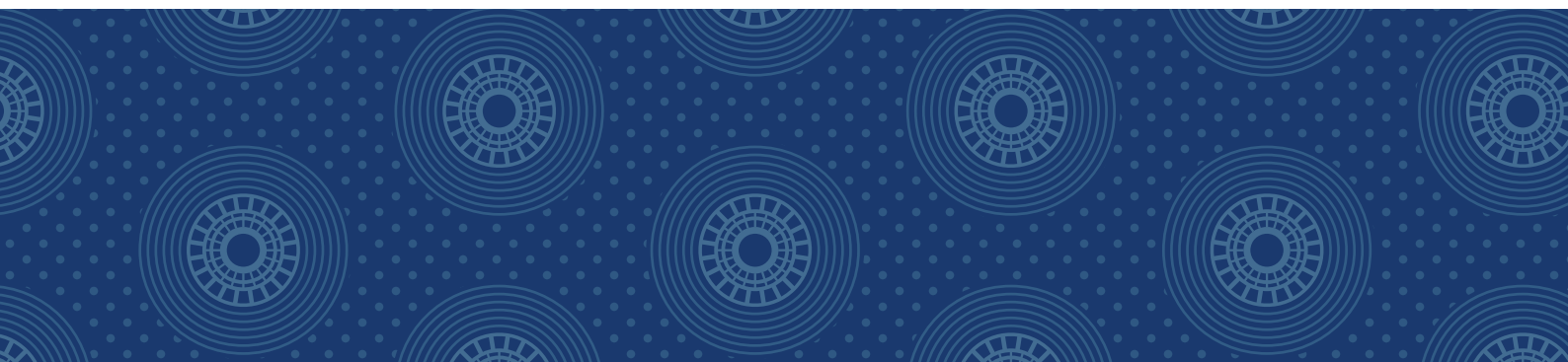


WHO BOTSWANA

BIENNIAL REPORT

2020–2021



WHO BOTSWANA



BIENNIAL REPORT

2020–2021



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ABBREVIATIONS AND ACRONYMS

AEFI	Adverse Events Following Immunisation	FCDO	Foreign, Commonwealth and Development Office (United Kingdom)
AIDS	Acquired Immune Deficiency Syndrome	GATS	Global Adults Tobacco Survey
AFRO	Africa Regional Office of the World Health Organization	GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
AMR	Antimicrobial Resistance	HIV	Human Immunodeficiency Virus
ANC	Antenatal Care	HRH	Human Resources for Health
ART	Antiretroviral Treatment	HRDC	Human Research Development Council
ARV	Antiretroviral	IAP	Incident Action Plan
BCG	Bacillus Calmette-Guerin	IAR	Intra-Action Review
BCP	Business Continuity Plan	ICC	Interagency Coordinating Committee
BDS	Botswana Demographic Survey	IDSR	Integrated Disease Surveillance and Response
BMZ	Federal Ministry for Economic Cooperation and Development (Germany)	IEC	Information Education and Communication
BoMRA	Botswana Medicines Regulatory Authority	IHR	International Health Regulation
CATTEM	Communities Acting Together to Eliminate Malaria	ILO	International Labour Organization
CCA	Common Country Assessment	IMCI	Integrated Management of Childhood Illnesses
CCM	Country Coordination Mechanism	IMS	Incident Management System
CD	Communicable Diseases	IPC	Infection Prevention and Control
CDC	Center for Disease Control and Prevention (United States of America)	IRS	Indoor Residual Spraying
CF	Country Framework	ISS	Integrated Supportive Supervision
CMS	Central Medical Stores	JEE	Joint External Evaluation
CHW	Community Health Workers	MDA	Mass Drug Administration
COVID19	Coronavirus Disease 2019	MDR	Multidrug-resistant
CSU	Country Support Unit	MMD	Multimonth Dispensing
DFATD	Department of Foreign Affairs, Trade and Development	MoHW	Ministry of Health and Wellness
DHIS	District Health Information Systems	MPTF	Multi-Partner Trust Fund
DFID	Department for International Development (United Kingdom)	MTCT	Mother-to-Child Transmission
DHMT	District Health Management Team	NAPHS	National Action Plan for Health Security
DPT	Diphtheria, Tetanus and -Pertussis	NASA	National AIDS Spending Assessment
DR	Drug-resistant	NCC	National Certification Committee
ECHO	European Union Civil Protection and Humanitarian Aid Operations	NCD	Non-Communicable Diseases
EOC	Emergency Operation Centre	NEOC	National Emergency Operations Centre
EPI	Expanded Programme on Immunisation	NGO	Non-Governmental Organisations
ESPEN	Expanded Special Project for Elimination of NTD	NHA	National Health Accounts
FAO	Food and Agricultural Organization	NHL	National Health Laboratory
		NORAD	Norwegian Agency for Development Cooperation
		NRSC	National Road Safety Committee
		NSF	National Strategic Framework
		NTD	Neglected Tropical Disease
		NTRL	National Reference Laboratory

ODK	Open Data Kit	SHA	System of Health Accounts
PCR	Polymerase Chain Reaction	SMS	Short Message Service
PHC	Primary Health Care	SOP	Standard Operating Procedures
PHEIC	Public Health Emergency of International Concern	STAR	Strategic Tool for Assessing Risk
PEPFAR	President's Emergency Plan for AIDS Relief (United States of America)	STH	Soil-Transmitted Helminths
PHE	Public Health Emergency	STI	Sexually Transmitted Infections
PHEOC	Public Health Emergency Operations Centres	TB	Tuberculosis
PHEMC	Public Health Emergency Management Committee	TOT	Trainer of Trainers
PHI	Public Health Institute	TWG	Technical Working Group
PIDM	Programme for International Drug Monitoring	UB	University of Botswana
PMTCT	Prevention of Mother-to-Child Transmission	UN	United Nations
PNC	Postnatal Care	UHC	Universal Health Coverage
PoE	Port of Entry	UNAIDS	Joint United Nations Programme on HIV/AIDS
RCCE	Risk Communication and Community Engagement	UNICEF	United Nations Children's Fund
RDT	Rapid Diagnostic Test	UNCT	United Nations Country Team
rGLC	Regional Green Light Committee	UNDP	United Nations Development Programme
RMNCAH	Reproductive, Maternal, Newborn, Child and Adolescent Health	UNEP	United Nations Environment Programme
RRT	Rapid Response Team	UNV	United Nations Volunteer Programme
SADC	Southern Africa Development Community	USAID	United States Agency for International Development
SARI	Severe Acute Respiratory Infections	VIRAT	Vaccine Introduction Readiness Assessment Tools
SCH	Schistosomiasis	WCO	World Health Organization Country Office
		WHO	World Health Organization
		WR	World Health Organization Representative

FOREWORD



“

We are grateful for the support and intend to continue working with all partners to support the national response and beyond.

The years 2020 and 2021 were fraught with challenges and opportunities arising from the COVID-19 pandemic. The WHO Country Office (WCO) in Botswana had to retool and re-strategise its activities to support the country's response to the outbreak. Given the restrictions and public health social measures necessitated by the outbreak, the WCO developed a business continuity plan, repurposed selected staff and supported the setting-up, capacitation, and mobilisation of the various structures and mechanisms of a comprehensive national emergency response, including establishing and mobilising an incident management system. We provided leadership, guided the development of the relevant technical and normative guidance, supported procurement of essential supplies, and facilitated a multi-sectoral response, including communicating and engaging with the community. Although the outbreak of COVID-19 shifted our focus, the WCO provided continuity of services to ensure that the gains won in other prioritised public health areas were not lost.

Accomplishing all this required more robust financing and partnerships, and so we engaged in a robust resource mobilisation campaign that secured resources from partners such as the European Union Civil Protection and Humanitarian Aid Operations (ECHO), the Department for International Development (DFID¹) of the United Kingdom, Azerbaijan, The Global Fund to Fight AIDS, Tuberculosis and Malaria, the U.S. President's Emergency Plan for AIDS Relief

(PEPFAR), and the U.S. Center for Disease Control and Prevention (CDC) in Botswana. We are grateful for the support and intend to continue working with all partners to support the national response and beyond. Although the outbreak came in the middle of a comprehensive restructuring and transformation of the health sector in Botswana, the country became better prepared early on as lessons were learnt from affected countries, especially the neighbouring South Africa.

Botswana was one of the case studies of best-prepared countries, as documented and promoted by the WHO. The government declared a State of Emergency, and the Parliament promulgated a law that expedited response actions and inspired a reciprocal response from the people. In the end, an All-of-Government and All-of-Society approach emerged to cushion the blow of the epidemic while strengthening health systems to ensure the continuity of essential services. Similarly, all levels of the WHO, national, regional and headquarters, worked as one to provide the necessary support, including a visit from the WHO AFRO Regional Director, Dr Matshidiso Moeti. All the support we received bolstered our resolve at WCO Botswana and emboldened us to better support the country's response to COVID-19.

Dr Josephine Namboze
WHO Country Representative

¹ In September 2020, the Department for International Development (DFID) was replaced by Foreign, Commonwealth & Development Office (FCDO)

2020 AND 2021 AT A GLANCE

With a total population of 2,374,698, life expectancy in Botswana increased from 50.2 years in 2001 to 70 years in 2020 (data.worldbank.org). Successes recorded in universal coverage with antiretroviral (ART) and the prevention of mother-to-child transmission (PMTCT) of HIV/AIDS, funded through the Government of Botswana's own resources, partly account for the increase in life expectancy. At the same time, while there has been some progress in dropping the poverty levels², Botswana is one of the most unequal countries globally. According to the 2020 UNDP report, Botswana has the 9th highest Gini coefficient, indicating the degree of income inequality. It has observed a consumption inequality, including access to health services, among districts and within specific groups, particularly rural women. The implications are specifically important in relation to the distribution of diseases, especially as efforts are being made toward attaining Universal Health Care. Gender inequality and discrimination also impede women's access to health services, thus limiting their ability to respond to the consequences of ill health. Another disadvantaged category of the population with poor access to health care is people with disabilities.



↑ WHO Country Office is hosted by the Botswana Motor Vehicle Accident Fund



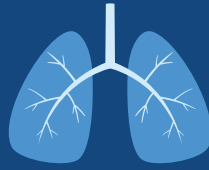
↑ Ministry of Health building, Gaborone

² From 1985 to 2015, Botswana's gross domestic product rose 5.3-fold, while poverty fell drastically (from 59% of people below national poverty line to 16%).

90%

COVERAGE (2021)

Mass drug administration against NTDs



2,521

TB CASES

(2020)



From 2020 to 2021 timeliness of IDSR reporting improved from 78% to

85%

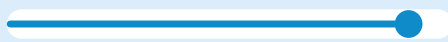
and completeness of reports improved from 68% to

80%

TB/HIV co-infection stands at 77%, and approximately 98% of the co-infected were put on ART (2020)



77%



98%

5,052

Road injuries with

325

fatalities (2020)



Treatment success rates for TB Multi-Drug Resistance are above

70%

(2021)



5,547 diarrhoea cases

60 deaths (2020)

2%

DIABETES PREVALENCE (2018)



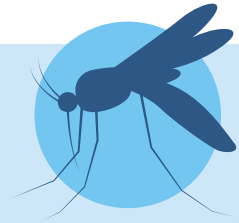
Most cancers are diagnosed late and most often after the disease has advanced



MATERNAL MORTALITY RATIO

166.3/100,000
LIVE BIRTHS IN 2019

75 deaths in 2020



Malaria cases

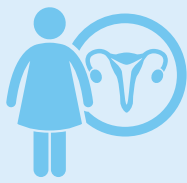
924 (2020)

719 (2021)

Malaria deaths

15 (2020)

10 (2021)



26.3%

of cervical and breast cancers were diagnosed early in 2020/2021, compared to **35%** in 2019/20

EARLY DETECTION AND DIAGNOSIS OF CERVICAL CANCERS

2020 ▶ **25%**

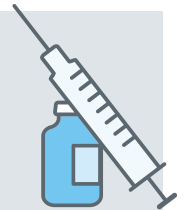
2015 ▶ **30%**

HYPERTENSION PREVALENCE

24%
(2018)

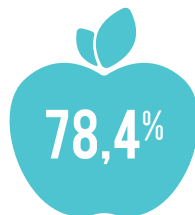


76% Diphtheria-tetanus-pertussis (DPT3) vaccination (2020)

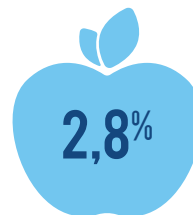


MALNUTRITION RATES 2020

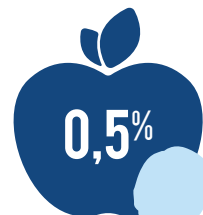
ATTENDANCE RATE



MODERATE



SEVERE



▼ Mother to child **transmission of HIV** lower than **2%** (2020)

AGAINST AIDS TARGET



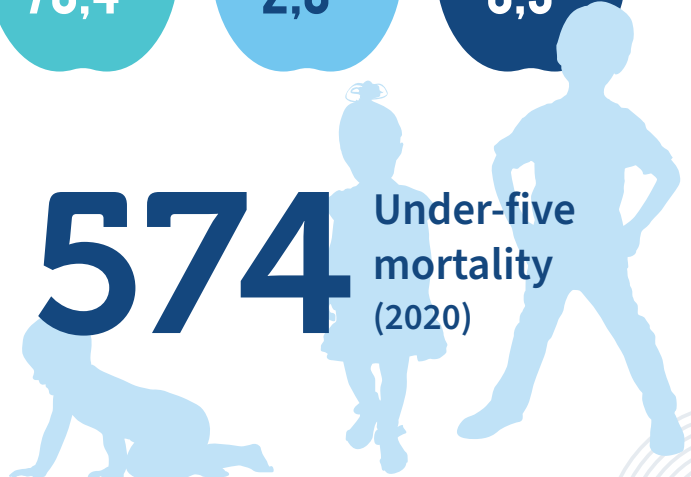
90-90-90

93-97-98



[National Behavioural AIDS Impact Survey (BAIS V) of 2021]

574 Under-five mortality (2020)



WHO WE ARE

WHO Country Office supports the Ministry of Health towards realization of the health goals as defined by the Government of Botswana.



↑ Country Office staff at the annual retreat 2021 in Lobatse

MISSION

The activities delivered in 2020–2021 contribute to WHO's general programme of work (GPW13) for 2019–2025.



PROMOTE
HEALTH

KEEP THE
WORLD SAFE

SERVE THE
VULNERABLE

STRATEGIC PRIORITIES AND GOALS

Ensuring healthy lives and promoting well-being for all at all ages by:

ACHIEVING UNIVERSAL
HEALTH COVERAGE



1 BILLION

more people benefitting from
universal health coverage

ADDRESSING
HEALTH EMERGENCIES



1 BILLION

more people better protected
from health emergencies

PROMOTING
HEALTHIER POPULATIONS



1 BILLION

more people enjoying better
health and well-being

WHO Botswana thanks its donors for their generous support to its activities in 2020 and 2021

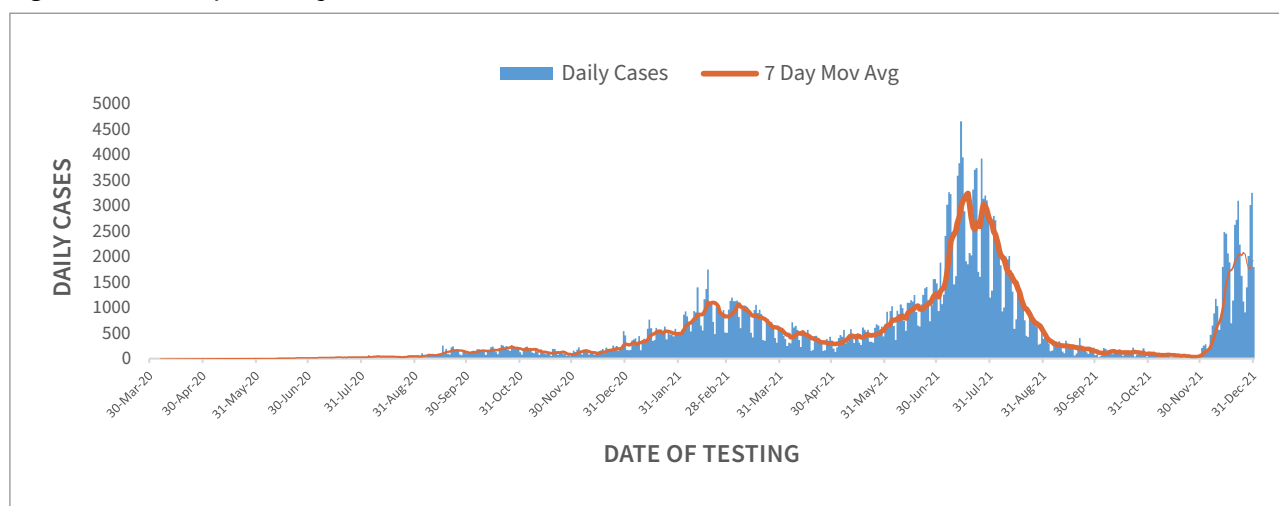


WHO BOTSWANA'S RESPONSE TO COVID-19

The COVID-19 outbreak dominated this biennium, and most of the work was directed at controlling the outbreak or mitigating the ramifications of the pandemic. The country's first report of COVID-19 infections was made on 30 March 2020, with three imported cases. The outbreak evolved from imported cases to clusters of cases driven by cross-border movements to community transmission affecting all 27 districts in varying degrees and with significant socioeconomic impact.

By the 31st of December 2021, 266,913 cases and 2,538 deaths had been reported. Throughout the outbreak, multiple spikes in the epidemiological curve were observed due to challenges in real-time reporting resulting in batch reporting. The general trend of cases, as presented by the 7-day moving average, revealed four waves of the epidemic, each driven by a different variant of the virus. Towards the end of 2021, a resurgence in cases driven by the Omicron variant was observed. The Greater Gaborone Health District, which served as the transmission hotspot for all the waves before spreading to the rest of the districts, accounted for 25% of all reported cases.

Figure 1: COVID-19 Epidemiological curve: March 2020–December 2021



Upon detection of the first imported COVID-19 case, His Excellency, the President of the Republic of Botswana, appointed the National COVID-19 Taskforce to lead and guide the coordination of the response. The National Emergency Operations Centre (NEOC), and the Ministry of Health and Wellness management, coordinated the response. The COVID-19 preparedness and response plan was developed, highlighting strategic actions organised under the nine pillars of the COVID-19 response at the time: Coordination, Risk Communication and Community Engagement, Surveillance, Ports of Entry, Laboratory, Infection Prevention and Control, Case Management, Logistics, and Maintaining Essential Health Services. Vaccination was subsequently included as the tenth pillar of the response. The WCO supported the government in coordinating and monitoring the implementation of COVID-19 interventions across all pillars of the response.

To control the outbreak, containment measures were instituted, including border closures, declaring a state of emergency, a nationwide lockdown, curfews and other public health and social measures. The testing of symptomatic cases and their contacts were prioritised in all districts. In addition, active case finding, isolation of patients, and quarantining of their contacts were instituted. After the reopening of the borders, all arriving travellers were required to present a valid 72-hour Polymerase Chain Reaction (PCR) test. Returning citizens and residents without a PCR test were subjected to 14-day mandatory quarantine and PCR testing, while non-citizens were not allowed entry into the country. With the changing epidemiology of the disease, this has since changed.

ACHIEVEMENTS

Coordination, Planning, Financing and Monitoring

Coordination played a crucial role in ensuring coherence and operational alignment throughout all pillars of the response at national and subnational levels and served as the platform for ongoing decision-making and course correction based on data. In 2020, the WHO supported Botswana to improve its preparedness and operational readiness to handle the initial impact of COVID-19 and subsequent recovery and to be able to meet its International Health Regulations (IHR, 2005) commitments.



→ Emergency Coordination Structures

At the national level, the Public Health Emergency Management Committee (PHEMC), which entailed a multi-sectoral, whole of government coordination mechanism that informed, monitored and reviewed response actions, was activated. In 2021, the Incident Management System (IMS) was established to provide a standardised, flexible and scalable coordination mechanism to manage the COVID-19 outbreak.

→ Surge Capacity

With AFRO support, the WCO could deploy an international surge capacity team across the different pillars to complement and strengthen the Country Office's COVID-19 response support. The deployment of various experts contributed significantly to the WHO's presence in the response.

→ Strategic Documents

Strategic documents were developed to guide the COVID-19 preparedness and response activities in the country, including the National Preparedness and Response Plan, the Country Office Operational and Readiness Plan, the WCO Business Continuity Plan (BCP), the COVID-19 Incident Action Plan (IAP), the COVID-19 Resurgence Plan, Technical Guidelines, Standard Operating Procedures (SOPs) and tools related to all the pillars of the response.

→ Risk and Operational Readiness Assessments

At the beginning of the COVID-19 pandemic, a district risk assessment was undertaken. A comprehensive analysis established each district's risk level, based on which key priority public health interventions were identified and implemented. Further along in the outbreak, an assessment of

operational readiness for a 4th COVID-19 wave was undertaken. The main aim of the district capacity assessment was to evaluate each district's level of preparedness for the wave, driven primarily by the Omicron variant.

→ Intra-Action Review (IAR)

In November 2020, the MoHW and its partners undertook an intra-action review of the COVID-19 response under all the pillars. Key recommendations were outlined for immediate, medium- and long-term implementation.

The MoHW leadership was briefed on the outcome of the IAR and the action points to be undertaken to improve the coordination of the response. Botswana shared its experience in a regional meeting for other countries to benchmark. In November 2020, a review of the implementation of recommendations made from the IAR was conducted.

→ Partnership and Resource Mobilisation

Several partners contributed and lent their in-kind and financial support to the COVID-19 response in Botswana. Most of the in-kind support, valued at 3,561,447 USD, was given directly to the MoHW. The partners listed in Table 1 provided financial support to the value of 2,503,346 USD, which was mobilised to enhance Botswana's emergency preparedness and response at both central and district levels by procuring lifesaving emergency supplies that were prepositioned in high-risk districts. The goal was to strengthen the health system against emergencies and contribute to the overall reduction of morbidity and mortality due to COVID-19 and other diseases that may arise in the future.



↕ Group discussions at the Intra-Action Review of the COVID-19 response workshop in November 2020

Table 1: Partner contributions to the COVID-19 response, channelled through the Country Office

NAME OF PARTNER	CONTRIBUTIONS (USD)
European Civil Protection and Humanitarian Aid Operations (ECHO)	1,196,737
United Kingdom Department for International Development (UK/DFID)	1,100,000
Azerbaijan	100,000
Germany	106,609
TOTAL	2,503,346



Risk Communication and Community Engagement (RCCE) and Infodemic Management

Guidance on developing and producing Information, Education, and Communication (IEC) materials and messages was provided, and a training curriculum for community health workers was developed. IEC messages were developed throughout the year and distributed to the public to sensitise, create awareness, and elicit a response to COVID-19. Social media platforms (mainly Facebook and Twitter) from both government and the WHO were used to educate and mobilise the public. Television, newspapers, web radio, and SMS campaigns were conducted and reviewed as the situation evolved. Local communities were further engaged through various forums such as health talks in clinics, workplace and school programmes, funerals, weddings, religious gatherings, and public address systems.



↑ COVID-19 information pamphlet in Braille

The WHO also addressed the Directors of Sports and other government sectors on the implications of COVID-19 for sports and other social gatherings and how to mitigate the possible impact, resulting in the creation of protocols for sports gatherings in the African Union Sports Commission Region 5.

Surveillance, Epidemiological Investigation, Contact Tracing and Adjustment of Public Health and Social Measures

→ Outbreak Investigation

Capacity was built to improve the country's ability to rapidly respond to Public Health Emergencies (PHE) through training and procuring equipment for the district's Rapid Response Teams (RRTs). Six RRTs from the national and district level were trained in the role and constitution of RRTs to support the outbreak field investigations in the context of the COVID-19 pandemic. All 27 districts were equipped with field investigation kits to facilitate the timely investigation of outbreaks. In addition, districts were trained in Integrated Disease Surveillance and Response (IDSR) to monitor the outbreak.

→ Information Management

Support was provided to the MoHW to establish Monitoring and Evaluation mechanisms from the national to subnational levels to improve timeliness, completeness of reporting and data quality. This entailed mentorship and on-the-job supervision of the surveillance and data management teams to improve data collection, data entry and management at national and subnational levels.

Training was conducted to build national and district capacity in analysing and interrogating data to guide COVID-19 response activities. This bolstered the IDSR unit's ability to prepare information products such as reports, sitreps and dashboards for presentation and dissemination to decision makers for informed actions to outbreak response. In addition, a resurgence plan was developed in readiness for upsurges.



↑ Representatives of MoHW, the EU and WHO at the handover event when Rapid Response Team Field Kits were donated, March 2021

Ports of Entry, International Travel and Transport, and Mass Gatherings

The Joint External Evaluation of the International Health Regulation (IHR, 2005) revealed that Botswana had no capacity for an effective public health response at its Ports of Entry (PoEs). As a result, in October 2021, Botswana assessed its IHR capacities in all 12 designated PoEs (four international airports and eight ground crossings) and 12 non-designated ground crossings. The assessment aimed to develop, strengthen and maintain the IHR public health capacities requirements at designated airports and ground crossings in Botswana related to prevention, early warning and response to public health risks and events. The assessment outcome was instrumental in (i) identifying the gaps in IHR capacities at the PoEs and (ii) guiding the country in selecting the borders for reopening after closure as a containment measure for COVID-19. Opening the borders was carried out in a phased manner. The following tables summarise the scores for each capacity assessed in the 12 designated PoEs.



OCTOBER 2020	INTERNATIONAL AIRPORTS			
ALL GROUPS OF CORE CAPACITIES	PG Matante	Maun	Kasane	Sir Seretse Khama
Coordination and communication	61%	64%	86%	89%
Core capacities at all times	47%	56%	51%	66%
Core capacities for responding to PHEICs	56%	60%	42%	61%
TOTAL	55%	60%	60%	72%

OCTOBER 2020	GROUND CROSSINGS							
ALL GROUPS OF CORE CAPACITIES	Pioneer Gate	Ramatlabama	Martin's Drift	Mamuno	Ramokgwebana	Tlokweng	Kazungula Ferry	Kazungula Road
Coordination and communication	72%	75%	72%	61%	33%	50%	39%	50%
Core capacities at all times	56%	56%	54%	70%	37%	56%	71%	58%
Core capacities for responding to PHEICs	34%	51%	68%	51%	43%	40%	35%	48%
TOTAL	54%	61%	65%	61%	38%	49%	48%	52%



Laboratories and Diagnostics

Inexistent at the beginning of the outbreak, the capacity for PCR testing to detect COVID-19 was developed with technical support provided by the WHO and the first laboratory kits were procured to strengthen the National Health Laboratory. Initially, four laboratory technicians and 21 laboratory assistants were trained in the testing and transporting of specimens from the various laboratories across the country. A national testing strategy was developed for the various COVID-19 tests resulting in guidance for the introduction and use of Antigen Rapid Diagnostic tests in the country. A laboratory assessment was conducted to identify gaps in selected laboratories resulting in the training of four laboratory technicians and 31 laboratory assistants on antigen testing for roll-out to the districts. The WHO supported decentralising the country's laboratory testing capacity to seven satellite laboratories. By the end of 2021, ten laboratories were testing for COVID-19 across the country, and as of 31 December 2021, 2,044,973 laboratory tests had been performed.



↑ As COVID-19 preventive measures, additional hand-washing facilities were established in educational institutions

Infection Prevention and Control and Protection of the Health Workforce

National IPC guidelines and SOPs were developed to provide COVID-19 guidelines for health care workers, prevent infection in health facilities, and provide a guide to safe burial. A monitoring and evaluation framework was developed, and capacity building on IPC was achieved through developing training manuals and training 29 trainers. Thirty-six health staff were trained in establishing IPC committees and terms of reference were developed.



↑ Nurses in full PPE at one of the isolation facilities



↑ UK Emergency Medical Team welcomed by the local authorities and health partners in Botswana

Case Management, Clinical Operations, and Therapeutics

Case management guidelines and SOPs were developed to monitor and guide the management of COVID-19 cases, including a case management audit tool and home-based care guidelines. An on-site assessment of isolation facilities in three districts was conducted to improve the management of cases in these facilities. Case management equipment such as oxygen concentrators and pulse oximeters were procured to augment capacity in all the high dependency units. Several types of facilities, including barracks, were assessed for repurposing as Severe Acute Respiratory Infections (SARI) treatment centres.

In June 2021, a team of Critical Care Specialists comprised of two doctors and four nurses were deployed to Botswana. The team supported ten districts by providing on-the-job mentorship and training in critical care.



↑ Critical care specialists assessing the isolation area at the Scottish Livingstone Hospital in Molepolole

In September 2021, a UK Emergency Medical Team comprised of ten personnel to support treatment facilities and augment the capacity of health facilities as a specialised care team was deployed into the country. This team supported targeted teaching hospitals in Gaborone (Sir Ketumile Masire Teaching Hospital and Princess

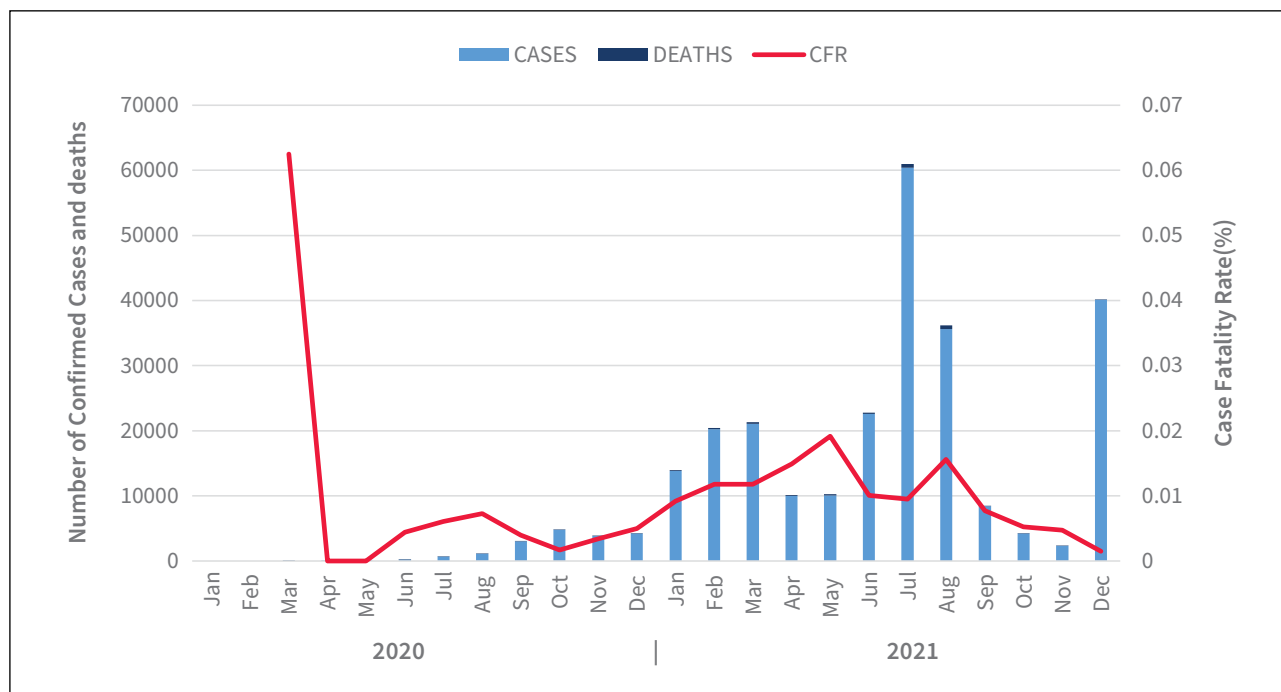
Marina Hospital) by strengthening and increasing the capacity of health services to respond better and more effectively to the third wave of the COVID-19 pandemic.

The two teams significantly improved critical care management capacities within the country.



↑ Critical care specialists and WHO Botswana staff at Scottish Livingstone Hospital in Molepolole, September 2021

Figure 2: COVID-19 case fatality trend March 2020 – December 2021



Operational Support and Logistics and Supply Chains

The logistical structure of the MoHW was reorganised, and the terms of reference, logistic support strategy for the DHMTs, and a 6-months work plan were developed to support field operations. A national vaccine deployment plan was designed to ensure appropriate cold chain facilities were in place and to facilitate vaccine distribution at national and district levels. The MoHW and Central Medical Store were supported to carry out stock inventory and monthly consumption rates of all COVID-19 commodities, including laboratory items. The procurement of COVID-19 commodities was facilitated through the WHO portal platform.

Maintaining Essential Health Services and Systems

A comprehensive assessment was conducted to appreciate the extent of the disruption in essential health services during the COVID-19 outbreak. The evaluation highlighted gaps in service delivery and challenges in accessing services during the COVID-19 lockdown. Interventions were proposed to address the challenges and the types of support and resources needed to ensure the continuity of services.

From the 2019 data analysis of maternal deaths reported by all the hospitals in the country, two referral hospitals, namely Princess Marina and Nyangabwe, contributed to the high burden of maternal deaths. A joint mission of the MoHW and Princess Marina Hospital Obstetrics and Gynaecology team was undertaken in reporting health facilities for support and mentorship. This contributed to a reduction in maternal deaths from 33 in 2019 to 23 in December 2020.



↑ Ensuring continuity of services during the COVID-19 pandemic in Gobajango

Vaccination

In collaboration with MoHW and other stakeholders, the WHO participated in developing the National Vaccine Deployment Plan to guide the rollout of COVID-19 vaccines in the country, which was executed in four phases. The WHO also provided technical support to strengthen cold chain and vaccine management and capacity building of health workers on COVID-19 Vaccine Management. The establishment of the Adverse Events Following Immunisation (AEFI) committee

that worked in collaboration with the Botswana Medicines Regulatory Authority (BoMRA) to strengthen causality assessment was also supported.

Botswana made considerable progress in COVID-19 vaccination, and by 31 December 2021, out of the national target of 1,390,856 people (over 18 years), 80.6% had received at least one dose of vaccine, and 71.9% were fully vaccinated.



1,390,856

NATIONAL TARGET (PEOPLE)



80.6%

RECEIVED AT LEAST ONE DOSE



71.9%

FULLY VACCINATED



↑ Case management training participant taking through oxygen delivery devices



↑ Demonstration of intubation during the Gaborone training by Dr John Appiah

WHO REGIONAL DIRECTOR FOR AFRICA VISITS BOTSWANA TO SUPPORT THE COVID-19 RESPONSE

After leading the WHO COVID-19 surge mission to South Africa, the WHO Regional Director for Africa, Dr Matshidiso Moeti, visited Botswana to support the WHO country office, meet with the government and pay a courtesy call to His Excellency, the President, Dr Mokgweetsi Eric Keabetswe Masisi virtually. During the brief mission, Dr Moeti also met with the Minister of Health and Wellness, the Honourable Dr Edwin Dikoloti, and his executive team to discuss strategic issues on the COVID-19 response and the continuity of essential health services.

Dr Moeti also met with the UN Resident Coordinator to discuss coordinated support for the national response, including sustaining the economy and post-pandemic recovery. Participants at the meeting, namely the SADC Deputy Executive Secretary and other SADC senior management representatives, agreed on the critical role of harmonisation, coordinating efforts across the Member States, and sharing information while strengthening collaboration on addressing cross-border infections without hurting the economy. Dr Moeti assured us that WHO experts would always be ready to engage with SADC on strategic and innovative ways to help Member States address COVID-19. Dr Moeti also met, thanked, and commended development partners for supporting and working with the WHO and assisting the government's response, particularly in enabling the availability of essential supplies, including personal protective equipment and laboratory supplies, as well as supporting other key areas of the response.

In her virtual meeting with the Presidential COVID-19 Task Force, Dr Moeti commended the coordination of the national response and discussed how the WHO could optimise its support.



↑ WHO Regional Director, Dr Matshidiso Moeti (red jacket), and her team met with the Minister of Health and Wellness, Dr Edwin Dikoloti (red face mask), and his team during a brief visit to Botswana



↑ WHO leadership and partners at a brief consultation on COVID-19. From left to right is Katja Nolte, Deputy Ambassador of Germany - Jan Sadek, EU Ambassador to SADC - Dr Matshidiso Moeti, WHO Regional Director for Africa, Laurence Beau, Ambassador of France, and Dr Josephine Namboze, WHO Country Representative to Botswana

Dr Moeti congratulated Botswana on its impressive and comprehensive multi-sectoral response and encouraged the country to consolidate on the gains it was making against the pandemic. She assured the country of continued WHO and UN support all through the response.

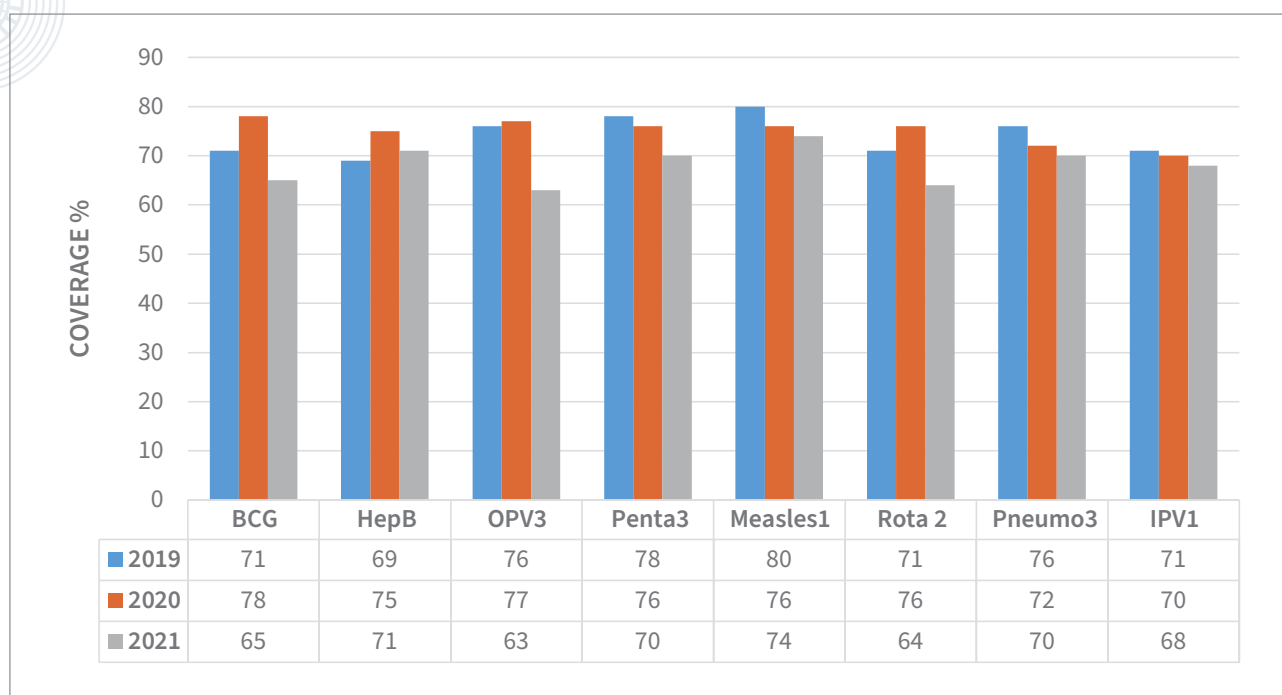
UNIVERSAL HEALTH COVERGE



However, despite the COVID-19 pandemic, the overall coverage trend for key antigens over the last ten years reveals a slight downward trend, as shown in Figure 2. BCG was 71% in 2019, 78% in 2020 and 65% in 2021. The first dose of the measles vaccine was 80% in 2019, 76% in 2020 and 74% in 2021.

In 2021 the Ministry conducted a Measles/Rubella follow-up campaign targeting children aged nine to 59 months, and despite the COVID-19 pandemic and compliance to COVID-19 protocol, 90% coverage was achieved.

Figure 4: Administrative Coverage of Routine Immunisation 2019 – 2021



Source: MoHW

To strengthen the implementation of child health activities and increase the uptake of high-impact interventions, the following activities were conducted:

- ➔ Retired nurses were engaged to support the Expanded Programme on Immunisation (EPI) and Integrated Supportive Supervision (ISS) and perform active searches in all the districts.
- ➔ The Measles/Rubella campaign conducted in February 2021, targeting children aged nine to 5 years, achieved 90% coverage.
- ➔ ISS was conducted in all 24 districts as well as cold chain assessments and vaccine management.
- ➔ Integrated EPI surveillance, AEFI, cold chain maintenance, vaccine management capacity building and the training of health workers.
- ➔ An under-five mortality audit was conducted in four hospitals (Gumare, Gantsi, Hukunsi, and Tsabong), the results of which will be published in 2022.
- ➔ Integrated Management of Childhood Illnesses (IMCI), distance training, and follow-up supportive supervision.
- ➔ Rotavirus surveillance training was given to the four active sentinel sites (Letsholathebe, Bobonong, Nyangabwe, and Princess Marina Hospital).

Using the Open Data Kit (ODK) platform key indicators of the Expanded Programme on Immunisation (EPI) and Integrated Supported Services (ISS) were monitored and tracked.

Figure 5: Integrated Supportive Supervision conducted in 2020

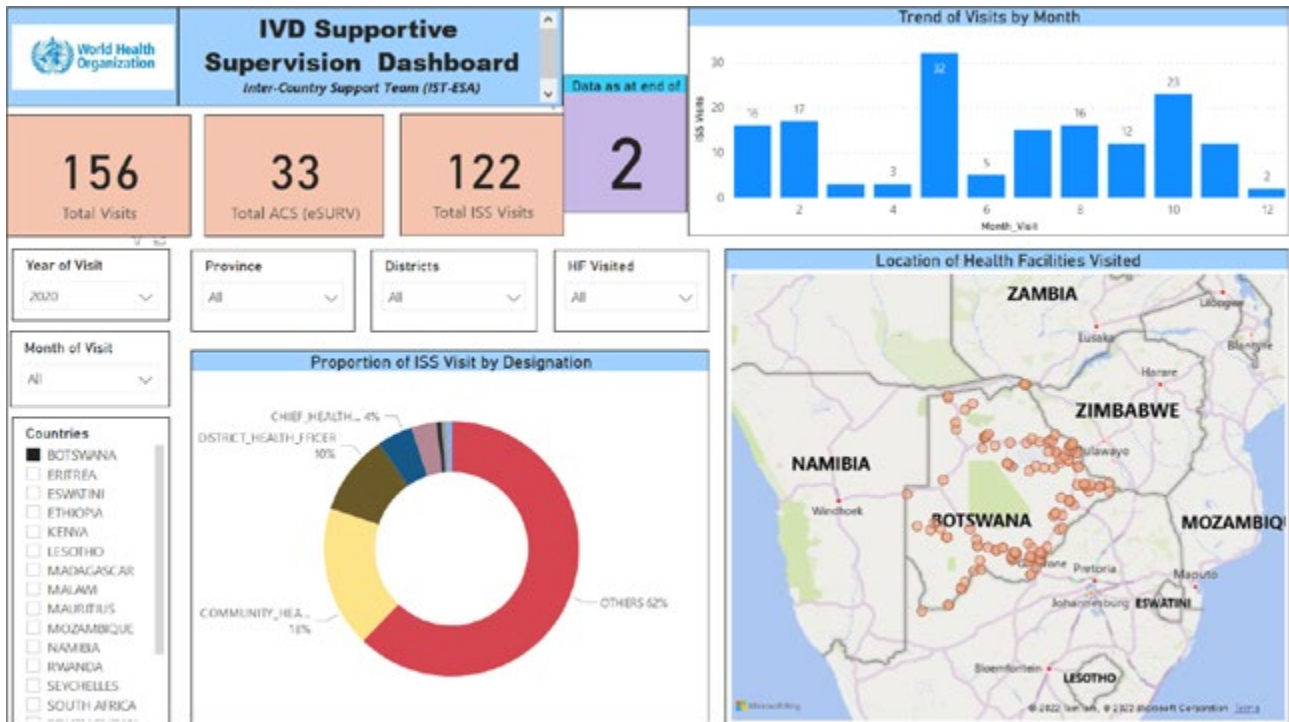
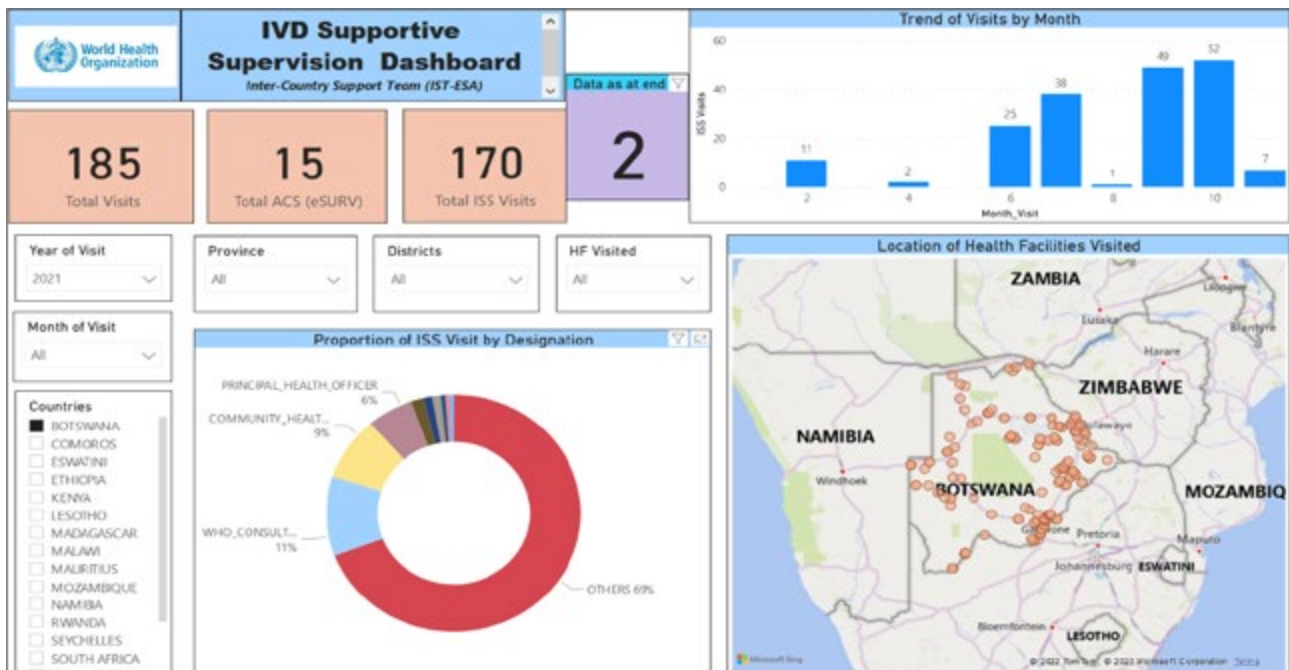


Figure 6: Integrated Supportive Supervision conducted in 2021



In addition, the Polio Eradication Committee met to review their performance in 2020 and submitted the 2020 NCC annual report. The committee also developed the 2021 work plan and is working on the NCC annual report for 2021.

A study was also conducted to assess the extent to which COVID-19 disrupted services in Reproductive, Maternal, Neonatal, Child and Adolescent Health (RMNCAH), and recommendations were made to ensure the continuity of essential health services in these areas. According to the report, Antenatal Care (ANC) attendance was lowest in April 2020, when pandemic-imposed travel restrictions were in place. In the three months prior (January 2020 to March 2020) there was a decline of 11.7% compared to the previous month. Postnatal Care (PNC) visits remained relatively constant over the four months.

COVID-19 Vaccinations

The WHO supported the reactivation of the structures and systems necessary for introducing the COVID-19 vaccine. The National Deployment and Vaccination Technical Working Group were established, and the terms of reference for the Interagency Coordinating Committee (ICC) and sub-committees were updated. The teams were oriented on their roles and responsibilities. The Ministry of Health and Wellness was supported to conduct periodic assessments and build capacity for COVID-19 vaccine introduction readiness using the Vaccine Introduction Readiness Assessment Tools (VIRAT/VRAF 2.0). From an initial score of 44% in November 2020, Botswana's readiness increased to >90% in March 2021.

Using global guidance, the WHO supported the development and costing of the National Deployment and Vaccination Plan for Botswana. The plan was approved, and COVID-19 vaccination commenced on 26 March 2021. The districts were supported in translating the National Deployment and Vaccination Plan to district level and conducting micro-planning exercises. Training materials developed by the WHO were adapted, teams at national and district levels were trained on COVID-19 vaccine deployment, and a series of capacity-building sessions were held for frontline health workers on the administration of COVID-19 vaccines.

As the global demand for vaccines resulted in global shortages, the vaccination drive was rolled out in Phases as vaccines became available. Phase 1 targeted persons aged 55 years and above and essential health workers, Phase 2 targeted individuals aged 30 to 54 years, and Phase 3 targeted persons aged 18 to 29. To support the COVID-19 vaccination rollout, the MoHW appointed ten Liaison Officers to work with districts to ensure that structures created to facilitate the COVID-19 vaccination roll out are effective and to help address the health systems challenges encountered during the roll out process. Between May and July 2021, WHO supported the planning meetings, field missions and feedback meetings for the Liaison Officers who visited all the 18 districts during the three months.

The WHO provided technical and financial support to the Botswana Medicines Regulatory Authority (BoMRA) to strengthen COVID-19 vaccine safety surveillance. The achievements included:

- ➔ Appointment of full-time technical expert based in the Pharmacovigilance Department in the Botswana Medicines Regulatory Authority to set up COVID-19 vaccine safety surveillance systems.
- ➔ Establishment and orientation of the National Adverse Events Following Immunisation (AEFIs) Committee.
- ➔ The adaptation of tools and guidelines for reporting adverse events following immunisation.
- ➔ The training of health workers at national and district levels in reporting and investigating adverse events following immunisation.
- ➔ The printing of 500 AEFI reporting books, 65,000 factsheets, and 3,300 posters to communicate vaccine safety and other information.
- ➔ A computer was purchased for the Pharmacovigilance Department to ensure that the AEFI data is captured, regularly shared with AFRO, and uploaded to the global platform VigiLyze, a tool used by members of the WHO Programme for International Drug Monitoring (WHO PIDM).
- ➔ Supporting the National AEFI Committee to conduct causality assessment on reported cases.
- ➔ Supporting the feedback meetings between senior management in MoHW and the National AEFI Committee to inform programming, especially for risk communication and community engagement relating to COVID-19 vaccination.

With support from the WHO, capacity was built for supply chain and logistics management for the COVID-19 vaccine at national and district levels. An expert Logistician contracted by the WHO worked with the Logistics Technical Working Group to assess the country's capacity for ultra-cold storage of vaccines, support the procurement of vaccination supplies, and build the capacity to monitor the vaccine stock status and track vaccine expirations.

The WHO supported the design and printing of COVID-19 vaccination data collection and reporting tools and the printing of 800,000 vaccination cards. COVID-19 vaccination data are summarised daily and disaggregated by age, sex, vaccine type and district. The COVID-19 vaccination uptake and coverage were tracked using the DHIS2 platform. The COVID-19 vaccination reports were periodically shared with the Interagency Coordination Committee, comprised of government, development partners, academia, civil society and private sector partners.

The WHO also supported the training and deployment of data clerks to capture and upload the data into DHIS2, thus improving monitoring and reporting. Support supervision district visits undertaken jointly by the MoHW and WHO from 24 to 27 September 2021 assessed the COVID-19 Vaccination monitoring systems and conducted manual verification of COVID-19 vaccination data at district level.

Integrated field visits to strengthen immunisation surveillance, vaccine safety monitoring, cold chain maintenance and vaccine management were conducted by four teams comprised of 18 technical officers from the Expanded Program on Immunisation (EPI), Central Medical Stores, the WHO and the Botswana Medicines Regulatory Authority (BoMRA) from the 7th to the 27th of October 2021.

The teams addressed surveillance for AEFIs, polio and measles, cold chain maintenance and vaccine management, the low reporting rates for routine immunisation as part of strengthening continuity of essential health services and

other gaps identified by the District Health Management Teams (DHMTs). In some cases, prioritising COVID-19 vaccination implementation and reporting led to less attention being paid to routine immunisation. The teams worked with monitoring and evaluation officers to ensure that the data for routine immunisation was uploaded and up to date. As more vaccines became available, the number of vaccinations per day increased and exceeded the rate at which the information was being uploaded into the DHIS2 system. This resulted in a data entry backlog. In mitigation, the WHO supported the engagement of 49 data clerks to upload 56,097 COVID-19 vaccination records contributing to the quality and completeness of COVID-19 vaccination data.

COVID-19 vaccination remains a key strategy in ending the acute phase of the COVID-19 pandemic, saving lives, and reducing the transmission and mortality rates arising from COVID-19 infections. By the end of December 2021, Botswana had exceeded the target set by the WHO that at least 10% of the population be fully vaccinated.

Figure 7: Summary of Botswana COVID-19 Coverage
(>18yrs) 26 March 2021–31 December 2021

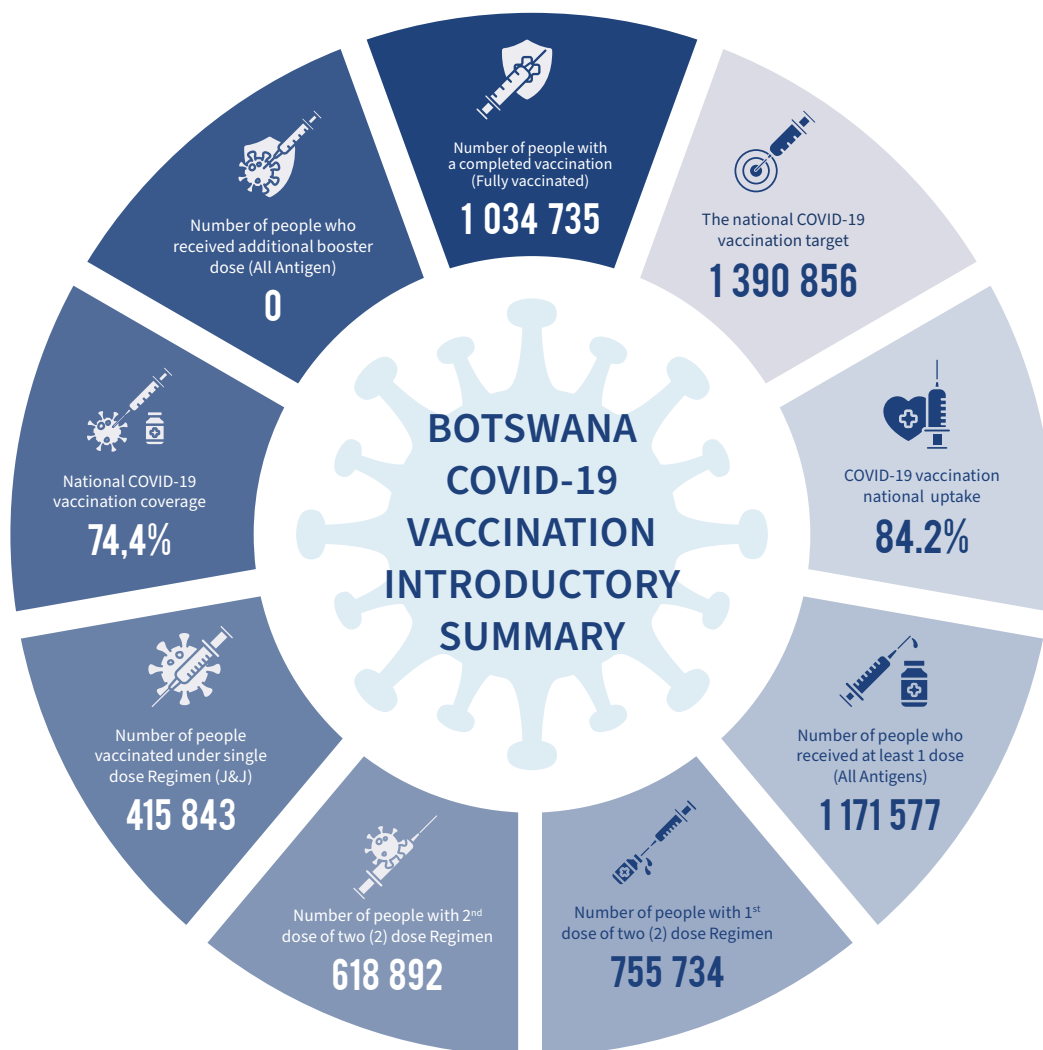


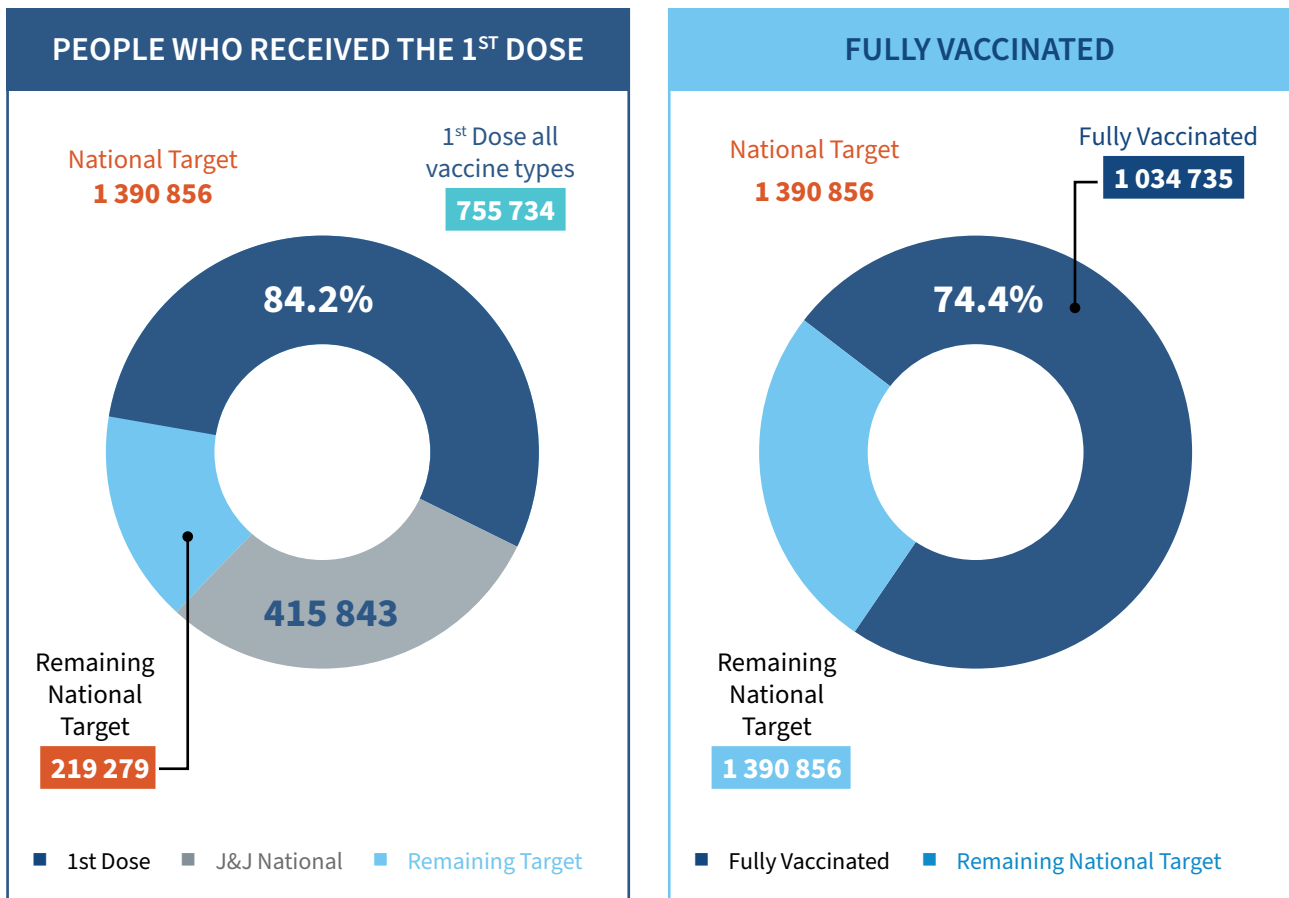
Figure 8: Vaccination coverage by districts: 26/03/2021–30/12/2021

No	18 Health DHMTs	District Targets	Fully Vaccinated	District Coverage
1	Boteti	46 381	39 759	86%
2	Chobe	15 862	15 537	98%
3	Ghanzi	26 638	19 796	74%
4	Greater Francistown	144 194	99 020	69%
5	Greater Gaborone	250 788	208 802	83%
6	Greater Lobatse	62 476	44 867	72%
7	Greater Selebi Phikwe	88 513	57 930	65%
8	Kgalagadi North	15 226	11 605	76%
9	Kgalagadi South	21 140	17 074	81%
10	Kgatleng	67 903	43 706	64%
11	Kweneng	139 849	93 527	67%
12	Mahalapye	86 023	61 343	71%
13	Ngamiland	60 722	43 971	72%
14	North East	27 026	22 751	84%
15	Okavango	38 750	30 677	79%
16	Serowe/Palapye	128 107	97 753	76%
17	Southern	114 643	78 387	68%
18	Tutume	56 615	47 997	85%
TOTAL		1 390 856	1 034 735	74%

Districts with Coverage above 80%	
District	Coverage
Chobe	98%
Boteti	86%
Tutume	85%
Northeast	84%
Greater Gaborone	83%
Kgalagadi South	81%

Districts with coverage less than 70%	
District	Coverage
Greater Francistown	69%
Southern	68%
Kweneng	67%
Greater Phikwe	65%
Kgatleng	64%

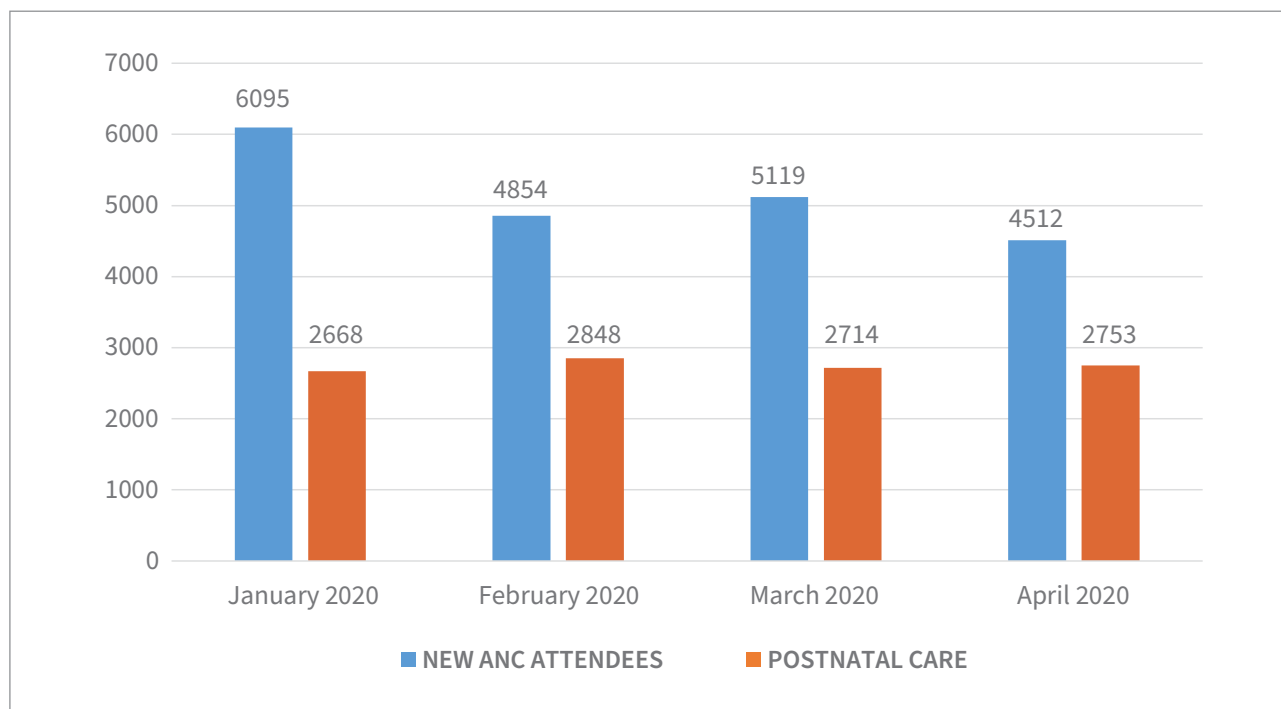
Figure 9: National COVID-19 Vaccination uptake & coverage: 26/03/2021–30/12/2021



- 84,2% uptake is inclusive of J&J
- National target has changed due to change in districts targets

Reproductive and Maternal Health

Figure 10: Distribution of new ANC and PNC visits from January–April 2020



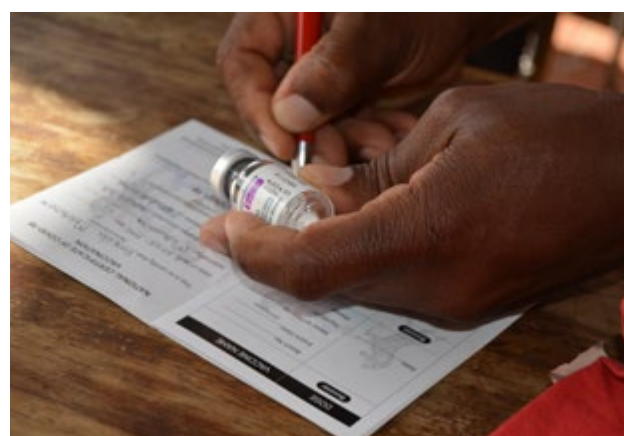
In collaboration with UNAIDS, an assessment to validate the elimination of mother-to-child HIV transmission and syphilis was conducted in ten districts across the country, purposefully sampled to include low-performing districts in the Prevention of Mother-to-Child Transmission (PMTCT) performance. The Healthy and Active Ageing Strategy (2020) was drafted to address the needs of the older population, and neonatal guidelines were reviewed.

Princess Marina Hospital (PMH) was supported to investigate the increased maternal deaths (Table 2) and to develop a plan of action to ensure continuity of the activities geared towards reducing maternal deaths. A Task Team was established to discuss the maternal mortality situation at PMH and in its catchment area, explore contributing factors from the facilities, strengthen working relationships with the referring facilities, and assist them in capacity building.

Table 2: Maternal deaths in 2017–2019 and the contribution of the Princess Marina Hospital

YEAR	NATIONAL	PMH
2017	74	21 (28.5%)
2018	71	18 (28.3%)
2019	86	31 (36%)

Teams visited all the facilities referring patients to PMH to assess their capacity for quality services, including infrastructure, human resource numbers and skills, medical supplies, and the availability of blood transfusion services, among others. The visits effectively strengthened communications with the referring centres and helped highlight the challenges faced by PHM as the referral centre, as well as the facilities in its catchment area. Figures 9 and 10 show that the Princess Marina Hospital has the highest number of deliveries, followed by Scottish Livingstone Hospital, Bamalete Lutheran Hospital, Deborah Retief Memorial Hospital and Kanye Seventh-day Adventist Hospital.



↑ Arm Ready — the vaccination campaign in Botswana

Figure 11: Deliveries in key health facilities 2017–2019

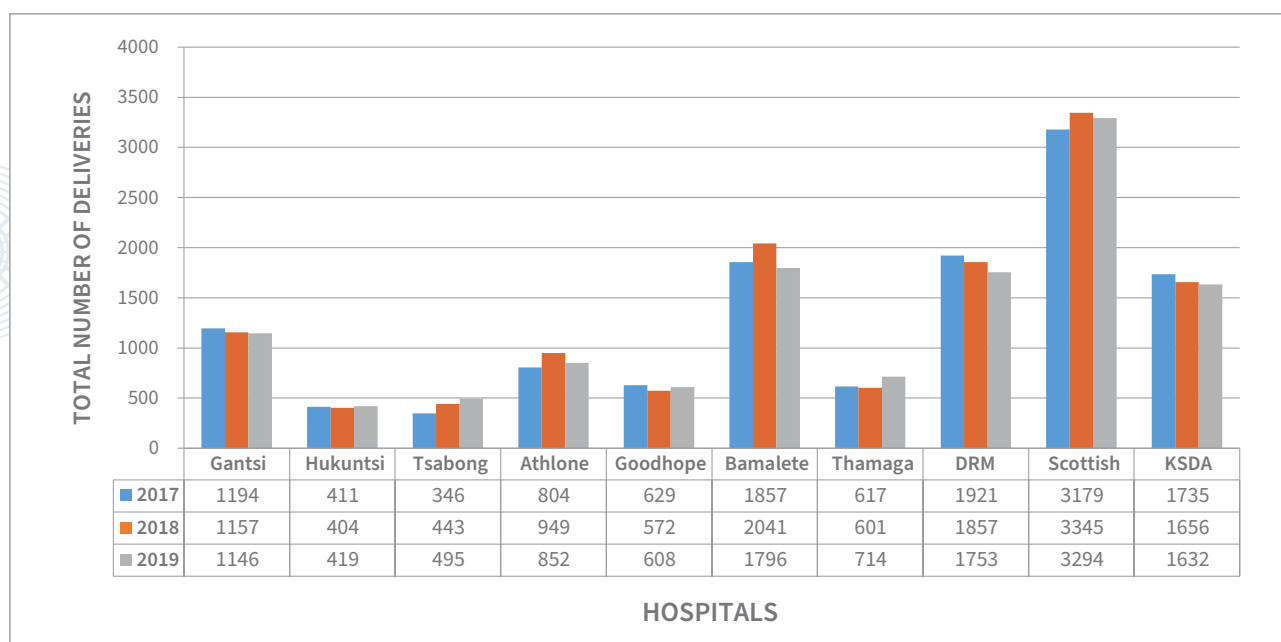
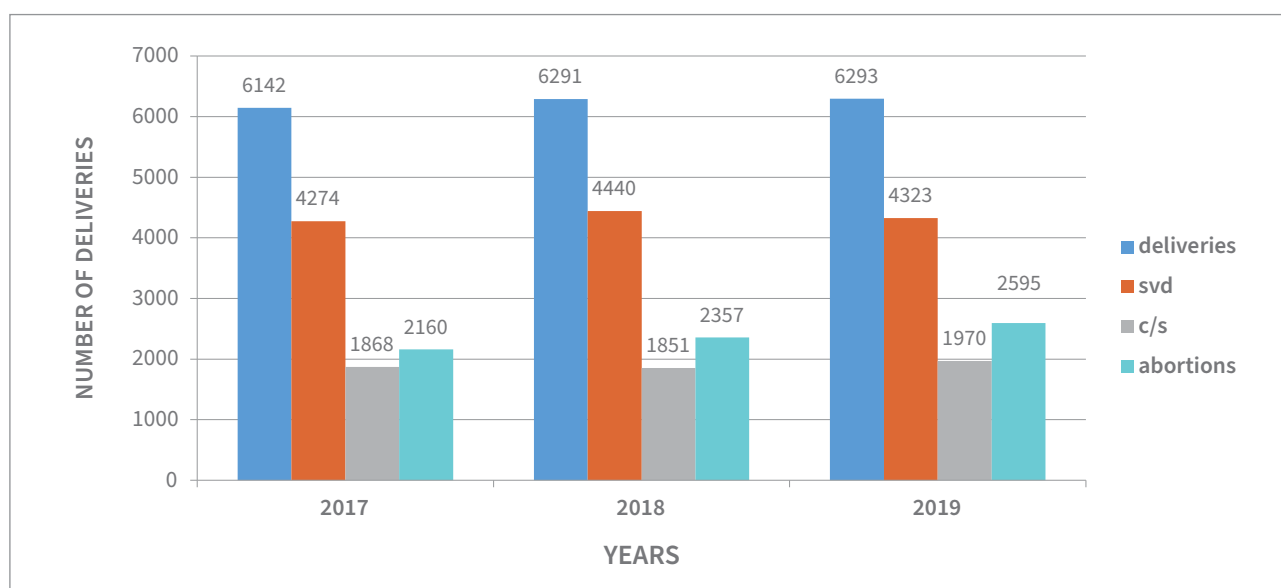


Figure 12: Deliveries in Princess Marina Hospital 2017–2019



The visits revealed a staff shortage, including doctors, midwives, nurse anaesthetists, theatre nurses and radiographers. In all these cadres, the MoHW staffing norms fell short of the WHO recommendation of four doctors and 23 nurses per 10,000 people.

Drug availability was good, but all facilities visited reported a shortage of blood and blood products. The facilities, however, had a good supply of hematinic for optimising haemoglobin levels during pregnancy and fresh dried plasma to control obstetric haemorrhage. Most staff were skilled in managing obstetrics and gynaecological emergencies.

The health infrastructure needed upgrading, and the theatre equipment needed refurbishing or replacing. There was also a challenge with essential instruments like episiotomy scissors, curettes, ultrasound machines, Doppler and CTGs. A shortage of transport means was reported in all the DHMTs visited. For districts like Gantsi (made up of Gantsi/Charles Hill) and Kgalagadi South and North, the available vehicles were not well-suited to the desert-like sandy roads. The ambulances lacked the equipment to monitor patients en route to the referral facilities and communication devices like long-range radios. The recommendations arising from the assessment were incorporated into the strategies and plans for the coming fiscal year.

WORLD PATIENT SAFETY COMMEMORATION — 2021

On 17 September 2021, the WHO Country Office of Botswana joined the Ministry of Health and Wellness to commemorate Patient Safety Day 2021 in Maun, in the Ngami district. The theme was *Safe Maternal and Newborn Care* and carried the slogan *Act Now for Safe and Respectful Childbirth*. This theme was considered because of the significant burden of harm women and newborns are exposed to as a result of unsafe care and gender equity and violence issues. To Botswana, this theme came at a time when the country grapples with challenges of maternal mortality and gender-based violence during the COVID-19 pandemic. The objectives of this day of Commemoration were to:

- Raise awareness on the issues of maternal and newborn safety, particularly during childbirth.
- Call for urgent and sustainable actions by all stakeholders to scale up efforts, reach the unreached and ensure safe maternal and newborn care, particularly during childbirth.
- Advocate for adopting best practices at the point of care to prevent avoidable risks and harm to all women and newborns during childbirth.

The day was graced by the Honourable Minister of Health and Wellness, Dr Edwin Dikoloti, who motivated concerted efforts to improve the quality of care to customers, especially maternal and newborn care. The WHO Representative, Dr Namboze, shared global and regional situations on patient safety and the WHO resolutions aimed at rendering quality care. Other dignitaries present included Dr Morrison Sinvula, a Ministry of Health and Wellness Consultant, Public Health Specialist for Ngami, Dr Sandra Maripe, Member of Parliament for Maun East and Mr Goretetse Kekgonogile, who delivered the closing remarks. Members of the community were there to witness this memorable day.



↑ The Honourable Minister, Dr Edwin Dikoloti, delivered the keynote address



↑ WHO Country Representative, Dr Josephine Namboze, addressed global and regional perspectives on patient safety

One highlight worth acknowledging was the recognition of retired Midwife Mrs Eva, who contributed significantly to the health and wellbeing of the mothers and children while a matron in Letsholathebe Hospital.

As part of the efforts to improve maternal and newborn care, the WHO donated 30 domiciliary kits to Letsholathebe District Hospitals. The kits consisted of bags, baby scales, stethoscopes, measuring tapes, blood pressure machines, thermometers and waste bins. The kits are expected to assist in monitoring the health of the newly delivered mother and baby.



↑ Dr Edwin Dikoloti, and the PHS for Ngami, receiving the donated domiciliary kits from the WR, Dr Josephine Namboze



↑ Donated Domiciliary Kits to Letsholathebe District Hospital

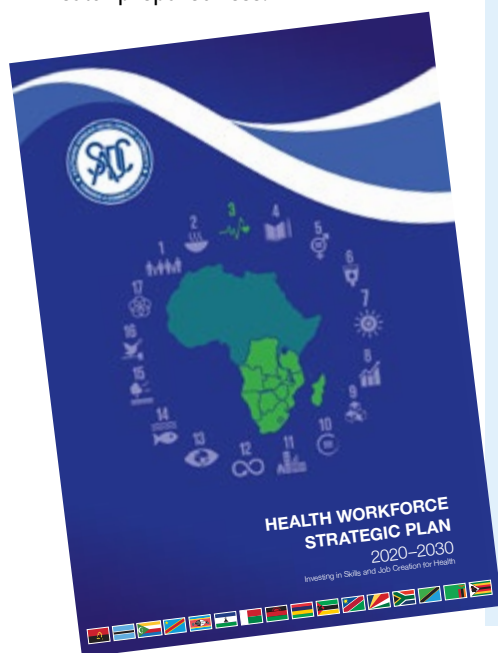


↑ Patient safety commemoration event in Maun, September 2021

Health Sector Policies, Strategies and Governance

During the biennium, the WHO provided technical and administrative support toward the development of the Southern African Development Community (SADC) Human Resources Health Strategic Plan 2020–2030, *Investing in Skills and Job Creation for Health*, as part of the joint WHO, ILO and OECD (Organisation for Economic Cooperation and Development) Working for Health (W4H) programme. The SADC Health Workforce Strategic Plan 2020–2030 was finalised and adopted at the SADC Ministerial Meeting in November 2020.

The SADC Human Resources for Health Strategic Plan 2020–2030 sets out its key priorities, specific actions, implementation approach and monitoring framework. The strategic plan aims to accelerate the SADC member states towards achieving their longer-term health goals through evidence-based policy and investment choices that will help build the sustained health workforce capacity and capability. The overarching goal is to drive health workforce investments and decent work as a catalyst for universal health coverage, economic growth, and public health preparedness.



↑ Launch of the Integrated Community-Based Health Services, from left to right – the Hon. Minister of Health and Wellness, Dr Edwin Dikoloti, Mr Kabelo Ebineng, Permanent Secretary of the MoHW, Mr Craig Cloud, the US Ambassador to Botswana, and WHO HSS, Dr Juliet Bataringaya

The WHO supported the development of the National Guideline for Implementation of Integrated Community-Based Health Services. This initiative, launched in November 2020 as a technical tool for implementing integrated community-based health services, is jointly technically and financially supported by USAID and their implementing partners. The guideline reflects the Ministry’s commitment to strengthening primary health care and implementing the *Harmonisation of Botswana’s Community Health Workers Groups: Primary Health Care – Community Health Workers (PHC-CHW) Coordination Strategy* launched in 2017. The guidelines promote an integrated approach to community-based health service delivery and standardise a minimum package of community-based health interventions with the specific objectives of providing technical and programmatic guidance, including:

- ➔ Improving the delivery of integrated community-based health interventions by providing a standardised minimum package of community-based health services.
- ➔ Providing leadership and governance to support coordinating and managing community-based health services through harmonised community health worker groups.
- ➔ Strengthening CHW’s competencies and skill mix to deliver integrated community-based health services.
- ➔ Bolstering information management for integrated community-based health services.

The guideline targets various actors and stakeholders, including policymakers, managers, Ministries and CHWs tasked with managing and implementing community-based health services.



↑ Delegates attending the DHMT training

← WR, Dr Josephine Namboze addressing attendees at the official opening of the DHMT training

District Health Management Team Training

As part of strengthening District Health Systems, the WHO supported the training of newly deployed district coordinators and the management team in November 2021. The goal of the training was to empower the deployed district management team on the overhauled business operational model of health service delivery arrangements at the implementation level. This is essential to achieve the ongoing Primary Health Care revitalisation and subsequent delivery of Universal Health Coverage. The training incorporated Corporate and Technical components. Topics covered under the corporate component included policy development, public sector regulatory frameworks, human resources and financial management processes, new job descriptions and change management.

Participants were re-oriented on the instruments that assist in the implementation of the health policy, including the Public Health Act, Integrated Health Services Plan, Patient's Bill of Rights, National Health Quality Standards, National Strategic Framework III, National NCD Strategy, Standards and Norms, Botswana Health Professions Council, the Nursing and Midwifery Council of Botswana, and many others.

A presentation on Human Resource Management meant to equip participants with Human Resource processes and functions was made. The core functions of HR were outlined as Manpower Planning, Training and Development, and Administration and Management of Services.

The Regulatory instruments that govern public service implementation also formed part of the package. It is imperative that people in DHMT leadership positions understand these

instruments and direct the implementation of health services accordingly. These instruments are the Public Service Act, Service Standards, General Orders, Trade and Disputes Act, Council standing orders, Social Protection, and many others.

The restructuring of the MoHW has brought some changes in the operational modalities, which necessitated a presentation on the Government of Botswana Change Management Framework (CMF). This provides a standard and systemic approach, detailed step-by-step, to introduce and roll out all change initiatives in the Public Sector. Communication as a critical component of change was presented, and the highlight was diplomacy in communicating issues inside and outside the organisation.

Job descriptions of the newly deployed district coordinators were discussed at length, including the implications and inherent responsibilities. This sparked extensive discussions regarding the boundaries of what coordinators are expected to do vis-a-vis what the Ministry headquarters does. The training included a technical component covering district situational analysis, quality of care, Universal Health Coverage, Primary Health Care concepts, Health System Thinking, Health Research, and monitoring and evaluating health programmes. Important tools for quality of care, quality improvement interventions and indicators, and the need to assure quality services during emergencies were discussed.

As a way forward, the training needs identified and the recommendations made at the end of the training will form the basis for additional capacity building planned for targeted districts in the biennium 2022–2023.



- ↑ *Permanent Secretary of the MoHW, Grace Muzila, welcoming delegates to the DHMT training during the official opening*
- ← *The Honourable Minister, Dr Edwin Dikoloti, delivering the keynote address during the official opening of the DHMT training*

Botswana Health Partners and Primary Health Care Consultative Fora

To strengthen the policy dialogue, health governance systems and partnerships with stakeholders working towards Universal Health Coverage, the WHO supported the convening of the Botswana Health Partners Forum on 28 October 2021 and the Botswana Primary Health Care Consultative Forum on the 22nd and 23rd of November 2021. The Botswana Health Partners Forum brought together stakeholders to receive progress on health indicators and appreciate

the impact of the COVID-19 pandemic on health services. The Botswana Primary Health Care Consultative Forum reviewed the status of Primary Health Care in Botswana given the impact of the COVID-19 pandemic and proposed an action plan to revitalise PHC in Botswana. Both processes revived the partnerships and collaborations within the health sector and aligned partners' support toward national priorities.





↑ Minister of Health and Wellness, Dr Edwin Dikoloti and WR/Botswana, Dr Josephine Namboze, at the Botswana Health Partners Forum, October 2021

Health Financing

The National Health Accounts (NHA) FY2014/15-2017/18 was finalised during the biennium. The Government of Botswana (GoB) endorsed the harmonisation of the System of Health Accounts (SHA) and the National AIDS Spending Assessment (NASA) processes to facilitate the institutionalisation of resource tracking in Botswana. The harmonised SHA/NASA approach aims to achieve the following:

- ➔ Increased efficiency by undertaking resource tracking using less duplicative data collection efforts.
- ➔ Ensuring a single resource tracking data collection effort comprehensively satisfies broader health and HIV/AIDS stakeholders' data needs.
- ➔ Improvement in the consistency and regularity of producing SHA and NASA analyses in the same period.

The processes were jointly supported by USAID through the African Collaborative for Health Financing Solutions (ACS) project implemented by a consortium led by Results for Development. The harmonisation of tools and data collection for NHA FY2018/19-2019/20 was completed in 2021.



↕ Botswana Health Partners Forum, October 2021



Health Technologies and Antimicrobial Resistance

During the biennium, the WHO provided technical input for developing the National Pharmaceutical Traceability Vision and Strategy to strengthen the supply chain of medical products in Botswana. Further technical support and tools were provided to support the regulation of medical devices, considering the increasing number of products available for COVID-19 diagnosis and management. Technical and financial support was provided to bolster laboratories at national and district levels to respond to COVID-19 diagnosis and management needs.

To bring attention to the country's Antimicrobial Resistance (AMR) agenda, the WHO has elected to commemorate World AMR Awareness Week (WAAW) in November annually. In 2020, the theme for the week-long commemoration was *United to preserve antimicrobials*. Supported by partners active in the AMR response agenda, the Ministry of Health and Wellness and the Ministry of Agriculture and Food Security, along with the Ministry of Environment, and representatives from UN agencies in the tripartite, namely the WHO, the International Organisation of Employers (IOE), and FAO, participated in the commemoration. Dibete was selected as the host village for the commemoration based on its prominence as a hub for cattle farmers supported by government veterinarians and other services, ranging from quarantine to in vitro-fertilisation for the livestock.

In 2021, World AMR Awareness week was commemorated in the village of Pitseng, where crops and animal farming are heavily practised. Despite the restrictions imposed by COVID-19 protocols, the event generated much interest from various stakeholders, and in addition to the traditional partners, the education sector also participated in the 2021 event.



Activities at the Anti-Microbial Resistance Day commemoration 2021, Village of Pitseng



CHALLENGES

- The COVID-19 pandemic continues to affect health system strengthening interventions due to their normative nature. In addition, the COVID-19 pandemic required the Ministry's Health Systems to shift their focus and redirect available funds toward the COVID-19 response.
- The COVID-19 outbreak and the resultant restrictions on movement and public gatherings impacted the provision of hands-on technical support and support supervision. The transition to using technology to substitute face-to-face interaction is hampered by the availability of computers and access to the internet.

NEXT STEPS

- Prioritise the unfinished agenda points from 2020–2021 for completion in the 2022–2023 biennium to get the targets back on course.
- Engage the MoHW to ensure the continuity of essential health services and high levels of services coverage.
- Build the capacity of the District Health Management Teams to strengthen the sub-national level and improve the delivery and management of health services while sustaining the response to the COVID-19 pandemic.

Communicable and Non-Communicable Diseases

SITUATION

The burden of communicable and non-communicable diseases (CDs and NCDs) and their risk factors are on the increase in Botswana. Although the impact of HIV has been minimised, it still compounds the situation by exacerbating the severe outcomes of NCDs and reducing the efficacy of some of the treatments.

At the same time, there is progress in controlling communicable diseases such as Malaria, and NTDs are moving towards elimination. The investments made by the Government in HIV/AIDS have also resulted in marked reductions to levels that would allow final elimination targets to be reached if the effort is sustained. However, a few communicable diseases have resurfaced or were previously overshadowed by the high burden of other diseases like hepatitis.

The COVID-19 health emergency impeded the implementation of planned activities in all the areas pertaining to CDs and NCDs in Botswana. In addition to the traditional issue of human resource shortages in the country, health care workers and staff at the DHMTs and implementing partners were repurposed to respond to the pandemic. The travel restrictions in the country also contributed to low delivery, as many activities were cancelled. The result was the under-performance of these programmes amidst increased demands to prevent the overwhelming impact of the pandemic.

In response to the COVID-19 emergency, certain public health services were also repurposed. The HIV viral load testing platforms, for example, were repurposed for COVID-19 diagnosis; hence the quality of care provided to HIV patients for viral load monitoring was affected, making it easier for clinicians to miss virologically failing patients.

Human Immunodeficiency Virus (HIV), STIs and Hepatitis

The HIV epidemic remains a significant challenge for Botswana; however, the country's globally acclaimed response continues to produce commendable results despite the challenges brought on by the COVID-19 pandemic. The response to the epidemic is deemed to have attained a mature status and is getting closer to epidemic control. Partner support, particularly by the US Government through PEPFAR and the Global Fund, contributed significantly to the success of the response.

Botswana has been at the forefront of the HIV response globally, positioning itself as a global benchmark. At the height of the HIV epidemic, mother-to-child transmission (MTCT), without intervention, was as high as 40%. By adopting WHO guidelines over the years, from dual prophylaxis to triple prophylaxis and currently Treat All (adopted in 2016), the MTCT rate has dropped to less than 2%. This has been heralded as an achievement compared to the global MTCT targets of 5% for high-burden countries.

The efforts to ensure that treatment coverage for ART exceeds 90% also contributed significantly to the reduction of mother-to-child HIV transmission. As part of a qualitative programme, the country undertook a validation process for eliminating MTCT, which also included a review of Syphilis. The WHO-guided process was undertaken together with other stakeholders, namely UNAIDS, UNICEF, the University of Botswana, Botswana-Baylor, and

HIV GLOBAL TARGET RESULTS

INDIVIDUALS AGED 15 TO 64



93%

of individuals living with HIV knows their HIV status



97%

of individuals reported being on treatment



98%

of individuals on treatment are virally suppressed

members of civil society organisations. The 5th Botswana HIV/AIDS Impact Survey (BAIS V) was successfully implemented under strenuous COVID-19 restrictions. The preliminary results indicated that Botswana is on the right trajectory towards epidemic control. Against the 90-90-90 set global targets for individuals aged 15 to 64, the cascade results were 93-97-98 (93% of individuals living with HIV reported knowing their HIV status, 97% reported being on treatment, and finally, 98% of those on treatment are virally suppressed).

ACHIEVEMENTS

- One of the most significant achievements for the country in 2020 was the landmark policy shift on the *provision of ARVs to non-citizens* residing in the country.
- The HIV Global Fund development proposal was supported with WCO representation in the Executive Country Coordination Mechanism (CCM) and proposal writing team. The proposal was successful through the Technical Review Panel review and iteration process. As a member of the Proposal Development Committee, the WHO supported the writing group in gathering the requisite information needed to internalise and understand the process. This resulted in the country being awarded 23,314,606 USD for TB and HIV in 2022–2024.
- Inception processes towards developing the National Operational plan for HIV, the next step down after launching the *National Strategic Framework 3 (NSF3)*.
- The Ministry implemented the *Multimonth Dispensing (MMD)* of ARVs previously planned for 1 to 2 months to 3 to 6 months. This was necessitated by the need to reduce clinic visits for stable patients, especially given the COVID-19 restrictions on movement.

NEXT STEPS

- Develop an implementation plan based on recommendations from the Validation for Path to Elimination of MTCT of HIV. The plan would include the processes for strengthening implementation towards eliminating Syphilis and Hepatitis, per the WHO guidelines released in December 2021.
- Innovate around reintroducing prevention services for HIV and TB within the context of COVID-19, such as male circumcision services.
- Support the MoHW in developing the BBSS-3 (Behavioural and Biological Surveillance Survey) research proposal to establish its prevalence among key populations.
- Work with central medical stores and DHMTs to optimise processes that ensure adequate ARV stock levels and enable the implementation of MMD. This would also ensure that the clients visit facilities less frequently, thereby minimising their risk of contracting COVID-19.
- Find ways to ensure patients get their viral loads checked, as this is an important quality of care indicator. Also reviewing and advocating for the use of existing point of care diagnostics, including early infant diagnosis via existing GeneXpert platforms, and outsourcing within the Government guidelines for PPP (Public Private Partnerships) implementation.
- Facilitate necessary studies to be undertaken.
- Support the Male Circumcision Strategy review.
- Support the guideline reviews for various programmes: National HIV Clinical Guidelines, STI Guidelines, and HIV Testing Guidelines.
- Support HIV Drug Resistance lab optimisation towards maintaining the WHO designation status.

ELIMINATION OF MOTHER-TO-CHILD TRANSMISSION OF HIV – DECEMBER 2021

The Elimination of Mother-to-Child Transmission of HIV

A National Validation Committee was appointed to supervise the validation of the report and present its progress to senior management at the MoWH for endorsement. The country report was then submitted to the WHO’s Global Validation Committee, which recommended awarding the Silver Tier Achievement for Path to Elimination (PTE) of HIV.

Sexually Transmitted Infections (STI) Programme

The MoHW has implemented the STI microbial survey for the second round in 2020. The survey was planned for 2019 with technical assistance from the WHO and other partners. The samples collected at clinics and hospitals were sent to the National Health Laboratory (NHL) in Gaborone, which served as the central processing and storage centre. The survey results are yet to be scrutinised as COVID-19 affected the availability of people to analyse and validate the results. The final report writing led by experts from the University of Botswana was completed in 2021.



↑ Dora, a woman in Serowe living with HIV who benefits of the highly effective lifelong triple antiretroviral treatment regimen since she became pregnant with her son Ryaz, born HIV free



↑ Cecilia from Lobatse, mother of four, benefits of free ARV treatment since 2004

Malaria Elimination Programme

Botswana satisfied the criteria and, alongside five other countries in the WHO AFRO region, namely Cabo Verde, Comoros, Eswatini, São Tomé and Príncipe, and South Africa, is committed to the WHO-led E-2025 initiative. E-2025 comprises 25 member states where Malaria has been earmarked for elimination by 2025. Botswana has received specialised technical support from the WHO to accelerate its progress and impact.

It is worth noting that progress towards malaria elimination in Botswana has been delayed, missing the initially-set 2020 target. Although Botswana has always reported system and operational challenges hampering its progress towards eliminating Malaria, the 2020/2021 biennium was characterised by a health system overstretched by the COVID-19 response.

Even though capacity building for Malaria response is institutionalised, effectiveness during the 2020/21 biennium was compromised by staff turnover, staff redeployments and the compromised continuity of essential services bought about by the COVID-19 response. The coverage of preventive interventions, primarily vector control by indoor residual spraying and long-lasting insecticidal nets, and foci investigations and response have not achieved the set elimination targets in the past five years. Notwithstanding these challenges, the WCO efforts to support the sub-national response to malaria in 2020/2021 have yielded desirable results, at least in the three priority districts of Bobirwa, Palapye, and Mahalapye, where the WHO deployed support. Support to Okavango was deployed in August 2021 through the STOP Malaria Project. Improvement of key malaria surveillance indicators like reporting timeliness, the rate of foci investigations and response, and case follow-ups were noted.

SITUATION

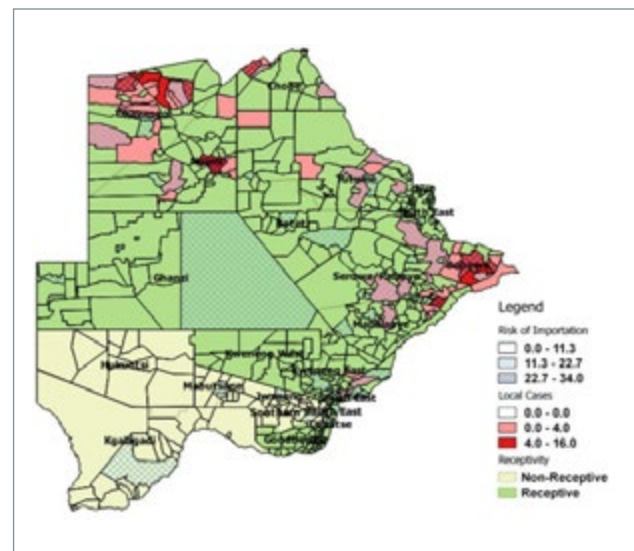
Rainfall patterns highly influence malaria transmission. Most parts of the country received higher rainfall during the summer months of October to March. The rainfall season coincides with an increase in malaria transmissions and peaks around April/May. During the 2021/2022 biennium, *Plasmodium falciparum* contributed to 100% of the country's reported morbidities and mortalities.

Malaria transmission is relatively high in the north-western districts of Chobe, Ngami, Okavango and eastern Bobirwa. Even though the levels of transmission are not uniform across the country, the entire country is considered receptive to malaria transmission except for the south-western districts of Mabutsane and Kgalagadi North and South.

Over three-quarters of the country's geographical space is at risk of malaria infection. Botswana's population is highly mobile, so non-receptive areas also report cases originating from transmission hotspots.

Figure 13 shows the country's stratification in terms of risk of importation, areas where local cases still exist, and receptivity. Most of the country still has high receptivity and therefore requires intense surveillance so that when cases are registered, the response to prevent transmission is immediate.

Figure 13: 2020 Malaria Stratification Map for Botswana



Source: National Malaria Elimination Surveillance Guidelines

The trends demonstrate variations in the progress towards elimination. Countrywide epidemics characterised transmission seasons 2016/17 and 2019/20. Essential services were disrupted by the COVID-19 response from March to May 2020 at the peak of the malaria transmission season. This resulted in an increase in the number of malaria cases reported (see Figure 14).

Even though a reduction in overall cases was observed (Figure 15), as a country targeting elimination, Botswana should not be reporting deaths due to malaria. The WCO has prioritised support to build capacities for case management to enable prompt diagnosis and proper case management, as well as social and community engagement for early health-seeking behaviours. Importation is not a significant problem in Botswana, so the prospects of re-establishing elimination and prevention strategies are within reach.

“

Notwithstanding these challenges, the WCO efforts to support the sub-national response to malaria in 2020/2021 have yielded desirable results.

Figure 14: National malaria trends for the past five years

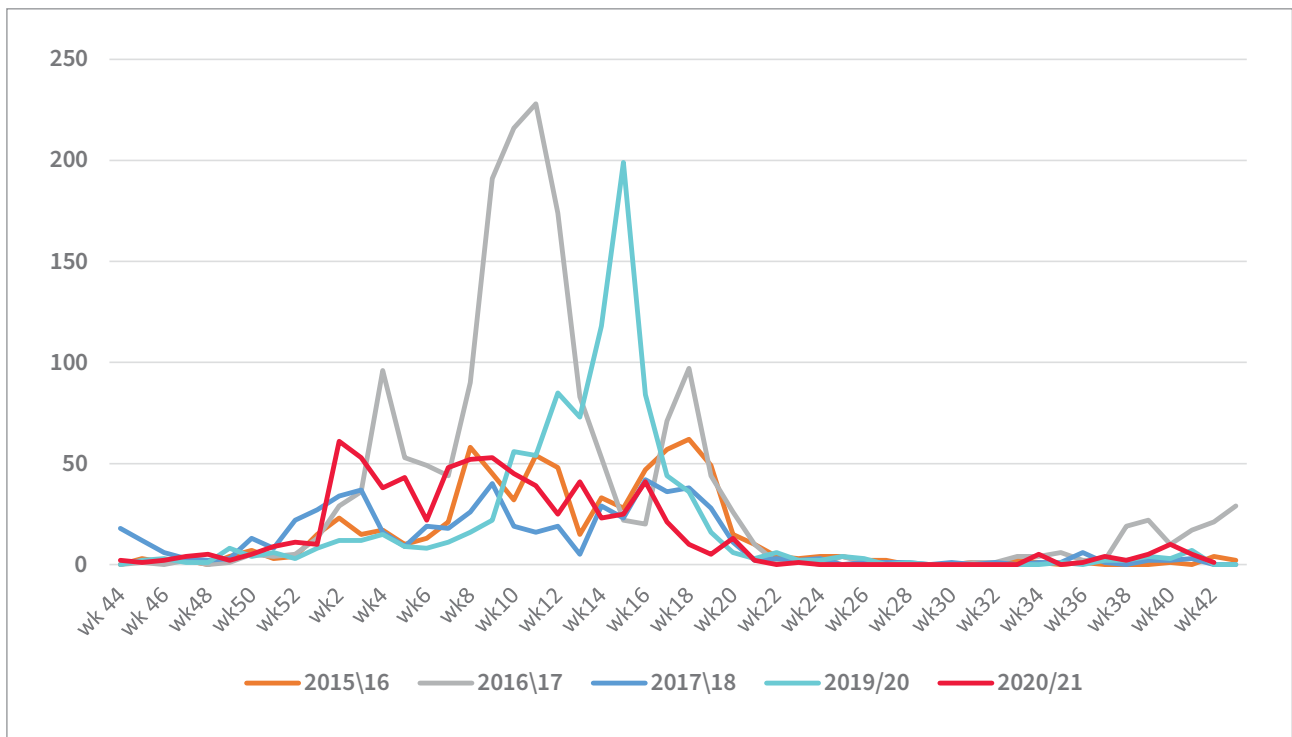
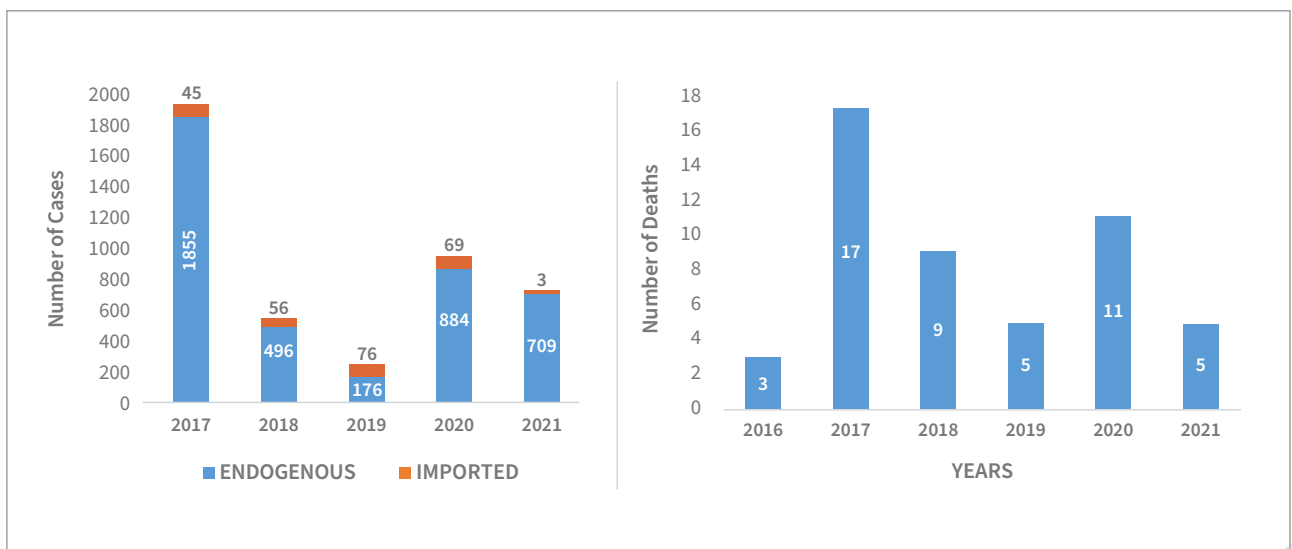


Figure 15: Reported malaria cases and deaths between 2020 and 2021



Progress in Implementing Strategies for Malaria Elimination

In June 2020, the WCO supported planning and review processes for the malaria response, which informed planning and preparedness for the 2020/21 season. Even amid the challenges posed by the COVID-19 response IRS and surveillance activities were better delivered in the 2020/21 season resulting in a decrease in the number of cases reported.

During a reporting biennium characterised by the prioritisation of the COVID-19 response, implementing strategies for malaria elimination in Botswana was less than optimal. The Botswana National Malaria Strategic Plan 2018–2023 highlights the implementation status of the malaria elimination strategies adopted during the 2020/21 biennium.

- Programme coordination
- Surveillance, Monitoring and Evaluation, and Operational Research
- Case Management
- Vector Control
- Advocacy for Community and Social Mobilisation

Programme Coordination

Botswana has an established national malaria programme; however, though well-articulated in the current strategic plan, several functions in the programme structure have not yet been activated. The Ministry of Health and Wellness has been restructuring with deliberate efforts to enhance implementation capacities at the sub-national level. The WCO has aligned with this initiative and deployed consultants to support Bobirwa, Palapye, Mahalapye and Okavango on malaria surveillance, case management and epidemic preparedness and response during the 2020/21 biennium. Supply chain management for malaria commodities was affected at the start of the COVID-19 pandemic. Due to their better procurement systems, the WCO facilitated the purchasing of vector control insecticides through UNICEF. In August and September 2021, Botswana conducted a malaria elimination audit to assess the readiness and position of the country's programme against the WHO-set elimination requirements. The recommendations for filling the identified gaps will be articulated in an implementation framework to enable acceleration towards elimination.

The establishment of an independent malaria elimination technical advisory committee should be fast-tracked during the next biennium to provide oversight and advice to the MoHW on the pathway to eliminating malaria and preventing re-establishment.



↑ The WHO supported the training of district IRS Coordinators and community leaders in the Okavango district on malaria response

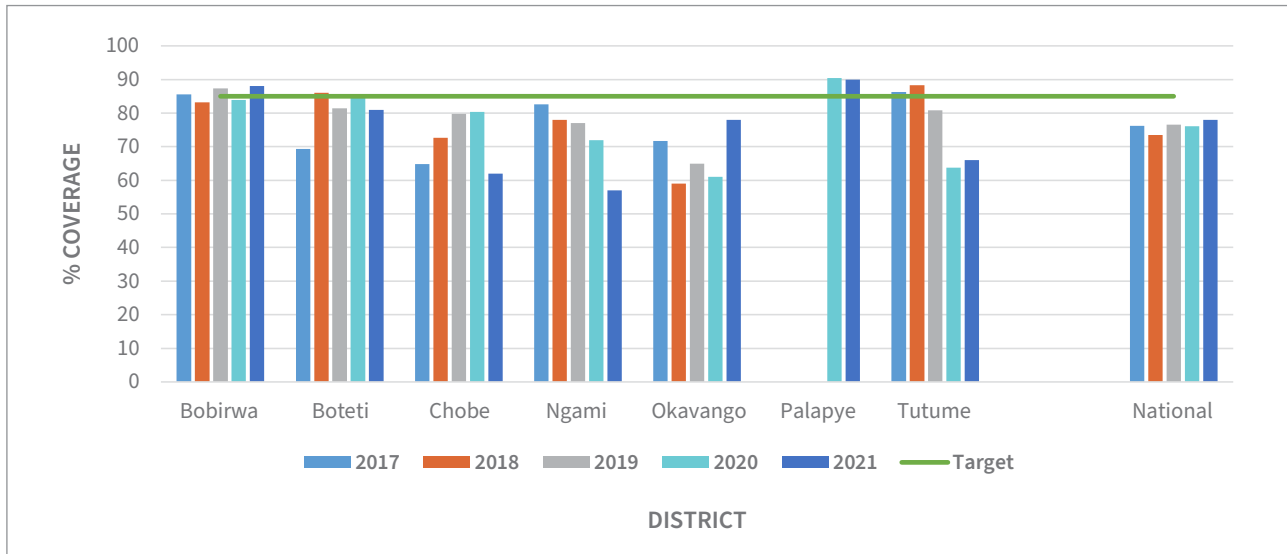
Case management

The country is still grappling with high fatality rates, with 15 out of 924 reported cases in 2020 and 10 out of 719 cases reported in 2021 resulting in fatalities. The WCO continues to intensify efforts to build capacities to manage uncomplicated and severe malaria. The WCO supported severe case management training in 2020 but cascading remains challenging. Field consultants from the WCO continue to support on-site case management training, an approach that has proven effective with the supported districts experiencing significantly reduced malaria deaths between 2020 and 2021.

Advocacy for Community and Social Mobilisation

Eliminating malaria requires the active participation of targeted communities in deploying interventions. As evidenced by the low uptake of preventive interventions like vector control, Botswana has not been doing well in this area. Even though the national programme innovated an approach for community engagement called Communities Acting Together to Eliminate Malaria (CATTEM), the goal of this innovation is yet to be realised, especially in the north-western districts of Okavango, Ngami, and Chobe. However, this innovation has proved effective, as demonstrated by the impact on the burden of the disease in Bobirwa, Palapye and Boteti, where implementation of CATTEM was identified to be near-optimal.

Figure 16: Routine IRS coverage from 2017 to 2021



Vector Control

Malaria vector control by IRS forms the cornerstone of malaria infection prevention in Botswana. However, Botswana is not achieving maximum benefit from this key intervention as most districts targeted for this intervention are grappling with operational coverages below the WHO-set target of 85%.

In 2019, the WCO commenced with the implementation of AFROII integrated vector management and the *STOP Malaria Project* in Bobirwa, the most malaria-burdened district at the time. The district was supported with the deployment of malaria interventions, especially vector control, with a ‘bottom-up’ rather than a ‘top-bottom’ approach empowering communities to take the lead and fully participate in implementing preventive interventions.

The WCO facilitated the cascading of learnings from Bobirwa to the neighbouring Palapye DHMT in 2020. The WCO assisted Palapye DHMT in developing a costed plan for vector control in June 2020 and supported the district throughout the preparations and implementation of the IRS campaign in November and December 2020. One year after implementing IRS, malaria cases in the Palapye district dropped from 103 in 2020 to 67 in 2021. Scaling-up has become a priority for the WCO in the 2022/2023 biennium.

Even though national coverage has not reached the 85% target since 2017, it has been demonstrated that IRS at high coverage significantly curtails malaria transmission, as evidenced by Bobirwa and Palapye districts. Okavango and Ngami, though very receptive to malaria, have not been able to achieve the minimum set target, and the two districts have reported the highest number of malaria cases during this biennium.

Surveillance

Botswana is making progress towards satisfying the WHO Global Technical Strategy for Malaria, 2016–2030. This document, among others, suggests redefining malaria surveillance as a core intervention. In March 2020, the WHO supported Botswana in conducting malaria re-stratification and finalising the currently implemented surveillance guidelines. These guidelines informed the new intervention mix for each stratum and revamping the intervention targeting strategy to enhance the effectiveness of deployed interventions. Training of evaluation officers and district focal points in surveillance and monitoring was conducted in 2020 and 2021. However, minimal cascading to community health workers has led to unsatisfactory performance on key surveillance indicators.

In 2021, the WHO also supported undertaking External Competency Assessment for Malaria Microscopists and training 12 microscopists



In 2021, the WHO also supported undertaking External Competency Assessment for Malaria Microscopists and training 12 microscopists. This training produced six microscopy experts who, among others, lead the country’s QA/QC (Quality Assurance vs Quality Control) system for malaria diagnosis implementation. A protocol for integrated drug efficacy studies to enable drug-resistance monitoring of medicines used to manage malaria in Botswana was also finalised. Laboratory reporting has been weak over the years. To fill in the reporting gaps identified in the laboratory systems, laboratory managers were trained on the principles of malaria elimination, particularly diagnosis and parasite surveillance.

Table 3: Malaria Elimination Indicators

STRATEGY	INDICATOR	TARGET	INDICATOR PERFORMANCE	
			2020	2021
Programme Coordination	An independent Malaria Advisory Committee	1	0	0
Case Management	Patients with suspected malaria who received a parasitological test	100%	100%	100%
	Patients with confirmed malaria who received appropriate antimalarial treatment according to the national guidelines	100%	90%	92%
Surveillance, Monitoring and Evaluation and Operational Research	Malaria cases investigated within 48hrs	100%	86%	95%
	Foci investigated and classified within 72 hours	100%	43%	65%
	Malaria parasite prevalence rate	0	0.39%	0.30%
Entomology and Vector Control	Populations in active and residual non-active foci covered by appropriate vector control	100%	100%	100%
	Operational IRS coverage	85%	73.3%	76.4%
Advocacy for Community and Social Mobilisation	Villages within targeted districts with community-driven projects	100%	23%	58%

ACHIEVEMENTS

- Stratification of the threat of malaria informed a shift from a district-level, blanket approach to a targeted, village-level approach increasing the effectiveness of interventions. (2020)
- Conducting a National Malaria Programme Elimination Audit that identified gaps in the strategy and led to recommendations to position the programme for elimination. (2021)
- Conducting External Competency Assessments for Malaria Microscopists (ECAMM). Out of 12 participants, the training and assessment process produced six expert microscopists. (2021)
- Developing the draft Malaria Integrated Drug Efficacy Studies Protocol and QA/QC technical document for malaria diagnosis (i.e. testing algorithm, microscopy technical SOPs, RDT job aids and logbooks). (2021)



NEXT STEPS

- Organise a retreat with the MoHW and other partners to concretise the recommendations of the Malaria Elimination audits and develop a framework for implementation.
- Support the MoHW in establishing the malaria elimination oversight committee.

Neglected Tropical Diseases (NTDs)

Efforts toward eliminating NTDs have been in force since 2016. This aligns with the WHO/AFRO elimination targets and the recent 2021–2030 Global NTDs Roadmap. A series of activities have since been conducted, including mapping surveys to determine the burden of NTDs, Mass Drug Administration (MDA), and stakeholders’ orientation and training sessions have been implemented. The endemicity for Schistosomiasis and Soil-transmitted Helminths has been determined, and nine endemic zones were identified. The aim is to curtail the transmission cycle for these diseases and contribute to the 2020 WHO/AFRO Neglected Tropical Diseases (NTDs) elimination target. The WHO works collaboratively with NTD focal persons, Child Health, Nutrition, Health Promotion, the Ministry of Education and Skills Development, and other stakeholders.

ACHIEVEMENTS

Mass Drug Administration — Through support from the WHO, the MoHW, in partnership with the Ministry of Education and Skills Development, conducted the 4th mass drug administration (MDA) of Albendazole for STHs targeting school-going children aged five to 14 years. The MDA was conducted in nine STH endemic districts: Chobe, Palapye, Serowe, Mahalapye, Ngami, Okavango, Selibe-Phikwe, Gantsi and Kgalagadi North. Of the 133,593 students targeted, 121,472 received treatment translating into over 90% coverage.

Past experiences have shown that partnerships, especially with community leadership, yield successful interventions that target mass community members. The MDA preparatory work leveraged off the EPI and School Health programmes that have vast experience in mass vaccinations over many years.



MASS DRUG ADMINISTRATION

SCHOOL-GOING CHILDREN 5–14 YEARS



133,593

STUDENTS TARGETED



121,472

RECEIVED TREATMENT



90%

COVERAGE

NTDs Stakeholders’ Engagement

The MoHW, in collaboration with the WHO, met with stakeholders regarding the NTDs programme implementation. The main objective was to improve stakeholder awareness and advocacy for NTDs, hopefully leading to increased visibility of NTDs on both public and private platforms and to solicit partner support for conducting interventions like mass drug administration, monitoring, research, and resource mobilisation. This intervention brought together representatives from the University of Botswana, the Veterinary Department from the Ministry of Agriculture, the Ministry of Education, and the Botswana Christian AIDS Intervention Programme, who all support the effort to eliminate NTDs.



↑ Ms Lorato Daniel, Botswana Christian AIDS Intervention Programme Manager at the NTDs stakeholder meeting

Training of Trainers and Cascading Training to the Districts

One of the major interventions for NTD elimination is ensuring adequate capacity is maintained across all levels of the health sector. The WHO training modules were adapted, and training was provided for 18 TOTs from the nine STH endemic districts. The training covered specific NTDs: Schistosomiasis, Lymphatic Filariasis, Leprosy, Trachoma and Rabies. The training covered specific topics on different diseases, including the transmission cycles, prevention, and treatment interventions, and provided guidance on surveillance, monitoring, and evaluation techniques.

The trained TOTs cascaded training to their respective districts of Kgalagadi North, Ghanzi, Okavango, Ngami, Greater Selebi Phikwe, Serowe, Palapye and Mahalapye. Participants were from different cadres, including nurses, health education assistants and medical officers.

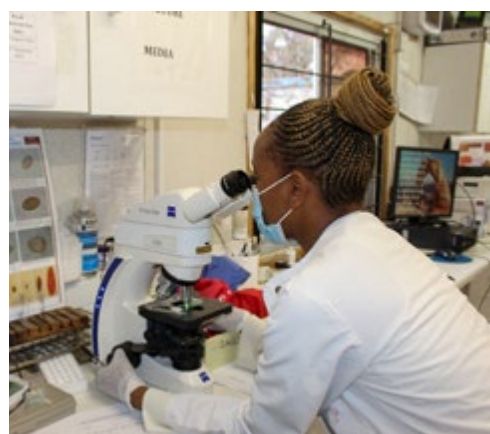


↑ Health care workers in training: Hukuntsi

Midterm Evaluation and Sentinel Surveillance for Soil-transmitted Helminths

As part of monitoring the impact of these treatment interventions, the country undertook a midterm evaluation of Soil-transmitted Helminths during the months of July and September 2021. This activity was part of the work plan sponsored by a Government of Japan grant. The midterm evaluation followed four MDA sessions of Albendazole for Soil-transmitted Helminths, targeting primary school children aged five to 14 years.

The mission was kick-started by developing survey protocols, procuring supplies, mobilising survey teams, training and carrying out all other coordination. The fieldwork started on 11 July, covering data collection from three schools in Maun, two in the Palapye district, and later in Chobe. Stool specimens from 3,440 randomly selected school children aged eight to 14 years were collected and microscopically examined for helminth infections using the standard Kato-Katz technique. Children were then asked a few questions on the WASH (Water Access, Sanitation and Hygiene) components to ascertain their hygiene practices, a major risk factor for contracting worm infestations. The laboratory investigation and interview results were then entered into the Expanded Special Project for the Elimination of NTDs (ESPEN) Collect Platform and transferred to the WHO server, where data cleaning and analysis took place. The prevalence of STH infection in the 13 districts surveyed that had received MDA was initially 16.1% (STH); however, the midterm survey revealed an increase in prevalence to 21.9%.



↑ Laboratory scientist examining a stool specimen

→ Children submitting stool specimens for testing



NEGLECTED TROPICAL DISEASES PROJECT FUNDED BY THE GOVERNMENT OF JAPAN

To accelerate NTD elimination in Botswana, the WCO compiled a funding proposal and successfully mobilised a grant of 181,818 USD from the Government of Japan. The overall goal of this project was to support government interventions to accelerate the elimination of Soil-transmitted Helminthiasis and contribute to ending the regional epidemics of NTDs in Africa, and achieve the Sustainable Development Goal 3, Target 3.3, which aims to end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases by 2030.

The project targeted nine districts where Soil-transmitted Helminthiasis are endemic. The interventions focused on reaching children, mainly primary school-going children, as they are amongst the most affected groups in the endemic communities. The major interventions targeted communities and schools and focused on raising partners' awareness of NTDs, capacity building for healthcare workers and other stakeholders, establishing sentinel surveillance sites for STH and SCH and logistical support for MDA treating children in the eight endemic districts.

The activities planned and undertaken under this grant included:

- Midterm Evaluation and Sentinel Surveillance for Soil-transmitted Helminths.
- Capacity building (training) of health care workers on NTD management.
- Development and dissemination of IEC materials on NTDs.
- Stakeholder engagement meeting on NTD elimination.

During the grant closure ceremony held in Kasane, Botswana, in October 2021, the Minister of Health and Wellness, the Honourable Dr Edwin Dikoloti, also appreciated the support of the WHO to Botswana's health sector and encouraged communities to participate in the fight to eliminate NTDs. His Excellency, Mr Hoshiyama Takashi, the Japanese Ambassador to Botswana, resonated on the importance of uplifting the socio-economic status of peripheral communities that are more affected by NTDs. The WR/Botswana, Dr Josephine Namboze, assured the Government of Botswana of the WHO's commitment to continue supporting the efforts to accelerate the elimination of NTDs.



↑ The Hon. Minister of Health and Wellness, Dr Edwin Dikoloti (seated, middle), the Japanese Ambassador to Botswana, H.E. Mr Hoshiyama Takashi (seated, right), and WR/Botswana, Dr Josephine Namboze (seated, left), during the Japan Grant Closure in Kasane, Botswana

CHALLENGES

- No dedicated budget for NTDs in the Ministry of Health and Wellness.
- Inadequate attention to the management of NTDs attributed to a low prevalence of these conditions in Botswana.
- Weak integration of NTD activities at the subnational level hampers the progress of implementation.
- Delays in skills transfer for progressive management of NTDs from the national to the sub-national level.
- The resurgence of NTDs in districts like Gaborone, which are not historically prone to NTDs.

NEXT STEPS

- Mobilise partnerships for NTD elimination efforts in Botswana.
- Capacity building at all levels (i.e. from communities to national) for the prevention and management of NTDs for sustainability.
- Advocate for establishing a domestic/government line budget for NTD elimination and integration in the current structure.
- More focussed interventions for districts with an increasing burden of STH and introducing Schistosomiasis control in the next biennium.

Tuberculosis (TB)

SITUATION

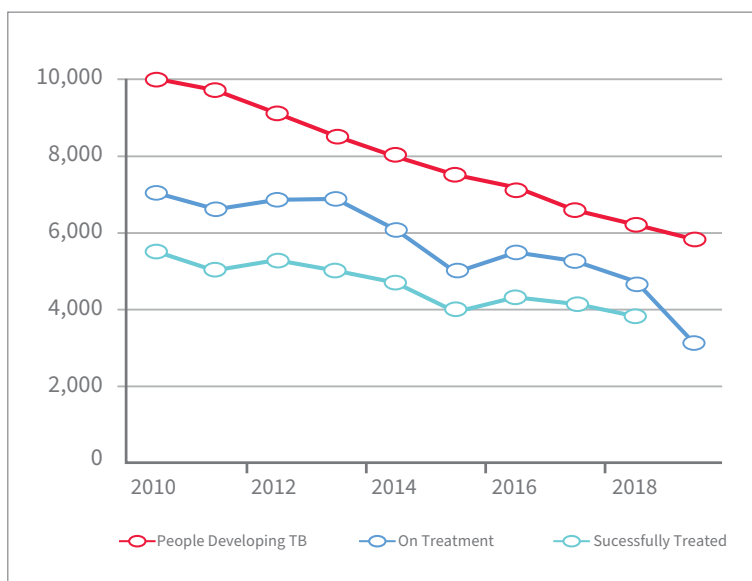
Over the years, TB has declined in both estimated incidence and prevalence. The 2020 incidence rate is estimated at 236/100,000. In 2016 the programme registered around 7,300 cases, compared to 2,521 cases in 2020, a significant decline of over 50%. This could be attributed to the robust TB interventions and ART programme, as primarily in Botswana, the majority of TB patients were a result of HIV/AIDS infection. TB/HIV coinfection stands at 77%, and about 98% of these co-infected were put on ART for the year 2020. The programme also registered about 65 DR-TB cases. It is anticipated that introducing the *Treat All* strategy will further reduce TB incidence. The treatment success rate for drug-susceptible TB in 2019 was 72%, while 70% of all MDR-TB were put on second-line drug treatment.



↑ Consultant and the Pharmacy Officer checking stock levels of DR-TB drugs

As Botswana was initially classified as one of the top 15 high TB/HIV countries, the epidemic is said to be largely HIV-driven. In recognition of this fact, the country adopted the WHO recommendation to implement TB Preventative Therapy (TPT), seeing more than 44,459 people living with HIV/AIDS being initiated by year-end and an estimated 94% completing the TPT course.

Figure 17: Trend in the TB treatment success rate



ACHIEVEMENTS

- The Botswana National TB programme has always depended on WHO estimates and the country's notification rates to determine the country's TB burden. The MoHW, therefore, planned to conduct a TB Prevalence Survey to provide the most accurate measure. **The WHO supported the development of the TB survey protocol using WHO guidelines.** The emphasis was on sampling methods robust enough to generate a representative sample of TB patients in the country. The relevant diagnostic methods, data management system, and quality assurance strategy were also outlined. The protocol was submitted and approved by the Human Research Development Council (HRDC). However, the fieldwork was put on hold due to the COVID-19 emergency response and inadequate funding.
- **The WHO supported the country in the Global Fund grant application process.** The TB programme was allocated 1,437,353 USD to improve the gaps identified, including improving TB diagnosis, case finding, and retention into care.
- **Assessing DR-TB management is requisite for countries implementing TB activities.** Per the requirements, a Regional Green Light Committee (rGLC) mission was conducted through desk reviews of the programme documents, interviews with implementers and stakeholders, and observing the DR-TB treatment sites. The assessment team visited Central Medical Stores (CMS), National Reference Laboratory (NTRL), Botswana Medical Regulatory Agency (BoMRA) MDR-TB treatment centres in Gaborone, Francistown and Serowe, and visited partners like the Botswana-University of Maryland School of Medicine Health Initiative (BUMMHI).

The findings have revealed positive and negative aspects of DR-TB management in the country. Care for DR-TB patients is decentralised to six treatment centres across the country and community-based care. In the positive aspects, patients are managed well in terms of clinical care, social support, and counselling. Patients on DR-TB are entitled to food baskets. The country has commenced an oral regime using *Bedaquiline*, which replaced injectable drugs but has not commenced a new short regimen as recommended by the WHO. Political commitment is robustly demonstrated by Government funding for over 80% of all TB control activities, including second-line drugs for DR-TB. The treatment success rates for MDR-TB are above 70%.

Most patients are cared for in their homes. Following a satisfactory infection control assessment situation in the home, patients take their treatment on an ambulatory basis from home. In contrast, those with conditions not conducive to infection control are hospitalised until sputum conversion.

Regarding the laboratory services for TB Control, the National TB Reference Laboratory is well-functioning, with good quality assurance processes and satisfactory external quality assurance results. The availability of the GX alert system, a monitoring tool for the TB diagnostics GeneXpert machines and the biannual MDR seminars are good platforms for sharing information and discussing issues. Pharmacovigilance is conducted, and active TB drug-safety monitoring is implemented with focal persons in the pharmacies around the country.

The challenges inherent in the programmatic management of DR-TB in the country includes, but are not limited to, the GeneXpert machines not functioning due to the lack of a maintenance contract and the second National TB Reference Laboratory not being operational resulting in an overload at the only National Reference Laboratory in Gaborone. These challenges ultimately affect case findings. The unstable forecasting of drugs leads to some occasional stock-outs being experienced. The quality of data at both DR-TB sites and the national level has gaps in completeness. The isolation ward in Jubilee hospital has been lacking negative pressure for a long time which puts health workers at risk of contracting DR-TB, and health care workers' surveillance of DR-TB is not routinely done. The number of staff members in the TB programme is minimal. Only four people are available at the national level, some of whom are also doing COVID-19 work.

- In realising the efforts and resources being diverted away from programmes such as the TB programme to support the COVID-19 response, **the TB programme, with support from the WHO, successfully hosted a meeting of TB stakeholders to discuss bringing advocacy for TB back into the spotlight.** The meeting directed the stakeholders in attendance towards the programme as part of the vital continuity of services pillar of the COVID-19 Strategy, hence the need to resource the programme to avoid reversing the gains.



The WHO supported the country in the Global Fund grant application process. The TB programme was allocated 1,437,353 USD.

CHALLENGES

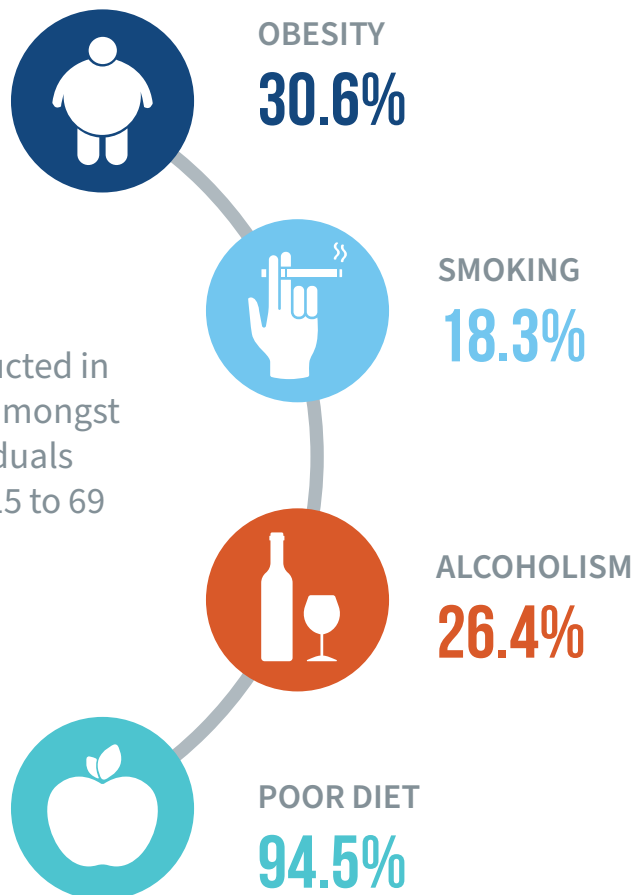
- Point-of-care diagnostics using GeneXpert machines remains a challenge as most of the equipment is not fully functional owing to insufficient maintenance and modules not being serviced or updated.
- Some of the GeneXpert machines were repurposed for COVID-19 diagnostics.
- Human resource shortage.
- Most of the TB programme staff were redeployed for COVID-19 response implementation.
- Occasional anti-TB drug stockouts.

NEXT STEPS

- Regional Green Light Committee (rGLC) recommendations to be synthesised and implemented.
- Development of the TB Prevalence Survey protocol.
- Advocacy for implementing the TB Prevalence Survey (due to the COVID-19 response, the fieldwork has been delayed, and some resources may have been diverted).
- Strengthen the continuity of TB services through better supervision and mentoring of the district staff.
- Conduct TB programme midterm review.
- Introduce a short regimen for DR-TB.

NATIONAL POPULATION- BASED SURVEY RESULTS

Conducted in
2014 amongst
individuals
aged 15 to 69



Non-Communicable Diseases (NCDs)

SITUATION

Although the impact of HIV has been minimised, it still compounds the situation by increasing the risk of severe outcomes for NCDs and reducing the effects of some treatments. According to the WHO country profile, in 2018, NCDs were responsible for 46% of total deaths, cardiovascular diseases for 18%, cancers for 7%, diabetes for 6%, and chronic respiratory diseases for 4%. The probability of individuals between 30 and 70 dying from the four main NCDs was 21% (WHO, 2018). This trend has not necessarily changed much, attributed mainly to inadequate and purposeful programming.

For example, programme data shows that over 1,400 cancers are diagnosed yearly, with the vast majority being diagnosed late when there is little chance of cure and treatment is more expensive and toxic to the patients. Beyond the prevalence of the disease, the burden of NCD risk factors is alarmingly high. A national population-based survey (STEPS) conducted in 2014 amongst individuals aged 15 to 69 revealed a high prevalence of obesity (30.6%), smoking (18.3%), alcoholism (26.4%), and poor diet (94.5%).

RESULTS

The major causes of NCD mortalities are cardiovascular diseases (18%), cancers (7%), diabetes (6%), and chronic respiratory diseases (4%).

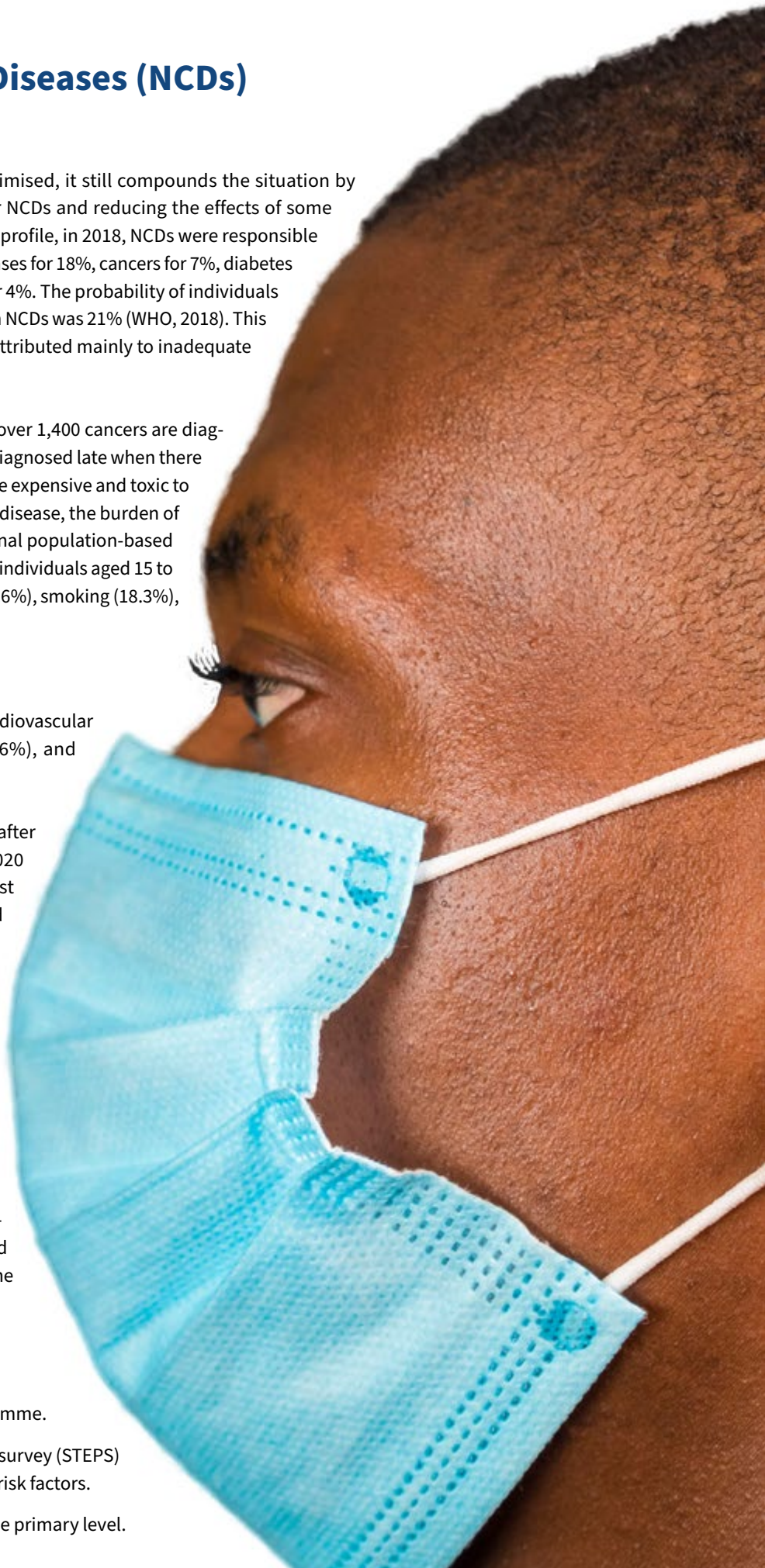
Most cancers are diagnosed late and often after the disease has advanced. In the 2019–2020 budget year, 35% of cervical and breast cancers were diagnosed early, compared to 26.3% in 2020–2021. 25% of cervical cancers were diagnosed early in 2020, compared to 30% in 2015.

CHALLENGES

Of all the COVID-19-related deaths with comorbidities, hypertension and diabetes were the most prevalent, at 31.7% and 23.9%, respectively (MoHW IDSR report, February 21, 2022). This shows the prevalence of non-communicable diseases and their devastating effects on our society in the COVID-19 era.

NEXT STEPS

- Developing the Cancer Control Programme.
- Conduct a national population-based survey (STEPS) to review the status of the major NCD risk factors.
- Strengthening screening of NCDs at the primary level.



HEALTH EMERGENCY PROTECTION

HEALTH EMERGENCY PROTECTION

SITUATION

Strengthening emergency preparedness and response remains the backbone to achieving global health security. In 2020, the Director-General of the WHO declared the novel coronavirus outbreak a public health emergency of international concern (PHEIC), the WHO's highest level of alarm under international law. For 2020 and 2021, the WCO was at centre stage in guiding the public health response to COVID-19. Considerable progress was made in building the country's capacity in preparedness, readiness and response to health emergencies considering an all-hazard approach. This chapter details our progress in building critical core capacities for health emergencies. The COVID-19 preparedness and response, as part of the Emergencies Cluster, is introduced at the beginning of the report.

Building Critical Core Capacities For Health Emergencies

The COVID-19 pandemic exposed existing weaknesses in the country's IHR (2005) core capacities and presented an opportunity to strengthen our emergency preparedness and response. This was achieved through the implementation of the following activities:

RESULTS

National Action Plan for Health Security (NAPHS)

The NAPHS was validated and costed by assessing core capacities using the Joint External Evaluation report of 2018. Though it has not yet been launched, some activities were successfully implemented. The COVID-19 epidemic revealed the need to reprioritise activities aligned with the 2021 operational plan.

Multi-Hazard Planning for Public Health Emergencies

The Multi-Hazard Plan was developed in February 2020 based on a strategic risk assessment (STAR) conducted in 2019; It was partly implemented during the COVID-19 pandemic and was used to guide the activation of the PHEMC, RRT and IMS response structures.

IHR Annual State Party Reporting

For the two years (2020 and 2021), Botswana submitted the State Parties Annual Report on progress made by the country in implementing International Health Regulations core capacities using the e-SPAR reporting tool.

Strengthening Data Management

An assessment of existing information management systems was undertaken with the emphasis on coordination and linkage between all departments in the Ministry involved in data management. Representatives from Health Statistics, Monitoring and Evaluation, and other MoHW programmes were involved. The assessment highlighted two major weaknesses: inadequate data flow from the districts to the national level and low utilisation of DHIS2 at all levels. Following this assessment, the following key activities were undertaken:

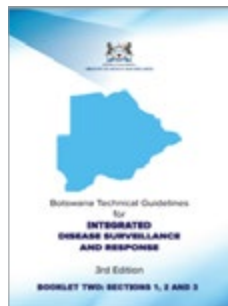
- Recruitment of data managers and clerks and procuring Information Technology equipment to improve data capture and flow from the lower levels to the national level.
- Capacity building of surveillance officers, data clerks and managers on data management and analysis.

A significant improvement was noted in data management capacities and the districts being able to analyse and interrogate their own data.



Strengthening Integrated Disease Surveillance and Response (IDSR) implementation for emergency preparedness and response

To improve Botswana's health system's ability to detect, report, investigate, confirm, and effectively respond to high-priority communicable and non-communicable diseases, the national IDSR unit, with support from the WHO, conducted planning and implementation of the IDSR strategy as below:



- Adapting the WHO's 3rd edition IDSR Technical Guidelines to Botswana context followed by a validation process involving the national and subnational levels and partners.
- Training of trainers (TOT): A cohort of 53 participants from 11 DHMTs was trained as TOTs on the adapted 3rd generation IDSR guidelines. The training was subsequently rolled out to 18 districts in the country.
- Recruitment of ten surveillance officers working as district epidemiologists in ten districts

Following the rollout, the timeliness of reporting improved from 78% to 85%, and the completeness of reports improved from 68% to 80%.

Port Health Strategic Documents

Several assessments of IHR capacities at ports of entry (JEE in 2017, STAR in 2019 and the PoE assessment in 2020) highlighted the need to develop guiding documents. The WCO supported the development of a 5-year Port Health Strategic Plan for Effective Public Response and an operational manual to ensure the standardisation of operations across the points of entry.

Public Health Emergency Operation Centre (PHEOC)

Capacity assessment for the Public Health Emergency Operation Centre (PHEOC) was conducted using the public health emergency management tool. The assessment generated useful feedback on the country's readiness to plan for the establishment of an Emergency Operation Centre (EOC). Key priority activities implemented to establish the EOC included:

- Developing plans and procedures to guide the operations of the EOC and Incident Management System (IMS) before, during and after emergency responses.
- Development of the PHEOC handbook and legal framework with relevant standard operating procedures (SOP) and validation with the technical team within the Ministry of Health and Wellness. A list of essential equipment for PHEOC functionality was prepared to guide the procurement.
- Training on the operations and management of a PHEOC that brought together 37 Health Professionals from DHMTs, the national level and other government sectors was conducted to equip frontline health care workers with the knowledge and skills on emergency response.



TIMELINESS OF REPORTING
Improved from 78% to 85%

COMPLETENESS OF REPORTS
Improved from 68% to 80%

CHALLENGES

- The COVID-19 outbreak delayed the implementation of some of the key activities of emergency preparedness and response, such as the NAPHS launch, finalisation of the Multi-Hazard plan and specific contingency plans for priority hazards.
- Technical guidance and recommendations from various assessments such as the District Capacity Assessment, IAR, Risk- and Case Management Assessments were not optimally implemented.
- A shortage of human resources in key technical departments (IDSR and IHR) resulted in the slow implementation of priority activities.
- The planning and implementation of UN partner and NGO activities in silos resulted in field activities being duplicated and the sub-optimal use of available resources.
- Inadequate constitution of multidisciplinary teams for outbreak response and high turnover of trained health officers.
- Inadequate dissemination of developed tools and guidelines and poor mentorship from the national level to the primary users at the district level.
- Ambiguous mandates and uncertainty around the chain of command during the COVID-19 pandemic presented challenges in the Ministry's national response coordination.

NEXT STEPS

- Support establishing the Botswana Public Health Institute and Emergency Operations Centre to strengthen the public health emergency response coordination.
- Launch the National Action Plan for Health Security.
- Rolling out the orientation of health care officers at district level on the role and composition of RRTs, 3rd generation IDSR guideline implementation, and establishment of Incident Management Structures at the district level.
- Review/update plans, guidelines, and SOPs for public health emergency preparedness and response (NAPHS, Multi-Hazard plans, contingency plans, COVID-19 guidelines, and IDSR).
- Undertake regular support, supervisory and mentorship visits to the districts to build their emergency preparedness and response capacity.
- Update the country risk profile to include COVID-19 using the Strategic Tool for Assessing Risks (STAR).



↑ PoE Team at the international airport in Gaborone



↕ Port Health site visits in September 2021



HEALTHIER POPULATION



HEALTHIER POPULATION

SITUATION

Despite the COVID-19 pandemic, which has diverted resources and focus from other programmes, the WHO continued to support the country to create conditions that facilitate better health and wellbeing for all. Policy, legal, normative, and strategic support and guidance was provided to create an environment that promotes and protects health, enables universal access to health, facilitates multi-sectoral actions, and empowers and mobilises individuals and communities to influence factors that determine their health.

ACHIEVEMENTS

- The most notable achievement in this biennium was passing the Tobacco Control Bill by parliament in August and assent by His Excellency the President of Botswana in October 2021. The new law is now called the Tobacco Control Act No.29 of 2021. It is comprehensively Framework Convention on Tobacco Control (FCTC) compliant and is viewed as one of the strongest tobacco laws in Africa by AFRO and some leaders in tobacco control. This achievement was realised amid fierce and relentless interference by the Tobacco Industry. The WHO provided technical guidance and leadership from drafting until its passage into law. Key phases included briefing the Minister and Executive Management, the Parliamentary Health Committee, and the Parliament General Assembly and supporting the Minister throughout the debate on the floor of parliament.
- In 2020, Botswana was supported to conduct a global virtual launch of its first-ever Global Adult Tobacco Survey report. The survey was conducted in 2017 and informed the newly passed Tobacco Control Act and the country's tobacco control and NCD prevention activities.



↑ Road Safety Campaign at Babalela Bokamoso school, Gaborone, May 2021

- The WHO also provided technical guidance to the Tobacco Levy Implementation Committee on the strategic use of levy funds to achieve tobacco control, NCD prevention and control, and health promotion objectives.
- The WHO also worked with the National AIDS and Health Promotion Agency (NAHPA), MoHW and the UN Inter-Agency Task Force on NCDs to develop an NCD Investment Case for Botswana. The process has been extensive, including a stakeholder conference officiated by the Hon. Minister of Health and Wellness, to introduce the concept and get stakeholders' buy-in. Stakeholders were then interviewed individually and collectively, resulting in a draft document to be validated and submitted in 2022. Its overriding purpose is to identify possible resources to finance and support NCD prevention and control.

- The Mental Health Bill was finalised and readied for circulation to line ministries before submission to cabinet en route to parliament. It is expected to pass parliament in July 2022. The law will repeal and replace the outdated Mental Disorders Act.
- The WHO provided strategic, technical and policy guidance to the Statutory National Road Safety Committee (NRSC) for the coordination and oversight of multi-sectoral road safety activities. The WHO also worked with the United Nations Economic Commission for Europe (UNECE), the Financial Intermediaries Association (FIA) and the Office of the UN Secretary General's Special Envoy for Road Safety to develop the capacity of the Ministry, NRSC and selected, key road safety stakeholders. The WHO also facilitated and helped coordinate successful commemorations of the 6th UN Global Road Safety Week and the Day of Remembrance for Road Safety Victims. Key activities and interventions of the National Road Safety Strategy 2011–2020 were evaluated, and the outcomes will inform the development of the National Road Safety Plan 2021–2030 in line with Global Road Safety Plan 2021–2030.
- Botswana was selected as one of five early adopters of the Global Standards for Health Promoting Schools. The Assistant Minister of Basic Education was engaged to address a global virtual conference on the Global Standards and School Health in Botswana. Three schools were selected and capacitated to pilot the implementation of the Global Standards. This was done in partnership with the United Nations Education, Scientific and Cultural Organization (UNESCO) and the ministries of Basic Education, Health and Wellness, and Local Government and Rural Development, who share responsibility for school health. The same entities worked on revising school health policy and the Education Act to ensure school health is improved and better resourced. Both tools will be concluded in 2022.



The most notable achievement in this biennium was passing the Tobacco Control Bill by parliament in August 2021.



↑ Dr Morrison Sinvula and Dr Josephine Namboze handing over the award to Prof Bontle Mbongwe

- The WHO continued to advocate for the taxation of health-harming commodities. In response, Botswana initiated another of the WHO Best Buys for NCD Prevention and Control by declaring a tax on sugary beverages. This will add to the Alcohol and Tobacco levies (taxes), where additional, sustainable financing for NCD prevention and health promotion will be sourced.
- As a technical member of the Sustainable Development Goals (SDG) Task Force and the Social Upliftment Thematic Working Group, the WHO supported the country in assessing performance on National Development Plan (NDP) 11, at the same time preparing for NDP 12.
- Selected civil society organisations were given technical support to mount public education campaigns on NCDs, mental health, and tobacco and alcohol.
- The WHO Country Office communication platforms were used extensively to inform the public on WHO work and key health developments.

CHALLENGES

- The WCO and Ministry of Health and Wellness Health Promotion Staff have been redeployed for COVID-19 response to ensure an effective Risk Communication and Community Engagement approach. The diverted attention and resources resulted in sub-optimal achievement of the intended targets and priorities.

NEXT STEPS

- Revitalise the focus on promoting health and wellbeing through the life course and creating an enabling environment that includes policy, legal and strategic frameworks that facilitate and support UHC, PHC and collaboration across sectors.
- Capacitate and enable structures and people to facilitate and create healthier environments and societies.



UN Resident Coordinator Zia Choudhury at the Road safety Campaign in 2021



'Commit to quit', an anti-tobacco campaign conducted in high-schools





↑ Botswana Nursing and Midwifery Union members listening to WHO Botswana representative's address during the launch of the First National Nursing and Midwifery Strategy for Botswana

2020, THE INTERNATIONAL YEAR OF THE NURSE AND MIDWIFE

The 72nd World Health Assembly designated 2020 as the International Year of the Nurse and Midwife, not only to honour the 200th anniversary of the birth of Florence Nightingale³ but to acknowledge the daily contributions of nurses and midwives to the health and well-being of populations across the globe.

Nurses and midwives continue to be the core of health service delivery despite the toll COVID-19, and other challenges have taken on them. They brave safety and security issues to and at work, gracefully endure the hardships of challenging working conditions and environments and still provide service with a smile and a humane touch.

Many of them, regardless of the social and personal scars visited upon them by COVID-19 and among them, women who have suffered gender-based violence sparked or exacerbated by COVID-19.

In Botswana, nurses and midwives took an oath to fight COVID-19 and put their lives on the line to provide kind, quality care to all. They lit the Florence Nightingale lamp and recommitted themselves to the nursing pledge as part of the launch of the International Year of the Nurse and Midwife. They went on to take their role at the core of health service provision, where they continue to be at risk and risk their families' health for the greater good.

“

Nurses and midwives continue to be the core of health service delivery despite the toll COVID-19, and other challenges have taken on them.

3 Florence Nightingale was an English social reformer, statistician and the founder of modern nursing.



World Health Organization

ELIZA K. BASIMANEBOTLHE

MORE EFFECTIVE AND EFFICIENT WHO



MORE EFFECTIVE AND EFFICIENT WHO

Health Data and Innovation

Reliable, timely, affordable and accessible data focusing on equity and gender are fundamental to effective monitoring and decision making. The WHO supports strengthening country information systems for health, including, Civil Registration and Vital Statistics (CRVS), promoting digital and innovative approaches to improve health information systems, and building sustainable institutional country capacity. Interventions include building research and innovation capacity to enable the scaling-up and integration of innovations into health systems and strengthening the monitoring of progress towards the Sustainable Development Goals, 13th General Programme of Work and Universal Health Coverage.

Strengthening monitoring and evaluation systems for evidence generation and monitoring national health trends is one priority of the WCO's work plan. Concrete actions are taken to:

- ➔ Strengthen health information systems for monitoring health services utilisation, coverage, morbidity, and mortality statistics.
- ➔ Support periodic strategic plans and programme evaluations to inform policy reviews and the documentation of best practices.
- ➔ Support upgrading and scaling up digital health systems for medical records, health care technology, telemedicine, the eHealth Innovation platform, and health services management at all levels.
- ➔ Deliver capacity building in health research, health assessments, data analysis and evidence generation to inform policy and health services delivery.

ACHIEVEMENTS

Botswana Health Data Collaborative (HDC) Initiative

The Ministry of Health and Wellness (MoHW) is committed to increasing accountability and improving quality data for decision-making by strengthening health information systems structures, governance, and implementation. The department of Monitoring and Evaluation (M&E) and Quality Assurance (QA) was established, and an assessment of the health information monitoring and evaluation system was conducted. To carry forward the recommendations of the assessment, the Botswana health sector, through the stewardship of the Ministry of Health and Wellness and led by the WHO, established the Botswana Health Data Collaborative in collaboration with CDC Botswana. The main purpose of the Health Data Collaborative is to rally the players in M&E and health information towards a common M&E and health information system to improve efficiency, transparency, and accountability, leading to an improved health system. The roadmap for the Collaborative initiative was developed, various relevant technical working groups were established, and



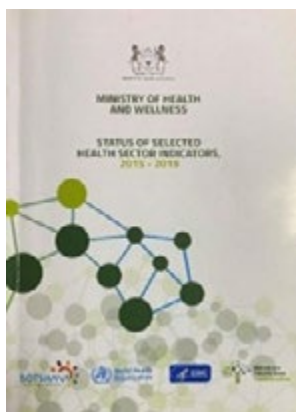
↑ Assistant Minister Sethomo Lelatisitswe and Dr Josephine Namboze at the launch of the Health Data Collaborative, March 2020

cost work plans were developed detailing the deliverables in the short-, medium and long term.

In March 2020, the launch of the Health Data Collaborative was hosted by the then Minister of Health and Wellness, Honourable Dr Lemogang Kwape and the Assistant Minister, Honourable Sethomo Lelatisitswe, the Statistician-General, Dr Burton Mguni, Permanent Secretary from the MoHW and other senior government officials, heads of agencies and partners.

Since the launch, Botswana has participated in regional and global meetings to share experiences on implementing the HDC (Health Data Collaborative) Roadmap.

Health Sector Performance Assessment and Reporting



As part of monitoring the implementation of the Integrated Health Services Plan (IHSP), the Ministry of Health and Wellness undertakes periodic health sector performance against target reviews. During the biennium, the WHO supported analysing health indicators to produce the report on the Status of Selected Health Sector Indicators 2015–2019.

The report highlighted trends in key health indicators to track the country's progress towards attaining national health- and sustainable development goals. The activity was part of the HDC Roadmap to improve health data availability and track health sector performance.

In 2021, the WHO provided technical and financial support to conduct data analysis for the fiscal year 2019/20, building on the trends analysis in the Status of Selected Health Sector Indicators 2015–2019 report. From this analysis, the Annual Health Sector Performance Report 2020 was drafted and will be finalised in 2022.

Strengthening of the District Health Information System 2 (DHIS 2)

The digitisation of health data in Botswana is a key priority for the Ministry of Health and Wellness. The ministry had previously adopted DHIS2, but the implementation and uptake were low due to gaps in the skills of health workers, low internet coverage, and a lack of suitable devices to use at reporting sites. To strengthen and harmonise data collation and analysis, the MoHW is committed to optimising the DHIS2 platform across the country and health programmes.

During the biennium, the MoHW adopted and customised the COVID-19 tracker module in DHIS2 for COVID-19 surveillance and reporting on COVID-19 vaccinations. The dashboards were also improved in line with the emerging systems' disease needs. The WHO supported the process, including rolling out and upskilling health care workers at different service delivery points within the district health management teams. The ministry and other partners also supported procuring devices for deployment to increase DHIS2 usage. Building on this, the WHO assisted with a comprehensive assessment of the DHIS2 environment, the servers, skills capacity, and current utilisation, and supported developing a comprehensive roadmap towards developing the DHIS2 platform as the leading platform for the collation and analysis of key health indicators. The process involved training and capacity transfer by engaging DHIS2 trainers in the African Region to work with counterparts in the MoHW.

CHALLENGES

- Some activities were delayed as more attention was paid to COVID-19 surveillance and vaccination monitoring.

NEXT STEPS

- In the next biennium, the DHIS2 platform will be strengthened. The procurement of servers, the creation of dashboards and training will be completed.
- The roadmap for implementing the Botswana Health Data Collaborative will be reviewed and updated.

The Country Support Unit (CSU)

The CSU provides administrative and operational support during programme implementation at the country level. The CSU falls under the direct supervision of the Operations Officer, with general supervision provided by the WHO Representative (WR) and the Director General Management Cluster at Regional Office. The CSU comprises human resources, procurement, budget and finance, travel, administrative services, and information technology management functions.

As with the other pillars of the WCO functional structure, COVID-19 impacted the office operations as transportation needs, travel arrangements, and coordination and operational needs more than doubled. Two communications assistants and a programme assistant were recruited while the Operational Officer relocated.

Human Resources

Three international staff members joined the Botswana Country Office during this biennium. Dr Juliet Bataringaya joined the office in June 2020 as Health Systems Advisor. As a result of the WHO functional review, two new functions were included in



↑ WCO Botswana Staff at Manong Game Lodge for the 2020 Retreat

the structure starting January 2021 — Mrs Cristina Birsan joined as the External Relations and Partnerships Officer and Mr Wilfred Dodoli as Programme Officer (50% covering the Lesotho Country Office). As part of the WHO/UNV Africa Women Health Champions programme, one international UN volunteer, Dr Violet Mathenge, was deployed for 12 months as Surveillance and Emergency Risk Management Officer, starting 10 September 2020. The National Officer for Operations, Mr Joel Motswagole, was reassigned to WCO Eritrea in October 2020. The National Professional Officer for the Expanded Programme on Immunisation, Mrs Bakanuki Flora Nfila, retired on 31 May 2021.

At the end of 2021, the WCO Botswana staff complement consisted of four international and 16 national staff members. In addition, 37 consultants and 54 additional temporary staff provided continuity of services and contributed to the delivery of planned activities.

CSU MAIN FUNCTIONS



HUMAN RESOURCES



PROCUREMENT



BUDGET & FINANCE



TRAVEL



ADMINISTRATIVE SERVICES



INFORMATION TECHNOLOGY MANAGEMENT

WCO BOTSWANA STAFF COMPLEMENT AS AT END 2021

4
INTERNATIONAL
STAFF MEMBERS

54
TEMPORARY
STAFF MEMBERS



16
NATIONAL
STAFF MEMBERS

37
CONSULTANTS

7,918,610USD

UTILISED FOR
ACTIVITIES AND
STAFF COSTS

610,563USD

MAINLY MOBILISED
FOR COVID-19

Funding

As of 31 Dec 2021, 7,918,610 USD was utilised for activities and staff costs, 92% of the financed amount. This does not include the cost of the 54 consultants received during this period. In addition, a total of 610,563 USD was mobilised mainly for COVID-19 support in the form of equipment, RDT and laboratory supplies, oxygen concentrators, and computers with docking.

Table 4: Funding utilisation biennium 2020–2021

STRATEGIC PRIORITY	APPROVED PROGRAMME BUDGET (USD)	FINANCING (USD)	FINANCING AS % OF APPROVED BUDGET	UTILISATION (USD)	UTILISATION AS % OF FINANCING
Universal Health Care	2,558,841	2,508,189	98.0%	1,484,231	59%
Emergencies	735,266	589,532	80.2%	532,388	90%
Better Health	116,078	45,000	38.8%	31,150	69%
Effective WHO	3,010,870	1,293,638	43.0%	1,900,687	147%
Polio	71,000	67,992	95.8%	32,427	48%
Crisis Response	4,190,443	4,061,668	96.9%	3,937,725	97%
TOTAL	11,284,498	8,566,019	76%	7,918,610	92%

ACHIEVEMENTS

The WHO team was instrumental in setting up and enabling critical COVID-19 response structures, including the EOC. The team supported the development of technical and normative guidance, including developing the Terms of Reference for the newly established Presidential COVID-19 Task Team.

The WHO Country Representative, Dr Namboze, continued dialogue with the Presidential Task Team and the Task Force in partnership with the Permanent Secretary in the Ministry of Health and Wellness. Dr Namboze also participated in and guided the Ministry Senior Management and Health Partners meetings on comprehensive and multi-sectoral emergency response.

Technical staff were redeployed for the COVID-19 response to provide leadership and technical guidance to critical components of the response, such as coordination, RCCE, IPC, Surveillance and Case management. Additional personnel supported the preparedness stages, including supply chain, organisation, and forecasting. The office of the WHO Representative and the Administration Unit ensured that the travel, coordination, and procurement components were ready to meet the demands that arose from COVID-19. The WCO prepared a Business Continuity Plan for the WCO and support for the rest of the UN in Botswana. The office also arranged and oversaw a brief support visit by the Regional



↑ WHO Country Representative Dr Namboze addressing a press conference on COVID-19 with the MoHW senior management

Director and facilitated her participation on national television and radio.

The WCO continually briefed the UNCT and development partners on the unfolding pandemic and its local and global implications. The administration cluster also ensured budget management was on point, including providing weekly updates on budget utilisation.

Partnerships and Resource Mobilisation

The WHO Country Office in Botswana places great importance on partnering with stakeholders and recognising their support in achieving the organisation's overarching objectives, as set out in the 'Triple Billion' targets.

As a high-medium income country, the pool of bilateral contributors is rather limited in the development sector in Botswana. In this context, the partnerships concentrate on increasing community empowerment, active involvement of the private sector, NGOs, academia, local government authorities, civil society and effective development partner coordination.

Partner priorities can shift to meet changing health needs and concerns. Likewise, our partner recognition activities evolve to meet new demands and opportunities. Ongoing engagement presents key highlights on the collaborations developed in consultation with the relevant partners and aims to be regularly updated, reflecting recent developments and achievements.

Efforts are ongoing under the Ministry of Health and Wellness leadership and the WHO to improve collaboration and coordination amongst partners in the health sector. Annual sector reviews were adopted, and it is important to support these endeavours.

The Botswana Health Partners Forum was established to discuss better ways to support the health sector and strengthen the harmonisation and alignment of partner support. The stakeholders are the Ministry of Health and Wellness, including the National AIDS Promotion Agency (NAHPA), local Governments, bilateral organisations such as the US government through USAID, PEPFAR and the CDC, Team Europe, the Global Fund, multi-laterals such as the UN family, local and international NGOs, academia, and public and private medical aid societies, among others.

Collaboration with SADC

The WHO Country Representative to Botswana also represents the WHO in the Southern African Development Community (SADC).

Over the years, SADC and the WHO have been working together to strengthen capacities in all 16 countries to implement IHR leading to, among others, more robust systems for surveillance, laboratories, and points-of-entry screening. Challenges experienced in implementing this legal framework, such as delays in information sharing by State Parties, have hindered international action to contain the spread of epidemics. During the COVID-19 pandemic, other issues also emerged, including problems arising from differing requirements for international travel, international contact tracing, and diagnosis and treatment. As southern Africa accounts for 46% of the continent's 8.5 million COVID-19 cases and 219,000 deaths, a coordinated response among the SADC member countries was critical.

The WHO provided technical and administrative support for developing the SADC Human Resources for Health Strategic Plan 2020–2030 'Investing in Skills and Job Creation for Health' as part of the joint WHO, ILO and OECD Working for Health (W4H) programme. Adopted at the SADC Ministerial Meeting in November 2020, the plan outlines its key priorities, specific actions, implementation approach and monitoring framework. The strategic plan aims to accelerate SADC State Parties towards achieving their longer-term health goals through evidence-based policy and investment choices that will help build the sustained health workforce capacity and capability. The overarching goal is to drive health workforce investments and decent work as a catalyst for universal health coverage, economic growth and enhance public health preparedness.



The WHO Country Office in Botswana places great importance on partnering with stakeholders and recognising their support in achieving the organisation's overarching objectives.

As part of ongoing support to SADC, on 26 August 2020, the African Development Bank (AfDB), SADC and the WHO entered into a tripartite agreement aimed at strengthening capacity for the COVID-19 response in six SADC beneficiary countries, namely Lesotho, Madagascar, Malawi, Mozambique, Zambia, and Zimbabwe. The WHO managed the resources for Component 1 of the project — the procurement of critical medical supplies and equipment, while maintaining the effective provision of other health and medical services to the population at a national level; the SADC Secretariat was responsible for Component 2 — the coordination of all interventions supported under the project. Finally, the AfDB awarded a grant of 8,503,380 USD to the WHO pursuant to the terms of the tripartite agreement. The main expenditures of the project were as follows: Biomedicals (33%), diagnostic supplies (32%), and Personal Protective Equipment (25%). By the end of 2021, 82,6% of the project budget has been successfully implemented. However, challenges in equipment availability at the peak of the outbreak led to a 1-year no-cost extension of the project.

As the pandemic significantly impacted societies and economies, pushing millions of people into poverty and exacerbating existing inequalities, the collaboration among SADC member states required a coordinated effort to mitigate the impacts in all sectors of society. Essential services for TB, HIV, malaria and nutrition, amongst others, in the SADC countries were assisted by WHO-SADC programmes, primarily in developing strategic documents and monitoring ongoing projects. One of these projects is around the malaria elimination global initiative. The WHO Botswana provided administrative support to facilitate a regional consultative meeting attended by representatives from all SADC countries and held in South Africa in November 2021 to review the Regional Malaria Elimination Strategic Plan 2021–2030, a 5-year Action Plan, as well as the 2021 Annual Malaria Report.

Collaboration with the UN

The UN system *delivers as one* through the United Nations Strategic Development Framework (UNSDF 2016–2021), which has been extended to align with the National Development Plan (NDP11). The collaboration of the WHO and UN entities in Botswana is also reflected by the elaboration of several policies and documents such as the Common Country Assessment (completed in December 2020), the UN Botswana Cooperation Framework 2022–2026 (launched on UN Day in 2021), the COVID-19 Contingency Plan and Business Continuity Plan (2020); the UN Social Economic Response Plan to COVID-19 (UNSERP) (2020). The WHO country office also assigned a COVID-19 Coordinator to facilitate communication regarding prevention measures, medical response, vaccination, and medical evacuation (Medevac) among the UN agencies at the country and global levels.

CHALLENGES

The rapidly unfolding events with many unknowns introduced challenges in briefing key stakeholders as information was always limited to what the WHO HQ and AFRO had at any point. Locally, the challenges included changes in the positions of key players in the control and containment of emergencies, such as the Minister, Permanent Secretary, and Director of Health Services. This necessitated repeated and continuous high-level advocacy and briefings.

NEXT STEPS

To continue to provide quick and quality support to the national response, including a staffing surge to support key areas as needs arise. Resource mobilisation to support the WCO and the country's needs will also be embarked on as the pandemic evolves. The Functional Review recommendations will be implemented to ensure that the WCO is fit-for-purpose and functions seamlessly and optimally.

8,503,380 USD
GRANT AWARDED
BY THE AfDB
TOWARDS THE
COVID-19
RESPONSE

BREAKDOWN
OF EXPENDITURES



82,6%

OF PROJECT BUDGET
SUCCESSFULLY
IMPLEMENTED



33%

BIOMEDICALS



32%

DIAGNOSTIC
SUPPLIES



25%

PERSONAL
PROTECTIVE
EQUIPMENT

In addition to the assessed and core voluntary contributions, the following sources financially supported the WHO Botswana Country Office's activities and operations in 2020 and 2021:

	The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM)		The Department for International Development (DFID), United Kingdom (renamed Foreign, Commonwealth and Development Office (FCDO), United Kingdom, effective September 2020)
	The European Commission (the Directorate-General for International Cooperation and Development (DG DEVCO) and the Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO))		The Department of Foreign Affairs, Trade and Development (DFATD), Canada
	The United Nations Development Programme Multi-Partner Trust Fund (UNDP/MPTF)		Azerbaijan
	The United Nations Environment Programme (UNEP)		Rotary International
	The Joint United Nations Programme on HIV/AIDS (UNAIDS)		Germany
	The Centers for Disease Control and Prevention (CDC), United States of America		Japan
	The United States Agency for International Development (USAID)		Sweden
	The Russian Federation		The Norwegian Agency for Development Cooperation (NORAD)
	The Federal Ministry for Economic Cooperation and Development (BMZ), Germany		Denmark

STRATEGIC DIRECTION FOR THE NEXT BIENNIUM

WHO Botswana will continue to deliver activities as planned by the 13th General Programme of Work (GPW13) for 2019–2025. To contribute to the Triple Billion targets to achieve measurable impacts on people's health in Botswana, the Country Office will focus on:

POLICY AND STRATEGY ●

Reviewing and developing the National Health Policy and Strategy

FINANCING STRATEGY ●

Reviewing and developing the Health Financing Strategy

DOCUMENTS AND PROCEDURES ●

Developing strategic documents and standard operating procedures for the prevention and control of NCDs

HEALTH CARE PACKAGE ●

Reviewing and developing the Essential Health Care package

ELIMINATION AUDITS ●

Conducting Comprehensive Elimination Audits of all targeted diseases (malaria, NTDs, syphilis, and the mother-to-child transmission of HIV)





- **EMERGENCY RESPONSE**

Building sustainable capacity for responding to the COVID-19 pandemic and other emergencies

- **CLIMATE RESILIENCE**

Strengthening health systems for climate resilience

- **HEALTH PLATFORM**

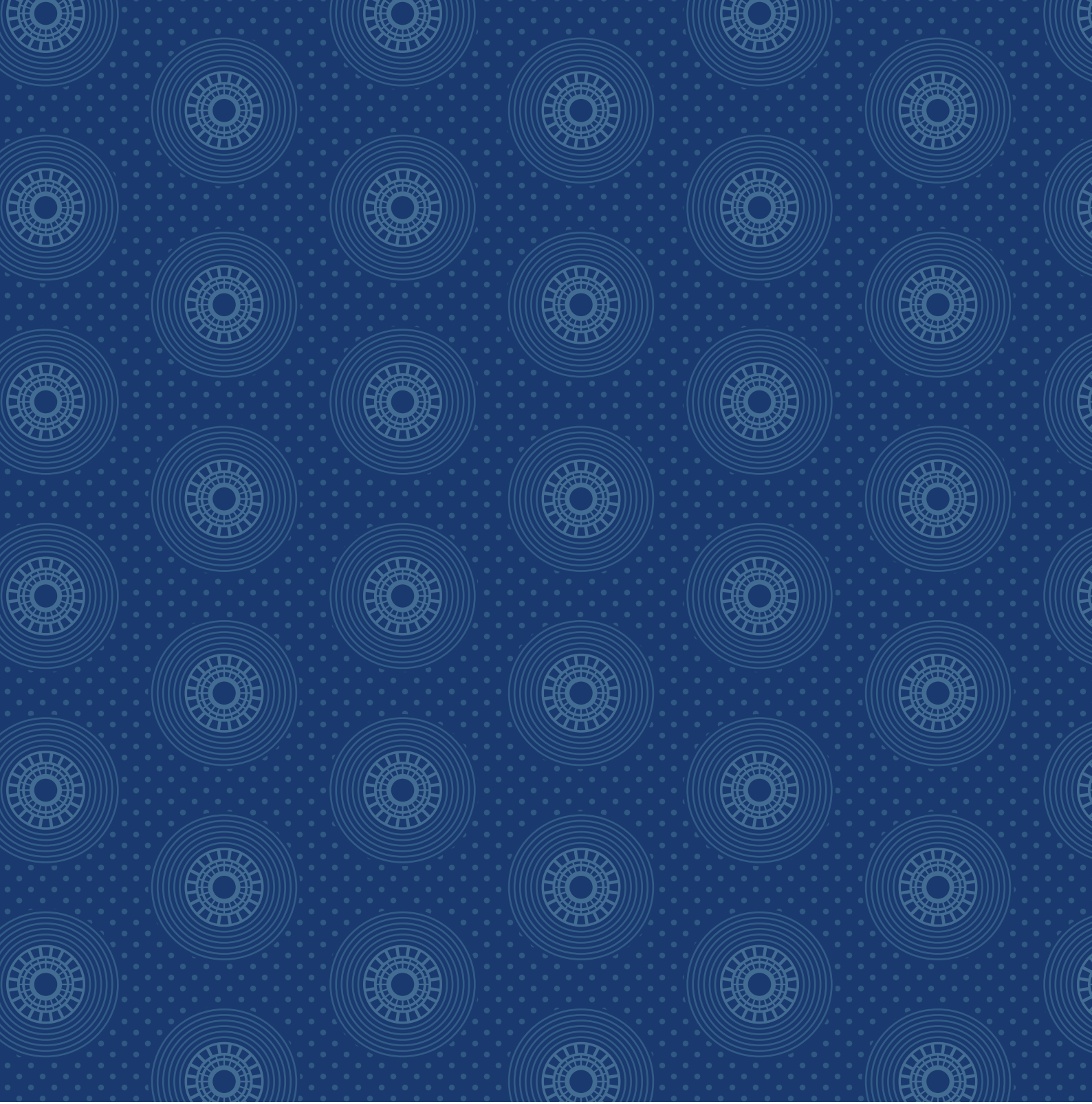
Establishing a One Health Platform in collaboration with the relevant sectors

- **INFORMATION SYSTEMS**

Strengthening health information systems for monitoring health services utilisation and capacity

- **INTER-SECTORAL PLATFORMS**

Strengthening the inter-sectoral platforms to promote health and wellbeing and address the social determinants of health



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