

WASH

Why water, sanitation and hygiene are vital for eliminating neglected tropical diseases

Brief



Sightsavers

Now is the time to say goodbye to neglected tropical diseases



Children from Ngangula Primary School carrying water to school in Chikankata, Zambia.

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Cover image

Peace Kiende, 11, a student at Antuaduru Primary School sings a song that helps her remember how to wash her hands and face, as part of the Sightsavers' WASH project in Meru, Kenya.

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Introduction

In communities where water is scarce, supplies are often reserved for drinking or farming, meaning hygiene and sanitation are sidelined.

Poor hygiene is linked to people contracting and spreading bacterial and parasitic infections, including a number of neglected tropical diseases (NTDs). Improving access to clean water, good sanitation and hygiene (often referred to by the acronym 'WASH') is critical in preventing and treating these diseases.

Sightsavers works on five NTDs and WASH initiatives play an essential role in controlling and eliminating three of these due to the way they are spread. These diseases are **trachoma** – an excruciating eye disease that can cause irreversible blindness – **intestinal worms** and **schistosomiasis**, both of which can lead to chronic illnesses and can even be fatal¹.

Some of the key WASH-related behaviours that prevent these NTDs are using latrines and washing hands and faces with water and soap. Other protective measures include boiling or filtering water for drinking or bathing, and safely handling fruit and vegetables.

Many sectors have a crucial part to play in WASH programmes, including ministries of health and water, affected communities, non-governmental organisations, academics, public and private funders and consumer goods companies. This is why multi-sectoral collaboration lies at the heart of successful WASH programmes.

Social behaviour change underpins many WASH initiatives. This aims to improve people's health by influencing their knowledge, attitudes and social norms. For instance, open defecation or sharing living space with livestock may be ingrained

in people's habits, community, culture or national tradition, but these practices are potentially harmful because they help trachoma and other NTDs to spread.

Closely linked to some of our WASH work is the WHO-approved 'SAFE' strategy for eliminating trachoma. This stands for Surgeries, Antibiotics, Facial cleanliness and Environmental improvements. The progress that has been made on eliminating trachoma has helped to push WASH up the NTD agenda through the large-scale implementation of 'F' and 'E' programmes.

In this brief document we highlight our work in WASH, which is focused primarily on social behaviour change, cross-sector coordination and data systems strengthening. We also outline our major WASH programmes, global progress to date and our plans for the future.

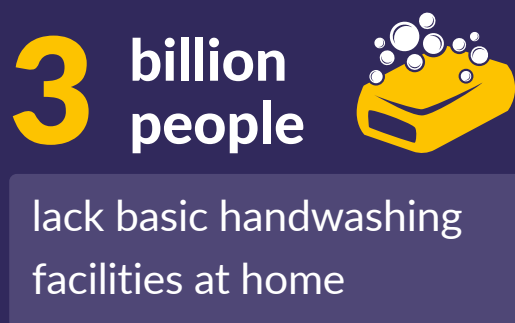
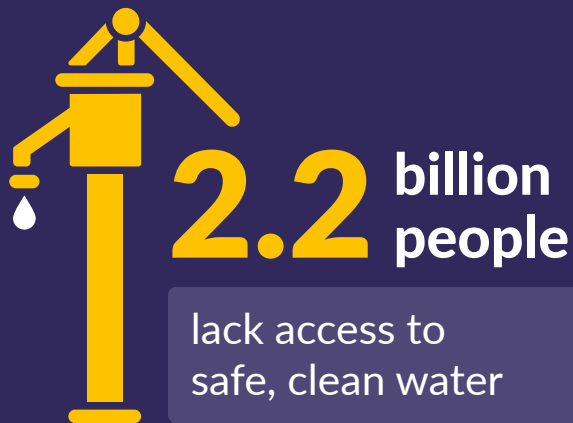


Did you know...

Neglected tropical diseases are a group of parasitic and bacterial infections that affect more than one billion people worldwide. They became known as 'neglected' because historically they did not spark the same public attention or investment as other tropical diseases such as malaria. They also affect some of the poorest and most neglected, communities in the world.

WASH: the facts

Water, sanitation and hygiene (WASH)²



Sightsavers works on WASH in 19 countries.

We help support:





Charles Mwiti, 12, stands by a toilet at his home outside Meru, Kenya. Through a Sightsavers' WASH initiative, Charles helped build the toilet and learned proper sanitation techniques to prevent trachoma and other NTDs.

WASH: our key programmes

Ascend West and Central Africa

This is UK aid's flagship NTD programme, and Sightsavers' largest multiple disease programme to date. The three-year initiative will make major progress towards eliminating five NTDs by working with communities, ministries of health and partners in Benin, Burkina Faso, Central African Republic, Chad, Côte d'Ivoire, Democratic Republic of Congo, Ghana, Guinea, Guinea-Bissau, Liberia, Niger, Nigeria and Sierra Leone. WASH activities focus on strengthening cross-sector coordination, data systems and design and implementing well-informed behaviour change interventions. For more on how Ascend is helping to coordinate WASH and NTD expertise, see page 11.

Sightsavers is flexing the Ascend programme to support countries in responding to the COVID-19 pandemic. Sightsavers has worked with ministries of health and national task forces to identify areas of need, ensuring we're providing

support where requested from national COVID-19 plans. Sightsavers is supporting the COVID-19 response in 10 of the Ascend countries. We're working alongside ministries of health and other partners to roll out hygiene-related behaviour change campaigns, for instance by creating COVID-19-related radio advertisements in local languages. We are also supporting the strengthening of health systems to deal with COVID-19 by training contact tracers, community health workers, and healthcare facility staff. A key focus is ensuring people know correct hygiene behaviours in order to avoid transmission; another is to stamp out misinformation. We are also working to ensure programming is inclusive of vulnerable groups. M&C Saatchi is our main partner in the hygiene-related behaviour change work happening under Ascend.

Accelerate trachoma elimination

Sightsavers has embarked on a remarkable journey with some of the most trusted names in modern philanthropy in a bid to

support the elimination of trachoma as a public health risk in Benin, Botswana, Burkina Faso, Cameroon, Guinea-Bissau, Guinea, Namibia, and Senegal, and make significant progress towards trachoma elimination in Côte d'Ivoire, Ethiopia, Kenya, Nigeria, Tanzania and Zimbabwe.

Led by Sightsavers, this huge collaborative effort is helping to ensure WASH services reach some of the most disenfranchised communities in trachoma-endemic areas. The programme supports intensified hygiene-related behavioural change in seven countries to help break the transmission of trachoma. Sightsavers is also supporting the utilisation and coordination of WASH and NTD data in 12 countries to more effectively allocate resources and plan future programmes through cross-sector collaboration.

Accelerate is funded by The Audacious Project, which is hosted by TED. Major donors include the Gates Foundation, ELMA Foundation, Children's Investment Fund Foundation, Virgin Unite, and UK aid.

Learning from past programmes

Between 2014 and 2019, The Queen Elizabeth Diamond Jubilee Trust's Trachoma Initiative³ (The Trachoma Initiative) and the UK aid-funded DFID SAFE programme helped to pioneer the SAFE strategy in seven African countries. As a result of these programmes, around 150 districts in seven countries benefited from facial cleanliness and environmental improvement activities.⁴ The programmes also advanced understanding about which trachoma elimination activities are most effective, generating key insights and data that is being put to use in our current WASH work.

Both programmes were led by the ministries of health in each country, coordinated by Sightsavers, and delivered by members of the International Coalition of Trachoma Control, of which Sightsavers is a part.

The Trachoma Initiative and DFID SAFE programme built the capacity of local partners and ministries to implement NTD-related WASH programming. Technical working groups were set up in Kenya, Ethiopia, Tanzania, and Uganda where WASH and NTD personnel came together to analyse data and plan trachoma interventions. Capacity was built through sub-national technical working groups and county trachoma task forces, some of which are still operating, despite the programmes coming to an end. WASH committees were set up, which were predominately designed to move people away from open defecation, helping to rid communities of trachoma and intestinal worms. Many WASH sector projects in these countries now place greater emphasis on communities' role in eliminating trachoma.⁵



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Community health volunteers travel by motorbike through a remote area of Turkana, Kenya.

Working with communities: helping neighbours and friends stay trachoma free

John Ekutan is from Turkana in Northern Kenya. This vast county is full of open desert and is home to some of the country's most remote populations.

In 2019, Turkana reached a huge milestone: levels of trachoma had fallen so low that mass surgeries could be stopped. This is especially impressive given that less than 10 years ago, a staggering 9% of adults needed operations to protect them from permanent sight loss.

The achievement wouldn't have been possible without the hard work of community health volunteers such as John. The volunteer searches villages for people with advanced signs of trachoma and bring them for surgery, while teaching people about the good hygiene practices that stop trachoma from spreading.

John was one of the first to volunteer in his area, managing several villages on his own. There are now seven volunteers doing the work he used to do alone, but with 45 homes in his village he still has his work cut out helping friends and neighbours stay trachoma free. He is passionate about changing the behaviours of as many people in his community as possible.

"When the chiefs have meetings, they usually let us talk to the community about all the activities they have to do," he says.

"We teach people to make sure they practice hand washing and washing their face. The main problem with trachoma is lack of water. Because when somebody wakes up in the morning, they don't even have a single cup of water to wash their face."

To help counter this, John goes to the borehole to give people information while they collect their water.

"When we do house-to-house visits, if we see things that aren't correct in that house, we tell them 'you have to have a pit [latrine], you should throw all your rubbish away, and ban animals from the house'. With hygiene I've seen that people are really working on this behaviour. They are improving. I feel good that we are changing the community."

The challenges of delivering WASH

Working on WASH isn't easy - but by working collectively we are finding solutions

Effective and accessible WASH services require infrastructure. But improving infrastructure **can be costly**, both in terms of initial capital expenditure and ongoing maintenance costs. Building infrastructure is also not in the remit or expertise of the health sector. To address this, Sightsavers and partners are supporting cross-sector coordination groups to advocate for targeted infrastructure programmes.

For NTD programmes to be successful in their WASH activities, they need strong partnerships with water and sanitation agencies. But **coordinating these stakeholders is often difficult.** This is partly because NTD programming tends to be led by ministries of health at a national level, while WASH interventions tend to operate at a local or district level and involve a range of local ministries. By activating sub-national level WASH and NTD coordination forums, we are working to enhance coordination.

The two sectors often measure progress and success in different ways, which can make collaboration difficult. For example, NTD programmes measure disease prevalence, whereas the WASH sector measures infrastructure coverage. Sightsavers is working to merge WASH and NTD data, creating value for both sectors.

Providing a clean and safe water source or toilet does not mean people will always use it. Effective **behaviour change** requires addressing deep-seated practices, rooted in social and cultural norms. Although behaviour change is the most sustainable and cost efficient way to ensure a disease does not reoccur, **interventions to change**

hygiene behaviours can be complex to design, implement, evaluate and sustain. Fortunately, Sightsavers has strong partnerships on the ground that have helped us to design sustainable, impactful, and culturally-relevant behaviour change interventions.



Students at Antuanduru Primary School show how to wash their hands and face in Meru, Kenya.

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Students recite ways to prevent trachoma at Mbaranga Primary School in Meru, Kenya, which benefits from the Sightsavers' WASH project.

Why WASH is worth the investment

Multiple studies provide compelling evidence on the value of WASH for NTD programmes.

For instance, a 2018 study found that when more than 80 per cent of a community has good sanitation, the entire community is more likely to be protected against active trachoma.⁶ Another study found that integrating WASH interventions into mass drug treatment programmes significantly contributes to controlling trachoma.⁷ A research review published in 2014 found strong evidence on the effectiveness of the F and E components of the SAFE strategy of trachoma elimination.⁸

Interventions that include WASH have been shown to be highly effective in

reducing the environmental exposure to, and transmission of, eggs and larvae for intestinal worms and schistosomes.⁹ Implementation of improved water and/or sanitation facilities has been observed to decrease the prevalence of the intestinal roundworm *Ascaris lumbricoides* by 29 per cent and schistosomiasis prevalence by 77 per cent.¹⁰

We also know that access to and use of WASH and sanitation facilities is critical when the decision is made to stop mass treatment in an area or district. Without this, there is a high risk of the disease reoccurring.

Encouraging collaboration between the WASH and NTD sectors

Historically, there has been limited crossover between the WASH and NTD sectors.

But in recent years, recognition is growing of the importance of cross-sector working to address the environmental factors that help NTDs to spread.

In 2015, WHO launched a new strategy to encourage greater collaboration between the WASH and NTD sectors. This sets out a number of actions on shared planning, delivery and evaluation of programmes, strengthening and sharing evidence, and using monitoring tools to better target

interventions.¹¹ It calls on both sectors to use their expertise and resources to ensure that investments in WASH reach those most in need.

A key focus of Sightsavers' NTD work is to bring together actors that work on the interconnecting elements required to improve access to safe water and sanitation and improve hygiene. We do this in a number of ways, as our case study below explains.



Co-ordinating expertise on NTDs and WASH

Ascend's approach to WASH coordination is based on a simple step-wise process.

Officials in each country have been supported to conduct a landscape analysis, which compiles and assesses national and district information on WASH, NTD prevalence and programmes, and behaviour change interventions - and their relationship to one another. For example, Kenya's landscape analysis found that around half of the population have at least one NTD and that they tend to be living in poverty without adequate sanitation.

A WASH/NTD data assessment was also conducted to establish whether national NTD and WASH databases existed, and if governments would be willing to share WASH data via WHO's specially

designed ESPEN portal. (For more on our WASH data work, see page 14).

Lastly, a process for joint planning/ decision-making between the NTD and WASH sectors has been designed. The way in which coordination works varies from country to country. For instance, the landscape analyses found that seven countries already had WASH NTD coordination platforms in place. Our focus in these countries is to utilise and strengthen these existing structures to ensure the WASH and NTD sectors work together in more robust and effective ways.

Developing tools to support WASH programmes

As well as delivering programmes, Sightsavers has played a critical role in developing new approaches to WASH in the context of NTDs.

We helped create a how-to guide on working with WASH sectors

In 2019, Sightsavers provided technical advice to WHO for a how-to guide for NTD programmes on working with WASH sectors.¹² The toolkit provides country programmes with a process to strengthen collaboration and planning between the WASH and NTD sectors. As part of the Accelerate programme, six countries have completed exercises outlined by the toolkit and are in the process of designing joint WASH and NTD interventions.

“This toolkit is unique in supporting all health managers to work with the WASH community, guiding them through building those partnerships, mobilising resources, and designing, implementing and evaluating interventions.” Dr Maria Neira, director, WHO Department of Public Health, Environmental and Social Determinants of Health.¹³

We've helped to create WASH information, education and communication materials for NTD programmes

We have designed a range of country-specific materials to promote behaviours that prevent infectious diseases, such as

trachoma, from spreading. These include posters, flyers, lesson plans and activity sessions for health school clubs, board games, wall murals, and scripts for radio jingles and plays and outdoor performances.

We have created WASH advocacy guidance

In Kenya, to support government officials make the case for more resources for NTDs, we have designed a range of infographics that provide a snapshot of NTDs and WASH in the country. To help improve coordination we have also designed terms of reference for joint-working groups, which define the group's purpose and structure.

We co-authored the BEST framework for NTDs

In 2017, Sightsavers co-authored the BEST framework (Behaviour, Environment, Social inclusion and equity, and Treatment) through the Neglected Tropical Disease Non-Government Organisation Network (NNN). This encourages those working on NTDs to embed cross-sectoral approaches and systems in their work.¹⁴



Working with children: soap and superheroes

The simple act of hand and face washing with soap can help reduce the risk of trachoma in children by 60 per cent. That's why in 2014 Unilever and Sightsavers created the Super School of Five, inspired by Lifebuoy soap's 'School of Five' handwashing campaign. This innovative programme features five cartoon superheroes that help children to remember the five key times in the day when they should wash their hands and faces.

The programme aims to form, then reinforce, good hygiene habits. It works because it's fun, memorable and rewarding, and is based on what motivates children to change their behaviour.

Super School of Five was trialed in Kenya to great success. The programme then expanded to Ethiopia, Nigeria and Zambia. Around 340 schools and 3,700 teachers have taken part in the programme since it began.

The impact has been huge – an evaluation of participating schools in Turkana, Kenya found face and hand washing increased by 40 per cent, a level of change that was still in place 20 months after the programme ended. Supported by other activities, the prevalence of trachoma in communities where the programme has run has fallen by 30 per cent, on average.



Students from Ngangula Primary School in Chikankata, Zambia, dress up as their favourite Super School of Five characters.



A woman collects water in the Gurage zone, Ethiopia.

Using WASH data to combat NTDs

Sightsavers is supporting a number of countries to merge WASH data with other information about NTDs.

Extensive WASH and NTD data from local districts in countries where we work is now being collected and stored in a central database. This includes data on access to safe drinking water, sanitation and waste management, hand and face washing stations, and hygiene levels in schools and health facilities.

Data from both areas is then analysed together, creating knowledge on how to

create more effective NTD and WASH programmes, and greater collaboration between key players.

By showing that working together on WASH can control multiple diseases, it is hoped that more support for multi-sector initiatives will emerge, alongside increased investment to improve WASH-related infrastructures.



Innovating in Ethiopia

Sightsavers is supporting the Ethiopian government to develop a national NTD database. This will integrate all NTD programmatic data with other national and global data systems. This new database has been built using the same software as its national health information management system, a platform called DHIS2¹⁵. The goal now is to fully integrate the new national NTD database into the country's health management information system and other global NTD systems.

This process has helped the Ethiopian ministry of health agree a set of standardised indicators to track surgeries, treatments and access to water, sanitation and hygiene. In 2018,

the decision to include these indicators in Ethiopia's health information management system was made, signalling a major step forward.

The work done in Ethiopia, which was initially carried out through the Trachoma Initiative and DFID SAFE programmes, has shown that merging NTD and WASH data can be an effective coordination tool. This has led to the approach being replicated in Zimbabwe, Nigeria, Kenya and Tanzania through the Accelerate programme.



in the Gurage zone, Ethiopia.



Zambia's behaviour change campaigns and use of technology

As part of the DFID SAFE programme in Zambia, Sightsavers worked in partnership with health research organisation Akros to gather data about hygiene and cleanliness in local communities.

Data about the cleanliness of children's faces and the hygiene of household surroundings were uploaded via mobile phone to a database. Areas of weakness were identified and shared with village leaders via interactive tablets, so barriers could be overcome and support given to people who needed it the most.



Jendi Hamaba, 9, from Ngangula Primary School, in Chinkankata, Zambia fills a tippy tap with water she carried to school.



Teacher Selina Banda from Nansenga Primary School in Chikankata, Zambia, teaching a class about the Super School of Five programme.

To ensure we reached older children at school, Sightsavers worked alongside school-based, community-led sanitation and hygiene programmes that share data with head teachers on hand and face washing in schools. We also worked with partners to adapt the national electronic health system to include data about trachoma and face washing.



Home of Keby Munyati from Nansenga Primary in Chikankata, Zambia, where a new latrine and tippy-tap have been built.

Social behaviour change communication: the practices that underpin WASH

Social behaviour change communication (SBCC) programmes use a variety of proven methods and techniques to improve people's health by influencing the knowledge, attitudes and social norms that shape their behaviour.

SBCC interventions can be successful even if access to water and sanitation facilities is limited as people will still take action to keep their families safer from diseases such as trachoma.

Where water and sanitation facilities are available, SBCC programmes will seek to address the individual and collective behaviour of communities in relation to them. For example, if a community's public toilets are not well maintained and people are reluctant to use them, they may resort to open-air defecation.

There is no 'one-size-fits-all' solution; customs and practices are culturally unique so the approach is tailored to each area. For example, we may work in collaboration with national ministries of health and education to spread the message about face washing through existing school health clubs, as well as by training teachers and providing activities to engage children. We will also

support 'community-led total sanitation and hygiene' (CLTSH) activities, which encourage communities to assess their own sanitation needs and take their own actions to avoid open-air defecation. Our work also encourages communities to demand good-quality water and sanitation infrastructure.

Through the Accelerate programme we are working with SBCC experts ThinkPlace to create change by tapping into existing behaviours and their drivers. For instance, in Ethiopia the My Clean Beautiful Family campaign is using social norms that associate pride with wellbeing in the family to promote face cleaning. The campaign combines radio and SMS adverts with the offer of photography portrait sessions in people's homes. Families who participate watch a face and hand washing demonstration and after they have cleaned their faces, each family member gets a free professional portrait taken.

Preparing for the future

We have ambitious plans to help fill in the gaps in WASH and NTD research, and our team is working with academics around the world to influence research agendas.

Water and sanitation play a prominent part in the UN's Sustainable Development Goals where eliminating NTDs has been included as an important target. Unquestionably this has encouraged the WASH and NTD communities to work together. We will continue to push for joint working between WASH and NTD sectors to be prioritised in national and international health agendas.

We will also carry on supporting countries to hone tools and strategies to ensure the WASH elements of current and future NTD programmes are as effective and sustainable as they can be. We will also ensure that merging WASH and NTD data is a strategic priority.

As our work evolves, we hope to see the social behaviour change communication interventions developed through WASH replicated in other areas, and become its own distinct field.

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Photo of students from the Super School of Five programme at Chikonkomene Primary School in Chikankata, Zambia. Students from left to right: Chisomo Lungu, 12, Charity Sipopa, 12, Lamik Goma, 12, Saboi Malala, 12, and Tracey Mwale, 12.

References

1. The other two NTDs Sightsavers works on are river blindness and lymphatic filariasis.
2. UNICEF and WHO (2019) Progress on household drinking water, sanitation and hygiene 2000-2017: Special focus on inequalities. www.who.int/water_sanitation_health/publications/jmp-report-2019/en/
3. The Queen Elizabeth Diamond Jubilee Trust was a time-limited charitable foundation and ceased operating in 2019 after successfully completing its goals.
4. Sightsavers et al. (2019) Trachoma elimination in Africa: lessons from two multi-country initiatives. www.sightsavers.org/wp-content/uploads/2019/07/Trachoma-Intiative-Report-Lessons-two-multi-country-initiative.pdf
5. Ibid.
6. Garn, J. et al (2018). 'Sanitation and water supply coverage thresholds associated with active trachoma: Modelling cross-sectional data from 13 countries', PLoS Medicine, 12 (1). doi.org/10.1371/journal.pntd.0006110
7. Mills, J and Cumming, O (2016). The Impact of Water, Sanitation and Hygiene on Key Health and Social Outcomes: Review of Evidence. www.lshtm.ac.uk/sites/default/files/2017-07/WASHEvidencePaper_HighRes_01.23.17_0.pdf
8. Stocks, M. et al (2014) 'Effect of Water, Sanitation, and Hygiene on the Prevention of Trachoma: A Systematic Review and Meta- Analysis', PLoS Medicine, 11 (2). doi.org/10.1371/journal.pmed.1001605
9. For example, see Campbell, SJ et al. (2014) 'Water, Sanitation, and Hygiene (WASH): A Critical Component for Sustainable Soil-Transmitted Helminth and Schistosomiasis Control', PLoS Neglected Tropical Diseases, 8 (4), e2651. www.ncbi.nlm.nih.gov/pmc/articles/PMC3983087/
10. Ibid.
11. WHO (2015) Water sanitation and hygiene for accelerating and sustaining progress on neglected tro Why water, sanitation and hygiene are vital pical diseases. A global strategy 2015-2020. www.who.int/water_sanitation_health/publications/wash-and-ntd-strategy/en
12. WHO (2019) WASH and health working together: A 'how-to' guide for Neglected Tropical Disease programmes. www.who.int/water_sanitation_health/publications/wash-health-toolkit/en
13. WHO (31 January 2019) NTDs: WHO launches toolkit to optimize water, sanitation and hygiene interventions (accessed May 2020). www.who.int/neglected_diseases/news/toolkit-water-sanitation-hygiene/en
14. NNN (2017) The BEST Framework: A comprehensive approach towards Neglected Tropical Diseases. www.ntd-ngonetwork.org/sites/nnn/files/content/attachments/2019-06-11/BEST_FRAMEWORK.pdf
15. For more information see www.dhis2.org

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