.3.1	Non Communicable Disease Cases and Deaths in Kerala – 2023 Diseases Cases Death	50 – 51
5.3.2	District-wise Non Communicable Disease Cases and Deaths in Kerala – 2023	51 – 53
Chapter 6		
6.2.1	Trend of OP and IP Reported in Facilities Under DHS & NHM (2009-10 to 2023-24)	55
6.2.2	Facility Service Utilization Summary (2014-15 to 2023-24)	56
6.2.3	Trend of Outpatient (OP) Visits in DHS Facilities - District wise(2015-16 to 2023-24)	56
6.2.4	Trend of Inpatient (IP) Visits in DHS Facilities – District wise (2015-16 to 2023-24)	56
6.2.5	District-wise Outpatient (OP) Visits by Facility Type in DHS Facilities (2020-21 to 2023-24)	57
6.2.6	District-wise Inpatient (IP) Visits by Facility Type in DHS Facilities (2020-21 to 2023-24)	57 – 58
6.3.1	Facility Service Utilization Summary 2023-24	58
6.3.2	Health care Service Delivery _DH _District wise_2023-24	58 – 59
6.3.3	Health care Service Delivery _GH _District wise_2023-24	59
6.3.4	Health care Service Delivery _Women & Child Hospital _District wise_2023-24	59
6.3.5	Health care Service Delivery _TH & THQH _District wise_2023-24	59 – 60
6.3.6	Health care Service Delivery _CHC & PHC _District wise_2023-24	60
Chapter 7		
7.1.1	Birth Rate Trends: Kerala vs India (1971–2020) – SRS Reports	62 – 63
7.1.2	Death Rate Trends: Kerala vs India (1971–2020) – SRS Reports	63 – 64
7.1.3	Total Fertility Rate Trends: Kerala vs India (1971–2020) – SRS Reports	64
7.1.4	Infant Mortality Rate Trends: Kerala vs India (1971–2020) – SRS Reports	65
7.1.5	Neo Natal Mortality Rate Trends: Kerala vs India (1971–2020) – SRS Reports	66
7.1.6	UNDER 5 MORTALITY RATE Trends: Kerala vs India (1971–2020) – SRS Reports	66 – 67
7.1.7	Maternal Mortality Ratio Trends: Kerala vs India (1971–2020) – SRS Reports	67
7.1.8	Life Expectancy at Birth Trends: Kerala vs India (1971–2020) – SRS Abridged lifetables	67
7.1.9	Life Expectancy at Birth Trends_Gender wise: Kerala vs India (1971–2020) – SRS Abridged lifetables	68
7.1.10	Sex ratio at birth Trends: Kerala vs India (1971–2020) – SRS Reports	68
7.1.11	Sex ratio at birth Trends: Kerala vs India (1971–2020) – SRS Reports	69
Chapter 10		
10.1	Investment in Health and Family Welfare (Rs in crore)	82
10.2	Plan Schemes Allocation & Expenditure From 2019-20 To 2023-24 /2211- Plan Schemes(FAMILY WELFARE- (Rs.in Lakhs)	82
10.3	Non Plan Schemes Allocation &Expenditure From 2019-20 To 2023 -24 /2211Non Plan (FAMILY WELFARE) - (Rs.in Lakhs)	82
10.4	Plan Schemes Allocation & Expenditure From 2019-20 To 2023-24 (2210,4210) Plan) (Rs.in Lakhs)	83
10.5	Non Plan Schemes Allocation & Expenditure From 2019-20 To 2023-24 (Rs.in Lakhs)	83
10.6	Schemes Allocation&Expenditure Report (FAMILY WELFARE) -2023-24 (Rs in Lakh)	83



EXECUTIVE SUMMARY: HEALTH AT A GLANCE

Chapter 1

Chapter 1

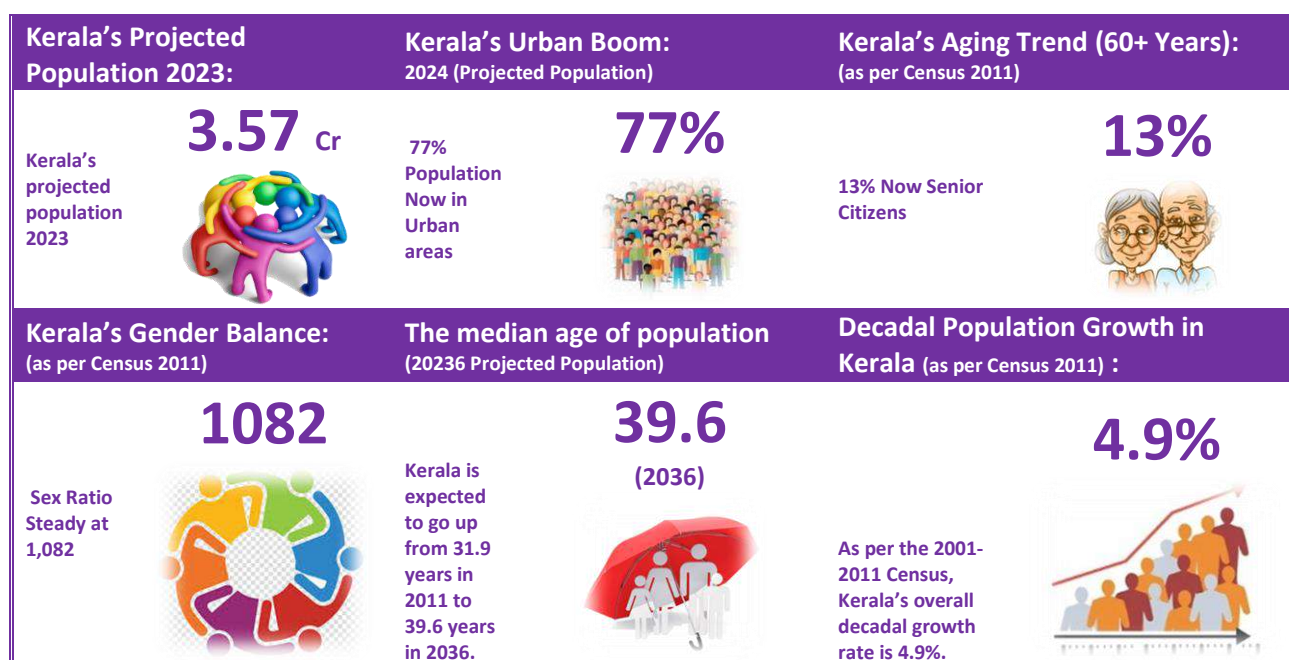
Health at A Glance : Executive Summary

1.1 Introduction

The Health at a Glance report provides a comprehensive overview of key health indicators, trends, and performance metrics within the healthcare system. This executive summary highlights the main findings from the subsequent chapters giving a brief and easy-to-understand overview of the health situation. Each section provides a short description of the chapter, along with key points shown in visual formats.

1.2 Demographic Profile of Kerala

Chapter Two of this report focuses on the demographic profile of Kerala. It presents key population characteristics based on Census data, including rural-urban distribution, gender composition, and the elderly population. Projected population estimates up to 2036 help anticipate future challenges, particularly in areas like aging and urbanization, enabling better policy planning and resource allocation. The main highlights of this chapter are summarized in the following picture



1.3. Healthcare Infrastructure under DHS

Chapter 3 provides an overview of the medical infrastructure managed by the Department of Health Services (DHS), including healthcare facilities, bed strength, and infrastructure expansions under Aardram Mission, which aims to enhance public healthcare institutions by improving amenities and service delivery. The chapter also covers the availability of critical maternal and neonatal care units such as delivery points, Newborn Stabilization Units (NBSUs), Special Newborn Care Units (SNCUs), and Newborn Care Corners (NBCCs). Additionally, it highlights the accessibility of essential blood transfusion services and emergency medical transport, including ambulances.

District Level Hospitals	Sub District Level Hospitals	Community Health Centres
DH – 18 GH – 18 W&C – 10* <i>*W&C Vaikom is temporarily non-functional</i>	THQH – 48 TH – 40	Total CHC – 226 Converted to FHC – 41
46 	88 	226 
Primary Health Centres	Janakeeya Arogya Kendram	Other Institutions
Total PHC – 849 Converted to FHC – 844	Janakeeya Arogya Kendram – 5415	School of Nursing – 15 Training Center – 9 PH Lab – 10 DVC Units – 14 Offset Press – 1 Blood Bank – 189 Public – 41 Private – 148 Blood Storage Unit – 132
849 	5415 	

1.4. Reproductive, Maternal, and Child Health Services

This chapter provides an overview of maternal and child health services, covering antenatal care, institutional deliveries, maternal and neonatal health indicators, and immunization programs. It highlights key initiatives like Mission Indradhanush and Pulse Polio campaigns, which have contributed to improved health outcomes. The data also examines trends over the past decade, district-wise variations, and differences between public and private healthcare providers. Information for this chapter is sourced from HMIS, the RCH portal, and district-level reports to support data-driven decision-making for better maternal and child health policies.

Pregnant Women Registration:	Pregnant Women- Anaemia	Rising C-Section Rates in Kerala
The number of pregnant women in Kerala shows a sharp decline post-COVID	27% pregnant women were identified as anaemic through VIVA testing.	Kerala continues to maintain a high C-section rate in both public and private sectors
4.13 lakh (2023-24) 	27% (2023-24) 	44% (2023-24) 
Maternal Deaths in Kerala	Rising Preterm Births	Underweight Newborns
44 - during pregnancy, 5-during delivery (within 24 hrs) 70-postpartum period.	The proportion of preterm births in Kerala has increased	The proportion of newborns weighing less than 2.5 kg has risen
119 (2023-24) 	7.21% (2023-24) 	14% (2023-24) 

1.5. Communicable and Non-Communicable Diseases

This chapter provides an overview of communicable and non-communicable diseases in Kerala, based on data from two key sources: the Integrated Disease Surveillance Programme (IDSP) for communicable diseases and the Central Bureau of Health Intelligence (CBHI) portal for non-communicable diseases. Under IDSP, all public sector hospitals and major private healthcare facilities report cases and deaths, ensuring a comprehensive surveillance system for communicable diseases. For non-communicable diseases, data reporting to the CBHI portal is based solely on cases and deaths recorded in healthcare

facilities under the DHS. District health authorities collect this data from DHS facilities and submit consolidated monthly reports to the CBHI portal.

Communicable diseases reported in Kerala 2023

Cases Reported

Dengue- 16766
Malaria- 566
Chikungunya- 31
West Nile-16
Zika- 13
JE- 6

153

Dengue Death

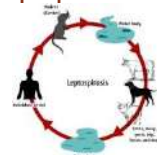


Cases Reported

Kala Azar-3
Scrub Typhus -614
Leptospirosis- 2417

133

Leptospirosis Death



Cases Reported

Cholera - 26
Typhoid- 103
Acute Diarrheal Disease -486266

2

ADD Death



Communicable diseases reported in Kerala 2023

Chicken Pox Cases- 26390
MPox Cases-6

4

Chicken Pox Death



Rabies Cases Reported- 17

Shigella cases-90
Amoebic Meningo Encephalitis - 2

17

Rabies Death



Cases Reported

Hepatitis A -1073
Hepatitis B-1147
Hepatitis C-381
Hepatitis E - 5

14

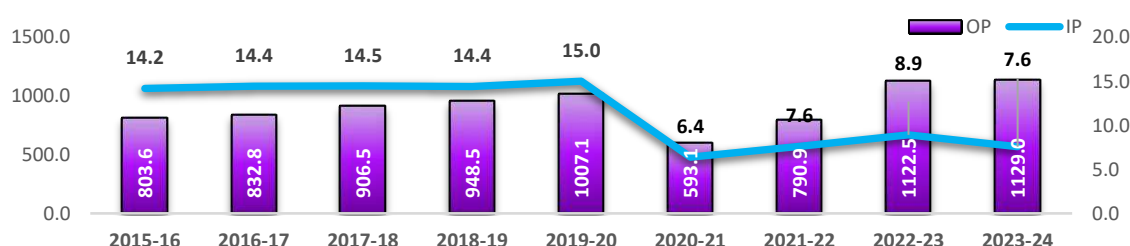
Hepatitis A Death



1.6. Healthcare Delivery under DHS

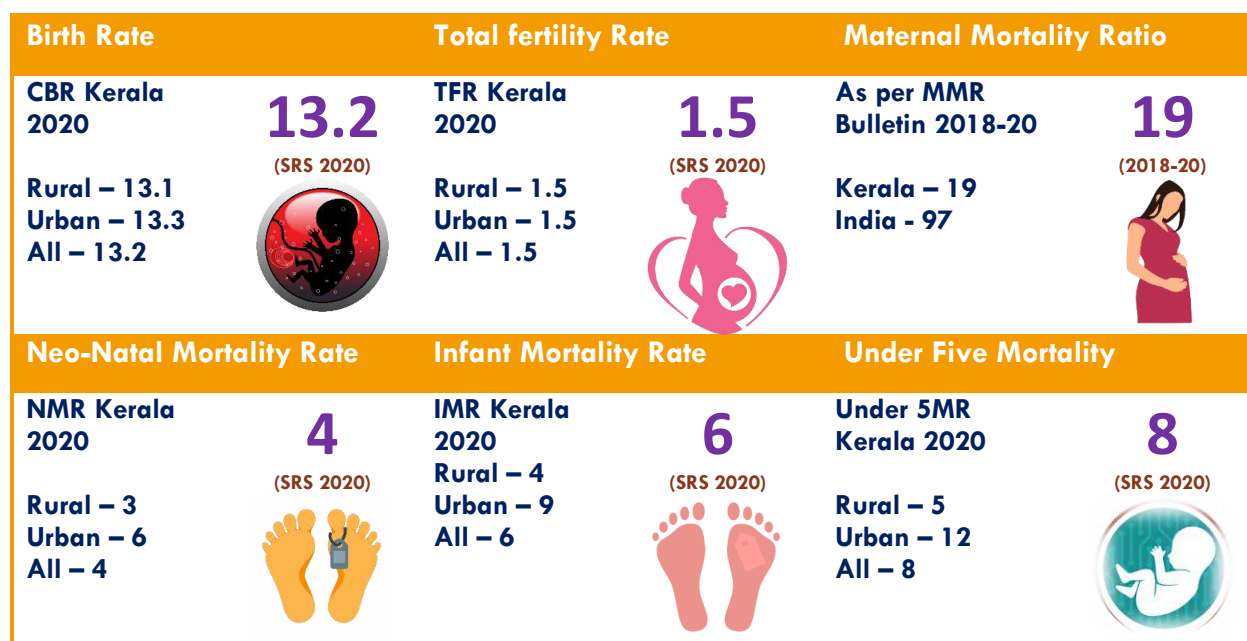
This chapter examines the healthcare services provided under the DHS. It highlights key service indicators such as outpatient and inpatient cases, major surgeries, and laboratory tests conducted across public health facilities. The analysis also includes data from UPHCs and UHCs under the NHM. The trends presented in this section help assess the efficiency and reach of healthcare services across Kerala. The data for this chapter is compiled from past editions of *Health at a Glance* reports, while the latest figures are sourced from the HMIS portal.

Trend of OP and IP 2015-16 to 2023-24 (in lakh)



1.7. Trends in Vital Statistics: Insights from SRS

Chapter 7 presents a comprehensive analysis of Kerala's vital indicators based on data from the Sample Registration System (SRS), spanning from 1976 to 2020. It includes historical trends in key indicators such as birth rate, death rate, total fertility rate (TFR), infant mortality rate (IMR), neonatal mortality rate (NMR), under-five mortality rate, life expectancy at birth, sex ratio at birth, and maternal mortality ratio (MMR). These indicators provide valuable insights into the health and demographic dynamics of the state over the past few decades.



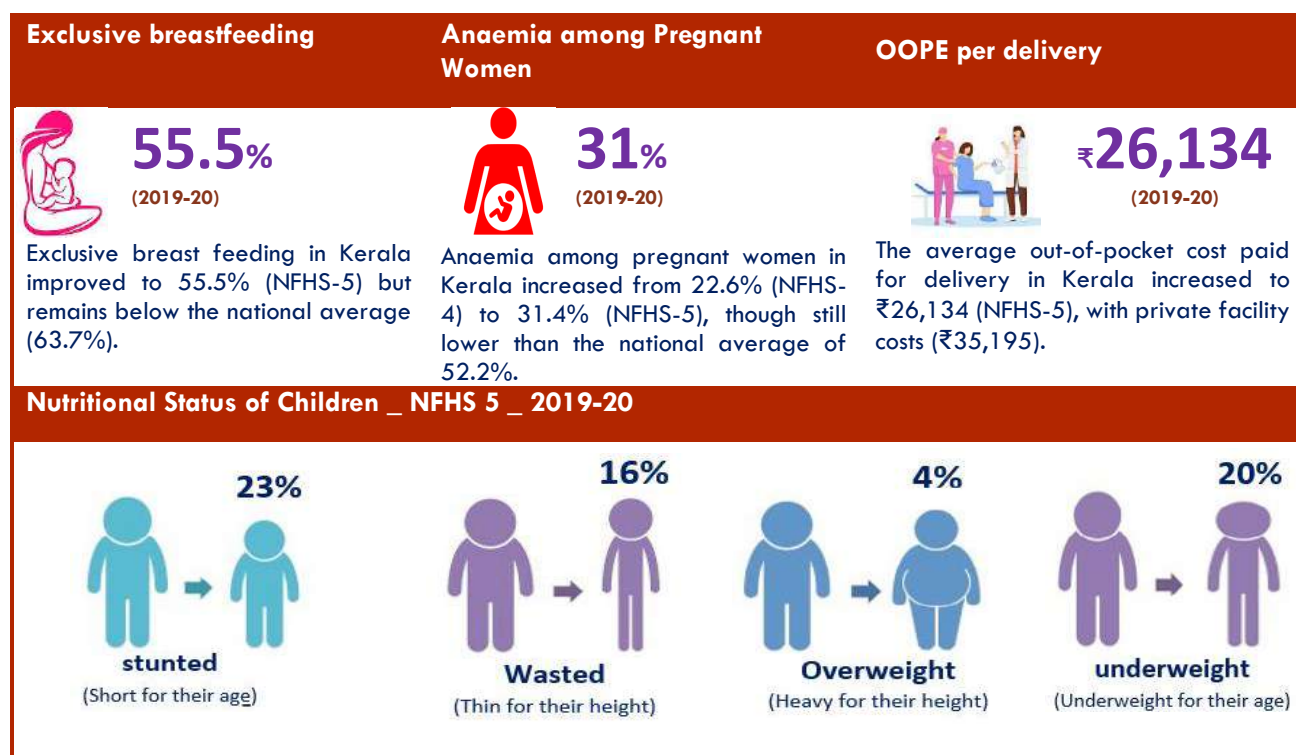
1.8. Performance of Health in NITI Aayog's Ranking

Chapter 8 evaluates Kerala's performance in various health-related indices and rankings published by NITI Aayog, with a particular focus on the Health Index and the SDG India Index, specifically Goal 3, which pertains to good health and well-being. The NITI Aayog health index provides a comprehensive assessment of the state's health system, including key metrics such as access to healthcare, nutrition, and maternal and child health outcomes. The SDG India Index measures the progress toward achieving the United Nations Sustainable Development Goals (SDGs), and Kerala's standing in Goal 3 offers insights into its achievements and areas for further improvement. This chapter highlights Kerala's strengths in health and identifies potential areas of focus for continued advancement in health and wellness.



1.9. NFHS Data Overview from Round 1 to 5

The National Family Health Survey (NFHS) is a crucial source of data on key health and family welfare indicators in India. Conducted in multiple rounds, it provides comprehensive insights into health parameters, reproductive health, nutrition, child and maternal health, and other social determinants of health across the country and in individual states. Chapter 9 presents the results from the NFHS surveys conducted in Kerala from NFHS-1 (1992-93) to NFHS-5 (2019-20). By examining the data across these surveys, we can track Kerala's progress in areas such as maternal and child health, nutrition, reproductive health, family planning, and health behaviour. The trends captured in these rounds help in understanding the impact of various health policies and programs implemented over time, and provide insights for future health interventions and planning.



1.10. Financial Allocation for Healthcare under DHS

Investing in health is a critical determinant of a state's ability to ensure equitable, accessible, and high-quality healthcare services. Adequate financial allocation and efficient utilization of resources are essential for strengthening healthcare infrastructure, expanding service delivery, and improving health outcomes. This chapter provides an overview of investment in health and expenditure trends, highlighting the state government's financial commitment to the health sector. The chapter 10 covers details of the Plan and Non-Plan allotments and expenditure for the health sector. It also examines the percentage of health expenditure in relation to the Gross State Domestic Product (GSDP), offering insights into the overall prioritization of health in the state's economic framework.

Total Health Exp				
7859.06 Cr 2018-19	8203.81 Cr 2019-20	9944.97 Cr 2020-21	13198.94 Cr 2021-22	11091.89 Cr 2022-23
Percentage of Health Expenditure to GDP				
1.42 2018-19	1.47 2019-20	1.94 2020-21	2.30 2021-22	NA 2022-23



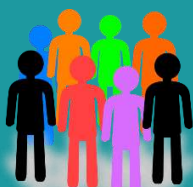
DEMOGRAPHIC PROFILE OF KERALA

Chapter 2

Key Insights at a Glance



Kerala's Population Shift: Rising Urbanization (Census 2011 & 2024 Projection). As per Census 2011, Kerala's total population was 3.34 crore, with 52% in rural areas. However, as per the 2024 projection, the total population is estimated at 3.59 crore, with a significant urban shift—77% (2.78 crore) residing in urban areas, while the rural population has declined to 0.81 crore, highlighting Kerala's rapid urbanization trend.



Gender Distribution and Sex Ratio in Kerala (Census 2011 & 2024 Projection): As per Census 2011, Kerala's total population was 3.34 crore, with 1.60 crore males and 1.74 crore females, resulting in a sex ratio of 1,084 females per 1,000 males. The 2024 projection estimates a total population of 3.59 crore, with 1.73 crore males and 1.87 crore females, and a sex ratio of 1,082 females per 1,000 males, indicating a consistent gender balance over time.



Scheduled Caste and Scheduled Tribe Population in Kerala (Census 2011): As per Census 2011, SC population in Kerala is 30,39,573 (9%), while ST population is 4,84,839 (1.45%)



Kerala's Aging Population: As per Census 2011, 13% of Kerala's population is aged 60 years and above, with the highest proportion in Pathanamthitta (18%), Kottayam (16%), and Alappuzha (15%). In contrast, the lowest proportions are seen in Malappuram (8%), Wayanad (10%), and Kasaragod (10%)



Kerala's Aging Population: A Rising Trend: With declining fertility and rising life expectancy, Kerala's elderly population (60+) is projected to grow from 13% in 2011 to 23% by 2036, making nearly one in five individuals a senior citizen.



The median age of population in Kerala is expected to go up from 31.9 years in 2011 to 39.6 years in 2036.



Decadal Population Growth in Kerala (2001-2011): As per the 2001-2011 Census, Kerala's overall decadal growth rate was 4.9%. While Idukki (-1.8%) and Pathanamthitta (-3%) recorded a negative growth rate, the highest growth was observed in Malappuram (13.4%), followed by Kasaragod (8.6%) and Kozhikode (7.2%)

Chapter 2

Demographic Profile of Kerala

2.1 Introduction

Understanding the demographic structure of Kerala is essential for effective planning and policy formulation in health and social sectors. This chapter provides an overview of the state's population characteristics based on Census data, including total population, rural-urban distribution, male-female composition, number of households, child population, and elderly (60+) population. Key demographic indicators such as population density and decadal growth rate are also analyzed to assess population trends over time.

In addition to Census data, this chapter includes projected population estimates for Kerala from 2011 to 2036, based on the Report of the Technical Group on Population Projections. These projections help in anticipating future demographic shifts, enabling better resource allocation and policy interventions to address emerging challenges related to aging, urbanization, and population growth.

2.2 Population Overview

This section presents key statistics from Census 2011, including the number of households in rural and urban areas, total population disaggregated by gender and residence (rural/urban), and the Scheduled Caste (SC) and Scheduled Tribe (ST) population. Additionally, the growing proportion of the aged population (60+) is highlighted, along with an age pyramid analysis to understand demographic shifts.

Table 2.2.1 District-wise Rural and Urban Households and Population Distribution (2011 Census)

State/ District	Number of Households			Total Population			Total Male Population			Total Female Population		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
TVM	837877	390963	446914	3301427	1529831	1771596	1581678	724864	856814	1719749	804967	914782
KLM	669375	376679	292696	2635375	1448217	1187158	1246968	680687	566281	1388407	767530	620877
PTA	322684	287615	35069	1197412	1065799	131613	561716	499820	61896	635696	565979	69717
ALP	535958	248616	287342	2127789	979643	1148146	1013142	464713	548429	1114647	514930	599717
KTM	487296	346899	140397	1974551	1409158	565393	968289	692673	275616	1006262	716485	289777
IDK	279812	267208	12604	1108974	1056929	52045	552808	527245	25563	556166	529684	26482
EKM	814011	259915	554096	3282388	1048025	2234363	1619557	518510	1101047	1662831	529515	1133316
TSR	759210	250877	508333	3121200	1024794	2096406	1480763	488303	992460	1640437	536491	1103946
PKD	637220	482285	154935	2809934	2133124	676810	1359478	1031466	328012	1450456	1101658	348798
MLP	793999	448037	345962	4112920	2295709	1817211	1960328	1095308	865020	2152592	1200401	952191
KKD	697710	235703	462007	3086293	1013721	2072572	1470942	484784	986158	1615351	528937	1086414
WYD	190894	183375	7519	817420	785840	31580	401684	386283	15401	415736	399557	16179
KNR	554298	202229	352069	2523003	882017	1640986	1181446	425682	755764	1341557	456335	885222
KSD	273410	169240	104170	1307375	798328	509047	628613	387716	240897	678762	410612	268150
KERALA	7853754	4149641	3704113	33406061	17471135	15934926	16027412	8408054	7619358	17378649	9063081	8315568

Source: Census 2011

Table 2.2 2 District-wise Rural and Urban SC/ST Population Distribution (2011 Census)

District	Total Population			SC Population			ST Population		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
TVM	3301427	1529831	1771596	372977	179917	193060	26759	20022	6737
KLM	2635375	1448217	1187158	328263	208474	119789	10761	7886	2875
PTA	1197412	1065799	131613	164465	151844	12621	8108	7663	445
ALP	2127789	979643	1148146	201211	111931	89280	6574	2961	3613
KTM	1974551	1409158	565393	153909	119360	34549	21972	19698	2274
IDK	1108974	1056929	52045	145486	143340	2146	55815	55243	572
EKM	3282388	1048025	2234363	268411	102403	166008	16559	8324	8235
TSR	3121200	1024794	2096406	324350	121839	202511	9430	5859	3571
PKD	2809934	2133124	676810	403833	322951	80882	48972	47023	1949
MLP	4112920	2295709	1817211	308266	192270	115996	22990	18247	4743
KKD	3086293	1013721	2072572	199191	75490	123701	15228	9555	5673
WYD	817420	785840	31580	32578	30378	2200	151443	148215	3228
KNR	2523003	882017	1640986	83350	23562	59788	41371	36302	5069
KSD	1307375	798328	509047	53283	34522	18761	48857	46094	2763
KERALA	33406061	17471135	15934926	3039573	1818281	1221292	484839	433092	51747

Source: Census 2011

Table 2.2 3. District-wise Comparison of Population, Decadal Growth, and Child Population: Census 2001 vs. 2011

District	Population			Density of Population		Child population		% of child population		Decadal change of %
	2001	2011	Decadal Growth rate	2001	2011	2001	2011	2001	2011	
ALP	21,09,160	2127789	0.9	1492	1504	226408	192046	11	9	-2
EKM	31,05,798	3282388	5.7	1012	1072	338924	304242	11	9	-2
IDK	11,29,221	1108974	-1.8	259	255	134177	105641	12	10	-2
KNR	24,08,956	2523003	4.7	812	852	279803	274318	12	11	-1
KSD	12,04,078	1307375	8.6	604	657	159002	155807	13	12	-1
KLM	25,85,208	2635375	1.9	1038	1061	292599	254260	11	10	-1
KTM	19,53,646	1974551	1.1	885	895	212622	174486	11	9	-2
KKD	28,79,131	3086293	7.2	1228	1316	347146	335645	12	11	-1
MLP	36,25,471	4112920	13.4	1021	1157	551525	574041	15	14	-1
PKD	26,17,482	2809934	7.4	584	627	318884	302297	12	11	-1
PTA	12,34,016	1197412	-3	468	452	127024	96837	10	8	-2
TVM	32,34,356	3301427	2.1	1476	1508	368515	307061	11	9	-2
TSR	29,74,232	3121200	4.9	981	1031	332459	303950	11	10	-1
WYD	7,80,619	817420	4.7	366	384	104058	92324	13	11	-2
Kerala	31841374	33406061	4.9	819	860	3793146	3472955	12	10	-2

Source: Census 2011

Table 2.2 4 Proportion of 60+ Population_Census 2001 Vs 2011

District	2001 Census			2011 Census		
	All ages	60+	% 60+	Total Population	60+ Population	% 60+
TVM	3234356	337184	10	3301427	429431	13
KLM	2585208	281616	11	2635375	350012	13
PTA	1234016	180018	15	1197412	213383	18
ALP	2109160	271910	13	2127789	322246	15
KTM	1953646	251835	13	1974551	312089	16
IDK	1129221	102560	9	1108974	128559	12
EKM	3105798	352743	11	3282388	450794	14

TSR	2974232	346943	12	3121200	428595	14
PKD	2617482	265758	10	2809934	333511	12
MLP	3625471	263551	7	4112920	341779	8
KKD	2879131	277870	10	3086293	360880	12
WYD	780619	58097	7	817420	78062	10
KNR	2408956	246752	10	2523003	316238	13
KSD	1204078	98838	8	1307375	127814	10
State	31841374	3335675	10	33406061	4193393	13

2.3 Projected Population

This section provides an analysis of the population estimates from 2011 to 2036, highlighting expected changes in total population size, age distribution, and other key demographic factors.

Table 2.3.1 Projected Total Population (000') by Sex as on 1st March - 2011 - 2036

Year	Total Population			Total Urban Population			Total Rural Population		
	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female
2011	33406	16027	17379	15935	7621	8314	17471	8406	9065
2012	33641	16141	17500	16849	8058	8791	16792	8083	8709
2013	33875	16254	17621	17774	8500	9274	16101	7754	8347
2014	34109	16368	17742	18709	8947	9762	15400	7421	7980
2015	34344	16481	17863	19653	9399	10254	14691	7082	7609
2016	34578	16594	17984	20602	9853	10749	13976	6741	7235
2017	34761	16684	18077	21524	10294	11230	13237	6390	6847
2018	34943	16774	18169	22447	10735	11712	12496	6039	6457
2019	35125	16863	18262	23369	11176	12193	11756	5687	6069
2020	35307	16953	18354	24287	11615	12672	11020	5338	5682
2021	35489	17043	18447	25200	12052	13148	10289	4991	5299
2022	35633	17113	18520	26079	12472	13607	9554	4641	4913
2023	35776	17184	18593	26947	12887	14060	8829	4297	4533
2024	35920	17254	18666	27802	13296	14506	8118	3958	4160
2025	36063	17324	18739	28642	13698	14944	7421	3626	3795
2026	36207	17395	18812	29465	14091	15374	6742	3304	3438
2027	36304	17444	18861	30232	14458	15774	6072	2986	3087
2028	36402	17492	18910	30976	14814	16162	5426	2678	2748
2029	36499	17541	18959	31695	15158	16537	4804	2383	2422
2030	36597	17589	19008	32388	15489	16899	4209	2100	2109
2031	36695	17638	19057	33051	15806	17245	3644	1832	1812
2032	36746	17665	19080	33640	16088	17552	3106	1577	1528
2033	36796	17693	19104	34195	16353	17842	2601	1340	1262
2034	36847	17720	19127	34713	16601	18112	2134	1119	1015
2035	36898	17747	19150	35192	16830	18362	1706	917	788
2036	36949	17775	19174	35630	17040	18590	1319	735	584

Source: REPORT OF THE TECHNICAL GROUP ON POPULATION PROIECTIONS

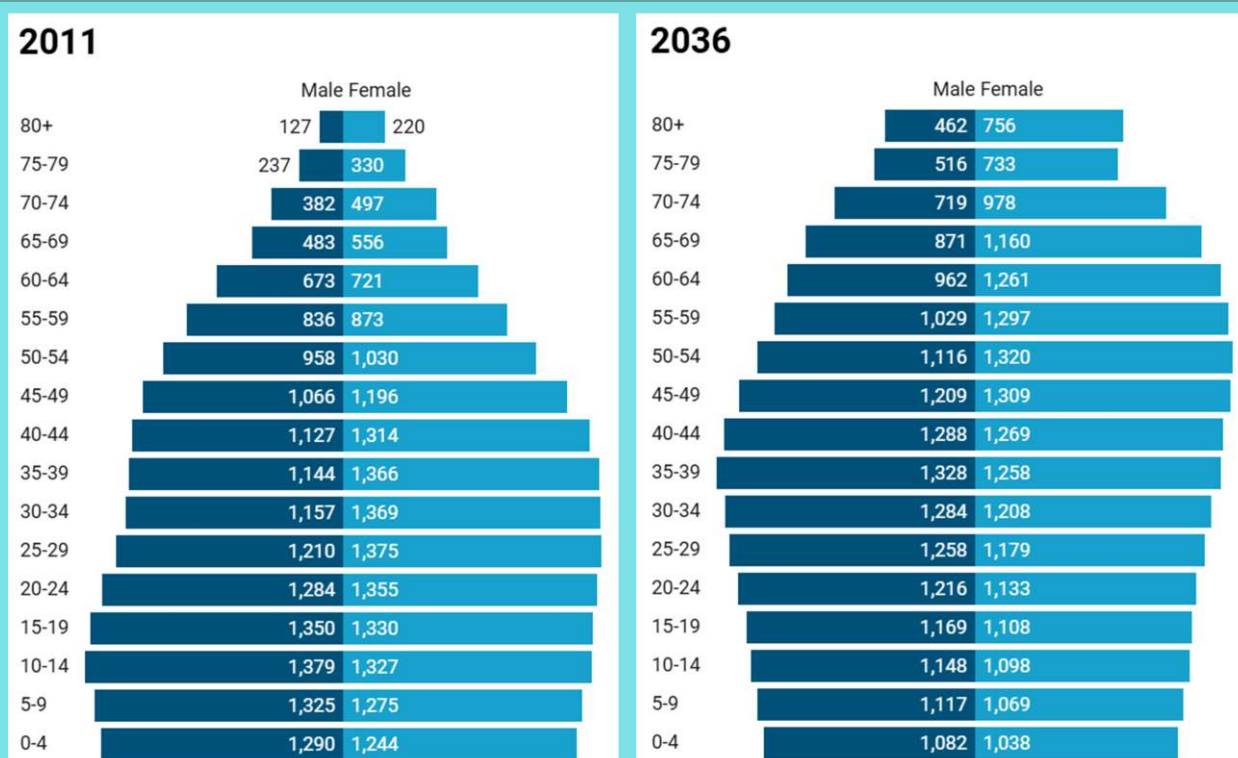
Table 2.3.2 Projected Population By Age and Sex As on 01st March : 2011-2036 ('000)

Age group	2011			2021			2026			2036		
	Person	Male	Female	Person	Male	Female	Person	Male	Female	Person	Male	Female
0-1	508	259	250	464	237	227	454	232	222	425	217	208
0-4	2534	1290	1244	2315	1181	1134	2263	1155	1108	2121	1082	1038
5-9	2599	1325	1275	2415	1234	1182	2305	1178	1128	2186	1117	1069
10-14	2706	1379	1327	2517	1283	1233	2408	1230	1177	2246	1148	1098
15-19	2680	1350	1330	2571	1316	1255	2496	1278	1218	2277	1169	1108
20-24	2639	1284	1355	2647	1363	1284	2533	1306	1227	2349	1216	1133
25-29	2585	1210	1375	2621	1329	1292	2625	1352	1273	2436	1258	1179
30-34	2526	1157	1369	2598	1261	1337	2601	1317	1284	2493	1284	1208
35-39	2509	1144	1366	2545	1186	1358	2577	1248	1328	2586	1328	1258

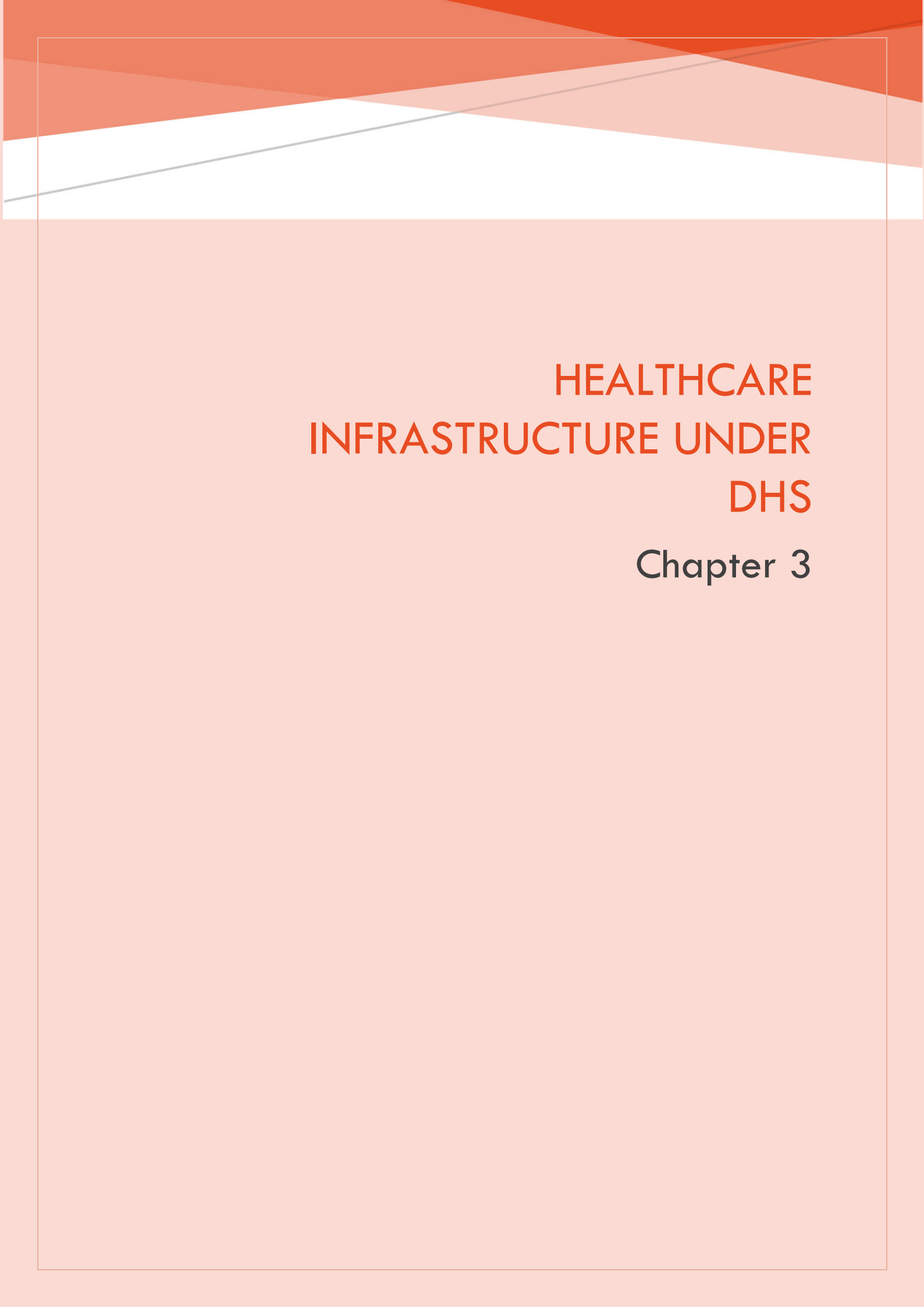
40-44	2441	1127	1314	2479	1127	1352	2519	1170	1350	2557	1288	1269
45-49	2262	1066	1196	2445	1102	1343	2444	1104	1339	2518	1209	1309
50-54	1989	958	1030	2349	1067	1282	2393	1068	1325	2436	1116	1320
55-59	1709	836	873	2136	983	1153	2276	1020	1256	2326	1029	1297
60-64	1395	673	721	1823	849	974	2035	919	1116	2224	962	1261
65-69	1039	483	556	1491	696	795	1689	767	922	2031	871	1160
70-74	879	382	497	1122	505	617	1317	591	726	1697	719	978
75-79	566	237	330	729	305	424	914	389	525	1249	516	733
80+	347	127	220	687	256	432	813	304	509	1218	462	756
Total	33406	16027	17379	35489	17043	18447	36207	17395	18812	36949	17775	19174

Source: REPORT OF THE TECHNICAL GROUP ON POPULATION PROIECTIONS

Graph 2.3.1 Age Pyramid of Kerala 2011 Vs 2036 (projected)



Source: REPORT OF THE TECHNICAL GROUP ON POPULATION PROIECTIONS



HEALTHCARE INFRASTRUCTURE UNDER DHS

Chapter 3

Key Insights at a Glance



District Level Hospitals

DH – 18
GH – 18
W&C – 10*

*W&C Vaikom is temporarily non-functional

46



Ambulance - 479

ALS – 27
BLS – 170
Patient
Transport – 279

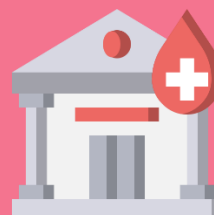
479



Sub District Level Hospitals

THQH – 48
TH – 40

88



Blood Bank – 189

Public – 41
Private -148
Blood Storage
Unit - 132

189



CHCs

Total CHC – 226
Converted to
FHC - 41

226



Delivery Points – 104

DH – 16, GH-15,
W&C – 10, GTSH – 1,
THQH – 37,
TH – 15, CHC -1,
Under DME - 9

104



PHCs

Total PHC – 849
Converted to
FHC - 844

849



Sanctioned Beds

Total Bed – 38525
Bed per
Population
Ratio – 1 : 867

38525



JAK

Total Janakeeya Aarogya Kendram
- 5415

5415



ICU Beds – 1104

Ventilator
(invasive) – 619
Ventilator
(non invasive) – 412)

1104



Other Institutions

School of Nursing – 15
Training Centers – 9
PH Lab – 10
DVC Units – 14
Offset Press - 1



SNCU – 23

NBSU – 63

NBCC - 100

Chapter 3

Healthcare Infrastructure under DHS

3.1 Introduction

This chapter presents an overview of the existing medical infrastructure under DHS, highlighting the availability of modern medical institutions, their sanctioned bed strength, and the expansion of healthcare services under various initiatives.

A key focus of infrastructure strengthening has been the **Aardram Mission**, which aims to transform public healthcare facilities into patient-friendly institutions with improved amenities and service delivery. The number of facilities upgraded under this initiative is detailed in this chapter. Additionally, the chapter provides insights into the availability of **delivery points**, **Newborn Stabilization Units (NBSUs)**, **Special Newborn Care Units (SNCUs)**, and **Newborn Care Corners (NBCCs)**—all critical components in improving maternal and neonatal health outcomes.

Further, ensuring access to essential blood transfusion services is crucial for emergency and routine medical care. The number of **Blood Banks** and **Blood Storage Units** available across the state is documented here. To support emergency and referral services, the chapter also includes data on the **availability of ambulances and other medical transport vehicles**.

The data presented in this chapter is compiled from various official sources, including **different sections within DHS, KSACS and NHM**.

TABLE 3.1 NUMBER OF MODERN MEDICINE INSTITUTIONS UNDER DHS 2023-24 AS ON 31.03.2024

Name of District	GH	DH	W&C	TH	THQH	CHC		PHC					DTBC	Specialty					Others			ALL	JAK	GRAND TOTAL
						CHC	CHC Converted to FHC	PHC Converted to FHC	24x7 PHC Converted to FHC	24X7 PHC	PHC	LEP		MHC	TBC	W&C (Specialty)	Specialty (Others)	Mobile Unit	General Dispensary	Health Clinic				
TVM	2	2	1	5	3	20	2	66	4	0	0	1	0	1	1	1	1	1	5	2	118	487	605	
KLM	0	1	1	4	5	12	4	52	6	0	0	1	0	0	1	0	0	0	1	0	88	421	509	
PTA	2	1	0	0	4	7	5	37	5	0	1	1	0	0	0	0	0	0	1	0	64	261	325	
ALP	1	2	1	2	4	15	1	44	17	0	0	1	1	0	1	0	0	0	0	0	90	366	456	
KTM	4	0	1*	0	3	13	7	43	12	0	0	1	0	0	0	0	1	0	0	0	85	333	418	
IDK	0	2	0	1	3	8	5	31	9	0	1	1	0	0	0	0	0	2	0	0	63	309	372	
EKM	2	1	1	6	5	21	2	42	33	0	0	1	0	0	0	0	0	0	1	0	115	410	525	
TSR	2	1	0	3	3	22	2	68	11	0	0	1	1	1	0	0	0	0	3	0	118	471	589	
PKD	0	1	1	1	6	16	3	64	12	0	0	1	0	0	0	0	0	2	6	1	114	504	618	
MLP	1	3	1	3	4	16	5	65	18	1	0	1	0	0	1	0	0	1	5	0	125	589	714	
KKD	1	1	1	6	1	15	1	58	5	1	0	1	1	1	0	0	0	0	0	0	93	401	494	
WYD	1	1	0	0	2	6	2	14	9	0	0	1	0	0	0	0	1	8	0	0	45	200	245	
KNR	1	1	1	8	1	8	2	74	6	0	0	1	0	0	0	0	2	4	2	0	111	416	527	
KSD	1	1	1	1	4	6	0	30	9	1	0	1	0	0	0	0	1	1	2	0	59	247	306	
Total	18	18	10*	40	48	185	41	688	156	3	2	14	3	3	4	1	6	19	26	3	128	541	670	

SOURCE : HIC DIVISION, DHS

*W&C Vaikom is temporarily non-functional

TABLE 3.2 NUMBER OF INSTITUTIONS SELECTED OR CONVERTED AS FAMILY HEALTH CENTRES 2023-24 As on 31.03.2024

DISTRICT	CHCs CONVERTED TO FHC	24 X 7 PHCs CONVERTED AS FHC	PHCs CONVERTED	TOTAL
			AS FHC	
TVM	2	4	66	72
KLM	4	6	52	62
PTA	5	5	37	47
ALP	1	17	44	62
KTM	7	12	43	62
IDK	5	9	31	45
EKM	2	33	42	77
TSR	2	11	68	81
PKD	3	12	64	79
MLP	5	18	65	88
KKD	1	5	58	64
WYD	2	9	14	25
KNR	2	6	74	82
KSD	0	9	30	39
KERALA	41	156	688	885

SOURCE : HIC DIVISION, DHS

TABLE 3.3 NUMBER OF OTHER INSTITUTIONS UNDER DHS 2023-24

District	School of Nursing	Training Centres	Government Public Lab	DVC Unit	OTHERS(DHS,DMOH, Offset Press)	Total
TVM	1	4	1	1	3	10
KLM	2	0	1	1	1	5
PTA	1	0	1	1	1	4
ALP	1	0	1	1	1	4
KTM	1	1	0	1	1	4
IDK	1	0	0	1	1	3
EKM	1	0	1	1	1	4
TSR	1	0	0	1	1	3
PKD	1	1	0	1	1	4
MLP	1	0	1	1	1	4
KKD	1	2	1	1	1	6
WYD	1	0	1	1	1	4
KNR	1	0	1	1	1	4
KSD	1	1	1	1	1	5
KERALA	15	9	10	14	16	64

SOURCE : HIC DIVISION, DHS

TABLE 3.4 BED STRENGTH IN THE INSTITUTIONS UNDER DHS BY TYPE OF INSTITUTION 2023-24

District	Number of institutions	Number of Beds (Sanctioned)
TVM	118	4718
KLM	88	2320
PTA	64	1957
ALP	90	3424
KTM	85	2823
IDK	63	1132
EKM	115	4518
TSR	118	3477
PKD	114	2773

MLP	125	2604
KKD	93	2825
WYD	45	1367
KNR	111	2948
KSD	59	1639
KERALA	1288	38525
SOURCE : HIC DIVISION, DHS		

TABLE 3.5 Sanctioned bed in DH, GH, W&C, THQH & TH

DISTRICT	DH		GH		W&C		THQH		TH	
	No	Bed	No	Bed	No	Bed	No	Bed	No	Bed
TVM	2	562	2	1205	1	428	3	420	5	326
KLM	1	537	0	0	1	273	5	703	4	269
PTA	1	234	2	714	0	0	4	431	0	0
ALP	2	487	1	400	1	308	4	632	2	42
KTM	0	0	4	1064	1*	0	3	551	0	0
IDK	2	274	0	0	0	0	3	260	1	30
EKM	1	217	2	1049	1	132	5	930	6	523
TSR	1	117	2	456	0	0	3	460	3	231
PKD	1	544	0	0	1	250	6	692	1	34
MLP	3	483	1	501	1	135	4	422	3	99
KKD	1	210	1	550	1	295	1	159	6	418
WYD	1	500	1	250	0	0	2	186	0	0
KNR	1	616	1	541	1	100	1	171	8	573
KSD	1	400	1	212	1	0	4	137	1	42
KERALA	18	5181	18	6942	10*	1921	48	6154	40	2587

SOURCE : HIC DIVISION, DHS

*W&C Vaikom is temporarily non-functional

TABLE 3.6 BED POPULATION RATIO IN THE INSTITUTIONS UNDER DHS 2023-24

DISTRICT	Population (Census 2011)	No. of Beds	Bed : Population
TVM	3301427	4718	1 : 700
KLM	2635375	2320	1 : 1136
PTA	1197412	1957	1 : 612
ALP	2127789	3424	1 : 621
KTM	1974551	2823	1 : 699
IDK	1108974	1132	1 : 980
EKM	3282388	4518	1 : 727
TSR	3121200	3477	1 : 898
PKD	2809934	2773	1 : 1013
MLP	4112920	2604	1 : 1579
KKD	3086293	2825	1 : 1092
WYD	817420	1367	1 : 598
KNR	2523003	2948	1 : 856
KSD	1307375	1639	1 : 798
KERALA	33406061	38525	1 : 867

SOURCE : HIC DIVISION, DHS

TABLE 3.7 DISTRICT WISE NUMBER OF ICU BEDS AND VENTILATORS IN THE INSTITUTIONS UNDER DHS 2023-24

DISTRICT	No. of ICU beds	No. of Ventilators	
		Invasive	Non Invasive
TVM	99	24	55
KLM	139	74	4
PTA	131	78	53
ALP	66	29	23
KTM	36	11	46
IDK	55	18	26
EKM	135	94	65
TSR	41	22	26
PKD	110	51	30
MLP	38	47	15
KKD	120	31	14
WYD	52	55	25
KNR	69	62	12
KSD	13	23	18
KERALA	1104	619	412

SOURCE : Line list collected MSP section- DHS

TABLE 3.8 DISTRICT WISE OF BLOOD BANKS & BLOOD STORAGE UNIT IN KERALA 2023-24

District	Number of Blood Banks			BCSU	BB	
						TOTAL
	Public	Private	Total			
TVM	7	14	21	17	4	21
KLM	4	12	16	12	4	16
PTA	2	13	15	10	5	15
ALP	3	5	8	4	4	8
KTM	2	14	16	9	7	16
IDK	1	9	10	6	4	10
EKM	3	22	25	20	5	25
TSR	2	14	16	5	11	16
PKD	2	9	11	10	1	11
MLP	3	8	11	10	1	11
KKD	4	16	20	15	5	20
WYD	2	2	4	3	1	4
KNR	4	10	14	9	5	14
KSD	2	0	2	2	0	2
KERALA	41	148	189	132	57	189

Source: KSACS

TABLE 3.9 DISTRICT WISE NUMBER OF DELIVERY POINTS IN KERALA 2023-24

District	DH	GH	W&C	GTSH	THQH	TH	CHC	Under DME	Total
TVM	2	1	2	0	2	4	0	1	12
KLM	0	0	1	0	4	3	0	1	9
PTA	1	2	0	0	2	0	0	0	5
ALP	2	0	1	0	3	1	0	1	8
KTM	0	4	0	0	1	0	0	1	6
IDK	2	0	0	0	3	0	0	0	5
EKM	1	2	1	0	5	1	0	1	11
TSR	1	2	0	0	3	1	0	1	8
PKD	0	0	1	1	5	0	0	0	7
MLP	3	0	1	0	2	1	0	1	8
KKD	1	1	1	0	1	3	0	1	8

WYD	1	1	0	0	2	0	1	0	5
KNR	1	1	1	0	4	1	0	1	9
KSD	1	1	1	0	0	0	0	0	3
KERALA	16	15	10	1	37	15	1	9	104

Source: HIC Division, DHS

TABLE 3.10 DISTRICT WISE NUMBER OF DIALYSIS UNITS UNDER DHS 2023-24							
DISTRICT	NO. OF DIALYSIS UNITS						
	DH	GH	THQH	TH	CHC	OTHERS	Total
TVM	2	2	3	3	0	0	10
KLM	1	0	4	3	0	0	8
PTA	1	2	2	0	0	0	5
ALP	1	1	3	1	0	0	6
KTM	0	2	1	0	1(FHC)	1	5
IDK	2	0	1	0	0	0	3
EKM	1	2	4	1	0	1	9
TSR	1	1	3	2	2	0	9
PKD	1	1	4	0	1	0	7
MLP	3	1	2	0	0	4 (LSGD)	10
KKD	1	1	1	5	0	0	8
WYD	1	0	2	0	1	1	5
KNR	1	1	1	5	0	3	11
KSD	1	1	2	1	2	0	7
KERALA	17	15	33	21	7	10	103

Source: DHS (MSP Section)

Table 3. 11 DISTRICT WISE NUMBER OF INSTITUTIONS HAVING FACILITIES FOR EYE DONATION 2023 -24 (DHS)			
DISTRICT	Number of institutions having facilities for eye Donation		
	Public	Private	Total
TVM	1	1	2
KLM	1	0	1
PTA	1	1	2
ALP	1	0	1
KTM	1	0	1
IDK	0	0	0
EKM	0	3	3
TSR	1	1	2
PKD	0	1	1
MLP	0	1	1
KKD	1	1	2
WND	1	0	1
KNR	2	1	3
KSD	0	0	0
KERALA	10	10	20

Source: NPCB

TABLE 3.12 DISTRICT WISE NUMBER OF NEW BORN STABILIZATION UNTTS (NBSU) 2023 -24								
DISTRICT	NUMBER OF NBSU							
	DH	GH	THQH	W&C	TH	CHC	MCH	TOTAL
TVM	2	1	2	1	3			9
KLM			3					3
PTA	1	1	2					4
ALP	2		2					4
KTM		3	1					4

IDK	1		3					4
EKM	1	1	4	1				7
TSR			3		1			4
PKD			4					4
MLP	3		2		1			6
KKD	1				4			5
WND		1	2			1		4
KNR			1		3			4
KSD		1						1
Kerala	11	8	29	2	12	1		63

Source: Child Health, NHM

TABLE 3.13 DISTRICT WISE NUMBER OF SPECIAL NEW BORN CARE UNITS (SNCU) 2023 -24

DISTRICT	NO. OF SNCU							TOTAL
	DH	GH	THQH	W & C	TH	CHC	Under DME	
TVM				1			1	2
KLM				1				1
PTA		1						1
ALP				1			1	2
KTM		1					1	2
IDK								
EKM		1					1	2
TSR		1					1	2
PKD				1	1			2
MLP							1	1
KKD				1			1	2
WND	1							1
KNR	1	1		1				3
KSD	1	1						2
KERALA	3	6	0	6	1	0	7	23

Source: Child Health, NHM

TABLE 3.14 DISTRICT WISE NUMBER OF NEW BORN CARE CORNER (NBCC)

DISTRICT	NUMBER OF NBCC							
	DH	GH	THQH	W&C	TH	UNDER DME	CHC	TOTAL
TVM	2	1	1	1	5	1	0	11
KLM	0	0	4	1	3	1	0	9
PTA	1	2	2	0	0	0	0	5
ALP	2	0	3	1	1	1	0	8
KTM	0	4	1	0	0	1	0	6
IDK	2	0	3	0	0	0	0	5
EKM	1	2	4	1	0	1	0	9
TSR	1	2	3	0	1	1	0	8
PKD	0	0	6	1	0	0	0	7
MLP	3	1	2	1	1		0	8
KKD	1	1	1	1	3	1	0	8
WND	1	1	2	0	0	0	1	5
KNR	1	1	2	1	2	1	0	8
KSD	1	1	0	1	0	0	0	3
KERALA	16	16	34	9	16	8	1	100

Source: Child Health, NHM

Table 3.15 AMBULANCE (ON ROAD) STATUS WISE ABSTRACT ON 31.03.2024

District	Advance Life Support	Basic Life Support	Patient Transport	Total
TVM	6	48	3	57

KLM	3	35	0	38
PTA	1	16	35	52
ALP	3	7	23	33
KTM	1	1	26	28
IDK	2	11	10	23
EKM	3	8	30	41
TSR	1	1	28	30
PKD	2	29	1	32
MLP	1	5	15	21
KKD	1	2	33	36
WND	1	1	33	35
KNR	2	2	32	36
KSD	0	4	10	14
KERALA	27	170	279	476

Source: HT Section, DHS

Table 3.16 VEHICLE TYPE WISE VEHICLES DETAIL As On : 31-03-2023

District	Ambulance	Car	Jeep	Two Wheeler	Bus	Van	Mini Van	Mini Bus	Auto Rickshaw	Spacio	GOODS CARRIER				Total
											Insulated Van	Delivery Van	Lorry	Truck	
TVM	73	19	13	0	1	5	8	15	0	10	1	1	1	0	147
KLM	40	3	0	0	2	2	2	3	0	7	1	0	0	0	60
PTA	63	2	0	2	0	0	0	1	0	2	1	1	0	0	72
ALP	21	1	7	2	0	0	1	4	0	4	0	1	0	1	42
KTM	28	2	2	5	0	4	0	1	0	1	1	1	0	0	45
IDK	26	1	10	4	0	0	1	0	0	1	1	0	0	0	44
EKM	55	2	11	5	0	8	19	13	0	13	2	0	0	0	128
TSR	30	1	9	5	0	0	1	0	1	4	1	1	0	0	53
PKD	32	1	4	6	2	6	0	0	0	9	0	0	0	0	60
MLP	21	2	1	7	1	1	0	0	0	4	0	3	0	0	40
KKD	42	2	3	2	1	0	10	0	1	6	1	0	0	0	68
WND	35	2	18	2	0	0	3	0	0	1	2	0	0	0	63
KNR	51	4	22	10	0	8	0	12	0	17	3	0	1	1	129
KSD	14	1	8	2	0	2	0	1	0	4	1	0	0	0	33
KERALA	531	43	108	52	7	36	45	50	2	83	15	8	2	2	984

Source: HT Section, DHS



REPRODUCTIVE, MATERNAL AND CHILD HEALTH SERVICES

Chapter 4

Key Insights at a Glance



Pregnant Women Registration: The number of pregnant women in Kerala saw a sharp decline post-COVID, dropping from 5.28 lakh in 2019-20 to 4.27 lakh in 2020-21, and further to 4.13 lakh in 2023-24.



Maternal Deaths in Kerala (2023-24): A total of 119 maternal deaths were reported, including 13 maternal suicides. Of these, 44 occurred during pregnancy, 5 on the day of delivery, and 70 in the postpartum period.



Age Distribution of Pregnant Women in Kerala (2023-24): Out of 4.14 lakh registered pregnancies, 15 were below 15 years, 9,298 were aged 15-19 years, 256 were above 49 years, and the rest fell within the 19-49 years age group.



Decline in Births Post-COVID: Births in Kerala have declined over the years, from 4.91 lakh in 2014-15 (2.51 lakh male, 2.40 lakh female) to 3.74 lakh in 2023-24 (1.90 lakh male, 1.84 lakh female).



Anaemia Among Pregnant Women (2023-24): 27% of pregnant women were identified as anaemic through VIVA testing.



Rising Preterm Births: The proportion of preterm births in Kerala has increased significantly, from 1.4% in 2017-18 to 7.21% in 2023-24.



Rising Abortion Trend (Last 10 Years): The abortion rate has been increasing, with a steeper rise in induced abortions compared to spontaneous abortions.



Increase in Underweight Newborns: The proportion of newborns weighing less than 2.5 kg has risen slightly from 11% in 2014-15 to 14% in 2023-24.



Decline in Family Planning Services: Utilization of family planning services, especially permanent methods, has decreased over the last 10 years, with a 64% dip in NSV, 38% dip in laparoscopic sterilization, and 47% dip in PPS.



Child Mortality in Kerala (2023-24): A total of 2,413 child deaths were reported, including 1,273 neonatal deaths and 2,032 infant deaths. Additionally, 1,648 stillbirths were recorded during this period.



Place of Delivery in Kerala (2023-24): Among 3,69,942 total deliveries, 70% took place in private facilities (2,59,874), 30% in public facilities (1,09,542), and 524 were home deliveries.



Infant Mortality Timing (2023-24): Among the 2,032 infant deaths reported, 18% occurred within 24 hours of birth, 43% within the first week, 63% within 28 days (neonatal period), and 37% after 28 days.



Rising C-Section Rates in Kerala: Kerala continues to maintain a high C-section rate in both public and private sectors, showing a slight increasing trend over the years. The rate has risen from 41% in 2014-15 (40% public, 41% private) to 44% in 2023-24 (44% in both public and private)



The statewide full immunization coverage has shown a marginal decline from 95% in 2021-22 to 94% in 2023-24. While districts like Kollam, Pathanamthitta, Alappuzha, Kottayam, and Idukki have consistently maintained high coverage (99%), districts such as Malappuram (86%) and Kozhikode (92%) have reported a declining trend

Chapter 4

Reproductive, Maternal and Child Health Services

4.1 Introduction

This chapter gives an overview of Reproductive, Maternal, and Child Health services, covering key areas like antenatal care, family planning, deliveries, maternal deaths, newborn health, and child immunization. It also includes special programs like Mission Indradhanush and Pulse Polio campaigns.

The data in this section looks at trends over the past ten years to show progress and challenges. It also includes age-wise details where needed, and a breakdown of services by public and private healthcare providers. For the year 2023-24, district-wise data is provided to highlight regional differences.

The data presented in this chapter is primarily sourced from the HMIS and the RCH portal, supplemented by monthly reports from districts. This information supports policymakers and healthcare professionals in making data-driven decisions to enhance maternal and child health outcomes across the state.

4.2 Antenatal Care

Antenatal care (ANC) is a vital aspect of maternal health, focusing on the care provided to pregnant women to ensure a healthy pregnancy and reduce risks during childbirth. In this section, we present key indicators related to antenatal care, offering a comprehensive overview of the status and trends over the last decade. The data includes the total count of pregnant women, early antenatal registration, tetanus toxoid (TD) vaccination, and the prevalence of anaemia among pregnant women.

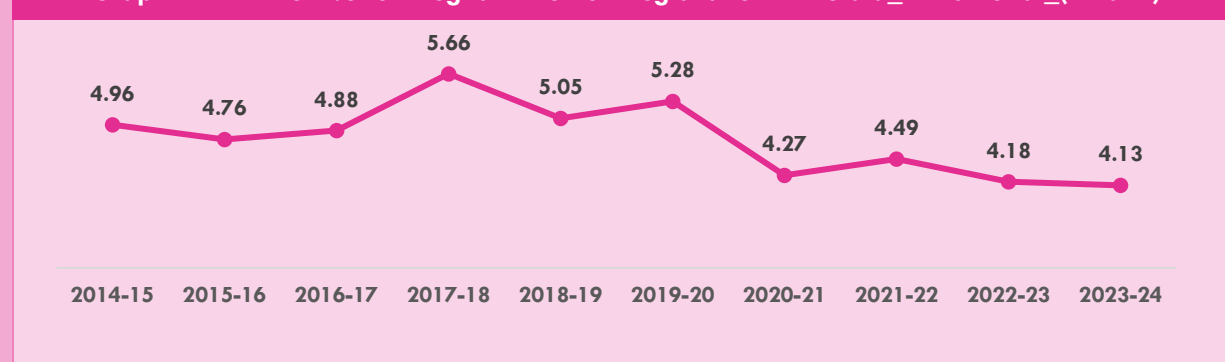
For the past ten years, data trends on ANC services have been compiled to track the progress and challenges in maternal health care. These trends provide valuable insights into the effectiveness of ANC programs and their reach among pregnant women. The figures presented also include a breakdown of the current year's status at the district level, offering a granular view of how ANC services are being delivered across the state.

The data for these indicators is sourced from the Health Management Information System (HMIS) portal, which includes information from both the public and private sectors. Private hospitals and medical colleges that provide ANC services are also included in the HMIS reporting, ensuring that a comprehensive picture of ANC services across Kerala is presented.

This section aims to highlight the current status and historical trends of antenatal care, with a focus on the coverage, quality, and accessibility of services throughout the state.

4.2.1 Pregnant Women Registration

Graph 4.2.1.1 Number of Pregnant Women Registration in Kerala_HMIS Portal_(in lakh)



4.2.2 Age-Wise Distribution of Pregnant Women Registration

Table 4.2.2.1 District-Wise Pregnant Women Registration Data for Kerala (2023-24) - HMIS					
District	Number of NEW Pregnant Women registered for ANC				
	Total	age <15 years	Age 15-19 years	Age >19 to 49 years	Age >49 years
TVM	38261	5	682	37570	4
KLM	24217	0	497	23711	9
PTA	12024	0	48	11916	60
ALP	15643	0	130	15509	4
KTM	15772	0	114	15653	5
IDK	10908	0	123	10780	5
EKM	29060	1	287	28715	57
TSR	32542	2	717	31772	51
PKD	35416	1	526	34889	0
MLP	90693	1	3585	87107	0
KKD	45340	0	1462	43846	32
WYD	11652	4	393	11255	0
KNR	30453	1	423	30006	23
KSD	21977	0	311	21660	6
State	413958	15	9298	404389	256

Source-HMIS Portal

4.2.3 Early initiation of Antenatal care

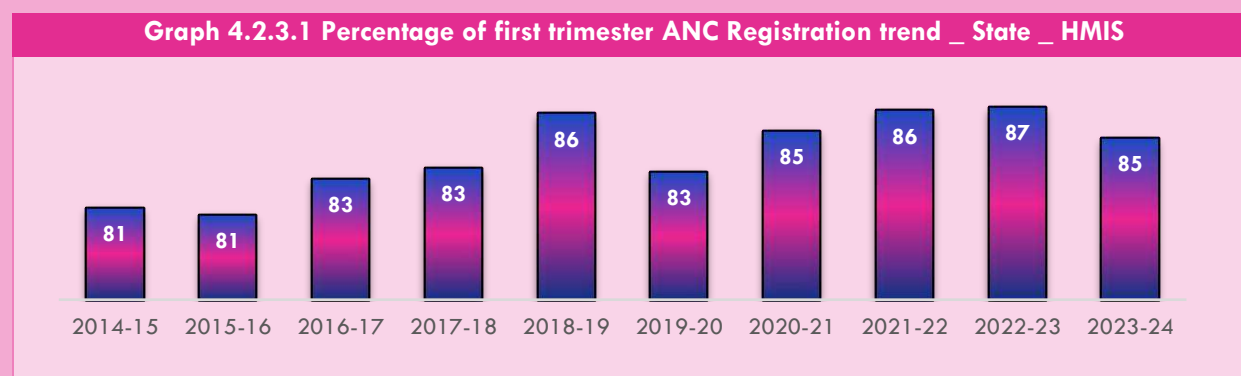


Table 4.2.3.1 Early Registration of (Within 12 Weeks) Pregnant Women 2023-24_District Wise			
District	NEW Pregnant Women Registration	Registered within 1st trimester	%
TVM	38261	30707	80
KLM	24217	23063	95
PTA	12024	7950	66
ALP	15643	13860	89
KTM	15772	12847	81
IDK	10908	9405	86
EKM	29060	23977	83
TSR	32542	27870	86
PKD	35416	32258	91
MLP	90693	77728	86
KKD	45340	40429	89
WYD	11652	10687	92
KNR	30453	25258	83
KSD	21977	17242	78
State	413958	353281	85

Source: HMIS Portal

4.2.4 Td vaccination

Table 4.2.4.1 Td Immunization Status of Pregnant Women – District-wise (HMIS) 2023-24				
District	No of PW registered for ANC	No of PW given Td1	No of PW given Td2	No of PW given Td Booster
TVM	38261	28635	24102	3063
KLM	24217	27058	23428	1191
PTA	12024	9042	8190	1240
ALP	15643	14034	12479	669
KTM	15772	12702	11493	1097
IDK	10908	8422	7168	860
EKM	29060	28068	23735	4211
TSR	32542	25094	23970	1733
PKD	35416	35170	26571	1913
MLP	90693	77368	71441	7171
KKD	45340	30498	27298	4173
WYD	11652	8383	7824	1101
KNR	30453	20070	19592	1948
KSD	21977	16224	13782	1378
State	413958	340768	301073	31748

Source: HMIS Portal

4.2.5 Prevalence of Anaemia in Pregnancy

As part of the **VIVA (Vilarchayil Ninnun Valarchayilekku) Campaign** initiated by the State Government, extensive hemoglobin testing was carried out across the state to assess the prevalence of anaemia among pregnant women. The findings from this initiative offer crucial insights into the burden of anaemia and serve as a foundation for targeted interventions. The percentage of pregnant women identified as anaemic through VIVA testing is presented below.

Table 4.2.5.1 Percentage of pregnant women found anaemic through VIVA testing			
District	No of PW tested	No of PW Anaemic	% of PW found Anaemic
TVM	15250	3984	26
KLM	9722	1385	14
PTA	2355	451	19
ALP	3674	1032	28
KTM	20034	5353	27
IDK	1783	282	16
EKM	12406	2066	17
TSR	16088	4793	30
PKD	5999	2673	45
MLP	26679	7579	28
KKD	10974	2541	23
WYD	8020	3374	42
KNR	8764	2874	33
KGD	10017	3157	32
State	151765	41544	27

Source: VIVA

4.3 Abortion

Abortion, both spontaneous and induced, is a key reproductive health indicator that reflects access to safe abortion services and maternal health outcomes. This section presents data on abortion trends at the state level over the past years, along with a district-wise analysis for the year 2023-24. The data is categorized based on the type of abortion - spontaneous and induced - and also includes a breakdown of cases reported from public and private healthcare facilities.

In the Health Management Information System (HMIS), spontaneous abortions are reported at the sub-center (JAK) level if the woman does not seek medical care at a higher facility. However, if she receives medical attention at a higher-level facility, the case is reported from that facility. Induced abortions are recorded at the facility where the procedure is conducted, whether in public or private health institutions.

4.3.1 Abortion trend

Table 4.3.1.1 Trends in Spontaneous and Induced Abortions – HMIS (2014-15 to 2023-24)

Year	PW Registration	Spontaneous Abortion			Induced Abortion			Abortion (All)		
		All	Public	Private	All	Public	Private	All	Public	Private
2014-15	495640	14732	6031	8701	2293	2293	0	17025	8324	8701
2015-16	476451	13962	5340	8622	2099	2099	0	16061	7439	8622
2016-17	487988	13739	4728	9011	2065	2065	0	15804	6793	9011
2017-18	565673	12175	5882	6293	9458	2811	6647	21633	8693	12940
2018-19	504654	13123	5108	8015	10510	2019	8491	23633	7127	16506
2019-20	527626	12502	5367	7135	10868	2255	8613	23370	7622	15748
2020-21	427278	11083	4313	6770	8525	1504	7021	19608	5817	13791
2021-22	448660	10961	4236	6725	10989	2494	8495	21950	6730	15220
2022-23	418152	11167	4378	6789	14519	3650	10869	25686	8028	17658
2023-24	413958	9858	3401	6457	20179	5354	14825	30037	8755	21282

Source: HMIS Portal

Graph 4.3.1.1 Abortion as a Percentage of Total Pregnancies Registered – Trend Analysis (2014-15 to 2023-24)

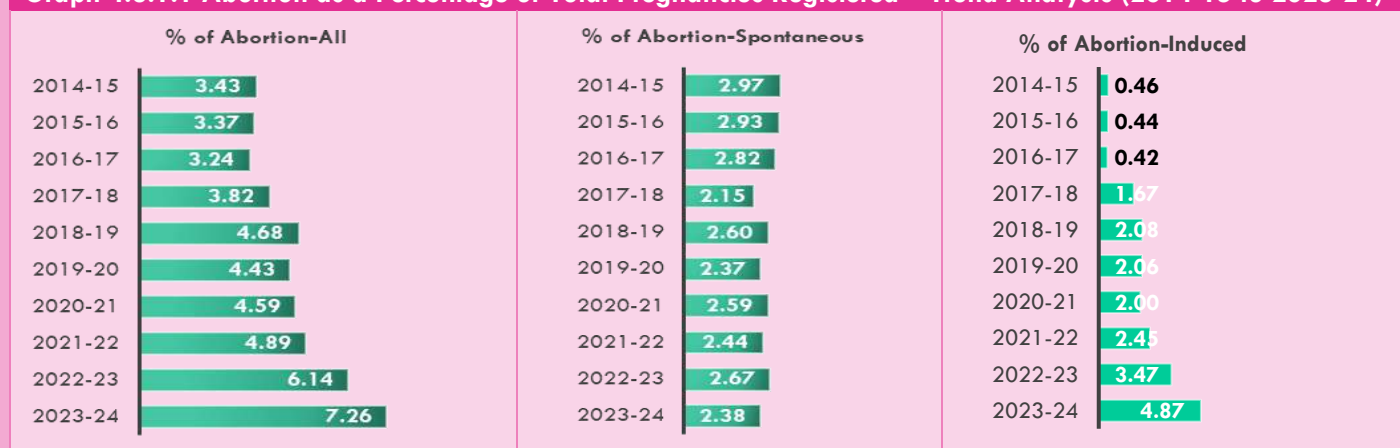


Table 4.3.1.2 Spontaneous & Induced Abortions in Public and Private Hospitals – District-Level (HMIS 2023-24)

District	Pregnant Women Registration	All				Public				Private			
		Abortion (spontaneous)	Surgical MTPs upto 12 weeks of pregnancy	MTP more than 12 weeks of pregnancy	MTPs completed through Medical methods of abortion	Abortion (spontaneous)	Surgical MTPs upto 12 weeks of pregnancy	MTP more than 12 weeks of pregnancy	MTPs completed through Medical methods of abortion	Abortion (spontaneous)	Surgical MTPs upto 12 weeks of pregnancy	MTP more than 12 weeks of pregnancy	MTPs completed through Medical methods of abortion
TVM	38261	1044	1434	510	1402	606	498	261	456	438	936	249	946
KLM	24217	608	899	125	530	273	282	20	135	335	617	105	395
PTA	12024	252	561	94	18	78	193	15	1	174	368	79	17
ALP	15643	335	287	84	668	171	34	51	167	164	253	33	501
KTM	15772	556	401	188	569	182	140	108	212	374	261	80	357
IDK	10908	512	245	15	75	209	230	10	65	303	15	5	10
EKM	29060	914	1232	426	983	267	217	52	225	647	1015	374	758
TSR	32542	1007	673	191	548	246	76	64	60	761	597	127	488
PKD	35416	486	724	285	673	187	197	93	129	299	527	192	544
MLP	90693	1708	745	131	1061	372	13	5	4	1336	732	126	1057
KKD	45340	794	409	287	949	361	136	165	765	433	273	122	184
WYD	11652	440	393	22	139	157	89	6	25	283	304	16	114

KNR	30453	602	685	190	497	183	75	39	22	419	610	151	475
KSD	21977	600	155	47	629	109	8	7	4	491	147	40	625
State	413958	9858	8843	2595	8741	3401	2188	896	2270	6457	6655	1699	6471

Source: HMIS Portal

4.4 Family Planning

Family planning plays a crucial role in reproductive health by enabling individuals and couples to plan and space pregnancies according to their needs. This section presents data on the utilization of both permanent and temporary methods of family planning over the past ten years at the state level, along with a district-wise analysis for the year 2023-24.

The data, sourced from the HMIS, covers both permanent methods (such as male and female sterilization) and temporary methods (such as intrauterine contraceptive devices (IUCDs), oral contraceptive pills and condoms). For sterilization and IUCD insertions, the report includes counts from both public and private healthcare facilities, ensuring a comprehensive overview of service utilization across different sectors.

Additionally, the use of family planning commodities—such as oral pills, condoms, and emergency contraceptives—is analyzed based on the distribution of these commodities through DHS facilities.

4.4.1 Male and Female Sterilization

Table 4.4.1.1 Male and Female sterilizations reported in HMIS at the state level from 2014-15 to 2023-24

Period	NSV			Laparoscopic sterilizations			Mini-lap sterilizations			PPS			PAS		
	All	Public	Private	All	Public	Private	All	Public	Private	All	Public	Private	All	Public	Private
2014-15	1262	1239	23	16783	10381	6402	5020	1712	3308	68406	32675	35731	NA	NA	NA
2015-16	1073	1060	13	16423	10170	6253	4360	1608	2752	63679	29795	33884	NA	NA	NA
2016-17	906	874	32	15740	9653	6087	4290	1322	2968	56473	25027	31446	NA	NA	NA
2017-18	730	665	65	13399	8555	4844	3162	1080	2082	45665	24673	20992	369	125	244
2018-19	736	723	13	13221	8138	5083	3592	1282	2310	57516	28126	29390	363	118	245
2019-20	658	643	15	12806	7764	5042	3549	1260	2289	53315	27745	25570	694	179	515
2020-21	73	38	35	5130	650	4480	2503	555	1948	45028	22407	22621	727	248	479
2021-22	299	295	4	6445	2272	4173	3039	1307	1732	44318	22843	21475	687	145	542
2022-23	634	623	11	10592	5086	5506	3494	1435	2059	45305	24223	21082	745	184	561
2023-24	457	426	31	10397	4283	6114	3890	1475	2415	36394	20446	15948	602	139	463

Source: HMIS Portal

Table 4.4.1.2 Male and Female Sterilizations reported in HMIS at the district level for 2023-24.

District	Number of NSV reported			Number of Laparoscopic sterilizations (excluding PAS)			Number of Interval sterilizations (other than PPS & PAS)			Number of PPS reported			Number of PAS reported		
	All	Public	Private	All	Public	Private	All	Public	Private	All	Public	Private	All	Public	Private
TVM	43	38	5	2093	1058	1035	393	164	229	4616	3310	1306	204	22	182
KLM	11	11	0	458	243	215	440	253	187	3044	2058	986	92	20	72
PTA	8	6	2	242	27	215	94	59	35	1188	785	403	12	2	10
ALP	51	50	1	371	81	290	185	44	141	1695	880	815	36	18	18
KTM	64	62	2	603	505	98	93	33	60	2163	1627	536	51	5	46
IDK	18	15	3	269	90	179	105	48	57	1317	551	766	43	35	8
EKM	37	34	3	831	38	793	249	46	203	2636	1151	1485	312	156	156
TSR	70	67	3	1175	604	571	543	277	266	3153	1737	1416	145	41	104
PKD	11	11	0	1384	862	522	498	71	427	2821	1256	1565	55	6	49
MLP	23	12	11	1233	137	1096	689	199	490	5650	2313	3337	207	2	205
KKD	27	27	0	627	255	372	251	159	92	4058	2717	1341	135	42	93
WYD	43	43	0	171	32	139	188	95	93	818	439	379	73	15	58
KNR	25	24	1	735	247	488	109	27	82	2433	1180	1253	100	39	61
KSD	26	26	0	205	104	101	53	0	53	802	442	360	50	0	50
State	457	426	31	10397	4283	6114	3890	1475	2415	36394	20446	15948	1515	403	1112

Source: HMIS

4.4.2 IUCD Insertion

Table 4.4.2.1 State-Level IUCD Insertion Data Reported in HMIS (Public and Private Sector) from 2014-15 to 2023-24

Period	PPIUCD			PAIUCD			IUCD Other			IUCD All		
	All	Public	Private	All	Public	Private	All	Public	Private	All	Public	Private
2014-15	3297	3167	130	NA	NA	NA	NA	NA	NA	51121	42780	8341
2015-16	2920	2758	162	NA	NA	NA	NA	NA	NA	49626	42242	7384
2016-17	2811	2713	98	NA	NA	NA	NA	NA	NA	49709	42580	7129
2017-18	3502	2928	574	491	295	196	36657	30602	6055	40650	33825	6825
2018-19	3601	3323	278	419	245	174	37083	30883	6200	41103	34451	6652
2019-20	3317	3042	275	400	188	212	32866	27190	5676	36583	30420	6163
2020-21	2297	1996	301	295	95	200	21481	16560	4921	24073	18651	5422
2021-22	2451	2025	426	305	90	215	22592	16323	6269	25348	18438	6910
2022-23	2271	1838	433	282	105	177	29893	22467	7426	32446	24410	8036
2023-24	2539	1972	567	602	139	463	26854	18357	8497	29995	20468	9527

Source: HMIS

Table 4.4.2.2 District-Wise IUCD Insertion Data Reported in HMIS for 2023-24

District	Number of Interval IUCD Insertions (excluding PPIUCD and PAIUCD)			Number of Postpartum (within 48 hours of delivery) IUCD insertions			Number of Post-abortion (within 12 days of spontaneous or surgical abortion) IUCD insertions			Number of Interval IUCD Insertions-All		
	All	Public	Private	All	Public	Private	All	Public	Private	All	Public	Private
TVM	1487	1074	413	306	284	22	39	13	26	1832	1371	461
KLM	1689	1396	293	123	74	49	14	7	7	1826	1477	349
PTA	1020	445	575	129	109	20	48	12	36	1197	566	631
ALP	958	687	271	111	88	23	33	29	4	1102	804	298
KTM	2010	1558	452	258	245	13	35	10	25	2303	1813	490
IDK	896	844	52	45	15	30	3	2	1	944	861	83
EKM	1713	1181	532	111	47	64	135	7	128	1959	1235	724
TSR	2809	1758	1051	127	78	49	13	5	8	2949	1841	1108
PKD	2530	1725	805	119	94	25	120	8	112	2769	1827	942
MLP	5160	2355	2805	306	120	186	52	0	52	5518	2475	3043
KKD	2484	1979	505	666	615	51	58	39	19	3208	2633	575
WYD	922	700	222	138	122	16	2	2	0	1062	824	238
KNR	1751	1472	279	54	35	19	48	4	44	1853	1511	342
KSD	1425	1183	242	46	46	0	2	1	1	1473	1230	243
State	26854	18357	8497	2539	1972	567	602	139	463	29995	20468	9527

Source: HMIS

4.4.3 Distribution of Family Planning Commodities

Table 4.4.3.1. Distribution of Family Planning Commodities (Public) Reported in HMIS (2014-15 to 2023-24)

Period	Oral Pills cycles distributed	Condom pieces distributed	Centchroman pills given	EC Pills distributed
2014-15	70926	4452851	1483	19824
2015-16	93511	4089074	401	16684
2016-17	97986	4629757	1945	25895
2017-18	65616	3710265	6042	15953
2018-19	40948	2281647	4509	9787
2019-20	52619	1878483	6828	7626
2020-21	85653	1118089	11900	10193
2021-22	97916	1283620	10044	8552
2022-23	112357	2192916	5122	5547
2023-24	94819	2347817	7683	5369

Source: HMIS Portal

Table 4.4.3.2. District-Wise Distribution of Family Planning Commodities (Public) Reported in HMIS for 2023-24

District	No of Combined Oral Pill cycles distributed	No of Condom pieces distributed to the beneficiary	No of Centchroman (weekly) pill strips distributed	No of Emergency Contraceptive Pills (ECP) given	No of Pregnancy Test Kits (PTK) utilized
TVM	6358	464489	855	191	9640
KLM	10867	196864	662	79	8273
PTA	2391	97782	149	103	5813

ALP	5470	105647	283	136	5675
KTM	6965	108487	381	1159	6493
IDK	2705	105590	216	156	7529
EKM	6886	161674	470	287	9204
TSR	5895	192864	1045	396	10586
PKD	6378	168125	626	628	8400
MLP	11959	170134	321	183	9039
KKD	10978	226970	592	1107	9914
WYD	3940	92057	362	111	12207
KNR	6478	185836	1157	717	10038
KSD	7549	71298	564	116	7765
State	94819	2347817	7683	5369	120576

Source: HMIS

4.5 Delivery

The number and distribution of deliveries provide crucial insights into maternal and newborn health services. This section presents trends in total deliveries at both the **state and district levels** over the past years, highlighting the overall decline in the number of deliveries in Kerala. The section also examines the **proportion of deliveries occurring in public and private facilities**, offering insights into institutional preferences and accessibility. Additionally, the **incidence of home deliveries** is analyzed. The data, sourced from the HMIS, includes deliveries reported from both **public and private healthcare facilities**, ensuring a comprehensive assessment of maternal healthcare trends across the state.

4.5.1 Trend in Total Deliveries in Kerala

Graph 4.5.1.1 Trend in Total Deliveries in Kerala 2014-15 to 2023-24 in lakh

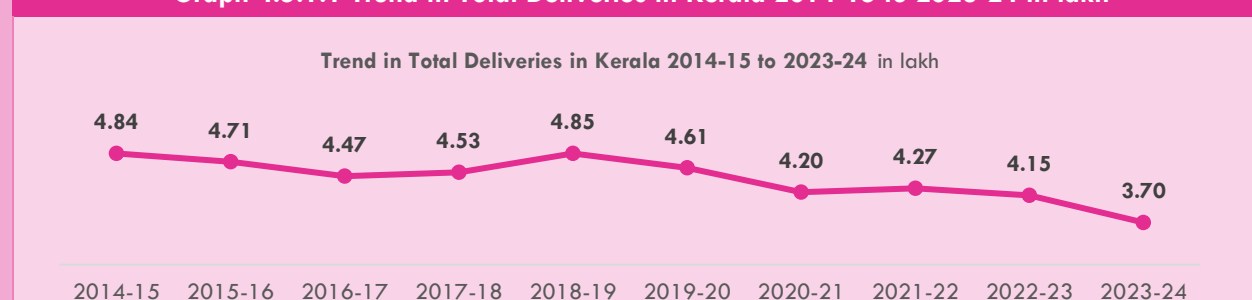


Table 4.5.1.1 Trends in Home and Institutional Deliveries (2014-15 to 2023-24)

Period	Home Delivery	Institutional Delivery			Total Delivery
		All	Public	Private	
2014-15	836	483565	146017	337548	484401
2015-16	729	469870	140353	329517	470599
2016-17	597	446123	122185	323938	446720
2017-18	795	452127	138510	313617	452922
2018-19	720	483836	143847	339989	484556
2019-20	467	460383	146174	314209	460850
2020-21	576	419786	131599	288187	420362
2021-22	586	426021	134284	291737	426607
2022-23	584	414580	128150	286430	415164
2023-24	526	369416	109542	259874	369942

Source: Institutional Delivery-HMIS, Home delivery - direct reporting(linelist)

Table 4.5.1.2 District-wise Institutional and Home Deliveries Reported in HMIS (2023-24)

District	Home Delivery	Total Inst. Delivery	Public	Private	Total Delivery	% of Institutional Delivery
TVM	32	33668	16184	17484	33700	99.91
KLM	25	19593	8426	11167	19618	99.87
PTA	8	11106	2675	8431	11114	99.93
ALP	14	12693	5641	7052	12707	99.89

KTM	8	17680	7667	10013	17688	99.95
IDK	25	8256	2795	5461	8281	99.70
EKM	26	31693	7308	24385	31719	99.92
TSR	15	31512	9953	21559	31527	99.95
PKD	29	28562	6156	22406	28591	99.90
MLP	252	77520	13749	63771	77772	99.68
KKD	24	40726	13525	27201	40750	99.94
WYD	42	10526	3422	7104	10568	99.60
KNR	16	30205	8719	21486	30221	99.95
KSD	10	15676	3322	12354	15686	99.94
State	526	369416	109542	259874	369942	99.86

Source: Institutional Delivery-HMIS, Home delivery - direct reporting(linelist)

Table 4.5.1.3 District-wise Institutional and Home Deliveries Reported in HMIS 2015-16 to 2023-24

Year	TVM			KLM			PTA			ALP			KTM		
	Institution deliveries	Home Deliveries	Total Deliveries	Institution deliveries	Home Deliveries	Total Deliveries	Institution deliveries	Home Deliveries	Total Deliveries	Institution deliveries	Home Deliveries	Total Deliveries	Institution deliveries	Home Deliveries	Total Deliveries
2015-16	41756	21	41777	28436	24	28460	13614	9	13623	18557	10	18567	24566	5	24571
2016-17	40633	17	40650	25529	21	25550	13656	14	13670	17038	15	17053	22064	3	22067
2017-18	40342	30	40372	26341	25	26366	14367	15	14382	16895	23	16918	23325	6	23331
2018-19	44674	11	44685	26261	18	26279	14753	23	14776	17117	13	17130	23972	12	23984
2019-20	40360	18	40378	25381	19	25400	14411	13	14424	15850	15	15865	22512	8	22520
2020-21	35889	15	35904	23337	18	23355	12450	15	12465	15014	12	15026	20794	5	20799
2021-22	36290	19	36309	24552	19	24571	12175	15	12190	15658	10	15668	20583	7	20590
2022-23	35827	43	35870	23120	24	23144	12151	14	12165	14500	14	14514	19743	11	19754
2023-24	33668	32	33700	19593	25	19618	11106	8	11114	12693	14	12707	17680	8	17688

Source: HMIS & District monthly report

Table 4.5.1.3 District-wise Institutional and Home Deliveries Reported in HMIS 2015-16 to 2023-24

Year	IDK			EKM			TSR			PKD			MLP		
	Institution deliveries	Home Deliveries	Total Deliveries	Institution deliveries	Home Deliveries	Total Deliveries	Institution deliveries	Home Deliveries	Total Deliveries	Institution deliveries	Home Deliveries	Total Deliveries	Institution deliveries	Home Deliveries	Total Deliveries
2015-16	10793	59	10852	35697	19	35716	42836	16	42852	36842	95	36937	86320	210	86530
2016-17	9493	48	9541	34000	25	34025	40509	15	40524	35001	49	35050	87562	208	87770
2017-18	10045	52	10097	40126	37	40163	41905	13	41918	36727	60	36787	85305	239	85544
2018-19	11370	72	11442	42069	27	42096	44233	27	44260	35338	51	35389	91344	304	91648
2019-20	10403	27	10430	41392	17	41409	41641	17	41658	33427	27	33454	88507	193	88700
2020-21	10623	54	10677	36639	23	36662	38050	19	38069	31949	35	31984	82660	258	82918
2021-22	10222	47	10269	36108	20	36128	38851	18	38869	32796	49	32845	87056	271	87327
2022-23	9205	39	9244	35691	18	35709	36347	17	36364	30881	28	30909	88952	266	89218
2023-24	8256	25	8281	31693	26	31719	31512	15	31527	28562	29	28591	77520	252	77772

Source: HMIS & District monthly report

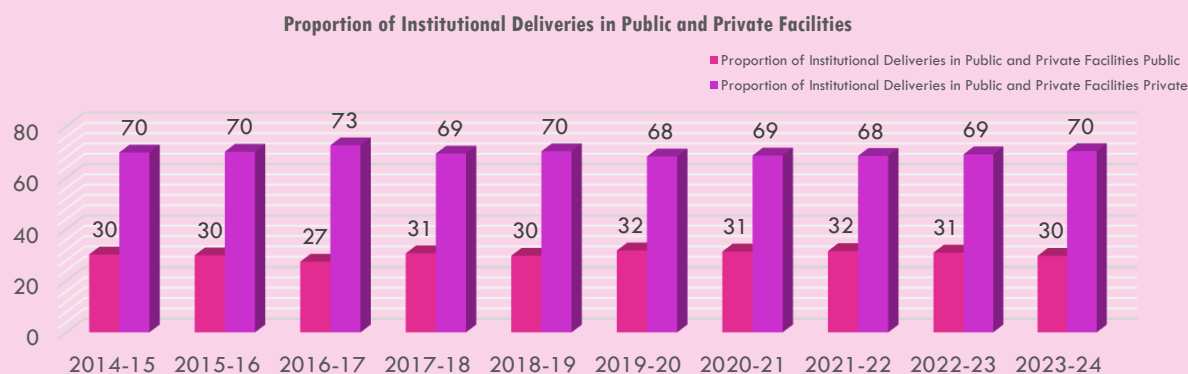
Table 4.5.1.3 District-wise Institutional and Home Deliveries Reported in HMIS 2015-16 to 2023-24

Year	KKD			WYD			KNR			KGD			State		
	Institution deliveries	Home Deliveries	Total Deliveries	Institution deliveries	Home Deliveries	Total Deliveries	Institution deliveries	Home Deliveries	Total Deliveries	Institution deliveries	Home Deliveries	Total Deliveries	Institution deliveries	Home Deliveries	Total Deliveries
2015-16	53197	18	53215	13185	200	13385	43648	14	43662	20423	29	20452	469870	729	470599
2016-17	50350	9	50359	9739	135	9874	41463	17	41480	19086	21	19107	446123	597	446720
2017-18	54657	12	54669	14599	216	14815	27266	43	27309	20227	24	20251	452127	795	452922
2018-19	54763	22	54785	14668	98	14766	43366	19	43385	19908	23	19931	483836	720	484556
2019-20	52219	13	52232	14515	62	14577	41311	18	41329	18454	20	18474	460383	467	460850
2020-21	44580	14	44594	13043	77	13120	36374	15	36389	18384	16	18400	419786	576	420362
2021-22	43220	20	43240	12936	49	12985	36398	14	36412	19176	28	19204	426021	586	426607
2022-23	43526	23	43549	12049	42	12091	34667	23	34690	17921	22	17943	414580	584	415164
2023-24	40726	24	40750	10526	42	10568	30205	16	30221	15676	10	15686	369416	526	369942

Source: HMIS & District monthly report

4.5.2 Public-Private Proportion of Institutional Deliveries

Graph 4.5.2.1 Proportion of Institutional Deliveries in Public & Private Hospitals (2014-15 to 2023-24) _ HMIS



Graph 4.5.2.2 District-wise Proportion of Institutional Deliveries in Public & Private Hospitals (2023-24) _ HMIS



4.6 Caesarean section deliveries

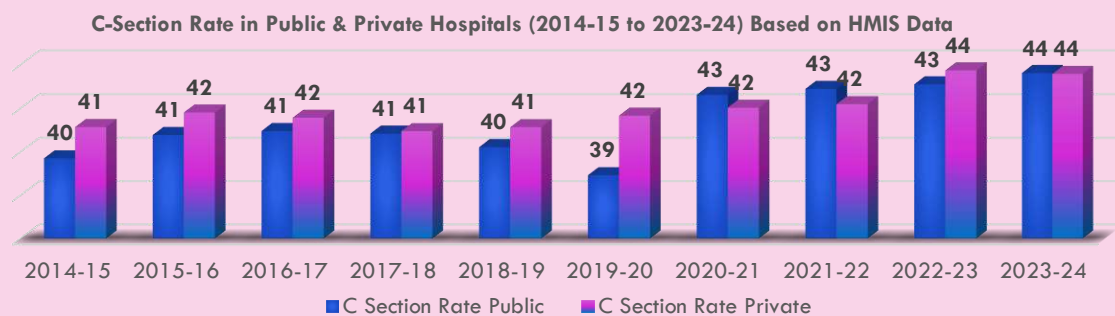
This section presents trends in the number of C-section deliveries performed over the years, with a detailed district-wise analysis for the year 2023-24. A breakdown of C-section deliveries in public and private healthcare facilities is provided. The data, sourced from the HMIS, includes reports from both public and private hospitals, ensuring a comprehensive understanding of the trends and patterns of C-section deliveries in Kerala.

4.6.1 Public & Private Caesarean section deliveries

Table 4.6.1.1 C-Section Rate in Public & Private Hospitals (2014-15 to 2023-24) Based on HMIS Data

Period	Institutional Delivery			C Section Deliveries			C Section Rate		
	All	Public	Private	All	Public	Private	All	Public	Private
2014-15	483565	146017	337548	196833	57969	138864	41	40	41
2015-16	469870	140353	329517	194993	57229	137764	41	41	42
2016-17	446123	122185	323938	184688	50043	134645	41	41	42
2017-18	452127	138510	313617	184992	56563	128429	41	41	41
2018-19	483836	143847	339989	197696	57853	139843	41	40	41
2019-20	460383	146174	314209	187797	56894	130903	41	39	42
2020-21	419786	131599	288187	177190	56080	121110	42	43	42
2021-22	426021	134284	291737	180663	57593	123070	42	43	42
2022-23	414580	128150	286430	180503	55229	125274	44	43	44
2023-24	369416	109542	259874	161016	47777	113239	44	44	44

Source: HMIS

Graph 4.6.1.1 C-Section Rate in Public & Private Hospitals (2014-15 to 2023-24) Based on HMIS Data**Table 4.6.1.2 District Wise C-Section Rate in Public & Private Hospitals 2023-24 Based on HMIS Data**

District	All			Public			Private		
	Institutional Deliveries	C -Section deliveries	C-Section Rate	Institutional Deliveries	C -Section deliveries	C-Section Rate	Institutional Deliveries	C -Section deliveries	C-Section Rate
TVM	33668	15561	46	16184	6836	42	17484	8725	50
KLM	19593	10182	52	8426	4434	53	11167	5748	51
PTA	11106	5925	53	2675	1360	51	8431	4565	54
ALP	12693	7198	57	5641	3032	54	7052	4166	59
KTM	17680	7924	45	7667	3146	41	10013	4778	48
IDK	8256	4145	50	2795	1317	47	5461	2828	52
EKM	31693	16724	53	7308	3949	54	24385	12775	52
TSR	31512	14115	45	9953	4627	46	21559	9488	44
PKD	28562	11161	39	6156	2493	40	22406	8668	39
MLP	77520	26830	35	13749	4529	33	63771	22301	35
KKD	40726	17796	44	13525	5948	44	27201	11848	44
WYD	10526	4113	39	3422	998	29	7104	3115	44
KNR	30205	14086	47	8719	4021	46	21486	10065	47
KSD	15676	5256	34	3322	1087	33	12354	4169	34
State	369416	161016	44	109542	47777	44	259874	113239	44

Source: HMIS Portal

4.7 Maternal Deaths

This section presents the trend in maternal mortality and MMR based on past data, with a specific focus on maternal suicides and their variations over the years. The distribution of maternal deaths is examined based on key parameters such as age, place of death, time of death, and place of occurrence, providing a comprehensive understanding of the patterns observed.

The data used for this analysis is sourced from the line list of maternal deaths submitted by districts on a monthly basis. This detailed dataset enables a systematic review of maternal mortality trends and supports evidence-based decision-making for improving maternal health services.

4.7.1 Trend in Maternal Mortality and MMR

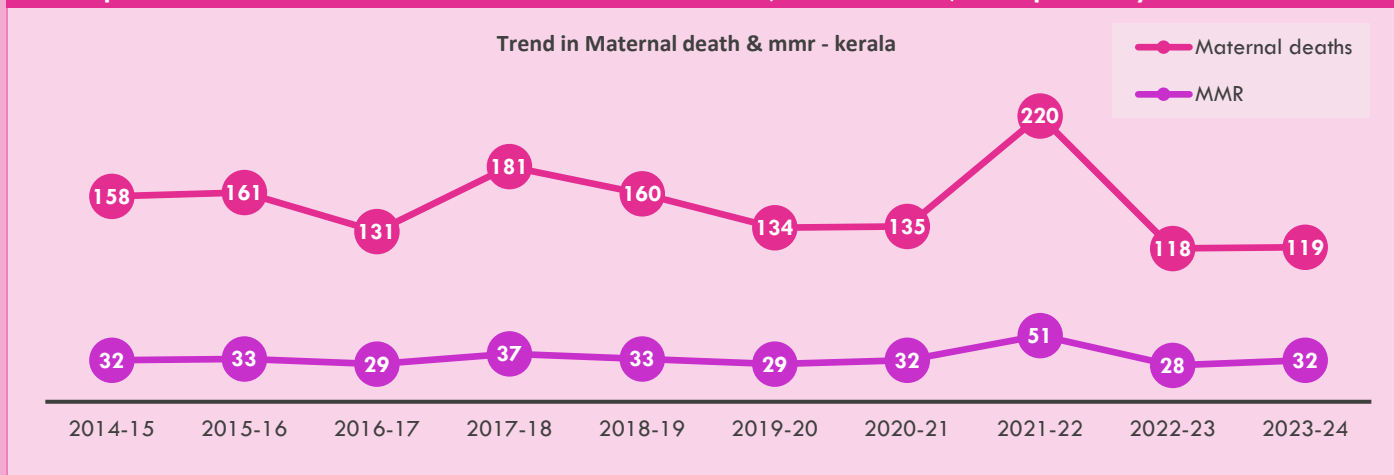
Table 4.7.1.1 Trend of Maternal Deaths (2014-15 to 2023-24) as Reported by District Line Lists

District	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
TVM	10	13	13	20	7	12	14	20	7	9
KLM	16	11	5	14	9	10	11	16	3	4
PTA	4	2	2	1	7	1	4	6	4	4
ALP	8	9	8	4	8	4	7	15	4	3
KTM	6	9	8	7	4	12	6	14	4	8
IDK	0	6	6	6	3	6	4	7	3	6
EKM	8	7	6	12	5	12	8	11	7	6
TSR	12	14	10	12	15	6	9	22	10	6
PKD	18	18	18	23	20	12	14	22	12	9
MLP	31	36	22	30	39	23	25	44	22	23
KKD	17	14	7	30	20	13	13	14	15	8
WYD	11	4	4	4	9	7	2	6	5	5

KNR	11	6	14	10	8	6	7	10	10	11
KSD	6	12	8	8	6	10	11	13	12	17
KERALA	158	161	131	181	160	134	135	220	118	119

Source: Live Birth-HMIS, Maternal Death- District line list

Graph 4.7.1.1 Trend of Maternal Deaths and MMR Kerala (2014-2023-24) as Reported by District Line Lists



#Note: Among 220 deaths reported during 2021-22, 97 are due to covid pneumonia

Table 4.7.1.2 Trend of MMR Kerala (2014-2023-24) as Reported by District Line Lists

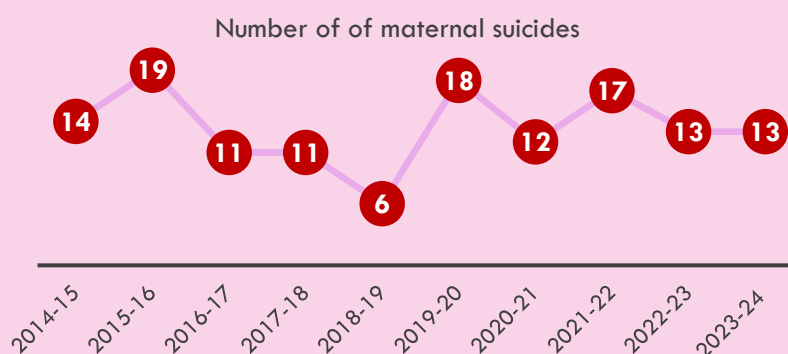
District	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
TVM	22	30	33	38	16	29	38	54	19	26
KLM	55	38	19	51	34	40	44	65	13	20
PTA	26	14	14	7	47	7	31	49	32	35
ALP	41	48	46	21	46	25	46	95	27	23
KTM	24	37	36	30	17	53	29	68	20	45
IDK	0	51	47	55	26	57	38	67	32	72
EKM	19	17	17	25	12	28	21	30	19	19
TSR	26	32	24	28	34	14	23	56	27	19
PKD	47	48	51	62	56	36	44	67	39	31
MLP	35	42	25	33	42	26	30	50	24	29
KKD	30	26	14	56	37	25	29	32	34	19
WYD	79	28	40	28	61	48	15	46	41	47
KNR	25	14	34	27	18	14	19	27	29	36
KSD	29	58	42	40	30	55	60	67	66	108
KERALA	32	33	29	37	33	29	32	51	28	32

Source: Birth- HMIS Portal, Maternal Death – District linelist

4.7.2 Maternal Suicides

Table 4.7.2.1 Maternal Suicides at the State Level from 2014-15 to 2023-24

Year	No of maternal suicides	Maternal deaths	% of Maternal suicides
2014-15	14	158	9
2015-16	19	161	12
2016-17	11	131	8
2017-18	11	181	6
2018-19	6	160	4
2019-20	18	134	13
2020-21	12	135	9
2021-22	17	220	8
2022-23	13	118	11
2023-24	13	119	11



Source: District monthly report (linelist)

Table 4.7.2.2 Maternal Suicides - District wise

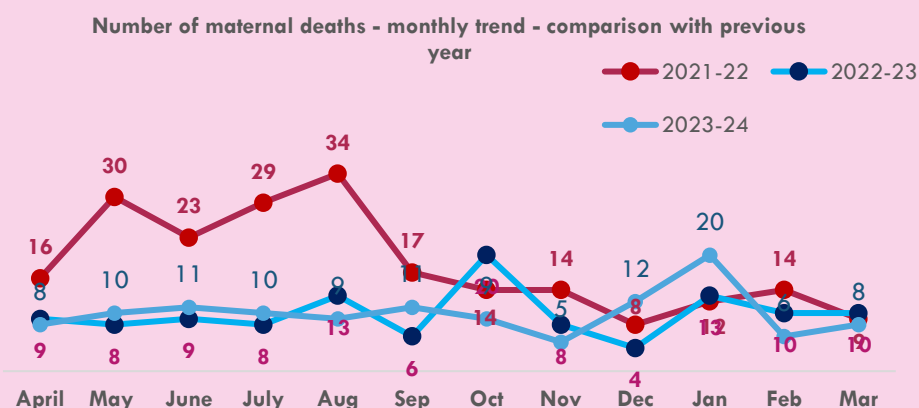
Period	2022-23		2023-24	
District	Total Maternal Death	Maternal Suicide	Total Maternal Death	Maternal Suicide
TVM	7	2	9	1
KLM	3	0	4	0
PTA	4	1	4	1
ALP	4	1	3	1
KTM	4	2	8	1
IDK	3	0	6	2
EKM	7	1	6	0
TSR	10	0	6	1
PKD	12	2	9	0
MLP	22	0	23	1
KKD	15	3	8	0
WYD	5	0	5	2
KNR	10	1	11	2
KSD	12	0	17	1
ALL	118	13	119	13

Source: District monthly report (linelist)

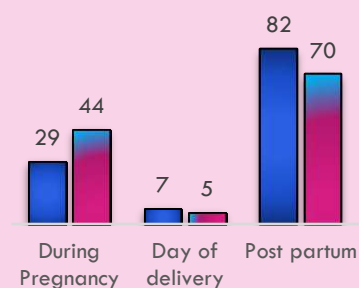
4.7.3 Distribution of Maternal Deaths**Table 4.7.3.1 Month-wise Maternal Deaths at the State Level for the Last Three Years**

Month	2021-22	2022-23	2023-24
April	16	9	8
May	30	8	10
June	23	9	11
July	29	8	10
Aug	34	13	9
Sep	17	6	11
Oct	14	20	9
Nov	14	8	5
Dec	8	4	12
Jan	12	13	20
Feb	14	10	6
Mar	9	10	8
Total	220	118	119

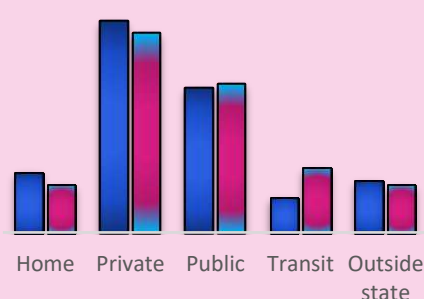
Source: District monthly report (linelist)

**Graph 4.7.3.1 Classification of Maternal Deaths by Time of Death, Place of Death and different age group****Time of Death**

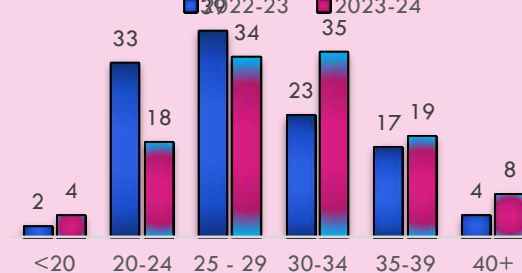
■ 2022-23 ■ 2023-24

**Maternal Death by place of death**

■ 2022-23 ■ 2023-24

**Age group**

■ 2022-23 ■ 2023-24



Source: District monthly report (linelist)

Table 4.7.3.2 Maternal Deaths by Place of Death 2023-24

District	Home	Private	Public	Transit	Outside state	ALL
TVM	2	5	2	0	0	9
KLM	0	1	2	1	0	4
PTA	0	2	2	0	0	4
ALP	1	0	2	0	0	3
KTM	0	4	3	1	0	8
IDK	1	3	1	1	0	6
EKM	0	4	0	2	0	6
TSR	1	2	1	2	0	6
PKD	0	2	6	0	1	9
MLP	2	11	7	3	0	23
KKD	0	3	4	1	0	8
WYD	1	3	1	0	0	5
KNR	1	5	3	2	0	11
KSD	2	2	1	2	10	17
State	11	47	35	15	11	119

Source: District monthly report (linelist)

Table 4.7.3.3 Maternal Deaths by Age Group 2023-24

District	<20	20-24	25 - 29	30-34	35-39	40+	ALL
TVM	0	3	2	3	1	0	9
KLM	0	0	0	2	0	2	4
PTA	0	1	0	1	2	0	4
ALP	0	1	1	0	0	1	3
KTM	0	0	2	4	2	0	8
IDK	0	3	0	2	0	1	6
EKM	0	0	4	0	1	1	6
TSR	0	0	3	2	1	0	6
PKD	0	2	3	3	1	0	9
MLP	1	4	3	9	5	1	23
KKD	1	1	4	1	1	0	8
WYD	1	0	1	2	0	1	5
KNR	0	1	5	1	3	1	11
KSD	1	2	7	5	2	0	17
State	4	18	35	35	19	8	119

Source: District monthly report (linelist)

4.8 Childbirth and Newborn Health Indicators

This section presents data on key newborn parameters such as sex ratio at birth, gender-wise distribution of births, place of birth (public vs. private hospitals), preterm births, underweight newborns, and stillbirths, sourced from the HMIS.

Mortality indicators, including neonatal mortality rate (NMR), infant mortality rate (IMR), and child mortality, are analyzed based on the detailed line list of child deaths submitted monthly by districts. Additionally, a cause-of-death analysis is presented, derived from the child death review conducted at the district level, with quarterly reports submitted for further evaluation. These data sources collectively provide a comprehensive understanding of newborn and child health, guiding targeted interventions to reduce mortality and improve outcomes.

4.8.1 Childbirth

Graph 4.8.1.1 Trend of Live Births by Gender from 2014-15 to 2023-24 (HMIS Data)

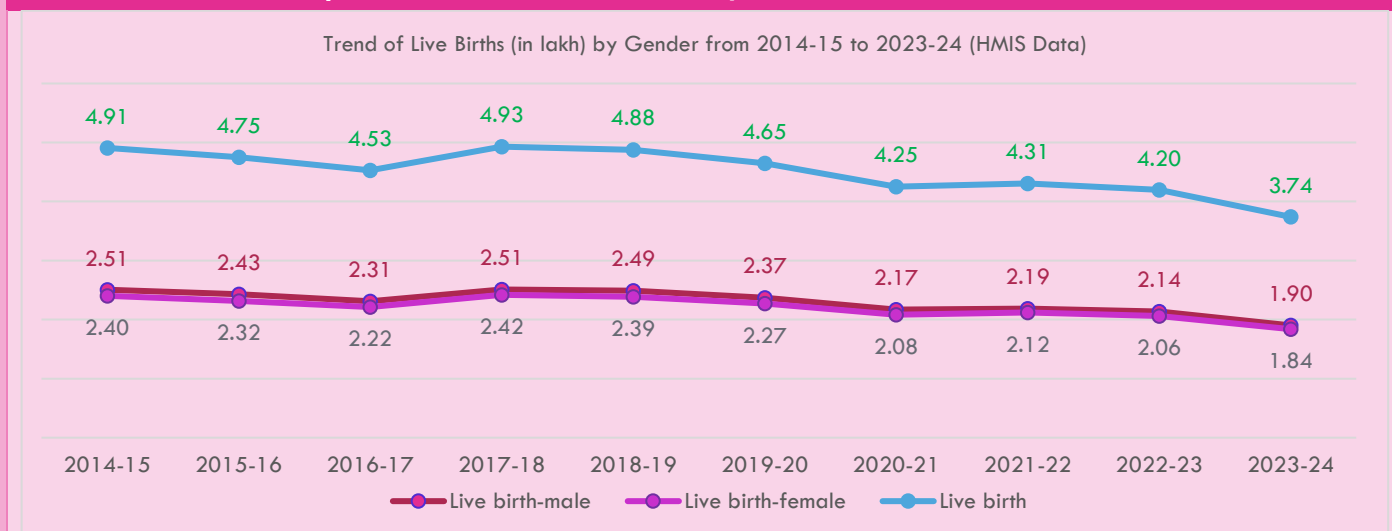


Table 4.8.1.1 Trend of Live Births by Gender (Male, Female & Total) from 2014-15 to 2023-24 (HMIS Data)

Period	Live Birth Male			Live Birth Female			Live Birth All		
	All	Public	Private	All	Public	Private	All	Public	Private
2014-15	250518	77018	173500	240276	73757	166519	490794	150775	340019
2015-16	243148	73207	169941	231782	69671	162111	474930	142878	332052
2016-17	231231	64030	167201	221534	61322	160212	452765	125352	327413
2017-18	251011	85892	165119	241953	82381	159572	492964	168273	324691
2018-19	248993	74459	174534	238797	71127	167670	487790	145586	342204
2019-20	237287	75563	161724	227243	72162	155081	464530	147725	316805
2020-21	217069	68107	148962	208107	64583	143524	425176	132690	292486
2021-22	218842	68870	149972	211828	66525	145303	430670	135395	295275
2022-23	213617	66090	147527	206190	63356	142834	419807	129446	290361
2023-24	190251	56349	133902	183827	54275	129552	374078	110624	263454

Source: HMIS

Table 4.8.1.2 District Wise - Live Births by Gender 2023-24 (Based on HMIS Data)

District	All			Public			Private		
	Live Birth - Male	Live Birth - Female	Live Birth - All	Live Birth - Male	Live Birth - Female	Live Birth - All	Live Birth - Male	Live Birth - Female	Live Birth - All
TVM	17503	16774	34277	8434	7961	16395	9069	8813	17882
KLM	9946	9821	19767	4286	4186	8472	5660	5635	11295
PTA	5735	5605	11340	1373	1318	2691	4362	4287	8649
ALP	6515	6322	12837	2908	2766	5674	3607	3556	7163
KTM	9080	8752	17832	3848	3841	7689	5232	4911	10143
IDK	4220	4092	8312	1447	1369	2816	2773	2723	5496
EKM	16361	16001	32362	3741	3612	7353	12620	12389	25009
TSR	16378	15535	31913	5122	4873	9995	11256	10662	21918
PKD	14677	14042	28719	3178	3006	6184	11499	11036	22535
MLP	40036	38449	78485	7145	6943	14088	32891	31506	64397
KKD	20834	20281	41115	6941	6723	13664	13893	13558	27451
WYD	5429	5216	10645	1800	1651	3451	3629	3565	7194
KNR	15557	15158	30715	4419	4389	8808	11138	10769	21907
KSD	7980	7779	15759	1707	1637	3344	6273	6142	12415
State	190251	183827	374078	56349	54275	110624	133902	129552	263454

Source: HMIS

Table 4.8.1.3 Trend in Sex Ratio at Birth (2014-15 to 2023-24) Based on HMIS Data

Period	Public	Private	All
2014-15	958	960	959
2015-16	952	954	953
2016-17	958	958	958
2017-18	959	966	964
2018-19	955	961	959
2019-20	955	959	958
2020-21	948	963	959
2021-22	966	969	968
2022-23	959	968	965
2023-24	963	968	966

Source: HMIS

Table 4.8.1.4 District Wise - Sex Ratio at Birth 2023-24 Based on HMIS Data

District	Public	Private	All
TVM	944	972	958
KLM	977	996	987
PTA	960	983	977
ALP	951	986	970
KTM	998	939	964
IDK	946	982	970
EKM	966	982	978
TSR	951	947	949
PKD	946	960	957
MLP	972	958	960
KKD	969	976	973
WYD	917	982	961
KNR	993	967	974
KSD	959	979	975
State	963	968	966

Source: HMIS

4.8.2 Birth by Key Newborn Parameters

Table 4.8.2.1 Proportion of Preterm Newborns (2016-17 to 2023-24) Based on HMIS Data

Period	Live Birth			Pre-term newborns			Proportion of preterm NB			Proportion of preterm NB
	All	Public	Private	All	Public	Private	All	Public	Private	
2017-18	492964	168273	324691	6916	4674	2242	1.4	2.8	0.7	2017-18 1.40
2018-19	487790	145586	342204	13077	8249	4828	2.7	5.7	1.4	2018-19 2.68
2019-20	464530	147725	316805	13206	7511	5695	2.8	5.1	1.8	2019-20 2.84
2020-21	425176	132690	292486	14890	7173	7717	3.5	5.4	2.6	2020-21 3.50
2021-22	430670	135395	295275	19556	8389	11167	4.5	6.2	3.8	2021-22 4.54
2022-23	419807	129446	290361	22222	7602	14620	5.3	5.9	5	2022-23 5.29
2023-24	374078	110624	263454	26968	8423	18545	7.2	7.6	7	2023-24 7.21

Source: HMIS

Table 4.8.2.2 District Wise Proportion of Preterm Newborns 2023-24 Based on HMIS Data

District	All		Public		Private		% of Preterm NB		
	Live Birth	Pre-term newborns	Live Birth	Pre-term newborns	Live Birth	Pre-term newborns	All	Public	Private
TVM	34277	3269	16395	1990	17882	1279	10	12	7
KLM	19767	512	8472	235	11295	277	3	3	2
PTA	11340	1005	2691	47	8649	958	9	2	11
ALP	12837	985	5674	466	7163	519	8	8	7
KTM	17832	1557	7689	729	10143	828	9	9	8
IDK	8312	457	2816	64	5496	393	5	2	7
EKM	32362	3665	7353	472	25009	3193	11	6	13
TSR	31913	2575	9995	932	21918	1643	8	9	7
PKD	28719	1495	6184	387	22535	1108	5	6	5
MLP	78485	4280	14088	137	64397	4143	5	1	6
KKD	41115	4161	13664	2257	27451	1904	10	17	7
WYD	10645	428	3451	56	7194	372	4	2	5
KNR	30715	2012	8808	575	21907	1437	7	7	7
KSD	15759	567	3344	76	12415	491	4	2	4
State	374078	26968	110624	8423	263454	18545	7	8	7

Source: HMIS

Table 4.8.2.3 Trend in Stillbirth Rate (2014-15 to 2023-24) Based on HMIS Data

District	Live Birth All			Still Birth			Still Birth Rate (out of 1000)		
	All	Public	Private	All	Public	Private	All	Public	Private
2014-15	490794	150775	340019	2089	1142	947	4	8	3
2015-16	474930	142878	332052	2101	1044	1057	4	7	3
2016-17	452765	125352	327413	2009	908	1101	4	7	3
2017-18	492964	168273	324691	2057	1114	943	4	7	3
2018-19	487790	145586	342204	2028	1056	972	4	7	3
2019-20	464530	147725	316805	1712	914	798	4	6	3
2020-21	425176	132690	292486	1789	960	829	4	7	3
2021-22	430670	135395	295275	1962	1084	878	5	8	3
2022-23	419807	129446	290361	1696	919	777	4	7	3
2023-24	374078	110624	263454	1648	749	899	4	7	3

Source: HMIS

Table 4.8.2.4 District-wise Stillbirth Rate by Intrapartum & Antepartum Classification (2023-24)

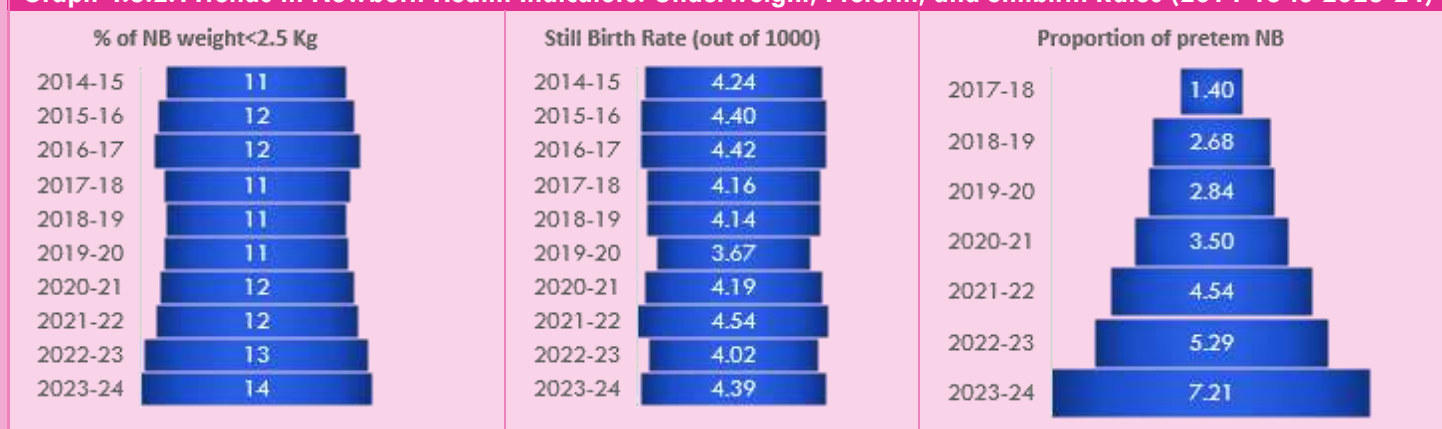
District	All					Public					Private				
	Live Birth	Intrapartum Still Birth	Antepartum Still Birth	Total Still Birth	Still Birth Rate	Live Birth	Intrapartum Still Birth	Antepartum Still Birth	Total Still Birth	Still Birth Rate	Live Birth	Intrapartum Still Birth	Antepartum Still Birth	Total Still Birth	Still Birth Rate
TVM	34277	139	22	161	5	16395	119	4	123	7	17882	20	18	38	2
KLM	19767	14	11	25	1	8472	8	2	10	1	11295	6	9	15	1
PTA	11340	10	9	19	2	2691	1	2	3	1	8649	9	7	16	2
ALP	12837	31	8	39	3	5674	24	6	30	5	7163	7	2	9	1
KTM	17832	91	39	130	7	7689	74	32	106	14	10143	17	7	24	2
IDK	8312	29	16	45	5	2816	13	3	16	6	5496	16	13	29	5
EKM	32362	81	54	135	4	7353	23	17	40	5	25009	58	37	95	4
TSR	31913	138	66	204	6	9995	38	41	79	8	21918	100	25	125	6
PKD	28719	60	84	144	5	6184	22	8	30	5	22535	38	76	114	5
MLP	78485	185	63	248	3	14088	35	6	41	3	64397	150	57	207	3
KKD	41115	128	142	270	7	13664	86	129	215	15	27451	42	13	55	2
WYD	10645	28	20	48	4	3451	13	14	27	8	7194	15	6	21	3
KNR	30715	57	46	103	3	8808	15	5	20	2	21907	42	41	83	4
KSD	15759	41	36	77	5	3344	8	1	9	3	12415	33	35	68	5
State	374078	1032	616	1648	4	110624	479	270	749	7	263454	553	346	899	3

Source: HMIS

Table 4.8.2.5 Trend of Underweight Newborns (2014-15 to 2023-24) from HMIS Data

Period	Live Birth All			NB Weight<2.5 Kg			Proportion of NB weight<2.5 Kg		
	All	Public	Private	All	Public	Private	All	Public	Private
2014-15	490794	150775	340019	53136	21965	31171	11	15	9
2015-16	474930	142878	332052	55550	22793	32757	12	16	10
2016-17	452765	125352	327413	55648	18635	37013	12	15	11
2017-18	492964	168273	324691	54836	24193	30643	11	14	9
2018-19	487790	145586	342204	52549	21544	31005	11	15	9
2019-20	464530	147725	316805	51471	21674	29797	11	15	9
2020-21	425176	132690	292486	49454	20135	29319	12	15	10
2021-22	430670	135395	295275	52124	21228	30896	12	16	10
2022-23	419807	129446	290361	56521	21322	35199	13	16	12
2023-24	374078	110624	263454	51608	18958	32650	14	17	12

Source: HMIS

Graph 4.8.2.1 Trends in Newborn Health Indicators: Underweight, Preterm, and Stillbirth Rates (2014-15 to 2023-24)

4.8.3 Infant Mortality

Table 4.8.3.1 Infant and Child Deaths Reported in Kerala (2014-15 to 2023-24) – Based on Monthly Reports Submitted by Districts

Period	Still Birth	Neonatal Death	Infant Death	Child Death
2014-15	2059	2034	2970	NA
2015-16	2100	1829	2705	NA
2016-17	2006	1706	2535	NA
2017-18	2057	1829	2543	NA
2018-19	2028	1696	2603	NA
2019-20	1712	1502	2401	NA
2020-21	1789	1466	2085	NA
2021-22	1962	1430	2066	2339
2022-23	1696	1478	2280	2667
2023-24	1648	1273	2032	2413

Source: Monthly Reports Submitted by Districts

Table 4.8.3.2 Number of Neonatal Deaths reported in Kerala - District-wise (2014-15 to 2023-24)

Dist.	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
TVM	171	160	157	222	149	169	133	153	105	114
KLM	151	119	104	124	122	107	98	89	85	76
PTA	69	51	33	51	39	34	31	33	42	22
ALP	104	94	90	69	65	81	68	61	76	59
KTM	113	68	82	80	64	53	41	49	49	40

IDK	78	62	59	70	59	49	63	59	47	49
EKM	104	83	81	72	89	88	102	94	98	96
TSR	133	143	122	121	129	102	118	122	136	106
PKD	188	179	134	149	160	110	138	99	109	100
MLP	405	380	364	365	373	287	298	291	306	258
KKD	170	182	175	181	181	147	108	130	141	132
WYD	95	93	69	77	68	71	64	58	61	42
KNR	128	118	111	140	112	111	122	98	123	91
KSD	125	97	125	108	86	93	82	94	100	88
KERALA	2034	1829	1706	1829	1696	1502	1466	1430	1478	1273

Source: Monthly Reports Submitted by Districts

Table 4.8.3.3 Number of Infant Deaths reported in Kerala - District-wise (2014-15 to 2023-24)

Dist.	2014-15	2015-16	206-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
TVM	245	228	235	281	225	242	184	200	158	183
KLM	230	197	167	192	189	172	138	132	143	124
PTA	90	69	46	72	63	59	41	51	61	46
ALP	153	130	118	100	101	122	88	92	115	96
KTM	142	105	113	101	96	89	59	80	76	68
IDK	116	103	86	106	100	81	99	96	81	72
EKM	165	116	122	118	133	139	149	129	129	138
TSR	192	201	194	176	203	164	166	162	189	164
PKD	268	262	204	213	236	203	191	154	168	162
MLP	599	548	546	560	541	470	438	421	502	406
KKD	255	261	220	101	274	215	139	195	212	202
WYD	128	137	110	126	110	100	91	95	97	75
KNR	203	187	181	211	183	195	175	130	196	154
KSD	184	161	193	186	149	150	127	129	153	142
KERALA	2970	2705	2535	2543	2603	2401	2085	2066	2280	2032

Source: Monthly Reports Submitted by Districts

Table 4.8.3.4 Number of Child Deaths (under 5) reported in Kerala - District-wise (2014-15 to 2023-24)

District	2021-22	2022-23	2023-24
TVM	212	193	213
KLM	157	163	156
PTA	57	73	53
ALP	109	136	118
KTM	89	97	87
IDK	109	93	83
EKM	147	147	160
TSR	178	226	190
PKD	169	206	191
MLP	487	609	511
KKD	234	231	230
WYD	107	108	85
KNR	145	222	177
KSD	139	163	159
KERALA	2339	2667	2413

Source: Monthly Reports Submitted by Districts

Table 4.8.3.5 Community and District-wise Distribution of Total Child Deaths Reported in Kerala 2023-24

District	Gen	OBC	SC	ST	NR	All
TVM	43	136	28	4	2	213
KLM	53	71	26	4	2	156
PTA	37	6	7	1	2	53
ALP	34	67	17	0	0	118
KTM	48	27	8	0	4	87
IDK	45	7	14	17	0	83
EKM	66	74	18	1	1	160

TSR	41	94	32	4	19	190
PKD	46	103	28	13	1	191
MLP	18	453	32	7	1	511
KKD	3	222	1	3	1	230
WYD	15	30	2	37	1	85
KNR	32	134	2	9	0	177
KSD	34	103	12	10	0	159
KERALA	515	1527	227	110	34	2413

Source: Monthly Reports Submitted by Districts

Table 4.8.3.6. Gender and District-wise Distribution of Total Child Deaths Reported in Kerala 2023-24

District	Male	Female	NR	All
TVM	118	95	0	213
KLM	91	65	0	156
PTA	26	27	0	53
ALP	75	43	0	118
KTM	46	41	0	87
IDK	48	35	0	83
EKM	94	66	0	160
TSR	107	78	5	190
PKD	105	86	0	191
MLP	299	212	0	511
KKD	138	92	0	230
WYD	51	34	0	85
KNR	101	75	1	177
KSD	89	69	1	159
KERALA	1388	1018	7	2413

Source: Monthly Reports Submitted by Districts

Table 4.8.3.7. Categorization of Infant Deaths reported 2023-24

District	Within 24 hr	1 day to 1 week	1 to 4 weeks	4 weeks to 1 yr	ALL
TVM	28	48	38	69	183
KLM	11	39	26	48	124
PTA	5	10	7	24	46
ALP	17	21	21	37	96
KTM	15	17	8	28	68
IDK	22	8	19	23	72
EKM	22	43	31	42	138
TSR	31	42	33	58	164
PKD	26	39	35	62	162
MLP	86	99	73	148	406
KKD	34	57	41	70	202
WYD	11	15	16	33	75
KNR	35	40	16	63	154
KSD	26	35	27	54	142
State	369	513	391	759	2032

Source: Monthly Reports Submitted by Districts

Table 4.8.3.8. Total Child Deaths by Place of Occurrence 2023-24

District	Home	Health facility: private	Health facility: public	In transit	NR	Total
TVM	11	40	157	5	0	213
KLM	11	47	89	9	0	156
PTA	3	22	26	2	0	53
ALP	15	42	61	0	0	118

KTM	3	28	51	5	0	87
IDK	12	17	48	6	0	83
EKM	9	102	41	7	1	160
TSR	7	118	59	5	1	190
PKD	17	89	66	19	0	191
MLP	76	205	187	43	0	511
KKD	10	57	159	4	0	230
WYD	6	30	40	8	1	85
KNR	15	114	41	7	0	177
KGD	24	74	55	6	0	159
TOTAL	219	985	1080	126	3	2413

Source: Monthly Reports Submitted by Districts

Table 4.8.3.9 Total Deaths by different birthweight strata of infant 2023-24

District	Extremely Low	Very Low	Low	Insufficient	Adequate	Macrosomia	NR	ALL
	(less than 1000 gm)	(1000 to 1499 gm)	(1500 to 2499 gm)	(2500 to 2999 gm)	(3000 to 3999 gm)	(greater than 3999gm)		
TVM	58	19	44	36	22	2	2	183
KLM	44	17	30	19	13	0	1	124
PTA	11	8	10	12	4	0	1	46
ALP	27	14	17	27	11	0	0	96
KTM	16	8	17	10	15	0	2	68
IDK	11	12	21	17	11	0	0	72
EKM	55	13	32	23	13	0	2	138
TSR	43	29	38	27	18	2	7	164
PKD	32	23	42	34	20	0	11	162
MLP	94	47	106	91	64	3	1	406
KKD	59	28	57	37	21	0	0	202
WYD	20	10	19	18	8	0	0	75
KNR	35	18	37	35	26	3	0	154
KSD	24	16	31	35	36	0	0	142
State	529	262	501	421	282	10	27	2032

Source: Monthly Reports Submitted by Districts

Table 4.8.3.10 Infant and Neonatal Mortality Rates in Kerala (2019-20 to 2023-24) Based on Monthly District Death Reports and HMIS Live Birth Data NMR & IMR district wise

	2019-20		2020-21		2021-22		2022-23		2023-24	
District	IMR	NMR	IMR	NMR	IMR	NMR	IMR	NMR	IMR	NMR
TVM	6	4	5	4	5	4	4	3	5	3
KLM	7	4	6	4	5	4	6	4	6	4
PTA	4	2	3	2	4	3	5	3	4	2
ALP	8	5	6	4	6	4	8	5	7	5
KTM	4	2	3	2	4	2	4	2	4	2
IDK	8	5	9	6	9	6	9	5	9	6
EKM	3	2	4	3	3	3	4	3	4	3
TSR	4	2	4	3	4	3	5	4	5	3
PKD	6	3	6	4	5	3	5	4	6	3
MLP	5	3	5	4	5	3	6	3	5	3
KKD	4	3	3	2	4	3	5	3	5	3
WYD	7	5	7	5	7	4	8	5	7	4
KNR	5	3	5	3	4	3	6	4	5	3
KSD	8	5	7	4	7	5	8	6	9	6
State	5	3	5	3	5	3	5	4	5	3

Monthly District Death Reports and HMIS Live Birth Data

4.8.4. Child Death Review

Table 4.8.4.1 Cause of Infant & Child Death (Based on CDR Quarterly report) 2020-21

District	Total Deaths Reviewed	Cause of Infant Death					Other Diseases
		Pneumonia	Prematurity and low birth weight	Diarrhoeal Diseases	Neonatal infections	Birth Asphyxia and birth trauma	
TVM	154	12	34	0	0	6	102
KLM	93	6	24	0	0	2	61
PTA	63	0	10	0	0	29	24
ALP	101	5	50	0	0	7	39
KTM	58	0	29	0	0	2	27
IDK	87	5	21	0	0	7	54
EKM	71	0	26	0	10	3	32
TSR	182	1	24	0	16	18	123
PKD	172	2	53	0	13	18	86
MLP	499	18	88	0	28	30	335
KKD	152	2	55	0	3	11	81
WYD	96	1	27	0	2	7	59
KNR	188	2	37	0	0	9	140
KGD	133	5	28	0	5	9	86
TOTAL	2049	59	506	0	77	158	1249

CDR quarterly report

Table 4.8.4.2 Cause of Infant & Child Death (Based on CDR Quarterly report) 2021-22

District	Total Deaths Reviewed	Cause of Infant Death -					Other Diseases
		Pneumonia	Prematurity and low birth weight	Diarrhoeal Diseases	Neonatal infections	Birth Asphyxia and birth trauma	
TVM	53	15	10	0	0	5	23
KLM	74	4	22	0	3	5	40
PTA	59	4	9	4	4	10	28
ALP	107	8	43	0	0	7	49
KTM	47	1	13	1	10	6	16
IDK	105	5	17	0	0	17	66
EKM	217	6	87	0	12	9	103
TSR	81	1	23	0	12	9	36
PKD	153	7	36	0	2	13	95
MLP	0	0	0	0	0	0	0
KKD	228	6	87	0	5	7	123
WYD	106	5	36	0	8	4	53
KNR	109	3	25	0	5	4	72
KGD	153	13	34	0	21	6	79
TOTAL	1492	78	442	5	82	102	783

CDR quarterly report

Table 4.8.4.3 Cause of Infant & Child Death (Based on CDR Quarterly report) 2022-23

District	Total Deaths Reviewed	Pneumonia	Prematurity and low birth weight	Diarrhoeal Diseases	Neonatal infections	Birth Asphyxia and birth trauma	Other Diseases
TVM	120	21	36	0	8	14	41
KLM	124	13	24	0	1	12	74
PTA	55	2	14	4	1	6	28
ALP	121	9	42	0	0	2	68
KTM	70	2	11	0	0	14	43
IDK	81	5	15	0	0	10	51

EKM	170	8	74	0	2	4	82
TSR	170	1	43	0	17	21	88
PKD	209	11	48	0	21	22	107
MLP	136	7	45	0	6	12	66
KKD	310	10	92	0	9	25	174
WYD	115	5	35	0	10	5	60
KNR	208	14	52	0	0	11	131
KGD	164	13	48	0	11	10	82
TOTAL	2053	121	579	4	86	168	1095
CDR quarterly report							

Table 4.8.4.4 Cause of Infant & Child Death (Based on CDR Quarterly report) 2023-24							
District	Total Deaths Reviewed	Pneumonia	Prematurity and low birth weight	Diarrhoeal Diseases	Neonatal infections	Birth Asphyxia and birth trauma	Other Diseases
TVM	210	24	85	0	12	13	76
KLM	153	13	37	0	6	4	93
PTA	9	1	1	0	0	0	7
ALP	103	3	28	0	2	2	68
KTM	44	5	5	1	0	5	28
IDK	64	3	12	0	0	2	47
EKM	112	1	44	1	2	5	59
TSR	143	7	23	0	2	10	101
PKD	187	9	55	0	16	12	95
MLP	359	13	96	1	21	39	189
KKD	275	28	49	2	34	20	142
WYD	68	5	20	0	0	3	40
KNR	255	5	64	0	0	15	171
KGD	155	2	34	0	4	4	111
TOTAL	2137	119	553	5	99	134	1227
CDR quarterly report							

4.9 Child Immunization

This chapter presents an analysis of immunization coverage trends in the state, with a focus on full immunization coverage and antigen-wise vaccine administration during the year 2023-24. The data is derived from reports available in the RCH portal.

During 2023-24, the Government of India conducted Mission Indradhanush 5.0 to strengthen routine immunization and cover unvaccinated and partially vaccinated children. The campaign was implemented in three rounds:

- **Round I:** 7th August 2023 – 14th August 2023
- **Round II:** 11th September 2023 – 16th September 2023
- **Round III:** 9th October 2023 – 16th October 2023

Additionally, **Pulse Polio Immunization** was conducted on **3rd March 2024** to sustain polio eradication efforts.

This chapter also includes the achievements of these immunization campaigns based on district-level reports, providing insights into the effectiveness of outreach efforts and highlighting areas for further strengthening.

4.9.1 Routine Immunization Coverage

Table 4.9.1.1 Trend in Full Immunization Coverage(%) of Children (Based on Birth Cohort One Year Prior), 2021-22 to 2023-24

Districts	2021-22	2022-23	2023-24
TVM	99	98	98
KLM	99	99	99
PTA	99	99	99
ALP	99	99	99
KTM	98	99	99
IDK	99	98	99
EKM	98	98	98
TSR	98	98	98
PKD	95	96	96
MLP	88	88	86
KKD	96	93	92
WYD	97	97	96
KNR	95	95	94
KSD	96	96	96
STATE	95	95	94

Note: A Child aged between 9 and 11 months is said to be fully immunized if they receive one dose of BCG, three doses of Pentavalent, three doses of Oral Polio Vaccines (OPV), and one dose of MR vaccine between 9-11 months of their birth. The full immunization coverage is measured as proportion of number of children provided all due vaccines as per immunization schedule within 1st year of age against the number of infants (0-1 year).

Source: RCH Portal

Table 4.9.1.2 Antigen-wise Number of Children Administered Vaccines During 2023-24 (Birth Cohort: Previous Year)

District	Birth 2022-23	BCG	OPV0	VitK	HEPB0	OPV1	OPV2	OPV3	PENTA1	PENTA2	PENTA3
TVM	32707	32573	32556	31495	32536	32389	32323	32303	32396	32348	32316
KLM	26421	26312	26305	25743	26278	26236	26210	26190	26234	26211	26193
PTA	9683	9643	9642	9544	9639	9631	9622	9618	9630	9622	9617
ALP	19472	19383	19360	18118	19283	19318	19291	19273	19318	19292	19275
KTM	16823	16758	16745	15974	16712	16704	16686	16675	16706	16690	16677
IDK	11019	10969	10958	10262	10934	10925	10908	10901	10924	10913	10908
EKM	30772	30649	30602	27851	30524	30464	30401	30353	30463	30399	30352
TSR	33948	33780	33751	27471	33569	33513	33389	33319	33505	33401	33323
PKD	36967	36804	36608	31214	35628	36183	35939	35747	36164	35931	35743
MLP	90025	88845	85520	52375	73828	82812	80520	78698	82756	80534	78720
KKD	41336	41118	40934	34617	40130	39749	39294	38900	39726	39307	38913
WYD	11176	11107	11051	10254	10997	10940	10880	10832	10939	10881	10833
KNR	33049	32893	32787	24641	31010	32021	31664	31353	31997	31655	31352
KSD	22110	21987	21902	20974	21775	21605	21463	21374	21599	21466	21375
Kerala	415508	412821	408721	340533	392843	402490	398590	395536	402357	398650	395597

Source: RCH Portal

Table 4.9.1.2 Antigen-wise Number of Children Administered Vaccines During 2023-24 (Birth Cohort: Previous Year)

District	Birth 2022-23	MR1/(MRCV1)	PCV1	PCV2	Rota1	Rota2	Rota3	IPV1
TVM	32707	32143	32387	31895	32384	32290	32277	32323
KLM	26421	26163	26233	26162	26231	26201	26185	26229
PTA	9683	9610	9628	9610	9630	9621	9615	9629
ALP	19472	19252	19297	19114	19308	19260	19250	19286
KTM	16823	16651	16702	16577	16698	16677	16665	16692
IDK	11019	10897	10923	10861	10923	10891	10897	10902
EKM	30772	30260	30456	30228	30444	30360	30317	30418
TSR	33948	33192	33419	32900	33482	33354	33275	33455
PKD	36967	35700	36028	35162	36133	35819	35611	36037
MLP	90025	78600	81736	66092	82572	79609	76937	82136
KKD	41336	38554	39515	35494	39661	39094	38612	39550
WYD	11176	10822	10905	10642	10926	10842	10801	10917
KNR	33049	31218	31929	30852	31954	31527	31176	31909
KSD	22110	21287	21523	20716	21576	21373	21266	21528
Kerala	415508	394349	400681	376305	401922	396918	392884	401011

Source: RCH Portal

Table 4.9.1.3 MR2 Vaccine Coverage in 2023-24 (Cohort of Children Born Two Years Prior)

District	Child Birth 2021-22	MR2/MRCV2	% MR2/MRCV2
TVM	33631	31687	94
KLM	27134	25702	95
PTA	10300	10220	99
ALP	20114	19824	99
KTM	17600	17308	98
IDK	12264	11595	95
EKM	31887	30606	96
TSR	36025	34277	95
PKD	38897	36112	93
MLP	88300	58990	67
KKD	40966	34230	84
WYD	12104	11516	95
KNR	33995	30502	90
KSD	22580	20786	92
Kerala	425797	373355	88

Source: RCH Portal

4.9.2 Intensified Mission Indradhanush**Table 4.9.2.1 Intensified Mission Indradhanush - 5.0 Round I report (07-08-2023 to 14-08-2023)**

District	IMI Round I Start Date	IMI Round I End Date	No. of target children for the Round: I (as per the due lists based on head count)		Target for MR Vaccine		No. of children vaccinated		0-5 Already Vaccinated After the Head count Survey	No. of target Pregnant women for the Round: I	No. of PW vaccinated
			up to 0-2 Years	2 to 5 yrs	MR-1	MR-2	up to 0-2 Yrs	2 to 5 yrs			
ALP	07-08-2023	14-08-2023	1739	1029	746	832	2121	854	462	560	701
EKM	07-08-2023	12-08-2023	2941	1780	736	960	3087	1639	329	1632	1705
IDK	07-08-2023	12-08-2023	363	310	158	206	408	230	62	221	175
KNR	07-08-2023	12-08-2023	4248	4359	3502	3593	3688	1536	551	790	566
KSD	07-08-2023	14-08-2023	2598	2126	1400	1390	2776	1580	754	1105	899
KLM	07-08-2023	12-08-2023	3218	248	492	967	2469	44	1094	1429	1554
KTM	07-08-2023	12-08-2023	521	1893	970	1143	1742	816	538	394	679
KKD	07-08-2023	12-08-2023	7861	5964	2459	3158	5827	1678	2529	2424	2176
MLP	07-08-2023	14-08-2023	15411	24474	14953	15661	6009	3365	4814	1416	1069
PKD	07-08-2023	12-08-2023	9243	5559	3698	3980	6775	3224	1811	2597	2271
PTA	07-08-2023	12-08-2023	815	360	263	376	1193	679	317	341	449
TVM	07-08-2023	12-08-2023	5996	2532	1638	2105	4554	2123	3076	2148	2232
TSR	07-08-2023	12-08-2023	5031	3212	1611	2142	3580	1120	5012	2598	2962
WYD	07-08-2023	12-08-2023	1767	991	652	1096	1517	427	949	1089	951
State	07-08-2023	14-08-2023	61752	54837	33278	37609	45746	19315	22298	18744	18389

Table 4.9.2.2 Intensified Mission Indradhanush - 5.0 Round II report (11-09-2023 to 16-09-2023)

District	IMI Round II Start Date	IMI Round II End Date	No. of target children for the Round: II		Target for MR Vaccine		No. of children vaccinated		0-5 Already Vaccinated After the Head count Survey	No. of target Pregnant women for the Round: II	No. of PW vaccinated
			up to 0-2 Years	2 to 5 yrs	MR1/ MRCV1	MR2/ MRCV2	up to 0-2 Years	2 to 5 yrs			
ALP	11-09-2023	16-09-2023	1980	784	663	646	2589	657	146	374	502
EKM	11-09-2023	16-09-2023	2512	948	750	803	3182	853	256	737	724
IDK	11-09-2023	16-09-2023	1218	282	254	239	1734	403	23	210	215
KNR	11-09-2023	16-09-2023	4374	4121	3007	2931	4005	1398	465	637	687
KSD	11-09-2023	16-09-2023	2909	1615	1204	1109	3110	1029	427	735	828
KLM	11-09-2023	16-09-2023	1966	14	392	328	2564	24	409	174	252
KTM	11-09-2023	16-09-2023	1831	917	339	509	2405	777	321	576	773

KKD	11-09-2023	16-09-2023	5610	3009	1510	1661	5103	1372	1105	1522	1698
MLP	11-09-2023	16-09-2023	13714	22491	13182	12729	15251	5554	777	628	1397
PKD	11-09-2023	16-09-2023	6431	2299	1519	1610	6889	2611	295	1713	1646
PTA	11-09-2023	16-09-2023	895	431	211	303	1390	539	130	241	285
TVM	11-09-2023	16-09-2023	6477	2887	1571	1887	5007	2046	2791	2082	1961
TSR	11-09-2023	16-09-2023	1480	1036	587	640	3897	1100	938	807	1045
WYD	11-09-2023	16-09-2023	1234	773	532	588	1432	377	187	485	555
State	11-09-2023	16-09-2023	52631	41607	25721	25983	58558	18740	8270	10921	12568

Table 4.9.2.3 Intensified Mission Indradhanush - 5.0 Round III report (09-10-2023 to 16-10-2023)

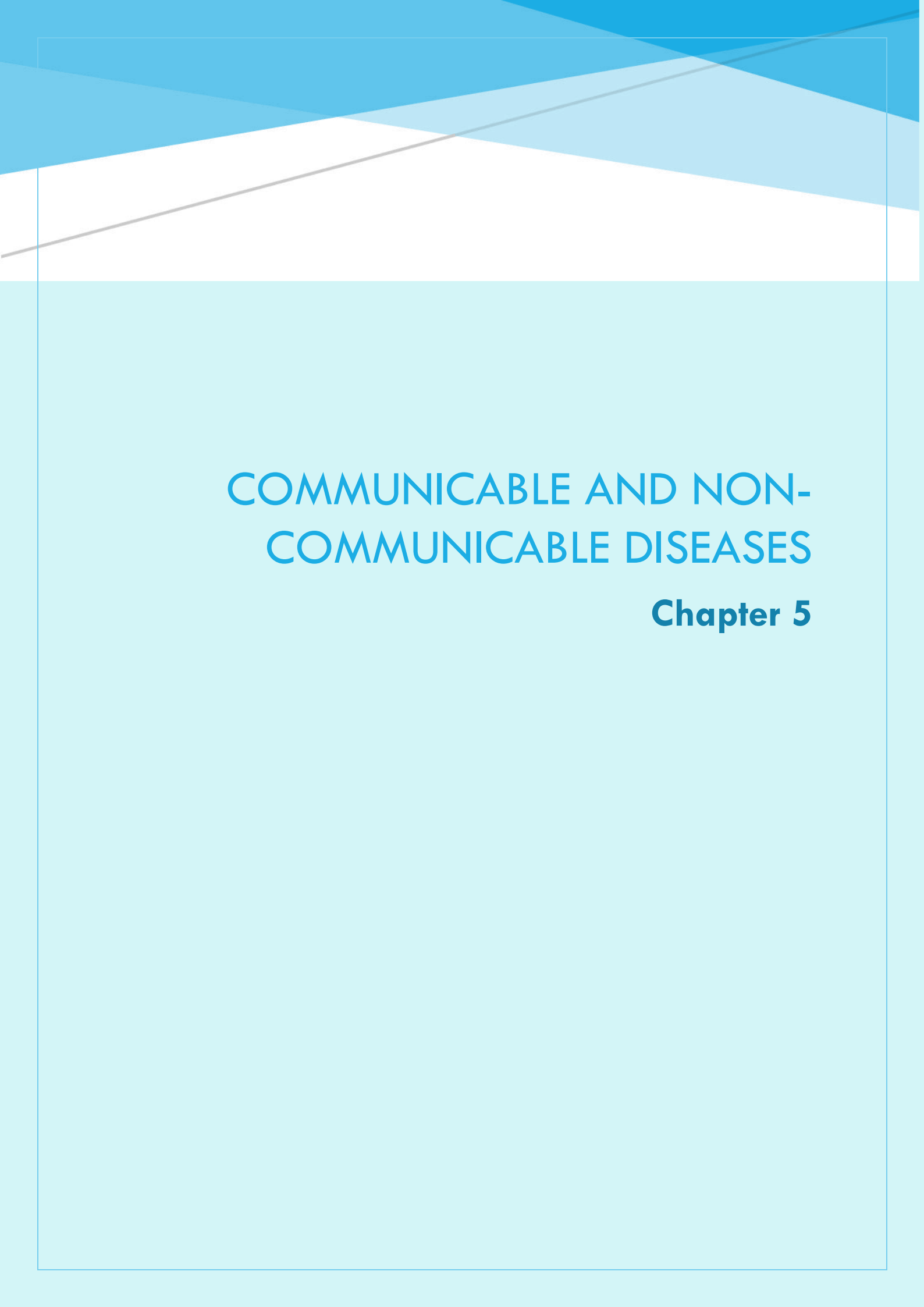
Dist	IMI Round III Start Date	IMI Round III End Date	No. of target children for the Round: III		Target for MR Vaccine		No. of children vaccinated		0-5 Already Vaccinated After the Head count Survey	No. of target Pregnant women	No. of PW vaccinated
			up to 0-2 Years	2 to 5 yrs	MR1/ MRCV1	MR2/ MRCV2	up to 0-2 Years	2 to 5 yrs			
ALP	09-10-23	14-10-23	2470	760	584	562	2455	569	411	514	520
EKM	09-10-23	14-10-23	2696	977	809	837	2912	958	240	686	758
IDK	09-10-23	14-10-23	1073	161	271	258	1054	166	38	224	225
KNR	09-10-23	14-10-23	3389	3242	2465	2343	3585	1084	218	450	534
KSD	09-10-23	14-10-23	2735	1505	886	852	2724	901	500	626	610
KLM	09-10-23	14-10-23	2356	38	328	441	2353	33	598	296	388
KTM	09-10-23	14-10-23	2004	748	438	456	2142	628	74	557	601
KKD	09-10-23	14-10-23	5644	2190	1517	1670	6243	1268	1058	1319	1597
MLP	09-10-23	16-10-23	12807	22092	11759	11425	13413	3972	292	603	1397
PKD	09-10-23	14-10-23	7635	2412	2187	2326	7082	2412	341	1181	1509
PTA	09-10-23	14-10-23	803	345	215	244	1103	356	168	207	245
TVM	09-10-23	14-10-23	5202	2410	1477	1626	4524	1987	2279	1706	1731
TSR	09-10-23	16-10-23	929	762	602	414	3396	965	524	421	783
WYD	09-10-23	16-10-23	1067	674	462	457	1183	296	124	414	429
State	09-10-23	16-10-23	50810	38316	24000	23911	54169	15595	6865	9204	11327

4.9.3 Intensified Pulse Polio Immunization Programme

Table 4.9.3.1 Intensified Pulse Polio Immunization Programme (03-03-2024)

District	Target	Booth coverage	House-to-House coverage				No. of children vaccinated outside of houses by Supervisor	No. of children vaccinated at transit points/ mela sites/ bazaars	No of migrant children immunised	Total children vaccinated	Total OPV vials used	Achievement
		Total children vaccinated in booth	No. of children vaccinated in houses by teams	No. of children vaccinated outside of houses by teams	No. of children vaccinated in 'X' houses	No. of children vaccinated in P-houses by Supervisor						
TVM	204183	182222	14785	616	734	1	23	4311	1761	204453	11608	100.13
KLM	163274	141950	14966	303	316	8	8	3564	815	161930	9280	99.18
PTA	64765	56982	4202	35	127	0	6	1689	582	63623	3563	98.24
ALP	118608	103828	7111	159	298	4	9	4979	1020	117408	6752	98.99
KTM	96698	89457	3794	18	181	0	5	2849	929	97233	5680	100.55
IDK	69092	57130	4323	45	161	1	2	2652	2684	66998	3924	96.97
EKM	196565	180145	7759	204	561	10	21	2615	7213	198528	10780	101.00
TSR	201851	169383	18460	142	528	12	23	5102	2210	195860	11132	97.03
PKD	201604	187111	18455	147	400	1	68	6112	2011	214305	11692	106.30
MLP	445201	306570	107685	284	2121	4	33	7206	2619	426522	24119	95.80

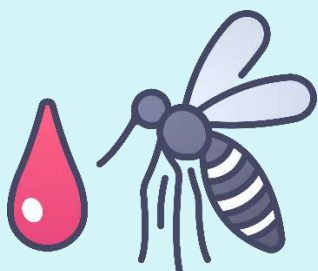
KKD	219320	187714	21074	145	707	2	82	5565	1539	216828	12228	98.86
WND	59038	48014	7790	95	154	3	32	2032	539	58659	3413	99.36
KNR	174030	141543	19310	1045	1360	7	200	3694	1740	168899	9534	97.05
KSD	110720	89102	16914	68	398	0	2	2100	1035	109619	6086	99.01
TOTAL	232494 9	1941151	266628	3306	8046	53	514	54470	26697	230086 5	129791	98.96



COMMUNICABLE AND NON- COMMUNICABLE DISEASES

Chapter 5

Key Insights at a Glance

	Disease	Cases 2023	Death 2023
	<i>Dengue</i>	16766	153
	<i>Malaria</i>	566	7
	<i>Chikungunya</i>	31	0
	<i>West Nile</i>	16	3
	<i>Zika</i>	13	0
	<i>JE</i>	6	1
	<i>Kala Azar</i>	3	2
	<i>Scrub Typhus</i>	614	17
	<i>Leptospirosis</i>	2417	133
	<i>Cholera</i>	26	0
	<i>Typhoid</i>	103	1
	<i>Acute Diarrheal Disease</i>	486266	2
	<i>Shigella</i>	90	1
	<i>Amoebic Meningo Encephalitis</i>	2	2
	<i>Chicken Pox</i>	26390	4
	<i>M Pox</i>	6	0
	<i>Hepatitis – A</i>	1073	14
	<i>Hepatitis – B</i>	1147	7
	<i>Hepatitis – C</i>	381	3
	<i>Hepatitis – E</i>	5	0
	<i>Rabies</i>	17	17

Chapter 5

Communicable and Non-Communicable Diseases

5.1 Introduction

This chapter provides an overview of communicable and non-communicable diseases in Kerala, based on data from two key sources: the Integrated Disease Surveillance Programme (IDSP) for communicable diseases and the Central Bureau of Health Intelligence (CBHI) portal for non-communicable diseases. Under IDSP, all public sector hospitals and major private healthcare facilities actively report cases and deaths, ensuring a comprehensive surveillance system for communicable diseases. For non-communicable diseases, data reporting to the CBHI portal is based solely on cases and deaths recorded in healthcare facilities under the DHS. District health authorities collect this data from DHS facilities and submit consolidated monthly reports to the CBHI portal.

The information presented in this chapter highlights the disease burden reported through these systems, offering insights into Kerala's public health trends and challenges.

5.2 Communicable Diseases in Kerala

This section presents data on communicable diseases reported in Kerala from 2011 onwards. The information is sourced from the Integrated Disease Surveillance Programme (IDSP), which captures case and death reports from public healthcare facilities and major private hospitals.

A total of around 32 communicable diseases are monitored under this system, covering a range of vector-borne, waterborne, respiratory, and other infectious diseases. The data provides insights into trends in disease incidence and mortality over the years

TABLE : 5.2.1 Trends in Communicable Disease Cases and Deaths in Kerala (2011–2022)

NAME OF DISEASES		2011		2012		2013		2014	
		CASES	DEATHS	CASES	DEATHS	CASES	DEATHS	CASES	DEATHS
Dengue Fever		1304	10	4056	16	7938	29	2548	13
Malaria		1993	2	2036	3	1634	0	1751	6
Confirmed Chikungunya		81	0	62	0	247	0	264	0
AES (Sus.JE)		37	2	41	10	51	6	9	2
JE		102	8	3	1	2	0	3	2
Leptospirosis		944	70	736	18	814	34	1075	43
Hepatitis - A		4583	10	6305	8	6166	8	2831	6
Hepatitis - B		852	15	1578	22	1107	20	1319	15
Suspected Cholera		125	5	113	3	67	3	13	0
Cholera		18	1	30	2	20	0	8	1
Diphtheria		0	0	0	0	0	0	0	0
Typhoid		2291	2	2849	1	2930	0	1956	0
ADD (Diarrhoea)		261178	4	357252	8	411819	2	442104	5
Scrub Typhus		0	0	39	4	68	0	433	6
Chicken Pox		0	0	0	0	0	0	0	0
Kysanur Forest Disease		0	0	0	0	1	0	6	0
H1N1		210	10	0	0	0	0	0	0
Nipah		0	0	0	0	0	0	0	0
West Nile Fever		0	0	0	0	0	0	0	0
Fever	Op	1843147	0	2301100	11	2922351	23	2655507	29
	Ip	84537	0	105529	0	119998	0	85959	0

SOURCE : IDSP

TABLE : 5.2.1 Trends in Communicable Disease Cases and Deaths in Kerala (2011–2022)

	2015	2016	2017	2018	2019
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NAME OF DISEASES		CASES	DEATHS	CASES	DEATHS	CASES	DEATHS	CASES	DEATHS	CASES	DEATHS
Dengue Fever		4114	29	7218	21	21993	165	4090	32	4651	14
Malaria		1549	4	1540	3	1194	2	908	0	656	1
Confirmed Chikungunya		152	0	124	0	54	4	76	0	109	0
AES (Sus.JE)		29	3	18	6	5	4	28	15	59	5
Japanese Encephalitis (JE)		0	0	1	0	1	0	5	2	11	2
Leptospirosis		1098	43	1710	35	1408	80	2079	99	1211	57
Hepatitis - A		1980	10	1351	10	988	24	1369	5	1620	7
Hepatitis - B		1015	16	1085	16	817	7	759	7	828	6
Suspected Cholera		0	0	118	0	10	0	7	0	20	0
Cholera		1	0	10	0	8	1	9	0	9	0
Diphtheria		0	0	69	2	79	5	23	1	32	2
Typhoid		1772	0	1668	2	314	1	109	0	27	0
ADD (Diarrhoea)		467102	4	493973	14	463368	8	540814	12	544027	6
Scrub Typhus		1149	15	633	3	340	5	400	6	579	14
Chicken Pox		0	0	0	0	0	0	222	0	29583	20
Kysanur Forest Disease		102	11	9	0	0	0	0	0	8	2
H1N1		0	0	0	0	1411	76	823	50	853	45
Nipah		0	0	0	0	0	0	18	16	1	0
West Nile Fever		0	0	0	0	0	0	1	0	11	2
Fever	Op	2676842	26	2641311	18	3417968	76	2935627	63	2862375	51
	Ip	96189	0	80049	0	109974	0	59983	0	60080	0

SOURCE : IDSP

TABLE : 5.2.1 Trends in Communicable Disease Cases and Deaths in Kerala (2011–2022)

NAME OF DISEASES	2020		2021		2022	
	CASES	DEATHS	CASES	DEATHS	CASES	DEATHS
Dengue Fever	2722	22	3251	27	4468	58
Malaria	268	1	309	1	439	0
Chikungunya	558	0	334	0	66	0
AES (Sus.JE)	15	4	36	1	38	8
Japanese Encephalitis (JE)	0	0	0	0	2	0
Leptospirosis	1039	48	1745	97	2482	121
Hepatitis - A	464	2	114	0	231	2
Hepatitis - B	475	3	529	1	1107	7
Hepatitis - C	115	1	205	3	379	0
Hepatitis - E	0	0	3	1	7	0
Cholera	2	0	1	0	0	0
Typhoid	16	0	30	0	55	0
Measles	76	1	3	0	0	0
ADD (Diarrhoea)	250788	1	238227	3	466211	2
Scrub Typhus	423	8	438	6	727	24
Kala Azar	1	0	1	1	13	0
Kysanur Forest Disease	29	3	4	0	1	0
H1N1	58	2	1	0	94	11
C.pox	14959	3	3457	2	9927	14
Rabies	5	5	11	11	15	15
Shigella	12	1	81	3	83	4
West Nile	0	0	1	0	3	1
Nipah	0	0	1	1	0	0
Zika	0	0	90	0	15	0
Diphtheria	0	0	0	0	3	0
Food Poisoning	0	0	0	0	1504	1
Monkey Pox	0	0	0	0	8	1
Dengue Fever	0	0	0	0	0	0
Amoebic Meningo Encephalitis	0	0	0	0	0	0
	OP	1265782	0	1463517	0	3285392
Fever	IP	18879	0	12458	0	25257

TABLE : 5.2.2 Communicable Disease Cases and Deaths in Kerala – 2023

NAME OF DISEASES		2023	
		CASES	DEATHS
Dengue Fever: Confirmed		16766	153
Dengue Fever: Probable		41599	12
Malaria		566	7
Chikungunya		31	0
Acute Encephalitis Syndrome		48	20
Japanese Encephalitis (JE)		6	1
Leptospirosis : Confirmed		2417	133
Leptospirosis : Probable		2769	149
Hepatitis - A : Confirmed		1073	14
Hepatitis - A : Probable		3508	1
Hepatitis - B		1147	7
Hepatitis - C		381	3
Hepatitis - E		5	0
Cholera		26	0
Diphtheria		1	0
Typhoid		103	1
Acute Diarrheal Disease		486266	2
Food Poisoning		4020	3
Shigella		90	1
Scrub Typhus		614	17
Kala Azar		3	2
Kysanur Forest Disease		0	0
Influenza A - H1N1		1036	68
Rabies : Confirmed		17	17
Rabies : Probable		8	8
Zika		13	0
West Nile		16	3
M Pox		6	0
Nipah		6	2
Amoebic Meningo Encephalitis		2	2
Chicken Pox		26390	4
Fever	Op	2979054	
	Ip	49099	4

Source : IDSP

TABLE : 5.2.3 District-wise Communicable Disease Cases and Deaths in Kerala – 2023

District	Conf: CG		Conf: DENGUE		Malaria		AES		JE		Scrub Typhus		Kala Azar		West Nile		Zika	
	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death
TVM	24	0	2451	12	30	0	6	4	0	0	405	7	0	0	1	1	8	0
KLM	0	0	2473	36	34	1	1	0	0	0	10	0	0	0	0	0	0	0
PTA	0	0	313	4	20	1	0	0	0	0	9	0	0	0	0	0	0	0
IDK	0	0	309	2	66	1	0	0	0	0	11	1	0	0	0	0	0	0
KTM	0	0	154	5	32	1	3	2	0	0	5	2	0	0	0	0	0	0
ALP	0	0	586	5	24	1	3	2	0	0	20	1	0	0	2	0	0	0
EKM	3	0	3855	27	83	1	1	1	0	0	4	0	0	0	2	1	0	0
TSR	1	0	1972	17	90	0	0	0	0	0	7	1	0	0	8	1	0	0
PKD	1	0	1063	26	37	1	24	5	3	1	26	0	0	0	1	0	0	0
MLP	2	0	2035	10	39	0	6	4	0	0	38	1	2	1	0	0	0	0
KKD	0	0	834	2	38	0	1	0	2	0	38	1	0	0	0	0	0	0
WYD	0	0	120	1	4	0	0	0	1	0	17	2	0	0	0	0	0	0
KNR	0	0	306	5	40	0	4	3	0	0	15	1	1	1	2	0	5	0
KSD	0	0	295	1	29	0	1	1	0	0	9	0	0	0	0	0	0	0
Kerala	31	0	16766	153	566	7	50	22	6	1	614	17	3	2	16	3	13	0

Source: IDSP

TABLE : 5.2.3 District-wise Communicable Disease Cases and Deaths in Kerala – 2023

District	Conf: LEPTO		Conf: Hep A		Hep B		Hep C		Hep E		Typhoid	
	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death	Cases	Death
TVM	346	12	31	0	52	0	36	0	2	0	26	0
KLM	175	9	9	0	218	2	38	0	1	0	4	0
PTA	213	2	30	0	42	0	2	0	1	0	0	0
IDK	31	2	15	1	12	0	1	0	0	0	3	0
KTM	77	2	26	0	90	2	13	0	0	0	12	0
ALP	314	11	16	0	88	1	69	1	0	0	1	0
EKM	192	15	20	0	255	0	80	0	0	0	23	0
TSR	184	26	44	0	7	0	5	0	0	0	9	0
PKD	86	11	48	1	164	0	68	1	0	0	4	1
MLP	249	14	525	5	126	0	14	1	1	0	13	0
KKD	201	18	170	4	49	0	35	0	0	0	4	0
WYD	210	4	20	0	14	1	3	0	0	0	0	0
KNR	74	6	61	3	17	1	12	0	0	0	2	0
KSD	65	1	58	0	13	0	5	0	0	0	2	0
Kerala	2417	133	1073	14	1147	7	381	3	5	0	103	1

Source: IDSP

TABLE : 5.2.3 District-wise Communicable Disease Cases and Deaths in Kerala – 2023

Districts	Fever (Undifferentiated)		ADD		Chicken Pox	
	OP	Death	OP	Death	Cases	Death
TVM	276356	0	39987	0	2184	0
KLM	169784	0	18317	0	1801	0
PTA	85778	0	8867	0	1062	0
IDK	87529	0	10261	0	839	0
KTM	151807	0	16946	0	1219	0
ALP	184295	1	21667	0	761	1
EKM	214809	1	40081	0	2692	0
TSR	164122	0	37209	0	1165	0
PKD	237323	0	46458	0	1662	2
MLP	455186	1	88166	1	6601	0
KKD	330921	0	53968	0	1379	0
WYD	186284	0	23170	1	1034	1
KNR	251673	1	52402	0	2490	0
KSD	183187	0	28767	0	1501	0
Kerala	2979054	4	486266	2	26390	4

Source: IDSP

5.3 Non-Communicable Diseases in Kerala

This section presents data on non-communicable diseases in Kerala, based on reports from healthcare facilities under the DHS. The data, collected from DHS facilities and consolidated at the district level, includes **monthly new OP cases** for each non-communicable disease and death is reported to the CBHI portal. There is a possibility of duplication if the same patient receives services from multiple facilities. For the year 2023, disease-wise and district-wise case (new OP) and death data are provided

TABLE : 5.3.1 Non Communicable Disease Cases and Deaths in Kerala – 2023

Diseases	Cases	Deaths
Accidental Injuries	370032	50
Acute Renal Failure	9567	104
Arsenicosis	0	0
Asthma	216718	214
Breast Cancer	12310	93
Bronchitis	103096	115
Burns	10399	13
Cerebro Vascular Accident	46951	415
Cervix Cancer	1599	50
Chronic Neurological Disorder	11749	26

Chronic Renal Failure	45993	331
Congenital Heart Disease	7804	71
Emphysemas	30044	259
Hypertension	2325332	73
Ischemic Heart Diseases	87416	792
Lung Cancer	5980	153
Mental Disorders	143441	1
Obesity	68835	0
Oral Cancer (Lip Oral Cavity and Pharynx)	5675	66
Other Cancers	29097	486
Other Cardio Vascular Diseases	135953	575
Other Neurological Disorders	25997	38
OTHERS	302699	357
Rheumatic Fever	1582	0
Road Traffic Accidents	89487	25
Severe Mental Disorders	34849	0
Snake Bite	4542	4
Type 1 diabetes	49639	0
Type 2 diabetes	115724	112
Source : CBHI portal (Data of facilities under DHS only)		

TABLE : 5.3.2 District-wise Non Communicable Disease Cases and Deaths in Kerala – 2023

DISTRICT		Accidental Injuries	Acute Renal Failure	Arsenicosis	Asthma	Breast Cancer	Bronchitis	Burns	Cerebro Vascular Accident	Cervix Cancer	Severe Mental Disorders	Snake Bite	Type 1-E-10	Type 2-E-11
TVM	CASES	21604	1044	0	25606	716	10887	284	5280	24	5551	266	7272	8266
	DEATHS	2	18	0	0	2	34	1	14	0	0	1	0	16
KLM	CASES	34945	2135	0	27924	3934	7219	1227	5185	274	13717	493	4187	8266
	DEATHS	11	6	0	5	30	2	4	83	13	0	0	0	5
PTA	CASES	3385	19	0	3513	38	250	306	1205	13	11	286	920	8266
	DEATHS	1	0	0	0	1	0	0	3	0	0	0	0	1
ALP	CASES	22197	123	0	15008	1147	4140	592	1877	92	3584	188	1095	8266
	DEATHS	0	0	0	0	0	0	0	2	0	0	0	0	0
KTM	CASES	10921	237	0	10491	182	4690	490	3632	48	0	216	61	8266
	DEATHS	1	0	0	0	0	0	0	0	0	0	0	0	0
IDK	CASES	3886	48	0	1545	32	606	69	739	10	1	171	2659	8266
	DEATHS	20	8	0	0	0	0	0	16	3	0	0	0	2
EKM	CASES	39319	456	0	13122	1235	10605	741	2224	111	2491	270	1474	8266
	DEATHS	0	25	0	5	29	1	7	13	19	0	2	0	0
TSR	CASES	60143	1296	0	30916	550	23438	2772	6054	134	462	242	5210	8266
	DEATHS	0	0	0	6	0	0	0	9	0	0	0	0	6
PKD	CASES	38480	684	0	18173	1899	5571	684	5098	236	3367	732	3579	8266
	DEATHS	10	38	0	2	17	0	0	141	6	0	0	0	65
MLP	CASES	53355	2580	0	24028	1469	14810	343	8372	472	3045	978	15260	8266
	DEATHS	5	7	0	160	14	78	0	96	9	0	1	0	9
KKD	CASES	6733	2	0	9827	101	6721	1482	2378	4	191	175	0	8266
	DEATHS	0	0	0	30	0	0	1	2	0	0	0	0	0
WYD	CASES	18417	211	0	5746	549	3080	375	2126	72	1871	131	1839	8266
	DEATHS	0	0	0	3	0	0	0	0	0	0	0	0	3
KNR	CASES	32233	482	0	10925	255	7495	954	1350	34	182	261	1384	8266
	DEATHS	0	2	0	3	0	0	0	36	0	0	0	0	5
KSD	CASES	24414	250	0	19894	203	3584	80	1431	75	376	133	4699	8266
	DEATHS	0	0	0	0	0	0	0	0	0	0	0	0	0
Source : CBHI portal (Data of facilities under DHS only)														

TABLE : 5.3.2 District-wise Non Communicable Disease Cases and Deaths in Kerala – 2023

DISTRICT		Lung Cancer	Mental Disorders	Obesity	Oral Cancer (Lip Oral Cavity and Pharynx)	Other Cancers	Other Cardio Vascular Diseases	Other Neurological Disorders	OTHERS
TVM	CASES	390	10531	13212	513	1005	18978	6994	3989
	DEATHS	10	0	0	0	14	19	0	0
KLM	CASES	1993	23532	15256	1036	4093	5682	1636	7529
	DEATHS	46	1	0	23	129	91	7	234
PTA	CASES	3	1026	70	22	151	15704	292	4099
	DEATHS	0	0	0	0	0	0	0	0
ALP	CASES	406	10776	3638	484	2549	7050	179	1
	DEATHS	0	0	0	0	0	0	0	0
KTM	CASES	231	5268	812	71	611	9022	532	83389
	DEATHS	0	0	0	0	0	0	0	0
IDK	CASES	3	1046	228	14	39	1641	76	3
	DEATHS	0	0	0	1	0	27	10	0
EKM	CASES	522	9814	6750	568	2501	11691	1397	161368
	DEATHS	29	0	0	16	97	105	4	14
TSR	CASES	789	10561	5022	1021	3647	17584	413	23644
	DEATHS	1	0	0	3	10	11	0	0
PKD	CASES	568	12348	3573	755	4644	10325	2062	1
	DEATHS	34	0	0	7	155	80	1	0
MLP	CASES	617	38976	13767	435	7434	23300	2410	3820
	DEATHS	27	0	0	14	25	175	16	40
KKD	CASES	24	1355	3605	182	158	3646	4706	3
	DEATHS	0	0	0	0	27	28	0	0
WYD	CASES	237	3540	2141	371	1465	4007	1910	12355
	DEATHS	2	0	0	0	0	0	0	0
KNR	CASES	130	10131	635	79	480	4322	154	2478
	DEATHS	4	0	0	2	29	39	0	69
KSD	CASES	67	4537	126	124	320	3001	3236	20
	DEATHS	0	0	0	0	0	0	0	0

Source : CBHI

TABLE : 5.3.2 District-wise Non Communicable Disease Cases and Deaths in Kerala – 2023

DISTRICT		Chronic Neurological Disorder	Chronic Renal Failure	Congenital Heart Disease	Emphysemas	Hypertension	Ischemic Heart Diseases	Rheumatic Fever	Road Traffic Accidents
TVM	CASES	1437	4458	463	9389	172912	6834	400	9619
	DEATHS	0	25	0	19	10	32	0	1
KLM	CASES	1148	6041	1570	460	119700	11250	24	11666
	DEATHS	3	34	28	20	6	232	0	4
PTA	CASES	915	115	1096	4	235686	2671	0	630
	DEATHS	4	0	2	0	3	0	0	3
ALP	CASES	425	748	287	432	220566	6150	6	7160
	DEATHS	0	3	0	0	0	0	0	0
KTM	CASES	321	547	106	370	122995	5678	0	3665
	DEATHS	0	0	0	0	0	0	0	0
IDK	CASES	47	243	533	78	21244	959	38	1825
	DEATHS	2	0	3	0	0	0	0	0
EKM	CASES	486	1271	238	138	89643	10108	4	12374
	DEATHS	6	22	7	0	2	182	0	0
TSR	CASES	204	5321	402	1961	419298	8244	39	8843
	DEATHS	1	4	0	0	2	2	0	1
PKD	CASES	2748	4690	456	2938	149768	7279	211	6530
	DEATHS	9	137	10	206	14	296	0	14
MLP	CASES	650	17478	1761	4567	467497	15121	109	6929
	DEATHS	1	78	17	0	34	46	0	2
KKD	CASES	2846	238	11	6107	26177	1635	0	7571
	DEATHS	0	18	0	0	0	0	0	0

WYD	CASES	360	1753	78	1782	65419	5716	15	2073
	DEATHS	0	0	0	0	0	1	0	0
KNR	CASES	64	2113	373	1646	64409	3224	531	4385
	DEATHS	0	10	4	14	2	1	0	0
KSD	CASES	98	977	430	172	150018	2547	205	6217
	DEATHS	0	0	0	0	0	0	0	0

Source: CBHI



HEALTHCARE DELIVERY UNDER DHS

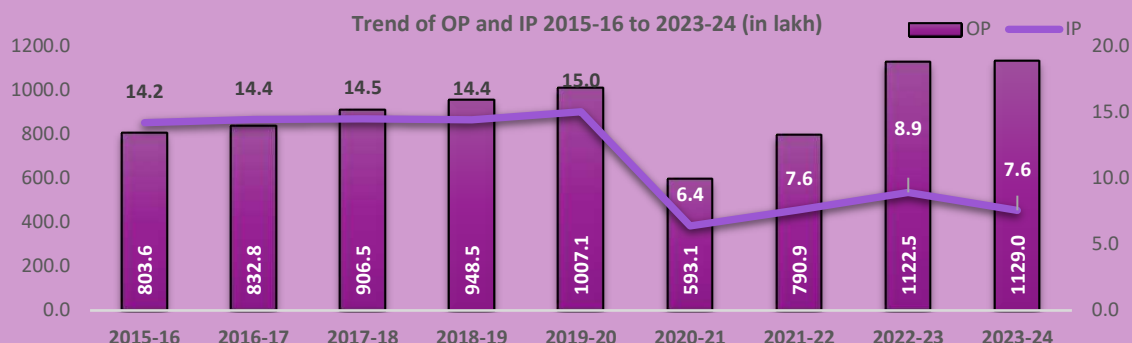
Chapter 6

Key Insights at a Glance

OP & IP Trend (2015-16 to 2023-24)

2023-24

OP – 11.29 Cr
IP – 7.6 Lakh

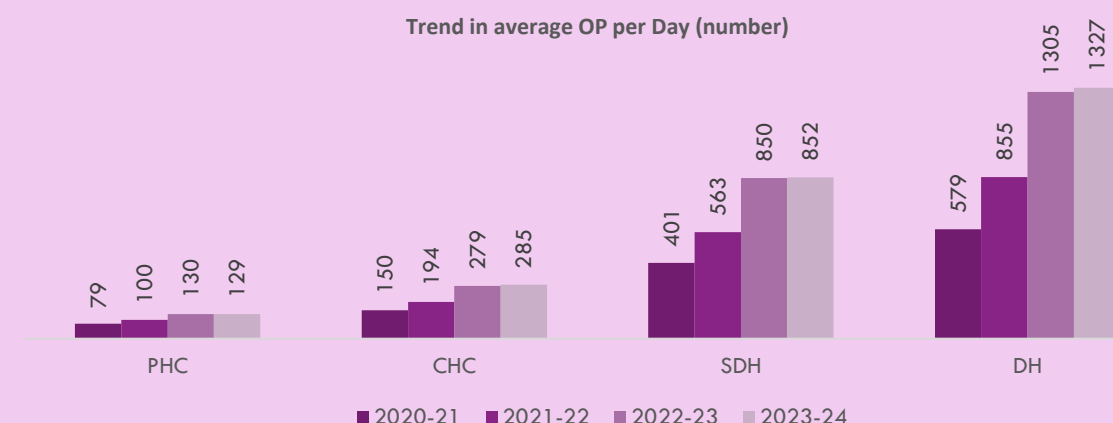


OP (both new and old) under the facilities of DHS shows an increasing trend, except during the COVID period. During the COVID period, OP decreased from 10.07 crores to 5.93 crores (almost halved) and afterward showed an increasing trend. It reached 11.29 crores in 2023-24. However, IP shows a slight decreasing trend compared to the previous year, declining from 8.9 lakh in 2022-23 to 7.6 lakh in 2023-24.

Trend in Average OP per Facility per Day (2020-21 to 2023-24)

Avg OP per day 2023-24

DH – 1327
SDH – 852
CHC – 285
PHC – 129



The average OP per day per facility was 1,327 at the District Hospital level, 852 at the Sub-District Hospital level, 285 at the Community Health Centre level, and 129 at the Primary Health Centre level. The OP at CHCs was almost double that of PHCs, at SDHs it was almost triple that of CHCs, and at DHs it was almost double that of SDHs.

Average OP per Facility per Day by District (2023-24)

2023-24

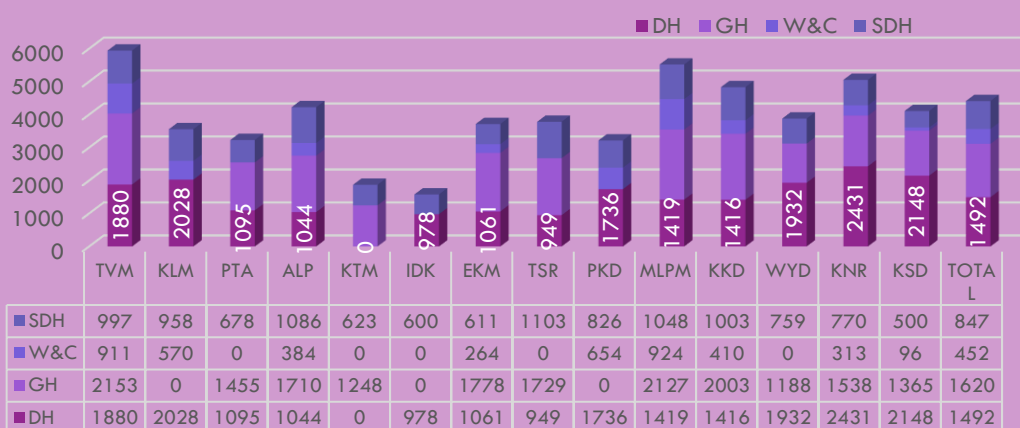
OP Per day

Highest

DH – 2431(KNR)
GH – 2153 (TVM)
W&C - 924 (MLP)
SDH – 1103 (TSR)

OP Per day Lowest

DH – 949(TSR)
GH – 1188 (WYD)
W&C - 96 (KGD)
SDH – 500(KGD)



The OP per day at the District Hospital level varied from 949 in Thrissur to 2,431 in Kannur. Among the General Hospitals, GH TVM had the highest per-day OP load, which ranged from 1,188 in WYD to 2,153 in TVM.

The per-day average OP among Women & Child Hospitals showed significant variation, ranging from 96 in KGD to 924 in MLP.

At the Sub-District Hospital level, the average per-day OP was highest in TSR at 1,103 and lowest in KGD at 500.

Chapter 6

Health Care Delivery under DHS

6.1 Introduction

The Department of Health Services (DHS) plays a crucial role in delivering healthcare services across various levels of the public health system in the state. The facilities under DHS, including Primary Health Centres (PHCs), Community Health Centres (CHCs), Sub-District Hospitals (SDHs), and District Hospitals, provide both outpatient (OP) and inpatient (IP) care, along with essential diagnostic and surgical services. Additionally, Urban Primary Health Centres (UPHCs) and Urban Community Health centres (UCHCs) under the National Health Mission (NHM) contribute significantly to healthcare delivery in urban areas.

This chapter presents an overview of key healthcare service indicators reported from DHS and NHM facilities over the years. The analysis includes trends in OP and IP cases, the midnight bed occupancy count, major surgeries performed, and total laboratory tests conducted. These indicators provide insights into healthcare utilization patterns and the capacity of the public health system to meet the population's needs.

The data for this analysis has been compiled from past editions of Health at a Glance reports, while the figures for the current year are sourced from the HMIS portal

6.2 Trend of OP and IP

Table 6.2.1 Trend of OP and IP Reported in Facilities Under DHS & NHM (2009-10 to 2023-24)

YEAR	OP	IP
2015-16	80364783	1418957
2016-17	83275079	1444025
2017-18	90647119	1447923
2018-19	94849912	1441206
2019-20	100707087	1501645
2020-21	59312582	638865
2021-22	79085553	760769
2022-23	112252782	892464
2023-24	112901897	756872

Source: Health @ A Glance Reports & HMIS data

OP reported includes all PHCs, CHCs, SDHs, and district-level hospitals under DHS (mapped in HMIS), as well as UPHCs and UCHCs under NHM.

IP reported includes only those facilities that provided inpatient services during the reference year.

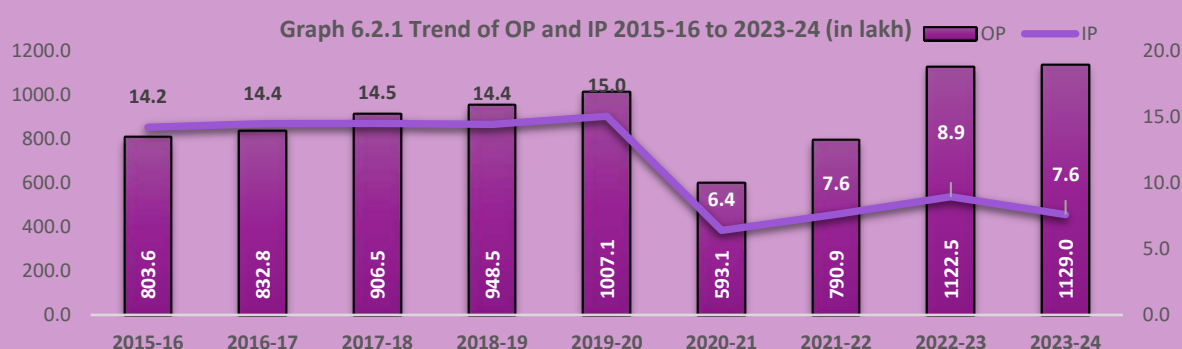


Table 6.2.2 Facility Service Utilization Summary (2014-15 to 2023-24)

YEAR	OP	IP	Major Surgeries	Midnight IP Count	Total Lab Test Done
2015-16	80364783	1418957	101953	5860264	-
2016-17	83275079	1444025	105101	5739907	-
2017-18	90647119	1447923	129192	5362328	26101898
2018-19	94849912	1441206	116025	5636488	42836088
2019-20	100707087	1501645	100606	4442784	47667609
2020-21	59312582	638865	55174	2736934	30645320
2021-22	79085553	760769	75159	2599812	39718065
2022-23	112252782	892464	105177	3686448	59181025
2023-24	112901897	756872	89775	3232653	70225861

Source: Health @ A Glance Reports & HMIS data

OP reported includes all PHCs, CHCs, SDHs, and district-level hospitals under DHS (mapped in HMIS), as well as UPHCs and UCHCs under NHM.

IP reported includes only those facilities that provided inpatient services during the reference year.

Table 6.2.3 Trend of Outpatient (OP) Visits in DHS Facilities - District wise(2015-16 to 2023-24)

District	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
TVM	9172957	9238644	11037657	11343571	11550699	6824396	8934692	12604595	13122303
KLM	6529524	7000781	7638239	7788168	8065670	4770349	6171148	8510930	8478431
PTA	3838311	3593795	3773120	4026985	4094462	2717167	3011165	4171072	4368666
ALP	5822585	7192205	6423874	6534832	6629452	3869592	4604969	7057489	7436201
KTM	5858896	5731452	5996300	6068631	6529701	3949795	5037802	6814023	6300020
IDK	2521752	2734271	2860496	2879192	3127862	1933821	2346066	3246736	3574174
EKM	7534256	7851670	8790892	8844921	9132363	5670806	7123167	10225467	9821597
TSR	6475787	6867812	7456876	7777168	8422035	5526293	7448061	10361811	10177366
PKD	5605282	5728859	6555198	6571238	7125458	4034197	5513785	7909688	8216684
MLP	9242156	9349145	10294248	11936596	13000509	6576202	9989181	13930167	13997465
KKD	6505006	7067029	7342748	7691636	8661137	4922927	6734243	10166576	10115822
WND	2848440	2451357	2760444	2769668	3178220	1802851	2416510	3820291	3675217
KNR	5999218	5952233	6825768	7602238	7879387	4811375	6864212	9511584	9167386
KSD	2410613	2515826	2891259	3015068	3310132	1902811	2890552	3922353	4450565
Total	80364783	83275079	90647119	94849912	100707087	59312582	79085553	112252782	112901897
Source	Monthly District Report	Monthly District Report	Monthly District Report	Monthly District Report	Monthly District Report	HMIS	HMIS	HMIS	HMIS

OP reported includes all PHCs, CHCs, SDHs, and district-level hospitals under DHS (mapped in HMIS), as well as UPHCs and UCHCs under NHM.

Table 6.2.4 Trend of Inpatient (IP) Visits in DHS Facilities – District wise (2015-16 to 2023-24)

District	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
TVM	130955	128546	173726	183378	221002	56659	68217	94403	93240
KLM	86196	80546	91589	89441	85863	40412	54916	75070	66465
PTA	131659	134989	139183	147039	158875	32003	33495	37469	32763
ALP	68516	91342	99165	94250	92907	25041	37125	32346	35499
KTM	74413	69859	69115	66364	66517	27262	34201	75877	38444
IDK	46802	46093	39920	34093	28833	15012	14914	24578	24583
EKM	121515	111791	103233	102545	110740	50624	52108	60956	59539
TSR	197124	182902	126989	131041	135413	66655	65085	64569	57937
PKD	147220	124936	133114	124410	142425	92118	146680	125267	89971
MLP	144239	184409	214584	220089	227368	84399	95965	110049	92323
KKD	98528	115992	75951	78451	70880	31588	32536	52113	37436
WND	47280	44791	47440	47360	43500	24886	29214	31439	31719
KNR	82013	86195	88827	78351	73349	48056	58702	61023	54974
KSD	42497	41634	45087	44394	43973	44150	37611	47305	41979
Total	1418957	1444025	1447923	1441206	1501645	638865	760769	892464	756872
Source:	direct Reporting	direct Reporting	direct Reporting	direct Reporting	direct Reporting	HMIS	HMIS	HMIS	HMIS

IP reported includes only those facilities that provided inpatient services during the reference year.

Table 6.2.5 District-wise Outpatient (OP) Visits by Facility Type in DHS Facilities (2020-21 to 2023-24)

	PHC				Community Health Centre			
District	2020-21	2021-22	2022-23	2023-24	2020-21	2021-22	2022-23	2023-24
TVM	2406379	3051067	3915830	4086781	1552169	1936638	2775121	2808889
KLM	1747299	2021762	2619900	2657131	907621	1057835	1647063	1725463
PTA	1081328	1092233	1307668	1331217	398818	415709	536502	585679
ALP	1636132	1854181	2336676	2340583	715420	820468	1139240	1192284
KTM	1569756	1826145	2323012	2250882	935211	1098684	1462898	1545301
IDK	841358	985629	1282415	1282628	422212	491618	670309	701993
EKM	2351605	2766837	3734016	3749395	1044261	1159027	1752746	1837280
TSR	2247529	2826486	3490260	3452514	1495242	1954798	2645619	2699939
PKD	1725621	2317717	3019892	2881495	1093506	1535946	2273452	2351948
MLP	3214489	4674387	6057200	5758758	1305060	1966245	2744062	2892507
KKD	2078296	2745830	4109343	4226497	959315	1387937	2118793	1928189
WYD	550643	671371	998272	997674	492891	611921	996790	985168
KNR	2087415	2805268	3603118	3420853	856040	1187854	1694799	1654525
KSD	926765	1222821	1518306	1596443	212995	365921	582630	624045
State	24464615	30861734	40315908	40032851	12390761	15990601	23040024	23533210

Source: HMIS data

Table 6.2.5 District-wise Outpatient (OP) Visits by Facility Type in DHS Facilities (2020-21 to 2023-24)

	Sub District Hospital				District Hospital				All			
District	2020-21	2021-22	2022-23	2023-24	2020-21	2021-22	2022-23	2023-24	2020-21	2021-22	2022-23	2023-24
TVM	1439343	1713330	2530354	2911811	1426505	2233657	3383290	3321430	6824396	8934692	12604595	13122303
KLM	1841495	2621599	3264464	3147406	273934	469952	979503	948431	4770349	6171148	8510930	8478431
PTA	642506	716266	1038129	989587	594515	786957	1288773	1462183	2717167	3011165	4171072	4368666
ALP	885739	1212753	2106677	2377400	632301	717567	1474896	1525934	3869592	4604969	7057489	7436201
KTM	404277	572266	886195	682343	1040551	1540707	2141918	1821494	3949795	5037802	6814023	6300020
IDK	471590	558378	783950	875817	198661	310441	510062	713736	1933821	2346066	3246736	3574174
EKM	1298216	1788248	2876761	2453622	976724	1409055	1861944	1781300	5670806	7123167	10225467	9821597
TSR	890725	1422205	2532873	2415997	892797	1244572	1693059	1608916	5526293	7448061	10361811	10177366
PKD	716382	1003075	1689018	1967124	498688	657047	927326	1016117	4034197	5513785	7909688	8216684
MLP	1069604	1699456	2553674	2678472	987049	1649093	2575231	2667728	6576202	9989181	13930167	13997465
KKD	1177637	1713351	2659298	2563773	707679	887125	1279142	1397363	4922927	6734243	10166576	10115822
WYD	290782	417165	642407	553822	468535	716053	1182822	1138553	1802851	2416510	3820291	3675217
KNR	1182024	1756609	2562342	2529136	685896	1114481	1651325	1562872	4811375	6864212	9511584	9167386
KSD	421922	686689	865030	912790	341129	615121	956387	1317287	1902811	2890552	3922353	4450565
State	12732242	17881390	26991172	27059100	9724964	14351828	21905678	22283344	59312582	79085553	112252782	112901897

Source: HMIS data

Table 6.2.6 District-wise Inpatient (IP) Visits by Facility Type in DHS Facilities (2020-21 to 2023-24)

	Primary Health Centre				Community Health Centre				Sub District Hospital			
District	2020-21	2021-22	2022-23	2023-24	2020-21	2021-22	2022-23	2023-24	2020-21	2021-22	2022-23	2023-24
TVM	341	325	7547	786	4780	5726	8398	8883	15817	12723	19094	17497
KLM	35	0	182	259	461	245	1982	2255	24944	37917	48669	35349
PTA	39	1999	0	0	171	185	153	183	7639	8808	11713	7720
ALP	200	374	796	428	1532	1480	1697	1700	8044	10287	13750	15636
KTM	2364	2713	5529	1873	2084	2894	2311	2351	4666	5548	36169	6932
IDK	380	322	444	268	2312	1061	2175	1968	8619	7776	10572	10180
EKM	0	0	8	0	1068	645	1832	1859	16413	13641	16895	18842
TSR	1	0	0	0	3534	3607	5066	5511	37038	37861	33586	24396
PKD	0	0	0	0	7373	7738	12111	13737	44741	97150	56212	29606
MLP	73	190	267	14	5120	4767	3502	3295	19258	19662	22151	18133
KKD	307	106	71	0	361	289	364	389	11016	11997	23457	10653
WYD	88	111	185	111	1877	1944	2838	2912	6849	8096	5829	5540
KNR	0	0	0	0	661	1235	1325	566	14189	17590	19996	15719
KSD	267	229	172	182	247	215	1093	676	3794	2199	7080	7049
State	4095	6369	15201	3921	31581	32031	44847	46285	223027	291255	325173	223252

Source: HMIS data

Table 6.2.6 District-wise Inpatient (IP) Visits by Facility Type in DHS Facilities (2020-21 to 2023-24)

	District Hospital				All			
District	2020-21	2021-22	2022-23	2023-24	2020-21	2021-22	2022-23	2023-24
TVM	35721	49443	59364	66074	25041	68217	94403	93240
KLM	14972	16754	24237	28602	50624	54916	75070	66465
PTA	24154	22503	25603	24860	15012	33495	37469	32763
ALP	15265	24984	16103	17735	48056	37125	32346	35499
KTM	18148	23046	31868	27288	44150	34201	75877	38444
IDK	3701	5755	11387	12167	40412	14914	24578	24583
EKM	33143	37822	42221	38838	27262	52108	60956	59539
TSR	26082	23617	25917	28030	31588	65085	64569	57937
PKD	40004	41792	56944	46628	84399	146680	125267	89971
MLP	59948	71346	84129	70881	92118	95965	110049	92323
KKD	19904	20144	28221	26394	32003	32536	52113	37436
WYD	16072	19063	22587	23156	56659	29214	31439	31719
KNR	33206	39877	39702	38689	66655	58702	61023	54974
KSD	39842	34968	38960	34072	24886	37611	47305	41979
State	380162	431114	507243	483414	638865	760769	892464	756872

Source: HMIS data

6.3 Facility Service Utilization _ 2023-24 _ as per HMIS data**Table 6.3.1 Facility Service Utilization Summary 2023-24**

DISTRICT	Total No of facilities	OP	IP	Major Surgeries	Midnight IP Count	Total Lab Test Done
TVM	126	13122303	93240	13507	439587	9656801
KLM	90	8478431	66465	20069	243535	7211335
PTA	64	4368666	32763	5036	159042	3424933
ALP	93	7436201	35499	5683	170182	4003154
KTM	86	6300020	38444	5448	200456	3486117
IDK	62	3574174	24583	1919	128863	2740018
EKM	129	9821597	59539	6756	304173	7033176
TSR	119	10177366	57937	3875	210162	5265122
PKD	109	8216684	89971	3820	339403	6543691
MLPM	131	13997465	92323	9145	369939	6232695
KKD	102	10115822	37436	4253	148512	4342116
WYD	38	3675217	31719	2837	151425	2927544
KNR	113	9167386	54974	4823	221439	4080925
KSD	57	4450565	41979	2604	145935	3278234
TOTAL	1319	112901897	756872	89775	3232653	70225861

SOURCE : HMIS PORTAL

Table 6.3.2 Health care Service Delivery _DH _District wise_ 2023-24

DISTRICT	Total DH	OP	IP	Major Surgeries (excluding C-section)	Midnight IP Count	Total Lab Test Done
TVM	2	1372257	16824	2201	82504	1209498
KLM	1	740377	17787	11693	61465	824764
PTA	1	399685	5611	787	28513	400799
ALP	2	761755	7213	2536	41552	532782
KTM	0	0	0	0	0	0
IDK	2	713736	12167	579	64970	842752
EKM	1	387154	3743	913	14747	303371
TSR	1	346445	5132	829	20973	348642
PKD	1	633610	30408	2172	120474	1498277
MLPM	3	1554090	24430	1806	112023	1270038
KKD	1	516798	7243	1231	31106	384846
WYD	1	705085	18465	1869	88659	606663
KNR	1	887173	24430	2728	90650	586165
KSD	1	784176	17539	1725	67337	653843

TOTAL	18	9802341	190992	31069	824973	9462440
SOURCE : HMIS PORTAL						

Table 6.3.3 Health care Service Delivery _GH _District wise _2023-24

DISTRICT	Total GH	OP	IP	Major Surgeries (excluding C-section)	Midnight IP Count	Total Lab Test Done
TVM	2	1571547	36869	8745	142411	2004413
KLM	0	0	0	0	0	0
PTA	2	1062498	19249	3300	81474	1257235
ALP	1	624048	5713	1521	10928	832889
KTM	4	1821494	27288	5049	149900	1481359
IDK	0	0	0	0	0	0
EKM	2	1297680	33678	4808	167001	2186624
TSR	2	1262471	22898	1454	74690	1219919
PKD	0	0	0	0	0	0
MLPM	1	776512	36059	3405	153816	1209495
KKD	1	730957	14563	2578	58387	614335
WYD	1	433468	4691	192	22048	427461
KNR	1	561515	10712	1189	48337	718782
KSD	1	498082	16171	868	57022	894425
TOTAL	18	10640272	227891	33109	966014	12846937

SOURCE : HMIS PORTAL

Table 6.3.4 Health care Service Delivery _Women & Child Hospital _District wise _2023-24

DISTRICT	Total W&C	OP	IP	Major Surgeries (excluding C-section)	Midnight IP Count	Total Lab Test Done
TVM	1	332341	11908	584	65551	416662
KLM	1	208054	10815	993	28759	508531
PTA	0	0	0	0	0	0
ALP	1	140131	4809	48	22875	249753
KTM	1	0	0	0	0	0
IDK	0	0	0	0	0	0
EKM	1	96466	1417	12	7042	114830
TSR	0	0	0	0	0	0
PKD	1	238638	11030	460	65432	553090
MLPM	1	337126	10392	510	39615	438201
KKD	1	149608	4588	178	13451	213704
WYD	0	0	0	0	0	0
KNR	1	114184	3547	1	14237	154167
KSD	1	35029	362	7	1135	34729
TOTAL	10	1651577	58868	2793	258097	2683667

SOURCE : HMIS PORTAL

Table 6.3.5 Health care Service Delivery _TH & THQH _District wise _2023-24

DISTRICT	Total SDH	OP	IP	Major Surgeries (excluding C-section)	Midnight IP Count	Total Lab Test Done
TVM	8	2911811	17497	1965	96874	2464024
KLM	9	3147406	35349	7383	141146	3400090
PTA	4	989587	7720	949	48420	998275
ALP	6	2377400	15636	1578	84194	1018900
KTM	3	682343	6932	399	29190	631076
IDK	4	875817	10180	1340	54154	971422
EKM	11	2453622	18842	1023	103316	1633072
TSR	6	2415997	24396	1592	89336	1340872
PKD	7	2110993	34796	1188	111868	2173696
MLPM	7	2678472	18133	3424	51898	1108480
KKD	7	2563773	10653	266	43734	1330027

WYD	2	553822	5540	693	26520	678153
KNR	9	2529136	15719	905	66460	1238232
KSD	5	912790	7049	4	16667	676319
TOTAL	88	27202969	228442	22709	963777	19662638

SOURCE : HMIS PORTAL

Table 6.3.6 Health care Service Delivery _CHC & PHC _District wise_2023-24

District	Total CHC & PHC Level facilities	OP	No of facilities provided IP Services	IP	MIDNIGHT IP COUNT	No of facilities provided Lab Services	NUMBER OF LAB TEST DONE
TVM	112	6889062	23	9669	50049	107	3429209
KLM	79	4382594	13	2514	12165	76	2477950
PTA	57	1916896	2	183	635	50	768624
ALP	83	3532867	18	2128	10633	67	1368830
KTM	79	3796183	19	4224	21366	73	1373682
IDK	56	1984621	10	2236	9739	50	925844
EKM	114	5586675	10	1859	12067	111	2795279
TSR	110	6152453	16	5511	25163	100	2355689
PKD	100	5233443	9	13737	41629	91	2318628
MLPM	119	8651265	12	3309	12587	108	2206481
KKD	92	6154686	3	389	1834	88	1799204
WYD	34	1982842	11	3023	14198	34	1215267
KNR	101	5075378	6	566	1755	79	1383579
KSD	49	2220488	5	858	3774	42	1018918
TOTAL	1185	63559453	157	50206	217594	1076	25437184

SOURCE : HMIS PORTAL



TRENDS IN VITAL STATISTICS: INSIGHTS FROM SRS (1971- 2020)

Chapter 7

Key Insights at a Glance



Birth Rate

13.2

Kerala 2020

- Rural – 13.1
- Urban – 13.3
- All – 13.2

All India 2020

- Rural – 21.1
- Urban – 16.1
- All – 19.5



Under Five Mortality Rate

8

Kerala 2020

- Rural – 5
- Urban – 12
- All – 8

All India 2020

- Rural – 36
- Urban – 21
- All – 32



Total fertility Rate

1.5

Kerala 2020

- Rural – 1.5
- Urban – 1.5
- All – 1.5

All India 2020

- Rural – 2.2
- Urban – 1.6
- All – 2



Still Birth Rate

4

Kerala 2020

- Rural – 4
- Urban – 4
- All – 4

All India 2020

- Rural – 4
- Urban – 3
- All – 3



Death Rate

7

Kerala 2020

- Rural – 7
- Urban – 7.1
- All – 7

All India 2020

- Rural – 6.4
- Urban – 5.1
- All – 6



Maternal Mortality Ratio

19

As per MMR Bulletin 2018-20

- Kerala – 19
- India - 97



Infant Mortality Rate

6

Kerala 2020

- Rural – 4
- Urban – 9
- All – 6

All India 2020

- Rural – 31
- Urban – 19
- All – 28



Mean Age at Marriage

23.4

Kerala 2019

- Rural – 23.2
- Urban – 23.6
- All – 23.4

All India 2019

- Rural – 21.7
- Urban – 23.3
- All – 22.1



Neo-Natal Mortality Rate

4

Kerala 2020

- Rural – 3
- Urban – 6
- All – 4

All India 2019

- Rural – 23
- Urban – 12
- All – 20

Sex Ratio at Birth

974

Kerala 2018-20

- Rural – 973
- Urban – 975
- All – 974

All India 2018-20

- Rural – 907
- Urban – 910
- All - 907

Chapter 7

Trends in Vital Statistics: Insights from SRS (1971-2020)

7.1 Introduction

This chapter presents a comprehensive analysis of Kerala's vital indicators based on data from the Sample Registration System (SRS), spanning from 1976 to 2020. It includes historical trends in key indicators such as birth rate, death rate, total fertility rate (TFR), infant mortality rate (IMR), neonatal mortality rate (NMR), under-five mortality rate, life expectancy at birth, sex ratio at birth, and maternal mortality ratio (MMR). These indicators provide valuable insights into the health and demographic dynamics of the state over the past few decades.

Table 7.1.1 Birth Rate Trends: Kerala vs India (1971–2020) – SRS Reports

Year	KERALA			INDIA		
	Rural+ Urban	Rural	Urban	Rural+ Urban	Rural	Urban
1971	31.1	31.3	29.6	36.9	38.9	30.1
1972	31.2	31.5	29.5	36.6	38.4	30.5
1973	29.2	29.4	28.5	34.6	35.9	28.9
1974	26.8	26.7	26.9	34.5	35.9	28.4
1975	28	28.1	27.5	35.2	36.7	28.5
1976	27.8	28.1	26.5	34.4	35.8	28.4
1977	25.8	26.1	24.1	33	34.3	27.8
1978	25.2	25.3	24.9	33.3	34.7	27.8
1979	25.8	26.3	23.9	33.1	34.3	28.3
1980	26.6	27	25	33.3	34.6	28.1
1981	25.6	26	23.5	33.9	35.6	27
1982	26.2	26.4	25.1	33.8	35.5	27.6
1983	24.9	25	24.9	33.7	35.3	28.3
1984	22.9	22.6	24.1	33.9	35.3	29.4
1985	23.3	23.1	24.1	32.9	34.3	28.1
1986	22.5	22.4	23	32.6	34.2	27.1
1987	21.7	21.5	22.3	32.2	33.7	27.4
1988	20.3	20	21.4	31.5	33.1	26.3
1989	20.3	20.2	20.5	30.6	32.2	25.2
1990	19.6	19.6	19.8	30.2	31.7	24.7
1991	18.3	18.4	18.1	29.5	30.9	24.3
1992	17.7	17.6	18.3	29.2	30.9	23.1
1993	17.4	17.5	17.3	28.7	30.4	23.7
1994	17.4	17.3	18	28.7	30.5	23.1
1995	18	18.1	17.7	28.3	30	22.7
1996	18	18	17.9	27.5	29.3	21.6
1997	17.9	17.9	17.9	27.2	28.9	21.5
1998	18.3	18.3	18.2	26.5	28	21.1
1999	18	18.1	17.7	26	27.5	20.8
2000	17.9	18	17.5	25.8	27.6	20.7
2001	17.3	17.4	16.7	25.4	27.1	20.3
2002	16.9	17	16.4	24.99	26.65	19.96
2003	16.7	16.9	16	24.8	26.4	19.8
2004	15.2	15.4	14.6	24.1	25.9	19
2005	15	15.1	14.8	23.8	25.6	19.1
2006	14.9	15	14.6	23.5	25.2	18.8

2007	14.7	14.8	14.5	23.1	24.7	18.6
2008	14.6	14.6	14.6	22.81	24.41	18.5
2009	14.7	14.6	14.9	22.55	24.12	18.31
2010	14.8	14.8	14.8	22.15	23.69	17.98
2011	15.2	15.4	14.4	21.79	23.33	17.61
2012	14.9	15.1	14.2	21.59	23.11	17.42
2013	14.7	15	14	21.4	22.9	17.3
2014	14.8	14.9	14.8	21	22.7	17.4
2015	14.8	14.8	14.8	20.8	22.4	17.3
2016	14.3	14.3	14.4	20.4	22.1	17
2017	14.2	14.1	14.2	20.2	21.8	16.8
2018	13.9	13.8	14	20	21.6	16.7
2019	13.5	13.4	13.7	19.7	21.4	16.4
2020	13.2	13.1	13.3	19.5	21.1	16.1

Table 7.1.2 Death Rate Trends: Kerala vs India (1971–2020) – SRS Reports

Year	KERALA			INDIA		
	Rural+ Urban	Rural	Urban	Rural+ Urban	Rural	Urban
1971	9	9.1	8.4	14.9	16.4	9.7
1972	9.2	9.4	7.8	16.9	18.9	10.3
1973	8.5	8.7	7.2	15.5	17	9.6
1974	7.8	8	7	14.5	15.9	9.2
1975	8.4	8.5	7.8	15.9	17.3	10.2
1976	8.1	8.2	7.6	15	16.3	9.5
1977	7.3	7.4	6.8	14.7	16	9.4
1978	7	7.1	6.7	14.2	15.3	9.4
1979	6.9	6.9	6.6	12.8	13.9	8.4
1980	7	7.1	6.5	12.4	13.5	8
1981	6.6	6.7	5.8	12.5	13.7	7.8
1982	6.6	6.6	6.6	11.9	13.1	7.4
1983	6.7	6.7	6.9	11.9	13.1	7.9
1984	6.4	6.2	7.3	12.6	13.8	8.6
1985	6.5	6.5	6.6	11.8	13	7.8
1986	6.1	6	6.9	11.1	12.2	7.6
1987	6.1	6.1	6.2	10.9	12	7.4
1988	6.4	6.3	6.7	11	12	7.7
1989	6.1	6	6.1	10.3	11.1	7.2
1990	6	6	6.1	9.7	10.5	6.8
1991	6	6.2	5.3	9.8	10.6	7.1
1992	6.3	6.3	6.5	10.1	10.9	7
1993	6	6	5.8	9.3	10.6	5.8
1994	6.1	5.9	6.4	9.3	10.1	6.7
1995	6	6	6	9	9.8	6.6
1996	6.2	6.3	6	9	9.7	6.5
1997	6.2	6.3	6.1	8.9	9.6	6.5
1998	6.4	6.5	6.2	9	9.7	6.6
1999	6.4	6.5	6.3	8.6	9.4	6.25
2000	6.4	6.5	6.2	8.5	9.3	6.3
2001	6.6	6.8	6.2	8.4	9.1	6.3
2002	6.4	6.4	6.2	8.1	8.7	6.1
2003	6.3	6.4	6.1	8	8.7	6
2004	6.1	6	6.4	7.5	8.2	5.8
2005	6.4	6.3	6.5	7.6	8.1	6
2006	6.7	6.8	6.5	7.5	8.1	6
2007	6.8	6.9	6.4	7.4	8	6
2008	6.6	6.7	6.4	7.4	7.95	5.92
2009	6.8	6.8	6.5	7.3	7.84	5.84
2010	7	7.1	6.7	7.21	7.74	5.77
2011	7	7.1	6.6	7.1	7.62	5.67
2012	6.9	7	6.5	7.04	7.56	5.6
2013	6.9	7	6.6	7	7.5	5.6

2014	6.6	6.8	6.5	6.7	7.3	5.5
2015	6.6	6.7	6.4	6.5	7.1	5.4
2016	7.6	7.3	7.8	6.4	6.9	5.4
2017	6.8	7.2	6.5	6.3	6.9	5.3
2018	6.9	7.1	6.7	6.2	6.7	5.1
2019	7.1	7.1	7.2	6	6.5	5
2020	7	7	7.1	6	6.4	5.1

Table 7.1.3 Total Fertility Rate Trends: Kerala vs India (1971–2020) – SRS Reports						
Year	KERALA			INDIA		
	Rural+ Urban	Rural	Urban	Rural+ Urban	Rural	Urban
1971	4.1	4.2	3.8	5.2	5.4	4.1
1972	4.1	4.2	3.6	5.2	5.4	4.3
1973	3.8	3.9	3.3	4.9	5.2	3.7
1974	3.3	3.3	3	4.9	5.2	3.7
1975	3.4	3.4	3.1	4.9	5.2	3.7
1976	3.4	3.5	2.9	4.7	5	3.6
1977	3	3.1	2.6	4.5	4.8	3.4
1978	2.9	3	2.7	4.5	4.8	3.4
1979	3	3.1	2.6	4.4	4.7	3.4
1980	3	3.1	2.6	4.4	4.7	3.4
1981	2.8	2.9	2.4	4.5	4.8	3.3
1982	2.9	3	2.6	4.5	4.9	3.4
1983	2.6	2.8	2.5	4.5	4.9	3.4
1984	2.4	2.4	2.4	4.5	4.8	3.5
1985	2.4	2.4	2.3	4.3	4.6	3.3
1986	2.3	2.3	2.2	4.2	4.5	3.1
1987	2.2	2.2	2.2	4.1	4.4	3.2
1988	2	2	2.1	4	4.3	3.1
1989	2	2.1	1.8	3.9	4.2	2.8
1990	1.9	1.9	1.9	3.8	4.1	2.8
1991	1.8	1.8	1.7	3.6	3.9	2.7
1992	1.7	1.7	1.7	3.6	3.9	2.6
1993	1.7	1.7	1.7	3.5	3.8	2.8
1994	1.7	1.7	1.8	3.5	3.8	2.7
1995	1.8	1.9	1.8	3.5	3.9	2.6
1996	1.8	1.8	1.8	3.4	3.7	2.4
1997	1.8	1.8	1.8	3.32	3.64	2.38
1998	1.8	1.8	1.9	3.25	3.52	2.39
1999	1.8	1.8	1.8	3.19	3.5	2.34
2000	1.9	1.9	1.8	3.19	3.51	2.33
2001	1.8	1.8	1.7	3.1	3.4	2.3
2002	1.8	1.8	1.7	3.01	3.31	2.2
2003	1.8	1.8	1.7	2.96	3.24	2.18
2004	1.7	1.8	1.7	2.9	3.3	2.1
2005	1.7	1.7	1.7	2.9	3.2	2.1
2006	1.7	1.7	1.7	2.79	3.09	2.05
2007	1.7	1.7	1.7	2.68	2.97	1.99
2008	1.7	1.7	1.7	2.6	2.9	2
2009	1.7	1.7	1.8	2.6	2.9	2
2010	1.8	1.8	1.8	2.5	2.8	1.9
2011	1.8	1.9	1.8	2.4	2.7	1.9
2012	1.8	1.9	1.8	2.4	2.6	1.8
2013	1.8	1.9	1.8	2.3	2.5	1.8
2014	1.9	1.9	1.8	2.3	2.5	1.8
2015	1.8	1.8	1.8	2.3	2.5	1.8
2016	1.8	1.8	1.8	2.3	2.5	1.8
2017	1.7	1.7	1.7	2.2	2.4	1.7
2018	1.7	1.7	1.7	2.2	2.4	1.7
2019	1.6	1.6	1.6	2.1	2.3	1.7
2020	1.5	1.5	1.5	2	2.2	1.6

Table 7.1.4 Infant Mortality Rate Trends: Kerala vs India (1971–2020) – SRS Reports

Year	KERALA			INDIA		
	Rural+ Urban	Rural	Urban	Rural+ Urban	Rural	Urban
1971	58	60	48	129	138	82
1972	63	66	43	139	150	85
1973	54	57	47	134	143	89
1974	54	56	44	126	136	74
1975	54	57	36	140	151	84
1976	56	58	47	129	139	80
1977	47	49	37	130	140	81
1978	42	45	29	127	137	74
1979	43	45	31	120	130	72
1980	40	41	35	114	124	65
1981	37	40	24	110	119	62
1982	30	32	24	105	114	65
1983	33	35	26	105	114	66
1984	29	29	27	104	113	66
1985	31	32	30	97	107	59
1986	27	28	20	96	105	62
1987	28	29	25	95	104	61
1988	28	29	22	94	102	62
1989	21	23	15	91	98	58
1990	17	17	15	80	86	50
1991	16	17	16	80	87	53
1992	17	17	13	79	85	53
1993	13	15	8	74	82	45
1994	16	16	14	74	80	52
1995	15	16	13	74	80	48
1996	14	13	16	72	77	46
1997	12.2	11.1	15.4	71	77	45
1998	16	15	17	72	77	45
1999	14.5	13.8	16.4	70	75	44
2000	13.9	13.8	14.4	68	74	44
2001	11.3	12.2	8.6	66	72	42
2002	10	10.7	7.5	63	69	40
2003	11	12	10	60	66	38
2004	12	13	9	58	64	40
2005	14	15	12	58	64	40
2006	15	16	12	57	62	39
2007	13	14	10	55	61	37
2008	11.5	12.1	9.8	53.47	58.43	35.92
2009	11.6	11.9	10.6	50.35	55.05	33.69
2010	13.3	14.3	10.4	47.06	51	31.22
2011	12.1	12.9	9.4	44.24	48.49	28.98
2012	11.8	12.5	9.2	42.27	46.3	27.66
2013	12	13	9	40	44	27
2014	12	14	10	39	43	26
2015	12	13	10	37	41	25
2016	10	10	10	34	37	23
2017	10	9	10	33	37	23
2018	7	9	5	32	36	23
2019	6	7	5	30	34	20
2020	6	4	9	28	31	19

Table 7.1.5 Neo Natal Mortality Rate Trends: Kerala vs India (1971–2020) – SRS Reports

Year	KERALA			INDIA		
	Rural+ Urban	Rural	Urban	Rural+ Urban	Rural	Urban
1971	37.5	39.1	28	75.2	80.6	45.4
1972	36.7	38.7	24.1	71.6	76.6	44.9
1973	30.5	31.3	26	68.2	72.1	47.5
1974	31.5	32.8	24.6	70.1	75.7	41
1975	34	36.1	22.1	78.3	84.3	46.2
1976	33.9	36.1	23.9	77	83	49
1977	28.1	31	12	80.2	88	42
1978	26.8	28.4	18.2	77.4	85.2	38
1979	29.8	31.7	18.1	71.7	77.7	42.4
1980	29.7	31.4	19.5	69.3	75.5	39.1
1981	25.7	27.1	16.8	69.9	75.6	38.5
1982	21.7	23	15.3	66.7	72.9	38.8
1983	23	24.3	17.4	67.2	73.6	39.3
1984	21	21.4	19.4	65.8	72.2	39.7
1985	22.1	22.3	20.9	60.1	66.6	33.3
1986	19.1	21	7.8	59.8	65.5	36.2
1987	19.3	20	16.1	57.7	63.6	33.3
1988	18	18.4	16.7	56.8	62	34.6
1989	14.2	15.2	9.7	56.4	62.1	31.4
1990	12.6	12.7	12	52.5	57.4	30.9
1991	11.3	11.6	10.3	51.1	55.4	32.2
1992	10.9	11.5	8.1	50	53.6	33
1993	10	10.8	7.4	47.1	52.3	28.4
1994	12.6	13.3	10.4	47.7	52	32.6
1995	11	11	10	48.1	52.3	29.2
1996	10	10	10	47	50	28
1997	7.5	7.2	8.4	46.12	50.52	26.16
1998	10.9	10.6	11.7	45.05	49	26.96
1999	11	10.1	13.8	44.85	49.24	27.65
2000	9.8	10	9	44.38	48.66	27.49
2001	8.9	9.9	5.6	40.42	44.26	24.93
2002	6.6	7.5	3.7	39.64	43.55	23.77
2003	6.6	6.6	6.7	37.09	40.8	21.88
2004	9.1	9.8	6.9	37.44	41.25	23.59
2005	10.9	11.2	9.9	36.74	40.53	23.19
2006	10	12	7	37.01	40.92	22.94
2007	7.5	9.1	2.2	36.35	40.41	21.8
2008	7.4	8.8	3.2	35.11	39.17	20.73
2009	7.2	7.5	6.4	34.18	38.02	20.55
2010	7.1	7.7	5.2	32.62	36.36	19.32
2011	6.7	7.7	3.2	30.56	34.37	16.86
2012	6.9	8	3.2	28.93	32.58	15.71
2013	6.4	7.5	2.8	28	31	15
2014	6	8	4	26	30	15
2015	6	8	4	25	29	15
2016	6	7	4	24	27	14
2017	5	7	4	23	27	14
2018	5	6	4	23	27	14
2019	5	5	4	22	25	13
2020	4	3	6	20	23	12

Table 7.1.6 UNDER 5 MORTALITY RATE Trends: Kerala vs India (1971–2020) – SRS Reports

Year	KERALA			INDIA		
	Rural+ Urban	Rural	Urban	Rural+ Urban	Rural	Urban
2011	13	14	10	55	61	35

2012	13	13	10	52	58	32
2013	12	13	9	49	55	29
2014	13	14	12	45	51	28
2015	13	14	11	43	45	28
2016	11	12	10	39	43	25
2017	12	12	12	37	42	25
2018	10	11	9	36	40	26
2019	9	9	8	35	39	23
2020	8	5	12	32	36	21

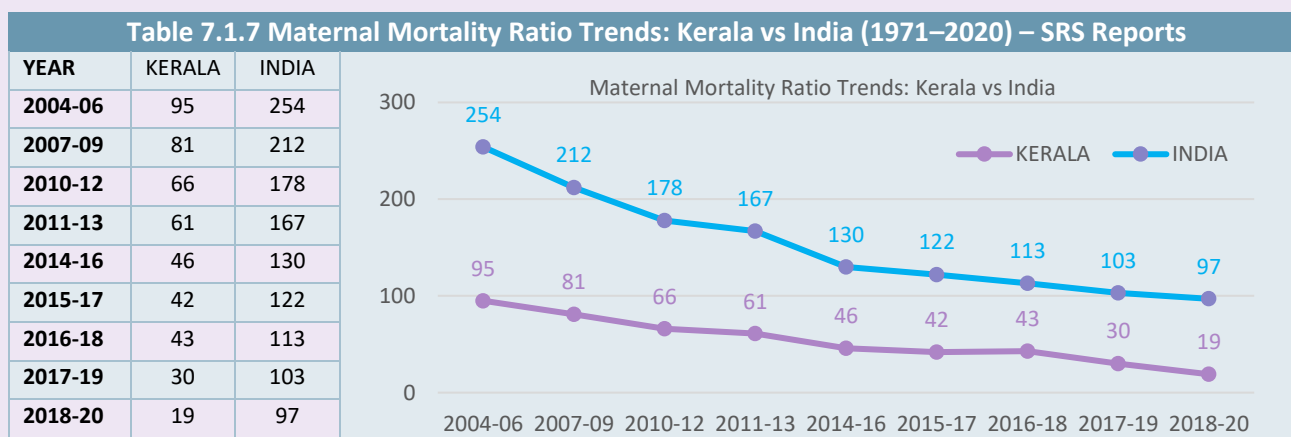


Table 7.1.8 Life Expectancy at Birth Trends: Kerala vs India (1971–2020) – SRS Abridged lifetables

Year	KERALA			INDIA		
	Rural+ Urban	Rural	Urban	Rural+ Urban	Rural	Urban
1976-80	65.5	65.5	65.7	52.3	50.6	60.1
1981-85	68.4	68.5	67.6	55.4	53.7	62.8
1986-90	69.5	69.6	68.6	57.7	56.1	63.4
1987-91	70.4	70.4	71.7	58.3	56.8	63.8
1988-92	70.9	70.9	72.3	58.7	57.4	64.1
1989-93	72	71.8	72.8	59.4	58	64.9
1990-94	72.7	72	73	60	58.6	65.4
1991-95	72.9	72.5	73.3	60.3	58.9	65.9
1992-96	73.1	72.8	73.6	60.7	59.4	66.3
1993-97	73.3	73.2	73.8	61.1	59.9	66.6
1994-98	73.4	73.3	73.8	61.4	60.1	66.8
1995-99	71.7	71.9	71.3	61.5	60.3	66.4
1996-00	71.6	71.7	71.4	61.9	60.7	66.7
1997-01	71.7	71.8	71.6	62.3	61.1	67.1
1998-02	71.9	71.9	71.7	62.9	61.6	67.6
1999-03	72.5	72.3	73.1	63.4	62.2	68
2000-04	73.2	73.1	73.4	63.9	62.7	68.4
2001-05	73.6	73.6	73.6	64.3	63	68.6
2002-06	73.9	74	73.8	64.7	63.5	68.9
2003-07	74.1	74.1	74.1	65	63.8	69
2004-08	74.3	74.4	74.1	65.4	64.2	69
2005-09	74.3	74.3	74.2	65.7	64.5	69.2
2006-10	74.2	74.2	74.3	66.1	64.9	69.6
2007-11	74.4	74.4	74.5	66.5	65.3	70.1
2008-12	74.7	74.6	74.8	67	65.8	70.6
2009-13	74.8	74.8	75.1	67.5	66.3	71.2
2010-14	74.9	74.9	75	67.9	66.7	71.5
2011-15	75.2	75.1	75.4	68.3	67.1	71.9
2012-16	75.1	75.2	74.9	68.7	67.4	72.2
2013-17	75.2	75.3	75.1	69	67.7	72.4
2014-18	75.3	75.4	75.1	69.4	68	72.6

Table 7.1.9 Life Expectancy at Birth Trends_Gender wise: Kerala vs India (1971–2020) – SRS Abridged lifetables

Year	KERALA			INDIA		
	Male+ Female	male	Female	Male+ Female	male	Female
1976-80	65.5	63.5	67.6	52.3	52.5	52.1
1981-85	68.4	65.4	71.5	55.4	55.4	55.7
1986-90	69.5	66.8	72.3	57.7	57.7	58.1
1987-91	70.4	67.7	72.9	58.3	58.1	58.6
1988-92	70.9	68.1	73.4	58.7	58.6	59
1989-93	72	68.8	74.7	59.4	59	59.7
1990-94	72.7	69.5	75.3	60	59.4	60.4
1991-95	72.9	69.9	75.6	60.3	59.7	60.9
1992-96	73.1	70.2	75.8	60.7	60.1	61.4
1993-97	73.3	70.4	75.9	61.1	60.4	61.4
1994-98	73.4	70.5	76	61.4	60.6	62.2
1995-99	71.7	68.8	74.9	61.5	60.8	62.3
1996-00	71.6	68.7	74.7	61.9	61.2	62.7
1997-01	71.7	68.8	74.8	62.3	61.4	63.3
1998-02	71.9	69	74.9	62.9	61.9	64
1999-03	72.5	69.7	75.3	63.4	62.3	64.6
2000-04	73.2	70.3	76.1	63.9	62.8	65.2
2001-05	73.6	70.5	76.7	64.3	63.1	65.6
2002-06	73.9	70.9	76.9	64.7	63.5	66.1
2003-07	74.1	71.1	77	65	63.7	66.5
2004-08	74.3	71.2	77.4	65.4	64	66.9
2005-09	74.3	71.3	77.2	65.7	64.3	67.2
2006-10	74.2	71.5	76.9	66.1	64.6	67.7
2007-11	74.4	71.5	77.3	66.5	64.9	68.2
2008-12	74.7	71.6	77.7	67	65.4	68.8
2009-13	74.8	71.8	77.8	67.5	65.8	69.3
2010-14	74.9	72	77.8	67.9	66.4	69.6
2011-15	75.2	72.2	78.2	68.3	66.9	70
2012-16	75.1	72.2	77.9	68.7	67.4	70.2
2013-17	75.2	72.5	77.8	69	67.8	70.4
2014-18	75.3	72.5	77.9	69.4	68.2	70.7
2016-20	75	71.9	78	70	68.6	71.4

Table 7.1.10 Sex ratio at birth Trends: Kerala vs India (1971–2020) – SRS Reports

Period	India			Kerala		
	All	rural	urban	Kerala	rural	urban
2005-07	901	904	891	958	957	962
2009-11	906	907	900	965	961	977
2013-15	900	903	890	967	978	950
2014-16	898	902	888	959	972	946
2015-17	896	898	890	948	965	931
2016-18	899	900	897	957	967	947
2017-19	904	904	906	968	980	955
2018-20	907	907	910	974	973	975

Table 7.1.11 Sex ratio at birth Trends: Kerala vs India (1971–2020) – SRS Reports

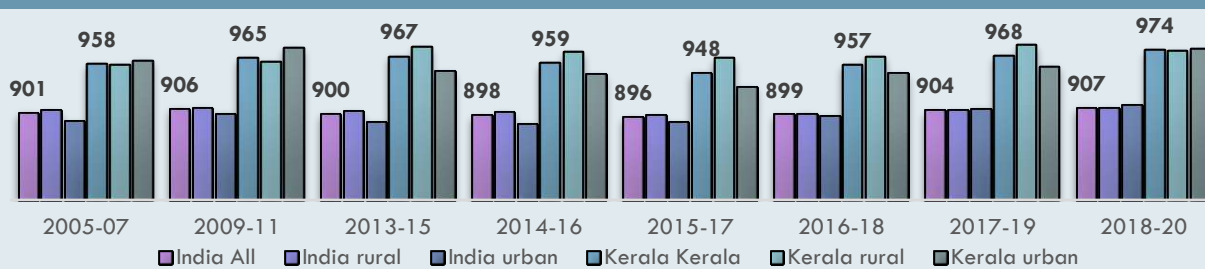
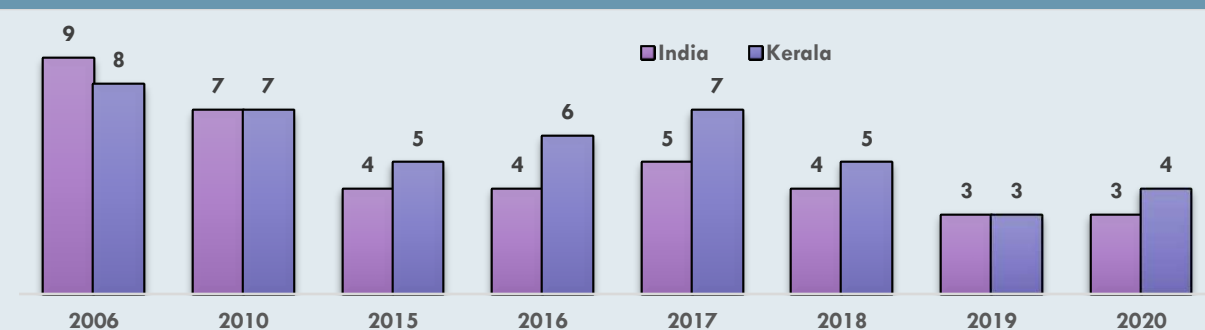


Table 7.1.12 Still Birth Rate Trends: Kerala vs India (1971–2020) – SRS Reports





PERFORMANCE OF HEALTH IN NITI AAYOG'S RANKING

Chapter 8

GOAL 3



ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

2023-24 PERFORMANCE OF KERALA ON GOAL 3 INDICATORS



19

Target - 70

MATERNAL MORTALITY RATIO per 100,000 live births



8

Target - 25

CHILDREN aged under five years DIE for every 1,000 live births

97.45%

TUBERCULOSIS CASES NOTIFIED against Target

Target - 100



85.4%

CHILDREN aged 9-11 months are FULLY IMMUNIZED

Target - 100



0.01

HIV incidence per 1,000 uninfected population

Target - 0

Target - 3.5



Target - 5.81

28.5

SUICIDE RATE

12.1

DEATHS due to ROAD TRAFFIC ACCIDENTS per 100,000 population

75

years LIFE EXPECTANCY at birth

Target - 74



of TOTAL Deliveries Reported to happen in Health Institutions

Target - 100



17

of monthly per capita OUT-OF-POCKET CONSUMPTION EXPENDITURE is on HEALTH

Target - 7.83



144

HEALTH WORKERS per 10,000 population

Target - 44.5



80

Kerala's

Goal 3 score
2023-24

Target
Achieved

4 out of 11

- MMR
- Under Five Mortality
- Life Expectancy
- Health Worker per 10,000 population

Chapter 8

Performance of Health in NITI Aayog's Rankings

8.1 Introduction

This chapter evaluates Kerala's performance in various health-related indices and rankings published by NITI Aayog, with a particular focus on the Health Index and the SDG India Index, specifically Goal 3, which pertains to good health and well-being. The NITI Aayog health index provides a comprehensive assessment of the state's health system, including key metrics such as access to healthcare, nutrition, and maternal and child health outcomes. The SDG India Index measures the progress toward achieving the United Nations Sustainable Development Goals (SDGs), and Kerala's standing in Goal 3 offers insights into its achievements and areas for further improvement. This chapter highlights Kerala's strengths in health and identifies potential areas of focus for continued advancement in health and wellness.

8.2 Kerala's Performance in SDG Ranking from the Base Year to 2023-24

NITI Aayog tracks and assesses India's progress toward the Sustainable Development Goals through the SDG India Index, which ranks states and Union Territories based on their performance across various SDG indicators. Launched in 2018, the index serves as a policy tool to measure progress, identify gaps, and encourage states to take targeted actions toward achieving the SDGs.

Since its inception, four editions of the SDG India Index have been published: the Baseline Report (2018), followed by Vol. 2 (2019-20), Vol. 3 (2020-21), and the latest Vol. 4 (2023-24). Each edition has refined the methodology and expanded the set of indicators to provide a more comprehensive assessment of sustainable development efforts across the country.

The index plays a crucial role in guiding policy decisions and fostering competitive progress among states. The following section examines Kerala's performance in the SDG India Index from the base year to 2023-24, highlighting key trends, achievements, and areas for improvement.

8.2.1 Overview of SDG India Index Reports (2018 to 2023-24)

The SDG India Index, introduced by NITI Aayog in 2018, has evolved over the years in terms of the number of goals, targets, and indicators considered for ranking. Each edition has expanded its scope to provide a more comprehensive assessment of states' progress toward the Sustainable Development Goals.

- Baseline Report (2018): Covered 13 goals, 39 targets, and 62 indicators.
- Vol. 2 (2019-20): Expanded to 16 goals, 54 targets, and 100 indicators.
- Vol. 3 (2020-21): Further refined with 16 goals, 70 targets, and 115 indicators.
- Vol. 4 (2023-24): Assessed 16 goals, 70 targets, and 113 indicators.

The ranking has been conducted independently for each selected goal, along with an overall SDG Index score for each state and Union Territory. Over time, refinements in methodology and indicator selection have strengthened the index's role as a policy tool for driving sustainable development in India.

A pictorial representation below summarizes the evolution of SDG indicators considered in each edition.



8.2.2 Goal-wise Top Scorers in SDG India Index 2023-24

The SDG India Index 2023-24 (Vol. 4) assessed states and Union Territories based on their performance across 16 SDGs. While each goal was assessed independently, an **overall ranking** was assigned based on the composite index score. In the latest ranking, **Kerala and Uttarakhand** jointly secured the **first position overall**. For **Goal 3 (Good Health and Well-being)**, **Gujarat** ranked first, while **Kerala** secured the **fourth position**.

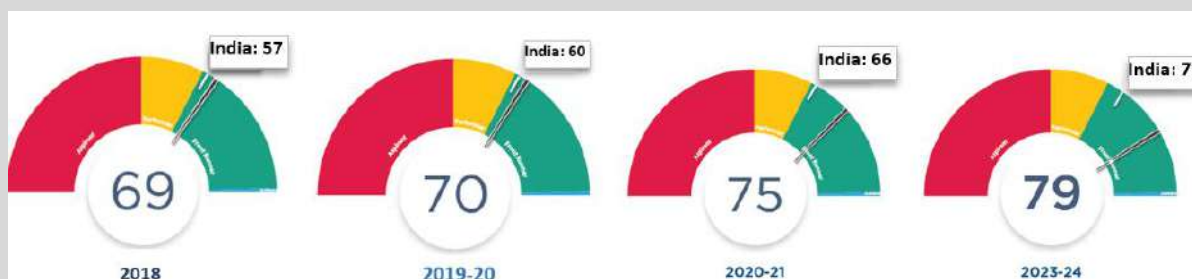
The pictorial representation below showcases the goal-wise top scorers along with the overall top-ranked states, providing a visual summary of state-wise achievements in the SDG India Index 2023-24.



8.2.3 Kerala's Performance in SDG India Index: From Baseline to 2023-24

Kerala has consistently ranked among the top-performing states in the **SDG India Index**, demonstrating steady progress in achieving the Sustainable Development Goals. In the **2023-24 ranking**, Kerala and Uttarakhand jointly secured the **top position** with a composite score of **79**, with Uttarakhand moving up from third place in the previous edition. **Tamil Nadu (78)** secured the **second position**, followed by **Goa (77)** and **Himachal Pradesh (77)**. Over the years, Kerala's composite index score has improved significantly, rising from **69 in 2018 to 79 in 2023-24**, marking a **10-point increase**. Similarly, India's overall composite score has also shown steady progress, increasing from **57 in 2018 to 71 in 2023-24**.

The pictorial representation below illustrates the **overall composite index score of Kerala compared to the all-India average**, highlighting Kerala's sustained leadership in sustainable development from the **baseline year to the 2023-24 edition**.



8.2.4 Kerala's Performance in Goal 3 Indicators 2023-24

While Kerala has maintained a high ranking in **Goal 3**, certain indicators have affected its overall position. In the **2023-24 ranking**, Gujarat secured the **top position**, while Kerala ranked **4th**. Key indicators such as the **suicide rate**, **health expenditure as a share of Monthly Per Capita Expenditure (MPCE)**, and **death rate due to road traffic accidents** have contributed to the state's lower ranking in this goal.

The table below provides a **detailed overview of Kerala's performance in Goal 3 indicators**, highlighting both its strengths and areas that require further improvement.

Srl.No	Indicators	Target	Kerala Score			
			2018	2019-20	2020-21	2023-24
1	Maternal Mortality Ratio	70	46	42	43	19
2	Under-Five Mortality Rate (per 1000 live birth)	25	7	7	10	8
3	Percentage of children aged 12-23 months fully immunized	100	82.1	NA	92	85.4
4	Proportion of Institutional Deliveries	100	NA	74	99.9	99.85
5	HIV Incidence per 1000 uninfected population	0	NA	0.03	0.02	0.01
6	Health worker density per 10,000 population	45	NA	112	115	144.03
7	Suicide Rate (per 100000 population)	3.5	NA	NA	24.3	28.5
8	Death rate due to road traffic accidents (per 100000 populations)	5.81	NA	NA	12.42	12.1
9	Monthly per capita out-of-pocket expenditure on health as a share of MPCE	7.83	NA	NA	17	17
10	Tuberculosis notification against target in percentage	100	NA	NA	NA	97.45
11	Life expectancy	74	NA	NA	NA	75

8.2.5 Progress on SDG Goal 3 Targets and Indicators (Based on NIF 3.1)

This section presents the current status of SDG Goal 3 based on the National Indicator Framework (NIF 3.1). The indicators have been mapped against the latest available data to monitor the state's progress towards the 2030 targets. For indicators sourced from national-level surveys such as the SRS, NFHS, NCRB, and NSS, the most recently published reports have been referred to. For indicators where the DHS is the primary source, the latest available administrative data has been used

SDG Goal 3 : Good Health and Well-Being
Ensure healthy lives and promote well-being for all at all ages

Indicator (as per NIF 3.1)			Kerala	Source & Period
Target 3.1 : By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births				
3.1.1	Maternal Mortality Ratio, (per 1,00,000 live births)		19	SRS 2020
3.1.2	Percentage of births attended by skilled health personnel (Period 5 years)		100	NFHS(2019-20)
3.1.3	Percentage of births attended by skilled health personnel (Period 1 year)		99.88	HMIS(2023-24)
3.1.4	Percentage of women aged 15–49 years with a live birth, for last birth, who received antenatal care, four times or more (Period 5 years) (in percentage)		78.6	NFHS(2019-20)
Target 3.2 : By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births				
3.2.1	Under - five mortality rate, (per 1,000 live births)		8	SRS 2020
3.2.2	Neonatal mortality rate,(per 1,000 live births)		4	SRS 2020
3.2.3	Percentage of children aged 12-23 months fully immunized (BCG, Measles and three dose		93	RCH portal (2023-24)
Target 3.3 : By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases				
3.3.1	Number of new HIV infections per 1,000 uninfected population		0.33	KSACS 2023-24
3.3.2	Tuberculosis incidence per 1,00,000 population		57	Nikshay portal 2023-24
3.3.3	Malaria incidence per 1,000 population		0.026	NVBDCP 2023-24
3.3.4	Viral Hepatitis incidence (per 1000 population)	Hepatitis A	0.791	IDSP 2024
		Hepatitis B	0.099	NVHCP 2023-24
3.3.5	Dengue: Case Fatality Ratio, (in ratio)		0.489	IDSP 2023-24
3.3.6	Number of Chikungunya cases.		31	IDSP 2023
3.3.7	Number of new cases of Kalaazar/ V Leishmaniasis		3	IDSP 2023
3.3.8	Number of new cases of Lymphatic Filariasis(LF)		365	IDSP 2024
3.3.9	Proportion of grade- 2 cases amongst new cases of Leprosy		26	State Leprosy Office (2023-24)
3.3.10	HIV Prevalence Rate(Adult (15-49 yrs) HIV Prevalence (%)		0.06	KSACS 2023-24
Target 3.4 : By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being				
3.4.1	Number of deaths due to cancer		21990	Vital Statistics Report for 2021(DES)
3.4.2	Suicide mortality rate, (per 1,00,000 population)		28.5	NCRB 2022
Target 3.5 : Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol				
3.5.1	Percentage of population (men (15 - 49 years) & women (15 - 49 years)) who drink alcohol about once a week out of total population (men (15 - 49 years) & women (15 - 49 years)) who drink alcohol	Women	11.9	NFHS(2019-20)
		Men	40.6	
3.5.2	Number of persons treated in de-addiction centres		3852	MoSPI PR3.1(Ministry of Social Justice and Empowerment) 2020-21
3.5.3	Percentage of population men (15 and above) and women (15 and above) who consume alcohol	Women (15-49)	0.2	NFHS(2019-20)

		Men (15-49)	19.9	
Target 3.6 : By 2020, halve the number of global deaths and injuries from road traffic accidents				
3.6.1	People killed/injured in road accidents (per 1,00,000 population) (similar to 11.2.2)		64	Road Accident in India 2022
Target 3.7 : By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes				
3.7.1	Percentage of currently married women (15-49 years) who use any modern family planning methods		52.8	NFHS(2019-20)
3.7.2	Percentage of women aged 15-19 years who were already mothers or pregnant.		2.4	NFHS(2019-20)
3.7.3	Percentage of Institutional Births.(5 years/1 years).		99.86	HMIS
Target 3.8 : Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all				
3.8.1	Percentage of currently married women (15-49 years) who use any modern family planning methods (similar to 3.7.1 and 5.6.1)		52.8	NFHS(2019-20)
3.8.2	Percentage of TB cases successfully treated (cured plus treatment completed) among TB cases notified to the national health authorities during a specified period		83.4	Nikshay portal 2023-24
3.8.3	Percentage of people living with HIV currently receiving ART among the detected number of adults and children living with HIV		69	KSACS 2023-24
3.8.4	Proportion of population in age group 15-49 years who are currently taking antihypertensive medication among age group 15-49 with systolic blood pressure ≥ 140 mmHg, or with diastolic blood pressure ≥ 90 mmHg medicine to control blood pressure (age 15 years and above)	Women	10.4	NFHS(2019-20)
		Men	17.4	
3.8.5	Proportion of population in age group 15-49 years who are currently taking medication for diabetes (insulin or glycaemic control pills) among number of adults 15-49 years who are having random blood sugar level – high (>140 mg/dl) sugar level (age 15 years and above)	Women	11.9	NFHS(2019-20)
		Men	13.7	
3.8.6	Proportion of women aged 30-49 years who report they were ever screened for cervical cancer and the proportion of women aged 30-49 years who report they were screened for cervical cancer during the last 5 years		3.5	NFHS(2019-20)
3.8.7	Prevalence of current tobacco uses among men and women aged 15 -49 years		17.84	NFHS(2019-20)
3.8.8	Total physicians, nurses and midwives per 10,000 population, (similar to Indicator 3.c.1)		119	National Health Profile 2019
Target 3.9 : By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination				
3.9.2	Proportion of men and women reporting Asthma in the age group (aged 15-49 years) (in percentage)	Men (per 1,00,000)	833	NFHS(2019-20)
		Women (per 1,00,000)	4792	

8.3 NITI Aayog's Health Index: Kerala's Performance – Round 1 to Round 4

The **NITI Aayog Health Index** is a key tool for evaluating the performance of Indian states and Union Territories in the health sector. The index provides a **comprehensive assessment based on key health indicators** related to outcomes, governance, and service delivery.

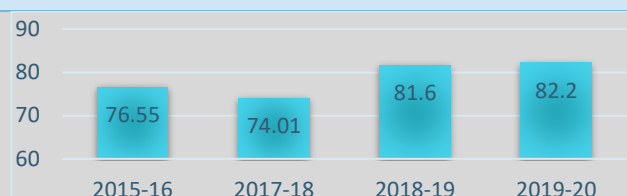
The index enables **comparative performance analysis** across states, encouraging healthy competition and driving improvements in healthcare systems. Kerala has consistently performed well in the Health Index, ranking among the top states in multiple rounds.

The following section presents Kerala's performance in the **NITI Aayog Health Index** over different assessment years, highlighting **key trends, improvements, and challenges**.

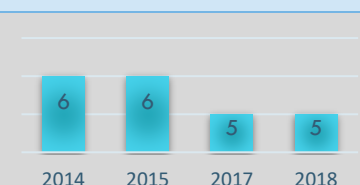
Health Index - Kerala – Performance: Round I through Round IV

Health Index - Kerala – Performance: Round I through Round IV

Kerala has been the top-ranking Larger State in all the four rounds of the Health Index. In Round IV, the Health Outcomes Index Score of the best performing state Kerala (82.2), was about three and half times that of the worst performing state, Uttar Pradesh (25.64)



Neonatal Mortality Rate



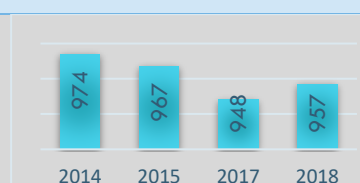
Kerala and Tamil Nadu are the only two States already achieved the SDG NMR target of 12

Under Five Mortality Rate



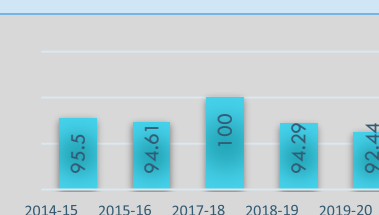
Himachal Pradesh, Kerala, Maharashtra, Punjab and Tamil Nadu have already achieved the SDG target of 25

Sex Ratio at Birth



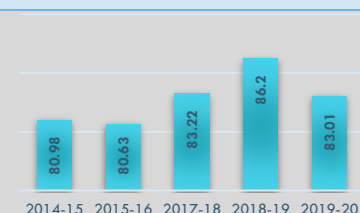
Kerala was the only Larger State with SRB of over 950 girls to 1000 boys.

Full Immunization Coverage



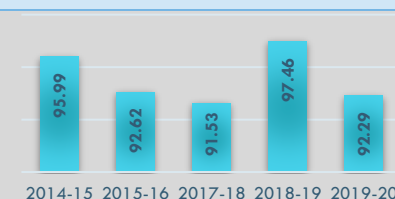
During 2014-15 to 2019-20, Kerala registered a decline in full immunization coverage

Proportion of ANC registered within first trimester against total registrations



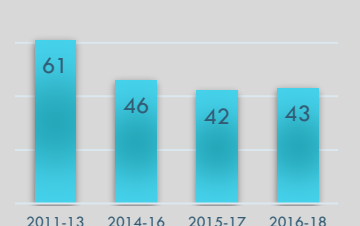
Tamil Nadu continued to have the highest first trimester ANC registration of around 93 percent both in 2014-15 and 2019-20

Proportion of institutional deliveries



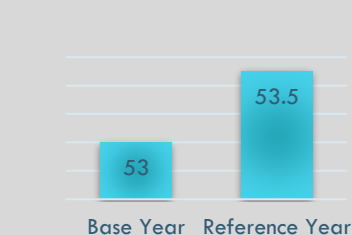
The states that conducted more than 90 percent institutional deliveries were Kerala, Telangana and Maharashtra in 2019-20

Maternal Mortality Ratio



The states of Chhattisgarh, Kerala, Punjab and Uttarakhand observed increase in MMR during 2016-18

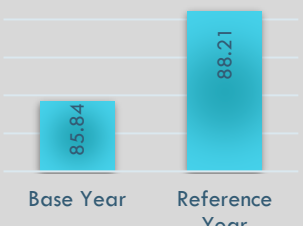
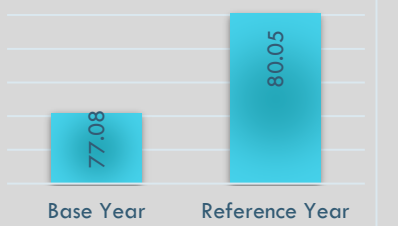
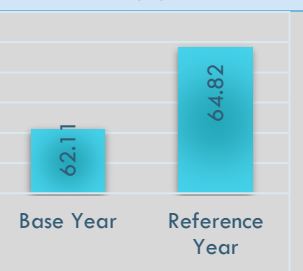
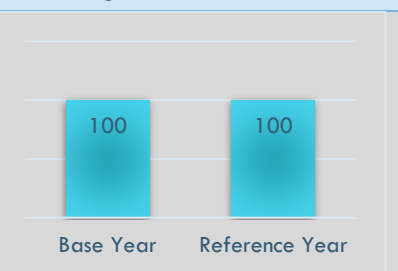
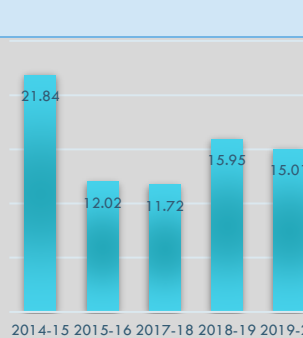
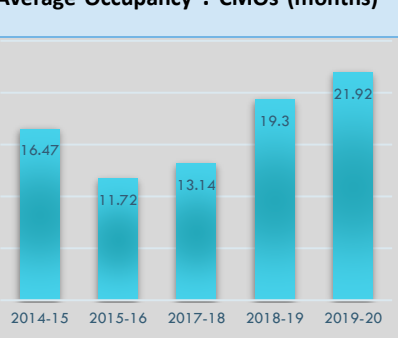
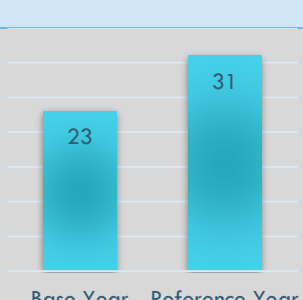
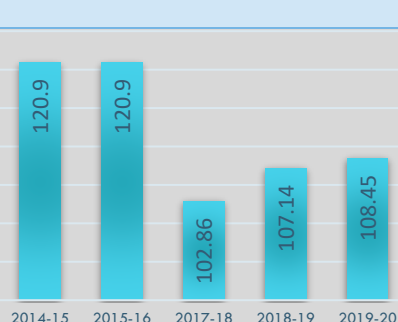
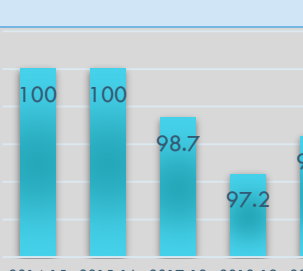
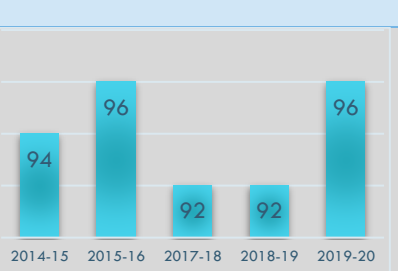
Modern Contraceptive prevalence (%)

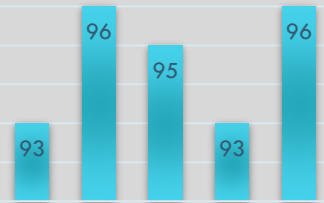
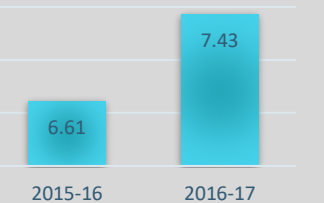
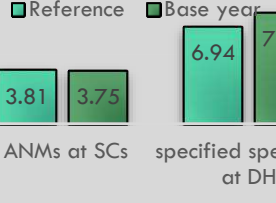
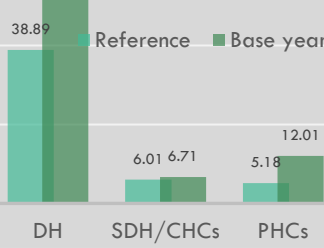
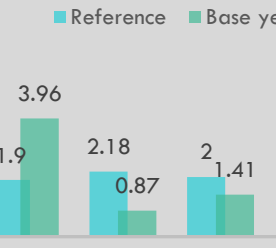


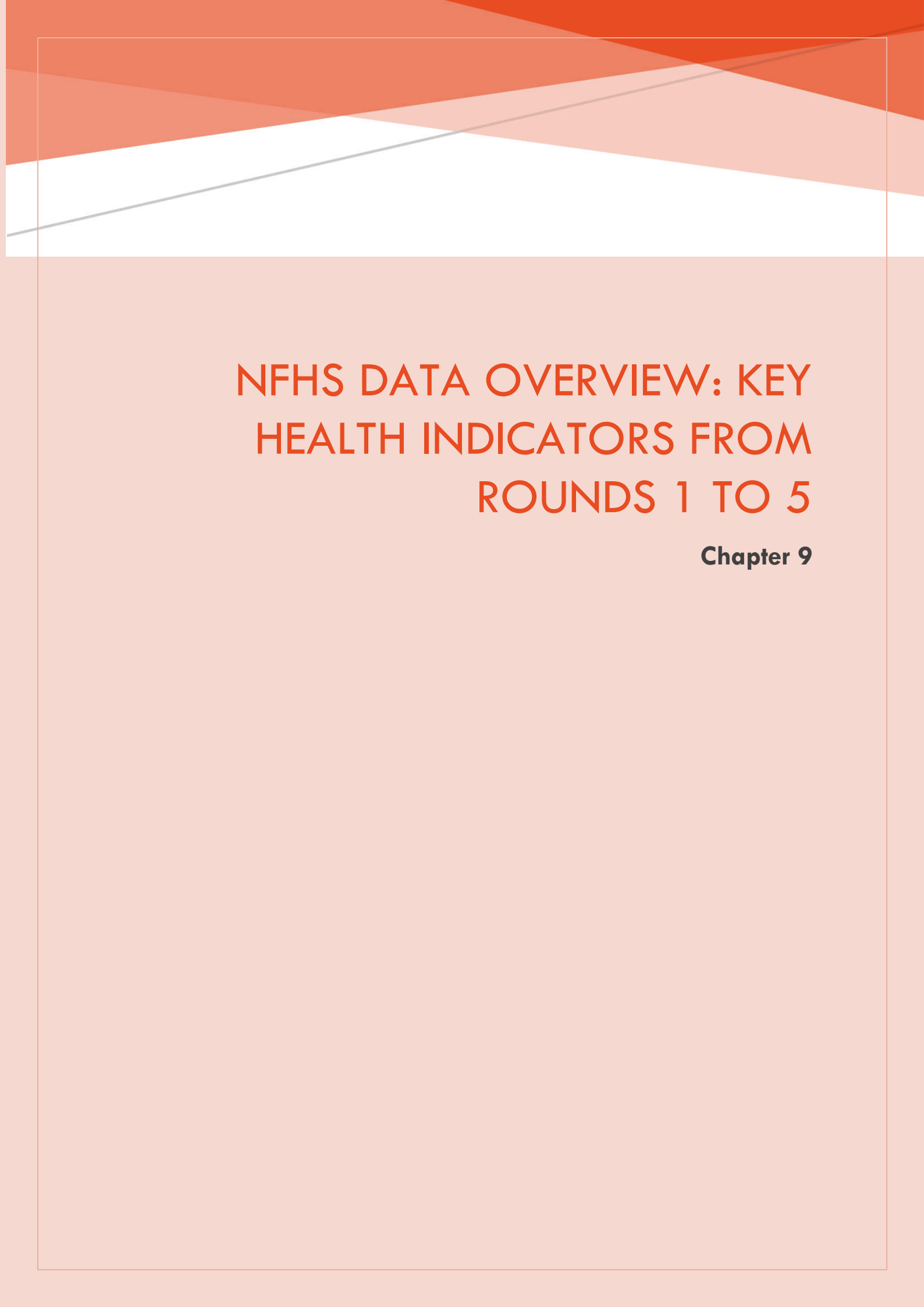
Most Larger States reported improvements on modern contraceptive prevalence rate

TB Treatment Success Rate (%)

TB Notification Rate

 Base Year Reference Year	Most Larger States reported improvements on TB treatment success rate	 Base Year Reference Year	Most Larger States reported improvements on TB notification rate
PLHIV on ART (%)  Base Year Reference Year	Level of Registration of Death  Base Year Reference Year	Fifty percent of the Larger States had universal death registrations both in the Base Year (2018-19) and Reference Year (2019-20).	
Average Occupancy : State level 3 Key Posts (months)  2014-15 2015-16 2017-18 2018-19 2019-20	Average Occupancy : CMOs (months)  2014-15 2015-16 2017-18 2018-19 2019-20		The average occupancy of three key state level administrative positions over a 36-month period was the highest for Kerala in 2014-15 and for Assam (28.0 months) in 2019-20.
Fund Transfer (number of Days)  Base Year Reference Year	Functional FRUs (%)  2014-15 2015-16 2017-18 2018-19 2019-20		The availability of the required number of functional First Referral Units (FRUs) was 100 percent or above in Karnataka, Kerala, Punjab, Tamil Nadu and Telangana.
Level of Registration of Births (%)  2014-15 2015-16 2017-18 2018-19 2019-20	IDSP Reporting of P Forms(%)  2014-15 2015-16 2017-18 2018-19 2019-20		Kerala slipped from 100.0 percent to 98.2 percent during this period
IDSP reporting of L Form(%)	Proportion of District Hospitals with Functional Cardiac Care Units		

 2014-15 2015-16 2017-18 2018-19 2019-20	Between 2018-19 and 2019-20, Kerala made improvement in reporting	 Base Year Reference Year	In the Reference Year (2019-20), 50 percent of the Larger States either had no DH with a functional CCU or had less than 10 percent DH with a functional CCU.
State Government Health expenditure to total State expenditure (%)		Proportion of Shortfall of Health care providers	
 2015-16 2016-17	In 2016-17, the highest percentage was observed by Kerala (7.4 percent) and the lowest by Madhya Pradesh (4.3 percent).	 Reference Base year ANMs at SCs specified specialists at DH	About half of the Larger States did not have any shortfall in positions of ANMs at SCs, both in the Base Year (2018-19) and Reference Year (2019-20)
Proportion of Public Health facilities with Kayakalp score >70%		Proportion of public health facilities with accreditation certificates (NQAS /NABH)	
 Reference Base year DH SDH/CHCs PHCs	The lowest percentage of SDH/CHC with Kayakalp score of >70% was in Kerala	 Reference Base year DH-SDH CHC PHC UPHC	Only three states (Andhra Pradesh, Haryana, Uttar Pradesh) had DH-SDH accreditation of more than 10 percent



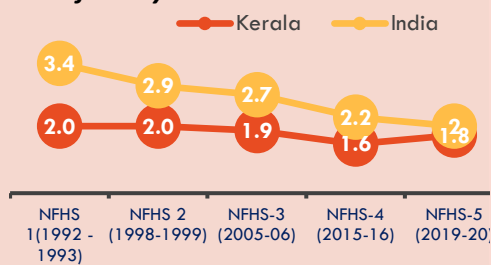
NFHS DATA OVERVIEW: KEY HEALTH INDICATORS FROM ROUNDS 1 TO 5

Chapter 9

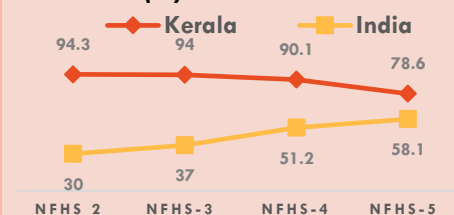
Key Insights at a Glance



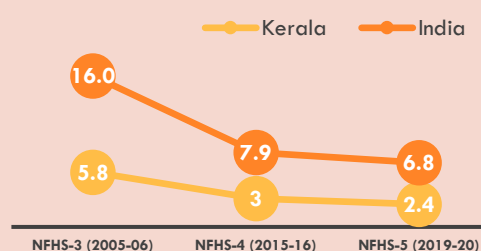
Total fertility rate



Mothers who had at least 4 antenatal care visits (%)



Prevalence of Teenage Pregnancy

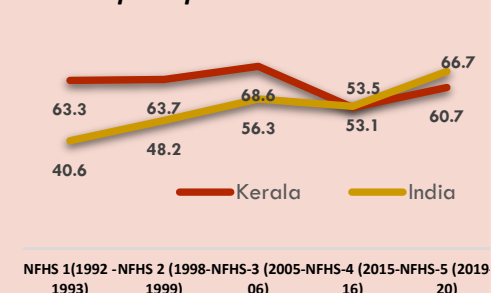


Average out-of-pocket expenditure per delivery in a public health facility (Rs.)

NFHS	Kerala		India	
	Public	Private	Any	Public
5	6710	35195	26134	2916
4	6901	27419	19768	3197



Contraceptive prevalence rate

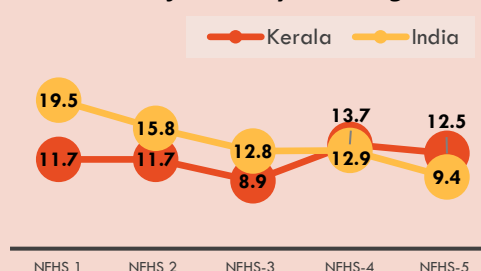


Institutional births (%)

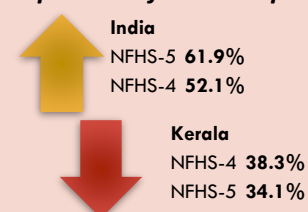
	Kerala	India
NFHS 1	88.9	26.1
NFHS 2	92.9	33.6
NFHS-3	99.5	40.8
NFHS-4	99.8	78.9
NFHS-5	99.8	88.6



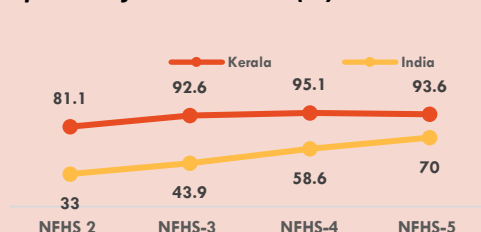
Unmet Need for Family Planning



Proportion of births in public facilities



Mothers who had an antenatal check-up in the first trimester (%)



Births delivered by caesarean section (%)

NFHS	Kerala		India	
	Public	Private	Public	Private
NFHS-4	31.4	38.6	12	41
NFHS-5	37.2	39.9	14	47

Chapter 9

NFHS Data Overview: Key Health Indicators from Rounds 1 to 5

9.1 Introduction

The National Family Health Survey (NFHS) is a crucial source of data on key health and family welfare indicators in India. Conducted in multiple rounds, it provides comprehensive insights into health parameters, reproductive health, nutrition, child and maternal health, and other social determinants of health across the country and in individual states. This chapter presents the results from the NFHS surveys conducted in Kerala from NFHS-1 (1992-93) to NFHS-5 (2019-20)

By examining the data across these surveys, we can track Kerala's progress in areas such as maternal and child health, nutrition, reproductive health, family planning, and health behavior. The trends captured in these rounds help in understanding the impact of various health policies and programs implemented over time, and provide insights for future health interventions and planning.

Indicators	NFHS-5 (2019-20)	NFHS-4 (2015-16)	NFHS-3 (2005-06)	NFHS 2 (1998-99)	NFHS 1 (1992 - 93)
Population and Household Profile					
1. Female population age 6 years and above who ever attended school (%)	95.5	95.4	NA	NA	NA
2. Population below age 15 years (%)	20.6	20.2	NA	NA	NA
3. Sex ratio of the total population (females per 1,000 males)	1,121	1,049	1,124	1,080	NA
4. Sex ratio at birth for children born in the last five years (females per 1,000 males)	951	1,047	924	NA	NA
5. Children under age 5 years whose birth was registered with the civil authority (%)	99.0	97.7	NA	NA	NA
6. Deaths in the last 3 years registered with the civil authority (%)	97.4	na	NA	NA	NA
7. Population living in households with electricity (%)	99.6	99.2	91.7	71.8	NA
8. Population living in households with an improved drinking-water source ¹ (%)	94.9	94.8	69.2	77.9	NA
9. Population living in households that use an improved sanitation facility ² (%)	98.7	98.2	90.5	85.2	NA
10. Households using clean fuel for cooking ³ (%)	72.1	57.4	NA	NA	NA
11. Households using iodized salt (%)	99.3	98.4	NA	39.3	NA
12. Households with any usual member covered under a health insurance/financing scheme (%)	51.5	47.7	NA	NA	NA
13. Children age 5 years who attended pre-primary school during the school year 2019-20 (%)	29.0	NA	NA	NA	NA
14. Average household size	3.7	NA	NA	NA	NA
15. Percentage of population aged 65 and above(%)	12.0	NA	NA	NA	NA
16. Percentage of female headed households (%)	24.0	NA	NA	NA	NA
17. Sex ratio of population under 7 years of age (females per 1000 males)	967.0	NA	NA	NA	NA
Characteristics of Adults (age 15-49 years)					
18. Women who are literate ⁴ (%)	98.3	NA	NA	NA	NA
19. Men who are literate ⁴ (%)	98.2	NA	NA	NA	NA
20. Women with 10 or more years of schooling (%)	77.0	72.2	NA	NA	NA
21. Men with 10 or more years of schooling (%)	73.3	70.5	NA	NA	NA
22. Women who have ever used the internet (%)	61.1	NA	NA	NA	NA
23. Men who have ever used the internet (%)	76.1	NA	NA	NA	NA
Marriage and Fertility					
24. Women age 20-24 years married before age 18 years (%)	6.3	7.6	15.0	NA	NA
25. Men age 25-29 years married before age 21 years (%)	1.4	2.8	3.0	NA	NA
26. Total fertility rate (children per woman)	1.8	1.6	1.9	2.0	2.0
27. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%)	2.4	3.0	5.8	NA	NA
28. Adolescent fertility rate for women age 15-19 years ⁵	18	21	NA	NA	NA
29. Women age 20-24 married by age 18 (%)	NA	NA	15.4	17.0	19.3

30. Men age 25-29 married by age 21 (%)	NA	NA	2.9	NA	NA
31. Median age at first birth for women age 25-49	NA	NA	22.7	21.9	21.6
32. Married women with 2 living children wanting no more children ¹ (%)	NA	NA	88.9	85.6	84.1
33. Two sons	NA	NA	87.5	86.6	85.4
34. One son, one daughter	NA	NA	90.9	87.1	88.1
35. Two daughters	NA	NA	86.4	85.8	80.6
36. The median age at first marriage among women aged 25 - 49 years	21.5	NA	NA	NA	NA
Infant and Child Mortality Rates (per 1,000 live births)					
37. Neonatal mortality rate (NNMR)	3.4	4.4	NA	NA	NA
38. Infant mortality rate (IMR)	4.4	5.6	NA	16.3	NA
39. Under-five mortality rate (U5MR)	5.2	7.1	NA	18.8	NA
Current Use of Family Planning Methods (currently married women age 15–49 years)					
40. Any method ⁶ (%) The contraceptive prevalence rate among currently married women(%) (percentage of currently married women using any method of family planning)	60.7	53.1	68.6	63.7	63.3
41. Any modern method ⁶ (%) (Use of modern family planning methods)	52.8	50.3	57.9	56.1	54.4
42. Female sterilization (%)	46.6	45.8	48.7	48.5	41.8
43. Male sterilization (%)	0.1	0.1	1.0	2.5	6.5
44. IUD/PPIUD (%)	1.5	1.6	2.3	1.6	2.7
45. Pill (%)	0.4	0.2	0.4	0.4	0.5
46. Condom (%)	3.4	2.6	5.5	3.1	2.9
Unmet Need for Family Planning (current+58:63y married women age 15–49 years)					
47. Total unmet need ⁷ (%) Unmet need for family planning is defined as the percentage of currently married women who either want to space their next birth or stop childbearing entirely but are not using contraception	12.5	13.7	8.9	11.7	11.7
48. Unmet need for spacing ⁷ (%)	7.0	8.3	6.0	6.9	7.2
49. For limiting (%)	5.5	5.4	2.9	4.8	4.5
Quality of Family Planning Services					
50. Health worker ever talked to female non-users about family planning (%)	15.0	17.0	NA	NA	NA
51. Current users ever told about side effects of current method ⁸ (%)	62.2	55.6	NA	NA	NA
Maternity Care (for last birth in the 5 years before the survey)					
52. Mothers who had an antenatal check-up in the first trimester (%)	93.6	95.1	92.6	81.1	NA
53. Mothers who had at least 4 antenatal care visits (%)	78.6	90.1	94.0	94.3	NA
54. Mothers whose last birth was protected against neonatal tetanus (%)	95.2	96.4	88.2	85.8	NA
55. Mothers who consumed iron folic acid for 100 days or more when they were pregnant (%)	80.0	67.1	76.0	95.8	NA
56. Mothers who consumed iron folic acid for 180 days or more when they were pregnant (%)	67.0	47.4	NA	NA	NA
57. Registered pregnancies for which the mother received a Mother and Child Protection (MCP) card (%)	91.3	84.2	NA	NA	NA
58. Mothers who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery (%)	93.3	88.7	87.2	94.9	NA
59. Average out-of-pocket expenditure per delivery in a public health facility (Rs.)	6,710	6,901	NA	NA	NA
60. Children who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery (%)	91.2	NA	NA	NA	NA
61. Mothers who had at least 3 antenatal care visits for their last birth (%)	NA	NA	93.9	98.6	95.4
62. Mothers who consumed IFA for 90 days or more when they were pregnant with their last child (%)	NA	NA	77.3	na	na
63. Births assisted by a doctor/nurse/LHV/ANM/other health personnel (%) ²	NA	NA	99.7	94.1	90.2
64. Mothers who received postnatal care from a doctor/nurse/LHV/ANM/other health personnel within 2 days of delivery for their last birth (%) ²	NA	NA	87.7	na	na
Delivery Care (for births in the 5 years before the survey)					
65. Institutional births (%)	99.8	99.8	99.5	92.9	88.9
66. Institutional births in public facility (%)	34.1	38.3	35.6	36.2	NA
67. Home births that were conducted by skilled health personnel ¹⁰ (%)	0.2	0.1	0.1	1.1	NA
68. Births attended by skilled health personnel ¹⁰ (%)	100.0	99.9	99.4	na	NA
69. Births delivered by caesarean section (%)	38.9	35.8	30.1	29.3	NA
70. Births in a private health facility that were delivered by caesarean section (%)	39.9	38.6	NA	NA	NA
71. Births in a public health facility that were delivered by caesarean section (%)	37.2	31.4	NA	NA	NA
Child Vaccinations and Vitamin A Supplementation					
72. Children age 12-23 months fully vaccinated based on information from either vaccination card or mother's recall ¹¹ (%)	77.8	82.1	75.3	79.7	54.4

73. Children age 12-23 months fully vaccinated based on information from vaccination card only ¹² (%)	85.2	88.3	NA	91.1	NA
74. Children age 12-23 months who have received BCG (%)	97.6	98.1	96.3	96.2	86.1
75. Children age 12-23 months who have received 3 doses of polio vaccine ¹³ (%)	84.1	88.5	83.1	88.4	75.2
76. Children age 12-23 months who have received 3 doses of penta or DPT vaccine (%)	85.2	90.4	84.0	88.0	73.7
77. Children age 12-23 months who have received the first dose of measles-containing vaccine (MCV) (%)	88.3	89.4	82.1	84.6	60.5
78. Children age 24-35 months who have received a second dose of measles-containing vaccine (MCV) (%)	15.5	NA	NA	NA	NA
79. Children age 12-23 months who have received 3 doses of rotavirus vaccine ¹⁴ (%)	9.5	NA	NA	NA	NA
80. Children age 12-23 months who have received 3 doses of penta or hepatitis B vaccine (%)	83.0	82.4	NA	NA	NA
81. Children age 9-35 months who received a vitamin A dose in the last 6 months (%)	84.1	78.4	46.4	NA	NA
82. Children age 12-23 months who received most of their vaccinations in a public health facility (%)	87.3	77.6	NA	NA	NA
83. Children age 12-23 months who received most of their vaccinations in a private health facility (%)	12.3	22.4	NA	NA	NA
Treatment of Childhood Diseases (children under age 5 years)					
84. Prevalence of diarrhoea in the 2 weeks preceding the survey (%)	4.3	3.4	NA	NA	NA
85. Children with diarrhoea in the 2 weeks preceding the survey who received oral rehydration salts (ORS) (%)	61.1	49.4	34.6	47.9	16.0
86. Children with diarrhoea in the 2 weeks preceding the survey who received zinc (%)	22.4	14.1	NA	NA	NA
87. Children with diarrhoea in the 2 weeks preceding the survey taken to a health facility or health provider (%)	86.9	76.3	67.4	82.1	71.4
88. Prevalence of symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey (%)	2.4	0.8	NA	NA	NA
89. Children with fever or symptoms of ARI in the 2 weeks preceding the survey taken to a health facility or health provider (%)	86.2	90.1	82.8	na	na
Child Feeding Practices and Nutritional Status of Children					
90. Children under age 3 years breastfed within one hour of birth ¹⁵ (%)	66.7	64.3	55.4	42.9	14.2
91. Children under age 6 months exclusively breastfed ¹⁶ (%)	55.5	53.3	56.2	NA	NA
92. Children age 6-8 months receiving solid or semi-solid food and breastmilk ¹⁶ (%)	71.3	63.1	93.6	NA	NA
93. Breastfeeding children age 6-23 months receiving an adequate diet ^{16, 17} (%)	23.6	21.3	NA	NA	NA
94. Non-breastfeeding children age 6-23 months receiving an adequate diet ^{16, 17} (%)	NA	22.3	NA	NA	NA
95. Total children age 6-23 months receiving an adequate diet ^{16, 17} (%)	23.5	21.4	NA	NA	NA
96. Children under 5 years who are stunted (height-for-age) ¹⁸ (%)	23.4	19.7	26.5	28.0	32.8
97. Children under 5 years who are wasted (weight-for-height) ¹⁸ (%)	15.8	15.7	15.6	13.0	13.7
98. Children under 5 years who are severely wasted (weight-for-height) ¹⁹ (%)	5.8	6.5	NA	NA	NA
99. Children under 5 years who are underweight (weight-for-age) ¹⁸ (%)	19.7	16.1	21.2	21.7	22.1
100. Children under 5 years who are overweight (weight-for-height) ²⁰ (%)	4.0	3.4	NA	NA	NA
Nutritional Status of Adults (age 15-49 years)					
101. Women whose Body Mass Index (BMI) is below normal (BMI <18.5 kg/m ²) ²¹ (%)	10.1	9.7	NA	NA	NA
102. Men whose Body Mass Index (BMI) is below normal (BMI <18.5 kg/m ²) (%)	10.0	8.5	NA	NA	NA
103. Women who are overweight or obese (BMI ≥25.0 kg/m ²) ²¹ (%)	38.1	32.4	NA	NA	NA
104. Men who are overweight or obese (BMI ≥25.0 kg/m ²) (%)	36.4	28.5	NA	NA	NA
105. Women who have high risk waist-to-hip ratio (≥0.85) (%)	70.7	na	NA	NA	NA
106. Men who have high risk waist-to-hip ratio (≥0.90) (%)	56.8	na	NA	NA	NA
Anaemia among Children and Adults					
107. Children age 6-59 months who are anaemic (<11.0 g/dl) ²² (%)	39.4	35.7	NA	NA	NA
108. Non-pregnant women age 15-49 years who are anaemic (<12.0 g/dl) ²² (%)	36.5	34.7	NA	NA	NA
109. Pregnant women age 15-49 years who are anaemic (<11.0 g/dl) ²² (%)	31.4	22.6	NA	NA	NA
110. All women age 15-49 years who are anaemic ²² (%)	36.3	34.3	NA	NA	NA
111. All women age 15-19 years who are anaemic ²² (%)	32.5	37.8	NA	NA	NA
112. Men age 15-49 years who are anaemic (<13.0 g/dl) ²² (%)	17.8	11.8	NA	NA	NA
113. Men age 15-19 years who are anaemic (<13.0 g/dl) ²² (%)	27.4	14.3	NA	NA	NA
Blood Sugar Level among Adults (age 15 years and above)					
Women					
114. Blood sugar level - high (141-160 mg/dl) ²³ (%)	8.3	NA	NA	NA	NA
115. Blood sugar level - very high (>160 mg/dl) ²³ (%)	13.1	NA	NA	NA	NA
116. Blood sugar level - high or very high (>140 mg/dl) or taking medicine to control blood sugar level ²³ (%)	24.8	NA	NA	NA	NA
Men					
117. Blood sugar level - high (141-160 mg/dl) ²³ (%)	9.8	NA	NA	NA	NA

118. Blood sugar level - very high (>160 mg/dl) ²³ (%)	13.8	NA	NA	NA	NA
119. Blood sugar level - high or very high (>140 mg/dl) or taking medicine to control blood sugar level ²³ (%)	27.0	NA	NA	NA	NA
Hypertension among Adults (age 15 years and above)					
Women					
120. Mildly elevated blood pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	15.5	NA	NA	NA	NA
121. Moderately or severely elevated blood pressure (Systolic ≥160 mm of Hg and/or Diastolic ≥100 mm of Hg) (%)	6.6	NA	NA	NA	NA
122. Elevated blood pressure (Systolic ≥140 mm of Hg and/or Diastolic ≥90 mm of Hg) or taking medicine to control blood pressure (%)	30.9	NA	NA	NA	NA
Men					
123. Mildly elevated blood pressure (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	19.2	NA	NA	NA	NA
124. Moderately or severely elevated blood pressure (Systolic ≥160 mm of Hg and/or Diastolic ≥100 mm of Hg) (%)	6.7	NA	NA	NA	NA
125. Elevated blood pressure (Systolic ≥140 mm of Hg and/or Diastolic ≥90 mm of Hg) or taking medicine to control blood pressure (%)	32.8	NA	NA	NA	NA
Indicators			NFHS-5 (2019-20)		
Screening for Cancer among Adults (age 30-49 years)			Urban	Rural	Total
Women					
126. Ever undergone a screening test for cervical cancer (%)	3.8	3.2	3.5	NA	NA
127. Ever undergone a breast examination for breast cancer (%)	2.8	2.0	2.4	NA	NA
128. Ever undergone an oral cavity examination for oral cancer (%)	0.8	0.6	0.7	NA	NA
Men					
128. Ever undergone an oral cavity examination for oral cancer (%)	0.0	0.9	0.5	NA	NA
Knowledge of HIV/AIDS among Adults (age 15-49 years)					
130. Women who have comprehensive knowledge ²⁴ of HIV/AIDS (%)	35.5	34.2	34.8	43.1	43.1
131. Men who have comprehensive knowledge ²⁴ of HIV/AIDS (%)	44.2	46.4	45.4	50.8	50.8
132. Women who know that consistent condom use can reduce the chance of getting HIV/AIDS (%)	73.5	74.7	74.1	74.2	74.2
133. Men who know that consistent condom use can reduce the chance of getting HIV/AIDS (%)	82.2	86.5	84.5	84.8	84.8
Women's Empowerment (women age 15-49 years)					
143. Currently married women who usually participate in three household decisions ²⁵ (%)	93.6	94.6	94.1	92.1	92.1
135. Women who worked in the last 12 months and were paid in cash (%)	25.8	25.8	25.8	20.4	20.4
136. Women owning a house and/or land (alone or jointly with others) (%)	25.3	29.2	27.3	34.9	34.9
137. Women having a bank or savings account that they themselves use (%)	78.9	78.2	78.5	70.6	70.6
138. Women having a mobile phone that they themselves use (%)	86.2	86.9	86.6	81.2	81.2
139. Women age 15-24 years who use hygienic methods of protection during their menstrual period ²⁶ (%)	94.9	91.4	93.0	90.0	90.0
Gender Based Violence (age 18-49 years)					
140. Ever-married women age 18-49 years who have ever experienced spousal violence ²⁷ (%)	9.9	14.3	16.4	NA	NA
141. Ever-married women age 18-49 years who have experienced physical violence during any pregnancy (%)	0.5	1.2	Na	NA	NA
Tobacco Use and Alcohol Consumption among Adults (age 15 years and above)					
142. Women age 15 years and above who use any kind of tobacco (%)	1.3	3.0	2.2	NA	NA
143. Men age 15 years and above who use any kind of tobacco (%)	14.0	19.6	16.9	NA	NA
144. Women age 15 years and above who consume alcohol (%)	0.2	0.3	0.2	NA	NA
145. Men age 15 years and above who consume alcohol (%)	18.7	21.0	19.9	NA	NA



FINANCIAL ALLOCATION FOR HEALTHCARE UNDER DHS

Chapter 10

Chapter 10

Financial Allocation for Healthcare Under DHS

10.1 Introduction

Investing in health is a critical determinant of a state's ability to ensure equitable, accessible, and high-quality healthcare services. Adequate financial allocation and efficient utilization of resources are essential for strengthening healthcare infrastructure, expanding service delivery, and improving health outcomes. This chapter provides an overview of investment in health and expenditure trends, highlighting the state government's financial commitment to the health sector.

The chapter covers details of the Plan and Non-Plan allotments and expenditure for the health sector. It also examines the percentage of health expenditure in relation to the Gross State Domestic Product (GSDP), offering insights into the overall prioritization of health in the state's economic framework.

The data presented in this chapter is sourced from the State Budget and various sections within DHS.

Table 10.1 Investment in Health and Family Welfare (Rs in crore)

Year	Plan Exp by health Depts	Plan Exp by other Depts	Total Plan Exp for Health	Non Plan	Total Health Exp	Total Govt Expenditure	Percentage of Health Expenditure to total Govt Expenditure	GSDP in Crores @ Constat Prices	Percentage of Health Exp to GSDP
2018-19	1862.76	760.5	2623.26	5235.8	7859.06	120069.8	6.55	554228.3	1.42
2019-20	2246.61	664.99	2911.6	5292.21	8203.81	114384.9	7.17	559194.2	1.47
2020-21	3144.73	1142.61	4287.43	5657.63	9944.97	138884.5	7.16	512076.1	1.94
2021-22	4104.83	1258.87	5363.7	7835.24	13198.94	163225.5	8.09	573591.5	2.30
2022-23	2711.33	1124.99	3836.32	7255.57	11091.89	17358.51	63.90		

Source: Budget in Brief

Table 10.2 Plan Schemes Allocation & Expenditure From 2019-20 To 2023-24 /2211- Plan Schemes(FAMILY WELFARE- (Rs.in Lakhs)

Year	Allocation	Expenditure	%of Expenditure
2019-20	44038.00	41928.19	95.21
2020-21	33700.45	35510.71	105.37
2021-22	53407.30	52870.07	98.99
2022-23	40710.04	42683.44	104.85
2023-24	41500.00	41617.43	100.28

SOURCE-DHS

Table 10.3 Non Plan Schemes Allocation & Expenditure From 2019-20 To 2023 -24 /2211Non Plan (FAMILY WELFARE) - (Rs.in Lakhs)

Year	Allocation	Expenditure	%of Expenditure
2019-20	15720.00	14042.06	89.33
2020-21	14577.42	12509.93	85.82
2021-22	18843.02	19571.22	103.86
2022-23	21460.20	16224.18	75.60
2023-24	17169.79	16154.55	94.09

SOURCE-DHS

Table 10.4 Plan Schemes Allocation & Expenditure From 2019-20 To 2023-24 (2210,4210) Plan) (Rs.in Lakhs)

Year	Allocation	Expenditure	%of Expenditure
2019-20	62109.00	47012.55	75.69
2020-21	57736.00	83526.55	144.67
2021-22	57770.00	174594.44	302.22
2022-23	58771.00	94946.00	161.55
2023-24	65591.00	75129.65	114.54
SOURCE-DHS			

Table 10.5 Non Plan Schemes Allocation & Expenditure From 2019-20 To 2023-24 (Rs.in Lakhs)

Year	Allocation	Expenditure	%of Expenditure
2019-20	233617.64	235882.32	100.97
2020-21	286094.58	247140.40	86.38
2021-22	257441.57	236292.97	91.79
2022-23	328832.41	299457.89	91.07
2023-24	314998.68	304971.17	96.82
SOURCE-DHS			

CHAPTER-10.6 Schemes Allocation&Expenditure Report (FAMILY WELFARE) -2023-24 (Rs in Lakh)

HEAD OF ACCOUNT	AVAILABLE PROVISION(INCLUDING SALARY OF REGULAR STAFF)	TOTAL EXPENDITURE (INCLUDING SALARY OF REGULAR STAFF)	TOTAL EXP %
2211-00-101-95 -(P)Salary of regular staff engaged for family welfare activities (Field workers) and non salary expenditure related to this scheme(CSS 60:40)	37150.00	37702.83	101.49
2211-00-003-95-(P)Salary of regular staff engaged for training of staff and students and non salary expenditure related to this scheme(CSS 60:40)	251.90	245.80	97.58
2211-00-003-96-(P)Salary of regular staff engaged for training of staff and students and non salary expenditure related to this scheme(CSS 60:40)	300.00	314.67	104.89
2211-00-001-96-(P)Salary of regular staff engaged for family welfare activities and its administration and non salary expenditure related to this scheme(CSS 60:40)	3798.10	3354.13	88.31
	41500.00	41617.43	100.28
SOURCE-DHS			

Department of Health Services

