

ESPEN 20 ANNUAL REPORT 22







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ASCEND	Accelerating the Sustainable Control and Elimination of Neglected Tropical Diseases
AfriSMC	Africa Science Media Centre
AWP	annual work plan form
СВМ	Christian Blind Mission
CAR	Central African Republic (CAR)
CDDs	community drug distributors
CHWs	community health workers
COR-NTDs	Coalition for Operational Research on Neglected Tropical Diseases
DEC	diethylcarbamazine
DRC	Democratic Republic of the Congo
DRG	Trachoma Dossier Review Group
EPIRF	epidemiological reporting form
ESPEN	Expanded Special Project for the Elimination of Neglected Tropical Diseases
EUs	evaluation units
FTS	Filariasis Test Strip
GTMP	The Global Trachoma Mapping Project
GSA	The Global Schistosomiasis Alliance
нкі	Helen Keller International
HQ	headquarters
IDA	Ivermectin, DEC, and Albendazole
IHME	Institute for Health Metrics and Evaluation
ITI	International Trachoma Initiative
IUs	implementation units
JAP	Joint Application Package
JRF	joint reporting form
JRSM	Joint Request for Selected Medicines
KOICA	Korea International Cooperation Agency
LF	lymphatic filariasis
LSHTM	London School of Hygiene & Tropical Medicine
MDA	mass drug administration
МоН	Ministry of Health
MMDP	morbidity management and disability prevention

NGDOs	Non-governmental Development Organizations
NCC	neurocysticercosis
NPO	national professional officer
NTD	neglected tropical diseases
OEM	onchocerciasis elimination mapping
ОИСНО	onchocerciasis
PC-NTDs	preventive chemotherapy neglected tropical diseases
EPHP	elimination as a public health problem
PZQ	praziquantel
RPRG	Regional Programme Review Group for Preventive Chemotherapy
SAFE strat- egy	Surgery for TT, Antibiotics to clear bacterial infection, Facial cleanliness and Environmental improvement to reduce transmission
SAC	school-age children
SCH	schistosomiasis
SCM	supply chain management
SDGs	Sustainable Development Goals
SOP	standard operating procures
STH	soil-transmitted helminthiasis
STP	São Tomé and Príncipe
TAS	transmission assessment surveys
TEC	Trachoma Expert Committee
TEMF	trachoma elimination monitoring form
TIS	Trachoma Impact Survey
ТоТ	training of trainers
TT	trachomatous trichiasis
UHC	universal health coverage
UN	United Nations
USAID	The United States Agency for International Development
WASH	water, sanitation and hygiene
WCOs	WHO country offices
WHO-AFRO	World Health Organization Regional Office for Africa
WHO-EMRO	World Health Organization Regional Office for the Eastern Mediterranean





EXECUTIVE SUMMARY

The year 2022 witnessed the initiation of plans by WHO/AFRO to review and realign their NTD programmes with the newly launched second WHO Road map for NTDs, entitled 'Ending the neglect to attain the Sustainable Development Goals: a road

map for neglected tropical diseases 2021–2030'. However, 2022 also faced ongoing challenges posed by the COVID-19 pandemic, which disrupted normal business operations, albeit with minimal impact. In addition, funding for the Expanded Special Project on Elimination of Neglected Tropical Disease (ESPEN) dropped significantly due in part to decreased contributions from major donors such as the UK Foreign, Commonwealth and Development Office (FCDO).

ESPEN has continued to work with country programmes and partners to ensure that everyone stays on track to meet the targets set out in the new NTD Road map for 2021–2030.

ESPEN's major achievements in 2022 include:

Scaling up

Over 3.7 million people in 12 countries were reached through Mass drug administration (MDA) campaigns. Specifically, five countries, the Democratic Republic of the Congo (DRC), Congo, Equatorial Guinea, Chad, and São Tomé and Príncipe (STP) conducted MDA for lymphatic filariasis; DRC, Burundi, and Chad for onchocerciasis; Botswana, Kenya, Liberia, Nigeria, South Sudan, and Somalia for schistosomiasis (SCH); and Burundi, Congo, Cabo Verde, Zambia, South Sudan, and Somalia for soil-transmitted helminths (STH). Combined SCH/STH MDA campaigns were conducted in Kenya and South Sudan.

Baseline surveys to determine the endemicity of trachoma were conducted in Angola and Botswana. The surveys confirmed that Angola is endemic for trachoma while Botswana was not, with the former planning for implementation of MDA while the latter prepared dossiers for certification as trachoma free.

Scaling down

Two countries Togo and Malawi were certified for the elimination of trachoma, while Niger and Algeria submitted dossiers for certification of elimination of onchocerciasis and schistosomiasis respectively. As part of impact assessments, three countries, Burundi, Cameroon, and Nigeria conducted onchocerciasis pre-stop-MDA and or onchocerciasis elimination surveys; while four, Comoros, DRC, Nigeria, and Zambia conducted pre-transmission assessment surveys for lymphatic filariasis. Three countries, Congo, Guinea, and Mali received technical support and capacity building for the epidemiological mapping for schistosomiasis and soil transmitted helminths.

Strengthening the information management system

The ESPEN Data Portal was expanded and contains over 15 000 disease-specific maps, including data from implemented activities. These maps provide valuable information on the five preventive chemotherapy NTDs. Disease-specific dashboards display endemicity and mass drug administration interventions by country. Forecast dashboards have been created, projecting treatment and survey needs until 2030. The ESPEN Joint Application Package import tool was operationalized allowing an online submission and review of the JAP reports. Nearly 700 JAP were reviewed and validated and made the publicly available to stakeholders for transparency and accountability.

The ESPEN Portal was accessed by 14 383 users from 174 countries, including 55 from Africa, during 34 272 sessions. While the ESPEN Collect tool for surveys was used for surveys in 5,845 sites in 19 countries: Benin, Burkina Faso, Chad, Congo, Cote d'Ivoire, the Democratic Republic of the Congo, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Malawi, Mozambique, Nigeria, Sao Tome, Senegal, Sierra Leone, and Togo.



Improving the effective use of donated medicines through enhanced supply chain management

In 2022, allocations of 585 653 000 tablets of albendazole (ALB), mebendazole (MEB), praziquantel (PZQ), and diethylcarbamazine (DEC), comprising 67 percent of the total request, for 37 of the 44 countries requesting were approved. This prevented loss of the equivalent of US\$ 20 million in medicines which would not have distributed due to lack of funds. Additional savings of US\$ 15.1 million was made as of March 2022 due efficient use of the Joint Application Package system to forecast medicines for donation.

Partnership and coordination

Ten countries developed masterplans in 2022 with technical support from ESPEN. Of these, four were launched; Angola, Ethiopia, Rwanda, and Senegal, while six would be launched in the following year – Cote d'Ivoire, Eritrea, Kenya, Sierra Leone, Tanzania and Togo. Despite the achievements and coming at the tail end of the Covid-19 pandemic, the financing to ESPEN, totalling US\$ 9.7 was the lowest since inception. This is 23 percent lower than total funds received in 2021. Only 48 percent of the budget for the year was realized and this had implications for human resource and the capacity to provide efficient technical support to countries. Overall, there was a reduction in funding for each strategic objective compared with 2021, except for strategic objective on scaling down, which received 67 percent more funding, totalling US\$1.8million, compared with US\$ 1.1million in 2021. On coordination, programme review meetings were convened for onchocerciasis, lymphatic filariasis and trachoma. ESPEN participated in global and regional partnership meetings convened by partners and initiated plans for face-to-face meetings of the steering committee and regional programme review groups in 2023.







Neglected tropical diseases (NTDs) are a group of 20 diverse conditions that primarily affect impoverished communities in tropical and subtropical regions. These diseases have severe health, social, and economic consequences, particularly for women and children. Despite affecting over one billion people, NTDs receive a disproportionately low amount of global health-care funding, with only 0.6% allocated to their control. Africa bears a significant burden, accounting for 40% of global NTD cases. NTDs lead to blindness, disfigurement, anaemia, malnutrition, and other debilitating health effects, trapping communities in a cycle of poverty.

CONTEXT

ESPEN focuses on the five most prevalent NTDs that can be controlled through preventive chemotherapy (PC-NTDs): lymphatic filariasis, onchocerciasis, soil-transmitted helminthiasis, schistosomiasis, and trachoma. ESPEN collaborates with countries to accelerate the elimination of these diseases by mapping disease burden, efficiently planning and delivering treatments, strengthening supply chain management of donated medicines, supporting disease-specific evaluations, and utilizing quality data for evidence-based decision-making.

ESPEN's mandate covers 52 countries, including 47 in the WHO African Region, 45 of which require preventive chemotherapy for at least one NTD. Mauritius and Seychelles do not require PC. In addition, ESPEN covers five countries in the WHO Eastern Mediterranean Region: Djibouti, Egypt, Somalia, Sudan (all in Africa), and Yemen (outside Africa).

Through its comprehensive approach, ESPEN strives to make a significant impact in controlling and eliminating PC-NTDs, ultimately improving the health and well-being of affected communities in Africa and beyond.

Major progress in NTD interventions in 2022

ESPEN has been preparing for the new decade of PC-NTDs in collaboration with many regional and international partners to address the need for evidence-based decision-making, which is the core of the new NTD road map. In 2022, ESPEN strengthened and expanded the NTD Data Portal to provide new tools and resources to enhance and facilitate data collection, reporting, and analytics for the NTD country programmes and stakeholders. Among other features, the ESPEN NTD Portal includes projections of the treatment and survey needs at both the implementation unit and country levels. These projections are underpinned by some assumptions about the outcome of the planned interventions, the expected MDA effective coverage and the success of assessment surveys. ESPEN is planning to improve the accuracy of these projections by incorporating information from mathematical models.

The ESPEN team also worked tirelessly with the NTD community to mitigate disruptions of PC-NTD activities caused by the COVID-19 pandemic. Furthermore, the early interruption of UK FCDO funding in 2021 was a major setback for the WHO African Region and its NTD programmes, benefiting from this international aid in the African Region. The UK FCDO support was provided through the "Accelerating the Sustainable Control and Elimination of Neglected Tropical Diseases" (ASCEND) programme, designed to support PC-NTD interventions in 19 countries and 1,858 implementation units in the WHO African Region and Sudan. This programme also included interventions against leishmaniasis. ESPEN collaborated with the NTD team at WHO headquarters, ASCEND programme implementers (Sightsavers and

Crown Agents), and other partners such as the NTD Modelling Consortium and the International Trachoma Initiative to assess the impact of this withdrawal. The goal was to identify the most vulnerable areas, including those on track to achieve the 2030 elimination targets, at risk of drug expiry, with limited potential for other funding, and those that would struggle the most to sustain progress if MDA interventions were interrupted. These assessments were based on modelling data. ESPEN took the lead in generating the evidence used by a coalition of donors (Bill & Melinda Gates Foundation, CIFF, and ELMA) to develop a strategic plan allocating \$100 million to countries previously covered by the UK FCDO.

In May 2022, Togo achieved validation as having successfully eliminated trachoma as a public health problem, marking a significant milestone in its efforts. Similarly, in September 2022, Malawi also received validation for the successful elimination of trachoma as a public health concern within its borders. These commendable achievements demonstrate the dedication and effectiveness of the respective countries' trachoma control programmes, showcasing their commitment to improving the health and well-being of their populations.

Another major breakthrough in the African Region was the official launch of the Kigali Declaration on Neglected Tropical Diseases by H.E. Paul Kagame, President of the Republic of Rwanda, at the Kigali Summit on Malaria and NTDs, held alongside the 26th Commonwealth Heads of Government Meeting in June 2022. The Kigali Declaration was first signed up by African leaders and stakeholders during the 1st WHO Africa NTD Summit held in Kigali, Rwanda in 2019. The Declaration has already galvanized substantial commitments from donor governments, endemic country governments, pharmaceutical companies, NGOs, with US\$ 1.5 billion in financial commitments and 18 billion donated tablets pledged at the Summit.

The impact of the Kigali Declaration on NTDs in the African Region is considerable. It has catalysed increased political will and commitment to address NTDs, leading to heightened efforts, resource mobilization, and programme implementation. The Declaration has helped to make NTDs a priority on national agendas, resulting in improved health-care systems, expanded access to treatment, and enhanced surveillance and monitoring.

Another milestone achieved in 2022 was the official launch of The Mwele Malecela Mentorship (MMM) Programme in June 2022. The launch was officiated by Dr Moeti Matshidiso, WHO Regional Director for Africa during the Kigali Summit for NTDs and Malaria. The programme seeks to mentor up-and-coming young women leaders to be advocates for the elimination of NTDs.

Table 1. Major treatment indicators in the African Region since 2014

Year	No. JRF submitted	Population Requiring PC for at least 1 PC-NTD	No. IU requiring PC for trachoma	Population Targeted for PC for at least 1 PC-NTD	Population Treated for at least 1 PC-NTD	No. IU implementing PC for trachoma	AF KPI 1.1.2a	% Treated among those targeted for at least 1 PC-NTD	% IU implementing PC for trachoma
2014	28	542 618 591	1 362	311 583 758	255 117 870	573	47,0%	81,9%	42,1%
2015	30	555 976 133	1 370	359 198 920	294 669 974	672	53,0%	82,0%	49,1%
2016	34	612 293 842	1 313	376 516 614	329 576 556	761	53,8%	87,5%	58,0%
2017	40	629 713 570	1 148	442 889 218	381 651 229	799	60,6%	86,2%	69,6%
2018	38	643 356 278	991	433 329 834	389 125 782	721	60,5%	89,8%	72,8%
2019	37	635 160 248	938	415 416 690	365 922 411	666	57,6%	88,1%	71,0%
2020	37	618 890 550	868	322 637 642	285 093 758	353	46,1%	88,4%	40,7%
2021	38	658 980 500	738	312 291 751	279 757 095	406	42,5%	89,6%	55,0%

AF KPI 1.1.2a: Percentage of population requiring interventions who received or are receiving interventions at least for one Neglected Tropical Disease (NTD).



The second WHO NTD Road map entitled 'Ending the Neglect to attain the Sustainable Development Goals: a road map for neglected tropical diseases 2021–2030' has set the following overarching targets:

- i. reduce the number of people requiring interventions against NTDs by 90%;
- ii. reduce the number of NTD-related disability-adjusted life years (DALYs) by 75%:
- iii. achieve elimination of at least one NTD in 100 countries; and
- iv. eradicate two NTDs.

In 2021, ESPEN developed its Strategic Framework for the period 2021–2025. This framework was created through a consultative process, building on the success of ESPEN's previous strategic framework for 2015–2020. The current strategic priorities of ESPEN were shaped by the progress made in implementing the previous framework, the external evaluation of ESPEN's work, accomplishments from 2016 to 2019, and the NTD Global Road map for 2021–2030.

ESPEN STRATEGIC FRAMEWORK 2021–2025 AND THE WHO NTD 2030 ROAD MAP

To ensure the relevance and effectiveness of the strategic priorities, a broad consultation process was conducted, involving NTD programme managers and other key stakeholders. This inclusive approach enabled those directly involved in NTD control and elimination efforts to make their inputs, thereby ensuring that the priorities were aligned with the needs and challenges encountered on the ground.

By taking into account past achievements, external evaluations, and the global road map, ESPEN aims to set clear and impactful strategic priorities for the coming years. This strategic framework serves as a road map for ESPEN's work in addressing neglected tropical diseases and driving progress towards their control and elimination.



Participants in an NTD workshop development for South Africa





ESPEN is focusing on 3 main strategic priorities for the next five years:

Accelerate programmatic action to ensure 100% geographical coverage and effective coverage by providing data support to countries to use WHO evidence-based guidelines to inform effective intervention strategies, plan and implement, and enhance service delivery through improved supply chain logistics and access to medicines and other commodities. ESPEN also focuses on scaling down MDA toward PC-NTD elimination and reduction of morbidity due to NTDs by undertaking impact assessments to measure progress in reducing disease prevalence and helping countries to document these achievements through dossiers to submit to WHO for validation. Laboratory strengthening is essential to this initiative.

1

Other areas of interest in accelerating programme action include;

- Strengthening information systems for evidence-based, Implementation-level decision-making with a focus on building a data strategy that helps African governments to have accurate, high-quality, timely, standardized information to support their decision-making.
- Promoting the effective use of donated medicines. ESPEN is working with governments to strengthen the quality of supply chain management, including ensuring that all donated tablets are procured and distributed to the intended population in a timely manner and without wastage, and that any unutilized drugs are appropriately stored and repurposed immediately or during other MDAs.

2

Intensify cross-cutting approaches through data, surveillance and supply chain support for One Health (for zoonotic PC-NTDs supported under ESPEN such as schistosomiasis and taeniasis), WASH, vector control and data integration and mainstreaming within national health systems for common delivery platforms that combine work on several diseases, and to improve the quality of NTD management in the context of universal health coverage, coordinating NTD-related interventions with other sectors within and beyond health.

2

Facilitate country ownership and health systems strengthening (HSS) recognizing the complexities and multiple impacts of health systems at national and subnational levels, by supporting community-level data, devolved mapping, devolved IU levels for interventions, integration and increased data use.

ESPEN recognizes that cross-sector collaboration will be key to accelerating progress for the next five years and beyond. There is a long-standing consensus that the root causes of NTDs cannot be solved without addressing their underlying determinants. This is why ESPEN has envisaged the inclusion of all stakeholders, particularly in the areas of health, finance, infrastructure, education, and social services.

However, progress in African countries, which bear nearly 40% of the global NTD burden, is essential to achieving these new global targets and improving the lives of millions of people.

Key achievements in 2022

Development of third and fourth generation NTD master plans for African countries

The main activity targeted under this ESPEN strategic objective was the development of third and fourth generations of country NTD master plans. To support planning and promote more efficient implementation of NTD programmes, it is imperative for countries to develop national strategic plans (NTD master plans) aligned with the new NTD road map developed collaboratively by WHO and stakeholders. ESPEN initiated plans to support countries in developing NTD master plans and costed work plans to facilitate the planning and implementation of NTD interventions. A total of 47 countries were earmarked to receive both technical and financial support from ESPEN.

In March and September 2022, ESPEN conducted surveys among NTD programme managers and WHO country offices to assess country progress on this activity. The aim was to establish the status of NTD master plan development and identify gaps in financial and technical support. The identified gaps were used to allocate financial resources and procure external experts to provide technical support.

Based on the feedback received from countries, they were classified into three categories: i) countries that had completed and validated master plans; ii) countries that had draft plans requiring review and validation; and iii) countries that had not yet initiated the process.

ESPEN hired 14 consultants, including nine preventive chemotherapy specialists and five case management specialists, to provide technical support to Member States in developing and reviewing their NTD master plans. The technical support focused on thematic areas such as desktop review of guidelines and policies, stakeholder mapping and engagement, technical review of draft plans and budgets, and final validation and dissemination of approved plans. During the reporting period, only one country, Senegal, validated its NTD master plan with support from ESPEN. Five countries (Benin, Eritrea, Kenya, the United Republic of Tanzania, and Togo) have finalized their master plans and shared them with ESPEN for final review before country validation. Technical support for the remaining countries in the Region is ongoing and expected to be completed by the first quarter of 2023.



NTD master plan development workshop in eSwatini

Table 2: Status of NTD master plan development in countries where the activity was ongoing by end of 2022

	Country	Status of NTD Master Plan
1	Botswana	Master plan under-going review
2	Congo, Republic of	Master plan under-going review
3	Gabon	Draft Master Plan finalized
4	Ghana	Draft Master Plan finalized
5	Gambia	Master plan under-going review
6	Equatorial Guinea	Review and development on going
7	Liberia	Master plan under-going review
8	Madagascar	Master plan under-going review
9	Mozambique	Master plan under-going review
10	Mauritania	Master plan under-going review
11	Malawi	Master plan under-going review
12	Namibia	Master plan under-going review
13	Nigeria	Master plan under-going review
14	Sierra Leone	Draft Master Plan finalized
15	South Sudan	Draft Master Plan finalized
16	Swaziland	Review and development on going
17	Tanzania	Draft Master Plan finalized
18	Uganda	Draft Master Plan finalized
19	South Africa	Draft Master Plan finalized
20	Zambia	Draft Master Plan finalized
21	Zimbabwe	Review and development on going
22	Cameroon	Draft Master Plan finalized
23	Zanzibar	Draft Master Plan finalized

ESPEN has provided guidelines on the inclusion of One Health in all the master plans being developed. The Kenya NTD Master Plan, for example, includes a mechanism for collaboration between NTDs and the recently established Zoonotic Diseases Unit.

Overall, despite the initial setbacks caused by the pandemic, countries showed resilience and determination to continue their efforts in combating neglected tropical diseases and aligning with the goals outlined in the Global NTD Road map.

The Mwele Malecela Mentorship (MMM) Programme

In February 2022, Africa suffered a profound loss with the passing of Dr Mwele Malecela, a highly respected female scientist and the driving force behind the 2030 WHO Road map for Neglected Tropical Diseases (NTDs). Dr Malecela, erstwhile Director of the WHO Department of Neglected Tropical Diseases Control in Geneva, was renowned for her dedication to mentoring and motivating the next generation of global health professionals, especially women.

To commemorate Dr Mwele Malecela's extraordinary legacy and her significant contributions to the field of NTDs, The Mwele Malecela Mentorship (MMM) Programme was established. This programme aims to support mid-career African women to overcome barriers and become leaders and advocates for the elimination of neglected tropical diseases, both nationally and internationally. The MMM programme is committed to empowering women working in NTDs by providing mentorship, training, and networking opportunities over a two-year period, spanning from 2023 to 2030.

During the Kigali Summit on NTDs and Malaria in June 2022, The MMM Programme received an official announcement from Dr Moeti Matshidiso, WHO Regional Director for Africa, emphasizing the programme's significance in advancing NTD efforts and its alignment with the Global NTD Road map. The official event highlighted the importance of mentorship in driving progress toward the eradication of NTDs and, particularly, in promoting women's leadership in this area. In December 2022, the call for applications was launched, inviting aspiring mentees to participate and seize the opportunity for personal growth, professional development, and empowerment.

The establishment of The Mwele Malecela Mentorship Programme is a significant achievement in WHO/AFRO's commitment to nurturing talent and catalysing positive change in the field of neglected tropical diseases (NTDs). Inspired by Dr. Mwele Malecela's visionary leadership and remarkable accomplishments, this programme seeks to honour her enduring legacy by offering emerging leaders within the NTD community a transformative mentorship experience. ESPEN, under the guidance of WHO/AFRO UCN, is leading the programme in collaboration with long-standing partners, including the Bill & Melinda Gates Foundation (BMGF), the END Fund, Menttium, and the American Society for Medicine, Hygiene and Tropical Medicine (ASTMH).

Achievements by disease

1. Lymphatic filariasis and onchocerciasis

Lymphatic filariasis



Scaling up

ESPEN played a crucial role in supporting LF MDA efforts in nine countries, namely Chad, Comoros, Congo, the Democratic Republic of the Congo (DRC), Eritrea, Madagascar, Nigeria, Sao Tome and Principe (STP), and Zambia. Through these MDA campaigns, ESPEN aimed to target a total population of 31 964 700 people across 241 implementation units. In addition, ESPEN supported the second round of MDA using ALB/DEC in LF loa co-endemic areas within Congo and the Democratic Republic of the Congo, focusing on reaching 799 446 individuals across 10 implementation units. Furthermore, ESPEN contributed to the review of the LF confirmatory mapping protocol for 19 implementation units in Zimbabwe.

Scaling down

ESPEN provided both financial and technical support to conduct pre-transmission assessment surveys (pre-TAS) and transmission assessment surveys (TAS) in five countries: Comoros, Democratic Republic of the Congo (DRC), Eritrea, Madagascar, and Nigeria. A total of 243 pre-TAS and 64 TAS were supported by ESPEN.

Furthermore, the ESPEN team actively reviewed and approved TAS eligibility forms from eight countries: Cote d'Ivoire, the Democratic Republic of the Congo, Ethiopia, Kenya, Madagascar, Mozambique, Nigeria, Senegal, and the United Republic of Tanzania, to facilitate the implementation of TAS surveys.

The ESPEN team also reviewed protocols for pre-TAS and TAS surveys from several countries, including Burkina Faso, Cote d'Ivoire, the Democratic Republic of the Congo, Guinea-Bissau, and Kenya. The aim of this review process was to ensure the quality and effectiveness of the surveys.

In 2022, ESPEN collaborated with WHO headquarters to approve and donate a total of 478 505 Filariasis Test Strip (FTS) kits (consisting of 14 739 kits) to 14 countries. In addition, 38 FTS positive control vials were provided.



Scaling up

ESPEN assisted in implementing MDA campaigns in onchocerciasis endemic districts of Burundi, Chad, the Democratic Republic of the Congo, Congo, and Nigeria. These districts had not previously received any institutional support to undertake MDAs. The target population for these programmes was 15 505 944 people, and the interventions were carried out in 112 implementation units. However, specific figures are yet to be confirmed.

In addition, ESPEN conducted virtual trainings in collaboration with NTD programmes in Burundi, Congo, and the Democratic Republic of the Congo. These trainings focused on two important aspects: comprehensive breeding site assessment and onchocerciasis elimination mapping surveys. By imparting knowledge and skills through virtual platforms, ESPEN sought to enhance the capacity of local teams involved in NTD control efforts.

Furthermore, ESPEN supported comprehensive breeding site assessment surveys in Congo, which were conducted prior to onchocerciasis elimination mapping surveys. These assessments helped to identify and evaluate breeding sites of vectors of the disease, thus providing crucial information for targeted interventions to eliminate onchocerciasis.

Scaling down

Support of the ESPEN laboratory to countries Technical laboratory support to countries

In 2022, the ESPEN laboratory processed samples from Burkina Faso and the Democratic Republic of the Congo. For Burkina Faso, samples received in the laboratory included 47 410 adult female blackflies, 52 aquatic larvae of blackflies, and 22 microscopic preparations of onchocerca larvae collected during entomological assessment surveys in the Comoé and Leraba river basins of Burkina Faso. Overall, the infectivity rate was 0.2362. 10-3 which is below the threshold of 0.05% recommended by WHO. The upper and lower band of the 95% confidence interval were 0.4223 and 0.1144 per 1000 flies confirming the interruption of transmission. However, infectious blackflies were detected at 4 collection points, namely Bodadiougou Barrière, Bodiadougou Peulh, Gnerpien and Point de Leraba,

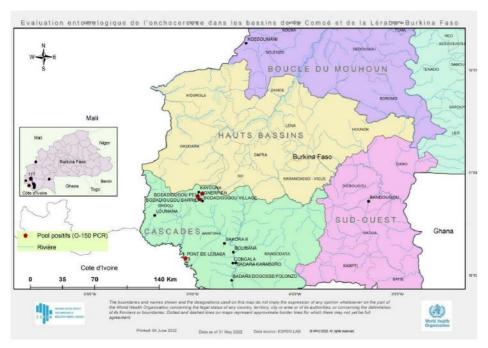


Figure 1: Blackflies collection sites in the Comoé and Leraba river basins in Burkina Faso and O-150 PCR results

Table 3: Infectivity rate of blackflies collected in Burkina Faso

Simulium catch point	Number of blackflies expected (number on labels)	Number of blackflies found after morphologi-	O-150 PCR Test (number of positive	Infectivity rate (10 ⁻³)	Confidence interval (10 ⁻³)	
		cal sorting	pools)	(== /	Lower limit	Upper limit
Bodadiougou Village	4270	4308	0	0.0000	0.0000	0.4456
Bodadiougou Barriere	11348	6106	1	0.1650	0.0051	0.8571
Bodadiougou Peulh	10378	10376	7	1.2388	0.4620	2.6083
Bodadiougou Petit Bar- rage	4472	4192	0	0.0000	0.0000	0.4579
Kayouna	5233	4702	0	0.0000	0.0000	0.3947
Gnerpien	5869	5801	1	0.1754	0.0001	0.9030
Congala	1016	1016	0	0.0000	0.0000	0.3092
BADARA FOLENZO	328	328	0	0.0000	0.0000	5.8366
LOUMANA	229	616	0	0.0000	0.0000	2.6599
BOKO BADARA	1247	1799	0	0.0000	0.0000	1.0667
DANGOUMDOUGOU	130	721	0	0.0000	0.0000	2.6594
BADARA KARABORO	934	735	0	0.0000	0.0000	2.6088
BOLIBANA	323	571	0	0.0000	0.0000	3.3569
KOUSSOUMANI K	413	386	0	0.0000	0.0000	4.9617
BANDOUGOU	148	148	0	0.0000	0.0000	12.8892
TOUSSIAMBOUGOU	45	62	0	0.0000	0.0000	30.4932
PONT DE LERABA	2422	5142	3	0.6202	0.1199	1.8010
SAKORA II	372	401	0	0.0000	0.0000	4.7766
TOTAL	49177	47410	12	0.2362	0.1144	0.4223

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Figure 2: Participants during a laboratory training on assessment of Simulium spp. breeding sites in Congo



NTD laboratory survey

The ESPEN laboratory in Ouagadougou conducted an online survey on NTD laboratories in the African Region. The objective of the survey was to assess the status of NTD laboratories and establish a structured laboratory network based on specific diseases or groups of NTDs. A total of 13 English-speaking countries (Rwanda, Uganda, Seychelles, Malawi, Sierra Leone, Namibia, Ghana, Botswana, Ethiopia, Cameroon, Lesotho, the United Republic of Tanzania, and Kenya) and 18 French-speaking countries (Benin, Madagascar, Niger, Equatorial Guinea, Angola, Mauritania, the Democratic Republic of the Congo, Senegal, Burkina Faso, Congo, Chad, São Tomé and Príncipe, Gabon, Guinea-Bissau, Mozambique, Guinea, Cameroon, Côte d'Ivoire, and Mali) participated in the survey.

Key statistics related to NTD laboratories are summarized in Figure 3. The survey results were currently under analysis at the time of publication of this report.

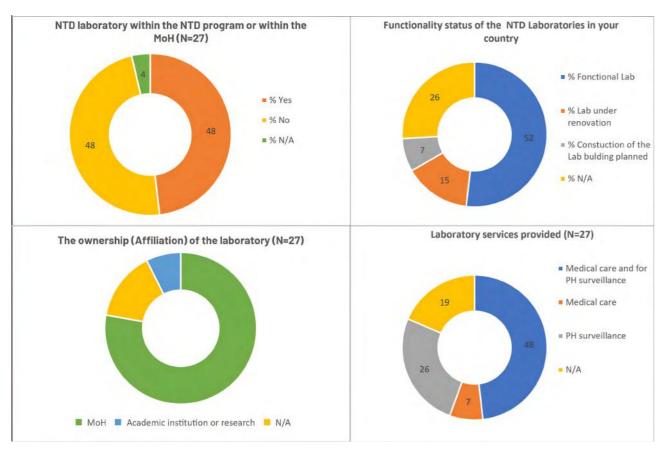


Figure 3: NTD Laboratory key figures

Network of laboratories on NTDs: Training course on integrated control of NTDs through preventive chemotherapy and One Health: diagnosis of helminthiasis

From 14 to 26 November 2022, ESPEN and WHO headquarters jointly organized a training workshop on the diagnosis of schistosomiasis, geohelminthiasis, and tapeworms in line with the One Health approach. The workshop took place at the WHO Collaborating Centre, in the Ivo De Carneri Public Health Laboratory in Pemba, Zanzibar, United Republic of Tanzania. The workshop focused mainly on field surveys, sample collection, good laboratory practices (GLP), and the networking of NTD laboratories.

The participants were divided into two cohorts. The English-speaking cohort attended from 14 to 19 November 2022, and comprised 21 trainees from 8 countries, with two participants per country. The countries represented were Namibia, Rwanda, Angola, Kenya, Zambia, the United Republic of Tanzania (with three participants), South Sudan, Eritrea, Botswana, and Malawi.

The French-speaking cohort attended from 21 to 26 November 2022, with 18 of the 20 expected participants coming from nine countries: Benin, Burkina Faso, Togo, Guinea-Bissau, Mali, Senegal, Côte d'Ivoire, Cameroon, and Congo. Unfortunately, representatives from Niger were unable to obtain visas and could not participate in the course.

The workshop combined plenary presentations, fieldwork (including faeces and urine sampling and conservation), and mass treatment with praziquantel for school-age children in the visited schools. Practical laboratory work was also conducted to examine the collected field samples for parasites.



Figure 4: Participants during a training workshop on the diagnosis of schistosomiasis, geohelminthiasis, and tapeworms in Zanzibar, United Republic of Tanzania

2. Soil-transmitted Helminthiasis and Schistosomiasis

Soil-transmitted Helminthiasis

Scaling up

- i. In 2022, ESPEN provided financial and technical support to bridge the treatment gap for school-age children (SAC) and adults in 10 countries:
 - For schistosomiasis (SCH) mass drug administrations (MDA): Botswana, Kenya, Liberia, Nigeria, South Sudan, Somalia.
 - For soil-transmitted helminthiasis (STH) MDA: Burundi, Congo, Cabo Verde, Zambia, South Sudan, Somalia.

- ii. In South Sudan, ESPEN provided support for SCH/STH MDA in 41 counties, aiming to reach 1 359 539 individuals. However, due to reported serious adverse events (SAEs), the MDA was temporarily halted, and only three counties were covered in 2021. After thorough investigations and addressing community concerns, including improving the community communication strategy and training community health workers and teachers, the MDA was successfully conducted in 2022.
- iii. In Kenya, ESPEN is collaborating with the Ministry of Health (MoH) to jointly support SCH/STH MDA in 20 implementation units (IUs) targeting 2 419 209 people in the Western Kenya Region. This initiative is part of the country's national strategy to interrupt the transmission of these diseases.

Schistosomiasis

Scaling down

ESPEN provided support for:

- i. the implementation of the Schistosomiasis Control Programme in Congo, including training and the development of a community-level mapping protocol;
- ii. the preparation of a dossier for the elimination of schistosomiasis in Algeria;
- iii. schistosomiasis data collection in the subdistricts of Guinea;
- iv. the acquisition of 10 tablets for a multicentre sampling study on schistosomiasis in Mali; and
- v. laboratory training in the United Republic of Tanzania, more specifically in Pemba.

Spotlight on schistosomiasis elimination in Algeria

Algeria is making significant progress towards achieving the interruption of schistosomiasis transmission, positioning itself as one of the leading countries in the African Region. Following a thorough review of the country's schistosomiasis transmission status by ESPEN, it has been confirmed that Algeria has had no indigenous cases of schistosomiasis for three consecutive years. To support Algeria's efforts, ESPEN has provided assistance in preparing a verification dossier. This support involved finalizing and validating a situation analysis to confirm the elimination of schistosomiasis as a public health problem in Algeria, developing a comprehensive plan to verify the interruption of schistosomiasis transmission, and creating a verification survey protocol specifically designed to assess the interruption of schistosomiasis transmission.



Dr Houria KHELIFI, DPC Algeria and Pr. Moussa Sacko, WHO/ESPEN consultant during the country support mission



The technical expert's group and WHO consultant

The next steps in Algeria's efforts to eliminate schistosomiasis involve several important actions. These include establishing a national committee that brings together experts from various disciplines and sectors to focus on eliminating urogenital schistosomiasis. Resource mobilization will also be key to ensuring sufficient funding and support for the elimination efforts.

A comprehensive survey will be conducted to verify the interruption of schistosomiasis transmission. This survey will assess the transmission status and confirm the success of elimination efforts.

In addition, the management of imported cases will be addressed to prevent the reintroduction of the disease. Algeria will also strengthen cross-border collaboration by updating existing collaboration agreements to include schistosomiasis and ensure effective management of epidemics across borders.

To enhance diagnostic capabilities, more sensitive techniques will be utilized to detect schistosomiasis cases. This will aid in identifying and managing any human cases that may arise.

Furthermore, Algeria will promote multisectoral collaboration through the "One Health" approach, which recognizes the interconnectedness of human, animal, and environmental health. This approach will facilitate the coordination of efforts to monitor and manage animal infestations, thereby ensuring a comprehensive approach to schistosomiasis elimination.

Scaling up One Health NTD interventions in the African Region

The status of T. Solium Taeniasis in the African Region has been finalized for 2022, and ESPEN participated in the publication of a report entitled "WHO Taenia Solium endemicity map – 2022 Update" in the Weekly Epidemiological Report. The publication, authored by several experts including M. Donadeu, K. Bote, E. Gasimov, SH. Kim, Z. Lin, A. Lucianez, P. Mwinzi, RS. Nicholls, S. Warusavithana, A. Yajima, and B. Abela-Ridder, provides valuable insights into the endemicity of T. Solium Taeniasis in the Region.

The report shows up to 20 African countries have been identified as endemic for T. Solium Taeniasis. These countries include Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Congo, the Democratic Republic of the Congo, Ghana, Cote d'Ivoire, Kenya, Madagascar, Namibia, Malawi, Mozambique, Nigeria, Senegal, South Africa, United Republic of Tanzania, Togo, and Uganda. The publication serves as an important resource for understanding the distribution and prevalence of this disease in the Region.

In order to address the prevalence of T. Solium taeniasis in the endemic countries identified, it is crucial for these countries to prioritize community-level mapping. This mapping should specifically target areas with risk factors such as free-roaming and backyard pigs, and inadequate sanitation practices including open defecation. It is recommended to adopt a One Health approach, which integrates the examination of pig tongues for signs of infection and stool examination among community members, following the guidelines provided by the World Health Organization (WHO) for T. Solium mapping.

In 2022, technical support was provided to Cameroon and the United Republic of Tanzania to assist them in finalizing their mapping protocols. These protocols are currently undergoing ethical review at both national and WHO/AFRO levels. This support aims to ensure that the mapping efforts align with established standards and ethical considerations, facilitating accurate and reliable data collection for further analysis and intervention planning.

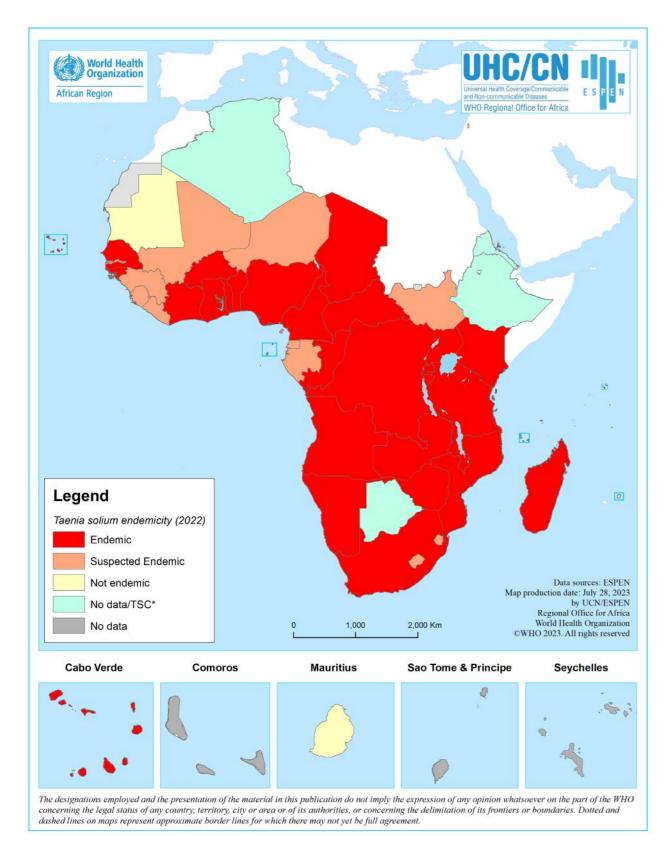


Figure 5: Endemicity of taeniasis in the African Region

3. Trachoma



Scaling up

ESPEN played a significant role in supporting trachoma baseline mapping efforts in different countries. Here is a summary of ESPEN involvement:

- i. Trachoma baseline mapping in Algeria: ESPEN provided technical and financial support for trachoma baseline mapping in Algeria. The mapping, conducted in 12 evaluation units (EUs) across five Wilayas (provinces), used WHO-recommended methodologies with the assistance of Tropical Data. The results revealed that the prevalence of trachomatous inflammation-follicular (TF) among children aged 1 to 9 years was below the elimination threshold in all 12 EUs. However, trachomatous trichiasis (TT) prevalence exceeded 0.2% in nine of the 12 EUs, covering 69 Communes.
- ii. Trachoma baseline mapping in Angola: ESPEN provided technical and financial support for the trachoma baseline mapping in Angola, using Tropical Data. The results of the baseline mapping conducted in Cunene and Namibe provinces confirmed that Angola is indeed a trachoma-endemic country.
- iii. Trachoma baseline mapping in Botswana: ESPEN contributed to the finalization of the trachoma baseline mapping protocols for Botswana. The mapping took place in the Okavango District in December 2022. The results indicated that Botswana is not endemic for trachoma.
- iv. Extension of baseline mapping protocol in Namibia: ESPEN supported the extension of the baseline trachoma mapping protocol in Namibia to include other relevant neglected tropical diseases (NTDs) such as scabies. With the assistance of WHO and Tropical Data, the Ministry of Health and Social Services (MoSSH) in Namibia is currently finalizing the protocol.

ESPEN's support of these trachoma baseline mapping initiatives has been instrumental in assessing the prevalence and endemicity of trachoma in different countries, aiding in the development of targeted interventions to control and eliminate the disease.

Scaling down

- i. Progress in trachoma control in the African Region has been significant, with a notable reduction in the number of people requiring antibiotic treatment. From 2014 to June 2022, the number of individuals needing treatment decreased by 84 million, from 189 million to 105 million. Eight countries achieved the elimination threshold for trachomatous inflammation-follicular (TF) and no longer required mass drug administration (MDA) in 2022.
- ii. Validation for the elimination of trachoma as a public health problem was granted to Togo in May 2022 and Malawi in September 2022. This brings the total number of countries validated for trachoma elimination in the WHO African Region to four. Ghana (June 2018) and The Gambia (April 2021) were the first two countries to achieve this milestone.
- iii. Currently, Trachoma remains endemic in 23 countries within the WHO African Region. Benin and Mali have declared that they have eliminated trachoma and have submitted their elimination dossiers for independent review. ESPEN provided financial support to Mauritania for the finalization of its trachoma elimination dossier in collaboration with the END Fund and OPC.
- iv. ESPEN also offered technical support in the informal review of trachoma elimination dossiers for Benin, Burundi, Malawi, Mali, Mauritania, and Togo in 2022. These efforts contribute to the overall goal of eliminating trachoma as a public health problem in the Region.



Strengthening information management system

Summary

ESPEN has made significant progress in its data portal and related tools. The number of disease-specific maps available on the portal has increased to over 15 000, incorporating data from activities carried out in 2020. In addition, new disease-specific dashboards have been developed to provide comprehensive information on major NTD indicators, including endemicity and MDA/PC interventions, categorized by country.

ESPEN has created an analytical dashboard to facilitate data analysis and planning, offering projections on treatment and survey requirements until 2030. This tool is integrated into the ESPEN NTD Data Portal, enabling users to access valuable insights and make informed decisions.

ESPEN has also finalized the ESPEN JAP import tool, which allows JAP (Joint Application Package) reports to be reviewed and validated. Currently, 692 JAP reports have been reviewed and validated, and they are publicly accessible.

In terms of user engagement, the ESPEN Portal has seen significant traffic. In 2022 alone, 14 383 users from 174 countries, including 55 countries in Africa, visited the portal during 3,272 sessions. This demonstrates the widespread utilization of and interest in the ESPEN platform.

Furthermore, ESPEN has received 59 requests from 19 countries to utilize the ESPEN Collect platform for surveys conducted in 5,845 sites. The countries involved include Benin, Burkina Faso, Burundi, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Ghana, Guinea Conakry, Guinea Bissau, Kenya, Liberia, Malawi, Mozambique, Nigeria, Sao Tomé, Senegal, Sierra Leone, and Togo. This highlights the platform's value in facilitating data collection and survey management for various countries in their efforts to combat NTDs.

ESPEN recognizes the importance of data-driven decision-making in the success of NTD programmes. To facilitate this, the WHO Regional Office for Africa developed the ESPEN NTD Portal, an online platform that provides easy access to subnational PC-NTD data for key stakeholders. The portal serves as a consolidated repository of data shared by health ministries through the Joint Application Package reporting system, offering a comprehensive view of the status of NTD programmes at the implementation unit level. This enables better progress tracking, cross-disease coordination, and forward planning.

The ESPEN NTD Portal initially made endemicity and treatment status maps available at the implementation unit level, but it has since expanded to include more NTD data. The portal now compiles epidemiological and treatment data since 2014, with efforts underway to collect historical data. ESPEN is also releasing community-level data for various NTDs in endemic countries across the African Region.

In 2022, ESPEN enhanced the existing interactive dashboards that provide both current progress and ten-year projections at the implementation level. By utilizing historical data from the ESPEN repository, these dashboards forecast the timing and strategy for MDA interventions, considering co-endemicity, and highlight when impact assessments should be conducted to meet the goals of the 2021–2030 NTD Elimination Road map. These resources greatly support the development of national NTD master plans and annual work plans.

ESPEN has also prioritized improving data collection and reporting tools for NTD country programmes. The ESPEN Collect Survey Support Services, or ESPEN Collect, offers standardized data collection and submission through EPIRF. This platform aims to enhance data quality and timeliness, reduce fragmentation in epidemiological assessments, and meet the increasing demand for mapping and impact assessment surveys. In addition, the ESPEN JAP import tool simplifies the submission and validation of Joint Application Package reports, streamlining the review process for WHO country offices, the ESPEN data team, and NTD country programme teams.

In 2022, ESPEN witnessed a growing number of countries utilizing ESPEN Collect and the JAP import tool, demonstrating their effectiveness in data collection and reporting. These tools facilitate efficient and reliable data management, supporting NTD programmes in making informed decisions and advancing their efforts towards NTD elimination. Thus, twenty-five countries fully relied on the JAP import tool to submit their reports on MDA activities implemented in 2021.

Supporting countries in submitting reliable data to WHO

To facilitate the monitoring and planning of preventive chemotherapy interventions in NTD programmes, Ministries of Health (MoH) utilize five standard electronic workbooks provided by WHO. These workbooks include the epidemiological reporting form (EPIRF), the joint reporting form (JRF), the joint request for selected medicines (JRSM), the annual work plan form (AW), and the trachoma evaluation and monitoring form (TEMF). While the TEMF is a stand-alone form, the others are part of the Joint Application Package and serve as the primary data source for the ESPEN Data Portal.

To ensure the quality of the reported data, the ESPEN data management team conducts thorough reviews and provides feedback to the country teams, which consist of the NTD focal person from the WHO country office, MoH staff, and implementing partners. This feedback aims to address any necessary corrections or discrepancies through appropriate explanations.

In 2022, a total of 38 JRF treatment reports for 2021 MDA activities were received. Seven countries reported not conducting MDA in 2020: Cabo Verde, Eswatini, Gabon, Namibia, Zimbabwe, Lesotho, and South Africa. Thirty-nine country programmes submitted medicine requests using the JRSM form. Of these, 30 requests have been approved and orders dispatched, 11 were under review at the country level, and 4 countries indicated that they did not require donated medicines.

As part of the scaling down of MDA after several years of implementation, 17 countries conducted impact assessment surveys and submitted the results to ESPEN using the EPIRF form. A total of 22 survey reports were received, reviewed, and provided with appropriate guidance based on the results and WHO guidelines.

Overall, ESPEN collected 282 JRFs from countries between 2014 and 2021. Regarding medicine requests (JRSM), ESPEN received 291 submissions between 2016 and 2021. There has been an increasing number of submissions since the inception of the ESPEN project in 2016. The countries that did not submit reports are those that did not implement MDA.



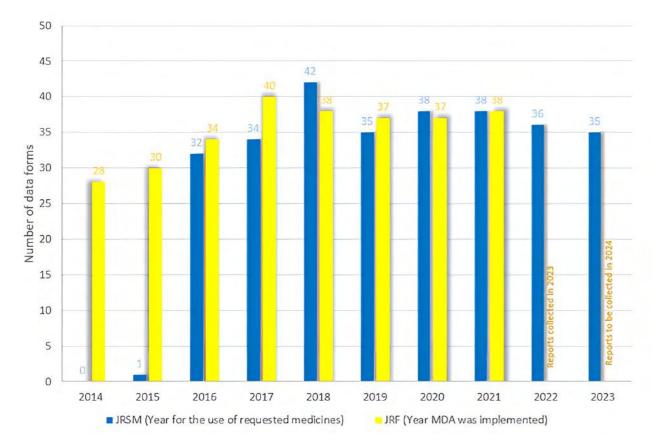


Figure 6: Trends in submission of medicine requests and treatment report by NTD programmes for 2014–2023

Promoting online submission of data files to WHO/AFRO/ESPEN

For a long time, email was the primary means of data sharing between country NTD programmes and WHO, including the review process. However, this system lacked transparency and accountability, making it challenging for stakeholders to track the status of data submission, review, and validation. This process involved multiple stakeholders, such as ministries of health, implementing partners, donors, drug-donor pharmaceutical companies, and various WHO entities (country offices, regional office, and WHO headquarters).

To address these limitations, ESPEN introduced an online submission tool for data files in 2019, aiming to enhance transparency among partners involved in NTD control. Taking user feedback into account, a more user-friendly interface was developed and launched in February 2023.

In 2022, 25 countries utilized this tool to submit at least one Joint Application Package (JAP) form. The level of usage varied among countries, with some simply submitting the initial version of the form while others submitted all versions and engaged in communication with WHO as part of the review process.

Setting up a Country Health Information Platform (CHIP)

ESPEN, in collaboration with Sightsavers, has created the "Country Health Information Platform (CHIP)" as a nationally managed data product to enhance access to longitudinal data through integration with the ESPEN Portal. This visualization tool is designed to review data submitted in the Joint Application Package (JAP) and trachoma elimination monitoring form (TEMF) at national, regional, and district levels, eliminating the need for additional data entry. Following a pilot phase in five countries, all 44 countries in WHO/AFRO that implement preventive chemotherapy for NTDs have been fully incorporated into the tool.

The CHIP tool, accessible at https://espen.afro.who.int/tools-resources/chip, is being utilized by ministries of health and implementing partners to facilitate informed decision-making processes. It assists in assessing consistency in treatment coverage and identifying implementation units that may require impact assessment surveys in the near future. By leveraging this tool, stakeholders can make more informed decisions and improve the effectiveness of NTD programmes.

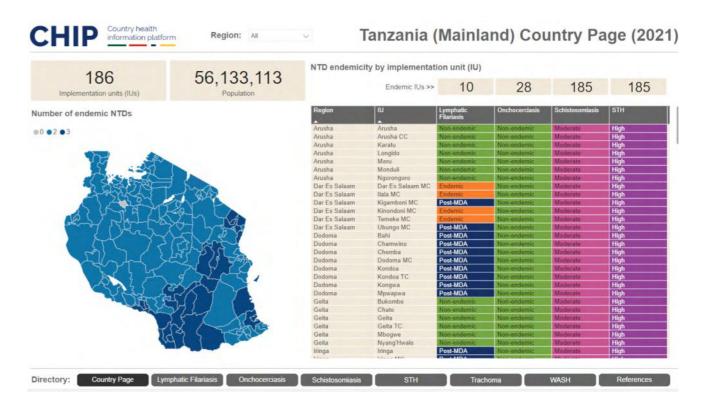


Figure 7. Country (United Republic of Tanzania) dashboard of the CHIP platform embedded into the ESPEN Portal, showing treatment coverage and elimination forecast until 2030





The ESPEN Portal, launched in 2017, has become a valuable resource with over 15 000 maps and underlying datasets for all PC-NTDs. The available data includes information at both the implementation unit level, providing details on endemicity status and treatment coverage, and at the site level, offering survey results. New maps have been recently added to the portal based on treatment data from 2021.

In addition, the ESPEN Portal includes maps and dashboards displaying estimates of accessibility to safe water and improved sanitation. To create these water and sanitation maps, ESPEN used WASH data from the Local Burden of Disease project at the Institute for Health Metrics and Evaluation (IHME). The IHME, in collaboration with WASH partners, has developed geostatistical models to predict the accessibility to protected sources of water and improved sanitation facilities worldwide. Using these predictions, ESPEN has generated summary indicators at the implementation unit level, resulting in informative maps that overlay the endemicity of soil-transmitted helminths (STH) and schistosomiasis (SCH) with access to water and sanitation.

In addition to expanding maps and datasets, the ESPEN Data Portal has recently introduced a comprehensive suite of data dashboards,

ESPEN NTD PORTAL

progress and forecast dashboards. These dashboards are designed to assist NTD programmes in monitoring the rollout and impact of interventions, enabling data-driven decision-making for future strategies. The continent, regional and country landing pages have also been enhanced, providing a summary of major treatment indicators and projections on survey and treatment requirements for the upcoming years.

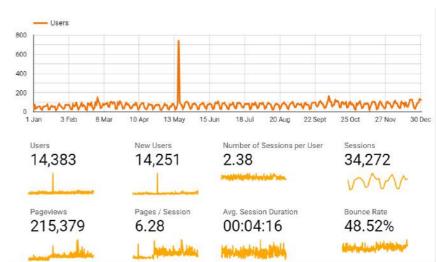
Furthermore, the portal offers various resources to support NTD programmes, including the country NTD master plans, partners' matrix, Regional Programme Review Group reports for Preventive Chemotherapy (RPRG), ESPEN annual reports, and disease elimination dossiers. These resources contribute to the comprehensive nature of the ESPEN Portal, serving as a centralized platform for accessing essential information and facilitating informed actions in NTD control.

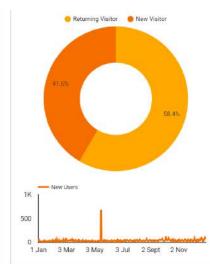
The ESPEN NTD Portal experienced a significant increase in usage from the African Region in 2022 compared to 2021. The number of new users rose by 39.06%, from 10 343 in 2021 to 14 383 in 2022. In terms of page views, there has been a remarkable 155.01% increase, from 84 460 views in 2021 to 215 379 in 2022. When examining these statistics by location, the African Region witnessed a 40% rise in the number of new users, growing from 3,065 in 2021 to 4,119 in 2022. The African Region actually has the largest total number of users worldwide, with 4,349 users, accounting for 29.2% of the global user base. The other regions follow with the Americas at 27.1%, Europe at 24.4%, Asia at 17.2%, and Oceania at 1.4%.

This increase in the uptake of the resources available on the ESPEN NTD Portal results from dedicated efforts to enhance its accessibility and usefulness. The growing numbers reflect the growing recognition and utilization of the portal's valuable information and tools by users in the African Region and across the globe.



Data Harmonisation for NTD Master plan Budgeting in Liberia





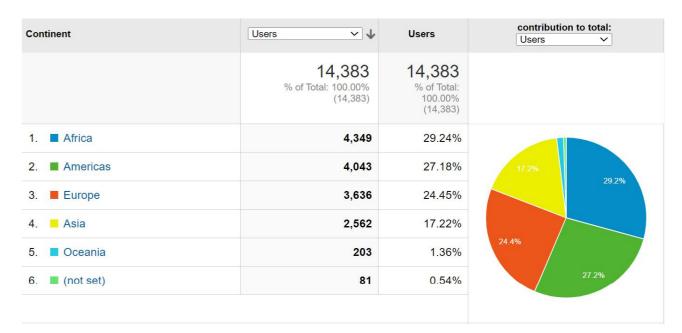


Figure 8: Number of stable users of ESPEN Portal by continent in 2022

Updating cartography of implementation units

With the update of the IU history, the IU boundaries have been updated to match the IUs which exist each year. This important update allows visualization of PC data using the exact IU division that applies to each year. The IU cartography publicly available in the ESPEN Portal is a resource that can be used by other health programmes, in the same way other programmes such as the WHO Polio Eradication Programme make their specific cartography available to the public.

Cartography database

Download

Year	Admin 0	Admin 1	Admin IU
2021	<u>↓</u> ESPEN_ADM0_2021.zip 3.6 MB	<u>↓</u> ESPEN_ADM1_2021.zip 7.98 MB	<u>↓</u> ESPEN_IU_2021.zip 26.73 M
2020	<u>↓</u> ESPEN_ADM0_2020.zip 3.55 MB	<u>↓</u> ESPEN_ADM1_2020.zip 7.98 MB	<u>↓</u> ESPEN_IU_2020.zip 28.08 M
2019	<u>↓</u> ESPEN_ADM0_2019.zip 3.51 MB	<u>↓</u> ESPEN_ADM1_2019.zip 7.96 MB	<u>↓</u> ESPEN_IU_2019.zip 27.17 M
2018	<u>↓</u> , ESPEN_ADM0_2018.zip 3.49 MB	<u>↓</u> ESPEN_ADM1_2018.zip 7.88 MB	<u>↓</u> ESPEN_IU_2018.zip 26.85 N
2017	<u>↓</u> ESPEN_ADM0_2017.zip 3.49 MB	<u>↓</u> ESPEN_ADM1_2017.zip 7.88 MB	<u>↓</u> ESPEN_IU_2017.zip 26.85 N
2016	<u>↓</u> ESPEN_ADM0_2016.zip 3.49 MB	<u>↓</u> ESPEN_ADM1_2016.zip 7.88 MB	<u>↓</u> ESPEN_IU_2016.zip 26.47 N
2015	<u>↓</u> ESPEN_ADM0_2015.zip 4.22 MB	<u>↓</u> ESPEN_ADM1_2015.zip 9.89 MB	<u>↓</u> ESPEN_IU_2015.zip 35.37 M
2014	<u>↓</u> ESPEN_ADM0_2014.zip 4.22 MB	<u>↓</u> ESPEN_ADM1_2014.zip 9.89 MB	<u>↓</u> ESPEN_IU_2014.zip 35.37 M
2013	↓, ESPEN_ADM0_2013.zip 4.22 MB		

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Figure 9: IU level cartography for LF, onchocerciasis, STH and SCH programmes in the African Region

Progress and forecast analytical dashboards

To facilitate evidence-based decision-making in NTD control, the ESPEN Data Portal has been expanded to include a comprehensive set of data dashboards. These dashboards are specifically designed to assist NTD programmes in effectively monitoring the implementation and impact of interventions, as well as making informed decisions regarding future strategies.

The newly added ESPEN Progress and Forecast dashboards offer users the ability to delve into vital statistics, analytics, graphics, and maps at both the subnational and national levels. These dashboards provide an overview of the current endemicity status and progress of mass drug administration (MDA) efforts for each PC-NTD (Preventive Chemotherapy NTDs). In addition, they outline the projected treatment needs and impact assessment requirements over the next decade.

The dashboards have been specifically designed to facilitate easy access and utilization of data by national programmes. By leveraging the information in the dashboards, decision-makers can make better informed choices, allocate resources more efficiently, and drive progress in their NTD control and elimination efforts. Users can access disease-specific dashboards through their respective country pages on the ESPEN Data Portal, simply by selecting the disease of interest.





Summary

In 2022, ESPEN Collect achieved significant milestones and made a positive impact in supporting data collection for neglected tropical diseases (NTDs). Here is a summary of the key achievements:

- a. Support requests: ESPEN Collect received 59 support requests from 19 countries, highlighting the platform's growing recognition and demand.
- b. Survey support: A total of 44 surveys from 19 countries received comprehensive support through ESPEN Collect. This support included protocol review, assistance in data collection, monitoring, cleaning, and guidance in generating electronic prevalence and impact reporting forms (EPIRFs).
- c. Partner collaboration: ESPEN Collect collaborated with five partner organizations, namely Sightsavers, FHI360, KEMRI, HKI, and Crown Agents, who used the platform for their surveys. This collaboration expanded the reach and impact of ESPEN Collect.
- d. Expansion to new countries: ESPEN Collect expanded to five new countries in 2022: Chad, Democratic Republic of the Congo, Guinea-Bissau, Kenya, and Malawi. These countries joined the growing list of nations benefiting from the platform's data collection capabilities.
- e. Extensive data collection: ESPEN Collect facilitated data collection from 546 districts and 5,845 sites, including schools and villages. This extensive data collection provided a comprehensive dataset for informed decision-making and programme evaluation.

In 2022, ESPEN Collect played a crucial role in supporting surveys across various countries, contributing to the collection of valuable epidemiological and coverage evaluation data. Highlights of ESPEN Collect's survey activities include:

Number of surveys: A total of 44 surveys were conducted in 2022, covering a wide range of sites. These surveys took place in 5,845 sites located within 546 districts across 29 countries.

Epidemiological reporting forms (EPIRF): Through the platform, 19 EPIRFs were successfully generated for the surveys conducted. These forms are used to capture and report essential epidemiological data.

Training and support: ESPEN provided training to 510 individuals on the usage of ESPEN Collect within the participating countries. This training ensured that survey teams were equipped with the necessary skills to effectively utilize the platform for data collection.

Collaboration with partners: ESPEN collaborated with esteemed partners such as Sightsavers, FHI360, KEMRI, Hellen Keller International (HKI), Crown Agents, and ESPEN itself. These partnerships proved instrumental in various aspects, including funding, procurement of smartphones for data collection, training facilitation, data management, and overall support to NTD country programmes.

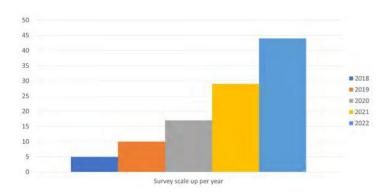


Expansion to new countries: A total of 5 new countries, namely Chad, the Democratic Republic of the Congo, Guinea-Bissau, Kenya, and Malawi, received support from ESPEN Collect in 2022. With the addition of these countries, the total number of countries benefiting from the platform reached 25 out of the 47 countries in the African Region.

Impact and growth: Since its launch in late 2018, ESPEN Collect has steadily grown in scale and impact. Nearly 2 million records have been submitted through the platform, underscoring its significance in enhancing data collection efforts for NTD programmes.

Overall, ESPEN Collect's survey activities in 2022 showcased its effectiveness in supporting data collection across a wide range of countries, facilitating collaboration with partners, and contributing to the growth of evidence-based decision-making in NTD control.

Below is the survey scale-up per year:



ESPEN Collect has been instrumental in supporting surveys for all four PC-NTDs targeted by the platform: lymphatic filariasis (LF), onchocerciasis, schistosomiasis, and soiltransmitted helminthiasis (STH).

For detailed information on the surveys conducted using ESPEN Collect since its inception in 2018 and in 2022 in particular, please refer to Figures 11 and 12.

Figure 10: Survey scale up by year.

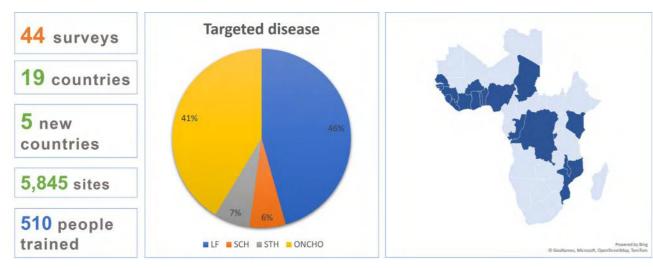


Figure 11: ESPEN Collect dashboard with major milestones (2018 –2022)

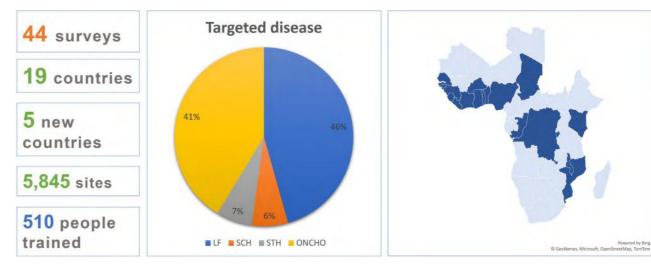


Figure 12: ESPEN Collect dashboard with major milestones in 2022

Table 4: The following table summarizes the number of surveys per country

Country	LF surveys	SCH /STH Surveys	Oncho surveys
Benin	0	1	1
Burkina Faso	3	0	2
Burundi	0	0	0
Chad	1	0	0
Congo	0	0	1
Côte d'Ivoire	2	0	2
Democratic Republic of the Congo	0	1	0
Ghana	1	0	2
Guinea	0	0	1
Guinea Bissau	3	0	1
Kenya	2	0	0
Liberia	2	0	1
Malawi	0	0	1
Mozambique	2	0	1
Nigeria	2	0	3
Sao Tomé	1	0	0
Senegal	2	1	0
Sierra Leone	0	0	1
Togo	0	0	2
Total	21	3	19





ESPEN JAP IMPORT TOOL

To enhance the accessibility of preventive chemotherapy data for country programmes and stakeholders, ESPEN has implemented improvements to its internal data management system. This includes the development of a new file upload tool and an Extract-Transform and Load tool. As a result of these enhancements, ESPEN has made several forms available to the public on the ESPEN Portal.

These forms include:

36 40 25

TREATMENT REPORTS

for the 2021 mass drug administration (MDA)

TREATMENT REPORTS

for the 2020 MDA

MEDICINE REQUEST

forms for the 2022 MDA

MEDICINE REQUEST

forms for the 2023 MDA

7 & 8

ANNUAL WORK PLANS

for 2022 and 2023, respectively

In total, the ESPEN Data Portal now provides access to 268 treatment report forms, 249 medicine request forms, 121 epidemiological reports (survey reports), and 52 annual work plan forms. These resources contribute to a more comprehensive and transparent data repository for preventive chemotherapy efforts.





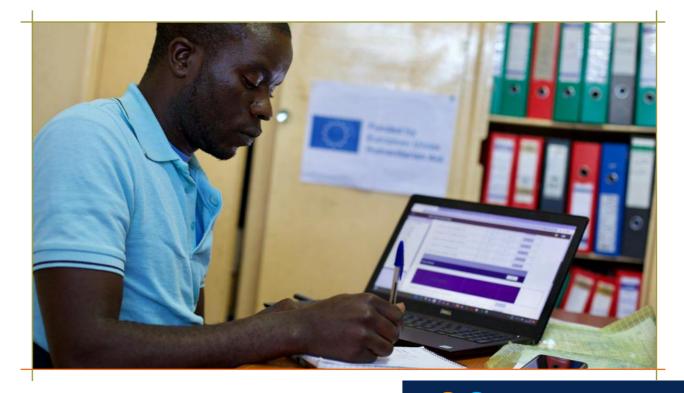
ESPEN is committed to providing evidencebased guidance to NTD country programmes, enabling them to make well-informed decisions tailored to their specific epidemiological context. To fulfil this commitment, ESPEN continues to process data collected through the ESPEN data repository, including information from the recently submitted joint reporting form (JRF) 2020 report. This data is used to generate key indicators for monitoring and evaluating progress towards diseasespecific control and elimination targets. These indicators are used to measure the impact of mass drug administration (MDA) interventions over time and to identify areas that may require additional attention from NTD control programmes.

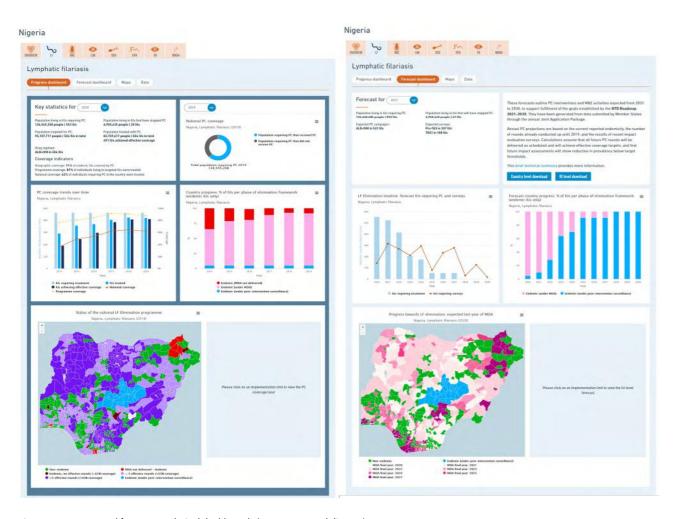
The ESPEN data team has analysed this data to produce endemicity and treatment-related indicators at different geographical levels, including at the implementation unit and country level, for the entire African Region.

ESPEN ANALYTICS

These indicators are made available through the ESPEN Data Portal as maps, tables, and recently developed countryand disease-specific dashboards. Analytical dashboards for monitoring progress are accessible for each PC-NTD disease and by country, presenting key statistics, demographic information, and implementation unit-level summaries for PC interventions. The progress dashboard provides a visual representation of national coverage over the years, while detailed graphics highlight population and MDA coverage trends at the implementation unit level over time. An interactive map displays treatment coverage trends, linked to an implementation unit-level plot showing PC treatment coverage. All charts and plots can be downloaded for users' convenience.

Moreover, new analytical dashboards incorporating projections of treatment and survey needs until 2030 have been developed and integrated into the ESPEN NTD Portal. These projections, available for each PC-NTD disease and by country, offer key statistics and indicators by year, outlining projected MDA and survey needs for each disease until 2030. The dashboard provides a clear visual timeline for disease-specific projections and an interactive map displaying the number of MDAs required to achieve disease control or elimination. This map is linked to an implementation unit-level PC plot, presenting treatment and survey needs for the upcoming years. All charts, plots, and data can be downloaded, providing users with comprehensive access to projections at both country and implementation unit levels.





 ${\it Figure 13: Progress \ and \ forecast \ analytical \ dashboards \ (per \ country \ and \ disease)}$

We have also generated disease-specific indicators for the entire African Region. These indicators have been made available through the different services and tools embedded in the ESPEN NTD Data Portal, including a new country landing page feature.

Identifying funding gaps for the completion of treatment and surveys

Through various inquiries, ESPEN has identified a lack of funding as a major reason for the expiry of medicines dispatched to conduct planned MDA interventions. The World Health Organization (WHO) has implemented the Joint Application Package system, which enables countries to report MDA and M&E interventions and request medicines. This system includes an annual work plan (AWP) form to collect information on funding availability and external support for planned interventions. However, the current system does not require countries to provide detailed information about the specific areas (implementation units) receiving external support or the activities supported by each partner.

In the African Region, 4,975 areas or implementation units require interventions for at least one PC-NTD. In 2021, only 58.2% (2,894 areas) of these units could conduct interventions for at least one PC-NTD. Unfortunately, a significant portion of the remaining areas (42.8%) did not receive any interventions due to a lack of funding. A recent study conducted by ESPEN in 26 countries sought to assess funding availability for planned MDA rounds scheduled in 2023. The study revealed that 12% of implementation units lacked funding to complete the required MDA rounds for LF, 11% for onchocerciasis, 35% for STH, and 24% for schistosomiasis. To address this issue, ESPEN has partnered with organizations involved in developing and maintaining the ESPEN Portal. Together, we have developed an online tool called the "IU Planner." This tool enables stakeholders to report and monitor funding availability and planned interventions. It serves as a centralized platform to track funding gaps and ensure transparency in resource allocation for PC-NTD interventions. By utilizing the IU Planner, stakeholders can better coordinate their efforts, identify areas needing additional funding, and prioritize interventions accordingly. This tool aims to improve the efficiency and effectiveness of resource utilization, ultimately leading to a greater impact in combating PC-NTDs in the African Region.

Strengthening supply chain management

Utilization of donated medicines

In October 2022, an advocacy workshop was successfully organized in Mombasa, Kenya, co-sponsored by the World Health Organization (WHO), the International Pharmaceutical Federation (FIP), and the Promoting the Quality of Medicines (PQM) programme. This workshop focused on ensuring the quality of priority medicines for neglected tropical diseases (NTDs). The event brought together National Medicines Regulatory Authorities (NMRAs) and manufacturers of NTD products. Participants engaged in discussions, knowledge sharing, and capacity-building activities to enhance the quality and availability of essential medicines for NTDs.

ESPEN conducted a supply chain support mission to Ghana from 26 April to 6 May 2022. The objective was to strengthen the country's supply chain management system for NTDs. During the mission, ESPEN experts provided technical assistance, guidance, and training to Ghanaian stakeholders involved in distributing and managing NTD medicines. The mission sought to enhance the efficiency and effectiveness of the supply chain processes, ensuring timely and reliable access to essential medicines for NTD control and elimination efforts.

Similarly, in April 2022, ESPEN conducted a supply chain support mission to Kenya. The mission lasted from 12 to 22 April and focused on improving the country's NTD supply chain management system. ESPEN collaborated with local stakeholders, providing expertise and support to enhance the logistics, distribution, and inventory management processes for NTD medicines in Kenya. The mission sought to strengthen the supply chain infrastructure, optimize resource utilization, and ensure uninterrupted availability of essential medicines for NTD programmes.

Recognizing the importance of a robust supply chain management, ESPEN engaged two supply chain consultants in April 2022. These consultants were assigned to support ESPEN in strengthening the NTD supply chain management systems in various countries across the African Region. Their expertise and guidance sought to enhance the capacity of national programmes to efficiently manage the procurement, storage, and distribution of NTD medicines, ultimately improving access to treatment for affected populations.

Through effective management of allocations, ESPEN achieved significant cost savings and resource optimization. ESPEN approved the allocation of 449 204 000 tablets of albendazole (ALB), mebendazole (MEB), praziquantel (PZQ), and diethylcarbamazine (DEC) to 36 out of 44 countries. This strategic allocation saved 77 527 000 tablets, equivalent to approximately US\$ 20 million, by avoiding unnecessary requests. By carefully managing the allocation process, ESPEN ensured that essential NTD medicines were distributed efficiently, addressing the needs of affected countries while maximising the utilization of available resources.

Medicines requests (JAP) review and clearance for treatments planned in 2022

To ensure timely access to an adequate supply of quality medicines for endemic countries, ESPEN follows the official WHO deadlines for quality medicines requests, which are 15 March and 15 July of each year. Once a request is approved, it takes approximately six to ten months for the medicines to reach the national warehouses.

In 2021, ESPEN took proactive measures to meet the medicine needs of endemic countries. By carefully reviewing and approving allocation requests, ESPEN successfully allocated a total of 449 204 000 tablets of albendazole (ALB), mebendazole (MEB), praziquantel (PZQ), and diethylcarbamazine (DEC) to 36 out of 44 countries in the African Region. These allocations ensured that the countries received sufficient quantities of the donated medicines.

By carefully managing the allocation process, ESPEN was able to save significant resources. A total of 130 288 379 tablets, equivalent to \$4 million, were saved by avoiding unnecessary requests. This strategic allocation approach optimized the utilization of available medicines, ensuring that they reached the countries where they were most needed. ESPEN's efforts in managing the allocation process contributed to the efficient distribution and timely availability of essential medicines for the control and elimination of neglected tropical diseases in the African Region.

Table 5: Medicines requests and review 2022

Medicines	Tablets initially requested	Tablets approved	No. of tablets saved	Unit price	Total costs saved
PZQ	247 647 000	285 855 000	0	0.13	0
ALB	198 175 379	110 381 000	87 794 379	0.03	2 633 831.37
MEB	65 280 337	42 000 000	23 280 000	0.0495	1 152 360
DEC	30 182 000	10 968 000	19 214 000	0.02	384 000
Total	541 284 716	449 204 000	130 288 379		\$4 150 191

Efficient monitoring of medicines utilization to reduce expiry and wastage rate

ESPEN recognizes the importance of monitoring medicine wastage and its impact on supply chain management efficiency. This exercise aims to determine the actual quantities of drugs reaching targeted communities compared to the overall quantities of medicines supplied. In public health supply chains, an acceptable wastage rate ranges from 2% to 4%, with a maximum of 5% of the volume supplied, demonstrating rational use and stewardship of the financial allocation of health resources.

During the 2022 mass drug administration (MDA) campaigns, it was observed that approximately 8 568 000 tablets were wasted due to various factors such as short shelf life, poor MDA planning, inaccurate quantifications and forecasts, inadequate distribution planning, suboptimal inventory management, COVID-19 impact or lack of funding to conduct MDAs. Out of the total donation of 247 339 000 tablets in 2022, the average wastage rate was calculated to be 3.4%.

To address these challenges and improve supply chain management, ESPEN provided proactive support in coordinating the shipment, delivery, and storage of medicines at central medical stores. This included expediting green-light lead time, facilitating tax exemption processes, and reducing customs clearance delays. ESPEN worked closely with countries' NTD programmes, DHL, and pharmaceutical donors on a daily basis, offering technical support in planning and monitoring shipments, including airfreight and sea freight bookings, pre-shipment inspections, import permits, green-light processes, tax exemption, and customs clearance. These efforts were designed to ensure the smooth flow of donated medicines and their timely arrival at central medical stores.

In 2022, out of a total of 74 planned shipments, 79% arrived in the respective countries, while the remaining 21% were still in transit as of January 2023. The shipments that were still in transit mainly involved countries such as Chad, Congo, Mauritania, Niger, Senegal, Burundi, Angola, Central African Republic, São Tomé and Príncipe, Madagascar, Guinea-Bissau, Equatorial Guinea, The Gambia, Ethiopia, and Nigeria. These shipments were for countries whose requests were approved in 2022.

ESPEN's commitment to optimizing supply chain management and providing ongoing support to countries and partners ensures the efficient utilization of donated medicines and their timely delivery to the communities in need, ultimately contributing to the successful control and elimination of neglected tropical diseases in the African Region.

Inventory tracking to mitigate FCDO funding cut and COVID-19 expiry risks

In 2022, ESPEN took proactive measures to monitor drug inventories at both the national and subnational levels to reduce the risk of drug expiry in countries. By the end of the year, ESPEN identified a potential risk of approximately 62 million praziquantel (PZQ) tablets expiring in the first half of 2023 if sufficient funding was not available to fully utilize the drug. In addition, nearly 13 million of cysticercosis elimination drug (CED) tablets were at risk of expiring before they could be used.

To address this critical issue, ESPEN co-hosted meetings with the affected countries and emphasized the importance of greater transparency and accountability in sharing accurate inventory data. Advocacy efforts were made to encourage countries to develop contingency plans involving all relevant stakeholders. At the same time, ESPEN examined funding gaps and identified priority areas where support was needed.

Through close monitoring and collaboration with the countries in question, ESPEN successfully prevented the expiry of approximately 74 million tablets by ensuring they were utilized before reaching their expiry dates. Only 1.2 million tablets were reported as expired in one country (Togo).

By effectively managing drug inventories and promoting timely utilization, ESPEN demonstrated its commitment to optimizing the use of available resources and maximizing the impact of donated medicines in controlling neglected tropical diseases in the African Region. Through these efforts, ESPEN contributed to safeguarding public health and advancing the goals of disease control and elimination.





PARTNERSHIPS AND COORDINATION

Throughout the year, ESPEN actively participated in various meetings, trainings, and conferences related to neglected tropical diseases (NTDs) and laboratory capacity development. The following is a summary of their involvement:

1

Integrated Onchocerciasis and Lymphatic Filariasis Regional Programme Review Meeting: ESPEN attended this meeting held in Malawi at Umodzi Park, BICC, where discussions on the progress of the programme took place.

2

Support for the Third Global Scientific Meeting on Trachomatous Trichiasis: ESPEN provided financial support to the meeting held in Cape Town, South Africa. The meeting focused on various themes related to trachomatous trichiasis, including diagnosis, grading, and post-elimination management.

3

Laboratory capacity development: ESPEN emphasized the enhancement of effective laboratory investigations and reporting. It provided training to programme managers on laboratory investigations for taeniasis and other soil-transmitted helminths. In addition, ESPEN supplied laboratory materials and equipment to support laboratory capacity development.

4

Participation in meetings and conferences: Dr Bakajika, an ESPEN representative, actively participated in multiple meetings and conferences. These included the International Coalition for Trachoma Control Meeting in London, the Stakeholder Meeting on Vector Control and Alternative Treatment Strategy for Onchocerciasis in Sally, Senegal, and the Trachoma Expert Committee Meeting in Decatur, Georgia, USA.

5

Training course on integrated control of NTDs: ESPEN provided technical support in organizing a training course on the integrated control of NTDs by preventive chemotherapy and One Health in Pemba, Zanzibar, United Republic of Tanzania. The training sought to enhance knowledge and skills related to the diagnosis of helminthiasis.

6

Annual Meeting of the East and Southern Africa Trachoma/NTDs Cross-border Partnership: ESPEN attended this meeting held in Dar es Salaam, United Republic of Tanzania, which focused on collaborative efforts to address trachoma and other NTDs across borders.

7

Other meetings and evaluations: Dr Bakajika participated in various national and regional meetings, such as the Nigeria Onchocerciasis Elimination Committee Meeting, the Tanzania Annual Joint Planning Technical Working and Disease-Specific Groups Meeting, and the Independent Committee for the Elimination of Onchocerciasis Meeting in Niger.

8

WHO Global Meeting on Post-Validation Surveillance of Lymphatic Filariasis: ESPEN took part in this meeting held in Bangkok, Thailand, to discuss post-validation surveillance strategies in the context of the integrated NTD Road map.

Throughout these engagements, ESPEN played an active role in supporting NTD programmes, providing technical expertise, and contributing to the overall efforts aimed at combating neglected tropical diseases.

Financial overview

Table 6: Funds utilization by objective - January 2022 to December 2022

Objectives	Amount utilised (USD)
Objective 1: Support affected Member States for the 5 PC-NTDs to scale up MDA to reach 100% geographic coverage	3,946,825.87
Objective 2: Scaling-down MDA toward PC-NTD elimination and reduction of those at-risk for NTDs	1,883,997.25
Objective 3: Promoting effective use of donated medicines	82,807.00
Objective 4: Strengthening information systems for evidence-based implementation-level decision-making	289,763.72
Objective 5: Enhancing collaboration, country ownership and health-system strengthening for sustainability	1,559,621.37
Human Resource Cost	2,021,335.00
Grand Total	9,784,350.21

Table 7: Funds distributed and utilised by WHO country offices in 2022

Countries	Amount Funded (USD)	Utilization (USD)	Fund balance (USD)
Angola	324,744.00	252,213.34	72,530.66
Botswana	115,043.00	72,535.92	42,507.08
Burundi	276,009.00	162,417.05	113,591.95
Cameroon	194,248.00	12,232.00	182,016.00
Cape Verde	7,200.00	7,199.95	0.05
Chad	219,848.00	219,774.46	73.54
Comoros	66,667.00	32,973.53	33,693.47



Countries	Amount Funded (USD)	Utilization (USD)	Fund balance (USD)
Congo, Republic of	429,477.00	410,366.07	19,110.93
Democratic Republic of Congo	2,138,668.00	1,674,577.45	464,090.55
Equatorial Guinea	182,000.00	-	182,000.00
Ethiopia	475,935.00	436,039.74	39,895.26
Gabon	5,000.00	-	5,000.00
Gambia	11,000.00	-	11,000.00
Ghana	16,490.00	16,490.00	-
Guinea	61,708.00	23,476.49	38,231.51
Kenya	1,064,234.00	190,028.06	874,205.94
Liberia	319,640.00	196,206.12	123,433.88
Madagascar	15,000.00	3,282.46	11,717.54
Malawi	169,548.00	30,670.00	138,878.00
Mali	1,932.00	-	1,932.00
Mauritania	51,293.00	23,047.37	28,245.63
Mozambique	12,000.00		12,000.00
Namibia	137,937.00	102,694.47	35,242.53
Niger	10,000.00	-	10,000.00
Nigeria	1,332,533.00	1,279,593.41	52,939.59
Representative's Office, Somalia	336,551.00	335,534.56	1,016.44
Senegal	8,000.00	-	8,000.00
Sierra Leone	14,592.00	9,597.37	4,994.63
South Africa	36,705.00	36,700.00	5.00
South Sudan	575,847.00	60,032.63	515,814.37
Swaziland	25,000.00	4,187.12	20,812.88
Tanzania	189,758.00	111,478.22	78,279.78
Tome & Principe	30,088.00	29,088.02	999.98
Uganda	30,000.00	6,243.19	23,756.81
Zambia	491,355.00	485,201.14	6,153.86
Zimbabwe	114,813.00	104,192.48	10,620.52
Grand Total	9,490,863.00	6,328,072.62	3,162,790.38

Donor supporting ESPEN -Project

ESPEN would like to acknowledge financial support from the donors listed below without whose support ESPEN would not have achieved the current milestones.

Donors Supporting -ESPEN
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