In 2022 The MENTOR Initiative celebrated its 20th anniversary. Since 2002, we have been responding to humanitarian crises to reduce deaths and suffering in challenging settings where the disease burden is the highest. We work where few others can, applying 20 years’ experience of large-scale vector control and healthcare in acute and ongoing emergencies.

UN OCHA estimate that in 2023, a record 339 million people will need humanitarian assistance and protection – a significant increase from 274 million people at the beginning of 2022.

Many of those will be displaced, fleeing conflict and natural disasters, and trying to survive in temporary shelters, camps or with host communities. In these settings, overcrowding, poor sanitation, overburdened healthcare and food insecurity increases the spread of many diseases. Typical preventative and curative measures do not work in these complex crises.

In 2022, MENTOR continued its response to address ongoing humanitarian emergencies across a range of countries and contexts. Our solutions are tailored to meet the needs of those most affected by crises, including:

- Integrated vector control to protect more than 3 million people from malaria and leishmaniasis.
- Supporting community-based healthcare to improve the diagnosis and treatment of malaria and other life-threatening diseases.
- Reaching more than 1.3 million people at risk of neglected tropical diseases such as soil transmitted helminths, schistosomiasis and onchocerciasis with Mass Drug Administration campaigns.
- Reducing rates of diarrhoeal diseases like cholera through better access to water, sanitation and hygiene.

I am proud to present updates from our programmes in this report. We also feature some of the 450-strong team dedicated to delivering this critical work and making a difference to people’s lives.

Special commendation must go to the team in Türkiye and Syria for their extraordinary commitment to helping others after the earthquakes when they had been so badly affected themselves.

We exist to serve those in most need – displaced and often forgotten people and communities affected by conflict and environmental disasters. With a committed team based primarily in-country, and partnerships that bring together a range of knowledge, expertise and experience we continue our work to save lives and lessen the suffering of millions of people.

Richard Allan - Chief Executive Officer
VISION

The MENTOR Initiative saves lives in emergencies through tropical disease control and then stays to help people recover from crisis with dignity. MENTOR works side by side with communities, health workers and health authorities to leave a lasting impact.

MISSION

The MENTOR Initiative is a discrete, agile organisation working with the world’s most vulnerable and hard to reach communities to reduce death and suffering from tropical diseases.

Our first and last considerations are the needs of the people we serve. Working in insecure and high-risk environments we establish large scale disease control during humanitarian emergencies. At the same time, we develop the capacity for the long-term sustainable control of these diseases.

We collaborate closely with communities, health workers, health authorities and other international organisations to establish effective surveillance, preventative and curative services, and learning for the future.

The strength of our partnerships brings together knowledge, power and resources for the greatest impact.

Our investment in targeted operational research brings evidence-based and proven disease control solutions to all our programmes. We use this learning to innovate, reduce costs and influence international policy and practice.

We will always uphold the highest professional values, standards, quality and accountability and our teams are committed to stay until the job is done.

HOW WE WORK

Founded in 2002, MENTOR specialises in the control of tropical diseases such as malaria, dengue fever and leishmaniasis, in complex, humanitarian crises. MENTOR provides a comprehensive package of interventions aimed to reduce the burden of diseases in acute and ongoing emergencies.

MENTOR works together with local governments, UN agencies and other partners to identify needs and develop interventions that maximise impact. MENTOR provides technical and operational support in six main areas:

- Integrated Vector Management
- Improving access to Quality Healthcare
- Neglected Tropical Diseases
- Water, Sanitation and Hygiene
- Monitoring and Evaluation
- Operational Research

MENTOR’s approach is to provide this specialist support in response to a humanitarian emergency to save lives and prevent diseases. We stay for as long as is needed to develop resilient and capable systems that provide effective healthcare and disease control.
**KEY PROGRAMME DATA**

**SYRIA**
The annual indoor residual spray campaign to prevent leishmaniasis reached over 2 million people, of whom around 1 million are internally displaced persons. Information, education and communication (IEC) activities to raise awareness of leishmaniasis prevention, diagnosis and treatment reached over 131,000 people.

**VENEZUELA**
The information, education and communication (IEC) campaign to raise awareness about the prevention, diagnosis and treatment of dengue reached over 577,000 people between April and December 2022. During the same period, 52,100 house-to-house visits were carried out, delivering information on hygiene promotion and vector control.

**MOSOAMBIQUE**
Between October 2022 and January 2023, the Internal Residual Spraying (IRS) campaign in Cabo Delgado reached 118,966 households protecting over 600,000 people from malaria. Hygiene promotion and larval source management campaigns reached over 909,000 people between August 2022 and March 2023.

**UKRAINE**
Imported and distributed over 20 tons of medical commodities to 67 health facilities in 2022.

**SOUTH SUDAN**
227,000 people were protected from malaria through the indoor residual spray campaign in 2022. Over 11,500 people in 26 primary schools were provided with hand washing facilities over 2022/2023.

**NIGERIA**
In Borno State, the combined delivery of malaria vector control and WASH interventions targeting vulnerable and internally displaced populations and host communities, reached more than 456,676 people in 2022.

**CENTRAL AFRICAN REPUBLIC**
From January 2022 to February 2023, 450 community health workers diagnosed around 95,000 cases of malaria and screened 83,622 children for malnutrition - diagnosing over 2,721 children with moderate acute malnutrition and 550 with severe acute malnutrition.

**ANGOLA**
832 health workers trained in malaria case management and 117 laboratory technicians in malaria diagnosis. Over 1 million children treated for soil transmitted helminths in deworming campaign.

**YEMEN**
A trial to study two innovative vector-control tools took place in urban areas of Aden and in camp settings in 2022/2023 as part of our Operational Research programme.

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**THE GLOBAL CONTEXT**

**Internally Displaced People**

At the end of 2022, 71.1 million people were living in internal displacement, due to disaster or conflict - the highest number ever recorded. The number of displacements associated with conflict and violence nearly doubled to 28.3 million people.

The number of Internally Displaced Persons (IDPs) in Nigeria makes the country the third highest in sub-Saharan Africa:

- 3,646,000 people were displaced from violence and conflict.
- 854,000 people were displaced by disaster.

Also in sub-Saharan Africa, South Sudan recorded the fifth highest number of internal displacements (movements) in 2022:

- 337,000 internal displacements by violence and conflict.
- 596,000 internal displacements by disasters.

**Global Report on Internal Displacement 2023, internal displacement monitoring centre (iDMC)**

**Malaria**

Globally in 2021, there were an estimated 247 million malaria cases in 84 malaria-endemic countries – an increase of 2 million cases compared with 2020. The WHO African Region continued to bear the highest burden, accounting for some 95% of global cases and 96% of global deaths in 2021.

29 countries accounted for 96% of malaria cases globally, and four countries – Nigeria (27%), the Democratic Republic of the Congo (12%), Uganda (5%) and Mozambique (4%) – accounted for almost half of all cases globally.

**World malaria report 2022, World Health Organisation**

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**Neglected Tropical Diseases**

More than one billion people were treated every year for four consecutive years between 2016 and 2019. Over the past decade, the number of people requiring interventions against NTDs has decreased by 25%, falling by some 80 million people between 2020 and 2021 alone.

This positive trend was disrupted by the COVID-19 pandemic. The 2021–2022 period also saw several outbreaks of NTDs, including dengue, chikungunya, leishmaniasis and scabies, whose management was made more challenging by restrictions on movement.

**Global report on neglected tropical diseases 2023, World Health Organisation**

**Water, Sanitation and Hygiene**

In 2019, use of safe WASH services could have prevented at least 1.4 million deaths and 74 million disability-adjusted life years (DALYs).

Diarrhoeal disease accounted for over two-thirds of the total WASH-attributable burden, with over one million deaths and 55 million DALYs. This comprised 505,000 diarrhoea deaths from unsafe drinking water, 564,000 from unsafe sanitation and 384,000 from unsafe hand hygiene.

**Burden of disease attributable to unsafe drinking-water, sanitation and hygiene 2019, World Health Organisation**

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**World Health Organisation**
On 6 February 2023, two earthquakes of magnitudes 7.8 and 7.5 respectively struck southern Türkiye and north-west Syria, killing at least 50,000 people, and injuring over 100,000. The earthquakes also caused widespread damage and destruction to buildings and infrastructure.

For Syrians living here this catastrophic natural disaster exacerbated the humanitarian crisis in this region, where around 2.9 million people are internally displaced due to the civil war. (source: OCHA)

Over the past decade, MENTOR has been coordinating and delivering a large-scale leishmaniasis control programme across northern Syria, supporting communities and healthcare facilities including in areas affected by the earthquake.

For the MENTOR team based in Gaziantep, Türkiye – near the epicentre of the earthquake – it was critical to establish an effective response to the disaster. It was quickly determined that the priority was emergency trauma care to treat injuries and transport injured people to medical facilities.

In the 48 hours after the earthquake, MENTOR was able to repurpose four of its mobile clinics to deliver emergency trauma care in the worst hit areas: Jandairis and Atareb, Aleppo Governorate and Sarmada and Salqin, Idleb Governorate.

This was made possible by the support from long-standing donors and partners USAID-Bureau for Humanitarian Assistance (BHA) and the United Nations Office for Coordination of Humanitarian Affairs (OCHA). Private partners including SC Johnson, Vector Global Solutions, Vestergaard and Sumitomo stepped up immediately by donating supplies and funds, to augment our emergency response capacity and treat those who were badly injured.

Experienced medical officers and assistants worked from the mobile clinics to treat a range of trauma injuries such as cuts and broken limbs. The mobile clinics were also used to transport patients with more serious injuries to health facilities further away. “The tremendous work provided by our earthquake emergency response team to the affected populations in northwest Syria is beyond them being aid workers – it was the human urge to serve and care for the ones in need. We all cherish their sublime confidence and professionalism demonstrated over the past week.” - Mohamad Agha Alkalaa, Regional Operations Manager

MENTOR donated critical medical supplies to seven health facilities and two mobile clinics run by local partner organisations: Ataa, Syrian American Medical Society (SAMS), Independent Doctors Association (IDA) and Dünya Doktorları Derneği (DDD). MENTOR medical officers also supported health facilities in Jandairis, one of the hardest hit areas.

The earthquake occurred at a time when another crisis for the already vulnerable population living around the earthquake-damaged buildings loomed. As the weather started to warm up from March, communities were even more exposed to sandfly bites and the risk of developing leishmaniasis, which can cause scarring, disfigurement and is sometimes fatal. The sandfly vector that spreads leishmaniasis and is endemic in Syria, breeds and proliferates in the cracks and rubble of damaged buildings.

Most cases are found in this part of the country where the protracted conflict has caused limited access to safe water and poor living conditions, including homes being set up among the rubble.

Ghassn Bnshi, Medical Assistant

Ghassn Bnshi is a Medical Assistant on MENTOR’s mobile clinic in Syria, which provides medical services focusing on leishmaniasis. When the earthquake struck, Ghassn and the mobile clinic treated people with trauma and injuries in the Harim District of the Idleb Governorate - one of the worst affected regions. This played a major role in reducing the burden on hospitals and reaching people quickly to treat injuries.

“We were able to use the mobile clinics to transfer critical cases to hospitals and provide follow-up treatment where people who had been displaced by the earthquake were sheltering. Or we referred them to the nearest medical point. There were many injuries as a result of the earthquake and the displacement of many families.”
Mohamad Agha Alkalaa, Regional Operations Manager

Mohamad Agha Alkalaa is the Regional Operations Manager covering the Middle East. Here, he establishes and maintains the organization’s operational, financial, administrative, grants and human resource systems across the region. Working closely with the team, he helps to ensure all vulnerable communities at risk in target areas have access to quality leishmaniasis and other vector-borne diseases case management and prevention.

“Throughout the aftermath of the earthquake I was in the office supporting the team with communications and working with the donor to divert resources to our trauma care response. This meant getting their approval and agreement for the planned support. I also issued care packages to all staff that were affected and made sure everyone was looked after. It was a very challenging time, implementing the work in response to the earthquake whilst at the same time trying to maintain self-control throughout the catastrophe. It was a case of responding to a disaster that was affecting us as well.”

Neglected Tropical Disease control in Syria

MENTOR’s annual Indoor Residual Spraying (IRS) campaign during the high transmission season (June to October) helps to protect people from leishmaniasis by spraying insecticide on inner walls of house and shelters, which kills the sandflies that land there. This significantly decreases their population and cases of leishmaniasis.

Sandflies in this region transmit Cutaneous and Visceral leishmaniasis. Cutaneous leishmaniasis causes skin lesions, mainly ulcers, leaving lifelong scars and serious disability or stigma. The visceral form of the disease affects the internal organs and is fatal if left untreated in over 95% of cases.

In 2022, MENTOR teams sprayed around 370,000 households in north-west and north-east Syria, protecting over 2 million people from this Neglected Tropical Disease.

The 2023 IRS campaign to stop the transmission and spread of leishmaniasis began in April 2023, which aims to cover over 400,000 homes. Because of the earthquakes, the campaign in the north-west increased its coverage of Internally Displaced Persons (IDP) camps and homes in host communities, to protect more people from leishmaniasis.

Supporting healthcare in Ukraine

The invasion of Ukraine in February 2022 has led to the second largest human displacement crisis in the world today after Syria. As of May 2023, nearly 5.1 million people are internally displaced, and more than 6.2 million refugees have been recorded globally. (UNHCR)

Soon after the war started, MENTOR began working with the health authorities in-country to support the procurement, import, storage and onward distribution of priority medical commodities to health facilities. This response applied MENTOR’s experience of working in insecure, complex settings whilst maximising the high degree of technical capacity in Ukraine to support the severely impacted healthcare system.

In 2022, MENTOR imported and distributed over 20 tons of medical commodities valued at approximately $4.8 million to 67 health facilities across the oblasts of Lvivska, Ivano-Frankivska, Kirovohrad, Mykolaivska, Kharkivska, Sumska, Chernihivska, Cherkasy, Poltava and to the Ukrainian Ministry of Health.

The MENTOR team developed a close relationship with local health authorities, getting relevant information about priority medical commodities and locations as well as authorised access to regions. This enabled us to achieve this large-scale distribution and provided humanitarian support to millions of people.

“The organisation effectively delivered shipments to the doors of hospitals, helping doctors not to think about the delivery of medicines at that time and to perform their work efficiently.” - Andriy Dovbush, Logistics Assistant, The MENTOR Initiative.

“MENTOR’s programme contributed to the resilience and effectiveness of a system under extreme stress. With targeted support that capitalised on existing capacity, MENTOR was able to support the Ukrainian health system in the initial months of the war.” – The MENTOR Initiative Programme Director.
Community-based healthcare in Central African Republic

A network of community health workers (CHWs) is continuing to respond to the ongoing humanitarian crisis in Central African Republic by delivering critical primary healthcare to vulnerable communities affected by conflict and violence in the country.

Since 2008, this network of CHWs has allowed The MENTOR Initiative to navigate violence and insecurity to reach communities in fragile areas with continuous healthcare support. Otherwise, these hard-to-reach communities could not access healthcare because of insecurity, poor roads and cost of travel.

From January 2022 to February 2023, 450 CHWs supported by MENTOR carried out over 118,700 consultations and diagnosed around 95,000 cases of malaria. The CHWs screened 83,622 children for malnutrition - diagnosing over 2,721 children with moderate acute malnutrition and 550 with severe acute malnutrition. The total number of referrals for severe diseases was 8,856 cases.

Community health workers are recruited directly from their own and host communities, ensuring they are trusted and established in their communities in a way that outsiders would not be. In cases of population displacement, the community health workers can move with their communities, and receive support and supplies from their supervisors in situ, or at an agreed safe location.

They provide a range of healthcare services in communities, focussing on the three deadliest diseases - malaria, diarrhoea, and respiratory infections. CHWs carry out screening for malnutrition, provide ante-natal services to pregnant women, and support mass distribution campaigns delivering deworming treatments and vitamin A.

CHWs identify patients who are severely ill and pay for them to be transported by local motorbike taxi to the nearest health facility or hospital. They are equipped to treat children with severe malaria symptoms and ensure they receive follow up care, significantly reducing deaths from severe malaria in these communities.

MENTOR also supports the provision of training, supplies and salaries for several roles within health facilities to improve referral level healthcare. This enables specialised support for specific areas of concern such as gender-based violence. Health facilities are supplied with appropriate medications and staffed sufficiently, without which healthcare would be completely inaccessible or virtually non-existent.

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Health Challenges

CAR remains among the most challenging places in the world in terms of provision of healthcare. A combination of poor living conditions, malnutrition and inadequate shelter means that disease spreads quickly and is often fatal, particularly in children.

The country’s health system is characterised by a scarcity of skilled health workers, a lack of essential drugs and limited service delivery. This includes access to secondary health, sexual and reproductive health services. Young children and pregnant women are especially vulnerable to disease, illness and death in this setting, and mortality rates are unacceptably high.

The deteriorating nutrition status of many of the communities we serve is affecting immunity, which leads to increased susceptibility to diseases that are often life-threatening.

Existing data seems to confirm the challenges in reducing the burden of these diseases in CAR and their associated mortality. Access to food, clean drinking water and essential sanitation services is also limited further aggravating the humanitarian needs that are expected to increase in 2023.

Female Focal Points

A network of women called Female Focal Points (FFP), was formed after a study of Community Health Workers in CAR in 2016 found women were not always comfortable approaching male CHWs about personal health issues.

The Female Focal Point network deliver direct health information and advice, particularly on maternal and child health issues. It has been found that women are more likely to listen to advice on child health when given by a FFP.

Initially, this network was set up on a voluntary basis providing information, education and communication (IEC) and sensitisation activities (directly engaging with the community to raise awareness of an issue on a personal level). Now FFPs are paid monthly and are an integral part of MENTOR’s community health model, improving the uptake of treatment and vaccinations and helping to prevent diseases.
Malaria control in Nigeria

The MENTOR Initiative’s seasonal Indoor Residual Spraying (IRS) programme was carried out in Borno State, Nigeria in May 2022, where malaria is the leading cause of morbidity and death. This was the second year of this large-scale spraying programme, protecting around 400,000 people in camps and communities in the region ahead of the rainy season.

MENTOR communicated the benefits of IRS and built trust with communities before the spraying by engaging with various stakeholders such as the Ministry of Health, religious and local leaders, village heads and local politicians. This helped to ensure a high take-up and the programme effectively protected people from malaria.

Over 100 members of the local community were trained and equipped to do the spraying during the six-week programme, with teams made up of a sprayer and a mobiliser (who liaises with the families and explains the process).

Lesha, who has five children, fled to Maiduguri due to the conflict caused by the militia group Boko Haram. She said: “I am very happy to have had my home sprayed. I heard about it from last year’s programme in 2021 and was hoping my house would be targeted this year. Before the spraying there were lots of insects, including mosquitoes, in the house, in the food, on clothes, in the bed – and now they are gone. I contracted malaria last year when my house was not sprayed.”
Malaria control and elimination

MENTOR also continues to support the National Malaria Control Programme (NMCP) in Angola to control malaria in high transmission areas of the country. In 2022, MENTOR supported the training and supervision of community and health facility workers across several provinces. Training focused on malaria case management and reached a total of nearly 1,200 health facility workers and 350 community health workers. Training was followed by around 700 supportive supervision visits.

In low transmission areas of southern Angola, MENTOR supported the NMCP with the ongoing transition to active surveillance activities focused on malaria elimination.

Targeted Indoor Residual Spraying (IRS) that was carried out in border districts with Namibia protected around 485,000 people from malaria. Targeted IRS is guided by improved data quality that identifies areas where there is an increase in malaria transmission.

Increased data quality has been a major focus of MENTOR’s work in southern Angola. These improvements initiated the start of active surveillance activities in late 2022. Active surveillance aims to report, classify and respond to each malaria case identified to rapidly and aggressively reduce the existing pockets of transmission in the region.

Arlete Troco, Entomological Surveillance Coordinator

Arlete Troco, a trained entomologist, is the Entomological Surveillance Coordinator in Angola. Here she supports the NMCP in the study of key behavioural characteristics of malaria vectors and testing local mosquito population for susceptibility to insecticides. She is also creating local capacity by training and supporting government supervisors to collect and identify the main malaria vectors. “Entomological surveillance is important to gain a clear picture of how mosquitoes behave and to adjust malaria control interventions to get the best results. We need to accelerate the progress Angola is making through surveillance and create the local capacity to continue doing so in the future using local resources.”

Dengue control in Venezuela

In Venezuela, poor sanitary conditions caused by the ongoing economic and political crisis has increased the rapid spread of dengue fever in urban settings. This puts many people at risk from this dangerous arboviral disease, which infects an estimated 100-400 million people every year (source: WHO).

Dengue, a viral infection transmitted through the bite of infected Aedes mosquito, can cause a flu-like illness or in more serious cases is lethal. Poor waste removal, piles of rubbish and water stored in open containers provide the perfect breeding sites, increasing the number of mosquitoes and the risk of being bitten and infected. Prevention and control activities are key to protecting communities from dengue, which has no specific treatment and in severe cases can be fatal.

MENTOR’s dengue control programme, which began at the end of 2021, has been working with the most vulnerable communities in seven districts across the country to reduce the risk of infection. Community Health Workers carry out house-to-house visits promoting important messages on vector control and hygiene promotion. MENTOR has also distributed water tanks and lids for water containers, for safe water storage and to reduce mosquito breeding sites.

Zaida lives in one of these communities, where she lives with her husband who is bed ridden. Water is supplied once a week in her neighbourhood. Now that she has received a water container from the programme, she is able to safely store the water to use for cleaning and drinking over the week. Zaida also received information on how to ensure safe drinking water and to maintain a clean household. She said: “No one ever comes here; we never received any help. Thanks to MENTOR we learned a lot about dengue and how to avoid having so many mosquitoes in the house. With my new water tank, I have sufficient water to last for the week.”
MENTOR supported the construction and supply of 2,860 tippy taps across six districts of Cabo Delgado Province, Mozambique in partnership with the Provincial Health Directorate (DPS) and local communities.

The new tippy taps ensure more than 300,000 people have access to handwashing stations, reducing the burden of diarrhoeal disease and risk of cholera outbreaks in these communities. Tippy taps are a type of handwashing station that are easy to build, low cost and made using local materials. Soap and clean water are the other two items needed for the station to function. In the absence of soap, ashes can be used as a substitute.

MENTOR also constructed tippy taps made of steel and distributed these to 48 schools affected by conflict, in the districts of Metuge, Chiure, Montepuez and Mueda. These tippy taps are adapted for children with a disability or who are wheelchair users.

In Cabo Delgado, most schools affected by the conflict lack basic services such as access to water, sanitation facilities and handwashing stations. Handwashing is one of the most useful methods to reduce the burden of diarrhoeal diseases, and children that practice regular handwashing are less likely to suffer from these diseases.

The availability of tippy taps has shown to significantly increase handwashing and the use of soap in communities. One study in the BMC Public Health journal reported that it effectively prevented episodes of stomach pain among participants. Tippy taps are placed in areas identified by local authorities and community members, such as Internally Displaced Persons (IDP) settlements, health facilities, schools and markets.

Hygiene promoters trained by MENTOR are also advocating for local families in neighbourhoods hosting Internally Displaced Persons to build their own tippy taps with their guidance. More than 1,500 tippy taps have already been installed by community members with their own materials, showing a high level of engagement and ownership of the activity.


Emergency programme in Cabo Delgado

Between March 2022 and May 2023, MENTOR implemented the emergency water, sanitation and hygiene (WASH), and healthcare programme in Cabo Delgado Province, Mozambique. The programme, supported by USAID’s Bureau of Humanitarian Assistance, aims to reduce the burden of vector-borne diseases amongst conflict-affected communities. Activities included:

- **Indoor Residual Spraying (IRS)**
  - The Indoor Residual Spraying campaign was carried out in partnership with the National Malaria Control Program (NMCP) and the Provincial Directorate of Health (DPS) in five districts, reaching over 600,000 people by spraying around 119,000 households (87% household coverage).

- **Hygiene and health promotion**
  - Door to door campaigns took place in internally displaced person (IDP) resettlement camps and host communities in six districts, reaching around 909,000 people with information and advice on health, hygiene and sanitation.

- **Improving access to healthcare**
  - Technical refresher training focusing on malaria diagnosis, treatment and referrals; supply chain management; and hygiene promotion was delivered to 305 community health workers (CHWs) and 87 CHW supervisors.
  - From July 2022 to April 2023, community health workers carried out 372,078 consultations. Over 50,000 cases of malaria were diagnosed in children under five years, and over 46,000 in children over five years. Community health workers also diagnosed 15,014 cases of diarrhoea and 19,689 cases of pneumonia.
Safe water and improved sanitation in South Sudan

In 2022, MENTOR worked with UNICEF and communities to implement a sustainable WASH programme in four counties of Eastern Equatoria State. This has increased access to water as well as improved hygiene and sanitation. This work has also created capacity in the community to sustain the availability of clean drinking water, which has helped to prevent waterborne and foodborne diseases.

In South Sudan, 59% per cent of the population does not have access to safe water, according to UNICEF. Dirty water, poor hygiene practices and a lack of sanitation significantly increases the risk of diseases like cholera and acute diarrhoea – the leading cause of death among children in the country. This crisis is compounded by extreme weather that causes frequent flooding, which contaminates water sources and adversely affects the availability of clean drinking water.

Community-Led Total Sanitation (CLTS)

Communities in Eastern Equatoria State came together with MENTOR staff and ministry officials in October 2022 to celebrate several villages being declared Open Defecation Free (ODF).

So far 60 communities have been declared ODF, which is achieved after a year since Community-Led Total Sanitation (CLTS) activities were implemented.

This initiative is part of the Sustainable WASH for Resilience programme with UNICEF (Partnership for Resilience and Recovery) in Eastern Equatoria State.

CLTS focuses on the behaviour changes needed to ensure real and sustainable improvements to sanitation and hygiene. This approach facilitates and mobilises communities to identify and find solutions to their needs using local knowledge, technology and innovation. Stopping open defecation is essential to break the cycle of faecal-oral contamination that causes diseases.

CLTS facilitates communities to analyse their own sanitation practices and faecal-oral pathways. Called ‘Triggering’ this process aims to initiate the community’s desire for collective change and action. Encouraging mutual support and local solutions leads to greater ownership and sustainability.

PROGRAMME HIGHLIGHTS

OVER 12 MONTHS INCLUDE:

- Reached 95,000 people with hygiene promotion messages.
- Reached 38,000 people with community led total sanitation (CLTS)
- Provided access to clean water for 30,000 people.
- Facilitated communities building 2,221 latrines in response to CLTS, to stop practice of open defecation.
- Reached 1,135 female students with menstrual hygiene messaging and menstrual hygiene kits.

Training in South Sudan

Around 70 people completed training in Community-Led Total Sanitation (CLTS) in Torit at the beginning of 2023, as part of an initiative to make the entire country open defecation free by 2030.

South Sudan remains one of the countries with the highest rates of open defecation worldwide. The newly equipped trainers will introduce the effective and low-cost CLTS approach into their respective states and implement it at scale.

Malaria control

In 2022, MENTOR carried out large-scale indoor residual spray (IRS) campaigns in refugee camps in Maban and Jamjang, South Sudan, to prevent malaria outbreaks during the high-transmission season, which reached around 205,000 refugees from Blue Nile State in Sudan.

The work to prevent and control vector-borne diseases in the camps also involved several fly control and mosquito larvicidal campaigns. Health education sessions for communities that live in the camps provided information about the symptoms of common diseases, where to seek help and how to prevent them.

Abdullahi Salan, WASH Coordinator, South Sudan

Abdullahi has a background in environmental science/climate change and brings over nine years of experience implementing water, sanitation and hygiene projects to the programme in South Sudan. His main responsibilities include implementing community-led total sanitation; hygiene promotion; and improving water access through the rehabilitation and construction of hand pumps and boreholes.

“Climate change and environmental degradation impact WASH, since water supply and quality depend on the natural water cycle and healthy ecosystems. Our upgrade work includes installing solar pumps and elevating borehole platforms in flood-prone areas, to help mitigate the effects of climate change.”
Treating Neglected Tropical Diseases

A large-scale Mass Drug Administration (MDA) campaign was carried out in seven counties in South Sudan to treat onchocerciasis and lymphatic filariasis.

The campaign was part of the Reaching the Last Mile Fund, for people living in hard-to-reach areas close to the border with Ethiopia. A team of nearly 4,000 workers carried out the MDA campaign, which treated 570,000 people for these two neglected tropical diseases.

School-based hygiene activities

Hygiene promotion programme in schools in Venezuela is using play-based activities to raise awareness of the importance of good hygiene and help protect children from diseases.

MENTOR has been working with educational partners in seven states to establish good hygiene habits in children, by promoting messages about hand washing, clean toilets and cleaning common areas of the school and community.

Since its start at the end of 2022, the programme has reached 80 educational centres, and trained 431 teachers and 225 school children in hygiene promotion.

Study in Syria

A study on the effectiveness of the first-generation spatial repellent ‘Envelope’ by SC Johnson called Mosquito Shield™ took place in a camp setting in north-east Syria and in an urban setting in north-west Syria between February 2021 and April 2022.

This spatial repellent tool is designed to protect people from leishmaniasis by reducing sandflies, the vector that transmits this endemic disease.

The epidemiological findings from northeast Syria showed the ‘Envelope’ had a protective efficiency of 48%. The incidence rate of cutaneous leishmaniasis (CL) was 9.9 per 1,000 cases in the control arm and 5.2 per 1,000 in the intervention arm.

The entomological findings showed that there were significantly fewer sandflies in the intervention households than in the control households.

Field evaluation trial in Yemen

A study to assess the impact of two novel tools in a humanitarian crisis setting was completed in Aden, Yemen in 2023. MENTOR carried out the trial in partnership with the National Malaria Control Programme in urban areas of Aden and in camp settings. The study was evaluating the impact of the tools on the density of the vector population, and to determine the communities’ perception of the tools.

The first tool is a long lasting spatial repellent tool called ‘Mesh’, the second-generation spatial repellent from SC Johnson known commercially as Guardian™. It is one of the first spatial repellent tools to provide long-lasting protection to users, with predicted efficacy of six months.

The active ingredient of Mesh is transfluthrin, a fast-acting volatile pyrethroid with low persistency, which act either by killing the vector or repelling them via sub lethal toxicity. The effect helps to reduce the risk of infectious bites.
The other tool in the trial is Sumilarv 2MR, a disk that slowly releases pyriproxyfen which prevents the emergence of adult vectors from the pupae stage. Manufactured by Sumitomo Chemical Co, the disk releases the synthetic juvenile hormone mimic over an extended period when placed in water.

The study aimed to assess the impact of Mesh on three disease-transmitting vectors: Anopheles mosquitoes, Aedes mosquitoes, and Phlebotomine sand flies, for people living in temporary shelters.

It is also comparing the feasibility and benefits of Mesh when used in vulnerable camp settings.

The results of the trial are being analysed but preliminary results indicate that both tools have had a significant impact on reducing the vector’s population density.

Qualitative surveys carried out in urban settings show high satisfaction from the community about the tools, fewer insect bites and a perceived decrease in rates of malaria. A participant in the focus group said: “Mesh certainly has a future in Yemen, and people will accept to buy it.”

Presence of Anopheles Stephensi confirmed

During the entomological surveys, larvae collected and raised to adults were morphologically identified as Anopheles Stephensi. The confirmation of An. Stephensi among IDP camps and host communities shows the recent spread of this vector, which breeds in open water containers.

The research was published in Malaria Journal* in January 2023, which outlined the urgent need to integrate WASH measures with larval control, to prevent the further spread of this invasive vector.

* Allan et al. Malaria Journal (2023) 22:1

Study of spacial repellent in Nigeria

MENTOR’s Operational Research team launched a new trial of Mesh spatial repellent in Borno State, Nigeria at the beginning of 2023. The study is assessing its effect on malaria cases among children 6 to 10 years old living in temporary shelters, along with its impact on Anopheles and Aedes mosquito populations.

Together with the Ministry of Health, the team met with leaders of internally displaced persons (IDP) camps ahead of the trial, to secure permission, provide information about the study and address concerns.

The entomological and epidemiological surveillance is taking place over six months in 24 IDP camps in the city of Maiduguri, including a sample of approximately 1,400 children aged between 6-10 years.

“Researching new prevention tools and treatments is critical for the successful delivery of disease control programmes that aim to have high rates of efficacy and feasibility. Spatial repellents to stop vector entry into households offer a promising new technology for the integrated management of vector-borne diseases. By conducting our research in vulnerable camp settings, we aim to evaluate the feasibility of Mesh and potentially scale up the use of this new tool to protect the many people at risk from harmful diseases.” – Sara Estecha-Querol, MENTOR Programme Manager – Operational Research.
Qualitative study on Community Health Workers

MENTOR carried out a qualitative study in Central African Republic in February 2023, to understand the experiences and challenges of Community Health Workers (CHWs) when delivering healthcare in their communities. Feedback about the training and supervision they receive from MENTOR was also collected. Findings from the in-depth interviews will help to improve services, training, and supervision.

The community-based healthcare approach in Central African Republic is making a significant impact on reducing diseases. By being based within their communities, they can continue delivering life-saving health services even if conflict forces them to flee somewhere safer.

Comments from the study included:
“During times of conflict when everyone goes to hide far away in the fields, I do the same with my community health worker documents and I treat patients. If we all hide in the bush and the community is trapped somewhere, I treat sick children under the trees.” – Mamadou*

Providing health information and encouraging preventative behaviours is also part of their role.
“When you arrive in the village, you will see that they take care of their houses, they protect their drinking water, they sleep under mosquito nets. They have literally changed their habits after the sensitisation (a process of raising awareness and understanding about an issue) sessions.” - Odilon*

*Names have been changed

Fatima Idris, Operational Research Officer

Fatima Idris is the Operational Research Officer in Maiduguri, Nigeria providing support to the field evaluation trial of the long lasting spatial repellent tool ‘Mesh’. Fatima works closely with the epidemiological and entomological teams, as well as other team members in data collection, finance, logistics and indoor residual spraying in Borno State, overseeing and supervising activities and protocols of the study.

“My role is to help evaluate the effectiveness of Mesh as a tool to repel disease carrying vectors like mosquitoes. I supervise the research field team carrying out epidemiological activities to monitor malaria in children aged from 6 to 10 years old. I also oversee the accurate collection and reporting of data from the field.”
FINANCIAL REPORT

FOR YEAR ENDED 30 SEPTEMBER 2022

Total Income: £17,419,288

Total expenditure: £17,284,855
DIRECTORS OF THE MENTOR INITIATIVE

Richard Allan: CEO
Richard is a qualified tropical parasitologist with many years' experience as a public health director. Before founding The MENTOR Initiative in 2002, Richard was the Roll Back Malaria co-ordinator for complex emergencies at the World Health Organisation. He established and managed the cross-sectorial partnerships that resulted in the development of important new disease control tools and strategies for malaria control.

Paul Jobson: Chair of the Board
Paul brings extensive organisational management skills and experience to support the CEO and the Senior Management Team to develop the organisation. Beginning his career in strategic consulting with W S Atkins, Paul then spent around 20 years in senior management in the automotive sector in the UK and North America, with Massey Ferguson and Perkins Engines. This was followed by almost a decade in private equity in UK becoming a partner with ECI Ventures. This was followed by four years as Managing Director of CDC (Commonwealth Development Corporation) investing in the developing world.

Linda Mobula
Linda has held various senior positions as a Health Specialist, Humanitarian advisor and Chief Medical Officer and was an ambassador for USAID / OFDA. She has worked for a range of organisations from the World Bank to Catholic Relief services in locations such as Haiti, Liberia and Philippines. Linda’s vast experience and expertise, such as Ebola response and improving public health systems, helps us to deliver our emergency diseases control programmes to a high standard.

D Scott Smith
As Chief of Infectious Disease and Geographical Medicine at Kaiser Permanente Hospital, California, Scott provides continuous technical support to the board. He serves with the San Mateo County California Mosquito and Vector Control Board. Scott also contributes to MENTOR’s global training workshops on malaria and vector-borne diseases, and works with the programme team to share knowledge and insights on disease control.

Gareth Williams
Gareth leads on systems and internal controls derived from his experience as a management consultant specialising in organisational change, service transformation projects and financial management working with government and corporations. Currently working as an independent management consultant providing advisory and programme management support, his expertise is cross-sectoral, and built from over 25 years in the private and international development sectors.

Children await treatment as part of a mass drug administration in Angola.
Community art raising awareness of dengue in Venezuela