

NTD Report 2015

Neglected Tropical Diseases





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More than 1 billion people – one-sixth of the world's population – are affected by one or more neglected tropical diseases (NTDs), and another 2 billion people are at risk, mainly in the tropics and sub-tropics.

Neglected tropical diseases flourish under conditions characterised by poor housing and sanitation, unsafe water, and limited access to basic health care. They cause great human misery – pain, disfigurement, and disability (mental and physical) – and result in about 0.5 million deaths each year. NTDs often lead to social stigmatisation and discrimination, especially for children, women and persons with disabilities. NTDs hinder development, keeping individuals and communities trapped in a cycle of poverty, and negatively impact almost all millennium development goals.

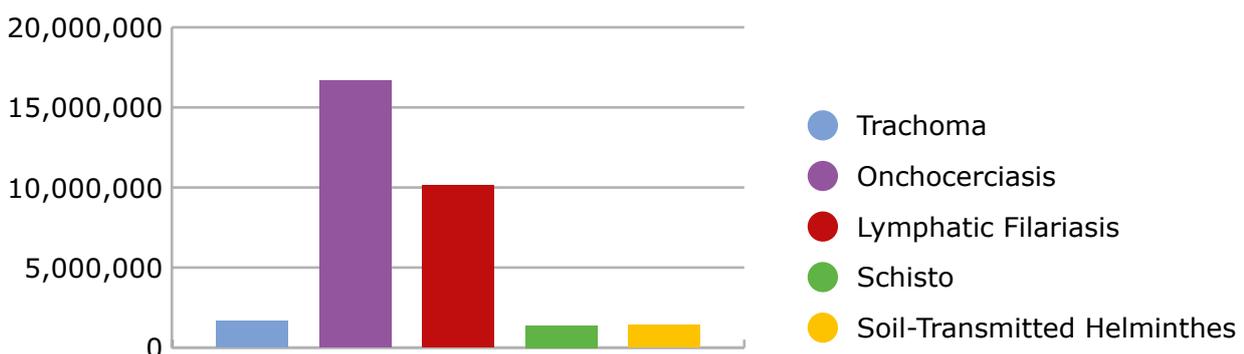
CBM supports NTD control programmes in areas where these diseases are identified as a public health problem. It has been successfully involved in the prevention of blindness from onchocerciasis and trachoma for more than 20 years. Building on its experience and expertise, and on its long-standing relationship with partner organisations and their networks all over the world, CBM is fully committed to engaging in fighting the five major NTDs (trachoma, onchocerciasis, lymphatic filariasis [LF], schistosomiasis [SCH], and soil-transmitted helminths [STHs]). CBM is dedicated to working with partners at the global, regional and country levels to support national programmes and their efforts to control or eliminate NTDs in line with WHO and national programme guidelines.

It is against this background that CBM supports the WHO NTD Roadmap, APOC and the proposed new AFRO 5-PCT entity, and is a member of the NTD non-governmental organisation (NGO) Network (NNN), the VISION 2020 Initiative, the GET 2020 and the GAELF alliances, the International Coalition for Trachoma Control (ICTC) and the Eastern Mediterranean Region (EMR) Alliance for Trachoma Control. It works with other disease-specific coordination groups and governments with the aim of achieving sustainable community-owned NTD programmes.

Mr. Dave McComiskey

CBM President

Global CBM-supported mass drug administration (MDA) for NTDs in 2014



CBM is committed to combatting NTDs by working with alliances and partnerships around the world.

With their primary focus on prevention and treatment, CBM-supported programmes treated 18.3 million patients for onchocerciasis and trachoma in 2014, while a further 12.9 million patients were treated for LF, STHs and schistosomiasis.

CBM further recognises the need to improve the quality of life of persons affected by NTDs and other disabilities, and aims to achieve inclusion of persons with disabilities as equal members of their communities.



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Dr Muhammad Babar Qureshi
CBM Director for Neglected Tropical Diseases

CBM supports work with NTDs in 25 countries



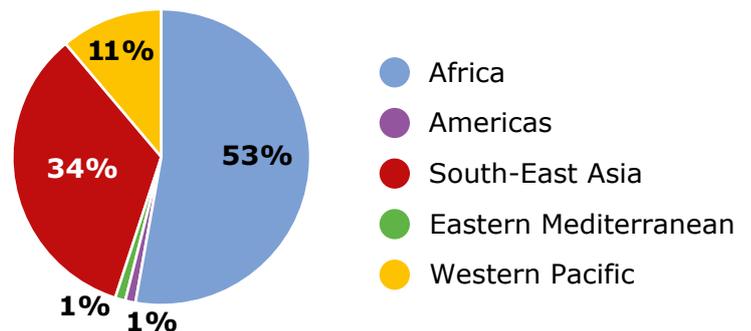
Trachoma

Trachoma is the world's leading cause of infectious blindness. According to the WHO's 3rd report on NTDs,¹ more than 21 million people globally have active trachoma, and 7.2 million are in need of surgery for trachomatous trichiasis (TT). Most of the burden of active trachoma is in Africa, along with nearly half the burden of TT. Globally, it is estimated that trachoma is responsible for a loss of \$5 billion in productivity each year. Blinding trachoma can have a devastating impact on whole families and communities.

CBM is committed to the elimination of blinding trachoma by 2020 as set out in the global VISION 2020 Initiative and the WHO-led GET 2020 Alliance through the implementation of the WHO endorsed SAFE strategy – ie **s**urgery for trichiasis; **a**ntibiotic therapy; **f**acial cleanliness; and **e**nvironmental improvement.

CBM-supported trichiasis surgeries for trachoma

10,914 surgeries in 2014



2014 statistics

- 10,914 TT surgeries were supported, mainly in Africa.
- 1,663,386 persons received antibiotic treatments through MDA with Zithromax®/TEO, mainly in Nigeria under the UNITED programme for integrated NTDs and in Ethiopia.
- 2,535,348 persons, mainly in Africa, received health education in facial cleanliness and environmental improvement (F&E).
- 39,483 community and health workers were trained, over 88% of these in Africa.
- 1,760 training trachoma trichiasis surgeons were trained or re-trained; with CBM support, many more eye health cadres were trained in TT surgery as part of their national curricula.

EMR Alliance for Trachoma Control

CBM is a founding member of this organisation. In a consortium with other non-governmental development organisations (NGDOs) under the auspices of the UK Department for International Development (DfID) funded Global Trachoma Mapping Project (GTMP), CBM has been assigned as an implementing partner for mapping trachoma in Punjab province in Pakistan.

¹ World Health Organization. Investing to overcome the global impact of neglected tropical diseases. Available at: <http://www.londonntd.org/news/who-releases-3rd-report-on-neglected-tropical-diseases>

The Queen Elizabeth Diamond Jubilee Trust Trachoma Initiative



TT surgery in Uganda. ©CBM

Along with other NGOs, CBM is involved in The Queen Elizabeth Diamond Jubilee Trust Trachoma Initiative to tackle blinding trachoma in 11 Commonwealth countries by 2019.

As an implementing partner in Kenya, Uganda and Malawi, CBM is responsible for the TT surgery element of the SAFE strategy in a number of districts known to have endemic trachoma. Treating this advanced stage of the disease reduces the immediate risk of people with trichiasis becoming blind and addresses the backlog of blinding trachoma. Surgery is conducted at outreach camps in affected communities across the identified districts. After training / re-training of CBM partner TT surgeons, the first surgical camps started in October 2014. By the end of June 2015 a total of 38 camps had been organised in the three countries. CBM is also providing support for the F&E components of the SAFE strategy.

The Amhara Trachoma Control Program (ATCP) in Ethiopia

Ethiopia is the country most affected by trachoma, carrying about one-third of the global trachoma burden. Along with South Sudan, it has the highest prevalence of active trachoma and one of the largest backlogs for TT surgery. The government of Ethiopia has identified the elimination of blinding trachoma by 2020 as one of its primary health priorities.

In 2014, CBM hosted the official launch of the second phase of the ATCP. CBM, in collaboration with the Organization for Rehabilitation and Development in Amhara (ORDA), the Bureau of Health, the Bureau of Education, and other NGOs including key WASH organisations, has been involved in implementing the ATCP since 2006.

According to WHO, about 80% of all diseases in the developing world are related to unsafe water supply and inadequate sanitation. Consequently, the second phase of the ATCP emphasises the need for a truly comprehensive SAFE strategy with enhanced focus on F&E through concerted efforts from the government and development agencies. The impressive progress made in the face of massive challenges in Ethiopia highlights the key role played by such partnerships in eliminating blinding trachoma.

“If we work alone we benefit ourselves but when we work together we benefit the community.”

**Former CBM Ethiopia Country Coordinator,
Mr. Tigabu Geberemedhin.**



Serkie in her hut. ©CBM

The fight against Trachoma is a long one ... (Cover story)

Mother of two, Serkie Yesu, suffers from TT. She and her husband Ali are peasant farmers who live in the Amhara Region of Ethiopia, without electricity, latrines and safe water. They cook over an open fire and live with their cattle – their most valuable possessions – under the same roof to protect them from thieves. “This is a breeding ground for flies and a source of trachoma,” says Teshome Ayele, a social worker from the CBM-supported ATCP. People in Amhara are sometime reluctant to learn more about the causes, consequences, prevention and treatment of trachoma. “They have other pressing problems, fighting for daily survival,” says Sadda Ashebia, a local governmental health extension worker and part of ATCP, who visited Serkie for the first time in 2014. Even though Serkie’s right eye had been itchy at that time, she wouldn’t listen to Sadda’s advice. “People here have that all the time. It comes and goes” Serkie said and added: “There’s nothing we can do anyway.” Her eyelashes had not turned inward at that point, but when they eventually did the pain became unbearable. Serkie initially asked her sister to pull out the lashes, but relief was short lived, as they always grew back. In the end Serkie couldn’t do anything and just wanted to rest with her eyes closed. With every hand needed for the family’s survival, her husband Ali became very worried. So, finally, Serkie listened to Sadda, who told her about the possibility of TT surgery as part of ATCP’s work.

As agreed, Serkie was picked up by a four-wheel-drive car belonging to CBM’s partner, ORDA, and taken to the nearby Boru Meda Hospital, which is supported by CBM. “She came here just in time. The eyelashes had turned inward as result of scaring but had not done permanent damage to the eye,” the nurse noted. Serkie’s operation took only 20 minutes, and she returned home on the same day. The following day, a senior nurse visited Serkie at home to examine her. “Everything was fine ... I can see a good future” Serkie says, and smiles at her daughter Hayte.

Thanks to ATCP's work to increase awareness of trachoma, Serkie and her family have now undertaken some changes at home. The animals are sheltered in a separate part of the hut, and Ali has built a pit latrine. With advice from ATCP, they are now planning to improve the latrine further to make their home a place free from flies – and trachoma.



Hayte – Serkie's 2-month-old daughter. ©CBM

The family now also has clean water; one of the 36 'safe springs', built with funding from CBM, is close by and protected from cattle by a fence. "I wash my hands and face several times a day and so do all my children," Serkie says, "I learned this from health worker Sadda."

Sadda also told Serkie about the free annual mass drug distribution (MDA) of Zithromax® donated by Pfizer. Serkie is very grateful and adds: "Please continue your work. I don't want our children to suffer in the same way, and there are so many others who also suffer from trachoma."



Serkie with her neighbour. ©CBM

This is very true. As the nurse was about to leave, two neighbours approached him with eye problems. Both have active trachoma and one has already trichiasis from trachoma. The nurse noted down their names and arranged to check all other family members. The fight against trachoma is indeed a long one!



Serkie with husband Ali and daughter Hayte. ©CBM

Onchocerciasis (River Blindness)

After trachoma, onchocerciasis – commonly known as river blindness – is the second most important infectious cause of preventable blindness. According to the WHO, worldwide 37 million people are infected with the filarial worm *Onchocerca volvulus*, which causes onchocerciasis, and more than 100 million people are at risk of infection. As a result of infection, 800,000 people are visually impaired and about 270,000 of these are blind. Onchocerciasis occurs mainly in tropical areas: more than 99% of infected people live in 31 countries in sub-Saharan Africa.

CBM has a long history fighting onchocerciasis in Africa, with the first Mectizan® treatments given in 1988. Due to the remarkable success of the WHO African Programme for Onchocerciasis (APOC) partnership – involving a community directed approach (CDTI), Government commitment, drug donations through the Mectizan® Donation Programme (MDP) and active support from NGOs – the incidence of blindness due to onchocerciasis is now gradually reducing. This is a fantastic achievement especially when the many challenges of getting the drug to all in need (such as poor infrastructure, weak health systems and conflict) are taken into consideration. This was particularly difficult in the Central African Republic and South Sudan in 2014.

2014 statistics

- 16,675,731 persons received treatments through MDA with Mectizan® (ivermectin). These were mainly in the Democratic Republic of Congo (DRC), in Nigeria (as part of the UNITED programme for integrated NTDs) and in Burundi.
- 3,696,468 persons, mostly in DRC, received health education for the prevention of river blindness.
- 15,430 patients received rehabilitation services.
- 177,472 CDTI community and health workers were trained.

Elimination of onchocerciasis in Ecuador

Last year the people of Ecuador and partners celebrated the elimination of river blindness in their country. Ecuador is only the second country to be verified as onchocerciasis free by WHO. CBM has been involved in fighting this disease in Ecuador, as part of the Onchocerciasis Elimination Programme for the Americas (OEPA), since 1992.

Onchocerciasis projects in DRC

A total of 18 million people in DRC are at risk of onchocerciasis. With technical support from CBM and APOC, the Ministry of Health in DRC launched a national programme for the control of NTDs, based in Kinshasa, which coordinates all NTD projects including 21 CDTI onchocerciasis projects. These are sustained by APOC, grants through the Merck's MDP, and by supportive NGOs. CBM supports 11 CDTI projects, and is the government's main NGO partner in the fight against onchocerciasis.

Onchocerciasis elimination programme in Burundi

Onchocerciasis was first detected in Burundi in 1950; however it was not until 1990 before the first distribution of Mectizan® took place, and this ran until 1997 with technical assistance from Belgium. In 2001, the Burundi Ministry of Public Health – in collaboration with APOC – started a mapping exercise, which CBM joined a year later. Having identified three disease foci, intervention projects were implemented in the provinces of Bubanza, Bururi and Rutana in 2005 and 2006. Despite many challenges, Burundi has one of the highest coverages, both geographical and therapeutic, of all APOC-identified post-conflict countries, and is now at the verge of elimination.

Epidemiological evaluations of microfilariae infections between 2012 and 2014 showed that levels in humans were close to zero. Entomological vector investigations have now been initiated under the national programme and APOC to determine whether interruption of transmission has been achieved, and thus to prove elimination of onchocerciasis in Burundi in the near future.



Mectizan® distribution in Burundi. ©CBM

“As part of the APOC partnership, CBM has supported communities affected by river blindness through conflict and post-conflict challenges from the start. Together with other stakeholders, this coalition will have averted 19 million disability-adjusted life years (DALYs) by the end of 2015. Today, new onset of blindness due to onchocerciasis has been reduced to a few remaining areas in Africa. However, we need to strengthen collaborations to support national programmes to secure these remarkable achievements, and to consign river blindness to history.” Prof. KH Martin Kollmann, CBM Senior Advisor for NTDs.

CASE HISTORY: onchocerciasis in Burundi

Batantanze Evariste was born in 1943 in the province of Cibitoke in Burundi. He is married and has 14 grandchildren. He and his family are farmers, growing tomatoes, bananas, manioc (cassava) and apricots. They also own goats and chickens. The family lives 2km away from the fast flowing river Muhira, where the black flies which carry the disease breed. This river used to be the family’s source of drinking water before the construction of a water well.

At the age of 50, Batantanze discovered several nodules under his skin. He also began to experience increasingly intense itching on his arms, legs and abdomen, and



“Leopard skin” due to onchocerciasis
©CBM

developed skin pigmentations – all signs of onchocerciasis. After several years had passed without treatment, he was too weak to continue working and his right leg was covered with 'leopard skin' and wounds due to his persistent scratching. Fortunately, at that point his eyes were not affected.

It was only with the start of the CBM-supported CDTI programme in 2005 that Batantanze (and, indeed, his entire community) had access to annual MDA of Mectizan®. The symptoms of the disease quickly disappeared, and Batantanze now sleeps well again and continues, despite his advanced age, to look after the family's animals.

CBM and Comprehensive NTD Programmes

The five major NTDs, trachoma, onchocerciasis, LF, SCH and STH, account for almost 90% of the global NTD burden and can be addressed through preventive chemotherapy (PCT). CBM supports MDA for the 'big five' in priority countries mainly through community-directed treatment – a strategy that helps communities to be responsible for the collection, delivery and recording of drug use.

The UNITED Programme in Nigeria

The UK DfID-funded UNITED programme is a four-year integrated NTD project in Northern Nigeria that was established in October 2013. Its aim is to control or eliminate seven NTDs through a coordinated approach. As members of the UNITED consortium, CBM and its local implementation partner, Health and Development Support (HANDS), are responsible for MDA for onchocerciasis, LF, schistosomiasis, STH and trachoma in communities in Kano state where these NTDs are endemic. Supporting and strengthening the capacity of NTD programmes run by HANDS and the Nigerian state are essential for sustainable success. CBM's NTD work in Nigeria is coordinated with other CBM-supported NTD activities for eye health and community base rehabilitation (CBR) in three more states (Jigawa, Yobe and FCT).



Training of community directed distributors in Nigeria. ©CBM

Drug distribution in Kano under the UNITED programme started in 2014. It consists of several phases, starting with the training of local community workers and school teachers, followed by awareness campaigns in communities and schools, the distribution of health education materials, monitoring of drug supply and distribution, and ending with a final review and impact assessment. As government ownership and leadership are essential, advocacy to the new state government, which came into office at the end of May 2015, is currently of particular importance.

CASE HISTORY: schistosomiasis in Nigeria

Tsoho Yahaya, who lives in the Garun Malam Local Government Area (LGA) of Kano State in Nigeria, is the coordinator of the Garun Malam LGA State Universal Basic Education Board (SUBEB). He is married and has eight children: five sons and three daughters. Tsoho and his daughters were free of schistosomiasis, but his sons were all experiencing pain when urinating and had blood in their urine, which are signs of the disease. Tsoho took his sons to the hospital for treatment and also tried traditional herbs, but nothing helped.

As the SUBEB coordinator in his LGA, in early October 2014 Tsoho was asked to take part in the schistosomiasis control programme undertaken by CBM's partner, HANDS, under the UNITED programme. He was actively involved in advocacy and the campaign to raise awareness of schistosomiasis in his LGA. This was a difficult task in Kano, as this was the first LGA to be targeted by the UNITED programme. This meant that people were unaware of praziquantel and its effectiveness.

When MDA was organised in schools, Tsoho's eight children were the first to take the drug. They experienced some temporary mild stomach pain and itching, which are known to be associated with praziquantel and for which they were given paracetamol and puritan tablets. After a short time, the schistosomiasis was cured; this time for good.

Rumours about the discomfort experienced by Tsoho's children meant that, initially, not all parents allowed their children to take the drug. When they discovered that the boys were free from the disease, however, these parents came to Tsoho's house to ask when the drug would be distributed again, so that their children also could be freed from the menace of schistosomiasis.

Tsoho is very grateful for the UNITED programme, thanking God for making it all happen. He hopes that the programme will continue, so that those who initially feared to take the drug will have a second chance.



Tsoho Yahaya with his five sons and the Chairman of the LGAs Focal Persons Forum Kano State. ©CBM

The UK DfID's LF Elimination Programme in DRC

In most areas of DRC, where LF is co-endemic with onchocerciasis, CBM has for several years been supporting work to eliminate these diseases in collaboration with the Liverpool School of Tropical Medicine (UK) and the DRC Ministry of Health. This work is funded by the UK DfID's LF Elimination Programme.

Disease mapping started in 2012, with the first MDA phase implemented in September 2014. This reached over 9 million people in the Bas Congo, Kasai Oriental, Kasai Occidental and Katanga provinces. The programme aims to complete mapping in 12 sentinel sites in the North and South Kivu, Oriental and Equateur provinces of DRC during 2015.



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Ethiopia; Serkie Yesu (green scarf), in front of her hut.
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