



Report of the seventeenth meeting of the Strategic and Technical Advisory Group for Neglected Tropical Diseases

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Abbreviations and acronyms

COP28	28th Conference of the Parties (United Nations Climate Change Conference)
COVID-19	coronavirus disease
DPP	dual path platform (treponemal test)
FAO	Food and Agriculture Organization of the United Nations
GAT	gap assessment tool
GNARF	Global NTD Annual Reporting Form
NTD	neglected tropical disease
PCR	polymerase chain reaction
RDT	rapid diagnostic test
STAG-NTD	Strategic and Technical Advisory Group for Neglected Tropical Diseases
UNEP	United Nations Environment Programme
UNICEF	United Nations Children's Fund
WASH	water, sanitation and hygiene
WHO	World Health Organization
WOAH	World Organisation for Animal Health (formerly OIE)

1.

**Introduction, strategic
priorities and follow-up**

The seventeenth meeting of the Strategic and Technical Advisory Group for Neglected Tropical Diseases (STAG-NTD) was held at the headquarters of the World Health Organization (WHO) in Geneva, Switzerland, on 11–12 October 2023. The theme of the meeting was “Accelerating towards 2030”. The agenda is included as Annex 1 and the participants are listed in Annex 2. The statements and statistics presented in the report may not represent the views, policies and official statistics of the Organization.

1.1 Opening remarks

Through a pre-recorded video, Dr Jérôme Salomon (WHO Assistant Director-General, Universal Health Coverage, Communicable and Noncommunicable Diseases) welcomed participants to the meeting. He said that NTDs are one of the most formidable health challenges. They afflict one billion individuals in the most vulnerable populations, miring them in poverty and desolation. This meeting was a key opportunity to steer collective efforts towards transformative solutions and strengthen collaboration among governments, organizations and individuals. The elimination of NTDs underscores the indispensable role of robust and adaptable health systems on the way to universal health coverage. Control of NTDs is about human empowerment, children’s education and people’s participation in their communities. By eliminating NTDs, we foster a legacy of health and optimism, and exemplify the importance of global unity and collective action. Together, we can all catalyse change, ensure a world where nobody needlessly suffers from these afflictions and health is genuinely a universal right.

1.2 Administrative matters including appointment of rapporteur

The STAG-NTD Chair, Professor David Mabey (London School of Hygiene & Tropical Medicine) welcomed the participants to the meeting and shared housekeeping notes. Professor Lucille Blumberg (National Institute for Communicable Diseases in South Africa) agreed to continue as rapporteur.

1.3 Reflections and strategic priorities

Dr Ibrahima Socé Fall (Director, Global Neglected Tropical Diseases Programme [WHO/NTD]) added his welcome and said he looked forward to the deliberations. He updated participants on the main progress achieved and the strategic priorities of WHO/NTD in relation to the road map for neglected tropical diseases 2021–2030 (1) (“the road map”).

Dr Fall recalled the four overarching global targets of the road map, which are by 2030 to achieve: (i) a percentage reduction of 90% in the number of people requiring interventions against NTDs; (ii) a percentage reduction of 75% in the number of NTD-related disability-adjusted life years; (iii) elimination of at least one NTD in 100 countries; and (iv) eradication of two NTDs (dracunculiasis and yaws). He stressed that health care is a right, not a privilege, and emphasized the importance of the cross-cutting road map targets: integrated approaches, multisectoral coordination, universal health coverage and country ownership. Dr Fall added that in 2021–2022 progress occurred but that challenges remain, which must be overcome through robust, sustainable and accelerated action towards 2030.

On target 1 (related to the Sustainable Development Goal indicator 3.3.5: number of people requiring interventions against neglected tropical diseases), a decline of some 80 million people occurred between 2020 and 2021 alone (2), but more collaboration is needed. On target 2 (related to the reduction of disability-adjusted life years

related to NTDs), the burden of disease has gradually declined but the road is still long and coordinated action is crucial. On target 3 (related to the number of countries that have eliminated at least one NTD, by August 2023 50 countries had achieved this target through strong country ownership, commitment and leadership. The next step is to align this effort on a global scale. Nevertheless, he said that public health is not all about numbers, so it is fundamental to focus also on the qualitative aspects of the problem. On target 4 (related to the eradication of dracunculiasis), from January to September 2023, only six cases were reported, but it is essential to address the root causes of this disease to prevent other cases in the future. Leveraging mechanisms are needed for a last push towards eradication. Also on target 4 (related to yaws eradication), there has been important progress in capacity, mass drug administration, and surveillance, although more efforts are required to achieve the 2030 target.

The road map remains strongly grounded on its three pillars: programmatic action (not only vertically but also horizontally, and not only within but also beyond NTDs) needs to accelerate; cross-cutting approaches need to intensify by using all available platforms, opportunities and spaces (e.g. conversations on climate change) to make the voice of NTDs heard; operating models and culture need to continue to change to facilitate country ownership.

Despite this progress, several challenges remain. Fragmentation jeopardizes efforts, so systemic issues should be addressed from a cross-cutting perspective. The coronavirus disease (COVID-19) pandemic created gaps that have not been filled yet. Funding mechanisms are changing, so the NTD community must adapt and harness opportunities to secure funding. Dr Fall shared that in a recent meeting in Botswana, the World Bank was invited to help countries understand the available funding mechanisms and how to use them in order to ultimately ensure that demand for funding comes directly from countries. Finally, knowledge gaps exist (e.g. in diagnostics, treatments, vaccines, vector control and behaviour change interventions), as do systemic challenges related to conflict and security.

The most persistent programmatic challenges are: slow or uneven progress globally, underlying factors (e.g. climate change and poverty), population growth and poor access to vulnerable populations in unstable areas of the world.

Within WHO, a functional review of the Global NTD Programme (which includes WHO, partners and countries) had identified what needs to be done better and faster and how to leverage the many diverse partners that constitute the worldwide NTD community. The main critical gaps identified so far are strategic planning for impact (to coordinate action, also through a precise budget and implementation plan); strategic engagement (to ensure that work against NTDs is visible, valued and prioritized across the global health architecture, starting from WHO); national coordination platforms (to create strong national coordination for joint planning, implementation, supply chain management, and monitoring and evaluation); research and development (to finance and coordinate the development of new tools); and a global coordination platform (for partners to harmonize work, also through working groups and work streams).

For the near future, the strategic priorities are to expand advocacy and raise the visibility of NTDs within and beyond the Global NTD Programme (e.g. at United Nations Climate Change Conferences/Conferences of the Parties [COP]); strengthen partnerships; develop a comprehensive and realistic costed implementation plan for delivering the road map targets; expand the donor base and secure sustainable funding (e.g. following the example of malaria, for the control of which financial forces were joined with those of the HIV control programme); strengthen the supply chain (e.g. by connecting the system for NTD medicines with that for other medicines); and finalize the NTD research and development blueprint.

In summary, accelerating towards 2030 calls for collaborative and accountable partnerships and the repositioning of NTDs in the global health infrastructure (e.g. in relation to, but also beyond, pandemic preparedness).

Discussion

The Chair congratulated Dr Fall on his leadership since assuming office, noting the impressive achievements made to date including the first global meeting on skin-related NTDs (27–31 March 2023) and the Global NTD Programme Partners' Meeting (12–13 June 2023). He then opened the floor for discussion.

On funding: countries appear hesitant or unaware of how to access and use funding from the Global Fund. Strategies should be identified to address this problem and find ways to leverage existing funding mechanisms (e.g. pandemic preparedness funding for contact tracing could be used also for NTDs) at the country level, so that countries do not miss important opportunities. Practical support and engagement with countries in this process are critical. Funding should not be a reason for discrimination.

On strategic coordination: within WHO, it is essential to ensure that priorities and efforts of WHO's regional offices and at headquarters are well aligned and that the prioritization of new tools and the research and development blueprint are coordinated within WHO/NTD and with countries. A global coordination platform and country ownership and leadership are essential to this.

On integration: in order to truly achieve universal health coverage, NTDs should be fully integrated into health systems in the context of the road map. Generally, much work remains to be done in the context of cross-cutting platforms.

On costing: at present, costing is based on how disease control has been implemented thus far, but we should now think carefully about integrating activities across sectors and among existing platforms. But how is this done practically? The first step should be to build bridges across platforms and broader health budgeting because, whatever the cost of NTD control, elimination and eradication, the NTD sector cannot bear it alone.

On rabies: there is a pressing need for greater country ownership and comprehensive, targeted advocacy on dog vaccination in endemic countries. While there are health issues (e.g. snakebite envenoming, climate change) for which data are accumulating, for diseases such as rabies, surveillance remains poor. For rabies, good data can come only through integrated surveillance (i.e. across the human and animal health sectors). The challenge of fragmentation must be overcome to avoid a disease being left behind. Despite this challenge, work to eliminate dog-mediated human rabies is progressing well with the commitment of GAVI, The Vaccine Alliance, to support countries with human rabies vaccines. The animal component, however, remains weak, so animal health programmes should accelerate by building demand in communities for investment in dog vaccines. Funding guidance will be available to countries during the first quarter of 2024. Oral dog vaccination represents another critical tool in the toolbox.

1.4 Regional reflections

1.4.1 WHO African Region

Dr Elizabeth Juma (WHO Regional Office for Africa) presented the update on progress, enablers, challenges and priorities in the African Region.

On progress: 42 countries have been certified for having interrupted dracunculiasis (Guinea-worm disease) transmission; 46 countries have attained and sustained the threshold for leprosy elimination as a public health problem; 10 countries have been validated for having eliminated at least one NTD as a public health problem (i.e. human African trypanosomiasis, lymphatic filariasis, trachoma). In 2023, Togo became the first country in the world to be acknowledged by WHO for having eliminated four NTDs, including the certification of interruption of dracunculiasis transmission. Treatment coverage of mass drug administration for the five preventive chemotherapy-NTDs has increased in all the endemic countries: 38 of the 47 countries achieved 100% geographical coverage for at least one preventive chemotherapy-NTD for at least one year between 2016 and 2022; 89.6% achieved programme coverage for at least one preventive chemotherapy-NTD; the number of people no longer requiring preventive chemotherapy increased from 92.7 million in 2016 to 215.5 million in 2021. The data for 2022 are still being compiled. Most of the countries in the Region have completed mapping of the preventive chemotherapy-NTDs. National and local governments have taken the lead in defining NTD priorities, mobilizing resources and establishing integrated programmes with strong coordination. For example, 36 countries have developed NTD master plans, 13 of which were officially launched by 2022. Governments are increasingly investing in resilient health systems by integrating NTDs into primary health care close to communities. For example, Ethiopia, Kenya and Nigeria have integrated NTD monitoring into their national health information systems. Communities are assisting in mapping endemic areas and also in case detection, reporting, promoting hygiene and facilitating health facility referrals (e.g. community-based surveillance of Guinea-worm cases led by WHO and the Carter Center's Guinea Worm Eradication Program).

On enablers: concerning governance, policy and institutional support, progress included issuance of regional guidelines for preparing national NTD master plans. As a result, 36 master plans have been developed of which 28 have been launched. Concerning innovation and tools, advancements include the promotion of collaboration and integration opportunities (e.g. NTD–malaria, NTD–WASH [water, sanitation and hygiene]), One Health integration for joint surveillance and elimination of Guinea-worm disease, rabies and cysticercosis, and integrated skin-NTD screening during mass drug administration (also including noma in two countries). Concerning capacity strengthening, progress included the integration of surveillance for skin-related NTDs (the so-called skin NTDs) and the preparation of dossiers for trachoma elimination. Concerning financing, the integrated implementation of community interventions (e.g. surveillance, mass drug administration) increased funding efficiency and effectiveness. Concerning supply chain management, consultants were engaged to directly support countries with follow-up on the Joint Application Package, and a joint review conducted by technical and data teams to rationalize medicine needs resulted in the timely submission of requests for approval. Concerning data management, advancement included the training in and timely completion of the Global NTD Annual Reporting Form (GNARF), and capacity building for 26 country data managers on preventive chemotherapy-NTD data tools and platforms. At the regional level, the declining incidence of COVID-19 and the full resumption of community health services implementation improved access to care.

On challenges: inadequate capacity for NTD surveillance resulted in underdiagnosis and under-reporting, affecting strategic decision-making, so technical capacity for data collection and analysis is critical. Inadequate technical programmatic capacity in some national programmes affected the mapping and determination

of endemic NTDs, the planning and implementation of appropriate interventions, partner coordination, monitoring and evaluation, and the collation of data required for impact assessment, performance monitoring, medicine requests and medicine supply chain. The cross-sectoral engagement needed to address key NTD determinants that require multisectoral collaboration is lacking or inadequate. Governing ownership is lagging, as demonstrated by insufficient coordination, inefficient use of resources, inadequate funding and the slow adoption of new NTD interventions. Financial shortfalls (e.g. donor withdrawals) owing to the global financial crisis greatly impacted interventions against NTDs, especially mass drug administration for the preventive chemotherapy-NTDs, leishmaniasis and yaws, and surveillance for dracunculiasis. Conflicts and humanitarian crises affect programme implementation and progress, and increase the risk of NTDs among affected populations.

On priorities: integrate surveillance for NTDs in national routine surveillance systems (including integrated disease surveillance and response systems); implement the pending mapping surveys, impact evaluations and comprehensive capacity assessments; review, develop and implement multi-year NTD master plans (which include the One Health approach); strengthen data systems and country capacity locally to improve reporting, collation and use of NTD data for decision making; establish or strengthen multisectoral coordination mechanisms for NTD partners; include NTDs as appropriate in One Health coordination underpinned by country ownership and community engagement; advocate and mobilize resources for NTDs (including domestic funding for NTDs with dedicated budget lines in countries).

1.4.2 WHO Region of the Americas

Dr Ana Luciañez (WHO Regional Office for the Americas) presented the update on progress, challenges and priorities in the Region of the Americas.

On progress on programmatic action towards reducing the incidence, prevalence, morbidity, disability and mortality caused by NTDs: only three countries have reported cases of dog-mediated human rabies in the past 2 years while the majority of countries have the conditions to validate the elimination of dog-mediated human rabies (following the example of Mexico). Several countries have identified risk areas for taeniasis/cysticercosis and are now working to confirm endemicity and implement mass drug administration. The Plurinational State of Bolivia, along with the WHO Collaborating Centre on Fascioliasis and Its Snail Vectors (University of Valencia), implemented an efficacy study of the 10-year annual mass drug administration campaign against human fascioliasis done in the country. The dengue case-fatality rate has decreased, preventing over 5000 deaths thanks to a strategy focused on the early identification of predictors of severe disease. The second edition of the guideline for the treatment of leishmaniasis was published in 2022. Guidelines on an evidence-based treatment for tungiasis are being developed. Thermotherapy treatment for cutaneous leishmaniasis is being introduced and implemented in five countries. It is expected that in 2023 Brazil will submit a dossier for the validation of elimination of lymphatic filariasis. Guyana completed its impact survey on ivermectin, diethylcarbamazine and albendazole for the elimination of lymphatic filariasis; results show that additional mass drug administrations are required in regions III and IV. The Regional Office for the Americas is coordinating the network of public laboratories manufacturing antivenoms and is strengthening national surveillance to support the improvement of good manufacturing practice and the availability of antivenoms.

On progress on integration, coordination and intersectoral collaboration: an integrated rapid mapping tool for five skin NTDs was developed to assist in the identification of the diagnosis in priority areas. Regional, national and local NTD drug safety workshops based on the WHO manual on safety in administering medicines for NTDs (2021) were implemented and the manual was translated into four languages. National systems for the surveillance and management of insecticide resistance of arbovirus, malaria and leishmaniasis vectors, with specific in-person training in several countries, were strengthened. Several One Health approach interventions

were implemented, such as the response to an outbreak of visceral leishmaniasis in the Plurinational State of Bolivia and of tungiasis in indigenous populations of Brazil and Colombia.

On progress on country ownership, sustainability and community engagement: the implementation of the Regional External Performance Assessment Program for the microscopic diagnosis of cutaneous leishmaniasis was continued, with the participation of the reference laboratories from 18 endemic countries. Through country consultations, the following resources were developed: the Leishmaniasis Plan of Action 2023–2030; a road map to accelerate efforts to demonstrate the interruption of transmission of yaws; manuals of procedures for surveillance and control of leishmaniasis and tungiasis; regional guidelines for the elimination of fascioliasis as a public health problem; methodological guidelines for external evaluations of the interruption of transmission and elimination of Chagas disease as a public health problem; and procedures to evaluate the susceptibility to insecticides of the main mosquito vectors in the Americas.

On progress on governance, policy, advocacy, institutional support and capacity strengthening: the following resources were developed: policy for an integrated and sustainable approach to eliminate 30 diseases by 2030 (PAHO Elimination Initiative); Sustainable Health Agenda for the Americas 2018–2030; One Health Policy (2021): a comprehensive approach for addressing health threats at the human–animal–environment interface; and the development of operational guidance, treatment guidelines and technical documents.

On progress on innovation and tools: integrated serological surveillance of communicable diseases using the multiplex platform was developed. For the first time, the Region applied geostatistical sampling for lymphatic filariasis and soil-transmitted helminthiasis impact surveys. REDIPRA (Meeting of Directors of the Rabies Programs of the Americas) for the dog-mediated human rabies elimination regional program was successful. Data from epidemiological, entomological and virological surveillance systems were integrated to strengthen analysis and decision-making capabilities.

On progress on financing from strategic partnerships: funding was received from the Government of Canada's grant award to advance support to the 2030 Sustainable Development Goals Agenda, through the elimination of trachoma as a public health problem in 10 countries. Funding was also received from the United States Agency for International Development, the Fred Hollows Foundation/Izumi Foundation, the United States Centers for Disease Control and Prevention and WHO/NTD.

On progress on NTD data: the Regional Information System for data gathering and analysis now includes SisLeish (for leishmaniasis), PLISA (for arboviruses) and the SIRVERA Rabies Epidemiological System (for rabies).

On challenges related to the post-pandemic recovery programme: the sub-notification of NTD cases (e.g. leishmaniasis, leprosy); delayed supply chain for NTD health products; the reconstruction of entomological surveillance in endemic countries (including capacity building of health professionals); the restarting of some key activities (e.g. trachomatous trichiasis surgeries, mass drug administration for soil-transmitted helminthiasis); and funding partners need to adopt the PAHO "Elimination Initiative" as a framework for their investment.

On challenges related to the factors placing the progress of the NTD programme towards 2030 at risk: challenges regarding treatment and diagnosis (e.g. lack of antileishmanial drugs due to manufacturing process and high prices, lack of alternatives for rapid tests for visceral leishmaniasis, lack of tests for strongyloidiasis and taeniasis); weak commitment and NTD prioritization by health ministries; lack of dedicated budget for several NTDs (e.g. brucellosis, cystic echinococcosis, arboviruses); and need to update and upgrade WHO technical documentation on brucellosis and cystic echinococcosis.

On priorities: intensify efforts for NTD elimination by moving forward in documenting the interruption of yaws transmission by applying the WHO surveillance and monitoring criteria; accelerate efforts (with the Government of Canada) to eliminate trachoma in 10 countries; strengthen surveillance for early detection and case management of leprosy and leishmaniasis; validate the elimination of lymphatic filariasis in Brazil (dossier presented at the end of 2023), Guyana (results of the IDA (ivermectin–diethylcarbamazine citrate–albendazole) impact survey completed in 2023 showed that additional mass drug administrations are required in two of the eight endemic regions) and the Dominican Republic, schistosomiasis in Saint Lucia, and dog-mediated human rabies in Argentina, Brazil, Chile and Uruguay; eliminate mother-to-child transmission of Chagas diseases; continue expanding mass drug administration for taeniasis/cysticercosis in several confirmed endemic countries; foster supply chain management for donated and WHO-managed NTD medicines and supplies; continue fostering NTD drug safety initiatives; develop an online course on WASH and NTD working together; and continue fostering capabilities for preventing and attending to envenoming by poisonous animals.

1.4.3 WHO Eastern Mediterranean Region

Dr Supriya Warusavithana (WHO Regional Office for the Eastern Mediterranean) presented the update on progress, enablers, challenge and priorities in the Eastern Mediterranean Region.

Overall in the Region, the number of people requiring interventions against NTDs in 2021 is 72 million, most of which are in Afghanistan, Pakistan, Sudan and Yemen. Between 2010 and 2021, the number of people requiring interventions against NTDs reduced by 55%. Of the 1 089 573 disability-adjusted life years, 48% are due to leishmaniasis and soil-transmitted helminthiasis. Disability-adjusted life years lost due to NTDs decreased by 12.5% between 2010 and 2019. Eight countries have eliminated at least one NTD.

On progress on cutaneous leishmaniasis: the Eastern Mediterranean Region has the highest burden of cutaneous leishmaniasis in the world (78.5%) and the burden is increasing. Yet, baseline estimates are not available, so conducting surveys to get baseline data is critical. On visceral leishmaniasis: the Region bears 44.1% of the global burden of visceral leishmaniasis in the world; most cases are in Sudan and Somalia. On leprosy: prevalence and incidence are slightly reducing; most cases remain in Somalia.

On progress on preventive chemotherapy coverage for lymphatic filariasis, soil-transmitted helminthiasis, schistosomiasis, trachoma and onchocerciasis: coverage is not satisfactory, especially during and after the COVID-19 pandemic.

On enablers: advocacy on World NTD Day is essential for resource mobilization. Capacity is strengthened through three WHO collaborating centres, the improvement and expansion of leishmaniasis case management, the translation of OpenWHO NTD courses into Arabic, and the annual Regional Programme Review Group meeting and NTD Programme Managers' meeting. For financing, the collaboration with the WHO Foundation and regional donors is crucial. To avoid problems in supply chain management, collaboration with the regional hub in Dubai for the procurement and distribution of commodities is key. For NTD data management and sharing, data submission for global reporting by countries is essential.

On systemic challenges: the Region has the world's most protracted and complex humanitarian crises, with over 127 million people in need of urgent humanitarian assistance. Two-thirds of countries are directly or indirectly affected by protracted conflicts or emergencies.

On NTD-specific challenges: lack of political commitment; minimum allocation of domestic funds for NTDs; total dependency on donor funds; lack of funds to support human resources, conduct validation processes for

elimination, support the procurement of commodities for case management, and conduct NTD programme evaluation and impact assessment surveys; and high turnover of health staff at the country level.

On priorities: improve and scale up case management for leishmaniasis; increase effective coverage in mass drug administration for preventive chemotherapy-NTDs; mobilize funds to support human resources at the regional and country level; validate and verify countries for NTD elimination; and integrate programme implementation where possible, especially with well-funded programmes (e.g. immunization, malaria, polio).

1.4.4 WHO South-East Asia Region

Dr Aya Yajima (WHO Regional Office for South-East Asia) presented the update on progress and priorities in the South-East Asia Region in the context of the three road map pillars.

The Region has 15 endemic NTDs, with at least one in each country. Half of the global population requiring interventions against NTDs in 2021 was in the South-East Asia Region. Therefore, accelerating progress is key to global success. Eliminating NTDs on the verge of elimination has been a Regional Flagship Priority since 2014.

On progress in general: seven countries have eliminated at least one NTD.

On progress on visceral leishmaniasis: in the past 7 years, new cases of visceral leishmaniasis have decreased by 97% and by the end of 2022, the last 1% of the implementation units in the Indian subcontinent remained to achieve the elimination threshold. Bangladesh submitted a dossier requesting validation of the elimination of visceral leishmaniasis as a public health problem and the Independent Validation Mission in Bangladesh is ongoing (October 2023). In 2022, the new Regional Strategic Framework for accelerating and sustaining visceral leishmaniasis elimination 2022–2026 was launched.

On progress on leprosy: new leprosy cases have been slowly declining in the past 15 years. Bhutan and Maldives have continued to report fewer than 25 new leprosy cases annually since 2013. Maldives launched the 100% leprosy-free islands framework and sub-national verification of leprosy elimination in Maldives is ongoing. A Regional Leprosy Programme Managers' meeting was organized in April 2023 to revitalize regional partnerships.

On progress on schistosomiasis: the Regional Office for South-East Asia supported the Independent Programme Review of the Indonesian schistosomiasis elimination programme in May 2023.

On progress on snakebite envenoming: in 2022, the Regional Action Plan for the Prevention and Control of Snakebite Envenoming 2022–2030 was launched. India is finalizing its National Action Plan and developing various tools to initiate the programme at the State level.

On progress on rabies: the Regional Office for South-East Asia established the Regional Technical Advisor Group for rabies elimination, convened the Rabies Programme Managers and Regional Technical Advisor Group meeting in March 2023, and supported the Regional Laboratory and Case Management Training Workshop in collaboration with the WHO Collaborating Centre for Reference and Research in Rabies (National Institute of Mental Health and Neurosciences, NIMHANS) in November 2023.

On progress on dengue: the Regional Office for South-East Asia convened the Dengue Programme Managers and Regional Technical Advisor Group meeting in June 2023, deployed multiple experts to strengthen capacity for outbreak control in multiple countries, and organized a 6-day regional webinar series on dengue outbreak control in August–September 2023.

On progress on integration, coordination and intersectoral collaboration, for mainstreaming all NTDs of high public health priority: the Regional Office for South-East Asia finalized a Regional Strategic Framework for sustaining, accelerating and innovating to end NTDs in 2023–2030. This framework identifies strategic priorities of action for countries, WHO and partners, advocates for all NTDs of public health importance in national health agendas, and facilitates integration and intersectoral collaboration within and beyond health.

On progress on integration, coordination and intersectoral collaboration, for promoting an integrated skin-NTD approach, a regional toolkit for integrated skin-NTD approach for primary health care workers is being developed. Bangladesh and Nepal have developed an integrated skin-NTD manual and launched integrated skin-NTD campaigns, screening and sensitization.

On progress on integration, coordination and intersectoral collaboration, for facilitating integration among vector-borne diseases, the Regional Office for South-East Asia: convened an Integrated Field Entomology Workshop for vector-borne diseases of public health importance (November–December 2022); developed a regional toolkit for integrated vector management and field entomology training, covering mosquitoes and sandflies; supported an integrated vector-borne diseases independent programme review of malaria, visceral leishmaniasis, lymphatic filariasis and dengue (May 2023), which provided an opportunity for cross-learning among different vector-borne disease programmes, common challenges and collaboration opportunities; and organized a meeting on cross-border collaboration for the elimination of malaria, visceral leishmaniasis and lymphatic filariasis along the India–Nepal international border (September 2023). The main outcomes of this meeting were: agreement on a minimum set of indicators on malaria and visceral leishmaniasis for cross-referral among districts along the border; creation of a WhatsApp group and contact list of district vector-borne disease focal points along the border; sharing of programme status and cases among the districts along the border; agreement on synchronizing mass drug administration for lymphatic filariasis among the districts along the border; and agreement to convene a biannual cross-border meeting to sustain the network and share progress on vector-borne disease elimination. The decrease of entomological capacity in the Region is cause for concern.

Concerning the Regional Tripartite collaboration with the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health (WOAH), the Regional Office for South-East Asia jointly convened an Asia-Pacific Tripartite Webinar on the prevention and control of neglected parasitic zoonoses (February 2023), and a Tripartite Webinar celebrating World Rabies Day in the South-East Asia Region (September 2023).

On priorities for pillar 1: convene biannual Regional Technical Advisor Group and programme managers' meetings (Regional Programme Review Group, visceral leishmaniasis, dengue, rabies, leprosy); independent programme review in priority countries for lymphatic filariasis leprosy, dengue and rabies; capacity-building support for dengue outbreak control, dengue laboratory diagnosis, leprosy single-dose rifampicin, snakebite prevention and control, rabies laboratory diagnosis, integrated bite case management, lymphatic filariasis monitoring and evaluation); and strengthen reporting and data management across the Region (dengue, rabies, snakebite envenoming).

On priorities for pillar 2: develop regional cross-cutting guidance to facilitate integration (surveillance/public veterinary services, skin-NTD, rehabilitation and assistive device, integrated vector management, public work for vector control); facilitate cross-border meetings and collaboration (India–Bangladesh/Nepal/Bhutan borders); secure a joint impact grant for implementation research focusing on integration and sustainability (with the Regional Office for South-East Asia/Special Programme for Research and Training in Tropical Diseases); and convene a regional COR-NTD meeting on integrated surveillance and monitoring and evaluation (February 2024).

On priorities for pillar 3: launch the Regional Strategic Framework for sustaining, accelerating and innovating to end NTDs in SEARO; high-level NTD partners meeting in February 2024; and support countries in the development of national NTD road maps.

1.4.5 WHO Western Pacific Region

Dr Kazim Sanikullah (WHO Regional Office for the Western Pacific) presented the update on progress, enablers, challenges and priorities in the Western Pacific Region.

The Region has some peculiar characteristics to consider for NTD elimination: it is a highly diverse area, with 20 small countries/territories in the Pacific with unique challenges, socioeconomic factors and urbanization affecting disease dynamics, and pockets of unreached and extremely vulnerable populations in each country regardless of economic development.

On progress: 12 countries have eliminated one or more NTDs and three countries are on the way. The Region is progressing well towards the elimination of lymphatic filariasis and trachoma. The burden of yaws (in Papua New Guinea) and echinococcosis (in China and Mongolia) remains the highest in the world. The number of people requiring interventions against NTDs has remained stable since 2019, but the number of untreated people was high in 2022 because of the COVID-19 pandemic, underreporting and neglect.

On enablers: existence of regional frameworks such as Reaching the Unreached through primary health centres to achieve universal health coverage; motivation for elimination and interest in One Health.

On challenges: financing; commitment; systems (including supply chain management); fragmented data collection and reporting causing issues of sustainability and fatigue; silos, competing priorities and lack of integration of NTDs in the national systems; and Pacific Island Countries with small populations that are facing major challenges (including the effects of climate change).

On priorities: strengthen integration across interventions and breaking silos; strengthen data collection and reporting in countries; reach the unreached; make better use of available tools, through increased research on implementation; focus on Pacific Island Countries with subregional meetings to develop a country-specific Action Plan; and overcome challenges with human resources in the regional office and country offices.

1.5 Update on recommendations from the previous meeting

Dr Albis Gabrielli (WHO/NTD) presented an update on a selection of the 17 recommendations agreed at the previous (sixteenth) STAG-NTD meeting (27–28 September 2022).

On advocacy, funding and efficiency: advocacy and resource mobilization were identified as a key priority by Dr Fall on starting his assignment on 1 December 2022; the Global NTD Programme Partners' Meeting was convened by WHO/NTD in June 2023; NTDs were included in the Political Declaration on universal health coverage and in the Political Declaration on pandemic prevention, preparedness and response, adopted by the United Nations General Assembly in October 2023; a Costing Task Team was convened to collect information on the resource needs for implementing the road map (next steps include the development of a costed Global Action Plan 2025–2030); and WHO supported a pilot programme in Côte d'Ivoire to integrate skin-NTD screening into a planned mass drug administration campaign against schistosomiasis, the objective of which was to test the feasibility and evaluate the effectiveness and efficiency of such integration.

On data collection, management and dissemination, information was analysed and disseminated in various ways (e.g. NTD road map tracker, NTD country profile dashboards, Global Report on NTDs 2023, nine Weekly

Epidemiological Records in 2022, five Weekly Epidemiological Records in 2023 so far, and regular update of the WHO Global Health Observatory); data reporting was strengthened through the introduction of the GNARF in the World Health Data Hub, a Gap Assessment Tool to update heatmap dimensions, and routine health information system toolkits aimed at standardizing data collection across all NTDs at the country level.

On capacity strengthening: the OpenWHO platform currently offers 54 online training courses related to NTDs on 23 different subjects in 11 languages; an informal YouTube channel (@NTDworld) was established to serve as a video repository; and an enhanced version of the Skin-NTDs App was released to assist front-line health workers in diagnosis and case management.

On an NTD goodwill ambassador: the only WHO Goodwill Ambassador related to NTDs, Mr Yohei Sasakawa, will continue to serve in his role for leprosy elimination only, not for all NTDs.

On donated medicines for NTDs: 18 different medicines, covering 11 diseases (with albendazole extended to enable treatment of cystic echinococcosis) are currently donated to WHO by 10 pharmaceutical donors; two manufacturers donate two medicines through other entities to national authorities; nine NTD medicines are included in the list of WHO prequalified pharmaceutical products; and dialogue with pharmaceutical companies on low-cost procurement processes is ongoing.

Discussion

On an NTD goodwill ambassador: it was clarified that this high-level advocacy role includes establishing and maintaining relationships with donors, partners, countries and patient associations, and travelling to countries to encourage implementation of disease control activities.

On data reporting: a comprehensive global report on NTDs is published by WHO at annual intervals and released on World NTD Day (30 January); in addition, dashboards, tools and channels are updated on a regular basis to facilitate routine dissemination of information.

On the alignment of the 2022 and 2023 STAG-NTD recommendations: the WHO Secretariat needs to revisit the 2022 recommendations with STAG-NTD members to formulate, prioritize and deliver on the 2023 recommendations.

On the changing dynamics of onchocerciasis transmission in Ghana due to changes in vector ecology caused by mining and environmental degradation: further discussion is recommended.

1.6 Advocacy and resource mobilization

Dr Camilla Ducker (WHO/NTD) presented on advocacy and resource mobilization on behalf of Dr Fall.

Strategic engagement, accountability for advocacy into action and sustainable funding are key priorities. Global funding mechanisms need to be engaged at different levels, in countries, between countries and globally, and among donors.

On strategic engagement: to date, strategic engagement for NTDs has been neglected within and outside WHO. Countermeasures include elevating the profile of NTDs within the global health Architecture; ensuring

that messaging from WHO/NTD is evidence-based, positive, clear, aligned with the road map and harmonized across time, technical areas, audiences and geographies; ensuring that all advocacy emanating from WHO/NTD is translated into action; amplifying messaging across WHO/NTD; strengthening country-level advocacy to increase political support for NTDs by leveraging existing and strengthened national coordination platforms; undertaking strategic engagement with global funding mechanisms; and engaging with other programmes across the global public health landscape.

On advocacy and visibility: WHO/NTD will focus on the message that NTD programmes are crucial components of the broader global health and social justice agenda and can play a crucial, collaborative role in the most pressing issues that the world is facing today. NTD elimination can make a substantial impact through true universal health care, better primary health care in poor communities, stronger health systems, efficient use of resources, adoption of One Health strategies and response to the effects of climate change. WHO/NTD has and will continue to deliver these messages (e.g. in speaking events by the Director and his team, opinion editorials, peer-reviewed publications and social media), working with the Department of Communications in the Office of the Director-General and with the Office of the Director-General to ensure alignment of key messages.

On costing: the work of the Costing Task Team is a priority because it is essential to understand how much the implementation of the road map will cost.

1.7 Update on costing work

Mr Sam Mayer (The END Fund) and Mr Iain Jones (Sightsavers) presented the progress made in 2023 by the Costing Task Team.

The goal of this team is to understand the investment required to implement the road map and deliver its objectives with reference to all 20 diseases and disease groups in all countries. This costing exercise is functional to understanding the total cost of implementing the road map, the components of this total cost and who could cover each component.

Estimating the resource needs is a complex task due to the absence of a list of priority actions to be costed, the diversity of diseases and the approaches to tackle them, the lack of disease epidemiological data, and the lack of cost data for cross-cutting approaches and advocacy.

There are two ways to estimate the resource needs to implement the road map: collating existing (disease-specific) estimation or modelling the costs of implementing the road map (including cross-disease integration). The Costing Task Team chose the first method. The advantages are the possibility to leverage existing information as a solution for a short timeline and the fact that cost information is often based on the resource needs for implementing a tangible plan. The disadvantages are the fact that it is not a direct cost estimation against the road map and that the costing approach is not standardized and its scope can differ across diseases.

At present, cost information has been collected for most NTDs, except human African trypanosomiasis, mycetoma, scabies and echinococcosis. That said, the scope and level of detail within each of the costed NTDs varies considerably. For example, cost information on dracunculiasis and leprosy is thorough, while many knowledge gaps remain for visceral leishmaniasis and taeniasis/cysticercosis.

At the Global NTD Programme Partners' Meeting (June 2023), the resource needs (excluding medicines) for 2023–2025 were estimated to be at least 2 billion US dollars. Work is ongoing with a focus on end-game costs

and research and development (based on the estimate of the Bill & Melinda Gates Foundation to reach the 2030 targets for five preventive chemotherapy-NTDs, gambiense human African trypanosomiasis and visceral leishmaniasis in Africa: about US\$ 410–450 million per year from 2023 to 2030), country-level investment needs (discussions with WHO health system financing team is ongoing to explore a multi-disease online costing platform – Integrated Health Tool – to support country planning for NTD interventions), and other cross-cutting issues (discussions on how to cost critical areas such as WASH and sustainability are ongoing).

Next steps include building on the modelling of the Bill & Melinda Gates Foundation to cover regions other than Africa; assessing the feasibility of applying the Foundation’s methodology to other NTDs; strengthening the June estimates of the Costing Task Team for non-preventive chemotherapy-diseases; considering appropriate estimates for coordination globally, regionally and nationally; finding ways to break down estimates into smaller asks; exploring the data from the Integrated Health Tool to support the estimation of country resource needs; and using vector control in selected countries as a basis for extrapolation. Clarity remains limited about some NTDs, broad health system strengthening activities, WASH interventions and veterinary interventions within One Health.

The Costing Task Team asks STAG-NTD members to ensure that dedicated human and financial resources are made available in 2024 for the development of a costed implementation plan for 2025–2030.

Discussion

On strategic advocacy: once the total cost is known, it will be fundamental to break it down into small pieces to make fundraising more effective. To do this, identifying “best buys” and priority areas is recommended.

On costing assumptions: given the changing global demographic scenario caused by climate change and migration, it is essential to consider the rapidly expanding population at risk and how to calculate costs accordingly. This can be done by using epidemiological studies but, most importantly, by being flexible and adaptable.

On costing NTD medicines: while this was initially excluded for many reasons, now it is crucial to include this huge gap. Such costing needs to include not only their delivery but also the very cost of medicines.

On the efficiency of implementation strategies: as demonstrated by HIV, it is important not only to cost each possible implementation strategy but also to identify the most efficient ones, to enable strategy prioritization where resources are scarce. Yet, a cost–effectiveness calculation is currently not a task of the Costing Task Team.

On support to costing in countries: during planning, countries need help to get a sense of the money required to make an impact, so the Integrated Health Tool is particularly helpful.

On combined interventions (e.g. with the animal health sector): while the task of the Costing Task Team is on costing and not budgeting, integration is already included to create a language and provide basic information on the costs of integrated strategies.

1.8 One Health

Dr Bernadette Abela (WHO/NTD) presented an update on the One Health approach.

One Health is grounded on the acknowledgement that human, animal and environmental health are interconnected. This approach has been increasingly used lately albeit not systematically and with a focus mainly on pandemic-prone diseases and production-related diseases. There is a strong need to increase the adoption of this approach against NTDs, especially because of the current, fast and profound changes in ecosystems caused by climate change, deforestation, pollution and intensive agriculture and animal production. One Health offers a way to address problems at their root, not just at the level of symptoms.

The One Health Joint Plan of Action developed by the Quadripartite provides a high-level broad framework of action to advance One Health advocacy, resource mobilization, policies and interventions at all levels. This Plan of Action is now being costed. The main challenge ahead is implementation and its translation at the country level. Therefore, an implementation framework is being piloted through the Regional Coordination Mechanisms that includes methodology and measurement tools, to guide successful implementation in line with the proposed pathways of change. Funding and financing mechanisms are being explored too. The Financial Intermediary Fund for Pandemic Prevention, Preparedness and Response was established in September 2022.

Rabies is particularly suited to demonstrate the benefits of a One Health approach, because sustained mass dog vaccination is essential to address transmission at its root and ensure that human vaccination is available and affordable to all at-risk individuals in situations where resources are limited. Moreover, approaching rabies in a One Health manner builds and develops networks and workforce capacity even beyond rabies, by strengthening relationships between the human and animal health sectors. One Health collaboration extends also to local communities to build engagement, awareness, demand for local services, community leadership and the design of disease elimination strategies that take into account local context needs, values and objectives. Social science research is essential in this regard. One Health collaboration can extend also across diseases: for example, rapid impact interventions to control *Taenia solium* have been successfully coordinated with schistosomiasis interventions. Moreover, this approach offers not one but three entry points for action: human, animal and environmental health. For example, in Madagascar, the animal health sector was initially little interested in this disease, but things changed when the human health sector supported pig vaccination. At a global level, the animal health sector usually has limited funding for investment in non-productive animals, so engagement with and traction from the human health sector are pivotal for change.

Vector-borne diseases are another key area of One Health application, as demonstrated by the Global Vector Control Response 2017–2030 and the Global Arbovirus Initiative, both of which have been designed to tackle the silent spread of vectors at the interface of human, animal and environmental health. This will enhance vector surveillance and link it to disease surveillance, build broader capacity in communities and countries, and develop measures to mitigate climate and environmental changes.

OpenWHO recently launched an online training course on One Health for NTD control. It provides examples of how to build the confidence necessary to start doing One Health, find priority health issues and common goals, overcome siloed approaches to foster intersectoral collaboration, identify new key players or new relationships among existing stakeholders, work with local communities from the very beginning, break down power imbalances in decision-making, advocate for a One Health approach to NTDs at all levels of government, and demonstrate success to ensure long-term political engagement and funding.

Countries, international organizations and non-State actors all have a role to play in achieving the 2030 targets for NTDs through a One Health approach. Moreover, One Health can serve as a bridge towards changes in the system (e.g. governance, budgeting), investments in prevention, increased sustainability, stronger surveillance, effective scaling-up of programmes and true impact measurement.

Discussion

On engagement with the animal health sector: this remains challenging, but support from the pharmaceutical sector with animal drug donations can start a change in the right direction. Also, budget is often allocated for productive animals, but mainly in the context of pandemic control or preparedness. More advocacy, synchronization and funding equity are necessary both across the three health sectors and across the two scales of endemic and pandemic diseases.

On communication: health sectors need to speak the same language, so it is recommended that representatives from WHO, WOA, FAO and the United Nations Environment Programme (UNEP) join each other's discussion on NTDs.

On disciplinary collaboration: given the need to consider social and cultural aspects when working with communities, collaboration with the social sciences is fundamental.

On data sharing: data should be shared between the animal and health sectors to break silos with shared reporting platforms. WHO could take the lead on this, ensuring that ethics in data-sharing are safeguarded; this is currently done informally. A common platform is the way forward.

On advocacy-related costing: coordination across sectors is indispensable to effective costing. Greater and more efficient advocacy is necessary, because it is not enough to say that cost-sharing across sectors is the best way to go. More attention should be paid to the building of effective advocacy skills among NTD colleagues who are part of One Health conversations.

On costing: more research is necessary on the costs of integrating interventions across sectors.

On engagement with the environmental health sector: environmental health has remained in the background of One Health (also because the focus of this approach was mainly on zoonoses), but now that UNEP is part of the Quadripartite, things will change.

On albendazole for echinococcosis control: progress in the donation of albendazole for human echinococcosis case management has been slow, but now WHO is working with endemic countries to build the capacity of health workers to use albendazole. This will lead to increased demand from countries.

On coordination at the country level: this is a key area for improvement.

On the role of WASH in One Health: WASH is of critical importance in One Health, as evidenced in countries where WASH is poor. Investment in WASH is big and on the rise, but it takes time. Meanwhile, other tools are available to reduce disease burden (e.g. pig vaccination for control of *T. solium*, drug treatment of animal fascioliasis).

2.

**Yaws eradication and updates
from working groups**

2.1 Yaws eradication

Dr Kingsley Asiedu (WHO/NTD) made the presentation on yaws eradication.

Historically, yaws was one of the first diseases to be targeted for eradication by WHO and the United Nations Children's Fund (UNICEF) in 1952. Today, the disease persists in limited geographical areas. Treatment is simple and visible results are evident within 4 weeks. Azithromycin replaced penicillin as the antibiotic treatment of choice; it is currently donated by the EMS pharmaceutical company in Brazil. The company has agreed to continue this donation until 2030.

WHO classifies countries into three epidemiological groups: Group A (countries with currently known endemic status, of which there are 15), Group B (formerly endemic countries with unknown current status, of which there are 82) and Group C (countries with no history of yaws, of which there are 107). To date, only India has interrupted yaws transmission. Testing can be done with dual path platform (DPP) and rapid diagnostic tests (RDT): RDTs are cheaper than DPP, so if the RDT is negative there is no need for DPP; if RDT is positive, DPP is used for confirmation.

Probably due to increased surveillance, the number of suspected yaws cases grew between 2008 and 2022. The Western Pacific Region (especially Papua New Guinea and Solomon Islands) carries nearly 70% of the world's known yaws burden. In the African Region, yaws surveillance is integrated in only 12 out of the 35 countries that participated in the survey conducted by WHO in 2022, and half of the surveyed countries have no experts or institutions working on yaws.

On progress on WHO support to endemic countries: support was provided for mass drug administration of azithromycin, active surveillance through diagnostic tests, implementation of total community treatment and capacity building (e.g. training guidelines, posters, strategic frameworks, etc. available in multiple languages).

On enablers: integrated skin-NTD approach; integrated sero-surveys; integrated capacity-building; and integration into universal health coverage and primary health care packages.

On challenges: lack of operational funds to implement activities (despite the donation of 153 million tablets of azithromycin); lack of prioritization of or inadequate commitment to the eradication programme by endemic countries; supply chain issues; difficult geographical access (e.g. areas in the Central African Republic with indigenous populations) and health system challenges.

Discussion

On the global yaws burden: the lack of data in Group B (formerly endemic countries with unknown current status ($n=82$)) is a source of concern towards the 2030 eradication target.

On funding: yaws eradication suffers from a lack of funding to implement mass drug administration of azithromycin. In Papua New Guinea, funding for mass drug administration is available for lymphatic filariasis (but not yaws) and there is uncertainty on whether medicines can be safely co-administered. Countries have to make this decision. WHO agrees to this, but it needs to be formalized in guidelines (because countries need to follow WHO guidelines). This impasse must be addressed, for example with emergency advice or interim guidance while WHO accelerates the development of guidelines.

On joint mass drug administration: in general, a number of countries have been identified for pilot implementation, with the support of many partners (e.g. GAVI, the Vaccine Alliance, UNICEF, Expanded Programme on Immunization, Global Malaria Programme). Specifically on yaws, the number of countries known to require mass drug administration is limited and the number of endemic areas is small; so mass drug administration can be done by single countries, with small amounts of operational funds.

On control and elimination: progress can happen rapidly.

On eradication: progress depends on rolling out effective surveillance in Group B: if countries are negative, only a formal process for validation is necessary; if they are positive, eradication is more challenging and funding for mass drug administration implementation (not for purchase of medicines) is necessary.

On the supply chain for medicines: accountability and practical solutions are necessary to resolve intercontinental issues with supply, which results in delayed campaigns, medicine expiry and overlapping priorities.

On DPP testing: in most places, RDT testing is enough and reliable, so the unavailability or high cost of DPP is not a priority concern.

2.2 Yaws survey protocol

Dr Michael Marks (London School of Hygiene & Tropical Medicine) and Dr Oriol Mitjà (University of Barcelona) provided updates on the yaws survey protocol.

On progress in research and development: advances have been made in diagnostics (showing a poor correlation between DPP and TP polymerase chain reaction (PCR)), which calls for a quality assurance system), control (through the combined mass drug administration of azithromycin and medicines for lymphatic filariasis), new therapeutics (with the efficacy of linezolid now being compared to that of azithromycin) and surveillance (with an expert Working Group finalizing survey design for monitoring and evaluation and the first draft of the surveillance protocol almost complete).

On challenges: to better understand the burden of yaws, it is necessary for countries to carefully interpret test results and report not only positive cases but also negative cases (because it is possible that only 5–15% of cutaneous ulcers are actually caused by yaws). Moreover, molecular diagnostics are necessary to confirm yaws, but only a few countries (especially in South-East Asia) have capacity for molecular testing.

Discussion

On serological surveillance: it is not ideal for three reasons: after mass drug administration, all ulcers decrease but then they rebound; healed patients will continue to be seropositive for a long time; and serology can miss up to 5% of cases in areas where disease prevalence is low, which is why the WHO strategy is based on mass drug administration.

On the systematic approach to serological surveys: this example from the yaws eradication community could be followed for other diseases too. High-quality geographical information systems would strengthen surveillance further, but most surveillance systems are not ready for this yet.

On laboratory capacity: the Western Pacific Region has no molecular surveillance specifically for yaws because there is no funding for strengthening PCR capacity, especially after the COVID-19 pandemic.

On antimicrobial resistance: monitoring for antimicrobial resistance is key.

On data interpretation: caution should be exercised in interpreting burden maps because countries in Group B (previously endemic but current unknown status ($n=82$)) could actually belong to Group A (currently endemic ($n=15$)).

2.3 Working groups: progress, challenges and priorities

2.3.1 Access to safe, efficacious and quality-assured health products

Dr Sarah Andersson (Murdoch Children's Research Institute) presented the update in her capacity as Chair of the Working Group on access to safe, efficacious and quality-assured health products for NTDs.

On progress: the second meeting of the Working Group was held in 2023 at which two subgroups were established on drug efficacy monitoring and on procurement and supply chain.

On key recommendations on medicine efficacy monitoring: the Working Group endorsed the recommendation made in 2022 to expand the scope of the initiative to include diseases and medicines other than those currently monitored, and secure appropriate resources and funding.

On key recommendations on procurement and supply chain management: the Working Group advised refining the terms of reference of this subgroup to ensure efficiency and avoid fragmentation and duplication; defining the responsibilities of the subgroup as a coordinating or advisory body; working together with existing and other relevant groups; seeking synergy in addressing common issues and challenges across diseases and areas (e.g. how to ensure long-term sustainability moving from donation to country procurement, how to ensure accurate forecast for mobilizing domestic funding and procurement); and addressing various dimensions such as forecasting, funding, demand and coordination for procurement for the introduction of new products (i.e. new paediatric praziquantel).

On key recommendations on meeting logistics: the Working Group may require more time to discuss and formulate recommendations.

2.3.2 Monitoring, evaluation and research

Dr Julie Jacobson (Bridges to Development) presented the update in her capacity as Chair of the Working Group on monitoring, evaluation and research.

On progress: the Working Group provided technical advice and supported the completion of the following WHO products: data review for the Global Report on NTDs 2023; NTD country profiles (now accessible online);

a compendium of indicators for NTDs (by providing guidance on indicators for protection from out-of-pocket catastrophic expenditure); review of NTD data platforms for data visualization and access; initiation of work on routine health system toolkit for NTDs; provision of feedback on the development of the GNARF; integration of NTD data collection into WHO's corporate World Health Data Hub; definition of a process for addressing road map indicator gaps; Gap Assessment Tool (GAT) criteria and implementation for four priority dimensions; and GAT simplification of process for the remaining seven dimensions.

On progress in implementing the GAT 2023: need for resources to complete the heat map with seven more dimensions.

On Secretariat challenges: minimal interaction and triangulation of efforts with other STAG-NTD working groups; unsupported work on the research component for monitoring and evaluation progressed; unclear mechanism to engage with monitoring and evaluation for intersectoral collaboration; and unanswered questions on strategic priorities with lack of internal alignment.

On financial challenges: absence of in-person meetings for 3 years, hence constrained interaction, under-utilization of expertise and reduced productivity; limited financial resources to operationalize the implementation of the road map monitoring and evaluation and sustainability frameworks; limited progress on integrated programme evaluation, despite strong interest expressed by several countries working towards sustainability and country ownership of NTD programmes; and limited progress due to reliance on volunteer time from members.

On priorities for building an integrated NTD data system: completing the development of the routine health information system toolkit for all 20 NTDs and related electronic derivatives (e.g., guidance documents, DHIS2 modules, trackers); consolidating and maintaining NTD road map trackers as the main portal for data sharing, visualization of global and country progress towards set goals; implementing the GNARF 2024 through the corporate WHO Health Data Hub; and supporting co-analysis of routinely reported NTD data with secondary databases from WASH, animal health, human development index, climate change statistics etc.

On priorities for improving NTD data quality: implement the gap assessment tool in full to generate an updated 2024 heat map; develop related products (e.g. GAT technical guidance, updated road map annex on disease summaries priority actions, GAT methodology); update disability-adjusted life years estimates and fill existing data gap for seven NTDs; and maintain the compendium of indicators for NTDs by filling in missing information and refining incomplete indicators.

On priorities for supporting effective programme evaluation: provide guidance for integrated NTD programme evaluations; design or improve approaches for integrated epidemiological assessments for NTDs; and include NTDs in large national population-based surveys (e.g. demographic health surveys, multi-indicator cluster surveys, world health survey plus).

Final priorities: re-evaluate the structure of the STAG-NTD Working Groups; create transparent mechanisms for Working Groups to coordinate and collaborate and avoid duplication and fraction; prioritize Working Groups' activities on harmonization of monitoring and evaluation for NTDs with a focus on simplifying and prioritizing metrics and methods for countries and regions; consider independent evaluation of monitoring and evaluation for elimination and eradication programmes to strengthen and improve progress; integrate NTD indicators into health systems that will need to be sustained; review current indicators to ensure that they are measurable and are measuring progress towards the public health goal; and ensure that STAG-NTD Working Group Chairs are supported to actively participate in STAG-NTD meetings.

2.3.3 Diagnostics

Professor Patrick Lammie (The Task Force for Global Health) presented the update in his capacity as Chair of the Working Group on diagnostics.

On progress: 21 target product profiles have been published and seven others are being developed. This Working Group is working with the Foundation for Innovative New Diagnostics and partners to define the needs and costs of NTD biobanks to support test development; address the challenge of test validation in the absence of a gold standard; focus on laboratory capacity and networking; and create engagement events for diagnostics manufacturers, funders, researchers and developers.

On progress on the work of the Expert Review Panel for Diagnostics: the process is to be run through WHO Prequalification, in close collaboration with WHO/NTD; the pilot phase for two new diagnostics (RDTs to detect circulating filarial antigen and RDTs to detect leishmania) was launched; and the deadline for dossier submission (which should include independent evaluation both in the laboratory and the field) was set as 20 November 2023.

2.3.4 Vector control

Dr Raman Velayudhan (WHO/NTD) presented the update on behalf of the Chair of the Working Group on vector control.

On general progress: in April 2023, the Vector Control Advisory Group 18 identified the following tools: systemic endectocide treatment for malaria elimination; spatial repellents for malaria control; attractive targeted sugar baits for malaria; and *Wolbachia* wMel for *Aedes*. The Vector Control Advisory Group 19 will assess the following tools: eave tubes for malaria control; sterile male release for *Aedes* control; and endectocides for prevention of Lyme disease. New control tools for *Aedes* mosquitoes are under evaluation by the Vector Control Advisory Group, namely: spatial repellents; the sterilization of male mosquitoes; and the reduction of pathogen transmission induced by *Wolbachia*.

On progress on the use of *Wolbachia*: the two strategies are the suppression strategy (which aims at reducing the mosquito population to a level that inhibits disease transmission) and the replacement strategy (which aims at establishing dominant populations of *Wolbachia*-infected *Aedes* that can block the infection). The replacement strategy looks encouraging (with a 77% reduction in virologically-confirmed dengue case incidence over a 27-month period), so a target product profile is being drafted and a systematic review and WHO recommendations are in preparation.

On progress on spatial repellents: a transfluthrin-based passive emanator is under evaluation, showing a 33% reduction of risk from dengue in Peru, while a second trial is ongoing in Sri Lanka.

On progress on sterile insect technique: multiple trials are ongoing; one epidemiological trial is starting (but it is non-randomized, so the conclusions we may be able to draw from it are likely to be limited).

Discussion

On ivermectin: it was suggested to add an item on the proposed use of ivermectin to the agenda of the next (eighteenth) STAG-NTD meeting.

On the use of biobanks: the *Brugia* rapid test has had a number of challenges and it has been recommended that countries do not use it. A dossier is to be submitted to WHO about a new prototype for antibody detection.

On multiplex tests for groups of diseases: their use should be encouraged.

On integrated surveillance: this is a key priority, because donors are not likely to support single-NTD surveillance.

On secretarial recommendations: the organizational challenges identified by Dr Jacobson apply to other Working Groups.

On vector control for onchocerciasis: there is nothing in the pipeline, but the WHO entomology manual has been published.

On decreasing entomological capacity (especially field-based) globally: this is a cause for great concern. Training packages need to be developed. Image libraries and artificial intelligence technology need to be (further) developed to help diagnosis.

On serological surveillance in children: because of their young age, the presence of antibodies that mark exposure to leprosy in children indicates the recent/current presence of leprosy in the area. This same method could be used for other diseases too. Yet, while it is easy to add many NTDs (and even immune-preventable diseases) into a serological test, not all disease results are equally ready to read and interpret. For example, cysticercosis can be added because accurate result reading is feasible.

3.

Noma and climate change

3.1 Noma

The Chair invited His Excellency Mr Abiodun Richards Adejola (Permanent Representative of Nigeria to the United Nations Office at Geneva, Switzerland) to present the case and the evidence for noma to be included in the list of NTDs.

Noma is a rapidly progressing infection with severe consequences. Urgent action is required because noma should not exist as a disease. Risk factors include malnutrition and poor oral hygiene. Noma is preventable and affects marginalized populations, especially children aged 2–5 years. If untreated, it has a 90% mortality rate within a few weeks. Surviving victims face social marginalization for the rest of their lives because of facial disfigurement. Noma is found mainly in Africa and Asia but also among other vulnerable populations around the world. WHO recognition of noma as an NTD would elevate this disease as a priority for action, advocacy and research. At present, the problem of underreporting and misdiagnosis generates neglect in research and surveillance. Noma can be controlled with interventions that can be easily added to the current framework and infrastructure. After the inclusion of noma in the NTD list, the development of a road map and help to countries creating national control plans would be next steps. The tools to control noma exist, but presently the will to use them is not apparent. Nigeria and 31 other countries in the global South and North therefore ask for the inclusion of noma in the NTD list today.

Mr Victor Nwaoba Itumo (Permanent Mission of Nigeria to the United Nations Office at Geneva, Switzerland) thanked the Secretariat for its support and added his remarks.

The urgency to include noma in the list of NTDs arises from its 90% mortality rate within weeks of infection, its global spread (with noma being present in North America and Europe, for example, in concentration camps during the Second World War), its long history (with the first medical description of noma as “water cancer” appearing in 1595), its current prevalence in Africa, Asia and South America, its annual occurrence of 140 000 cases and the stigma it leaves on 770 000 survivors. Physical consequences on patients include speech problems, saliva leakage, feeding difficulties and breathing complications.

Noma mainly affects children aged between 2 and 6 years (after weaning) who are highly immunocompromised, live in extremely poor living conditions and in resource-constrained countries, lack oral hygiene and proper nutrition, and already suffer from malaria, kwashiorkor, measles or HIV. In this context, infection with noma becomes particularly dangerous because of the lack of local awareness about what the disease is; the lack of widespread knowledge on preventive measures and response measures; and the lack of public health funding and resource mobilization specifically for noma.

There is hope for progress against noma because it is preventable through knowledge about the disease and how to treat it (e.g. good nutrition, oral hygiene and access to health care and vaccinations against childhood diseases) and it is treatable (with basic oral hygiene, antibiotics and wound dressing) if detected and managed during the first weeks of disease.

The benefits of including noma in the WHO list of NTDs include increased research, resource mobilization, the establishment of national and international programmes on noma, more widespread awareness, alignment with WHO WHA76 Agenda’s Pillar 1 (one billion more people benefitting from universal health coverage) and alignment with WHO WHA76 Agenda’s Pillar 3 (one billion more people enjoying better health and well-being).

Nigeria leads the process of appeal for the inclusion of noma in WHO’s list of NTDs, with the support of MSF/Doctors Without Borders. Some 31 additional countries from all WHO regions have provided a letter of endorsement in support of Nigeria’s request. They are: Austria, Benin, Botswana, Bulgaria, Burkina Faso, Cabo

Verde, Canada, Chad, Costa Rica, Ecuador, Guinea-Bissau, Ireland, Japan, Kenya, Liberia, Luxembourg, Mauritius, Mexico, Mozambique, Namibia, Netherlands (Kingdom of the), Niger, Palestine (Observer), Republic of Korea, Russian Federation, Rwanda, Senegal, Slovakia, Spain, Sudan and Switzerland. Nigeria thanks these countries for their support.

Further appeals

Mr Mark Alexandre Sherlock (Médecins Sans Frontières) described the components of the MSF road map for noma: (i) programming based on surveillance screening, vaccination campaigns and nutrition screening; (ii) advocacy; and (iii) research. MSF is currently funding research and response. Research funding and commitment depend on noma being included in the WHO list of NTDs. Inclusion in this list would be a massive catalyst for change for noma.

Professor Philippe Guérin (University of Oxford) presented the results of a systematic review conducted to find evidence on noma prevention and treatment approaches. Of 5000 articles screened, 366, collectively including data on one thousand patients, were of relevance and therefore reviewed in detail. Evidence is thus poor because of inadequate surveillance, but it indicates a consistent burden of disease in the “noma belt” (i.e. countries from Senegal to Ethiopia, southern Africa and South Asia). No solid evidence base is available for making recommendations on treatment, although antibiotics appear to work if used early. If treatment starts early, the chances of survival are considerably higher, but reconstructive surgery often remains necessary.

Discussion

On the best strategy to serve the interests of the noma control community: there is no doubt that noma is a seriously neglected issue, but NTDs notoriously suffer from lack of funding, integration in national programmes and coordination in implementation measures, so the doubt is whether noma’s inclusion in the WHO list of NTDs will unintentionally set this disease up for failure. Alternative strategies for a better fit should be considered (e.g. the nutrition or oral health programmes), or a hybrid approach between these and NTDs (meaning that noma becomes an NTD but a strong link with the nutrition and oral health programmes must be maintained). Within WHO, noma currently sits in the noncommunicable diseases department, but if it entered WHO’s list of NTDs, the NTD and the noncommunicable disease programmes would work together on it.

On an integrated approach: due to the many factors associated with noma (immunocompromise, lack of oral hygiene, malnutrition, and underlying infections such as malaria, kwashiorkor, measles, HIV), an integrated and multisectoral approach is fundamental to address the problem at its root. Nigeria has already incorporated noma strategically in its health plans, and other countries should replicate this model. The burden of noma cannot be adequately addressed without integration, especially with reference to funding from various programmes.

On integrated surveillance: since active case-finding is essential for early treatment, noma could be added as a skin NTD, especially in connection with leprosy. Mapping is an urgent priority to advance on this.

On funding: including noma in the WHO list of NTDs will require funding, but its inclusion could be a catalyst to raise funds. That said, noma is already funded, but more funding is expected come after inclusion, especially from academic donors.

On antimicrobial resistance: research is currently insufficient, which is why more funding is needed for academic work.

On the future burden of noma: the world is going to witness more poverty and malnutrition (because of migration, war, draught) so noma may increase as a problem.

David Mabey announced that the decision on whether noma should be included in the WHO list of NTDs would be taken during the closed discussion in the afternoon.

3.2 Climate change and COP28

Dr Anthony Solomon (WHO/NTD), on behalf of the Climate Change Task Team, presented information on a systematic review on climate change and NTDs being carried out by the team. The review is looking in parallel at climate change and malaria.

The objectives of the review are to summarize the known and predicted impact of climate change on progress towards the 2030 road map targets, to assess the likely effect of possible mitigation and adaptation measures, and to identify knowledge gaps (scientific, geographical, data). The review provides an opportunity to strengthen global understanding of the relationship between climate and communicable diseases, build community engagement, and link considerations of NTDs and climate change to the broader Sustainable Development Goals' agenda and other health/development goals (e.g. universal health coverage, pandemic prevention, preparedness and response).

This review is phase 1 of a larger work stream. Phase 2 includes communications, advocacy and a Member States' roundtable; discussion in a future NTD-STAG meeting; additional research to cover gaps (including disease-specific modelling of future scenarios and likely impact of mitigation and adaptation measures and NTD interventions); and development of the NTD research and development blueprint.

Dr Petra Klepac (University of Cambridge) explained the details of Phase 1.

A rapid systematic review is being conducted, built on the systematic review carried out by Tidman and colleagues in 2020 ("The impact of climate change on neglected tropical diseases: a systematic review", published in 2021 in the Transactions of the Royal Society of Tropical Medicine and Hygiene). Due to time constraints (in view of the 28th Conference of the Parties (COP28)), the current review pathway aims at being thorough and rapid, thanks in part to the use of artificial intelligence (using Covidence software).

Discussion

On knowledge gaps: this review will show what knowledge gaps exist for about pathogens and geographical areas being underrepresented. Also, most papers (e.g. on malaria) focus on the impact of climate change on vectors, but not on interventions (meaning how to do mosquito control in a changed landscape). The review will explore the extent of this knowledge gap.

On integration of efforts: Sightsavers is working on this too and is happy to link up with WHO. In view of COP28 (which is a great opportunity but a crowded space), it is fundamental to unify messaging across NTD advocates and present solid evidence. Time is of the essence in the finalization of this review.

On reporting from the WHO European Region: a voice from the Region was unfortunately missing. It is critical to raise advocacy and awareness about NTDs in Europe too. In the “neglected tropical diseases” label, it is time to think whether “neglected” is useful (because branding a disease as neglected may actually increase its neglect) and whether “tropical” is still appropriate (because of changes in the global map of NTDs).

On the removal of diseases from the list of NTDs (e.g. dengue because it is not limited to tropical areas and is not neglected by research): there is no procedure or criteria for removing diseases from the list, but this should be discussed further (even though no disease can be removed from the list before 2030). Any discussion on the removal of a certain disease should consider where that disease sits on the path to eradication (mindful of last-mile challenges, as happened to the yaws eradication programme in the 1960s), where the disease will go (e.g. dengue is under-resourced in the vector control community compared to malaria) and countries’ reaction to removal (because they will consider it as a step back and progress erosion). Additionally, removing “big diseases” such as dengue may impact negatively other NTDs that benefit from connections with dengue. Finally, since post-validation guidance still has to be developed (although sero-surveillance in post-validation surveillance is already recommended), it is now premature to remove diseases from the list.

On noma’s inclusion in the WHO list of NTDs: the decision to include noma should consider whether the WHO Secretariat and the Special Programme for Research and Training in Tropical Diseases have resources for noma, and whether actions can be truly implemented (in an isolated or, as recommended, integrated manner) especially at the country level, where there could be drawbacks in implementation if noma becomes “neglected” and moves from the oral health to the NTD programme.

On integrated mass drug administration: further discussion is necessary on the possibility of considering ivermectin mass drug administration for scabies too.

On integration: information and data management should be improved to facilitate integration and harness opportunities for eHealth and mHealth. The One Health approach currently represents one of the most advocated and most funded pathways to integration (e.g. for One Health surveillance).

On yaws sero-surveillance: given the high number of countries whose endemicity status is unknown but which may be endemic for yaws, it is recommended to conduct integrated sero-surveys and integrated clinical surveys to see how close yaws currently is to the 2030 eradication target. Sero-surveillance is particularly useful in young, disease-naïve segments of the population (e.g. for trachoma, leprosy). Integrated sero-surveillance is the best and most cost-effective approach because the highest cost is not the test itself, but reaching marginalized populations. The International Federation of Anti-Leprosy Associations and The End Fund would be happy to collaborate on a proposal for integrated sero-surveillance.

On yaws eradication: to accelerate progress towards the 2030 target, it may be helpful to focus on those countries that have never reported cases and to conduct a desk review to certify eradication fast (e.g. for dracunculiasis).

On costing: onchocerciasis requires mapping and a clear understanding of the disease burden for costing to be accurate.

On disease notification: notifiable diseases include diseases that are targeted for elimination or eradication, as well as outbreak-prone diseases. Yet, diseases that are not notifiable can still be reportable (which requires less bureaucracy). A system should be built for the quick sharing of cases of reportable diseases, as happens in the veterinary health sector. Ideally, all NTDs should be reportable.

On STAG-NTD working groups and subgroups: they are under review to determine which are relevant and which should be prioritized, and to identify barriers and bottlenecks. The overall goal is to avoid duplication of effort and optimize available resources. Support should be given to the Working Group on Monitoring, Evaluation and Research.

On NTD advocacy: the 49th G7 Summit (Hiroshima, 21 May 2023) was a good platform for NTD advocacy, which WHO/NTD utilized well.

The STAG-NTD members thanked and greeted the rest of the participants after which the Chair closed the open discussion.

4.

Conclusions and recommendations

During its 17th meeting, the STAG-NTD agreed the following conclusions and recommendations.¹

The STAG-NTD:

1. Commending the vision and the work of the new leadership of the Global Neglected Tropical Diseases Programme (WHO/NTD), and recognizing some important progress in moving towards delivery of the road map for neglected tropical diseases 2021–2030 (“the road map”);

Acknowledging the work of the Diagnostic and Technical Advisory Group for Neglected Tropical Diseases in preparing target product profiles for several NTDs, the First global meeting on skin-related neglected tropical diseases (27–31 March 2023), the Global Neglected Tropical Diseases Programme Partners’ Meeting (12–13 June 2023) and the ongoing work of the Secretariat;

Resolves that STAG-NTD recommendations be consistently aligned with the new strategic vision, as laid out by Director NTD.

2. Recalling recommendation 7 of the Sixteenth STAG-NTD meeting (27–28 September 2022) concerning the request for an urgent and comprehensive multi-stakeholder assessment of the support provided to national programmes that facilitates quality-assured, quality-controlled data generation, analysis, interpretation, reporting, stewardship and linkage to decision-making;

Further recalling the October 2023 communication to stakeholders from Director NTD on the need for transformative changes to the operational mechanisms, managerial hierarchies and reporting frameworks of WHO/NTD and the gaps in its existing structure;

Noting the specific concerns expressed at this meeting by the Chair of the Working Group on Monitoring, Evaluation and Research about fragmentation, potential duplication of effort, imperfect communication between the STAG-NTD Working Groups and the WHO Secretariat, and the lack of adequate resources to support Working Group functions;

Calls again for an urgent and comprehensive review of the support provided to national programmes that facilitates quality-assured, quality-controlled data generation, analysis, interpretation, reporting, stewardship and linkage to decision-making; and

Further calls for a review of the number, mandates, funding, operation and interaction of the various Working Groups and the support provided to them by the Secretariat, and for the Secretariat to ensure that resources are made available to facilitate their functions.

3. Acknowledging the valuable work already completed by the Costing Task Team, largely through short-term voluntary contributions from individuals who have considerable experience and expertise; and

Noting that short-term voluntary contributions are not a sustainable approach for producing work of such scale and importance;

Recommends the urgent development of a costed implementation plan for the road map using the best currently available data on burden and unit cost that would facilitate prioritization of activities by relevant stakeholders; and

Strongly recommends that the Secretariat direct resources to support the work of the Costing Task Team.

4. Endorses the development of the research and development blueprint for NTDs and encourages the Secretariat to work with all appropriate stakeholders, including other relevant groups within the UN system.

¹ The recommendations were approved by the Director-General on 12 December 2023.

5. Noting the report of the Secretariat on yaws eradication;

Requests WHO to work with relevant stakeholders urgently to facilitate completion of the assessment of the endemicity status of yaws in Member States previously known to be yaws-endemic for which the current endemicity status is not known, with strong consideration given to the use of integrated multi-NTD serosurveys for this purpose;

Recommends that WHO provide technical support for improving access to quality-assured diagnostics and logistical support for improving access to azithromycin for yaws;

Requests WHO to support monitoring of antimicrobial susceptibility of *Treponema pallidum pertenuis*, including through production of WHO guidance to Member States on the use of molecular surveillance for resistance allied to any large-scale programmatic use of azithromycin for yaws eradication;

Recommends that WHO review the resources available to support this work;

Urges WHO to accelerate issuance of guidance on co-administration of locally-appropriate combinations of albendazole, diethylcarbamazine citrate, ivermectin and azithromycin in the context of mass drug administration, including by exploring options to fast-track such guidance using any appropriate means; and

Requests WHO to accelerate the production of standard operating procedures for certification of interruption of yaws transmission, and to encourage Member States expected not to be endemic to undergo certification.

6. Recognizing the critical importance of issues surrounding climate change on human health, and its key importance as a factor for future work on control, elimination and eradication of NTDs;

Strongly supports the ongoing work of the Climate Change Task Team and its plans for engagement at COP28; and

Recommends continuing work to align with other ongoing work on climate change both within and outside WHO.

7. Expressing its thanks to Nigeria for submitting the dossier on noma to WHO on behalf of 32 Member States;

Agreeing that noma is a debilitating disease that requires urgent and comprehensive multisectoral interventions globally and locally to prevent, detect and manage the disease;

Recommends to the WHO Director-General that noma be included on the list of NTDs as a category A disease.¹

8. Recognizing that many NTDs are intertwined with animal health and may be encountered as outbreaks and/or in the context of complex humanitarian emergencies;

Encourages greater interaction and alignment between WHO/NTD and the One Health platform in areas of mutual interest, including surveillance, control and advocacy;

Requests that WHO reinvigorate the One Health Working Group on NTDs;

Requests a presentation at the next (eighteenth) meeting of the STAG-NTD on the work of the Quadripartite Secretariat for One Health²; and

Endorses the initiative of WHO/NTD to strengthen and broaden its on-the-ground work with WHO's Emergencies Programme.

¹ Noma was officially recognized as an NTD by WHO on 15 December 2023 (see press release (3) and fact sheet (4)).

² Comprising representatives of the Food and Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme (UNEP), the World Health Organization (WHO) and the World Organisation for Animal Health (WOAH, founded as OIE).

9. Acknowledging the broad mandate of the STAG-NTD;

Desiring to provide the best possible advice to the WHO Director-General on NTDs;

Requests the Secretariat to schedule meetings 6 months in advance;

Requests the Secretariat to provide all pre-read materials at least 2–3 weeks in advance of the first day of STAG-NTD meeting; and

Requests the Secretariat to convene two meetings per annum, with one of those being virtual.

10. Welcomes the news that WHO is developing guidance on treatment of individuals with scabies and the use of mass drug administration approaches for scabies control.

Meeting closure

Dr Fall congratulated all STAG-NTD members and thanked them for their engagement and expertise, stressing once more the need to increase advocacy outside the NTD community.

After the formal exchange of courtesies, the meeting was closed.

References

1. Ending the neglect to attain the Sustainable Development Goals: a road map for neglected tropical diseases 2021–2030. Geneva: World Health Organization; 2020 (<https://iris.who.int/handle/10665/338565>, accessed 20 December 2023).
2. Global report on neglected tropical diseases 2023. Geneva: World Health Organization; 2023 (<https://iris.who.int/handle/10665/365729>, accessed 20 December 2023).
3. WHO officially recognizes noma as a neglected tropical disease. In: WHO/News [website]. Geneva: World Health Organization; 2023 (<https://www.who.int/news/item/15-12-2023-who-officially-recognizes-noma-as-a-neglected-tropical-disease>, accessed 20 December 2023).
4. Noma. In: WHO/Fact sheets. Geneva: World Health Organization; 2023 (<https://www.who.int/news-room/fact-sheets/detail/noma>, accessed 20 December 2023).

Annex 1. Agenda

Day 1: Wednesday 11 October 2023

Session 1. Introduction, strategic priorities and follow-up		
Time	Topic	Lead
09:00–09:10	Opening remarks	ADG
09:10–09:20	Administrative matters, including appointment of rapporteurs	Chair
09:20–09:50	Reflections and strategic priorities	Ibrahima Socé Fall
09:50–10:45	Regional reflections	Regional NTD focal points
11:00–11:10	Update on STAG-NTD recommendations from the sixteenth meeting	Albis Gabrielli
11:10–11:30	Advocacy and resource mobilization Update on costing work <ul style="list-style-type: none"> – Work undertaken and work planned – Development of a Global Action Plan 	Ibrahima Socé Fall Costing Task Team
11:30–11:50	One Health	Bernadette Abela
11:50–13:00	Discussion on morning agenda items	All
Session 2. Yaws, Working groups		
14:00–14:30	Yaws eradication Update on the yaws survey protocol	Kingsley Asiedu Michael Marks/ Oriol Mitjà
14:30–15:00	Discussion	All
15:00–15:30	Read out from Working Groups – Progress, challenges and priorities (Access; Monitoring & Evaluation; Diagnostics; Vector Control Advisory Group)	Sarah Andersson Julie Jacobson Patrick Lammie Raman Velayudhan
15:30–15:50	Discussion	All
16:00–17:30	Closed session on Day 1 agenda items	STAG-NTD members
17:30–18:30	Reception (main cafeteria)	All

Day 2: Thursday 12 October 2023

Session 3. Noma, Climate change		
Time	Topic	Lead
09:00–10:00	Noma, discussion	Nigeria
10:00–10:30	Climate change and COP28, discussion	Climate Change Task Team
11:00–12:30	Discussion and closure of open meeting	Chair
Session 4. Closed STAG-NTD discussion		
14:00–15:30	Consolidation of recommendations	Chair Rapporteurs
15:50–16:50	Finalization of recommendations	STAG-NTD members
16:50–17:00	Meeting closure	Chair

Annex 2. List of participants

Members

Dr Ahmed Abd El Wahed, Leipzig University, Leipzig, Germany

Professor Olaoluwa Pheabian Akinwale, Nigerian Institute of Medical Research, Yaba, Nigeria

Professor Lucille Blumberg (Rapporteur), National Institute for Communicable Diseases, Johannesburg, South Africa

Dr Vu Quoc Dat, Hanoi Medical University, Hanoi, Viet Nam

Dr Neeraj Dhingra, Ministry of Health & Family Welfare, New Delhi, India

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Dr Indeewarie E. Gunaratna, Ministry of Health, Colombo, Sri Lanka

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Dr Alaa Hamed, Independent expert in public health, Cairo, Egypt

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Mr Victor Itumo, Permanent Mission of Nigeria to the United Nations Office at Geneva, Switzerland

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Dr Elizabeth Juma, WHO Regional Office for Africa, Brazzaville, Congo

Dr Amir B. Kello, WHO Regional Office for Africa, Brazzaville, Congo

Dr Vivek Lal, WHO Regional Office for South-East Asia, New Delhi, India

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¹ Invited but unable to attend.

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