

Type of clinic	No. of clinic visits
Baby	476,404
Cancer	429,996
Orthopaedic	389,594
E.N.T.	387,692
Nerve	264,041
Genito urinary	117,171
Neuro surgical	78,882
V.D	64,152
Other	263,420



2020

# ANNUAL HEALTH BULLETIN

MINISTRY OF HEALTH  
SRI LANKA

# **ANNUAL HEALTH BULLETIN**

## **2020**



**Ministry of Health  
Sri Lanka**

**Medical Statistics Unit**

**Ministry of Health**

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## Preface

Annual Health Bulletin - 2020, published by the Ministry of Health of Sri Lanka is the 35<sup>th</sup> of the series of Annual Health Bulletins, which is being published since 1980. The Annual Health Bulletin, which is the main publication for overall health data; provides information and indices which illustrate health situation of the country and make available data for various purposes such as planning and management of health care services, monitoring and evaluation of health and health related projects and programs, providing data for disease surveillance activities, etc.

Annual Health Bulletin (AHB) was restructured in the year 2016 in order to improve the quality and coverage of the health statistics as well as the methodology of presentation of the information in AHB. The new structure presents health information on four major areas; Health Status of the country, Health Risk Factors among the population, Health Service Coverage and Health System inputs and outputs. In addition to that, AHB contains data of four major areas; morbidity, mortality, resource availability and provision of services.

The officials who have given their generous support by providing data of their institutions, programs and surveys are greatly appreciated and their continuous support is expected in the future as well. My sincere appreciation is extended to the staff of Medical Statistics Unit for their dedication and commitment in preparation of this publication.

**S.J.S. Chandraguptha**  
**Secretary**  
**Ministry of Health**





# Message from the Director General of Health Services

Annual Health Bulletin (AHB) is the main comprehensive document of the Ministry of Health that represent an overall picture of the government health sector of Sri Lanka. It is published annually since 1980. Annual Health Bulletin provides information on the state health sector in Sri Lanka to meet the information needs for Policymakers, Health Planners, Researchers and other interested stakeholders.

The structure of the Annual Health Bulletin was changed since year 2016 and hence AHB 2020 is the 5<sup>th</sup> in the restructured series of bulletins. New structure has been more useful and more user friendly according to the views of stakeholders.

AHB 2020 is structured based on four sections: Health Status, Risk Factors, details of Service Coverage and information on the Health System which facilitated the provision of health services. It is expected that the information and data in the AHB will be used by the policy makers, health planners, health administrators and the development partners as the main reference for their strategic decision-making.

Medical Statistics Unit of the Ministry of Health is responsible for collecting and compiling the health data and presenting in the Annual Health Bulletin in a meaningful way. I would like to extend my sincere gratitude to Ms. S.T.C. Gaveshika, Director of the Medical Statistics Unit and her staff for their hard work in completing this publication. Finally, I thank all the Directors and other health staff, who gave their support by sharing the data, information and the write-ups for this publication without which it would not have a success. I hope that readers will provide their feedback to make this valuable publication more useful and improve the quality in the future.

**Dr. Asela Gunawardena**  
**Director General of Health Services**



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## List of Abbreviations

AAAEC	Academic Affairs, Accreditation and Examinations Committee
ABST	Antibiotic Sensitivity Test
ADC	Adolescent Dental Clinics
ADOS	Average Duration of stay
AFC	Anti Filariasis Campaign
AFP	Acute Flaccid Paralysis
AICU	Adult Intensive Care Unit
AIDS	Acquired Immune Deficiency Syndrome / Acquired Immunodeficiency Syndrome
ALC	Anti-Leprosy Campaign
AMC	Anti Malaria Campaign
AMOH	Assistant/Additional Medical Officer of Health
ANC	Antenatal Care
APHNH	Association of Private Hospitals and Nursing Homes
ARI	Acute Respiratory Infections
ART	Antiretroviral Therapy/Antiretroviral Treatment
ASICU	Accident Service Intensive Care Unit
AST	Antimicrobial Susceptibility Testing
BAT	Basophil Activation Test
BCG	Bacille Calmette–Guerin
BES	Biomedical Engineering Services
BH	Base Hospital
BHA	Base Hospital (Type A)
BHB	Base Hospital (Type B)
BHT	Bed-Head Ticket
BIA	Bandaranaike International Airport
BMI	Body Mass Index
BOI	Board of Investment
BOM	Board of Management
BOR	Bed Occupancy Rate
BTR	Bed Turnover Rate
CBR	Crude Birth Rate
CBRN	Chemical, Biological, Radiological and Nuclear
CCP	Consultant Community Physician
CD4	Cluster of Differentiation 4
CDC	Community Dental Clinics
CDR	Crude Death Rate
CE	Capillary Electrophoresis
CEA	Central Environment Authority

CEBH	Colombo East Base Hospital
CFA	Chief Food Authority
CFR	Case Fatality Rate
CHI	Core Health Indicators
CIM	Cancer Institute - Maharagama
CKD	Chronic Kidney Diseases
CKDu	Chronic Kidney Disease of unknown etiology
CLPD	Chronic Lymphoproliferative Disorders
CMC	Colombo Municipal Council
CNTH	Colombo North Teaching Hospital
COE	Centres of Excellence
COPA	Committee on Public Administration
C-PAP	Continuous Positive Airway Pressure
CPH	Census of Population and Housing
CRP	Consultant Respiratory Physician
CRRT	Continuous Renal Replacement Therapy
CSF	Cerebrospinal Fluid
CSHW	Castle Street Hospital for Women
CSSD	Central Sterile Supplies Division
CSTH	Colombo South Teaching Hospital
CT	Computerized Tomography
CTICU	Cardiothoracic Intensive Care Unit
CVD	Cardio Vascular Disease
DCP	Dengue Control Programme
DDG/DS	Deputy Director General/Dental Services
DGH	District General Hospital
DGHS	Director General of Health Services
DH	Divisional Hospitals
DHIS2	District Health Information Software 2
DHQS	Directorate of Healthcare Quality and Safety
DHS	Demographic and Health Survey
DLT	Dental Laboratory Technician
DMFT	Decayed Missing Filled Teeth
DMH	De Soyza Maternity Hospital
DMT	Department of Motor Traffic
DNAP	District Nutrition Action Plan
DNMS	District Nutrition Monitoring System
DO	Development Officer
DOTS	Directly Observed Treatment Short Course
DPT	Diphtheria Pertussis Tetanus

DTC	"Drug and Therapeutic Committee"
DTCO	District Tuberculosis Control Officer
ECG	Electro-cardiography
ECPAS	Established Code (Branch) Process Analysis Solutions
eHEAPIMS	eHealth Education and Promotion Information Management System
eIMMR	Electronic Indoor Morbidity and Mortality Reporting
EIMS	Electronic Information Management System
ELISA	Enzyme-Linked Immunosorbent Assay
EMTCT	Elimination of Mother to Child Transmission
ENMR	Early Neonatal Mortality Rate
ENT	Ear, Nose, Throat
EPF	Employees' Provident Fund
EPTB	Extra Pulmonary Tuberculosis
eRHMS	Electronic Reproductive Health Management Information System
ESBL	Extended Spectrum Beta-Lactamase
ET&R	Education, Training and Research
ETCICU	Emergency Treatment Care Intensive Care Unit
ETU	Emergency Treatment Unit
FAC	Food Advisory Committee
FAO	Food and Agricultural Organization
FBC	Full Blood Count
FBDG	Food Based Dietary Guidelines
FCAU	Food Control Administration Unit
FHB	Family Health Bureau
FISH	Fluorescent In Situ Hybridisation
FSW	Female Sex Worker
GARC	Global Alliance for Rabies Control
GBV	Gender Based Violence
GFATM	The Global Fund to Fight AIDS, Tuberculosis and Malaria
GFN	Global Foodborne Infections Network
GHO	Global Health Observatory
GICU	General Intensive Care Unit
GIS	Geographic Information System
GLC	Green Light Committee
GOSL	Government of Sri Lanka
GVAC	The Global Validation Advisory Committee
H&E	Hematoxylin and Eosin
HC	Health Communication
HCWM	Health Care Waste Management
HDC	Health Development Committee

HDU	High Dependency Unit
HE	Health Education
HEO	Health Education Officer
HIES	Household Income and Expenditure Survey
HIV	Human Immunodeficiency Virus
HLC	Healthy Lifestyle Centre
HMA	Health Management Assistant
HP	Health Promotion
HPB	Health Promotion Bureau
HPLC	High Performance Liquid Chromatography
HPV	Human Papilloma Virus
HQ&S	Healthcare Quality and Safety
HRCoD	Human Resource Coordination Division
HRH	Human Resources for Health
HSEP	Health System Enhancement Project
HVS	High Vaginal Swab
ICD	International Classification of Diseases
ICT	Information and Communication Technology
ICU	Intensive Care Unit
IDH	Infectious Disease Hospital
IDU	Injecting Drug User
IEC	Information, Education and Communication
IgE	Immunoglobulin E
IgM	Immunoglobulin M
IHD	Ischaemic Heart Diseases
IHR	International Health Regulations
IHR	International Health Regulations
ILI	Influenza-Like Illness
ILO	International Labour Organization
IMMR	Indoor Morbidity and Mortality Return/Reporting
IMR	Infant Mortality Rate
INFOSAN	International Food Safety Authorities Network
IQR	Inter Quartile Range
ISH	International Society of Hypertension
IT	Information Technology
IVM	Integrated Vector Management
KDU	Kothalawala Defence University
KOICA	Korea International Cooperation Agency
KP	Key Population
LOS	Length of Stay

LPA	Line Probe Assay
LRH	Lady Ridgeway Hospital
LRT	Ligation and Resection of Tubes
LSCS	Lower (uterine) Segment Caesarean Section
LTBI	Latent Tuberculosis Infection
MA	Management Assistant
MCH	Maternal and Child Health
MCV	Measles Containing Vaccine
MD	Doctor of Medicine
MDPU	Management, Development and Planning Unit
MDR	Multi Drug Resistant
MDT	Multi Drug Therapy
MHPSS	Mental Health and Psycho-Social Support
MICU	Medical Intensive Care Unit
MLT	Medical Laboratory Technician
MMR	Maternal Mortality Ratio
MO	Medical Officer
MOH	Medical Officer of Health
MoH	Ministry of Health
MOIC	Medical Officer in Charge
MOMCH	Medical Officers of Maternal and Child Health
MRI	Magnetic Resonance Imaging
MRI	Medical Research Institute
MRIA	Mattala Rajapaksha International Airport
MRSA	Methicillin-Resistant Staphylococcus Aureus
MS	Master of Surgery
MS	Medical Services
MSc	Master of Science
MSD	Medical Supplies Division
MSG	Mothers' Support Groups
MSM	Men who have Sex with Men
MSMIS	Medical Supplies Management Information System
MSU	Medical Statistics Unit
MTBC	Mycobacterium Tuberculosis Complex
NAITA	National Apprentice and Industrial Training Authority
NATA	National Alcohol and Tobacco Authority
NBC	National Blood Centre
NBTS	National Blood Transfusion Service
NCCP	National Cancer Control Programme
NCD	Non-Communicable Disease

NCI	National Cancer Institute
NCL	National Control Laboratory
NCPI	National Committee for Prevention of Injuries
NDCU	National Dengue Control Unit
NEQASH	National External Quality Assessment Scheme in Hematology
NFP	National Focal Points
NGO	Non-Governmental Organization
NHA	National Health Accounts
NHC	National Health Council
NHDC	National Health Development Committee
NHRC	National Health Research Council
NHSL	National Hospital of Sri Lanka
NHWA	National Health Workforce Accounts
NIC	National Influenza Centre
NICS	National Intensive Care Surveillance
NICU	Neonatal Intensive Care Unit
NIHS	National Institute of Health Sciences
NIID	National Institute of Infectious Diseases
NILET	National Institute of Language Education and Training
NINDT	National Institute of Nephrology and Dialysis Transplantation
NIP	National Immunization Programme
NMCW	National Mosquito Control Week
NMMR	National Maternal Mortality Reviews
NMRA	National Medicine Regulatory Authority
NNMR	Neonatal Mortality Rate
NNP	National Nutrition Policy
NOHS	National Oral Health Surveys
NPM	Nutrition Profile Model
NPTCCD	National Programme for Tuberculosis Control & Chest Diseases
NRL	National Reference Laboratory
NRR	National Renal Registry
NSACP	National STD and AIDS Control Programme
NSICU	Neuro Surgery Intensive Care Unit
NTD	Neglected Tropical Diseases
NTICU	Neuro-Trauma Intensive Care Unit
NTP	National Transplant Programme
NTRL	National Tuberculosis Reference Laboratory
NTS	Nurses Training School
NWSDB	National Water Supply and Drainage Board
OECD	Organization for Economic Co-operation and Development

OGP	Open Government Partnership
OPD	Out Patient Department
OPMD	Oral Potentially Malignant Disorders
PAP	Papanicolaou (Papanicolaou smear)
PCB	Polychlorinated Biphenyl
PCR	Polymerase Chain Reaction
PDHS	Provincial Director of Health Services
PENTA	Pentavalent Vaccine
PEP	Post Exposure Prophylaxis
PEPSE	Post Exposure Prophylaxis following Sexual Exposure
PET	Post-Exposure Therapy
PG	Post Graduate
PGH	Provincial General Hospital
PGIM	Post Graduate Institute of Medicine
PHEIC	Public Health Emergency of International Concern
PHI	Public Health Inspector
PHM	Public Health Midwife
PHNS	Public Health Nursing Sister
PHSD	Private Health Sector Development
PHSRC	Private Health Services Regulatory Council
PHVS	Public Health Veterinary Services
PICU	Pediatrics Intensive Care Unit
PLHIV	People Living with HIV/AIDS
PMCU	Primary Medical Care Units
PMDT	Programmatic Management of Drug resistant Tuberculosis
PMI	Private Medical Institution
PMR	Personal Medical Record
PNH	Paroxysmal Nocturnal Haemoglobinuria
PoE	Points of Entry
PPO	Programme and Planning Officer
PrEP	Pre Exposure Prophylaxis
PSM	Professions Supplementary to Medicine
PSSP	Primary Care System Strengthening Project
PTB	Pulmonary Tuberculosis
PVL	Panton-Valentine Leukocidin
PWID	Persons Who Inject Drugs
QC	Quality Control
QHRMS	Quarantine Health Record Management and Surveillance System
RASFF	Rapid Alert System for Food and Feed
RCT	Rank Container Terminal

RDHS	Regional Director of Health services
RE	Regional Epidemiologist
RGD	Registrar Generals' Department
RHMIS	Reproductive Health Management Information System
RIF	Rifampin
RMNCAYHP	Reproductive, Maternal, New-born, Child, Adolescent and Youth Health Programme
RMO	Registered Medical Officers
RMSD	Regional Medical Supplies Divisions
RVT	Regional Validation Team
SAARC	South Asian Association for Regional Cooperation
SARA	Service Availability and Readiness Assessment
SARE	Stepwise Approach towards Rabies Elimination
SARI	Severe Acute Respiratory Tract Infections
SBCC	Social Behavior Change Communication
SBCH	Sirimavo Bandaranaike Childrens' Hospital
SBR	Still Birth Rate
SDC	School Dental Clinics
SDG	Sustainable Development Goals
SDT	School Dental Therapists
SEARO	South-East Asia Regional Office
SICU	Surgical Intensive Care Unit
SIM	Strategic Information Management
SJGH	Sri Jayawardenapura General Hospital
SLAB	Sri Lanka Accreditation Board
SLDA	Sri Lanka Dental Association
SLIDA	Sri Lanka Institute of Development Administration
SLSI	Sri Lanka Standard Institute
SLSMA	Sri Lanka Sports Medicine Association
SMCC	Special Mosquito Control Campaigns
SMI	School Medical Inspections
SPC	State Pharmaceutical Corporation
SPHI	Supervising Public Health Inspectors
SPMC	State Pharmaceutical Manufacturing Corporation
SRBC	Southern Regional Blood Centre
STD	Sexually Transmitted Disease
STEPS	STEPwise approach to Surveillance
STI	Sexually Transmitted Infection
TACMIC	Technical Advisory Committee on Management of Industrial Chemicals
TAG	Technical Advisory Group
TB	Tuberculosis



TCS	Tertiary Care Services
TFR	Total Fertility Rate
TH	Teaching Hospital
TORCH	Toxoplasmosis, Other (syphilis, varicella-zoster, parvovirus B19), Rubella, Cytomegalovirus (CMV) and Herpes
TOT	Training of Trainers
TT	Tetanus Toxoid
TTI	Transfusion Transmitted Infections
UNICEF	United Nations International Children's Emergency Fund
UNIDO	United Nations Industrial Development Organization
USAID/FHI	United States Agency for International Development/Family Health International
VDRL	Venereal Disease Research Laboratory
VHS-CDC	Voluntary Health Services - Centers for Disease Control and Prevention
VIP	Very Important Person
WHO	World Health Organization
WTO-SPS	World Trade Organization - Sanitary and Phytosanitary
WWC	Well Woman Clinic

## Key Health Indicators 2020

Indicator	Year	Data	Source	
<b>Demographic Indicators</b>				
Total population (in thousands)	2020*	21,919	Department of Registrar General	
Land area (sq. km)	1988	62,705	Survey General's Department	
Population density (persons per sq. km)	2020*	350	Department of Registrar General	
Crude birth rate (per 1,000 population)	2020*	13.8	Department of Registrar General	
Crude death rate (per 1,000 population)	2020*	6.0		
Urban population (%)	2012	18.2	Census of Population & Housing, 2012	
Sex ratio (No. of males per 100 females)	2012	93.8		
Child population (under 5 years) (%)	2012	8.6		
Women in the reproductive age group (15-49 years) (%)	2012	51.0		
Average household size (Number of persons per family)	2012	3.8		
<b>Socio-economic Indicators</b>				
GNI per capita at current prices (Rs.)	2020	664,620	Department of Census & Statistics	
Human development index	2020	0.780	Human Development Report 2020	
Unemployment rate	Total	2020	5.5	Department of Census & Statistics
	Female		8.5	
	Male		4.0	
Dependency ratio	Total	2012	60.2	Census of population & Housing, 2012
	Old-age (60 years and more)		19.8	
	Young (under 15 years)		40.4	
Literacy rate (%) (10 years or more)	Total	2012	95.7	Census of population & Housing, 2012
	Female		94.6	
	Male		96.9	
Pupil teacher ratio in	Government Schools	2020	16.3	Ministry of Education
	Private Schools		17.0	
	Pirivenas		9.5	
Singulate mean age at marriage (years)	Female	2012	23.4	Census of population & Housing, 2012

Contd.

Indicator		Year	Data	Source
<b>Health and Nutrition Indicators</b>				
Life expectancy at birth (years)	Female	2011-2013	78.6	Department of Census and Statistics (Life Tables for Sri Lanka 2011-2013 by District and Sex)
	Male		72.0	
Neonatal mortality rate (per 1,000 live births)		2015	4.7	Department of Registrar General
Infant mortality rate (per 1,000 live births)		2015	7.5	
Under-five mortality rate (per 1,000 live births)		2015	9.0	
Average No. of children born to ever married women in Sri Lanka		2012	2.4	Census of Population & Housing, 2012
Maternal mortality ratio (per 100,000 live births)		2015	23.2	Department of Registrar General
		2020*	30.2	Family Health Bureau
Low-birth-weight rate per 100 live births in government hospitals		2020	15.8	Medical Statistics Unit
Percentage of under five children	Underweight (weight-for-age)	2016	20.5	Demographic and Health Survey, 2016
	Wasting (Acute under-nutrition or weight-for-height)		15.1	
	Stunting (Chronic malnutrition or height-for-age)		17.3	
<b>Primary Health Care Coverage Indicators</b>				
Percentage of pregnant women attended by skilled personnel		2016	99.5	Demographic and Health Survey, 2016
Percentage of live births occurred in government hospitals		2019	93.0	Department of Registrar General and Medical Statistics Unit
Current contraceptive usage of currently married women age 15-49 years (%)	Modern method	2016	53.6	Demographic and Health Survey, 2016
	Traditional method		11.0	
Population with access to safe water (%)		2012	81.1	Census of Population & Housing, 2012

Contd.

Indicator	Year	Data	Source
<b>Health Resource Indicators</b>			
Government health expenditure as a percent of GNP	2020	1.68	Central Bank of Sri Lanka - Annual Report 2020, Department of National Budget - Budget Estimate 2019, 2020, 2021 Ministry of Finance and Planning, Sri Lanka - Annual Report 2020, Department of state Accounts, General Treasury - Financial Statements for the year ended 31st December 2020, Ministry of Health - Appropriation Account - 2020
Government health expenditure as a percent of total government expenditure	2020	5.63	
Per capita health expenditure (Rs.)	2020	11,443	
Medical Officers per 100,000 population	2020	98	Medical Statistics Unit
Population per Medical Officer	2020	1022	
Dental Surgeons per 100,000 population	2020	7.1	
Nurses per 100,000 population	2020	211.6	
Supervising Public Health Midwives/Public Health Midwives per 100,000 population	2020	28.2	
Number of hospitals	2020	646	
Number of hospital beds	2020	87,280	
Hospital beds per 1,000 population	2020	4.0	
Number of Medical Officer of Health (MOH) Divisions	2020	358	

\* Provisional

## COVID-19 Response of the Ministry of Health, Sri Lanka in 2020

Ministry of Health faced an unprecedented challenge in facing the pandemic of Covid 19 during 2020. The Ministry activated the existing outbreak preparedness and response plans in place upon the declaration of COVID-19 as a Public Health Emergency of International Concern by the World Health Organization on 30th January 2020. Sri Lanka strengthened the surveillance at the Airports. COVID-19 diagnostic capacity of the health system of Sri Lanka was rapidly enhanced. With the reporting of cases within the country, the patients were managed successfully in the hospitals. The contact tracing and outbreak control activities were carried out by the public health staff, while risk communication activities were simultaneously launched.

Surveillance was further strengthened at the Airports and quarantine of the returnees were implemented with the support of stakeholders. Emerging clusters of cases were successfully controlled through clinical management of the cases, proper disposal of the dead and the control of the spread in the community. Country wide risk communication activities were carried out.

It was possible to maintain low local cases until October 2020. With the increasing number of cases thereafter, the augmented capacity of the health system proved to be effective. It was possible to ensure rapid response to the cases by the augmented hospital system. Essential supplies to the hospitals were increased as per the demand. The health staff were provided with rapid training and orientation of COVID-19 case management. Several coordination mechanisms were established and strengthened, with the participation of stakeholders within and outside the Ministry of Health.

With these strategies, the Ministry of Health, Sri Lanka was able to successfully control and manage the COVID-19 pandemic during the year the challenging year of 2020.



97.9

Medical  
Doctors



7.1

Dental  
Surgeons



211.6

Nurses



26.9

Public Health  
Midwives

Per 100,000 population



123

Base and above  
Hospitals



481

Divisional  
Hospitals



523

Primary Medical  
Care Units



358

MOH  
Offices



5,785,147

Hospital  
Admissions



23,402,668

Clinic  
Visits



38,912,622

OPD  
Attendance



87,280

Hospital  
Beds



beds per 1000 population

# 1. Country Profile

## 1.1. Background

Sri Lanka, officially known as the Democratic Socialist Republic of Sri Lanka, is an island situated in southern coast of India, separated from Indian sub-continent by a narrow strip of shallow water known as Palk Strait. Sri Lanka lies between northern latitudes  $5^{\circ} 55'$  -  $9^{\circ} 50'$  and eastern longitudes  $79^{\circ} 42'$  -  $81^{\circ} 52'$ . It has a total area of 65,610 square kilometres, including 2,905 square kilometres of inland water.

The island has a central mountainous region, 'Hill country' which peaks as high as 2,524 metres above sea level and is surrounded by a plain known as 'Low country' which is narrow in the East, West and South and broadens in the North. Many rivers spring up from mountain peaks and flow towards the Indian Ocean through low lying plains following a radial pattern. These topographical features affect wind pattern, rainfall, temperature, humidity and other climatic features.

Climatic condition of the country is also affected by its proximity to the equator as well as elevation above sea level and monsoons. Mean temperature ranges from  $26.5^{\circ}\text{C}$  to  $28.5^{\circ}\text{C}$  ( $79.7^{\circ}\text{F}$  to  $83.3^{\circ}\text{F}$ ) in low country and from  $14^{\circ}\text{C}$  to  $24^{\circ}\text{C}$  ( $58^{\circ}\text{F}$  to  $75^{\circ}\text{F}$ ) in hill country. Sri Lanka receives an average of 2,000 mm of rainfall annually, amounting to about 130 billion cubic meters of water. Both hill country and south west region, receive sufficient rain. The rest of the island, mainly the North, North Central and Eastern parts, remain dry for a considerable period of the year.

Sri Lanka has a parliamentary democratic system in which sovereignty of people and legislative powers are vested in parliament. Executive authority is exercised by a Cabinet of Ministers presided over by the Executive President. For central administration, Sri Lanka is divided into 9 provinces, 25 districts and 331 divisional secretary areas and 14,021 GN divisions (Annexure I: Detailed Table 1).

The provincial administration is vested in Provincial Councils. The local government, the lowest level of government in Sri Lanka, is responsible for providing supportive services for the public.

In the year 1931, Universal Franchise was granted to Sri Lankan citizens above the age of 18 years and free education system was established in the year 1938. Following independence, the country adopted a free health policy and provided free health care for all Sri Lankans and it helps to reach a higher Human Development Index compared to the other countries in South Asian region.



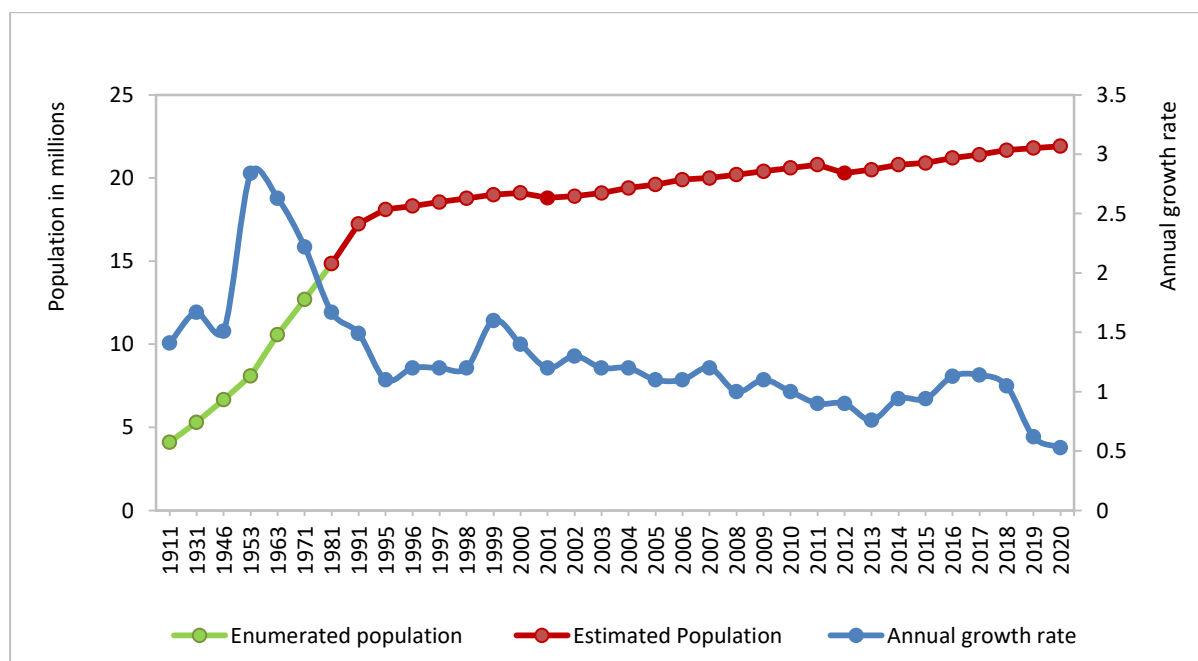
**Table 1.1 : Human Development Index (HDI) for South Asian Region**

Country	HDI value (2019)
Sri Lanka	0.782
Maldives	0.740
Bhutan	0.654
India	0.645
Bangladesh	0.632
Nepal	0.602
Pakistan	0.554
Afghanistan	0.511

Source: United Nations Development Programme

## 1.2. Population Size and Growth

Fourteenth national Census of Population and Housing (CPH) which covered the entire island after a lapse of 31 years since 1981 was conducted by Department of Census and Statistics on 20<sup>th</sup> March 2012. Data were collected from persons according to their place of usual residence. According to final results of the census, the enumerated population was 20,359,439. The first Census of Population in Sri Lanka was held in the year 1871 and at that time population was 2.4 million. So, the Sri Lankan population has grown nine times since the year 1871.



**Figure 1.1: Population size and annual growth rate, 1911 - 2020**

Source: Department of Census and Statistics, Department of Registrar General

Estimated mid-year population of Sri Lanka for the year 2020 is 21.9 million<sup>1</sup> (Annexure I: Detailed Table 2). As shown in Figure 1.1, according to Department of Registrar General, the annual

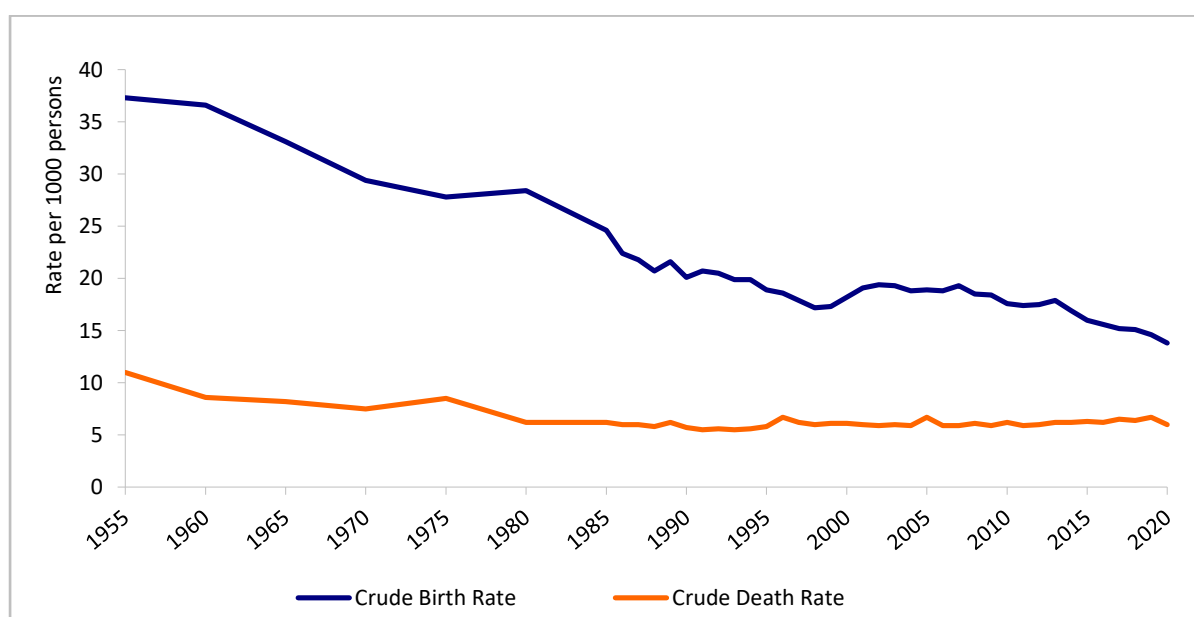
<sup>1</sup> When estimating population for the year 2020, it was assumed that the age structure of the year 2020 remained as same age structure of the last Census of Population & Housing, which was held in the year 2012.



population growth rate was 0.53 per cent during the year 2020, which added around 116,000 persons during 2020 to the total population, due to natural increase.

The first significant decline in Crude Birth Rate (CBR) began in 1950s; fertility decline gathered momentum in year 1960 through to the year 2000 and has been relatively flat since then (Figure 1.2). CBR was 13.8 per 1,000 persons in 2020 (provisional). Rapid mortality decline was observed during the post-world war II period in Sri Lanka and gradual decrease can be seen up to 1980s. Crude Death Rate (CDR) was somewhat steady during the last few decades with small fluctuations and CDR in 2020 was 6 deaths per 1,000 populations (provisional).

As a result of declining overall mortality and infant mortality rates, life expectancy has continuously risen. At the same time, low fertility rates and high life expectancy involve a declining share of children and increasing share of elderly.



**Figure 1.2: Crude birth and death rates, 1955 – 2020**

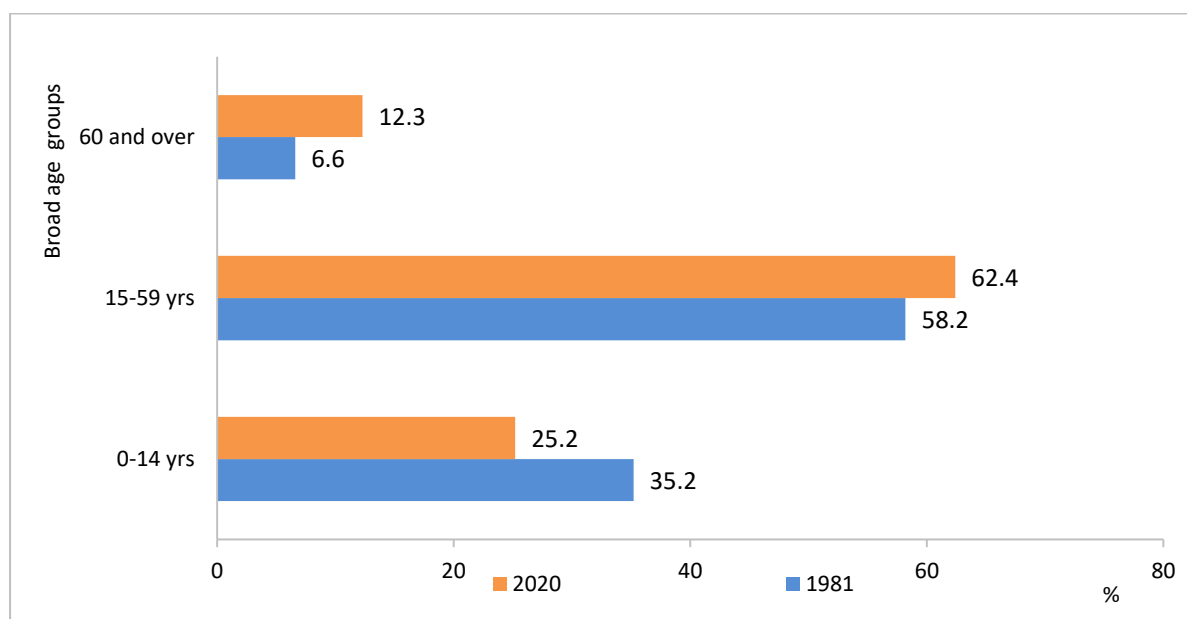
Source: Department of Registrar General

Percentage of child population (<15 years) in year 2020 shows a significant decline compared to year 1981 and at the same-time working-age population as well as elderly population present an increase (Figure 1.3). According to Census of Population & Housing, 2012, median age of population was 31 years, which means that half of the population was below the age of 31 years. Median age was around 21 years until 1981.

Table 1.2 present Ageing Index and Dependency Ratio. Ageing Index, the ratio between 60 years and over population to 0 – 14 year population in a given year, has increased from 18.8 per cent in 1981 to 48.8 per cent in 2020. Shifting of median age and increasing trend of Ageing Index imply the ageing of Sri Lankan population.

It is noticeable that the Dependency Ratio, an approximation of average number of dependents that each person of working age group must support, has decreased from 71.8 in 1981 to 60.1 in 2020,

due to a relative decline in the proportion of children. The working age population has increased from 58.2 per cent in 1981 to 62.4 per cent in 2020. The working-age population is significantly larger than the dependent population in 2020.



**Figure 1.3: Population by broad age groups, 1981 and 2020**

Source: Department of Census and Statistics and Department of Registrar General

**Table 1.2: Percentage distribution of population by broad age groups, Ageing Index and Dependency Ratio, 1911 – 2020**

Year	0 - 14 Years	15 - 59 Years	60 Years and over	Ageing Index	Dependency Ratio
	(A)	(B)	(C)	(C/A)*100	(A+C)/B*100
1911 <sup>2</sup>	40.9	54.8	4.3	10.5	82.5
1946 <sup>2</sup>	37.2	57.4	5.4	14.5	74.2
1971 <sup>2</sup>	39.0	54.7	6.3	16.2	82.8
1981 <sup>2</sup>	35.2	58.2	6.6	18.8	71.8
2001 <sup>1,2</sup>	26.3	64.5	9.2	35.0	55.0
2012 <sup>2</sup>	25.2	62.4	12.4	49.2	60.3
2020 <sup>3</sup>	25.2	62.4	12.3	48.8	60.1

<sup>1</sup> Excludes Northern Province, Batticaloa and Trincomalee districts in Eastern province

<sup>2</sup> Censuses of Population and Housing – 1911, 1946, 1971, 1981, 2001, 2012

<sup>3</sup> Estimated mid-year population - Department of Registrar General

### 1.3. Demographic Transition

Demographic transition is a transition from an undesirable state of slow growth of population where mortality and fertility rates are high to a desirable state of slow population growth with low fertility and mortality levels. As discussed above, changes in Sri Lankan population size, growth, fertility, mortality and the age structure reveal that Sri Lanka is undergoing a phase of demographic transition.

Usually, a country undergoes a period known as a “window of opportunity”<sup>2</sup> during age structure transition. Sri Lanka currently has the “window of opportunity” or in other words, “demographic dividend” or “demographic bonus” to achieve a rapid economic growth with a larger working-age population compared to the population in non-working age groups (dependents).

The continuation of ageing will lead to a decline of working-age population and an increase in dependents.

#### Trends in age-specific sex ratio

Sex ratio is an indicator that describes sex composition of a population. Sex ratio, defined as the number of males per 100 females. This ratio is 93.9 in Sri Lanka for year 2020. It indicates an excess of females over males. When comparing sex ratios in 1981, 2001 and 2020, it shows a decreasing trend (Table 1.3). Age-specific sex ratios in 2020 are declining gradually as age increases with fluctuations in some age groups. This indicates more females than males in older age groups. However, the sex ratio under 14 years is greater than 100, which reflects more males among children less than 14 years of age. According to the Department of Registrar General, the sex ratio at birth is 104 males per 100 females (provisional) for the year 2020.

#### Population density

Population density is defined as the number of persons in an unit area. It is vital to study population density by districts, as overcrowding might lead to many health hazards. Population density for the year 2020 is 350 persons per square kilometre which shows an increase of 52 per cent from 230 persons per square kilometre in 1981. Population densities among districts show marked regional variations. Colombo district shows the highest density of 3632 persons per square kilometre in 2020. The next highest density of 1807 is recorded from adjoining district; Gampaha.

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<sup>2</sup> The demographic window is defined by U.N. Population Department as the period when the proportion of children and youth under 15 years falls below 30 per cent and the proportion of people who are 65 years and older is below 15 per cent.

**Table 1.3: Age specific sex ratios, 1981, 2001, 2012 and 2020**

Age group (in years)	Sex ratio (No. of males per 100 females)			
	1981 <sup>1</sup>	2001 <sup>1,2</sup>	2012 <sup>1</sup>	2020 <sup>3</sup>
All Ages	103.9	97.9	93.8	93.9
Under 1	104.1	104.5	101.7	101.8
1 – 4	103.8			
5 – 9	103.6	103.1	101.9	101.8
10 - 14	104.1	104.5	102.2	102.3
15 - 19	102.7	103.6	99.5	99.4
20 - 24	100.3	98.0	93.9	93.8
25 - 29	99.8	93.8	91.9	91.7
30 - 34	102.0	95.4	94.6	94.6
35 - 39	100.6	95.2	94.9	94.9
40 - 44	106.0	96.6	94.8	94.9
45 - 49	102.0	97.1	92.6	92.5
50 - 54	111.1	95.9	91.1	91.3
55 - 59	110.2	92.8	88.9	89.1
60 - 64	116.2	92.7	86.4	86.4
65 - 69	111.0	88.0	81.2	81.3
70 - 74	115.7	85.0	78.9	78.6
75 and Over	107.3	84.6	67.6	67.7

<sup>1</sup> Census of Population & Housing

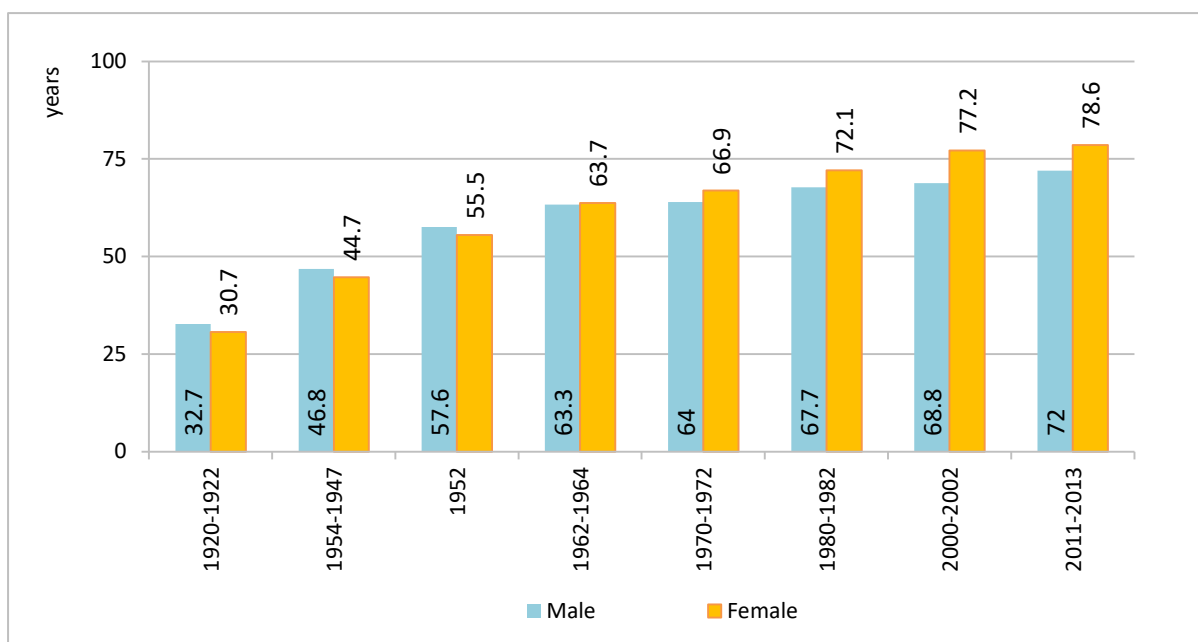
<sup>2</sup> Excludes Northern Province, Batticaloa and Trincomalee districts in Eastern Province

<sup>3</sup> Estimated mid-year population - Department of Registrar General

## 1.4. Trends in Life Expectancy

Life expectancy is the average number of years a person would live under the current pattern of mortality. Figure 1.4 presents life expectancy at birth by sex from 1920 to 2013.

Gender differences can be seen in life expectancy at birth in Sri Lanka. “Life Tables for Sri Lanka 2011 - 2013 by District and Sex” published by Department of Census and Statistics shows that life expectancy at birth was 72 years for males and 78.6 years for females during 2011 - 2013.



**Figure 1.4: Life expectancy at birth by sex, 1920 - 2013**

Source: Department of Census and Statistics

## 1.5. Trends in Fertility Rates

Total Fertility Rate (TFR) of a population, is the average number of children that would be born to a woman over her lifetime if she was to experience exact current age-specific fertility rates throughout her lifetime and she was to survive from birth until the end of her reproductive life.

Table 1.4 reveals that the TFR declined steadily from 2.8 in the year 1987 to 1.9 in the year 2000, which was below replacement level of fertility (replacement level of fertility is defined as an average of 2.1 children per woman). Afterward, it increased to above replacement level of fertility during the period 2003 to 2012. Currently, TFR is 2.2 children per woman according to the Demographic and Health Survey (DHS) 2016.

**Table 1.4: Total fertility rates (per 1,000 women), 1987 - 2016**

Data source (Period)	DHS 1987 (1982-1987)	DHS 1993 (1988 – 1993)	DHS 2000 (1995-2000)	DHS 2006/07 (2004-2007)	DHS 2016 (2013-2016)
TFR	2.8	2.3	1.9	2.3	2.2

Source: Department of Census & Statistics

## 1.6. Introduction to Sri Lankan Health Sector

Sri Lankan health system comprises of different systems of medicine; Traditional, Western, Ayurvedic, Unani, Sidha, Homeopathy and Acupuncture. Of these, Western or Allopathic medicine is the leading sector catering to needs of the majority. Western medicine is provided through both public and private sectors but share of care is different for inpatients and outpatients. The public sector provides the bulk of inpatient care, providing a safety net for citizens. In year 2020, over 5 million hospitalizations and over 38 million outpatient visits occurred in public sector.

The public sector has an extensive network of health care institutions and has a system for Ayurvedic care. The private sector provides access to almost all types of care at a cost while public sector provides free health services at the point of care.

Public health sector is organized into two parallel streams:

- community health services focusing mainly on promotive and preventive health
- curative care services ranging from non-specialized primary care to specialized care delivered through a variety of hospitals

Ministry of Health of central government is the leading agency providing stewardship to health service development and regulation. It is also responsible for ensuring resources for health such as trained human resources, drug supply and major health infrastructure development. The delivery of care in the public sector is decentralized and management of primary care in some specialized allopathic hospitals is done by the provincial health authorities.

**Table 1.5: Number of government health care institutions by type, 2020**

Government health care institutions	Number
Teaching Hospitals	18
Provincial General Hospitals	2
District General Hospitals	20
Base Hospitals (Type A)	33
Base Hospitals (Type B)	50
Divisional Hospitals (Type A)	67
Divisional Hospitals (Type B)	147
Divisional Hospitals (Type C)	267
Other Hospitals	35
Primary Medical Care Units	523
PMCU and Maternity Homes	7
MOH	358

Source: Medical Statistics Unit

# Health Status

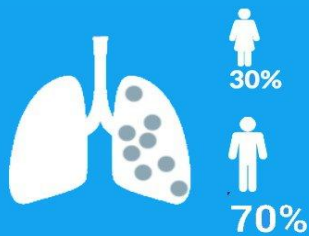
# In 2020,



Hospital admissions declined by 2 million due to the COVID-19 pandemic.



Mental health disorders are increasing.



Among the hospital admissions with TB, 70% are males.



## 2. Morbidity and Mortality

### 2.1. Concepts

#### Morbidity

Morbidity refers to the state of being diseased or unhealthy within a population. Morbidity statistics measure the extent of a nation's health and the provision of health facilities. Morbidity data could be used to measure which medical facilities are utilized and to investigate patterns of occurrence of illness.

Incidence and prevalence rates are the main morbidity indicators. Morbidity data is collected according to disease type, sex, age and location.

#### Mortality

Mortality refers to the incidence of death or the number of deaths in a population. Mortality indicators play a vital role in determining the size, growth and structure of population. It is considered the most striking demographic event all over the world.

Mortality trends reflect health status of a country. Mortality statistics are useful in public health administration to determine the requirements of the health sector and to evaluate the progress of public health programmes in different aspects of health.

Furthermore, the collection and analysis of mortality information helps:

1. to identify levels and trends of mortality
2. to identify patterns and trends in cause of death and their impact on mortality
3. to observe age patterns of mortality
4. to compare mortality patterns between sub populations
5. to identify demographic, social, economic, behavioral and environmental factors which influence levels and trends in mortality
6. to compare mortality levels between different populations

The main indicators computed using morbidity and mortality information are as follows,

1. Cause-specific death rates
2. Case fatality rates
3. Crude death rate
4. Maternal mortality ratio
5. Child mortality rate
6. Standardized mortality rates
7. Age specific mortality rates

In Sri Lanka, both morbidity and mortality data are collected using IMMR (Indoor Morbidity and Mortality Return) from all the government hospitals, processed and disseminated by the Medical Statistics Unit (MSU) of the Ministry of Health. This system has been collecting morbidity and mortality data since 1985. However, mortality data provided by IMMR is based only on government hospitals. It is noteworthy that nearly 60-70% of the total deaths in Sri Lanka occur in a non-hospital setting. Therefore, the vital registration system, which was established in 1867, is preferred in retrieving information on all the deaths registered in Sri Lanka, irrespective of the place of occurrence.

**Table 2.1: Number of deaths reported by Department of Register General and government hospitals, 2015 - 2020**

Year	Death reporting source		Percentage covered by government hospitals
	Department of Register General	Government hospital	
2015	132,011	47,808	36.2
2016	130,912	48,020	36.7
2017	139,822	52,338	37.4
2018	139,498	53,171	38.1
2019	146,053	58,976	40.4
2020	132,431	47,830	36.1

*Source: Department of Registrar Generals, Medical Statistics Unit*

Total number of deaths declined in 2020 due to transport restrictions, lock down conditions, good practices followed by people and facilities provided by health sector.

## 2.2. Data Collection

In Sri Lanka, morbidity data is available only on patients seeking treatment as inpatients from government hospitals that provide allopathic medicine. Morbidity data of patients attending outpatient departments of government hospitals are not available.

Indoor Morbidity and Mortality Return (IMMR) is the main source of morbidity data. The Medical Statistics Unit (MSU) collects this return quarterly from all the government hospitals with indoor facilities. Since 1996, IMMR is based on the 10<sup>th</sup> revision of the International Classification of Diseases (ICD-10<sup>th</sup> version). In 2012, MSU introduced a web-based system called eIMMR to collect morbidity and mortality data.

Hospitals where computers and internet facilities are available send their data through eIMMR. Accurate, detailed and timely data collected through eIMMR from more than five hundred hospitals are processed and published in this report.

Final diagnosis, as mentioned in Bed Head Tickets (BHTs) of patients, are recorded in a formal register, and then summarized to complete IMMR return. Hospitals, which send data through eIMMR, can directly enter final diagnosis of a patient into the system and the system generates an IMMR report. It is a duty to be performed by Medical Recording Officer in the hospital record room or the hospital statistics unit. However, since there is a limited number of qualified Medical Recording Officers in the system, other staff categories such as Medical Recording Assistants, Planning and Programming Officers, Planning and Programming Assistants and Development Officers are involved in the said activity.

Registered/Assistant Medical Officers or sometimes Medical Officers, also engage in the compilation of inpatient statistics. Though these officers are mainly employed to attend patient care, they perform statistical activities as an additional duty.

It should be noted that repeat visits, transfers and multiple admissions of the same patient for the same disease are reflected in morbidity data as additional cases. Therefore, morbidity data available in Sri Lanka should be interpreted with caution, considering the above limitations.

### 2.3. Total Hospitalizations

Total hospital admissions were ranged between 6.3 million to 7.4 million from 2015 to 2019. In 2020 admissions were declined due to COVID - 19. Apart from that several major hospitals could not complete data entry.

Hospitalization episodes during 2015 to 2020 are shown in Table 2.2.

**Table 2.2: Hospitalization episodes by sex and age groups, 2015 – 2020**

Year	Total *	Sex		Age group (Years)				
		Male	Female	Less than 5	5-16	17-69	70+	Age not specified
2015	6,359,681	3,155,124	3,204,557	611,987	648,243	4,388,937	704,721	5,793
2016	6,497,773	3,243,867	3,253,906	566,726	663,802	4,520,841	740,483	5,921
2017	6,910,249	3,448,273	3,461,976	579,279	720,814	4,821,387	783,099	5,670
2018	7,116,268	3,546,399	3,569,869	587,201	710,057	4,956,392	857,924	4,694
2019	7,477,860	3,740,535	3,737,325	585,622	727,950	5,214,168	945,026	5,094
2020**	5,785,147	2,913,586	2,871,561	358,153	487,362	4,183,218	752,869	3,545

\*Total hospitalizations includes both live discharges and deaths

\*\* Excluded Eye hospital/IDH/ Kurunegala PGH/ Trincomalee DGH and hospitals mentioned in annexure II (Table 12)

Source: Medical Statistics Unit

### 2.4. Trends in Hospital Morbidity and Mortality

Live discharges and deaths were categorized by sex. On average 5.7 million live discharges were reported in 2020 to the IMMR system and approximately, half of them were males. In terms of hospital admissions, both admissions and live discharges of females were higher than that of males. Among the hospital deaths, majority were among the male population. Furthermore, the number of reported deaths is increasing from the year 2015 to 2019. Table 2.3 presents the data related to the live discharges and the deaths from the year 2015 to 2020.

**Table 2.3: Live discharge episodes and number of hospital deaths by Sex, 2015 – 2020**

Year	Live discharges			Hospital deaths		
	Total	Male	Female	Total	Male	Female
2015	6,311,873	3,126,759	3,185,114	47,808	28,365	19,443
2016	6,449,753	3,215,646	3,234,107	48,020	28,221	19,799
2017	6,857,911	3,417,870	3,440,041	52,338	30,403	21,935
2018	7,063,097	3,515,323	3,547,774	53,171	31,076	22,095
2019	7,418,884	3,706,458	3,712,426	58,976	34,077	24,899
2020*	5,737,317	2,885,697	2,851,620	47,830	27,889	19,941

\* Excluded Eye hospital/IDH/ Kurunegala PGH/ Trincomalee DGH and hospitals mentioned in appendix-1

Source: Medical Statistics Unit

There are eighteen hospitals categorized under teaching hospitals in Sri Lanka. Data indicates that approximately one fourth (27%) of the hospital admissions were reported to Teaching hospitals in 2020. One fifth (20%) of the hospital admissions were to District hospitals. Among others, higher percentages reported to Base hospital type A and B. Teaching, District General, Base hospital type A and B provided inpatient health care services to 70 percent of total admissions in the year 2015 while this has been increased to 76 percent in the year 2020. Table 2.4 presents the percentage distribution of total hospitalizations by type of hospital from 2015 to 2020.

**Table 2.4: Percentage distribution of total hospitalizations by type of hospital, 2015-2020**

Type of hospital	2015	2016	2017	2018	2019	2020
Teaching Hospitals	24	24	24	25	26	27
District General Hospitals	19	19	18	19	19	20
Base Hospitals - Type A	15	15	15	16	16	17
Base Hospitals - Type B	12	12	13	12	12	12
Divisional Hospitals - Type B	9	9	9	8	8	8
Divisional Hospitals - Type C	8	8	8	8	8	6
Provincial General Hospitals	6	6	6	4	4	2
Divisional Hospitals - Type A	6	6	5	6	5	6
Other Hospitals	2	2	2	2	2	2
Total	100	100	100	100	100	100

Source: Medical Statistics Unit

### 2.4.1. Leading Causes of Hospitalization

Traumatic injuries (S00 –T19, W54) are the leading cause of hospitalization as usual. This was the most frequent cause of hospitalization for all districts except Mannar and Mullaitivu in 2020 (Table 23 of Annexure II). Out of reported hospitalization in the year 2020, over 900,000 (16%) admissions were reported for traumatic injuries. The second and third leading causes are symptoms, signs and abnormal clinical and laboratory findings and diseases of the urinary system. Table 2.5 shows more than two thirds of traumatic injuries hospital admissions were males.

Over 1.5 million (52%) male admissions were due to the traumatic injuries, symptoms, signs and abnormal clinical and laboratory findings, diseases of the urinary system, diseases of the gastrointestinal tract, respiratory diseases excluding diseases of the upper respiratory tract and diseases of skin and subcutaneous tissue.

**Table 2.5: Number of hospitalizations by cause of hospitalization, 2020**

Causes of hospitalization (Top 10)	Total	Male %	Female %
Traumatic injuries (S00-T19, W54)	939,902	67.1	32.9
Symptoms, signs and abnormal clinical and laboratory findings (R00-R99)	520,801	48.6	51.4
Diseases of the urinary system (N00-N39)	369,097	60.5	39.5
Diseases of the gastrointestinal tract (K20-K92)	291,652	53.7	46.3
Direct and indirect obstetric causes (O10-O46, O48-O75, O81-O99, Z35)	247,689	-	100
Diseases of the respiratory system excluding diseases of upper respiratory tract, pneumonia and influenza (J20-J22, J40-J98)	224,646	55.7	44.3
Diseases of skin and subcutaneous tissue (L00-L99)	204,150	55.9	44.1
Diseases of the musculoskeletal system and connective tissue (M00-M99)	165,101	52.7	47.3
Viral diseases (A80-B34)	149,989	56.0	44.0
Neoplasms (C00-D48)	141,817	44.5	55.5
Diseases of the eye and adnexa (H00-H59)	136,117	51.2	48.8

Source: Medical Statistics Unit

Table 2.6 shows top three causes of hospitalizations for age less than 1 year, 1-4 years, 5-16 years, 17-69 and 70 and above groups. Except under 1 year age group, all other age groups reported traumatic injuries (S00-T19, W54) as one top three causes of hospitalization. Males in age group 5-16 years and 17-69 years should be highlighted for risk of Traumatic injuries. Signs, symptoms and abnormal clinical findings (R00-R99) were also reported by all age groups as the top three causes of hospitalization.

Other conditions originating in the perinatal period (P00-P04, P08-P96) was reported as the most frequent reason for infant hospitalizations.

**Table 2.6: Leading causes of hospitalization in specific age groups, 2020**

Age group	Causes of hospitalization	Total	Male (%)	Female (%)
<b>Under 1 year</b>	Other conditions originating in the perinatal period (P00-P04, P08-P96)	39,628	49.5	50.5
	Persons encountering health services (Z00-Z13,Z40-Z54)	13,093	51.8	48.2
	Signs, symptoms and abnormal clinical findings (R00-R99)	11,491	51.7	48.3
<b>1-4 years</b>	Traumatic injuries (S00-T19, W54)	59,137	53.3	46.7
	Signs, symptoms and abnormal clinical findings (R00-R99)	23,544	55.6	44.4
	Persons encountering health services (Z00-Z13,Z40-Z54)	18,235	56.0	44.0
<b>5-16 years</b>	Traumatic injuries (S00-T19, W54)	145,779	66.3	33.7
	Signs, symptoms and abnormal clinical findings (R00-R99)	49,652	48.7	51.3
	Persons encountering health services (Z00-Z13,Z40-Z54)	39,067	58.8	41.2
<b>17-69 years</b>	Traumatic injuries (S00-T19, W54)	661,682	70.3	29.7
	Persons encountering health services (Z00-Z13,Z40-Z54)	438,608	51.2	48.8
	Signs, symptoms and abnormal clinical findings (R00-R99)	361,156	47.4	52.6
<b>70+ years</b>	Persons encountering health services (Z00-Z13,Z40-Z54)	98,600	61.7	38.3
	Signs, symptoms and abnormal clinical findings (R00-R99)	74,741	51.5	48.5
	Traumatic injuries (S00-T19, W54)	67,901	51.0	49.0

Source: Medical Statistics Unit

## 2.4.2. Leading Causes of Hospital Deaths

Total government hospital deaths reported in the year 2020 were 47,830. Out of them more than half of the hospital deaths (52%) occurred due to ischaemic heart disease (I20-I25), neoplasms (C00-D48), zoonotic and other bacterial diseases (A20-A49), respiratory diseases, excluding cerebrovascular disease (I60-I69) excluding diseases of the upper respiratory tract (I20-I22, I40-I98). Majority of deaths that occurred due to these five disease categories were among males. Traumatic Injuries were the prime cause of hospitalization in Sri Lanka and annually 1500-2000 deaths were reported due to traumatic Injuries.

Table 2.7 shows majority of deaths that occurred due to top 10 disease categories were also males.

**Table 2.7: Number of hospital deaths by cause of death, 2020**

Causes of death (Top 10)	Number	Male (%)	Female (%)
Ischaemic heart disease (I20-I25)	6,665	57.1	42.9
Neoplasms (C00-D48)	5,353	55.1	44.9
Zoonotic and other bacterial diseases (A20-A49)	5,237	53.2	46.8
Diseases of the respiratory system excluding diseases of upper respiratory tract, pneumonia and influenza (J20-J22, J40-J98)	4,094	60.7	39.3
Cerebrovascular disease (I60-I69)	3,695	58.5	41.5
Pulmonary heart disease and diseases of the pulmonary circulation (I26-I51)	3,437	53.1	46.9
Diseases of the urinary system (N00-N39)	2,736	58.9	41.1
Pneumonia (J12-J18)	2,598	59.0	41.0
Diseases of the gastro-intestinal tract (K20-K92)	2,422	69.5	30.5
Traumatic injuries (S00-T19, W54)	1,537	78.3	21.7

Source: Medical Statistics Unit

## 2.5. Registration of Deaths

In Sri Lanka 80 percent of registrars who register deaths are non-medical registrars. Therefore, the cause of death offered by non-medical registrars may not be as accurate as expected. This is evident by the large number attributed to symptoms, signs and ill-defined conditions.

## 3. Health Related Sustainable Development Goals (SDG)

Sustainable Development Goal 3, regarding "Good Health and Well-being", is one of the 17 Sustainable Development Goals established. This goal is to ensure healthy lives and promote wellbeing for all at all ages. There are 13 targets to be achieved in SDG 3 which is measured using 26 indicators.

A national workshop was held in May 2016 to identify core health indicators relevant to Sri Lanka, best data sources for these identified indicators, whether routine data can be used or special surveys are required to get data and the level of equity stratification required. Accordingly, the Ministry of Health, Sri Lanka identified and finalized 46 indicators which are relevant to health. Thirteen core indicators of SDG 3 had been subdivided into 38 health indicators which included 16 indicators for the measurement of UHC. The remaining 8 indicators were non-SDG 3 but related to health.

In January 2017, Ministry of Health established a National Steering Committee on SDG 3 to support, guide and oversee progress of achieving SDG3 Core Health Indicators (CHI) in Sri Lanka. Two National Steering Committee Meetings were held in 2020. Another significant milestone is the development of strategic plan to achieve the targets set for 2030. With the establishment of the SDG Council, a consultative meeting was held by the council to develop the strategic framework and to decide the organizations responsible for the indicators. Accordingly, the Ministry of Health has been given the responsibility of reporting 31 SDG-3 indicators and 3 non-SDG- 3 indicators.

Responsibility of reporting the following SDG indicators were entrusted to other organizations.

3.4.1	Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	WHO
3.4.2	Suicide mortality rate	Sri Lanka Police
3.6.1	Death rate due to road traffic injuries	Sri Lanka Police
3.8.2	Proportion of population with large household expenditures on health as a share of total household expenditure or income	DCS
3.9.1	Mortality rate attributed to household and ambient air pollution	WHO
3.9.3	Mortality rate attributed to unintentional poisoning	RGD
3.b.2	Total net official development assistance to medical research and basic health sectors	OECD



**Table 3.1: Baseline values, targets set for 2030 and the current values for the SDG 3 indicators**

Indicator number	Indicator	Primary data source	Baseline	2018	2019	2020	Target for 2030
3.1.1	Maternal mortality ratio ( per 100,000 live births)	FHB	33.7 (2015)	32	28.83	NA	16
3.1.2	Births attended by skilled health personnel	DHS	99.5% (2016)	-	-	-	100%
		FHB		99.9% (FHB)	99.9% (FHB)	99.99% (FHB)	
3.2.1	Children under-five mortality rate (per 1,000 live births)	RGD	9.8 (2013)	-	-	-	5
		FHB		10.6 (FHB)	11.0 (FHB)	9.8(FHB)	
3.2.2	Neonatal mortality rate (per 1,000 live births)	RGD	5.9 (2013)	6.5 (FHB)	6.6 (FHB)	6.3(FHB)	3
3.3.1	HIV incidence rate (per 1,000 population)	NSACP	0.01	0.01	0.01	0.01	<0.01
3.3.2	TB incidence rate (per 100,000 population)	NPTCCD	65 (2015)	40.1 (NPTCCD) 64 (WHO estimate)	37.8 (NPTCCD)	32.2 (NPTCCD)	13
3.3.3	Malaria Incidence per 1,000 population	AMC	0	0	0	0	0
3.3.4	Hepatitis B incidence per 100,000 children 5 years of age	A survey has been planned in 2019 to establish baseline and target					

*Contd...*

Indicator number	Indicator	Primary data source	Baseline	2018	2019	2020	Target for 2030
	Number of people requiring interventions against Neglected Tropical Diseases (NTD)						
3.3.5	1. Dengue - incidence of dengue cases per 100,000 population in a given year (number receiving treatment for dengue - reported cases)	DCP	41,819 (average number of cases from 2012 to 2016)	54,532	105,049	34,411	21,000
	2. Rabies - number of deaths due to human rabies	PHVS	23 (2017)	25	26	26	0
	3. Filariasis - Number of new lymphedema cases due to filariasis receiving treatment per year	AFC	753 (2016)	736	871	523	0
	4. Leprosy - Number receiving treatment for leprosy per year	ALC	1,973 (2016)	1,821	1,657	1,137	1,000
	5. Leishmaniasis - incidence Reported cases of leishmaniasis per year per 100,000 population	Epidemiology Unit	1,113 7.2 (2016)	3,273	4,066	3162	<1
3.4.1	Mortality between 30 and 70 years of age from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases (WHO Statistics)		17.7 (2015)				25% reduction from the baseline value

Contd...

Indicator number	Indicator	Primary data source	Baseline	2018	2019	2020	Target for 2030
3.4.2	Suicide mortality rate per 100,000 population	Sri Lanka Police	14.5 (2015)	15.1	14.4		11.6
3.5.1	Coverage of treatment intervention (Pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders 1) Drugs 2) Alcohol and other psychoactive substances	Mental Health Unit	2.4%(2019) 5%(2018)	5%	2.4%		17.4% 10%
3.5.2	Total alcohol per capita (age 15+ years) consumption litres per person	NATA	4.3 (2016)	3.88	3.92	3.56	3.56
3.6.1	Mortality rate from road traffic injuries per 100,000 population	Sri Lanka Police	13.4 (2015)	14.54	13.07		Reduce by 20%
3.7.1	Demand for family planning satisfied with modern methods	DHS	74.2% (DHS) 78.5% (RHMIS) (2016)	79.1% (RHMIS)	79.6% (RHMIS)	79.5% (RHMIS)	81%
3.7.2	Adolescent fertility rate per 1,000 women in the 15-19 years age group	DHS	30 (2016)				20 per 1,000
3.8.1.2	Antenatal care coverage - at least four visits (%)	DHS	98.8% (2016)				100%

Contd...

Indicator number	Indicator	Primary data source	Baseline	2018	2019	2020	Target for 2030
3.8.1.3	Percentage of infants receiving three doses of diphtheria-tetanus-pertussis containing vaccine	Epidemiology Unit	DPT 3 - 97% (2016) Instead of DPT 3, Sri Lanka is giving PENTA 3	95%	98%	96%	100%
3.8.1.4	Care-seeking for symptoms of Acute Respiratory Infections (ARI)	DHS	52.3% (2016)				Not available
3.8.1.5	TB treatment success rate	NPTCCD	84.6% (2016)	84.1%	84.1%	84.2 %	> or = 90%
3.8.1.6	Antiretroviral Therapy (ART) coverage	NSACP	15.3% (spectrum software) (2016)	44.53%	51%	51.72 %	>90.0%
3.8.1.7	Percentage of population in malaria-endemic areas who slept under an insecticide-treated net in the previous night	Not relevant to Sri Lanka					
3.8.1.8	Population using safely managed sanitation services	DHS	91.2% (2016)				98%
	Population using safely managed drinking-water service	DHS	90.4% (2016)				100%
3.8.1.9	Age-standardized prevalence of non-raised blood pressure (among adults aged 18+ regardless of treatment status)	STEPS	74% (2015)				80%
3.8.1.10	Age-standardized mean fasting plasma glucose (mg/dl) for adults aged 18 to 69 years	STEPS	81.6mg/dl (2015)				80mg/dl

Contd...

Indicator number	Indicator	Primary data source	Baseline	2018	2019	2020	Target for 2030
3.8.1.11	Age-standardized prevalence of adults >=15 years not smoking tobacco in last 30 days	STEPS	74.2% (2015)	-		-	90%
3.8.1.12	Hospital beds per capita, relative to a maximum threshold of 18 per 10,000 population	Medical Statistics Unit	100% (2016)	100%	100%	100%	Maintain at same level
3.8.1.13	Health worker density and distribution (per 1,000 population) Threshold values: Physicians - 0.9 per 1,000 population Psychiatrists - 1 per 100,000 population Surgeons - 14 per 100,000 population	(Medical Statistics Unit)	Physicians - 0.895 Psychiatrists - 0.32 Surgeons - 2.26 (2016)	Physicians - 0.910 Psychiatrists - 0.40 Surgeons - 2.42	Physicians - 0.935 Psychiatrists - 0.46 Surgeons - 2.64	Physicians - 0.979 Psychiatrists - 0.46 Surgeons - 2.74	Physicians - 1.79 Psychiatrists - 1.2 Surgeons - 3.8

Contd...

Indicator number	Indicator	Primary data source	Baseline	2018	2019	2020	Target for 2030
3.8.1.14	International Health Regulations (IHR) core capacity index	Quarantine Unit	43% (2018)	43%	54%	62%	70%
3.8.2	Financial protection coverage	HIES	>10% - 6% >25% - 1% (2013)				Maintain at the same level
3.9.1	Mortality rate attributed to household and ambient air pollution (WHO Global Health Observatory)		89 per 100,000 population (2016)				75 per 100,000 population
3.9.3	Mortality rate attributed to unintentional poisoning	RGD	0.63 per 100,000 population (2013)				Maintain at the same level
3.a.1	Age standardized prevalence of current tobacco use among persons aged 18-69 years	STEPS	25.8% (2015)				10%
3.b.1	Proportion of the target population covered by all vaccines included in their national program	Epidemiology Unit	BCG (99.2%) DPT3 (97%) Polio 3 (96%) MCV 2 (16.3%) TT (96.2%) HPV 2 (0%)	BCG (96%) PENTA 3 (95%) Polio 3 (97%) MCV 2 (96%) TT (95%) HPV 2 (65%)	BCG (99%) PENTA (98%) Polio 3 (98%) MCV 2 (97%) TT (98%) HPV 2 (58%)	BCG (99%) PENTA (96%) Polio 3 (96%) MCV 2 (97%) TT (97%) HPV 2 (32%)	BCG (100%) PENTA 3 (100%) Polio 3 (100%) MCV 2 (100%) TT (100%) HPV 2 (100%)
3.b.2	Total net official development assistance to medical research and basic health sectors (OECD data)		0.984 USD (2016)				Not available

Contd...

Indicator number	Indicator	Primary data source	Baseline	2018	2019	2020	Target for 2030
3.b.3	Availability of essential medicines and commodities	SARA	50% - Public - 100.0 Private - 95.29 75% - Public - 82.16 Private - 80.26 90% - Public - 21.44 Private - 53.04				Maintain at same level
3.c.1	Health worker density and distribution per 10,000 population	(MSU)	Physicians - 8.95 Dental surgeons - 0.87 Midwives/Nurses - 24.28 Pharmacists - 1.42 (2016)	Physicians - 9.10 *Dental surgeons - 0.90 Midwives/Nurses - 25.32 Pharmacists - 1.59	Physicians - 9.35 *Dental surgeons - 0.90 Midwives/Nurses - 25.46 Pharmacists - 1.61	Physicians – 9.79 Dental surgeons – 0.71 Midwives/Nurses – 25.18 Pharmacists – 1.68	Physicians - 17.9 Dental surgeons - 1.4 Midwives/Nurses - 38.2 Pharmacists - 4.7
3.d.1	IHR capacity and health emergency preparedness	Quarantine Unit	43% (2018)	43%	54%	62%	70%
2.2.1	Prevalence of stunting among children under 5 years of age	DHS	17.3 (2016)	8.9 (RHMIS)	8.4 (RHMIS)		10.8 by 2025 and <10% by 2030
2.2.2	Prevalence of wasting among children under 5 years of age	DHS	15.1 (2016)	10.2 (RHMIS)	9.9 (RHMIS)		<5%

\*Included all Dental Care Service Providers such as dental technician and school dental therapists.

From 2020 onwards , ISCO -08 (International Classification of Occupations) is followed.

## 4. Maternal and Child Health

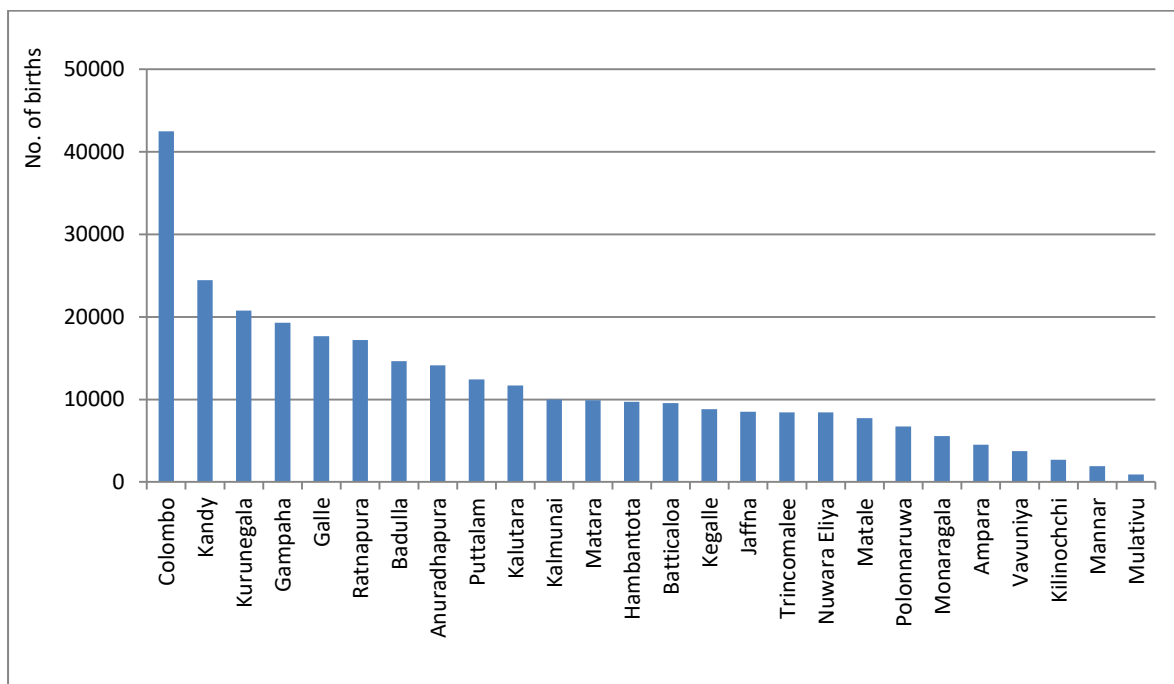
### 4.1. Maternal Mortality Ratio (MMR)

The maternal mortality ratio is assumed as a pivotal index of human and social development. It reflects women's overall status, access to health care and the responsiveness of a country's health care system to their needs.

Sri Lanka reported the MMR of 1694 per 100,000 live births in the year 1947 and gradually reduced the number over the last few decades to achieve the best MMR in the South Asian region.

In the year 2020, out of reported 164 maternal deaths, 91 deaths were categorized as maternal deaths giving a provisional national Maternal Mortality Ratio (MMR) of 30.2 per 100,000 live births. Live births reported by the Registrar General's Department for the year 2020 were taken as the denominator (301,706). It is notable that although the number of maternal deaths were reduced compared to the year 2019, the MMR for the year 2020 was increased by 1 point due to the substantial reduction of live births (17,304) in the denominator (2019 - 319,010).

Maternal Deaths	=	91
Live Births	=	301,706
MMR (Provisional)	=	30.2
(Per 100,000 live births)		

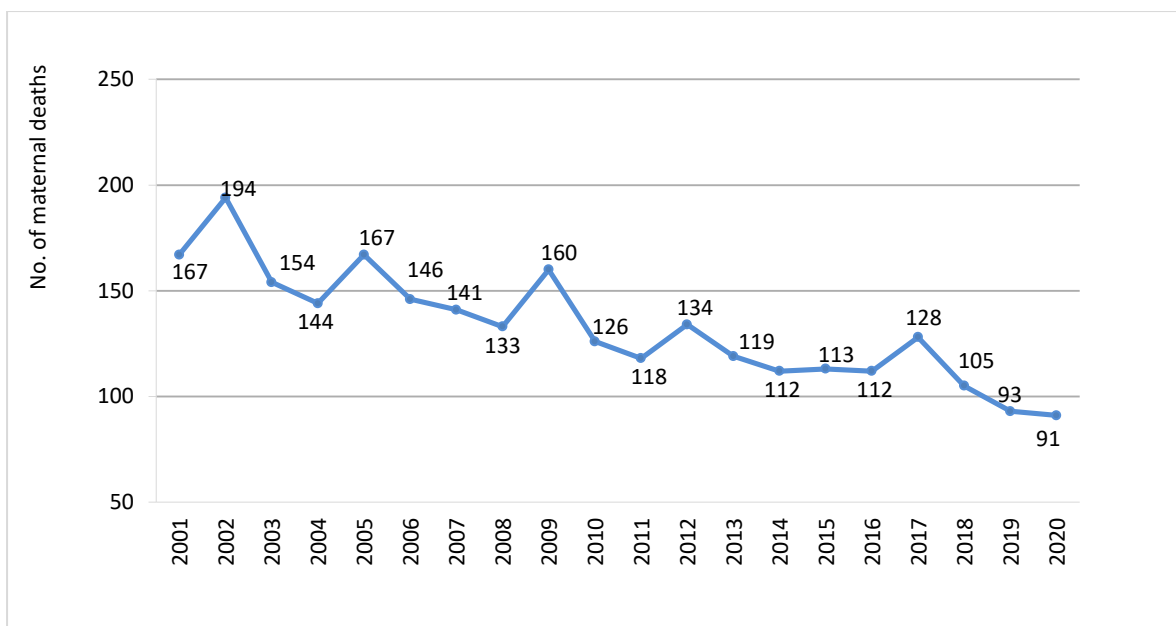


**Figure 4.1: Number of births by district, 2020**

Source: Maternal & Child Morbidity & Mortality Surveillance Unit - Family Health Bureau

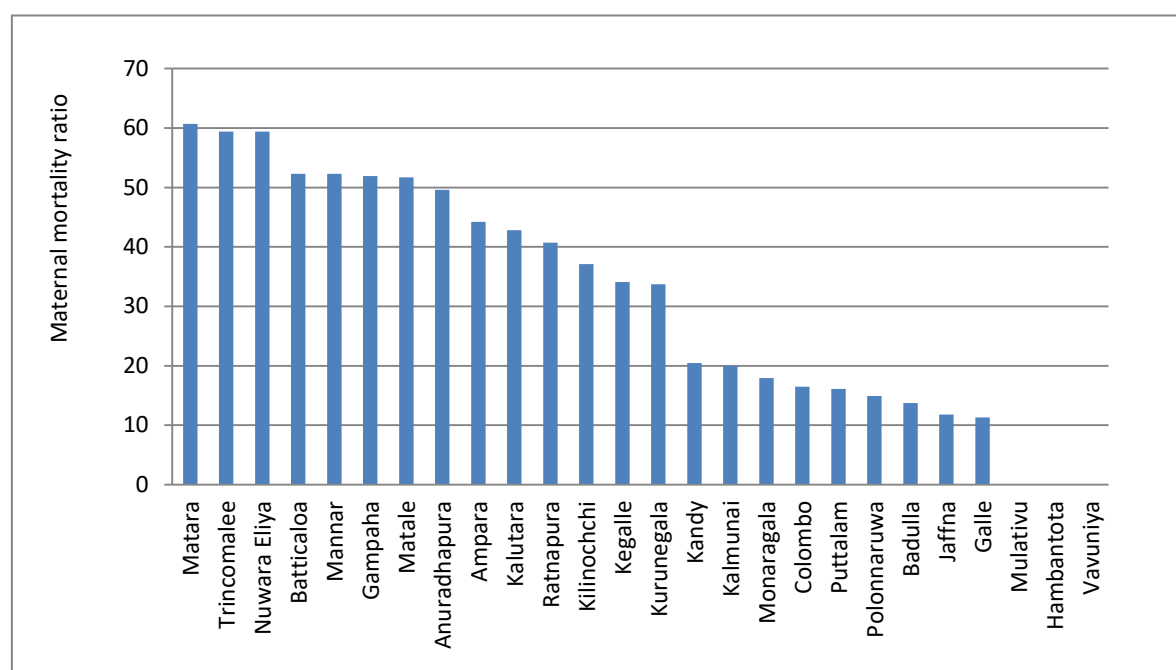
A graph depicting the number of confirmed maternal deaths from 2001 to 2020 is included in Figure 4.2. It is noteworthy that a substantial reduction in the annual maternal deaths (n=37, 29%) between the years 2017 & 2020.





**Figure 4.2: Number of maternal deaths, 2001 – 2020**

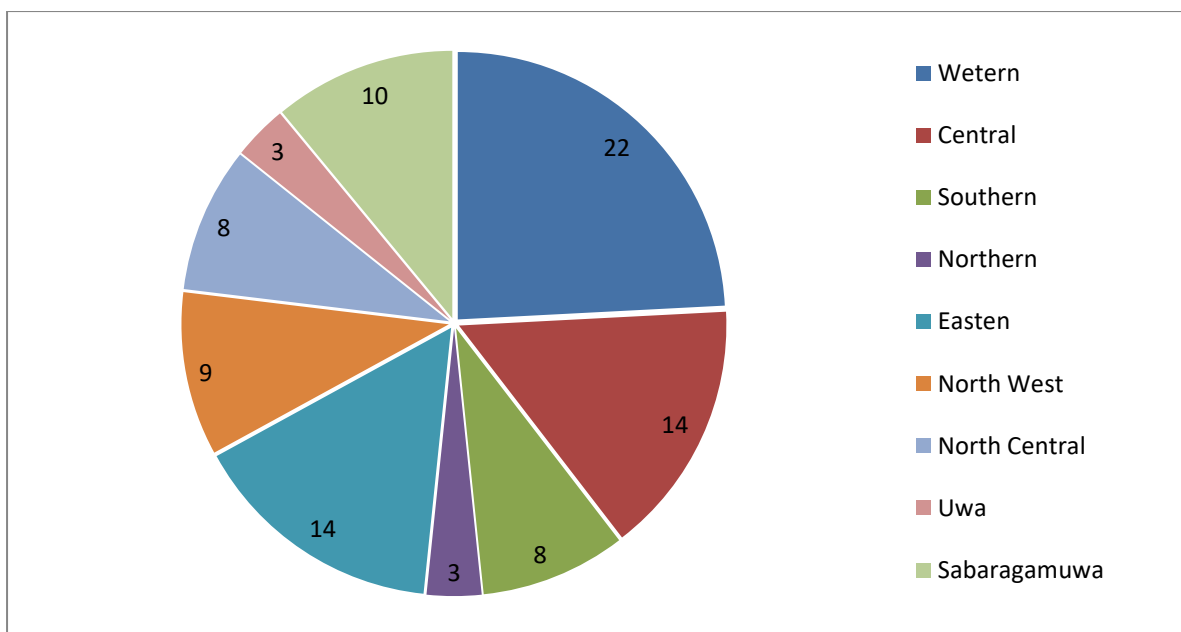
Source: Maternal & Child Morbidity & Mortality Surveillance Unit - Family Health Bureau



**Figure 4.3: Maternal mortality ratio by district, 2020**

Source: Maternal & Child Morbidity & Mortality Surveillance Unit - Family Health Bureau

Figure 4.3 shows the MMR of each district based on the live births reported by Department of Registrar General. The highest MMR was reported from Matara district (60.7 per 100,000 live births) and other leading districts include NuwaraEliya, Trincomalee, Batticaloa, Mannar and Gampaha.



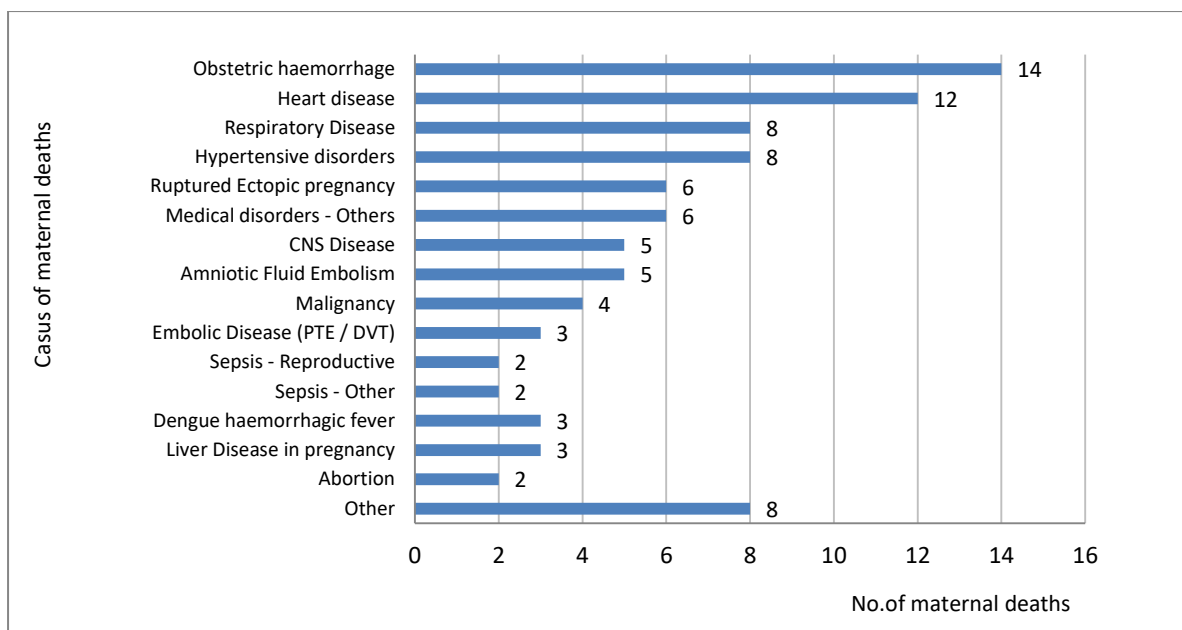
**Figure 4.4: Number of maternal deaths by province, 2020**

Source: Maternal & Child Morbidity & Mortality Surveillance Unit - Family Health Bureau

The highest number of maternal deaths were reported from Western Province (Gampaha district - 10). The majority of the maternal deaths (70) were reported from rural sector (77%). The urban sector reported 19 deaths (21%) while 2 deaths reported from the estate sector (2%). Ethnic composition included; Sinhala (66%), Tamil (23%) and Muslim (11%). Marital status of 3 maternal deaths were identified as unmarried. There were three teenage maternal deaths. Majority (74%) were in the 20 – 35 year age group. It is a significant finding that 21 women were above 35 years of age.

Maternal deaths are categorized into two groups, direct and indirect. Direct obstetric deaths result from obstetric complications of the pregnant state (pregnancy, labor, and puerperium), interventions, omissions, incorrect treatment, or a chain of events resulting from any of the above. Indirect obstetric deaths result from previous existing disease or disease that developed during pregnancy and which was not due to direct obstetric causes, but which was aggravated by physiologic effects of pregnancy. A majority (56%) of deaths were direct maternal deaths while 39 deaths were categorized as indirect and one death could not be categorized.

The causes of maternal deaths reported in 2020 are indicated in Figure 4.5. Leading causes were obstetric haemorrhage (14), heart disease (12), hypertensive disorders (8) and respiratory disease (8). Hypertensive disorders assumed a leading cause after a long duration of time and the other three causes were rotating over the past few years as the leading causes of maternal deaths in the country. There were no maternal deaths reported due to COVID-19 in the year 2020.

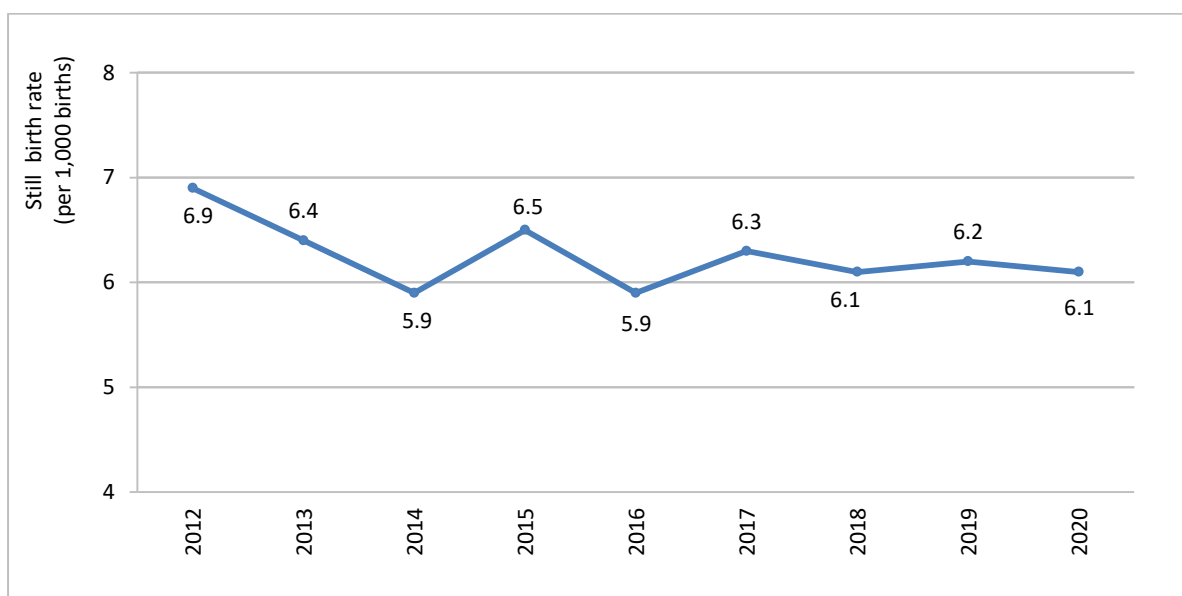


**Figure 4.5: Causes of maternal deaths, 2020**

Source: Maternal & Child Morbidity & Mortality Surveillance Unit - Family Health Bureau

## 4.2. Still Birth Rate

In order to reduce the still birth rate to 3.5 per 1000 births by the end of 2025 as given in “Every New-born Action Plan”, a still birth rate of 4.5 per 1000 births by 2020 must be achieved. However, such a reduction was not achieved by 2020. Therefore, more targeted interventions and strengthening of intra-natal care in Sri Lanka are essential to achieve the targeted still birth rate of 2.2 per 1000 births by 2030.

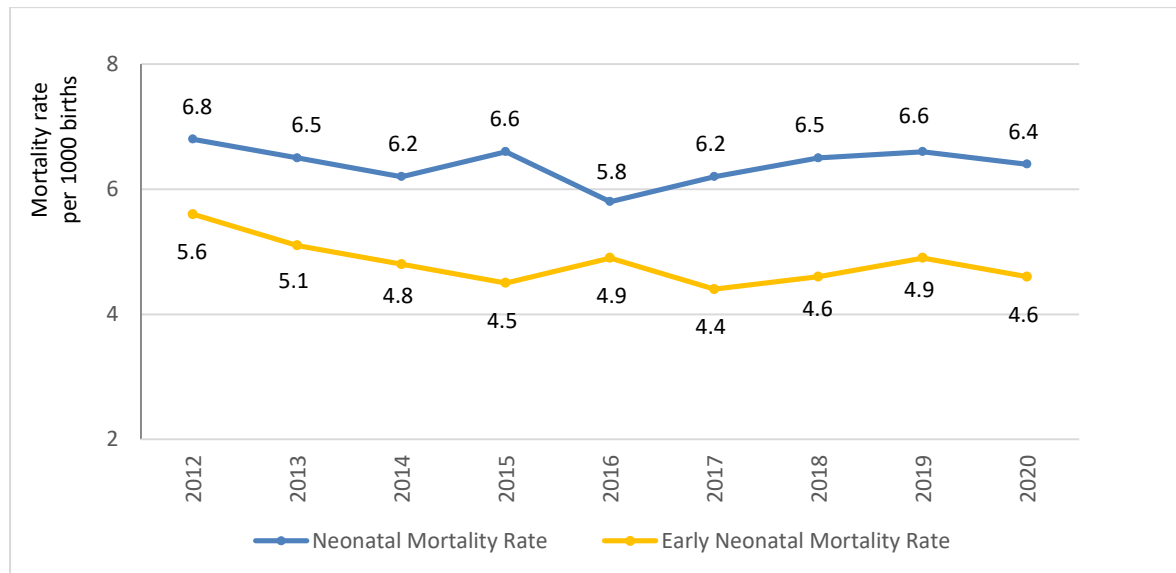


**Figure 4.6: Still birth rate, 2012 - 2020**

Source: eRHMS 2020, Family Health Bureau

### 4.3. Early Neonatal Mortality Rate (ENMR) and Neonatal Mortality Rate

ENMR for 2020 reported by RHMIS is 4.6 per 1000 live births. It is important that the early neonatal deaths are reduced in order to achieve a further reduction in infant mortality rates.



**Figure 4.7: Early neonatal mortality rate and neonatal mortality rate, 2012 - 2020**

Source: eRHMIS 2020, Family Health Bureau

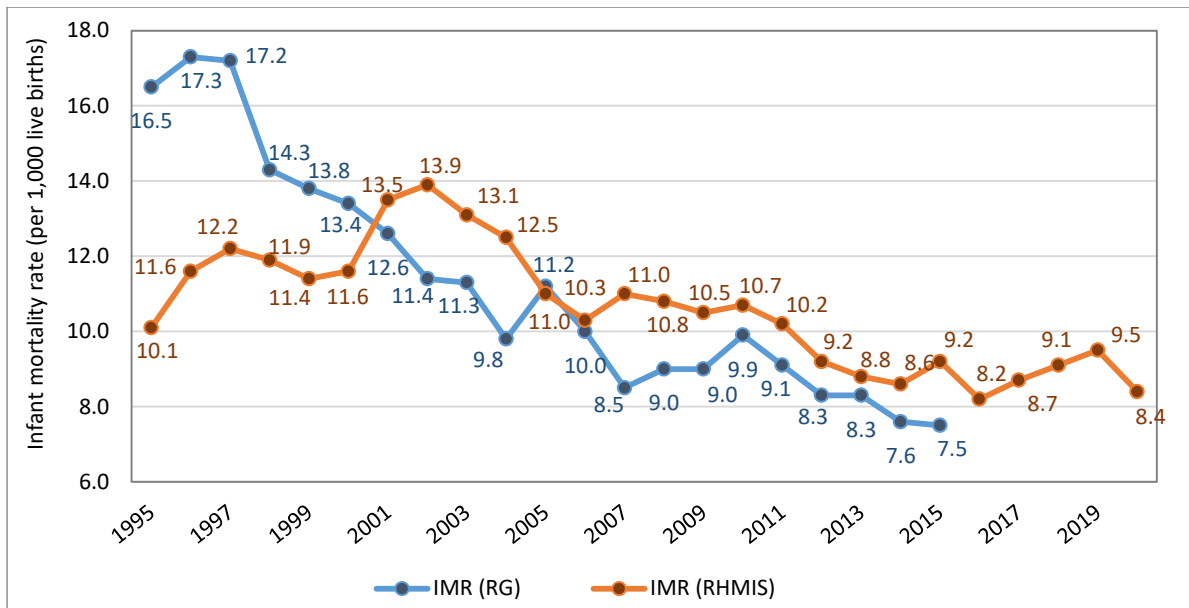
To achieve the targets set for ENMR in 2030, and SBR priority packages of interventions have been identified to strengthen care during labour and child birth, essential newborn care, care of the sick and small newborn and care beyond newborn survival. More investments are needed in improving this area.

### 4.4. Infant Mortality Rate (IMR)

Infant mortality is a sensitive indicator of the health status of children and the social and economic conditions under which they live. It is also a good indicator of the availability, use and effectiveness of health care.

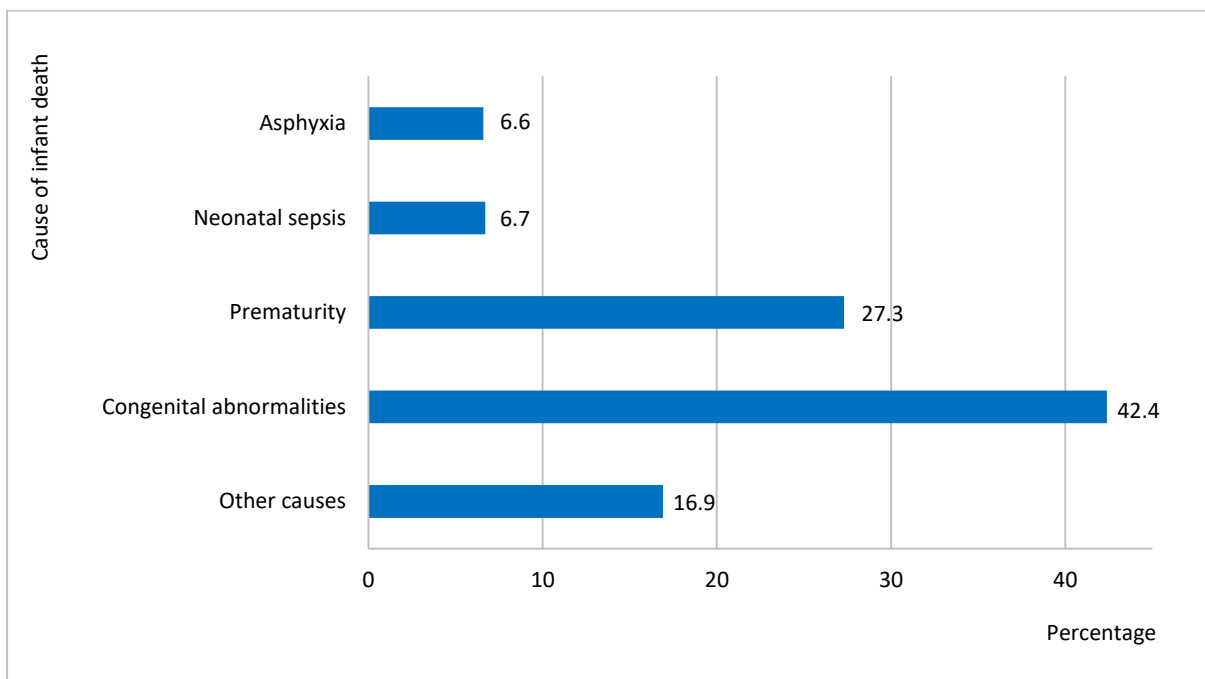
Over the years, Infant Mortality Rates of Sri Lanka have reduced to the level of many high-income countries. Last available IMR from Department of Registrar General is for 2015 and it was 7.5 per 1000 live births. eRHMIS reports an IMR of 8.4 per 1000 live births in 2020 which shows a slight reduction in IMR (Figure 4.8)

Out of infant deaths, 42.4 per cent were due to non-preventable congenital abnormalities, while nearly 40 per cent were due to preventable causes: prematurity, asphyxia and neonatal sepsis. Since most of the infant deaths are happening during early neonatal period, it further emphasize that more focus should be on improving intrapartum and newborn care.



**Figure 4.8: Comparison of trends in national IMRs determined from RHMIS and Department of Registrar General, 1995 - 2020**

Source : eRHMIS 2020, Family Health Bureau, Department of Registrar General

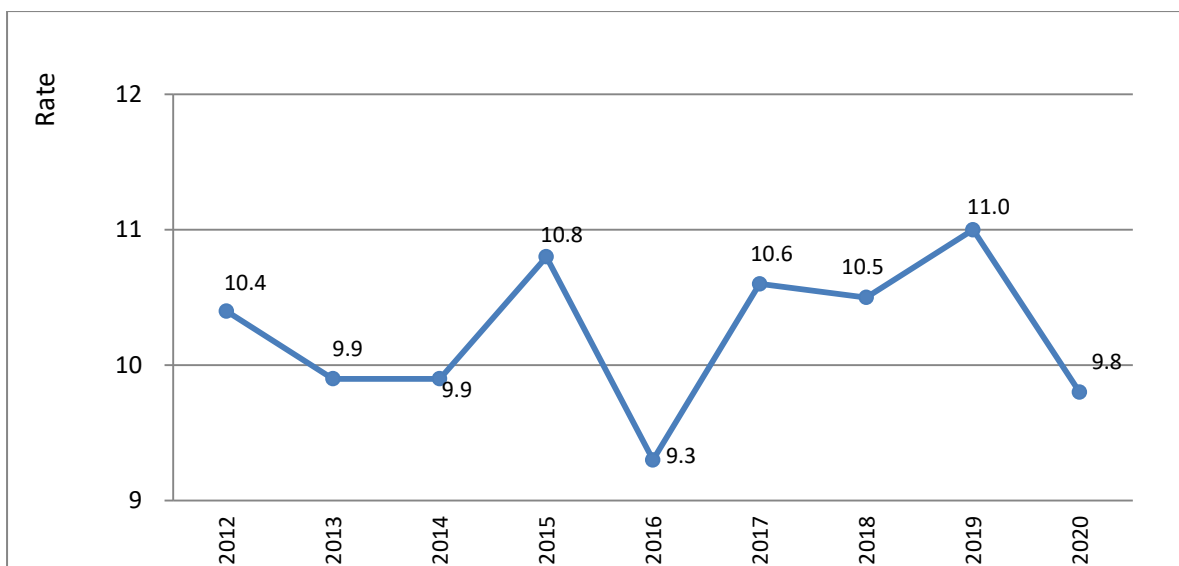


**Figure 4.9: Percentage distribution of cause of infant deaths, 2020**

Source: eRHMIS 2020, Family Health Bureau

#### 4.5. Under Five Mortality Rate

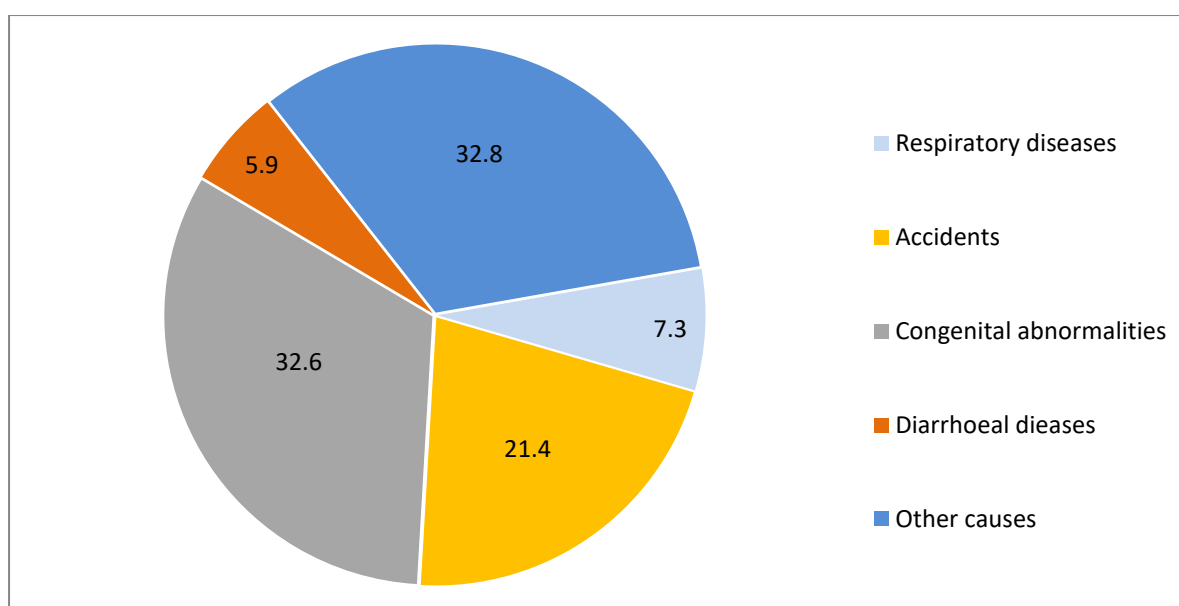
Figure 4.10 presents under five mortality rates from 2012 to 2020. In 2020, there is a reduction in under 5 mortality rate to 9.8.



**Figure 4.10: Under five mortality rate, 2012 - 2020**

Source: eRHMS 2020, Family Health Bureau

Out of the under 5-years child deaths, 32.6 per cent were due to congenital abnormalities followed by 21.4% due to accidents. There is a significant reduction in accidents in 2020 compared to 2019 and 2018 which may be due to quarantine curfew and travel restrictions.



**Figure 4.11: Percentage distribution of cause of 1-5 year child deaths, 2020**

Source: eRHMS 2020, Family Health Bureau

## 4.6. Data Availability of Maternal and Child Health

All registered births are available at Department of Registrar General.

### **Outcome of Maternal Death Surveillance and Response system (MDSR)**

The objective of a Maternal Death Surveillance and Response (MDSR) system is to improve maternal health and to end preventable maternal deaths. Sri Lanka's MDSR mechanism was introduced in 1981, which was followed by the issue of gazette regulation on mandatory notification of probable maternal deaths. A process of structured review of maternal deaths in collaboration with the professional colleges was started in 1995. In the year 2000, national maternal death database was developed by the Family Health Bureau (FHB). Numerous quality dimensions were later added to the MDSR process and the Sri Lankan model of MDSR is recognized as a role model at global level.

### **Process of MDSR**

The process of MDSR mechanism covers the entire country with data originating from both community and facility levels. When a probable maternal death is known, field and hospital health staff notify, conduct post-mortems, review the index death at field and hospital levels and send a detailed report to FHB. At FHB, a database is maintained and comprehensive case scenarios are developed. These cases are then desk reviewed by an expert panel comprised of different specialties related to maternal care service provision. A national team of experts from related specialties visit each and every district to conduct National Maternal Mortality Reviews (NMMR) with the participation of all concerned stakeholders. Each maternal death is reviewed based on 3 delays (deficiencies in seeking healthcare, reaching and treating), and lessons learnt are translated into practice, programs and policies at district and national levels.

Due to the COVID-19 pandemic situation, the usual maternal death review procedures involving central desk reviews and national maternal mortality reviews at district level could not be conducted. Concurrence was obtained from the Ministry of Health to conduct an interim analysis of maternal deaths for the year 2020 considering the demand for timely mortality metrics.

## 5. Infectious Diseases/ Communicable Diseases

This chapter presents common infectious diseases in Sri Lanka. According to the Indoor Morbidity and Mortality Returns (IMMR) nearly 5 per cent of hospitalizations are due to Communicable diseases.

### 5.1. Dengue Fever/ Dengue Haemorrhagic Fever

Dengue illness, a major public health problem in Sri Lanka, is currently hyper-endemic in some districts with cyclic outbreaks. Dengue virus is transmitted most effectively by *Aedes aegypti* mosquitoes that are highly anthropophilic and domesticated, adapted to co-exist effectively with humans in densely populated urban and suburban areas. *Aedes albopictus*, the secondary vector is commonly found in rural areas. Dengue outbreaks are mainly seen in urban and suburban areas with rural outbreaks.

Table 5.1 presents the number of Dengue patients reported from 2015 to 2020. The highest number of Dengue cases was reported in 2017 and in 2019 also reported over 100,000 cases. Table 10 of Annexure II presents reported dengue cases, deaths and CFR from 1996 to 2020.

Compared to 2019, reported dengue cases were significantly low in 2020. Overall incidence rate was 142 per 100,000 population and case fatality rate was 0.15 in 2020. During the 1<sup>st</sup> week of 2020, more than 3000 dengue cases were reported per week and after 4<sup>th</sup> week gradually declined the reported cases as shown in the Figure 5.1.

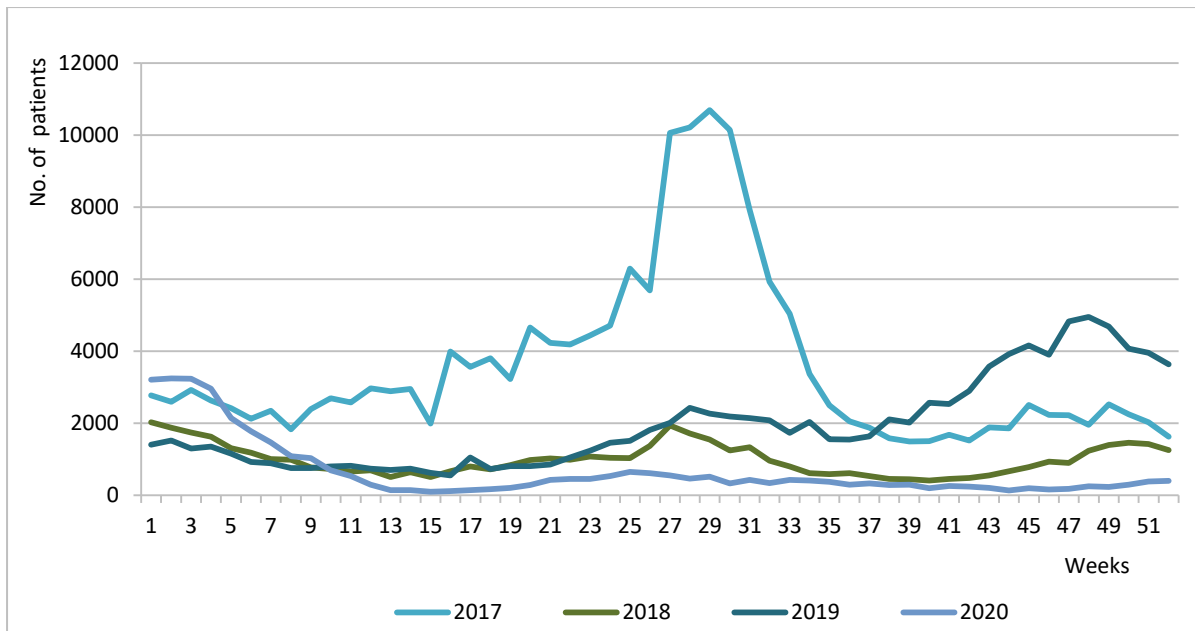
**Table 5.1: Number of reported dengue patients, 2015-2020**

Item / Year	2015	2016	2017	2018	2019	2020
No. of reported dengue patients	29,777	55,150	186,101	51,569	105,049	31,162
Incidence rate (per 100,000 population)	142.0	263.0	866.0	241.8	479.7	142.0

Source: National Dengue Control Unit

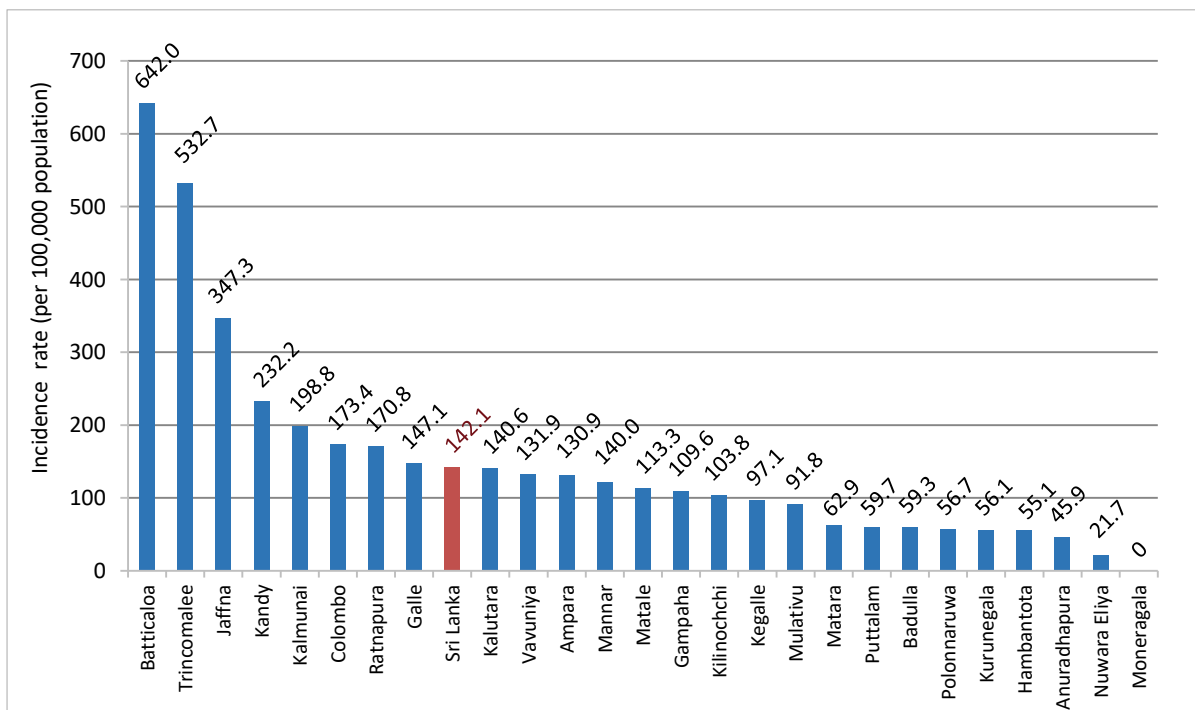
**National Action Plan on Prevention and Control of Dengue aims to achieve case incidence below 100 per 100,000 population and to reduce and maintain case fatality rate below 0.1% by the year 2023.**





**Figure 5.1: Number of reported dengue cases by week and year, 2017 - 2020**

Source: Epidemiology Unit



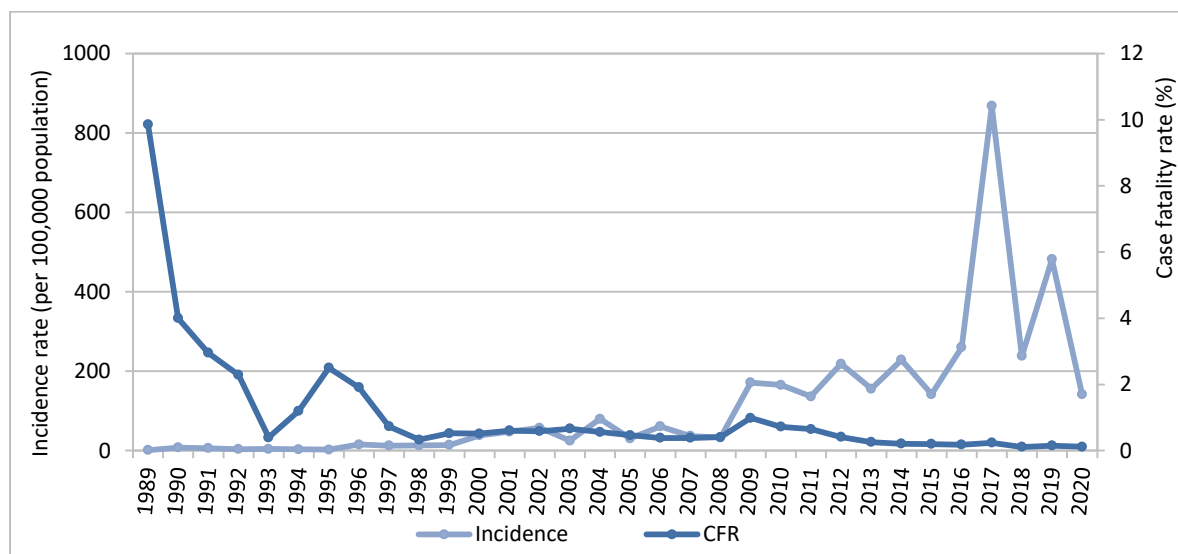
**Figure 5.2: Dengue incidence rate by RDHS division, 2020**

Source: Epidemiology Unit

In 2020, wide dispersion of incidence is observed among RDHS Divisions, which is illustrated in Figure 5.2.

The highest incidence rate of 642 per 100,000 population was reported from Batticaloa district due to the outbreaks which started in the latter part of 2019 (39<sup>th</sup> week) in Oddamavadi, Valachchanai, Batticaloa, Kattankudi and Korale Pattu Central MOH areas. Trincomalee (532.7) and Jaffna (347.3)

districts reported the second and third highest incidence rate respectively. The fluctuation of dengue incidence rate and Case Fatality Ratio (CFR) from 1989 to 2020 is shown in Figure 5.3.



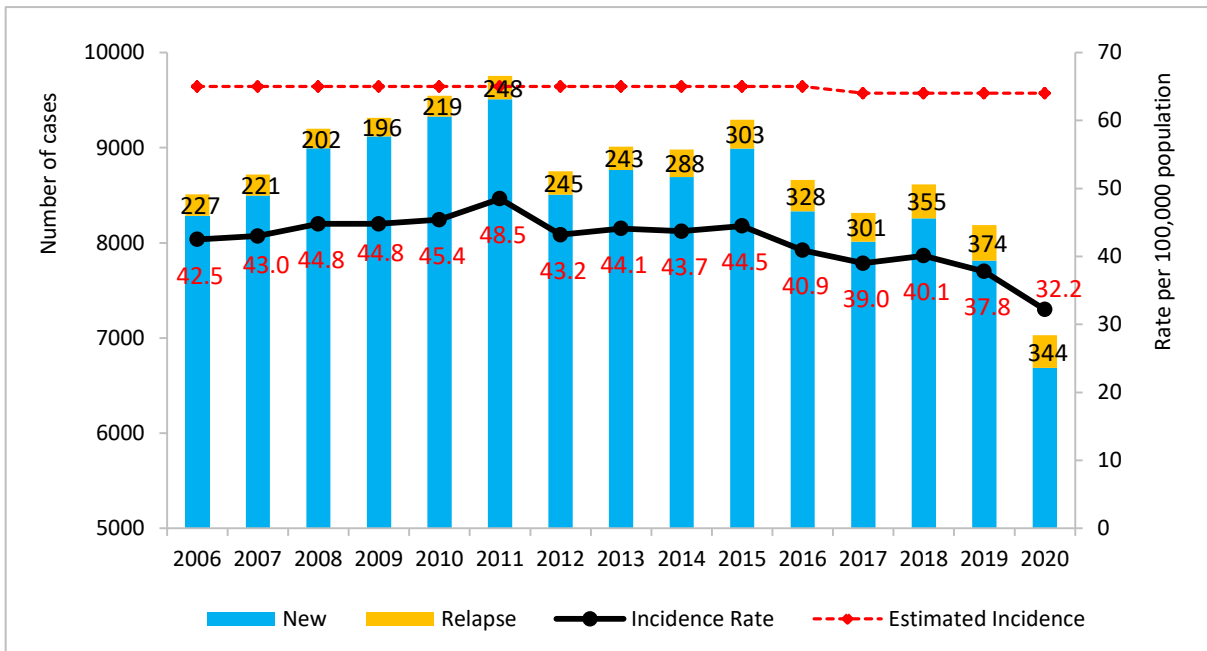
**Figure 5.3: Dengue incidence rate and case fatality ratio, 1989 - 2020**

Source: Epidemiology Unit

According to the above linear diagram, the highest incidence rate was observed in 2017 which coincides with the massive outbreak with total cases of 186,101. A significant decline in CFR is observed since 2009.

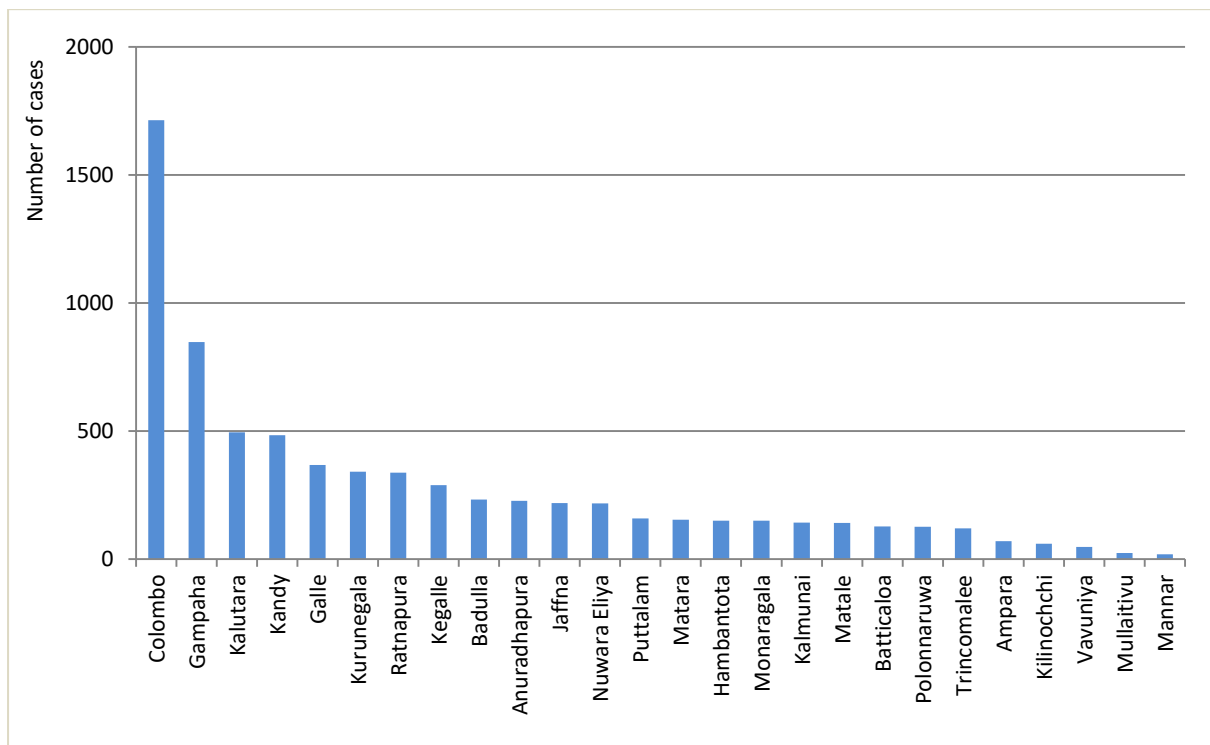
## 5.2. Tuberculosis

Tuberculosis (TB) remains to be a major public health problem in the country and around 9,000 cases reported every year. There were 7,258 (64 per 100,000 populations) TB cases detected in 2020. Due to COVID-19 pandemic situation in the country, there was around 14 per cent decline in the total case finding in 2020 compared to 2019. Ratio for new Pulmonary to new Extra Pulmonary TB was 2.47 in 2020. Nearly 79 per cent of total TB cases are pulmonary TB (PTB), while around 80 per cent of these PTB are bacteriologically confirmed. Total cases detected in 2020 were 7,258 and out of which, 192 were paediatric TB cases. As a percentage, it was 2.64 per cent. Out of the total cases found in 2019, paediatric TB cases were 2.82 per cent. In 2020, there were 21 Multi Drug Resistant (MDR) TB patients registered and the number of patients with TB/HIV co-infection was 33.



**Figure 5.4: Gap between the estimated TB cases (new & relapse) and notified cases, 2006 – 2020**

Source: National Programme for Tuberculosis Control & Chest Diseases



**Figure 5.5: District distribution of TB cases, 2020**

Source: National Programme for Tuberculosis Control & Chest Diseases

Observed inadequacies were:

- Due to the COVID 19 pandemic, TB services were threatened because of the difficulty to conduct awareness programs in community level.
- Due to stigma and fear, reduced number of self-referrals
- Low rates of referrals of OPD attendees with symptoms suggestive of TB for diagnostic services by OPD medical staff

- Underutilization of microscopic centers with facilities for smear microscopy testing
- Inadequate screening of contacts of bacteriologically confirmed TB patients
- Inadequate human resource at central & district level
- Maldistribution of human resource trained on respiratory disease including TB
- Inadequate involvement of private sector (private hospitals and part-time practitioners) in TB diagnosis and DOTS provision
- Reduction of mass screening in prisons and community

**Table 5.2: Trend of new TB case detection, 2006 - 2020**

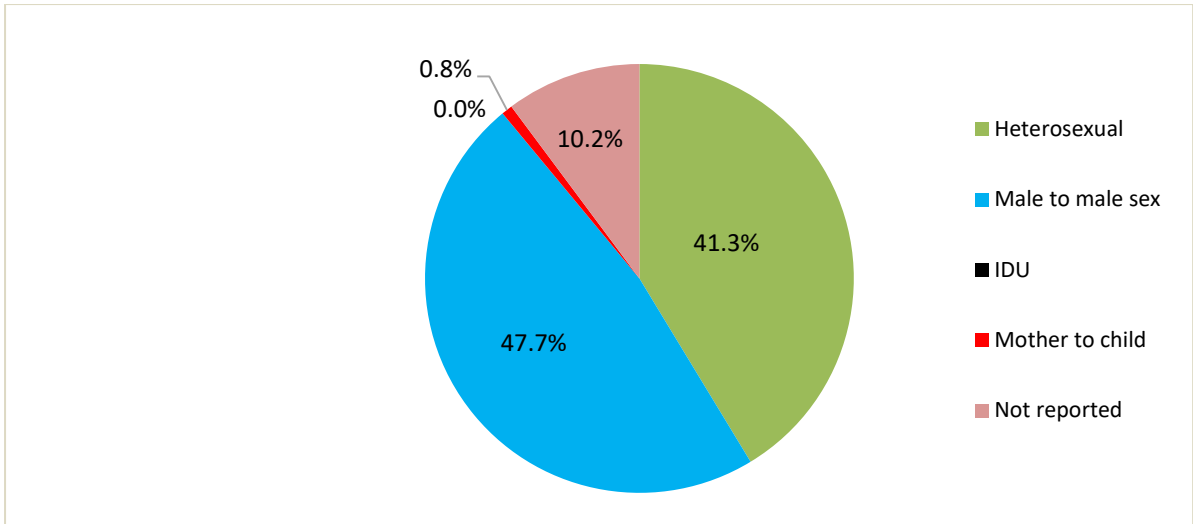
Year	No of new TB cases
2006	8,283
2007	8,497
2008	8,996
2009	9,118
2010	9,328
2011	9,508
2012	8,507
2013	8,767
2014	8,692
2015	8,990
2016	8,332
2017	8,013
2018	8,258
2019	7,812
2020	6,686

Source: National Programme for Tuberculosis Control & Chest Diseases

### 5.3. HIV/AIDS and Sexually Transmitted Infections

The estimated number of people living with HIV (PLHIV) in 2020 is 3,700 (3,400-4,100). A cumulative total of 3,993 HIV cases has been reported in Sri Lanka between 1987 and 2020. There were 1,381 deaths among all diagnosed HIV cases during the same period. Therefore, the number of people living with HIV and who knows their HIV status as of the end of 2020 is 2,612.

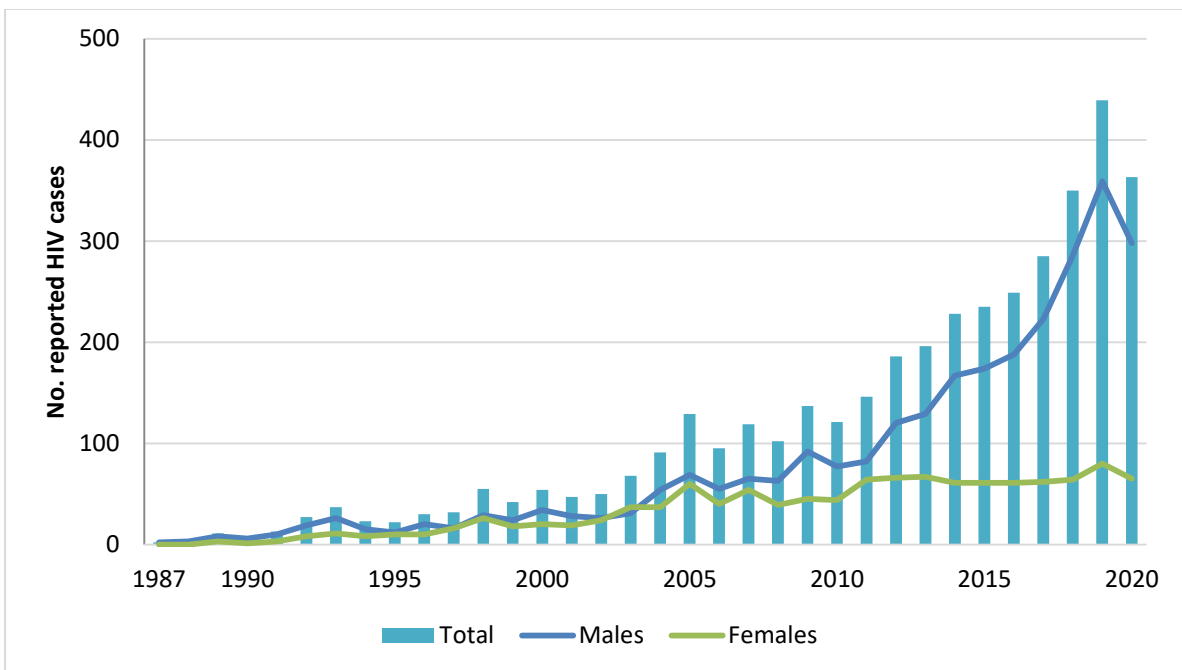
There are more males among cumulatively reported HIV cases (female to male ratio 1:2.4). In 2020, the female to male ratio was increased to 1:4.6. i.e., there are almost 5 men for every 1 woman infected with HIV. The probable mode of HIV transmission is collected during the initial diagnosis of all HIV infected persons. As shown in the Figure 5.6, the highest proportion of HIV infections was seen among men who have sex with men. Four cases of mother-to-child transmission were among children who were born prior to 2018. There were no HIV infections due to injecting drug use among HIV cases reported during 2020.



**Figure 5.6: Percentage of probable modes of transmission, 2020**

Source: STD-AIDS Control Programme

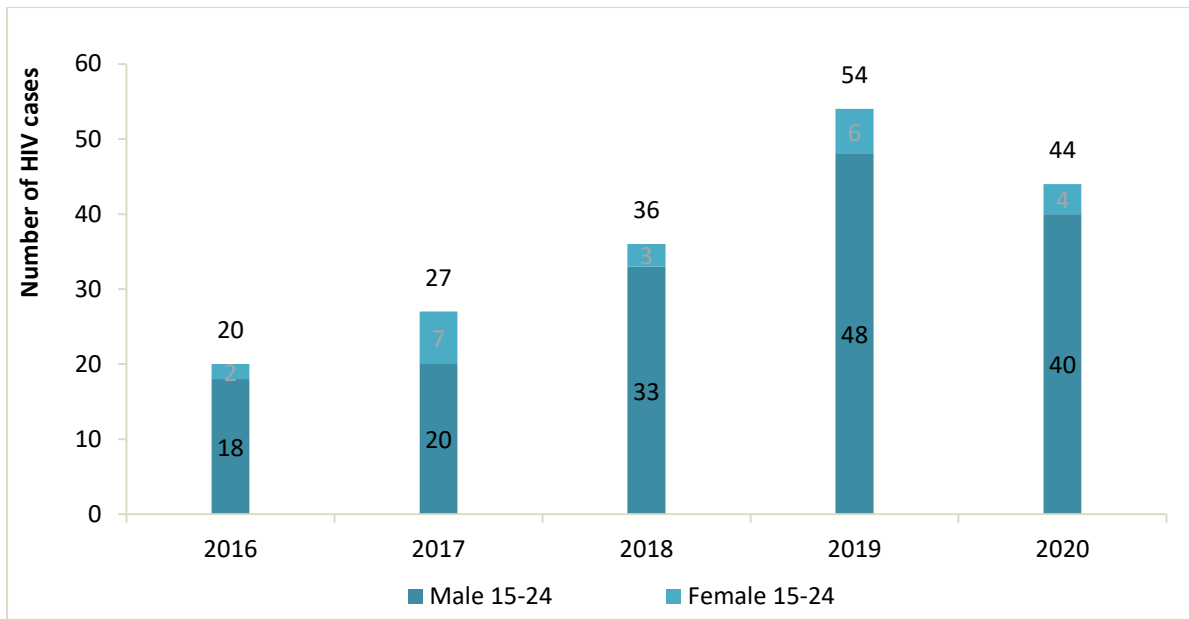
In 2020, the COVID-19 pandemic affected all HIV services including HIV testing. The number of HIV cases reported during 2020 has declined by 17% compared to 2019. As shown in the Figure 5.7, a higher drop was noticed among male HIV cases.



**Figure 5.7: Number of reported HIV cases by sex and year, 1987-2020**

Source: STD-AIDS Control Programme

HIV diagnoses among youth (age 15-24 years) are more likely to represent recently acquired HIV infections or new HIV infections that occurred during the reported year. Figure 5.8 shows a gradual increase in the numbers of youth during recent years until 2020. Fewer numbers were reported in 2020 probably due to disruption of HIV testing services due to COVID-19 lockdowns.

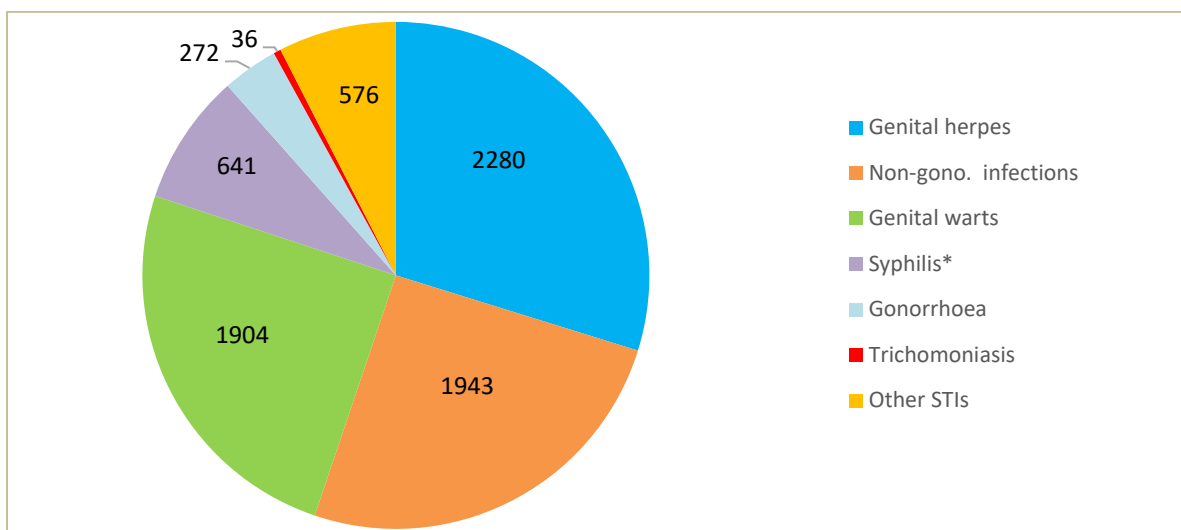


**Figure 5.8: Young HIV cases aged 15-24 years by sex, 2016-2020**

Source: STD-AIDS Control Programme

### Reported sexually transmitted infections in 2020

Main STIs reported during 2020 consist of genital herpes, non-gonococcal infections and genital warts.

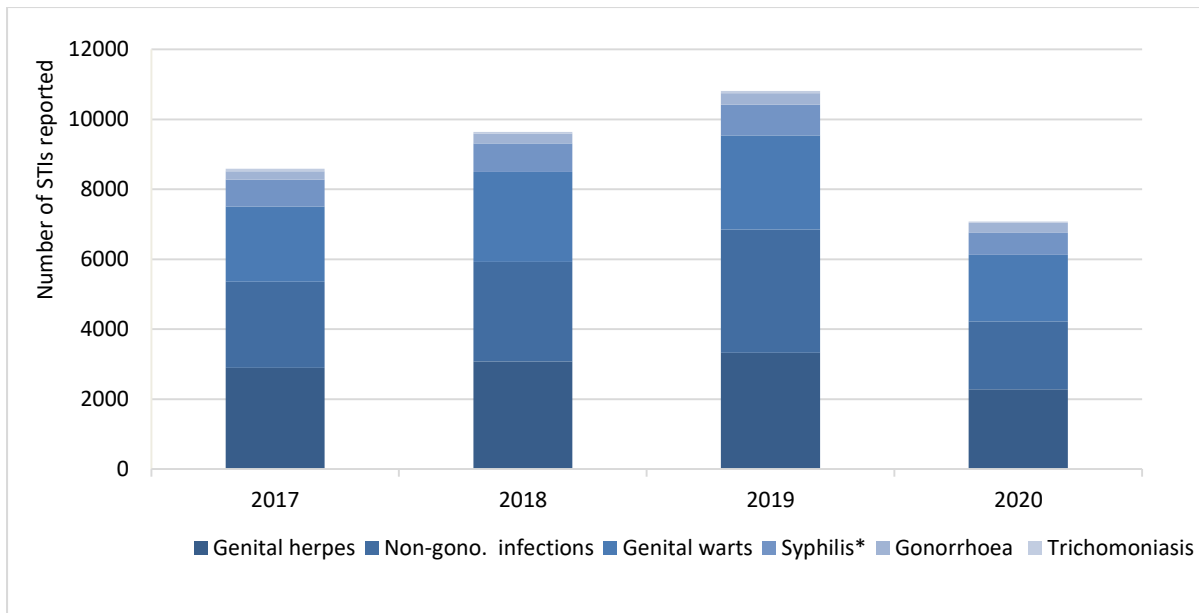


**Figure 5.9: Number of reported sexually transmitted infections, 2020**

Source: STD-AIDS Control Programme

\*Both early and late syphilis

The trends of all STI rates have declined during 2020 compared to the previous year due to the disruption of STI services following COVID-19.



**Figure 5.10: Trend of the reported number of STIs, 2017-2020**

Source: STD-AIDS Control Programme

\*Both early and late syphilis

## 5.4. Vaccine Preventable Diseases

### 5.4.1. Measles

Regional Measles-Rubella Verification Committee for South East Asia Region (SEAR-RVC) certified Sri Lanka has eliminated endogenous measles in 2019 and re-affirmed in 2020. Possible 2 imported or import related cases were attended to through rapid response and controlled outbreak successfully. The COVID-19 impact on surveillance has been identified as low non-measles, non-rubella discarded rate at national and district levels. However, surveillance was further continued in strengthening to detect non-endogenous cases. The surveillance case definition has been broadened to “fever and maculopapular rash” to identify all possible measles cases for notification purposes. All suspected cases were investigated epidemiologically and laboratory for final categorization to differentiate between endogenous and imported cases.

A total of 90 fever and maculopapular rash suspected cases were notified and investigations for 90% of them were started within 48 hours of notification and 74 were tested in the laboratory (82%). Basic laboratory investigations were done in the national proficiency laboratory for measles and rubella at Medical Research Institute. The laboratory investigations include measles serology for IgM.

Two laboratory confirmed cases were identified, one from Colombo and one from Hambantota, categorized as possible import related cases who were above 20 years of age. The measles incidence was 0.09 per million population. The non-measles, non-rubella discard rate was 0.44 per 100,000 population.

### 5.4.2. Rubella

Regional Measles-Rubella verification committee for South East Asia Region (SEAR-RVC) certified Sri Lanka as eliminated endogenous rubella in 2020 amidst of COVID-19 pandemic. Measles and rubella surveillance is carried out as combined surveillance for fever and maculopapular rash surveillance and identified the requirement of further strengthening as the discarded rate of non-measles and non-rubella is 0.44 per 100,000 population. The expected target to achieve is 2 per 100,000 population of non-measles, non-rubella rate. After thorough investigations of all the notified (90) suspected cases, no case was confirmed.

### 5.4.3. Congenital Rubella Syndrome (CRS)

Congenital Rubella Syndrome is a notifiable condition. Surveillance was continued with both routine notifications and active surveillance in monitoring cases through institutional and field level zero reporting systems. All congenital abnormalities suspected of a cause due to congenital infections were screened for TORCH, in which CRS was included. All suspected cases are investigated and followed up at the field level to identify CRS cases.

In the year 2020, 19 suspected cases were investigated and became negative, and categorized as the non-CRS cases. No confirmed CRS cases after 2014 in the country and maintained required elimination target of zero CRS cases per 1000 live births.

### 5.4.4. Poliomyelitis

Poliomyelitis eradication programme is ongoing and the country is maintaining a polio free status since the last case of wild poliovirus in 1993. Acute Flaccid Paralysis (AFP) surveillance was continued among under 15-year-old children with satisfactory surveillance indicators without any polio positive cases. The target of the surveillance had been set at 2 per 100,000 under 15 child population.

A total of 94 AFP cases were reported from hospitals based on routine and active case detection. A total case (100%) was epidemiologically investigated at the hospital and field level. Laboratory testing for polio was done for 88 per cent (% of AFP cases with 2 stool specimens collected at last 24 hours apart and within 2 weeks of the onset of paralysis), in Regional Reference Laboratory for poliomyelitis at the Medical Research Institute with a satisfactory sample collection rate. The excluded non-polio AFP rate is at 0.97 per 100,000 under 15 child population.

Polio vaccination is continued as bivalent OPV given at 2, 4, 6 and 18 months and at 5 years of age together with fractional dose IPV at 2 and 4 months. All hospitals where consultant physicians and consultant pediatricians are available were closely monitored with zero reporting as sentinel site hospitals to ensure strengthened surveillance. SARA survey done in 2018 ensured adequate immunity development to polio from two fractionated doses at 2 and 4 months (87.2%).



### 5.4.5. Other Vaccine Preventable Diseases

Information related to other vaccine preventable diseases are shown in Table 5.3.

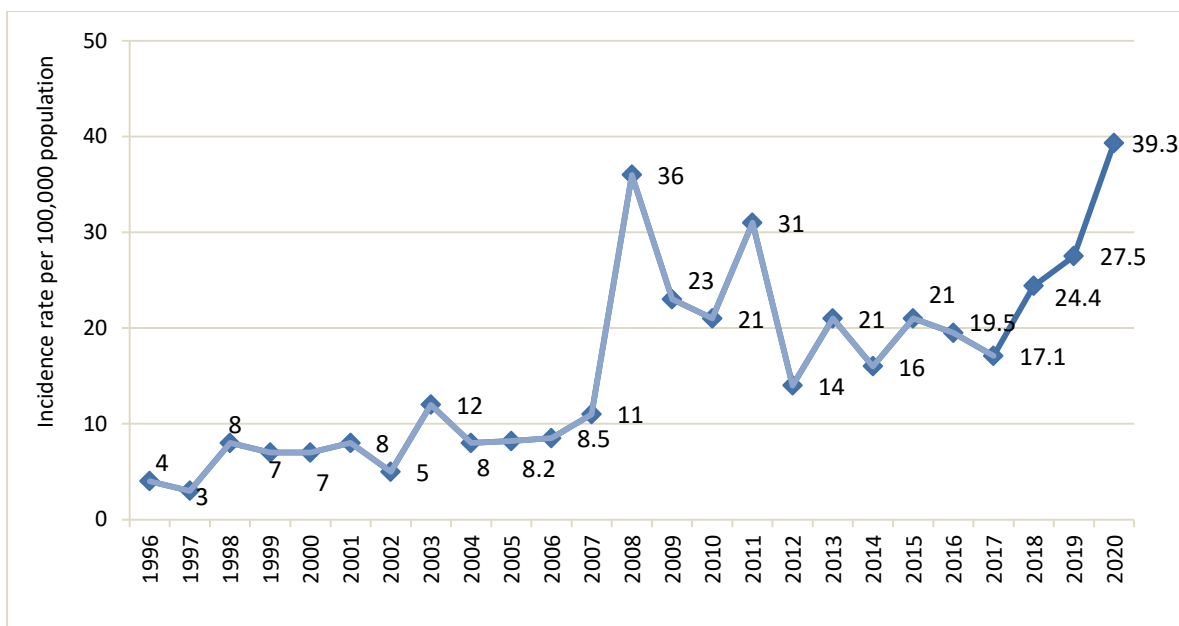
**Table 5.3: Information related to vaccine preventable diseases**

Diseases	No. of suspected cases	No. of clinically confirmed	Districts reported the highest number of cases	Remarks
Encephalitis	166	122	Batticaloa (10), Kegalle (11), Kurunegala (13), Matara (17), Galle (20), Rathnapura (29)	
Mumps	170	127	Kegalle (19), Gampaha (17), Kurunegala (13), Matara (10), Jaffna (10)	According to case-based investigation, maximum presentation of cases was 21 - 30 years of age (24.6%) and male (55.7%). A majority (86.8%) was found as having no complications
Whooping Cough	10	1		
Tetanus	3	3		No neonatal tetanus cases were reported during 2020 and no tetanus cases were reported during pregnancy.
Rabies		31	Kurunegala (06) Gampaha (04) Galle (03) Anuradhapura (03) Kalutara (03)	Confirmed cases are deaths.

Source: Epidemiology Unit

### 5.5. Leptospirosis

A total of 8579 cases of leptospirosis were notified to the Epidemiology Unit in 2020. Throughout the past years, the case incidence rate has been fluctuating with an upward trend in 2020. This increase is mainly due to the rise in agricultural activities during the COVID-19 pandemic. Reporting of leptospirosis cases has shown an annual seasonal pattern with peaks during rainy seasons of two monsoons in the country. There were 104 deaths due to leptospirosis in 2020 indicating a Case Fatality Rate of 1.2 per 100 cases. Deaths due to leptospirosis have also been on the rise during the past years.



**Figure 5.11: Leptospirosis incidence rate per 100,000 population, 1996-2020**

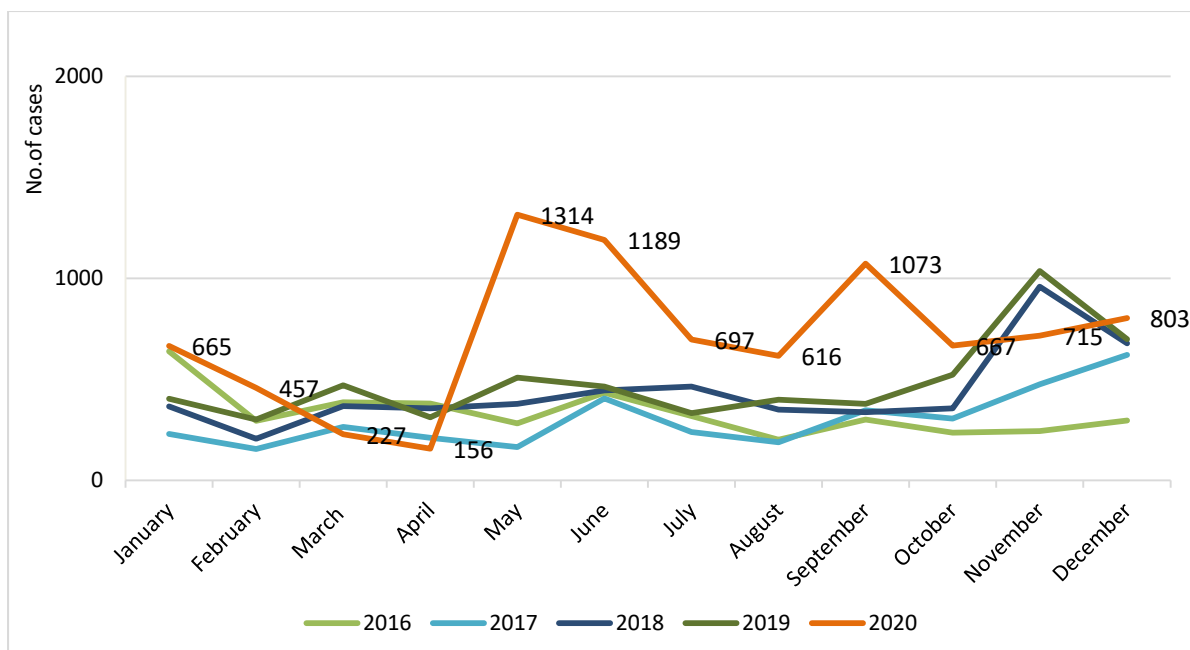
Source: Epidemiology Unit

Leptospirosis is a zoonotic disease of great public health importance in Sri Lanka. Recent surveillance data received at the Epidemiology Unit indicate that paddy farming is the major source of exposure. Therefore, increased reporting is observed during the rainy seasons which coincide with the ‘Yala’ and ‘Maha’ paddy cultivation seasons. Hence each year to control and prevent leptospirosis, activities are conducted at the Medical Officer of Health (MOH), district and central levels to increase community awareness, strengthen inter-sectoral coordination and provide chemoprophylaxis to the identified high-risk individuals.

**Table 5.4: Number of leptospirosis deaths and CFR, 2008 – 2020**

Year	No of deaths	CFR (%)
2008	207	2.8
2009	145	2.9
2010	123	2.7
2011	100	1.5
2012	52	2.0
2013	80	1.8
2014	41	1.3
2015	71	1.6
2016	62	1.5
2017	52	1.4
2018	108	2.0
2019	120	2.0
2020	104	1.2

Source: Epidemiology Unit



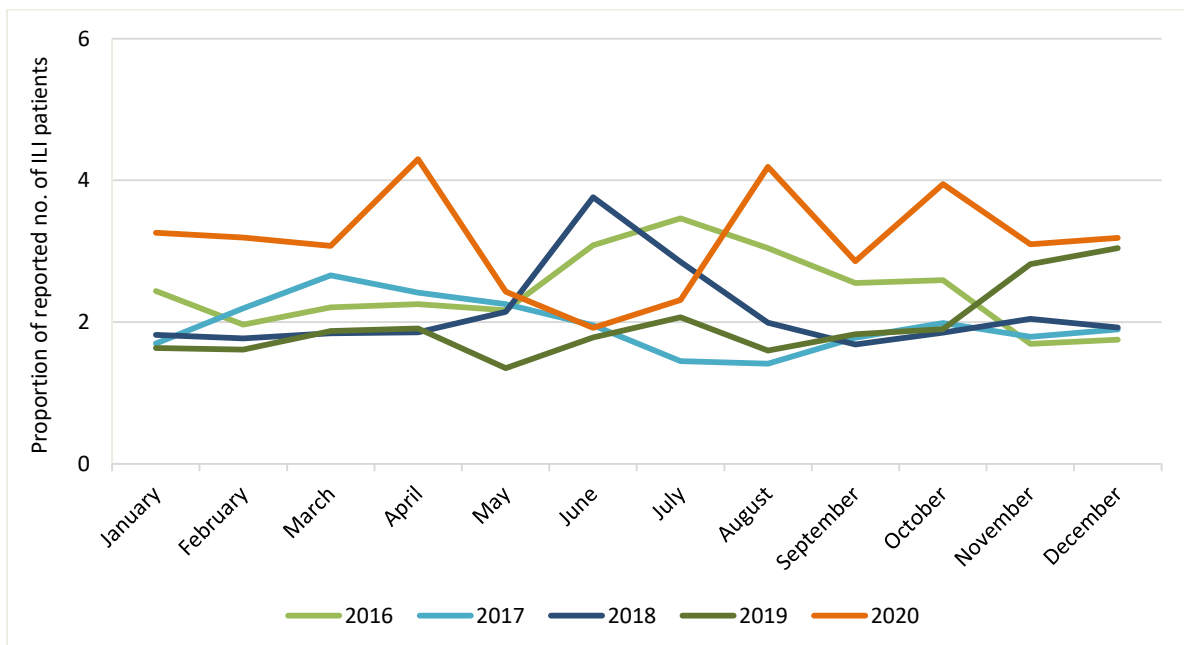
**Figure 5.12: Number of reported leptospirosis by month, 2016-2020**

Source: Epidemiology Unit

## 5.6. Influenza

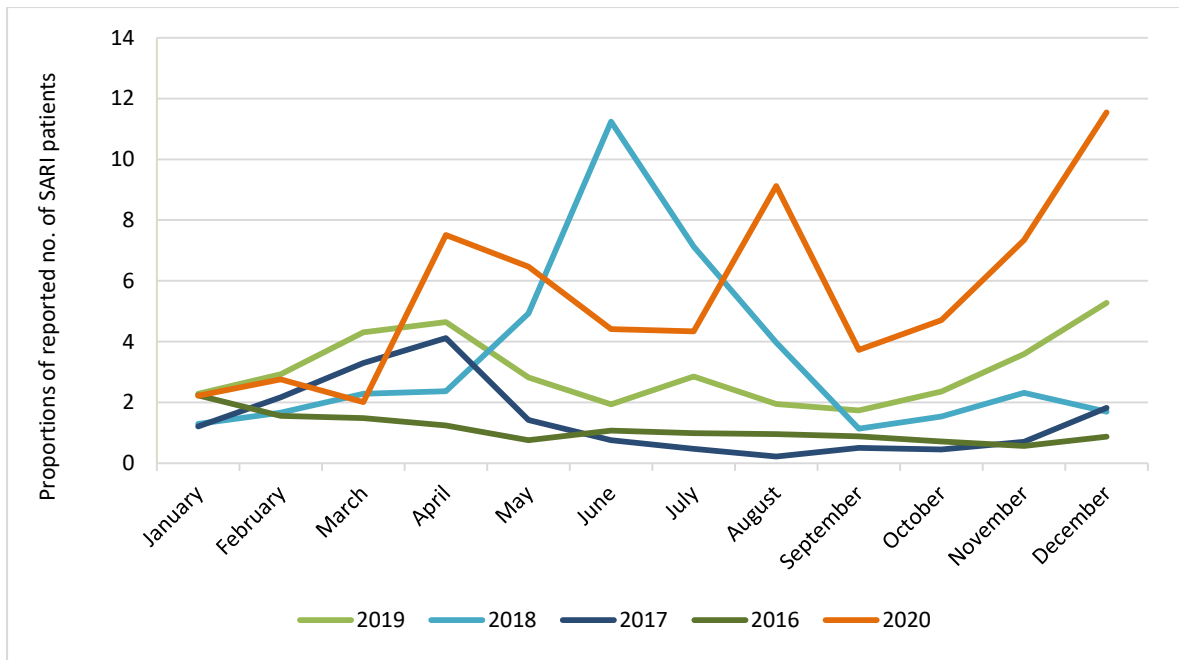
- Influenza surveillance in humans had been established complementary to the influenza surveillance in animals by the Department of Animal Production and Health (DAPH) as a part of the pandemic preparedness activities initiated in the country for Avian/Pandemic Influenza. Both these activities are supervised by the National Technical Committee for Avian/Pandemic Influenza Preparedness which convene every month.
- Human and animal influenza surveillance activities are considered the early warning system for a possible Avian/Pandemic Influenza outbreak in the country.
- Human influenza surveillance is conducted in selected sentinel hospitals under the guidance and supervision of the Epidemiology Unit of the Ministry of Health.
- This surveillance comprises of 2 components; Influenza like illness (ILI) surveillance and Severe Acute Respiratory Tract Infections (SARI) surveillance.
- The ILI surveillance is established in 19 sentinel sites within the country. Namely, National Hospital of Sri Lanka (NHSL), Colombo South Teaching Hospital, National Institute for Infectious Diseases, Lady Ridgeway Hospital, Colombo North Teaching Hospital, TH Peradeniya, DGH Nuwara Eliya, TH Karapitiya, PGH Badulla, TH Kurunegala, DGH Chilaw, DGH Ampara, TH Jaffna, DGH Vavuniya, TH Anuradhapura, DGH Polonnaruwa, PGH Ratnapura, DGH Matara and TH Batticaloa. The surveillance activities are carried out in the OPD settings of these hospitals.

- SARI surveillance is carried out among the inward patients of four sentinel sites established for SARI surveillance, namely Lady Ridgeway Hospital, Colombo North Teaching Hospital, TH Peradeniya and DGH Matara.
- 64,787 ILI visits have been reported from all sentinel sites for the year 2020, which amounts to 3.12 % of total OPD visits to the 19 sentinel sites.
- Figure 5.13 depicts the trend of ILI reporting from the year 2016 to 2020. Two peaks are observed for each year; from June to July and December to January. A noticeable reduction of the usual peak in the June-July months was observed in the year 2020, possibly due to the restriction of movement of the public.
- The sentinel sites for SARI surveillance reported 2636 SARI visits for the year 2020, which was 4.80% of all admitted patients to medical and paediatric wards of these four hospitals.
- Virological surveillance is carried out at the Medical Research Institute which is the National Influenza Centre (NIC) in Sri Lanka for human influenza surveillance. In addition to the NIC, virological surveillance was carried out by the virology labs TH Kandy and TH Karapitiya in the year 2020.
- Data management of the influenza surveillance is conducted at the Epidemiology Unit via 'FluSys', an online data management system.



**Figure 5.13: Monthly distribution of proportions of reported influenza-like Illness (ILI) patients from sentinel sites, 2016-2020**

Source: Epidemiology Unit



**Figure 5.14: Monthly distribution of reported number of severe acute respiratory infection (SARI) patients by sentinel sites, 2016-2020.**

Source: Epidemiology Unit

## 5.7. Leishmaniasis

The number of notified cases of Cutaneous Leishmaniasis in 2020 was 3,162. Six districts reported more than 250 cases in 2020. Hambantota had the highest number (760) reported, followed by Kurunegala (496), Matara (403), Polonnaruwa (378), Matale (348) and Anuradhapura (344). Out of the total number reported, 2,650 were clinically confirmed.

Cutaneous Leishmaniasis is an emerging public health problem in many countries including Sri Lanka. Cutaneous Leishmaniasis has been established as an endemic disease within a short period in the country despite the first local case reported from the Ambalanthota MOH area in Hambantota district in 1992. The number of reported Leishmaniasis cases has increased gradually after the disease became notifiable in 2008.

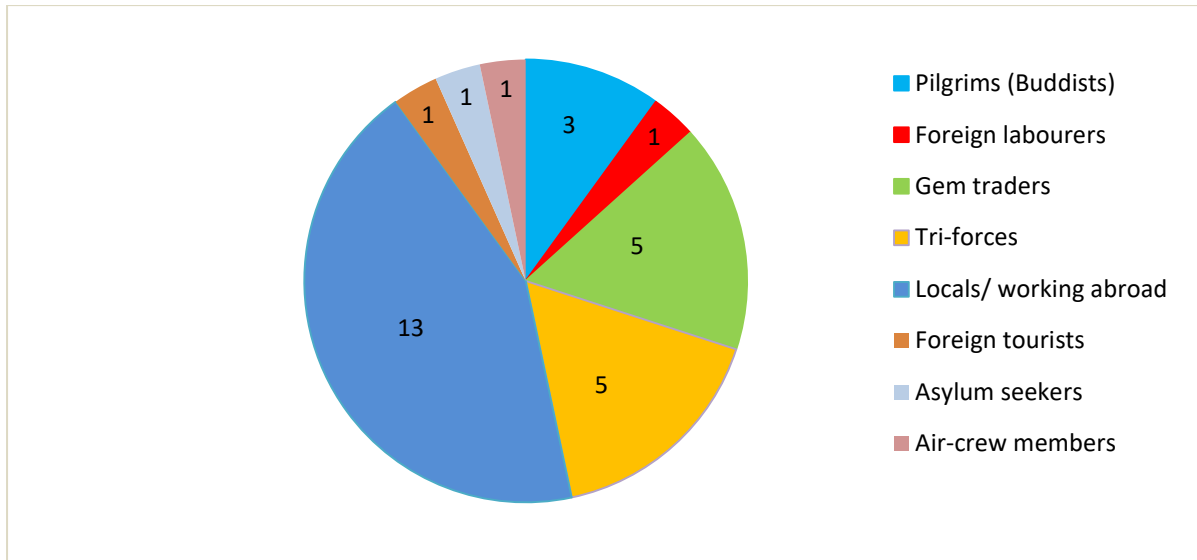
## 5.8. Chickenpox

A total of 4,044 cases of Chickenpox were reported in 2020 and 3,634 (89.8%) were clinically confirmed. Districts reporting the highest number of cases were Kurunegala (345), Galle (323), Kalutara (298), Kalmunai (278) and Gampaha (266). According to the case-based investigation, the maximum presentation of cases were between 21-40 years of age (42.8%) and male (49.7%). The majority (96.3%) were found as no complications.

## 5.9. Malaria

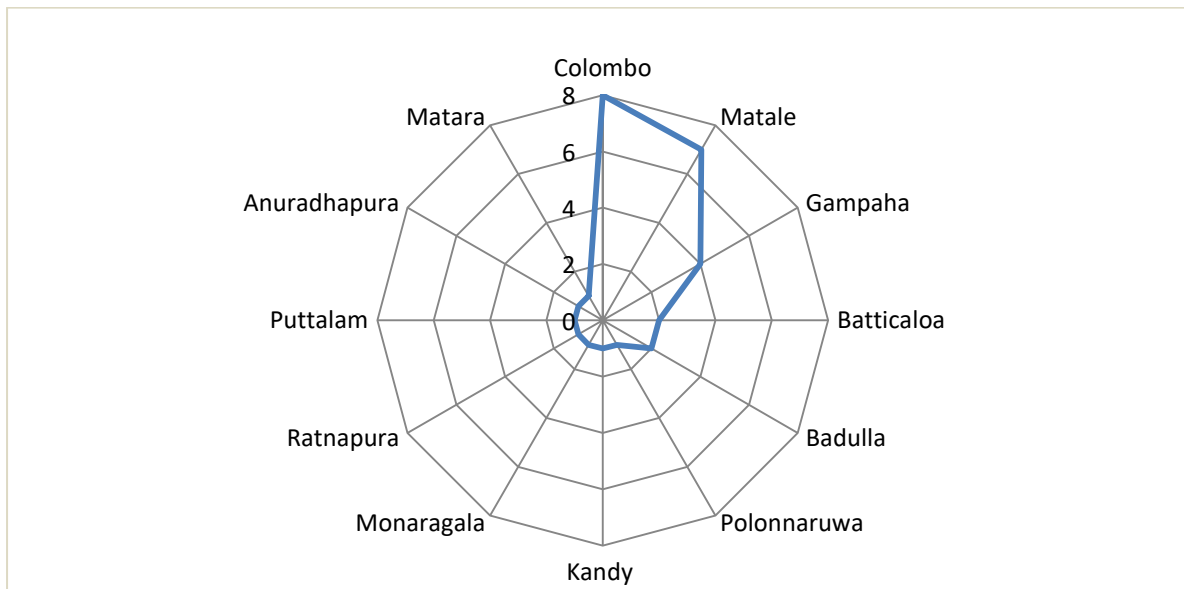
Sri Lanka was certified by the World Health Organization as a malaria free country on 6<sup>th</sup> September 2016, at the 69<sup>th</sup> session of the Regional Committee for South East Asia in Colombo after continuous effort over four decades led by the Anti-Malaria Campaign, Ministry of Health.

Currently, Sri Lanka is in the phase of prevention of the reintroduction of malaria. A total of 30 microscopically confirmed, imported malaria cases including two severe cases were reported in Sri Lanka in 2020 and of which 11 cases were detected from Quarantine Centers including 26 males and 4 females. *P.vivax* infections constituted 11 (36.7%), while *P. falciparum*, *P. ovale*, *P. malaria* and mixed infection represented 8 (26.7%), 8 (26.7%), 2 (6.6%) and 1 (3.3%) respectively. No deaths due to malaria were reported during the year 2020. Accordingly, zero mortality due to malaria has been sustained since 2007.



**Figure 5.15: Number of imported malaria cases by risk category, 2020**

Source: Anti-Malaria Campaign



**Figure 5.16: Distribution of malaria cases by treated district, 2020**

Source: Anti-Malaria Campaign

**Table 5.5: Blood smear examination by RDHS division, 2020**

RDHS division	No. of blood smears examined
Ampara	16,079
Anuradhapura	43,404
Badulla	26,949
Batticaloa	49,758
Colombo	98,534
Galle	20,781
Gampaha	33,842
Hambantota	15,890
Jaffna	43,704
Kalmunai	33,950
Kalutara	13,162
Kandy	46,335
Kegalle	19,634
Kilinochchi	14,587
Kurunegala	61,434
Mannar	18,919
Matale	28,836
Matara	31,271
Monaragala	33,406
Mullaitivu	20,261
Nuwara Eliya	12,821
Polonnaruwa	22,083
Puttalam	29,153
Ratnapura	33,730
Trincomalee	24,542
Vavuniya	17,130
<b>Total</b>	<b>810,195</b>

Source: Anti Malaria Campaign

## 5.10. Filariasis

Filariasis is a disease causing lifelong disfiguring complications to affected individuals. Sri Lanka was validated as a country that eliminated Lymphatic Filariasis (LF) as a public health problem in 2016. *Wucheraria bancrofti* and *Brugia malayi* are the two main nematode parasites transmitting the disease in the country. *Culex quinquefasciatus* acts as the main vector for transmitting urban (Bancroftian) filariasis while *Mansonia* mosquito species act as the main vector species for rural (Brugian) filariasis.

### Filaria control activities

Filariasis control activities in Sri Lanka has a 3 pronged approach.

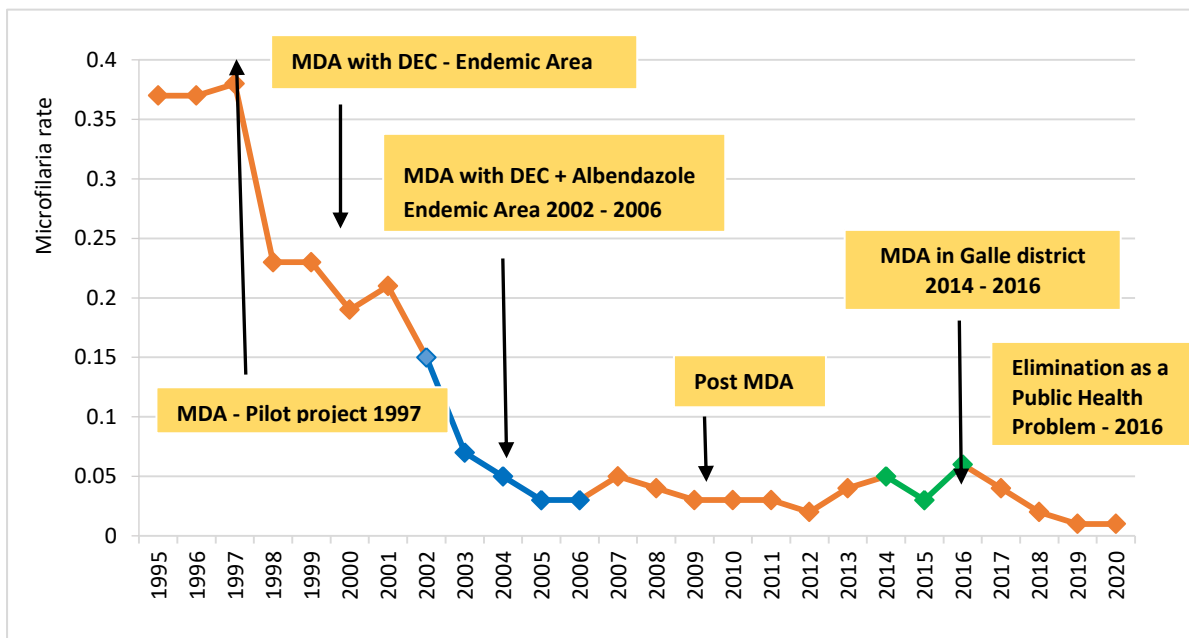
- Identification and elimination of the filarial parasite in humans- **Parasitological surveillance**
- Identification of the vector juvenile and adult's stages to guide parasitological surveillance and elimination of breeding sites- **Entomological surveillance**

- Identifying and managing all patients with lymphedema irrespective of etiology- Morbidity management and disability prevention (MMDP)  
-MMDP (Management of Morbidity and Disability Prevention)

### 1) Parasitological surveillance

The identification of juvenile filarial parasites (microfilaria, mf) in humans is mainly done by collecting night blood films. This is done as a routine or special house-to-house survey or at special settings; clinics, and institutions. Other than night blood filming, antigen and antibody testing is also done in the field setting.

Migrants from Filariasis endemic countries have also threatened sustenance of the elimination status. Therefore, Anti Filariasis Campaign embarks on migrant screening together with International Organization for Migrants.

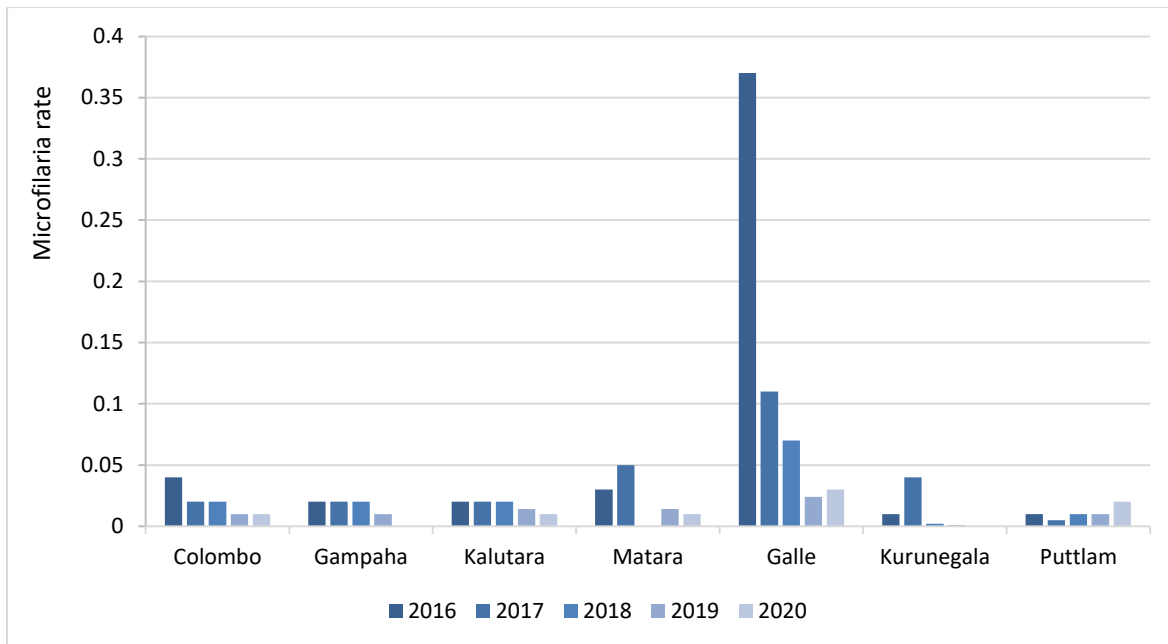


**Figure 5.17: Microfilaria rate in Sri Lanka, 1995 – 2020**

Source: Anti Filariasis Campaign

\*Microfilaria rate= Number of positive individuals/ total number of individuals examined X 100





**Figure 5.18: Microfilaria rates in endemic districts in Sri Lanka, 2016 - 2020**

Source: Anti Filariasis Campaign

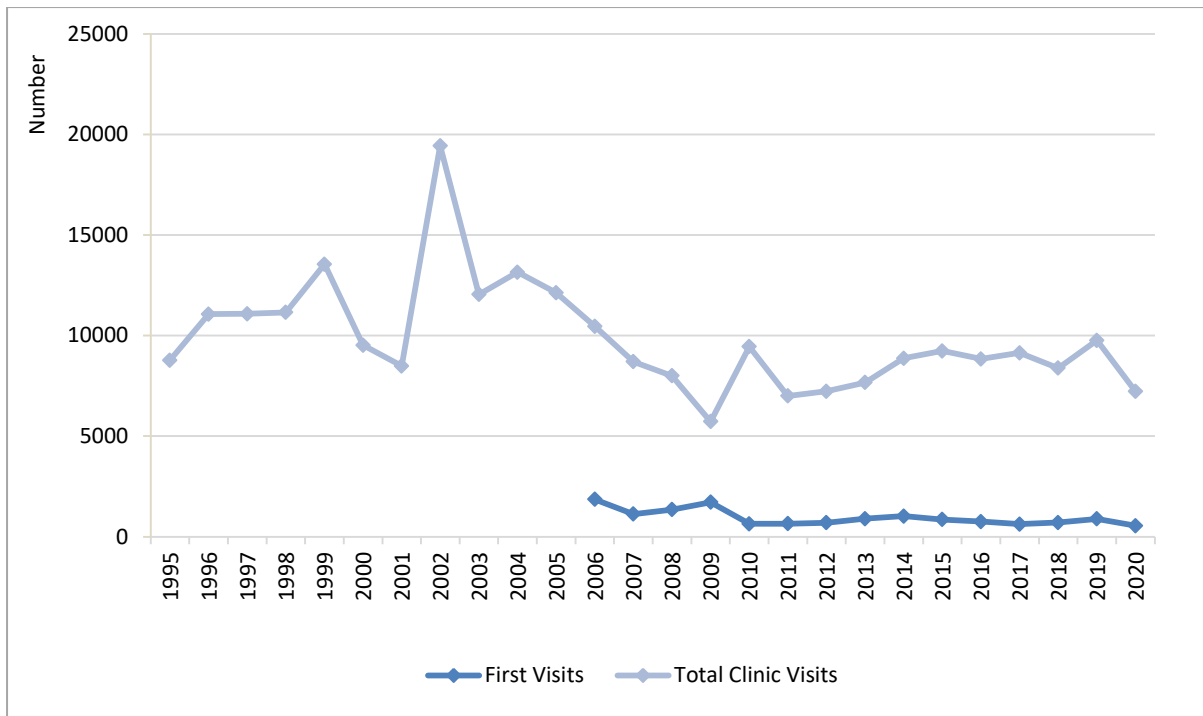
## 2) Entomological surveillance

Adult mosquitoes for entomological surveillance are collected through different methods; indoor hand collection, using gravid traps and using cattle baited net traps. Collected mosquitoes are being dissected to find parasitic larval stages within mosquitoes or subjected to polymerase chain reaction testing to identify parasitic antigens. Mosquito positivity rates are used to calculate infective (mf, L1, L2, L3) and infected rates (L3).

## 3) Management of Lymphedema patients

There are 19 clinics in the 8 identified endemic districts for filariasis conducting specialized lymphedema management clinics. Community awareness campaigns, as well as training of medical staff, are done by the Anti-filariasis Campaign to improve referrals to lymphedema management clinics and improve foot care among patients. All the patients are well educated on the management of their feet.

Clinical status and stage of lymphedema are monitored among patients through regular follow-ups. During the last few years, the number of newly diagnosed lymphedema cases was falling especially during the year 2020. It may be attributed to the COVID-19 situation and the associated travel restrictions. The trend in identifying the new cases of lymphedema patients is shown in the graph below. The Anti-filariasis Campaign aims to reach zero number of cases with lymphedema by the year 2030.



**Figure 5.19: Lymphodema cases attended to anti filariasis clinics, 1995 - 2020**

Source: Anti Filariasis Campaign

Although Sri Lanka had been declared as a country that had eliminated filaria as a public health problem in 2016, pockets of filariasis foci are still prevalent in a few localities in endemic districts.

Greater involvement of the preventive and curative sectors of the Ministry of Health, other government departments, non-governmental organizations and the community as a whole will help in eliminating filaria from this country.

**Table 5.6: Entomological indices by district, 2020**

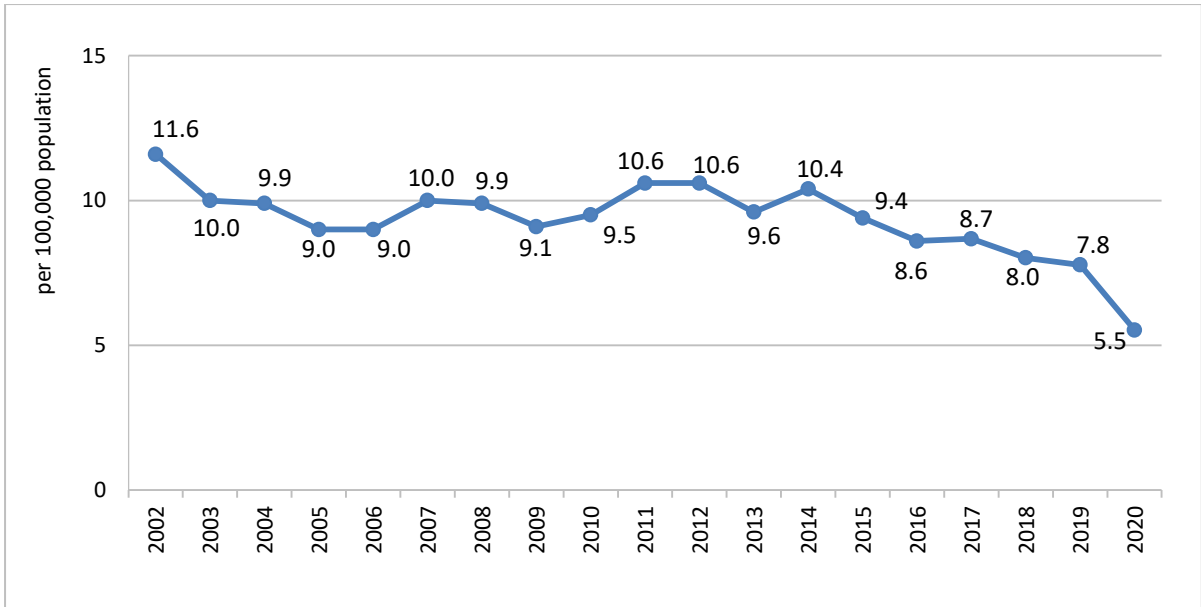
District		No of premises			<i>Culex quinquefasciatus</i>			% Infected	% Infective
		Examined	Positive for <i>Cx quin</i>	Positive (%)	Dissected	Infected	Infective		
Colombo	Routine	347	139	40.06	347	0	0	0	0
	Special survey				3,458	0	0		
Gampaha	Routine	984	455	46.24	1,486 (5)*	35 (0)*	0 (0)*	1.46 (0)*	0 (0)*
	Special survey				1,049	2	0		
Kalutara		3,189	1,776	55.69	5,981	49	1	0.82	0.02
<b>Western Province</b>		<b>4,520</b>	<b>2,370</b>	<b>52.43</b>	<b>12,321 (5)*</b>	<b>86 (0)*</b>	<b>1 (0)*</b>	<b>0.70 (0)*</b>	<b>0.01 (0)*</b>
Galle	Routine	2,197	930	42.33	2,984	38	27	1.02	0.67
	Special survey				1,048	3	0		
Matara	Routine	1,103	411	37.26	941	26	1	1.97	0.14
	Special survey				481	2	1		
Hambantota		-	-	-	-	-	-	-	-
<b>Southern Province</b>		<b>3,300</b>	<b>1,341</b>	<b>40.64</b>	<b>5454</b>	<b>69</b>	<b>29</b>	<b>1.50</b>	<b>0.66</b>
Kurunegala		1,175	346	29.45	765	0	0	0.00	0.00
Puttlam	Routine	483	172	35.61	487 (14)*	17 (0)*	0 (0)*	3.49 (0.43)*	0 (0)*
	Special survey				(680)*	(3)*	(0)*		
<b>North Western Province</b>		<b>1,658</b>	<b>518</b>	<b>31.24</b>	<b>1,252 (694)*</b>	<b>17 (3)*</b>	<b>0 (0)*</b>	<b>1.36 (0.43)*</b>	<b>0 (0)*</b>
Non endemic survey					661	0	0	0	0
<b>Sri Lanka</b>		<b>9,478</b>	<b>4,229</b>	<b>44.62</b>	<b>19,688 (699)*</b>	<b>172 (3)*</b>	<b>30 (0)*</b>	<b>0.87 (0.43)*</b>	<b>0.15 (0)*</b>

( )\* - *Mansonia sp.*

Source : Anti Filarasis Campaign

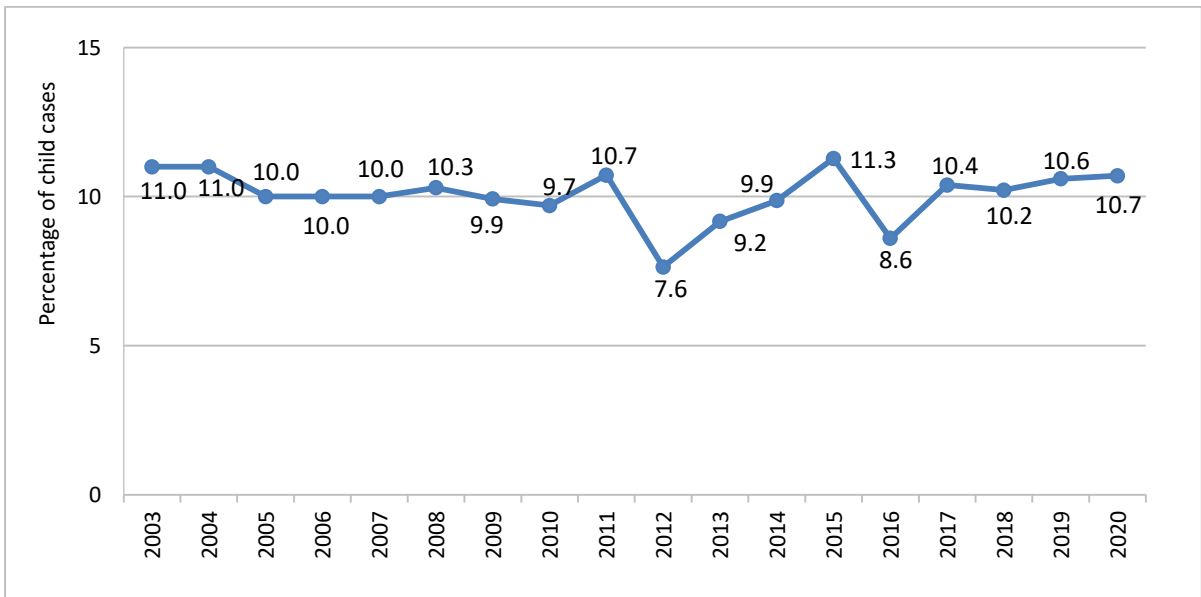
## 5.11. Leprosy

Leprosy is a neglected tropical disease that is curable with Multi-Drug Therapy (MDT). Sri Lanka has successfully achieved the elimination target for leprosy in 1995 as a result of the successful implementation of a social marketing campaign along with MDT. However; Sri Lanka is stagnating at the same incidence level for more than a decade for leprosy. It is about 8-10 per 100,000 population. Usually, around 2,000 new patients were reported every year in the last decade. The reported number of cases in 2020 is 1,213. This reduction may be mainly due to the obstacles arising for active case findings due to the midst of the COVID-19 pandemic. Also, static rate of new child cases and Grade 2 deformities among new leprosy cases are reported during the last decade.



**Figure 5.20: New case detection rate (NCDR) of leprosy per 100,000 population, 2002 - 2020**

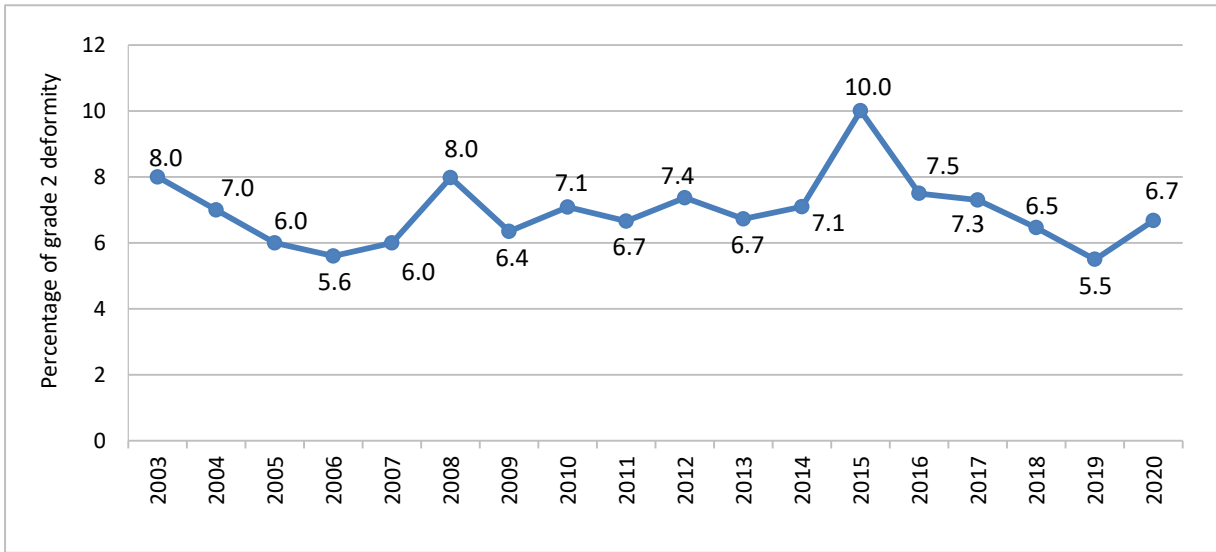
Source: Anti-Leprosy Campaign



**Figure 5.21: Percentage of child cases among new leprosy cases, 2003 - 2020**

Source: Anti-Leprosy Campaign

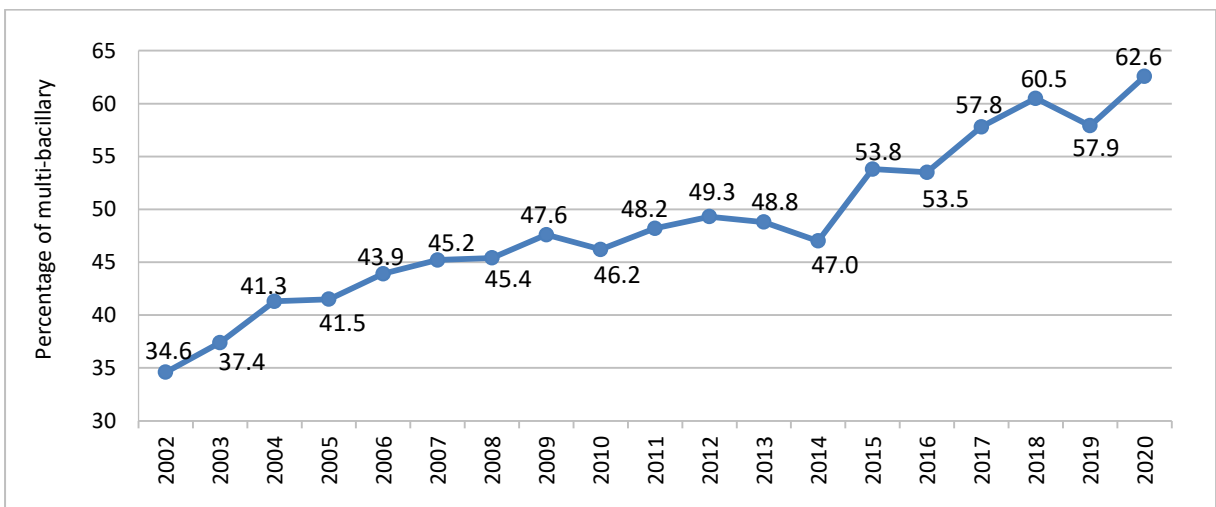
New child case percentage fluctuated from around 10% from 2003 to 2011 and it has dropped to 7.64 per cent in the year 2012. Then, an increasing trend was shown till the year 2015 (11.28%). In the year 2016, there is a drastic drop in the value up to 8.6% and after that, the value fluctuates around 10 per cent.



**Figure 5.22: Percentage of grade 2 deformity at the time of diagnosis, 2003 - 2020**

Source: Anti-Leprosy Campaign

In 2015; the highest value of disability percentage was reported which was 10.0%. This may be due to the improvement in the detection of deformities following the introduction of “Patient File” in the year 2015.



**Figure 5.23: Percentage of Multi-Bacillary (MB) at the time of diagnosis, 2002 - 2020**

Source: Anti-Leprosy Campaign

Multi Bacillary (MP) leprosy is the infective type; hence it is very important to detect them early to prevent the spread of the disease. These patients are at more risk of developing deformities in their later lives too. An increasing trend in MB percentage can be seen during past years. It is decaf released with active case findings. Several difficulties occurred for active case finding due to COVID-19 pandemic this year. In 2020, the MB percentage was 62.6 per cent.

**Table 5.7: Multi Bacillary detection rate by province, 2020**

Province	New patients		MB		Grade 2 deformity		Child cases	
	No.	NCDR	No.	%	No.	%	No.	%
Central	27	0.97	20	74.07	1	3.70	1	3.70
Eastern	187	10.71	121	64.71	5	2.67	32	17.11
North Central	123	8.87	71	57.72	13	10.57	11	8.94
North Western	124	4.83	93	75.00	9	7.26	8	6.45
Northern	44	3.82	26	59.09	3	6.82	4	9.09
Sabaragamuwa	87	4.2	49	56.32	7	8.05	7	8.05
Southern	153	5.73	107	69.93	12	7.84	14	9.15
Uva	54	3.89	31	57.41	4	7.41	8	14.81
Western	414	6.69	241	58.21	27	6.52	45	10.87
<b>Sri Lanka</b>	<b>1,213</b>	<b>5.53</b>	<b>759</b>	<b>62.57</b>	<b>81</b>	<b>6.68</b>	<b>130</b>	<b>10.72</b>

Source: Anti Leprosy Campaign

The highest and the lowest NCDR were reported from Eastern Province (10.71 per 100,000 population) and Central province (0.97 per 100,000 population) respectively. Majority of MB patients (241) were reported from Western province. The highest percentage of leprosy patients with Grade 2 Deformities are reported from North Central province (10.57%) while the lowest percentage was reported in Eastern province (2.67%). The highest number of child cases is seen in the Western province (45) while the highest percentage was reported in the Eastern province (17.11%).

## 5.12. Food and Water-borne Diseases

- Viral hepatitis, Dysentery, Food Poisoning and Enteric Fever notified to the Epidemiology Unit, depicts a downward trend in the past few years. However, due to the COVID-19 pandemic, there could be an element of underreporting of the cases.
- Following were the districts which report the highest number of food and water-borne diseases in 2020.

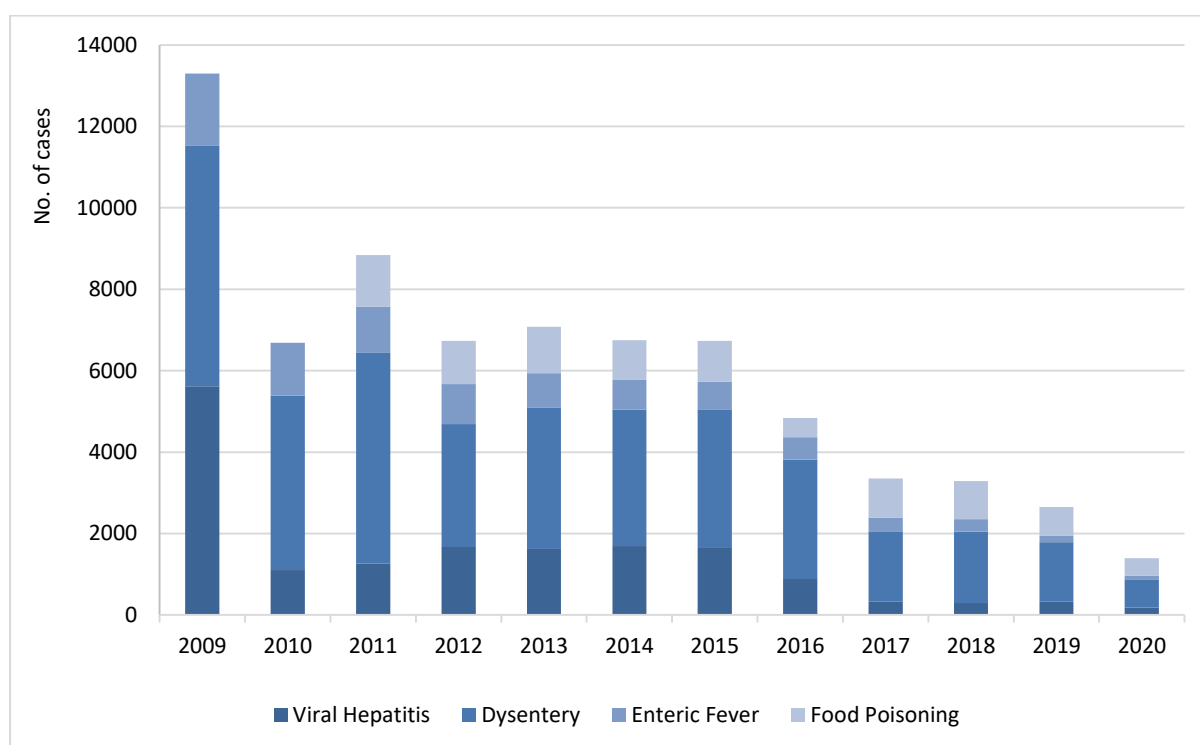
**Table 5.8: Highest number of food and water-borne diseases reported districts**

Enteric fever	Food poisoning	Dysentery	Hepatitis A
Jaffna	Jaffna	Jaffna	Kegalle
Kilinochchi	Hambanthota	Batticaloa	Polonnaruwa
Nuwara Eliya	Batticaloa	Rathnapura	Kandy
Gampaha	Galle	Kalmunai	Matara
Vavunia	Anuradhapura	Kilinochchi	Anuradhapura

Source: clinically/lab confirmed cases reported from H 411a; Epidemiology Unit

Community water supply schemes are the main source of drinking water in most of these districts and tested water samples from these sources showed bacteriological contamination.

In addition, preserving the catchment areas of the water sources, proper purification of drinking water; specially the community water schemes and wells and strict law enforcement for food establishments could help to further reduce food-borne diseases in Sri Lanka.



**Figure 5.24: Number of reported most prevalent food & water-borne diseases in Sri Lanka, 2009-2020**

Source: clinically/lab confirmed cases reported from H 411a; Epidemiology Unit

## 6. Non-Communicable Diseases (NCD)

### 6.1. Major Chronic Non-Communicable Diseases

Nearly 50 per cent of the total deaths occurred in the government hospitals in Sri Lanka were due to major Non-Communicable Diseases (NCDs) such as cardiovascular disease, cancer, chronic respiratory diseases and diabetes mellitus. The proportionate mortality for ischemic heart disease was 15.3 per cent, for cancers 12.3 per cent, for diseases of the respiratory system (excluding pneumonia, upper respiratory illnesses, and influenza) 9.4 per cent, for cerebro-vascular disease 8.5 per cent, for hypertensive diseases 1.2 per cent and for diabetes mellitus 1.4 per cent. Number of deaths and admissions due to major chronic NCDs in government hospitals from 2016-2020 is shown in Table 6.1 and Table 6.2.

**Table 6.1: Number of deaths due to selected NCDs in government hospitals, 2016-2020**

Major NCD	ICD Code	2016	2017	2018	2019	2020
Cardiovascular diseases	I10-I99	14,094	15,031	16,058	17,093	14,470
Cancer	C00-D48	5,148	4,938	5,789	6,296	5,353
Chronic respiratory diseases	J20-22-J40-98	3,564	4,577	4,900	5,749	4,094
Diabetes mellitus	E10-E14	773	803	709	714	590

Source: Medical Statistics Unit

**Table 6.2: Number of admissions due to selected NCDs in government hospitals, 2016-2020**

Major NCD	ICD code	2016	2017	2018	2019	2020
Cardiovascular diseases	I10-I99	345,050	344,213	385,666	410,314	342,451
Cancer	C00-D48	135,794	135,009	158,058	162,998	141,817
Chronic respiratory diseases	J20-22-J40-98	397,115	469,256	474,752	480,000	224,686
Diabetes mellitus	E10-E14	87,916	84,984	93,527	107,336	82,565

Source: Medical Statistics Unit

Ischaemic heart disease is the leading cause of death during last 10 years and each year between 12-15 percent of government hospital deaths occurred due to ischaemic heart disease. Table 6.3 present age distribution of deaths due to ischaemic heart disease by sex in 2020. According to the data shown in Table 6.3, male deaths due to ischaemic heart diseases are higher than female deaths and age group 70+ reported the highest number of deaths due to ischaemic heart disease, while second highest reported in age group of 50 – 69 years.



**Table 6.3: Number of deaths due to ischaemic heart disease in government hospitals by sex and age group, 2020**

Age group	Sex	
	Male	Female
0 -4 years	0	0
5-16 years	2	1
17-49 years	269	132
50-69 years	1,699	1,030
70+	1,828	1,694
Age not specified	8	2
<b>Total</b>	<b>3,806</b>	<b>2,859</b>

Source: Medical Statistics Unit

Table 6.4 and Table 6.5 present deaths due to chronic respiratory disease and diabetes mellitus. Deaths due to chronic respiratory diseases were reported from all age groups, however diabetes mellitus is not common among children under 5 years. Data illustrate that 39 infant deaths and 13 child deaths were due to chronic respiratory disease.

**Table 6.4: Number of deaths due to chronic respiratory diseases in government hospitals by sex and age group, 2020**

Age group	Sex	
	Male	Female
Less than 1 year	23	16
1-4 years	3	10
5-16 years	15	12
17-49 years	137	99
50-69 years	862	417
70+	1,443	1,054
Age not specified	3	0
<b>Total</b>	<b>2,486</b>	<b>1,608</b>

Source: Medical Statistics Unit

**Table 6.5: Number of deaths due diabetes mellitus in government hospitals by sex and age group, 2020**

Age group	Sex	
	Male	Female
Less than 1 year	0	1
1-4 years	0	0
5-16 years	1	0
17-49 years	31	32
50-69 years	135	141
70+	125	122
Age not specified	2	0
<b>Total</b>	<b>294</b>	<b>296</b>

Source: Medical Statistics Unit

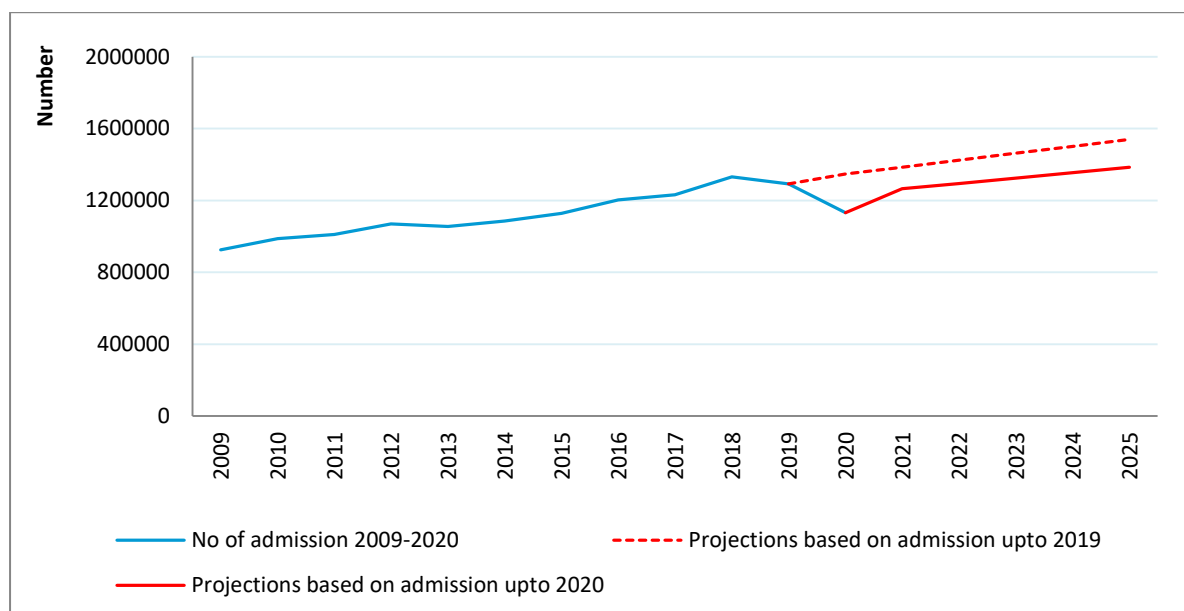
## 6.2. Injuries

### Key Messages

- Traumatic injuries are the number one cause of hospitalization.
- Among many injuries, falls are the most common.
- The highest number of injuries reported during Sinhala and Tamil New Year season.
- Majority of victims are males
- Adolescents, youth and young adults are mostly affected.
- Most injuries occurred at home.
- Number of hospital admissions are increasing.
- Out of all deaths after admissions, about 6% are due to injuries.
- Most injury related deaths are due to transport injuries.
- Most reported outpatient admissions are due to animal bites.

### Burden of injuries

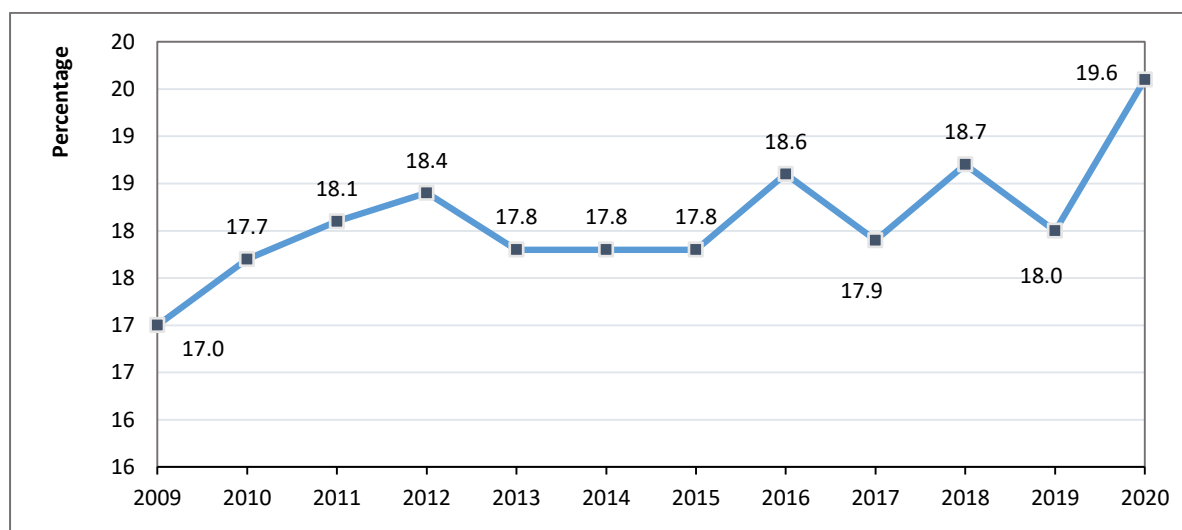
Injuries are the number one cause of hospitalization over the last few decades and it continued to be the same in 2020. Since 2019, there has been a slight decrease in hospital admissions due to injuries. Total number of admissions reported in 2018 was around 1.3 million whereas it has decreased to 1.29 million in 2019 and 1.13 million in 2020. Drop in admissions in 2020 compared to 2019 was about 12 percent. However, according to projections done in 2019, more than 1.34 million admissions due to injuries were expected by 2020 (even more than 2018 admissions). Projections based on Indoor Morbidity and Mortality Returns (IMMR) for last 12 years, revealed that number of injury admissions to all government hospitals may increase by 0.25 million by the year 2025 if current trend continues (Figure 6.1).



**Figure 6.1: Comparison of projected number of admissions due to injuries in government hospitals, 2021- 2025 (based on admissions from 2009 to 2019 and 2020)**

Source: Medical Statistics Unit

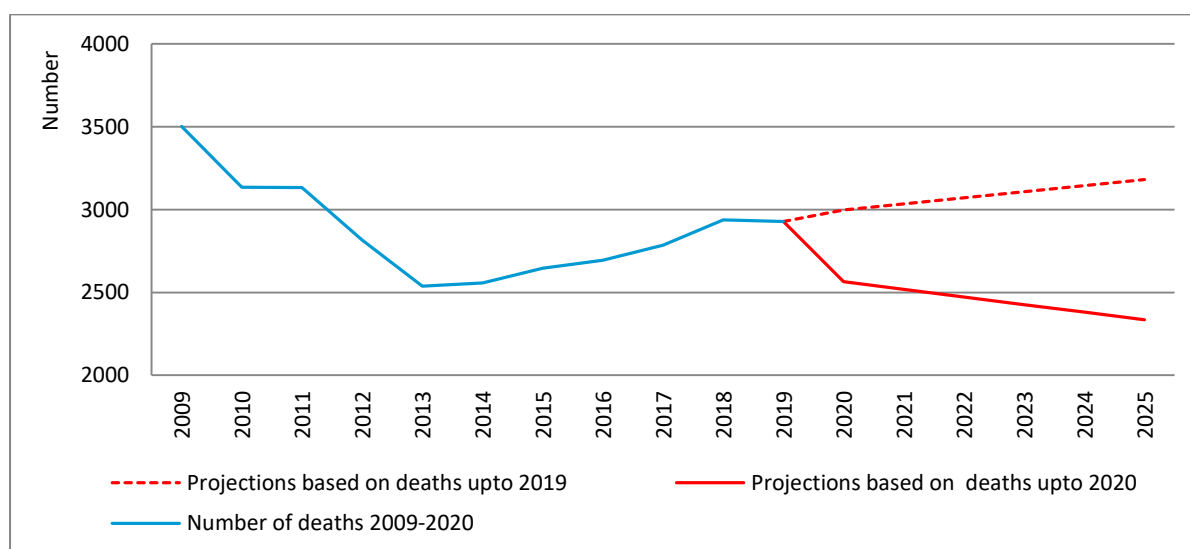
On average, injuries accounted for about 18 percent of all admissions to government hospitals. A gradual increase has been observed in percentage of injury admissions since 2009 from 17% to 20.8% in 2020 (Figure 6.2).



**Figure 6.2: Percentage of admissions due to injuries out of the total admissions in government hospitals, 2009 – 2020**

Source: Medical Statistics Unit

Injury related deaths in government hospitals have been reduced from 2,928 to 2,564 between 2019 in 2020. The drop in 2020 was about 12 percent compared to 2019. According to the IMMR for the last 12 years, injury related deaths have declined over the years and the projected number of deaths may reduce by about 230 by the year 2025 even if there is no intervention for prevention of injuries are carried out (Figure 6.3).

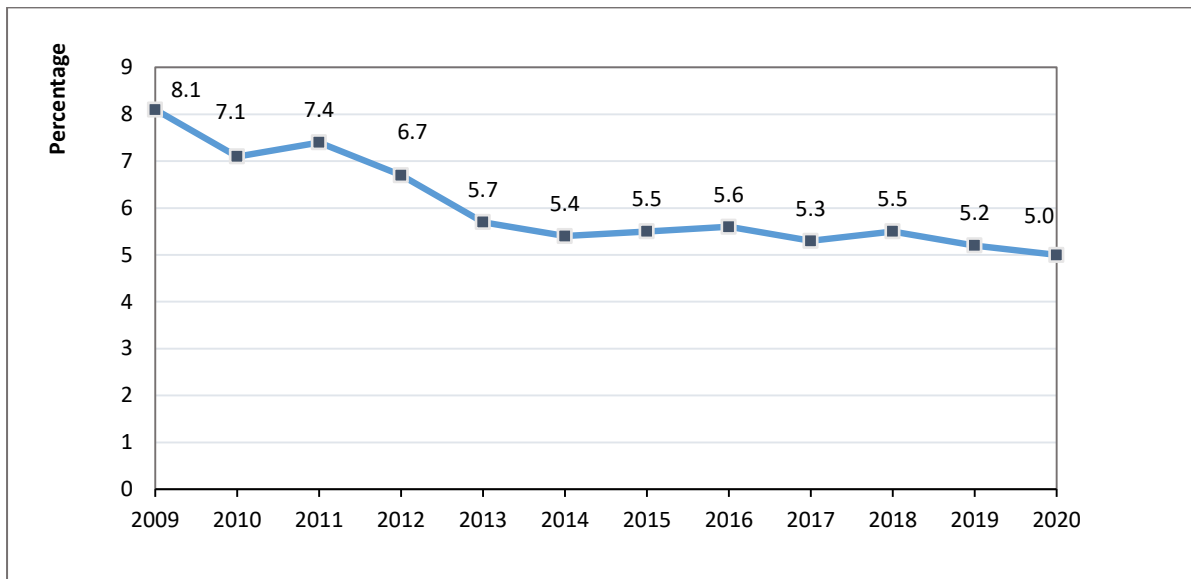


**Figure 6.3: Comparison of projected number of injury related deaths in government hospitals, 2021 - 2025 (based on deaths from 2009 and 2020)**

Source: Medical Statistics Unit

Even though total number of deaths from all causes in government hospitals has increased over the years, a gradual decline has been observed in injury related deaths. Out of total number of deaths

in government hospitals, 8.1 per cent were due to injuries in 2009 whereas it was only 5.2 per cent in 2019 and about 5.9 per cent in 2020 (Figure 6.4).

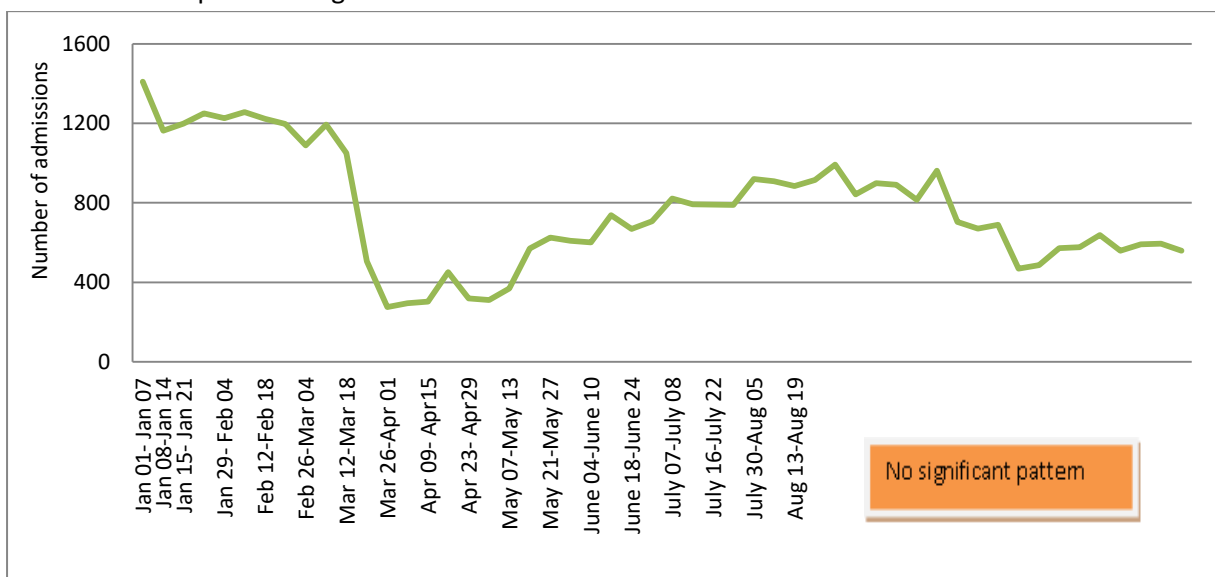


**Figure 6.4: Percentage of injury related deaths out of total deaths in government hospitals, 2009 - 2020**

Source: Medical Statistics Unit

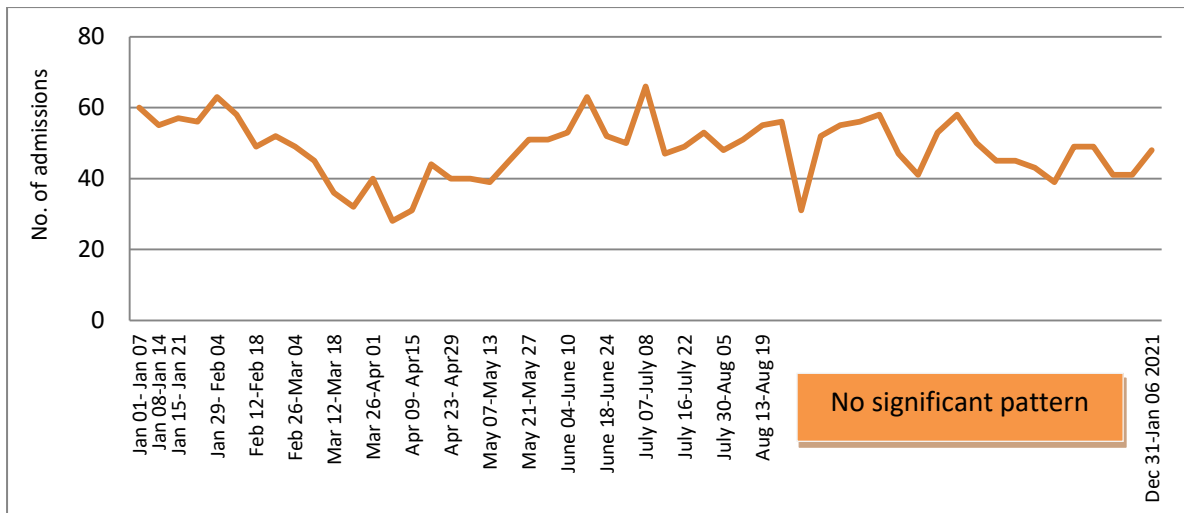
### National Injury Surveillance

According to IMMR data, the highest number of injury related admissions to hospitals was reported during Sinhala and Tamil New Year. Based on data from National Injury Surveillance System (NISS), this increase was mainly due to increase in number of transport accidents during Sinhala-Tamil New Year period. In the same way, the highest number of injury related deaths occurred among victims admitted to hospitals during Sinhala and Tamil New Year.



**Figure 6.5: Number of admissions to government hospitals due to transport injuries, 2020**

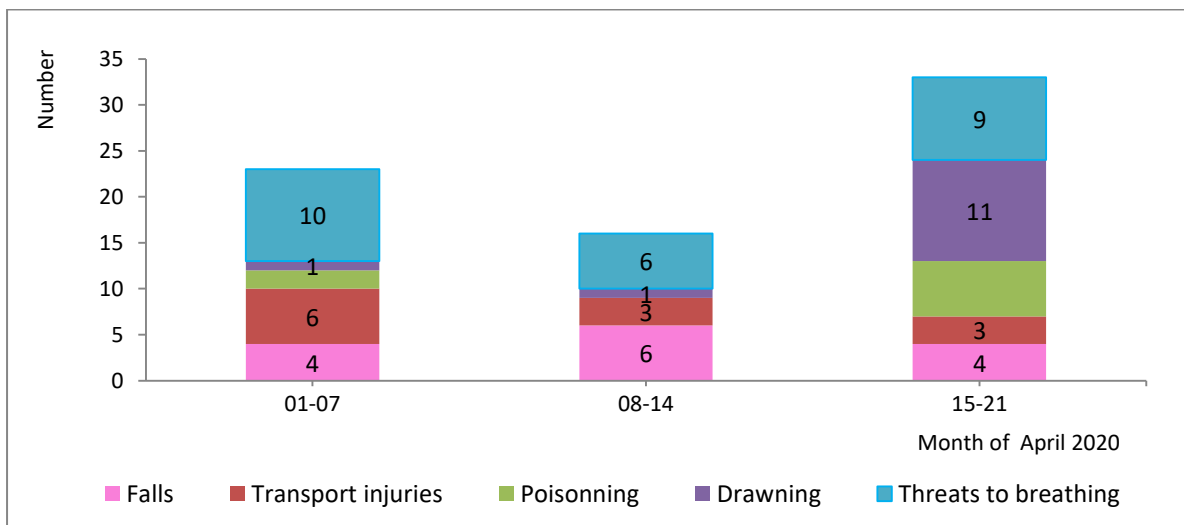
Source: National Injury Surveillance System



**Figure 6.6: Number of deaths in government hospitals due to injuries, 2020**

Source: National Injury Surveillance System

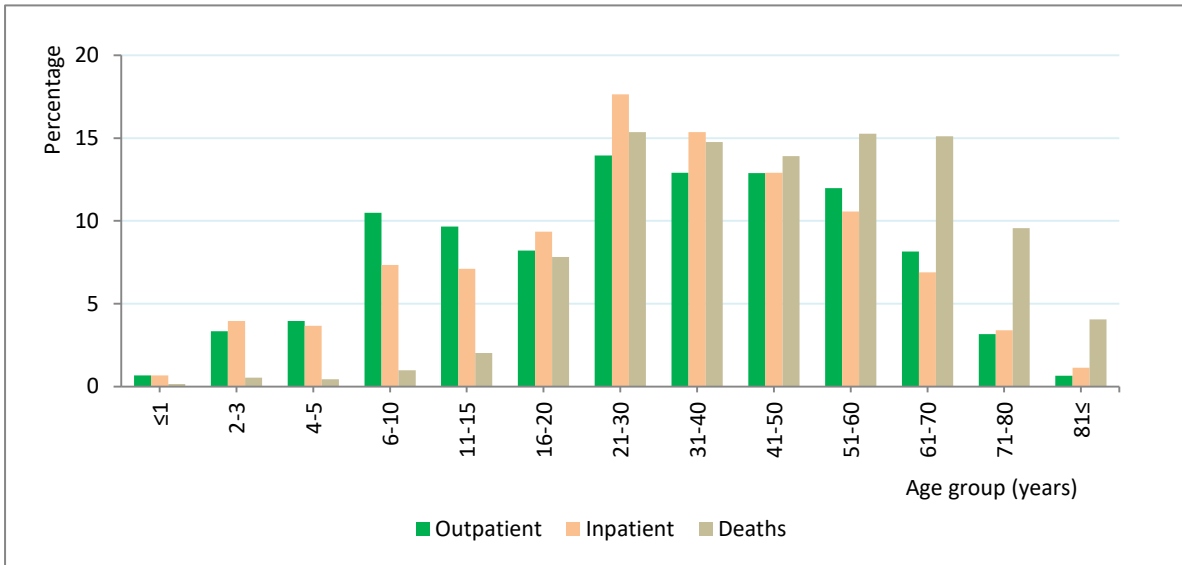
According to death surveillance of the NISS, since 2018, transport injuries, falls, drowning, poisoning and threats to breathing largely contributed for this increase. But, in 2020, though deaths due to transport injuries and falls were common throughout the Sinhala and Tamil New Year period, in the third week of April, deaths due to drowning were mostly occurred (Figure 6.7).



**Figure 6.7: Number of admissions during Sinhala and Tamil New Year period by type of injury mechanism, 2020**

Source: National Injury Surveillance System

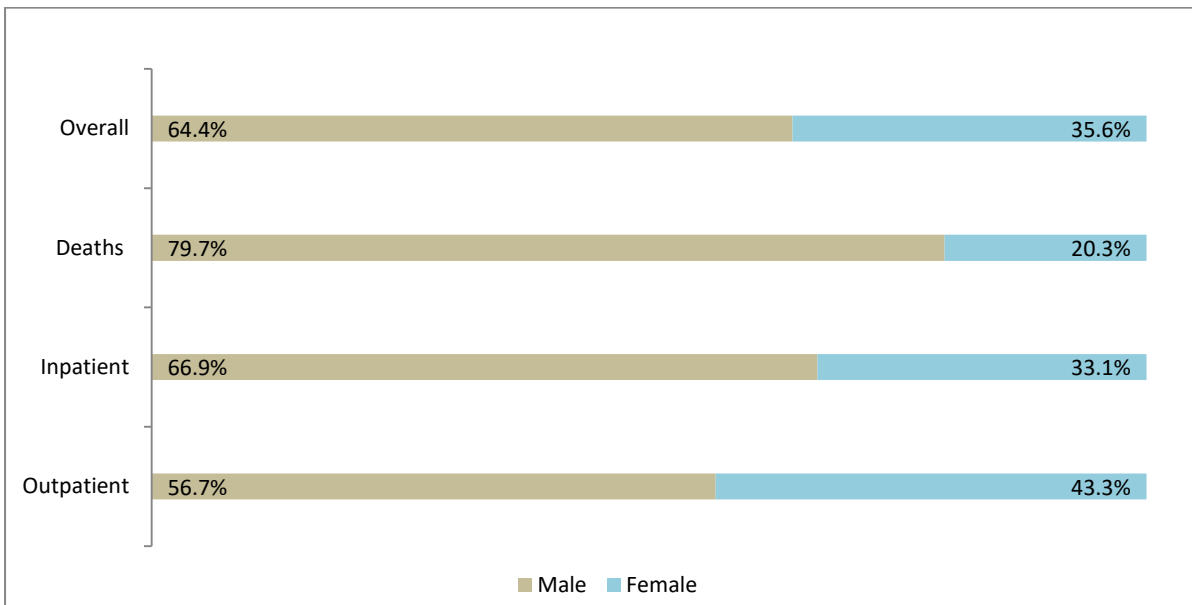
According to NISS, adolescents, youths, young adults were mostly affected by injuries. Injury related deaths were also common among elders over 60 years of age.



**Figure 6.8: Age distribution of individuals affected by injuries, 2020**

Source: National Injury Surveillance System

Figure 6.9 shows the sex distribution of outpatient, inpatient, and deaths of injury-affected individuals. It depicts males were more affected than females. Among injury deaths almost 80 per cent were males.



**Figure 6.9: Sex distribution of individuals affected by injuries, 2020**

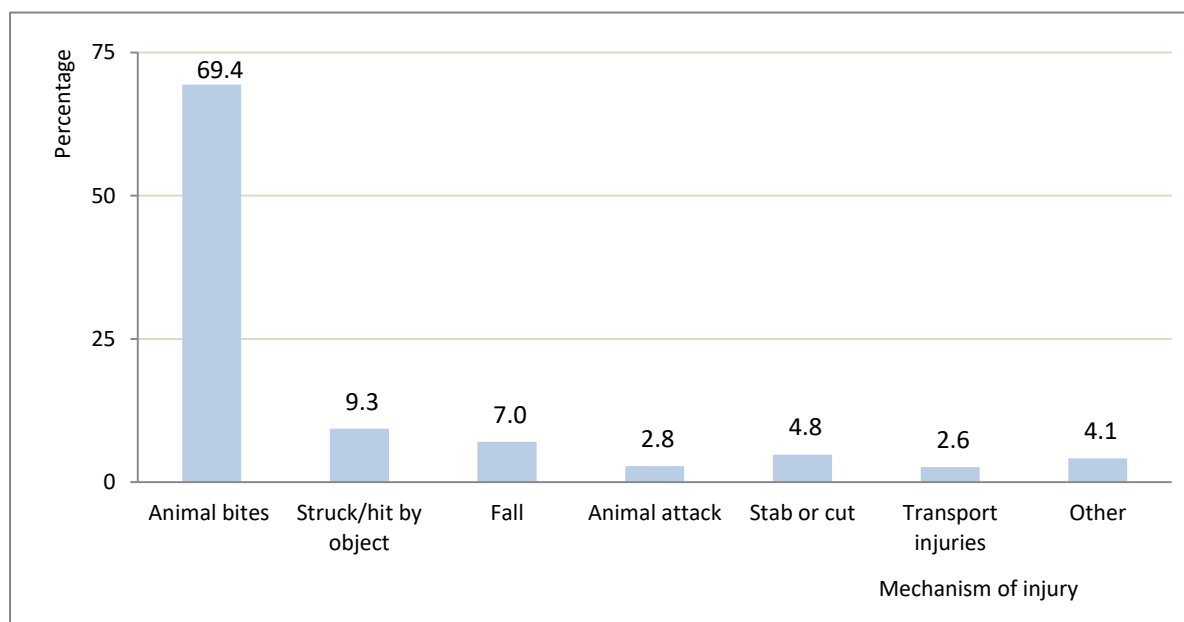
Source: National Injury Surveillance System

**Types of injuries reported to government hospitals**

IMMR reports injuries according to main diagnosis coded according to the ICD (version 10). As a result, it does not currently provide exact mechanism of injury. But NISS provides specific mechanisms of injuries treated at sentinel institutions.

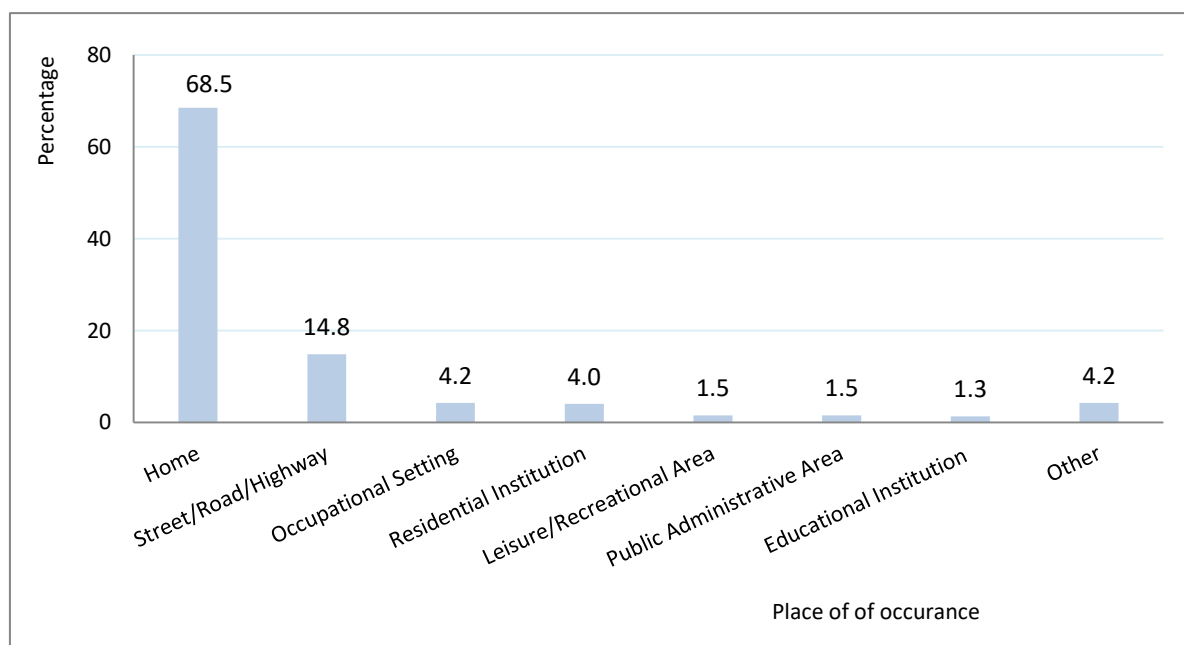
## Outpatients due to Injuries

According to injuries reported through outpatient surveillance, 69.4 per cent was due to animal bites (Figure 6.10) and 68.5 per cent occurred at home (Figure 6.11).



**Figure 6.10: Percentage of reported OPD attendance due to injuries by mechanism, 2020**

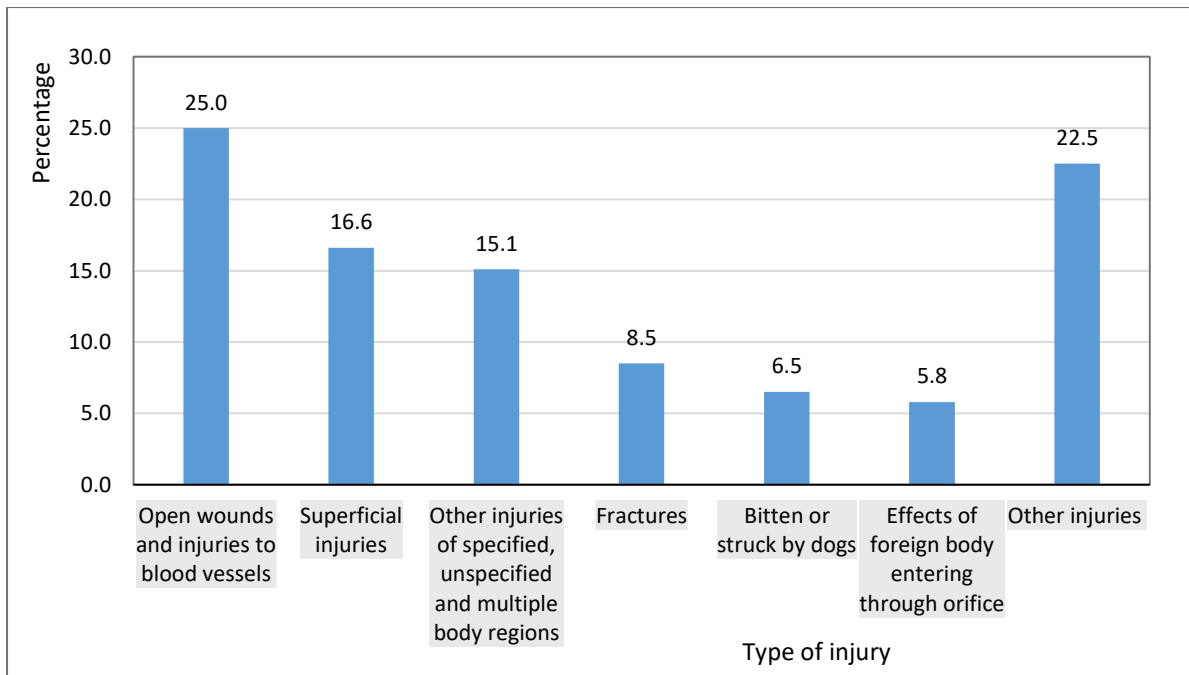
Source: National Injury Surveillance System



**Figure 6.11: Percentage of reported OPD attendance due to injuries by place of occurrence, 2020**

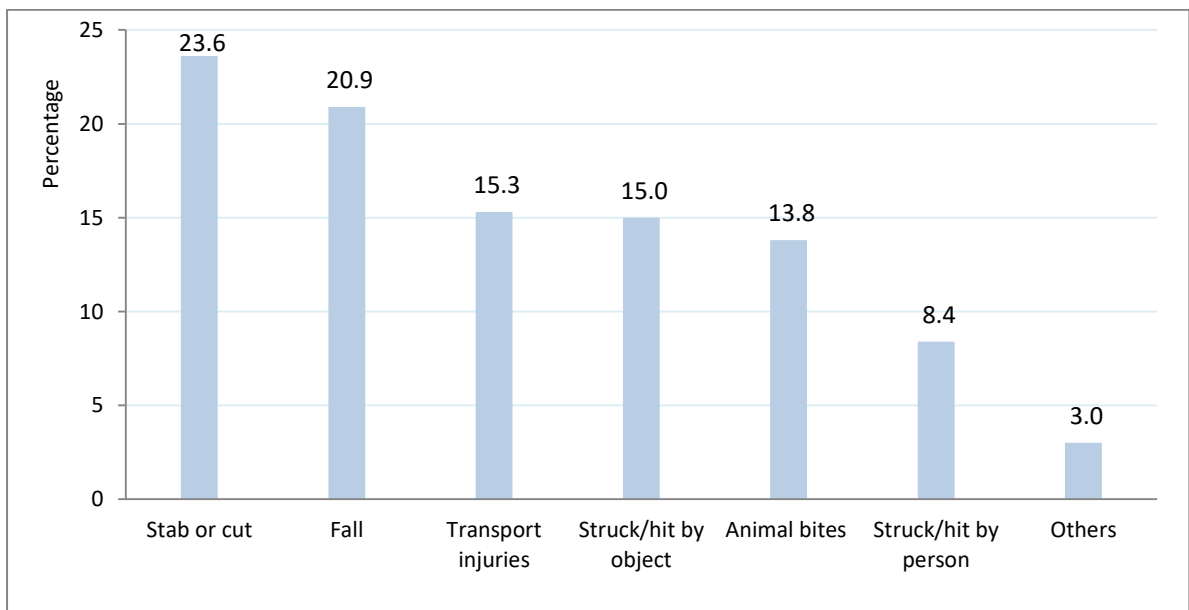
Source: National Injury Surveillance System

According to IMMR, leading injury category admitted to hospitals in 2020 was open wounds and injuries to blood vessels (25%) (Figure 6.12). As reported in NISS, the leading mechanism responsible for open wounds was stab / cut injuries (24%) (Figure 6.13).



**Figure 6.12: Percentage of reported admissions due to injuries, 2020**

Source: Medical Statistics Unit



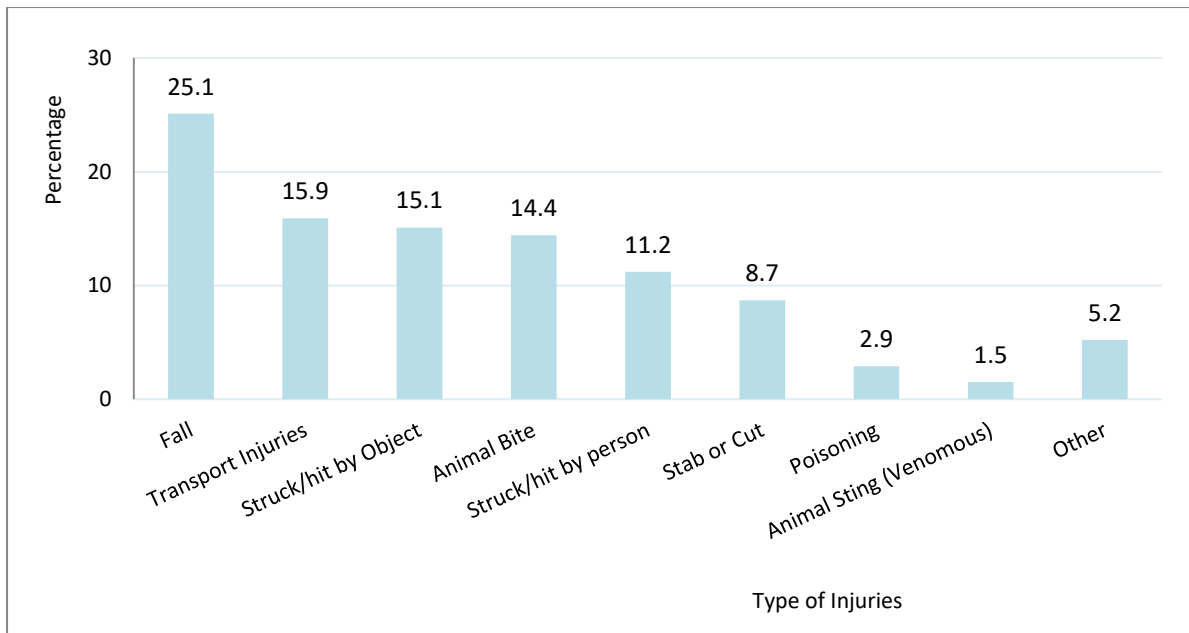
**Figure 6.13: Percentage of injuries leading to open wounds by mechanism, 2020**

Source: National Injury Surveillance System

### Inward patients due to injuries

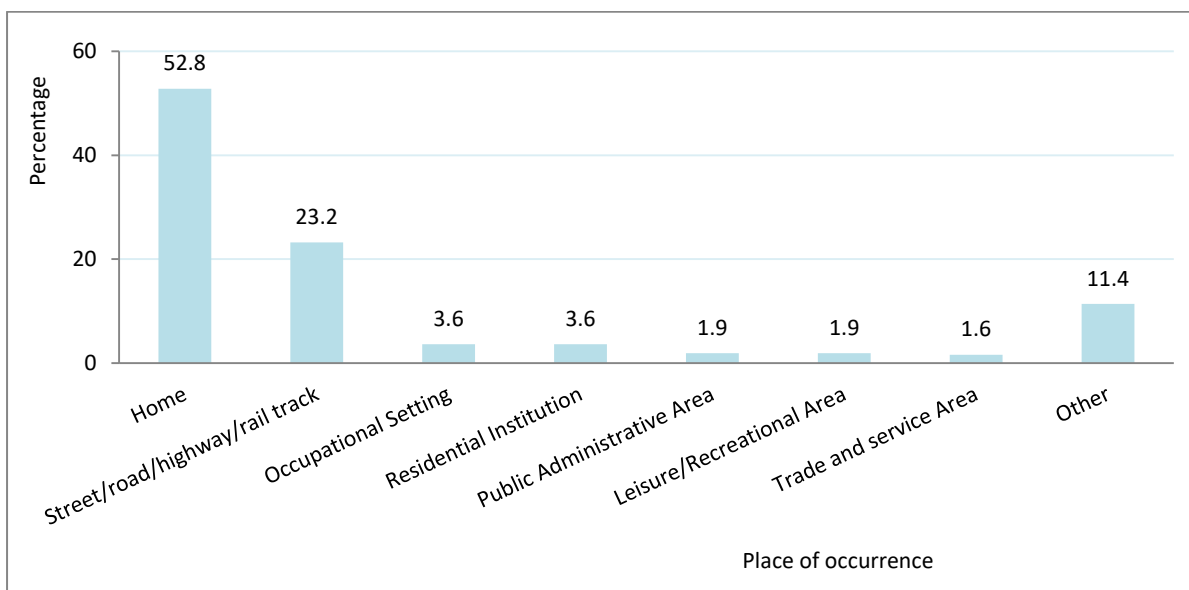
Out of all reported inward injuries to NISS in 2020, leading mechanism of injury was falls (25.1%). 90% of injuries were due to falls, transport injuries, struck/hit by object, animal bites, struck/hit by person and stab/cut (Figure 6.14). Further, the majority of all reported inward injuries occurred at home (53%) (Figure 6.15).





**Figure 6.14: Percentages of reported inward injuries by type, 2020**

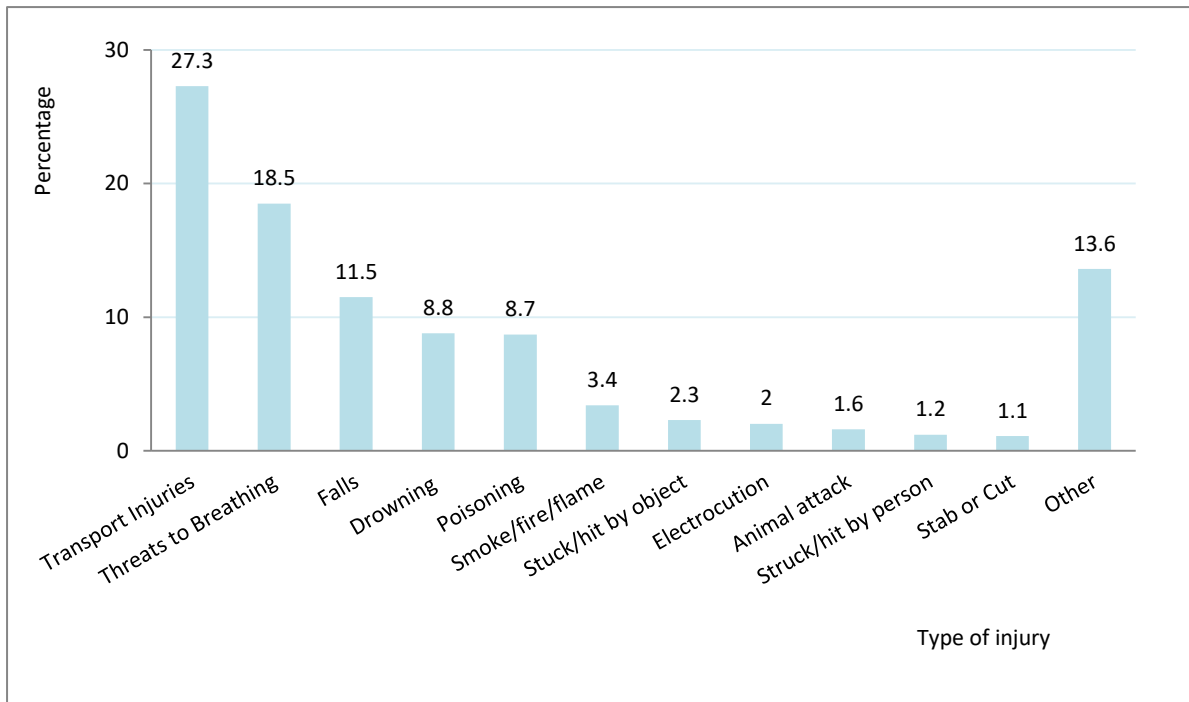
Source: National Injury Surveillance System



**Figure 6.15: Percentages of reported inward injuries by place of occurrence, 2020**

Source: National Injury Surveillance System

Out of all notified injury deaths, most were due to transport injuries (27.3%) followed by threats to breathing (18.5%), falls (11.5%), drowning (8.8%) and poisoning (8.7%). Of all injuries, deaths due to transport injuries, falls, drowning, struck/ hit by object and electrocution were mostly unintentional (97%, 96%, 88%, 63% and 98% respectively). However, deaths due to threats to breathing (80%), poisoning (82%) and stab/ cut (60%) were mostly intentional.



**Figure 6.16: Percentages of deaths due to injuries by type of injuries, 2020**

Source: National Injury Surveillance System

### Effect of COVID-19 pandemic on burden of injuries

According to IMMR, there was a 22 percent reduction in number of inpatients and post-admission deaths in government hospitals in 2020 compared to 2019. Furthermore, total number of admissions due to injuries and Injury related deaths in government hospitals have been reduced by 12 percent in 2020 compared to 2019. According to IMMR, 1<sup>st</sup> and 2<sup>nd</sup> waves of COVID-19 pandemic which occurred between March and October 2020 and October and December 2020, respectively, number of hospitalizations due to injuries gradually decreased compared to the first quarter of 2020.

## 6.3. Cancer

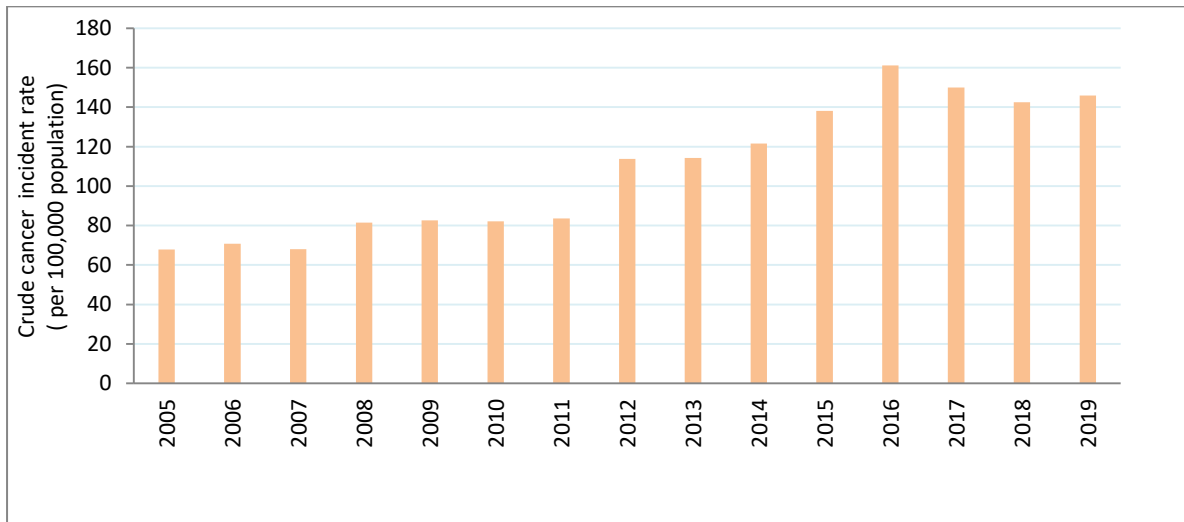
### 6.3.1. Cancer Incidence

Cancer incidence data in Sri Lanka can be obtained through the National Cancer Registry Programme which is coordinated by the NCCP. The crude incidence rate of cancers reported through the process of cancer registration in Sri Lanka for the time period of 2005- 2019 is shown in Figure 6.17.

#### Age Specific Cancer Incidence Rates

Age specific cancer incidence rates of both sexes are increased from childhood to older age. The highest age specific cancer incidence rates was reported at 70-74 old age group and it was 888 per 100,000 in year 2019. Also, over the last 15 years age specific cancer incidence rates were increased in each 5 year age group. Therefore, diagnostic and treatment services for cancer care

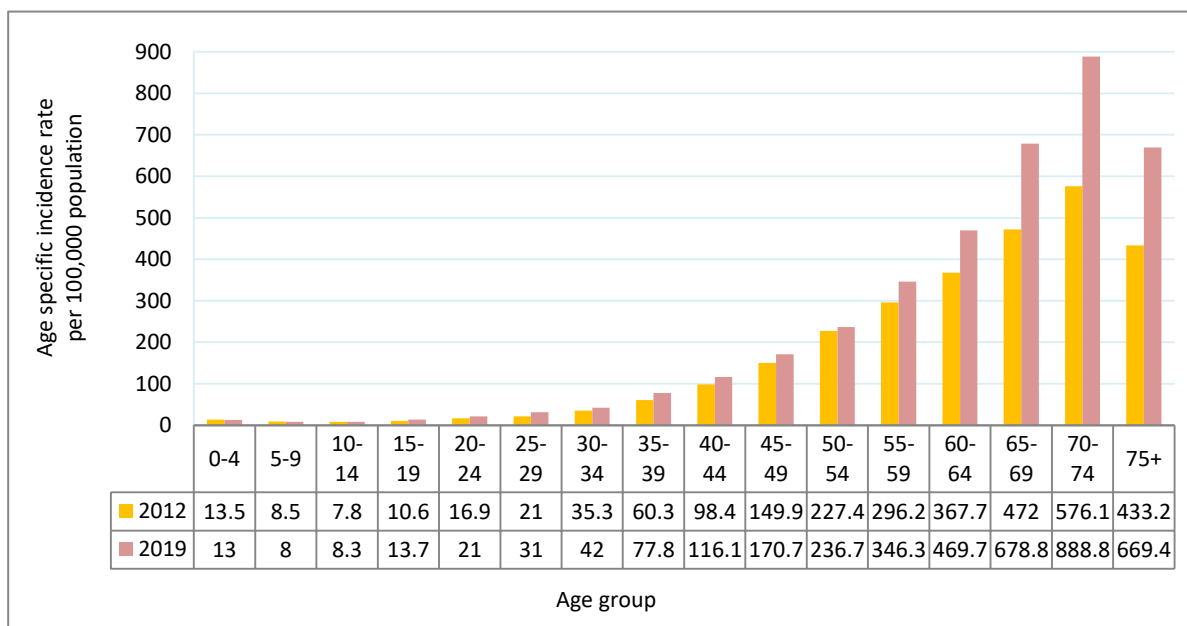
need to be expanded to cater to the increasing demand for care due to population ageing over the years.



**Figure 6.17: Crude cancer incidence in Sri Lanka, 2005 - 2019**

Source: National Cancer Registry Programme

Crude cancer incidence rates of males, females and both sexes are being increased over the last 15 years. Therefore, diagnostic and treatment services for cancer care need to be expanded to cater increasing demand.



**Figure 6.18: Age specific cancer incidence rates in Sri Lanka, 2012 and 2019**

Source: National Cancer Registry Programme

**Table 6.6: Number of deaths due to cancer by age group and sex, 2020**

Age group	Sex	
	Male	Female
Less than 1 year	5	5
1-4 years	21	18
5-16 years	45	28
17-49 years	420	461
50-69 years	1,594	1,267
70+	862	627
<b>Total</b>	<b>2,947</b>	<b>2,406</b>

Source: Medical Statistics Unit

According to Table 6.6, ten infant deaths, 39 deaths from 1-4 years group, and 73 deaths from 5-16 years group occurred due to cancer. Older age groups reported more cancer deaths and data shows that male deaths outnumbered the female deaths.

Male deaths due to malignant neoplasm of trachea, bronchus and lung were more than twice of female deaths due to that type. Furthermore, malignant neoplasm of lip, oral cavity and pharynx (C00-C14), malignant neoplasm of oesophagus (C15) and leukaemia (C91-C95) were among other leading types of male cancer deaths. Data shows that 193 female deaths were due to leukaemia (C91-C95).

**Table 6.7: Number of deaths due to cancer by type of cancer and sex, 2020**

Type of cancer	Sex	
	Male	Female
Malignant neoplasm of trachea, bronchus and lung (C33-C34)	554	201
Malignant neoplasm of lip, oral cavity and pharynx (C00-C14)	321	77
Malignant neoplasm of oesophagus (C15)	251	116
Leukaemia (C91-C95)	239	193
Malignant neoplasm of liver and intrahepatic bile duct (C22)	206	110
Malignant neoplasm of other endocrine, ill-defined, secondary and unspecified sites (C74-C80,C97)	198	112
Malignant neoplasm of other lymphoid haematopoietic and related tissue (C82-C85,C88-C90,C96)	171	132
Malignant neoplasm of prostate (C61)	121	0
Malignant neoplasm of stomach (C16)	105	42
Malignant neoplasm of larynx (C32)	93	9

Source: Medical Statistics Unit

There is a significant difference between male and female deaths due to cancer.

**Table 6.8: Number of deaths due to cancer by type of cancer and age group, 2020**

Type of cancer	Age group					
	Less than 1	1-4	5-16	17-49	50-69	70+
Malignant neoplasm of trachea, bronchus and lung (C33-C34)	1	0	4	86	435	229
Malignant neoplasm of breast (C50)	0	0	1	109	282	88
Leukaemia (C91-C95)	2	16	34	128	159	93
Malignant neoplasm of lip, oral cavity and pharynx (C00-C14)	0	0	0	68	230	100
Malignant neoplasm of oesophagus (C15)	0	0	0	35	213	119
Malignant neoplasm of liver and intrahepatic bile duct (C22)	1	4	1	29	162	119
Malignant neoplasm of other endocrine, ill-defined, secondary and unspecified sites (C74-C80,C97)	1	4	7	49	152	97
Malignant neoplasm of other lymphoid haematopoietic and related tissue (C82-C85,C88-C90,C96)	1	2	4	55	147	94
Malignant neoplasm of female genital organs (C51,C52,C56,C57)	0	0	1	44	150	55
Malignant neoplasm of rectosigmoid junction,rectum, anus and anal canal (C19-C21)	1	0	0	25	98	50

Source: Medical Statistics Unit

### 6.3.2. New Patients Registration at Cancer Treatment Centers

There are nine main cancer treatment centres, one in each province of the country that deliver specialized cancer care. These nine centres are developed as Centres of Excellence (COE) for cancer care. In addition, at the end of 2020, there were 16 other cancer treatment centres available at district level. Since the same patient may register in more than one cancer treatment centre, there is a chance of duplication. Table 6.9 reports new patients reported to NCI Maharagama, NH Kandy, TH Karapitiya and for all other centers.

**Table 6.9: New patient registration at government cancer treatment centers, 2008 - 2020**

Year	NCI Maharagama	NH Kandy	TH Karapitiya	All others	Total
2008	11,163	3,648	1,764	2,734	19,309
2009	11,756	3,634	1,866	3,282	20,538
2010	11,513	4,046	1,793	4,165	21,517
2011	12,403	5,042	2,193	5,819	25,457
2012	12,550	3,717	2,158	7,027	25,452
2013	12,689	3,516	2,455	6,855	25,515
2014	13,247	4,000	2,479	6,615	26,341
2015	13,890	4,023	2,394	8,167	28,474
2016	14,248	3,877	2,595	9,538	30,258
2017	13,651	4,150	2,585	11,278	31,664
2018	14,171	4,042	2,652	14,088	34,953
2019	13,928	3,882	2,473	14,824	35,107
2020	11,864	3,889	2,442	17,668	35,863

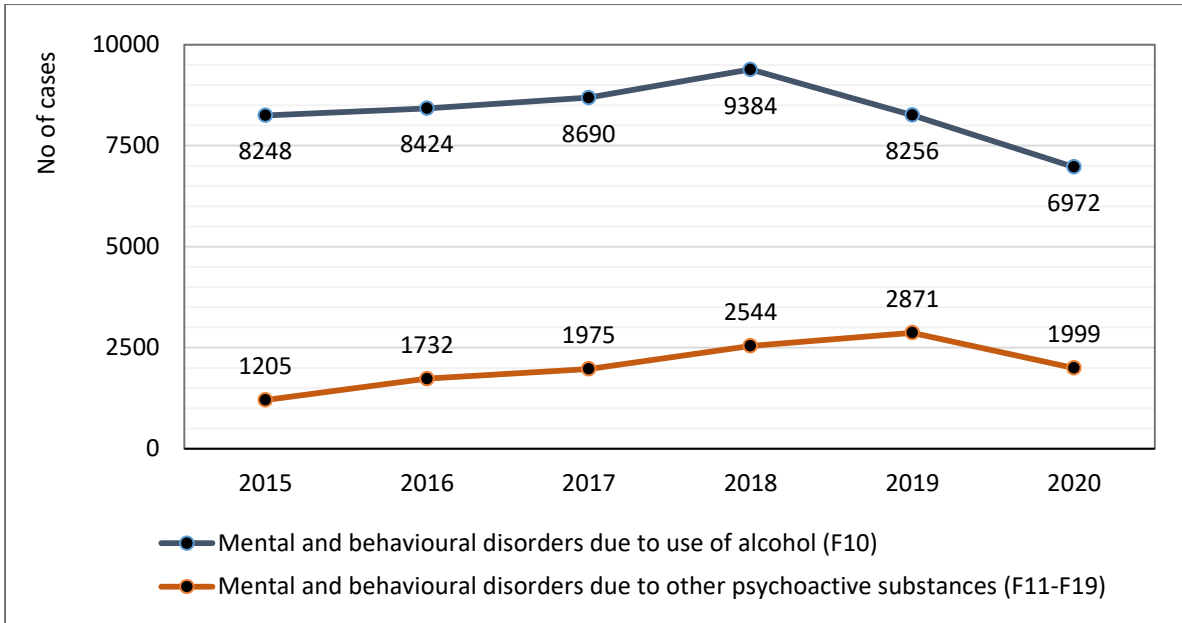
Source: National Cancer Control Programme

Out of all new patient registration in year 2020, one third of patients registered at Apeksha Hospital (National Cancer Institute Maharagama) while 10.8 %, 7.1%, 6.8% and 5.8% were registered at TH Kandy, PGH Badulla, TH Karapitiya and TH Kurunegala.

## 6.4. Directorate of Mental Health

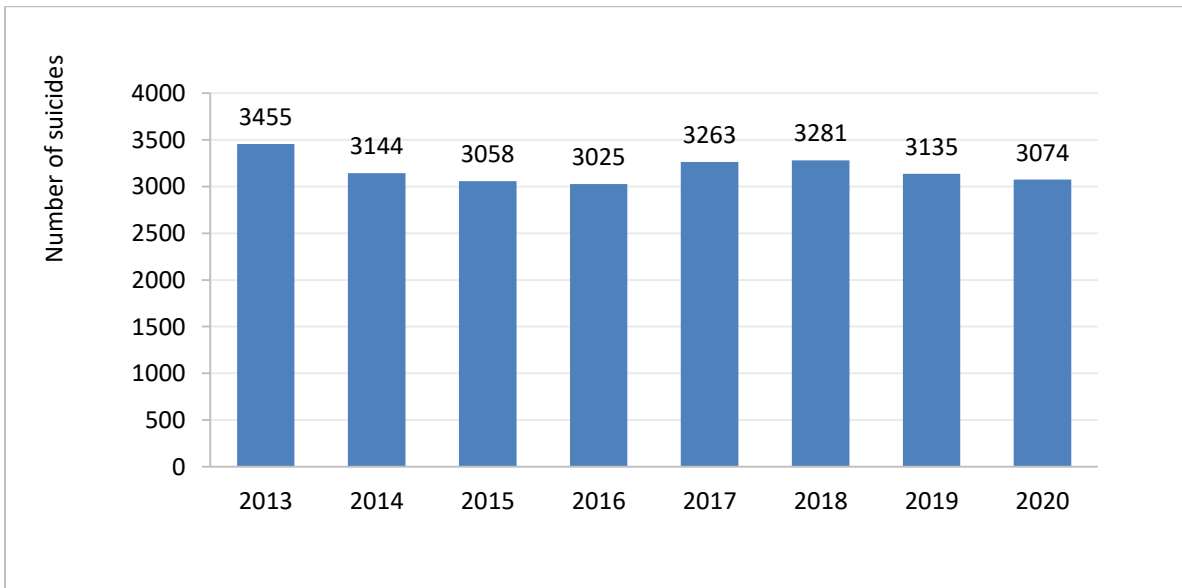
### Mental Disorders

According to the recent past data, people with substance use mental and behavioral disorders are in an increasing trend. Mainly the cannabinoids abuse has become a critical issue in the Sri Lankan context, particularly in the past decade (NDDCB Report, 2019). The increase of numbers is partly due to the improvement and expansion of mental health services provided to persons with substance use disorders.



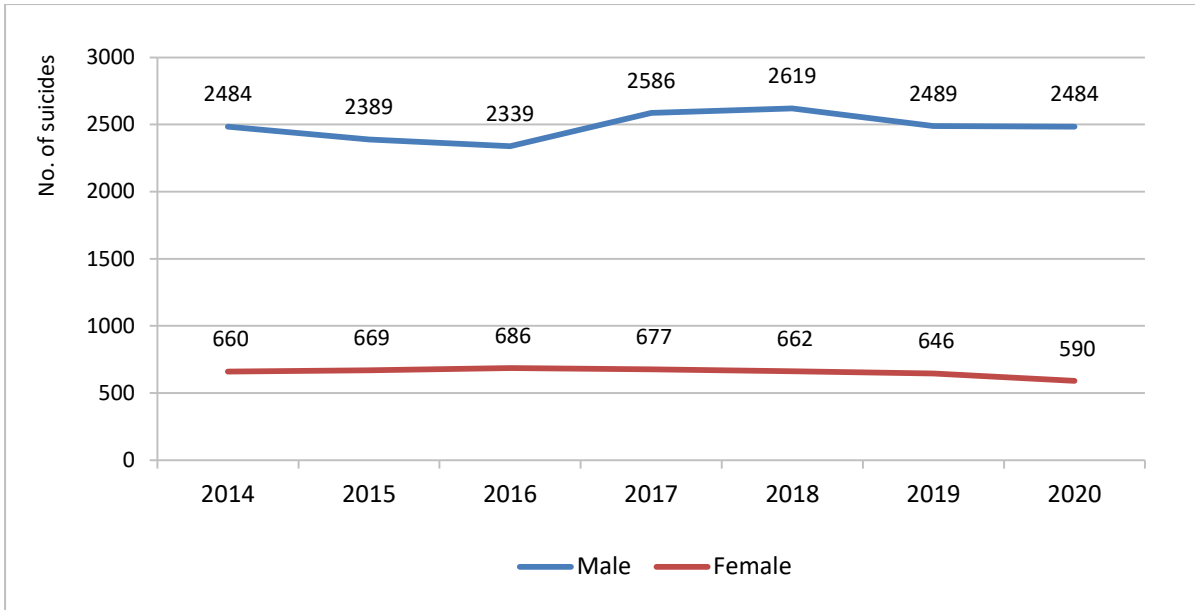
**Figure 6.19: Trends in substance use mental disorders based on hospital admissions, 2015-2020**

Source: Medical Statistics Unit



**Figure 6.20: Reported number of suicides in Sri Lanka, 2013 - 2020**

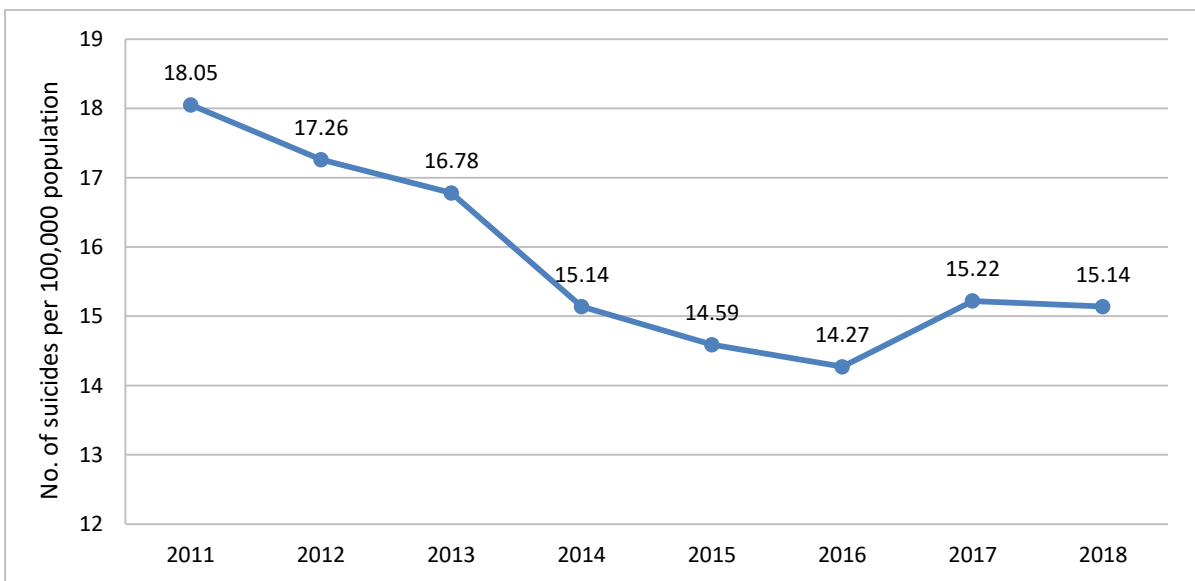
Source: Directorate of Mental Health



**Figure 6.21: Number of suicides by sex, 2014 - 2020**

Source: Directorate of Mental Health

### Trends in Suicides



**Figure 6.22: Suicide rates, 2011 - 2018**

Source: Directorate of Mental Health

Marital disharmony and family disputes were the reason for 19.2 per cent of suicides, the presence of chronic diseases and disabilities were the reason for 12 per cent of suicides and 11.5 per cent of the deaths were due to mental disorders in 2020, which has been increased by 2 per cent as compared to 2019. Reasons were not given for nearly one third of (30.6%) the suicides.



### **Actions Taken in 2020**

- The psychological autopsy tool piloted in Gampaha district with initial training on the autopsy tool.
- Community Support Centers at Ragama, Ambalanthota, Meerigama, Uppuveli and Kegalle were established in collaboration with district mental health teams.
- The process of expansion of 1,926 helpline service was initiated.
- Developed the suicide prevention strategy and action plan in Sri Lanka.

### **Recommendations**

- Helplines and supportive networks are an essential component in suicide prevention, as most suicides occur with impulsive acts. Therefore, it is important to strengthen and expand the helplines in collaboration with National Institute of Mental Health and non-governmental institutions such as CCC foundation and Sumithrayo.
- Establish community support centers in all the medical officer of health areas by 2025 to promote mental well-being, establish psychosocial support network and establish elderly and youth day centers to provide continuous support to all at risk.
- School mental health promotion package and violence prevention program should be implemented country wide.
- Implement effective surveillance system for suicides and attempted suicides /self-harm.

# Risk Factors

# In 2020,



The number of individuals with BMI of more than 25 has doubled within the past 10 years.



Out of all registered pregnancies, 4.1% are teenage pregnancies.



The number of anaemic pregnant mothers are increasing.



One in three pregnant mothers are anaemic.

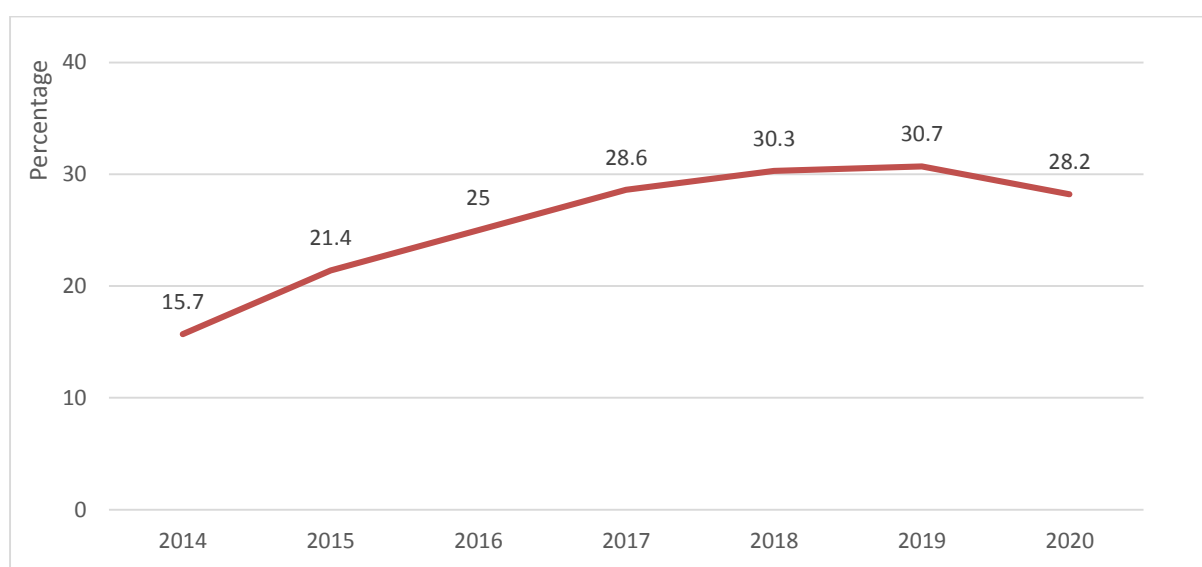
## 7. Risk Factors

This chapter describes the current status of several risk factors for maternal and child health and non-communicable diseases. Among risk factors, anemia, low/high BMI during pregnancy, risk factors related to nutritional status, risk factors related to adolescent health and gender based violence are highlighted.

### 7.1. Maternal and Child Health

#### Anaemia in pregnancy

Maternal nutritional status is closely related to the nutritional status of the foetus and later on the child's nutritional status. Therefore, maternal nutritional status needs to be closely monitored for the early detection of aberrations to prevent adverse outcomes of pregnancies associated with poor nutritional status.



**Figure 7.1: Percentage of pregnant mothers with anemia during 26<sup>th</sup> - 28<sup>th</sup> weeks of gestation, 2014 - 2020**

*Source: Family Health Bureau*

Anemia among pregnant women is on the rise and in 2020 it was reported as 28.2 per cent with a slight reduction.

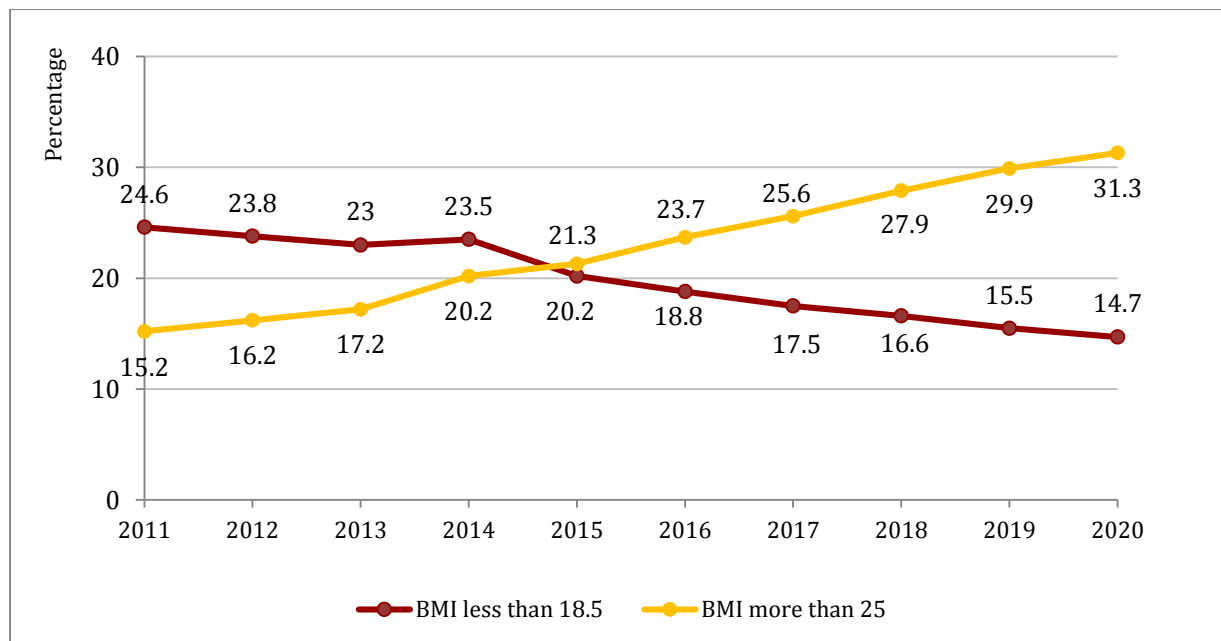
#### Recommendation

Usual cutoff level of hemoglobin is 11 g/dl and this cutoff is not applicable for Sri Lankan settings. A decision has been taken to revise the cutoff points for moderate anemia and it was agreed at the Technical Advisory Committee of Maternal Care and Family Planning to revise cutoffs for Sri Lanka from the year 2021.

## BMI in pregnancy

Sri Lanka is experiencing a significant burden of maternal malnutrition. Prevalence of low body-mass index (BMI < 18.5 kg/m<sup>2</sup>) among the first trimester pregnant women has decreased from 24.6 per cent in 2011 to 14.7 per cent in 2020. In contrast, there had been an increase in overweight (BMI ≥ 25 kg/m<sup>2</sup>) from 15.2 per cent to 31.3 per cent during the same period.

The government health sector provides a package of nutrition specific interventions that are delivered through antenatal and postnatal care in view of uplifting the nutritional status of pregnant mothers in the country. As part of a preventive approach, through a pre-pregnancy care programme, newly married women are educated on achieving a healthy weight via diet and exercise before becoming pregnant.



**Figure 7.2: Percentages of pregnant mothers at risk BMI levels, 2011 - 2020**

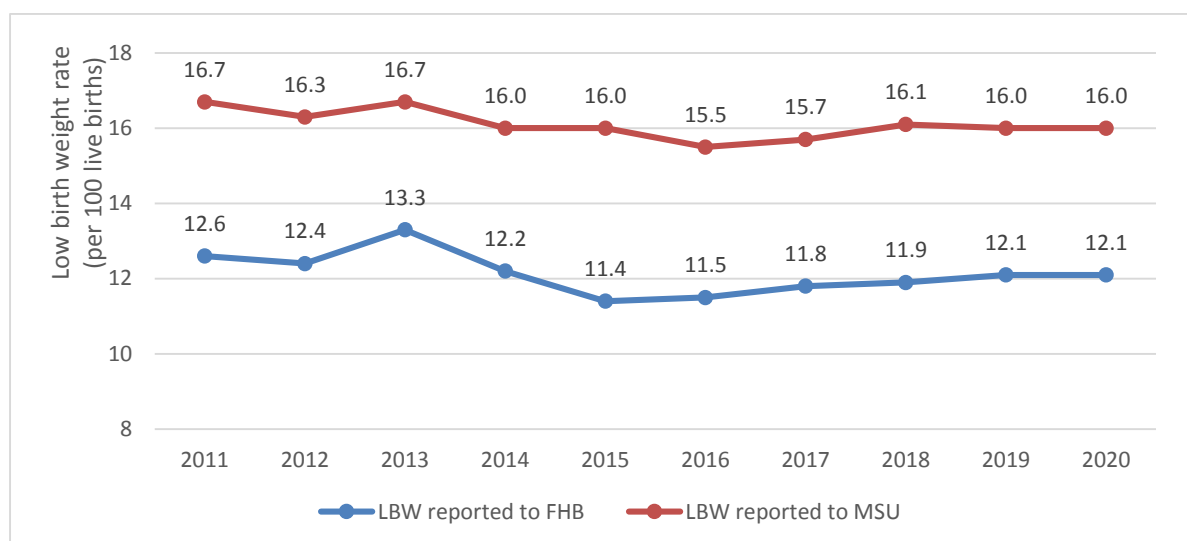
*Source: Family Health Bureau*

## Recommendation

To overcome the issue of maternal over weight and obesity, a targeted package would be developed for preconception care and for the inter-pregnancy period.

More field level activities to achieve pre pregnant weight following pregnancy should be carried out to prevent overweight and obesity in subsequent pregnancies.

## Low birth weight among new-born



**Figure 7.3: Low birth weight rate among new-born, 2011 - 2020**

Source: Family Health Bureau and Medical Statistics unit

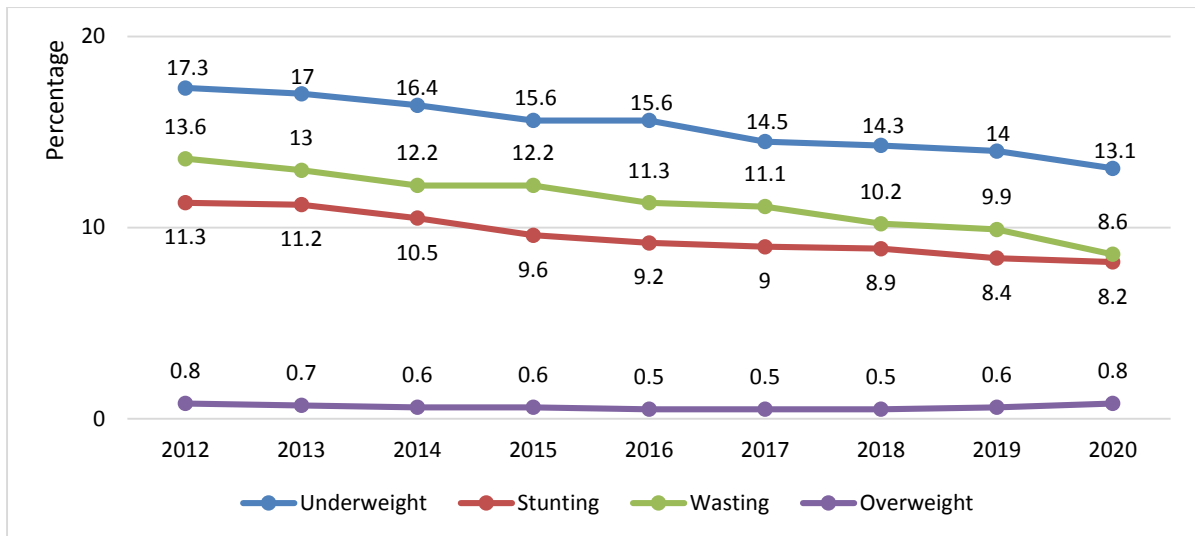
According to the figure 7.3, low birth weight rate reported to Medical Statistics Unit from hospitals were higher than the eRHMS value. This discrepancy in reporting needs to be verified at field level supervision.

## 7.2. Nutrition Status

### Children under the age of 5 years

FHB conducts an annual population-based survey of child nutrition status during National Nutrition Month as a measure of rejuvenating child nutrition services and also as a measure of obtaining comprehensive prevalence data.

According to this activity which was conducted amid the COVID-19 pandemic during the month of October in the year 2020, the declining trend which was seen over the years continues in all three indices pertaining to under-nutrition of children under the age of 5 years; underweight (weight for age < -2SD), stunting (length/height for age < -2SD) and wasting (weight for length/height < -2SD). When classified according to recently revised WHO-UNICEF population cut-offs, Sri Lanka is a low prevalent country with regard to chronic under nutrition since the prevalence of stunting is 8.2% (cut off for low 2.5 - < 10) but with a medium prevalence of acute under-nutrition with wasting at 8.6% (medium 5 - <10 ). The overweight rate among children under the age of 5 years continues to remain at the same low level (0.8% in the year 2020) (WHO-UNICEF cut-off for very low <2.5%). Figure 7.4 shows malnutrition status from 2012 to 2020



**Figure 7.4: Malnutrition status of under 5 children, 2012 – 2020**

Source: Family Health Bureau

### Actions taken in 2020

- Annual Nutrition Month survey was further improved by introducing segregation of data by different sectors to further enable Divisional, District, Provincial and National health authorities to plan and carry out more sector specific interventions.
- As one measure to mitigate the effect of the COVID-19 pandemic on the capacity building of health staff, work was initiated to convert standard training packages on IYCF and GMP into e-training modules. Once completed, it is expected that this training package will reach a wider audience and also will improve their knowledge of child nutrition to streamline service provision including supportive supervision, mentoring and monitoring of community-level health service providers in child nutrition. Guidance to field health staff on advice to parents and caregivers to safeguard the nutritional status of children during the COVID-19 pandemic was developed.
- A qualitative study on determinants of infant and young child feeding practices and child care in rural, estate and urban sectors was carried out to identify drivers of and barriers to appropriate feeding practices with a view to developing a Social Behavior Change Communication (SBCC) strategy.
- Several initiatives were taken to minimize the negative impact on nutritional status of children due to restrictions imposed upon routine growth and nutrition promotion activities carried out by field care services and the hospitals during pandemics such as; community awareness through social media (i.e. Facebook posts) on protecting nutrition of children during difficult times, printing and distribution of Complementary Feeding booklet in Sinhala and Tamil with donor support to guide caregivers on proper infant and young child feeding practices.

## Recommendations

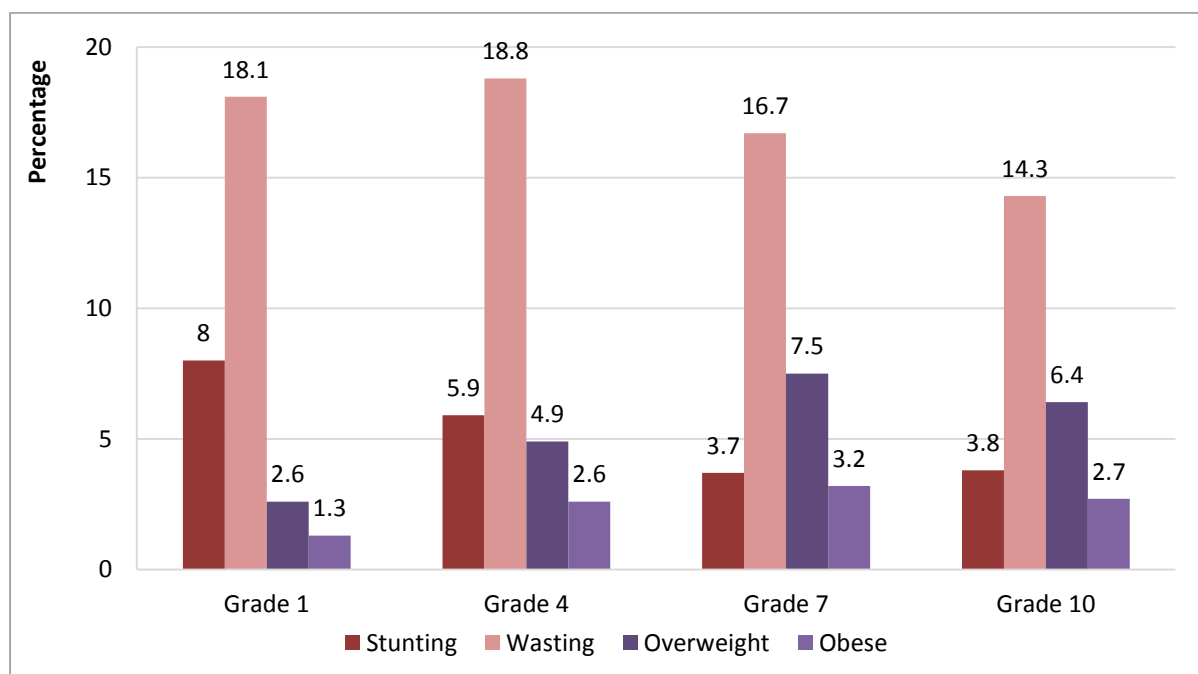
- Extensive effort should be taken targeting further improvement of quality and coverage of these nutrition specific interventions which should include increasing cadre, human resources, their capacities to provide nutrition interventions and providing required facilities for quality service provision from grass root level upwards.
- Nutrition specific interventions implemented by Ministry of Health to be further successful, a supportive environment should also be created by the non – health sector through inter sector collaboration which should encompass implementation of nutrition sensitive interventions such as ensuring food security, poverty alleviation and support for proper child care.

## Malnutrition among school children

During the School Medical Inspections (SMIs) students are assessed for their nutritional status. Stunting is assessed in grades 1, 4, 7 and 10. In 2020, due to COVID-19 pandemic situation most of the schools were closed and SMI programme were carried out only in 54% of schools. Among SMI completed schools 8% and 6% of children in Grades 1 and 4 were stunted respectively.

In 2020, wasting was more common among Grade 1 and 4 students, 18.1% and 18.8% respectively. The highest rate of over weight was reported among children in Grade 7 (7.5%), while among children in grade 10 it was 6.4% percent (Figure 7.5).

Highest rate of obesity was noted among Grade 7 students and it was 3.2%. It was 2.7% among grade 10 students.



**Figure 7.5: Percentages of school children by malnutrition indicator and grade, 2020**

Source: Family Health Bureau



## COVID-19 response activities towards school children

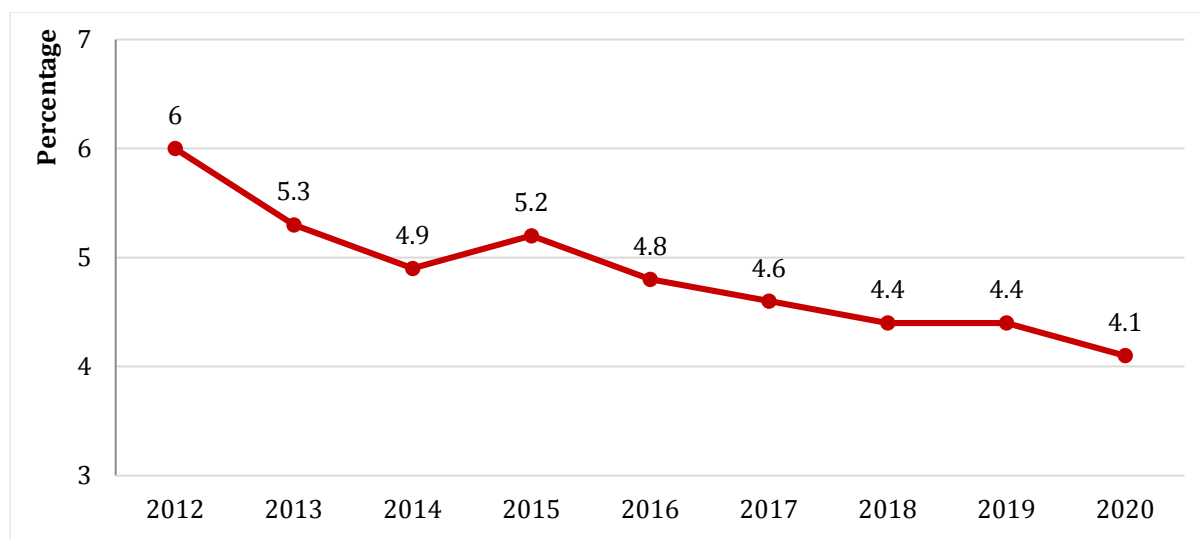
FHB provided guidance to the educational sector on prevention of COVID-19 at school immediately after the first case identified in the country in March 2020. Circular guidelines were issued on Preparedness and Response for COVID-19 outbreak in school setting, sports activities in school settings, guidance for school re-opening etc. Ministry of Education established infrastructure facilities in schools to implement guidelines given. Videos for parents and adolescents with the advice to spend the locked down season effectively was developed and handed over to Ministry of Education. Guidelines were issued on continuation of school nutrition programme as dry rations. Micronutrients for school children were delivered to parents with the instruction leaflets through public health staff during the period of school closure. Grade 5 scholarship exam and the G.C.E. A/L examinations were conducted successfully in October 2020 and support given by the peripheral health staff was highly appreciated. COVID-19 positive students were allowed to sit for the exam while remaining in the treatment centers. Quarantined children from Gampaha district were allowed to sit for the exam in identified exam centers in the same area even though they were going to schools in other districts. District secretariat arranged transport facilities for these children.

## 7.3. Adolescence Health

### Teenage pregnancies

There has been a gradual reduction in percentage of teenage pregnancies reported over the past decade, where it was 6% in 2012 and 4.1% in the year 2020.

Among teenage pregnant mothers, 80 % of them were in 18-19 age group and 20 % were below 18 years.



**Figure 7.6: Percentages of teenage pregnant mothers, 2012 - 2020**

Source: Family Health Bureau

## **Following interventions were carried out to address sexual and reproductive health risk among adolescents**

- Development of life skills including assertiveness to avoid risk behaviors is currently been carried out through citizenship education and health science curriculum for school children in grade six and above.
- During a situation where teenagers are at high risk of sexual and reproductive health issues including teenage pregnancy, getting exposed to sexually transmitted diseases and becoming victims of sexual violence, services are provided at field and hospital level to address sexual and reproductive health issues of an adolescent. These services are provided at the best interest of the child after case-by-case assessment and include family planning services, sexual and reproductive health education, parent education, counselling services and appropriate referral.
- Sexually transmitted infections including HIV/AIDS prevention, referral and management services are available at Medical Officer of Health Office, Yowun Piyasa clinics and STI clinics while prevention and management of the victims of gender-based violence is done at Mithuru Piyasa centers at hospitals with the support of field staff. Services are provided without any discrimination in equitable manner.
- Service package on adolescent sexual and reproductive Health; life-skill education and skill development of adolescents to protect from unhealthy sexual relationships and protect from abuse is carried out at field, schools, youth training centers and Yowun Piyasa centers.

## **7.4. Gender Based Violence**

Gender-based Violence (GBV) is recognized as a major public health issue that results in a wide range of consequences to the survivors creating a negative impact on children, and acting as an inhibiting factor towards the family wellbeing. Every one-in-third woman all over the world suffers from Intimate Partner Violence (IPV) (WHO 2014). Although this is a common problem, it is also considered a hidden problem as most of the women do not reveal about their sufferings due to reasons such as culture, fear of reprisal, and concern over children, shame, and internalizing the violence.

Health sector response within a country is often the initial, and crucial response to GBV from governments. As such, all countries in the region, including Sri Lanka, have addressed this issue through the health sector to a varying extent.

Health sector in Sri Lanka has responded favourably by addressing GBV in the areas of prevention as well as in the response to the survivors, in an effective manner, cross-cutting the health sector. FHB is the nodal agency at the national level responsible for addressing GBV in the health sector. The programmes implemented by FHB include programmes which focus mainly on,

- i. Prevention of GBV,
- ii. Programmes centered mainly on the provision of care for survivors of GBV,
- iii. Programmes concentrating on both prevention of GBV and provision of care for survivors of GBV,
- iv. Activities and events set to create an enabling environment to strengthen the health sector response to GBV.

**Table 7.1: Number of services provided by type of service, 2016 – 2020**

Service		2016	2017	2018	2019	2020
No. of new survivors identified	Men	1,365	2,649	2,766	2,560	3,628
	Women	4,769	6,157	8,495	11,235	13,961
No. of survivors given emotional support		3,298	4,103	5,787	7,726	9,153
No. of survivors referred for further care		1,096	2,438	3,016	3,636	3,946

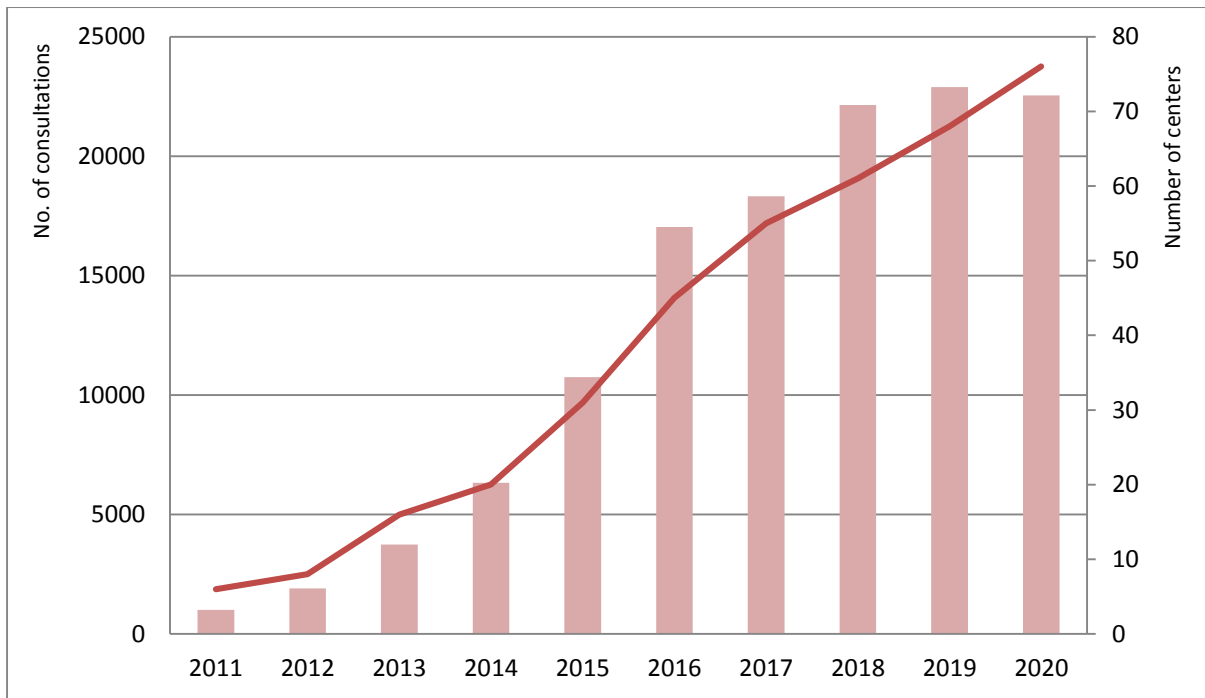
Source: Family Health Bureau

**Table 7.2: Number of services provided by Mithuru Piyasa centres, 2011 – 2020**

Services	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Mithuru Piyasa centres	6	8	16	20	31	45	55	61	68	76
New survivors seeking care over the Year	447	870	1,722	2,949	4,670	7,577	7,463	8,943	9,426	9,735
Subsequent consultations held with survivors	230	355	726	1,360	2,683	4,131	4,743	5,579	5,966	5,581
Consultations held with family members of survivors	232	432	827	1,309	2,135	3,077	3,276	4,418	4,445	4,003
Consultations held with perpetrators	101	249	471	717	1,261	2,243	2,834	3,205	3,049	3,229

Source: Family Health Bureau

Establishment of Gender Based Violence Care Centres named “Mithuru Piyasa / Natpu Nilayam” at hospitals, which are dedicated to provide essential medical care and basic emotional support to survivors of GBV is designed to respond to survivors in an effective manner. There were 76 “Mithuru Piyasa” centres established in the country by the end of year 2020.



**Figure 7.7: Number of Mithuru Piyasa centres and consultations done at centres, 2011 - 2020**

Source: Family Health Bureau

## 7.5. Chronic Non-Communicable Diseases

### Prevalence of behavioral and intermediate risk factors for NCD

Screening for chronic NCDs and their risk factors are carried out in Healthy Lifestyle Centres (HLC). During 2020, more than 300,000 clients were screened at HLCs for chronic NCDs and selected behavioural and intermediate risk factors.

The prevalence of behavioral and intermediate risk factors of NCDs among the screened population is shown in Table 7.3

**Table 7.3: Prevalence of behavioral and intermediate risk factors among the screened population, 2015-2020**

Behavioral or intermediate risk factor		2015	2016	2017	2018	2019	2020 <sup>1</sup>
Total population screened		383,161	391,260	313,699	548,048	605,148	321,055
Fasting blood glucose $\geq$ 126 mg/dl	No.	41,372	33,845	60,998	62,465	59,739	25,291
	%	10.6	10.8	11.1	11.0	17.2	14.2
Raised blood pressure (systolic $\geq$ 140 mmHg and/or diastolic $\geq$ 90 mmHg)	No.	89,862	74,387	110,549	96,757	109,018	58,692
	%	23.0	23.7	20.2	16.9	18.0	17.8
Overweight (BMI 25-29.9 kg/m <sup>2</sup> )	No.	99,873	78,695	136,137	150,098	175,021	101,712
	%	25.5	25.1	24.8	26.3	30.1	29.1
Obese (BMI $\geq$ 30 kg/m <sup>2</sup> )	No.	32,300	24,955	41,440	47,888	67,526	38,992
	%	8.3	8.0	7.6	8.4	11.6	11.2
Current tobacco smokers	No.	26,826	21,356	30,986	33,277	37,004	22,580
	%	6.9	6.8	5.7	5.8	5.9	6.5
Current tobacco chewers	No.	53,651	45,230	66,265	71,777	75,484	47,880
	%	13.7	14.4	12.1	12.6	12.0	13.7
Current alcohol users	No.	29,836	25,339	41,829	44,200	53,153	32,982
	%	7.6	8.1	7.6	7.7	8.5	9.4
With 10-year CVD risk > 30%	No.	2,268	908	1,794	1,563	2,150	1,949
	%	0.6	0.3	0.3	0.3	0.4	0.8

Source: Directorate of NCD

<sup>1</sup>HLC services were at a halt due to COVID 19 pandemic in the year 2020.

RDHS-wise prevalence of behavioral and intermediate risk factors of NCDs among the screened population in the year 2020 is given in Table 7.4.

**Table 7.4: Prevalence of behavioral and intermediate risk factors among the screened population by RDHS, 2020**

RDHS Division	Target population	Screened population	% with blood glucose $\geq 126$ mg/dl	% with raised blood pressure (systolic $\geq 140$ and/or diastolic $\geq 90$ mmHg)	% of BMI 25 - 29.9	% of BMI $\geq 30$	% of Smokers detected	% of Tobacco chewers detected	% of Alcoholic users	% with CVD risk $>30$
Colombo	982,000	5,950	19.17	17.2	37.8	15.2	20.0	5.5	34.3	0.1
Gampaha	969,200	19,450	17.98	16.6	34.1	13.8	19.1	7.4	30.3	0.7
Kalutara	384,400	14,465	13.19	14.8	18.4	12.3	19.0	11.3	37.0	0.8
NIHS	130,400	5,303	10.20	12.1	22.6	20.5	28.3	4.7	37.2	1.5
Kandy	593,200	21,049	17.71	20.2	32.0	9.9	25.2	11.5	36.7	1.0
Matale	210,000	8,784	14.43	21.7	20.7	10.7	20.3	12.1	33.7	0.8
Nuwara Eliya	309,200	13,950	13.09	21.9	24.7	7.6	31.5	21.5	51.9	1.1
Galle	454,000	10,776	14.19	21.1	25.4	14.7	21.0	5.7	29.3	3.9
Matara	346,400	12,346	13.26	16.7	25.6	7.9	17.1	8.1	25.8	0.8
Hambantota	267,200	20,530	12.28	14.8	26.1	8.6	21.3	14.2	30.0	0.3
Jaffna	248,400	15,296	21.59	26.6	30.6	12.2	13.1	12.1	15.7	0.8
Kilinochchi	52,000	2314	12.15	14.1	30.2	12.7	15.3	14.2	18.2	1.4
Mullaitivu	39,200	2,521	16.76	20.3	27.0	9.4	15.6	14.6	24.9	2.5
Mannar	44,800	3,481	21.00	24.7	32.7	12.8	19.1	12.0	28.1	0.2
Vavuniya	76,400	4,773	12.72	13.6	27.7	10.5	29.4	21.6	31.1	0.2
Batticaloa	231,600	12,335	10.95	29.3	29.2	11.6	14.6	16.5	23.8	0.6
Ampara	101,200	4,585	8.53	14.3	28.8	10.1	19.8	18.5	31.1	0.4
Kalmunai	193,200	13,012	15.89	10.2	31.5	13.3	12.2	9.2	8.1	0.2
Trincomalee	172,400	8,115	20.32	16.8	34.8	18.5	23.4	13.2	18.2	1.1
Kurunegala	690,400	15,709	14.94	19.1	30.3	9.4	17.7	11.5	25.1	0.8
Puttalam	334,800	13,843	12.72	13.2	33.2	14.0	15.7	12.1	25.0	1.1
Anuradhapura	377,200	20,178	14.67	20.9	28.8	10.2	23.7	15.9	33.0	0.8
Polonnaruwa	177,200	19,168	12.37	12.3	29.4	10.0	20.5	16.0	31.0	0.1
Badulla	354,400	22,599	9.85	19.3	30.3	9.8	28.8	23.3	52.3	1.2
Monaragala	200,400	4,792	9.41	13.6	33.0	11.3	11.9	22.3	45.7	0.2
Ratnapura	471,600	13,750	11.73	16.8	27.8	8.8	17.2	20.6	32.1	0.3
Kegalle	356,400	11,881	13.13	15.4	28.7	10.0	14.2	8.4	22.0	0.5

Source: Directorate of non-communicable diseases

# Service Coverage

# In 2020,



39.5 % births were **Caesarean** sections.



95 % of registered pregnant mothers visited **at least one field clinic**.



The Unmet need for family planning is **declining**.



## 8. Health Service Coverage

Ministry of Health is responsible for providing health services for all the citizens of the country. The goal is to provide a sufficient quality service to people in need of promotive, preventive, curative, rehabilitative, or palliative healthcare that would achieve potential health gains.

Indicators of service coverage, which are defined as the proportion of people in need of a service that receive it, regardless of quality, are more commonly measured than effective coverage indicators which require the measurement of the intervention effect of the service provided. The assessment of the service coverage indicators is a critical dimension of tracking performance.

### 8.1. Service Coverage Indicators

According to the WHO publication on the 2018 Global Reference List of 100 core health indicators (plus health-related SDGs) ; “Service Coverage” indicators reflect priorities across the spectrum of health services including reproductive, maternal, newborn, child and adolescent, immunization, HIV, TB, malaria, neglected tropical diseases, non-communicable diseases, mental health and substance abuse.

Given below are the service coverage indicators in the 2018 Global Reference List of 100 core health indicators (plus health-related SDGs):

#### **Reproductive, Maternal, Newborn, Child and Adolescent**

- Demand for family planning satisfied with modern methods [SDG 3.7.1]
- Contraceptive prevalence rate
- Antenatal care coverage
- Births attended by skilled health personnel [SDG 3.1.2]  
(Also: institutional delivery – overall and in “baby-friendly” institutions)
- Postnatal care coverage - women
- Postnatal care coverage - newborn
- Care-seeking for symptoms of pneumonia
- Coverage of diarrhoea treatment
- Vitamin A supplementation coverage

#### **Immunization**

- Immunization coverage rate by the vaccine for each vaccine in the national schedule [SDG 3.b.1]

#### **HIV**

- People living with HIV who know their status
- Prevention of mother- to - child transmission
- Antiretroviral therapy (ART) coverage
- HIV viral load suppression

## **Tuberculosis**

- Drug susceptibility testing coverage for TB patients
- TB treatment coverage
- Treatment coverage for drug-resistant TB

## **Malaria**

- Intermittent preventive therapy for malaria during pregnancy (IPTP)
- Use of insecticide-treated nets (ITNs)
- Treatment of confirmed malaria cases
- Indoor residual spraying (IRS) Coverage

## **Neglected tropical diseases**

- Number of people requiring interventions against neglected tropical diseases [SDG 3.3.5]
- Coverage of preventive chemotherapy for selected neglected tropical diseases

## **Screening and preventive care**

- Cervical cancer screening

## **Mental health**

- Coverage of services for severe mental health disorders

## **Substance abuse**

- Treatment coverage for alcohol and drug dependence [SDG 3.5.1]

## **Essential health services**

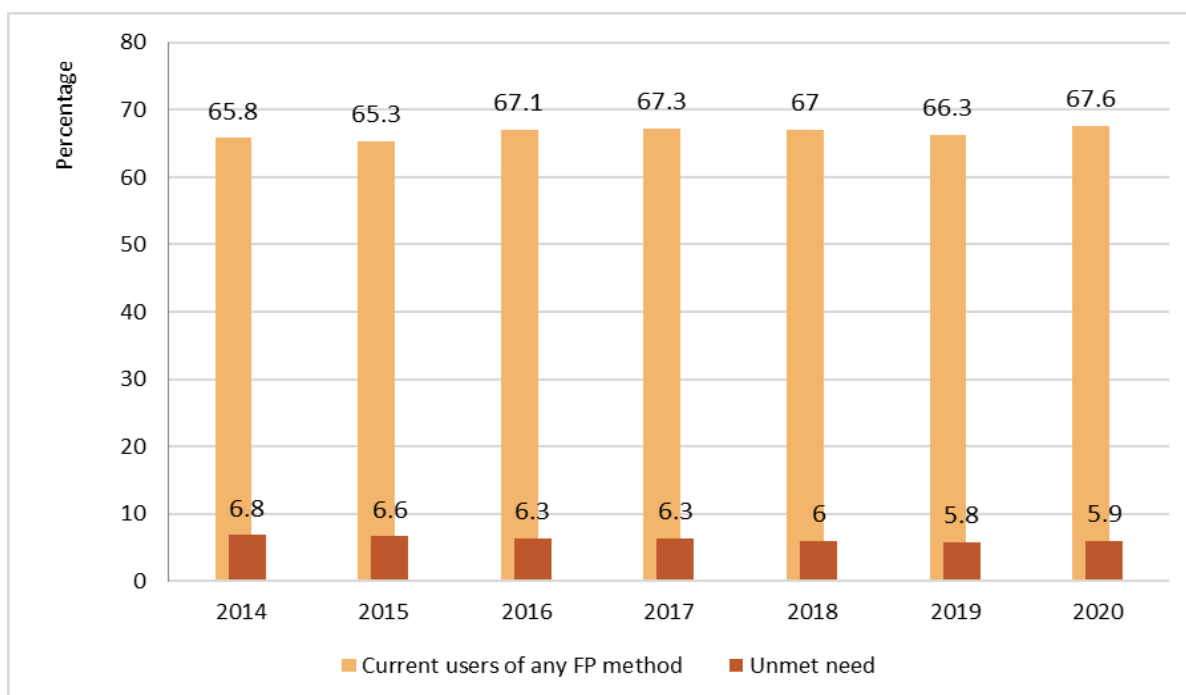
- Coverage of essential health services [SDG 3.8.1]

Out of the above service coverage indicators, some indicators were selected to be included in the Annual Health Bulletin 2020 based on the availability of information through the current routine health information system. Further, related indicators suggested by the service providing agencies were also included in this section.

## **8.2. Reproductive, Maternal, Newborn, Child, Adolescent and Youth Health (RMNCAYHP) Services Coverage**

### **8.2.1. Reproductive Health**

The overall contraceptive prevalence for any method has been stagnant since 2016. The unmet need for family planning reported in 2020 is 5.9 per cent. To improve contraceptive prevalence, strategies have been developed to provide access to young people, private sector employees and women in remote rural areas through partners working in the area of family planning (Figure 8.1).



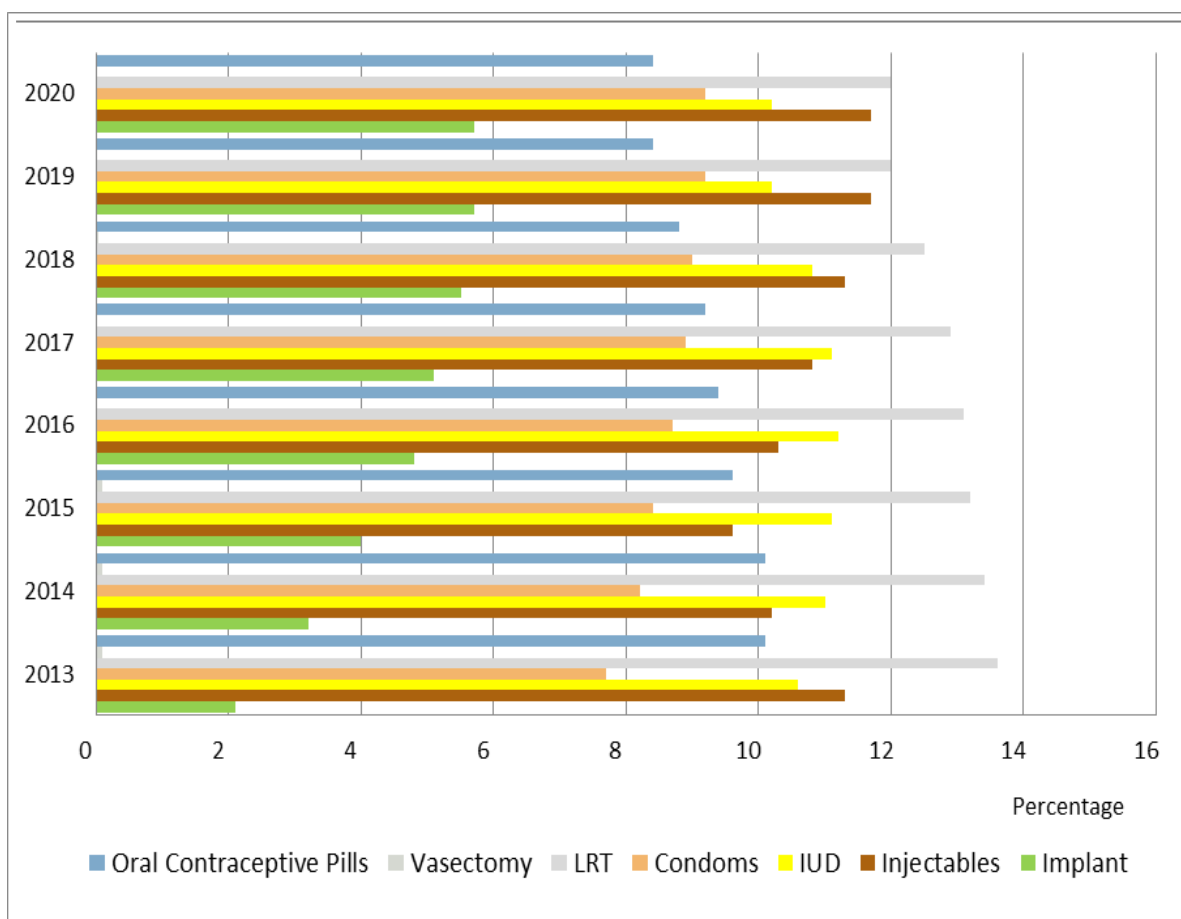
**Figure 8.1: Percentage of current users of any family planning method and the unmet need for family planning, 2014 – 2020**

Source: eRHMS 2020, Family Health Bureau

Figure 8.2 shows the method mix of modern contraceptives from 2013 to 2020. Although the method mix has improved over the years, the permanent family planning methods (Vasectomy Ligation and Resection of Tubes) have declined significantly due to a lack of service availability, especially for vasectomies.

Oral contraceptive pill use and IUD use declined between 2013 and 2020. Injectable users have declined in 2015 and later increased by 2.3 per cent in 2020.

Condom use has increased by 2 per cent and Implants use increased by 3.7 per cent between 2013 and 2020.



**Figure 8.2: Percentages of using of modern family planning methods, 2013 - 2020**

Source: eRH MIS 2020, Family Health Bureau

### 8.2.2. Pre-Pregnancy Care

Sri Lanka is one of the countries in the region to commission a Pre-Pregnancy Care package which was initiated in 2012. Package includes creating awareness, health promotion, screening and other appropriate interventions to reduce risk factors that might affect future pregnancies of the reproductive aged women.

In 2020, out of all primi mothers registered by PHMs, 57.1 per cent have attended at least one session of pre-conception care and 39.9 per cent have attended both sessions.

### 8.2.3. Antenatal Care Coverage

The registration of pregnant mothers has been more than 90 per cent over the years. Out of them, over 80.9 per cent registered for care before 8 weeks of amenorrhea and this number has been rising over the last few years from 75.4 per cent to 80.9 per cent. Protection for Rubella with immunization before pregnancy, protection for Tetanus, antenatal screening for Syphilis and testing for blood group at the time of delivery has achieved almost universal coverage.

**Table 8.1: Percentages of pregnant mothers registered at PHMs by type of antenatal care, 2015 - 2020**

Indicator	2015	2016	2017	2018	2019	2020
Pregnant mothers registered by PHMs out of estimated pregnancies (%)	93.5	99.1	95.6	98.3	93.4	89.5
Pregnant mothers registered before 8 weeks (%)	77.1	78.5	79.4	79.8	80.6	80.9
Pregnant mothers registered between 8-12 weeks (%)	16.5	14.9	14.3	13.8	13.0	12.6
Pregnant mothers protected with Rubella at registration (%)	97.6	96.6	98.2	98.5	98.5	98.5
Pregnant mothers tested for VDRL at the time of delivery (%)	98.7	99.9	98.7	99.1	99.5	98.4
Pregnant mothers' blood group tested at the time of delivery (%)	99.0	99.9	99.4	99.6	99.7	99.7
Pregnant mothers protected for Tetanus out of reported deliveries (%)	99.3	99.9	99.3	99.5	99.6	99.6

Source: Family Health Bureau

**Table 8.2: Antenatal service coverage by public health staff, 2015 - 2020**

Indicator	2015	2016	2017	2018	2019	2020
Registered pregnant mothers visited at least once at home by PHM (%)	88.5	90.3	90.9	91.9	94.3	94.2
Registered pregnant mothers attending at least one field clinic visit (%)	94.6	94.7	96.3	95.8	95.4	95.6

Source: eRHMS, Family Health Bureau

In 2020, 94.2 per cent of registered pregnant women were visited at least once at home by the PHM, and 95.6 per cent of them have made at least one field clinic visit.

## 8.2.4. Intra-Natal and Post-Natal Care Coverage

Pregnancy outcome was reported for 85.4 per cent of pregnancies registered with the PHM. Almost all reported deliveries had taken place in institutions and four out of ten reported deliveries were caesarean sections. The percentage of home deliveries has decreased to a very minimum level (0.1%) over the years. The caesarean section rate has gradually increased to 41.7 per cent in 2020. In-depth analysis is needed in the future to identify the underlying reasons. Obstetric transition, indirect maternal mortality causes and over-medicalization have been recognized as emerging issues in maternal care. Good quality maternal care services in hospitals should be available to all women through well-organized, better equipped, client-friendly and specialized maternal care units.

Approximately 80 per cent of mothers were visited at home by PHMs at least once during the first ten postpartum days and 77.6 per cent during the first five postpartum days. The average number of postpartum home visits was 2 per mother.

**Table 8.3: Pregnancy outcome and postpartum care for registered mothers, 2015 - 2020**

Indicator	2015	2016	2017	2018	2019	2020
Pregnancy outcome reported out of registered pregnancies (%)	95.8	85.0	86.4	90.5	88.0	85.4
Deliveries reported out of total live births registered by Department of Registrar General (%)	96.2	93.7	92.3	93.5	92.3	95.0
Deliveries reported out of total estimated births (%)	79.5	91.4*	83.9*	85.0*	88.5	85.9
Institutional deliveries out of total reported deliveries (%)	99.9	99.9	99.9	100	99.9	99.9
Caesarean sections out of total institutional deliveries reported (%)	33.8	36.3	37.3	40.8	40.5	41.7
Postpartum (PP) mothers receiving at least 1 visit by PHM during first 10 days out of estimated births (%)	73.6	76.2	80.8	83.8	85.9	80.9
PP visits by PHM around 42 days out of estimated births (%)	63.3	79	77.5	76.5	73.5	70.0
Average number of home visits during first 10 postpartum days	1.7	1.7	1.7	1.8	1.7	1.7
Number of home deliveries	280	222	246	248	257	244
Home deliveries out of total reported deliveries (%)	0.09	0.07	0.08	0.06	0.08	0.09
Untrained deliveries out of total reported deliveries (%)	0.06	0.07	0.06	0.04	0.06	0.05

\*Out of live births registered by Department of Registrar General for the year

Source: eRHMS, Family Health Bureau

## 8.2.5. Infant and Child Care Service Coverage

### Coverage of infant and child care services by field staff

The PHM should register infants for domiciliary and clinic care which includes immunization, growth assessment and development. In 2020, more than 90 per cent of infants have been registered by PHMs, and out of registered infants, 49.1 per cent have been visited by PHM at least once with an average of 7.5 visits per infant, and 100 per cent of the infants registered have been seen by a MOH in their clinics (Table 8.4).

The percentage of infants weighed at weighing posts was 90.2 per cent. Among the 1-2 year old age-group 83.6 per cent and among the 2-5 year old age-group only 81.7 per cent had been weighed. More attention should be paid to increase the 2-5 year weighing coverage by field staff.

Children received Vitamin A mega dose at selected age groups are given in Table 8.4, where approximately three fourth of estimated children in specified age groups had received it. The under reporting of Vitamin A coverage needs to be addressed at all levels.

**Table 8.4: Infant and child care provided by the field staff, 2015 - 2020**

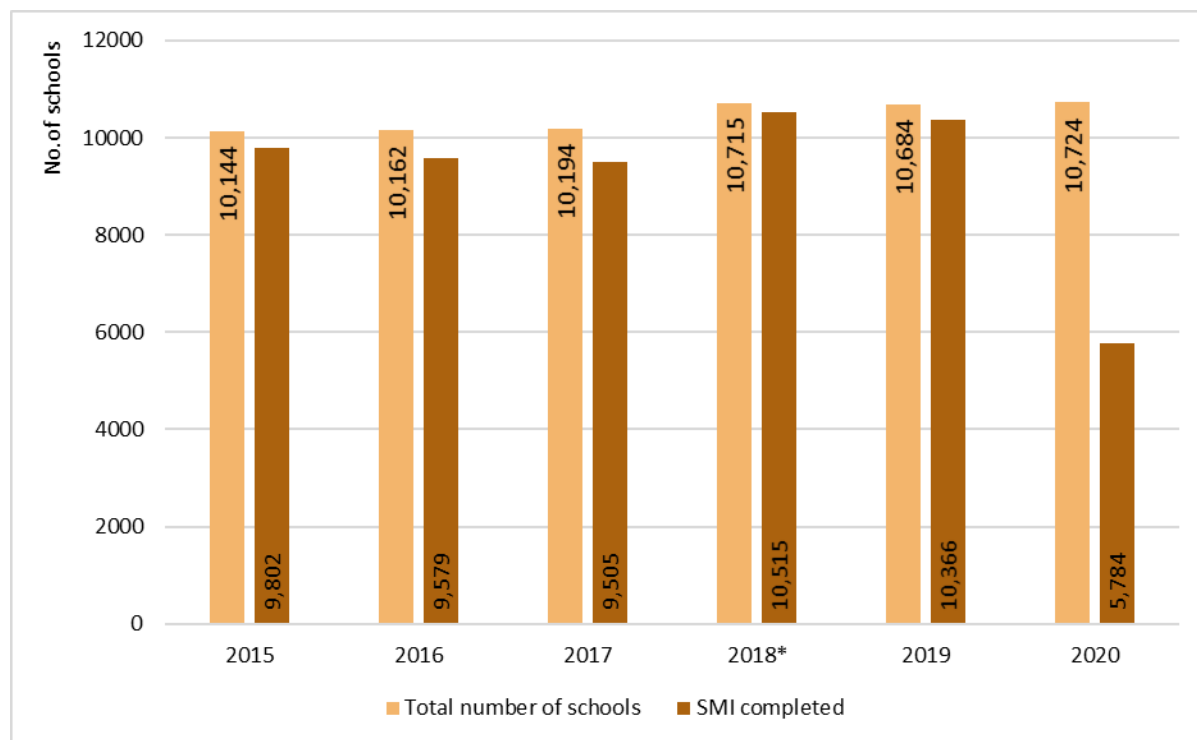
Indicator	2015	2016	2017	2018	2019	2020
Infants registered by PHMM out of estimated births (%)	89.3	95.3*	94.1	95.6	93.8	90.6
Infants having at least 1 home visit after 42 days out of	53.7	53.4	50.3	50.7	51.4	49.1
Average number of home visits per infant	7.0	7.2	6.9	7.0	7.6	7.5
Infants weighed (%)	88.2	88.4	87.5	88.1	90.2	67.8
Infants making at least one clinic visit out of registered infants (%)	100.0	100.0	100.0	110.4	110.0	90.4
Average number of clinic attendance for an infant	4.5	4.7	4.7	4.9	5.1	5.3
Estimated infants given Vitamin A at 6 months (%)	71.6	80.5	78.7	84.5	79.0	78.6
Young children (1-2 years) weighed (%)	80.2	79.2	78.7	81.9	83.6	60.9
Estimated children given Vitamin A at 18 months (%)	74.9	80.6	86.1	86.1	78.6	85
2-5 Year old children weighed (%)	78.7	80.5	80.3	80.2	81.7	62.3
Estimated children given Vitamin A at 3 years (%)	74.5	90.5	91.2	92.9	83.1	87.1

Source: eRHMS, Family Health Bureau

\*Data mentioned for 2016 were based on number of births actually registered by RGD for the year.

### 8.2.6. Coverage of School Medical Inspections (SMI)

There were 10,724 schools and 1,387,595 children to be examined out of the enrolled 502,821 children. Despite the temporary closure of schools, dedicated field public health staff managed to conduct SMIs in 5,784 schools resulting in an overall school coverage of 54 per cent.



**Figure 8.3: Number of schools where SMI were conducted, 2015 - 2020**

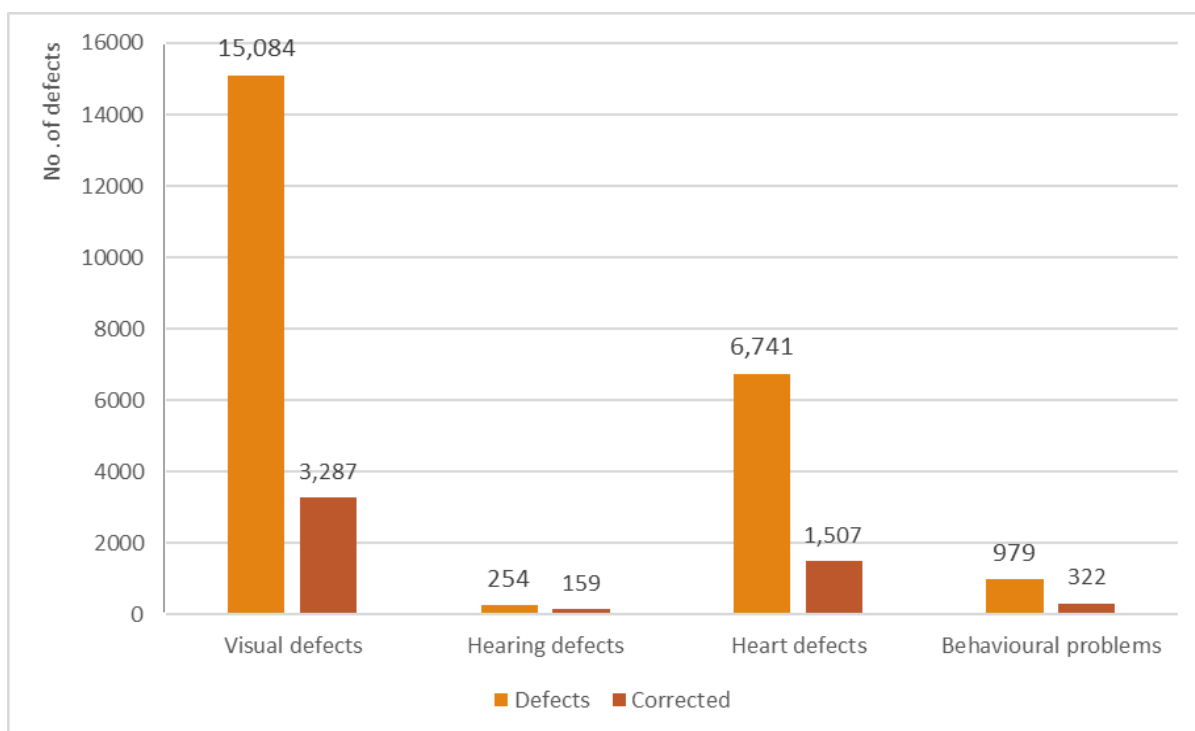
Source: FHB, eRH MIS 2020

\* 2018 data included Government, Pirivenas and some International Schools as well

#### Strengthening follow up of defects detected following SMI

The follow up of children with special needs, suspected heart disease, visual defects & hearing defects has been strengthened. The follow up visits by the PHI for the students identified with correctable defects should be closely monitored at the monthly MOH conferences in order to increase the number of corrected defects. However, the follow-up could not be done properly due to PHIs were totally involved in COVID-19 activities in the year 2020 and the school health services were also severely affected.





**Figure 8.4: Number of selected defects and corrected defects, 2020**

Source: eRH MIS 2020, Family Health Bureau

### School health surveys

It is the responsibility of the range PHI to complete the school health survey annually. It should be completed preferably within the first quarter of the year for timely action. In 2020, school health surveys of 90.5 per cent of the schools had been conducted island-wide despite the COVID-19 pandemic. The proper sanitation, hygiene and use of safe water are vital in providing a safe school environment. Nearly 70.5 per cent of the schools had adequate drinking water sources.

### 8.3. Service Coverage of Sexually Transmitted Infections

Sexually transmitted infections including HIV/AIDS prevention, referral and management services are available at Medical Officer of Health Office, Yowun Piyasa clinics and STI clinics while prevention and management of the victims of gender-based violence is done at Mithuru Piyasa centers at hospitals with the support of field staff. Services are provided without any discrimination in equitable manner.

#### Interventions carried out to address sexual and reproductive health risk among adolescents

Development of life skills including assertiveness to avoid risk behaviors is currently been carried out through citizenship education and health science curriculum for school children in grades six and above.

During a situation where teenagers are at high risk of sexual and reproductive health issues including teenage pregnancy, getting exposed to sexually transmitted diseases and becoming victims of sexual violence, services are provided at the field and hospital level to address the sexual and reproductive health issues of an adolescent. These services are provided in the best interest of the child after case-by-case assessment and include family planning services, sexual and reproductive health education, parent education, counseling services and appropriate referral.

## Service package on adolescent sexual and reproductive health

Service package on adolescent sexual and reproductive health; life-skill education and skill development of adolescents to protect from unhealthy sexual relationships and protection from abuse is carried out at the field, schools, youth training centers and yowun piyasa centers.

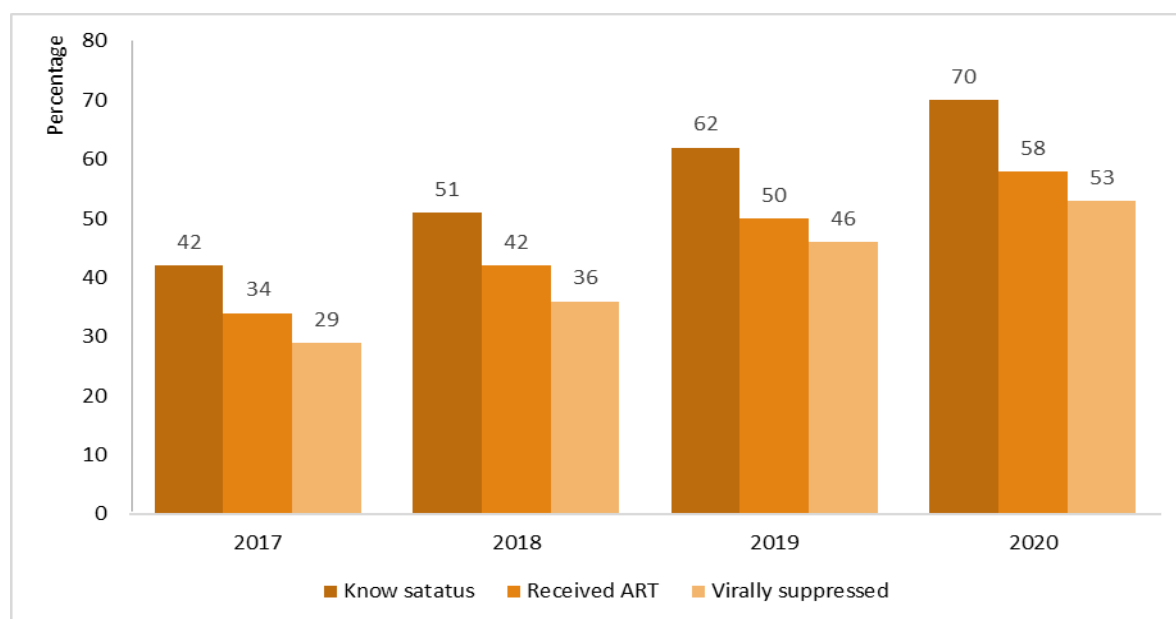
### 8.3.1. HIV Service Coverage

#### People living with HIV who know their status

#### Need to fill the existing gaps in the HIV treatment and care cascade to end AIDS in Sri Lanka.

1. Only 70% of the estimated people living with HIV (PLHIV) know their status.
2. Only 58% of the estimated PLHIV are on antiretroviral treatment.
3. Only 53% of the estimated PLHIV are having suppressed HIV viral levels (viral loads).

Figure 8.5 depicts the HIV treatment cascade analysis during the last four years. According to the latest HIV estimations, the average number of people living with these graphs is prepared take 3,700 (100%) as the common denominator for all these years and all three indicators. i.e. know status, received antiretroviral treatment (ART) and virally suppressed (less than 1,000 copies of HIV per milliliter of blood). As shown in Figure 8.5, the HIV diagnosis (know status) has improved from 42 per cent to 70 per cent. Further, received ART and viral suppression have improved from 34 per cent- 58 per cent and from 29 per cent - 53 per cent respectively over the last four years.



**Figure 8.5: HIV cascade analysis for people living with HIV, 2017-2020**

Source: National STD/AIDS Control Programme

## 8.4. Screening and Preventive Care

### 8.4.1. Coverage of Well Women Services

Well Woman Clinics (WWC) are conducted by Medical Officers of Health (MOHs) and they screen women for hypertension, diabetes, breast/thyroid/cervical cancers (pap smears) and obesity. In addition, WWCs provide family planning services, health education and counseling on issues related to reproductive tract infections, menstrual cycle and menopause.

Main target populations for well-woman services are women aged 35 years and 45 years (since 2018). The Public Health Midwives (PHM) in the MOH area, identify women aged 35 years (those born in 1985) and 45 years (those born in 1975) from the eligible families registered and motivate them to attend WWCs. Table 8.5 shows the number of first visits of women attending WWCs by age 35 years, 45 years and other age groups from 2013 to 2020.

**Table 8.5: Number of first visits of women attending WWCs by age, 2013 - 2020**

Age category	2013	2014	2015	2016	2017	2018	2019	2020
35 Years	73,359	74,871	94,089	111,798	114,314	132,691	129,321	102,389
45 Years	-	-	-	-	-	-	44,634	36,841
Other ages	60,054	55,620	52,675	50,411	46,936	50,469	45,518	22,592
<b>Total</b>	<b>133,413</b>	<b>130,491</b>	<b>146,764</b>	<b>162,209</b>	<b>161,250</b>	<b>183,160</b>	<b>219,473</b>	<b>161,822</b>

Source : eRHMIS, Family Health Bureau

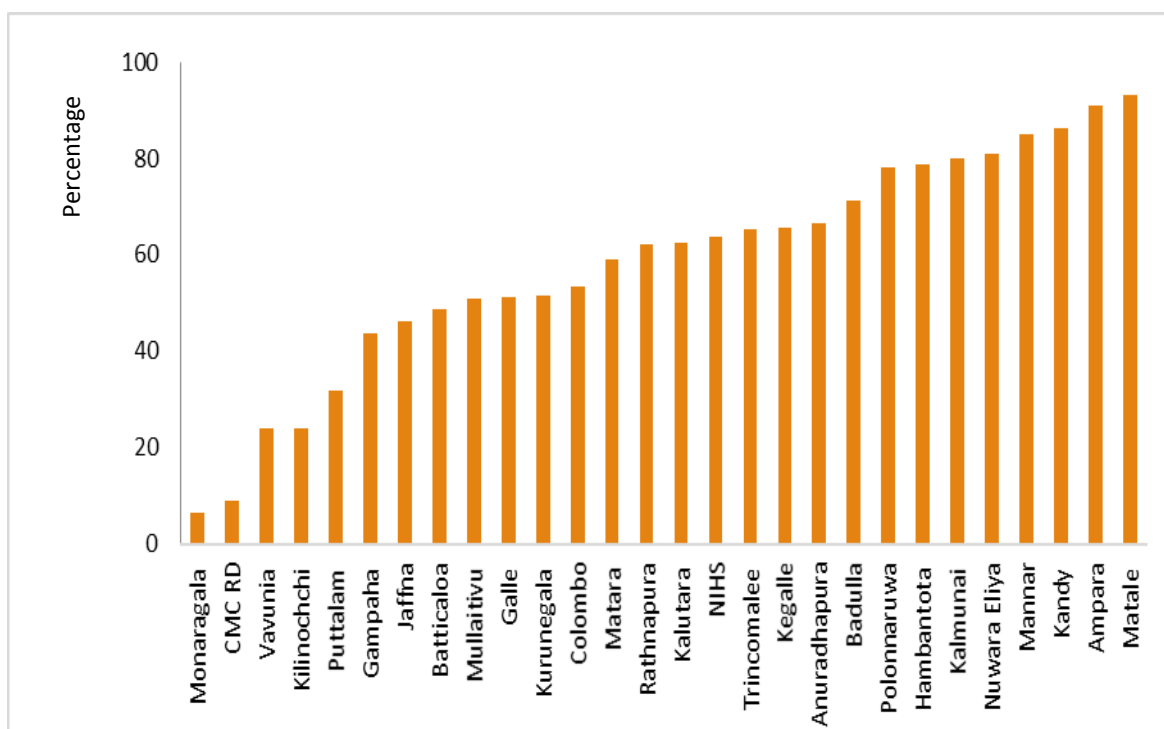
The coverage of women aged 35 years and 45 years attending Well Woman Clinics from 2013 to 2020 is given in the Table 8.6.

**Table 8.6: Percentage of women who attended the WWC, 2013 – 2020**

Category	2013	2014	2015	2016	2017	2018	2019	2020
Women aged 35 years	33.9	34.6	45.1	52.8	53.3	61.6	59.1	58.1
Women aged 45 years	-	-	-	-	-	16.6	25.5	20.9

Source: eRHMIS, Family Health Bureau

The coverage (%) of women aged 35 years attending the WWCs has increased from 33.9 per cent to 58.1 during the period from 2013 to 2020. However, there were disparities across districts during COVID-19 pandemic, WWCs were not conducted, hence the coverage of both 35 and 45 cohorts were reduced.



**Figure 8.6: Percentage of women aged 35 years who attended the WWC, 2020**

Source: eRHMS - Family Health Bureau

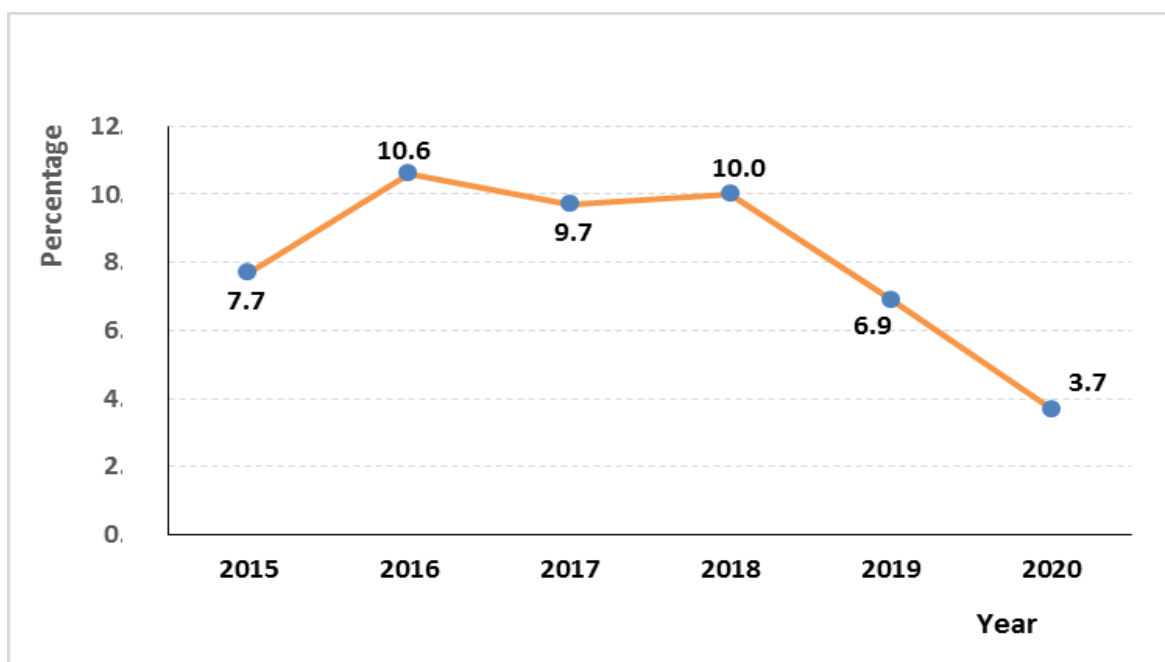
## 8.5. Non-Communicable Diseases Service Coverage

### 8.5.1. Screening at Health Lifestyle Center

NCD screening is carried out by 1002 HLCs established mostly in primary care settings. In 2020, with the COVID-19 pandemic, the functioning of HLCs was affected. The total number screened 321,055 (3.7%) was nearly half when compared to 2019 in which it was 6.9 per cent. However, it is noteworthy that male participation at HLCs was poor with a 2.4:1 female: male ratio.

At HLCs clients undergo an assessment of BMI, hip ratio, blood pressure, blood sugar (fasting or random) and total cholesterol levels, oral examination, breast examination, pap smear by referral to MOH clinic and screening for lifestyle risk factors such as tobacco (including smokeless tobacco) and alcohol use, physical inactivity, unhealthy diet. The WHO / ISH risk prediction chart is used to assess the CVD risk within the next 10 years and if necessary, interventions are offered.

Lifestyle modifications counseling such as cessation of smoking and alcohol use, maintenance of correct BMI, engaging in regular physical activity, taking five servings of fruits and vegetables per day, restricting salt sugar and foods containing trans-fatty acids are offered to clients to cover the major risk factors of chronic NCDs.



**Figure 8.7: Percentage of the target population screened, 2015-2020**

Source: Directorate of NCD

Table 8.7 presents the coverage of screening of the target population by the HLCs across the country.

**Table 8.7: Service of health lifestyle centers in Sri Lanka, 2015-2020**

Indicator	2015	2016	2017	2018	2019	2020
Total number of HLCs	814	826	871	922	1,000	1,002
Cumulative % of the target population screened <sup>1</sup>	23.1	25.5	42.7	58.8	40.6	44.2
Annual screening coverage	391,260	540,535	493,965	511,438	605,148	321,055
% of eligible population screened annually	7.7	10.6	9.7	10.0	6.9	3.7 <sup>1</sup>
Ratio of men: women screened	1: 2.6	1: 2.7	1: 2.3	1:2.2	1:2.6	1:2.4

Source: Directorate of NCD

<sup>1</sup>HLC services were at a halt due to COVID 19 pandemic in the year 2020.

HLC: Healthy Lifestyle Centre

<sup>1</sup> This percentage is calculated from the cumulative number of all eligible participants screened from the year 2011 to 2019. Target population of 40-65-year age group is calculated from the total population as indicated by 2012 Census, up to the year 2018 (5,089,860). For the year 2019, 35 years and above group is calculated from the total population as indicated by 2012 Census (8,856,356).

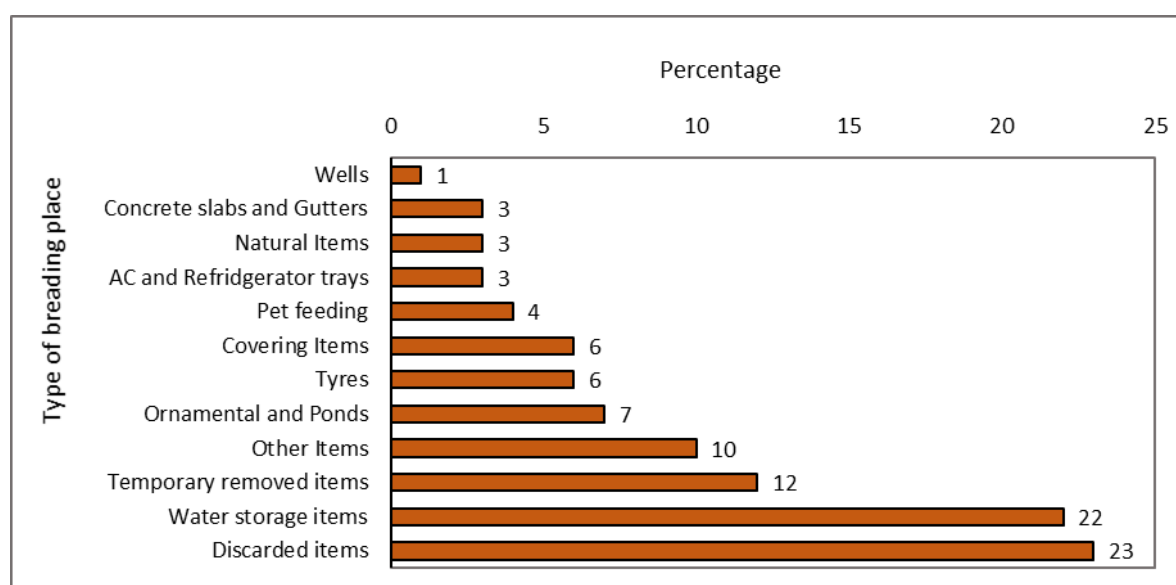
## 8.6. Prevention and Control of Dengue

The overall aim of current dengue prevention and control activities and prompt treatment of dengue is to reduce the risk of dengue transmission, strengthen and sustain the control measures in place and minimize the morbidity and mortality of the disease. This attempts to reduce the impact/burden of dengue by minimizing the clinical, social and economic impact.

In the context of the COVID-19 pandemic, given the logistical and human resource constraints in the public health sector for the prevention of dengue mosquito breeding, field entomological surveys and premise inspection were strengthened by adhering to the COVID guidelines. The entomological findings with mosquito breeding are given in Figure 8.8.

In 2020, of the total breeding sites examined, 23 per cent of the items were discarded items, whereas 22 per cent were water storage containers. It is noted that ornamental items, tyres and covering items polythene sheets, concrete slabs and roof gutters too were positive for *Aedes* mosquito breeding. Despite the low percentage, these places pose a remarkable threat since the productivity of larvae is high in some of these uncommon breeding sites. Outbreaks are recognized and rapid response is initiated, funded and supervised by NDCU. Targeting the outbreak areas, 6 special mosquito control campaigns (SMCC) were conducted in 2020.

According to the data collected from special mosquito control programs, most potential premise types for mosquito breeding were construction sites, factories, schools, religious and public places, etc. Mosquito breeding has been observed in all these sites. Establishing high dependency units in hospitals for the close monitoring and management of dengue patients and strengthening dengue management protocols, by upgrading Dengue Management Guidelines were actions considered. For any patient presenting with fever to the hospital, a triage protocol at OPD/PCU/ETU for fever patients was recommended. The NDCU is also involved in novel strategies for mosquito control such as the implementation of the *Wolbachia* project, partnering with the Monash University, Australia. The release of *Aedes aegypti* mosquito infected with *Wolbachia* was commenced in 2020, supported by molecular assessment for *Wolbachia* frequency among mosquito samples post-release.



**Figure 8.8: Percentages of positivity by type of breeding sites, 2020**

Source: National Dengue Control Unit

# Health System

# In 2020,



4 Hospital  
beds per  
1000 population.



23.4 million  
clinic visits  
reported.



The average  
duration of  
hospital stay  
had declined.



## 9. Curative Care Services

Curative Care Services in Sri Lanka are provided by either government or private sector and the former caters to the top majority. By the end of 2020, inward care was provided by 646 government curative care hospitals. Detailed information about those hospitals is provided in Annexure I, Detailed Table 07. OPD care is provided by all the hospitals and Primary Medical Care Units. Patients who need further treatment and care are directed to inward care. The follow-up services and the continuous series of treatments are provided in clinics conducted by specialists in each discipline or relevant medical staff. In case of unavailability of facilities or staff, patients are transferred to the nearest higher-level hospital.

### 9.1. Inward Care

There is a 22 per cent reduction in number of patients who received inward care in 2020 compared to 2019. The reported number of admissions is 5,785,147 (excluding non-reported hospitals). The inward patient capacity of the hospital system is measured by the hospital bed strength.

#### Hospital beds and bed Strength

In the government health institutions, total bed capacity is 87,280 in 2020. It is a rate of 4.0 beds per 1,000 population. Further information on hospital beds are illustrated in Annexure I, Detailed Table 07. Number of government health institutions and patient beds in Sri Lanka over the period from 2014 to 2020 is presented in Table 9.1.

**Table 9.1: Number of health institutions and hospital beds, 2014 - 2020**

Item	2014	2015	2016	2017	2018	2019	2020
Hospitals	622	631	629	628	641	643	646
Hospital Beds	80,105	80,581	81,580	83,275	84,728	86,589	87,280
Bed Occupancy Rate	61.9	61.3	60.5	63.3	61.1	61.2	48.4 <sup>1</sup>
Bed Turnover Rate	84.4	88.4	88.5	93.8	93.1	97.6	77.3 <sup>1</sup>
Hospital Beds per 1,000 Population	3.9	3.8	3.8	3.9	3.9	4.0	4.0
Inpatient Beds per 1,000 Population	3.6	3.5	3.5	3.6	3.6	3.6	3.6
Central Dispensaries/ Primary Medical Care Units	475	473	480	496	515	522	523
MOH Areas	338	341	342	347	353	356	358

<sup>1</sup>Excluding non - reported hospitals

Source: Medical Statistics Unit

In 2020, overall Bed Occupancy and Bed Turnover reduced due to the COVID 19 pandemic situation. The number of patients admitted for inward care were reduced in almost all the hospitals other than the hospitals reserved as COVID - 19 treatment centers.

The use of hospital beds is indicated by Bed Occupancy Rate (BOR). In 2020, the highest BOR was reported from Madampe hospital(DHC) in Ratnapura district (158.3 %) and this is due to the lower number of bed availability. Padukka, Athurugiriya, Neriyaikulam and Handapanagala Divisional Hospitals have reported BOR over 90 per cent due to the same reason. Among the main hospitals, the highest BOR was reported in Tangalle Base Hospital (94.1 %). BOR of Teaching Hospitals and Provincial Hospitals were in the range of 30-70 per cent. Most of the District General Hospitals (DGHs) were in the range of 40 - 80 per cent.

16 Divisional Hospitals have reported BORs less than 5 per cent. Deegawapiya and Palam Kotte are the lowest, where the BOR is less than 1 per cent.

Distribution of hospital beds by type of institution is illustrated in the Table 9.2.

**Table 9.2: Availability of hospital beds by type of institution, 2020**

Type of institution	Number	Hospital beds (range)	Average number of hospital beds	Number of hospitals having Less than average number of hospital beds
Teaching Hospitals	18	287 - 3,227	1,287	11
Provincial General Hospitals	2	1,586 - 2,465	2,026	1
District General Hospitals	20	230 - 1,225	692	10
Base Hospitals - Type A	33	19 - 627	322	18
Base Hospitals - Type B	50	8 - 403	162	32
Divisional Hospitals - Type A	67	32 - 218	90	35
Divisional Hospitals - Type B	147	14 - 283	60	75
Divisional Hospitals - Type C	267	2 - 110	28	139
Primary Medical Care Unit and Maternity Homes	7	8 - 26	15	5
Other Hospitals *	35	2 - 1,409	174	27

\* Hospitals that provide cancer treatments, dental services and mental health services plus military, police and prison hospitals are categorized under the "other hospitals" category.

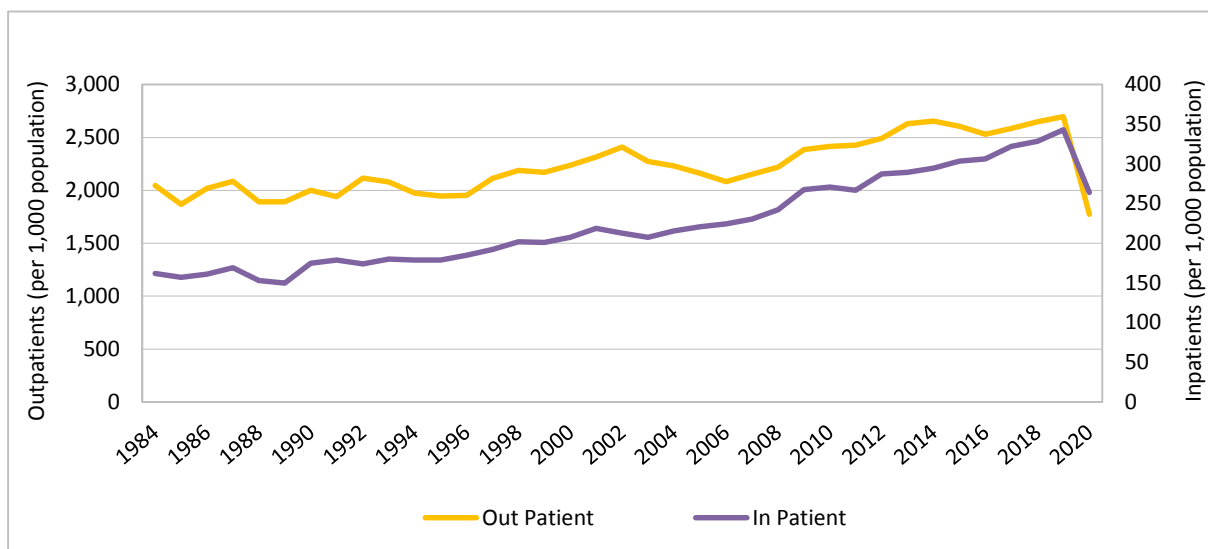
Note: Average number of hospital beds was calculated based on the number of institutions from which data was received.

Source: Medical Statistics Unit

Bed Turnover Rate (BTR) measures the productivity of hospital beds, and it represents the number of patients treated per bed in a defined period, usually a year. In simple words, how many patients have used a single bed during one-year period. In 2020, there were 9 Divisional Hospitals with BTR higher than 200. Leprosy Hospital - Hendala, Prison Hospital - Pallekele, Meedunpitiya Mental Health Center, Palamkotte - (EH) and Dematanpitiya Mental Rehabilitation Center have reported the lowest BTR, which were less than 3. BTR in Teaching Hospitals (TH) varies between 40 and 130. Colombo South Teaching Hospital has reported the highest BTR among the teaching hospitals, which is 128. This means that, on average, a hospital bed in Colombo South Teaching Hospital is used by 128 patients. BTR of District General Hospitals is between 20 and 160. In Base Hospitals, BTR is in the range of 30 to 200.

## 9.2. Service Utilization

### Attendance to Out Patient Departments (OPD) of hospitals



**Figure 9.1: Inpatient and Outpatient attendance in government medical institutions, 1984 - 2020**

Source: Medical Statistics Unit

District-wise distribution of OPD visits is presented in Annexure I, Detailed Table 31. Outpatient attendance was affected by the COVID – 19 pandemic and the ratio of OPD attendance per 1000 population has declined by nearly 34 per cent from 2019 to 2020. It was the lowest ratio reported for the last 50 years.

### Attendance to curative care health clinics

Table 9.3 presents the number of visits reported to Medical, Dental and Gynecology & Obstetrics clinics from 2015 to 2020.

**Table 9.3: Number of Medical, Dental, Gynecology and Obstetrics clinic visits, 2015 - 2020**

Type of clinic	2015	2016	2017	2018	2019	2020
Medical	11,407,213	12,081,931	12,639,230	13,609,792	14,586,731	10,932,051
Dental	3,092,664	3,180,347	3,154,244	3,441,489	3,636,278	2,336,293
Gyn & Obs	1,637,838	1,720,538	1,732,762	1,775,922	1,721,838	1,432,991

Source: Medical Statistics Unit

**Table 9.4: Number of clinic visits by type of clinic , 2020**

Type of clinic	No. of clinic visits	Type of clinic	No. of clinic visits
Medical	10,932,051	Baby	476,404
Dental	2,336,293	Cancer	429,996
Gynecology and Obstetrics	1,432,991	Orthopaedic	389,594
Diabetic	1,278,758	E.N.T.	387,692
Eye	1,128,594	Nerve	264,041
Psychiatric	955,088	Genito urinary	117,171
Surgical	914,236	Neuro surgical	78,882
Skin	800,114	V.D	64,152
Cardiology	665,940	Other	263,420
Paediatric	487,251		

Source: Medical Statistics Unit

There were 23,402,668 clinic visits in 2020, and compared to the previous years, it was a decrease by 25 per cent. As usual, the highest number visited common medical clinics (10.9 million) followed by dental (2.3 million) and gynaecology and obstetrics clinics (1.4 million).

### Maternal services

**Table 9.5: Number of deliveries by type of institutions and outcome, 2020**

Type of institution	Outcome of delivery			Total deliveries	
	Single deliveries	Twin deliveries	Other deliveries	Number	%
Teaching Hospitals	88,659	1,069	53	89,781	32.1
Provincial General Hospitals	16,614	208	6	16,828	6.0
District General Hospitals	76,385	770	6	77,161	27.6
Base Hospitals (Type A)	64,750	545	12	65,307	23.4
Base Hospitals (Type B)	25,774	195	3	25,972	9.3
Divisional Hospitals (Type A)	1,082	4		1,086	0.4
Divisional Hospitals (Type B)	1,336	5		1,341	0.5
Divisional Hospitals (Type C)	798	7		805	0.3
Maternity Homes	49			49	0.0
Special Hospitals	1,089	9		1,098	0.4
<b>Total</b>	<b>276,536</b>	<b>2,812</b>	<b>80</b>	<b>279,428</b>	<b>100.0</b>

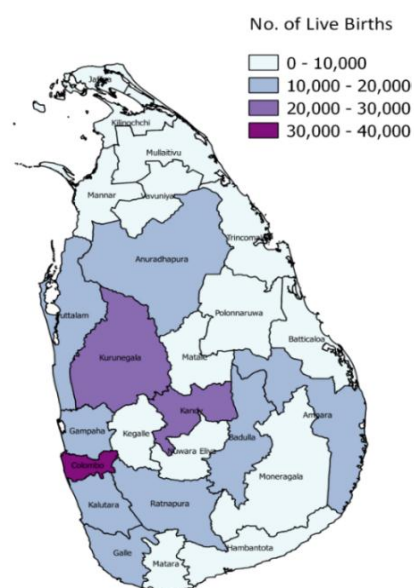
Source: Medical Statistics Unit

**Table 9.6: Number of deliveries by type of institutions and method of delivery, 2020**

Type of institution	Method of delivery			
	Normal (Vaginal)	Forceps	Caesarean	
			Number	%
Teaching Hospitals	53,384	917	35,480	39.5
Provincial General Hospitals	8,573	200	8,055	47.9
District General Hospitals	44,776	520	31,865	41.3
Base Hospitals (Type A)	40,204	441	24,662	37.8
Base Hospitals (Type B)	15,890	211	9,871	38.0
Divisional Hospitals (Type A)	1,081	5		
Divisional Hospitals (Type B)	1,341			
Divisional Hospitals (Type C)	805			
Maternity Homes	49			
Special Hospitals	534	26	538	49.0
<b>Total</b>	<b>166,637</b>	<b>2,320</b>	<b>110,471</b>	<b>39.5</b>

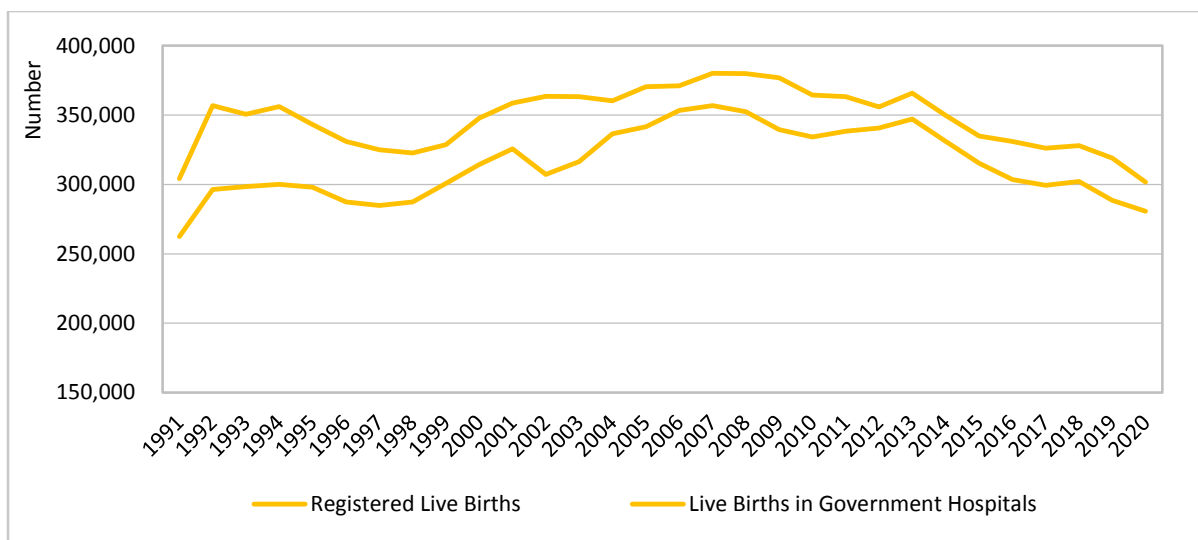
Source: Medical Statistics Unit

Table 9.5 and 9.6 illustrate the maternal services provided by different types of government health institutions. The total number of deliveries that took place in the government hospitals was 279,428 in 2020. Out of these deliveries, 99 per cent were single deliveries. Almost all the multiple deliveries were taken place in major hospitals (Base and above). According to the data, approximately 40 per cent of deliveries were caesarean deliveries.



**Figure 9.2: Distribution of hospital live births by place of occurrence in Sri Lanka, 2020**

Source: Medical Statistics Unit



**Figure 9.3: Registered births Vs. hospital live births, 1991 - 2020**

Source: Department of Registrar General and Medical Statistics Unit

Figure 9.3 shows the all registered live births and live births occurred in government hospitals from 1991 to 2020. In 2020, ninety three per cent of live births have taken place in government health institutions.

### Utilization of medical institutions

There is no proper referral system in the curative sector of Sri Lanka. Patients are free to visit any type of institution for treatments. The reputation gained by some institutions based on resource availability or some other unknown facts, may affect the selection of hospitals by patients. However, it is still an unstudied area. Due to this situation, many small institutions are underutilized and some major institutions are overcrowded.

The average duration of stay (ADOS) varies with the type of hospital. It is significantly higher in some specialized hospitals such as leprosy, mental and rehabilitation hospitals. As experienced in the past decades, ADOS is usually high in teaching hospitals than in the other hospital types. National Institute of Mental Health - Angoda, Leprosy Hospital - Handala, Mental Rehabilitation Center-Dematanpitiya, Mental Health Center-Meedunpitiya and Rehabilitation Center-Leliambe and Muwandeniya have reported the highest ADOS.

Table 9.7 includes the Bed Occupancy Rate (BOR), Bed Turnover Rate (BTR) and Average Duration of Stay (ADOS) by hospital type. A comparison of these three indicators is given in Figure 9.4. All three indicators are relatively high in cancer hospital, maternity hospitals, national hospitals and teaching hospitals. In Divisional Hospitals, low ADOS and high BTR indicate there are relatively more patients per bed, but they won't stay long, resulting in low BOR. Highest BTR in DGH and base hospitals and middle-level ADOS have contributed to the increase in the BOR. In rehabilitation hospitals, higher ADOS and lower BTR indicate a less number of patients per a bed with long stay, keeping BOR in the middle level.

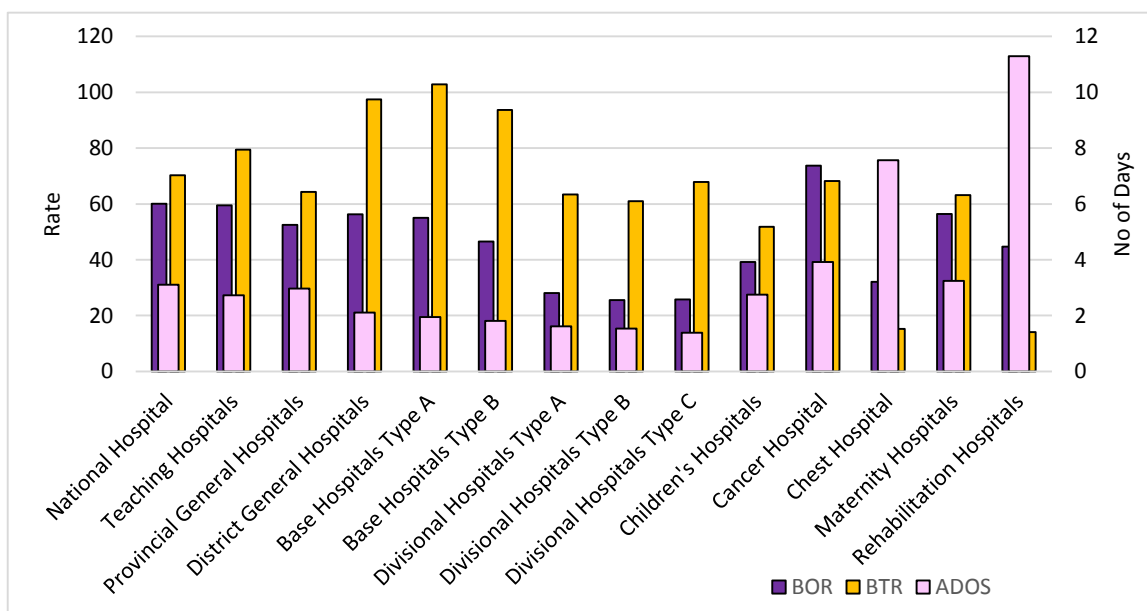
**Table 9.7: BTR, ADOS and BOR by type and speciality of hospital 2020**

Type of Institution	ADOS (Days)	BOR	BTR
National Hospital	3.10	60.01	70.29
Teaching Hospitals <sup>1</sup>	2.73	59.52	79.46
Provincial General Hospitals	2.97	52.47	64.28
District General Hospitals	2.10	56.31	97.40
Base Hospitals Type A <sup>1</sup>	1.95	55.07	102.79
Base Hospitals Type B	1.81	46.50	93.66
Divisional Hospitals Type A <sup>1</sup>	1.61	28.03	63.34
Divisional Hospitals Type B <sup>1</sup>	1.53	25.58	60.99
Divisional Hospitals Type C <sup>1</sup>	1.39	25.74	67.83
Children's Hospitals <sup>2</sup>	2.75	39.15	51.79
Cancer Hospital <sup>2</sup>	3.92	73.70	68.14
Chest Hospital <sup>2</sup>	7.57	32.12	15.22
Maternity Hospitals <sup>2</sup>	3.25	56.43	63.20
Rehabilitation Hospitals <sup>2</sup>	11.29	44.66	14.11

Source: Medical Statistics Unit

<sup>1</sup>Excluded Specialized Hospitals

<sup>2</sup>Specialized Hospitals



**Figure 9.4: BTR, ADOS and BOR by type and speciality of hospital, 2020**

Source: Medical Statistics Unit

**Average Duration of Stay (ADOS)** - Average number of days a patient stay in the hospital (excluding healthy newborns).

**Bed Occupancy Rate (BOR)** - The percentage of inpatient beds occupied over a given period.

**Bed Turnover Rate (BTR)** - The number of times, a hospital bed, on an average changes occupants during a given period of time.

## 10. Public Health Services (Preventive Health Services)

In Sri Lanka, public health services in ground level are provided through Medical Officers of Health (MOH) who are responsible for each MOH division. These MOH divisions are almost geographically equal to Divisional Secretariat divisions, with several exceptions. There are 358 such MOH divisions, and each MOH serves approximately 60,000 population.

Each MOH is facilitated by a supporting staff including Public Health Nursing Sisters, Supervising Public Health Inspectors, Supervising Public Health Midwives, Public Health Inspectors and Public Health Midwives.

Overall responsibility for the management of public health services lies with the Provincial Health Authorities. The scope of public health is divided among two Deputy Director Generals at the national level.

### 10.1. Deputy Director General – Public Health Services 1 (DDG-PHS 1)

The main responsibilities of the DDG-PHS I includes leading and managing public health system of the country related to communicable diseases. However, some responsibilities in Non- Communicable Diseases are also among the designated scope of DDG-PHS 1.

Following directorates are under the purview of DDG-PHS 1.

1. Epidemiology Unit
2. Directorate of Environment Health, Occupational Health & Food Safety
3. National STD, AIDS Control Programme (NSACP)
4. National Programme for Tuberculosis Control and Chest Diseases (NPTCCD)
5. Anti-Malaria Campaign (AMC)
6. Anti-Leprosy Campaign (ALC)
7. Public Health Veterinary Services (PHVS)
8. Quarantine Unit
9. National Dengue Control Unit (NDCU)
10. Chronic Kidney Disease Unit (CKDU)
11. Anti-Filaria Campaign (AFC)
12. Principal Public Health Inspector (PPHI)

#### 10.1.1. Epidemiology Unit

Epidemiology Unit is responsible for prevention and control of communicable diseases. Disease surveillance programme involves routine notification, and special surveillance on selected diseases such as vaccine preventable diseases, leptospirosis, human rabies and dengue fever. In addition, sentinel site surveillance is being carried out for influenza like illness and severe acute respiratory illness which are potential to be endemic. The Unit acts as the emergency response division for disease control activities in disasters, emergencies and handles outbreak investigation and control.



Epidemiology Unit is the focal point for the National Immunization Programme (NIP). It is responsible for developing policies and strategies for vaccine introduction, coordinating provision of logistics, supply of vaccines and injection safety items and monitoring and evaluation of the NIP. National Immunization Programme of Sri Lanka is one of the best performing public health programmes in the region as well as in the world as well.

In-addition, the unit involves in training medical postgraduates and health staff on activities related to communicable disease control and the National Immunization Programme. It also serves as an international training centre on disease prevention and control and the childhood immunization programme.

The National Immunization policy has been approved by the Cabinet of Ministries of the Democratic Socialist Republic of Sri Lanka on 16<sup>th</sup> October 2014.

### **10.1.2. Directorate of Environmental Health, Occupational Health and Food Safety**

#### **Environmental health**

Environmental Health encompasses the assessment and control of those environmental factors that can potentially affect health. It is targeted towards preventing diseases and creating health-supportive environments. There are several aspects covered under the environmental health including air quality, water quality, bio-diversity, climate changes and waste management with a special attention to healthcare waste management.

Ministry of Health liaises closely with the Ministry of Environment, Central Environmental Authority and other relevant stakeholders working in the area of environmental health. The implementation of environmental health activities in the preventive health sector are conducted mainly through the Provincial and District Level Health Services via the MOH system. The Medical Officers of Health and the Public Health Inspectors carry out environmental health activities at the grassroots level.

#### **Main objectives of the unit are,**

- To formulate an institutional framework that enables efficient coordination and collaboration of the various sectors and stakeholders that bear environmental health related responsibilities.
- To ensure an effective institutional capacity for the provision of environmental health services
- To strengthen the capacity of health staff working in the area of environmental health to become efficient agents and catalysts for desired change.
- To adopt a partnership approach with the purpose of facilitating holistic and integrated planning in environmental health.
- To facilitate the development and maintenance of an effective Environmental Health Management Information System.
- To promote community participation and development through empowerment in environmental health, to contribute to promote health.

## **Actions taken in 2020**

### **Strengthening Healthcare Waste Management (HCWM) in government health institutions**

Health Care Waste Management is a major national programme of the Ministry of Health. The technical focal point for this is the Environmental and Occupational Health Directorate. Healthcare Waste Management has been identified as an important area needing significant attention.

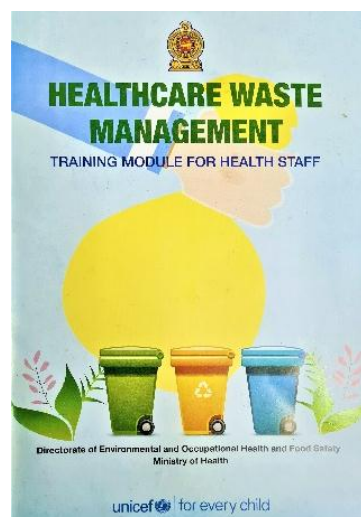
COVID-19 pandemic has increased the generation of waste in healthcare setting. Managing Personal Protective Equipment (PPE) kits has been challenging due to limited management options. Ministry of Health employed several methodologies to manage infectious wastes and sharps in healthcare setting. Onsite treatment of such waste using incinerators, MetaMizers and outsourcing to licensed private parties are some common modalities.

Guidelines on healthcare waste management during the COVID-19 pandemic was developed and circulated.

An incinerator with a capacity of 1.5 Metric tons/day was installed in District General Hospital Chilaw with financial support from WHO to strengthen the infectious waste management. This incinerator is expected to cater to other healthcare institutions to manage infectious and sharp waste.



**Incinerator installed in the DGH Chilaw**



**The training manual for healthcare waste management**

#### **1. Provision of logistic support required for the management of healthcare waste**

Pedal operated bins and waste carts were provided to Base Hospital Minuwangoda, Homagama, Beruwela and Thelippalei with the UNICEF financial assistance.

#### **2. Development of a training module**

A training manual for healthcare waste management was developed with the financial assistance from the UNICEF. Five thousand training manuals were distributed to health care institutions throughout Sri Lanka.

#### **3. Capacity building of healthcare staff on healthcare waste management and infection**

## prevention

Single day capacity building workshops on healthcare waste management were held in 18 hospitals with WHO financial assistance and four workshops with UNICEF financial assistance amidst the COVID-19 pandemic. Around 1115 hospital staff handling healthcare waste including Medical Officers, Nursing Sisters, Nursing Officers, laboratory staff and cleaning staff were trained in 2020.



## Capacity building workshops conducted

### 4. Undergraduate and post-graduate training

Environmental health lectures were conducted to under graduate students of the Faculty of Medicine, University of Colombo. Students attached to Post-graduate Institute of Medicine, Colombo following MSc in Community Medicine and Diploma in Disaster Management were trained on Environmental Health.

**Table 10.1: Number and percentage of healthcare institutions by type of license**

Type of license	Number	Percentage out of reported hospitals (N=993)	Percentage out of total hospitals (N=1513)
Environmental Protection License (EPL)	218	21.95	14.41
Scheduled Waste Management License (SWML)	55	5.54	3.64
Both EPL and SWML	52	5.24	3.44

Note: as at 31<sup>st</sup> December 2020

Source: Directorate of Environmental Health

**Table 10.2: Environmental Protection License (EPL) and Scheduled Waste Management License (SWML) status of base**

Type of license	Number	Percentage out of reported hospitals (N=112)	Percentage out of total hospitals (N=133)
Obtained EPL	64	57.14	48.18
Obtained SWML	33	29.46	24.81
Obtained both EPL and WML	31	27.68	23.31

Note: as at 31<sup>st</sup> December 2020

Base and above hospitals with EPL and SWML license

Source: Directorate of Environmental Health

### Occupational health

Health and safety of healthcare workers have been negatively affected during the COVID-19 pandemic, highlighting the importance of strengthening their occupational health, safety and wellbeing. Health sector is required to play a leading role in protecting and promoting the health of employees during biological emergencies such as the COVID-19 pandemic. Active engagement of employers and employees is vital in this regard. In addition addressing psychological risks at work setting in Sri Lanka needs to be considered in future plans.

Occupational Health Unit of the Directorate of Environmental and Occupational Health is responsible for implementing the National Occupational Health Programme of the Ministry of Health in Sri Lanka. This programme focuses the employees in different categories of occupations. Occupational Health services are provided at the grass root level by Public Health Inspectors (PHI) in collaboration with the Medical Officers of Health (MOH) through the District and Provincial Health systems.

#### Main objectives of the unit are,

- To promote and maintain the highest degree of health among workers in all occupations
- To prevent adverse health outcomes caused by the working environment and work conditions
- To protect workers in their employment from work risks
- To adapt the work environment to workers
- To improve health and wellbeing of workers
- To provide curative services for workers with occupational injuries and diseases
- To provide rehabilitative health services for workers needing rehabilitation due to work related injuries and diseases
- To establish a monitoring and evaluation mechanism to assess the effectiveness of the National Occupational Health and Safety Programme of the Ministry of Health

Occupational Health Unit is responsible for capacity building of public health staff, curative health staff as well as other staff categories in the Ministry of Health on Occupational Health. Trainings are conducted for undergraduate and postgraduate medical students. The unit involves in awareness creation and research and development in the area of occupational and related environmental health issues. Additionally, the unit liaises with other important stakeholders such as the Ministry of Labour in implementing the National Occupational Health Programme of the Ministry of Health.

## Activities conducted in 2020

### 1. Advocacy

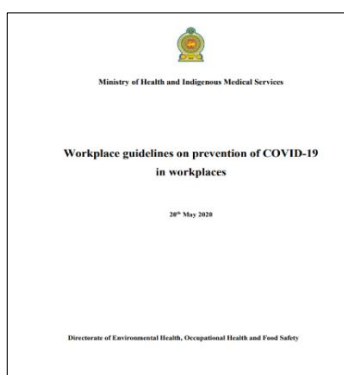
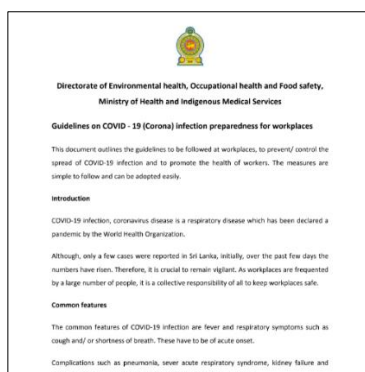
It was advocated to the political leaders, government officials and employers regarding the importance of adhering to health protocols to protect the health of employees during the COVID-19 pandemic. The importance of active stakeholder engagement, team work and building an enabling environment at work setting was highlighted as essential components for business resilience and continuity during the COVID-19 pandemic.

### 2. Development of guidelines on preparedness and response to COVID-19 for work settings

Guidance from the health sector for nationally important industrial sectors such as tea, rubber, Board of Investment (BOI), apparel and construction sector was crucial for continuation of operations during the COVID-19 pandemic in Sri Lanka. During the first wave of the COVID-19 pandemic, the Occupational Health unit together with relevant experts prepared comprehensive documents with guidelines for preparedness and response for COVID-19 at work setting. These documents included guidance on modifying workplaces physically and administratively to prevent the transmission of COVID-19, thus protecting the health of employees. “Operational Guideline for preparedness and Response for COVID-19 outbreak for work settings” was published in Sinhalese, Tamil and English languages and distributed to all districts in Sri Lanka. Furthermore, a set of guidelines for specific work settings was developed and circulated.

Later during the second wave of the COVID-19 in Sri Lanka, guidance documents were prepared introducing the bio-bubble concept for the following sectors.

- Manufacturing
- Apparel
- Banks and non-bank financial institutions
- Government sector offices
- Economic Centres and Fish Markets



**Guidelines on ‘COVID-19 preparedness for workplaces’ and ‘prevention of COVID-19 in workplaces’**







Front pages of the developed guidance documents for different work settings

### 3. Strengthening inter- sectoral coordination to better manage COVID-19 transmission at work settings

Focal points were identified from all BOI industries, Banks, Government Ministries and State Ministries. The occupational unit maintains a database of all focal points by sector and liaises with them in improving preparedness and response to COVID-19 .

### 4. Guiding the public health staff to manage COVID-19 at work settings

Circular instructions have been sent regarding the management at COVID-19 at work settings to Medical Officers of Health and Public Health Inspectors. Capacity building sessions on COVID-19 prevention at work settings were held online to public health staff. A workplace inspection check list, were developed and circulated to assess the preparedness and response to COVID-19 in workplaces.

### 5. Awareness raising on the management of COVID-19 at workplaces

Several webinars were conducted to raise awareness on the preparedness and response for COVID-19 at work places for representatives of the management and focal points of different work settings. Webinars for BOI and Export Development Board enterprises, apparel sector industries, banks, Ministries and State Ministries, economic centres were conducted throughout 2020.

### 6. Monitoring of workplaces on the management of COVID-19

Google forms were developed and sent to all focal points of BOI enterprises, Banks and Government Ministries and State Ministries. Through them, the COVID-19 situation and their preparedness and response were assessed regularly. This mechanism was helpful to identify gaps and to refer issues to the relevant public health officials for management.

## Images of google forms developed for BOI enterprises, banks and government ministries and state ministries

### 7. Reviewing the progress of COVID-19 management in BOI zones

Reviews were conducted in all BOI zones (12) to assess the disease burden, preparedness and response to COVID-19 in enterprises. These reviews were attended by health officials from the national, provincial, district and divisional levels, BOI management, focal points of enterprises and representatives of the management of BOI industries.

### 8. Postgraduate training

Training of MSc Community Medicine students attached to the Postgraduate Institute of Medicine, Colombo on Occupational health and safety was supported.

### Actions to be taken in 2021 for occupational health

Measures will be taken to strengthen preparedness and better response to COVID-19 at workplaces. Vulnerable yet economically important sectors such as apparel, manufacturing, construction and plantation sectors will be prioritized to ensure health of employees.

### 10.1.3. National STD/AIDS Control Programme (NSACP)

Health services needs to fill the existing gaps in the HIV treatment and care cascades to end AIDS in Sri Lanka. Following actions were planned by the NSACP.

#### Actions taken in 2020

1. HIV rapid tastings performed for all STD clinic attendees to reduce the turnaround time of HIV test results.
2. Three (03) rapid test algorithms have been introduced for the confirmation of HIV infection and implemented and practiced in 2020.
3. Enhance flexibility and accessibility of the HIV test by commencement of an evening clinic at the Colombo STD clinic as three days a week from 5 pm – 8 pm.
4. Explored new methods to scale up HIV testing at healthcare settings and index case testing.
5. Made HIV testing services a permanent agenda item in the District and Provincial AIDS committee meetings.
6. Pre ART-drug resistance surveillance initiated in later part of 2020.
7. Facilitated district STD clinics to issue the anti-tuberculosis drug, INAH, with ART to improve adherence to treatment.



8. A circular regarding HIV care services including free ART for inbound migrants with residence visa.
9. Increased participation of youth in implementation of the National HIV communication.
10. Started developing a national KP Programme Monitoring Dashboard.
11. A pilot study was conducted to cover the gaps in HIV testing by introducing HIV Self-testing to Sri Lankan context with the financial aids of Global Fund.
12. Communication Strategy to be used as a form of social marketing for HIV testing.
13. Rapid initiation of ART within 2 weeks as far as possible.
14. Improved contact tracing and index case testing for higher yield of PLHIV.
15. Decentralizing viral load and CD4 testing facilities.
16. District level laboratories were strengthened to provide quality assured care.
17. A targeted social media campaign initiated to promote HIV testing and treatment seeking behaviours among key populations.

### **Actions to be taken in 2021**

- Introduce HIV self-testing to the country and scaling up island wide.
- To initiate a virtual HIV service provision via online application as well as a mobile phone-based application.
- Improve monitoring and evaluation of HIV services by using a software named Prevention Information Management System.
- Upgrade the current know4sure.lk website platform to provide remote HIV services.

Based on below mentioned four key messages NSACP planned actions 2020 and 2021

**Key Message 1:** Most of the newly reported HIV infections occur among males, and most of these infections are due to male-to-male sexual relationships.

### **Actions taken in 2020**

1. Initiate Pre-exposure prophylaxis (Prep) services for high-risk MSM to prevent new HIV infections in the country.
2. Increase the service provision through 'Know4sure.lk' mobile application by increasing the number of workers.
3. The Case Finder model (hybrid model) is to be introduced to the second tier of districts (Kalutara, Kandy, Galle and Kurunegala).
4. Government of Sri Lanka taken over funding for peer-led intervention model through NGO partners in some districts.

### **Actions to be taken in 2021**

- Initiation of targeted social media campaign for high-risk men.
- Scale up virtual HIV services to men who have sex with men (MSM).
- Introducing HIV self-testing to the country.
- Scale up of post exposure prophylaxis following sexual exposure to HIV.
- Scale up Pre-exposure prophylaxis (PrEP) services for men who have sex with men.

**Key message 2:** Number of reported sexually transmitted infections declined during 2020 compared to the previous years due to disruption of STI services following COVID-19 lockdowns.

#### **Actions taken in 2020**

1. Completed container clinics in 7 places and opened for services with all required equipment.
2. All newly established clinics were provided with specialist services.
3. Most of the newly established clinics facilitated with laboratory services.
4. In many places the healthcare worker carder has been increased.

#### **Actions to be taken in 2021**

1. Initiate HIV rapid testing in prison by pre-trained prison officers with the support of the local STD clinic.
2. Providing specialist services to island wide STD clinics.
3. Improving the laboratories in the STD clinics further in relation to infrastructure as well as human resources amidst the COVID-19 pandemic.
4. Filling the gaps in the healthcare worker carder to provide continuous uninterrupted treatment and care services.
5. Incorporating peer led targeted interventions to the STD clinic services.
6. Scaling up of virtual preventive services through awareness programmes, social media and IEC material.

**Key message 3:** Sri Lanka obtained the WHO validation certificate for the programme for elimination of mother to child transmission (EMTCT) of HIV and syphilis.

Sri Lanka became the fourth country in the SEARO region to eliminate mother to child transmission (EMTCT) of HIV and syphilis in 2019. Thailand, Malaysia and Maldives achieved this goal in 2015, 2017 and in 2018 respectively. The year 2020 was an important year to sustain the achievements of the EMTCT programme and address the recommendations suggested by the Global Validation Committee (GVAC). The achieved indicators need to be maintained and the programme is expected to be revalidated in November 2021.

The EMTCT programme continued the multidisciplinary approach with the involvement of the Family Health Bureau (FHB), maternal and child health (MCH) services in government and private sector, provincial and regional health authorities, tertiary care hospitals, STD clinics and National Reference Laboratory (NRL) of NSACP. UN organizations, non-governmental organizations, key population and PLHIV organizations worked closely with the programme.

#### **1. Pregnant women with HIV**

Sixteen (16) women living with HIV delivered in the year 2020 and of these ten (10) pregnant women were identified as having HIV during antenatal screening. Other six (6) were known women with HIV who became pregnant while on ART. All 16 infants were started on antiretroviral prophylaxis and early diagnostic tests were arranged including DNA PCR at birth. All mothers who received EMTCT services for HIV, delivered uninfected babies.

#### **2. Paediatric HIV diagnoses**

In the year 2020, three children were identified with HIV infection. These were from Monaragala, Matara and Batticaloa and their ages were four, three and six years respectively. Two children from Monaragala and Batticaloa were born before the establishment of EMTCT

services in these districts, as island wide EMTCT services were started in 2016. Mother of the child identified in Matara was negative for HIV in her early pregnancy. Therefore, the possibility of seroconversion during her pregnancy was considered in this case.

### **3. MTCT of syphilis**

During 2020, 64 pregnant women with syphilis delivered and all these pregnant women with syphilis received appropriate services including treatment with benzathine penicillin. All babies born to mothers with syphilis were appropriately managed with prophylactic benzathine penicillin. One pregnant woman who had a miscarriage was treated with no penicillin regimen. Six (6) babies born to pregnant women who were late presenters or who showed inadequate response to treatment were identified as having congenital syphilis and were treated for congenital syphilis.

#### **Actions in 2020**

- Sri Lanka obtained the WHO validation certificate for the programme for elimination of mother to child transmission (EMTCT) of HIV and syphilis officially from WHO country office.
- The Global Validation Advisory Committee (GVAC) has identified areas to improve and has given recommendations which are being implemented currently.

#### **Actions to be taken in 2021**

- The WHO will re-evaluate the EMTCT programme in 2021. It is important to maintain the interest shown by all stakeholders to achieve satisfactory impact and process indicators and to sustain the success in the coming years.

**Key message 4:** National STD/AIDS Control programme is scaling up the automated electronic systems for prevention and monitoring of STI and HIV services.

#### **i. The Electronic Information Management System (EIMS).**

The National STD/AIDS control programme established an electronic medical record system named Electronic Information Management System (EIMS) with the financial support of the Global Fund. This is one of the major investments of Global Fund with the intention of improving clinical care of clients who attend seeking care for STD and HIV related services. The SIM unit of the NSACP is coordinating this activity. By the end of 2020, out of the 42 reporting units 28 have started using EIMS for management of client information. COVID-19 travel restrictions, converting some STD clinic premises to COVID treatment centers and disruption of supply chain management of computer equipment delayed the roll out of EIMS to all the clinics.

#### **Benefits of EIMS**

1. Introduction of a paperless electronic medical record.
2. Ability to transfer electronic medical records between clinics.
3. Lab test results can be entered from the NRL and district STD clinics can view results immediately.
4. Efficient and real-time data visualization.
5. Easy monitoring system for patients on HIV care services.

6. Ability to generate real time reports.
7. Monitoring of all STD clinics in a dashboard.
8. Ability to track the care given to mothers infected with HIV/syphilis and the outcome of child

### **Actions of EIMS in 2020**

Computer equipment purchased to all peripheral STD clinics. Started to establish peripheral STD clinics and an e-learning platform developed for learning purposes. Computer equipment distributed to all peripheral STD clinics.

The system was further improved to customize each STD clinic according to their requirements. EIMS won the 4th Commonwealth Digital Health Awards 2020.

### **ii. Prevention Information Management System (PIMS).**

Prevention Information Management System (PIMS) is one of the new software projects initiated by the National STD/AIDS control programme. The purpose of the PIMS software is to develop an electronic system for monitoring key population related HIV prevention programmes conducted by the STD clinics and NGO partners. Prevention Information Management System (PIMS) will be a paperless system which consists of a browser-based web and a mobile application. A built-in dashboard in the PIMS will provide real time progress of KP population monitoring to programme management and implementers.

### **iii. Upgrading of the know4sure.lk**

Over the years, a high risk and vulnerable population have been finding partners via virtual social media platforms and dating Apps. Know4sure.lk intends to provide a platform where these populations can have access to STD services in a confidential manner. Know4sure.lk is a convenient way to assess individual STD risk and make appointments in the STD clinics, while maintaining confidentiality. Two online outreach workers (OOW) are based in the Central STD clinic, Colombo, facilitating clients to get STD services. In addition, OOWs are engaged in virtually reaching out to key populations and creating awareness and encouragement to get STD services.

During 2021, Know4sure.lk will be further developed to provide other HIV services such as delivering condoms, lubricants and HIV self-test kits. Other STD clinics will be included in the know4sure.lk platform for booking appointments.

### **Actions to be taken in 2021**

- Establish prevention information management system (PIMS) for implementation and monitoring of peer led interventions and train staff on how to use them.
- Upgrade and scale up know4sure platform further to improve virtual reaching and HIV testing facility.
- EIMS will be fully installed in all the STD clinics by the end of the year permitting the pandemic situation in the country.
- Know4sure.lk platform will be upgraded into the international standards in order to improve with HIV self-testing and provision of STI services for the key populations of Sri Lanka.

#### 10.1.4. National Programme for Tuberculosis Control and Chest Diseases

The National Programme for Tuberculosis Control and Chest Diseases is the national focal point for prevention and control of TB in the country. TB related health services are provided through a network of 26 district chest clinics, 1 sub chest clinic, over 100 branch clinics and more than 180 microscopic centres scattered throughout the island. Diagnostic culture facilities are available at National TB Reference Laboratory (NTRL) located in Welisara and Intermediate TB Laboratories at Rathnapura, Kandy, Jaffna and Galle. Other diagnostic facilities of sputum smear testing, Gene pert testing and chest X ray are available at district level, at each chest clinic, healthcare institutions above Base Hospital level and microscopic centres. Anti-TB treatment is initiated by district chest clinics and Directly Observed Treatment Short course (DOTS) is provided to each patient by a DOT provider under the close supervision of district chest clinic.

##### Key TB control activities implemented in 2020

1. Sri Lanka has committed to achieve the WHO End TB strategy targets by the year 2035. Reaching these targets requires intensive integrated strategic actions at the national and subnational level. As recommended by midterm review conducted in July 2017, NPTCCD introduced a pilot district programme that include rigorous actions to overcome the challenges identified in eliminating TB. The pilot programme was initiated by recruiting Kalutara, Kegalle and Gampaha districts in 2018. It was expanded in 2019 to include Kurunegala, Rathnapura, Kandy, Badulla and Monaragala. In 2020, Matara, Matale, Puttlam, NuwaraEliya, Polonnaruwa, Ampara, Vavuniya and Jaffna has been introduced as pilot districts. This will be expanded, and all 25 districts will be covered in 2021.
2. Decentralization of diagnostic services beyond District Chest Clinics was done by expanding microscopic centres at district level.
3. Another effective strategy for reduction of TB disease burden is having a National Guideline for management of Latent TB Infection (LTBI). Drafting the National Guidelines was initiated in 2019 and it was scaled up in 2020.
4. The NPTCCD successfully conducted an Epidemiological Review in August - September 2020, with the assistance of national and international experts to assess the TB surveillance activities in the country, where national experts participated physically, and international experts participated virtually.
5. After successful completion of the Epidemiological Review, the NPTCCD conducted an End Term Programme review from October-November 2020, to evaluate the activities of National Strategic Plan (NSP) from 2015 to 2020. This review was carried out by four national consultants who participated physically and four international consultants who worked remotely due to travel restrictions because of the COVID-19 pandemic.
6. Based on the recommendations of the End-Term Review, the new National Strategic Plan for TB control activities for the period 2021-2025 was initiated in mid-November, 2020. This exercise will be continued to 2021 as well.
7. Regular supervisory visits were conducted from the central level to monitor the progress of the TB control activities and to identify the issues and constraints for the provision of diagnostic, curative and preventive care services.
8. Regular in-service capacity building programmes for chest clinic staff as well as for the hospital and field health staff was continued in 2020.

9. Procurement of lab equipment, consumables and X-pert MTB/Rif cartridges for 2020 was done to assure smooth functioning of the laboratory diagnostic services to enhance the TB diagnostic capacity.
10. Anti-TB drugs were timely purchased, and distributed to all district chest clinics to maintain uninterrupted drug distribution throughout 2020. In addition, drugs were distributed to patients' houses in areas which were locked down due to COVID-19 outbreaks in the country in 2020.
11. Several COVID mitigation measures were taken during 2020.
  - I. Three guidelines related to TB and COVID were issued
    - a. Guidelines on diagnosis and management of TB patients at district level during current COVID-19 pandemic situation
    - b. Interim guidance for intermediate TB laboratories, Gene pert laboratories and microscopy centres for handling patients' samples amid COVID pandemic.
    - c. COVID - 19 response strategy at district chest clinics
  - II. PPEs (Personal Protective Equipment) were provided for the health staff
  - III. Distribution of drugs to the patients' door steps by PHI

### **Actions to be taken in 2021**

1. Revision/update of manuals and guidelines
  - I. Implementation of Latent TB Infection Management guideline (Scale-up, advocacy, capacity building)
  - II. Revision of lab manual
  - III. Revision of national manual
 

The national manual developed in 2015 need to be revised with new updates in management. It should be user friendly and compatible with Sri Lankan context and accepted by the clinicians. Therefore it was decided to have a local consultant (Senior Respiratory Physician) for one month period to revise this manual.
  - IV. Revision of PMDT (Programmatic Management of Drug-Resistant Tuberculosis) guideline
  - V. Revision of Extra Pulmonary Tuberculosis (EPTB) management guideline.
  - VI. Development of comprehensive infection control action plan on TB in Sri Lanka
2. Advocacy programmes
  - I. Advocacy meetings on ending TB(to enhance administrative and financial commitment).
  - II. In collaboration with Estate and Urban Health Unit, conduct an awareness programme for estate administrators and supportive staff to get their contribution to increase the case finding.
3. Improving awareness
  - I. SMS for patients
  - II. SMS for clinicians
4. ePIMS (Electronic Patients' Information Management System) Networking
5. Estimating TB cases and their additional economic costs incurred by TB patients and their families for TB diagnosis and treatment – A multi centric study (Bhutan, Nepal and Sri Lanka)
6. Procurement of diagnostics and related items
  - I. Purchasing training microscope
  - II. Purchasing microscopes for microscopy centres at district level
  - III. Purchasing mini-refrigerators for collecting centres at peripheral level

- IV. Procurement of X-pert MTB/Rif cartridges, culture consumables, etc.
- V. Procurement of biosafety cabinets
- 7. Infrastructure development
  - I. Construction/renovation and NTRL building expansion
  - II. Improve treatment facilities at peripheral level
- 8. Procurement of Anti TB drugs
- 9. Capacity building of TB service providers
  - National and international training for TB service providers (including CRPs, CCPs, Consultant Microbiologists, MOO/NPTCCD, DTCCO, MOO, MLTs, Pharmacists at district chest clinics)

### 10.1.5. Anti-Malaria

Sri Lanka was certified by the World Health Organization as a malaria-free country on 06<sup>th</sup> September 2016, at the 69<sup>th</sup> session of the Regional Committee for South-East Asia in Colombo after continuous effort over four decades by the Anti-malaria Campaign. Currently Sri Lanka is in the phase of prevention of the reintroduction/ re-establishment (PoR) phase of malaria.

#### Activities of anti-malaria campaign in 2020

Sri Lanka has maintained the malaria-free status during the last 8 years. Sustained surveillance activities are in keeping with the ministerial declaration signed on 29<sup>th</sup> November, 2017 in New Delhi by all Health Ministers of SEAR countries on accelerating and sustaining malaria elimination in the South-East Asia Region aiming malaria-free South-East Asian Region (SEAR) in 2030.

Accordingly, the strategies for prevention of reintroduction/ re-establishment of malaria are mainly focused on,

- Detection and treatment of imported cases during 2020; a total of 30 imported malaria cases were reported, the majority from African countries. Two of these cases were severe cases.
- All imported cases were promptly admitted to hospital and treated. Anti-Malaria Campaign extended prompt service, free of charge with malaria diagnostics and treatment facilities, to both Government and private health institutions in managing these imported malaria cases. All necessary activities related to detected cases (including primary and secondary parasitological screening, entomological surveillance, vector control) were promptly conducted.
- From 2020 April, activities of AMC were affected due to COVID-19 situation. Training programmes, supervision, field work and reviews were such activities affected. However, AMC continued all activities with the following innovative ways.
- Development and implementation of interim Guidelines for surveillance during COVID-19 situation.
  - Prioritization of essential work
  - Continuing reactive case-based activities as a priority while adhering to safety measures
  - Conducting routine meetings online using free platform (eg; Monthly RMO review, Case review Committee, technical staff meetings and special meetings)
  - Follow up of patients and high-risk groups with use of Whatsapp and Viber groups



- Screening and following up of high-risk population. Steps were taken to ensure that all malaria patients entering the country were diagnosed promptly and treated effectively to ensure malaria-free status. All returnees from malaria endemic countries that are quarantined were screened for malaria before sending them home. Eleven Malaria cases were detected by AMC from Quarantine centers in 2020.
- The AMC has taken several measures to verify the absence of malaria transmission within the country. Mobile malaria clinics were conducted with personal protective measures targeting high-risk groups. Over 800,000 blood smears were examined as a part of the parasitological surveillance including proactive and reactive parasitological surveillance in hospitals and field, and screening of blood bank slides.
- Providing chemoprophylaxis to travellers to malaria-endemic countries. Sri Lankans traveling abroad to malaria-endemic countries were provided with the necessary guidance and preventive treatment free-of-charge by the AMC to prevent malaria during their overseas travel.
- Enhanced parasitological and entomological surveillance - Entomological surveillance was continued with nearly 20 sentinel sites and proactive surveys in vulnerable areas as well as reactive surveys when imported malaria cases occur throughout the country to monitor behavior of malaria vector mosquitoes and targeted vector control measures were taken as and when necessary. Long-lasting insecticide-impregnated bed nets were distributed for selected target groups to prevent re-establishment of malaria.
- Selective vector control activities- Urban malaria vector which was detected from six districts in Northern and Eastern provinces was successfully controlled due to intensified entomological surveillance and vector control activities and is currently limited to three districts.
- Global Fund (GF) last grant cycle - successfully completed and applied for budget support in transitional phase from GF in 2020. GF approved budget support lasts December 2021.
- Quality assured and quality-controlled malaria diagnostic services have been scaled up throughout the country. Malaria diagnostic services were scaled up and continued with Rapid Diagnostic Test kits (RDT) for hospitals throughout the country.
- Simulation program was conducted in Hambantota in 2020 for all Regional Malaria Officers and AMC-HQ staff, as a training program on how handle a malaria outbreak.
- Mid-Term review on implementation of the National Strategic Plan 2018-2022 was conducted in 2020.
- Vector control guidelines in Prevention of Re-establishment phase of malaria in Sri Lanka was developed in 2020.

### 10.1.6. Anti-Leprosy

Anti-Leprosy Campaign (ALC) is the focal point of Leprosy control activities at Ministry of Health which provides preventive, curative and rehabilitative services in Sri Lanka. Policy/ programme planning and implementation, monitoring and evaluation, collection and dissemination of Leprosy related information and conducting research are some of the major activities lead by the ALC. In 1954, Anti-Leprosy campaign was started as a centrally controlled campaign, but now Directorate of ALC consists of Director Office at Welisara, Central Leprosy clinic at NHSL and Leprosy hospital at Hendala. Around 90 dermatology clinics in the country provide services to Leprosy patients.

The National Leprosy Strategy 2021-2025 is created to address the requirements for Leprosy eradication with the consideration of WHO global strategies and National Health Policies.



Even amidst of COVID-19 pandemic, services were conducted with great difficulties to achieve our vision of “Accelerating towards a Leprosy free Sri Lanka”

### **Activities done in 2020**

1. Conducted house to house surveys in high endemic districts.
2. Patient mapping system was expanded and established to all island 2020.
3. Distributed MCR shoes for patients with grade 2 disabilities.
4. Provision of ulcer care kits, splints and gutters for needy Leprosy patients.
5. Monitoring and evaluation sessions were conducted at most of the Dermatology clinics in the country such as Bibile, Badulla, Mahiyanganaya, Jaffna, Dickoya, Monaragala, Hambanthota, Diyathalawa, Nuwara-Eliya, Hambanthota, Mannar, Vavunia and Trincomalee.
6. Detailed Case Analysis of Leprosy in Sri Lanka was initiated.
7. Six initiation meetings were conducted for preparation of National Strategic Plan 2021-2025.
8. Six Capacity building programs were conducted for preventive and curative health staff (480 participants) for early diagnosis and referral of Leprosy.
9. Two Capacity building programs on mental well-being were conducted for Anti- Leprosy campaign staff (40 participants) at Elkaduwa and Waikkal.
10. Two days PHI training on Leprosy activities was conducted to 8 Public health Inspectors.
11. Four workshops were conducted with local experts for physiotherapists/ Occupational therapists (184 participants) in disability management and rehabilitation.
12. Special awareness programs and mobile clinics were conducted in poya days for the people who observed sil, at Matara and Galle.
13. Distributed MDT treatments for all Leprosy patients in the country to their doorstep by Anti- Leprosy Campaign during lockdown period due to COVID-19 pandemic.
14. Dry ration vouchers were distributed to needy Leprosy patients in all the provinces in the country during COVID-19 pandemic to support their economy.
15. Nineteen (19) monitoring and evaluation visits were done in 11 districts namely Anuradhapura, Nuwara-Eliya, Badulla, Monaragala, Matara, Hambanthota, Galle, Kandy, Gampaha, Matale, Kegalle.
16. Conducted Annual Review meeting of previous year in two sessions at Anuradhapura and Colombo to limit participants adhering to the COVID-19 guidelines.
17. Conducted seven district review meetings at Nuwara- Eliya, Badulla, Monaragala, Kandy, Matale, Gampaha and Galle districts.
18. Twenty-four (24) illuminated boxes (in 2 sets) on Leprosy were prepared and 2 hoardings were established in Colombo.
19. A stall on Leprosy and its prevention was conducted in Medicare exhibition at BMICH.
20. Several awareness programmes were broadcasted through mass media ( Derana, Rupavahini, ITN, and Sirasa ) and several articles on Leprosy were published in Newspapers.
21. A special awareness programs were conducted to religious leaders at Kotagala and to school children at Diyathalawa.

### 10.1.7. Public Health Veterinary Service (PHVS)

The Directorate of Public Health Veterinary Services (PHVS) within the Ministry of Health holds the operational and overall coordination responsibility for the prevention and control of Rabies in Sri Lanka. Rabies is a nearly 100 per cent fatal viral zoonotic disease, yet it is vaccine-preventable. The world Rabies theme for the year 2020 was '*End Rabies Collaborate, Vaccinate*' and island-wide Rabies controlling activities were re-oriented inclined with the global theme of 2020.

Based on the conclusions made during the national campaign evaluation using the Stepwise-Approach towards Rabies Elimination (SARE) in 2019 the national target was set to achieve zero human deaths from dog-mediated Rabies by 2025. PHVS together with relevant stakeholders committed to achieve above national target through a One Health Approach.

#### **Status of animal rabies**

Dog has been the main reservoir and the primary source responsible for nearly 90 per cent of the Rabies related human deaths in Sri Lanka.

Based on animal samples (according to animal species) received at MRI Rabies laboratory, 59.8 per cent (n=383) of dog samples and 13.6 per cent (n=43) of cat samples were confirmed Rabies positive. Out of the overall Rabies positive samples dogs and cats denoted 84.0 per cent and 9.4 per cent respectively. Twenty-seven out of 29 jackal samples submitted for laboratory testing were confirmed positive for Rabies.

#### **Actions taken in 2020**

Program implementation was significantly impacted and many pre-scheduled activities were delayed/ postponed due to the effects of the COVID-19 pandemic and island-wide lockdowns in the year 2020.

In-service training programs were organized and conducted for Rabies PHII and vaccinators in order to equip them with up-to-date knowledge and upgrade their skills with regard to Rabies control strategies and activities.

Several rounds of discussions/meetings were held with higher administrative officials of the Ministry of Provincial Councils and Local Governments to strengthen multi-sect oral collaboration. More, discussions were held with the officials of the wildlife sector and conducted joint activities to strengthen the partnership among key Rabies controlling stakeholders.

In addition to routine dog population control activities, series of special stray dog vaccination and sterilization programmes were carried out with the collaboration of animal welfare organizations in identified public places in Hambantota, Galle, Anuradhapura, Rathnapura, Gampaha and Colombo districts.

World Rabies Day (WRD) was commemorated on 25<sup>th</sup> of September in collaboration with Gampaha Local Government. Officials from the national and regional levels of the Ministry of Health, Regional Veterinary and other stakeholders including Animal-Welfare Organizations and the PHVS staff participated at the awareness walk and the meeting. Media coverage for the event was given. Parallel to the main event, several regional level WRD commemoration events were organized and successfully conducted.

Wild Rabies outbreak was emerged in Kalutara district due to jackals. A systematic outbreak control mechanism was adopted and implemented with the collaboration of all relevant Health, Veterinary, Wildlife, Local Government, Animal Welfare Organizations and Education sectors under the leadership of the PHVS. Outbreak was successfully managed and potential threat to humans and domestic animals was neutralized.

Dog population estimation survey was carried-out in the Nuwara-eliya district. Initial steps including program planning and obtaining ethical clearance were completed to conduct a Rabies survey in the Kurunegala district.

#### **Routine training and awareness programs**

- Two PET programs were conducted in the Kurunegala and Gampaha districts and trained 127 Medical Officers and Nursing Officers on PET guidelines.
- Two Rabies progress meetings were held during the year to evaluate district level Rabies controlling activities and to review human Rabies deaths.
- Public awareness was done through conducting a Rabies awareness stall during an exhibition held in March, 2020 at BMICH.
- Five Community Leader Awareness Programmes were conducted for 855 Grama Niladari and Samurdi Niladari to create awareness on Rabies.

#### **Activities implemented with regional rabies units of RDHS**

Mass dog vaccination programs and female dog sterilization programs were carried out by Regional Rabies Units under the technical supervision of the PHVS. A total of 1,237,257 dogs (Domestic: 1,132,545, Stray: 104,712) were vaccinated against Rabies during the year 2020.

Further, an aggregate of 38,349 female dogs were sterilized during the year 2020 for dog population management. Moreover, several public awareness and health educational programmes were carried out in district levels.

#### **Actions to be taken in 2021**

In addition to routine activities planned in the annual strategic plan, the following special activities are being planned for the year 2021.

- Develop a coasted National Strategic Plan (NSP) for the period 2021- 2025.
- Enhance Rabies real-time surveillance mechanism through providing essential IT equipment (e.g.: Laptops and tabs) and skills training to national and regional level staff.
- Provide recommendations and necessary technical assistance for the development of Rabies legislations.
- Organize and conduct dog population estimation surveys in selected districts.
- Implementation of the 'Rabies Survey' was delayed due to the implications of COVID-19. Steps will be undertaken for expedited implementation of the survey.
- Continuous efforts will be undertaken to enhance Rabies surveillance by increasing the numbers of animal samples being sent to Rabies laboratories, and also by improving real-time data entry to the web-based Rabies surveillance system.

- The PHVS in collaboration with the WHO intend to purchase logistics essential for stray dog vaccination (auto-plungers) and animal sample collection to strengthen MDV and Rabies surveillance.

### 10.1.8. Quarantine Unit

Quarantine Unit of Ministry of Health is a main partner involved in maintaining border health security in Sri Lanka. The main responsibility of the unit is to limit and respond to the international spread of diseases and other public health threats while avoiding unnecessary interference with international traffic and trade. Protection measures seek to prevent harm to human health, including the health and wellbeing of international travellers, aircraft and ship crew and the general public.

Quarantine Unit of Ministry of Health works with other agencies with boarder control responsibilities, including security, customs, biosecurity, maritime and aviation transport, animal health, policing and immigration responsibilities and other units of Ministry of Health.

History of the notification of communicable diseases in Sri Lanka dates back to late 19<sup>th</sup> century. The Quarantine and Prevention of Diseases Ordinance had been introduced in 1897 to implement the notification system on communicable diseases in the country. Sri Lanka is also legally bound to comply and obliged to implement the International Health Regulations (IHR)-2005 with the other member states in accordance with the purpose and scope to protect, prevent and control of international spread of diseases as well as public health risks specially the PHEIC.

The Quarantine Unit and the Epidemiology Unit of Ministry of Health (MoH) are identified as the IHR Co-National Focal Points (NFP). NFP should be accessible at all times and coordinate with WHO IHR focal points. Activities related to implementation of IHR-2005 in Sri Lanka are being carried out by both units in collaboration with each other.

In Sri Lanka, Colombo Port and Bandaranaike International Airport (BIA), Katunayake are the designated Points of Entry (PoEs). Designated PoEs should have the core capacities to act during all times and during a PHEIC situations.

Following Offices are under the Quarantine Unit of Ministry of Health

1. Port Health Office, Colombo Port
2. Airport Health Office, Bandaranaike International Airport (BIA), Katunayake
3. Port Health Office, Galle
4. Port Health Office, Magampura Rajapaksha International Port, Hambantota
5. Airport Health Office, Mattala Rajapaksha International Airport (MRIA), Mattala
6. Port Health Office, Trincomalee
7. Port Health Office, Norochcholai
8. Assistant Port Health Office, Medical Research Institute (MRI), Colombo 08  
This unit is involved with vaccination of travellers against Yellow Fever, Meningococcal Meningitis and Polio.
9. Immigration Health Unit

Ministry of Health with International Organization for Migration (IOM) conducted Inbound Health Assessment of resident visa applicants and screen them for Malaria, Filariasis, Tuberculosis and HIV. Immigration Health Unit of Quarantine Unit refers the positive applicants to relevant Public Health Campaigns of Ministry of Health and monitor their follow up.

### Legal enactments for quarantine and boarder health security

At present, the following legislations are being used to prevent and control the spread of diseases into Sri Lanka.

- Quarantine and Prevention of Diseases Ordinance No. 3 of 1897 and its subsequent amendment No. 13 of 1936, No. 11 of 1939, No. 7 of 1917, No. 14 of 1919, No. 14 of 1920, No. 5 of 1941, No. 13 of 1943, Act No. 12 of 1952, SARS Regulations of 2003 of Quarantine Regulations - 1960 (chapter 173)
- International Health Regulations -2005 (IHR-2005)



**Figure 10.1: Distribution of port and airport health offices**

*Source: Quarantine Unit*

### Main functions of the Quarantine Unit and Port/Airport health offices

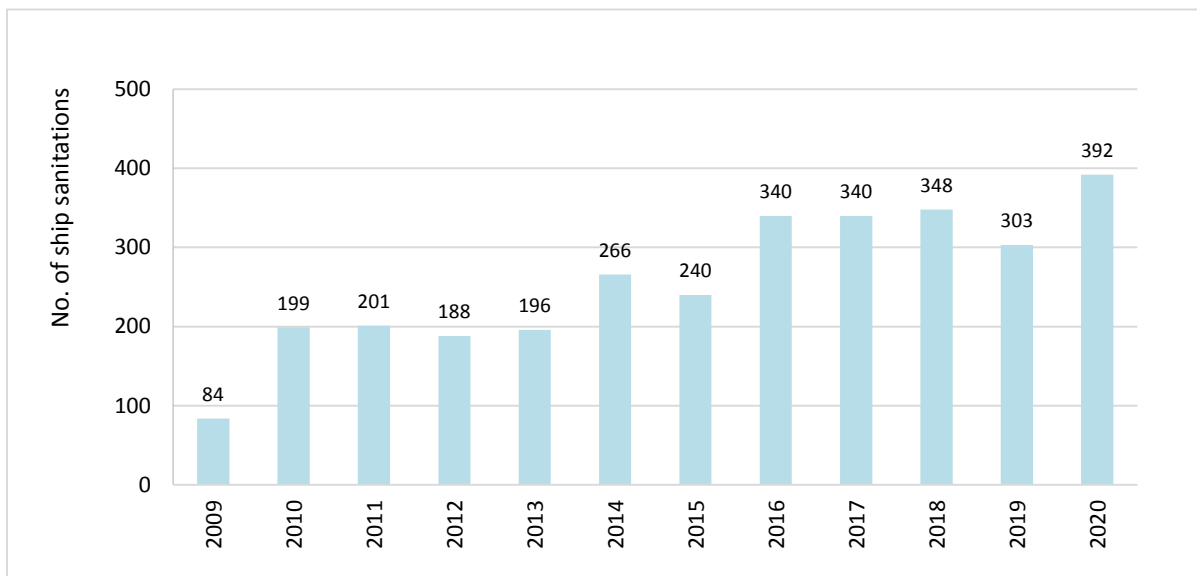
1. Programming, planning, implementation, supervision and monitoring of activities of Public Health Offices at Points of Entry (Ports and airports).
2. Providing technical guidance to staff of port/airport health offices at Points of Entry (PoEs).
3. Inspection of vessels and cargo for prevention of contamination, to maintain in a condition that they are free of sources of infection or contamination, including vectors and reservoirs.
4. Supervision for disinfection, disinsection or decontamination of baggage, cargo, containers, conveyances, goods, postal parcels and human remains or sanitary measures for persons.
5. Inspection of vessels and issuance of free pratique.

6. Issuance of ship sanitation certificates through port health offices at authorized ports.
7. Ensure the environment sanitation and vector control at PoEs.
8. Provision of yellow fever vaccine, oral polio vaccine, meningococcal vaccine and anti-malarial prophylaxis to travellers through Assistant Port Health Office at MRI.
9. Maintain IHR core-capacities at PoEs.
10. Monitoring of implementation of IHR- 2005, Quarantine Ordinance, Food Act, NATA Act, Nuisance Ordinance and Other relevant legislations.
11. Training public health staff on boarder health security and IHR - 2005.
12. Quarantine Unit and Epidemiology Unit act as Co-National Focal Points of IHR- 2005 to coordinate with WHO.

#### **Other activities conducted in 2020**

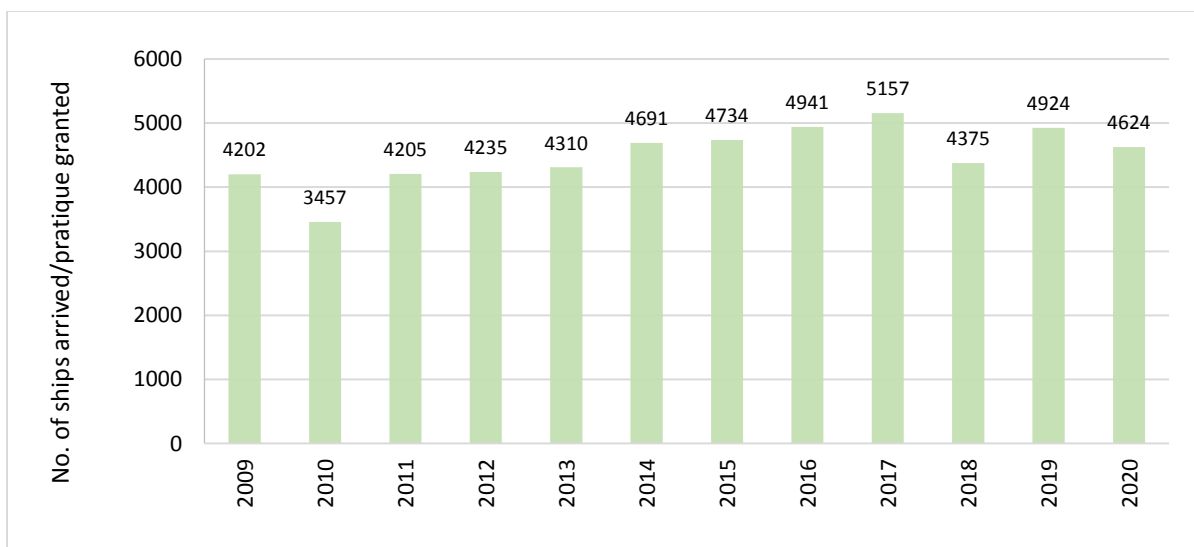
- Training of postgraduate doctors on IHR- 2005 and activities of Quarantine Unit and Airport/Port Health Offices.
- Trained staff for PCR sample collection to detect COVID-19
- Coordinated and conducted PCR sample collection of arriving passengers at Bandaranaike International Airport.
- Conducted awareness programs for staff of Airport and Port Health Offices, Immigration, Customs, Plant Quarantine Unit, Sri Lankan Airlines, Sri Lanka Port Authority, Airport and Aviation Services Limited on COVID - 19 preventive measures.
- Conducted meetings with stakeholders of Corona Virus and staff of Airport/Port Health Offices.
- Prepared guidelines in relation to the quarantine measures of travellers issued by Ministry of Health.
- Introduction of Health Declaration Form and health screening of travellers arriving at points of entry.

Activities carried out by Airport health offices, Port health offices and Assistant port health offices , MRI Colombo are shown in table 7,8 & 9 of annexure II



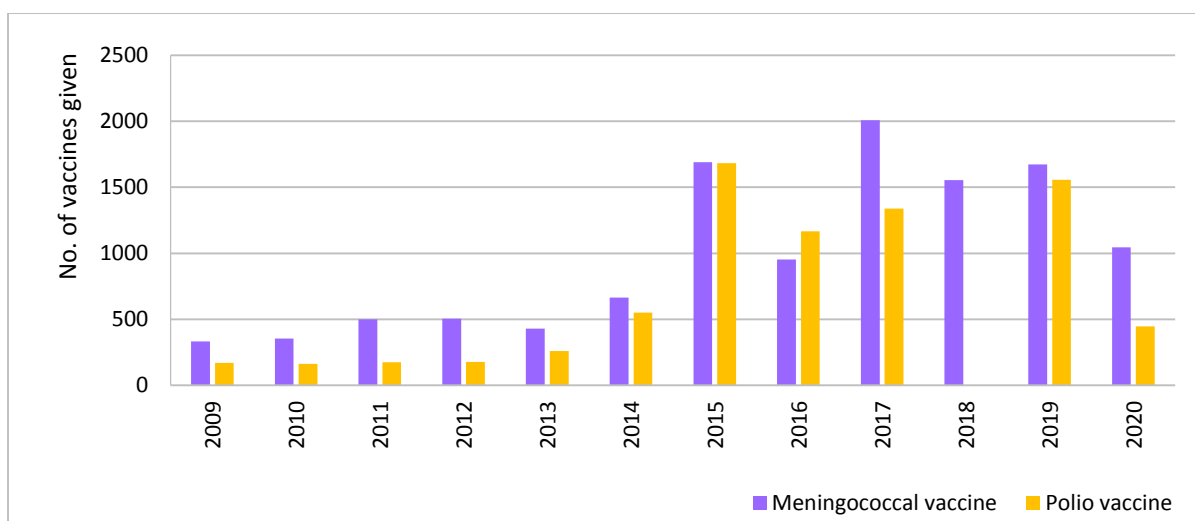
**Figure 10.2: Number of ship sanitations done by port health offices, 2009 - 2020**

Source: Quarantine Unit



**Figure 10.3: Number of ships arrived/ pratique granted by port health offices, 2009 - 2020**

Source: Quarantine Unit



**Figure 10.4: Number of vaccines given by assistant port health office, MRI, 2009 - 2020**

Source: Quarantine Unit

### 10.1.9. National Dengue Control Unit

The National Dengue Control Unit (NDCU) is the central organization in planning and coordination for dengue control and prevention in Sri Lanka, since its establishment in 2005.

#### Actions taken in 2020

The overall aim of current dengue prevention and control activities and prompt treatment of dengue is to reduce the risk of dengue transmission, to strengthen and sustain the control measures in place and minimize the morbidity and mortality of disease. This attempts to reduce the impact/burden of dengue by minimizing the clinical, social and economic impact.

1. Outbreaks were recognized and rapid response was initiated, funded and supervised by NDCU. Targeting the outbreak areas, 6 special mosquito control campaigns (SMCC) were conducted in 2020. The details are depicted in following Table.  
According to the data collected from special mosquito control programmes, most potential premise types for mosquito breeding were construction sites, factories, schools, religious and public places, etc. Mosquito breeding has been observed in all these sites.
2. NDCU was involved in improving dengue management by,
  - Establishing high dependency units in hospitals for the close monitoring and management of dengue patients.
  - Strengthening dengue management protocols, by upgrading Dengue Management Guidelines: for any patient presenting with fever to the hospital, a triage protocol at OPD/PCU/ETU for those fever patients was recommended.
3. NDCU was also involved in novel strategies for mosquito control such as, implementation of the *Wolbachia* project, partnering with the Monash University, Australia. The release of *Aedes aegypti* mosquito infected with *Wolbachia* was commenced in 2020, supported by molecular assessment for *Wolbachia* frequency among mosquito samples post-release.



**Table 10.3: Premises-wise summary of mosquito control campaigns implemented, 2020**

Premises type	No. of premises visited	No. of potential premises	%	No. of Premises with larvae	%
Houses	399,394	99,641	24.95	13,800	3.46
Schools	996	389	39.06	77	7.73
Other educational institutions	1,022	225	22.02	56	5.48
Government institutions	2,587	685	26.48	111	4.29
Private institutions	13,890	3,245	23.36	451	3.25
Factories	770	293	38.05	58	7.53
Construction sites	5,672	3,129	55.17	616	10.86
Religious places	2,040	786	38.53	159	7.79
Public places	1,622	574	35.39	96	5.92
All other places	4,122	1,476	35.81	107	2.60
<b>Total</b>	<b>432,115</b>	<b>110,443</b>	<b>25.56</b>	<b>15,531</b>	<b>3.59</b>

Source: National Dengue Control Unit

- Health education on dengue prevention and seeking medical advice was conducted through mass media and public health staff in the community.

#### Actions to be taken in 2021

- Monitoring and evaluation of *Wolbachia* project in pilot areas by epidemiological and molecular diagnostic data.
- A web-based Entomology reporting system will be implemented with electronic data management platform.
- Establishing a molecular biology laboratory to enhance molecular diagnostic studies.
- Establishing a surveillance system to identify the serotype and genotype of the Dengue virus (DENV) among symptomatic patients admitted to major referral hospitals. This will enable NDCU, to analyse change in DENV serotypes and to assess the predictability of outbreaks.

#### 10.1.10. Chronic Kidney Disease Unit

National Renal Disease Prevention and Research Unit (NRDPRU) of Ministry of Health is coming directly under Additional Secretary (Public Health Services) and Deputy Director General (Public Health Services-I). The Unit conducts National Renal Program, management of the National Kidney Fund and carrying out activities of former President Task Force for Prevention of CKD.

Key messages of the programme are as follows:

- Screening programs for CKD/CKDu are conducted in the CKDu affected areas for early detection of CKD/CKDu patients.
- The clustering pattern of the occurrence of CKD/CKDu in CKDu affected areas needs to be identified for provision of safe drinking water. GPS mapping and survey of CKD/CKDu patients and their water sources helps to locate the occurrence of clustering pattern.

3. Due to expanding number of haemodialysis (HD) patients strengthening of National Haemodialysis Programme is required.
4. Improving the knowledge on Medical RO plant among HD staff and upgrading the quality of Medical RO plants of HD Units is a vital necessity.
5. National Peritoneal Dialysis Programme is helpful to improve the quality of life of CKD/CKDu patients and reduce the HD burden of hospitals.
6. Supplying of drinking water (including RO water) in CKDu affected areas helps to reduce the incidence of CKD/CKDu.
7. Implementing and maintaining the Sri Lanka Renal Registry in collaboration with the Sri Lanka Society of Nephrologists helps to provide required information to make the necessary managerial decisions.
8. Providing facilities to conduct CKD/CKDu developmental programmes to improve the quality of services.

### 1. CKD screening programs conducted in 2020

**Table 10.4: Number of CKD screening conducted and referrals, 2020**

District	No. screened	No. referred
Anuradhapura	15,546	337
Polonnaruwa	18,650	631
Kurunegala	21,802	910
Trincomalee	1,244	30
Ampara	2,076	85
Vavuniya	523	100
Mullativu	1,203	17
Badulla	924	47
Monaragala	14,286	1,041
Matale	7,099	106
Puttalam	1,201	78
<b>Total</b>	<b>84,554</b>	<b>3,382</b>

Source: National Renal Disease Prevention and Research Unit

### 2. GPS mapping and survey CKD/CKDu patients and their water sources

GPS mapping and survey CKD/CKDu patients/water sources was conducted in Minipe (Kandy), Embilipitiya (Rathnapura) and Cheddikulm (Vavuniya) in 2020

### 3. National peritoneal dialysis programme

There were a total of 479 CAPD patients and 15 APD patients in 2020, during which commencement of NPD programme by NRDPRU took place. An extensive four day training was provided to Renal Unit staff of Hospitals on National Peritoneal Dialysis programme by NRDPRU.



#### Training of healthcare staff on NPD in different hospitals

Source: National Renal Disease Prevention and Research Unit

**Table 10.5: Training of doctors and nurses on NPD programmes by district**

District	Number of trainees	
	Doctors	Nurses
Kandy	05	38
Colombo	01	15
Gampaha	15	25
Rathnapura	09	43
<b>Total</b>	<b>30</b>	<b>121</b>

Source: National Renal Disease Prevention and Research Unit

#### 4. National haemodialysis programme

Distribution of service utilization of HD facilities is depicted in Annexure II (table no 3 & 4).

#### 5. Supplying drinking water projects (including RO water) in CKDu affected areas

The NRDPRU of Ministry of Health has commissioned 92 drinking water RO plants in 2020, with the assistance of Sri Lanka Navy with the financial assistance from National Kidney Fund. The purified water from these drinking water RO plants are provided free of charge to the public. The maintenance cost and the electricity bills for functioning of the drinking water RO plants are borne by NRDPRU.

#### Collaborations

1. The constructing of the Water lab along with the medical investigation facilities were commenced at University of Peradeniya
2. MOU signed by Hon. Minister of Health, Nutrition and Indigenous Medicine with Chinese Academy of Sciences. This includes:
  - CKDu aetiological research
  - Foreign training of medical officers, nursing officer, biomedical, field staff on clinical and research aspects
    - 8 Medical Officers, 8 Nursing Officers and 4 Bio Medical Engineers/ Technicians were sent for a two months training in China
    - 10 Field Officers were sent for a two weeks training in China

- Medical laboratory facilities for the Water Laboratory in University of Peradeniya
  - Donation of mobile labs for CKD/CKDu activities
3. Development of Palliative Care Centre in Anuradhapura for CKD and Cancer patients in collaboration with Shanthi Foundation of Australia
  4. There were 6 research collaborations with Renal Disease Prevention and Research Unit

### **Actions in 2020 in relation to key messages**

Commencement of the National Peritoneal Dialysis Programme

Commencement of Medical RO plant establishment through Sri Lanka Navy

Obtaining the donation of eight State of the Art CKD/CKDu Mobile Screening Vehicles



### **Mobile Screening Vehicles**

#### **Actions to be taken in 2021**

Development of four National Peritoneal Dialysis Units in pre-identified Teaching Hospitals.

Introduction of pre-dialysis and post-dialysis renal function assessments in identified Dialysis Units.

Introduction of point of care service delivery during CKD/CKDu screening by RDHS Offices

Installation of eight donated State of the Art CKD/CKDu Mobile Screening Vehicles

## **10.2. Deputy Director General - Public Health Services II (DDG-PHS II)**

Deputy Director General Public Health Services II is mainly assigned to public health areas outside the scope of communicable diseases.

Directorates under DDG (PHS II)

1. Maternal and Child Health
2. Health Education and Publicity
3. Directorate of Nutrition
4. Directorate of Youth, Elderly and Disability
5. Directorate of Nursing
6. Directorate of Estate and Urban Health

### **10.2.1. Maternal and Child Health (Family Health Bureau)**

Family Health Bureau (FHB) is the national focal point in the Ministry of Health responsible for planning, implementing, monitoring and evaluating the Reproductive, Maternal, New-born, Child Adolescent and Youth Health programme (RMNCAYH). FHB provides technical guidance for provincial health care system on its implementation. In addition, FHB advocates the Ministry of Health on matters related to policy, finance, infrastructure and other resource requirements relevant to RMNCAYH programme. Quality control, monitoring and evaluation of the RMNCAYH programme also come under the purview of FHB.

FHB has several units that cover the different components of the RMNCAYH programme. These include:

- Maternal Health
- Intrapartum and New-born Care
- Child Health, Development and Special Needs
- Child Nutrition
- School Health
- Adolescent and Youth Health
- Gender and Women's Health
- Family Planning
- Maternal Morbidity and Mortality Surveillance
- Monitoring and Evaluation
- Oral Health
- Research and Development
- Reproductive Health Center

Each of these units is headed by a Consultant Community Physician (public health specialist) and the Reproductive Health Centre is headed by a Consultant Obstetrician and Gynaecologist. Each unit possesses a separate staff responsible for advocacy, policy and strategic analysis, programme development, technical guidance, evaluation and supervision related to the respective programme components.

During 2020, with the reporting of COVID-19 first case in Sri Lanka, FHB carried out numerous activities to combat the pandemic situation in the country.

### **10.2.2. Health Education and Publicity (Health Promotion Bureau)**

The Health Promotion Bureau (HPB) is the key wing of the Ministry of Health, Sri Lanka, responsible for Health Promotion (HP), Health Communication (HC) and Media Publicity. The HPB promotes and encourages voluntary, positive behaviour change towards healthy living with special focus on Non Communicable Diseases, Communicable Diseases, Nutrition through life course approach, Sexual and Reproductive Health, Mental wellbeing and Oral Health. Partnership with community based organizations, community groups and liaison with all other health and non – health stakeholders from national to grassroots level enable successful implementation of the activities planned by the HPB.

Major activities of the HPB are focused on capacity building of staff for health promotion from health / non health disciplines, private/government sectors, civil society groups and communities, facilitation and creation of supportive environments for healthy lifestyles, development and reduction of Information, Education & Communication (IEC) material on key health issues, coordination with all government and non-governmental institutions and international agencies in promoting health of communities through HP initiatives, education of the general public on health issues through mass media, new media and telehealth services and monitoring of all HP and HC activities at national, provincial and district levels.

Health Education Officers (HEOO) attached to Regional Directorates of Health Offices act as facilitators of HP and are responsible to develop knowledge and skills of all public health field officers and Nursing Officers assigned for Health Education (HE) in hospitals on HP and HC. In addition, they facilitate HP initiatives in the selected settings through advocacy, mediation and enabling, coordinate and conduct publicity events on priority health issues and support district technical focal points in the development of Information, Education & Communication material (IEC).

Health Promotion programmes of the HPB is based on three major strategies: Advocacy, Enabling and Mediation.

**Advocacy** involves achieving political commitment, policy support, social acceptance and systems support for HP.

**Enabling** for HP is achieved by creating a supporting environment which would support communities to adopt healthy lifestyles and the provision of information and skills which is required to make health choices.

**Mediation** involves communication and partnership between various sectors, health and non-health organizations, individuals, families and communities as well as professional and social groups with a view to achieving optimum health status. Furthermore, the programmes focus on communication for positive behaviour change through development and implementation of special communication strategies.

The programmes of the HPB aim to empower communities of specified settings: village, pre-school, school, hospital and workplace, to make healthy choices the best choice and to adopt appropriate positive behaviours. The Mothers' Support Groups (MSG) is a special community based platform which enables the implementation of HP activities through community engagement.

### **Action taken in 2020**

The COVID-19 pandemic and its impact was a major barrier for the implementation, monitoring and evaluation of routine planned programmes of the HPB as identified in its three year strategic plan. However, all capacity building programmes and review meetings were conducted according to plan as virtual programmes. Guidelines for selected categories of health promotion settings: preschool, workplace and hospital were finalized. In addition, development and finalization of a handbook for members of MSG on home gardening and waste management, advocacy programmes for health and non-health sector on establishing HP settings were achieved.

Activities specific for COVID-19 prevention and control were planned and implemented in par with the National Risk Communication plan on COVID-19 with specific focus on advocacy and Health

Education through media, new media and development of Information, and Education and Communication (IEC) material.

Information, Education and Communication material were developed in Sinhala, Tamil and English languages in the form of leaflets, handbills, posters, wall charts, short video clips and pull-up banners.

Special regular media briefing sessions were conducted on selected days of the week at specified times which enabled the sharing of information on daily status of COVID-19 cases and deaths. They provided an opportunity to advice the general public on safety behaviours to prevent the spread of infection as well as update them on guidelines released by Ministry of Health on public movement and access to health services particularly during periods of lockdown.

They were developed in response to the dynamic situation pertaining to the reporting of morbidity and mortality in the country as well the public response to recommended behaviour changes to prevent spread of the disease. It was ensured that all IEC material was distributed to all districts and feedback was obtained through district Health Education officers. Existing roadside digital screens were utilized to display short video clips as visual messages on COVID-19 prevention as well.

### **Social media platforms of the Health Promotion Bureau**

Official Facebook page and Viber were optimized and utilized to convey health messages to promote positive behaviour change through various posts in Sinhala, Tamil and English languages. The views of the users were monitored on a regular basis and were reported as public concerns on a regular basis to the higher officials of the Ministry of Health.

Suwasariya – 24 hour trilingual health hotline which is answered by doctors attached to the HPB was strengthened and made user friendly by introducing a four digit -1999, toll free number. Concerns of callers were compiled and reported regularly to relevant officials of the Ministry of Health.

A new official website of the HPB was developed with the reporting of the first native case of COVID-19; the special features being a COVID-19 dashboard and an Application Programming Interface (API).

A new Short Message Service (SMS) portal specific for the HPB was established which was used to convey messages on COVID-19 prevention to specific community groups, where health promotion programmes were being implemented.

Regular online surveys were conducted to obtain views of the general public on COVID-19 prevention measures and to assess the challenges they faced as well as their feasibility when they adhered to health recommendations. Findings were utilized to modify interventions implemented to control the pandemic as well as modify messages which would motivate the general public to adhere to recommended behaviours.

District Health Education Officers supported the implementation of the programmes of the HPB by distributing all IEC materials as well as in monitoring programme implementation.

An existing auditorium was converted to an online conference room where all virtual meetings, discussions and training programmes were conducted.



## **Action to be taken in 2021**

All programmes identified in the three year strategic plan have been identified for the year 2021. However, the implementation of programmes would depend on the COVID-19 situation in the country.

### **10.2.3. Directorate of Nutrition**

Nutrition Division is the focal point for overall management of the nutrition services across the country on behalf of the Ministry of Health and coordinates the nutrition related activities within the Ministry of Health, other ministries and non-governmental organizations. Monitoring and evaluation of the nutrition related activities are also carried out by the Nutrition Division. This unit is responsible for nutrition related policy and guideline formulation too. In addition to those, Nutrition Division conducts in-service training programmes, awareness programmes and other capacity building programmes on nutrition for the health and non-health staff.

Sri Lanka is suffering from triple burden of malnutrition (under nutrition, overweight/obesity and micronutrient deficiencies). Nutrition Division is working to alleviate the nutritional problems in Sri Lanka through various activities.

## **Actions taken in 2020**

### **1. Implementation of the activities related to District Nutrition Action Plan (DNAP)**

District specific nutritional problems were identified and district specific interventions were planned by the district level programme managers. Those interventions were reviewed and funded by the Nutrition Division.

It is noteworthy that in year 2020, even with COVID-19 pandemic, above 50 per cent of the allocation has been utilized and spent from the annual allocation for DNAP.

### **2. District Nutrition Monitoring System (DNMS)**

District Nutrition Monitoring System (DNMS) is a mobile application developed by Health Informatics Society of Sri Lanka to track district level multi-sectoral approach to reduce nutritional problems among the under five children. Nutrition Division initiated upgrading of DNMS with digitalization of Child Health Development Record (CHDR) in collaboration with Family Health Bureau under WHO funds.

### **3. National strategy for prevention and control of micronutrient deficiencies in Sri Lanka**

National Strategy for Prevention and Control of Micronutrient Deficiencies was developed by Nutrition Co-ordination Division with the support of UNICEF and WHO to provide guidance to improve the nutrition status of the population by preventing the micronutrient deficiencies.

Mid-term review of implementation of National Strategy for Prevention and Control of Micronutrient Deficiencies in Sri Lanka 2017-2022 was proposed with WHO funds.

### **4. Thripasha programme**

Thripasha Programme is contributing to reduce the malnutrition among the pregnant mothers and under five children by providing a nutrient dense food supplement. It was decided to improve the composition of Thripasha according to WHO standards to provide



adequate nutrients for children with moderate acute malnutrition. In view of upgrading the Thriposha premix, baseline study was planned to assess the nutrient levels in the product throughout the supply chain with the aid of World Food Programme.

#### **5. Food fortification programme**

Staple food fortification was considered as a sustainable complementary strategy in place to food supplementation to reduce the prevalence of iron deficiency anaemia. Inclusion of iron fortified rice to the school mid-day meals and mandatory fortification of wheat flour was approved by the Cabinet for this purpose.

Operational feasibility study was carried out to evaluate the possibility of the expansion of the rice fortification programme to five vulnerable districts while development of standards for wheat flour fortification was in progress with the relevant stakeholders.

#### **6. Revision of the national nutrition policy**

Draft of the revised National Nutrition Policy was prepared and series of multi-stakeholder consultative meetings were conducted to improve the drafted document.

#### **7. Revised the food based dietary guidelines for Sri Lankans**

Revised Food Based Dietary Guidelines for Sri Lankans was launched to promote healthy eating. Nutrition Division of the Ministry of Health finalized the guidelines in consultation with relevant Ministries and government organizations, universities, nutrition associations, development partners, various consumer and non-governmental organizations. Website for Nutrition Division was designed and launched mainly to promote Revised Food Based Dietary Guidelines and other activities conducted by the Division.

#### **8. Promotion of nutrition among elderly population**

Considering that nutrition among elders is one of the neglected areas of concern, three publications were developed and printed to create awareness with the technical and financial support of the World Health Organization.

- i. "Guide on nutrition for community dwelling older persons and caregivers" was developed to make aware on healthy eating among elders and their care givers.
- ii. Nutrition Division has taken steps to develop first ever "National Nutrition Quality Standards (NNQS) for residential care for older people" in the country in view of Improving the provision of nutrition care and support for residents.
- iii. "Implementation Guidelines for National Nutrition Quality Standards for residential care for older people" was finalized with the support of relevant stakeholders and in view of facilitating the management and the staff on implementation of NNQS.

#### **9. Promotion of optimum nutrition status during COVID-19 pandemic**

Implemented a nutrition-oriented home gardening project in collaboration with Presidential Task Force for Economic Revival and Poverty Alleviation. Each PHM identified ten households with at least one family member; child or a pregnant mother, who is nutritionally vulnerable due to impaired nutrition status, i.e. stunting, wasting, growth faltering, Low BMI, anaemic, etc. And these families were provided with nutritionally rich plantlets and seeds free of

charge. To promote home gardening at household level, 30 second video clip, a booklet and a leaflet was designed titled “Our nutrition from our own garden” and disseminated too.

In addition, awareness programmes were conducted through mass media to improve immunity through promotion of healthy eating during the pandemic. Capacity building programmes on healthy eating were conducted for health staff and representatives from civil society organizations.

#### **10. Upgraded the Nutrition Profile Model (NPM) for Sri Lanka**

Nutrition Profile Model for Sri Lanka was adapted using WHO - SEARO nutrition profile model with the aim to control undue exposure of children to high fat, sugar and salt including trans-fat. A web application has been developed to translate this information to a platform accessible to community and locally available ready to eat food items will be entered to the system under financial support of WHO.

#### **Actions to be taken in 2021**

- Launching of,
  - National Nutrition Policy
  - Guide on nutrition for community dwelling elders and caregivers
  - National Nutrition Quality Standards for residential care for older people
- Development of Practitioner’s hand book for Food Based Dietary Guidelines for Sri Lankans and capacity building of relevant stakeholders
- Development of nutrition education module to promote healthy eating
- Advocacy on National Nutrition Quality Standards (NNQS) for residential care for older people
- Capacity building on nutrition among elderly and implementation of National Nutrition Quality Standards (NNQS) for residential care for older people
- Updating Nutrition Profile Model

#### **10.2.4. Directorate of Youth, Elderly and Disability**

Directorate of Youth, Elderly and Disability (YED) is the national focal point for health of youth, elderly and persons with disabilities.

To improve the quality of health among youth, elderly and disabled persons through improving the health facilities, disability prevention and health promotion by coordinating, planning, implementing, monitoring and evaluating activities is the goal of the directorate. The national policies, the strategic frameworks, guidelines and the delivery plan including multi-sectoral action plan have been in place to achieve the objectives of the programme.

#### **Youth**

Youth is defined as persons within the age range of 15-24 years. According to the Census of Population and Housing- 2012, 15.6 per cent of the total population belonged to this category. The National Youth Policy of Sri Lanka developed under the principles to ensure, enable and empower

youth includes, 7 goals and objectives focusing on building capacity of young people to meaningfully engage in the national development process.

Awareness and behavioural change programmes for youth is in progress with a special focus on out of school youth and youth attached to state and private higher educational institutions and vocational training institutions. With an objective of identifying the risk behaviour among youth, island wide survey for youth is planned. Capacity building among youth through life course approach is implemented as an ongoing effective intervention. Successful achievements were obtained in conducting activities to minimize lifestyle risk factors among youth using the elderly as a resource group to youth.

As a national focal point for youth health, Directorate of Youth, Elderly and Disability maintains inter and inter-sectoral collaboration with multi-stakeholders for the youth health activities.

### **Elderly**

Elderly health care major activities are implemented according to the National Elderly Health Care Policy. Policy objectives were to make available a comprehensive care package for elderly and equitable delivery of services, encourage private sector and NGO elderly care services, life-course approach, management of human resources for elderly care, strengthening public private partnership, and empower community at large.

In the 'Decade of Healthy Ageing', Directorate of Youth, Elderly and Disability initiated the activities to reduce the burden on families in caring of elderly, strengthening of intermediate care facilities for the needy elders, re-orientation of existing health system focusing person centred integrated care of older persons (ICOPE) with primary healthcare services and strengthens health information system.

In 2020 many activities have initiated which are successfully progressing towards 2021, such as establishment of intermediate elderly care facilities at under-utilized health institutions identified by the national and provincial authorities. Fifty two such units were identified at primary care setting, which are named as "Sanda Piyasa".

Capacity building of the identified multidisciplinary team members on elderly care at primary care setting including informal care givers at community level is progressing as a continuous activity.

Development of training manuals and advocacy materials on elderly health care, adopting ICOPE global training manual to Sri Lanka and preparing manual for the informal care givers on elderly health care were successfully completed.

Promotion of active and healthy ageing programme at different settings including pre-retirement seminars is successfully progressing. Conducting of elderly health care Steering Committee is a higher-level decision-making platform for elderly health issues both in curative and preventive sector. This committee is chaired by the Secretary of the Ministry of Health.

Older persons were identified as a vulnerable group for the COVID-19 pandemic. All possible preventive and curative measures were taken to protect elders from COVID-19. Educational materials were developed on prevention of COVID-19 among older persons. Health guidelines were developed for the elderly homes. Social Service Officers, Elder Rights Promotion Officers and administrators of the elderly homes were given training on how to operationalize the health guidelines at elderly homes and community to prevent COVID-19 among elderly. Many activities were conducted to

promote mental wellbeing among elderly especially during lockdown periods. Among the activities, publishing of “Elder’s Diary” and “Youth 2 Elderly” booklets were successfully completed. Multi-stakeholder collaboration was done to fulfil the health, social and economic needs of the elders during the COVID-19 lockdown and travel restricted periods.

## Disability

As of the last Population Census conducted in 2012, population with difficulties (5 years and above) by the type and level of difficulty is given in the following Table 10.6

**Table 10.6: Population with difficulties by type and level of difficulty, 2012**

Type of difficulty	Number of persons with difficulty	Percentage (%) out of total Cases	Number of persons not possible at all	Percentage (%) out of total cases
Seeing	968,265	62.2	28,674	20.3
Hearing	354,871	22.8	34,206	24.2
Walking	662,200	42.6	72,013	51.0
Cognition	301,192	19.4	42,497	30.1
Self-care	142,583	9.2	54,992	39.0
Communication	133,623	8.6	47,210	33.5
<b>Total cases</b>	<b>1,555,536</b>		<b>141,096</b>	

Source: Department of Census and Statistics

Ministry of Health (Directorate of YED) has published a handbook titled “Design Considerations on Accessibility for Persons with Disabilities”. Based on this hand book, Directorate of Youth, Elderly and Disability has taken measures to improve capacity building among health care workers at policy level on the importance of implementing elderly and disability friendly environments at health institutions both in state and private sector. Based on this initiative many health institutions developed accessibility facilities for the persons with disabilities.

Directorate of Youth, Elderly and Disability has initiated many advocacy programmes on prevention of COVID-19 among persons with disabilities and their caregivers, under the theme of “leaving no one behind”. Advocacy, awareness materials and guidelines were developed and distributed for persons with disabilities with a special attention to who are using wheel chairs and persons with Disabilities with hearing difficulties using sign language. Materials needed to practise preventive measures for COVID-19 such as disability friendly wash basins were distributed with the assistance of World Health Organization.

Activities for disability care and rehabilitation through multi-sectoral, multi-disciplinary team involvement focusing right based holistic approach was implemented. Revised the disability and rehabilitation guidelines for Sri Lanka and strengthened the number of health institutions with accessibility facilities for persons with disabilities. Improving infrastructure facilities and human resource facilities for the disability care and rehabilitation at provincial rehabilitation health institutions and other health institutions with rehabilitation units are progressing.

Primary health care institutions will be strengthened for disability care by rehabilitation under the primary health care reforms and using essential health care package. This will be implemented as a

joint activity of strengthening elderly health care at primary level. Health disparities will be reduced by making existing health care systems more reachable to persons with disabilities. Providing all categories of trained human resource for disability rehabilitation to improve multi-disciplinary team concept is already initiated. Improved advocacy programmes for key stakeholders on disability care and rehabilitation including training on sign language. Special focus to improve knowledge on sexual and reproductive health among persons with disabilities is another initiative to cater unmet need. Improve community awareness and advocacy to avoid discrimination of persons with disabilities; strengthening of public private partnership and participation of NGOs and strengthening of evidence based information on disability rehabilitation into practice are identified as way forward activities.

# 11. Medical Services

Medical Services are organized under two Deputy Director Generals. This chapter presents services provided by responsible units under these two DDGs.

## 11.1. Deputy Director General (Medical Services-I)

The division of Deputy Director General (Medical Services-I) caters to a wide range of services pertaining to human resource management functions of Intern medical officers, postgraduate trainees, specialist medical officers and medical administrators as well as supervision, coordination and monitoring of medical services especially tertiary care services. Yearly, more than 1620 Intern medical officers are appointed and around 3000 postgraduate trainees are following around 58 different specialties ranging from Diplomas, Master's Degrees and Doctoral Studies (MD). Nearly 2500 specialist medical officers are providing specialist care for the nation and 270 medical administrators are distributed in health institutions at different levels of care; Base Hospitals, District General Hospitals, Provincial General Hospitals and Teaching Hospitals, as well as in public health programmes, specialized medical institution and Ministry of Health. In addition, the National Transplant Programme (NTP) in the government sector and the Quality Assurance programme in the health sector falls under the direct purview of DDG (MS-I).

Development of tertiary level medical facilities in major hospitals and other institutions including the establishment of necessary infrastructure facilities, provision of medical equipment with high technology, and providing administrative support are major functions of the division.

The multitude of COVID-19 related responsibilities undertaken by the Department of DDG (MS-I) could be categorized as follows:

1. Infrastructure development
2. Human resource management
3. Training and education for COVID-19
4. Guidance to hospitals and preparation of necessary guidelines
5. Equipment and consumables including PPE
6. Monitoring and supervision
7. Lab sector development in relation to COVID-19
8. Coordination of relevant experts
9. Identify and coordination of external fund sources, donors and assistance of tri forces
10. Provision of assistance for the preventive sector when necessary

Priorities under DDG (MS-I) for 2020

1. Establishment of National Transplant Programme
2. Accreditation of healthcare Institutions as well as quality and safety in health sector
3. Capacity building of medical administrators (Scaling up medical administrative abilities and innovative management) and specialist medical officers in related areas
4. Upgrading of services of all hospitals above the level of base hospitals Category B

There are four directorates under the purview of DDG (MS-I)

1. Tertiary Care Services (TCS)
2. Healthcare Quality and Safety (HQ&S)
3. Registered Medical Officers (RMO)
4. Nursing-Medical Services (Nursing-MS)

Following are some of the main duties performed by the DDG (Medical Services - I) and its directorates

### **11.1.1 .Tertiary Care Services**

- Recruitment and deployment of medical administrators
- Recruitment and deployment of all medical specialists in the government health services
- Postgraduate training of the medical professionals including overseas training
- Internship training of medical graduates from state and foreign universities
- Human resources management functions in relation to relief house officers, PGIM trainee medical officers, specialists, medical officers and medical administrators.
- Coordination, supervision and monitoring of medical services, teaching hospitals and specialized Institutions

#### **Achievements of tertiary care services**

- Appointed 1621 intern medical officers (2 Batches)
- Established an online inquiry system with tracking of activities.
- Almost completed service minute revision.
- Almost completed transfer policy of specialist medical officer and medical administrators.
- Streamlined annual transfers of specialist medical officers.
- Established database for medical administrators and specialist medical officers with online application
- Infrastructure and cadre improvement
- Established Internal IT network at Tertiary Care Services unit
- Established online inquiry management system, file management and tracking system, video conference and E mail communication system

### **11.1.2. Directorate of Healthcare Quality and Safety**

Directorate of Healthcare Quality and Safety (DHQS) was commenced in year 2012 with the principles of a centrally driven, locally lead, clinically oriented, patient centered continuous quality improvement. The National Policy on Healthcare Quality and Safety was published in year 2015 with following seven key result areas.

1. Customer /Patient satisfaction
2. Managerial systems and process improvement
3. Clinical effectiveness
4. Risk management and safety
5. Enabling culture for quality improvement
6. Staff development and welfare
7. Research for quality improvement and patient safety

#### **Actions taken in 2020**

- Conducted capacity building programmes for medical administrators, medical officers, nursing officers and para medical officers (covered up to base hospitals)

**Table 11.1: Information on capacity building programs, 2020**

Name of training	No. of programs	No. of participants	No. of days
Training of master trainers on 5S, CQI, &TQM	2	125	5
Training on clinical audits	2	87	2

- Conducted performance review meetings

**Table 11.2: Quarterly and annual performance review meetings, 2020**

Review meeting	Line ministry participants (49)	Provincial ministry participants (26)	Remarks
Annual performance review meeting	47	8	Conducted online
1 <sup>st</sup> Quarter review	48	21	Conducted online
2 <sup>nd</sup> Quarter review	48	21	Conducted online
3 <sup>rd</sup> Quarter review	48	-	Conducted online
4 <sup>th</sup> Quarter review	-	-	-

- Developed a website for the directorate of healthcare quality and safety.

Addressing the requirement of a website for the Directorate of healthcare quality and safety, developing of a website was performed and it was launched with the blessings of the Hon. Minister of Health during the national celebration of World Patient Safety Day 2020.

- Revised check list for supervision of primary healthcare institutions and piloting.

Revision of check list for supervision of primary healthcare institutions was a much-needed project. The quality and safety of the primary care institutions has been assessed using a checklist that was developed in 2015. The checklist was revised with stakeholder concurrences and was piloted in selected PMCUs in Gampaha district. The revised tool was published and launched as a booklet in December 2020.

- Celebrated patient safety day 2020.

World Patient Safety Day 2020 was celebrated in the auditorium of the Directorate of healthcare quality and safety. Hon. Minister of Health graced the occasion as the chief guest. The event was conducted following the COVID-19 health regulations with the physical presence of a limited number of participants and the rest of the participants joining virtually.

Sharing best practices related to the COVID-19 pandemic situation was a main activity of the event. Best proposals were selected for awarding and they were allowed to present their best practices as the main event.

In parallel to this event, the iconic Lotus Tower was lighted in orange to appreciate the service of healthcare workers during the pandemic.

- Quality assessment of COVID-19 treatment centers and isolation wards of all hospitals.



### **Activities to be performed in 2021**

- Development of 5 year strategic plan for quality & safety
- Development of national guidelines on management of central sterile supplier department.
- Development and launching of national action plan on medication safety
- Strengthening of clinical audits in hospitals by conducting training programmes for healthcare staff.
- Advocacy for medical professionals through SLMA.

#### **11.1.3. Directorate of Registered Medical Officers**

Main role of this directorate is human resource management functions of registered medical officers and assistant medical officers in health services.

#### **11.1.4. Directorate of Nursing (Medical Services)**

Directorate of Nursing (Medical Services) is responsible for improving quality and productivity in nursing service care.

### **11.2. Deputy Director General (Medical Services-II)**

This unit functions under the scope of supervision and coordination of medical care services and human resources management functions of medical officers in government health services other than production, disciplinary action and termination.

Directorates under the purview of DDG (MS-II)

1. Medical services branch
2. Primary care service branch
3. Private health sector regulatory branch
4. Administrative branch I and II
5. Prison health services

Areas of development under Deputy Director General (Medical Services-II)

1. Improve in health care services
2. Improve health care manpower and human resources
3. Infrastructure development in the health sector
4. Training of staff and the general public in the aspect of accident & emergency care
5. Sports Medicines - Improve screening of athletes' pre-participation in events

#### **Objectives**

- Maximum utilization of primary health care institutions and prevention of underutilization of health care resources while improving and implementing the referral system.
- To establish more effective and efficient medical services administration through centrally linked system in island-wide services.
- Utilization and regulation of private health care services for more quality, safety and customer-friendly affordable system in Sri Lanka.

- Improve the mental, physical and social well-being of detainees in Sri Lanka.
- Establishment of a more effective Non-communicable diseases prevention system in all levels of health care institutions that utilization of sports medicine and nutrition experts.
- Minimizing death and disabilities due to accidents & injuries while strengthening the accident & emergency care services.
- To ensure the more effective and efficient establishment of activities for appointments, confirmation and promotion of all kinds of leave and retirement processes of medical officers.

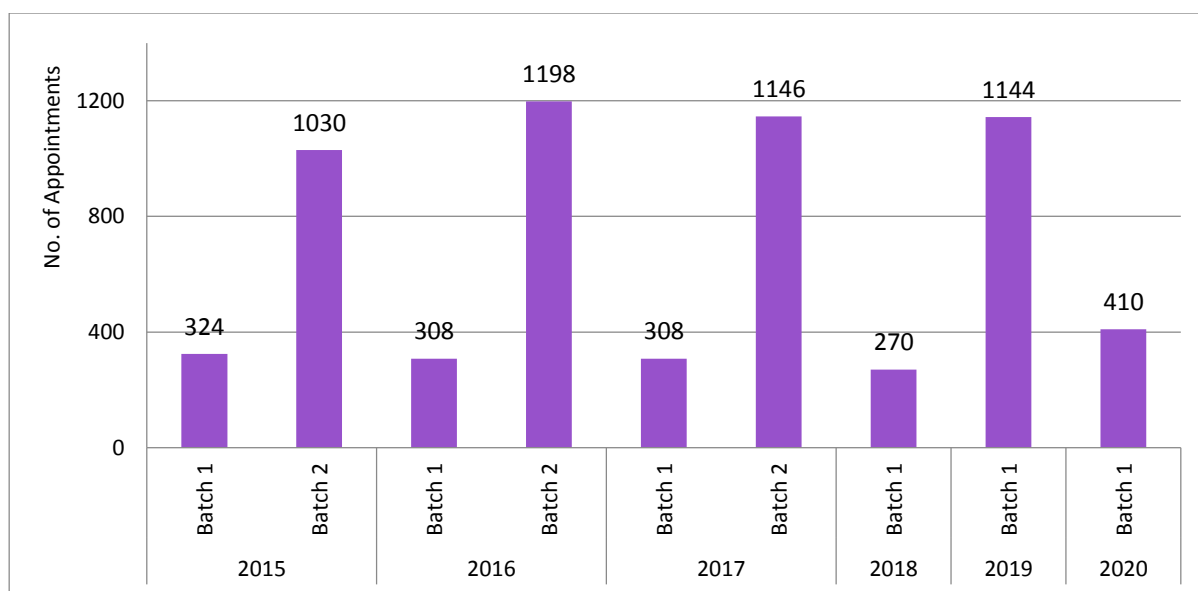
### **11.2.1. Measures Taken to Improve Health Care services**

Ministry of Health Services, primary health service with collaboration of WHO implementation of primary health care project. The government has recognized that to achieve United Nations health-related Sustainable Development Goals (SDGs) and universal health coverage, a stronger primary healthcare system is essential. Ministry of Health and Ministry of Provincial Councils and Local Government in Sri Lanka has embarked on a 5-year project to strengthen primary healthcare. The development objective of the project is to increase the utilization and quality of people-centered primary healthcare services.

- Strengthening and streamlining of establishment of accident & emergency care service in twenty-eight (28) line ministry hospitals. The investment of over 9.12 billion in health care services.
- Annual grant – Ministry of Health provided a large number of grants for professional colleges for the benefit of health care development.

### **11.2.2. Measures Taken to Improve Health Care Manpower and Human Resources**

- 1) Appointing medical officers who have completed their internship to institutions in all provinces for the opening of new units and closed institutions.
- 2) Implementing annual transfer orders on the 1<sup>st</sup> of January as per the Public Service Commission guidelines.
- 3) Re-attachment of medical officers to the Ministry after completion of PGIM attachment.



**Figure 11.1: Number of post-intern appointments, 2015 - 2020**

Source: Deputy Director General-II (Medical Services)

**Table 11.3: Number of implemented annual transfers, 2015 - 2020**

Year	2015	2016	2017	2018	2019	2020
Number of transfers	2,924	2,930	3,507	2,621	2,837	2,700

Source: Deputy Director General-II (Medical Services)

**Table 11.4: Number of appointments given to PGIM training completed medical offices, 2015 – 2020**

Year	2015	2016	2017	2018	2019	2020
Number	133	179	430	231	131	125

Source: Deputy Director General-II (Medical Services)

### 11.2.3. Infrastructure Development in the Health Sector

Since the commencing of the Accident & Emergency Care Project in 2016, by 2022 the Ministry of Health has profoundly implemented the culture and awareness among the staff handling accidents, emergencies, and the public those who interact with accidents and emergencies. Furthermore, since 2016 Ministry of Health established 6 new Accident & Emergency care units (A&E units) in the following hospitals out of a total of 28 hospitals.

**Table 11.5: Establishment of A&E units – construction of new units and provision of equipment for units**

Name of institution	Year of completion
TH Jaffna / TH Ragama/ TH Batticaloa/ DGH Kalutara / DGH Polonnaruwa / BH Kalmunai North	Completed construction in 2018 and continue to streamline of Accident & Emergency care services
DGH Trincomalee / DGH Gampaha / BH Mulleriyawa East / DGH Chillaw / BH Gampola/ TH Kegalle/ TH Kandy/ PGH Badualla/ DGH Ampara	Commenced in 2018 planning to expedite construction

Source: Deputy Director General - II (Medical Services)

Upgrading of 14 Accident & Emergency care units in line ministry institutions  
Essential medical equipment was provided to following 14 line ministry hospitals;

PGH Rathnapura	TH Colombo South -Kalubowila
DGH Monaragala	TH LRH
TH Karapitiya	DGH NuwaraEliya
AMH Kalmunai North	TH SBCH Peradeniya
DGH Hambanthota	TH Batticaloa
PGH Kurunagala	BH Akkeripaththu
TH Colombo North - Ragama	BH Kanthale

#### 11.2.4. Establishment of National and Provincial Simulation Centers

Major steps have been taken to streamline simulation training in the country in each province including establishing,

1. Advisory committee on resuscitation involving all the colleges – chaired by DGHS every 4 months including simulation core group meetings
2. National core group for simulation which representing professional colleges of Sri Lanka and the other relevant stakeholders.  
Provincial simulation training center is the training hub in each province in accidents and emergencies.

The main goal of the simulation center is to improve safety within patient care. Current and future health care professionals “practice on plastic” honing their skills, refining advanced techniques and learning valuable social interactive tools for delivering important news to patients. This translational research becomes vital for creating the gold standard in patient safety and medical teaching.

Following hospitals are established with provincial simulation centers

TH Jaffna  
 TH Karapitiya  
 TH Kurunegala  
 TH Kandy  
 TH Batticaloa  
 TH Anuradhapura  
 TH Mulleriyawa (National Simulation Center)  
 PGH Badulla

### 11.2.5. Sports Medicines- Health Screening of Athletes

The main focus is on school and professional athletes' health, diagnosis, treatment, and injury prevention. This unit is responsible for establishing Sports Medical Unit at the province level. Since 2014 around 1920 medical officers were trained to assess and issue a medical certificate fitness assessment certificate.

**Table 11.6: Budget allocations for Deputy Director General- II (Medical services branch) ,2019 -2020**

Project		2019	2020
1	Accident & Emergency Care Project ( <i>Rs. Mn</i> )	400	75
2	National stroke center BH Mulleriyawa ( <i>Rs. Mn</i> )	200	135

Source: Deputy Director General - II (Medical Services)

## 11.3. Primary Care Services

### 11.3.1. National Intensive Care Surveillance (NICS)

National Intensive Care Surveillance is a critical care registry presently networking 85 adult Intensive Care Units (ICUs), 10 pediatric ICUs and 13 neonatal ICUs in government hospitals of Sri Lanka. It is a collaboration led by the Ministry of Health and maintains a critical care registry and operates a 24/7 ICU bed availability service for adults, children and neonates.

The main objectives are:

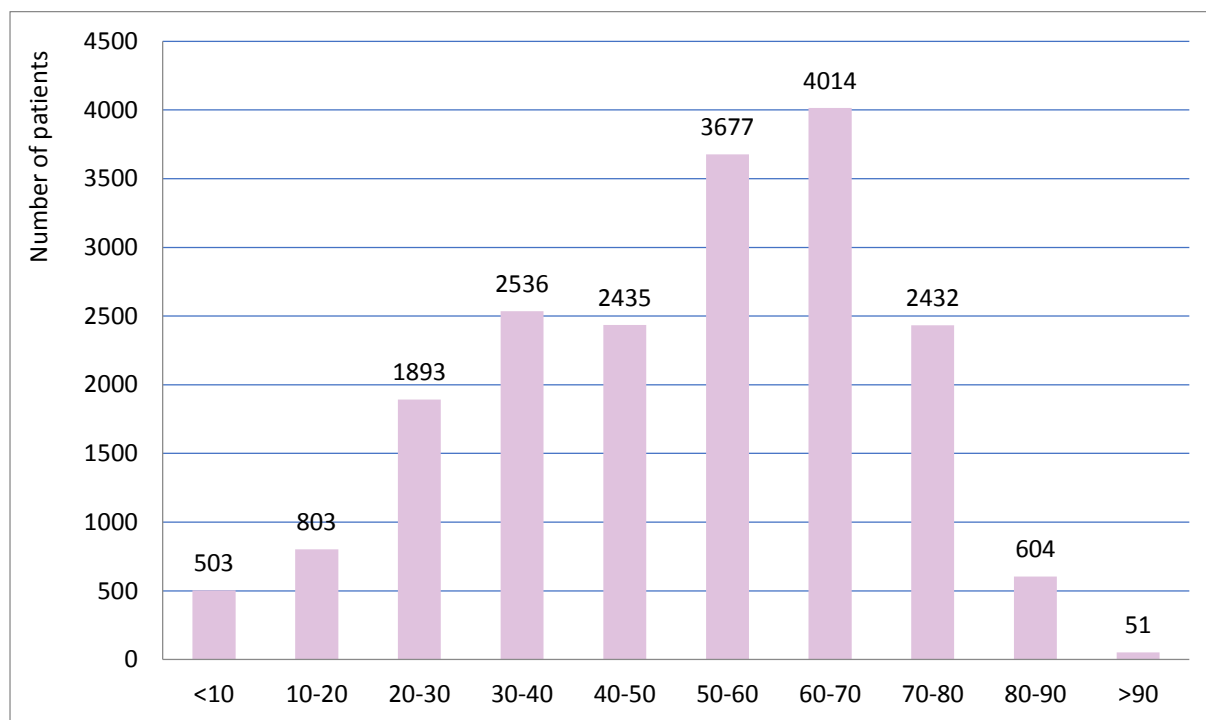
1. To maintain a national critical care clinical registry in Sri Lanka
2. To maintain a critical care bed availability / information system
3. To provide feedback/reporting to the participating ICUs to improve the quality of care

NICS system is involved in gathering, cleaning, analyzing and disseminating information from ICUs regarding patients, staffing, beds and other available resources. In addition, NICS captures information to enable benchmarking of ICUs adjusting for severity of illness. NICS also makes it possible to assess 30-day post ICU outcomes and the quality of life of critically ill patients.

The benefits of NICS include; having an ICU bed availability system (24/7), enables planning of ICU services based on needs, capacity and resources; helping coordinate ICU resource management during any national/regional emergency or disaster, improving quality of patient care, improving the

cost effectiveness of critical care, capacity building of critical care personnel, promotes local and international audits/research.

Age distribution of patients admitted to adult ICUs in 2020 is illustrated in Figure 11.2 and is shown in table 11 of annexure II.



**Figure 11.2: Age distribution of patients admitted to adult ICUs, 2020**

Source: National Intensive Care Surveillance

#### 11.4. Medical Statistics Unit

Medical Statistics Unit (MSU) has been established in the Ministry of Health around 1960 and functions under the Assistant Secretary (Medical Services) of the Ministry of Health. MSU is responsible to provide accurate, unbiased, reliable and timely statistics related to the health sector of the country. Technical support for collect, compile and analysis hospital statistics are provided by the staff of the Department of Census and Statistics.

This unit collects inpatient, outpatient and clinic data, health staff and specialist's data, maternal and dental data and bed capacity. MSU publishes Annual Health Bulletin (AHB) for disseminating statistical information and other remarkable activities carried out by the various units, campaigns and branches of the Ministry of Health. Hospital data, collected by MSU are immensely useful for health sector policy planners, researchers, students and many other national and international stakeholders. It is expected that those published health data are used by health administration for evidence-based decision making, evaluation, research and study needs and other data requirements. Medical Statistics Unit also provides necessary clarifications and guidance to the researchers and many other data users for proper use of the relevant data in practice.

Except for part of inpatient data collection, all other data collection activities are done by postal methods. Out of all these activities, Inpatient Mobility and Mortality data collection is the heaviest operation and annually, over 7 million hospital episodes are reported for inpatient data collection. With the assistance of Health Informatics Consultants of the Ministry of Health, inpatient data collection is powered by the web application eIMMR and the data analysis is also automated for certain outcomes. By the year 2020, more than 90 per cent of government sector health institutions supported to the eIMMR system.

### Activities done in 2020

MSU conducts annual training programs and awareness workshops at the RDHS division level to improve the quality and timeliness of data. All relevant staff engaged with hospital data collection and other officers who contributed for data collection at the RDHS division level are participated to this training programs. Hospital medical recording officers use ICD 10 for disease classification and MSU staff continuously conducts training programs to identify the issues with data coding and data entry, to improve the analysis at the hospital level and regional level and to build up the capacity to use data for evidence based decision making, etc. Due to the pandemic situation in 2020, these programmes were been able to conduct only in Killinochchi, Mullativu and Jaffna districts in Northern Province.

**Table 11.7: Number of e-IMMR and hospital statistics training programs, 2016-2020**

Year	2016	2017	2018	2019	2020
Number of Programs	26	26	26	26	3

Source: Medical Statistics Unit

In the year 2020, MSU was responsible to plan a data collection procedure for island wide hospital theatre operations. As an initial step, a format for a formal theatre register is prepared in the year 2020 and a pilot study was planned to be done in 8 government hospitals: Anuradhapura TH, Peradeniya TH, Castle Street Hospital for Women, Lady Ridgeway Hospital, National Hospital Colombo, National Eye Hospital, BH Panadura and DGH Gampaha. Based on the observations, necessary adjustments will be made to finalize the structure of the theatre register.

## 12. Education, Training and Research

Education, Training and Research Unit of the Ministry of Health which is headed by the Deputy Director General - ET&R, is the focal point in policy formulation, providing technical guidance related to training and coordination of basic training programmes for all staff categories except for basic degree programmes for medical officers and dental surgeons. Furthermore, this unit is responsible for capacity building of the health work force through post-basic and in-service training programmes. In addition, the unit is responsible for developing policies and capacity in research related to health. Medical Research Institute (MRI) and National Institute of Health Sciences (NIHS) also come under the purview of the DDG-ET&R. Coordination and technical supervision of the work carried out by these institutions is a responsibility of the DDG-ET&R. Furthermore, the ET&R unit coordinates with the Ceylon Medical College Council (CMCC), University Grants Commission (UGC) and other relevant academic and professional institutions and organizations in Sri Lanka intending to strengthen the human resource capacity of the health sector.

### Actions taken in 2020:

- **Recruitment and basic/post-basic training programs**

Intake for training is determined by the administrative sections of the Ministry of Health in consultation with the ET&R unit and Human Resource Development unit. The training profile for 2020 is shown in the Table 12.1.

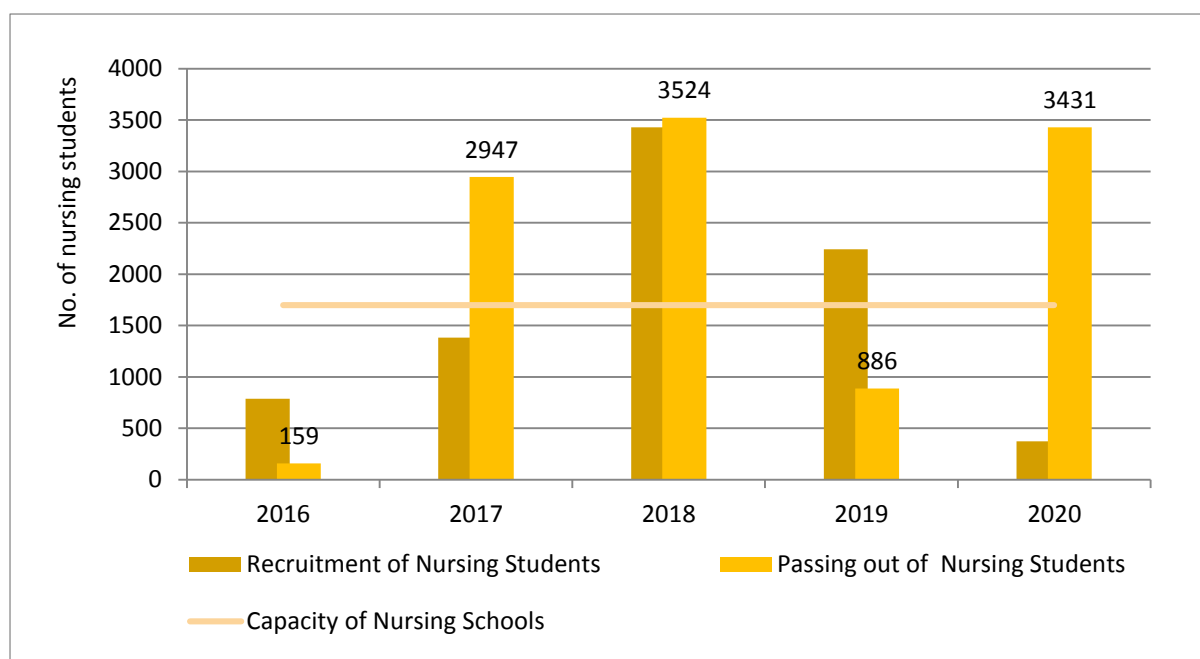
**Table 12.1: Profile of basic training programs, 2020**

Category of staff	No. recruited	No. completed	Capacity
Nursing Officers (Basic Training)	373	3,431	1,700
Medical Laboratory Technologists	113	133	150
Pharmacists	32	79	200
Physiotherapists	-	8	80
Occupational Therapists	51	5	20
Radiographers	-	6	50
Public Health Inspectors	317	43	250
Health Entomology Officers	15	23	15
Electro-Encephalographers	16	-	20
Ophthalmic Technologists	-	8	30
Dental Technicians	12	-	6
School Dental Therapists	55	14	30
Prosthetics & Orthotics	8	-	20
Public Health Laboratory Technicians	-	61	70
Hospital Attendants	409	394	-
<b>Total</b>	<b>1,401</b>	<b>4,205</b>	<b>2,641</b>

Source: Education, Training and Research Unit



From 2016 to 2020, annual recruitment of student nurses and annual number of passed out is illustrated in the Figure 12.1.



**Figure 12.1: Trends of training nursing students, 2016 - 2020**

Source: Education, Training and Research Unit

- **Post basic training for nursing officers**

Table 12.2 demonstrates the post basic training programmes (6 months duration) carried out for the nursing officers in 2020.

**Table 12.2: Post basic training programmes, 2020**

Name of programme	Number of officers	
	Recruited	Completed
Psychiatry nurses training	-	59
Ward management & supervision training	822	-
Public Health Nursing Sister training	125	-
Public Health Nursing Officer training	88	-
Teaching & supervision training	29	80
Midwifery training	-	612
<b>Total</b>	<b>1,064</b>	<b>751</b>

Source: Education, Training and Research Unit

- **Capacity development of service providers of the Department of Health**

The ET&R Unit plays a pivotal role in the management of in-service training programmes in the health sector by providing necessary technical and financial assistance. Depending on institutional needs, during the year 2020 funds were allocated for the training of many categories of the health workforce. The ET&R Unit reviews the training proposal for eligibility based on the training needs identified by the relevant institutions such as PDHS, RDHS, hospitals and other health institutions. Training programmes fulfilling eligibility criteria were funded. Fund utilization is monitored and evaluated. The numbers and categories of staff who received in-service training with funds from the ET&R Unit during the year 2020 for Group Training Programmes, Language Training Programmes and Individual Training Programmes are as follows.

**Table 12.3: Number of health personals received in-service training, 2020**

Category of health personal	Group training	Individual training	Language training
Consultants	85	-	140
Medical officers	1,844	12	-
Principals/Tutors	-	17	-
Nursing officers	3,041	15	1,344
PSM categories	975	-	90
Paramedical	220	-	
PPO/PPA/DO/HMA/MA	888	62	-
Health assistants	535	-	-
Other staff	701	-	-
<b>Total</b>	<b>8,289</b>	<b>106</b>	<b>1,574</b>

Source: Education, Training and Research Unit

- **Research**

ET&R Unit of the Ministry of Health coordinate the research activities in collaboration with the National Health Research Council (NHRC) to promote health and health-related research in Sri Lanka. The research proposals submitted to the unit for funding are scrutinized for suitability by the NHRC and grants are provided for the approved proposals through the consolidated fund.

**Table 12.4: Activities carried out by the research unit, 2020**

Name of the activity	Description	Remarks
Research methodology programme (Online)	Done two workshops for health care workers	1 <sup>st</sup> workshop - January 2020 2 <sup>nd</sup> workshop - March 2020
Evaluate ethics review committees	Sent data collecting format to relevant committees	Completed
Dissemination of research findings	Categorized researches according to directorates and copied to CDs	Ready to send to units
Granted admin clearance for 03 COVID-19 related pieces of research and others	Granted administrative clearance	Approved - 25 Additional approved - 4 Provisional approved - 1
Revised circular on administrative clearance issued in 2015 and 2017	Identified need of revising the circular on administrative clearance. NHRC contributed to developing it.	Circular issued under the No. 01/30/2020
Identified national health research priority	Developed the format for gathering data	In-progress
Identified the need of revising existing guidelines on establishing ERCs at the institutional level	Research Management Committee (RMC) advised preparing a guide to establish ERC in the Ministry of Health	Identified resource pool , Inputs are taken into process
Identified focal points for institutional research cells	Meeting was arranged with regional CCPs	Pending feedback from the focal point
Started to develop a curriculum to train the ERC members	Identified the committee	In progress
Developing a pathway to approve research proposals with Material Transfer Agreements	A preliminary discussion was taken place at the Research Management Committee	In progress
Awareness was done regarding research allowance for non-medical categories	Conducted workshop to aware/promote non-medical categories	Completed Awaiting feedback
Approving NHRC act	Prepared Cabinet Memorandum	Awaiting to brief the Minister
Conducting online research methodology programme for medical officers	An advanced online research methodology programme was developed	Awaiting to conduct
Developed an online research submission and tracking system	Completed system developments	Awaiting to launch
National Health Research Repository	Started to upload the research	In progress

Source: Education, Training and Research Unit

- **Paying research allowance**

Payment of research allowance for senior officers, are as follows.

**Table 12.5: Number of research proposals approved for payments, 2020**

Date	New research proposals	Progress reports	Publications
2020.01.25	20	4	3
2020.02.15	5	2	1
2020.04.18	14	2	1
2020.05.23	5	3	4
2020.06.23	4	2	3
2020.07.18	6	10	3
2020.08.15	6	8	5
2020.09.19	13	8	1
2020.10.17	5	10	0
2020.11.21	4	7	4
<b>Total</b>	<b>82</b>	<b>56</b>	<b>25</b>

Source: Education, Training and Research Unit

## 12.1. Medical Research Institute

Medical Research Institute is the premier institution in the country that provides special and reference diagnostic facilities for patient care. It is also at the forefront of conducting health-related biomedical research and providing teaching and training in various disciplines for undergraduates and postgraduate medical students and paramedical categories of staff.

MRI functions as the Regional Reference Laboratory for Poliomyelitis, in the South East Asian region, while being the national reference laboratory for Japanese encephalitis, measles, rubella, rotavirus, influenza, leptospirosis, toxoplasmosis, food and water microbiology, immunological investigations, special parasitological investigations and platelet aggregation studies; many of the laboratories being WHO accredited.

Furthermore, it is the central laboratory that administers surveillance programs for communicable, non-communicable and emerging diseases investigates outbreaks and conducts laboratory quality assurance programs for hospital laboratories Island wide.

Additionally, the MRI is also the national control laboratory for the National Authority for Vaccines and Biologicals. MRI also carries out the pre-registration evaluation of pharmaceuticals and reagents.

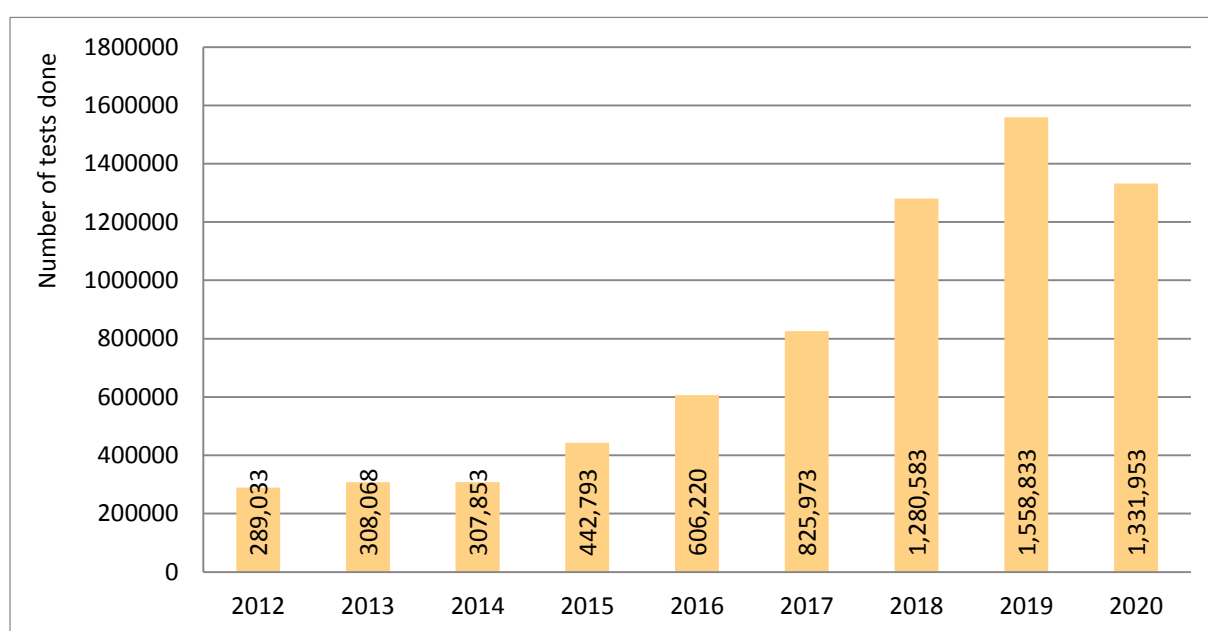
With a total of 18 departments namely bacteriology, immunology, virology, mycology, parasitology, histopathology, hematology, biochemistry, nutrition, pharmacology, natural products, molecular biology, entomology, rabies and vaccine QC, food and water, radio immune assay electron microscopy and animal sciences, MRI conducts many types of research in these fields and have frequent publications and awards.

## Special Events in 2020

During the COVID-19 pandemic, MRI was able to establish Novel Coronavirus 2019 (COVID-19) PCR in late January 2020, being the second country in South East Asia Region to establish diagnostic capacity. And later it went on to establish 4 more laboratories for COVID-19 PCR testing, of which the offsite laboratory at Bandaranayke International Airport was established in July 2020, initially to test passengers and airline crew and currently now testing samples from the community as well.

Additionally, the Department of Molecular Biology & Department of Rabies established COVID-19 PCR laboratories within MRI premises in April 2020 and October 2020 respectively.

The four labs combined have tested more than 244,400 tests as of 31<sup>st</sup> December 2020. MRI successfully went on to produce VTM (Viral Transport Medium) in-house during the pandemic lockdown at the Department of Immunology as well and had produced 150,000 tubes for this year.



**Figure 12.2: Number of tests done at MRI, 2012-2020**

Source: Medical Research Institute

**Table 12.6: Number of COVID-19 PCR tests by type of results, 2020**

Type of Lab	Total	Number of samples tested		
		Positive	Negative	Invalid
Virology lab	122,165	4,508	117,530	127
Molecular lab	20,844	1,071	19,206	567
Rabies lab	6,797	372	6,389	36
BIA lab	96,456	4,184	90,305	1,967

Source: Medical Research Institute

### 12.1.1. Department of Nutrition

**Key message:** To enable food and nutrition security conducive to good health, growth & development and increase productivity through dedicated research with a vision of a healthy nation with optimum nutrition level.

**Study 1:** Assessment of the impact of COVID-19 on child malnutrition, women obesity and household food insecurity in urban underserved settlements in Sri Lanka

**Result:** In urban underserved settlements of Sri Lanka, there is an increase in the prevalence of child wasting and overweight after the first wave of COVID-19 pandemic. Overall child wasting is alarmingly high and recommended to provide supplementary food for children under five years while focusing on child overweight. It is needed to focus on mildly wasted children to prevent further wasting. Urgent need to focus on obese women with diabetes and hypertension to minimize the vulnerability to COVID-19 and control the weight gain of overweight women to prevent further increase in obesity. This population needs to be provided with targeted subsidy schemes to improve food security during the lockdown period.

**Study 2:** A study was done to determine the patient perception of hospital diet and a quantitative analysis of salt, crude fat and crude protein contents of hospital diets was done in Lady Ridgeway hospital for children, National Hospital of Sri Lanka and De Soysa maternity hospital, Colombo.

#### Actions to be taken in 2021

- A study will be done to assess the quantity, quality and gap of the nutrition services received by the children living in urban underserved settlements in Sri Lanka during the COVID-19 pandemic.
- Food Composition Database of Sri Lanka is updated and the final report will be published in 2021.
- A survey is conducted to assess the impact of COVID-19 on diets and the food environment in Sri Lanka's urban underserved areas.
- A national research will be commencing to assess the gaps in energy and nutrient consumption at the household level in Sri Lanka.

### 12.1.2. Department of Parasitology

Parasitology Department of Medical Research Institute receives blood samples of clinically suspected patients of Toxocara infection from hospitals all over the country.

Trends of Toxocara in the country are identified enabling early diagnosis, proper treatment, and control activities.

**Table 12.7: Number of blood samples suspected for Toxocara, 2017- 2020**

Year	Samples from all ages		Samples from less than 12 years old patients	
	Total	Positive samples	Total	Positive samples
2017	519	193	126	62
2018	820	393	374	175
2019	1,013	577	444	344
2020	793	606	424	282

Source: Medical Research Institute

#### Action taken in the year 2020

- Immediately informed the relevant clinician/institute regarding the positive results over the phone if the clinical history was suggestive of treatment

#### Action to be taken in the year 2021

- Increasing awareness of clinicians, respective authorities and the public about increasing trends of Toxocara infection over the years.
- Ensuring the detailed history and contact details are included in the request form sent to Medical Research Institute, to inform if treatment is suggestive.
- Relevant stakeholders within and outside the Ministry should be informed to get their support and participation to control the trend.

### 12.1.3. Department of Histopathology

200,000 samples were received from four provinces in year 2020.

There were 65 per cent of laboratories that met acceptable limits (overall accuracy Index).

#### Action taken in 2020

- Expanded the Immunofluorescence markers and Immuno Histochemistry markers
- Held 4 EQA programmes

#### Action to be taken in 2021

- Plan to start Cytogenetic Diagnosis for Cancers and other Pathological entities like muscular dystrophy, neural diseases, etc.

### 12.1.4. Department of Virology

Initiate a novel coronavirus PCR at MRI at an early stage of the pandemic and was able to detect a positive case on 27.01.2020. Sri Lanka was the second country in the WHO region to establish testing capacity at an early stage and to raise awareness and readiness for the pandemic.

Department of Virology,

- was able to train MLTs at different hospitals and assist directory to establish COVID-19 PCR testing capacity at many hospitals and institutions.
- evaluation of PCR test kits, extraction kits and VTM to ensure the quality of reagents that were donated and purchased.
- established an External Quality Assurance Programme (EAQP) / conformity testing as advised by the Ministry of Health to enhance the quality of results of PCR laboratories including the private sector.

The number of COVID-19 samples received in the year 2020 from all over Sri Lanka is 119,878.

#### Action taken in 2020

- Increased department capacity of COVID-19 testing while continuing other virology tests and capacity building of other laboratories in the country.
- Conducted EQAP once in three months among participant laboratories.

#### Action to be taken in 2021

- Plan to increase the capacity of full automation of PCR testing
- Plan to interface PCR machines with laboratory information system to avoid manual entering of results

### 12.1.5. Department of Molecular Biology

#### Key message:

1. To carry out routine diagnostic and reference investigations pertaining to SARS CoV-2
2. To offer clinical virology advice to healthcare teams
3. To contribute to the preparation of national and regional virology guidelines for COVID-19 pandemic management
4. Performing audits for situation analysis of COVID-19

**Table 12.8: Number of SARS CoV-2 PCR tests, 2020**

Month	No. of PCRs done	No. of positive results	%
April	93	12	12.9
May	1,365	36	2.6
June	1,085	18	1.7
July	2,087	33	1.6
August	2,350	6	0.3
September	1,122	31	2.8
October	3,297	296	9.0
November	3,760	300	8.0
December	5,641	341	6.0
<b>Total</b>	<b>20,800</b>	<b>1,073</b>	<b>5.1</b>

Source: Medical Research Institute



Total No. of COVID-19 antibody tests done in 2020	- 725
Total No. of COVID-19 positive antibodies in 2020	- 345

### Study on results of PCR and antibody tests done from a maternity care hospital in Colombo

Total number of PCR tests done	- 1091
Total number of Positive PCR tests	- 116
	CT ≤ 30 - 90
	CT > 30 - 26
Total number of Antibody tests done	- 45
Total number of Positive Antibody tests	- 22

### Actions taken in 2020

- COVID-19 routine diagnostic work (SARS CoV-2 RT PCR Assay and COVID-19 Antibody Assay) was carried out, and clinical teams from various hospitals and public health institutions were informed and updated on a day-to-day basis
- Repeat and Follow-up testing were arranged when indicated.
- Kit verification (Under the official request of NMRA, Ministry of Health or Director, MRI)
- Done analysis of available data for PCR, COVID-19 Antigen and COVID-19 Antibody for interpretation and situation analysis (i.e., Antibody positivity rate with COVID-19 PCR of CT values over 30 on the first detection with PCR, COVID-19 Antigen assay sensitivity in individuals with PCR CT values less than 25, etc.)

### Actions to be taken in 2021

- Capacity building on SARS CoV-2 gene sequencing based on the already existing collaborative work on Oxford Nanopore technology with the Department of Zoology, University of Colombo

### 12.1.6. Department of Bacteriology (Food & Water)

1. Department of Bacteriology (Food & Water) consists of the enteric reference laboratory, anaerobic reference laboratory and the food and water microbiology laboratory.
2. Food and water microbiology laboratory is ISO 17025 accredited laboratory and obtained accreditation in 2019.
3. It is the first microbiology laboratory in the Ministry of Health to obtain accreditation from Sri Lanka accreditation board.
4. Services provided include function as the food microbiology regulatory laboratory, research, training and surveillance food borne diseases and foodborne pathogen AMR.
5. National salmonella surveillance of the human sector is already in place. Anaerobic diagnostic services and rickettsial antibody detection tests are some of the other services available.
6. In the year 2020, out of the 347 bacterial isolates received for identification, 177 isolates were confirmed as salmonella. Out of the 512 stool samples received for *Clostridioides difficile* toxin detection, 17.5 % (n=90) samples became positive for *C. difficile* toxin.
7. Both immunochromatographic tests, as well as RT-PCR, is being used for *Clostridioides difficile* toxin detection. Immunofluorescence antibody detection for rickettsial disease diagnosis is only available at MRI.

## 12.2. National Institute of Health Sciences (NIHS)

National Institute of Health Sciences (NIHS) is the premier public health training institute of the Ministry of Health for the training of human resources for the Primary Health Care (PHC) program in Sri Lanka. The origin of the institute dates back to 1<sup>st</sup> July 1926, when the 1<sup>st</sup> health unit in South East Asia was established in Kalutara. In 1966 the health unit was upgraded to the 'Institute of Hygiene', later in 1979 developed as the National Institute of Health Sciences. National Institute of Health Sciences conducts several basic, post basic and in-service programs to achieve its primary objectives while providing primary health care services to a population of about 330,000 living in the NIHS field practice area. The field practice area has got two Medical Officer of Health (MOH) areas which are the only MOH areas functioning under the line ministry. In addition to the usual national level public health training programs, NIHS provides public health laboratory services and clinical microbiological services focusing on quality, accuracy and timeliness of lab reports ensuring superior services. Only a few in-service training programs were conducted during the year 2020 due to the COVID-19 pandemic (Table 12.9). All basic training programs were postponed due to the restrictions imposed throughout the country.

**Table 12.9: Training programs conducted at NIHS, 2020**

No	Training program	Number of programs	Number of trainees
01	Virtual Training program on Health System Research (HSR) for PHNS	01	108
02	International Classification of Diseases 10th revision & Mortality Coding for medical record officials in Registrar Generals Department	01	30
03	Virtual Training program on Health System Research (HSR) for PHNS	01	22
04	Training on orientation of MOOH, RE, MO/MCH	01	40
05	Field Training for MD (Com Med) PG Trainees	01	35
06	Field component for MSc (Com Med) PG Trainees	01	50
07	Health Learning material development program	02	69
08	Training of Trainer of Educational Science	01	28
09	Elderly Medicine attachment of PG student	01	15
10	Public Health Inspector	01	112
11	Pharmacy	01	118
12	Public Health Midwife	01	112
13	Medical Laboratory Technologist	01	46

Source: Medical Research Institute

**Table 12.10: Service laboratory performance, 2020**

No	Name of the test	Number of performed specimens	Number of positive specimens
01	Urine culture & ABST	15,669	3,671
02	Blood Culture & ABST	9,500	921
03	CSF Culture & ABST	413	5
04	HVS, Wound Swabs and Pus Culture & ABST	5,440	3,726
05	Sputum culture & ABST	2,455	1,673
06	Body Fluids, Bronchial Wash	591	97
07	Other Swabs	150	38
08	Stool Culture & ABST	91	10
09	Pap Smears	4,702	24
10	TB PCR	930	226
	<b>Total</b>	<b>39,941</b>	<b>10,391</b>

Source: Medical Research Institute

The clinical microbiological laboratory and the food chemistry laboratory have continued their routine work even during the COVID-19 pandemic in 2020. Imported food samples and water samples from the bottling water plants were also tested for their quality parameters.

In the year 2020, clinical, and microbiological services provided 39,941 reports and 10,391 were positives. In the food laboratory, 6104 food samples were analyzed for quality under the food regulations and 14 per cent of them were found unsatisfactory in quality. NIHS Food Laboratory has planned to start Trans Fatty Analysis using GC/MS in 2021.

The Community Support Centre was established in 2007, at NIHS. It serves to improve the mental health status of the people living in the NIHS field practice area. As the outbreak of the COVID-19 had affected many areas of daily life including mental health; around 2000 patients were reported and treated in the year 2020. When considering funding, in addition to the funding by the state (Ministry of Health), the inputs and financial assistance extended by the donor agencies such as WHO, UNFPA, ADB and World Bank have immensely contributed to the performance of the NIHS.

#### **Food chemistry laboratory performance in 2020**

NIHS food chemistry laboratory has continued routine work as testing food and water for the regulatory compliance for the year 2020. Imported food samples and water samples from the bottling water plants were also tested for their quality parameters.

This is one of the income generating activities from the laboratory. The annual income generated was Rs.12,040,650.00.

6104 of the food samples were analyzed for quality under the food regulations and 14 per cent of them were of unsatisfactory quality.

In 2020 new chapter of utilizing advanced analytical techniques was started in food analysis in a food chemistry laboratory. Analytical methods for aflatoxin in coconut & dried chilies were developed with HPLC/FLD. Heavy metal analysis was commented on using ICPMS/MS.

In the year 2021, Trans Fatty analysis will be starting using GC/MS. It is planned to participate in the national survey of food contaminants (Aflatoxins & Heavy metals & adulterants) which will be conducted by the Food Administration Unit, Ministry of Health, in 2021.

### Mental health unit performance in 2020

**Table 12.11: Number of clients attended, 2020**

No	Sub-Unit	First visit	Follow up
01	Out-patient clinic, Beruwala, DH	55	1,145
02	Out-reach clinic, Beruwala, MOH	115	111
03	Community support centre, NIHS	511	618
04	Outreach clinic, Kalutara, Prison	149	0
	<b>Total</b>	<b>830</b>	<b>1,874</b>

Source: Medical Research Institute

**Table 12.12: Leading diagnosis among new clients in all clinics, 2020**

No	Diagnosis	No. of clients
01	Depressive epi/Recurrent depressives (F32, F33)	218
02	Mental & behavioural disorders due to opioids (F11)	94
03	Pregnancy related mental health disorders (F53)	52
04	Anxiety disorders (Phobia, GAD) (F40, F41)	30
05	Mental & behavioural disorders due to alcohol (F10)	30
06	Digital Addiction	30
07	Schizophrenia (F20)	28
08	Specific development dis. of scholastic skills (F81)	24
09	Delusional disorders (F22)	21
10	Obsessive compulsive disorders (F42)	19
11	Mental & behavioural disorders due to cannabinoids	15
12	Manic episode/Bipolar affective disorder (F30, F31)	13
13	Reaction to severe stress/Adjustment disorders (F43)	13
14	ADHD (F90)	11
15	Emotional disorder childhood specific (F93)	11
16	No psychiatric illness	161

Source: Medical Research Institute

## 13. Management, Development and Planning

Management, Development and Planning Unit of the Ministry of Health is headed by the Deputy Director General Planning (DDG Planning). Activities related to planning and development are mainly coordinated and formulated by the unit. The development of long-term, medium term and annual plans for the government health care delivery system is the core function of the unit. It is also responsible for planning, finance allocation, monitoring and evaluation of health projects conducted by the line ministry hospitals and programmes. Moreover, it is responsible for the maintenance of health databases, organization development and performance monitoring and organizing international conferences. In addition, policy development activities and reforms are also undertaken by the unit.

The unit has the following directorates functioning under Deputy Director General Planning.

- 1) Directorate of Planning
- 2) Directorate of International Health
- 3) Directorate of Organizational Development
- 4) Directorate of Health Information
- 5) Directorate of Finance Planning
- 6) Directorate of Policy Analysis

### 13.1. Directorate of Planning

Directorate of Planning is the central coordinating body of the Ministry of Health which executes planning, management, monitoring and evaluation functions.

Routine activities of the Planning Unit are,

1. Preparation of annual action plan and monitoring the quarterly progress of the action plan.
2. Evaluation of new project proposals, submission of approved proposals to the Department of National Planning and obtaining necessary approvals including cabinet approval for implementation.
3. Preparation of the previous year performance report of the Ministry and submission to the parliament.
4. Preparation of quarterly progress reports and submission to the Project Management and Monitoring Department.
5. Submission of requests made for new cadre creation to the Department of Management Services.
6. Preparation of bi-annual HR profile.

#### **Coordinating health projects**

##### **Matara district maternal and new-born healthcare strengthening project (KOICA)**

Through the Matara district maternal and new-born healthcare strengthening project, it is planned to upgrade the Korea-Sri Lanka Friendship Hospital (KSFH) in Godagama, Matara. DGH-Matara is a tertiary referral hospital and the intended construction in Godagama will mainly function as a

specialized hospital for maternal and newborn care. It is planned to transfer all the functions of maternal and newborn care from the existing Matara District General Hospital to KSFH. The planning unit is involved in coordinating the activities carried out in this regard. Construction of the new building and re-modelling of the existing building commenced in 2018 and construction works were completed and handed over to the ministry by the end of the year. This complex is funded by the Korea International Cooperating Agency (KOICA).

### **Special achievements**

- General Circular on “Facilities offered at different categories of medical care institutions” was published (No. 01-18/2020 dated 03.03.2020).
- A norm for the required cadre by specialty for Base Hospitals and above has been developed.
- The Essential Services Package (ESP) has been identified as a tool to achieve universal health coverage and the ESP specifies the services that should be made available at different categories of hospitals. Activities related to the operationalization of the ESP package were conducted in the identified provinces.
- Development of cadre norms based on Workload Indicators for Staffing Needs (WISN) was started with the collaboration of WHO. First national steering committee meeting was held on 08.07.2019. Refresher training was held on 20.08.2019. Five provincial training programmes were planned and North-Western, Central, North Central & Northern Provincial programmes were held during the month of September. Time motion study was carried out by North-Western, Central and North Central Provinces.

## **13.2. Directorate of International Health**

International Health (IH) Unit functions as the focal point for planning, implementation and monitoring of international health activities of the Ministry of Health and assist in the coordination of the international health activities with donor agencies.

A key function of IH unit is to process all budget proposals forwarded by project directors under funded projects, especially for the World Health Organization (WHO), United Nations Population Fund (UNFPA) and United Nations International Children’s Emergency Fund (UNICEF). This is facilitated by this unit; providing technical guidance in preparing budget proposals, scrutinization of technical details and financial facts as per department rules, and monitoring technical reports of executed programmes. WHO biennium plan activities are also facilitated by this unit by preparation of the WHO collaborative activity plan, launch and dissemination of it every two years.

Managing fellowships is another critical activity done by the IH unit. The fellowships are received from regular programmes such as WHO, UNICEF, UNFPA, JICA, KOICA, SAARC and World Bank and the approvals are processed by this unit. IH Unit prepares, disseminates advertisements, holds interviews to select suitable candidates when possible and also may request nominations from Additional Secretary of Public Health Services, Additional Secretary of Medical Services, Director General of Health Services (DGHS) & relevant Deputy Director General (DDG) to process nominations and advertise in the web site in long term fellowships for awareness. Nomination and approval of fellowships are done through the fellowship committee, chaired by the Secretary, Additional Secretaries, DGHS and relevant DDGs.

IH Unit is involved with granting concurrence for visits by foreign experts, visitors, consultants, trainers and Non-Governmental Organizations related to health. Co-ordination of visits related to the

Ministry of Health, technical assistance by identifying the relevant focal points of the visits and necessary guidelines are provided by this unit. In addition to them, the provision of Credential Letters for official travel is also done by this directorate. Facilitation of communication related to foreign countries via the Ministry of Foreign Affairs and different Directorates of the Ministry of Health is also done by this unit.

Preparatory activities and coordinator activities related to global health fora are also important activities of this unit especially with the World Health Assembly of WHO and South East Asia Regional Sessions of the WHO. During the above international sessions, delegates of Sri Lanka engage in contributing to Global Health Agenda via making verbal interventions and submitting written statements through physical and virtual participation and this is facilitated by maintaining the circulation of documents, preparation of progress reports, briefs and interventions and keeping records of decisions taken at international conferences.

### **13.3. Directorate of Organizational Development**

Directorate of Organization Development is coordinating the national health development network of the Ministry of Health. Drafting the organizational structure and preparation of the job descriptions of the Ministry of Health are main tasks of this unit. This unit coordinates a number of activities with other ministries as a focal point, to achieve the sustainability of efficient and effective health service in Sri Lanka.

#### **Coordination of the national health development network**

Organization Development Unit is a secretariat for the coordination of the National Health Development Network: Health Development Committee (HDC) meeting, National Health Development Committee (NHDC) meeting and National Health Council (NHC). Each year first HDC meeting is scheduled in the 3<sup>rd</sup> week of January and continued to have once in every two months, 6 meetings a year. This is chaired by the DGHS and there were officials members within the Ministry of Health: all the ministry officials below the level of DDGs, PDHS, RDHS and all the heads of the line ministry institutions. Two HDC meetings were completed. Two special meetings were organized with the minister for the discussion of pandemic preparedness.

NHDC meeting was chaired by the Secretary of the Ministry of Health and official members of the meeting: All the additional secretaries of the Ministry of Health, DDGs, selected heads of the institutions, chief secretaries, health secretaries, commissioners of Ayurveda of the provinces, Secretaries of the other ministries, country representatives of donor agencies and representatives of tri forces and police. This meeting is conducted bi-annually and one meeting was completed.

Chair of the NHC is the Prime Minister of Sri Lanka and it is supposed to be held in once a year with all the ministers of the parliament. NHC was not conducted in the year 2020.

#### **Organizational structure**

Series of discussions with the higher officials were coordinated to revise the organogram of the Ministry of Health. Prepared the draft document for approval. Revision is in progress with new reforms.

#### **Development of job descriptions**

Series of consultative meetings was conducted to revise the Job description of the DDGs. Completed job description of DDG (Laboratory Services) was approved by the Secretary of Health. A Series of discussions were coordinated to draft the job description for the Senior House Officer (SHO)/ Medical

Officer (MO). The job descriptions of Medical Officer of Health (MOH) and Assistant Medical Officer of Health (AMOH) were initiated. Observations of higher officials were obtained for the job descriptions of DGHS, DDG(NCD), DDG(ET&R), DDG (NHSL), DDG(NH Kandy) DDG (PHS-I) and DDG(PHS-II). Revision of other 9 DDGs was initiated.

#### **Sustainable health financing strategy**

Series of consultative meetings were conducted with the major stakeholders to plan for the application of financial strategy into practice in health care institutions.

#### **National human right action plan**

Director, Organization Development, is the focal point of the components of the national human rights action plan which is related to health. The activities under 7 components were coordinated by the national secretariat of human rights: Rights of the persons with disabilities, Prevention of torture, Rights of the migrants, Women's rights, Economic, social and cultural rights of the internally displaced, returnees and refugees. Quarterly reports were obtained from the relevant units of the Ministry of Health and forwarded to the secretariat office for human rights.

#### **Open Government Partnership (OGP)**

Organization Development Unit is the focal point for the activities of OGP. A Series of virtual discussions were held with non-state sector stakeholders of Health: Sarvodaya and Peoples Health Movement, collaborated with the OGP activities with the non-state sector stakeholder agencies.

#### **Implementation of operational research**

Several discussions were carried out with the Research Unit of the Ministry of Health regarding the collaboration of other research institutions in collecting the research data. Initial discussions were made to obtain access to research repositories in research institutions.

#### **Capacity building and trainer trainee program for health sector employees**

Proposals for the development of training module need to be finalized and to be forwarded funding agencies to proceed with the process.

#### **Sustainable green building designing training program for health managers**

A series of discussions were held with the stakeholder agencies and the concept notes and budget proposals were prepared for approval.

#### **Training and capacity building of MDPU staff**

Training Need Identification Survey among different categories of MDPU staff was carried out. Budget proposals of training programs were prepared for approval. Most of the activities were abandoned due to the country-wide lockdown due to the COVID-19 pandemic.

### **13.4. Directorate of Health information**

Sri Lanka is embarking on a new wave of development in the health sector through the adaptation of eHealth or digital health technologies. The Health Information Unit (HIU) is the main focal point in the Ministry of Health for health information system coordination and other the digital transformation of the state health sector in Sri Lanka. A National Health Information System would benefit from proper strategic planning on health information management to avoid



compartmentalization of information governance mechanisms, strengthen coordination among existing information systems, improve data sharing, improve the use of information for decision making, and enhance automation.

The success of this endeavor depends on all health care institutions working according to a set of uniform digital health practices in curative and preventive institutes. The Health Information Unit (HIU) of MDPU is the focal point of this activity coordination and the services on digital health have expanded following the COVID-19 pandemic.

Following are the key activities coordinated by HIU for the year 2020:

- COVID-19 data presentation
- Development and implementation of policies and guidelines related to digital health
- Hospital Health Information systems (HIMS/HHIMS) implementation and follow-up
- Cloud HIMS management for the Healthy Lifestyle Clinics
- Functioning as PGIM afflicted training center for MSc in BMI and MD in HI.
- Assisting other state health institutes on ICT procurement evaluation
- Capacity building of health staff on digital health
- Human Resource Management System management
- Maintenance of Ministry of Health website, Ministry of Health server and webmail systems
- Approval and allocation of domain names and emails for state health institutes
- Technical support to other directorates, MOH in digital health activities including technical procurement assistance.

### **Health information systems in hospitals**

Hospital Health Information System is a digital system designed to manage healthcare data in a hospital. This includes digital systems that collect, store, manage and transmit a patient's electronic medical record enabling better hospital operational management and supporting healthcare policy decisions. This enables hospital staff to refer to previous clinical records when the patient comes in for treatment and assist continuation of care.

This system will thus significantly reduce the need for maintaining paper based records and enable improved and efficient service to the patient. HIMS initiated by Apeksha Hospital (National Cancer Hospital) and HHMIS developed in partnership with ICTA are two main examples of health information systems that are installed on servers located at each hospital. By the end of 2020, HIMS has been implemented in 13 Hospitals and HHIMS in 39 hospitals.

### **Cloud HIMS**

This is a web based Hospital Management Information System that is currently used to manage Healthy Lifestyle Centres under the Primary Healthcare System Strengthening Project and Non Communicable Disease Management System. The system is implemented in 200 health institutes.

### **Development of digital health standards and guidelines**

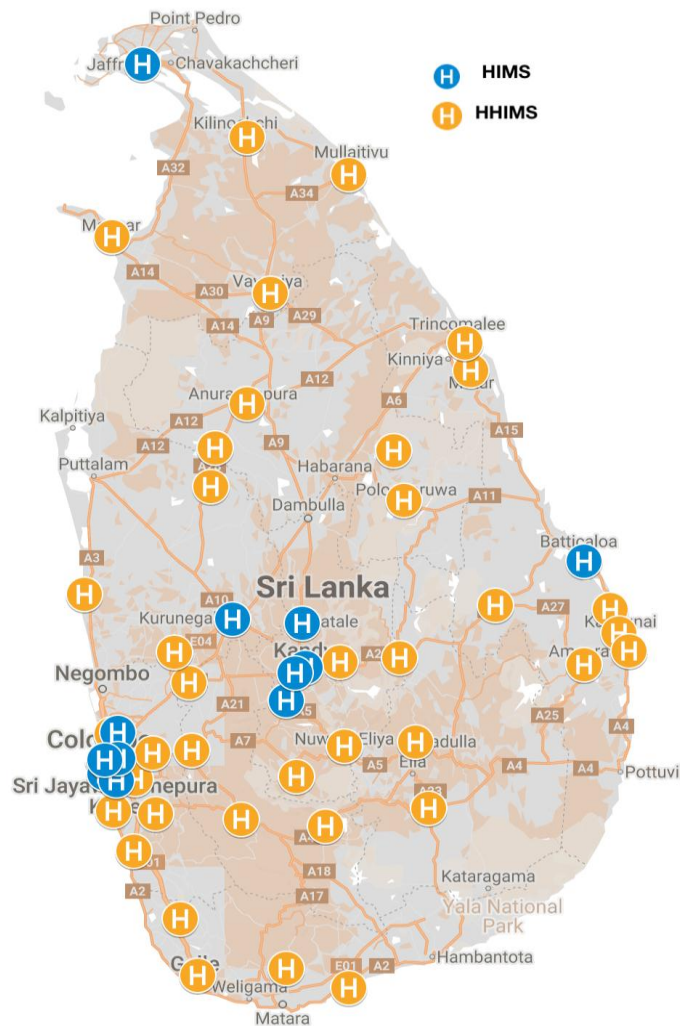
Aimed at streamlining the implementation of digital health solutions in the health sector of Sri Lanka. These Guidelines and Standards were intended to be adopted when implementing eHealth solutions

in the state and private healthcare institutions in the country. The current issue is the National Digital Health Guidelines and Standards published in 2020.

### HRMIS

This was planned with the aim of developing a web-based central database for all staff categories in the Ministry of Health. Around 130,000 records belonging to 307 staff categories are collected in this system.

#	HHIMS
1	BHA_THAMBUTHTHEGAMA
2	BHA_MAHIYANGANAYA
3	BHA_KALUWANCHIKUDY
4	BHA_HOMAGAMA
5	BHA_ELPITIYA
6	BHA_TANGALLE
7	BHA_KALMUMUNAI NORTH
8	BHA_PANADURA
9	BHA_HORANA
10	BHA_KAMBURUPITIYA
11	BHA_DICKOYA
12	BHA_MUTTUR
13	BHA_BALANGODA
14	BHB_MAHAOYA
15	BHB_NINTAVUR
16	BHB_TELDENIYA
17	BHB_WARAKAPOLA
18	BHB_DAMBADENIYA
19	BHB_GALGAMUWA
20	BHB_WELLAWAYA
21	BHB_MEDIRIGIRIYA
22	DHA_DOMPE
23	TH_ANURADHAPURA
24	NHSL
25	TH_KARAPITIYA
26	TH_RATHNAPURA
27	TH_KALUTARA
28	DGH_AMPARA
29	PGH_BADULLA
30	DGH_AVISSAWELLA
31	DGH_KILINCHCHI
32	DGH_MANNAR
33	DGH_MULLAITHIVU
34	DGH_NUWARA ELIYA
35	DGH_POLONNARUWA
36	DGH_CHILAW
37	DGH_TRINCOMALEE
38	DGH_VAVUNIYA
39	CHEST HOSPITA WELISARA



#	HIMS
1	BHB_GAMPOLA
2	TH_BATTICALOA
3	TH_KALUBOWILA
4	TH_CASTLE ST HOSPITAL
5	TH_RAGAMA
6	TH_JAFFNA
7	NH_KANDY
8	TH_PERADENIYA
9	TH_KURUNEGALA
10	DGH_MATALE
11	APEKSHA HOSPITAL
12	NIMH
13	LRH

**Figure 13.1: HIMS and HHIMS implemented hospitals in Sri Lanka**

Source: Directorate of Health Information

## **Actions to be taken in 2021**

- **National COVID-19 immunization system**  
An information system will be developed to follow up and manage the COVID-19 vaccination process in the country.
- **National COVID-19 health information system**  
A nationwide health information system will be developed to manage COVID-19 laboratory diagnostic testing (PCR and RAT) and following management.
- **Cluster information system for selected provinces**  
Cluster based Hospital Information systems for selected provinces will be done utilising ADB funds.
- **PACS radiology imaging system**  
The Ministry of Health will be introducing the PACS/RIS digital platform at NHSL-Colombo, TH-Kandy, TH-Karapitiya, TH-Kalutara and LRH. Another 15 Hospitals have been identified for Phase II of the PACS/RIS implementation.
- **Focal point development and follow-up at health institutes**  
Focal point will be developed in all RDHS and PDHS offices to coordinate digital health implementations
- **Information security enhancement in state sector health institutes**  
Information security guidelines for healthcare institutions will be finalized and published. Information security assessments are planned to be done in existing Health Information systems in the health sector with assistance from SLCERT.
- **National digital health blueprint development**  
The proposed architecture blueprint shall serve as a roadmap for scaling up and sustaining digital health interventions in the country. It will also develop a health information interoperability plan that integrates clinical and public health workflows leading to better informed decision making. ICT equipment will be procured to expand digital health infrastructure.
- **Expansion of HHIMS**  
HHMIS is planned to be expanded and implemented in 15 hospitals.

## **13.5. Directorate of Finance Planning**

Finance section of the Management Development & Planning Unit (MDPU) was established in the initial stage to perform all the finance activities in this unit, under the supervision of an Accountant/Finance (Planning). It is in the processing stage to introduce the web-based system for cost accounting system linking with other institutions under the line ministry.

### **Key messages**

1. The Finance Planning Unit is actively involved in the preparation of annual capital budget estimates to improve health financing through resource allocation for all the institutions under the line ministry. In the end, the capital budget estimate is submitted to the Department of Treasury Operations of the Ministry of Finance for approval.
2. Finance Planning Unit serves as the focal point for monitoring the capital activities against the annual action plan.
3. Processing stage to introduce web-based system for a cost accounting system.
4. Coordination, preparation and updating of financial documents.
5. Coordination and compiling information for audit queries relevant to MDPU

## Details of the key messages

Collecting the annual action plan from all programmes under the line ministry institutions according to the format of the Treasury. In this event, it is concerned about the previous year's performance of relevant institutions according to capital estimate. After getting the approval from the relevant officials in the ministry and submitting that to the Department of Treasury Operations of the Ministry of Finance.

**Table 13.1: Capital budget estimates, 2021**

Description	Estimate for the year 2021 (Rs'000)
<b>Rehabilitation and improvement of capital assets</b>	<b>4,871,300</b>
<ul style="list-style-type: none"> <li>● Buildings and structures</li> <li>● Plant, machinery and equipment</li> <li>● Vehicles</li> </ul>	<p style="text-align: right;">2,774,000</p> <p style="text-align: right;">2,013,800</p> <p style="text-align: right;">83,500</p>
<b>Acquisition of capital assets</b>	<b>17,568,500</b>
<ul style="list-style-type: none"> <li>● Vehicles</li> <li>● Furniture and office equipment</li> <li>● Plant, machinery and equipment</li> <li>● Buildings and structures</li> <li>● Software development</li> <li>● Capital payment for leased vehicles</li> </ul>	<p style="text-align: right;">-</p> <p style="text-align: right;">341,500</p> <p style="text-align: right;">5,264,700</p> <p style="text-align: right;">11,961,800</p> <p style="text-align: right;">500</p> <p style="text-align: right;">-</p>
<b>Capital transfer</b>	<b>779,000</b>
<ul style="list-style-type: none"> <li>● Public institutions</li> <li>● Development assistance</li> </ul>	<p style="text-align: right;">779,000</p> <p style="text-align: right;">-</p>
<b>Capacity building</b>	<b>705,000</b>
<ul style="list-style-type: none"> <li>● Staff training</li> </ul>	<p style="text-align: right;">705,000</p>
<b>Other capital</b>	<b>7,071,200</b>
<ul style="list-style-type: none"> <li>● Procurement preparedness</li> <li>● Infrastructure development</li> <li>● Research and development</li> <li>● Other</li> </ul>	<p style="text-align: right;">50,000</p> <p style="text-align: right;">380,500</p> <p style="text-align: right;">39,200</p> <p style="text-align: right;">6,601,500</p>
<b>Total</b>	<b>30,995,000</b>

Source: Directorate of Finance Planning

1. Monitoring the progress of capital activities of all institutions with collecting quarterly progress reports for all 4 quarters and prepare the capital financial progress report against the action plan.
2. To expedite the cost accounting system, a web based system was implemented and the host space was obtained from SLT . 31 hospitals were selected for the implementation of web-based system in the first phase.

**Table 13.2: Capital activities carried out by institutions under the Ministry of Health, 2020**

Project type	Number of projects	Allocation (Rs. Mn.)	Expenditure Rs.Mn.	%
GOSL funded capital programme	42	10,511.18	2,007.62	99.49
GOSL funded capital ongoing projects	36	3,494.26	572.39	99.53
Foreign funded capital programme	5	49.97	21.28	85.37
Foreign funded capital ongoing projects	20	29,135.41	16,612.89	97.96
<b>Total</b>	<b>103</b>	<b>43,190.82</b>	<b>19,214.18</b>	<b>98.45</b>

*As at 31<sup>st</sup> of December*

*Source: Directorate of Finance Planning*

### 13.6. Directorate of Policy Analysis and Development

Policy Analysis & Development Unit (PA&D) is the national focal point responsible for analyzing existing health and health-related policies and advocating for senior officials of the Ministry of Health on health issues that require policy interventions. The PA&D unit provides the technical guidance to health programs, and directorates of the Ministry of Health and health-related areas in other ministries/departments to review or to develop new policies as per the needs of the health sector.

#### **Vision: Directorate of Policy Analysis & Development.**

To ensure the uppermost health standard of Sri Lankans by warranting national and sectoral health policy analysis, development, implementation, and evaluation using up-to-date evidence in a responsive manner.

#### **Mission: Directorate of Policy Analysis & Development.**

To strengthen and ensure national and sectoral health policy development, implementation and evaluation; conduct policy-related research and translate evidence to policy decisions for strengthening the health of the Sri Lankans.

#### **National health policies in Sri Lanka**

The present National Health Policy (2016-2025) has been published by the Ministry of Health in 2016 and focused on strengthening the patient-centered health system in the country. The first National Health Policy of Sri Lanka was prepared in 1996 and it has been replaced with an updated the National Health Policy 2016-2025 after 20 years. As a first sectoral policy, the Population and Reproductive Health Policy of Sri Lanka had been published by the Ministry of Health and Indigenous Medicine in 1998. Over the past, the Ministry of Health has developed national and sectoral policies to uplift the health status of citizens of Sri Lanka.

Sectoral policies are

1. National policy on maternal and child health- 2012,
2. National immunization policy-2014,
3. National policy and strategy on cleaner production for the health sector- 2007,
4. Mental health policy of Sri Lanka,
5. National medicinal drugs policy for Sri Lanka – 2015,
6. National health promotion policy,
7. Sri Lanka national migration health policy,
8. National HIV-AIDS policy for Sri Lanka,
9. National blood policy
10. National policy and strategic framework for prevention and control of NCD,
11. National health laboratory policy
12. Accident and emergency care policy of Sri Lanka,
13. National policy on health care quality and safety,
14. National policy and strategic framework for cancer prevention and control,
15. National policy and strategic framework for prevention of injuries,
16. National policy and strategy on the health of the young persons,
17. National policy on alcohol control 2016,
18. Policy on healthcare delivery for universal health coverage,
19. National nutrition policy of Sri Lanka,
20. The national occupational safety and health policy,
21. Prison HIV prevention, treatment and care policy
22. National policy on organ tissue and cell transplantation 2021.

All developed policies are maintained and updated on the repository of health policies published on the website of the Ministry of Health.

Link : (<http://www.health.gov.lk> Publications Policies, Strategies, and Plans)

### **Activities initiated and completed during the 2021**

National policy on organ tissues and cell transplantation was completed in 2021 and it was the first cabinet-approved policy for human organ tissues and cell transplantation. This policy will help to revise the current 'Transplantation of Human Tissues Act No.8 of 1987'. In addition, the policy on national oral health and the national policy on elimination of rabies has been initiated in the year 2021, and the policy development process has been processed in collaboration with relevant stakeholders.

### **Review of national health policy**

It has been decided to review the national health policy 2016-2025 together with the national health master plan. The objective of this task is to review the implementation of the existing national health policy 2016-2025 and health master plan 2016- 2025 and identifying its relevance, strengths, gaps and challenges for achieving the highest attainable health status through promotive, preventive, curative, and rehabilitative services of high quality made available and accessible to people of Sri Lanka, with a view of making recommendations for their revisions.

# 14. Services for Prevention and Control of Non-Communicable Diseases

## 14.1. Directorate of Non-Communicable Diseases

Directorate of Non-Communicable Diseases is the focal point in the Ministry of Health, for the prevention and control of both chronic and acute NCDs and injuries in the country.

The Multi Sectoral Action Plan for NCD prevention and control has identified the following targets to be achieved by 2025.

1. A 25 percent relative reduction in premature mortality from cardiovascular disease, cancer, diabetes, or chronic respiratory diseases.
2. A 10 percent relative reduction in the use of alcohol.
3. A 10 percent relative reduction in the prevalence of insufficient physical activity.
4. A 30 percent relative reduction in mean population intake of salt/sodium.
5. A 30 percent relative reduction in the prevalence of current tobacco use in persons aged over 15 years.
6. A 25 percent relative reduction in the prevalence of raised blood pressure and/or contain the prevalence of raised blood pressure.
7. Halt the rise in obesity and diabetes.
8. 50 percent of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes.
9. 80 percent availability of affordable basic technologies and essential medicines including generics, required to treat major non-communicable diseases in both public and private facilities.
10. Reduce the use of solid wood as primary source of cooking by 50%.

## 14.2. Directorate of Mental Health

Directorate of Mental Health is the national focal point of the Ministry of Health responsible for policy development, strategic planning, strengthening of mental health services through improved infrastructure, human resources and monitoring & evaluation of the national mental health programme. In implementing this role, a close collaboration is established with professional bodies, provincial health authorities, other relevant ministries and departments, NGOs, civil societies and consumer groups.

### Actions taken in 2020

- Conducted special clinics for persons with mental and behavioral disorders due to substance use
- Conducted multi sectoral alcohol prevention program at district level
- Carried out a district level training program for medical officers on management of substance use disorders



- Strengthened mental health promotion activities at the community and institutional levels
- Initiated rehabilitation services for persons with substance use disorders (other than alcohol) at Rambukkana Alcohol Rehabilitation Center, Kegalle ,in small scale
- Established a Drug Rehabilitation Center at Base Hospital, Minuwangoda and it will be opening in near future

### **Recommendations**

- Strengthen delivery of comprehensive mental health services through the developed standard guidelines and protocols in case management with a comprehensive care package
- Strengthen rehabilitation mechanism
- Ensure sustainable uninterrupted supply of essential medicines
- Capacity building of medical officers, at Primary Health Care Institutions for management of substance use disorders
- Implement social support network at MOH level
- Strengthening multi sectoral drug prevention programs

### **Mental well-being during COVID-19 pandemic**

The unexpected pandemic left mentally ill persons, their families and immediate responders in psychological distress. Moreover, issues emerged in relation to admitting persons with mental disorders in routine COVID-19 treatment centers. As a result, the Directorate of Mental Health conducted an online survey on stigma during COVID-19 response.

#### **Online survey on stigma during COVID-19 response**

The survey conducted among 4,022 participants. Majority were female, Sinhalese and in the 25-29 year age category. Results indicated that personnel in the health services, security services, essential services and their family members experienced stigmatizing behaviors from their neighbors, society and/or media. Those who recovered from COVID-19, returned from quarantine centers, were in home quarantine and their family members also experienced some form of stigma and discrimination. Majority of the general public reported to be avoiding places where health, security and essential service personnel gathered.

Results indicated that 44.4 per cent health care workers were being subjected to discrimination and verbal abuse.

#### **Actions taken for COVID-19 related issues**

- A circular was issued on continuation of psychiatric medication in wake of COVID-19 crisis and home delivery of clinic drugs was implemented
- Developed instructions for mental health professionals in the wake of COVID-19 crisis in the country
- Prepared a guide on mental health response for health care workers for front-line health workers mental well-being
- Developed mental well-being video clips for general public and frontline health workers with the collaboration of Health Promotion Bureau and disseminated



- Developed mental well-being assessment scale for front-line workers and inward patients in 19 treatment centers
- Conducted drama therapy programmes in children's homes
- Visited to COVID-19 treatment and quarantine centers to identify mental health issues, to improve their mental well-being and conducted survey on mental wellbeing of frontline workers
- Developed health messages on mental health promotion during the reopening of schools

#### **Recommendations**

- Conduct psychosocial first aid training program for mental health staff in all districts
- Integration of Mental Health Care Plan into the existing COVID-19 management plan

### **14.3. National Cancer Control Programme**

National Cancer Control Programme (NCCP) is the national focal point for the prevention and control of cancers in the country. It is also responsible for policy, advocacy, planning, monitoring and evaluation of prevention and control of cancers including surveillance of cancers and facilitating research related to cancers. Further, NCCP coordinates activities related to the prevention and control of cancers according to the 'National Policy and Strategic Framework on Cancer Prevention and Control-Sri Lanka' which was approved in the year 2015. Presently all activities are based on the national strategic plan on cancer prevention and control 2020-2024 & National Strategic Framework for palliative care development in Sri Lanka 2019-2023.

## 15. Laboratory Services

The Laboratory Services Unit of Ministry of Health provides support to curative, preventive, promotive and rehabilitative care services through public sector laboratory services. It includes the Laboratory Services Directorate, the Medical Research Institute and the National Blood Transfusion Service. Though the private laboratories are regulated by the Private Health Services Regulatory Council which is chaired by the Director-General of Health Services, the technical guidance is delivered through the Laboratory Services Unit. Laboratory Services are provided under five main subspecialties including Histopathology, Chemical Pathology, Haematology, Microbiology and Transfusion Medicine, each of which is subdivided into sub-components to cater to expanding clinical demands.

### Key functions

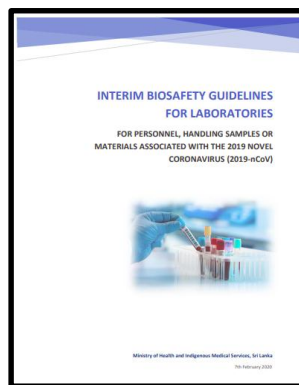
1. Strengthen and regulate laboratory services in government line ministry hospitals and special campaigns
2. Expansion and strengthening of laboratory services in provincial health institutions
3. Provide allocations for purchasing of equipment for laboratories
4. Provide funding for proper maintenance of laboratory equipment
5. Support disease prevention, control, and surveillance through the provision of diagnostic services
6. Policy development relevant to laboratory services
7. Training and education of laboratory staff
8. Providing guidance to staff of all government and private health laboratories on new developments
9. Partnerships, communication and coordination with stakeholders relevant to laboratory services
10. Act as the focal point of combating Anti-Microbial Resistance in the country
11. Carrying out SWOT analysis on laboratory sector to prepare strategic plan to develop the sector to cater the existing or new challenges including emergency response to laboratory services
12. Improvement of Biosecurity and Biosafety of laboratory sector

### 15.1. Key Activities Related to Laboratory Diagnostic Services of COVID-19

#### 15.1.1. Development of Guidelines and Distribution to Healthcare Institutions

Three guidelines were published and distributed immediately throughout healthcare institutions in the country when the COVID-19 pandemic was announced as a global emergency.

- Interim guidelines on emergency preparedness and response plan of laboratory sector during public health emergencies of international or national concern, confined to infectious diseases
- Interim biosafety guidelines for laboratories
- Laboratory samples handling guidelines to improve primary health care services



### **Interim guidelines on emergency preparedness and response plan of laboratory sector and Interim biosafety guidelines for laboratories.**

*Source: Laboratory Services Division*

#### **15.1.2. Supervision of Laboratories Engaged in the Diagnosis of COVID-19 Infection**

- Laboratories engaged in COVID – 19 PCR are regularly supervised by the Deputy Director General of Laboratory Services and Director, Laboratory Services.
- Medical Research Institute is being continuously monitored on the activities in reference to the COVID - 19 infection.
- Requests for laboratory reagents and chemicals are being received by laboratory services constantly. These requests have been forwarded to the Medical Supply Division and give the fullest attention to continue the supply chain uninterrupted.
- According to the information from laboratories, different brands and models of PCR machines are being used. Therefore, it is important to order the test kits with the specification compatible with PCR machines and it helps quality of the testing. 'Specifications for PCR reagents and consumables for COVID 19 PCR assay' was prepared by the committee with the consensus of virologists and was shared with Medical Supplies Division.
- From the beginning of COVID-19 infection, Laboratory Services Unit developed and maintained a PCR performance database, infection in the country to monitor the PCR and rapid antigen testing during the period of the pandemic. It is being used to integrate different aspects to the above database to facilitate decision-making about the supply chain management, laboratory equipment, human resource management and other resource distribution.

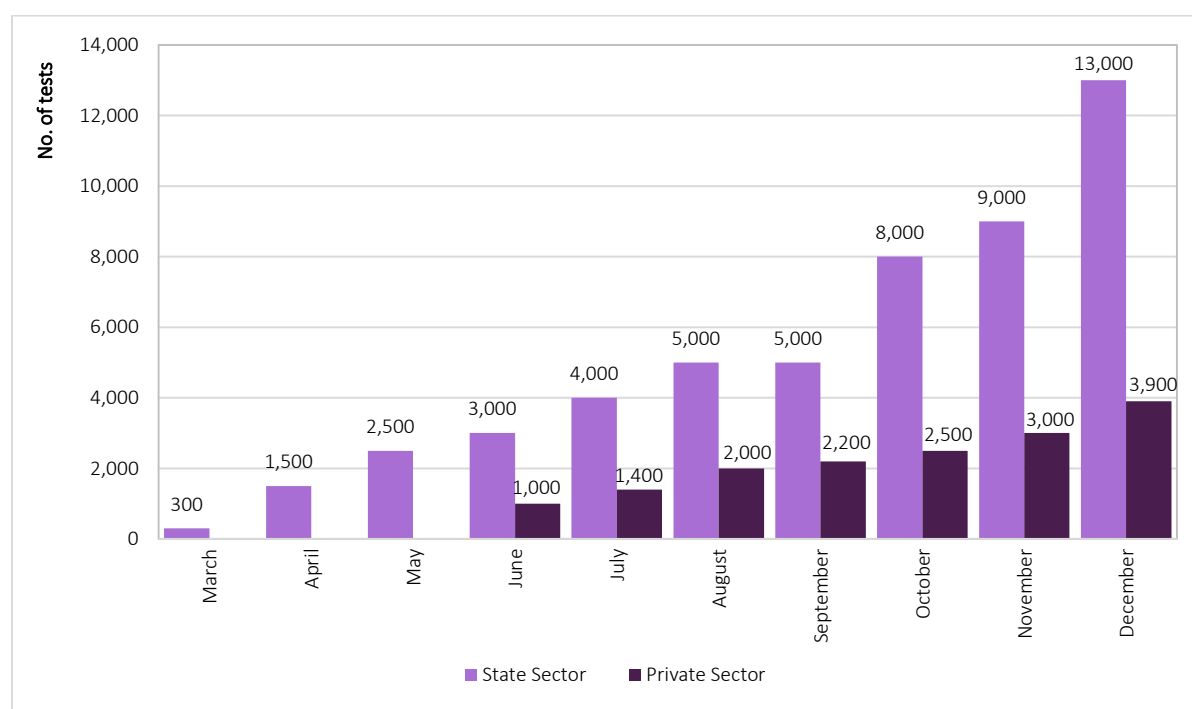
#### **Laboratory Capacity for COVID -19 PCR Testing**

When the pandemic was announced, Sri Lanka had only 3 PCR laboratories. Laboratory capacity was around 300 tests per day. At the end of the year 2020, 27 laboratories (23 government sector and 4 private sector) were engaged in PCR testing for COVID – 19 and the testing capacity was around 10,000 tests per day. Table 15.1 presents the number of labs and PCR testing capacity per day at the end of 2020.

**Table 15.1: PCR testing capacity as at 31.12.2020**

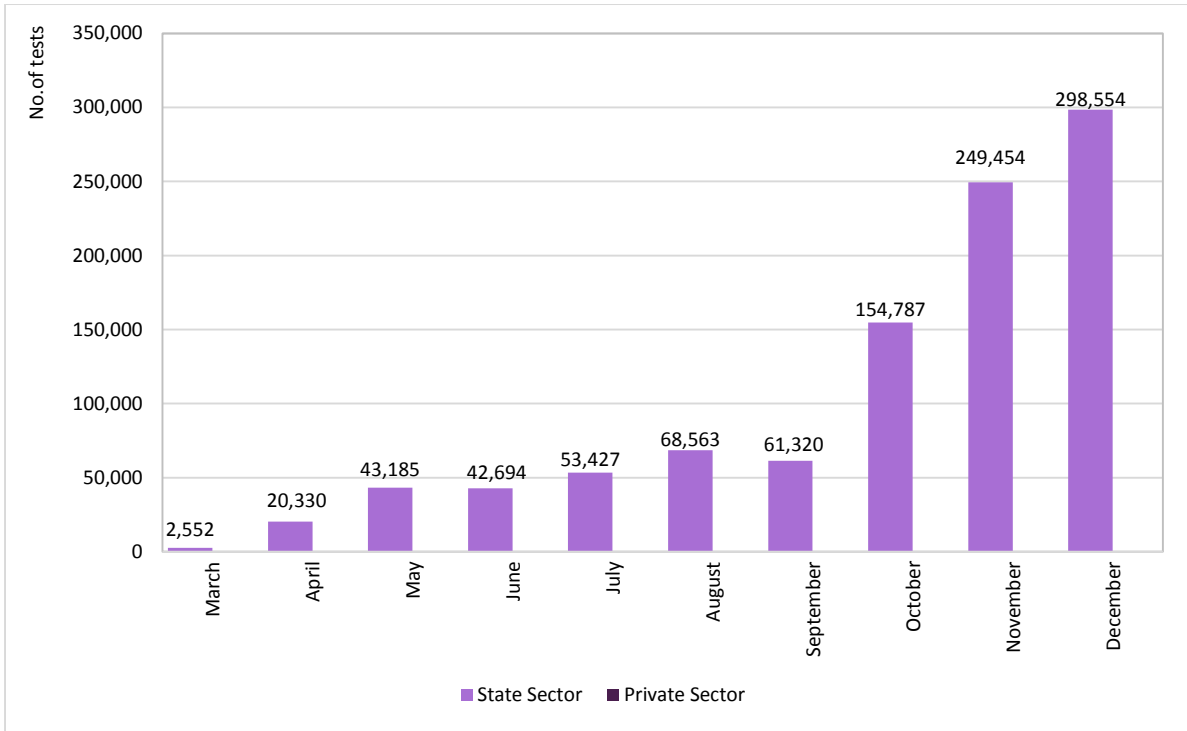
Type of institution	Number of labs	Average no of tests (per day)
<b>State sector</b>		
Ministry of Health	16	10,450
Ministry of Higher Education	5	2,150
Ministry of Defense	2	400
<b>Private Sector</b>	4	3,900
<b>Total</b>	<b>27</b>	<b>16,900</b>

Source: Laboratory Services Division



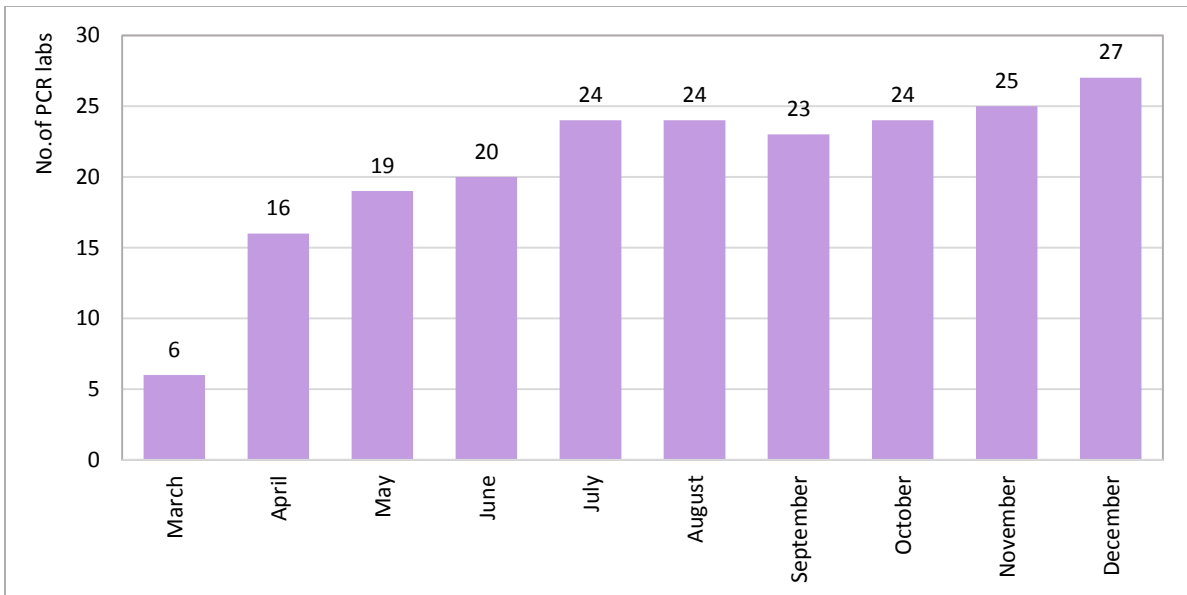
**Figure 15.1: Daily COVID – 19 PCR testing capacity (Average number of PCR tests per day by sector and month)**

Source: Laboratory Services Division



**Figure 15.2: Number of COVID-19 PCR tests done by sector and month**

Source: Laboratory Services Division



**Figure 15.3: Number of PCR laboratories, 2020**

Source: Laboratory Services Division

**Table 15.2: Average number of PCR tests per day by type of institutions as at 31.12.2020.**

<b>Institutions</b>	<b>Daily test capacity</b>
<b>Ministry of Health</b>	
MRI	1,500
BIA - Katunayaka	2,500
BH - Mulleriyawa	1,500
NH - Kandy	800
TH - Karapitiya	1,000
IDH	700
TH - Anuradhapura	600
DGH - Badulla	200
TH - Jaffna	400
TH - Batticaloa	400
TH - Rathnapura	200
GH – Sri Jayawardhanapura	200
Apeksha Hospital	200
DGH – Nuwara Eliya	150
TH - Kurunegala	50
CNTH- Ragama	150
<b>Ministry of Education</b>	
FOM Japura	1,500
FOM Jaffna	400
FOM Peradeniya	100
FOM Colombo	100
FOM Karapitiya	50
<b>Ministry of Defence</b>	
Army Hospital	200
Kotelawala Defence University (KDU)	200
<b>Private Sector</b>	
Nawaloka Hospital	1,500
Lanka Hospital	900
Durdans Hospital	750
Asiri Hospital	750
<b>Total</b>	<b>16,900</b>

Source: Laboratory Services Division

## **WHO coordinated External Quality Assessment Programme (EQAP) for government sector PCR laboratories in Sri Lanka**

Laboratory Services was able to establish an External Quality Assessment Programme with the coordination of WHO.

### **External Quality Assessment Programme (EQAP) 1**

On the invitation of WHO for the SARS-CoV-2 EQAP four laboratories were initially registered for EQA 1 in May 2020, with the University of Hong Kong. All four laboratories had achieved correct results in July 2020, with 100% concordance, based on the report from the Center for Health Protection of the Department of Health, Hong Kong.

### **External Quality Assessment Programme (EQAP) 2**

WHO has made arrangements to include all PCR testing laboratories in a global EQAP in November 2020 with the Royal College of Pathologists of Australasia, Quality Assurance Programme (RCPAQAP).

### **Actions to be taken in 2021**

- (a) Increase the COVID 19 testing capacity in the government sector by establishing new government sector PCR laboratories at
  - National Institute of Health Sciences, Kalutara
  - National Hospital of Sri Lanka
  - Base Hospital, Theldeniya
  - Colombo South Teaching Hospital, Kalubowila
  - District General Hospital, Hambantota
- (b) Increase laboratory capacity of COVID – 19 testing in existing laboratories by procuring automated extractors and PCR machines
- (c) Establish a comprehensive process of assessment involving all the stakeholders for private-sector laboratory authorization to perform PCR testing for COVID-19. It will expand the domestic COVID – 19 testing facilities and the involvement of the private sector will be important for establishing tourism, repatriation of workers, and maintaining the regular functioning of factories and workplaces.
- (d) Further, with the expansion of the private sector testing capacity, maintaining the quality of their testing will become apparent. Hence an External Quality Assurance process for private sector laboratories engaged in COVID 19 PCR will be established with the coordination of the Medical Research Institute.
- (e) New Medical Laboratory Scientists will be added to the service to strengthen the human resource of the laboratories engaged in COVID – 19 diagnosis. They will receive 6 months service orientation programme under the Ministry of Health to strengthen the diagnosis and control of the COVID - 19 pandemic.
- (f) The hands-on training will be conducted regarding the Rapid Antigen test to the Medical Officers of the institutions above the level of Base Hospitals.
- (g) Strengthen the COVID – 19 Laboratory database to regularise the PCR data and the Rapid Antigen Test.

## Combating antimicrobial resistance in Sri Lanka.

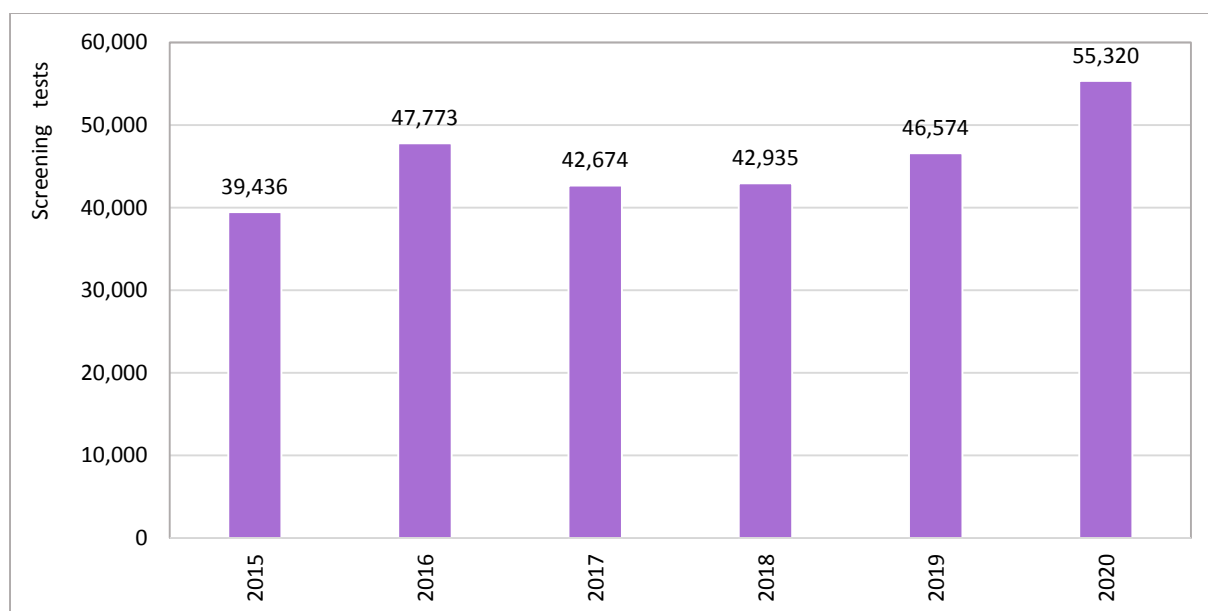
Hands-on training programmes were conducted for 60 health care staff of 20 hospitals on WHONET software. WHONET is the tool used for data collection, aggregation and analysis of data on antimicrobial resistance for the Antimicrobial resistance surveillance programme. Training for 7 more hospitals is to be conducted in 2021.

### Activities in progress

1. Workshops to finalise the draft of the National Policy on Infection Prevention and Control, updating the Manual on Hospital Infection Prevention and Control, and National Guidelines on Infection Prevention and Control are being conducted.
2. Monthly online meetings by AMR Surveillance system data analysis and interpretation committee with sentinel sites staff are being conducted by the Laboratory Services.
3. Workshops are being conducted for the working groups on Infection Prevention Control to finalise the IEC material for antibiotic awareness week.

### Mobile laboratory services

Mobile laboratory services have performed 55,320 routine screening tests for identifying non-communicable diseases despite the COVID – 19 pandemic and the added workload in the provision of COVID – 19 testing services.



**Figure 15.4: Non-communicable diseases screening tests performed by the mobile laboratory, 2015-2020**

*Source: Laboratory Services Division*



### Expansion and strengthening of laboratory services in central government and provincial health institutions

Laboratory Services Unit distributed laboratory equipment to 27 central institutions and 46 provincial institutions. Equipment distributed to provincial institutions are as follows.

**Table 15.3: Type of equipment distributed to provincial institutions, 2020**

Type of Equipment	Number of institutions
Fully Automated 5 - Part Hematology Analyzer	12
Hormone Analyzer	7
HbA1C Analyzer	7
Tissue Processor	8
Microtome	10
Blood Culture Machine	7

Source: Laboratory Services Division

## 15.2. National Blood Transfusion Services

National Blood Transfusion Service (NBTS), Sri Lanka is a centrally coordinated, specialized campaign of the Ministry of Health. It carries the national responsibility of supply of blood and blood products to all government hospitals and majority of private sector hospitals. There are 105 hospital based Blood Banks & 2 standalone blood centers affiliated to 24 cluster centers depending on the geographic distribution.

**Table 15.4: Number and rate of blood collection, 2015 - 2020**

Year	Voluntary collection	Rate (per 1000 population)
2015	395,500	19
2016	414,175	20
2017	423,668	20
2018	450,640	21
2019	444,515	21
2020	397,833	19

Source: National Blood Transfusion Service

**Table 15.5: Prevalence of TTI and comparison with previous years, 2014-2020**

Item	2014	2015	2016	2017	2018	2019	2020
Total Collection	380,367	395,500	414,175	423,668	450,640	444,515	397,833
HIV (scr.+ve)	648	646	696	764	797	694	533
Prevalence (%)	0.17	0.16	0.17	0.18	0.17	0.16	0.13
HIV (Conf. +ve)	26	21	25	28	29	44	34
Prevalence (%)	0.007	0.005	0.006	0.006	0.006	0.01	0.0085
Hepatitis B (rpt. +ve)	394	409	505	618	513	528	252
Prevalence	0.10	0.10	0.12	0.14	0.11	0.12	0.06
Hepatitis C (rpt. +ve)	657	800	847	905	898	804	613
Prevalence(%)	0.17	0.2	0.20	0.21	0.20	0.18	0.15
VDRL +ve	1,265	1,125	1,027	1411	1577	1344	960
Prevalence(%)	0.33	0.28	0.25	0.33	0.35	0.30	0.24
TPPA +ve	152	175	152	152	107	119	96
Prevalence(%)	0.04	0.04	0.04	0.03	0.02	0.03	0.024
MP +ve	0	0	0	0	0	0	0
Prevalence(%)	0	0	0	0	0	0	0

Source : National Blood Transfusion Service

(Scr.+ve) - Screening positive;

(conf.+ve) - confirmed positive;

(rpt.+ve) - repeat positive;

MP - Malaria parasites;

VDRL - Venereal Disease Research Laboratory;

TPPA - *Treponema Pallidum Particle Agglutination*

### Statistics of HLA laboratory

At the moment in government sector, HLA testing is carried out in National Blood Centre and Blood Bank in National Hospital Kandy.

**Table 15.6: Comparison of HLA laboratory statistics (at NBC), 2015 - 2019**

Typing and cross matches	2015	2016	2017	2018	2019
Class 1	2,288	2,015	1,253	2,415	1702
Class 11	2,214	1,777	1,099	2,415	
Cross match	1,471	2,490	1,954	828	703
B27	194	319	492	602	543
PRA (Class I , Class II )	295	484	475	2,456	1,255
<b>Transplantation</b>					
Kidney (Patients ,Donor)	2,094	1,589	1,027	2,017	1,704
Bone Marrow (Patients, Donors)	108	167	163	264	387
AP Donor	32	171	7	0	84
Cadaveric Donor	15	11	34	30	41

Source : National Blood Transfusion Service

**Table 15.7: HLA serology typing & compatibility testing, 2020 (at NBC)**

By CDC method	No. of tests
Class I Typing by CDC	01
B27	304
B57	27
B51	10
B15 / Others	08
Cadaveric Crossmatch	91
Compatibility Tests (with cadaveric)	666

Source: National Blood Transfusion Service

**Table 15.8: HLA molecular typing and PRA, 2020 (at NBC)**

HLA typing by rSSO	No. of tests
Renal - Patient	738
Renal - Donor	716
BMT - Patient	53
BMT - Donor	129
AP Donors	89
Platelet Refractoriness patients	18
Cadaveric Donor	18
B57 / B51	54
B27	334
<b>Luminex PRA and antibody identification</b>	
Renal	1,137
Platelet Refractoriness patients	08
Others	30

Source : National Blood Transfusion Service

**Table 15.9 : HLA laboratory statistics (at Blood Bank/National Hospital Kandy)**

Typing and cross matches	2019	2020
Cross match	210	233
PRA (Class I , Class II )	190	160
Single Antigen Bead Assay	-	50
<b>Transplantation</b>		
Kidney (Patients, Donor)	356	183
Bone Marrow (Patients, Donors)	06	-
AP Donor	276	-
Cadaveric Donor	20	18
Cadaveric Donor Q-PCR	-	04

Source: National Blood Transfusion Service

National Blood Transfusion Service designated as a World Health Organization Collaborating Center for Transfusion Medicine.

World Health Organization (WHO) often engages in scientific and technical work in cooperation with other institutions which act as expertise centres for the designated specialties. WHO designates institutions as Collaborating Centres (WHO CCs), when they have been cooperating effectively with WHO for years, in assisting WHO to implement its mandated work.

There are about 800 institutions designated as WHOCCs worldwide. However, in the field of Blood Transfusion Services, there are only about 13 centres. National Blood Transfusion Service, Sri Lanka is the second collaborating centre for SEARO in the field of Blood Transfusion Service.

This designation recognizes the history of collaboration with WHO and provides a formal framework for future joint activities.

The period of designation has commenced on 7th September 2018 for four years duration.

#### **Actions taken in 2020**

1. Maintaining the collection of whole blood from 100 per cent voluntary non-remunerated blood donors.
2. To introduce new technologies to transfusion related laboratory services while ensuring cost effectiveness - Regularize the screening cell panel. Establishing the new services in the Reagent laboratory. Established the Levis Donor panel. Recruitment DD the sufficient Levis donors and increase the quality of screening cells.

#### **Actions to be taken in 2021**

1. Maintaining the collection of whole blood from 100 per cent voluntary non-remunerated blood donors.
  - Increase 100 per cent voluntary non-remunerated blood donors by increasing in house blood donors.(Through the introduction of SMS ).
  - Introduction of strategies to safe blood collection during COVID -19 outbreak.
2. Digitalization of data receiving system of the National Blood Transfusion Service.
  - NBTS monthly statistics reporting system.
  - NBTS weekly hemovigilance reporting system.
3. Introduction of Best Practice Guide in Stock Management.
4. To obtain ISO accreditation.
5. Strengthening of HMV system with the introduction of zero reporting system.

# 16. Oral Health

## 16.1. Oral Health Services

The year 2020 was a challenging year for the Oral Health Services due to the COVID-19 pandemic. In spite of the risk, emergency services were maintained in all the institutions.

Public oral health services in Sri Lanka have a long history with its inception in 1925, establishing the first dental clinic in General Hospital, Colombo. The Dental Surgeons initially graduated from the Ceylon Medical College, Colombo and in 1953 the Dental School was shifted to the University of Peradeniya. In 1951 the training of School Dental Nurses (later referred as School Dental Therapists) commenced similar to the New Zealand system, leading to the establishment of the School Dental Services in Sri Lanka.

The Deputy Director General-Dental Services is the focal point of administration of oral health services in the Ministry of Health and is responsible for providing policy directions, technical guidance and coordination of the Dental Services island wide.

Oral health services are provided to the public by both government and private sectors. Health service in the government / public sector is free at the point of delivery and it provides the majority of oral health care services from primary care to tertiary care levels. Oral health care in the private sector is provided by General Dental Practitioners and Dental Surgeons employed in the government sector after official duty hours. Universities, Tri Forces, Police and Non-Governmental Organizations provide oral health services to their employees and families through services established in their organizations.

Oral health services in the public sector mainly consist of two components.

- Curative care services – provided through a network of hospitals ranging from non-specialized services at the primary care level to specialised services at the Tertiary care level. This includes dental clinics located in approximately 1500 various hospitals such as Primary Medical Care Units, Divisional Hospitals, Base Hospitals, District General Hospitals, Provincial General Hospitals, Teaching Hospitals and National Hospitals.
- Preventive care services – provided through specialised health programmes, campaigns and hospital dental clinics. School Dental Clinics (SDC), Adolescent Dental Clinics (ADC) and Community Dental Clinics (CDC) are also established to provide these preventive care services to the public.

In 2020, there were 1,567 Dental Surgeons working under the Ministry of Health to deliver oral health care services. During the year 2020, 84 new Dental Surgeons were recruited to the Ministry of Health. The second group of 87 interns was absorbed into the internship programme for one year.

The 27 Regional Dental Surgeons are operating at the district level at the office of the Regional Director of Health Services and coordinate with the district level, provincial level and the central level to ensure the provision of effective oral health care services.

Community Dental Clinics are located in highly populated metropolitan areas and dental surgeons working in these clinics focus on preventive care for specialised groups like pregnant mothers and children below 3 years of age. There were 61 Community Dental Clinics in 2020.

## 16.2. School Dental Services

Oral health care services for school children with a discernible preventive component are mainly provided by School Dental Clinics (SDC) and Adolescent Dental Clinics (ADC) located in school premises. In the year 2020, 378 School Dental Therapists (SDT) were providing services to children below 13 years in 443 School Dental Clinics. The number of Adolescent Dental Clinics (in a fully functional state), providing services to children above 13 years was 39. The Adolescent Dental Clinics are under the purview of the Medical Officer of Health and have a wider coverage of the population than SDC which provide services to pregnant mothers as well. During the COVID 19 pandemic, as the schools were closed most of the time the SDT were deployed to assist in COVID 19 activities along with other public health staff. The number of SDTs recruited to services in 2020 was 48.

## 16.3. Specialized Oral Health Services

The five main specialties in oral health care services in Sri Lanka are Oral & Maxillo-Facial Surgery, Orthodontics, Community Dentistry/ Dental Public Health, Restorative Dentistry and Oral Pathology.

**Table 16.1 : Distribution of Dental Consultants under the Ministry of Health by Specialty, 2020**

Specialty	Number of Consultants
Oral and Maxillofacial Surgery	30
Restorative Dentistry	15
Orthodontics	25
Community Dentistry	10
Oral Pathology	03
<b>Total</b>	<b>83</b>

Source: Directorate, Oral Health Services

Dental Laboratory Technician (DLT) is a trained health care worker who works in a dental laboratory, as a member of the dental health care team. They construct all fixed and removable dental prostheses and appliances according to the prescriptions given by the Dental Surgeons and Dental Consultants.

There were 47 DLTs working in 20 dental laboratories island wide in 2020.

## 16.4. Mobile Dental Services

In order to achieve universal health coverage Mobile Dental Services are carried out to provide essential oral health services to marginalised populations with poor accessibility to oral health services such as inmates in orphanages, elderly homes, prisons, etc. Dental units mounted on vehicles are available in almost all districts which are under the supervision of the respective Regional Dental Surgeons and there is a special mobile unit attached to the Ministry of Health. They are deployed throughout the country to various destinations.

## 16.5. National Level Special Preventive Oral Health Care Programmes

There are four main ongoing special community oral health programmes conducted successfully island wide.

- Oral health care during pregnancy
- Early childhood caries prevention program/Fluoride Varnish program
- Oral Potentially Malignant Disorders (OPMDs) and Oral Cancer Prevention and early detection programme
- School Oral Health Program

Oral health care programme for pregnant mothers is geared to provide comprehensive oral health care to improve the oral health status by reducing the complications of dental decay and periodontal diseases during pregnancy and prevent worsening of the existing oral diseases.

This will reduce the risk of transmission of causative bacteria of dental caries to the new-born and reduce the possibilities of adverse pregnancy outcomes.

The Ministry of Health decided to introduce Fluoride Varnish applications in ADC and CDC in order to prevent and control the development of dental caries among young children.

The National Cancer Control Programme of the Ministry of Health promotes early detection and prevention of Oral Pre Malignant Disorders (OPMD) and oral cancer to strengthen the primary oral health care in Sri Lanka. Screening programmes are carried out among the high risk populations by both public health staff and Dental Surgeons. Individuals identified as having a higher risk for OPMD/Oral Cancer are referred for diagnosis to Dental Surgeons and OMFS units.

According to the cancer incidence data in 2020, oral cancer is the most common cancer among the Sri Lankan male population. In the year 2020, there were 2,820 new oral cancer cases detected. According to scientific evidence chewing betel quid with or without tobacco and chewing tobacco and areca nut, mixed products are considered to be major risk factors for oral cancer. A circular has been issued to ban betel quid chewing and selling of betel quid, tobacco and areca nut products on hospital premises and all other healthcare facilities. The National Guidelines for management of Oral Cancer, Sri Lanka was published by the Oral Cancer Prevention Unit of the National Cancer Control Programme in 2020.



## Special activities 2020

- The dental services in 2020 were mainly limited to emergency services due to the COVID-19 pandemic. Guidelines were prepared and distributed among the health care providers on the preventive measures during the pandemic.
- In accordance with the Minamata Convention 2019, the Ministry of Health decided to phase down amalgam in dentistry and allow use in special circumstances only. Therefore, it was decided to use capsulated amalgam in such situations and include it in the formulary.
- Believing in the importance of a preventive strategy in oral health, Sri Lanka with co-sponsors proposed a resolution on the “Inclusion of oral health into non communicable diseases agenda of the World Health Organisation” to be submitted to the 148<sup>th</sup> executive board (which was held in 2021) which will recommend to the World Health Assembly.

## 17. Medical Supplies Division

Medical Supplies Division (MSD) of the Ministry of Health is the central organisation responsible to supply all pharmaceuticals, surgical items, laboratory items, radioactive items and printed forms for all the government sector healthcare institutions of Sri Lanka. In addition, MSD is the sole supplier of dangerous drugs (narcotics) to all hospitals in the country including the private sector. In this context, the main functions of MSD are the estimating, indenting, procuring, storing, monitoring, distributing and accounting of medical supplies. The national requirements of medical items are procured through different suppliers such as State Pharmaceutical Corporation (SPC), State Pharmaceutical Manufacturing Corporation (SPMC) and local manufacturers.

Medical supplies are stored until they are being distributed among government healthcare institutions in a network of stores consisting of a central medical store in Colombo and suburbs and 26 regional stores at the district level. The central medical stores consist of 18 bulk warehouses at the main building, 3 bulk warehouses at Angoda, 5 bulk warehouses at Wellawaththa, one warehouse at Digana and one warehouse at Welisara.

These medical items are distributed directly to line ministry institutions by MSD and to institutions under the provincial administration through Regional Medical Supplies Divisions (RMSDs) based on their annual estimates and on their requests. In addition, donations received from donor agencies such as WHO/UNICEF etc, are cleared by the wharf branch of MSD and stored and distributed.

**Table 17.1: Value of medical supplies issued, 2016 - 2020** (Rs. Mn.)

Medical supplies issued	2016	2017	2018	2019	2020
Drug	26,477.50	24,693.00	29,211.80	38,265.36	46,079.28
Surgical	9,167.00	10,731.30	12,651.40	14,376.38	19,043.97
Lab	2,080.40	2,202.20	2,684.70	2,898.09	4,204.24
<b>Total</b>	<b>37,724.90</b>	<b>37,626.50</b>	<b>44,547.90</b>	<b>55,539.83</b>	<b>69,327.49</b>

Source: Medical Supplies Division

### Actions taken in 2020

During the period of the COVID - 19 pandemic,

- A special unit was established to streamline the storing and distribution of medical supplies to COVID - 19 treatment centres and other related institutions island wide. Mainly 15 items were issued on the requests made by the hospitals, according to a regular distribution plan. These items were issued to Prison Hospital, Army Hospital, Air Force, Town Councils, Election Commission Department and Airport as per requests. Other than designated COVID centres, items were issued to line ministry institutions, Base Hospitals and Divisional Hospitals.
- Donations received from WB, ADB, WHO, China and individual donors were stored and issued from this special unit. This unit is functioning 24 hours and is directly monitored by the Director/MSD and supervised by Deputy Director General (Medical Supplies). Further, this unit has a daily reporting system for receiving and issuing items.

- Carried out emergency procurement and supplied all diagnostics (PCR, antigen kits, ect.) required for the campaign against 1<sup>st</sup> and 2<sup>nd</sup> waves of the COVID - 19 pandemic.
- Procured and supplied personal protective equipment, sanitizer chemicals and disinfectants for the COVID -19 management in the country.

### **Other Major Developments**

- The Computerised Medical Supplies Management Information System (MSMIS) has been expanded up to provincial level health care institutions (District General Hospitals, Base Hospitals (type A, B) and Divisional Hospitals (type A, B). Accordingly, MSMIS system access was provided to 145 institutions.
- To minimise the shortages of essential drugs and devices, weekly supply position review meetings chaired by the Director General of Health Services have been held regularly with the participation of the representatives of all stakeholder institutions including the National Medicines Regulatory Authority (NMRA), State Pharmaceutical Corporation (SPC) and Ministry of Health.
- Formulary revision for medical drugs list, medical devices lists and laboratory items list of MSD is currently in process.
- Revision of the management of the Manual of drugs of Medical Supplies Division has been initiated.
- The project, “Strengthening the Medical Storing Facilities in Hospitals and Regional Medical Supplies Divisions” has been initiated and allocation of Rs. 86.21 Million has been issued for 31 institutions and 11 institutions. This was completed in 2020.
- “Osu Diriya” is a special unit established to provide a 24/7 hotline to address issues related to medical supplies from general public and medical institutions.
- Pricing and checking unit was established with the objective of providing a quality customer care for clients.
- Institutional and regional Drug and Therapeutic Committee Meetings (DTC) were conducted successfully via teleconferencing facility amidst COVID-19 situation in the country.

### **Infrastructure Development**

1. Air conditioning of the MSD main store is close to completion.
2. Renovation of the Stock Control Unit in MSD was accomplished.
3. Renovation of drug stores building at Digana was accomplished.
4. Action plan has been implemented to improve the infrastructure facilities at MSD and sub stores.

### **Actions to be taken in 2021**

1. Procuring COVID - 19 vaccines and syringes required for the mass vaccination programme of the COVID - 19 pandemic.
2. Continuous supply of all diagnostics (PCR, antigen kits, ect.), personal protective equipment, sanitizer chemicals and disinfectants for the COVID-19 management in the country.

3. Continuing phase II of the project of improving store facilities of line ministry institutions, RMSDs, Base Hospitals and Divisional Hospitals in all provinces.
4. It has been scheduled to expand the Medical Supplies Management Information System (MSMIS) Project to connect all provincial health institutions up to all Divisional Hospitals.
5. Conducting a new revision to revise MSD's main formulary items list (pharmaceutical, laboratory and surgical items) with the sponsorship of WHO.
6. Regularisation of DTC committees at all institutions to make them aware of the Supply Chain Management.
7. Conducting 2021 annual estimation workshops for 26 RDHS divisions to prepare a realistic estimate for the year 2022 through online platforms.
8. Revising the Drug Manual of MSD with the collaboration of the National Medicine Regulatory Authority (NMRA), Officers of the Ministry of Health and officers of the Medical Supplies Division which is funded by WHO.
9. An action plan is to be implemented to improve the infrastructure facilities at MSD and sub stores.

## 18. Biomedical Engineering Services

The division of Biomedical Engineering Services of the Ministry of Health is responsible for procuring, installing, commissioning and maintaining medical equipment in line ministry hospitals. This division also provides technical assistance to the Provincial Health Authorities on their requests.

The main functions and responsibilities of the Biomedical Engineering Services (BES) are as follows.

1. Technical assessment and planning
2. Procurement of medical equipment
3. Repair and maintenance of medical equipment
4. Preparing standard specifications for medical devices and guidelines for the maintenance of medical devices and their supporting systems
5. Training of end users and technical staff
6. Provision of technical expertise in medical equipment

Apart from that, Biomedical Engineering Service also provides room for industrial training of engineering undergraduates at government universities and private universities. Furthermore, this unit has initiated the development of a web-based software for the 'Medical Equipment Inventory Management System'. The Head office of the Biomedical Engineering Services Division in Colombo has facilities to conduct workshops, warehouse facilities for equipment and spare part storage in addition to the administrative functions. Currently, the following staff is available to perform the above functions.

<b><u>Technical staff</u></b>		<b><u>Non-technical Staff</u></b>	
Director	01	Accountant	01
Biomedical Engineers	14	Administrative Officer	01
Foremen	42	Development Officers	11
Technicians	42	Management Assistants	27
		SKS	35
		Drivers	12

BES is in the process of extending Regional Biomedical Engineering Units in the line ministry hospitals in Anuradhapura, Badulla, Kandy, Jaffna, Batticaloa, Ragama, Rathnapura, Kurunegala, Maharagama and Matara.

# 19. Human Resources for Health

## 19.1. Human Resource Coordination Division

Human Resource Coordination Division (HRCoD) was established to address the long term Human Resources for Health (HRH) challenges met by the Ministry of Health. HRCoD functions as the focal point for taking policy directions and conducting human resource-related research in the Sri Lankan health sector. The unit is also entrusted with HRH cadre projections responsibility to guide service expansions in the curative and preventive care services. HRCoD utilises research-based data and mathematical modelling to perform these functions accurately. Furthermore, recruitment, training needs identification, proper strategies for HRH development, developing of an appropriate performance appraisal system and evidence e-based deployment can be described as other key responsibilities entrusted with the unit. Besides, the Health Economic Cell of the Ministry of Health is also established within the HRCoD to plan and implement relevant activities.

The unit has pioneered these activities by launching an online recruitment system for nurses, professions supplementary to medicine (PSM) and paramedical staff through which the transparency of the recruitment process was improved. This on-line recruitment scheme received an international award for the innovation.

The unit provides up-to-date data to the National Health Workforce Accounts (NHWA) portal of the WHO.

Regular production and publication of National Health Accounts (NHA) for Sri Lanka are one of the main tasks of the unit. It is published as a monograph and available online at the Ministry of Health website.

### **Actions taken in 2020**

In 2020, the HRCoD called applications for nursing students from GCE (A/L) examination - Science stream in 2017 & 2018. Nearly 6200 applicants who fulfilled the minimum qualifications were interviewed and out of them 4258 trainees were recruited into the training schools based on district Z scores.

Further, the HRCoD called applications for PSM and paramedical courses from GCE (A/L) examination in 2017 & 2018. Nearly 5000 applicants who fulfilled the minimum qualifications were interviewed and 1185 trainees were recruited into the training schools island wide based on Provincial Z scores.

National Health Accounts for the year 2017 and 2018 is in the draft stage. Data collection for 2019 NHA is in the process. This is an important document for healthcare planners and decision-makers to take evidence-based actions.

The unit engaged in preparing the National Strategic Plan for HRH 2020-2030 to expand the functionality.

Unit strengthened the information flow between provincial and central ministries through establishing human resource coordinating units in each Provincial Directorate of Health Services.

## 19.2. Postgraduate Institute of Medicine (PGIM)

The PGIM was established by the PGIM ordinance No.01 in 1980 and was affiliated to the University of Colombo. This institute is providing training and research in a range of specialties and subspecialties in Medicine/Dentistry. The PGIM works in close collaboration with the Ministry of Higher Education, Ministry of Health, Faculties of Medicine of Universities and Professional Colleges. The PGIM has been contributing immensely during the past thirty years towards the development of specialist doctors needed by the country. During the year PGIM conducted 115 examinations including Selection, Certificates, PG Diploma, MSc and MD examinations in addition to the in-course assessments.

Actions were taken to prepare the prospectuses for the following new training programmes.

- MD & Board Certification in Laboratory Molecular Medicine (Awaiting for the council approval)  
Following Curricula/Prospectuses of existing programmes were revised during this year
- Master of Forensic Medicine  
(PG Diploma has been upgraded to Masters. UGC approval: 22<sup>nd</sup> October 2020)
- Board Certification in Clinical Pharmacology & Therapeutics
- MSc in Clinical Pharmacology & Therapeutics
- MD & Board Certification in Family Medicine
- Board Certification in Rheumatology and Rehabilitation Following are still under review.
- Postgraduate Diploma in Anatomy
- Postgraduate Diploma in Physiology
- Postgraduate Diploma in General Dental Practice
- Master in Molecular Medicine  
(Postgraduate Diploma & MSc will be replaced by Master of Molecular Medicine)
- MD & Board Certification in Clinical Oncology
- MD & Board Certification in Medical Microbiology
- MD & Board Certification in Emergency Medicine
- MD & Board Certification in Anesthesiology
- MD & Board Certification in Virology
- MD & Board Certification in Oral and Maxillofacial Pathology(Nomenclature has been changed from MD & Board Certification in Oral Pathology to MD & Board Certification in Oral and Maxillofacial Pathology)
- Board Certification in Cardiac Electrophysiology
- Board Certification in Imaging Cardiology
- Board Certification in Neurology

New training programmes.

- Master in Clinical Travel Medicine
- Master in Forensic Odontology

**Postgraduate output**

MD/MS	- 443
PG Diploma	- 186
MSc	- 61
Broad Certification	- 235

**New entrants**

PG Certificate	- 16
PG Diploma	- 319
MSc	- 145
MD	- 507

Workshop for Trainers/ Examiners	- 17
Workshops for Trainees	- 28
Research/Theses/ Dissertations done by PG trainees	-250



## 20. Private Health Sector

### 20.1. Directorate of Private Health Sector Development and Private Health Services Regulatory Council

The Ministry of Health has recognized the importance of safe, efficient and quality health service provision either through state or private healthcare services, through monitoring and evaluation, regulating through guidelines and developing through capacity building and technical support. Events/Innovations carried out by the Directorate of Private Sector Development and Private Health Services Regulatory Council are as follows.

- Capacity building of General Practitioners to cater the demands of population including routine medical problems and emergency medical problems
- Completion of amending the existing Private Medical Institutions (Registration) Act
- Improvement of registration and renewal of registration of private medical institutions by strengthening the capacity of provincial health authorities
- Improvement of complaint handling procedure by timely investigation and enforcing remedial actions against private medical institutions
- Inspection and observation visits to private medical institutions
- Conducting advocacy workshops in coordination with Provincial Directorates of Health Services following observation visits to selected private medical institutes in the respective provinces
- Granting preliminary approval to establish new private hospitals after evaluating the project proposals
- Processing of documents pertaining to kidney transplants by private hospitals
- Processing of documents pertaining to temporary registration of foreign specialists
- Providing technical expertise in human resource development training programs conducted by provincial health authorities for private health institutions
- Initiation of a survey in respect of private health sector with the help of PHIs in the MOH areas
- Conduct of refresher/gap filling course for private sector nurses
- Initiation of refresher/gap filling course for private dental assistants
- Conduct of island wide survey on prices charged by private health institutes

**Table 20.1: Number of registered private medical institutions by category, 2016 – 2020**

Category	Year				
	2016	2017	2018	2019	2020
Private Hospitals and Nursing Homes & Maternity Homes	104	116	117	111	102
Medical Laboratories	374	404	448	413	373
Medical Centres/Screening Centres/Day Care Medical Centres/Channel Consultations	152	191	182	181	150
Full Time General Practices/Dispensaries/Medical Clinics	116	117	171	194	155
Part Time General Practices/Dispensaries/Medical Clinics	178	188	355	394	272
Full Time Dental Surgeries	26	27	33	37	32
Part Time Dental Surgeries	7	12	20	20	23
Full Time Medical Specialist Practices	4	4	6	7	2
Part Time Medical Specialist Practices	9	4	7	5	4
Private Ambulance Services	12	10	10	10	7
Other Private Medical Institutions	34	40	45	60	50
<b>Total Private Medical Institutions</b>	<b>1,016</b>	<b>1,113</b>	<b>1,394</b>	<b>1,432</b>	<b>1,170</b>

Source: Directorate of Private Health Sector Development and Private Health Services Regulatory Council

# Annexure I

**Table 1. Administrative Divisions and Local Government Bodies, 2020**

Administrative Areas (Province/District)	Divisional Secretary Divisions	Grama Niladari Divisions	Local Government Bodies		
			Municipal Councils	Urban Councils	Pradeshiya Sabhas
<b>Western Province</b>					
Colombo	13	557	5	5	3
Gampaha	13	1,177	2	5	12
Kalutara	14	762	-	4	12
<b>Central Province</b>					
Kandy	20	1,187	1	4	17
Matale	11	545	2	-	11
Nuwara Eliya	5	491	1	2	5
<b>Southern Province</b>					
Galle	19	895	1	2	17
Matara	16	650	1	1	15
Hambantota	12	576	1	1	10
<b>Northern Province</b>					
Jaffna	15	435	1	3	13
Kilinochchi	4	95	-	-	3
Mannar	5	153	-	1	4
Vavuniya	4	102	-	1	4
Mullaitivu	6	136	-	-	4
<b>Eastern Province</b>					
Batticaloa	14	346	1	2	9
Ampara	20	503	2	1	17
Trincomalee	11	230	-	2	11
<b>North-Western Province</b>					
Kurunegala	30	1,610	1	1	19
Puttalam	16	548	-	2	10
<b>North Central Province</b>					
Anuradhapura	22	694	1	-	18
Polonnaruwa	7	295	-	-	7
<b>Uva Province</b>					
Badulla	15	567	2	1	15
Monaragala	11	319	-	-	10
<b>Sabaragamuwa Province</b>					
Ratnapura	17	575	1	2	14
Kegalle	11	573	-	1	11
<b>Sri Lanka</b>	<b>331</b>	<b>14,021</b>	<b>23</b>	<b>41</b>	<b>271</b>

Source: Department of Census and Statistics

**Table 2. Population, Land Area and Density by Province and District**

Administrative Area (Province/District)	Land Area (sq. km) as at 1988 <sup>1</sup>	Percentage Land Area	2020*			Average Annual Growth Rate (%) 1981 - 2012 <sup>3</sup>
			Population (‘000) <sup>2</sup>	Percentage Distribution of Population	Population Density (Persons per sq. km)	
<b>Sri Lanka</b>	<b>62,705</b>	<b>100.00</b>	<b>21,919</b>	<b>100.0</b>	<b>350</b>	<b>1.0</b>
<b>Western Province</b>	<b>3,593</b>	<b>5.73</b>	<b>6,165</b>	<b>28.1</b>	<b>1,716</b>	
Colombo	676	1.08	2,455	11.2	3,632	1.0
Gampaha	1,341	2.14	2,423	11.1	1,807	1.7
Kalutara	1,576	2.51	1,287	5.9	817	1.2
<b>Central Province</b>	<b>5,575</b>	<b>8.89</b>	<b>2,781</b>	<b>12.7</b>	<b>499</b>	
Kandy	1,917	3.06	1,483	6.8	774	0.9
Matale	1,952	3.11	525	2.4	269	1.0
Nuwara Eliya	1,706	2.72	773	3.5	453	0.6
<b>Southern Province</b>	<b>5,383</b>	<b>8.58</b>	<b>2,669</b>	<b>12.2</b>	<b>496</b>	
Galle	1,617	2.58	1,135	5.2	702	0.9
Matara	1,270	2.03	866	4.0	682	0.7
Hambantota	2,496	3.98	668	3.0	268	1.1
<b>Northern Province</b>	<b>8,290</b>	<b>13.22</b>	<b>1,152</b>	<b>5.3</b>	<b>139</b>	
Jaffna	929	1.48	621	2.8	668	-0.7
Kilinochchi	1,205	1.92	130	0.6	108	0.7
Mannar	1,880	3.00	112	0.5	60	-0.2
Vavuniya	1,861	2.97	191	0.9	103	2.0
Mullaitivu	2,415	3.85	98	0.4	41	0.7
<b>Eastern Province</b>	<b>9,361</b>	<b>14.93</b>	<b>1,746</b>	<b>8.0</b>	<b>187</b>	
Batticaloa	2,610	4.16	579	2.6	222	1.5
Ampara	4,222	6.73	736	3.4	174	1.7
Trincomalee	2,529	4.03	431	2.0	170	1.3
<b>North-Western Province</b>	<b>7,506</b>	<b>11.97</b>	<b>2,563</b>	<b>11.7</b>	<b>341</b>	
Kurunegala	4,624	7.37	1,726	7.9	373	0.9
Puttalam	2,882	4.60	837	3.8	290	1.4
<b>North Central Province</b>	<b>9,741</b>	<b>15.53</b>	<b>1,386</b>	<b>6.3</b>	<b>142</b>	
Anuradhapura	6,664	10.63	943	4.3	142	1.3
Polonnaruwa	3,077	4.91	443	2.0	144	1.5
<b>Uva Province</b>	<b>8,335</b>	<b>13.29</b>	<b>1,387</b>	<b>6.3</b>	<b>166</b>	
Badulla	2,827	4.51	886	4.0	313	0.9
Monaragala	5,508	8.78	501	2.3	91	1.6
<b>Sabaragamuwa Province</b>	<b>4,921</b>	<b>7.85</b>	<b>2,070</b>	<b>9.4</b>	<b>421</b>	
Ratnapura	3,236	5.16	1,179	5.4	364	1.3
Kegalle	1,685	2.69	891	4.1	529	0.7

\* Provisional

Source: <sup>1</sup> Survey General's Department

<sup>2</sup> Registrar General's Department

<sup>3</sup> Census of Population & Housing, 2012

**Table 3. Population by Five Year Age Groups and Sex, 1981, 2001, 2012 and 2020**

Age Group	1981 <sup>1</sup>		2001 <sup>1</sup>		2012 <sup>1</sup>		2020* <sup>2</sup>					
							Total		Male		Female	
	Population	%	Population	%	population ('000)	%	population ('000)	%	population ('000)	%	population ('000)	%
<b>All ages</b>	<b>14,846,750</b>	<b>100.0</b>	<b>16,929,689</b>	<b>100.0</b>	<b>20,359</b>	<b>100.0</b>	<b>21,919</b>	<b>100.0</b>	<b>10,613</b>	<b>100.0</b>	<b>11,306</b>	<b>100.0</b>
0 - 4	1,854,738	12.5	1,439,761	8.5	1,744	8.6	1,881	8.6	949	8.9	932	8.2
5 - 9	1,682,527	11.3	1,483,591	8.8	1,748	8.6	1,885	8.6	951	9.0	934	8.3
10 - 14	1,689,333	11.4	1,525,674	9.0	1,640	8.1	1,768	8.1	894	8.4	874	7.7
15 - 19	1,603,187	10.8	1,646,827	9.7	1,644	8.1	1,773	8.1	884	8.3	889	7.9
20 - 24	1,526,463	10.2	1,591,126	9.4	1,533	7.5	1,651	7.5	799	7.5	852	7.5
25 - 29	1,274,857	8.6	1,340,562	7.9	1,553	7.6	1,672	7.6	800	7.5	872	7.7
30 - 34	1,125,426	7.6	1,290,121	7.6	1,639	8.1	1,765	8.1	858	8.1	907	8.0
35 - 39	839,073	5.7	1,258,112	7.4	1,409	6.9	1,516	6.9	738	7.0	778	6.9
40 - 44	698,203	4.7	1,170,941	6.9	1,359	6.7	1,462	6.7	712	6.7	750	6.6
45 - 49	609,289	4.1	1,030,560	6.1	1,286	6.3	1,384	6.3	665	6.3	719	6.4
50 - 54	539,524	3.6	917,139	5.4	1,219	6.0	1,312	6.0	626	5.9	686	6.1
55 - 59	422,322	2.8	671,403	4.0	1,064	5.2	1,144	5.2	539	5.1	605	5.4
60 & above	981,808	6.6	1,563,872	9.2	2,521	12.4	2,706	12.3	1,198	11.3	1,508	13.3

\* Provisional

Note : Year 2001 population excludes the districts Jaffna, Mannar, Vavunia, Mullaitivu, Kilinochchi, Batticaloa & Trincomalee.

Source: <sup>1</sup> Census of Population and Housing

<sup>2</sup> Registrar General's Department

**Table 4. Vital Statistics by District**

District	Crude Birth Rate(CBR)			Crude Death Rate (CDR)			Maternal Mortality Ratio, 2015 (Per 100,000 Live Births)	Infant Mortality Rate, 2015	Neo-Natal Mortality Rate	
	Per 1,000 Population								2014	2015
	2018*	2019*	2020*	2018*	2019*	2020*				
Colombo	13.6	13.4	11.6	7.4	7.5	6.3	29.0	12.7	8.1	7.8
Gampaha	12.0	11.6	10.3	6.3	6.7	5.8	12.4	5.3	5.1	4.2
Kalutara	12.6	11.7	10.8	7.1	7.2	6.7	19.6	5.4	5.5	3.9
Kandy	15.7	15.4	14.5	7.0	7.2	6.5	53.4	14.2	9.6	10.0
Matale	14.9	14.3	13.9	6.6	6.7	6.6	-	5.5	3.8	3.9
Nuwara Eliya	14.1	13.6	14.4	6.2	6.5	6.2	22.0	9.3	5.7	7.0
Galle	15.6	15.2	14.3	7.6	8.1	7.2	20.8	7.6	4.2	5.5
Matara	13.3	13.1	12.2	6.6	6.8	6.2	9.0	5.0	2.6	4.4
Hambantota	17.0	16.9	16.7	5.6	5.8	5.3	9.3	2.0	2.5	1.6
Jaffna	15.4	15.4	14.1	7.2	7.8	6.9	38.2	10.3	9.8	7.5
Kilinochchi	21.0	21.9	19.9	4.0	4.4	3.7	-	3.9	0.9	2.0
Mannar	17.4	18.5	19.1	3.9	4.6	4.5	-	2.4	1.5	0.6
Vavuniya	18.8	15.3	16.7	5.2	4.9	4.5	-	2.8	5.9	2.2
Mullaitivu	11.1	8.8	10.7	4.6	4.0	3.4	-	-	1.0	-
Batticaloa	18.9	17.9	16.8	4.6	5.0	4.7	32.6	10.2	7.9	7.9
Ampara	22.0	21.0	20.3	4.7	5.0	4.7	7.5	2.0	1.3	1.3
Trincomalee	22.4	21.3	20.2	4.4	4.8	4.6	38.6	2.8	0.6	2.1
Kurunegala	14.8	14.4	13.1	6.9	7.3	6.5	34.1	10.2	7.7	8.2
Puttalam	17.1	16.5	15.5	5.8	6.2	5.9	7.3	3.9	2.8	2.8
Anuradhapura	16.7	15.8	15.0	5.9	6.0	5.5	26.0	6.2	4.7	4.3
Polonnaruwa	16.7	15.9	15.2	6.3	6.4	5.8	28.4	4.8	2.5	4.1
Badulla	16.2	14.6	14.9	6.1	6.3	5.7	12.8	5.4	4.1	3.6
Monaragala	16.9	15.2	14.3	4.9	5.1	4.9	14.2	1.4	1.6	1.0
Ratnapura	14.8	14.9	14.4	6.5	6.6	6.2	5.3	5.6	3.3	3.8
Kegalle	13.2	13.4	12.8	6.9	7.2	6.7	52.1	2.0	2.0	1.6
<b>Sri Lanka</b>	<b>15.1</b>	<b>14.6</b>	<b>13.8</b>	<b>6.4</b>	<b>6.7</b>	<b>6.0</b>	<b>23.2</b>	<b>7.5</b>	<b>5.3</b>	<b>5.3</b>

\* Provisional

Source: Registrar General's Department

Note : CBR and CDR are based on usual residence data.

All other indicators are based on place of occurrence data.

**Table 5. Number of Households in Occupied Housing Units by Main Source of Drinking Water and District, 2012**

Province/District	Total households	Main source of drinking water												
		Protected well within premises	protected well outside premises	Unprotected well	* Tap within unit	* Tap within premises but outside unit	* Tap outside premises	Rural water supply project	Tube well	Bowser	River/ tank/ streams/ spring	Rain water	Botteled water	Other
<b>Sri Lanka</b>	<b>5,264,282</b>	<b>1,652,972</b>	<b>772,819</b>	<b>211,556</b>	<b>1,110,050</b>	<b>363,043</b>	<b>181,235</b>	<b>482,937</b>	<b>177,432</b>	<b>18,931</b>	<b>239,952</b>	<b>4,022</b>	<b>9,984</b>	<b>39,349</b>
<b>Western Province</b>														
Colombo	572,475	123,735	11,188	1,951	360,380	29,938	26,539	12,728	2,065	38	1,560	112	828	1,413
Gampaha	604,009	317,581	43,463	13,128	126,947	26,607	17,208	18,388	35,527	481	274	131	605	3,669
Kalutara	305,737	138,335	41,714	13,508	63,237	9,212	5,633	20,378	7,272	90	4,933	90	43	1,292
<b>Central Province</b>														
Kandy	348,019	49,629	38,580	10,117	132,091	28,270	14,564	39,395	6,762	688	24,032	221	61	3,609
Matale	129,710	26,731	22,822	5,253	24,559	8,876	4,168	22,399	7,500	62	6,605	28	63	644
Nuwara Eliya	181,182	9,149	10,157	6,899	19,002	22,837	11,826	38,262	1,169	66	60,177	103	17	1,518
<b>Southern Province</b>														
Galle	273,140	117,064	40,126	19,214	56,542	14,807	7,671	7,028	3,171	135	5,984	10	41	1,347
Matara	206,790	65,292	25,843	12,457	46,985	17,580	3,913	19,013	1,562	14	13,140	48	25	918
Hambantota	156,476	18,709	11,881	3,618	38,450	42,035	7,728	24,791	3,666	501	3,264	57	108	1,668
<b>Northern Province</b>														
Jaffna	140,323	54,642	44,554	1,255	2,407	2,963	14,251	-	15,607	3,142	13	3	53	1,433
Kilinochchi	28,369	9,033	9,652	7,029	32	87	43	-	1,481	835	12	1	3	161
Mannar	23,975	5,700	6,644	661	1,192	3,834	1,302	-	1,666	2,785	32	2	42	115
Vavuniya	41,908	19,540	8,517	1,623	880	1,171	1,522	275	7,256	134	8	38	912	32
Mullaitivu	24,896	8,153	8,242	6,462	60	100	141	-	1,088	210	48	-	4	388
<b>Eastern Province</b>														
Batticaloa	134,966	77,504	29,831	2,965	4,110	4,762	802	796	12,184	210	994	135	78	595
Ampara	165,166	44,011	33,011	7,436	35,590	24,812	5,607	10,148	2,375	168	755	83	39	1,131
Trincomalee	96,951	26,911	22,617	3,175	15,596	15,106	4,170	1,001	1,408	4,425	1,090	12	81	1,359
<b>North Western Province</b>														
Kurunegala	443,349	230,275	111,409	25,653	15,640	6,355	4,656	34,950	9,312	142	2,389	343	444	1,781
Puttalam	202,796	57,030	34,591	3,661	17,626	13,074	5,545	19,864	34,696	3,961	491	715	3,445	8,097
<b>North Central Province</b>														
Anuradhapura	231,356	50,933	64,063	7,811	33,806	17,571	8,164	35,054	5,941	205	3,138	1,259	2,504	907
Polonnaruwa	111,010	29,968	25,434	7,627	12,098	8,554	2,979	18,437	3,273	28	1,620	174	480	338
<b>Uva Province</b>														
Badulla	214,900	29,028	27,523	12,707	28,328	15,963	7,813	45,155	2,198	106	44,812	205	40	1,022
Monaragala	120,137	25,872	20,186	7,076	15,009	13,785	4,251	20,424	5,483	69	6,892	79	21	990
<b>Sabaragamuwa Province</b>														
Ratnapura	285,893	49,680	37,636	14,384	28,830	24,976	12,868	75,632	4,235	399	34,825	111	34	2,283
Kegalle	220,749	68,467	43,135	15,886	30,653	9,768	7,871	18,819	535	37	22,864	62	13	2,639

Source: Census of Population and Housing, 2012

Note : ' \* ' Refers to piped born water distributed through pipe lines by National Water Supply and Drainage Board or the Local Government Institution.



**Table 6. Number of Households in Occupied Housing Units by Type of Toilet Facility and District, 2012**

Province/District	Total Households	Type of Toilet			
		Exclusive	Shared	Common	Not Using a Toilet
<b>Sri Lanka</b>	<b>5,264,282</b>	<b>4,565,611</b>	<b>574,303</b>	<b>36,088</b>	<b>88,280</b>
<b>Western Province</b>					
Colombo	572,475	509,447	43,101	19,602	325
Gampaha	604,009	529,623	72,180	1,447	759
Kalutara	305,737	279,716	24,776	458	787
<b>Central Province</b>					
Kandy	348,019	312,932	31,740	1,639	1,708
Matale	129,710	112,819	15,969	231	691
Nuwara Eliya	181,182	144,939	27,164	2,019	7,060
<b>Southern Province</b>					
Galle	273,140	246,407	25,192	502	1,039
Matara	206,790	187,602	18,289	462	437
Hambantota	156,476	138,062	17,728	58	628
<b>Northern Province</b>					
Jaffna	140,323	114,174	17,033	1,866	7,250
Mannar	23,975	17,471	3,657	342	2,505
Vavuniya	41,908	31,860	5,133	1,898	3,017
Mullaitivu	24,896	15,764	3,844	148	5,140
Kilinochchi	28,369	17,560	4,539	64	6,206
<b>Eastern Province</b>					
Batticaloa	134,966	99,173	18,523	345	16,925
Ampara	165,166	142,438	18,194	191	4,343
Trincomalee	96,951	75,723	16,516	1,071	3,641
<b>North Western Province</b>					
Kurunegala	443,349	391,708	46,208	869	4,564
Puttalam	202,796	172,310	22,973	988	6,525
<b>North Central Province</b>					
Anuradhapura	231,356	193,611	32,347	189	5,209
Polonnaruwa	111,010	94,835	13,906	135	2,134
<b>Uva Province</b>					
Badulla	214,900	183,329	28,963	402	2,206
Monaragala	120,137	104,608	13,027	186	2,316
<b>Sabaragamuwa Province</b>					
Ratnapura	285,893	248,948	34,647	648	1,650
Kegalle	220,749	200,552	18,654	328	1,215

Source: Census of Population and Housing, 2012

**Table 7 : Distribution of Government Medical Institutions and Beds by Regional Director of Health Services Division, as at 31.12.2020**

RDHS Division	Teaching Hospital		Provincial General Hospital		District General Hospital		Base Hospital (Type A)		Base Hospital (Type B)		Divisional Hospital (Type A)		Divisional Hospital (Type B)		Divisional Hospital (Type C) <sup>1</sup>		Primary Medical Care Unit and Maternity Homes		Other Hospitals <sup>2</sup>		Total Hospitals		Beds per 1,000 Population	Primary Medical Care Unit	MOH Area
	Ins.	Beds	Ins.	Beds	Ins.	Beds	Ins.	Beds	Ins.	Beds	Ins.	Beds	Ins.	Beds	Ins.	Beds	Ins.	Beds	Ins.	Beds	Ins.	Beds			
Colombo	7	7,740			1	578	3	994			1	107	6	454	2	104	5	72	10	4,137	38	14,186	6	29	19
Gampaha	1	1,749			2	1,550	1	627	3	442	3	466	1	82	7	215			7	1,123	28	6,254	3	45	16
Kalutara					1	1,188	3	1,018	2	148	2	201	7	469	8	205					24	3,229	3	9	15
Kandy	3	4,275			1	460			2	624	16	1,060	21	726	10	204			6	229	59	7,578	5	28	23
Matale					1	880	1	367			7	471	6	157	5	58					21	1,933	4	15	13
Nuwara Eliya					1	704	1	204	1	191	2	231	10	632	12	295					27	2,257	3	21	13
Galle	2	2,357					2	946	1	155	2	178	8	849	10	297			2	60	27	4,842	4	24	20
Matara					1	1,225	1	319	1	153	3	328	6	491	3	75					15	2,591	3	22	17
Hambantota					1	967	1	331	2	416	1	106	8	581	8	300			1	56	23	2,757	4	14	12
Jaffna	1	1,395					2	755	2	269			5	347	18	340			1	40	31	3,146	5	16	14
Kilinochchi					1	355			1	51			1	81	6	164					9	651	5	4	4
Mullaitivu					1	230	1	19	2	173	1	38	2	76	4	12					12	548	6	6	6
Vavuniya					1	623			1	99			1	36	7	84					11	842	4	6	4
Mannar					1	331			1	105			5	273	4	66			1	16	13	791	7	11	5
Batticaloa	1	1,163					3	732	1	116	3	248	3	136	11	430					22	2,825	5	14	14
Ampara					1	858	1	217	1	111			1	70	6	221				16	12	1,493	5	17	7
Kalmunai							4	1,284	3	312	1	70	2	127	10	396	1	19	1		21	2,208		8	13
Trincomalee					1	564	3	556	1	43			1	37	13	516			1	134	22	1,850	4	17	12
Kurunegala	1	692	1	2,465			1	418	3	720	8	924	12	834	20	504	1	12	1	14	48	6,583	4	53	31
Puttalam					1	592	1	467	3	609	1	113	3	117	9	197					15	2,095	3	30	13
Anuradhapura	1	2,269					1	207	5	560	1	103	11	668	20	586			2	77	41	4,470	4	21	22
Polonnaruwa					1	779			3	342			3	201	5	174					13	1,496	3	17	8
Badulla			1	1,586			2	809	1	219	2	242	9	566	33	486					48	3,908	4	16	16
Moneragala					1	564			3	520	1	103	5	330	8	241					18	1,758	4	10	11
Ratnapura	1	1,520			1	522	1	359	4	643	6	480	7	364	18	338			1	12	40	4,238	4	49	19
Kegalle					1	870			3	1,073	6	578	3	102	10	114			1	14	24	2,751	3	21	11
<b>Sri Lanka</b>	<b>18</b>	<b>23,160</b>	<b>2</b>	<b>4,051</b>	<b>20</b>	<b>13,840</b>	<b>33</b>	<b>10,629</b>	<b>50</b>	<b>8,094</b>	<b>67</b>	<b>6,047</b>	<b>147</b>	<b>8,806</b>	<b>267</b>	<b>6,622</b>	<b>7</b>	<b>103</b>	<b>35</b>	<b>5,928</b>	<b>646</b>	<b>87,280</b>	<b>4</b>	<b>523</b>	<b>358</b>

<sup>1</sup>Divisional Hospital (DHC's) which have no indoor facilities are also included in some districts (Gampaha - 1, Kalutara - 2, Jaffna - 1, Mullaitivu - 2, Kalmunai - 1, Kurunegala - 1, Badulla - 15, Kegalle - 4, Vavuniya - 1)

<sup>2</sup>Teaching Hospitals : Institute of Cancer, Mental and Dental hospitals are categorized under "Other Hospitals"

<sup>3</sup>Includes Kalmunai data

Source : Medical Statistics Unit

**Table 8 : Distribution of Inpatient Beds<sup>1</sup> by Regional Director of Health Services Division, as at 31.12.2020**

RDHS Division	Teaching Hospital	Provincial General Hospital	District General Hospital	Base Hospital (Type A)	Base Hospital (Type B)	Divisional Hospital (Type A)	Divisional Hospital (Type B)	Divisional Hospital (Type C)	Primary Medical Care Unit & Maternity Homes	Other Hospitals <sup>2</sup>	Total Inpatient Beds	Inpatient Beds per 1,000 population
Colombo	7,340		545	912		102	386	83	51	3,905	13,324	5
Gampaha	1,665		1,508	594	387	440	67	168		1,093	5,922	2
Kalutara			1,135	961	140	175	392	176			2,979	2
Kandy	3,845		424		580	921	613	173		208	6,764	5
Matale			840	325		419	121	48			1,753	3
Nuwara Eliya			679	189	155	213	551	255			2,042	3
Galle	2,220			855	141	159	762	252		51	4,440	4
Matara			1,151	306	131	271	413	55			2,327	3
Hambantota			898	264	374	84	501	255		56	2,432	4
Jaffna	1,308			698	238		289	253		40	2,826	5
Kilinochchi			299		45		78	134			556	4
Mullaitivu			206	16	152	29	69	7			479	5
Vavuniya			511		85		27	70			693	4
Mannar			325		84		244	34		16	703	6
Batticaloa	1,144			665	83	221	117	361			2,591	4
Ampara			814	174	95		58	179		16	1,336	4.4 <sup>3</sup>
Kalmunai				1,113	258	49	120	347	12		1,899	
Trincomalee			555	483	33		33	476		118	1,698	4
Kurunegala	672	2,260		404	624	796	714	421	6	14	5,911	3
Puttalam			548	433	547	99	94	158			1,879	2
Anuradhapura	2,121			198	484	93	567	482		73	4,018	4
Polonnaruwa			748		285		144	151			1,328	3
Badulla		1,466		676	192	181	478	410			3,403	4
Moneragala			546		435	90	279	201			1,551	3
Ratnapura	1,437		471	353	589	379	318	254		11	3,812	3
Kegalle			798		969	489	78	86		12	2,432	3
<b>Sri Lanka</b>	<b>21,752</b>	<b>3,726</b>	<b>13,001</b>	<b>9,619</b>	<b>7,106</b>	<b>5,210</b>	<b>7,513</b>	<b>5,489</b>	<b>69</b>	<b>5,613</b>	<b>79,098</b>	<b>4</b>

<sup>1</sup>Excludes Examination beds, labour room beds, OPD beds, etc

Source : Medical Statistics Unit

<sup>2</sup>Teaching Hospitals : Institute of Cancer, Mental and Dental hospitals are categorized under "Other Hospitals"

<sup>3</sup>Includes Kalmunai data

**Table 9. Total Hospital Beds by Speciality and Regional Director of Health Services Division, as at 31.12.2020**

RDHS Division	Medical & Surgical <sup>1</sup>	Medical	Surgical	Paediatrics / Children <sup>2</sup>	Obstetrics / Gynaecology	Communicable Diseases	Tuberculosis	Cancer	psychiatric	Neurology / Neuro Surgical	Genito Urinary	Cardiology	E.N.T.	Eye	Skin	Orthopaedic / Accident	Thoracic Surgery	Plastic Surgery / Burns Unit	Rheumatology / Rehabilitation	Oral and Maxillofacial	Others <sup>3</sup>	Total
Colombo	719	2,639	1,901	1,733	1,573	46		936	1,564	318	96	202	107	486	74	665	196	115		73	743	14,186
Gampaha	213	1,837	882	704	818	11	271	54	209	29	44	31	117	206	21	134		45	292	20	316	6,254
Kalutara	395	787	569	512	445	6	61	74	31			24	8	36	18				11	7	245	3,229
Kandy	350	1,926	1,044	1,034	1,141		91	174	173	192	40	84	89	213	47	211	62		37	47	623	7,578
Matale	44	802	240	238	316	8			56				17	67	15	30					100	1,933
Nuwara Eliya	282	611	290	277	460			12	63			36	28	58		19				2	119	2,257
Galle	185	1,612	606	701	695	14		197	40	52	37	22	41	97	32	62	83		38	20	308	4,842
Matara	71	767	418	397	497	6			57	20	3	18	28	45	25	50			23	28	138	2,591
Hambantota	184	771	326	339	582			30	92			32	28	31	21	69				33	219	2,757
Jaffna	135	809	559	390	520	6	23	109	84	63				65	18	5	10		10		340	3,146
Kilinochchi	33	183	67	114	173	12			8					18							43	651
Mannar	17	328	69	101	161	25			16												74	791
Vavuniya	52	169	96	98	212		10		28				31	30		69					47	842
Mullaitivu	73	157	62	90	91				10			12									53	548
Batticaloa	258	706	438	428	417			71	72			5	32	40	11	146			10		191	2,825
Ampara	58	568	148	229	255	8			29		19	16		33		26			24	12	68	1,493
Trincomalee	93	722	276	209	313	31			20				14	44		16					112	1,850
Kalmunai	263	495	314	408	388				27			2		30		30			10	2	239	2,208
Kurunegala	646	1,922	686	767	1,172	10		105	82	69	29	16	42	99	62	145	63	16	38	40	574	6,583
Puttalam	102	591	305	312	455	6	16	4					18	44	7	69			10		156	2,095
Anuradhapura	629	1,303	439	447	766	49		86	138	49	26	46		30	24	67			12		359	4,470
Polonnaruwa	203	307	159	210	320	15			27			46	38	48	21	34				7	61	1,496
Badulla	225	1,057	528	539	685			141	55	58	32	32	42	60	24	93			31	30	276	3,908
Moneragala	215	462	202	373	331	4								48							123	1,758
Ratnapura	357	1,244	576	607	697	4	16	79	35	34	25	20	39	77	27	90				22	289	4,238
Kegalle	286	682	421	357	530				30				32	42	13	48			38		272	2,751
<b>Sri Lanka</b>	<b>6,088</b>	<b>23,457</b>	<b>11,621</b>	<b>11,614</b>	<b>14,013</b>	<b>261</b>	<b>488</b>	<b>2,072</b>	<b>2,946</b>	<b>884</b>	<b>351</b>	<b>644</b>	<b>751</b>	<b>1,947</b>	<b>460</b>	<b>2,078</b>	<b>414</b>	<b>176</b>	<b>584</b>	<b>343</b>	<b>6,088</b>	<b>87,280</b>

Includes:

<sup>1</sup>Beds in medical and surgical intensive care units, wards for priests,armed sevice and medical

<sup>2</sup>Beds in premature baby units

<sup>3</sup>Mixed wards with beds for obstetrics, psychiatry,skin,ENT,eye,dental,neurology,surgery,tuberculosis and heamatology

Source : Medical Dtatistics Unit

**Table 10. Key Health Personnel, 1992 - 2020**

Year	Medical Officers <sup>1</sup>		Dental Surgeons <sup>2</sup>		Registered/ Assistant Medical Officers		Nurses		Public Health Nursing Sisters		Public Health Inspectors		Public Health Midwives		Hospital Midwives	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
1992	3,345	19.2	381	2.2	1,253	7.2	11,214	64.4	113	0.6	846	5.0	4,108	23.6	2,025	11.6
1993	3,713	21.1	390	2.2	1,305	7.4	11,818	67.1	109	0.6	876	5.0	4,361	24.8	2,172	12.3
1994	4,047	22.7	387	2.2	1,357	7.6	13,060	73.1	117	0.7	928	5.2	4,400	24.6	2,214	12.4
1995	4,577	25.3	421	2.3	1,376	7.6	13,403	74.0	174	1.0	932	5.1	4,383	24.2	2,288	12.6
1996	5,117	27.9	462	2.5	1,397	7.6	13,933	79.1	189	1.0	915	5.0	4,352	23.8	2,393	13.1
1997	5,628	30.1	481	2.6	1,384	7.4	13,815	73.8	145	0.8	901	4.8	4,497	24.0	2,284	12.2
1998	6,427	34.2	521	2.8	1,340	7.1	14,448	77.0	183	1.0	888	4.7	4,578	24.4	2,410	12.8
1999	6,994	36.7	529	2.8	1,340	7.0	14,052	73.8	237	1.2	1,142	6.0	4,625	24.3	2,503	13.1
2000	7,963	41.1	637	3.3	1,349	7.0	14,716	76.0	270	1.4	1,486	7.7	4,798	24.8	2,596	13.4
2001	8,384	44.8	751	4.0	1,343	7.2	15,797	84.4	259	1.4	1,401	7.5	4,654	24.9	2,723	14.5
2002	9,290	48.9	867	4.6	1,326	7.0	16,517	86.9	310	1.6	1,470	7.7	4,819	25.4	2,794	14.7
2003	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2004	8,874	45.6	915	4.7	1,218	6.3	18,654	95.8	315	1.6	1,397	7.2	4,524	23.2	2,668	13.7
2005	10,198	51.9	954	4.9	1,274	6.5	19,934	101.4	313	1.6	1,512	7.7	4,896	24.9	2,371	12.1
2006	10,279	51.7	1,181*	5.9	1,183	5.9	24,988	125.7	299	1.5	1,535	7.7	5,080	25.5	2,555	12.8
2007	11,023	55.1	1,314*	6.6	1,194	6.0	31,466	157.3	290	1.4	1,740	8.7	6,167	30.8	2,828	14.1
2008	12,479	61.7	858	4.2	1,134	5.6	30,063	148.7	270	1.3	1475 <sup>3</sup>	7.3	5,331	26.4	3,016	14.9
2009	13,737	67.8	1,046	5.1	1,084	5.3	31,297	153.0	264	1.3	1398 <sup>3</sup>	6.8	5,389	26.3	2,768	13.5
2010	14,668	71.0	1,139	5.5	1,107	5.4	35,367	171.2	380	1.8	1436 <sup>3</sup>	7.0	5,477	26.5	2,971	14.4
2011	15,273	73.2	1,147	5.5	1,063	5.1	35,870	171.9	349	1.7	1,501	7.2	5,491	26.3	2,884	13.8
2012	15,910	78.6	1,223	6.0	1,130	5.6	36,486	180.3	332	1.6	1510 <sup>3</sup>	7.5	5,821	28.6	2,605	12.8
2013	16,690	81.5	1,279	6.2	1,064	5.2	35,629	173.9	322	1.6	1,763	8.1	5,950	29.0	2,848	13.9
2014	17,615	84.8	1,360	6.5	999	4.8	38,451	185.1	277	1.3	1,526	7.3	5,954	28.7	2,888	13.9
2015	18,243	87.0	1,340	6.4	936	4.5	42,420	202.3	290	1.4	1,604	7.7	6,041	28.8	2,765	13.2
2016	18,968	89.5	1,433	6.8	883	4.2	42,556	200.7	277	1.3	1,692	8.0	6,247	29.5	2,365	11.2
2017	19,800	92.3	1,473	6.9	818	3.8	45,480	212.1	328	1.5	1,720	8.0	5,746	26.8	2,485	11.6
2018	19,720	91.0	1,561	7.2	789	3.6	46,024	212.4	314	1.4	1,697	7.8	5,811	26.8	2,694	12.4
2019	20,381	93.5	1,561	7.2	738	3.4	46,841	214.8	325	1.5	1,668	7.7	5,716	26.2	2,633	12.1
2020	21,450	97.9	1,564	7.1	661	3.0	46,385	211.6	302	1.4	1,910	8.7	5,901	26.9	2,624	12.0

\* Provisional

Source: Medical Statistics Unit

Rate per 100,000 population

<sup>1</sup> All medical officers in curative, administrative and preventive services including specialists and interns

<sup>2</sup> Includes Regional and Consultant Dental Surgeons

<sup>3</sup> Excludes Supervising Public Health Inspectors

N/A - Not Available

Note : All PGIM trainees were included in Dental Surgeons category in 2007 based on 2006 estimates which was not corrected.

In 2008, this was revised by including PGIM trainees in Medical Officers category. Therefore the total Dental Surgeons category has reduced in 2008.

**Table 11. Distribution of Health Personnel by Regional Director of Health Services Division, as at 31.12.2020**

RDHS Division	Administrative Grade (Senior and Deputy) Medical Officers	Administrative Grade (Senior and Deputy) Non Medical Officers	Medical Officers																		Consultant Dental Surgeons	Regional Dental Surgeons	Dental Surgeons	P.G.I.M Trainees**	Dental Surgeons <sup>3</sup>
			Specialists/Consultant (other than administrative grade)	Hospital Medical Officers (D.M.O., M.O.I.C., S.H.O., S.M.O. in OPD, etc.)	Medical Officers in MOH/AMOH	School Medical Officers	Medical Officers (Malaria)	Medical Officers (Filaria)	Medical Officers (Leprosy)	Medical Officers (Venereal Diseases)	Medical Officers (Tuberculosis)	Epidemiologists	Medical Officers (Maternal and Child Health)	Judicial Medical Officers	Medical Officers (Blood Bank)	Internee Medical Officers (H.O.)	P.G.I.M. Trainees **	Other Medical Officers	Medical Officers <sup>1</sup>	Total Medical Officers <sup>2</sup>					
Colombo	94	74	689	3,149	66	4	7	5	8	3	37	6	13	7	64	153	423	351	4,296	5,079	29	1	230	38	298
Gampaha	16	2	191	1,350	58	1	0	4	9	10	0	1	2	11	45	193	190	409	2,283	2,490	6	1	93	1	101
Kalutara	11	19	103	604	43	3	0	1	0	3	0	2	1	7	22	67	10	61	824	938	4	2	60	0	66
Kandy	20	0	213	1,276	41	1	2	1	0	6	1	2	2	1	0	120	149	101	1,703	1,936	5	0	174	17	196
Matale	3	0	49	254	16	0	1	0	0	1	1	1	1	2	8	30	3	14	332	384	2	1	26	0	29
Nuwara Eliya	4	0	53	227	16	0	0	0	0	2	0	1	1	2	11	39	2	9	310	367	1	1	33	0	35
Galle	12	1	169	771	36	1	0	3	0	10	0	0	1	0	12	27	0	16	877	1,058	6	1	64	0	71
Matara	7	3	68	459	34	1	0	1	0	2	8	0	0	1	2	33	0	68	609	684	2	1	33	0	36
Hambanthota	7	0	74	267	17	1	1	0	0	1	3	4	1	0	0	35	0	8	338	419	3	1	32	0	36
Jaffna	6	1	80	248	16	0	1	0	0	0	2	0	0	0	0	54	51	281	653	739	1	1	44	2	48
Kilinochchi	2	0	25	91	4	0	1	0	0	1	1	0	0	1	3	12	0	6	120	147	0	1	10	0	11
Mannar	2	0	22	71	5	0	1	0	0	0	1	0	0	1	2	0	0	5	86	110	1	0	14	0	15
Vavuniya	3	0	31	106	9	0	1	0	0	3	2	1	1	0	3	25	0	62	213	247	1	1	20	1	23
Mullaitivu	1	0	12	71	6	0	1	0	0	0	1	0	0	1	3	0	0	8	91	104	0	0	8	0	8
Batticaloa	7	0	69	289	17	0	1	0	0	1	1	1	1	0	1	0	0	8	320	396	2	1	45	0	48
Ampara	4	0	36	227	13	0	2	0	0	2	0	0	1	4	1	23	0	43	316	356	1	0	25	0	26
Trincomalee	7	1	51	245	17	0	2	0	0	1	1	1	2	5	6	0	0	9	289	347	1	1	23	0	25
Kalmunai	6	1	37	288	15	0	1	0	0	1	1	0	0	6	12	17	3	39	383	426	0	0	26	0	26
Kurunegala	12	1	130	793	56	0	0	1	0	0	10	0	1	3	16	57	2	31	970	1,112	5	0	87	0	92
Puttlam	6	0	78	333	26	0	1	0	0	0	1	0	0	4	8	69	1	10	453	537	2	0	42	0	44
Anuradhapura	7	1	109	449	37	0	1	0	0	1	5	0	2	3	11	112	44	19	684	800	3	0	44	2	49
Polonnaruwa	7	0	44	241	18	0	1	0	0	0	1	1	1	0	0	0	0	7	270	321	3	0	36	0	39
Badulla	6	0	98	406	23	0	2	0	0	0	1	2	2	2	15	42	2	26	523	627	4	2	70	0	76
Moneragala	5	0	43	204	15	0	1	0	0	0	1	1	1	3	8	60	1	13	308	356	0	1	33	0	34
Rathnapura	12	0	112	520	30	0	1	0	0	3	9	1	4	9	14	115	9	20	735	859	5	1	74	1	81
Kegalle	6	10	71	382	20	1	1	0	2	2	1	1	16	4	19	38	4	43	534	611	4	1	43	3	51
<b>Sri Lanka</b>	<b>273</b>	<b>114</b>	<b>2,657</b>	<b>13,321</b>	<b>654</b>	<b>13</b>	<b>30</b>	<b>16</b>	<b>19</b>	<b>53</b>	<b>89</b>	<b>26</b>	<b>54</b>	<b>77</b>	<b>286</b>	<b>1,321</b>	<b>894</b>	<b>1,667</b>	<b>18,520</b>	<b>21,450</b>	<b>91</b>	<b>19</b>	<b>1,389</b>	<b>65</b>	<b>1,564</b>

\*\* Include PGIM trainees drawing their salaries from the institutions concerned

<sup>1</sup> Total Medical Officers, exclude: Administrative and Specialists

<sup>2</sup> Total Medical Officers

<sup>3</sup> Total Dental Surgeons

Continued...

Source: Medical Statistics Unit

**Table 11. Distribution of Health Personnel by Regional Director of Health Services Division, as at 31.12.2020**

RDHS Division	Registered/Assistant Medical Officers	Matrons	Ward Masters/ Sisters	Principals/Sister Tutors	Nursing Officers	Public Health Nursing Officers	Supervising Public Health Nursing Sisters/Public Health Nursing Sisters	Pupil Nurses	Total Nurses	MRO	MRA	SSO	PPO	PPA	DO	DA	Pharmacists	Medical Laboratory Technologists	Radiographers	Physiotherapists	Speech Therapists	Occupational Therapists	School Dental Therapists	Dental Technicians	Entomologists	Entomological Officers/Assistants
Colombo	111	72	224	36	8,996	6	27	532	9,893	7	3	0	5	20	480	25	479	705	237	218	30	51	36	25	9	33
Gampaha	59	23	75	24	2,698	18	30	794	3,662	4	3	0	2	4	123	1	154	131	48	81	10	27	37	2	1	9
Kalutara	41	21	55	33	1,634	10	36	414	2,203	1	3	0	1	2	77	5	81	97	18	16	2	5	26	1	2	9
Kandy	91	38	131	4	3,743	7	16	529	4,468	1	18	14	39	5	182	38	180	161	71	82	12	21	22	4	1	8
Matale	24	6	27	1	617	2	9	1	663	1	2	10	8	0	36	1	38	30	7	6	1	2	8	0	1	4
Nuwara Eliya	9	7	10	0	561	3	3	2	586	2	1	1	4	0	28	0	34	34	19	13	0	1	10	0	1	1
Galle	48	19	82	34	2,413	4	21	516	3,089	2	4	0	1	20	164	4	107	103	40	46	7	10	27	6	1	1
Matara	31	7	41	27	1,442	0	9	620	2,146	0	2	0	0	20	127	6	63	54	17	14	3	8	19	1	1	9
Hambanthota	9	6	19	10	1,162	7	7	293	1,504	0	0	0	0	3	85	0	55	44	14	15	3	5	8	0	1	17
Jaffna	0	15	24	13	837	0	2	160	1,051	0	0	0	1	0	114	4	59	58	20	24	1	5	8	1	1	3
Kilinochchi	0	1	4	0	137	0	4	0	146	0	0	0	0	0	23	0	10	7	2	4	1	1	3	0	0	2
Mannar	2	3	10	0	165	0	3	0	181	0	0	0	1	0	24	0	9	10	2	4	1	0	2	5	1	3
Vavuniya	4	4	22	1	228	1	2	135	393	0	0	0	1	0	29	3	17	17	6	5	1	2	2	0	0	4
Mullaitivu	0	1	2	0	126	0	2	0	131	0	0	0	0	0	9	0	12	8	2	4	0	0	1	0	0	2
Batticaloa	7	15	12	3	878	0	6	362	1,276	0	1	0	9	0	85	3	51	47	20	27	2	6	6	0	1	3
Ampara	4	8	8	28	577	0	5	580	1,206	0	0	0	0	0	33	2	39	35	11	14	1	2	4	0	1	3
Trincomalee	5	4	12	0	611	3	11	0	641	0	0	0	1	0	59	1	40	39	17	18	1	2	6	3	1	5
Kalmunai	11	11	12	0	822	0	10	0	855	0	3	0	7	1	49	3	46	48	17	16	2	1	9	0	0	4
Kurunegala	71	19	77	37	2,438	12	22	0	2,605	4	18	0	1	0	285	3	112	99	36	47	4	5	30	3	0	12
Puttlam	14	6	25	0	764	2	5	0	802	0	3	0	0	6	63	6	57	50	14	10	2	1	13	1	1	5
Anuradhapura	23	13	61	48	1,491	5	18	296	1,932	0	1	0	0	3	45	6	76	80	28	33	2	5	19	5	0	6
Polonnaruwa	5	5	16	0	767	1	4	0	793	0	2	0	0	4	18	2	50	37	14	15	2	2	7	3	1	3
Badulla	34	14	50	16	1,386	2	19	406	1,893	6	1	0	0	1	119	1	88	78	26	24	4	5	18	1	2	6
Moneragala	3	6	18	0	635	5	11	0	675	0	6	0	0	9	76	4	37	37	12	9	1	2	10	0	1	4
Rathnapura	29	20	47	37	1,718	12	9	352	2,195	2	0	0	2	3	163	2	78	75	25	29	4	5	16	1	1	7
Kegalle	26	8	50	1	1,319	5	11	2	1,396	1	3	1	1	9	144	6	59	54	18	15	2	1	16	1	1	1
<b>Sri Lanka</b>	<b>661</b>	<b>352</b>	<b>1,114</b>	<b>353</b>	<b>38,165</b>	<b>105</b>	<b>302</b>	<b>5,994</b>	<b>46,385</b>	<b>31</b>	<b>74</b>	<b>26</b>	<b>84</b>	<b>110</b>	<b>2,640</b>	<b>126</b>	<b>2,031</b>	<b>2,138</b>	<b>741</b>	<b>789</b>	<b>99</b>	<b>175</b>	<b>363</b>	<b>63</b>	<b>30</b>	<b>164</b>

Continued...

Source: Medical Statistics Unit

**Table 11. Distribution of Health Personnel by Regional Director of Health Services Division, as at 31.12.2020**

RDHS Division	Ophthalmic Technicians	Food and Drug Inspectors	Supervising Public Health Inspectors	Public Health Inspectors	Supervising Public Health Midwives	Public Health Midwives	Hospital Midwives	ECG Recordists	EEG Recordists	Public Health Laboratory Technician	Dispensers	Public Health Field Officers	Public Health Field Assistants	Nutritionists	Photograph Technicians	Audiology Technicians	Orthopedic Technicians	Cinema Technicians	Attendants	Accountant	Administrative Officers	Management Service officers	Ward Clerks	Telephone Operators	Drivers	SKS (Ordinary)	SKS (Junior)	SKS (Other)	Any Other	Total
Colombo	65	2	11	273	15	475	226	114	36	70	120	29	1	14	1	11	8	2	1,339	36	57	1,151	116	78	602	2,325	4,750	718	2,357	<b>31,775</b>
Gampaha	19	0	8	150	14	480	151	28	12	26	104	27	1	1	0	4	0	1	453	19	10	205	29	32	126	672	1,282	236	635	<b>11,315</b>
Kalutara	10	4	19	115	11	383	139	17	2	15	66	26	0	1	0	1	0	1	442	4	6	142	11	16	106	276	716	55	284	<b>5,774</b>
Kandy	21	2	9	101	17	427	183	36	13	17	97	25	0	4	0	5	0	0	707	8	8	283	36	28	192	1,282	1,598	273	569	<b>13,493</b>
Matale	6	0	2	42	9	165	53	6	1	8	48	15	0	0	0	0	0	0	145	1	2	67	2	3	58	131	278	19	106	<b>2,422</b>
Nuwara Eliya	3	0	4	56	11	271	106	3	5	7	55	9	3	0	0	0	0	0	222	2	3	90	0	7	80	275	344	44	67	<b>2,813</b>
Galle	13	1	14	104	20	325	132	25	7	14	88	23	0	1	0	3	0	1	380	7	9	234	26	15	123	595	1,291	168	339	<b>8,108</b>
Matara	8	2	15	78	14	255	101	14	3	11	58	26	0	2	0	1	0	0	349	2	3	137	15	12	86	287	666	20	176	<b>5,585</b>
Hambanthota	7	2	12	68	10	216	88	11	3	8	60	20	0	1	0	2	0	1	252	3	4	119	10	11	80	200	709	31	124	<b>4,270</b>
Jaffna	8	2	15	77	7	144	87	8	2	6	69	15	0	1	0	0	0	1	460	4	6	126	6	17	100	215	503	0	457	<b>4,482</b>
Kilinochchi	1	1	5	16	4	43	18	2	0	4	19	11	0	0	0	0	0	0	89	2	2	35	1	1	36	69	164	9	88	<b>977</b>
Mannar	1	1	3	20	4	57	32	2	0	5	24	5	0	0	0	0	0	0	116	2	3	40	1	8	39	140	131	66	67	<b>1,137</b>
Vavuniya	0	1	3	16	4	55	32	2	2	4	20	8	0	0	0	0	0	1	122	2	2	56	3	4	47	159	144	74	124	<b>1,780</b>
Mullaitivu	1	0	1	19	2	55	20	1	0	3	23	4	0	0	0	0	0	0	122	1	1	24	3	0	27	78	183	5	114	<b>968</b>
Batticaloa	3	3	13	73	14	114	133	16	2	4	45	44	0	0	0	2	0	2	175	4	6	107	1	5	69	249	688	75	165	<b>4,000</b>
Ampara	4	2	8	32	7	108	63	8	1	5	31	19	0	0	0	0	0	0	205	2	3	79	5	6	51	136	504	26	131	<b>3,173</b>
Trincomalee	5	2	7	46	10	123	76	9	1	6	33	39	2	0	0	0	3	0	205	2	6	91	4	6	90	121	386	58	332	<b>2,726</b>
Kalmunai	5	0	11	49	11	166	130	11	1	7	42	36	2	1	0	0	0	0	218	3	1	53	7	7	66	308	441	33	135	<b>3,269</b>
Kurunegala	11	0	25	135	21	415	189	21	5	28	141	37	1	0	0	1	0	0	662	4	5	185	15	19	131	685	1,318	41	292	<b>8,862</b>
Puttlam	4	0	10	55	10	188	84	11	2	12	61	19	0	0	0	1	0	0	130	0	3	75	3	6	55	133	581	5	57	<b>3,134</b>
Anuradhapura	5	2	12	80	11	252	155	21	9	34	89	23	2	0	0	1	2	1	469	3	8	188	16	6	110	884	354	155	181	<b>6,187</b>
Polonnaruwa	5	0	6	37	8	135	53	12	1	10	43	10	1	0	0	1	0	0	181	2	3	75	6	7	58	99	531	26	103	<b>3,166</b>
Badulla	11	2	15	69	14	302	116	15	2	14	95	11	0	0	0	2	0	0	423	2	6	142	5	8	151	955	566	50	240	<b>6,226</b>
Moneragala	3	1	10	38	12	169	71	8	0	8	41	10	9	0	0	0	0	0	184	1	4	71	8	3	87	249	369	60	111	<b>2,803</b>
Rathnapura	13	2	16	95	17	344	98	16	4	15	96	24	0	1	0	1	0	0	377	3	4	152	19	15	90	663	989	129	174	<b>6,930</b>
Kegalle	7	1	12	66	15	234	88	8	0	8	74	11	1	0	0	1	0	0	230	4	4	129	13	16	84	402	761	112	189	<b>4,898</b>
<b>Sri Lanka</b>	<b>239</b>	<b>33</b>	<b>266</b>	<b>1,910</b>	<b>292</b>	<b>5,901</b>	<b>2,624</b>	<b>425</b>	<b>114</b>	<b>349</b>	<b>1,642</b>	<b>526</b>	<b>23</b>	<b>27</b>	<b>1</b>	<b>37</b>	<b>13</b>	<b>11</b>	<b>8,657</b>	<b>123</b>	<b>169</b>	<b>4,056</b>	<b>361</b>	<b>336</b>	<b>2,744</b>	<b>11,588</b>	<b>20,247</b>	<b>2,488</b>	<b>7,617</b>	<b>150,273</b>

Source: Medical Statistics Unit



**Table 12. Distribution of Specialists in Curative Care Services<sup>1</sup> by Regional Director of Health Services Division, as at 31.12.2020**

RDHS Division	General Physicians	General Surgeons	Obstetricians & Gynaecologists	Cardiologists	Chest Physicians	Thoracic Surgeons	Neurologists	Neuro Surgeons	Dermatologists	Rheumatologists	Psychiatrists	Paediatricians	Paediatric Surgeons	ENT Surgeons	Eye Surgeons	Orthopaedic Surgeons	Plastic Surgeons	Genito Urinary Surgeons	Anaesthesiologists	Histo-Pathologists/ Chemical Pathologists	Haematologists	Bacteriologists/ Microbiologists	Biochemists	Oncologists/Radiotherapists	Oncology Surgeons	Radiologists	Venereologists	Forensic Pathologists	Public Health/Community Health Physicians	Endocrinologists	Gastroenterologists	Nephrologists	Specialist Dental Surgeons-Orthodontists	Specialist Dental Surgeons-Maxillofacial/Restorative	Specialist Dental Surgeons-Restorative	Others <sup>2</sup>	Total	
Colombo	75	39	36	23	6	6	12	8	13	7	27	42	6	12	19	21	9	7	47	25	16	22	2	19	5	38	8	13	59	7	3	9	10	9	6	48	714	
Gampaha	22	17	10	6	5	4	4	0	7	4	5	15	1	7	7	4	1	3	15	7	5	3	1	2	2	12	3	3	4	3	2	3	3	2	0	18	210	
Kalutara	12	7	7	4	1	0	1	0	4	1	4	11	0	2	3	2	0	1	6	4	3	2	0	1	0	6	2	3	5	1	1	1	2	1	0	7	105	
Kandy	24	12	13	10	6	3	5	2	7	6	6	21	3	7	8	8	3	2	17	9	6	4	0	3	1	10	4	5	3	3	1	4	6	7	2	23	254	
Matale	3	2	2	0	2	0	1	0	1	0	1	2	0	0	1	0	0	0	2	1	1	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	23
Nuwara Eliya	6	4	6	1	2	0	1	0	3	1	2	4	0	1	2	1	0	1	4	1	1	1	0	1	0	2	2	2	0	1	1	0	0	1	0	2	54	
Galle	17	8	7	5	4	2	3	2	5	2	4	11	2	2	4	2	1	2	12	5	4	2	0	6	3	10	5	3	3	1	2	3	1	1	1	6	151	
Matara	8	5	5	2	2	0	1	0	4	1	4	7	0	1	2	2	0	1	4	3	1	1	0	1	0	4	1	2	1	1	1	1	1	1	0	2	70	
Hambantota	12	6	6	2	1	0	1	0	3	1	5	6	0	1	1	1	0	1	6	2	2	2	0	1	0	5	2	1	1	1	1	0	1	1	1	3	77	
Jaffna	13	7	6	2	1	0	2	1	2	1	3	4	0	2	2	3	1	1	6	1	1	0	0	3	0	7	1	1	1	1	1	1	1	0	0	4	80	
Kilinochchi	3	2	2	1	1	0	0	0	1	1	0	2	0	0	0	1	0	0	2	1	1	0	0	0	1	1	2	1	0	1	0	0	0	0	0	3	27	
Mannar	2	2	2	1	1	0	0	0	1	0	1	2	0	0	0	1	0	0	2	1	1	1	0	0	0	1	2	1	0	0	0	0	0	0	0	0	23	
Vavuniya	3	2	1	1	0	0	1	0	1	0	2	2	0	1	1	2	0	1	1	1	1	1	0	1	0	2	1	0	0	1	0	2	1	0	0	2	32	
Mullaitivu	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	12	
Batticaloa	10	4	4	2	0	0	1	0	1	1	2	5	1	1	3	3	1	2	5	2	1	1	0	2	2	2	0	1	1	0	1	1	1	2	1	5	69	
Ampara	5	4	4	1	1	0	1	0	2	1	1	4	0	1	0	0	0	1	3	1	2	0	0	0	0	3	0	1	0	0	0	0	0	0	1	0	0	37
Trincomalee	6	5	5	1	1	0	0	0	4	0	2	4	0	1	2	1	0	0	5	2	1	1	0	1	0	4	1	1	1	1	0	1	1	0	0	0	52	
Kalmunai	9	5	5	0	0	0	0	0	1	0	1	4	0	0	2	1	0	0	3	1	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	37	
Kurunegala	15	9	9	3	2	2	2	2	4	2	6	13	1	3	5	3	1	1	6	4	4	2	0	2	2	7	1	3	2	1	2	3	1	1	2	5	131	
Puttalam	11	6	6	1	3	0	1	1	2	1	2	7	0	2	3	3	0	1	6	4	2	1	0	1	0	5	2	2	2	1	1	0	1	1		1	80	
Anuradhapura	18	7	4	2	1	1	2	2	3	1	6	7	1	2	2	4	1	2	4	5	2	2	0	2	2	5	3	2	1	1	1	3	1	1	1	10	112	
Polonnaruwa	5	3	3	2	1	0	1	0	2	1	2	5	0	1	1	2	0	1	4	1	1	1	0	1	0	3	1	0	0	0	1	1	1	1	1	1	48	
Badulla	11	7	7	3	1	0	2	1	4	3	3	7	0	3	4	1	0	2	7	4	3	2	0	2	2	7	1	3	2	1	1	1	1	2	1	3	102	
Moneragala	8	3	3	1	1	0	0	0	1	1	2	5	0	1	1	1	0	1	2	1	1	1	0	1	0	3	1	1	1	1	0	0	0	0	0	1	43	
Ratnapura	14	8	9	3	2	0	1	1	5	2	6	11	1	3	2	3	1	2	6	4	2	2	0	2	1	6	3	1	0	2	1	1	2	1	1	6	115	
Kegalle	10	6	7	1	1	0	1	0	4	1	4	8	0	1	2	1	0	1	5	2	1	2	0	1	0	6	0	1	0	1	1	0	1	1	0	2	72	
<b>Sri Lanka</b>	<b>324</b>	<b>182</b>	<b>171</b>	<b>79</b>	<b>46</b>	<b>18</b>	<b>44</b>	<b>20</b>	<b>85</b>	<b>39</b>	<b>101</b>	<b>209</b>	<b>16</b>	<b>55</b>	<b>77</b>	<b>71</b>	<b>19</b>	<b>34</b>	<b>182</b>	<b>92</b>	<b>64</b>	<b>54</b>	<b>3</b>	<b>53</b>	<b>21</b>	<b>155</b>	<b>48</b>	<b>54</b>	<b>87</b>	<b>30</b>	<b>22</b>	<b>35</b>	<b>37</b>	<b>34</b>	<b>17</b>	<b>152</b>	<b>2,730</b>	

Source: Medical Statistics Unit

Excludes:

<sup>1</sup> Specialists working under University Grants Commission

Includes:

<sup>2</sup> Virologists, Immunologists, Parasitologists, Nephrologists & Neonatologists

**Table 13. National Expenditure, Health Expenditure and GNP, 2014 - 2020**

Description	2014	2015	2016	2017	2018	2019	2020
National Expenditure (Rs. Million)	2,601,723	3,203,280	3,106,443	3,470,589	3,970,636	4,075,827	4,457,390
Government Health Expenditure (Not Included Private Health Sector) (Rs. Million)	155,008	181,122	192,535	206,182	234,899	262,436	250,813
Health Expenditure (Not Included Private Health Sector) as a % of National Expenditure	5.96	5.65	6.20	5.94	5.92	6.44	5.63
Mid Year Population ('000 Persons)	20,771	20,966	21,203	21,444	21,670	21,803	21,919
Per-capita Health Expenditure (Not Included Private Health Sector) (Rs.)	7,463	8,639	9,081	9,615	10,840	12,037	11,443
GNP/GNI (Rs. Billion)	10,125	10,676	11,676	12,975	13,977	14,584	14,973
Health Expenditure as a % of GNP	1.53	1.70	1.65	1.59	1.68	1.80	1.68

Source: Central Bank of Sri Lanka - Annual Report 2019, Department of National Budget - Budget Estimate 2019,2020,2021,2020

Ministry of Finance and Planning Sri Lanka - Annual Report 2020,

Department of State Accounts, General Treasury - Financial Statements for the year ended 31st December 2020,

Ministry of Health - Appropriation Account - 2020

**Table 14. Summary of Health Expenditure and Source of Fund, 2014 - 2020**

Rs. Million

Description	2014	2015	2016	2017	2018	2019	2020
<b>Government Health Expenditure (Not Included Private Health Sector)</b>							
Recurrent Expenditure	130,360	149,790	164,397	172,525	198,334	232,161	206,257
Capital Expenditure	24,648	31,332	28,138	33,657	36,565	30,275	44,556
<b>Total</b>	<b>155,008</b>	<b>181,122</b>	<b>192,535</b>	<b>206,182</b>	<b>234,899</b>	<b>262,436</b>	<b>250,813</b>
<b>Source of Fund</b>							
Consolidated Fund	136,123	168,904	184,754	197,912	226,160	259,873	224,711
Foreign Aid	18,885	12,218	7,781	8,270	8,739	2,563	26,102
<b>Total</b>	<b>155,008</b>	<b>181,122</b>	<b>192,535</b>	<b>206,182</b>	<b>234,899</b>	<b>262,436</b>	<b>250,813</b>

Source: Central Bank of Sri Lanka - Annual Report 2019, Department of National Budget - Budget Estimate 2019,2020,2021,2022

Ministry of Finance and Planning Sri Lanka - Annual Report 2020,

Department of State Accounts, General Treasury - Financial Statements for the year ended 31st December 2020,

Ministry of Health - Appropriation Account - 2020

**Table 15. Summary of Health Expenditure by Programme, 2020**

Rs. Million

Programme	Health Expenditure		
	Ministry of Health	Provincial Health	Total
<b>Recurrent Expenditure</b>			
<b>Operational Activities</b>	<b>109,825</b>		
Minister's Office	27		
Ministry Administration and Establishment Services	17,109		
Medical Supply Division			
Hospital Operation	92,689		
State Minister's Office			
<b>Development Activities</b>	<b>16,743</b>		
Health Promotion and Disease Prevention	1,498		
National Nutrition Programme	1,123		
Medical Research	399		
Human Resources Development	13,723		
<b>Total Recurrent Expenditure</b>	<b>126,568</b>	<b>79,689</b>	<b>206,257</b>
<b>Capital Expenditure</b>			
<b>Operational Activities</b>	<b>4,977</b>		
Minister's Office	3		
Ministry Administration and Establishment Services	697		
Medical Supply Division			
Hospital Operation	4,277		
State Minister's Office			
<b>Development Activities</b>	<b>37,543</b>		
Hospital Development Project	35,007		
Health Promotion and Disease Prevention	277		
Control of Communicable and Non Communicable Diseases	929		
National Nutrition Programme	24		
Medical Research	89		
Promotion of Indigenous Medicine			
Human Resources Development	1,217		
<b>Total Capital Expenditure</b>	<b>42,520</b>	<b>2,036</b>	<b>44,556</b>
<b>Total Health Expenditure (Recurrent + Capital)</b>			
<b>Operational Activities</b>	<b>114,802</b>	-	-
Minister's Office	30		
Ministry Administration and Establishment Services	17,806		
Medical Supply Division	-		
Hospital Operation	96,966		
State Minister's Office	-		
<b>Development Activities</b>	<b>54,286</b>		
Hospital Development Project	35,007		
Health Promotion and Disease Prevention	1,775		
Control of Communicable and Non Communicable Diseases	929		
National Nutrition Programme	1,147		
Medical Research	488		
Promotion of Indigenous Medicine	-		
Human Resources Development	14,940		
<b>Grand Total (Recurrent + Capital)</b>	<b>169,088</b>	<b>81,725</b>	<b>250,813</b>

Source: Central Bank of Sri Lanka - Annual Report 2019, Department of National Budget - Budget Estimate 2019, 2020, 2021, 2022

Ministry of Finance and Planning Sri Lanka - Annual Report 2020,

Department of State Accounts, General Treasury - Financial Statements for the year ended 31st December 2020

Ministry of Health - Appropriation Account - 2020

**Table 16. Indoor Morbidity and Mortality Statistics by Broad Disease Groups, 2020**

	Disease Group	Total*	Live Discharges ( % )									Deaths
			Sex		Age Group							
			Male	Female	under 1	1 - 4	5 - 16	17 - 49	50 -69	70+	Unknown	
1	Intestinal infectious diseases (A00-A09)	60,825	47.3	52.7	7.6	16.1	13.4	28.4	20.9	13.6	0.0	48
2	Tuberculosis (A15-A18)	6,576	71.5	28.5	0.2	0.9	2.6	36.8	44.8	14.5	0.2	231
3	Other bacterial diseases (A20-A49)	32,963	71.0	29.0	8.2	3.3	6.6	44.6	27.7	9.5	0.0	5,237
4	Infections with sexual mode of transmission (A50-A64)	552	54.0	46.0	1.1	2.5	5.4	65.0	17.9	6.3	1.6	-
5	Viral diseases (A80-B34)	149,989	56.0	44.0	4.3	11.4	15.4	45.4	17.4	6.0	0.0	172
6	Malaria (B50-B54)	49	65.3	34.7	2.0	2.0	6.1	59.2	22.4	8.2	-	-
7	Helminthiasis (B76,B77,B79,B80)	24	41.7	58.3	4.2	20.8	20.8	25.0	25.0	4.2	-	-
8	Other infectious and parasitic diseases	14,202	48.9	51.1	1.8	6.3	14.9	45.4	24.4	7.2	0.0	17
9	Neoplasms (C00-D48)	141,817	44.1	55.9	0.4	2.8	5.4	25.7	49.1	16.6	0.0	5,353
10	Iron deficiency anaemias (D50)	6,241	33.7	66.3	0.9	3.0	5.3	34.6	30.6	25.7	-	22
11	Haem. con. and other diseases of blood and ... (D51-D89)	38,127	51.8	48.2	2.4	7.7	26.6	27.4	20.8	15.0	0.0	67
12	Diabetes mellitus (E10-E14)	82,565	45.8	54.2	0.1	0.2	1.3	26.2	53.4	18.8	0.0	590
13	Malnutrition and vitamin deficiencies (E40-E46,E50-E56)	563	44.4	55.6	5.4	17.9	13.3	28.9	21.5	13.1	-	5
14	Oth eno, nutr and metabo... (E00-E07,E15-E34,E58-E89)	34,866	38.3	61.7	1.7	1.8	3.4	31.9	40.0	21.1	0.1	168
15	Mental and behavioural disorders (F00-F99)	46,595	57.2	42.8	-	0.5	3.6	61.3	27.5	6.6	0.4	-
16	Diseases of the nervous system (G00-G98)	65,652	50.9	49.1	2.6	4.5	11.2	39.6	28.6	13.4	0.1	574
17	Diseases of the eye and adnexa (H00-H59)	136,117	51.2	48.8	0.7	2.1	6.5	25.2	42.7	22.9	0.0	-
18	Dis of the ear.. (H60-H61,H65-H74,H80-H83,H90-H95)	56,432	45.3	54.7	2.2	7.0	13.3	35.5	29.1	12.9	0.0	-
19	Rheum. fever and rheum. heart dis. (I00-I02,I05-I09)	3,693	51.0	49.0	0.1	0.7	22.4	37.5	30.9	8.5	0.1	14
20	Hypertensive diseases (I10-I15)	93,335	40.1	59.9	0.0	0.0	0.2	21.5	47.5	30.6	0.0	533
21	Ischaemic heart disease (I20-I25)	123,557	56.2	43.8	0.0	0.0	0.1	18.1	53.1	28.6	0.0	6,665
22	Other heart diseases (I26-I51)	34,445	51.2	48.8	0.6	0.4	1.4	19.2	44.9	33.5	0.0	3,437
23	Cerebrovascular disease (I60-I69)	53,258	59.9	40.1	0.0	0.1	0.2	11.3	45.9	42.4	0.2	3,695
24	Other diseases of the circulatory system (I70-I84)	37,856	59.4	40.6	0.1	0.8	2.4	34.1	45.0	17.5	0.1	140
25	Influenza (J10-J11)	2,663	39.0	61.0	2.0	10.3	8.8	31.2	34.3	13.4	0.0	29
26	Pneumonia (J12-J18)	13,284	55.0	45.0	4.9	8.8	8.8	18.9	32.5	26.1	0.0	2,598
27	Other dise. of the upper respir. tract (J00-J06,J30-J39)	61,633	52.1	47.9	6.5	15.4	17.5	35.2	17.6	7.8	0.0	25
28	Diseases of the resp. system exclu... (J20-J22, J40-J98)	224,646	55.6	44.4	3.2	7.9	12.7	23.2	30.2	22.7	0.1	4,094
29	Diseases of teeth and supporting structure (K00-K014)	13,382	54.7	45.3	0.9	8.1	16.9	40.8	24.2	9.0	-	-
30	Diseases of the gastrointestinal tract (K20-K92)	291,652	53.6	46.4	0.7	2.1	8.5	43.1	32.3	13.2	0.0	2,422
31	Diseases of skin ad subcutaneous tissue (L00-L08,L10-L98)	204,150	55.9	44.1	1.3	4.3	7.9	33.7	35.9	16.9	0.0	78
32	Disorders of the musculoskeletal system (M00-M99)	165,101	52.7	47.3	0.2	1.2	6.8	45.6	33.8	12.5	0.0	89
33	Diseases of the urinary system (N00-N39)	369,097	60.6	39.4	0.7	1.5	3.6	38.5	40.9	14.8	0.0	2,736
34	Diseases of breast (N60-N64)	11,698	8.5	91.5	0.5	0.4	4.5	64.7	23.5	6.4	-	1
35	Diseases of the male genital organs (N40-N50)	20,843	100.0	-	0.8	6.2	12.1	26.0	30.7	24.1	0.0	7
36	Disor. of female genito-urinary sys. (N70-N98, N99.2, N99.3)	75,819	-	100.0	0.1	0.2	2.3	71.9	21.0	4.3	0.0	7
37	Abortions (O00-O08)	43,905	-	100.0	-	-	0.3	99.4	0.2	-	0.1	1
38	False labour (O47)	9,742	-	100.0	-	-	0.6	99.3	0.1	-	0.0	-
39	Other obstetric conditions and those admitted...	247,829	-	100.0	-	-	0.3	99.5	0.1	-	0.1	52
40	Single spontaneous delivery (O80)	154,920	-	100.0	-	-	0.3	99.5	0.0	-	0.1	-
41	Slow fetal growth, fetal malnutrition and... (P05-P07)	6,106	48.7	51.3	100.0	-	-	-	-	-	-	444
42	Other conditions originating in the perinatal period (P00-P04, P08-P96)	39,628	49.4	50.6	100.0	-	-	-	-	-	-	611
43	Congenital malformations deformations... (Q00-Q99)	10,069	59.3	40.7	43.5	28.4	16.4	8.6	2.5	0.6	0.0	461
44	Signs, symptoms and abnormal clinical findings (R00-R99)	520,801	48.6	51.4	2.2	4.5	9.5	40.0	29.4	14.3	0.0	594
45	Traumatic injuries (S00-T19, W54)	939,902	67.1	32.9	0.5	6.3	15.5	49.5	20.9	7.2	0.1	1,537
46	Burns and corrosion (T20-T32)	12,813	57.2	42.8	2.2	23.5	18.3	37.8	13.8	4.3	0.0	185
47	Toxic effects of pesticides (T60.0,T60.1-T60.9)	8,967	61.3	38.7	0.4	4.0	9.0	70.4	13.6	2.6	0.1	246
48	Snake bites (T63.0)	30,046	61.4	38.6	0.2	2.8	11.9	50.7	28.5	5.9	0.0	45
49	Tox. effe. of ot. sub. oth tha.. (T36-T59,T61-T62,T63.1-T65)	60,740	50.9	49.1	0.7	7.3	14.5	57.9	15.6	4.0	0.0	191
50	Effects of unspecified external causes... (T33-T35,T66-T79)	67,809	51.5	48.5	1.4	7.4	21.0	41.2	21.9	7.0	0.1	148
51	Complications of surgical and medical care... (T80-T88)	13,909	53.2	46.8	5.2	5.6	8.9	38.1	26.8	15.4	0.0	31
52	Sequelae of injuries, poisoning and of other... (T90-T98)	1,861	59.1	40.9	0.4	2.4	6.4	33.9	36.5	20.4	0.1	7
53	Persons encountering health services.... (Z00-Z13,Z40-Z54)	607,888	53.6	46.4	2.2	3.0	6.4	37.1	35.0	16.2	0.0	-
54	Sterilizations (Z30.2)	3,340	1.4	98.6	-	-	-	97.6	2.2	0.1	0.1	-
55	Undiagnosed/Uncoded	330,605	52.5	47.5	2.5	3.1	6.9	44.8	30.7	11.9	0.1	4,223
<b>Total</b>		<b>5,785,147</b>	<b>50.3</b>	<b>49.7</b>	<b>2.2</b>	<b>4.0</b>	<b>8.5</b>	<b>43.9</b>	<b>28.6</b>	<b>12.8</b>	<b>0.1</b>	<b>47,830</b>

\* Total = (Number of Live Discharges + Deaths)

Source : Medical Statistics Unit

**Table 17. Trends in Hospital Morbidity and Mortality by Broad Disease Groups, 2010 - 2020**

Disease Group by International Classification of Diseases (10th Revision)	Morbidity (Cases per 100,000 population)											Mortality (Cases per 100,000 population)										
	2010 <sup>5</sup>	2011 <sup>5</sup>	2012	2013	2014	2015	2016	2017	2018	2019	2020	2010 <sup>5</sup>	2011 <sup>5</sup>	2012	2013	2014	2015	2016	2017	2018	2019	2020
1. Certain infectious and parasitic diseases (A00-B99)	2,693.2	2,202.5	2,364.5	2,208.0	2,102.4	1,984.9	2,061.6	3,309.7	2,148.7	2,410.1	1,209.8	17.2	18.4	16.6	18.4	21.5	22.8	26.0	28.8	27.3	32.5	26.0
2. Neoplasms (C00-D48)	403.2	418.8	470.9	477.8	540.0	604.6	640.4	629.6	729.4	747.6	647.0	21.5	22.2	22.2	22.2	24.0	22.9	24.3	23.0	26.7	28.9	24.4
3. Diseases of the blood & blood-forming organs & certain disorders involving the immune mechanism (D50-D89)	124.6	128.9	138.8	144.7	154.9	173.9	195.2	191.2	250.5	245.6	202.4	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.4
4. Endocrine, nutritional and metabolic diseases (E00-E90)	465.1	455.1	518.3	535.9	524.9	526.9	573.6	555.2	610.5	682.5	538.3	4.0	4.1	4.0	3.7	3.8	3.9	4.4	4.4	4.1	4.2	3.5
5. Mental and behavioural disorders (F00-F99)	213.7	219.0	223.2	227.6	226.9	233.4	244.3	246.1	267.5	269.6	212.6	-	-	-	-	-	-	-	-	-	-	-
6. Diseases of the nervous system (G00-G99)	313.8	319.3	329.3	323.9	320.1	323.9	324.4	322.8	354.4	366.9	299.5	3.0	2.6	2.9	2.9	2.9	2.8	2.8	3.0	3.1	3.3	2.6
7. Diseases of the eye and adnexa (H00-H59)	646.7	647.0	697.9	699.6	758.8	786.6	832.3	714.6	789.1	865.3	621.0	-	-	-	-	-	-	-	-	-	-	-
8. Diseases of the ear and mastoid process (H60-H95)	168.9	180.4	184.9	197.8	200.0	219.0	221.6	241.1	280.8	305.0	257.5	-	-	-	-	-	-	-	-	-	-	-
9. Diseases of the circulatory system (I00-I99)	1,490.1	1,456.1	1,573.1	1,588.4	1,619.5	1,610.4	1,641.6	1,619.5	1,800.0	1,906.5	1,579.2	63.1	61.9	65.4	66.6	69.6	68.6	66.7	70.3	74.3	78.7	66.1
10. Diseases of the respiratory system (J00-J99)	2,873.7	2,709.9	2,892.7	2,939.3	2,847.0	3,028.4	2,513.2	2,935.2	2,939.0	2,991.6	1,378.8	24.1	23.1	25.2	28.1	30.1	35.3	30.0	39.6	40.6	46.3	30.8
11. Diseases of the digestive system (K00-K93)	1,375.5	1,386.5	1,439.3	1,440.6	1,482.9	1,545.1	1,552.4	1,544.8	1,704.7	1,718.9	1,391.6	12.0	10.1	10.4	11.2	11.6	11.1	11.1	11.1	11.6	12.3	11.0
12. Diseases of the skin and subcutaneous tissue (L00-L99)	901.7	903.7	970.0	952.4	1,038.9	991.1	1,121.5	1,045.0	1,063.8	1,157.3	931.4	-	0.2	0.1	0.2	0.3	0.4	0.5	0.5	0.4	0.5	0.4
13. Diseases of the musculoskeletal system and connective tissue (M00-M99)	708.3	736.8	789.7	768.6	777.1	804.1	838.9	817.2	910.8	938.1	753.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.5	0.4
14. Diseases of the genitourinary system (N00-N99)	1,506.8	1,494.3	1,578.3	1,567.0	1,601.3	1,620.8	1,747.4	1,786.3	2,096.6	2,419.2	2,178.3	11.1	11.6	12.1	12.4	13.1	13.0	12.8	12.9	13.2	14.4	12.6
15. Pregnancy, childbirth and the puerperium <sup>1,4</sup> (O00-O99)	4,613.9	4,668.2	5,299.6	5,389.3	5,266.0	5,226.2	5,167.6	5,211.2	5,619.5	5,587.5	5,056.3	1.0	0.9	0.9	1.0	0.6	0.6	0.6	0.7	0.9	0.7	0.9
16. Certain conditions originating in the perinatal period <sup>2,3</sup> (P00-P96)	-	-	9,188.4	11,448.5	12,729.4	13,138.4	13,565.6	14,182.4	15,658.1	16,500.1	15,158.5	-	-	222.2	389.2	360.3	372.1	308.1	338.9	375.2	372.7	349.7
17. Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)	61.9	52.9	55.8	63.0	58.7	54.8	55.0	54.0	56.4	60.8	45.9	3.1	2.6	2.6	2.7	2.9	3.2	2.4	2.5	2.6	2.7	2.1
18. Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified (R00-R99)	2,143.7	2,030.8	2,300.1	2,430.2	2,549.7	2,708.0	2,854.7	3,051.5	3,325.2	3,389.5	2,376.0	9.7	7.7	8.6	9.4	6.6	4.8	3.1	3.3	3.5	3.3	2.7
19. Injury, poisoning and certain other consequences of external causes (S00-T98)	4,832.9	4,880.2	5,316.3	5,210.7	5,289.8	5,446.5	5,753.6	5,818.9	6,227.5	6,272.7	5,182.9	15.2	15.2	13.9	12.5	12.4	12.7	12.9	13.1	13.7	13.8	10.9

<sup>1</sup> Rate Per 100,000 females of the reproductive age group

<sup>2</sup> Per 100,000 live births / infant population

<sup>3</sup> Not calculated for the year 2010 - 2011 since infant population was not available

Excludes:

<sup>4</sup> Single spontaneous delivery, false labour and those admitted and discharged before delivery

<sup>5</sup> Mullaitivu district

**Table 18. Trends in Hospitalization and Hospital Deaths of Selected Diseases, 2012 - 2020**

Disease and ICD Code		Number of Hospitalizations per 100,000 Poulation									Number of Deaths per 100,000 Ppulation								
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2012	2013	2014	2015	2016	2017	2018	2019	2020
Intestinal infectious diseases	(A00 - A09)	634.4	607.5	619.8	625.9	619.4	512.9	592.5	529.7	277.5	0.2	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.2
Tuberculosis	(A15 - A19)	39.0	40.6	41.5	40.8	42.2	37.9	39.8	38.5	30.0	1.5	1.6	1.6	1.5	1.3	1.2	1.2	1.2	1.1
Whooping cough	(A37)	0.5	0.2	0.3	0.5	0.3	0.1	0.3	0.2	0.0	-	-	-	0.0	-	-	-	-	-
Septicaemia	(A40, A41)	33.6	38.1	44.2	47.0	56.1	60.7	63.3	71.4	59.5	12.6	14.4	17.5	18.7	22.6	24.3	23.8	28.6	22.8
Rabies	(A82)	0.2	0.2	0.3	0.7	0.7	0.8	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Measles	(B05)	0.4	23.2	16.5	15.5	2.2	0.6	0.4	0.5	0.1	-	-	-	0.0	-	-	-	-	-
Viral hepatitis	(B15 - B19)	15.9	16.1	15.2	12.9	7.6	5.4	4.8	4.8	3.7	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Malaria	(B50 - B54)	0.6	0.5	0.4	0.2	0.3	0.4	0.3	0.3	0.2	-	-	-	-	-	-	-	-	-
Helminthiasis	(B76, B77, B79, B80)	1.2	1.3	0.6	0.5	0.5	0.3	0.4	0.4	0.1	-	-	-	-	-	-	-	-	-
Diabetes mellitus	(E10 - E14)	388.1	411.4	391.8	381.8	414.6	396.3	431.6	492.3	376.7	3.3	3.1	3.2	3.3	3.6	3.7	3.3	3.3	2.7
Nutritional deficiencies	(E40 - E46, E50 - E56)	7.6	7.9	4.6	6.7	5.2	4.8	4.0	3.7	2.6	-	-	-	0.1	0.0	0.0	0.0	0.0	0.0
Anaemias	(D50 - D64)	105.6	111.9	121.7	137.3	156.9	151.1	189.3	183.0	152.9	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
Hypertensive disease	(I10 - I15)	486.4	489.3	477.7	463.6	464.3	429.8	468.6	498.9	425.8	2.6	2.8	3.1	3.4	3.1	3.0	2.9	2.8	2.4
Ischaemic heart disease	(I20 - I25)	494.9	506.1	524.3	532.1	540.5	546.8	630.8	667.2	563.7	27.6	29.1	30.6	29.7	28.5	31.0	34.2	37.2	30.4
Asthma	(J45 - J46)	928.0	910.8	916.3	911.0	787.3	803.3	811.9	815.5	465.5	3.1	3.0	2.9	3.2	2.5	2.9	2.6	2.6	1.3
Diseases of the liver	(K70 - K76)	77.5	82.2	83.2	76.3	77.2	74.9	82.1	87.5	78.1	8.3	8.7	9.1	8.7	8.9	8.9	8.9	9.4	8.5
Abortions <sup>1</sup>	(O00 - O08)	959.3	922.4	893.4	870.4	861.3	864.4	895.1	853.1	761.3	-	0.1	0.2	0.1	0.0	0.1	0.1	0.0	0.0

<sup>1</sup> Rate per 100,000 females of the reproductive age group

Source : Medical Statistics Unit

**Table 19. Leading Causes of Hospitalization, 2020**

Rank Order	ICD Code (10 <sup>th</sup> Revision)	Causes of Hospitalization	Morbidity		Cases per 100,000 Population
			Number of Cases	%	
1	S00 - T19, W54	Traumatic injuries	939,902	20.1	4,288.1
2	R00 - R99	Symptoms, signs and abnormal clinical and laboratory findings	520,801	11.1	2,376.0
3	N00 - N39	Diseases of the urinary system	369,097	7.9	1,683.9
4	K20 - K92	Diseases of the gastro-intestinal tract	291,652	6.2	1,330.6
5	O10 - O46, O48 - O75, O81 - O99, Z35	Direct and indirect obstetric causes	247,689	5.3	1,130.0
6	J20 - J22, J40 - J98	Diseases of the respiratory system excluding diseases of upper respiratory tract, pneumonia and influenza	224,646	4.8	1,024.9
7	L00 - L99	Diseases of skin and subcutaneous tissue	204,150	4.4	931.4
8	M00 - M99	Diseases of the musculoskeletal system and connective tissue	165,101	3.5	753.2
9	A80 - B34	Viral diseases	149,989	3.2	684.3
10	C00 - D48	Neoplasms	141,817	3.0	647.0
11	H00 - H59	Diseases of the eye and adnexa	136,117	2.9	621.0
12	I20 - I25	Ischaemic heart disease	123,557	2.6	563.7
	A00 - T98, Z35, Z00 - Z13, Z30.2, Z40 - Z54, W54	All causes <sup>1</sup>	4,681,852	100.0	21,359.8

<sup>1</sup> Analysed all discharges (Live Discharges+Deaths) excluding ;

Source : Medical Statistics Unit

Single spontaneous delivery, False labour and those admitted and discharged before delivery,

Persons encountering health services for examination, investigation and for specific procedures of health care, Undiagnosed/uncoded

**Table 20. Leading Causes of Hospital Deaths, 2020**

Rank Order	ICD Code (10th Revision)	Causes of Death	Number of Deaths	Proportionate Mortality	Deaths Per 100,000 Population
1	I20 - I25	Ischaemic heart disease	6,665	15.3	30.4
2	C00 - D48	Neoplasms <sup>1</sup>	5,353	12.3	24.4
3	A20 - A49	Zoonotic and other bacterial diseases	5,237	12.0	23.9
4	J20 - J22, J40 - J98	Diseases of the respiratory system excluding diseases of upper respiratory tract, pneumonia and influenza	4,094	9.4	18.7
5	I60 - I69	Cerebrovascular disease	3,695	8.5	16.9
6	I26 - I51	Pulmonary heart disease and diseases of the pulmonary circulation	3,437	7.9	15.7
7	N00 - N39	Diseases of the urinary system	2,736	6.3	12.5
8	J12 - J18	Pneumonia	2,598	6.0	11.9
9	K20 - K92	Diseases of the gastro-intestinal tract	2,422	5.6	11.0
10	S00 - T19, W54	Traumatic injuries	1,537	3.5	7.0
11	P00 - P04, P08 - P96	Conditions originating in the perinatal period excluding disorders related to short gestation, low birth weight, slow fetal growth and fetal malnutrition	611	1.4	2.8
12	R00 - R99	Symptoms, signs and abnormal clinical & laboratory findings	594	1.4	2.7
13	E10 - E14	Diabetes mellitus	590	1.4	2.7
14	A00 - T98, Z00 - Z13, Z35, Z40 - Z54, W54	All causes <sup>2</sup>	43,607	100.0	198.9

<sup>1</sup> Includes deaths reported (not classified by type of neoplasm) from Cancer Institute, Maharagama

Source : Medical Statistics Unit

<sup>2</sup> Analysed all deaths excluding undiagnosed/uncoded

**Table 21. Rank of the Leading Causes of Hospitalization, 2010 - 2020 <sup>1</sup>**

Disease and ICD (10 <sup>th</sup> Revision) Code		2010 <sup>2</sup>	2011 <sup>2</sup>	2012	2013	2014	2015	2016	2017	2018	2019	2020
		Rank										
Traumatic injuries	S00 - T19, W54	1	1	1	1	1	1	1	1	1	1	1
Symptoms, signs and abnormal clinical and laboratory findings	R00 - R99	2	2	2	2	2	2	2	2	2	2	2
Diseases of the urinary system	N00 - N39	8	7	7	7	7	7	6	6	5	4	3
Diseases of the gastro-intestinal tract	K20 - K92	5	5	5	5	4	4	4	5	4	5	4
Direct and indirect obstetric causes	O10 - O46, O48 - O75, O81 - O99, Z35	6	6	6	6	6	6	7	7	7	7	5
Diseases of the respiratory system excluding diseases of upper respiratory tract, pneumonia and influenza	J20 - J22, J40 - J98	3	3	3	3	3	3	3	4	3	3	6
Diseases of skin and subcutaneous tissue	L00 - L99	7	8	8	8	8	8	8	8	8	8	7
Diseases of the musculoskeletal system and connective tissue	M00 - M99	10	9	9	9	9	9	9	9	9	9	8
Viral diseases	A80 - B34	4	4	4	4	5	5	5	3	6	6	9
Neoplasms	C00 - D48	16	15	15	15	13	12	11	11	11	11	10
Diseases of the eye and adnexa	H00 - H59	11	11	10	10	10	10	10	10	10	10	11
Ischaemic heart disease	I20 - I25	13	13	13	13	14	14	13	13	12	12	12

Excludes:

<sup>1</sup> Single spontaneous delivery, False labour and those admitted and discharged before delivery,

Persons encountering health services for examination, investigation and for specific procedures of health care, Undiagnosed/uncoded

<sup>2</sup> Mullaitivu District



**Table 22. Leading Causes of Hospital Deaths, 2010 - 2020**

Disease and ICD (10 <sup>th</sup> Revision) Code		2010 <sup>2</sup>	2011 <sup>2</sup>	2012	2013	2014	2015	2016	2017	2018	2019	2020
		Rank										
Ischaemic heart disease	I20 - I25	1	1	1	1	1	1	1	1	1	1	1
Neoplasms <sup>1</sup>	C00 - D48	2	2	2	2	2	2	2	3	2	3	2
Zoonotic and other bacterial diseases	A20 - A49	6	6	6	6	3	3	3	2	3	2	3
Diseases of the respiratory system excluding diseases of upper respiratory tract, pneumonia and influenza	J20 - J22, J40 - J98	5	5	5	5	6	4	5	4	4	4	4
Cerebrovascular disease	I60 - I69	4	3	4	3	5	6	6	7	5	7	5
Pulmonary heart disease and diseases of the pulmonary circulation	I26 - I51	3	4	3	4	4	5	4	5	6	6	6
Diseases of the urinary system	N00 - N39	8	7	7	7	8	8	8	8	8	8	7
Pneumonia	J12 - J18	9	9	8	8	7	7	7	6	7	5	8
Diseases of the gastro-intestinal tract	K20 - K92	7	8	9	9	9	9	9	9	9	9	9
Traumatic injuries	S00 - T19, W54	11	11	11	11	10	10	10	10	10	10	10
Conditions originating in the perinatal period excluding disorders related to short gestation, low birth weight, slow fetal growth and fetal malnutrition	P00 - P04, P08 - P96	12	12	12	12	13	15	17	16	15	14	11
Symptoms, signs and abnormal clinical and laboratory findings	R00 - R99	10	10	10	10	11	11	12	12	11	12	12
Diabetes mellitus	E10 - E14	16	14	14	13	13	13	11	11	12	13	13

<sup>1</sup> Includes deaths reported from the Cancer Hospital (not analysed by site and type of neoplasm)

<sup>2</sup> Excludes Mullaitivu District

**Table 23. Leading Causes of Hospitalization by District, 2020 <sup>1</sup>**

District and Rank Order Disease and ICD (10 <sup>th</sup> Revision) Code		Sri Lanka	Colombo	Gampaha	Kalutara	Kandy	Matale	Nuwara Eliya	Galle	Matara	Hambantota	Jaffna	Vavuniya	Mannar	Kilinochchi	Mullaitivu	Batticaloa	Ampara <sup>2</sup>	Trincomalee	Kurunegala	Puttalam	Anuradhapura	Polonnaruwa	Badulla	Monaragala	Ratnapura	Kegalle	
		Traumatic injuries	S00 - T19, W54	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1
Symptoms, signs and abnormal clinical and laboratory findings	R00 - R99	2	3	2	2	3	2	2	2	2	2	2	2	1	2	3	2	3	3	2	2	2	2	2	2	3	3	2
Diseases of the urinary system	N00 - N39	3	4	3	3	2	3	9	4	4	4	4	5	4	5	1	5	2	4	5	4	3	5	3	2	2	5	
Diseases of the gastro-intestinal tract	K20 - K92	4	6	4	4	4	5	3	5	3	3	8	3	7	8	6	6	4	5	3	5	4	3	4	4	5	3	
Direct and indirect obstetric causes	O10 - O46, O48 - O75, O81 - O99, Z35	5	5	7	5	6	6	4	7	5	5	3	4	3	3	4	4	5	8	11	3	5	4	6	5	7	7	
Diseases of the respiratory system excluding diseases of upper respiratory tract, pneumonia and influenza	J20 - J22, J40 - J98	6	8	6	7	8	7	5	8	6	6	5	6	8	7	5	8	6	6	4	9	6	6	5	6	4	6	
Diseases of skin and subcutaneous tissue	L00 - L99	7	7	5	6	11	8	8	6	8	7	6	9	6	6	7	9	7	2	6	8	7	9	9	7	6	4	
Diseases of the musculoskeletal system and connective tissue	M00 - M99	8	11	8	10	9	9	6	9	9	9	7	7	5	4	8	7	9	9	7	13	8	8	8	8	9	9	
Viral diseases	A80 - B34	9	10	9	9	12	10	15	11	10	12	11	15	9	11	10	3	8	7	10	6	11	11	13	10	8	8	
Neoplasms	C00 - D48	10	2	18	21	5	20	24	3	23	22	10	26	24	24	27	24	29	24	29	27	10	22	10	27	13	26	
Diseases of the eye and adnexa	H00 - H59	11	18	10	11	7	4	12	10	7	16	9	8	25	9	28	10	10	11	16	7	12	7	7	13	11	12	
Ischaemic heart disease	I20 - I25	12	9	11	8	10	11	13	12	12	11	12	13	10	23	18	15	12	17	9	10	9	10	14	15	12	11	

Excludes:

Source : Medical Statistics Unit

<sup>1</sup> Single spontaneous delivery, False labour and those admitted and discharged before delivery,

Persons encountering health services for examination, investigation and for specific procedures of health care, Undiagnosed/uncoded

<sup>2</sup> Includes Kalmunai RDHS Division

**Table 24. Leading Causes of Hospital Deaths by District, 2020**

District and Rank Disease and ICD (10 <sup>th</sup> Revision) Code		District																									
		Sri Lanka	Colombo	Gampaha	Kalutara	Kandy	Matale	Nuwara Eliya	Galle	Matara	Hambantota	Jaffna	Vavuniya	Mannar	Kilinochchi	Mullaitivu	Batticaloa	Ampara <sup>2</sup>	Trincomalee	Kurunegala	Puttalam	Anuradhapura	Polonnaruwa	Badulla	Monaragala	Ratnapura	Kegalle
Ischaemic heart disease	I20 - I25	1	2	1	1	2	1	3	2	1	1	3	4	8	5	7	1	1	2	1	2	2	1	1	2	1	
Neoplasms <sup>1</sup>	C00 - D48	2	1	7	7	1	7	6	1	8	6	4	8	5	6	3	4	7	9	9	9	1	2	3	5	6	7
Zoonotic and other bacterial diseases	A20 - A49	3	3	2	2	4	2	4	5	3	3	1	7	7	6	3	3	2	3	2	5	4	3	2	2	1	2
Diseases of the respiratory system excluding diseases of upper respiratory tract, pneumonia and influenza	J20 - J22, J40 - J98	4	4	3	4	5	5	5	3	2	5	2	5	10	2	10	10	3	7	10	1	3	7	7	4	3	8
Cerebrovascular disease	I60 - I69	5	5	6	3	3	3	2	4	4	8	6	6		6	5	8	4	13	3	4	6	4	8	3	5	4
Pulmonary heart disease and diseases of the pulmonary circulation	I26 - I51	6	6	4	5	7	4	1	10	6	2	5	2	1	1	5	7	6	1	4	2	9	10	6	7	7	5
Diseases of the urinary system	N00 - N39	7	8	9	8	6	8	7	7	7	7	8	1	4	11	1	5	7	4	8	7	4	5	4	6	9	9
Pneumonia	J12 - J18	8	9	8	9	9	6	8	9	5	4	10	3	2	4	8	11	5	7	7	6	7	6	5	8	3	3
Diseases of the gastro-intestinal tract	K20 - K92	9	7	5	6	8	10	9	8	9	9	7	10	13	13	13	12	10	11	5	8	8	9	10	9	8	6
Traumatic injuries	S00 - T19, W54	10	11	10	10	10	9	12	6	10	13	9	8	10	2	1	9	9	9	11	11	10	8	9	10	10	10
Conditions originating in the perinatal period excluding disorders related to short gestation, low birth weight, slow fetal growth and fetal malnutrition	P00 - P04, P08 - P96	11	12	18	11	13	12	19	16	17	19	13	11	2	6		6	10		16	10	16	14	13	25	21	18
Symptoms, signs and abnormal clinical & laboratory findings	R00 - R99	12	17	11	14	20	11	10	18	12	10	14	17	6	6	13	2	12	4	14	17	21	21	18	13	15	11
Diabetes mellitus	E10 - E14	13	10	14	19	15	14	15	12	18	12	16	19	18	16	13	20	18	13	12	15	11	22	12	17	18	14

Includes :

<sup>1</sup>Deaths reported from Cancer Hospital (not analysed by site and type of neoplasm)

<sup>2</sup> Kalmunai RDHS Division

Source : Medical Statistics Unit

**Table 25. Cases and Deaths of Poisoning and Case Fatality Rate<sup>1</sup> by Regional Director of Health Services Division, 2020**

RDHS Division	Poisoning by Drugs, Medicaments and Biological Substances		Toxic Effects of Pesticides				Toxic Effects of Other Substances Mainly Non Medicinal		Total				Case Fatality Rate <sup>1</sup>
			Organophosphate and Carbamate Insecticides		Other Pesticides				Number		Rate per 100,000 Population		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	
Colombo	1,433	5	64	2	120	5	1,675	7	3,292	19	134.1	0.8	0.58
Gampaha	1,442	4	135	16	76	3	1,678	8	3,331	31	137.5	1.3	0.93
Kalutara	1,176	2	41	1	147	4	1,165	14	2,529	21	196.5	1.6	0.83
Kandy	1,514	5	262	8	85	2	2,716	4	4,577	19	308.6	1.3	0.42
Matale	686	1	463	15	111	2	1,552	6	2,812	24	535.6	4.6	0.85
Nuwara Eliya	385	1	416	9	50	-	3,099	1	3,950	11	511.0	1.4	0.28
Galle	892	2	52	6	106	3	1,565	18	2,615	29	230.4	2.6	1.11
Matara	702	2	45	2	93	3	1,031	9	1,871	16	216.1	1.8	0.86
Hambantota	664	-	207	4	301	4	1,659	5	2,831	13	423.8	1.9	0.46
Jaffna	659	2	150	7	68	-	2,642	6	3,519	15	566.7	2.4	0.43
Kilinochchi	266	-	275	2	24	2	1,291	1	1,856	5	1,427.7	3.8	0.27
Mannar	143	-	10	-	8	-	625	2	786	2	701.8	1.8	0.25
Vavuniya	226	-	208	6	2	-	986	1	1,422	7	744.5	3.7	0.49
Mullaitivu	173	-	167	2	42	-	658	1	1,040	3	1,061.2	3.1	0.29
Batticaloa	699	-	185	2	88	-	1,815	5	2,787	7	481.3	1.2	0.25
Ampara	488	-	218	2	40	-	589	1	1,335	3	480.2	1.1	0.22
Trincomalee	304	-	72	-	79	-	1,097	-	1,552	-	360.1	-	-
Kalmunai	325	-	47	3	54	-	1,074	1	1,500	4	327.5	0.9	0.27
Kurunegala	1,245	3	976	9	156	9	1,902	6	4,279	27	247.9	1.6	0.63
Puttalam	821	-	218	18	75	1	1,768	3	2,882	22	344.3	2.6	0.76
Anuradhapura	1,392	3	576	22	593	12	2,956	6	5,517	43	585.0	4.6	0.78
Polonnaruwa	716	4	166	17	252	3	1,133	9	2,267	33	511.7	7.4	1.46
Badulla	628	3	508	15	82	-	2,971	9	4,189	27	472.8	3.0	0.64
Moneragala	455	-	320	10	65	1	1,321	3	2,161	14	431.3	2.8	0.65
Rathnapura	1,243	2	266	9	50	-	1,436	17	2,995	28	254.0	2.4	0.93
Kegalle	564	3	129	5	24	-	1,095	6	1,812	14	203.4	1.6	0.77
<b>Sri Lanka</b>	<b>19,241</b>	<b>42</b>	<b>6,176</b>	<b>192</b>	<b>2,791</b>	<b>54</b>	<b>41,499</b>	<b>149</b>	<b>69,707</b>	<b>437</b>	<b>318.0</b>	<b>2.0</b>	<b>0.63</b>

<sup>1</sup> Deaths per 100 cases  
Cases = Live discharges+deaths

Source : Medical Statistics Unit

**Table 26. Distribution of Patients with Mental Disorders by Regional Director of Health Services Division, 2020**

RDHS Division	Dementia	Mental and Behavioral Disorders		Schizophrenia, Schizotypal and Delusional Disorders	Mood Disorders	Neurotic, Stress-Related Somatoform Disorders	Mental Retardation Related Disorders	Behavioral and Emotional Disorders Usually in Childhood and Adolescence	Other and Unspecified Mental Disorders	Total
		Due to Use of Alcohol	Due to Other Psychoactive Substance Use							
Colombo	215	731	604	3,237	2,718	577	160	108	519	8,869
Gampaha	79	752	298	929	1,269	272	3	75	537	4,214
Kalutara	43	369	81	465	386	88	-	43	272	1,747
Kandy	73	826	78	781	2,300	393	16	45	312	4,824
Matale	45	246	29	359	639	109	13	28	83	1,551
Nuwara Eliya	20	309	17	199	496	135	3	35	120	1,334
Galle	41	355	26	663	535	121	7	19	148	1,915
Matara	51	310	15	151	524	69	-	3	150	1,273
Hambantota	26	70	4	476	269	56	8	8	274	1,191
Jaffna	45	303	17	606	381	239	25	16	166	1,798
Kilinochchi	3	161	88	125	107	83	9	18	31	625
Mullaitivu	-	42	1	110	149	9	-	2	23	336
Vavuniya	10	46	9	138	165	70	1	2	21	462
Mannar	-	37	2	115	134	32	1	-	41	362
Batticaloa	6	129	58	236	279	54	-	42	91	895
Ampara	15	75	21	216	179	57	-	41	96	700
Kalmunai	7	157	102	344	183	198	23	11	64	1,089
Trincomalee	2	10	12	39	92	83	2	5	52	297
Kurunegala	24	357	68	209	415	58	1	17	125	1,274
Puttalam	14	274	18	109	160	58	1	11	75	720
Anuradhapura	51	239	140	748	1,075	275	19	40	416	3,003
Polonnaruwa	23	72	31	330	270	79	5	2	133	945
Badulla	100	274	155	550	319	76	1	58	1,116	2,649
Monaragala	8	89	19	203	394	98	4	5	85	905
Ratnapura	55	383	35	523	505	172	-	69	250	1,992
Kegalle	29	356	71	259	683	86	6	23	112	1,625
<b>Sri Lanka</b>	<b>985</b>	<b>6,972</b>	<b>1,999</b>	<b>12,120</b>	<b>14,626</b>	<b>3,547</b>	<b>308</b>	<b>726</b>	<b>5,312</b>	<b>46,595</b>

Source : Medical Statistics Unit

**Table 27. Case Fatality Rate<sup>1</sup> for Selected Diseases, 2015 - 2020**

Disease and ICD Code		2015			2016			2017			2018			2019			2020		
		Cases	Deaths	Case Fatality Rate	Cases	Deaths	Case Fatality Rate	Cases	Deaths	Case Fatality Rate	Cases	Deaths	Case Fatality Rate	Cases	Deaths	Case Fatality Rate	Cases	Deaths	Case Fatality Rate
Typhoid and para typhoid	(A01)	1,298	-	-	1,109	-	-	942	1	0.1	782	1	0.1	680	-	-	272	-	-
Tetanus	(A34, A35)	87	5	5.7	74	3	4.1	138	-	-	73	4	5.5	183	5	2.7	55	1	1.8
Shigellosis	(A03)	1,737	-	-	1,236	4	0.3	917	1	0.1	1,005	2	0.2	954	-	-	412	-	-
Slow fetal growth, fetal malnutrition and disorders related to short gestation and low birth weight	(P05 - P07)	7,455	586	7.9	6,463	520	8.0	7,245	557	7.7	7,752	601	7.8	6,603	518	7.8	6,106	444	7.3
Measles	(B05)	3,240	1	0.0	457	-	-	138	-	-	78	-	-	102	-	-	25	-	-
Whooping cough	(A37)	105	1	1.0	70	-	-	30	-	-	60	-	-	36	-	-	3	-	-
Viral hepatitis	(B15 - B19)	2,706	6	0.2	1,617	6	0.4	1,151	3	0.3	1,035	4	0.4	1,047	7	0.7	820	7	0.9
Malaria	(B50 - B54)	48	-	-	56	-	-	88	-	-	60	-	-	58	-	-	49	-	-
Tetanus neonatorum	(A33)	-	-	-	2	-	-	4	-	-	4	-	-	8	-	-	-	-	-
Diseases of the liver	(K70 - K76)	16,005	1,819	11.4	16,361	1,882	11.5	16,061	1,898	11.8	17,798	1,929	10.8	19,078	2,052	10.8	17,117	1,868	10.9
Septicaemia	(A40, A41)	9,845	3,930	39.9	11,889	4,782	40.2	13,022	5,208	40.0	13,725	5,155	37.6	15,573	6,237	40.1	13,044	5,008	38.4
Snake bites	(T63.0)	36,631	78	0.2	34,494	55	0.2	31,361	66	0.2	31,847	61	0.2	34,239	50	0.1	30,046	45	0.1
Hypertensive diseases	(I10 - I15)	97,207	713	0.7	98,437	649	0.7	92,163	643	0.7	101,536	637	0.6	108,782	607	0.6	93,335	533	0.6
Ischaemic heart disease	(I20 - I25)	111,564	6,221	5.6	114,609	6,041	5.3	117,250	6,649	5.7	136,685	7,409	5.4	145,475	8,121	5.6	123,557	6,665	5.4
Pneumonia	(J12 - J18)	26,451	3,288	12.4	22,116	2,738	12.4	25,777	3,856	15.0	26,681	3,842	14.4	27,252	4,299	15.8	13,284	2,598	19.6
Asthma	(J45 - J46)	191,004	667	0.3	166,935	529	0.3	172,262	630	0.4	175,937	572	0.3	177,794	569	0.3	102,029	279	0.3
Bacterial meningitis	(G00, G03)	3,167	104	3.3	3,791	106	2.8	4,231	108	2.6	3,895	100	2.6	4,132	125	3.0	2,916	89	3.1

<sup>1</sup> Deaths per 100 cases

Source : Medical Statistics Unit

**Table 28. Inpatients Treated and Hospital Deaths by Type of Institution and RDHS Division, 2020**

District	Teaching Hospitals		Provincial General Hospitals		District General Hospitals		Base Hospitals Type A		Base Hospitals Type B		Divisional Hospitals Type A		Divisional Hospitals Type B		Divisional Hospitals Type C		Other Hospitals with Indoor Patients		Total		Inpatients per 1,000 Population	Hospital Deaths per 100 Cases
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths		
Colombo	481,267	6,788			33,790	280	45,539	486			7,937	11	35,568	78	11,001	17	100,163	2,105	715,265	9,765	291.4	1.4
Gampaha	118,808	1,937			148,223	1,790	69,395	583	40,116	219	29,687	31	7,228	11	13,023	16	20,951	287	447,431	4,874	184.7	1.1
Kalutara					87,706	989	113,703	1,086	12,775	24	11,726	18	32,529	63	12,823	12			271,262	2,192	210.8	0.8
Kandy	270,789	3,799			34,950	234			56,027	532	45,370	116	45,092	30	5,556	4	2,846	4	460,630	4,719	310.6	1.0
Matale					69,883	729	64,101	479			31,788	73	7,150	7	2,599	1			175,521	1,289	334.3	0.7
Nuwara Eliya					54,232	589	19,414	127	22,549	141	5,650	2	32,421	49	17,369	33			151,635	941	196.2	0.6
Galle	177,798	2,718					77,832	747	13,700	98	11,793	11	29,990	37	21,077	4	1,728		333,918	3,615	294.2	1.1
Matara					110,744	1,287	29,792	130	13,623	40	17,470	28	26,292	56	4,615	3			202,536	1,544	233.9	0.8
Hambantota					69,550	449	37,579	349	44,056	158	4,886	4	36,731	11	17,662	6			210,464	977	315.1	0.5
Jaffna	107,420	1,307					51,488	326	17,580	40			12,666	10	11,109	5	1,196		201,459	1,688	324.4	0.8
Kilinochchi					38,596	87			3,862				3,212		6,452	3			52,122	90	400.9	0.2
Mullaitivu					19,211	57	1,805		10,617	4	1,383		1,701	1					34,717	62	354.3	0.2
Vavuniya					52,799	402			6,800	5			1,307	3	5,314	1			66,220	411	346.7	0.6
Mannar					23,592	161			3,595	6			6,986	2	1,357	1	324		35,854	170	320.1	0.5
Batticaloa	89,872	660					43,932	123	11,689	11	14,261	1	6,252	5	14,565	3			180,571	803	311.9	0.4
Ampara <sup>1</sup>					55,825	383	138,006	576	29,941	74	3,759	2	9,913	3	27,691	7	328		265,463	1,045	360.7	0.4
Trincomalee							58,167	186	4,030	6			1,901	12	22,748	9	2,450		89,296	213	207.2	0.2
Kurunegala	55,578	467					37,084	240	54,943	449	57,056	135	40,707	70	21,900	14			267,268	1,375	154.8	0.5
Puttalam					57,858	747	43,197	357	50,212	421	5,256	8	2,931	4	9,884	5			169,338	1,542	202.3	0.9
Anuradhapura	140,091	2,256					31,290	95	37,475	80	6,566	7	36,094	60	32,815	28	1,651		285,982	2,526	303.3	0.9
Polonnaruwa					106,273	1,027			36,290	196			13,319	14	12,418	10			168,300	1,247	379.9	0.7
Badulla			101,708	974			82,253	701	24,101	167	15,946	56	28,968	33	28,977	19			281,953	1,950	318.2	0.7
Monaragala					63,139	521			42,963	171	6,286	7	18,110	23	27,140	18			157,638	740	314.6	0.5
Ratnapura	113,572	1,320			74,949	491	37,804	309	69,674	335	30,514	30	10,095	2	22,297	24			358,905	2,511	304.4	0.7
Kegalle					69,887	768			88,543	721	35,874	49	4,403	3	2,692				201,399	1,541	226.0	0.8
<b>Sri Lanka</b>	<b>1,555,195</b>	<b>21,252</b>	<b>101,708</b>	<b>974</b>	<b>1,171,207</b>	<b>10,991</b>	<b>982,381</b>	<b>6,900</b>	<b>695,161</b>	<b>3,898</b>	<b>343,208</b>	<b>589</b>	<b>451,566</b>	<b>587</b>	<b>353,084</b>	<b>243</b>	<b>131,637</b>	<b>2,396</b>	<b>5,785,147</b>	<b>47,830</b>	<b>263.9</b>	<b>0.8</b>

<sup>1</sup> Includes Kalmunai RDHS Division

Source : Medical Statistics Unit

**Table 29. Hospitalizations, Hospital Deaths and Case Fatality Rates of Selected Non-Communicable Diseases, 2019 - 2020**

Disease and ICD Code		2019					2020				
		Live Discharges		Deaths		Case Fatality Rate *	Live Discharges		Deaths		Case Fatality Rate *
		Male	Female	Male	Female		Male	Female	Male	Female	
Diabetes mellitus	(E10 - E14)	48,059	58,563	339	375	0.67	37,564	44,411	294	296	0.71
Essential hypertension	(I10)	39,273	58,612	267	274	0.55	33,595	50,393	239	228	0.55
Other hypertensive diseases	(I11 - I15)	4,015	6,275	43	23	0.64	3,582	5,232	40	26	0.74
Ischaemic heart diseases	(I20 - I25)	76,463	60,891	4,584	3,537	5.58	65,685	51,207	3,806	2,859	5.39
Cerebrovascular diseases	(I60 - I69)	33,945	22,726	2,396	1,690	6.73	29,695	19,868	2,162	1,533	6.94
Chronic obstructive pulmonary diseases	(J40 - J44)	36,995	8,720	1,158	151	2.78	21,765	4,334	546	96	2.40
Asthma	(J45 - J46)	84,616	92,609	267	302	0.32	50,758	50,992	141	138	0.27
Alcoholic liver diseases	(K70)	1,905	243	164	15	7.69	1,450	218	149	14	8.90
Other diseases of liver	(K71 - K76)	10,468	4,410	1,294	579	11.18	9,579	4,002	1,187	518	11.15
Neoplasms	(C00 - D48)	68,315	88,387	3,462	2,834	3.86	60,213	76,251	2,947	2,406	3.77
Renal failure	(N17 - N19)	94,212	50,039	1,435	734	1.48	103,353	53,754	1,065	645	1.08

\* Deaths per 100 cases

Source : Medical Statistics Unit



**Table 30. Hospitalizations, Hospital Deaths and Case Fatality Rates of Selected Non-Communicable Diseases by RDHS Division, 2020**

RDHS Area	Neoplasms (C00 - D48)			Diabetes mellitus (E10 - E14)			Essential hypertension (I10)			Ischaemic heart disease (I20 - I25)			Cerebrovascular disease (I60 - I69)		
	Live Discharges	Deaths	Case Fatality Rate *	Live Discharges	Deaths	Case Fatality Rate *	Live Discharges	Deaths	Case Fatality Rate *	Live Discharges	Deaths	Case Fatality Rate *	Live Discharges	Deaths	Case Fatality Rate *
Colombo	56,269	2,053	3.52	7,989	188	2.30	6,312	35	0.55	15,623	1,122	6.70	5,302	539	9.23
Gampaha	5,141	271	5.01	5,423	41	0.75	4,796	22	0.46	9,506	725	7.09	5,390	349	6.08
Kalutara	2,457	94	3.68	2,447	6	0.24	3,272	5	0.15	7,151	415	5.49	3,296	193	5.53
Kandy	20,791	644	3.00	7,855	53	0.67	9,191	53	0.57	11,391	571	4.77	4,847	402	7.66
Matale	1,565	84	5.09	3,016	16	0.53	3,069	10	0.32	3,297	216	6.15	1,261	128	9.22
Nuwara Eliya	1,145	68	5.61	3,249	7	0.21	4,383	20	0.45	2,549	89	3.37	1,608	115	6.67
Galle	14,538	507	3.37	2,835	48	1.66	3,123	80	2.50	6,304	495	7.28	3,303	341	9.36
Matara	1,650	70	4.07	2,272	6	0.26	2,180	14	0.64	4,067	255	5.90	1,897	154	7.51
Hambantota	1,372	58	4.06	2,750	24	0.87	4,045	28	0.69	3,370	178	5.02	1,191	42	3.41
Jaffna	5,057	152	2.92	3,386	17	0.50	2,142	16	0.74	3,999	207	4.92	1,521	134	8.10
Kilinochchi	366	5	1.35	616	1	0.16	451	-	-	405	6	1.46	188	5	2.59
Mullaitivu	104	6	5.45	560	1	0.18	357	1	0.28	271	4	1.45	91	5	5.21
Vavuniya	390	15	3.70	604	2	0.33	872	4	0.46	814	30	3.55	217	23	9.58
Mannar	209	9	4.13	545	-	-	488	-	-	842	4	0.47	200	-	-
Batticaloa	870	59	6.35	2,253	3	0.13	2,085	-	-	2,065	116	5.32	705	46	6.13
Ampara	381	22	5.46	1,066	3	0.28	1,819	3	0.16	2,485	94	3.64	660	52	7.30
Kalmunai	620	20	3.13	4,608	3	0.07	758	7	0.92	2,674	173	6.08	1,006	39	3.73
Trincomalee	396	3	0.75	2,267	1	0.04	1,186	2	0.17	913	34	3.59	274	1	0.36
Kurunegala	1,186	61	4.89	5,351	43	0.80	7,711	87	1.12	7,591	274	3.48	2,610	118	4.33
Puttalam	877	75	7.88	1,686	19	1.11	1,397	20	1.41	4,179	181	4.15	1,343	122	8.33
Anuradhapura	6,701	334	4.75	4,157	52	1.24	4,591	8	0.17	7,431	318	4.10	2,563	189	6.87
Polonnaruwa	1,172	134	10.26	1,461	2	0.14	2,329	-	-	3,358	201	5.65	1,455	119	7.56
Badulla	5,449	240	4.22	5,128	25	0.49	4,560	24	0.52	3,923	263	6.28	1,596	106	6.23
Monaragala	1,071	53	4.72	3,202	6	0.19	3,412	8	0.23	2,670	113	4.06	1,268	79	5.86
Ratnapura	5,651	228	3.88	4,678	10	0.21	5,233	4	0.08	6,175	312	4.81	4,001	232	5.48
Kegalle	1,036	88	7.83	2,571	13	0.50	4,226	16	0.38	3,839	269	6.55	1,770	162	8.39
<b>Sri Lanka</b>	<b>136,464</b>	<b>5,353</b>	<b>3.77</b>	<b>81,975</b>	<b>590</b>	<b>0.71</b>	<b>83,988</b>	<b>467</b>	<b>0.55</b>	<b>116,892</b>	<b>6,665</b>	<b>5.39</b>	<b>49,563</b>	<b>3,695</b>	<b>6.94</b>

\* Deaths per 100 cases

Contd...

Source : Medical Statistics Unit

**Table 30. Hospitalizations, Hospital Deaths and Case Fatality Rates of Selected Non-Communicable Diseases by RDHS Division, 2020**

RDHS Area	Bronchitis, emphysema and other chronic obstructive pulmonary disease (J40 - J44)			Asthma (J45 - J46)			Alcoholic liver disease (K70)			Other diseases of liver (K71 - K76)			Renal failure (N17 - N19)		
	Live Discharges	Deaths	Case Fatality Rate *	Live Discharges	Deaths	Case Fatality Rate *	Live Discharges	Deaths	Case Fatality Rate *	Live Discharges	Deaths	Case Fatality Rate *	Live Discharges	Deaths	Case Fatality Rate *
Colombo	2,128	68	3.10	6,433	18	0.28	149	39	20.74	2,091	298	12.47	11,375	243	2.09
Gampaha	1,124	42	3.60	8,135	24	0.29	178	17	8.72	1,900	303	13.75	17,689	126	0.71
Kalutara	1,172	21	1.76	4,696	6	0.13	174	6	3.33	871	99	10.21	5,360	54	1.00
Kandy	3,692	106	2.79	6,095	17	0.28	34	5	12.82	1,794	180	9.12	25,919	191	0.73
Matale	1,501	42	2.72	2,215	11	0.49	112	3	2.61	246	34	12.14	7,681	63	0.81
Nuwara Eliya	1,738	31	1.75	2,299	9	0.39	7	-	-	254	31	10.88	154	21	12.00
Galle	1,340	50	3.60	5,043	32	0.63	12	3	20.00	975	143	12.79	939	110	10.49
Matara	590	7	1.17	4,266	20	0.47	13	7	35.00	413	37	8.22	4,666	18	0.38
Hambantota	533	14	2.56	6,089	14	0.23	16	-	-	345	31	8.24	3,266	29	0.88
Jaffna	488	20	3.94	5,200	7	0.13	29	-	-	781	75	8.76	6,150	63	1.01
Kilinochchi	247	1	0.40	925	1	0.11	8	-	-	118	2	1.67	1,665	4	0.24
Mullaitivu	183	2	1.08	743	-	-	1	-	-	56	1	1.75	4,879	7	0.14
Vavuniya	302	11	3.51	769	-	-	1	1	50.00	82	9	9.89	357	36	9.16
Mannar	140	-	-	363	-	-	4	-	-	68	1	1.45	1,710	10	0.58
Batticaloa	783	5	0.63	3,428	-	-	8	-	-	96	7	6.80	4,379	24	0.55
Ampara	639	9	1.39	1,126	4	0.35	15	1	6.25	108	11	9.24	9,236	13	0.14
Kalmunai	819	11	1.33	4,232	4	0.09	4	-	-	84	3	3.45	7,618	28	0.37
Trincomalee	466	1	0.21	2,257	1	0.04	5	1	16.67	30	-	-	2,809	7	0.25
Kurunegala	628	6	0.95	8,215	24	0.29	373	25	6.28	312	38	10.86	609	19	3.03
Puttalam	89	4	4.30	2,583	22	0.84	162	16	8.99	215	55	20.37	4,647	39	0.83
Anuradhapura	1,257	34	2.63	3,958	8	0.20	43	6	12.24	659	85	11.42	5,596	222	3.82
Polonnaruwa	773	17	2.15	1,766	1	0.06	2	2	50.00	240	36	13.04	718	85	10.59
Badulla	2,044	54	2.57	4,951	12	0.24	158	24	13.19	179	22	10.95	2,370	157	6.21
Monaragala	870	25	2.79	3,505	9	0.26	30	-	-	321	27	7.76	9,415	40	0.42
Ratnapura	1,071	29	2.64	9,385	20	0.21	50	1	1.96	968	102	9.53	17,651	71	0.40
Kegalle	1,482	32	2.11	3,073	15	0.49	80	6	6.98	375	75	16.67	249	30	10.75
<b>Sri Lanka</b>	<b>26,099</b>	<b>642</b>	<b>2.40</b>	<b>101,750</b>	<b>279</b>	<b>0.27</b>	<b>1,668</b>	<b>163</b>	<b>8.90</b>	<b>13,581</b>	<b>1,705</b>	<b>11.15</b>	<b>157,107</b>	<b>1,710</b>	<b>1.08</b>

\* Deaths per 100 cases

Source : Medical Statistics Unit

**Table 31. Out Patient Attendance by District and Type of Institution, 2020**

District	Teaching Hospitals	Provincial General Hospitals	District General Hospitals	Base Hospitals Type A	Base Hospitals Type B	Divisional Hospitals Type A	Divisional Hospitals Type B	Divisional Hospitals Type C	Primary Medical Care Units with Maternity Homes	Other Institutions with Indoor Facility	Other Institutions without Indoor Facility	Primary Medical Care Units	Total Attendance	Attendance per 1,000 Population
Colombo	1,239,693		150,704	394,446		84,909	435,651	124,660		395,542		364,480	3,190,085	1,299
Gampaha	216,846		241,189	165,799	271,681	277,724	79,512	256,594		173,047		418,911	2,101,303	867
Kalutara			222,822	314,681	122,945	121,677	336,764	212,246		1,640	14,524	142,568	1,489,867	1,158
Kandy	615,826		214,816		257,695	712,156	673,609	173,366		180,730	75,809	245,561	3,149,568	2,124
Matale			226,263	147,252		318,513	159,543	48,602		77	390	213,681	1,114,321	2,123
Nuwara Eliya			142,476	117,545	132,882	72,892	311,236	290,031				271,146	1,338,208	1,731
Galle	394,434			338,825	66,955	118,636	379,989	329,382		14,165	41,747	435,126	2,119,259	1,867
Matara			235,312	121,518	48,598	183,743	284,759	98,973			3,168	518,356	1,494,427	1,726
Hambantota			106,613	85,838	211,034	78,908	619,185	312,052				149,611	1,563,241	2,340
Jaffna	190,149			174,423	124,105		214,501	438,621		2,139		196,329	1,340,267	2,158
Kilinochchi			108,681		43,283		20,708	131,201				17,241	321,114	2,470
Mannar			76,095		42,648		100,008	65,856		6,411		51,079	342,097	3,054
Vavuniya			194,804		46,763		17,798	127,469			11,555	46,513	444,902	2,329
Mullaitivu			44,851	26,857	100,138	21,007	29,182	54,610				23,313	299,958	3,061
Batticaloa	150,044			265,363	97,556	90,343	102,250	231,236			3,961	238,313	1,179,066	2,036
Ampara			114,130	652,452	254,575	47,197	105,543	401,362	10,626	129	4,979	325,110	1,916,103	2,603
Trincomalee			117,129	273,821	30,953		30,095	292,629		15,069		189,940	949,636	2,203
Kurunegala	164,548	203,576		143,749	241,807	507,236	576,611	580,173	12,508			529,637	2,959,845	1,715
Puttalam			109,427	171,487	249,399	41,174	105,029	242,702				230,788	1,150,006	1,374
Anuradhapura	169,782			116,774	370,778	77,702	537,177	591,457		21,572	7,609	331,804	2,224,655	2,359
Polonnaruwa			149,677		253,238		183,767	226,996		285		169,845	983,808	2,221
Badulla		235,926		250,312	140,876	193,631	449,791	669,090			22,516	253,699	2,215,841	2,501
Monaragala			123,171		311,736	72,962	289,088	360,966			7,693	82,018	1,247,634	2,490
Rathnapura	214,094		162,924	104,829	372,927	325,797	255,596	470,621		16,092		613,420	2,536,300	2,151
Kegalle			198,708		367,884	248,012	60,993	109,724			12,438	243,352	1,241,111	1,393
<b>Sri Lanka</b>	<b>3,355,416</b>	<b>439,502</b>	<b>2,939,792</b>	<b>3,865,971</b>	<b>4,160,456</b>	<b>3,594,219</b>	<b>6,358,385</b>	<b>6,840,619</b>	<b>23,134</b>	<b>826,898</b>	<b>206,389</b>	<b>6,301,841</b>	<b>38,912,622</b>	<b>1,775</b>

**Table 32. Out Patient Attendance by RDHS Division, 2020**

RDHS Division	Quarter				Total Visits
	First	Second	Third	Fourth	
Colombo	1,179,632	619,376	875,411	515,666	3,190,085
Gampaha	793,767	447,573	559,760	300,203	2,101,303
Kalutara	548,841	342,155	372,447	226,424	1,489,867
Kandy	1,076,517	624,270	861,310	587,471	3,149,568
Matale	380,196	231,197	299,107	203,821	1,114,321
Nuwara Eliya	412,194	300,817	368,782	256,415	1,338,208
Galle	811,229	393,436	552,580	362,014	2,119,259
Matara	509,897	309,537	411,918	263,075	1,494,427
Hambantota	486,239	309,332	399,647	368,023	1,563,241
Jaffna	444,515	273,604	347,514	274,634	1,340,267
Kilinochchi	106,528	63,495	89,343	61,748	321,114
Mannar	102,926	75,691	93,735	69,745	342,097
Vavuniya	141,974	84,614	130,013	88,301	444,902
Mullaitivu	99,162	62,389	78,802	59,605	299,958
Batticaloa	385,571	242,544	314,208	236,743	1,179,066
Ampara	231,640	140,225	201,437	118,575	691,877
Trincomalee	318,875	192,033	245,500	193,228	949,636
Kalmunai	433,638	231,308	353,143	206,137	1,224,226
Kurunegala	1,000,890	637,383	773,665	547,907	2,959,845
Puttalam	368,823	251,304	287,664	242,215	1,150,006
Anuradhapura	795,459	429,490	580,649	419,057	2,224,655
Polonnaruwa	344,662	192,779	267,487	178,880	983,808
Badulla	734,531	421,319	614,919	445,072	2,215,841
Monaragala	433,303	242,091	363,240	209,000	1,247,634
Ratnapura	820,355	570,992	673,555	471,398	2,536,300
Kegalle	395,334	282,479	345,569	217,729	1,241,111
<b>Sri Lanka</b>	<b>13,356,698</b>	<b>7,971,433</b>	<b>10,461,405</b>	<b>7,123,086</b>	<b>38,912,622</b>

Source : Medical Statistics Unit

**Table 33. Out Patient Department (OPD) Visits by Type of Hospital, 2020**

Hospital Type	Quarter				Total Visits
	First	Second	Third	Fourth	
Teaching Hospitals	1,267,159	619,810	937,415	531,032	3,355,416
Provincial General Hospitals	131,622	86,718	104,273	116,889	439,502
District General Hospitals	1,049,528	587,851	839,464	462,949	2,939,792
Base Hospitals - Type A	1,377,079	805,595	1,002,812	680,485	3,865,971
Base Hospitals - Type B	1,467,495	848,125	1,113,452	731,384	4,160,456
Divisional Hospitals - Type A	1,229,895	764,935	990,693	608,696	3,594,219
Divisional Hospitals - Type B	2,142,100	1,278,839	1,678,120	1,259,326	6,358,385
Divisional Hospitals - Type C	2,307,508	1,430,770	1,817,469	1,284,872	6,840,619
Primary Medical Care Units with Maternity Homes	6,038	5,832	5,956	5,308	23,134
Other Institutions with Indoor Facility <sup>1</sup>	264,606	164,730	229,982	167,580	826,898
Other Institutions without Indoor Facility	72,279	34,583	60,556	38,971	206,389
Primary Medical Care Units	2,041,389	1,343,645	1,681,213	1,235,594	6,301,841
<b>Total Visits</b>	<b>13,356,698</b>	<b>7,971,433</b>	<b>10,461,405</b>	<b>7,123,086</b>	<b>38,912,622</b>

<sup>1</sup> Includes: Mental, Chest, Leprosy, Police, Prison, Fever, Cancer, Dental and Rehabilitation hospitals

Source : Medical Statistics Unit

**Table 34. Clinic Visits by Quarter, by RDHS Division, 2020**

RDHS Division	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Total	
	First Visits	Total Visits	First Visits	Total Visits	First Visits	Total Visits	First Visits	Total Visits	First Visits	Total Visits
Colombo	208,781	1,033,089	102,510	526,804	220,386	1,041,473	87,042	558,078	618,719	3,159,444
Gampaha	131,518	606,153	68,755	330,129	136,072	599,369	47,017	276,701	383,362	1,812,352
Kalutara	75,253	306,427	36,625	178,107	66,428	274,129	34,013	192,858	212,319	951,521
Kandy	155,140	729,837	83,294	412,141	142,132	666,433	90,609	561,286	471,175	2,369,697
Matale	30,451	180,400	21,062	134,166	33,926	186,184	24,393	142,814	109,832	643,564
Nuwera Eliya	29,204	165,237	25,235	127,881	34,145	164,560	28,666	145,541	117,250	603,219
Galle	119,113	329,239	69,377	204,983	112,883	324,360	85,428	241,982	386,801	1,100,564
Matara	62,768	226,136	47,564	164,741	69,011	224,376	41,727	176,724	221,070	791,977
Hambantota	39,484	170,575	25,922	129,592	47,988	183,361	31,125	145,780	144,519	629,308
Jaffna	57,755	312,880	38,208	238,609	57,082	321,882	46,170	269,526	199,215	1,142,897
Kilinochchi	11,634	45,715	8,041	33,345	12,642	47,617	9,534	40,775	41,851	167,452
Mullaitivu	8,286	32,282	7,207	25,941	14,685	40,515	9,798	32,984	39,976	131,722
Vavuniya	21,230	97,823	16,567	72,951	24,445	103,400	17,633	87,114	79,875	361,288
Mannar	11,073	48,518	8,619	38,837	12,186	50,846	8,511	39,907	40,389	178,108
Batticaloa	32,542	168,095	22,654	134,776	32,655	145,801	26,299	136,462	114,150	585,134
Ampara	23,786	112,393	17,191	83,742	26,543	105,159	20,040	89,152	87,560	390,446
Kalmunai	35,614	162,591	25,457	119,013	34,740	152,949	22,801	111,483	118,612	546,036
Trincomalee	26,918	117,178	15,017	70,327	22,873	98,366	13,973	74,494	78,781	360,365
Kurunegala	64,397	380,038	42,012	249,657	76,543	372,808	49,146	284,041	232,098	1,286,544
Puttalam	49,636	186,486	37,187	155,249	53,678	185,061	38,155	151,565	178,656	678,361
Anuradhapura	54,952	313,036	35,112	228,749	56,093	312,876	42,298	253,248	188,455	1,107,909
Polonnaruwa	46,918	181,388	28,625	108,643	43,389	156,108	32,164	136,776	151,096	582,915
Badulla	70,457	363,690	50,867	253,187	74,367	354,442	56,516	291,274	252,207	1,262,593
Moneragale	36,642	131,036	24,755	99,313	43,922	152,222	23,754	112,522	129,073	495,093
Ratnapura	84,396	352,329	53,762	248,086	90,817	363,683	59,212	316,069	288,187	1,280,167
Kegalle	40,687	206,108	28,783	167,328	59,860	249,758	25,468	160,798	154,798	783,992
<b>Sri Lanka</b>	<b>1,528,635</b>	<b>6,958,679</b>	<b>940,408</b>	<b>4,536,297</b>	<b>1,599,491</b>	<b>6,877,738</b>	<b>971,492</b>	<b>5,029,954</b>	<b>5,040,026</b>	<b>23,402,668</b>

Source : Medical Dtatistics Unit

**Table 35. Clinic Visits by Quarter, by Type of Hospital, 2020**

Type of Hospital	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Total	
	First Visits	Total Visits	First Visits	Total Visits	First Visits	Total Visits	First Visits	Total Visits	First Visits	Total Visits
Teaching Hospital	382,820	1,852,184	213,142	1,081,485	388,101	1,805,148	213,859	1,245,615	<b>1,197,922</b>	<b>5,984,432</b>
Provincial General Hospital	18,703	120,869	13,853	90,035	21,377	129,039	16,299	105,197	<b>70,232</b>	<b>445,140</b>
District General Hospital	307,202	1,155,702	202,447	746,655	339,408	1,227,798	196,687	816,583	<b>1,045,744</b>	<b>3,946,738</b>
Base Hospital (Type A)	223,529	840,450	135,926	532,912	225,429	775,540	156,126	619,702	<b>741,010</b>	<b>2,768,604</b>
Base Hospital (Type B)	128,677	633,400	83,791	423,016	135,695	641,527	84,935	464,015	<b>433,098</b>	<b>2,161,958</b>
Divisional Hospital (Type A)	85,448	432,934	50,425	289,121	96,102	416,572	48,037	309,587	<b>280,012</b>	<b>1,448,214</b>
Divisional Hospital (Type B)	116,533	607,699	71,468	440,860	121,044	592,885	71,963	470,274	<b>381,008</b>	<b>2,111,718</b>
Divisional Hospital (Type C)	125,208	557,381	76,968	414,001	119,326	535,553	86,188	447,764	<b>407,690</b>	<b>1,954,699</b>
Primary Medical Care Units and Maternity Homes	185	1,679	173	1,426	203	1,726	246	1,561	<b>807</b>	<b>6,392</b>
Other Hospital and Clinics <sup>‡</sup>	64,145	303,925	27,300	130,112	67,473	291,705	25,858	136,599	<b>184,776</b>	<b>862,341</b>
Primary Medical Care Units	76,185	452,456	64,915	386,674	85,333	460,245	71,294	413,057	<b>297,727</b>	<b>1,712,432</b>
<b>Grand Total</b>	<b>1,528,635</b>	<b>6,958,679</b>	<b>940,408</b>	<b>4,536,297</b>	<b>1,599,491</b>	<b>6,877,738</b>	<b>971,492</b>	<b>5,029,954</b>	<b>5,040,026</b>	<b>23,402,668</b>

<sup>‡</sup>Includes : Mental,Chest,Leptosy,Police,Prison,Fever, Cancer, Dental and Rehabilitation hospital

Source : Medical Dtatistics Unit

**Table 36. Clinic Visits by Type of Clinic 2016 - 2020**

Type of Clinic	2016	2017	2018	2019	2020
Medical	12,081,931	12,639,230	13,609,792	14,586,731	10,932,051
Surgical	1,230,339	1,199,025	1,193,304	1,264,560	914,236
Orthopaedic	396,851	428,802	481,336	513,027	389,594
Thoracic	88,341	51,861	51,019	67,593	43,093
Cardiology	792,072	799,830	879,116	863,805	665,940
Neuro Surgical	85,426	96,190	85,924	94,378	78,882
Nerve	161,422	204,169	279,865	279,263	264,041
E.N.T.	514,429	531,539	561,326	598,198	387,692
Genito Urinary	93,802	113,159	134,741	135,750	117,171
Rectum	6,898	5,420	2,873	2,875	3,226
Skin	877,731	876,544	999,218	1,101,265	800,114
Paediatric	719,986	724,432	749,338	725,864	487,251
Psychiatric	1,077,541	1,098,637	1,128,036	1,203,172	955,088
Baby	631,053	613,574	640,686	605,790	476,404
Gynaecology and Obstetrics	1,720,538	1,732,762	1,775,922	1,721,838	1,432,991
Eye	1,527,818	1,468,437	1,589,141	1,664,924	1,128,594
Dental	3,180,347	3,154,244	3,441,489	3,636,278	2,336,293
Cancer	349,730	394,099	457,679	504,825	429,996
V.D	114,723	114,096	120,072	137,792	64,152
Diabetic	1,390,434	1,385,153	1,460,036	1,625,611	1,278,758
Other	276,474	227,000	204,012	211,958	217,101
<b>Sri Lanka</b>	<b>27,317,886</b>	<b>27,858,203</b>	<b>29,844,925</b>	<b>31,545,497</b>	<b>23,402,668</b>

Source : Medical Statistics Unit



**Table 37. Clinic Visits by Type of Clinic and RDHS Division, 2020**

Type of Clinic	Sri Lanka	Colombo	Gampaha	Kalutara	Kandy	Matale	Nuwera Eliya	Galle	Matara	Hambantota	Jaffna	Kilinochchi	Mullaitivu
Medical	10,932,051	1,066,493	911,462	502,022	1,022,375	359,658	335,317	477,059	398,356	347,688	439,805	63,709	64,398
Dental	2,336,293	237,932	129,983	113,935	196,521	69,765	64,895	148,529	95,038	77,750	111,144	19,243	15,974
Gynaecology and Obstetrics	1,432,991	186,076	90,876	51,947	139,782	37,438	49,374	68,527	39,108	34,520	91,267	14,996	12,065
Diabetic	1,278,758	188,602	79,524	12,497	154,984	29,264	28,442	36,803	12,113	569	146,778	15,193	11,575
Eye	1,128,594	223,804	141,496	62,453	94,913	22,620	15,809	64,431	38,832	24,858	48,317	15,197	5,254
Psychiatric	955,088	153,988	88,050	45,267	77,357	25,552	16,673	43,237	38,465	30,841	50,708	7,527	4,184
Surgical	914,236	166,769	78,198	35,124	95,013	25,609	21,435	58,745	29,082	22,983	43,395	3,307	4,148
Skin	800,114	103,635	52,349	27,053	63,767	20,111	18,089	32,632	28,178	24,494	43,309	10,760	4,455
Cardiology	665,940	237,178	41,791	10,432	94,560	7,499	2,613	30,790	21,718	11,214	44,269	1,329	
Paediatric	487,251	45,192	42,402	16,144	55,682	11,636	19,769	15,521	12,211	16,298	18,567	4,068	2,859
Baby	476,404	26,855	58,223	17,238	52,123	11,387	11,459	10,788	14,775	8,687	22,000	960	456
Cancer	429,996	183,597	8,277	7,261	60,299		3,717	38,152	1,628	2,800	9,006	462	48
Orthopaedic	389,594	84,889	18,770	9,396	57,789	6,388	5,841	15,001	14,644	4,994	27,393	5,802	1,950
E.N.T.	387,692	83,363	29,183	19,778	56,963	6,425	4,425	8,126	11,666	10,061	20,514	738	
Nerve	264,041	70,793	15,255	9,894	37,877	4,488	366	21,060	15,174	2,691	15,414		
Other	217,101	34,198	14,512	5,685	60,862	3,772	954	7,164	18,205	4,278	3,015	4,067	1,048
Genito Urinary	117,171	22,982	3,819	2,619	20,070		1,942	8,622	2,553	2,729	4,068		
Neuro Surgical	78,882	22,724	7		21,256	1,163		4,814			3,616	94	
V.D	64,152	1,939	8,175	2,776	396	789	2,099	2,677	231	1,853			3,297
Thoracic	43,093	17,203			5,618			7,886			312		11
Rectum	3,226	1,232			1,490								

Continued.....

Source : Medical Statistics Unit

**Table 37. Clinic Visits by Type of Clinic and RDHS Division, 2020**

Type of Clinic	Vavuniya	Mannar	Batticaloa	Ampara	Kalmunai	Trincomalee	Kurunegala	Puttalam	Anuradhapura	Polonnaruwa	Badulla	Moneragale	Ratnapura	Kegalle
Medical	155,668	90,719	283,299	212,637	253,518	165,370	713,916	295,413	606,112	275,080	567,012	238,732	670,937	415,296
Dental	26,849	13,242	58,903	29,511	57,284	28,747	134,704	81,045	92,100	79,157	166,602	62,633	140,619	84,188
Gynaecology and Obstetrics	22,098	11,722	15,373	30,532	33,422	32,309	102,140	54,759	63,849	29,395	73,232	30,267	72,050	45,867
Diabetic	24,518	23,045	46,132	9,544	75,168	17,519	106,902	38,231	13,796	33,163	80,473	45,704	21,493	26,726
Eye	21,927	7,172	21,875	15,503	20,232	24,890	8,893	42,485	40,418	14,688	58,427	15,762	52,717	25,621
Psychiatric	13,638	6,907	32,669	10,782	21,989	11,762	41,958	31,747	26,711	18,646	45,919	18,469	54,993	37,049
Surgical	7,532	4,463	28,384	19,582	18,584	16,539	28,956	20,097	27,558	16,143	54,867	16,321	46,785	24,617
Skin	18,149	4,956	18,678	9,984	18,008	28,005	23,500	27,738	33,979	20,262	58,377	19,292	51,849	38,505
Cardiology	2,607		19,524	6,536	3,345			4,254	34,231	23,990	13,662	9,156	29,406	15,836
Paediatric	5,973	1,904	13,117	8,990	10,415	9,512	28,658	18,498	32,163	9,701	22,168	13,708	32,566	19,529
Baby	5,877	5,183		11,537	8,037	11,250	70,808	24,125	26,514	12,148	28,358	5,100	17,488	15,028
Cancer	1,991	382	12,481	1,051		6,552		4,570	30,832	4,166	28,913	2,953	19,276	1,582
Orthopaedic	11,399	2,369	10,921	3,355	3,867	6,519	5,012	10,230	17,862	15,442	18,967	2,772	15,748	12,274
E.N.T.	9,312	2,354	7,134	5,592	12,230		6,471	15,562	19,180	7,555	13,603	8,837	20,579	8,041
Nerve			6,943	3,458	27			909	11,717	13,662	9,796		16,753	7,764
Other	973	1,081	3,208	379	9,456	683	3,905	2,035	7,749	4,900	10,936	2,378	9,446	2,212
Genito Urinary	2,649		3,530	4,046			10,376	2,254	7,177	3,748	5,526	3,009	3,871	1,581
Neuro Surgical	8,218		2,963	1,342		708		187	3,360	7	5,755		2,668	
V.D	9,850	2,609		6,085	454		345	4,222	12,097	1,059			923	2,276
Thoracic	12,060									3				
Rectum									504					

Source : Medical Statistics Unit

**Table 38. Utilization of Medical Institutions by Regional Director of Health Services Division, 2020**

RDHS Division	Teaching Hospitals			Provincial General Hospitals			District General Hospitals			Base Hospitals Type A			Base Hospitals Type B		
	Average Duration of Stay	Bed Occupancy Rate	Bed Turn Over Rate	Average Duration of Stay	Bed Occupancy Rate	Bed Turn Over Rate	Average Duration of Stay	Bed Occupancy Rate	Bed Turn Over Rate	Average Duration of Stay	Bed Occupancy Rate	Bed Turn Over Rate	Average Duration of Stay	Bed Occupancy Rate	Bed Turn Over Rate
Colombo	2.92	56.37	70.13				1.66	62.94	138.12	2.33	39.31	61.40			
Gampaha	2.86	57.89	73.64				1.81	48.77	98.41	1.71	55.54	118.37	1.59	44.31	101.46
Kalutara							2.57	58.89	83.49	1.79	55.65	113.57	1.70	35.19	75.61
Kandy	2.91	57.40	71.71				2.00	45.78	83.42				1.98	56.05	103.22
Matale							2.34	53.35	83.02	1.62	88.08	198.06			
Nuwara Eliya							2.31	53.47	84.14	2.44	72.07	107.36	1.47	59.56	147.21
Galle	3.06	68.83	81.71							1.84	47.36	93.87	2.75	76.65	101.28
Matara							2.01	50.16	90.74	2.02	56.66	102.23	1.61	43.54	98.42
Hambantota							2.13	49.85	84.89	2.43	94.14	140.96	2.04	66.89	119.35
Jaffna	2.86	64.71	82.33							2.19	43.22	71.77	1.64	31.11	69.00
Kilinochchi							2.05	77.47	137.55				1.23	33.89	100.98
Mullaitivu							1.82	41.01	82.14	1.21	24.12	73.12	1.51	24.63	59.47
Mannar							3.40	68.85	72.92				1.77	16.59	34.24
Vavuniya							2.28	64.20	102.37				1.16	23.45	74.08
Batticaloa	2.60	56.51	79.18							1.82	36.06	72.30	1.66	55.29	121.44
Ampara							2.26	48.26	77.71	1.44	59.02	149.83	1.07	23.41	80.05
Trincomalee										1.31	41.00	113.84	1.94	53.58	100.75
Kalmunai										2.11	51.88	89.75	1.38	28.29	75.08
Kurunegala	1.91	43.31	82.83							2.79	69.28	89.79	1.99	45.24	82.89
Puttalam							1.68	59.80	129.52	2.34	60.73	94.85	1.88	46.77	90.71
Anuradhapura	2.83	53.23	68.37							1.73	78.85	165.54	1.89	39.26	75.66
Polonnaruwa							2.14	56.20	95.58				1.38	40.09	106.04
Badulla				2.97	52.47	64.28				1.95	61.44	114.75	2.02	72.62	130.85
Monaragala							2.32	74.40	116.85				1.71	44.31	94.60
Ratnapura	2.72	63.71	85.26				1.72	75.58	159.99	2.35	69.06	107.22	1.71	53.60	114.25
Kegalle							2.41	58.04	87.54				2.06	49.39	87.06
<b>Sri Lanka</b>	<b>2.85</b>	<b>58.25</b>	<b>74.31</b>	<b>2.97</b>	<b>52.47</b>	<b>64.28</b>	<b>2.10</b>	<b>56.31</b>	<b>97.40</b>	<b>1.96</b>	<b>54.98</b>	<b>102.30</b>	<b>1.81</b>	<b>46.50</b>	<b>93.66</b>

Continued...

Source: Medical Statistics Unit

**Table 38. Utilization of Medical Institutions by Regional Director of Health Services Division, 2020**

RDHS Division	Divisional Hospitals Type A			Divisional Hospitals Type B			Divisional Hospitals Type C			Other Hospitals			Hospitals with Indoor Facility		
	Average Duration of Stay	Bed Occupancy Rate	Bed Turn Over Rate	Average Duration of Stay	Bed Occupancy Rate	Bed Turn Over Rate	Average Duration of Stay	Bed Occupancy Rate	Bed Turn Over Rate	Average Duration of Stay	Bed Occupancy Rate	Bed Turn Over Rate	Average Duration of Stay	Bed Occupancy Rate	Bed Turn Over Rate
Colombo	1.31	33.36	92.98	1.75	54.36	113.07	1.41	83.27	214.31	8.12	64.58	27.86	3.38	57.93	61.99
Gampaha	2.71	47.29	63.45	1.46	43.74	109.19	1.44	30.37	77.28	6.49	34.45	18.91	2.33	48.21	75.26
Kalutara	1.85	35.51	69.73	1.37	26.86	71.43	1.61	33.41	75.78				1.99	49.19	90.16
Kandy	1.55	22.64	53.37	1.43	28.59	72.90	1.62	19.80	44.68	9.02	30.94	12.17	2.48	47.78	70.14
Matale	1.33	33.08	90.76	2.00	30.51	55.66	3.33	43.73	47.98				1.89	53.15	102.22
Nuwara Eliya	2.78	23.73	30.95	1.55	23.72	55.89	1.52	28.09	67.22				1.97	40.23	74.53
Galle	1.63	25.09	56.37	2.06	30.63	53.97	1.27	28.75	83.07	3.42	27.30	28.92	2.52	54.61	79.02
Matara	1.52	25.17	60.30	1.58	26.63	61.48	1.43	28.95	73.89				1.87	42.86	83.29
Hambantota	1.88	24.43	47.38	1.41	27.54	71.35	1.33	28.50	78.28				1.97	49.42	91.43
Jaffna				1.51	19.37	46.74	1.25	13.27	38.24	5.27	33.39	23.10	2.42	46.11	69.39
Kilinochchi				1.42	14.67	37.68	1.27	30.95	89.33				1.85	55.89	109.86
Mullaitivu	1.13	5.58	17.99	1.44	12.18	30.85							1.65	27.38	60.67
Mannar				1.91	12.51	23.89	1.01	5.36	19.46	4.29	25.41	21.50	2.88	35.56	44.71
Vavuniya				1.14	11.29	36.36	1.34	27.86	75.93				2.07	52.88	92.94
Batticaloa	1.38	27.70	73.23	1.63	19.42	43.49	1.78	25.10	51.57				2.16	43.57	73.60
Ampara				2.42	28.39	42.07	1.30	16.41	46.22				1.85	42.53	83.67
Trincomalee							1.40	26.23	68.53	5.29	33.62	23.23	1.48	35.35	87.20
Kalmunai	1.44	16.64	42.15	1.44	21.74	55.02	1.66	31.45	69.61	5.49	29.36	19.41	1.91	41.70	79.47
Kurunegala	1.28	22.26	63.49	1.63	23.77	53.12	1.31	18.80	52.43				1.82	34.90	69.78
Puttalam	1.92	27.01	50.95	1.44	21.91	55.80	1.42	20.70	53.43				1.88	49.48	96.05
Anuradhapura	1.74	31.62	66.23	1.57	24.84	57.61	1.46	23.46	58.91	4.05	42.24	38.13	2.24	43.44	70.60
Polonnaruwa				1.41	27.74	71.65	1.28	28.17	80.38				1.86	47.75	93.61
Badulla	1.49	31.80	77.80	1.40	21.98	57.49	1.47	24.45	60.73				2.19	46.18	76.84
Monaragala	1.40	22.63	59.09	1.27	21.11	60.88	1.24	44.51	131.76				1.81	48.60	98.08
Ratnapura	1.33	28.33	77.88	1.12	15.95	51.82	1.27	31.18	89.80				2.03	55.23	99.36
Kegalle	1.72	32.93	69.70	1.23	32.04	95.02	5.18	63.71	44.32				2.14	48.75	82.74
<b>Sri Lanka</b>	<b>1.62</b>	<b>27.23</b>	<b>61.28</b>	<b>1.55</b>	<b>26.33</b>	<b>61.88</b>	<b>1.45</b>	<b>26.30</b>	<b>67.32</b>	<b>7.70</b>	<b>54.82</b>	<b>25.06</b>	<b>2.28</b>	<b>48.40</b>	<b>77.29</b>

Source: Medical Statistics Unit

**Table 39. Average Duration of Stay (Days) by Type and Speciality of Hospitals, 2011 - 2020**

Type and Speciality of Hospital	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
National Hospital, Colombo	4.3	3.9	3.9	3.7	3.7	3.7	3.5	3.5	3.5	3.1
Teaching Hospitals <sup>1</sup>	3.2	3.1	3.2	3.3	3.2	3.1	2.9	2.9	2.8	2.7
Provincial General Hospitals	3.5	2.9	2.9	3.2	3.1	3.0	2.9	2.9	2.8	3.0
District General Hospitals	2.5	2.4	2.3	2.4	2.3	2.2	2.3	2.2	2.1	2.1
Base Hospitals Type A <sup>1</sup>	2.3	2.0	2.1	2.1	2.1	2.0	2.1	1.9	1.9	2.0
Base Hospitals Type B	2.2	2.1	2.3	2.1	2.1	2.1	2.1	2.0	2.0	1.8
Divisional Hospitals Type A	1.8	1.7	1.8	1.9	1.7	1.7	1.7	1.7	1.7	1.6
Divisional Hospitals Type B <sup>1</sup>	1.9	1.7	1.7	1.6	1.6	1.5	1.6	1.5	1.6	1.5
Divisional Hospitals Type C <sup>1</sup>	1.8	1.6	1.8	1.7	1.6	1.6	1.5	1.7	1.7	1.4
Childrens' Hospital	3.0	2.8	2.9	2.8	2.9	2.8	2.7	2.7	2.8	2.8
Eye Hospital	4.3	4.0	4.2	4.5	3.5	3.3	3.7	3.5	3.4	-
Cancer Hospital	6.7	5.9	5.8	5.1	4.7	4.3	4.3	3.9	4.0	3.9
Mental Hospitals	33.6	28.7	36.5	38.7	51.2	51.4	49.5	52.0	40.0	45.8
Chest Hospitals	14.3	12.3	15.7	14.7	15.9	15.5	14.9	9.8	8.7	7.6
Maternity Hospitals	3.1	3.5	2.7	3.7	3.8	3.8	3.5	3.6	3.6	3.2
Leprosy Hospitals	74.5	84.4	77.6	87.7	81.9	81.9	75.5	66.6	66.4	74.6
Rehabilitation Hospitals	33.0	24.0	29.3	30.0	30.0	18.9	17.1	10.3	9.7	11.3

<sup>1</sup> Excludes Specialized Hospitals; NHSL, Maternity, Mental, Eye, Children and Rehabilitation

Source: Medical Statistics Unit

**Table 40. Registered Births Vs Hospital Live Births, 1980 - 2020**

Year	Registered Live Births <sup>1</sup>	Live Births in Government Hospitals <sup>2</sup>	% of Live Births in Government Hospitals
1980	418,373	316,394	75.6
1985	389,599	292,970	75.2
1990 <sup>a</sup>	294,120	241,390	82.1
1991 <sup>a</sup>	304,347	262,388	86.2
1992	356,842	296,484	83.1
1993	350,707	298,567	85.1
1994	356,071	300,180	84.3
1995	343,224	297,949	86.8
1996 <sup>b</sup>	330,963	287,514	86.9
1997 <sup>b</sup>	325,017	284,955	87.7
1998	322,672	287,514	89.1
1999	328,725	300,866	91.5
2000	347,749	314,352	90.4
2001	358,583	325,813	90.9
2002	367,709	307,272	83.6
2003	370,643	316,465	85.4
2004	364,711	336,642	92.3
2005	370,731	341,539	92.1
2006	373,538	353,361	94.6
2007	386,573	356,852	92.3
2008	373,575	352,523	94.4
2009	368,304	339,437	92.2
2010	363,881	334,137	91.8
2011	362,044	338,463	93.5
2012	359,959	340,800	94.7
2013	365,762	347,033	94.9
2014	349,744	330,898	94.6
2015	336,097	315,221	93.8
2016	331,073*	303,593	91.7
2017	326,052*	300,169	92.1
2018	328,112*	302,134	92.1
2019	319,010*	288,666	90.5
2020	301,706*	280,661	93.0

\* Provisional

Source: <sup>1</sup> Registrar General's Department

Excludes:

<sup>2</sup> Medical Statistics Unit<sup>a</sup> Northern and Eastern Provinces<sup>b</sup> Kilinochchi and Mullaitivu Districts

**Table 41: Live Births, Maternal Deaths, Still Births and Low Birth Weight Babies in Government Hospitals by District, 2020**

District	Live Births	Maternal Deaths		Still Births		Low Births <sup>4</sup>	
		No.	Rate <sup>1</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>3</sup>
Colombo	31,800	13	40.9	222	6.9	5,086	16.0
Gampaha	17,001	3	17.6	106	6.2	2,475	14.6
Kalutara	11,636	2	17.2	71	6.1	1,626	14.0
Kandy	22,062	11	49.9	200	9.0	3,982	18.0
Matale	7,796			42	5.4	1,293	16.6
NuwaraEliya	9,027			73	8.0	2,284	25.3
Galle	16,123			84	5.2	2,242	13.9
Matara	9,136			43	4.7	1,323	14.5
Hambantota	9,824			41	4.2	1,273	13.0
Jaffna	7,825	2	25.6	48	6.1	1,153	14.7
Kilinochchi	2,646	3	113.4	16	6.0	291	11.0
Mullaitivu	922			3	3.2	122	13.2
Vavuniya	3,620			18	4.9	284	7.8
Mannar	2,016			10	4.9	144	7.1
Batticaloa	8,501	1	11.8	38	4.5	1,423	16.7
Ampara <sup>5</sup>	14,060	1	7.1	69	4.9	1,921	13.7
Trincomalee	7,975			80	9.9	1,327	16.6
Kurunegala	20,150	10	49.6	104	5.1	3,080	15.3
Puttalam	12,415	1	8.1	91	7.3	1,848	14.9
Anuradhapura	14,104	2	14.2	99	7.0	2,038	14.4
Polonnaruwa	6,513	1	15.4	35	5.3	1,049	16.1
Badulla	14,570	2	13.7	86	5.9	2,813	19.3
Monaragala	5,590			30	5.3	975	17.4
Rathnapura	16,444	3	18.2	97	5.9	2,695	16.4
Kegalle	8,905	1	11.2	40	4.5	1,523	17.1
<b>Sri Lanka</b>	<b>280,661</b>	<b>56</b>	<b>20.0</b>	<b>1,746</b>	<b>6.2</b>	<b>44,270</b>	<b>15.8</b>

<sup>1</sup> Per 100,000 live births.

Source: Medical Statistics Unit

<sup>2</sup> Per 1,000 total births.

<sup>3</sup> Per 100 live births.

<sup>4</sup> Birth weight less than 2500 grams.

<sup>5</sup> Includes Kalmunai RDHS division.

**Table 42: Performance of Dental Surveys by RDHS Division, 2020**

District	Emergency care					Routine care														Attendance					
	Extractions	Oro-facial pain relief	Dento-alveolar trauma	Soft tissue Injuries	Post Op infections / bleeding	TF	Amalgam	GIC	Composite	RCT (Dressings)	R CT ( Completions)	Pulp Therapy (Deciduous)	Scaling	Fluoride applications	Fissure Sealants	OPMD *	Minor Oral surgery *	HE Sessions *	Referrals*	Others*	Total Attendance	Pregnant mothers	Children (less than 3 years old)	Adolescents (Aged between 13-19 years old)	Inward Patients
Colombo	53,294	60,655	875	888	397	34,365	1,066	50,707	7,607	1,888	1,636	1,679	9,040	637	150	158	649	10,973	13,041	41,351	263,026	7,037	742	8,891	877
Gampaha	34,580	21,423	378	332	947	17,965	2,294	14,998	1,950	906	664	571	2,713	66	76	129	854	3,796	5,052	15,715	112,064	7,408	1,340	5,631	134
Kalutara	28,324	25,905	276	241	462	16,364	562	16,132	2,186	437	300	1,108	1,718	147	64	266	551	4,961	4,092	17,989	102,703	8,518	953	10,733	2,548
Kandy	51,648	36,729	269	190	325	28,867	768	39,510	4,712	1,306	1,046	1,675	4,758	656	45	260	1,295	1,688	8,525	32,991	195,376	11,389	1,807	6,517	563
Matale	23,127	13,500	418	387	744	12,262	792	10,769	1,561	974	635	2,443	3,169	698	1,239	218	732	4,219	2,799	5,723	75,788	6,640	1,204	6,103	660
Nuwara Eliya	28,045	21,800	193	108	310	12,788	853	18,717	1,656	1,032	469	1,725	3,063	181	807	119	1,230	5,607	3,463	6,010	90,972	8,252	1,885	7,030	465
Galle	49,020	23,420	595	459	361	25,212	306	21,529	4,368	848	1,238	600	4,137	11	90	171	1,425	2,620	5,147	17,017	148,473	8,303	656	11,391	1,090
Matara	34,728	21,245	162	152	452	21,221	811	26,561	3,481	2,213	1,818	1,413	4,097	264	1,624	122	1,311	4,220	4,894	13,590	111,862	8,129	1,237	14,100	462
Hambantota	21,824	29,376	220	108	152	8,294	23	11,171	787	209	260	234	1,392	34	49	61	459	5,936	2,957	11,617	90,683	7,298	485	4,645	233
Jaffna	23,525	38,831	221	72	447	6,211	203	7,178	2,806	879	468	138	2,797	236	48	108	192	8,174	1,566	15,584	99,007	7,490	575	3,615	67
Kilinochchi	7,680	8,467	176	184	148	1,590	5	2,653	1,804	693	249	330	1,050	1	0	43	169	325	449	875	24,272	1,701	163	2,181	258
Mannar	4,841	7,718	102	24	32	617	1	771	225	99	29	12	310	0	0	12	91	423	78	2,403	19,912	1,600	131	1,600	115
Vavuniya	5,656	10,368	5	16	133	1,728	89	2,906	113	182	32	43	380	2	0	9	5	1,904	421	6,100	29,188	2,431	165	1,162	807
Mullaitivu	7,206	3,869	336	236	118	1,216	36	1,372	691	143	129	128	1,013	53	26	28	197	958	511	1,009	17,964	1,425	61	1,130	494
Batticaloa	56,946	43,368	1,191	1,590	1,586	9,802	72	14,493	8,078	1,315	708	1,024	5,388	345	753	237	1,203	10,298	2,532	27,019	138,388	15,102	855	16,039	439
Ampara	9,873	15,346	270	365	73	6,767	80	9,293	2,258	667	404	1,038	2,552	139	7	146	410	7,830	1,695	6,436	50,325	3,803	964	3,405	955
Trincomalee	26,442	26,359	137	25	146	4,994	223	4,796	1,917	430	217	33	1,900	43	78	35	921	4,692	1,134	6,762	76,214	10,007	1,649	9,702	579
Kalmunai	29,441	21,975	205	449	290	5,133	122	7,339	4,850	680	378	176	2,320	51	40	211	690	2,922	628	14,816	83,666	6,029	1,138	8,007	1,775
Kurunegala	57,412	42,042	647	370	708	26,972	3,111	24,573	4,215	1,306	913	1,555	4,801	1,115	300	212	1,242	11,174	6,154	26,324	189,829	19,930	5,768	12,196	168
Puttalam	28,589	16,994	56	180	187	7,216	24	10,433	3,551	1,029	656	660	2,600	161	198	116	694	3,962	1,118	9,985	77,171	7,898	917	4,993	1,238
Anuradhapura	22,133	15,664	127	13	49	10,052	27	6,405	655	143	821	346	1,174	171	12	41	339	3,500	1,038	14,387	71,232	4,348	636	3,439	712
Polonnaruwa	15,703	16,765	107	178	293	7,495	124	14,241	829	879	431	860	3,086	163	25	94	136	2,983	2,919	11,647	63,938	6,243	3,014	3,059	515
Badulla	46,951	34,435	421	291	813	21,260	2,895	27,958	7,509	1,720	1,129	2,975	8,064	468	536	402	1,002	7,402	5,758	26,720	167,716	16,950	4,711	11,928	885
Monaragala	18,820	23,440	485	393	84	17,629	7	17,814	4,824	996	560	1,363	4,844	64	17	275	793	1,125	1,752	17,673	100,258	8,143	718	7,386	948
Rathnapura	39,349	27,829	442	341	532	28,404	329	31,505	6,222	2,418	1,491	2,055	4,963	989	1,320	524	980	4,166	3,318	20,620	155,196	12,229	1,428	9,906	804
Kegalle	23,022	25,477	266	124	223	11,399	371	19,581	2,724	1,208	678	1,345	1,930	185	24	112	452	4,473	3,489	15,274	98,846	8,115	1,701	4,790	496
<b>Sri Lanka</b>	<b>748,179</b>	<b>633,000</b>	<b>8,580</b>	<b>7,716</b>	<b>10,012</b>	<b>345,823</b>	<b>15,194</b>	<b>413,405</b>	<b>81,579</b>	<b>24,600</b>	<b>17,359</b>	<b>25,529</b>	<b>83,259</b>	<b>6,880</b>	<b>7,528</b>	<b>4,109</b>	<b>18,022</b>	<b>120,331</b>	<b>84,530</b>	<b>385,637</b>	<b>2,654,069</b>	<b>206,418</b>	<b>34,903</b>	<b>179,579</b>	<b>19,492</b>

Note : Based on the consolidated statistics submitted by the Regional Dental surgeons and Monthly Dental Returns

Source: Oral Health Services

# Annexure II



**Table 1: Survey Findings of CKD/CKDu Patients During GPS Mapping of DS Divisions, 2020**

Characteristics	Cheddikulum	Minipe	Embilipitiya
<b>Sex</b>			
Male	246	351	351
Female	101	133	138
<b>Age</b>			
0-10	2	2	0
11-20	1	3	6
21-30	1	3	7
31-40	8	12	18
41-50	28	54	33
51-60	85	100	94
61-70	147	200	178
>70	75	110	153
<b>Education</b>			
< Grade 5	193	237	207
Grade 6 to O/L	93	149	203
O/L to A/L and Above	3	16	24
No Education	58	82	55
<b>Total</b>	<b>347</b>	<b>484</b>	<b>489</b>

Source: National Renal Disease Prevention and Research Unit

**Tables 2 : CKD/CKDu Incidence in the DS Divisions of Anuradhapura and Polonnaruwa Districts (per 100,000 Population)**

DS Division	CKD/CKDu Incidence (per 100,000 population)		
	2010-2013	2014-2016	2017-2020
<b>Anuradhapura district</b>	127.0	340.3	187.7
Medawachchiya	453.6	964.3	288.9
Padaviya	597.0	504.4	368.5
Rambewa	206.0	598.1	281.4
Kahatagasdigiya	230.6	536.3	377.3
Kebithigollewa	455.8	573.3	164.6
NPC (Nuwaragampalatha Central)	65.8	249.4	190.7
Maha Wilachchiya	91.2	467.3	306.0
Horowpothana	263.6	497.4	305.5
Galenbindunuwewa	94.7	464.6	247.4
NPE (Nuwaragampalatha East)	28.7	124.8	125.8
Nachchidoowa	41.4	227.2	167.5
Thalawa	56.7	305.1	182.5
Thirappane	63.8	584.2	172.8
Nochchiyagama	64.1	239.2	165.8
Kekirawa	24.0	171.1	85.2
Palugaswewa	57.8	194.7	123.6
Mihintale	64.4	237.0	181.3
Thambuthtegama	119.6	145.3	106.6
Galnewa	53.2	222.5	110.1
Rajanganaya	64.8	187.8	120.0
Ipalogama	35.4	151.0	102.9
Palagala	24.2	180.4	74.3
<b>Polonnaruwa district</b>	150.7	336.5	302.6
Medirigiriya	254.7	565.8	345.4
Dimbulagala	183.3	304.2	249.8
Hingurakgoda	143.5	359.3	288.6
Elahera	138.9	392.4	495.2
Thamankaduwa	74.3	167.5	252.4
Lankapura	153.0	282.6	298.4
Welikanda	85.1	322.8	247.2

Source: National Renal Disease Prevention and Research Unit

**Table 3 : Distribution of Service Utilization of HD Facilities by District, 2020**

Province	District	Total No. of dialysis sessions	Dialysis sessions per 100,000 population	No. of new CKD/CKDu patients dialyzed	New CKD/CKDu patients per 100,000 population
<b>Central</b>	Kandy	44,795	3,257	760	55
	Matale	5,545	1,144	175	36
	Nuwera Eliya	4,018	565	22	3
	<b>Sub Total</b>	<b>12,504</b>		<b>368</b>	
<b>Eastern</b>	Ampara	18,641	2,870	225	35
	Batticaloa	9,601	1,823	249	47
	Trincomalee	8,646	2,278	88	23
	<b>Sub Total</b>	<b>36,888</b>		<b>562</b>	
<b>Northern</b>	Jaffna	13,002	2,227	439	75
	Kilinochchi	1,420	1,251	9	8
	Mannar	1,669	1,676	79	79
	Mullaitivu	2,202	2,387	16	17
	Vavuniya	9,977	5,797	40	23
	<b>Sub Total</b>	<b>28,270</b>		<b>583</b>	
<b>North Central</b>	Anuradhapura	38,327	4,454	148	17
	Polonnaruwa	22,164	5,458	163	40
	<b>Sub Total</b>	<b>60,491</b>		<b>311</b>	
<b>North Western</b>	Kurunegala	25,250	1,560	296	18
	Puttalam	3,422	449	29	4
	<b>Sub Total</b>	<b>28,672</b>		<b>325</b>	
<b>Sabaragamuwa</b>	Kegalle	-		-	
	Rathnapura	14,669	1,348	644	59
	<b>Sub Total</b>	<b>14,669</b>		<b>644</b>	
<b>Southern</b>	Galle	13,371	1,257	504	47
	Hambanthota	3,218	536	147	25
	Matara	6,039	742	351	43
	<b>Sub Total</b>	<b>22,628</b>		<b>1,002</b>	
<b>Uva</b>	Badulla	21,695	2,661	323	40
	Moneragala	7,970	1,767	182	40
	<b>Sub Total</b>	<b>29,665</b>		<b>505</b>	
<b>Western</b>	Colombo	48,080	2,069	2,016	87
	Gampaha	22,910	994	857	37
	Kalutara	10,041	820	770	63
	<b>Sub Total</b>	<b>81,031</b>		<b>3,369</b>	
<b>Grand Total</b>		<b>356,672</b>	<b>1,698.4</b>	<b>8,532</b>	<b>40.6</b>

Source: National Renal Disease Prevention and Research Unit

**Table 4 : Distribution of HD Facilities by District**

Province	District	No. of hospitals with HD units	No. of HD units	No. of HD machines	HD machines per 100,000 population
<b>Central</b>	Kandy	3	5	91	6.62
	Matale	1	1	8	1.65
	Nuwera Eliya	1	1	2	0.28
Sub Total		5	7	101	
<b>Eastern</b>	Ampara	2	2	18	4.31
	Batticaloa	4	4	13	2.47
	Kalmunai	4	4	10	4.48
	Trincomalee	4	4	17	
Sub Total		14	14	58	
<b>Northern</b>	Jaffna	4	4	20	3.43
	Kilinochchi	1	1	2	1.76
	Mannar	1	1	2	2.01
	Mullaitivu	1	1	3	3.25
	Vavuniya	2	2	12	6.97
Sub Total		9	9	39	
<b>North Central</b>	Anuradhapura	5	5	49	5.69
	Polonnaruwa	3	3	33	8.13
Sub Total		8	8	82	
<b>North Western</b>	Kurunegala	6	6	34	2.1
	Puttlam	1	1	5	0.66
Sub Total		7	7	39	
<b>Sabaragamuwa</b>	Kegalle	0	0	0	
	Rathnapura	3	3	15	1.38
Sub Total		3	3	15	
<b>Southern</b>	Galle	2	2	13	1.22
	Hambanthota	3	3	6	1.00
	Matara	2	2	7	0.86
Sub Total		7	7	26	
<b>Uva</b>	Badulla	3	3	22	2.70
	Moneragala	2	2	12	2.66
Sub Total		5	5	34	
<b>Western</b>	Colombo	7	8	67	2.88
	Gampaha	4	4	20	0.87
	Kalutara	3	3	11	0.90
Sub Total		14	15	98	
		<b>72</b>	<b>75</b>	<b>492</b>	<b>2.46</b>

Source: National Renal Disease Prevention and Research Unit

**Table 5 : Distribution of Drinking Water RO Plants Maintained by NRDPRU**

Province	District	No. of drinking water RO plants
<b>Central</b>	Kandy	02
	Matale	38
	<b>Sub Total</b>	<b>40</b>
<b>Eastern</b>	Ampara	24
	Batticaloa	05
	Trincomalee	46
<b>Sub Total</b>	<b>75</b>	
<b>Northern</b>	Jaffna	17
	Mullaitivu	09
	Vavuniya	38
	Mannar	01
<b>Sub Total</b>	<b>65</b>	
<b>North Central</b>	Anuradhapura	247
	Polonnaruwa	43
<b>Sub Total</b>	<b>290</b>	
<b>Sabaragamuwa</b>	Rathnapura	01
<b>Sub Total</b>	<b>01</b>	
<b>Southern</b>	Galle	01
	Hambanthota	22
<b>Sub Total</b>	<b>23</b>	
<b>North Western</b>	Kurunegala	85
	Puttlam	36
<b>Sub Total</b>	<b>121</b>	
<b>Uva</b>	Badulla	54
	Moneragala	85
<b>Sub Total</b>	<b>139</b>	
<b>Grand Total</b>		<b>754</b>

Source: National Renal Disease Prevention and Research Unit

**Table 6 : Percentage of New Patient Registration at Government Cancer Treatment Centers, 2016 - 2020**

Cancer treatment centre	Year				
	2016	2017	2018	2019	2020
NCI -Maharagama	47.1	43.1	40.5	39.7	33.1
NH - Kandy	12.8	13.1	11.6	11.1	10.8
TH - Karapitiya	8.6	8.2	7.6	7.0	6.8
TH -Jaffna/ BH Thelippalai	3.6	3.5	3.4	3.4	3.6
TH - Anuradhapura	3.7	3.8	4.2	4.1	4.3
PGH - Badulla	7.4	6.4	6.2	7.4	7.1
TH - Batticaloa	4.4	3.3	2.5	2.0	2.6
TH - Kurunegala	6.2	6.5	6.3	6.2	5.8
TH - Rathnapura	3.6	3.5	3.1	3.1	3.2
NCTH Ragama			2.1	1.8	2.3
DGH Gampaha		0.5	1.7	2.2	1.9
DGH Avissawella			0.2	0.8	0.8
DGH Kalutara			1.4	1.4	1.8
DGH Nuwara Eliya	0.8	0.7	0.6	0.8	1.2
DGH Matara				0.5	1.1
DGH Hambanthota		0.6	0.9	1.2	1.3
DGH Vavuniya		0.1	0.6	0.7	0.7
DGH Polonnaruwa		2.0	2.0	1.8	2.0
DGH Monaragala	0.4	0.4	1.2	0.7	0.7
DGH Trincomalee		2.2	1.6	1.0	0.9
DGH Amapara	0.5	0.4	0.3	0.5	0.4
DGH Chilaw	0.3	0.8	1.3	1.7	1.9
DGH Kegalle	0.6	0.9	0.7	0.8	0.9
KDU Teaching Hospital					4.2
Nevil Fernando TH					0.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: National Cancer Control Programme

**Table 7 : Activities Carried Out by the Airport Health Offices**

Activity	Katunayake	Mattala
<b>1. Yellow Fever Surveillance</b>		
1.1 No. of travellers with a valid certificate	605	0
1.2 No. of travellers without a valid certificate	8	0
1.3 No. of travellers referred to NIID (IDH)/other hospitals	0	0
<b>2. Disinfections of Aircrafts</b>		
2.1 No. of flights arrived	8,995	195
2.2 No. of flights needed to be disinfected	8,620	186
2.3 No. of flights disinfected	6,351	126
<b>3. Passenger Arrivals &amp; Departures</b>		
3.1 No. of passengers arrived	1,085,113	14,669
<b>4. Release of Human Remains</b>		
4.1 No. of human remains released without inquest	75	0
4.2 No. of human remains submitted to inquest	118	0
4.3 No. alleged suicide	16	0
<b>5. Airport Sanitation</b>		
5.1 No. of sanitary inspections carried out including food establishments	63	23
5.2 No. of food samples taken under the Food Act	4	0
5.3 No. of defectives found	Prosecuted	0
	Warned	0
5.4 No. of water samples taken for bacteriological analysis	9	8
5.5 No. of water samples reported as contaminated	0	15
5.6 No. of environmental inspection	5	114
5.7 No. of potential mosquito breeding places detected	1	51
5.8 No. of larval breeding places detected	0	10
<b>6. Vaccines Given</b>		
6.1 No. of Yellow Fever vaccine doses given	0	0
6.2 No. of Oral Polio vaccine doses given	151	0
<b>7. Other Activities</b>		
7.1 No. of health education programs done	4	28

Source: Quarantine Unit

**Table 8 : Activities Carried Out by the Port Health Offices**

Activity	Colombo	Galle	Hambantota	Trincomalee	Norochcholai
No. of ships arrived/ pratique granted	3,936	111	304	225	48
No. of yellow fever vaccines given	3	4	0	0	0
No. of ship sanitation exemption certificates issued	309	25	23	35	0
No. of human remains released	0	1	1	0	0
No. of medical students/doctors/PHI students trained	196	79	0	28	0

Source: Quarantine Unit

**Table 9 : Activities Carried Out by the Assistant Port Health Office, MRI - Colombo**

Activity	Number of Doses
No. of yellow fever vaccinations given	2,274
No. of meningococcal vaccinations given	1,045
No. of oral polio vaccinations given (booster)	446

Source: Quarantine Unit



**Table 10 : Reported Dengue Cases, Deaths and CFR, 1996 - 2020**

Year	Cases	Deaths	CFR
1996	2,824	54	1.91
1997	2,332	17	0.73
1998	2,419	8	0.33
1999	2,668	14	0.52
2000	7,213	37	0.51
2001	8,931	54	0.60
2002	10,933	64	0.59
2003	4,805	32	0.67
2004	15,463	87	0.56
2005	5,994	28	0.47
2006	11,980	46	0.38
2007	7,332	28	0.38
2008	6,607	27	0.41
2009	35,095	346	0.99
2010	34,188	246	0.72
2011	28,473	185	0.65
2012	44,461	184	0.41
2013	32,063	83	0.26
2014	47,502	99	0.21
2015	29,777	60	0.20
2016	55,150	98	0.18
2017	186,101	440	0.24
2018	51,659	58	0.11
2019	105,049	157	0.15
2020	31,162	36	0.12

Source: National Dengue Control Unit

**Table 11 : Number of Beds, Admissions and LOS(Days) in ICUs, 2020**

ICU (ICU ID)	Number of Beds	Admissions	LOS in days Median (Q1, Q3)
Ampara MICU (52)	8	300	3(2,6)
Ampara SICU (53)	3	216	3(1,5)
Anuradhapura MICU (41)	5	233	4(2,9)
Anuradhapura NSICU (43)	4	204	4(2,8)
Anuradhapura SICU (42)	5	350	2(1,4)
Avissawella GICU(1)	4	253	3(1,5)
CSHW ICU (10)	4	246	3(1,5)
Badulla MICU (39)	4	316	3(1,5)
Badulla SICU (40)	8	665	2(1,4)
Balangoda ICU (54)	4	199	3(2,6)
Balapitiya(13)	4	156	4(1.5,8.5)
Batticaloa MICU (50)	5	341	2(1,5)
Batticaloa SICU (51)	5	385	2(1,4)
Dambulla ICU (26)	3	120	4(2,6)
Diyathalawa GICU (55)	5	226	3(2,6)
DMH ICU (9)	3	253	3(2,4)
Embilipitiya(48)	5	276	2(1,4)
Gampaha MICU (34)	6	316	2(1,4)
Gampola ICU (25)	4	145	2(1,6)
Hambantota ICU (47)	6	299	2(1,5)
Homagama ICU (3)	6	120	3(2,6)
Horana (7)	4	149	3(2,6)
Jaffna GICU (62)	13	715	2(1,4)
Jayawardanapura CTICU (4)	12	529	5(4,6)
Jayawardanapura GICU (6)	10	693	2(1,5)
Kaburupitiya ICU (75)	6	147	3(2,5)
Kalmunei BASE 2(66)	3	180	3(1.5,7.5)
Kalmunei ICU (49)	5	290	3(1,5)
Kalubowila MICU (11)	5	201	4(2,7)
Kalubowila SICU(2)	8	571	3(1,5)
Kalutara ICU (5)	5	389	3(2,6)
Kandy CTICU (24)	6	419	3(2,4)
Kandy MICU (20)	9	267	4(2,9)
Kandy NSICU1(22)	5	254	3(2,8)
Kandy NSICU2(23)	5	223	4(2,9)
Kandy SICU (21)	8	841	2(1,4)
Karapitiya ETCICU (17)	6	288	4(2,8)
Karapitiya GICU (16)	9	335	4(2,8)
Karapitiya Oncology ICU (15)	5	570	1(1,2)
Kegalle ICU (37)	6	230	2(1,4)
Kuliyapitiya GICU (16)	5	219	3(1,6)
Kurunegala AICU (29)	3	233	2(1,4)
Kurunegala GICU (28)	11	750	2(1,3)
Kurunegala MICU27)	7	436	4(2,7)

**Table 11 : Number of Beds, Admissions and LOS(Days) in ICUs, 2020**

ICU (ICU ID)	Number of Beds	Admissions	LOS in days Median (Q1, Q3)
Mahamodara AdultICU (14)	4	343	1(1,2)
Maharagama MICU (69)	6	251	5(2,9)
Maharagama SICU (68)	12	644	2(1,4)
Mahiyanganaya GICU (64)	6	214	3(2,6)
Mannar ICU (61)	4	87	3(2,6)
Maravila ICU (63)	3	102	3(2,7)
Matara MICU (18)	5	253	4(2,8)
Matara SICU (19)	5	448	2(1,4)
Mathale ICU (31)	5	417	3(2,5)
Mawanella ICU (58)	3	152	3.5(1,7)
Monaragala GICU (32)	6	447	2(1,4)
Nawalapitiya (57)	5	243	3(2,6)
Negombo MICU (12)	7	319	2(1,4)
NHSL ASICU1(70)	6	176	9(5,19)
NHSL ASICU2(71)	4	260	7(4,16)
NHSL NICU (72)	9	406	4(1,8)
NHSL NTICU2(8)	8	216	7(3,14.5)
NHSL NTICU4(73)	8	372	4(2,8)
NHSL NTICU5(74)	8	263	4(2,9)
Nikawaratiya GICU (76)	3	172	4(2,7)
Nuwara Eliya(56)	5	312	4(2,7)
Peradeniya toxic (74)	4	238	3(2,5)
Polonnaruwa GICU (44)	8	563	3(1,5)
Puttalam ICU (59)	4	219	3(2,6)
Ragama MICU (36)	8	322	3(1,6)
Ragama SICU (35)	7	607	2(1,4)
Ratnapura (67)	6	315	2(1,5)
Tangalla ICU (46)	4	208	3(2,6)
Trincomalee ICU (45)	5	273	4(2,6)
Vavuniya ICU (30)	4	234	3(1,5)
Welisara ICU (33)	7	672	1(1,3)
Paediatrics ICUs	Number of Beds	Admissions	LOS in days Median (Q1, Q3)
Anuradhapura PICU (77)	4	114	3(2,5)
LRH MICU (79)	11	389	3(2,7)
LRH CTICU 1(80)	6	194	5(3,9)
LRH CTICU 2(81)	11	651	3(2,5)
Kandy PICU (82)	5	278	3(2,7)
Karapitiya PICU (83)	7	302	3(1,5)
Maharagama PICU (84)	4	235	4(2,6)
Sirimavo MICU (85)	5	127	6(3,13)
Sirimavo SICU (86)	5	279	4(2,8)

Source: National Intensive Care Surveillance

LOS – Length of Stay

## Unavailability of eIMMR Data for 2020

Institution Name	Type	Number of Quarters
National Eye Hospital	TH	4
Colombo Central - Maligawatta	DHB	4
Angoda (IDH) - National Institute of Infectious Disease	BHA	4
Malwathuhipitiya	DHC	4
Prison, Mahara	Other 1	4
Udadumbara	DHA	4
Kahawatta	DHC	4
Gonadeniya	DHC	4
Atchuweli	DHB	4
Poonakery / Poonaryn	DHC	4
Mandapathady	DHC	4
Santhively	DHC	4
Trincomalee	DGH	4
Kurunegala	PGH	4
Rajangane	DHC	4
Lunuwila	DHB	4
Ayagama	DHB	4
Belihuloya	DHC	4
Gilimale	DHB	4
Gonagaldeniya	DHC	4
Prison Hospital - Kegalle	Other 1	4
Mahawilachchiya	DHC	2
Karadiyanaru	DHC	3
Avissawella	DGH	2
Akaragama	DHC	3
Kirama	DHC	1
Delft	DHC	3
Maruthankerney	DHC	1
Nainativu	DHC	1
Karaitivu	DHC	1
Aluthgama	DHC	2
Dunhinna	DHC	1
Amithirigala	DHB	3
Beligala	DHB	1
Hinguralakanda	DHC	3
Veravil	DHC	1
Lagalla Pallegama	DHA	1
Unnapulavu (DH - Mullaitivu)	DHB	1
Walapane	DHA	1
Udappuwa	DHB	2
Eratna	DHB	2
Kaltota	DHA	1
Ranwala	DHC	3

Source: Medical Statistics Unit

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