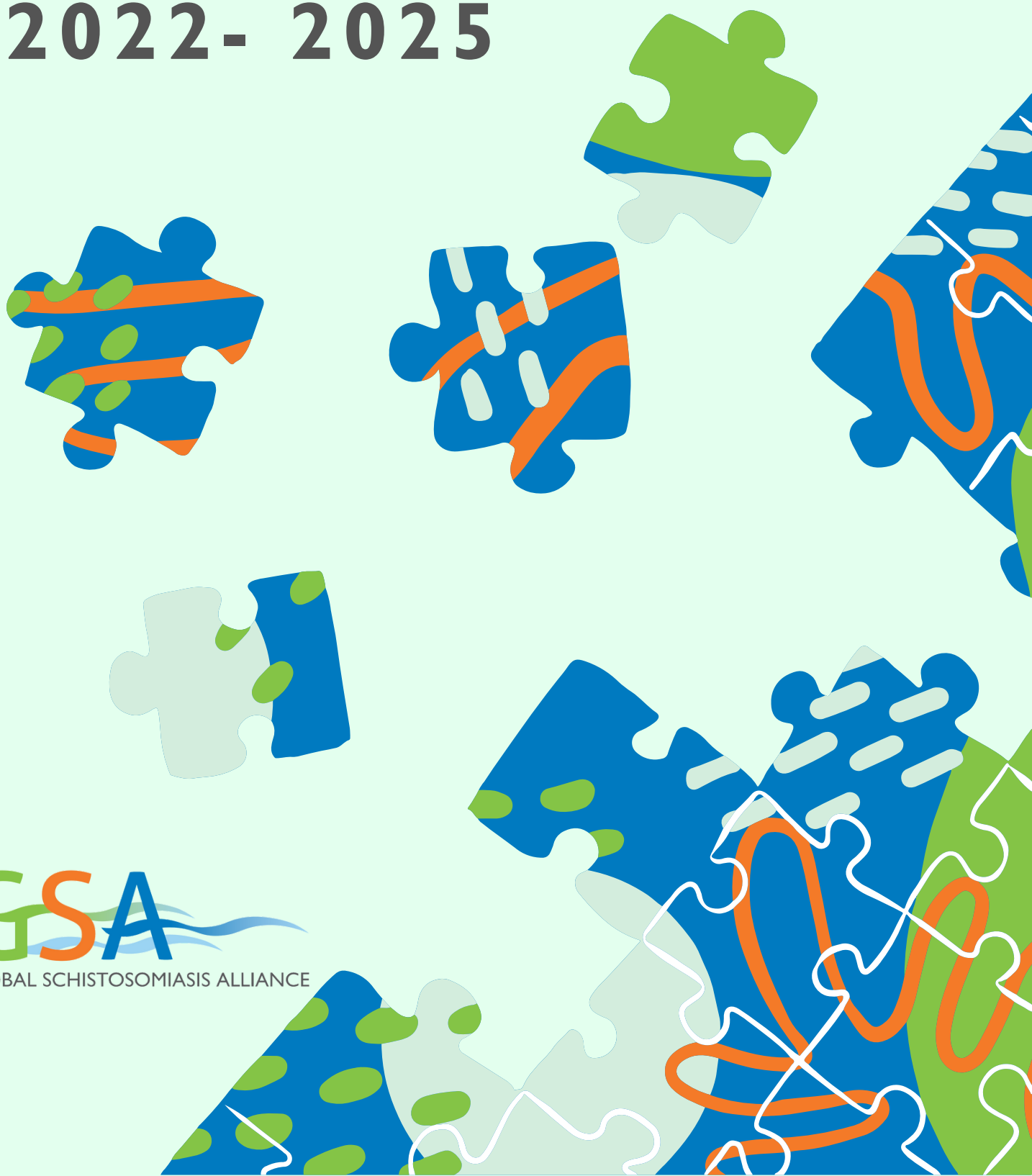


Strategic plan

2022- 2025



Executive Summary

In many tropical and sub-tropical regions of the world, schistosomiasis, a water borne parasitic disease harboured by aquatic snails, continues to be a major threat to the health and well-being of people and their domestic animals; in 2020, estimates suggest that at least 241.3 million people, the vast majority in sub-Saharan Africa, require treatment for schistosomiasis[1].

That said, sustained control activities have been proven to significantly reduce the overall prevalence of schistosomiasis, with many countries now making considerable progress in reducing the impact of this debilitating disease on their populations. To eliminate this water-borne disease, a holistic, cross-cutting approach is recommended, bringing together multi-sector actors to address safe water and sanitation access and behaviour change; integrated vector control practices; appropriate veterinary and animal health measures; and an effective and efficient delivery of health services and disease-elimination programmes. Strengthened by the new WHO Road Map 2030[2] commitments and the ambitious targets set for schistosomiasis elimination as a public health problem and interruption of transmission, the GSA is fully committed to enabling and supporting the schistosomiasis community, including partners and country programmes, to ensure that swift progress towards schistosomiasis elimination can be achieved.

[1] WHO Schistosomiasis and soil-transmitted helminthiases: progress report, 2020 Weekly epidemiological record (WER) No 48, 2021, 96, 585–595

[2] Ending the neglect to attain the Sustainable Development Goals: a road map for neglected tropical diseases 2021–2030. Geneva: World Health Organization; 2020.

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Here we outline the GSA strategic priorities for the next four years, 2022 to 2025. Our strategy strongly aligns with the WHO 2030 Road Map and the GSA Schistosomiasis Action Plan. It is broken down into 5 focus areas and associated actions. The details herein will guide our future activities, but we fully intend that this should be a fluid and flexible document that can be updated on a regular basis to reflect new directives and any material external changes taking place in the world around us.

GSA PRIORITIES FOR 2025

Focus areas	Actions
Resources, Capabilities & Knowledge Development	<ul style="list-style-type: none"> • Promote, support and strengthen schistosomiasis technical and operational capabilities
Monitoring and Evaluation	<ul style="list-style-type: none"> • Facilitate and strengthen ways to measure progress and evaluate interventions • Enable learn & adapt approaches to current and future challenges, • Meet verification/validation requirements for schistosomiasis elimination as a public health problem and interruption of transmission.
Integrated solutions to schistosomiasis elimination	<ul style="list-style-type: none"> • Enhance practices and improve the quality of services, promoting targeted, context & evidence driven interventions, including preventive chemotherapy, snail control and environmental management, WASH, behaviour change communication and health education and cross-sector collaborative interventions.
Diagnostics	<ul style="list-style-type: none"> • Promote development and adoption of diagnostics to support M&E for MDA, test & treat, surveillance and to facilitate the integration of SCH into all levels of the health system.
Innovation, Integration & Cross-cutting action	<ul style="list-style-type: none"> • Promote basic, clinical & operational research, to engage with innovations and novel tools from different sectors, • Encourage collaborative research to facilitate cross-cutting and cross-sector approaches for sustainable elimination of schistosomiasis.

The success of our forward-thinking strategy presented here will depend on the continued input and involvement of the schistosomiasis community. The GSA relies on the commitment and motivation of many individuals and organisations to run and populate our working groups, work streams and community of practice. We draw extensively on global experience relating to Monitoring and Evaluation, Research, Diagnostics, Behavioural Change and Health Education, Engineering, Elimination, Praziquantel Coordination, Snail Research and Control, Genital Schistosomiasis; and provide a platform to share information and benefit from learning about each other's experiences in endemic countries and associated research. We are proud of the depth and breadth of the discussions that take place within the Alliance, which not only identify current gaps in understanding, but often lead to new investigations and outputs and wider discussions on practical aspects and logistics of health programmes. Our future success depends on maintaining this transparency and openness for the benefit of all.

We welcome individual comments in relation to how the Alliance can be improved and to hear about emerging issues that the GSA should act upon. We are immensely grateful to our Advisers and Ambassadors for their wisdom and insights into neglected tropical diseases and global health. While we operate in a complex multidisciplinary environment, we believe that implementation of the GSA Strategic Plan 2022 -2025 will be a significant contribution to hasten the journey to realise our ultimate and shared goal of elimination of schistosomiasis.

The GSA Executive Team very much looks forward to supporting and working with you all in the years ahead.

Prof David Rollinson
Director of the Global
Schistosomiasis Alliance

Dr Johannes Waltz
Director of Strategy &
Finance

Dr Anouk Gouvras
Director of Communications
& Programmes

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Global Schistosomiasis Alliance

In many tropical and sub-tropical regions of the world, schistosomiasis, a water borne parasitic disease harboured by aquatic snails, continues to be a major threat to the health and well-being of people and their domestic animals [1]; in 2020, estimates suggest that at least 241.3 million people, the vast majority in sub-Saharan Africa, require treatment for schistosomiasis[2]. That said, sustained control activities have been proven to significantly reduce the overall prevalence of schistosomiasis, with many countries now making considerable progress in reducing the impact of this debilitating disease on their populations.

To eliminate this water-borne disease, a holistic, cross-cutting approach is recommended, bringing together multi-sector actors to address safe water and sanitation access and behaviour change, and integrated vector control practices, appropriate veterinary and animal health measures, and an effective and efficient delivery of health services and disease-elimination programmes.

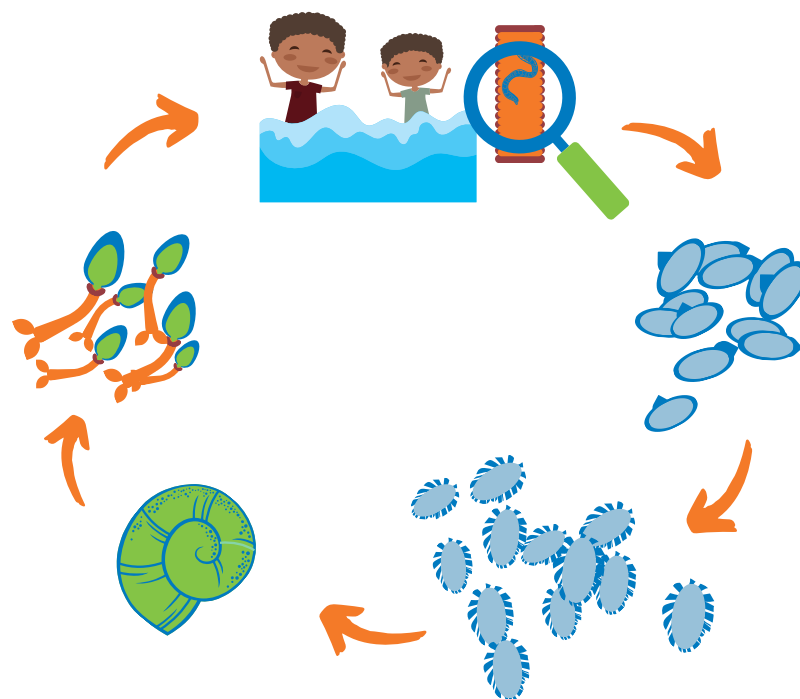
The [Global Schistosomiasis Alliance](#), the key international, collaborative platform for schistosomiasis, was launched in 2014 as an alliance of partners working together to accelerate progress towards schistosomiasis control and elimination. GSA started with 10 founding partners and has since grown to 23 core partner organisations, with a wide network of members and stakeholders contributing to working groups and workshops, engaging online and following on social media.

The Global Schistosomiasis Alliance (GSA) is a broad coalition to mobilise and drive the momentum to eliminate schistosomiasis. It is constituted as a diverse, representative partnership of public health programmes, academic and research institutions, international development agencies and foundations, non-governmental organisations, private sector companies and advocacy and resource-mobilisation partners.

Our alliance is not limited to partner organisations but also includes individuals, research groups and various networks, collaborating as a community to control and eliminate schistosomiasis.

[1] Léger E, Borlase A, Fall CB, Diouf ND, Diop SD, Yasenev L, Catalano S, Thiam CT, Ndiaye A, Emery A, Morrell A, Rabone M, Ndao M, Faye B, Rollinson D, Rudge JW, Sène M, Webster JP. Prevalence and distribution of schistosomiasis in human, livestock, and snail populations in northern Senegal: a One Health epidemiological study of a multi-host system. *Lancet Planet Health*. 2020 Aug;4(8):e330-e342. doi: 10.1016/S2542-5196(20)30129-7. PMID: 32800151; PMCID: PMC7443702.

[2] WHO Schistosomiasis and soil-transmitted helminthiases: progress report, 2020 *Weekly epidemiological record (WER)* No 48, 2021, 96, 585–595



Our Vision, Mission and Approach

Vision - Elimination of schistosomiasis.

Mission - To be the leading advocate for schistosomiasis elimination.

Approach - To lead and coordinate a multi-stakeholder platform consisting of public and private sector partners across the globe, contributing to schistosomiasis elimination as a public health problem and the ultimate goal of sustained interruption of transmission.

Underlying Principles & Values

At the GSA, diversity, equity, and inclusion are at the core of who we are and what we do. Our commitment to these values is unwavering – across all our network’s activity, around the world. They are central to our mission of eliminating schistosomiasis and to our impact as an alliance.

In practice, these values translate into Representation, Participation & Leadership from different geographies, at diverse levels, with different stakeholders, to strengthen efforts to move to schistosomiasis elimination.

GSA Strategy 2022-2025

Following the launch of the World Health Organization (WHO) Ending the neglect to attain the Sustainable Development Goals: A road map for neglected tropical diseases 2021–2030[1]; and the recent launch of the WHO Guidelines on Control and Elimination of Human Schistosomiasis[2], the Alliance has developed a 4-year strategy to support the WHO mid-term 2025 and 2030 schistosomiasis targets. This multi-year strategy document will serve to clarify the objectives, resources and value-add of the GSA multi-stakeholder platform to stakeholders, which include members of the alliance, multilateral observers and those directly or indirectly impacted by schistosomiasis.

This GSA Strategic Plan defines the strategic priorities of the GSA over the next 4 years to 2025 and how the alliance can contribute to these priorities to accelerate progress towards the WHO roadmap goals and schistosomiasis elimination as a public health problem. This document will highlight GSA resources and products and identify capabilities and progress indicators. The GSA strategy document will be a live document and will serve as a checkpoint & reference document to regularly evaluate the GSA's performance as summarised in the annual report and to develop the annual operational plan.

[1] Ending the neglect to attain the Sustainable Development Goals: a road map for neglected tropical diseases 2021–2030. Geneva: World Health Organization; 2020. Licence: CC BY-NC-SA 3.0 IGO

[2] WHO guideline on control and elimination of human schistosomiasis. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO

Targets and Identified Critical Actions

The WHO targets for schistosomiasis are set out in the WHO road map for NTDs 2021-2030, specifically in the annex on schistosomiasis. The annex and the existing GSA action plan were used to identify priority objectives for the GSA 4-year strategy to 2025.

Box 1 outlines the targets that need to be reached for the 2025 schistosomiasis milestone.

WHO targets by 2025

Schistosomiasis Elimination as a public health problem

- 69/78 (88%) of countries to be validated for elimination as a public health problem (currently defined as <1% proportion of heavy intensity schistosomiasis infections).

Schistosomiasis Transmission Interruption

- 19/78 (24%) of countries where absence of infection in humans has been achieved.

BOX 1 WHO SCHISTOSOMIASIS SPECIFIC TARGETS 2025

Taken from: Ending the neglect to attain the Sustainable Development Goals: a road map for neglected tropical diseases 2021–2030 – page 154.

The WHO road map 2021-2030 highlights key action areas for all NTDs (see Box 2 in appendix) and the schistosomiasis annex identifies 5 critical actions to achieve the 2030 targets (see Box 4 in appendix), and priorities in the following categories:

Technical

- Scientific understanding
- Diagnostics
- Effective intervention

Strategy & Service delivery

- Operational and normative governance
- Planning, governance and programme implementation
- Monitoring and Evaluation
- Access and logistics
- Health care infrastructure and workforce

Enablers

- Advocacy and funding
- Collaboration and multisectoral action
- Capacity and awareness building

The [GSA Action Plan for Schistosomiasis](#) was developed by the schistosomiasis community. In April 2018, the GSA convened a meeting to agree and endorse this schistosomiasis strategic action plan, and for it to be overseen by the GSA. This Strategic Action Plan guided the activities of the GSA and the GSA working groups and fed into the WHO schistosomiasis annex. The GSA Action Plan for schistosomiasis has the following categories:

Scaling existing tools

Preventive Chemotherapy (PC) treatment delivery, Supply chain, Data quality, reporting & mapping, Compliance

Optimizing existing tools

Optimize PC for targeted interventions, broaden MDA to reduce transmission, monitor drug efficacy

Introducing new tools

Diagnostics, paediatric PZQ, alternative treatment options, snail control, vaccines

WASH / Behaviour Change

WASH & BC for schistosomiasis, Cross sector data targets & tracking, multisector planning

Mobilization

WASH & BC for schistosomiasis, Cross sector data targets & tracking, multisector planning

Priority Strategic Objectives

Based on the WHO Schisto annex and the GSA Action Plan, five key strategic priorities were identified for the GSA four-year strategy. These are defined in Box 2.

Focus areas	Actions
Resources, Capabilities & Knowledge Development	<ul style="list-style-type: none"> • Promote, support and strengthen schistosomiasis technical and operational capabilities
Monitoring and Evaluation	<ul style="list-style-type: none"> • Facilitate and strengthen ways to measure progress and evaluate interventions • Enable learn & adapt approaches to current and future challenges, • Meet verification/validation requirements for schistosomiasis elimination as a public health problem and interruption of transmission.
Integrated solutions to schistosomiasis elimination	<ul style="list-style-type: none"> • Enhance practices and improve the quality of services, promoting targeted, context & evidence driven interventions, including preventive chemotherapy, snail control and environmental management, WASH, behaviour change communication and health education and cross-sector collaborative interventions.
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BOX 2 GSA PRIORITIES FOR 2025

The next section covers each priority objective, giving more detail on the GSA approach for each of its priority objectives. It highlights which GSA products and activities contribute to which objective and how they contribute.

Priority Strategic Objectives for 2025



Advocate for & enable resources, capabilities & knowledge development



Achieving the WHO road map goals necessitates building a sustainable, country led and owned NTD response, as outlined in the WHO Sustainability Framework for NTDs. Advocating for the investment of resources, including financial, material, technological and human resources for schistosomiasis elimination is needed at the international, national and local level, to ensure schistosomiasis interventions are sustainably embedded and mainstreamed into health systems and public health policies.

It is imperative that normative & technical guidance, best practices, and knowledge are strengthened and disseminated to all stakeholders working towards schistosomiasis elimination, and across sectors where multisector action is needed.

To advocate for and enable resources, capabilities and knowledge development, a platform is needed to:

- Determine and develop effective evidence-based messaging for policy change and for funding and investments in schistosomiasis elimination.
- Enable partnerships, coordination, and collaborations across sectors, between different organizations and stakeholders to accelerate effective implementation and multi-sector action.

- Create feedback mechanisms on implemented policy and interventions from diverse stakeholders to monitor impact and identify barriers or challenges, and discuss potential solutions, ensuring that guidance, best practice, tools, methodologies, and protocols are shared and disseminated effectively to policy makers, implementers and stakeholders.
- Strengthen capabilities & competencies (technical ability & skills) to facilitate capacity-building at the individual, institutional and systems levels and across sectors, through knowledge sharing, skills development and training.

Knowledge management and communication tools

- Use of GSA website for documents, guides, tools, videos and audios as a resource repository, and one-stop-shop for schistosomiasis technical knowledge.
- Use of GSA working groups & work streams to identify barriers, discuss & share solutions, best practice and tools, and to develop useful products.
- Use of GSA communication tools:
 - GSA Microsoft 365 email groups to facilitate communication within working groups and work streams.
 - GSA Mailing list & newsletters to communicate to wider schistosomiasis community.
 - GSA social media platforms (Linked In & Twitter) to promote news & events to the schistosomiasis community and beyond.
 - GSA webinars with ISNTD to highlight schistosomiasis research in more depth.

Communication and community of practice approach

- Use of GSA network and platform to bring together schistosomiasis stakeholders from across disciplines, sectors and organisations.
- Use of GSA network and communication tools to ensure dissemination of normative & technical guidance, best practices, current and innovative tools and knowledge.
- Maintain and strengthen the network of schistosomiasis elimination practitioners & advocates as a schistosomiasis elimination community of practice.
- Support and contribute to cross NTD and cross sector communications (NNN SCH-STH Disease Specific Group, NNN cross-cutting groups, WASH and development networks, national NTD networks, nutrition and education networks and sexual and reproductive health networks), to amplify the voice of NTDs and schistosomiasis within other advocacy and policy spaces and enable collaboration and learning.
- Use of key NTD, global health and development days and events to raise the profile of schistosomiasis and to highlight the need for increased funding for schistosomiasis interventions, research and development and capacity-building.
- Leverage opportunities to advocate for access to treatment & diagnostic tools, and integration of schistosomiasis, including female genital schistosomiasis into health services and health education; for multisector engagement and coordination to include schistosomiasis prevention measures in projects for water and agriculture development.

Accelerate Monitoring & Evaluation



Understanding the public health need, tracking progress and validating milestone or target achievement requires measuring key indicators of schistosomiasis. A Monitoring and Evaluation programme to meet the WHO roadmap targets necessitates indicators and methodologies to:

- Improve data analysis and transparency of schistosomiasis elimination progress in each country.
- Enable the evaluation of interventions & improve efficacy.
- Enable justification & targeting of interventions including medicines & resources.
- Measure progress towards schistosomiasis elimination as a public health problem.
- Enable a transparent verification/validation dossier for Elimination as a Public Health Problem (EPHP).

Monitoring and Evaluation (M&E) working group

The GSA has an active M&E working group bringing together the technical experts and stakeholders of monitoring and evaluation programmes and implementers. The aim of the group is to identify & discuss challenges and tools for M&E. The group meets regularly. There is a standing item for presenting and sharing experiences on an M&E tool (called the Toolbox Forum). The working group identifies needs for M&E programmes and actions priorities, or sets up task teams to action priorities, which will strengthen M&E programmes.

The group will work closely with the new WHO Technical Advisory Group for schistosomiasis and soil-transmitted helminthiasis and the subgroup on M&E to enable alignment, feedback and learning. Actions include:

- Collate & Review M&E tools/materials for SCH epidemiology and for SCH programme and data quality assessment. Following discussions with the group members and with ESPEN NTD team, the M&E working group has set up two task teams to collate tools, protocols and materials for a) SCH epidemiological surveys and for b) SCH programme evaluation. The Task teams will review these, produce a gap analysis and a work plan. These will address what is needed to produce packages of tools, protocols and training for all stages of SCH M&E. The gap analysis and work plan will be presented to the M&E WG and to ESPEN.
- Develop and consult on survey standards. Following findings from the review process, the group will discuss drafting a set of survey standards that can be agreed on by members and submitted for review to ESPEN.

Workshops and operational research meetings

- The GSA, through partners, M&E WG members and stakeholders develop workshop & meeting proposals (e.g., standalone meetings, COR NTD sessions, symposiums) to review and consult on current practices for mapping and M&E, and to identify key operational research priorities required to meet the needs of M&E programmes and accelerate progress to schistosomiasis elimination.
- Review and consult on morbidity and M&E indicators and denominators.
- Review and consult on the draft M&E framework for SCH.
- Support design and best practice development for mapping and sampling surveys, including precision mapping.

Strengthen practices and promote effective interventions



For interventions to be effective they need to reach those in need and at risk and avoid or mitigate any potentially negative effect such as inefficient/inappropriate use of health products, miscommunication & mistrust among communities or damage to the environment. Preventive chemotherapy needs to reach all populations in need. This can be achieved by increasing access to treatment using appropriate platforms for different at-risk groups, and through appropriate messaging and engagement of stakeholders, including patients and at-risk groups to build trust and to secure buy-in.

Interventions at the environment level, such as snail control and management need to be targeted and tailored to the local setting with appropriate application taking into consideration community interest, buy-in, ecological and environmental setting and potential eco-environmental impact. Integration & cross-sector coordination are also crucial and are covered in priority objective 5.

See Box 5 for the core strategic interventions for schistosomiasis outlined in the WHO NTD roadmap.

Schistosomiasis interventions must work to:

- Ensure all at-risk populations in need receive adequate treatment.
- Ensure effective and efficient allocation of treatment to those in need.

- Improve the tracking & monitoring of medicine supplies & delivery (including quantification/forecasting, procurement, quality assessment, storage, distributions and logistics management information systems).
- Improve medicine uptake, community buy-in & demand for interventions (through formative research such as barrier analysis).
- Reduce the risk of schistosomiasis in the environment through snail control & behaviour change communications.
- Design and direct interventions at the local level to reflect the focal nature of schistosomiasis transmission.
- Facilitate access to schistosomiasis related health services and products (diagnostics, human treatment, veterinary interventions, snail and environmental control technologies and products), and research and development (samples, technologies, data and training) to enable solutions and the development, evaluation and scale up of new and improved tools for schistosomiasis elimination.
- Rapidly disseminate normative and technical guidance and tools from the WHO, ESPEN and other technical partner.

WHO CORE STRATEGIC INTERVENTIONS FOR SCHISTOSOMIASIS

Taken from: *Ending the neglect to attain the Sustainable Development Goals: a road map for neglected tropical diseases 2021–2030 – page 154*

- Preventive chemotherapy
- Regular treatment through mass drug administration (MDA) with praziquantel of at-risk groups (school-aged children, communities in highly endemic areas, adults in occupations involving contact with infested water)

- WASH
- Access to safe water
 - Improved sanitation and management of excreta across communities (including animal waste)
 - Individual hygiene education (e.g. use of toilets, personal hygiene)

- Vector control
- Snail control with molluscicides, physical removal and environmental modification

- Veterinary public health
- Promote development and adoption of diagnostics to support M&E for MDA, test & treat, surveillance and to facilitate the integration of SCH into all levels of the health system.

- Case management
- Treatment of animals with praziquantel
 - Treatment with praziquantel on case-by-case basis and individualized disease management (e.g., surgery and self-care) where appropriate

- Other
- Behaviour change, self-care, and environmental management interventions

Risks that require mitigation

Zoonotic reservoirs could continue transmission; reintroduction of the disease by migration raises the risk of recrudescence; the disease could resurge if regular treatment through MDA is stopped without sustainability interventions in place (e.g. WASH and surveillance)

BOX 5 WHO CORE STRATEGIC INTERVENTIONS FOR SCHISTOSOMIASIS

Contributing to the priority of effective interventions

Ambassador Programme

- Identify priority needs and questions to be addressed by guidance and policy development, operational research, implementation research and implementation support organisations.
- Consult and discuss challenges faced by country programmes and share experiences between countries on schistosomiasis elimination.

Behaviour Change Working Group

- Promote and support sharing of behaviour change best practices and operational research for effective BC interventions.
- Determine current knowledge of what works and identify gaps and needs in BC operational research for SCH.
- Contribute to the development of programmatic guidance document for the design, implementation & evaluation of BC interventions.

Supporting ESPEN, WHO AFRO, and endemic countries

- Promote the ESPEN Schistosomiasis MDA Optimization Sub-District Analysis Tool.
- Provide technical support to country programme planning when requested/invited.

Implementation Working Group – Praziquantel (PZQ)

Coordination work stream & Elimination work stream

- PZQ Coordination work stream: Communicate and coordinate PZQ supply status, challenges and solutions. Advocate and share best practices in PZQ supply and delivery tracking and monitoring.
- Elimination work stream: Communicate and advocate elimination experiences and lessons learnt from programme managers, researchers and technical experts.

GSA Malacology Work Stream

- Communicate and share best practices and training for snail identification and mapping, molluscicide & biocontrol implementation.
- Review and rank current practices for snail control - including environmental management, molluscicide & biocontrol.
- Collate & propose review of current knowledge / datasets/ sample collections.
- Consult and review malacology capability needs for countries with schistosomiasis

Facilitate diagnostic development, adoption, and adaptation



Linked to objective 1 and 2, measuring progress to schistosomiasis elimination and validating achieving this target is dependent on diagnostics that are sensitive in all intensity settings, logistically feasible to use in different resource settings and have high acceptability-of-use for large-scale surveys in communities. A suitable diagnostic to validate interruption of transmission and to enable surveillance is also needed. The WHO has produced Diagnostic Target Product Profiles for M&E and surveillance of schistosomiasis, however diagnostic research and development is hampered by lack of suitable, standardised samples for testing, comparing and evaluation, standardised collection and storage protocols, as well as and lack of clarity on what diagnostics exist and whether they are suitable for programmatic needs. There is also a need for reliable, point-of-care diagnostic for clinical settings, for particular conditions such as female and male genital schistosomiasis and travel health.

Contributing to the priority of diagnostics

Biennial review and update of the commercially available diagnostics manufacturers table	Consult and develop papers on needs for schistosomiasis diagnostic research & development and evaluation
Promote and support schistosomiasis samples virtual biobank for diagnostic development, leveraging the GSA network and communication approach	Collate existing standard operation procedures and protocols for the collection and storage of samples to support standardization development
Communicate updates and progress on schistosomiasis diagnostics	Communicate programmatic and clinical diagnostics needs and priorities

Support innovation, integration & cross-cutting action



Innovation & cross-sector approaches require research, both operational and basic/fundamental research. Multidisciplinary research and innovation can unlock knowledge and tools that could accelerate schistosomiasis elimination. Learnings and integration opportunities can be gained from other health programmes (other NTDs, malaria, nutrition, sexual reproductive health and others) as well as different sectors (agriculture, education, WASH, infrastructure development etc). The GSA will strive to leverage cross-cutting approaches and build opportunities to work across sectors to research, accelerate and sustain schistosomiasis elimination.

Key areas for innovation, integration and cross-cutting action include, but are not limited to:

- Engineering solutions for WASH infrastructure, water treatment, cercariae control and diagnostics.
- Using social sciences and working with WASH and education sectors to build behaviour change.
- One Health approach for the identification of zoonotic infections and transmission control.
- Integrating and mainstreaming schistosomiasis into primary health care services and other NTD / health programmes, including Sexual and Reproductive Health Services and Rights.
- Research and development on new treatments, surveillance, and vaccines.
- Health economics and cost-benefit analysis, mathematical and statistical modelling and simulations of changes to schistosomiasis prevalence including using different interventions, impact of environmental changes, climate change, impact of pandemics etc.

Contributing to the priority of innovation, integration & cross-cutting action

Research working group

- Identify research priorities for schistosomiasis elimination and recommend creation of work streams or groups for a particular research priority.
- Develop and organise schistosomiasis research innovation meetings, either as standalone meetings or as symposia, workshops or seminars linked to conferences, such as COR NTD, ECTMIH, ASTMH etc.
- Produce or recommend publications and opinion pieces.
- Develop opportunities for schistosomiasis researchers, at all stages, to network and share ideas.
- Develop opportunities for regional schistosomiasis researcher networks.
- Feed into the WHO NTD R&D blueprint for schistosomiasis.

Snail work stream

- Share and discuss opportunities & challenges for snail genomic research and application.
- Share protocols, technical knowledge on snail genomic tools and resources.
- Coordinate & work with the Malacology work stream on snail datasets, samples, and control technologies

Engineering working group

- Collate relevant existing information, recommend best practices, identify gaps in knowledge, and promote research and implementation at-scale, of infrastructure or technological solutions to schistosomiasis prevention.
- Review and disseminate design guides for safe water contact infrastructure.
- Review impact of large engineering projects on schistosomiasis risk (e.g., dams, irrigation projects) and current best practices, identifying gaps in technical knowledge.

Genital Schistosomiasis community of practice

- Promote, communicate, and share genital schistosomiasis technical resources.
- Share findings and progress on Female Genital Schistosomiasis (FGS) and Male Genital Schistosomiasis (MGS) to improve diagnosis, treatment, and prevention of genital schistosomiasis, contributing to improved integration of these elements into primary health services, sexual and reproductive and other health services.

Appendix

Background

The [Global Schistosomiasis Alliance](#), the coalition for schistosomiasis, was set up in 2014 as an alliance of partners working together to accelerate progress towards schistosomiasis control and elimination.

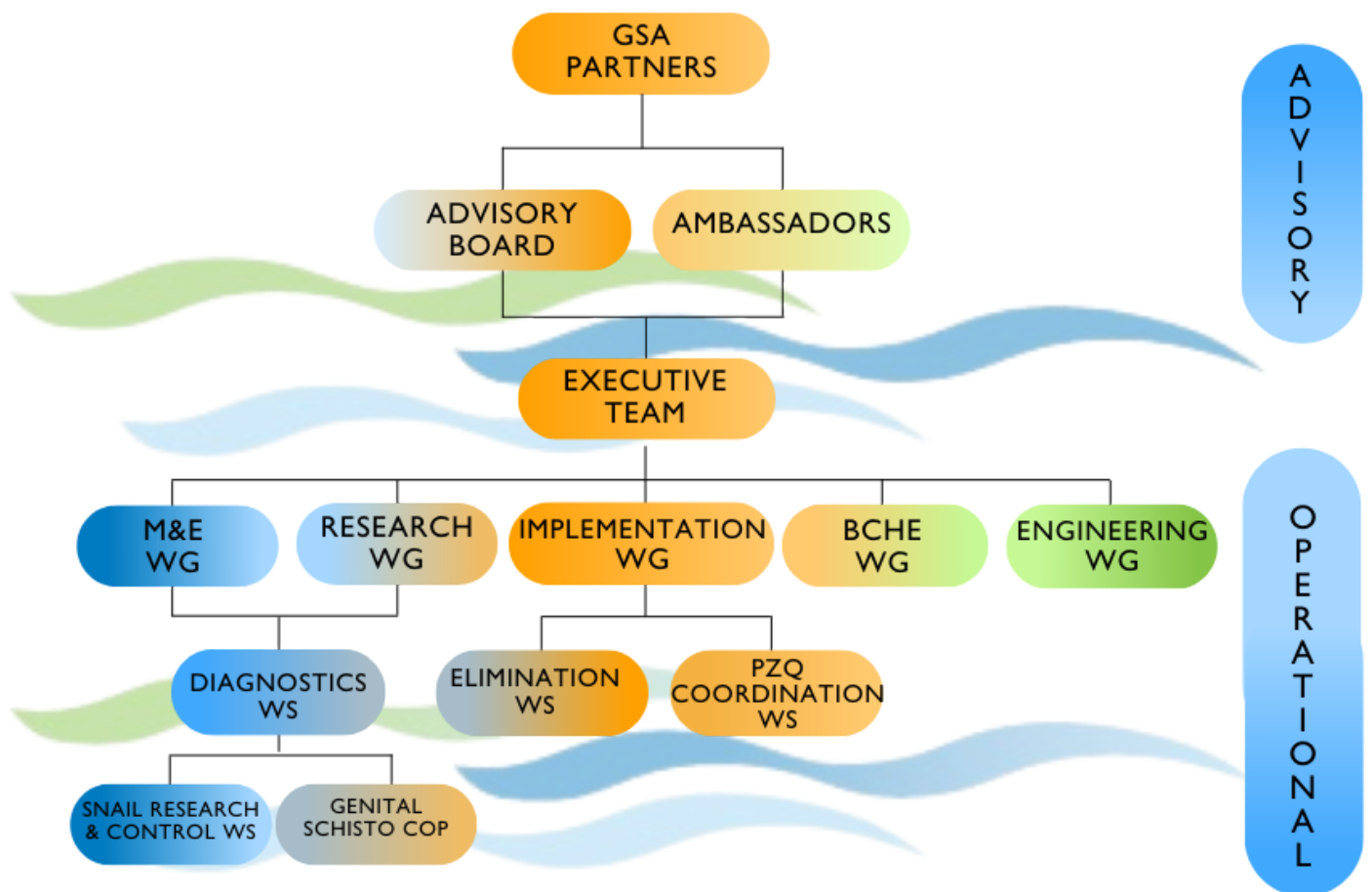
GSA was formed by founding members including Bill & Melinda Gates Foundation, SCI Foundation (then SCI), Merck, the US Agency for International Development, Federal Ministry of Health Ethiopia, Chinese Centre for Disease Control and Prevention, Liverpool School of Tropical Medicine, Children's Investment Fund Foundation and World Vision International. It has since grown to 23 partner organizations, over 300 individual members contributing to working groups, and a wide network of stakeholders.

Structure

[Alliance partners](#) come from government departments, non-governmental organizations, research institutes, philanthropic funding organizations, and industry. The GSA is managed by an Executive Team and oversees and supports the GSA Working Groups (WG) and Work Streams (WS). Working Groups and Work Streams bring together relevant experts and stakeholders, drawn from the partner organizations and from other organizations, research groups and programmes, to produce tangible outputs addressing specific challenges or barriers to schistosomiasis control and elimination as identified in the GSA Schistosomiasis Action Plan. The working group outputs are aimed at accelerating progress towards the WHO roadmap goals and beyond. The GSA Executive Team works with the Working Group Chairs to develop an annual operational strategy and plan.

The alliance also has a network of GSA Ambassadors who are GSA points of contact in endemic countries and advise on progress being made and challenges being faced in-country with regard to the control and elimination of schistosomiasis. They contribute to discussions to determine actions required by the schistosomiasis community and feedback on their experience and concerns to the community via the GSA and fellow Ambassadors. The annual operational strategy and progress report is reviewed by the GSA Advisory Board.

GSA network & community



PARTNERS

Alliance partners are listed on the website. We have key Point of Contacts (POC) for each partner organization.

ADVISORY BOARD

The Advisory board, convened once a year, is made up of members with different expertise who review the GSA's annual report and advise on the annual operational strategy. Some members of the board also participate in working groups and advise throughout the year.

AMBASSADORS

GSA Ambassadors are experts on schistosomiasis and schistosomiasis programmes in endemic countries. Some ambassadors are the country's Ministry of Health schistosomiasis programme manager or sit on the country's MoH technical expert committee on schistosomiasis and/or infectious diseases.

EXECUTIVE TEAM

A general Director of the GSA, a Director of Communications and Programmes and Director of Strategy and Finance, supported by a Communications expert.

WORKING GROUPS

Working Groups (WG) bring relevant experts and stakeholders together to produce tangible outputs addressing specific challenges or barriers to schistosomiasis control and elimination. WG are led by chairs which are key roles in the GSA. Chairs lead the work of the WG according to the terms of reference of each WG. The chairs feed into the GSA annual report and operational strategy. WG members participate in meetings and contribute technical expertise, operational experience and knowledge to the outputs being developed.

WORK STREAMS

Work Streams (WS) are set up by WGs to tackle specific topics. They are less formal than WGs (no terms of reference, instead they have a rationale or concept note), have a strong research focus and the chairs report back to the working group. The chairs also feed into the GSA annual report and operational strategy document.

GENITAL SCHISTOSOMIASIS COMMUNITY OF PRACTICE

The Community of Practice on Genital Schistosomiasis is currently chaired by a GSA Exec Team member. This Community of Practice is an information sharing platform. A future chair of this CoP would also feed into the GSA annual report and operational strategy.

SCHISTOSOMIASIS NETWORK AND COMMUNITY

The GSA has an online network of individuals interested and working in schistosomiasis. This online network is currently in the form of an email repository/directory. The members of the network are on the GSA mailing list and receive news and information from the GSA via regular newsletters. There is also a wider external network of stakeholders that are engaged through the GSA social media platforms.

Resources

WHO REFERENCES, DOCUMENTS & TOOLS

Taken from: Ending the neglect to attain the Sustainable Development Goals: a roadmap for neglected tropical diseases 2021–2030 – Figure. 5. Areas that require concerted action, page 20.

- | | |
|--|---|
| Accelerate programmatic action | <ul style="list-style-type: none">• Technical progress, e.g., scientific understanding, effective intervention• Strategy and service delivery, e.g., planning and implementation, access, and logistics• Enablers, e.g., advocacy and funding, collaboration and multisectoral action |
| Intensify cross-cutting approaches | <ul style="list-style-type: none">• Integrating NTDs on common delivery platforms that combine work on several diseases• Mainstreaming within national health systems to improve the quality of NTD management in the context of universal health coverage• Coordinating with other sectors within and beyond health on NTD-related interventions |
| Change operating models and culture to facilitate country ownership | <ul style="list-style-type: none">• Country ownership at national and subnational levels• Clear stakeholder roles throughout NTD work• Organizational set-ups, operating models and thinking aligned to achieve the 2030 targets |

Supported by enablers, e.g., disaggregated data, monitoring and evaluation, capacity-building

BOX 2 WHO ROAD MAP 2030 AREAS THAT REQUIRE CONCERTED ACTION

Taken from: Ending the neglect to attain the Sustainable Development Goals: a road map for neglected tropical diseases 2021–2030

Define indicator for measuring morbidity

Implement effective interventions, including extending preventive chemotherapy to all populations in need and ensuring access to the necessary medicines; implement targeted snail control with updated guidelines; continue micro-mapping and targeting

Develop diagnostic tests, including standardized point-of-care diagnostic, and develop new interventions, including alternatives to praziquantel and methods of snail control

Create effective cross-sectoral governance mechanisms to coordinate with WASH, vector control, animal health, environment, and other key sectors

Ensure sufficient resources, including domestic financing, for access to interventions (including MDA for children and adults as well as snail control), development of new tools and strengthening of health care capacity

BOX 4: WHO SCHISTOSOMIASIS ANNEXE SUMMARY OF CRITICAL ACTIONS TO ACHIEVE TARGETS

WHO GUIDELINES

- [WHO guideline on control and elimination of human schistosomiasis](#)
- [WHO Ending the Neglect to attain the Sustainable Development Goals: A Road map for NTDs 2021-2030](#)
- [WHO Ending the Neglect to attain the Sustainable Development Goals: A sustainability framework for action against NTDs](#)
- [WHO Ending the Neglect to attain the Sustainable Development Goals: A Framework for monitoring and evaluating progress towards the NTD road map 2030](#)
- [WHO Ending the neglect to attain the sustainable development goals. A Global Strategy on Water, Sanitation and Hygiene to Combat Neglected Tropical Diseases 2021–2030](#)

- WHO [ESPEN Schistosomiasis MDA Optimization through data analysis tool](#)
- WHO mollusciciding manuals: [Guidelines for laboratory and field testing of molluscicides for control of schistosomiasis](#) and [WHO Generic risk assessment model for insecticides used for larviciding and mollusciciding](#).
- WHO [Diagnostic target product profiles for monitoring, evaluation and surveillance of schistosomiasis control programmes](#)
- WHO [Preventative Chemotherapy Tools for improving the quality of data and information](#)
- WHO [Female Genital Schistosomiasis Pocket Atlas](#)
- WHO [WASH-NTDs toolkit for working cross-sectorally](#)
- WHO [One Health: Approach for action against neglected tropical diseases 2021-2030](#)
- WHO [NTD Drug Safety Manual](#)

In preparation

- WHO Investment Case
- WHO Research Inventory/Research agenda - blueprint
- WHO Snail Identification Application

WHO GROUPS

- WHO Strategic and Technical Advisory Group for Neglected Tropical Diseases
 - WHO SCH-STH Technical Advisory Group
 - Monitoring and Evaluation subgroup
 - Elimination as a public health problem subgroup
 - Water Sanitation and Hygiene subgroup
 - Zoonotic schistosomiasis
- WHO Diagnostic Technical Advisory Group
- WHO Protocol Development Group

OTHER GROUPS & NETWORKS

- [NTD NGO Network](#)
 - [NNN Wash working group](#) – including the Behaviour Change Task Team
 - [NNN SCH-STH Disease specific group](#)
- [Female Genital Schistosomiasis Integration Group \(FIG\)](#)
- [Uniting to Combat NTDS](#) – NTDs advocacy
- [iChords](#) Community of Practice for social and behaviour disciplines addressing implementation gaps in NTDs
- [Kikundi](#) NTD Programme Managers Community of Practice
- [ISNTD](#) International Society for Neglected Tropical Diseases
 - [ISNTD Connect](#) – GSA webinars
- Networks (Research, National, Regional, other): [ARNTD](#), [RNAS](#), [LCNTD](#), [CNTD](#), [GNTD](#) etc

SCHISTOSOMIASIS RESOURCES ON THE GSA WEBSITE

- [Commercially available diagnostics manufacturers table](#)
- [Teacher Toolkits for Schistosomiasis](#)
- [Genital Schistosomiasis Collection](#)
- [Behaviour Change Collection](#)
- [Monitoring and Evaluation Collection](#)
- [Diagnostic Collection](#)
- [Snail Resource Collection](#)

Glossary.

Advisory and Operational

In the context of the GSA – Advisory means giving strategic direction and feedback on GSA activities and goals. Operational refers to the collaborative work done through working groups and work streams.

Coordination

Collaboration among adjacent sectors and programmes, within and beyond health, in the broader NTD network. Sectors such as vector control, animal health and WASH make critical contributions to progress against NTDs, and working together more effectively will accelerate and sustain progress towards elimination and control of NTDs.

Control

Reduction of disease incidence, prevalence, morbidity and/or mortality to a locally acceptable level as a result of deliberate efforts; continued interventions are required to maintain the reduction.

Elimination as a public health problem

A term related to both infection and disease, defined by achievement of measurable targets set by WHO in relation to a specific disease. When reached, continued action is required to maintain the targets and/or to advance interruption of transmission. Documentation of elimination as a public health problem is called validation.

Female Genital Schistosomiasis (FGS) and Male Genital Schistosomiasis

Female genital schistosomiasis (FGS) is a manifestation mainly of *Schistosoma haematobium* infection. When the eggs lodge in the genital tract they cause a form of the disease referred to as genital schistosomiasis. In women, where the impact is more apparent, this is called female genital schistosomiasis (FGS). In men it is called male genital schistosomiasis (MGS).

Integration

Grouping or “packaging” of several diseases, depending on their burden in countries, to facilitate joint delivery of interventions through a common platform such as preventive chemotherapy and use of multiplex diagnostics, and integrated monitoring, evaluation and reporting for all relevant endemic NTDs.

Interruption of Transmission

Reduction to zero of the incidence of infection caused by a specific pathogen in a defined geographical area, with minimal risk of reintroduction, as a result of deliberate efforts; continued action to prevent re-establishment of transmission may be required. Documentation of elimination of transmission is called verification.

Neglected Tropical Diseases (NTDs)

A diverse group of 20 conditions of parasitic, bacterial, viral, fungal and non-communicable origin, that cause pain and disability, and create lasting health, social and economic consequences for individuals and societies.

Malacology

Malacology is the branch of invertebrate zoology that deals with the study of the Mollusca. In the case of schistosomiasis it is the study of the aquatic and/or semi-aquatic snail that acts as the intermediate host for *Schistosoma* parasites.

Mass drug administration (MDA)

Distribution of medicines to the entire population of a given administrative setting (for instance, state, region, province, district, subdistrict, or village), irrespective of the presence of symptoms or infection; however, exclusion criteria may apply. (In this document, the terms mass drug administration and preventive chemotherapy are used interchangeably.)

Monitoring and Evaluation

Processes for improving performance and measuring results in order to improve management of outputs, outcomes and impact.

Morbidity

Detectable, measurable clinical consequences of infections and disease that adversely affect the health of individuals. Evidence of morbidity may be overt (such as the presence of blood in the urine, anaemia, chronic pain or fatigue) or subtle (such as stunted growth, impeded school or work performance or increased susceptibility to other diseases).

Stakeholders

Individual or group that has an interest in any decision or activity of an organization.

Sustainability

The ability of national health systems to maintain or increase effective coverage of interventions against NTDs to achieve the outcomes, targets and milestones identified in the road map - in the WHO Sustainability Framework.

Preventive chemotherapy

Large-scale use of medicines, either alone or in combination, in public health interventions. Mass drug administration is one form of preventive chemotherapy; other forms could be limited to specific population groups such as school-aged children and women of childbearing age. (In this document, the terms preventive chemotherapy and mass drug administration are used interchangeably.)

Vector control

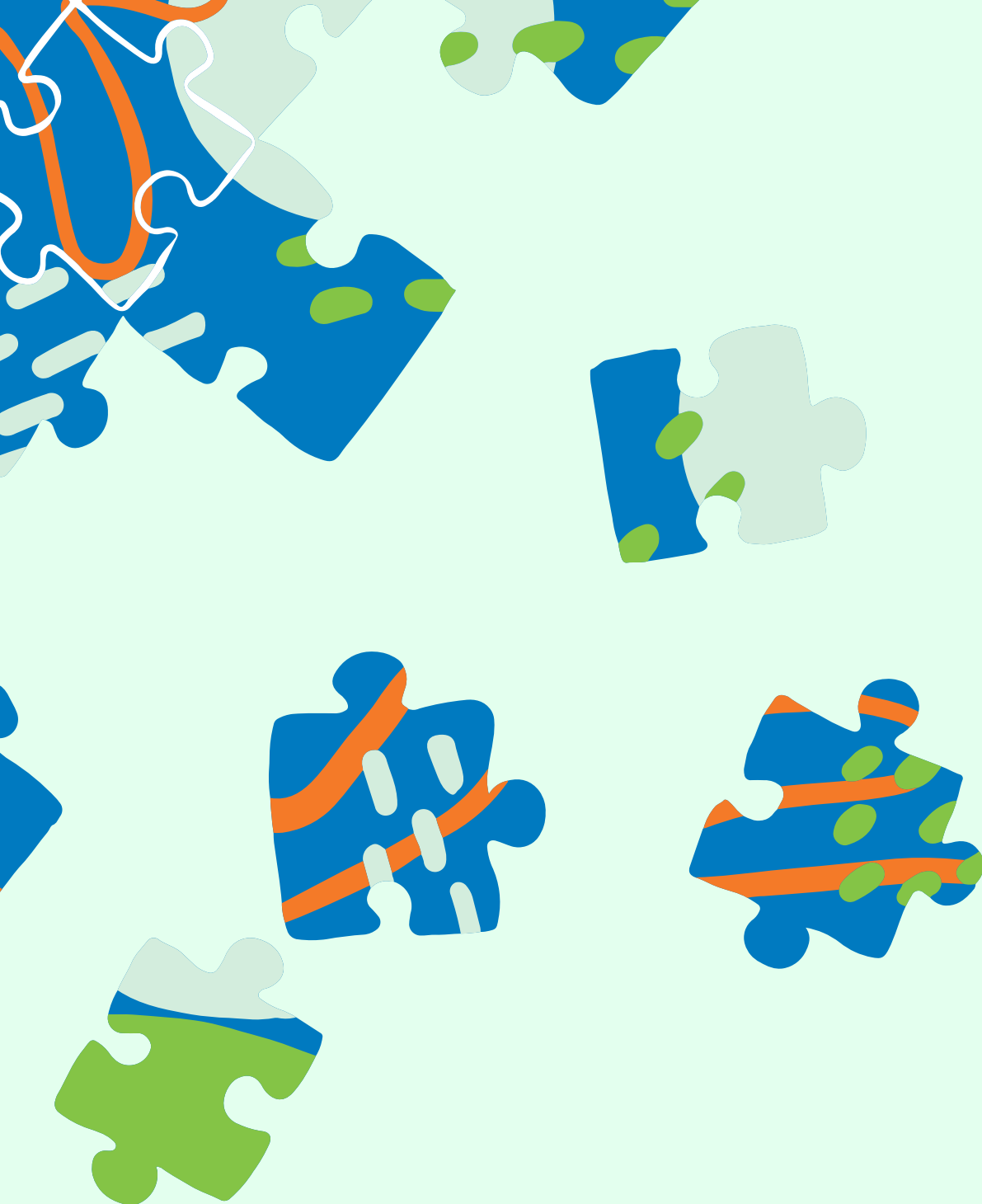
Vector control aims to limit the transmission of pathogens, in this case the *Schistosoma* parasite, by reducing or eliminating human contact with the vector or in this case the snail intermediate host.

Veterinary public health

WHO definition, the sum of all contributions to the complete physical, mental and social well-being of humans through an understanding and application of veterinary medical science

WASH

Water, Sanitation and Hygiene.



GSA

GLOBAL SCHISTOSOMIASIS ALLIANCE