

# WHO SIERRA LEONE BIENNIAL REPORT



2020 - 2021

# TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS _____	2
FOREWORD _____	4
EXECUTIVE SUMMARY _____	6
UNIVERSAL HEALTH COVERAGE _____	9
IMPROVED ACCESS TO QUALITY ESSENTIAL HEALTH SERVICES _____	10
Quality of Care _____	10
Reproductive, Maternal, Newborn Child and Adolescent Health _____	12
Immunization _____	15
Outbreak of Circulating Vaccine-Derived Poliovirus Type 2 _____	18
Strengthened health systems to deliver on condition and disease specific service coverage _____	21
Strengthened health systems to address population-specific health needs _____	28
HEALTH EMERGENCIES _____	35
HEALTHIER POPULATIONS. _____	49
IMPROVED COUNTRY SUPPORT _____	55
STAFF ASSOCIATION _____	60

# ABBREVIATIONS AND ACRONYMS

ABHR	Alcohol-Based Hand Rub
AFP	Acute Flaccid Paralysis
ANC	Antenatal Clinic
AVADAR	Auto-visual AFP Detection and Reporting
BPEHS	Basic Package of Essential Health Services
CHW	Community Health Workers
CMO	Chief Medical Officer
CCOP	Cold Chain Optimization Plan
CHAMPS	Child Health and Mortality Prevention Surveillance
cMYP	Comprehensive Multi-Year Plan
COVID-19	Corona Virus Diseases 2019
cVDPV2	circulating Vaccine-Derived Poliovirus type 2
DHMT	District Health Management Team
DTCs	Drug and Therapeutic Committees
EPI	Expanded Programme on Immunization
FCDO	Foreign, Commonwealth and Development Office
FCTC	Framework Convention on Tobacco Control
HAI	Healthcare Associated Infections
HMIS	Health Management Information System
IEC	Information, Education and Communication
IPC	Infection Prevention and Control
MDSR	Maternal Death Surveillance Report
MDG	Millennium Development Goals
MCV	Measles Containing Vaccine
MoHS	Ministry of Health and Sanitation
MNH	Maternal and Newborn Health
NIPCU	National Infection Prevention and Control Unit
NMCP	National Malaria Control Programme
NGOs	Nongovernmental Organizations
NTDs	Neglected Tropical Diseases
MDA	Mass Drug Administration

MMR	Maternal Mortality Rate
ITNs	Insecticide Treated Nets
NITAG	National Immunization Technical Advisory Group
NHSSP	National Health Sector Strategic Plan
NMR	Neonatal Mortality Rate
NQSC	National Quality Steering Committee
ODCH	Ola During Children's Hospital
PCMH	Princess Christian Maternity Hospital
PIH	Pregnancy Induced Hypertension
PHU	Peripheral Health Units
PPH	Postpartum Haemorrhage
QoC	Quality of Care
RMNCAH	Reproductive, Maternal, Neonatal, Child, and Adolescent Health
RCH-TCC	Reproductive and Child Health Technical Coordination Committee
SDG	Sustainable Development Goals
TB	Tuberculosis
UK	United Kingdom
USAID	United States Agency for International Development
WHO	World Health Organization

# FOREWORD



On behalf of the WHO Sierra Leone Country Office, I am delighted to present to you the 2020-2021 Biennial Report that summarises key highlights of WHO contributions to the health sector in Sierra Leone. The 2020-2021 report compiles the work done by WHO in collaboration with the Ministry of Health and Sanitation (MoHS) and other stakeholders through advancing Universal Health Coverage (UHC), protecting people from health emergencies, and promoting healthier population.

Over the past two years, Sierra Leone was challenged by the COVID-19 pandemic as it was all over the world. By 31 December 2021, a cumulative total of 7 064 cases had been recorded with 123 COVID-19 related deaths since the country's first case on 31 March 2020. WHO support during this period contributed to strengthening the country's capacity to be more resilient and to robustly prevent, detect, and respond to public health threats and emergencies and to enhance continuity in quality routine health services.

The 2021 International Health Regulations (IHR) State Party Annual Report (SPAR) was compiled showing that the IHR capacity score for the country improved from 49% in 2020 to 51% in 2021. The country's national integrated disease surveillance and response system also improved with the introduction of new innovations and technologies for disease surveillance. The improved capacities resulting from the investment by WHO through support from our donors and close collaboration with other partners has seen considerable improvement in disease surveillance. This is evident in a demonstrated capacity of over 95% public health facilities that now consistently meet the reporting requirements and timely submission of their weekly epidemiological data to the central level.

Despite the COVID-19 challenges, strategic health sector policy documents including the National Health and Sanitation Policy (NHSP) and the National Health Sector Strategic Plan (NHSSP) were developed and disseminated. Continued support for the implementation of these policies and strategies remain our priority.

Quality of Care, Reproductive, Maternal, Newborn Child and Adolescent Health (RMNCAH); immunization; tuberculosis (TB), Human Immunodeficiency Virus (HIV) and Malaria Control Programmes also recorded significant progress in service delivery and implementation of the national plans and strategies.

The above achievements would not have been possible without the leadership of the Ministry of Health and Sanitation and the conducive environment provided by the Government of Sierra Leone as well as the strong collaboration with other health sector partners and the generous support of our donors.

I take this opportunity to express my gratitude to the Government of Sierra Leone, specifically the leadership of the Ministry of Health and Sanitation and its agencies for their steadfast efforts to improve the country's health system. My appreciation also goes to the UN agencies, Development Partners, and my WHO colleagues at the Country Office, Regional and Headquarters for the support, dedication, commitment, and collaboration for a common goal during the biennium.

As we move ahead through the new biennium, WHO reiterates its commitment to the Government in its strive to implement people centred health sector priorities for the improvement of the health of all people in Sierra Leone.



.....  
**Dr Steven V. Shongwe**  
**WHO Representative in Sierra Leone**

# EXECUTIVE SUMMARY

WHO defines its Strategic directions through its General Programme of Work (GPW) which is implemented over a 5-year period. The current Programme of Work or GPW13 (2019-2023)<sup>1</sup> focusses on triple billion targets to achieve measurable impacts on people's health at the country level by promoting health, keeping the world safe, and serving the most vulnerable. The GPW13 is translated into actions through the Biennial Workplans implemented and reported at country level in alignment with country priorities and the SDG targets.

The 2020-2021 Biennial Report presents the contributions of WHO Sierra Leone to the Government's priorities towards the health-related SDG targets through technical and leadership support. The key achievements are summarized under the following thematic areas:

## Universal Health Coverage

With WHO support, access to quality essential health services improved significantly. National health sector policies and strategic technical documents were developed including the National Health and Sanitation Policy, the National Health Sector Strategic Plan 2021-2025, National Quality of Care (QoC) Policy; the Maternal,

Neonatal, Child and Adolescent Health (MNCAH) Strategic Roadmap among others. Implementation of these documents are being supported to improve health outcomes in Sierra Leone.

Institutionalizing the quality-of-care agenda in Sierra Leone is fundamental in improving patient safety and outcome. WHO supported the government's efforts in this direction by facilitating a National QoC stakeholders' forum that discussed critical issues such as regulations, experience of care, health care standards, leadership, and management.

Change packages aimed at reducing maternal mortality from Pregnancy Induced Hypertension (PIH), Postpartum Haemorrhage (PPH) and Sepsis were developed. In addition, the Emergency Triage and Treatment (ETAT) manual for improved paediatric care in hospitals was developed and implemented as part of WHO support to implement the Maternal and Newborn Health (MNH) standard.

Substantial efforts for polio eradication through routine immunization, safe and secure retention of polioviruses have been recorded. WHO provided technical and financial support that contributed to the successful implementation of three rounds of poliovirus

---

<sup>1</sup> GPW defines WHO's strategy for the five-year period. However, the current GPW has been extended from 2019-2025.

(cVDPV2) outbreak response campaigns in all sixteen districts to protect children 0-5 years from the debilitating effects of the virus. These supports contributed to quality campaigns and high coverages of 97%, 95%, and 96% in the first, second and third rounds of the campaigns respectively. The success of these nationwide campaigns resulted in the interruption of cVDPV2 transmission in Sierra Leone.

In addition to supporting routine vaccination services, WHO also supported the delivery and implementation of emergency vaccinations including COVID-19. At the same time the country was supported to implement preventive Ebola virus disease (EVD) vaccination campaign to protect high-risk population groups in communities along the Guinea border following the February 2021 Ebola outbreak in the neighboring country.

In terms of improving disease specific service coverage, sound and up to date analyses of the implementation of planned activities of the national TB, HIV and malaria control programmes were conducted through technical support of WHO. Findings of the reviews helped to inform development of the next 5 years national strategic plans for the three diseases. In addition, WHO continued to provide technical support and leadership in setting norms, standards and developing evidence-based policy for HIV, TB and malaria prevention and care; as well as building national capacity for implementation and

monitoring progress of the response to the three diseases at country level.

Sierra Leone is one of the seven high TB burden countries that have already reached the 2020 milestone of 35% reduction in mortality due to TB. Although not yet on track, Sierra Leone also achieved reductions in malaria case incidence and mortality during the biennium compared to the 2015 baseline.

To advance the Universal Health Coverage (UHC) target for reducing the number of people suffering financial hardship with catastrophic expenditures to health services, WHO is supporting the establishment of the Sierra Leone Social Health Insurance Scheme (SLeSHI) as an innovative prepayment health financing scheme. In the same framework, support has been provided for developing the Health Financing Strategy and the 2019-2020 National Health Account (NHA) with a sub-account for Sexual Reproductive Health Rights (SRHR).

Antimicrobial Resistance (AMR) and Infection Prevention and Control (IPC) are among the key priorities for quality of healthcare services. WHO provided technical support in the development and validation of a comprehensive 5-year AMR surveillance strategic plan which included a 2-year costed implementation plan. A total of 54 MoHS personnel were trained on the WHO Point Prevalence Survey (PPS) methodology on



antibiotic use and as a result a nationwide PPS was carried out in 26 hospitals.

Sierra Leone conducted the first regional and national structured operational research training initiative (SORT IT) and manuscripts of four participants have been published in an open platform.

Infection Prevention and Control (IPC) activities were intensified including the adaptation of WHO COVID-19 training manual and training of over 6 500 frontline healthcare workers (HCWs), routine monitoring of IPC compliance in 29 public hospitals across 16 districts and 575 Peripheral Health Units (PHUs) using standardized IPC monitoring tools among others.

WHO also supported the local production and promotion of alcohol-based hand rub solutions which contributed to improved hand hygiene practice and health worker and patient safety in health facilities.

## **Health Security and**

### **Emergencies**

WHO leverages on its comparative advantage as the leading technical organization on health to strengthen the country's capacity to prevent, detect and respond to emergencies. Guidelines, protocols, and standard operating procedures were developed and followed during the COVID-19 pandemic. WHO

technical officers supported their national counterparts, which improved the quality of COVID-19 case identification and investigations, contact tracing and capacity building of the health work force.

Country capacity for emergency preparedness improved during the biennium. The 2021 International Health Regulations (IHR) State Party Annual Report (SPAR) was compiled and the IHR capacity score for the country improved from 49% in 2020 to 51% in 2021. National technical personnel with responsibilities for disaster and emergency management have been capacitated in their roles as technical area leads for the National Action Plan for Health Security and the Joint External Evaluation (NAPHS/JEE). These improved capacities have led to better country ownership, leadership, and coordination in the implementation of NAPHS. As a result, the annual operational plans (AOPs) for NAPHS were developed and implemented in 2020 and 2021, and an online tracking tool to monitor implementation introduced.

National capacity for rapid detection and response to public health emergencies was strengthened through investment and the improvements in the national integrated disease surveillance and response (IDSR) system as seen in the consistent high completeness and timeliness of public health surveillance reporting. On average, over 95% of health facilities submitted their weekly

reports and quality of the weekly epidemiological data reported and relayed via the electronic IDSR platform improved from 67% to 89%.

Knowledge transfer through national and institutional capacity development is a fundamental part of WHO supported. WHO demonstrated this commitment during the biennium by supporting a long term IDSR sustainability plan for Sierra Leone through institutionalization of the IDSR/IHR curriculum in public health training institutions.

Assorted critical laboratory commodities and supplies for priority diseases including COVID-19 and for routine testing were procured and prepositioned in the country for a timely detection and response to any potential disease outbreaks.

## **Improved Healthier Population**

Noncommunicable Diseases (NCDs) remain major public health challenges in Sierra Leone. In addressing these challenges and garner support to reduce the health risks, WHO supported high level advocacy with

Members of Parliament resulting in the enactment of the Breastmilk Substitute Act 2021, and the Tobacco Control Bill which was also gazetted in 2021.

Improvements in breastfeeding practices in the country have been observed, wherein early initiation of breastfeeding rate increased by almost 14% from 75.3% in 2019 to 89.4% in 2021. The exclusive breastfeeding rate of infants 0-6 months stands at 52.7% and continued breastfeeding up to 23 months is at 53.1%. Technical and financial support were provided for the revision of the National Nutrition Policy 2022-2026 and development of National Food Safety and Quality Control Guidelines.

The Ministry of Health and Sanitation continues to prioritize the protection, promotion, supporting, and sustaining breastfeeding practices in hospitals towards attaining the national target of 75% for exclusive breastfeeding by 2025. To foster the achievement of this target, 330 maternity staff at regional hospitals were trained on baby friendly hospital initiative (BFHI) with technical support of WHO.

# UNIVERSAL HEALTH COVERAGE

## IMPROVED ACCESS TO QUALITY ESSENTIAL HEALTH SERVICES



World Health Organization  
Sierra Leone

### Quality of Care

Of all the 10 Quality of Care (QoC) network countries across the globe, Sierra Leone was the first to undertake and showcase a national learning forum to share, learn and drive the agenda on critical issues including regulations, experience of care, health care standards, leadership, and management for quality at the District Health Management Teams (DHMTs) and hospitals and service delivery levels. Strategic documents including the national quality of care policy; and Maternal, Neonatal, Child and Adolescent Health (MNCAH) Strategic

Roadmap were also developed and launched during the review period.

To garner support and raise awareness on patient safety, which is a critical component of QoC, World Patient Safety Day was commemorated in Sierra Leone for the first time in 2021. The event facilitated increased advocacy. Mentorship, regular coaching, and supervision visits to learning facilities were supported and periodic supportive supervision tools were developed.

Accreditation of Postgraduate Education at the Ola During Children's Hospital (ODCH) and the Princess Christian Maternity Hospital (PCMH) in Freetown was a key milestone achieved in 2021. The process was supported by bringing expertise from the region to strengthen the Programme through training, coaching, and mentorship, as well as skills in leadership and management. Strengthening coordination and advocacy in institutionalizing QoC at national and district levels led to the creation of QoC structures at hospitals and DHMT levels and the appointment of dedicated QoC officers to lead, manage and sustain the initiative.

Prior to the accreditation, WHO facilitated assessment for Postgraduate (PG) training in country, and accreditation guidelines were developed. Technical support was also provided to the postgraduate training initiative and teaching of undergraduate students delivered by WHO staff.

Concrete actions geared towards reduction of maternal mortality from pregnancy induced hypertension (PIH), postpartum haemorrhage (PPH) and Sepsis were implemented as guided by the Maternal and



Newborn Health (MNH) standards supported by WHO. The interventions also included the development of change packages that aimed at addressing reduction of mortality among newborns from preventable complications such as asphyxia, sepsis, and hypothermia as well as stillbirths, malaria, pneumonia, diarrhoea diseases, and malnutrition.

## Reproductive, Maternal, Newborn Child and Adolescent Health

In 2021, a midterm review to monitor progress, lessons, and challenges in the implementation of the Reproductive, Maternal, Newborn Child and Adolescent Health Strategy (RMNCAH 2017-2021) was conducted. The annual performance review brought together stakeholders and utilized

engagement including community members to advocate and address issues of RMNCAH and to strengthen the existing coordination system and structures.

Technical support was provided to review Health Management Information System (HMIS) tools, strengthening of data quality, monitoring and evaluation and supervision. Interventions to measure hospital's performance were also supported in close collaboration with the Directorate of Policy,

WHO is a member of the Child Health and Mortality Prevention Surveillance (CHAMPS) Network advisory committee, and in that capacity continued to provide technical support to MoHS to respond to findings of infections in newborns and children...



data driven performance monitoring on progress and challenges as well as tracking status of indicators for various districts. WHO provided technical and operation support through the existing Reproductive and Child Health Technical Coordination Committee to optimize and enhance multi-stakeholder

Planning, and Information (DPPI) and the QoC Program Management unit. Assessments were conducted in three regional hospitals on the status of medical records management, challenges, and opportunities for them to improve their medical record management systems.

Technical assistance and exchange visits were conducted to replicate some of the best practices through QoC endeavors. The MoHS and the Ministry of Education were supported in developing guidelines and mainstreaming comprehensive sexuality education in the education system through strategic participation and the provision of technical guidance aimed at improving efforts to strengthen adolescent health services.

WHO is a member of the advisory committee for Child Health and Mortality Prevention Surveillance (CHAMPS) Network, and in that capacity the Organization continued to provide technical support to MoHS to respond to findings of infections in newborns and children and linking to the larger national discussions on antimicrobial resistance (AMR). Meanwhile, child death audits were supported at Ola During Children's Hospital (ODCH) with examples of excellent practices observed and presented to partners to help improve child health service delivery.

Child death audit training was also rolled out with the support of WHO in all 16 districts, and review efforts helped facilities to develop plans to address identified and prioritized modifiable factors. For instance, almost all the facilities undergoing child death audit



identified medication error or mismanagement, poor nursing care such as vital sign monitoring; poor adherence to clinical protocol, as priority problems affecting children admitted at their facilities. Understanding this, these health facilities were able to develop improvement plans based on identified attributable factors and have started implementing these change packages.

Emergency Triage and Treatment (ETAT) is an initiative that has contributed to improving paediatric care in district hospitals across Sierra Leone. With the support of WHO, a manual developed to guide health workers was reviewed and updated and 50 staff in five new health facilities including faith-based hospitals trained with funding from the Islamic Development Bank. The Care of the Critically Ill Child (CCC) manual and training resources were validated and printed. Technical support was provided for the review of other strategic documents and guidelines including essential medicines list (essential SRHR commodities), pre-service curriculum, development of in-service guidelines and training manual. Trainings were also delivered on EmONC, MPDSR, Adolescent Health, IMNCI, ETAT+.

Over the past biennium, WHO has focused on strengthening nursing and midwifery leadership within the Ministry of Health and Sanitation (MoHS) by creating the conditions to better monitor and coordinate activities, but also to harmonize training programmes in the country. A unified curriculum for midwives was developed and technical assistance provided to support the training of 30 nurses in senior positions in five hospitals under the Nursing Process Toolkit.



With funding from LAD and SIDA, WHO was able to assist the Directorate of Nursing and Midwifery Service (DNMS) at MoHS to create a new direct access midwifery curriculum to harmonize all three midwifery schools. To ensure the quality of the curriculum, WHO recruited an international and national consultant to support the review and validation process. This support provided a better overview and facilitated the coordination of activities for DNM.

Meanwhile, WHO Sierra Leone with support from its headquarters and sponsorship from MSD/Merck for Mothers Foundation, supported the MOHS to implement the WHO, UNFPA, UNICEF and ICM's "*Framework Action for Strengthening quality midwifery education for Universal Health Coverage 2030*" to improve the quality of midwifery education in Sierra Leone for evidence-based, humanized care.

## Immunization

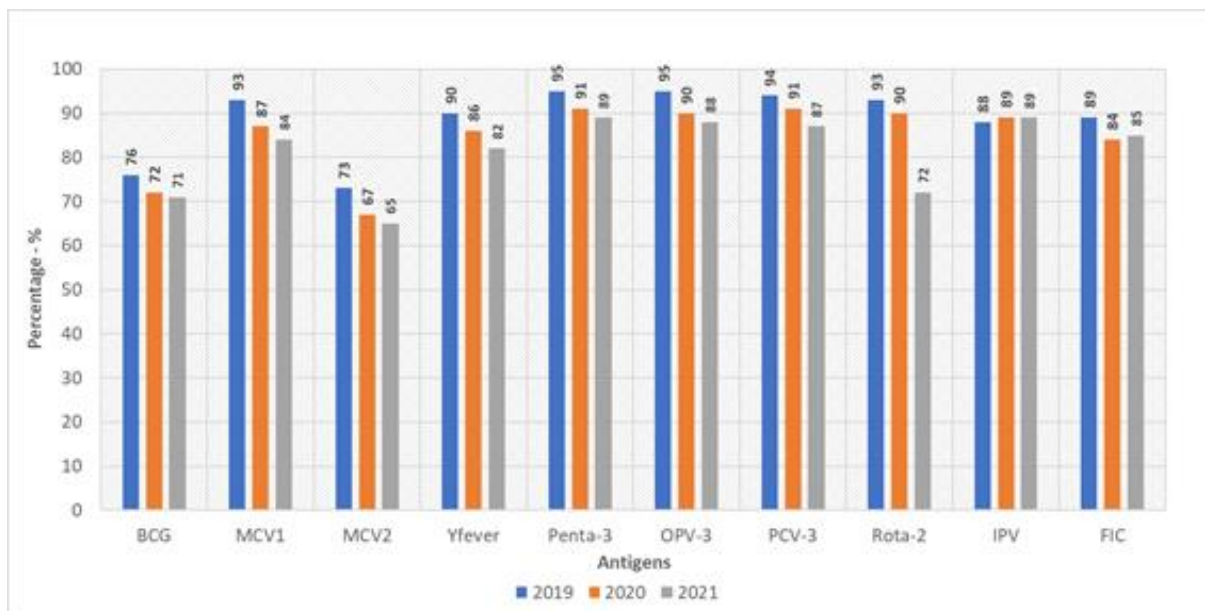
The Ministry of Health and Sanitation (MoHS) has the mandate to implement high quality vaccination interventions and achieve, as well as maintain high vaccination coverage levels. The MoHS also ensures the implementation of effective vaccination strategies to reach underserved populations. In addition, the ministry fosters prompt reporting and thorough investigation of suspected disease outbreaks, including rapid response actions to improve public awareness and outbreak control. This mandate is in line with the WHO recommendations that more than 90% of a population should receive their recommended doses of vaccines at the right time and age through a strong health system. WHO contributed to the government's efforts to attaining these recommendations by strengthening routine immunization activities with focus on implementation of the "reaching every district/child (RED/REC) approach and Vaccine Preventable Disease (VPD) surveillance enhancement.

The COVID-19 pandemic and the resultant vaccine hesitancy adversely affected uptake of vaccines. This resulted in low national routine immunization coverage for all vaccines by December 2021, including Pentavalent 3 (89%) and Measles Containing Vaccines (MCV 1 & 2) first dose

(84%) at nine months and second dose (65%) at fifteen months. (See figure below).







**Routine Immunization January-December 2021**

WHO in collaboration with UNICEF and other health partners supported the efforts of the Ministry of Health and Sanitation (MoHS) in strengthening service delivery and immunization monitoring to achieve the goals of the Decade of Vaccines as well as the implementation of the Comprehensive Multi-Year Plan (cMYP). The Cold Chain Optimization Plan (CCOP) implementation which started in 2020 continued in 2021, resulting in the replacement of obsolete cold chain equipment at district and service delivery levels. Monthly integrated supportive supervisions to districts and health facilities were conducted to provide mentorship on immunization activities from the national level.

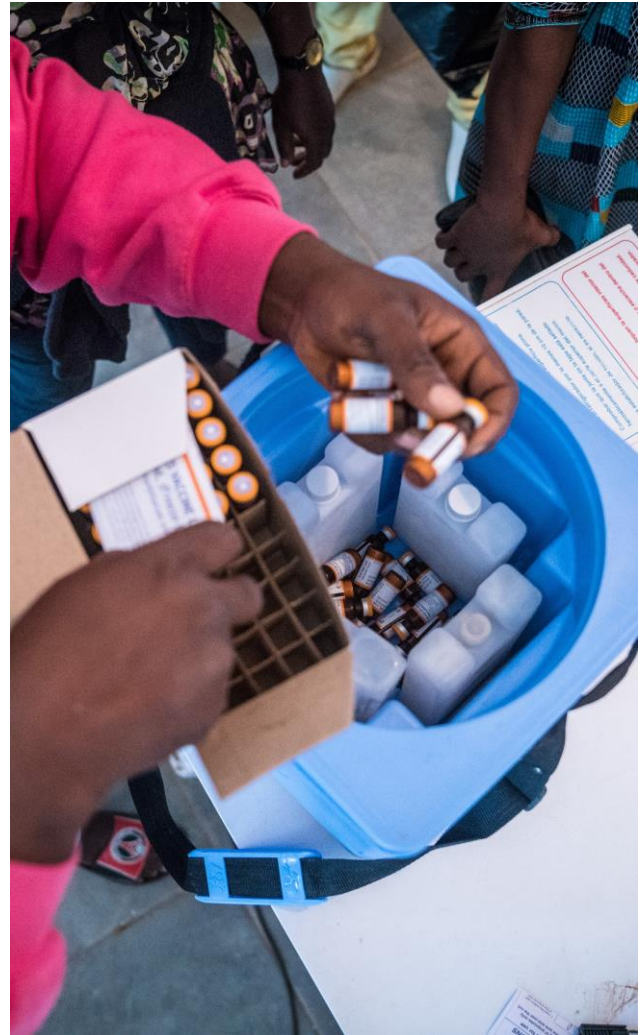
Through technical support provided by WHO, National Immunization Technical Advisory

Group (NITAG) was established, and members trained to provide guidance to the country's immunization programme and activities. In addition to the NITAG, the Inter-Agency Coordinating Committee (ICC) on immunization was also strengthened.

Following the February 2021 declaration of Ebola outbreak in neighbouring Republic of Guinea, Sierra Leone took proactive public health measures to protect people at high risk of infection in case of any potential cross-border transmission of the disease. WHO provided technical, logistical, and operational support in collaboration with the U.S Centers for Disease Control and Prevention (CDC) in ensuring that frontline health workers in health facilities, where people who may be infected with Ebola would first present themselves for care, are

protected. Other high-risk exposure groups such as traditional healers, and commercial motor bike riders along the border districts and regional hospitals' health personnel were vaccinated with the Johnson and Johnson Ebola (J&J) vaccine donated to the country through partnership between World Health Organization (WHO) and the vaccine manufacturer, Johnson and & Johnson (Vaccine manufacturer). An estimated 16,000 people were targeted with the intervention in the selected areas.

Prior to the vaccination, the Ministry of Health and Sanitation (MoHS) developed and launched a comprehensive six month Ebola Outbreak Preparedness and Contingency Plan to guide the country's preparedness. Preventive vaccination of selected target groups is one of the strategic priority interventions highlighted in the Plan.



## Outbreak of Circulating Vaccine-Derived Poliovirus Type 2

Sierra Leone experienced an outbreak of the circulating Vaccine Derived Poliovirus type two or cVDPV2 between December 2020 and June 2021. The outbreak was attributed to decline in routine vaccination services largely over the years and partly in the negative impact of COVID-19 pandemic. Technical experts from the Polio Eradication Initiative (GPEI) were immediately deployed by WHO to coordinate response activities.

A coordinated response to the outbreak led by the government with support of its health sector partners facilitated the planning and implementation of three Outbreak Response

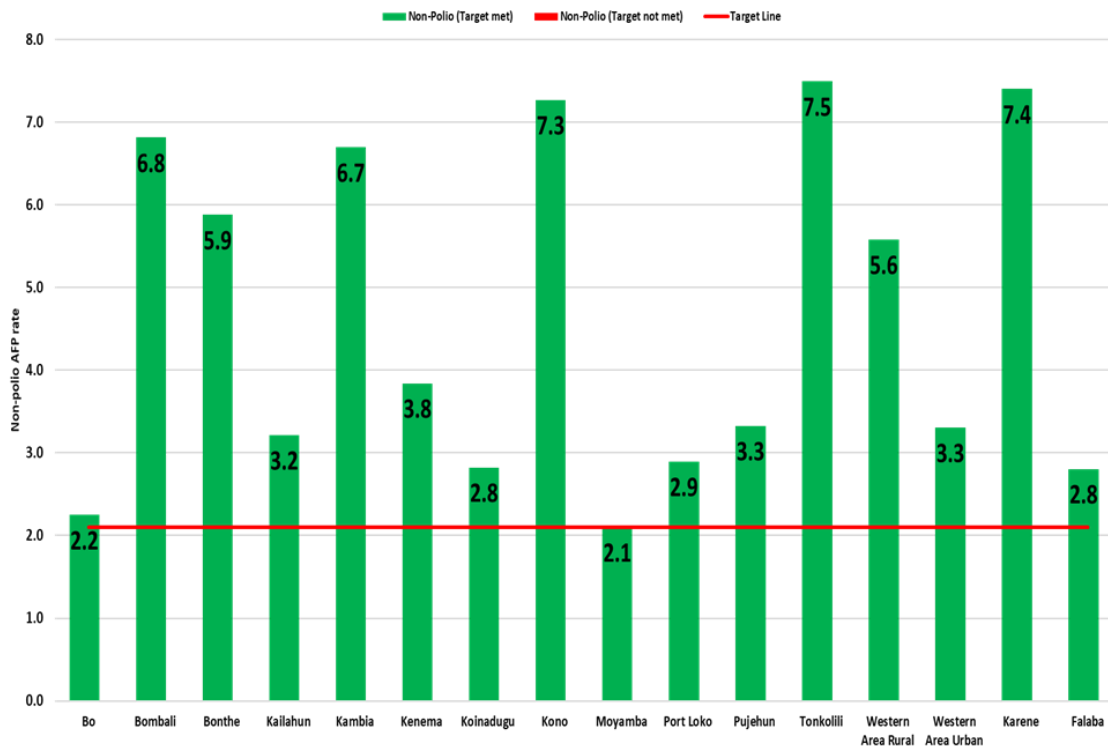
campaigns (OBR 1, 2 and 3), using the Novel Oral Polio Vaccine type 2 (nOPV2). This vaccine was used for the first time in Sierra Leone to vaccinate all eligible children and interrupt transmission of the virus. Vaccination coverage of 96%, 99% and 115% was achieved for the three rounds respectively.

### Acute Flaccid Paralysis (AFP)

The country achieved the two core AFP performance indicators in 2020 and 2021. The performance improved in 2021 compared to 2020 with a Non-polio AFP rate from 2.9 in 2020 to 4.5 in 2021 per 100 000 population of children under 15 years. The stool adequacy for the same period were 80.7% and 84.7, respectively.



Three Outbreak Responses (OBR 1,2 and 3) campaigns were conducted with the Novel Oral Polio Vaccine type 2 (nOPV2) being used for the first time in Sierra Leone.



Non-Polio AFP Rate per month January-December 2021

## Environmental surveillance

Environment surveillance was established in five sites in Sierra Leone (all in Western Area Urban and Rural) in February 2021 to complements the existing AFP surveillance system with testing of sewage samples to isolate Polio and other non-polio enteroviruses. By the end of December 2021, a total of 234 environmental samples were collected weekly from the selected sites and shipped to the regional laboratory in Accra for testing. Results for all samples were as follows: 9 cVDPV2s, 104 NPENT, 107 negatives, 1 Sabin +NPENT, 5 Sabin, 2 NEV and 9 nOPV2.

Sentinel surveillance of Vaccine Preventable Diseases (VPD) including rotavirus diarrhoea and paediatric bacterial meningitis were supported by WHO at the Ola During Children's Hospital. Meanwhile, WHO in collaboration with MoHS and eHealth Africa supported Auto-visual AFP Detection and Reporting (AVADAR) project in four districts Kono, Tonkolili, Western Urban and Western Rural. The project played an important role in the AFP surveillance structure in the country. Community Health Workers (CHWs) and health facilities were supported to intensify community surveillance and reporting of AFP cases with resultant increase in AFP detection and reporting in the four AVADAR

implementing districts. A total of 143 alerts were recorded in 2021, of which 132 (92%) were investigated by District Surveillance Officers (DSOs) with 45 (34%) of the investigated alerts been confirmed to meet the standard case definition for true AFP cases and they were reported from all districts. Nationally, completeness and timeliness of the reports were 82% and 78% respectively. However, the project had reached its implementation end period and its being transitioned into e-Surveillance.

Also, as part of the VPD surveillance Measles, Yellow fever and Neonatal tetanus surveillance were done in all districts. For the period under review a total of seventy-six suspected measles cases were reported from fourteen district. Thirty two percent (27 cases) of these were confirmed measles IgM positive. Thirty suspected cases of Yellow Fever and thirteen cases of Neonatal Tetanus were reported and invested respectively from the districts.

Furthermore, after the Measles and Rubella outbreaks in 2015, 2016 and 2017. Measles/Rubella vaccine was introduced in 2019 in a nationwide campaign. This resulted in a drastic drop in Measles/Rubella case. However, in the last quarter of 2021, there were outbreaks in Port Loko, Kambia and Falaba Districts. This was inevitable as the cohort of unimmunized and non-sero

converted children had accumulated over the period FROM 2019-2021. The districts adequately responded to these outbreaks with support from WHO. Ring vaccination, outreach services, community engagement, active case search and case management were part of the key activities conducted (Figure 0-1 below).

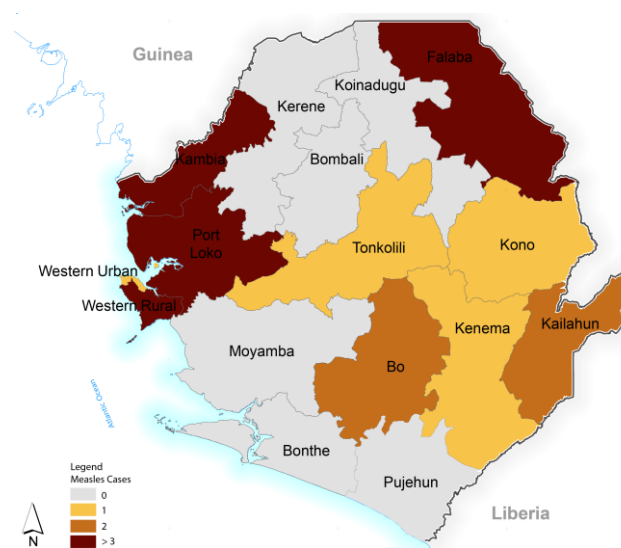


Figure 0-1: Measles/Rubella Outbreaks in Port Loko, Kambia and Falaba districts



## **Strengthened health systems to deliver on condition and disease specific service coverage**

Support for the analysis of the implementation of the national tuberculosis (TB), Human Immunodeficiency Virus (HIV) and Malaria Control Programmes facilitated understanding of country priorities, capacities, and equity issues. The findings were used to inform development of the next 5 years national strategic plans for the 3 diseases, and preparation of grant documents for the Global Funds application process.

## **Human immunodeficiency Virus - HIV**

Clear and long-term strategic directions for the Elimination of Mother-to-Child Transmission (EMTCT) of HIV and Paediatric HIV as defined in the Sierra Leone EMTCT of HIV and Paediatric HIV Strategic and Operational Plan 2021-2025 and the costed plan were reviewed and validated with technical contribution and financial support from WHO.

## **Tuberculosis**

Sierra Leone is one of the 30 high tuberculosis (TB) burden countries in the world with an annual incidence of 24 000 cases. There were an estimated 3 100 TB deaths, including TB deaths among HIV positive people in 2021.

Drug resistant TB (DR-TB) continues to be a serious threat to national health security. More than 600 people develop DR-TB each year and the country's capacity to diagnose and treat the drug resistant forms of TB is limited. There remains a huge gap between the estimated number of people who become ill with TB and DR-TB and the number of people who are diagnosed and put on treatment in the country. In 2021, only 66% of people who developed TB were diagnosed and put on treatment. About two-thirds of the estimated TB cases remain undetected in the community and thus transmitting the disease.

In 2020-2021, WHO provided technical support to the National Leprosy and TB Control Programme for the development of the next 5 years national strategic plan

(NSP). Through USAID funding, WHO provided financial and technical assistance to the MoHS to conduct the end-term review of current national strategic plan including the epidemiological review of TB in Sierra Leone.

The development of the new NSP 2021-2025 was informed by findings of the end-term review of the current strategic plan and the epidemiological review of TB disease in the country. The review indicated significant reduction in mortality due to TB disease over the past 20 years and Sierra Leone has met the 2020 milestone of 35% reduction in TB mortality. However, the gap between the estimated and notified TB cases remains wide and every year more than 5 000 TB cases are missed in the community.

In 2020, WHO provided technical support to the national Leprosy and TB Control Programme for the development of the next five-years national strategic plan (NSP).

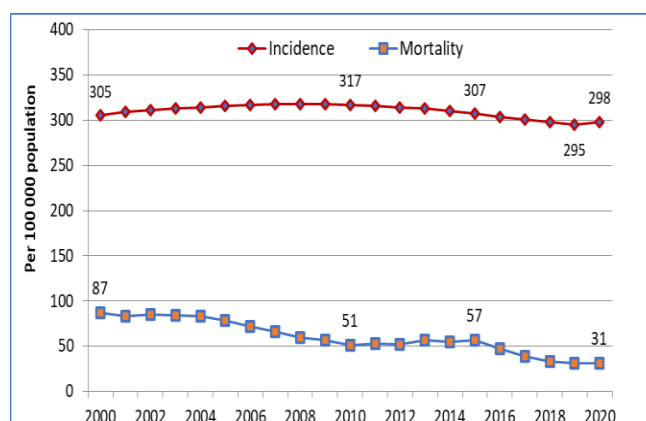


Continued technical support was provided to the MoHS for the decentralization of drug resistant TB diagnostic and treatment services and clinical guide was developed to support the implementation of all oral shorter MDR-TB treatment regimens in Sierra Leone. In collaboration with the Global Fund and MSF-Holland, the National Leprosy and TB Programme has launched DR-TB services in the Makeni Regional Hospital, the second DR-TB management centre in the country. This has significantly improved the country's capacity to enrol all notified DR-TB patients to second-line treatment. WHO has also conducted an independent assessment to evaluate the feasibility of initiating treatment for drug-resistant TB patients in the Bo regional hospital and provided workable recommendations to address the gaps in TB infection prevention and control measures to make the centre fit for admission and management of DR-TB patients. In addition, four GeneXpert machines were procured and installed through Global Fund grant to improve access to TB and DR-TB diagnosis services.

National guidelines and standard operating procedures (SOPs) were developed through technical support from WHO to maintain the continuity of essential TB services in the

context of the COVID-19 pandemic. District supervisors were oriented on the guidelines and SOPs and continued technical support provided to the national Programme to strengthen the collection, analysis and use of routine TB and MDR-TB data for decision making to mitigate the impact of COVID-19 on TB Programme performance.

WHO has also continued to strengthen the national capacity for the Global Fund grant management and implementation. Finding request was developed and successfully submitted to mobilize resources for TB programme implementation for the next 5 years and continued technical assistance was provided to the MoHS for the implementation of universal access plan to TB diagnosis, treatment, and care in the six high burden districts and for the decentralization of drug resistant TB services.



Trends in TB incidence and mortality rates: 2000-2020



Moving forward, implementation of universal access to TB diagnosis, treatment, and care in selected high burden districts and scale-up of the decentralization of DR-TB services will be the major priority areas of support to strengthen the national response to the epidemic. Revision of the national guidelines to adapt the recent global policy recommendations for the treatment of TB

and DR-TB, building capacity for the implementation of the new national strategic plan, and training of health care workers on TB and Drug Resistant TB will also be some of the high priority areas of intervention as the country continues to identify and treat everyone suffering from TB in Sierra Leone.

*WHO Global TB report 2021 Country Profile*

Indicator	Number	Rate per 100 000 population
<b>Total TB incidence</b>	24 000 (15 000-34 000)	298 (191-428)
<b>HIV-positive TB incidence</b>	3 300 (2 100-4 800)	42 (27-60)
<b>HIV-negative TB mortality</b>	2 400 (1 600-3 500)	31 (20-44)
<b>HIV-positive TB mortality</b>	690 (450-980)	8.6 (5.6-12)





A total of 4.6 million nets were distributed countrywide during the campaign with technical support from the Roll Back Malaria (RBM) partners including WHO

## Malaria

Malaria is widespread in Sierra Leone with the entire population at risk of the disease, and where it remains the leading cause of ill health and deaths among children and pregnant women. The disease is responsible for 47% of the outpatient visits by children under 5 years and accounts for 38% of outpatient visits of all ages to public health facilities.

Heeding the guidance provided by WHO to continue to provide core preventive and case management services for malaria during the COVID-19 outbreak, national campaign for long-lasting insecticidal nets (LLIN) was conducted with a revised strategy to mitigate impact of COVID-19 in Sierra Leone. According to a modelling analysis conducted by WHO and partners, undertaking the 2020

nationwide mass LLINs campaign and continuing to provide malaria prevention and control services would avert an estimated 13 000 deaths and reduce the number of malaria cases by 29% in the country in 2020 alone.

A total of 4.6 million nets were distributed countrywide with technical support from the Roll Back Malaria (RBM) partners including WHO and was sponsored by the Global Fund and the Presidential Malaria Initiative (PMI/USAID). For the first time in Sierra Leone, the WHO recommended piperonyl butoxide (PBO) insecticidal nets were distributed to households. PBO enhances the effectiveness of long-lasting insecticidal nets (LLINs).

For the first time in Sierra Leone, the WHO-recommended piperonyl butoxide (PBO) insecticidal nets were distributed to households.



Sierra Leone relies on multiple interventions to tackle the prevalence of malaria and reduce its devastating effects. Malaria treatment is free in the public health facilities, as is intermittent preventive treatment for infants and pregnant women and the routine distribution of long-lasting insecticidal nets.

To build capacity of health care workers to provide malaria in pregnancy (MIP) services during delivery of antenatal care (ANC), teams of national and district trainers were trained on MIP/ANC implementation of the new WHO recommendations with funding from PMI/USAID. These trainings facilitated the plan for rolling out and scaling up MIP/ANC implementation for 2 600 PHU staff nationwide.

To equip health workers with skills to effectively manage and provide supportive care for a case of suspected severe malaria/critically ill child, 2 600 health workers were trained on Rectal Artesunate Malaria Suppository implementation with funding from PMI/USAID.



The NTD Programme in collaboration with the in-country partners conducted annual Schistosomiasis (SCH) Mass Drug Administration (MDA) in seven endemic districts and integrated Onchocerciasis (ONCHO), Lymphatic Filariasis (LF) and Soil transmitted Helminthes (STH) in twelve endemic districts



## **National coordination and management of Neglected Tropical Diseases control and Elimination**

The recommended annual Mass Drug Administration campaigns were conducted to achieve the global targets for the PCT Neglected Tropical Diseases (NTDs) endemic in Sierra Leone and the Sierra Leone NTD Master Plan 2016-2020. The NTD Programme in collaboration with partners conducted annual Schistosomiasis (SCH) Mass Drug Administration (MDA) in seven endemic districts and integrated Onchocerciasis (ONCHO), Lymphatic Filariasis (LF) and Soil transmitted Helminthes (STH) in twelve endemic districts despite the COVID-19 challenges. To assess the progress made towards elimination of Lymphatic filariasis,

WHO recommends Pre-transmission assessment survey (Pre TAS) after 5 effective rounds of MDA.

The NTD Programme in collaboration with Hellen Keller International and partners conducted Pre TAS in Western Area Rural, Kenema, Kailahun, Bombali, Karene, Koinadugu and Falaba districts. The results showed that three districts (Western Area Rural, Kenema, Kailahun) out of seven districts passed the assessment. This means these three districts are now eligible to move to the next step of conducting a transmission assessment survey. The four districts that failed the Pre TAS will undertake annual MDA for two more years before redoing the pre transmission assessment.



WHO supported institutionalization of Health System Governance culminating in the development and launching of key sector priority strategic documents.

### **Strengthened health systems to address population-specific health needs**

In 2021, WHO facilitated three comprehensive readiness assessments to determine level of preparedness for response to EVD and Marburg as outbreaks of the same occurred in neighbouring Guinea. The Organization also guided periodic review of COVID-19 threats especially in anticipation of escalation in disease burden. Meanwhile, validated Multi-Hazard Public Health National Emergency Response Plan (NERP) was printed and distributed to all 16 District Health Management Teams (DHMTs) across the country to guide preparedness and response to emergencies. The government was also to

extend functional one-health collaboration to include the subnational level and district rapid response teams trained in “one-health compliance” methodology; while surveillance of priority zoonotic diseases in Sierra Leone are incorporated and being strengthened in the human health disease surveillance system.

Sierra Leone continues to institutionalize recommendations of the IHR-PVS. There is a functional One Health secretariat and periodic coordination meetings of stakeholders being held. However, there remains some gaps to address including making the human and animal health surveillance platforms fully inter-

**Vice President of the Republic of Sierra Leone launching the country's first National Health Financing Strategy, National Health Sector Strategic Plan and National Health and Sanitation Policy.**



operable and optimize the One Health information sharing at district level.

### **Strengthened Health Governance**

WHO supported institutionalization of Health System Governance culminating in the development of key sector strategic priority documents and launched by the Vice President of the Republic of Sierra Leone. Some of the documents included the National Health and Sanitation Policy (NHSP), National Health Sector Strategic Plan (NHSSP), National Research for Health Policy (NRHP) and National Health Sector Monitoring and Evaluation Plan. Other documents that have been produced included the Health Financing Strategy and the Primary Health Care (PHC) Handbook.

District Health System Planning and Monitoring was fully delivered with support to all 16 districts to prepare their annual plans as the decentralized health system governance is being reinforced. The district health management teams (DHMTs) were also supported in bottleneck analysis which they used to prepare their 2022 Annual Workplans which were collated to develop the national Annual Workplan.

### **Health Workforce**

Integrated Human Resources Information System (IHRIS) was scaled up with the training of all Human Resources for Health (HRH) technical staff at MoHS Headquarters and 20 DHMT members in the use of iHRIS tool - the most basic tool deployed in HRIS activities. More than 100 MoHS personnel

were trained across all levels in HRH Governance. This was to empower the HRH practitioners to utilize the available human resources effectively.

The Sierra Leone Postgraduate College of Health Specialties was supported to develop its Strategic Plan 2021-2025 which was finalized and launched by the President, His Excellency Dr Julius Maada Bio. This was followed by the inauguration and induction of about 150 foundation fellows.

The celebration of 2020 as the International Year of the Nurse and the Midwife provided the opportunity to increase advocacy to improve resources, capacity and support for nursing and midwifery in Sierra Leone. There was support in the development of Postgraduate strategy for Nursing and Midwifery, as well as support for the development of training courses for paediatric and neonatal nurses on one hand and another for care of the Critically Ill Child (CCC). Technical support was provided on embedding elements including nursing process, into nursing courses, and reinforcing this in regional trainings for nurses, midwives, and similar health care workers.

## **Reduced Number of people Suffering Financial Hardship**

WHO is supporting for establishment of the Sierra Leone Social Health Insurance Scheme (SLeSHI) as an Innovative Prepayment Health Financing Scheme. This includes the establishment of a functioning Secretariat with a Lead and technical and administrative staff. There are nine Working Groups covering various strategic areas needed for the setting up of the scheme and its roll out. These activities are undertaken in collaboration with several other health partners including (World Bank, UNICEF, GiZ, FCDO and some NGOs). The Ministry of Health and Sanitation was supported to develop its 2019-2020 National Health Account (NHA) which was validated awaiting a formal launch. This NHA had a sub-account for Sexual Reproductive Health Rights (SRHR). As part of the NHA development process, the capacity of 13 staff from the Director of Policy Planning and Information (DPPI), Ministry of Finance and some NGOs were built in Systems for Health Accounts (SHA) 2011, and Health Account Tools. The period also saw the finalization and launching of 2017-2018 NHA Report.

## Improved Access to Essential Medicines, Vaccines, Diagnostics, and Devices for Primary Health Care

WHO provided Technical and financial support to the Ministry of Health and Sanitation for assessment and supportive supervision of its blood banks in all districts. This support helped in improving the management of safe blood services. Through ASDB grant, WHO has procured blood commodities for the National Safe Blood Services (NSBS), including laboratory reagents and blood bags. WHO has given visibility to safe blood transfusion agenda through the commemoration of World Blood Donor Day each year and supported donor drives.

Support was provided for functioning blood laboratory fridges at Connaught, King Harman Road, and Rokupa Hospitals to create functioning blood banks. During the burns event with mass casualties, there was no shortage of blood for patients due to the effective coordination of the NSBS and implementing partners. WHO coordinated with AISPO for technical assistance support to strengthening the national blood bank services through developing SOPs, establishing national blood banks, and training.

WHO continued to advocate and mobilize stakeholders to reduce adverse effect of COVID-19 in the safe blood supply chain as well as blood donor mobilization.

WHO supported the development and validation of the Standard Treatment





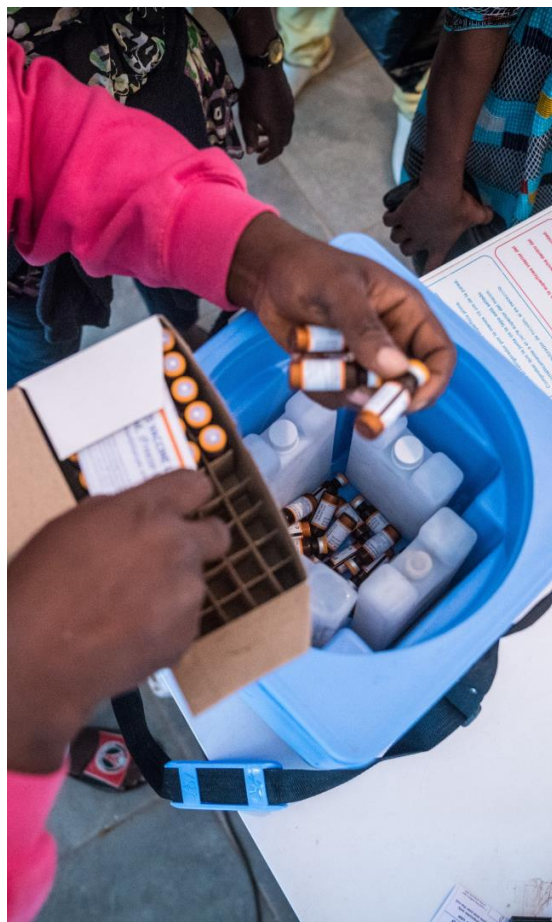
Guideline, Treatment Cards, and Essential Medicines List. The Directorate of Pharmaceutical Services was supported to establish Drug and Therapeutic Committees (DTCs) in 13 public hospitals at Bo, Connaught, Kingharman, Koinadugu, Kono, Lakka, Makeni, Magburuka, Moyamba, Ola During Children Hospital, Princess Christian maternity, Rokupa and Sierra Leone China Friendship. There was the strengthening of capacity of all the DTCs in areas including medicine use problems in hospitals which included irrational prescribing and use of antimicrobials and antimalarials, IPC, and AMR.

### Equitable Health Products

WHO made large procurements of equipment including 266 oxygen concentrators and guided MoHS on procurement and prepositioning based on of critical commodities. Creation of a group to review maintenance has been led by MoHS with technical input from WHO, including some regional TA on equipment and oxygen systems and maintenance.

The MoHS developed Medical Rehabilitation and Assistive Technology Policy and Strategy with support from WHO and in collaboration with other partners including the UN agencies and NGOs. This document was followed by the development of Assistive Technology Priority Equipment List which is to support the

country to identify assistive technology equipment that should be available in the country at the instances of the public and private sectors.





## Antimicrobial Resistance

There has been strong collaboration between WHO and other stakeholders in supporting the Ministry of Health and Sanitation to strengthen Antimicrobial Resistance (AMR) governance structure in line with the One Health structure in Sierra Leone. The Organization provided technical support in the development and validation of a comprehensive 5-year AMR surveillance strategic plan.

The plan includes a two-year costed implementation to guide efforts towards controlling and reversing the growing trend of AMR, and a 5-year Antimicrobial Consumption/Use (AMC/AMU) surveillance plan which provides strategic guidance to the establishment of a surveillance system to increase multistakeholder accountability and

stewardship of antimicrobials for optimal health outcomes with support from the Fleming Fund grant. With the support of the WHO Regional Office for Africa (AFRO), 54 MoHS personnel were trained on the WHO Point Prevalence Survey (PPS) Methodology on antibiotic use. One of the first noticeable impacts of the training was a nationwide PPS done in 26 hospitals to support establishment of antimicrobial stewardship programs in health facilities.

In commemoration of the World Antimicrobial Awareness week, WHO supported MoHS in advocacy and awareness raising activities to enhance understanding of AMR among healthcare workers and the public.

With the assistance of the three levels of WHO (HQ, AFRO, and the country office), Sierra

Leone became the first country to pilot the WHO AMR costing and budgeting tool for national action plans on antimicrobial resistance resulting in a fully costed 2-year national action plan.

For the first time, a regional and national structured operational research training initiative (SORT IT) was undertaken.

The 10-12 months training covers four modules with clear milestones and measurable targets. Four regional participants completed the training and their manuscripts have been published<sup>2</sup>. The national SORT IT training continues with 12 participants having successfully completed module 3 and have submitted their manuscripts for publication in an open-access journal.



---

<sup>2</sup> [https://www.mdpi.com/journal/tropicalmed/special\\_issues/AMR](https://www.mdpi.com/journal/tropicalmed/special_issues/AMR)

# HEALTH EMERGENCIES



## **Countries prepared for health emergencies**

WHO technical and financial support to the Government of Sierra Leone in 2020-2021 contributed to the reduction of the health consequences of public health emergencies, natural disasters, and conflicts which in turn minimized social and economic impact on the country. Key achievements were noted in the areas of prevention, early warning, early detection, and rapid and effective response operations in acute and protracted emergencies arising from hazard with health consequences.

## **All-hazards emergency preparedness capacities in countries assessed and reported**

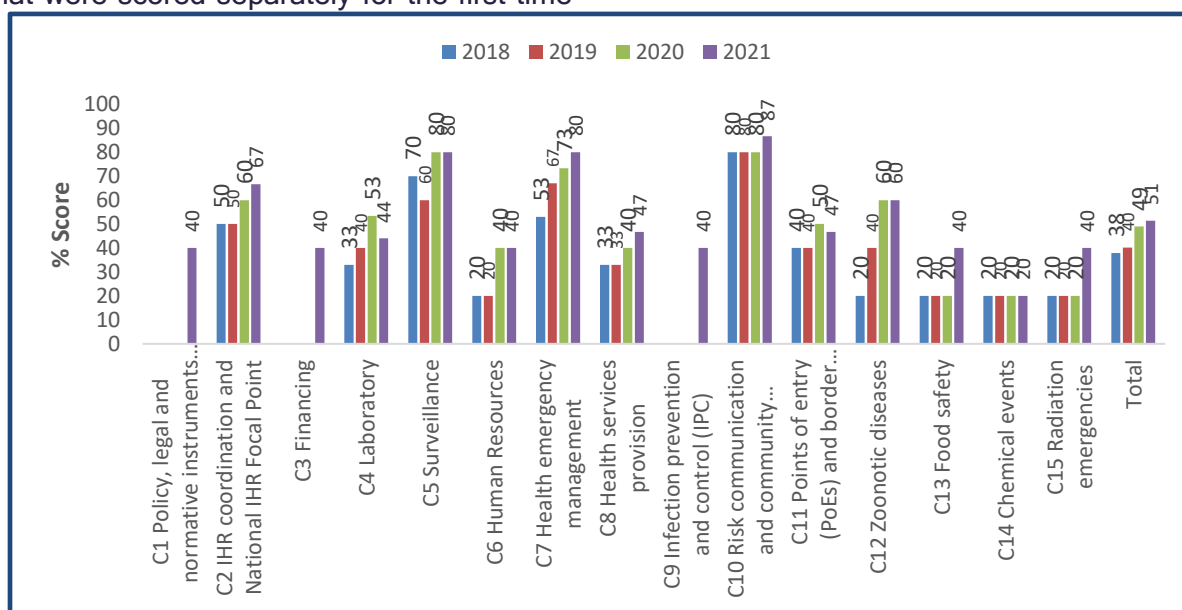
Improving the national capacity to respond to emergencies remains a key focus of support to the Ministry of Health and Sanitation and other national emergency response authorities. The World Health Organization continued to provide strategic technical and financial support to bolster the national capacity to prevent, detect and respond to public health emergencies. This capacity was evaluated through annual assessments which were conducted, and reports shared with the World Health Assembly as per International Health Regulations guidelines.

The continued support to the Government contributed for improvement in the overall health security capacities of the country from 49% in 2020 to 51% in 2021 as per the International Health Regulations State Party Annual Reports (SPAR). The 2021 assessment used a new SPAR tool (second Edition) that assessed 15 capacities compared to 13 capacities in 2020.

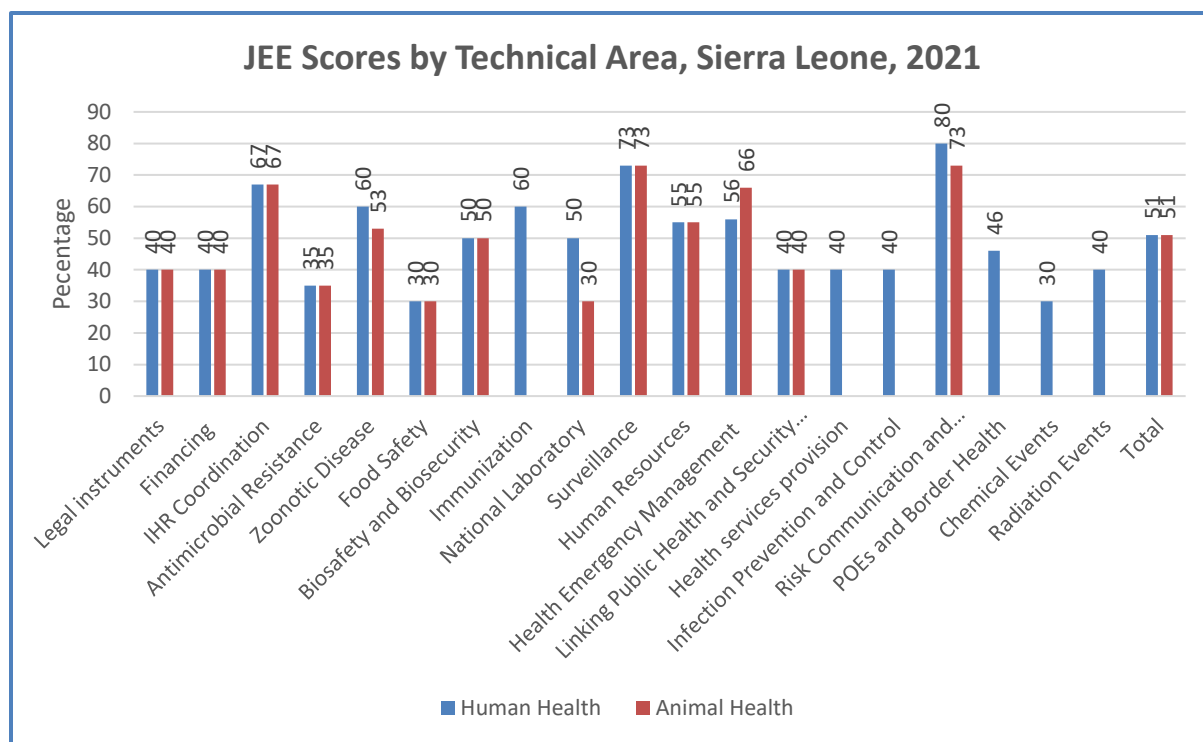
In 2021 there was improvement in 6 IHR capacities: IHR coordination, health emergency management, health services provision, risk communication, food safety and radiation emergencies. Capacities that maintained the same score were four: surveillance, human resources, zoonotic diseases, and chemical events. There was a drop by two capacities (Laboratory and POE) mostly attributed to new indicators. Capacities that were scored separately for the first time

were: policy, legal and normative instruments, Financing, and IPC (See Figure below).

The country also conducted Joint External Evaluation (JEE) Self-assessments in 2020 and 2021. The 2021 assessment used a new JEE tool (3rd Edition) that had new and revised indicators compared to the second Edition tool. Due to the new tool, the overall JEE scores dropped from 57% in 2020 to 51% in 2021 while the score for animal health was 51% in 2021 compared to 52% in 2020. These scores per technical area are as shown below:



SPAR Scores, Sierra Leone, 2018-2021



*JEE Self-Assessment Scores by Technical Area, Sierra Leone, 2021*

WHO also supported the Government to conduct a midterm evaluation of the 5-year NAPHS strategic plan (2018-2022). This was carried out in June 2021 (at 3 and half years of implementation). The assessment showed that 52% of the planned activities had been implemented against an expected target of 70% for that period as shown in the figure below. This achievement was realized despite the COVID-19 pandemic which slowed down implementation of many of the planned activities.

Three comprehensive readiness assessments to determine level of preparedness to respond to EVD and Marburg outbreaks were also conducted with technical

support of WHO in the wake of similar outbreaks that occurred in neighbouring Guinea. An EVD Outbreak Preparedness and Contingency plan was developed in readiness/preparedness for eminent threat from the Guinea outbreak.

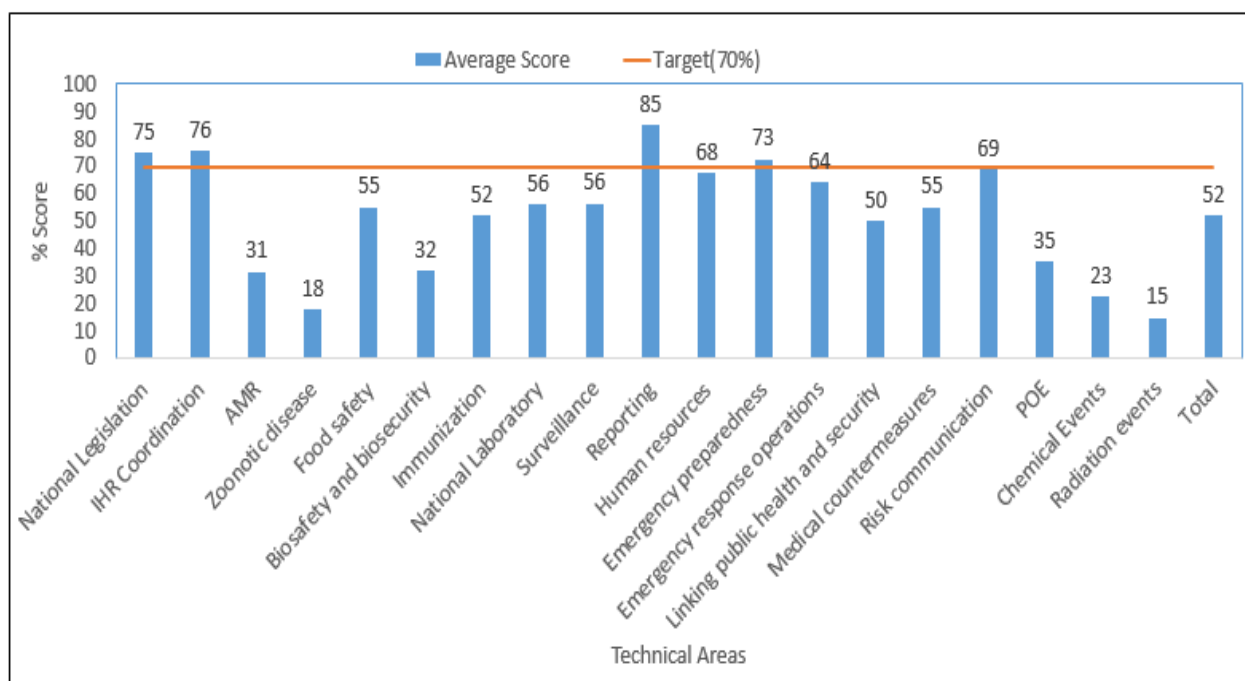
Throughout the COVID-19 pandemic, WHO was at the forefront in assisting the government and stakeholders to prepare for, and institute various public health measures to limit the spread of COVID-19. WHO also guided periodic review of the effectiveness of public health measures for COVID-19 response especially in anticipation of increase in cases. This was done through routine and Intra-Action Reviews. WHO also supported

counterparts in government to develop and adapt guidance documents, SOPs, materials and training of required personnel and procurement of critical commodities to support laboratory testing, IPC, and case management for COVID-19.

To mitigate the impact of potential outbreaks due to Cholera, WHO supported MoHS to conduct a risk assessment and mapping of Cholera hotspots, which informed the development of the National Cholera Elimination Plan in line with the global strategy to eliminate cholera by 2030.

## Capacities for emergency preparedness strengthened

The number of IHR core capacities that had at least a level 3 score or (developing capacity) based on the IHR SPAR were 5/15 (33%) in 2021 compared to 5/13 (38%) in 2020. Following the assessments (SPAR and JEE), the National Action Plan for Health Security (NAPHS) annual operational plans were developed and implemented in 2020 and 2021. An online tracking tool to monitor progress of the implementation was introduced and this helped the technical area leads to closely monitor progress of their planned activities which eventually contributed to the improvement of their JEE indicators.



Percentage Implementation Rate of NAPHS (2018-2022) Strategic Plan after 3.5 years of implementation (n=167 activities)

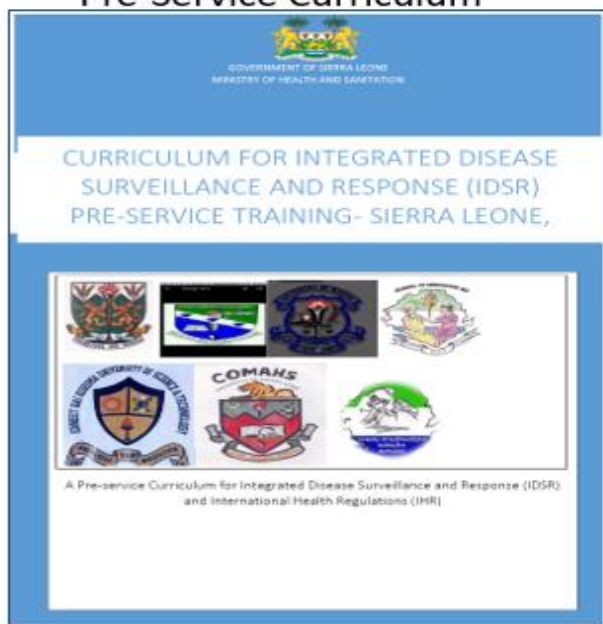
In 2020 and 2021, Sierra Leone continued to utilize and strengthen the national disease surveillance system. All 16 districts in the country are implementing the IDSR system (indicator and event-based surveillance) with at least 90% coverage of public health facilities. The main achievements in 2020 included introduction of the IDSR/IHR training curriculum, cascading of one-health to the districts, scale up of electronic case-based reporting and supporting the COVID-19 response. In 2021, the gains made in 2020 were sustained with a resilient IDSR reporting system with over 95% weekly facility reporting rates in all 16 districts.

To further strengthen and institutionalize Integrated Disease Surveillance and Response (IDSR) and the International Health

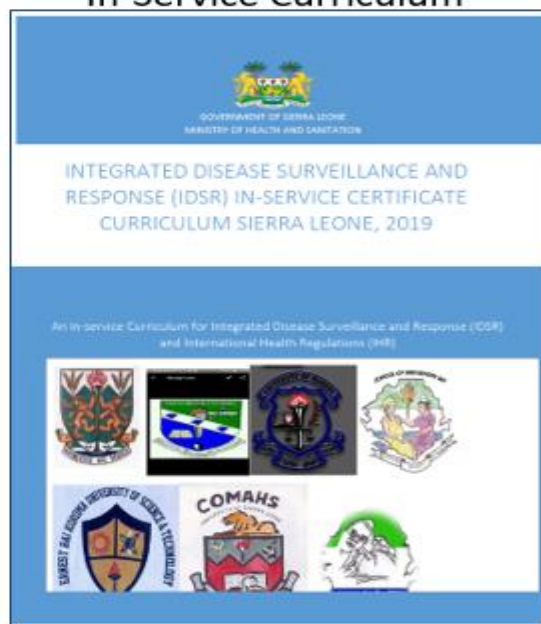
Regulations (IHR), WHO supported completion of the IHR/IDSR curricula development which was launched in October 2020. The curricula saw the introduction of a pre-service and in-service curriculum for public health training institutions to have an IHR/IDSR course. WHO also supported the adaptation and rollout of the third edition IDSR guidelines. In this revised edition, some changes were made to make the surveillance system a more versatile tool in disease control.

In 2021, perinatal deaths and snake bites were included as events under weekly surveillance. These, among other changes are part of the ongoing renewal and strengthening of the IDSR system in the country.

### Pre-Service Curriculum



### In-Service Curriculum



*DSR Pre-Service and In-service Curriculum for Public Health Training Institutions*



Border health once again proved to be a critical component of the public health system. Assessments of public health capacities of Points of Entry (PoE) at border crossings and wharves in seven border districts were carried out in 2020 and 2021. The assessments found that capacity to respond to public health emergencies was either fully or partially established in 45% of the PoEs. Findings were shared with MoHS and partners.

Data quality assessments were conducted in 157 health facilities from the 16 health districts across the country. Overall, 89.03% of the 5 024 weekly disease specific reports reviewed and analysed were within the acceptable range for overall accuracy Verification Factor (DHIS 2 data in comparison to the Health Facility Register data) which is 95% to 105%.

WHO supported engagements of communities to increased awareness on EVD preventive behaviours in responding to EVD risk emanating from neighbouring Guinea. Enhancement of public information and dissemination including mitigating fears, rumours, and misinformation in the population, empowered communities in maintaining trust in government and partners' interventions carried out across the country to targeted groups.

## Epidemics and Pandemics Prevented

In 2021, clinical laboratory interface survey was implemented in seven public health facilities with the objective to assess the perceived factors that influence utilization of the bacteriology unit by clinicians for laboratory diagnosis and treatment of patients with suspected infectious diseases in Sierra Leone. Over 50% of the laboratory scientists had not completed certified bacteriology training. Following the survey, a quality improvement plan was developed and is being implemented.

WHO also supported biosafety audit in all district hospital laboratories and five selected laboratories from the Western Area. Equipment mapping for the proposed bacteriology laboratories was also done while criteria for outsourcing of specimen referral courier was developed. Meanwhile, 80 laboratory technicians and 40 surveillance officers were trained on specimen management.





WHO donated various consignments of laboratory commodities for COVID-19 as well as routine laboratory testing supplies to the Ministry of Health and Sanitation.

WHO support in the COVID-19 pandemic response contributed to reduction in spread of cases. To strengthen the country's response to the pandemic, WHO donated various consignments of laboratory commodities for COVID-19 as well as routine laboratory testing supplies to the Ministry of Health and Sanitation. The donations formed part of the Organization's continued assistance to Sierra Leone to scale-up COVID-19 testing and confirmation of cases in communities and public health facilities at national and sub-national levels. The support over the period also facilitated heightened surveillance for Ebola and ensured the availability of critical laboratory testing services for appropriate patient management.

### **Health Emergencies rapidly Detected and responded to**

WHO continued to strengthen implementation of the Integrated Disease Surveillance and Response (IDSR) and the International Health Regulations (IHR 2005) with focus on national priorities. Indicator-based surveillance, events-based surveillance, community-based surveillance, use of electronic web-based tools in surveillance and response have been strengthened, including introduction of EIOS (Epidemic Intelligence from Open Sources). Weekly surveillance data is received from all the districts with nearly 98% of health facilities submitting their weekly surveillance data.



WHO donated various consignments of laboratory commodities for COVID-19 as well as routine laboratory testing supplies to the Ministry of Health and Sanitation.

Sustainability of the gains made in the IDSR system was one of the focus areas in the last biennium. Sierra Leone is now implementing an IDSR-IHR curriculum in the public health training institutions with colleges and universities having started integrating the curriculum into their various courses. Documentation of IDSR-IHR best practices has continued with 11 manuscripts developed and four published during the biennium.

The WHO funded toll-free telephone (CUG) system continued to support disease alert, notification, and reporting. Weekly disease surveillance data continued to be relayed via the e-IDSR system from the health facilities into the national database (the DHIS 2). Reporting of suspected COVID-19 cases was integrated into the weekly IDSR and case-based electronic reporting system, which is

also relayed via the e-IDSR platform. WHO continued to support the MoHS to review and strengthen the e-CDBS implementation, which will continue to undergo more reviews and improvements in the next biennium.

Following the EVD outbreak in Guinea, rapid IPC assessment was conducted in 63 Peripheral Health Units (PHUs) in the eight EVD high risk districts as part of EVD preparedness. The assessment focused mainly on screening and isolation capacities, hand hygiene and PPE stockpile in these PHUs. Gaps in IPC implementation were identified which included non-triage screening facilities, functional isolation units, minimum stock of PPE not available, poor waste management among others. Action plans were developed and shared with the district health teams for improvement.



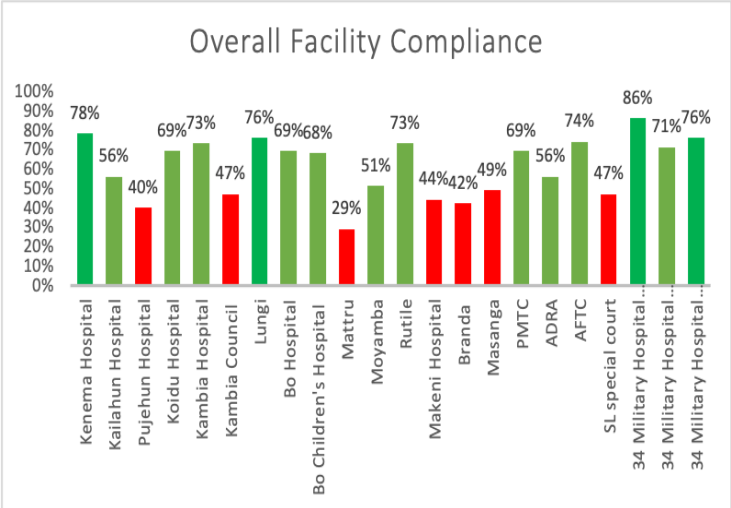
RRT Inception Meeting in Falaba on EVD preparedness

RRT members reviewing patients' register with health staff for retrospective active case search at Faama CHC in Nomo chiefdom, Kenema.

Rapid Response Teams (RRTs) were capacitated with logistics and skills to enhance effectiveness in all phases of response to emergencies and aptness in rolling out recommended public health interventions. The National RRTs supported districts in the investigation and response to various public health alerts/threats including outbreaks of Measles in three districts. This timely support helped in reducing the adverse impact of these threats and outbreaks.

In the wake of the November 2021 mass casualty fire disaster in Freetown resulting from fuel tanker explosion that affected more than 300 people with 138 deaths, WHO delivered 6.6 metric tons of emergency medical supplies and commodities to support the government's

response to the disaster. These lifesaving commodities were mobilized within 24 hours of WHO receiving a request from the Sierra Leone authorities for urgent support to respond to the incident. Furthermore, WHO assisted the MoHS in activating the Incident Management System and coordinated public health response to the fire disaster, including deployment of the first international



Emergency Medical Team (EMT) to support the clinical and surgical management of survivors of the disaster.

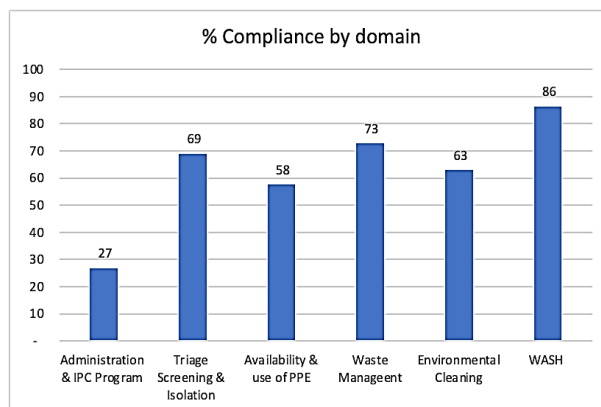
### **Strengthening Infection Prevention and Control (IPC) in 2020 and 2021.**

Prior to the confirmation of Sierra Leone's first COVID-19 case on 31 March 2020, several assessments of healthcare facilities (private and public) were conducted to determine the country's preparedness and readiness to provide quality healthcare services to suspected and confirmed COVID-19 patients. Findings from the assessments and simulations facilitated the development of a detailed response plan leading to the implementation of key activities such as the training, strengthening of triage and isolation units, provision of IPC materials to all healthcare facilities and establishment of COVID-19 Treatment Centres (CTC) and Community Care Centres (CCC).

A total of twenty-two (22) COVID-19 centres were assessed with the overall facility compliance, in different centres and compliance in different domains detailed as shown in the Figures below. This assessment provided relevant data to MoHs in planning for total bed and surge capacities.

To improve on the knowledge, skills, and competencies of healthcare workers, WHO supported the MoHs to adopt the WHO

COVID-19 training manual for training of over 6 500 frontline healthcare workers (HCWs) from both private and public health facilities since 2020. The training covered IPC measures, COVID-19 epidemiology, and clinical management.



Finding local solutions for local problems with local ownership such as the production and promotion of alcohol-based hand rub (ABHR) solutions helped behaviour change and improved hand hygiene practice among

2021 showed improvement in hand hygiene practices with increased availability of the locally produced ABHR at 79% of hand hygiene stations. A sustainability plan has also been drafted to ensure continuity with the



healthcare workers. Additionally, it helped to reduce the burden of healthcare-associated infections, including COVID-19, Ebola, and antimicrobial resistance. With funding from the British Government through FCDO, WHO provided technical support in the local production of 47 780 litres of alcohol-based hand rub (ABHR) in 2020 for distribution to health facilities countrywide. Results from latest IPC assessments in the last quarter of

production of the commodity. The local production of ABHR is cost-effective and sustainable as all the ingredients are being purchased locally and the cost of producing 500 ml of ABHR locally is USD 4-5 as compared to USD 10 for 350 ml if imported.

By the end of 2021, Sierra Leone recorded a total of 269 COVID-19 cases among health workers which was 3.5% of the total confirmed cases in the country. There were also 6



confirmed COVID-19 related deaths of health workers. Considering the rate of health worker's infection, surveillance of healthcare associated infections (HAI) among healthcare workers was critical to providing scientific data to inform and guide IPC strategies at both national and facility levels. The HAI (COVID-19) surveillance employed descriptive survey methods to determine whether healthcare workers infected with COVID-19 contracted the virus at their healthcare facilities or in the communities. The nationwide data collection was done by the National Infection Prevention and Control Unit (NIPCU), with technical support from WHO over a 4-week period. The

survey found that 53.3% were infections acquired within health facilities compared to 46.7% community acquired infections

Multiple assessments conducted by the MoHS and partner organizations such as WHO and CDC during 2017-2021 highlighted the need to update the national guidelines in 2021 to provide reference guidance on IPC best practices in different medical specialties and to include prevention and triaging of infectious diseases of epidemiological importance.

The national IPC unit with support from partners conducted routine monitoring of IPC compliance in 29 public hospitals across 16 districts and 575 Peripheral Health Units (PHUs) using standardized IPC monitoring tools. Performance of facilities assessed was graded based on the total standards in the Checklist/Tool guided by the colour coding table

Facilities that were partial compliant were 16 Or 55% compared to 14 (48%) in 2022 and 8 (28%) achieved a full-compliant level compared to 14 (48%) in 2021

Out of the ten IPC domains monitored, triage and isolation standard carry the highest score of 96%, followed by PPE (89%) and hand hygiene (81%). Environmental cleanliness



When compared across two years the overall IPC performance of hospitals improved by a difference of 14% from 69% in 2020 to 83% in 2021. This signifies overall progress in the implementation of IPC programme activities.

In terms of compliance level among the 29 hospitals assessed, 5 (17%) were non-compliant, compared to only 1 (3%) in 2021.

and waste management were consistently the least performing domain across both quarters. Actionable plans were developed for improvement based on the identified gaps.

A total of 575 PHUs were assessed across the 16 districts in 2021 with only 14 (2%) having been compliant, 95 (17%) were partial



compliant and majority of the PHUs, 81% were noncompliant with IPC standards.

The average performance of all assessed PHUs across all districts was low. With Bombali being the best performing district

with an average score of 68% and lowest 35% (Tonkolili). The overall performance in all domains was significantly low with a mean score of 54%.



## HEALTHIER POPULATIONS.



### **Strengthened National capacity for the management of malnutrition and promotion of optimal infant and young child feeding,**

Undernutrition remains a major public health and developmental challenge among young children, and it is characterized by significant variations in stunting, underweight, and wasting. However, the prevalence of stunting and underweight in the country reduced by about 2% over the last 6 years. The stunting prevalence among children under 5 years reduced from 28.8% in 2014 to 26.2% in 2021, underweight reduced from 12.9% to 11% in 2021 while the prevalence of wasting remains a challenge and stands at 5.2%.

Improvements in breastfeeding practices in the country have been observed, wherein, early initiation to breastfeeding rate increased by almost 14% from 75.3% in 2019 to 89.4% in 2021. The exclusive breastfeeding rate of infants 0-6 months stands at 52.7%, and 53.1% for continued breastfeeding up to 23 months.

Adequate complementary infant and young child feeding (IYCF) is still sub-optimal. About 40% of the children are prematurely introduced to solid/semi-solid foods before the age of six months. Overall, 22.9% of infants between 6 months to 23 months received diversified diet (minimum dietary diversity); 33% met the recommended



minimum meal frequency and only 4.9% met the minimum acceptable diet.

A major and significant success recorded in 2021 was the enactment by the Sierra Leone Parliament of the Breastmilk Substitute Act

2021. Technical support was provided in the revision of the National Nutrition policy 2022-2026 which will be validated in 2022.

National training packages on the management of severe acute malnutrition



among children for both in-patient and outpatient care facilities have been developed. Practical actions were also supported to improve the quality of care for children with severe acute malnutrition and with medical complications (SAM/MC) admitted at the inpatient care facilities. These actions included the training of 228 health care providers from 10 districts, logistical supported provided by procuring mixing and feeding equipment and printed reporting tools for the management of in-patient children with SAM/MC across the country.

Protecting, promoting, supporting, and sustaining breastfeeding in hospitals remains a major priority of the Ministry of Health and Sanitation towards attaining the national target of 75% exclusive breastfeeding by 2025. To contribute to the achievement of this target, 330 Maternity Staff at Regional hospitals were trained on baby friendly hospital initiative (BFHI). Four hospitals (Makeni, Port Loko, Kenema and Bo) out of the 5 implementing hospitals have attained over 75% of maternity staff trained on BFHI. In addition, monitoring and supervision, one-to-one counselling of mothers on optimal infant feeding practices was carried out in the five BFHI implementing hospitals at Princess Christian Maternity Hospital, Makeni, Port Loko, Kenema and Bo. Data from these hospitals revealed that out of the 10 121 mothers interviewed and

counselled on optimal infant feeding practices 8 006 (79%) reported that they initiated breastfeeding within an hour of birth.

BFHI Training of paediatric nurses in Bo, Capacity of food safety officers in the Ministry of Health was built on the prevention, monitoring and response to food safety incidents. This contributed to a shift in the International Health Regulations scores on core capacities from red (no capacity) to amber (developed capacity).

In response to the COVID-19 pandemic, technical support was provided to the Food and Nutrition Pillar in the development of Standard Operating Procedure (SOPs), guidance notes and Information Education and Communication (IEC) materials on maternal, infant, and young child nutrition in the context of COVID-19. These were disseminated to hospitals, Peripheral Health Units (PHUs) and communities.

## Risk factors reduced through multisectoral action

Significant progress was made in accelerating implementation of the WHO Framework Convention on Tobacco Control (FCTC) in Sierra Leone. With funding from the FCTC 2030 project, WHO supported high level advocacy and consultations on the draft tobacco bill with Members of Parliament, Ministries, Department and Agencies, civil society and other key stakeholders at national and subnational levels leading to presentation of the draft Bill in Parliament and ongoing legislative processes for its enactment.

WHO also provided technical and financial support for regional consultative meetings on the development process of the National Alcohol Policy development, focusing on Restrictions on alcohol availability, taxation, drink driving counter measures, advertising



and marketing and community action for reducing harm from alcohol abuse.

Work on the School Health Policy and Strategy have seen remarkable progress. Series of consultations with key stakeholders at national and regional levels have been concluded and will further inform revision of the Policy & Strategy. There is consensus on a school health package adopted from the six pillars as proposed in the global health promoting schools' standards.

## Strengthened Healthy environments to promote health and sustainable societies

Results of the 2017 Multiple Indicator Cluster Survey (MICS6) showed that only 2% of the households' populations were using safely managed drinking water services, 58% of households had access to basic drinking water, 16% basic sanitation and 23% practicing basic hygiene. To improve these indicators, WHO supported MoHS and

Ministry of Water Resources (MoWR) to train 63 health facilities staff in Western Area Rural District on water safety surveillance. To address the WASH situation during the COVID-19 emergency, WHO supported the Ministry of Health and Sanitation (MoHS) through the Directorate of Environmental Health and Sanitation to train 14 District Health Management Team members as master trainers from six Districts (Bo, Kenema, Western Area Urban and Rural, Bombali and Kono) on Water, Sanitation and Hygiene Improvement Tool (WASH-FIT) and assessment of the WASH situation at health care facilities using WASH-FIT Tools. The trainings were geared towards identifying challenges on sanitation, hygiene, health care waste management and other aspects of environmental health and facility management issues at the health facility level. A total of 108 health staffs from 54 health facilities across the country have benefited from the cascade trainings on WASH-FIT.

WHO supported assessment of Occupational Health and Safety for health workers with the aim to collect data to inform development of policy guidelines and establishment of occupational health and safety programme for the healthcare workers in Sierra Leone. To address some of its recommendations, 29 health workers

including eight (28%) females were trained on workplace improvement

The Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS) is a UN Water initiative implemented by the World Health Organization. WHO provided both technical and financial assistance to the MoHS to conduct GLAAS survey 2021 to collect and validate data to inform decision making.

GLAAS ensures global and regional level monitoring of inputs such as human resources, finance, other deliverables, and the enabling environment (laws, plans, guidelines, strategies and policies, institutional arrangements, and monitoring), which are required to sustain and scale-up water, sanitation, and hygiene (WASH) systems and services especially to the most vulnerable population in Sierra Leone. GLAAS also analyses the factors associated with progress, to identify drivers and bottlenecks, highlight knowledge, gaps and assess strengths and challenges within and across the country and inform decision making and policy formulation in WASH. To establish multi sector advocacy network on the importance of addressing climate change in the health sectors, the government of Sierra Leone through Ministry of Health and Sanitation made a commitment letter to climate change and health programs that

was shared before the COP 26 event in Glasgow 2021.

In the next biennium, WHO will support the MoHS to continue developing the health system to be resilient to the impacts of climate change through implementation of the climate change and health vulnerability and adaptation assessment (V and A), develop a National Adaptation Plan informed by the health vulnerability and adaptation

assessment, which will form part of the National Adaptation Plan (NAP) and develop the health system to be sustainable and low carbon ensuring that it contributes to meeting the emission targets of the Paris Agreement.



## IMPROVED COUNTRY SUPPORT



### **Strengthened country capacity in data and innovation**

The MoHS was supported to develop its Health Information Systems Policy (HISP) that was validated, printed, and launched by the Honourable Vice President during the commemoration of the International Universal Health Coverage (UHC) Day in December 2021.

The implementation of Data Quality Assessment (DQA) was supported in five districts and monitoring visits conducted to

mentor data entry and Monitoring and Evaluation officers leading to complete inputting of four months data backlogs into the DHIS in all 16 districts.

### **Strengthened leadership, governance, and advocacy for health**

Every other year, Country Offices of WHO develop their operational plans informed by the Organization's General Programme of Work (GPW) and aligned with the priorities of their host countries. The WHO Sierra Leone



Operational planning for 2022-2023 biennium was developed through a participatory and consultative engagements with the MoHS and other Stakeholders. The consultations included a two-day technical and operational planning retreat with the Ministry of Health and Sanitation that resulted in integrated and joint workplans well aligned with the current General Programme of Work of the World Health Organization (GPW13) and the Country Vision to guaranty access to affordable quality health care services and health security without suffering undue financial hardship to all people in Sierra Leone.

The deliberations were held by senior management and technical officials from the

Ministry of Health and Sanitation, including the Chief Medical Officer, the two Deputy Chief Medical Officers (Public Health and Clinicals), Directors and Managers and their counterparts from the WHO Country Office, led by the Country Representative.

The priorities defined in the operational planning will be implemented through four main pillars and will contribute to the attainment of triple billion goals envisioned by WHO namely, one billion more people benefiting from Universal Health Coverage, one billion more people better protected from health emergencies and one billion more people enjoying better health and wellbeing.

### Joint Planning Retreat WHO-MOHS



In addition to the priorities guiding WHO for 2022-2023; the two institutions agreed on mechanism for joint regular monitoring of the work plan implementation.

### **Strategic priorities resourced in a predictable, adequate, and flexible manner through strengthening partnerships**

The country mobilized financial resources to support the national response to COVID-19 and implementation of routine public health interventions. These successful mobilizations led to the increase in the budget space for 2020-21 biennial workplan. There have been improved relationship with the traditional donor partners while partnerships and networking were established with new multilateral and bilateral donors.

High level engagements were held to garner support and resources to support the operations of WHO and implementation of critical national health interventions.

At the end of 2021, a partners evening was organized to acknowledge partners support to the Organization. The event also aimed to share information on the achievements and challenges as the Organization strive to support the government in contributing to the attainment of the triple billion targets by 2030. The event was attended by over 60

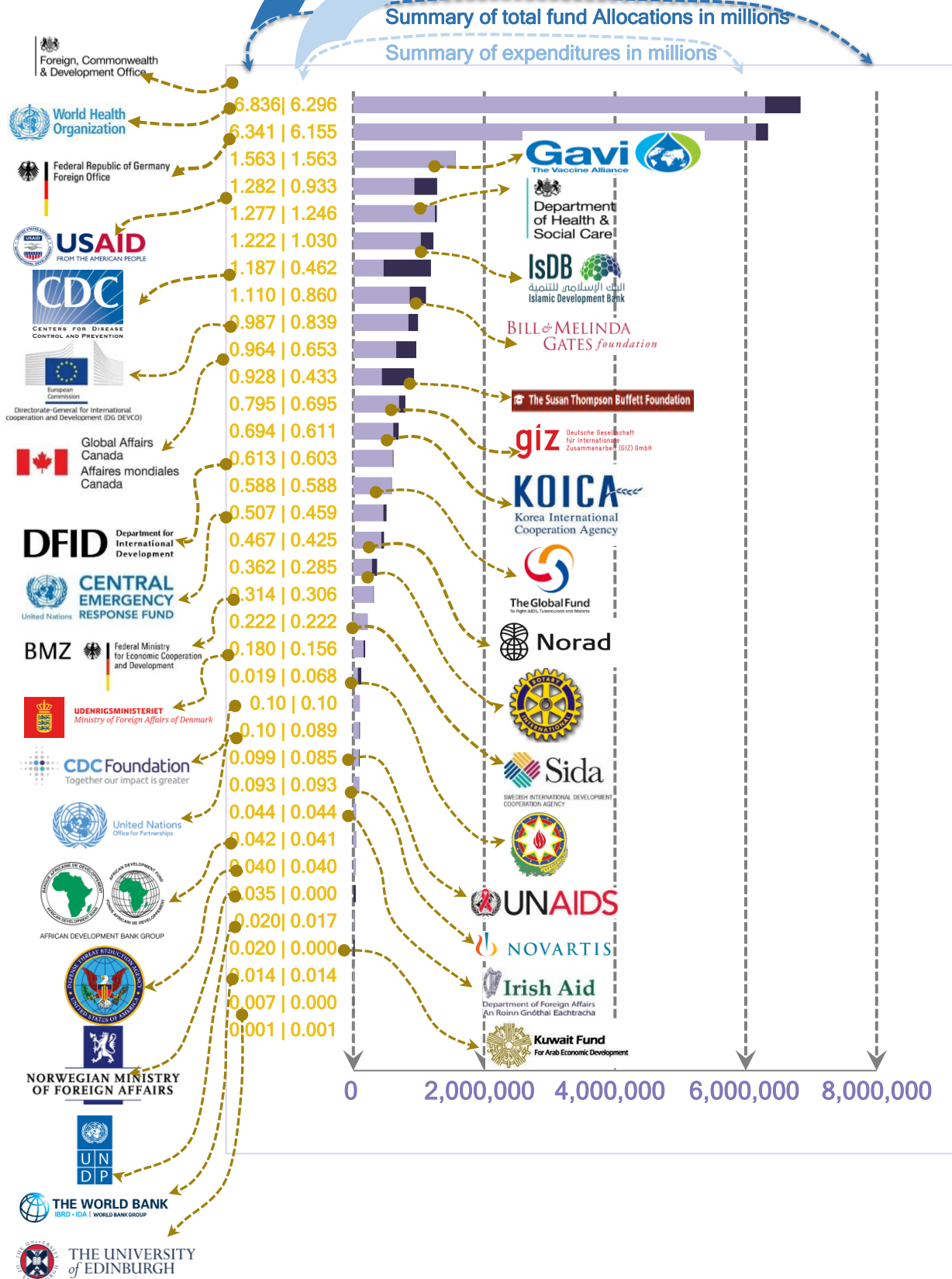
participants including the Minister of Health and Sanitation and other senior government officials, diplomats and other development partners, Ambassadors, senior officials from UN agencies among others. The event was also an opportunity to hear the Minister reiterating the government's priorities for the health sector, which provided a clear guidance for future resource needs, mobilization, and allocation.



Implementation of the 2020-2021 Biennial Workplan for Sierra Leone was supported by in kind and technical assistance and funds from the following donors and development Partners:

**2020-2021 Biennium** | **US\$ 29 Millions**

**Allocations 29,173,802**  
**Expenditures 25,412,514**



## Financial, human, and administrative resources managed efficiently

The Operations Cluster of the WHO Country Office in Sierra Leone oversees the finances, human resources, ICT, procurement, and logistics units. These units provide administrative and operational support to the technical units for the implementation of the day-to-day activities and emergency operations to ensure efficient and effective programme support and delivery.

The total budget mobilized for WHO Sierra Leone for 2020-2021 was USD 29 173 802

including USD 23 972 314 from voluntary contributions to implement the Workplan. The funds mobilized represent 88% of total funds available - a significant level of funding for the period. By the end of the biennium, the country office achieved an overall implementation rate of 94% of its workplan.

Within the 2020-2021 biennium, the COVID-19 pandemic significantly altered working arrangements. However, the Organization devised means of ensuring business continuity and effective programme implementation and delivery.



# STAFF ASSOCIATION



*Maintaining solidarity in a conducive work environment*

WHO Sierra Leone Country Office has a formidable Staff Association established with the objectives of promoting and safeguarding the rights, interest, and welfare of staff members, foster close fellowship with other UN Staff Associations through the Federation of UN Staff Association (FUNSA) and to serve as interface between the administration and staff.

Despite membership of the Association being voluntary, all current Staff of the Country Office are members.

During the biennium, the Association's constitution was reviewed, participated in the comprehensive salary survey for UN national staff and supported welfare and bade farewell to staff leaving the Organization on retirement or end of contract.

To Work the Talk and encourage staff members maintain a healthy lifestyle, a mini gym was refurbished with the installation of physical exercise equipment.

And in Walking the Talk, the Association also worked with Management of the office to initiate a monthly 4-5 km walk as part of the quest to ensure a healthy lifestyle by all staff members.



