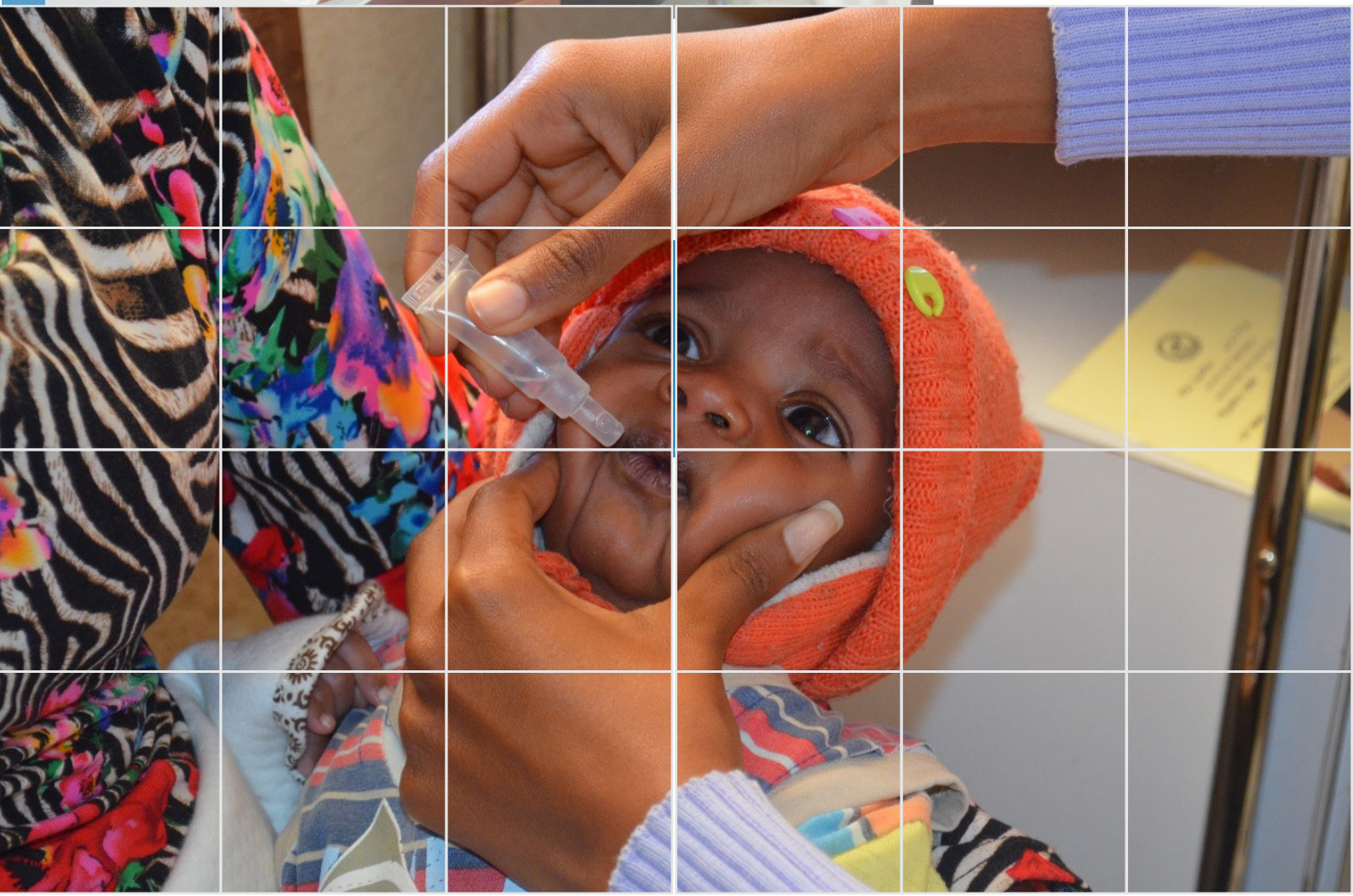
World Health Organization



WHO Eritrea Annual Report 2022

Group photo of WHO Eritrea staff members after attending a training on Preventing & Responding to Sexual Exploitation,Abuse and Harrassment (PRSEAH). Photo © WCO Eritrea 2022.

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Annual Report 2022

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Contents

Acknowledgements

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Coverage in Eritrea. The stewardship, support, partnership and collaboration received from the Ministry of Health Eritrea has significantly contributed towards delivery of our programmatic interventions and achievements as elucidated in this report, which directly or indirectly contribute to improving the health of the people of Eritrea.

Development Partners of WHO in Eritrea.

The WHO collaborates with all development partners in a results-oriented partnerships to promote Universal Health Coverage in Eritrea. This collaboration harnesses the comparative advantage of the partners for complementarity. Significant efforts are therefore made to ensure strong partnerships with all stakeholders, including multilateral and bilateral.

WHO continues to leverage its convening powers in accessing and utilizing the largest share of partnership on offer in the health landscape in Eritrea. The development partners who supported WHO Eritrea in 2022 includes the EU member states, Bill & Melinda Gates Foundation, the Foreign, Commonwealth & Development Office (FCDO) of the UK Government, GAVI, GIZ, AFDB, China, Global Fund and the USA

AFRICAN DEVELOPMENT BANK GROUP

The African Development Bank

Bill & Melinda GATES Foundation

Government of People's Republic of China

The European Union

Foreign & Commonwealth Office

The Foreign & Commonwealth Office

Gavi The Vaccine Alliance

GAVI the Vaccine Alliance

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) Gı

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Government of the Federal Republic of Germany

Government of Japan

Government of United States of America

The Global Fund To Fight AIDS, Tuberculosis and Malaria

The Global Fund to fight AIDS, Tuberculosis and Malaria

Abbreviations

AEFI	Adverse events following immunization
AFRO	WHO Regional Office for Africa
AIDS	Acquired immune deficiency syndrome
ART	Antiretroviral treatment
ARVs	Antiretroviral drugs
CCS	Country cooperation strategy
DHIS	District Health Information System
DRS	Drug resistance survey
DR-TB	Drug-resistant tuberculosis
EML	Essential Medicines List
EPI	Expanded Programme on Immunization
EU	European Union
GAVI	The vaccine alliance
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GPW	General Programme of Work
HIV	Human immunodeficiency virus
HIV-DR	HIV drug resistance
HPV	Human papillomavirus
HRH	Human Resources for Health
HSSDPIII	Health Sector Strategic and Development Plan III
IDRS	Integrated Diseases Surveillance and Response Strategy
IHR	International Health Regulations
MCV	Measles-containing vaccine
MDGs	Millennium Development Goals
MDR-TB	Multidrug-resistant tuberculosis
MoH	Ministry of Health
NCDs	Non-communicable disease conditions
NHO	National Health Observatory
NTDs	Neglected tropical diseases
PCV	Pneumococcal conjugate vaccine
PHC	Primary health care
PMTCT	Prevention of mother-to-child transmission of HIV
SDGs	Sustainable Development Goals
SMO	Severe maternal outcome
SOS	Sustainable Outreach Services
SRMHCAH	Sexual, Reproductive, Maternal, New-born, Child and Adolescent Health
TB	Tuberculosis
UHC	Universal health coverage
UN	United Nations
UNAIDS	United Nations Programme on HIV/AIDS
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nation Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Emergency Fund
WCO	WHO Country Office
WHA	World Health Assembly
WHO	World Health Organization

Foreword

On behalf of WHO Eritrea, I am delighted to report our progress in furthering joint health priorities with the Government of the State of Eritrea and other UN agencies and health partners in 2022. WHO worked with the Ministry of Health MoH) and partners and accelerated progress towards attainment of Sustainable Development Goal number 3 (SDG 3) with emphasis on Universal Health Coverage (UHC) ensuring that no one is left behind. The work of WHO was guided by WHO's General Programme of Work 13 (GPW 13) triple billion goals namely: One billion more people benefitting from universal health, One billion more people better protected from health emergencies and One billion more people enjoying better health and well-being. These goals are in line with the strategic objectives in the Health Sector Strategic and Development Plan III (HSSDP III) 2022-2026 by the MoH.

During the year 2022, COVID-19 continued to be a significant challenge in Eritrea as in many other countries across the world. As COVID-19 devastated communities around the world, WHO worked with the MoH to strengthen the National and Sub-National health systems in order to meet community needs and mitigate the devastation during the pandemic and beyond. One of the major achievements in the year 2022 was the beginning of the journey towards validation of the elimination of mother to child transmission of HIV, syphilis, and hepatitis B. This is the culmination of years of commitment and determination by the political leadership, national and international partnerships to reduce the associated indices to levels that qualify for elimination.

WHO worked with the MoH to provide strategic direction towards attaining Sustainable Development Goals by developing related key documents. These include the national Health Sector Strategic and Development Plan 2023-27 (HSSDP III) and its Monitoring and Evaluation Plan, the Essential Health Care Package (2021), the National Action Plan for Health Security 2022-26 (NAPHS), The National immunization Strategic Plan 2022-2026, Reproductive Maternal New-born Adolescent and Health strategic plan and Neglected Tropical Diseases Strategic Plan. These strategies are critical in chatting the roadmap and mobilizing resources towards attainment of sustainable development goals.

Regardless of the recent global and local challenges, WHO remains committed. Following a functional review of operations in the context of the country, WHO has adapted flexible and agile measures to provide all the necessary support to MoH in the implementation of her health agenda to achieve the highest possible health for the people of Eritrea.

In 2023 and beyond, WHO will continue to prioritize cross-cutting, whole-system solutions such as the robust funding to strengthen the district health systems, establish and operationalize public health emergency operations centres at national and sub-national levels and enhance information systems to facilitate UHC and SDG tracking.

Dr. Martins OVBEREDJO

WHO Country Representative to Eritrea

Executive Summary

Eritrea is located in the Horn of Africa and borders the Red Sea to the east, the Republic of Djibouti to the South-East, Ethiopia to the South and the Republic of Sudan to the north and west. The surface area is over 124,000 square Kilometres. The population is estimated to be 3,650,000 (UNDESA) as of 2021 and is projected to grow to 3,937,197 (increase of 7.9%) by 2026. As of 2020, about 41.1% and 14.0% of the total population was under the age of 15 years and under 5 years, respectively. The population that is 65 years and above is estimated at about 4.5%. Life expectancy at birth is estimated to be 67 years as at 2020 (UNFPA 2020).

The health agenda of Eritrea is implemented mainly through the interventions elucidated in the National Health Plan as well as the Health Sector Strategic and Development Plan (HSSDP). The country is currently operating the third HSSDP for five years, 2022-2026, with the central goal of "improving the health status of its people". The WHO country office aligns collaborative activities with the MoH with the priorities and interventions contained in the HSSDP, through Country Cooperative Strategic (CCS) document.

The next WHO CCS (2023-2027) has four strategies that are aligned with the country's HSSDP (2022-2026). These strategic priorities are:

1. Increase achievement towards Universal Health Coverage (UHC), leaving no one behind
2. Enhance health security through strengthened prevention, detection, and response
3. Promote and optimize synergy, coordination, and leadership on the determinants of health for improved health and well-being and
4. Enhance health systems functionality to sustainably modernize medical services and expand resilient and comprehensive public health services.

This annual report of the 2022 provides a consolidated update of WHO's activities against the objectives that were set out for the year 2022. It highlights key actions taken by WHO in the various programmes that range from advocacy, technical and financial support to implementation and operational support. This report also highlights achievements made, the challenges and lessons learned. The next steps to sustain or improve on the gains made as well as circumvent the challenges encountered have been included in the interventions in the CCS 2023-2027.

Taken together, despite multiple challenges, WHO in collaboration with MoH and other partners addressed the critical health challenges through innovation, adaptability, leveraging on the capacity of bilateral and multilateral partners and prioritization. The efforts made significant impact as many of the health indices have improved with some achieving UHC and SDG targets. Some infectious diseases are at the verge of being eradicated from the country. By sustaining the gains made and addressing the gaps/challenges encountered there will be further progress towards UHC and achieving more SDGs targets thereby further improving the health of the people of Eritrea.

Dr Martins Ovberedjo (left) welcoming the new UN Resident Coordinator of Eritrea Mr Aeneas Chuma (right) to the WCO. Photo ©WCO Eritrea 2022.

Achievements of Programmes

The WCO provided technical support to the MoH for the accreditation process for upgrade of the laboratory to the expected competency level required by ISO/IEC 17025

The WCO supported the provision of routine and supplementary immunization activities. There are 302 (85%) health facilities providing routine immunization services 6 days per week.

WCO supported the development of a eRegional and Zoba level profile template for review of RMNCAH, HIV, TB and Malaria

WCO supported the strengthening of the subnational laboratory network through supply of necessary lab equipment.

WCO supported the finalisation of the Eritrea Neglected Tropical Diseases (NTD) Master Plan 2022-2026.

WCO supported the development, costing and printing of RMNCAH, NUT & HAA Strategic Plan 2022-2026.

A. Health Systems Strengthening

National Drug Quality Control Laboratory (DCCL) Accreditation Process. On request, WHO provided technical guidance to MoH for the accreditation process for upgrade of the laboratory to the expected competency level required by ISO/IEC 17025 and/or WHO pre-qualification. This activity developed the QMS according to ISO/IEC 17025:2017 standard, WHO GPCL and WHO GBT guidelines, and laid the basis for its implementation.

It also laid the base for implementation of the QMS including development of Quality Manual and the development of Quality and Laboratory technical procedures. Furthermore, WHO technical support facilitated the Gap Analysis audit of the ISO/IEC 17025: 2017 Standard and WHO GPCL (Accreditation or WHO Inspection type of audit)- Typical Audit or Inspection CAPA development and clearance on non–conformances - Quality Manager activities. This exercise was associated with technical capacity development of MoH staff in terms of practical mentoring and coaching on related skills for implementation and monitoring of ISO 9001:2015 standard for the rest of NMFA departments.

District Health Strengthening: Development of Zoba Profile Template. WHO supported the MoH to develop a Regional/Zoba profile template as a tool for the health sector joint annual reviews including RMNCAH, HIV, TB and Malaria. This will be used to collate essential health parameters in each Zoba thereby facilitating the tracking of their progress towards implementation of the UHC and SDGs agenda.

Strengthening of the sub-national laboratory network: WHO has contributed to strengthening of the laboratory network at the sub-national levels by procuring and supplying laboratory equipment. The availability of both the equipment and skilled manpower at the sub-national levels should enhance access to a higher quality of laboratory diagnostic services in the health facilities at the sub-national levels thus improving the quality of care for the people in the peripheral areas.

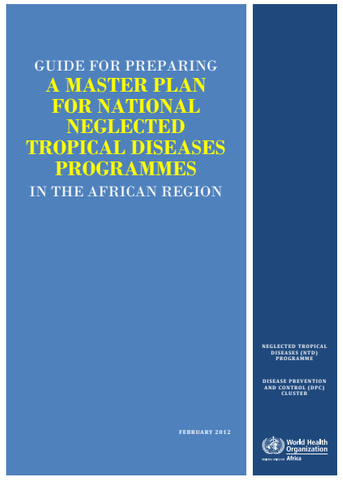
Human Resources for Health Strategic Plan: The country intends to enhance health systems functionality to modernize medical services and expand resilient and comprehensive public health services for which human resources for health (HRH) would play a major role. WHO is supporting the development of the Human Resources for Health Strategic Plan that guides the development, management, and implementation of various interventions for the strengthening the HR capacity in the country.

Development of the Zoba profile guide: Many indices for assessing progression towards UHC happen at the grass-root of the population, yet obtaining them are often difficult. WHO supported the MoH to develop a Zoba profile template used to obtain the relevant parameters, thereby supporting the Zobas to track their progress towards attaining UHC and the SDGs. It will also serve as a tool for the health sector joint annual reviews as well as help to identify the Zobas that are performing well or badly on the progression on the UHC and SDGs agenda.

Issues that need to be addressed

1. Strengthening the data generation and use for tracking SDGs
2. Improving the quality of care at all levels of health facilities
3. Strengthening the laboratory capacity, network and accessibility to the population
4. Strengthening the District Health Management structures to support the efficient delivery of health services through a Primary Health Care (PHC) approach

Neglected Tropical Diseases (NTDs)



Neglected Tropical Diseases Master Plan (Strategic Plan). WHO supported the finalisation of the Eritrea Neglected Tropical Diseases (NTD) Master Plan 2022-2026. It aligns with the new NTD Roadmap 'Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030'. This NTD Master Plan is a comprehensive five-year strategic document for the government to effectively plan and implement sustainable NTD programmes for the control, elimination, and eradication of targeted NTDs that are relevant in the country in collaboration with its national institutes, implementing partners and donors.

It enhances synergies among various NTD initiatives, provides the basis for integrated or linked NTD project plans and includes costing and financing requirements for effective NTD programme performance. Furthermore, this NTD Master plan will form the foundation for harmonized implementation by various stakeholders as well as monitoring of performance of all NTD interventions. NTDs of public health concerns in Eritrea include Anthrax, Brucellosis, Dengue Fever, Echinococcosis, Foodborne trematodiases, Leishmaniasis, Leprosy, Lymphatic filariasis, Rabies, Scabies, Schistosomiasis, Snakebite Envenoming, Soil Transmitted Helminthiasis and Trachoma.

Leishmaniasis Guidelines. The MoH finalised the development of the National Guidelines for The Diagnosis and Treatment of Visceral Leishmaniasis and the National Leishmaniasis Guide-Line for Prevention, Control, Diagnosis and Treatment with the support of WHO.

There have been discrepancies in the management of leishmaniasis that have added to the prolongation of its elimination. Therefore, this guideline with harmonized and evidence-based interventions will guide health workers to enhance prevention, diagnosis and treatment of leishmaniasis thereby contributing significantly in the efforts at eliminating this disease in Eritrea.

C. Sexual reproductive health for maternal and new-born, children, adolescent health and healthy ageing

Development, Costing and printing of RMNCAH, NUT & HAA Strategic Plan 2022-2026. The MoH with WHO support developed the Reproductive, Maternal, neonatal, Child, Adolescent Health, Nutrition and Healthy & Active Ageing (RMNCAH NUT & HAA) strategic plan 2022-2026. This followed a detailed programme review and therefore contains comprehensive strategies and interventions for RMNCAH NUT & HAA in collaboration with UNICEF and UNFPA and other partners.

Expansion of Neonatal Intensive Care Units (NICUs). Significantly, up to 50% of neonatal deaths occur in the first 24 hours of a child's life and 75% occur during the first week mainly due to the preventable and treatable diseases such as preterm birth, birth asphyxia, neonatal sepsis and other causes related to poor maternal health. However, only 9 of the 22 hospitals had NICUs with most of them poorly equipped and dysfunctional. WHO supported the MoH to establish new NICUs in 8 regional hospitals and strengthened 7 existing but poorly equipped ones in regional hospitals by providing functional and modern equipment. The implementation of these cost WHO about US$297,991 and led to a significant increase of functional NICUs from 41% to 77% of the regional hospitals where appropriate care will be given to new-borns thereby reducing the neonatal and infant mortality rates in keeping with the SDGs.

Case Study on Progress to Reduce Maternal and Newborn mortality in Eritrea

Women and neonates continue to suffer from, and die, of preventable or treatable diseases. In fact, preventable conditions like postpartum hemorrhage, pre-eclampsia/ eclampsia, complications of unsafe abortion and sepsis are still responsible for majority of maternal deaths in Eritrea. The Government of the State of Eritrea is committed to improving maternal and newborn health to attain the SDGs 3 targets 3.1 and 3.2. The interventions to achieve these goals were included in the National Health Policy and National Health Sector Development Plan that are being implemented with significant impact on the desired effect.

The number of health facilities, staff and equipment increased following extension to more sub-Zobas and strengthening of existing ones. Most Zobas focused on expansion of maternity waiting homes, including staffing of midwives and 24 hours availability of staff and services. There was also a reduction of financial barriers through provision of free PHC services. These contributed to a significant increase in access and utilization of health services.

Accordingly, the proportion of deliveries attended by a skilled health worker has continued to increase, the proportion of women attending first antenatal clinic has remained high (96%-98%) (Figure 1), while the ANC 4th visit is gradually shifting from 61% in 2017 to 64 % in 2020 (LQAS, 2017 and 2019; EPI coverage 2017 and 2020). However, the time in pregnancy that women attend their first antenatal clinic has not changed significantly over the years (Figure 2).

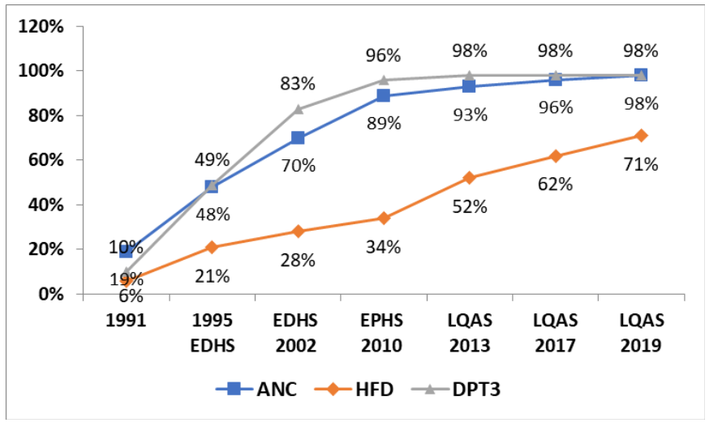


Figure 1 above: Coverage of Immunization (DPT3), Antenatal Care Attendance (ANC), and Delivery at Health Facility (HFD), 1991-2019

ANC = antennal care attendance; HFD = health facility delivery; DPT3 = 3rd dose DTP vaccine

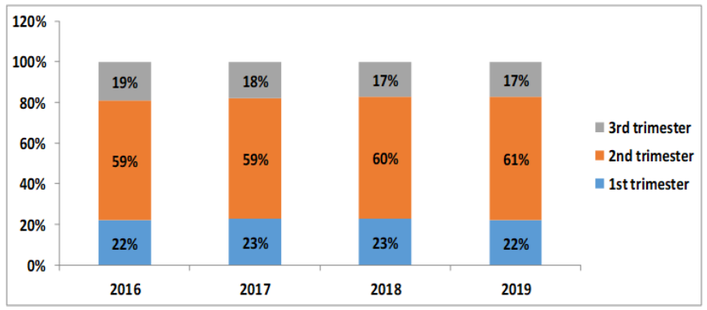


Figure 2: Time of pregnancy at first antenatal care attendance 2016-2019

Major Causes of Neonatal Deaths in NICU

A study conducted in 2020 in Eritrea by MoH with WHO support to evaluate the neonatal mortality and its risk factors in NICUs, found respiratory distress syndrome (48.1%); extremely low birth weight (40.9%) and very low birth weight (30.5%); and congenital abnormalities (3.95%) as the major ones. Neonates that stayed > 24 hours in the Specialized Neonatal Care Unit (0.23%) had a lower likelihood of death. This could imply that most neonatal deaths occur in the first 24 hours of life, thereby underscoring the need for increased access to functional NICUs in the country.

In another recent study conducted in 2022 in Keren hospital with WHO guidance, the association between various process and timeliness indicators of CEmOC and adverse maternal outcome was evaluated. It compared various process and timeliness indicators between women with potentially life-threatening condition and those with severe maternal outcome (SMO). The process indicators such as failure to give uterotonics for the treatment of postpartum hemorrhage, failure to administer prophylactic antibiotics, and delayed laparotomy for uterine rupture were significantly associated with SMO. Also, delays in referral, triaging, seeing an obstetrician, and receiving definitive treatment were strongly associated with SMO.

The following causes of delay were also found to be independently associated with SMO: erroneous diagnosis, inappropriate management, multiple referrals between health facilities, unavailability of a senior obstetrician, and poor communication during referral. Among the miscellaneous factors, nighttime admission and referral during the rainy season showed significant association with SMO.

Recommended Strategic Interventions to reduce maternal and newborn mortality in Eritrea

Eritrea 's baseline MMR <420 in 2010 and the country should reduce its by at least two third by 2030 through the following:

1. Early initiation of ANC and regularity in attendance by pregnant mothers in the short term. Long term solution is through empowering the community and women in particular, by increasing the level of participation in health education.
2. The various process and timeliness indicators of CEmOC and adverse maternal outcome identified in the above studies should be used to guide interventions with prioritization of the most feasible ones for immediate impact, then progressing to more advanced interventions
3. Evidence from the Specialized Neonatal Care Unit of Orotta National Referral Hospital (ONRH), Asmara, Eritrea in 2016 on neonatal mortality should guide mitigations. Low birth weight, late admission, low Apgar scores and congenital abnormalities were significantly associated with neonatal mortality. Therefore, early management of low birth weight, preterm births, and neonatal complications etc. should be the priority issues for controlling local neonatal deaths.

D. Immunization and surveillance of vaccines preventable diseases in Eritrea

Routine and supplementary immunization activities.

The EPI programme in Eritrea was introduced with a mission to make immunization services available, accessible, and equitable to all children and women in the country. The goal of the programme is to reduce morbidity and mortality of children and mothers from vaccine preventable diseases. The target of immunization programme is to increase and sustain immunization coverage of children to above 95 percent at national and sub-national levels by addressing the problems affecting various components of the EPI programme.

There are 302 (85%) health facilities providing routine immunization services 6 days per week. In addition, there are 450 outreach immunization sites in the country providing immunization services in every catchment area that is more than 10 km from these health facilities, particularly those with poor transportation. In addition, Periodic Intensified Routine Immunization/ Sustainable Outreach Immunization (PIRI/SOS) Services are implemented every quarter in 18 districts with hard-to-reach areas and nomadic population groups.

As of November 2022, the National Immunization includes 12 antigens against 12 vaccine preventable diseases. The extensive immunization activities have been associated with several achievements including those described below:

1. **National Immunization Programme Review.** WHO provided financial and technical support to the MoH to conduct National EPI programme review. The objective of the programme review was to assess the performance of the immunization and prevalence of Vaccine Preventable Diseases (VPD) over the past 5 years (2017-2021). The review showed the newly introduced vaccines and their coverages, and prevalence of vaccine preventable diseases. The review also highlighted the achievements and best practices, and identified key barriers and challenges. The information obtained from this review contributed to many interventions included in the National Immunization Strategic Plan 2022–2026. In addition, WHO/UNICEF Joint reporting for immunization and surveillance data was also completed.

2. **Implementation of Human Papilloma Virus (HPV) and Measles/Rubella Vaccination campaigns.** WHO provided financial and technical support to the MoH to conduct HPV and Measles/Rubella vaccination campaigns. This effort included support to develop and adapt norms and standards for data collection tools, field guidelines and training materials for HPV vaccination campaign. The target population is 9-14 years and are estimated to be 59,236 girls vaccinated. Arrangement has also been made to have similar exercise next year, 2023.

In Pictures

Measles-Rubella Launch Campaign in Massawa

Above: Periodic Intensification of Routine Immunization activities conducted in Zoba Anseba, Gash Barka and Southern Red Sea

Hard-to-reach areas and nomadic population in Shieb and Foro, Northern Red Sea Zoba

Below: Measles-Rubella campaign in Galelo, Northern Red Sea

Above: Periodic Intensification of Routine Immunization activities conducted in Zoba Anseba, Gash Barka and Southern Red Sea

Above: Health workers in Hard to Reach Areas in Eritrea

Below: Periodic Intensification of Routine Immunization activities conducted in Zoba Anseba, Gash Barka and Southern Red Sea

3. **Implementation of Sustainable Outreach Immunization services.** To improve immunization coverage in hard-to-reach areas as well as the very mobile nomadic population, four rounds of Sustainable Outreach Immunization (SOS) was implemented. This extension of immunization services to this population usually unreached by routine immunization was supported both technically and financially by WHO. The SOS has focused on 18 districts in four Zobas (NRS, SRS, Anseba and Gash Barka) of the country, that have relatively low immunization coverage (below 79%) due to the presence of hard-to-reach areas and nomadic population groups. The SOS has had a positive impact as subsequent evaluations show increasing number of children completing their immunization plan and increasing number of women of childbearing age receiving two or more doses of Td vaccines. The immunization coverage of PENTA 3, OPV, IPV Rotavirus, Pneumonia vaccine and Measles/Rubella vaccination has increased from 79% to 95% in all districts including in hard-to-reach areas and nomadic population, thereby contributing to reducing VPD and reaching the SDG and UHC targets.

4. **Sustenance of polio virus eradication.** WHO provided financial and technical support for the introduction of Inactivated Polio Vaccine (IPV) to the routine immunization programme. The launching of this was integrated with vitamin A supplementation campaign during the African Vaccination Week. IPV immunization coverage was 95% in October 2022. Risk assessment for circulating Vaccine Derived Polio Viruses (cVDPV)/WPV was conducted and mitigation plan developed. National polio outbreak preparedness and response plan was also updated for 2022.

5. **National Immunization Strategic Plan 2022-2026.** With financial and technical support from WHO, the global Immunization Agenda 2030 was adopted to develop National Immunization Strategic Plan 2022-2026 as well as the Action Plan.

6. **Surveillance of Vaccine Preventable Diseases (VPD).** The MoH with financial and technical support from WHO has established structures in prioritized health facilities at national and Zoba levels that are linked to the community for the surveillance of VPD. Such facilities include health management information system (HMIS), EPI and IDSR focal points who operate according to standard guidelines. These facilities have been categorized as high, medium, and low for active surveillance for AFP, Measles/Rubella, PBM, Rotavirus and NNT.

The achievements in the VPD surveillance include:

- **Good AFP surveillance performance** as the indicators and milestones set by WHO were achieved. The completeness of the routine report was 98% and timeliness was 97%. As of 31 October 2022, a total of 136 AFP cases were detected, but were dismissed as non-polio cases by the National Polio Expert Committee (NPEC), since laboratory results were negative for wild polio viruses in the stool samples. This is equivalent to a national non-polio AFP rate was 7.5% while the stool adequacy rate was 100%. Non-Polio Enteroviruses (NPEV) were detected in 22 of the stool samples. No WPV has been found, a total of positive and were discarded as non-polio viruses.

- **The National level target of Non-Measles Febrile Rash Illness** cases per 100,000 population of 2022 was met. A total of 280 suspected measles/rubella cases (febrile rash) were detected but the laboratory assessment of IgM antibody against both Measles and Rubella IgM were negative, implying that they were not cases of measles or rubella. National level measles annualized investigation rate was sustained above 2/100,000 population and no measles/rubella associated death was reported in 2022.

There remain some gaps in the immunization programme, which include:

1. Significant proportion of the populations exists that are hard to reach because of either their geographical location or migratory lifestyle, which make them difficult to be reached with routine immunization and disease surveillance activities.

2. No sentinel surveillance system in place to investigate and report congenital rubella syndrome (CRS) cases.

3. The country has not yet established National Measles Verification Committee (NVC) to document the progress with measles elimination.

4. EPI and Surveillance activities are not synchronized with neighbouring countries, thereby making the proportion of immunized population per time in the region inadequate to constitute required herd immunity to break transmission.

Communicable Diseases

Therapeutic efficacy of anti-malarial drugs study. Currently, Eritrea uses Artesunate-amodiaquine as first line therapy for uncomplicated malaria cases at the health facilities and community level, with artesunate injection considered as treatment of choice for severe malaria cases. The efficacy of this drug regime has been monitored every two years in patients aged 6 months and above with uncomplicated P. falciparum or P. vivax malaria infection since 2007.

This study determines the proportion with early treatment failure, late clinical failure, late parasitological failure or an adequate clinical and parasitological response as indicators of efficacy. It also uses polymerase chain reaction (PCR) analysis to differentiate between recrudescence and new infection. WHO provides technical and financial support to develop the proposal, provide the standard ACT medicines and laboratory reagents for this surveillance.

Elimination of Mother to Child transmission (eMTCT) of infectious diseases. Eritrea with the support of UNAIDS and WHO conducted an assessment of the status of the mother to child transmission of HIV. The result indicated that there is a low HIV prevalence in the country, high coverage of process indicators suggesting that eMTCT of HIV has been already achieved. It also showed that eMTCT of syphilis is on the decline with a possibility for validation.

On the other hand, the result shows that the eMTCT-Hepatitis B needs additional work such as introduction of screening pregnant women, PEP and Hep. B birth dose. Furthermore, WHO and other UN agencies supported the country to establish four technical working groups to address the gaps identified in the assessment related to programme, data, laboratory, and human rights and equity.

Non-Communicable Diseases

STEPS Survey Concept Note.

WHO has supported the MoH in the preparation and planning of the STEPwise approach to NCD risk factor surveillance (STEPS) survey, including terms of reference for the technical working groups. The WHO STEPS is a simple, standardized method for collecting, analysing and disseminating data on key NCD risk factors in countries.

The survey instrument covers key behavioural and biological risk factors. By this WHO intervention, the country now uses the same standardized questions and protocols as all other countries. This is good for not only monitoring the risk factors for NCD within the country, but also for making comparisons across countries.

Health Emergencies

Emerging and re-emerging infectious diseases and other global threats such as antimicrobial resistance (AMR), global warming and climate change, present a serious socio-economic challenge to countries worldwide. The recent COVID-19 pandemic continues to remind us of the urgency to establish adequate capacities to prevent, rapidly detect and promptly respond to public health threats and events. The risks of a similar or more severe emergency in the future have been multiplied by the COVID-19 pandemic itself and its devastating impact on the resilience of health systems, economies, and societies.

As a signatory to the International Health Regulations (2005), Eritrea has been taking steps to develop, strengthen, and maintain core public health and emergency preparedness capacities to detect, assess, notify, and respond to any potential public health events of international concern.
WHO has been working with the Government of the State of Eritrea and partners to build capabilities and platforms for health emergency preparedness and response according to established global guidelines and has made significant achievement.

The following significant achievements have been made.

1. **National Action Plan for Health Security 2022-2026.** WHO provided both technical and financial support to the MoH for the development of the NAPHS 2022-2026. The interventions were guided by the evidences obtained from the review of the 19 technical areas of the previous NAPHS (2017-2021) using the revised JEE tool, as well as the experiences acquired during the COVID-19 response. So, the NAPHS 2022-2026 focuses on sustaining and strengthening the gains made as well as addressing challenges experienced in the implementation of the previous NAPHS. WHO facilitated the launching and dissemination of NAPHS to all the Zobas. Moreover, WHO also ensured the development and dissemination of the annual operational plans to ensure effective implementation of the NAPHS. Through implementation of the plan, Eritrea's capacity to prevent, detect and respond to public health threats should be further strengthened in line with the International Health Regulations (IHR) requirements. This will subsequently lead to a reduction in morbidity, mortality, disability, and socio-economic disruptions due to public health threats and contribute to the achievement of SDG 3.d.1 indicator on strengthening International Health Regulations (IHR) capacity and health emergency preparedness.

2. **Third edition of the WHO IDSR technical guidelines, training manuals and training slides adapted and IDSR ToT trainings conducted.** WHO supported the MoH to adapt the 3rd Edition IDSR Technical Guidelines (TGs) and Training Modules. This is a key milestone towards strengthening IDSR implementation in Eritrea. The IDSR technical guidelines clearly describe the roles of the different actors at all levels with regards to the surveillance functions, which includes detection of priority diseases and conditions, reporting, data analysis, investigation of suspected outbreaks, preparing to respond, responding, monitoring, evaluation, and supportive supervision. The guidelines also recommend thresholds for action for identifying and responding to the threats.

3. **The revised technical guideline** will serve as working reference document for the Eritrean health workforce at all levels of the health system and will facilitate early detection, notification, and timely response to public health events. The training modules which comprise of facilitators manual, participants manual and training slides will be utilized to build capacity of health care workers at all levels of the health system. Furthermore, WHO also provided technical support for a follow up training of trainers (TOT) as part of system-wide capacity development and sustainability.

4. **Enhancement of emergency preparedness for monkeypox and other public health events.** WHO in collaboration with MoH conducted a workshop to scale up IDSR for prompt detection and effective response to monkeypox outbreak and other public health emergencies. A total of 45 participants from the Zobas and national levels participated in the workshop. The workshop happened just after Eritrea completed the adaptation of the 3rd edition of integrated disease surveillance and response (IDSR) technical guidelines. So, it provided an opportunity for participants to have a practical experience on utilization of the guidelines to promptly detect and respond to a potential monkeypox outbreak and other public health emergencies. During the workshop, each Zoba assessed their preparedness capacity for response to monkeypox outbreak and other public health threats. Components assessed included capacities for coordination, risk communication and community engagement, epidemiological surveillance, rapid response teams, contact tracing, laboratory diagnosis, infection prevention and control, case management, points of entry, logistics and vaccination. Following the assessment, each Zoba developed action plans to address the identified gaps. A combination of this hands-on training and the availability of the IDSR and NAPHS should enhance the National and sub-National levels readiness to respond to monkeypox outbreaks and other public health threats.

5. **Strengthened laboratory services at all levels including the sub-zoba levels.** The MoH has been supported by WHO to procure various laboratory equipment to augment the diagnostic capacity at several health centres and community hospitals. Some of the equipment procured include the GeneXpert machines, glucometers, autoclaves, incubators, hemoglobin A1C analyzers, binocular microscopes, and differential hematology analyzers. This provision and its distribution to sub-Zoba levels will not only improve the standard of laboratory diagnosis available but will also create availability of such tests in the rural communities, thereby improving the quality of clinical health services for the population.

6. **Costed Action Plan for establishment of Public Health Emergency Operations Centres (PHEOC) at National and Zoba levels developed.** WHO worked with the MoH to develop the action plan for establishing preparedness and response to public health emergencies operations center (PHEOCs) at the National and Zoba levels. The action plan proposes a detailed roadmap of activities and the associated costs to ensure that the PHEOCs are established and functional. The successful establishment and operationalization of PHEOCs will enhance detection of early warning signs of public health emergencies, support effective coordination of responses, and enhance real-time communication and information sharing at all levels of the national health system. A PHEOC therefore plays a critical role in fulfilling the International Health Regulations (IHR) obligations as well as the Integrated Disease Surveillance and Response (IDSR) core functions. The inclusion of the related cost will provide an evidence-based reference for the facilitation of advocacy and resource mobilization efforts for implementation.

Way-forward

The priority in 2022 was to ensure that strategies, guidelines, and platforms for enhancing country capacity to prevent, detect and respond to health emergencies are in place. In 2023, the focus will be to implement the Action Plan developed to establish and operationalize the PHEOCs, which will entail the following:

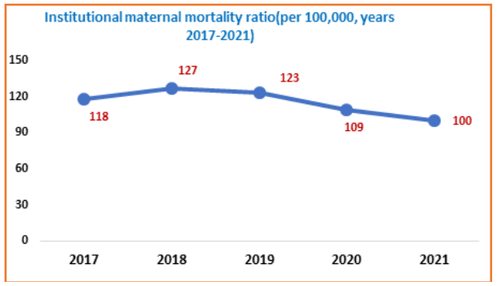
1. Development of PHEOC policies, plans and procedures
2. Refurbishment of physical infrastructure
3. Provision of the information and communication technology (ICT) infrastructure
4. Provision of Information systems and standards to increase the availability, accessibility, quality, timeliness, and usefulness of emergency operations information for public health action.
5. Capacity building for PHE EOC staff

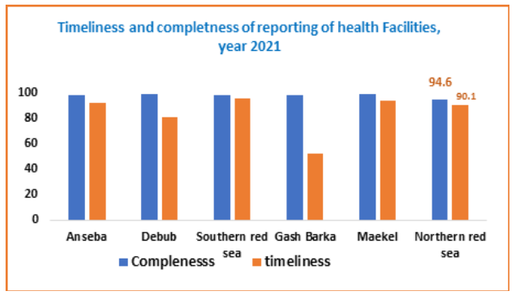
Data management and health information system

Health Information System Strategic Plan. The MoH is highly committed to monitoring and evaluation of health services and health conditions of the population of Eritrea, including the indicators to monitor the UHC and SDG targets. Accordingly, WHO supported the MoH to evaluate the readiness of the health information system (HIS) in the country to perform this task using the HMN assessment tool. Following this assessment, the key indicators were included in the development of a monitoring and evaluation framework that will show the progression as well as the impact on the desired output and targets of UHC and SDGs as outlined in the Eritrean HSSDPIII.

Strengthening the district health information system. The district health information system (DHIS) is critical for monitoring progress on the UHC and health-related SDGs agenda since most of the relevant indicators are obtained at the district level. WHO has supported MoH to introduce and sustain functional DHIS-2 at national, sub national and in 44% of the districts in Eritrea. WHO has continued to ensure the strengthening of the internal capacity on HIS. In the previous two years 50 persons including data managers and HMIS focal persons at national and sub national level trained on DHIS2 academy.

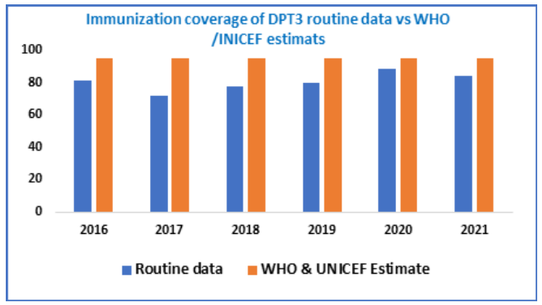
Training included analysis and interpretation of data using software such as power BI, Tablea, and on data quality assessment skills at all the levels. In the year 2022 the DHIS 2 server was upgraded to the latest version with new data analysis applications and WHO data quality applications. These activities have made significant impact. The HMIS unit produces Annual Health Service Activity Report annually which contains statistics of the routine health and diseases records such as Health Services, Communicable Diseases, Mother & Child data and others. Moreover, despite internet and IT infrastructure challenges in the country the reporting timeliness and completeness of reporting of health events and records through DHIS2 are one of the best in the African region.





Strengthen National Health Observatory (NHO). The NHO is a platform for centralization health and health related information and producing knowledge products. The source includes the population surveys, CRVS and DHIS2. The WHO had supported the Ministry of Health to establish national health observatory. The support includes establishing NHO office with all office equipment's, capacity building training for the designated public health officer and statistician.

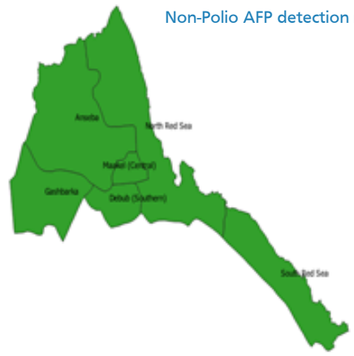
A comprehensive indicator setting process was conducted which would use to monitor and track the health sector plan, the UHC and the health SDG targets. All available data from different sources had been collected and verified by the designated technical working group. And reviewed by the steering committee. The data will be uploaded to the integrated African health observatory when the ministry of health approved and launched the NHO.



Non-Polio AFP detection rate by Zoba (2021 & 2022)

Non-Polio AFP detection rate by Zoba 2021

Non-Polio AFP detection rate by Zoba 2022

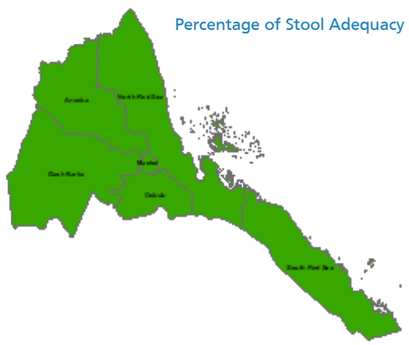


Key (Non-Polio AFP)

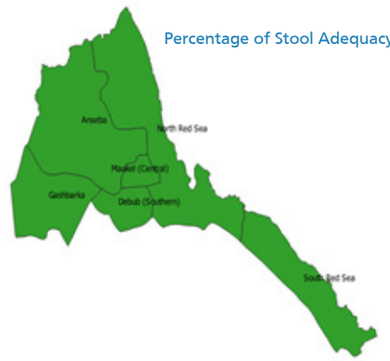
	Silent
	<1 Non Polio AFP Rate
	>=1 Non Polio AFP Rate >2
	>2 Non Polio AFP Rate

Percentage of Stool Adequacy by Zoba

Percentage of Stool Adequacy by Zoba 2021



Percentage of Stool Adequacy by Zoba 2022



Key: Stool Adequacy

	Silent
	<80% Stool Adequacy
	>80% Stool Adequacy

WHO ERITREA COUNTRY SUPPORT

The WCO continues to provide leadership in coordinating health partners and building external relations with other partners as a way of driving the impact of GPW13 and SDG strategic goals in Eritrea. The MoH is supported technically with catalytic funding given for some of the national programmes. The WCO also ensured that the health agenda is promoted at all levels and the impact of all health interventions is aligned to the Eritrean country priorities as evidenced by its leadership during the development of Joint Operational Workplans for 2022-2023 between the Government of State of Eritrea and UN Agencies (GoSE).

The WCO is innovative in brokering solutions with its partners and ensuring that solutions comply with WHO rules. The UN Agencies signed a Cooperation Framework with GoSE in 2022 and were requested to develop joint sector workplans for 2022-23 to operationalize it. To ensure that the workplan comply with WHO rules, the WCO facilitated the consultations with the MoH and other UN Agencies in Health to develop the joint sector workplan.

The WCO developed an acceleration plan for implementing the 2022-2023 biennium as a way of improving the organizational efficiency at all levels to deliver its strategic objectives. The WCO planning strategy is based on an agile programme management concept founded on Results-based management with a bottom-up planning as a way of achieving maximum impact. The WCO has strengthened its performance management system and accountability framework to ensure that we "do the right things in the right place and in the right way' and that results are achieved using interventions that give value for the money invested.

Monitoring and evaluation of programmes and interventions are done regularly as a way of identifying gaps and strengthening the capacity of the WCO and partners. Data management remains a handicap to reach optimum capacity building and there is need to deploy a Strategic Health Information Expert to the country.

Operational Support by the Country Support Unit (CSU). The primary mission of the CSU is to provide operational support to the WHO Country Office to achieve its strategic goals as espoused in the GPW13, CCS and other Health Sector Programmes. During the year of 2022, the CSU received an award from AFRO as one of best WCO with improved Managerial KPIs for 2021. This was made possible by weekly coordination meetings held in the WCO whereby KPIs are tracked and corrective actions taken to improve the WCO performance.

Human Resources Support. The Functional Review implementation is in progress and identified eight vacant positions. Seven of these positions have been filled. The remaining vacant position will be filled by the end of 2022. The Functional Review process has also recommended abolition of 5 positions and the separation of the affected staff is ongoing with the Local Reassignment Committee established to handle the reassignment process.

Procurement and Logistical Support. Several international procurements were commenced in 2022 to support MoH strengthen its health system and improve its emergency response capability. The expected delivery of most of the commodities below will be in late 2022 and early 2023. These items include:

1. Procurement of supplies to upgrade the regional referral hospital - USD 389,058.07
2. Procurement of five ambulances - USD 265,805.66
3. Procurement of Emergency Care unit - USD 156,514.63
4. Supplies to upgrade the regional referral lab - USD 149,360.59

Financial and Budgetary Support. Programme budget support and awards implementation in the WCO were monitored continuously in 2022 with Managerial KPIs for the unit being on track. Since the beginning of the current biennium and for the year 2022 many activities have been implemented with the following achievements:

1. Maintenance of up-to-date, timely and fully balanced financial records monthly.
2. Conducting regular budget analysis and producing budget and award reports to assist management and programme officers on budget performance.
3. Verification of financial transactions and returns of DFCs, DIs, and Travel Claims to the WCO for accuracy and compliance with the financial rules and regulations.
4. Preparation of scheduled, ad-hoc and/or special reports as required to facilitate financial implementation analysis.

Information and Communication Technology. The WCO has enhanced the Information and Communication Technology (ICT) by upgrading the bandwidth & replacing the old video system with the latest CISCO equipment. This has enabled the coordination and hosting of live event Streams through Tele & Video conferences (Zoom, WebEx, Teams) and other technologies. During the year 2022 the office supported the MoH by providing internet connection for meetings conducted by WHO/AFRO virtually.

Challenges In the year 2022. Intermittent power outages in the country remains a challenge and poses a risk to the WCO's ability to offer technical and operational support to MoH. The office has three sources of electricity: the main grid, a backup generator and solar system. The life-span of the solar system has been exhausted and the WCO is currently in the process of replacing it in early 2023.

Below: Group Photo of WHO Staff and new UN Resident Coordinator to Eritrea Mr Anaenas Chuma

In Pictures Staff Training on Preventing & Responding to Sexual Exploitation,Abuse and Harrassment (PRSEAH)

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