2021 Annual Highlights:

Community-Based Health Programs Respond with RESILIENCE

Message from Yao Sodahlon, Director

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2021: Resilience in the Face of Adversity

The COVID-19 pandemic continued to be a challenge for all of us in 2021. Despite obstacles, Merck & Co., Inc.* never interrupted operations to supply Mectizan® to partner countries. Those countries in turn demonstrated their determination, through thick and thin, to eliminate onchocerciasis (river blindness) and lymphatic filariasis (LF); and their strong commitment to making progress towards the goals and targets outlined in the WHO NTD Road Map 2021-2030, which was launched in January 2021.

Despite the ongoing difficulties, in 2021 the Mectizan Donation Program (MDP) persevered in getting Mectizan to 29 countries and territories for mass drug administration (MDA) to eliminate river blindness and lymphatic filariasis.

Mass treatments were interrupted at the beginning of the pandemic in 2020 from April to September, but by 2021 we were happy to see MDA had resumed with COVID-19 mitigation measures in place. This perseverance revealed the extraordinary resilience of endemic communities, community drug distributors, governments, donors, and NGO partners.

In 2021, a total of 364.4 million treatments was approved—a decrease from 2020 when 416.8 million treatments were approved. This drop was due to several factors, most of which are related to the cancellation of ten applications due to surplus inventory of Mectizan that remained after the 2020 lockdown and resulting interruptions and delays to MDA. Another factor was the temporary suspension of MDA in two countries where high customs clearance fees prevented shipments of donated Mectizan from reaching the national programs.

An unexpected challenge arose as misinformation about the use of ivermectin to treat COVID-19 patients circulated around the globe. This misrepresentation raised the risk of diversion of Mectizan for unauthorized uses. In a heartening display of resilience, country partners and supporting organizations, MDP, the Mectizan Expert Committee, and Merck & Co., Inc. took diligent measures to protect Mectizan for its intended use: treatment of river blindness and LF. We are particularly grateful to our colleagues from the Department of Control of Neglected Tropical Diseases at WHO headquarters and from WHO’s Expanded Special Program to Eliminate NTDs (ESPEN) for hosting two webinars to clarify the WHO position and sensitize countries on the appropriate use of Mectizan.

Progress
As of the end of 2021, cumulatively, nearly 4.8 billion Mectizan treatments have been approved by MDP since the program started in 1987, and nearly 11 billion tablets have been shipped to endemic countries. These numbers are staggering!

Even more staggering is the number of people who no longer need treatment with Mectizan as transmission of the diseases is suspected to have been interrupted. For river blindness, this number is 15.7 million and for

*Merck & Co., Inc. is known as MSD outside the United States and Canada.
Message from Yao Sodahlon, Director

Events of the year 2021 revealed the extraordinary resilience of endemic communities, community drug distributors, governments, donors, and NGO partners.

LF the number is 191.8 million. It is remarkable to see these numbers increase each year as countries make substantial progress towards reaching their goals.

Five new countries and territories (Comoros, French Polynesia, Myanmar, Nepal, and New Caledonia) were approved to receive Mectizan for the implementation of IDA (co-administration of ivermectin, diethylcarbamazine, and albendazole) to accelerate elimination of LF, bringing the number of IDA-implementing countries and territories to 20.

The Future

With the goals of the WHO NTD Road Map 2021-2030 in mind, the Mectizan Donation Program held a virtual onchocerciasis stakeholders meeting in October 2021, bringing together organizations and individuals from multiple sectors. The onchocerciasis community will be working together to develop solutions to some of the most common challenges. In other promising developments for river blindness elimination, WHO published target product profiles for new diagnostics; cross-border collaboration between endemic countries is growing stronger; and national onchocerciasis elimination committees are supporting Ministries of Health to ensure progress is made toward the elimination of transmission.

Achieving high treatment coverage and expanding treatment to hypoendemic areas are critical to maintaining and accelerating elimination of river blindness. Training new entomologists and building laboratory capacity are also critical to the long-term success of river blindness elimination.

In 2021, it was encouraging to see Niger begin to compile its dossier for WHO to verify elimination of transmission of river blindness. If it is verified, we look forward to celebrating the first country in Africa to achieve this milestone and are optimistic that other countries will follow soon.

Lymphatic filariasis elimination, too, is well on track to meeting the goals established by the new NTD Road Map. Two new countries, Benin and Cameroon, stopped treatment with Mectizan and albendazole (donated by GSK) for LF in all endemic districts and have joined Mali and Uganda in undertaking the five-year post-treatment surveillance to demonstrate that elimination has been achieved. Based on trends toward scaling up and scaling down of MDA implementation, WHO estimates that 17 of the 20 countries implementing IDA will no longer require treatment by 2025.

In 2022, we remain committed to work with partners to continue the positive trajectory toward achieving the 2030 NTD Road Map goals for LF and river blindness—perhaps even surpassing them.

On behalf of the MDP team and the Mectizan Expert Committee, I am committed to ensuring that Mectizan is supplied in a timely manner and to supporting endemic countries and our partners as we work together to #StampOutOncho and #EliminateLF!

Dr. Yao Sodahlon, Director
Mectizan Donation Program
Onchocerciasis-Endemic Countries

Countries where onchocerciasis has been eliminated*

- Angola
- Benin
- Brazil
- Burkina Faso
- Burundi
- Cameroon
- Central African Republic
- Chad
- Colombia
- Ecuador
- Guatemala
- Mexico

Countries eligible for Mectizan

- Congo
- Côte d’Ivoire
- Democratic Republic of the Congo
- Equatorial Guinea
- Ethiopia
- Gabon
- Ghana
- Guinea
- Guinea-Bissau
- Liberia
- Malawi
- Mali
- Mozambique
- Niger
- Nigeria
- Senegal
- Sierra Leone
- South Sudan
- Sudan
- Tanzania
- Togo
- Uganda
- Venezuela
- Yemen

* Elimination of transmission
The Global Reach of the Mectizan Donation Program

Lymphatic Filariasis-Endemic Countries

Countries where LF has been eliminated*

- Cambodia
- Cook Islands
- Egypt
- Kiribati
- Malawi
- Maldives
- Marshall Islands
- Niue
- Palau
- Sri Lanka
- Thailand
- Togo
- Tonga
- Vanuatu
- Vietnam
- Wallis and Futuna
- Yemen

Countries eligible for Mectizan and albendazole

- Angola
- Benin
- Burkina Faso
- Cameroon
- Central African Republic
- Chad
- Congo
- Côte d’Ivoire
- Democratic Republic of the Congo
- Equatorial Guinea
- Ethiopia
- Gabon
- Ghana
- Guinea
- Guinea-Bissau
- Liberia
- Mali
- Mozambique
- Niger
- Nigeria
- Senegal
- Sierra Leone
- South Sudan
- Sudan
- Tanzania
- Uganda

Countries eligible for Mectizan, DEC, and albendazole (IDA)*

- American Samoa
- Bangladesh
- Brazil
- Brunei Darussalam
- Comoros
- Dominican Republic
- Eritrea
- Federated States of Micronesia
- Fiji
- French Polynesia
- Guyana
- Haiti
- India
- Indonesia
- Kenya
- Lao PDR
- Madagascar
- Malaysia
- Myanmar
- Nepal
- New Caledonia
- Papua New Guinea
- Philippines
- Samoa
- São Tomé and Príncipe
- Timor-Leste
- Tuvalu
- Zambia
- Zimbabwe

* Elimination as a public health problem

* Countries in italics have been approved for Mectizan
2021 Elimination Progress—Overview

11 Billion Mectizan tablets shipped from 1988 to 2021

= 4.8 Billion Mectizan treatments approved from 1988 to 2021
2021 Progress toward River Blindness and Lymphatic Filariasis Elimination

In 2021, the Mectizan Donation Program approved 364.4 million treatments for mass drug administration (MDA) to eliminate onchocerciasis (river blindness) and lymphatic filariasis (LF) in 32 countries and territories.

Figure 1: Total treatments approved 2021 (in millions)
2021 Elimination Progress—Overview

We are beginning to see astonishing numbers of people coming off treatment for river blindness and LF, which is a strong indicator of progress towards the elimination of these two diseases.

An estimated 16 million people and 192 million people no longer needed treatment for river blindness and lymphatic filariasis, respectively. It is remarkable to see this progress each year as countries downscale the number of people treated.

In 2021, we saw a decrease in Mectizan shipped to eligible endemic countries from 749.8 million tablets in 2020 to 552 million tablets. The decrease was mainly due to delays in shipments (n = 286 million tablets) to countries where the tax exemption process took longer than usual.

Since the inception of the donation program in 1987, a cumulative number of nearly 11 billion Mectizan 3 mg tablets have been supplied by Merck to ensure the distribution of the 4.8 billion treatments approved by the Mectizan Donation Program.

Figure 2: Cumulative Number of Treatments Approved 1988–2021 (in millions)

Children are eligible for treatments starting at age five.
River Blindness (Onchocerciasis) Elimination in 2021

We are making strides in the campaign to #StampOutOncho: In 2021, country partners demonstrated their resilience by safely implementing mass drug administration for river blindness elimination with COVID-19 mitigation measures in place. This contributed to the encouraging progress being made toward river blindness elimination.

In 2021, 205.8 million treatments were approved for use in the elimination of onchocerciasis in 18 African countries, plus Brazil, Venezuela, and Yemen (Figure 3).

Downscaling: as of the end of 2021, 15.7 million people were living in areas where transmission is suspected to have been interrupted or eliminated, and who no longer need treatment with Mectizan. Of these, 4.5 million people remain under treatment for elimination of a co-endemic disease, LF. Post-treatment surveillance for river blindness will begin in these communities when they are eligible to stop MDA for LF following the required evaluations.

Table 1 shows the population for whom treatment for onchocerciasis has been stopped since transmission is suspected to have been either interrupted or eliminated (as of December 2021).

Table 1: Mectizan Treatment Stopped for Onchocerciasis

<table>
<thead>
<tr>
<th>Country</th>
<th>Onchocerciasis districts no longer needing treatment</th>
<th>Total onchocerciasis districts</th>
<th>Population in onchocerciasis districts where treatment has stopped</th>
<th>Population in onchocerciasis districts where treatment has stopped but still under treatment for LF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia*</td>
<td>1</td>
<td>1</td>
<td>1,515</td>
<td>0</td>
</tr>
<tr>
<td>Ecuador*</td>
<td>1</td>
<td>1</td>
<td>30,015</td>
<td>0</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>4</td>
<td>4</td>
<td>260,687</td>
<td>41,686</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>18</td>
<td>252</td>
<td>2,380,505</td>
<td>0</td>
</tr>
<tr>
<td>Guatemala*</td>
<td>4</td>
<td>4</td>
<td>286,521</td>
<td>0</td>
</tr>
<tr>
<td>Mali</td>
<td>2</td>
<td>22</td>
<td>918,814</td>
<td>0</td>
</tr>
<tr>
<td>Mexico*</td>
<td>3</td>
<td>3</td>
<td>227,118</td>
<td>0</td>
</tr>
<tr>
<td>Nigeria</td>
<td>44</td>
<td>482</td>
<td>8,105,010</td>
<td>4,408,665</td>
</tr>
<tr>
<td>Sudan</td>
<td>6</td>
<td>8</td>
<td>261,606</td>
<td>0</td>
</tr>
<tr>
<td>Uganda*</td>
<td>15</td>
<td>17</td>
<td>3,079,562</td>
<td>0</td>
</tr>
<tr>
<td>Venezuela</td>
<td>2</td>
<td>3</td>
<td>122,128</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>797</strong></td>
<td><strong>15,673,481</strong></td>
<td><strong>4,450,351</strong></td>
</tr>
</tbody>
</table>

* In the Americas and Uganda, the geographical unit is a focus rather than a district.
The Mectizan Donation Program Convenes Onchocerciasis Stakeholders

As the clock started ticking with the official launch of the WHO’s new NTD Road Map in January—which also marked the official transition from onchocerciasis control to elimination of transmission—MDP organized an informal stakeholders meeting on October 14. The objectives of this meeting were to review the goals assigned to oncho elimination in the new Road Map; discuss opportunities and challenges, how to align or realign current elimination activities to meet the goals; and discuss collaboration and synergy across stakeholders to achieve the elimination of transmission of onchocerciasis.

The Road Map serves as a call to action for member states, donors, implementing partners, disease experts, and all other stakeholders to align strategies and alleviate suffering of people affected by NTDs. This meeting was one step to answering that call to action.

A second meeting, held on the following day, brought together Mectizan donees (NGOs that receive Mectizan on behalf of endemic countries) and representatives from MDP and Merck & Co., Inc. The goals of the meeting were to share news from Merck and MPD, express appreciation to donees, and open a dialogue for feedback. Progress toward oncho and lymphatic filariasis elimination would not be possible without the support of these key partners—many of whom have been partners since the very beginning. MDP and Merck thanked the donees for their critical support and commitment to the elimination of river blindness and LF.

Due to pandemic travel restrictions, both October meetings were virtual. These stakeholders have not been together since the African Program for Onchocerciasis Control (APOC) ended in 2015, which resulted in feedback from participants calling the event a “reunion.”

In February MDP participated in an important symposium exploring key lessons learned over the years and best practices for the future. The Power of Partnership: Defeating Onchocerciasis featured panel discussions by experts who shared the long history of the onchocerciasis elimination effort; innovations and best practices; lessons learned; and the partnerships that have made it all possible.

Watch the video of the event at https://tinyurl.com/Oncho21
Lymphatic Filariasis Elimination in 2021

In 2021, a total of 259.7 million treatments was approved for LF elimination worldwide. Of these, 196.4 million were approved in African countries where Mectizan and albendazole are co-administered, and 63.3 million were approved in countries implementing triple therapy—also known as IDA—with Mectizan (ivermectin), diethylcarbamazine (DEC), and albendazole.

Application approvals for LF elimination in onchocerciasis-endemic countries under treatment with Mectizan and albendazole

In Africa where Mectizan (donated by Merck) and albendazole (donated by GSK) are co-administered for LF elimination, 196.4 million treatments were approved for 13 countries including 101.1 million Mectizan treatments for distribution in communities where LF and onchocerciasis are co-endemic, and 95.3 million treatments for distribution in communities endemic for LF only.

Downscaling: The number of people who no longer need treatment with Mectizan and albendazole for LF elimination increased from 178.2 million in 2020 to 191.8 million in 2021 as shown in Table 2 on the next page. Among those, approximately 49.7 million will continue to receive Mectizan for river blindness until those communities can safely stop treatment.

Benin, Cameroon, Mali, and Uganda are all implementing 5-year post-treatment surveillance activities to ensure that LF has been eliminated as a public health problem based on WHO’s requirements for validation. They are on their way to joining Malawi, Togo, and Yemen in successfully eliminating LF as a public health problem.

Application approvals for the implementation of IDA (ivermectin, DEC, and albendazole) for LF elimination in countries where onchocerciasis is not co-endemic

In addition to the unlimited donation of Mectizan for the global elimination of onchocerciasis, and the elimination of LF in African countries and Yemen co-endemic for onchocerciasis, in 2017 Merck & Co., Inc. committed up to 100 million Mectizan treatments annually through 2025 for the implementation of triple therapy to accelerate LF elimination in countries where onchocerciasis is not endemic.

In 2021, 63.2 million treatments were approved for IDA in 10 countries. Five new countries and territories were added in 2021: Comoros, French Polynesia, Myanmar, Nepal, and New Caledonia. The total number of countries that have adopted IDA as a strategy to eliminate LF is now 20.
Despite obstacles, in 2021 five new countries adopted IDA as a strategy to eliminate LF.

Table 2: Mectizan + Albendazole Treatment Stopped for Lymphatic Filariasis

<table>
<thead>
<tr>
<th>Country</th>
<th>LF districts no longer needing treatment</th>
<th>Total LF districts</th>
<th>Population in LF districts where treatment has stopped</th>
<th>Population still receiving treatment for onchocerciasis in districts where LF treatment has stopped</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin**</td>
<td>48</td>
<td>48</td>
<td>5,575,573</td>
<td>3,171,774</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>62</td>
<td>70</td>
<td>20,008,464</td>
<td>293,773</td>
</tr>
<tr>
<td>Cameroon**</td>
<td>139</td>
<td>139</td>
<td>18,205,310</td>
<td>12,190,347</td>
</tr>
<tr>
<td>DRC</td>
<td>26</td>
<td>246</td>
<td>5,067,297</td>
<td>1,102,106</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>31</td>
<td>97</td>
<td>1,903,532</td>
<td>1,872,074</td>
</tr>
<tr>
<td>Ghana</td>
<td>108</td>
<td>119</td>
<td>14,754,263</td>
<td>4,319,638</td>
</tr>
<tr>
<td>Malawi*</td>
<td>28</td>
<td>28</td>
<td>18,880,575</td>
<td>3,062,290</td>
</tr>
<tr>
<td>Mali**</td>
<td>75</td>
<td>75</td>
<td>21,833,639</td>
<td>6,790,076</td>
</tr>
<tr>
<td>Mozambique</td>
<td>20</td>
<td>114</td>
<td>3,566,722</td>
<td>0</td>
</tr>
<tr>
<td>Niger</td>
<td>44</td>
<td>55</td>
<td>15,739,092</td>
<td>0</td>
</tr>
<tr>
<td>Nigeria</td>
<td>38</td>
<td>581</td>
<td>9,203,884</td>
<td>1,249,541</td>
</tr>
<tr>
<td>Senegal</td>
<td>3</td>
<td>50</td>
<td>606,345</td>
<td>0</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>12</td>
<td>16</td>
<td>7,904,387</td>
<td>5,732,452</td>
</tr>
<tr>
<td>Tanzania</td>
<td>111</td>
<td>120</td>
<td>28,794,214</td>
<td>6,866,428</td>
</tr>
<tr>
<td>Togo*</td>
<td>9</td>
<td>9</td>
<td>1,642,865</td>
<td>1,243,871</td>
</tr>
<tr>
<td>Uganda**</td>
<td>64</td>
<td>64</td>
<td>17,935,436</td>
<td>1,725,480</td>
</tr>
<tr>
<td>Yemen*</td>
<td>11</td>
<td>11</td>
<td>128,099</td>
<td>76,357</td>
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<tr>
<td><strong>Total</strong></td>
<td>829</td>
<td>1,845</td>
<td>191,794,697</td>
<td>49,696,207</td>
</tr>
</tbody>
</table>

* Validated by WHO as having achieved elimination as public health problem.
** All endemic districts are under post-treatment surveillance (PTS).
Guyana Catches Up in Campaign to Eliminate Lymphatic Filariasis

After being forced by the pandemic in 2020 to postpone distribution of treatments, in 2021 the Caribbean nation of Guyana got back on track.

The first step was a spirited kickoff event—live-streamed, of course—to launch two weeks of mass drug administration (MDA) across the country. The MDA was carried out by 1,400 volunteers trained in both IDA administration and in COVID-19 infection mitigation. The campaign was supported with press coverage and regional events. By late March 2021, Minister of Health Dr. Frank Anthony announced “...I’m very pleased to report that the program is now completed. Overall, our assessment is that... about 70 percent of the population have received the filarial pills.” Transmission assessment surveys (TAS) will verify if they can interrupt MDA and start post-treatment surveillance to confirm that elimination is achieved. Guyana is aiming for elimination of LF as a public health problem by 2025.

The 2021 MDA was kicked off with a live-streamed ceremony featuring music, an entertaining skit, and speeches from government officials.
Mectizan Expert Committee/Albendazole Coordination

The Mectizan Donation Program was established in 1987 in part to serve as the secretariat for the Mectizan Expert Committee, which is the independent, technical body of experts providing scientific, technical, and medical oversight for the donation of Mectizan.

The Mectizan Expert Committee (MEC) was originally composed of 7 members, including the chair. In 1998, two more members were added to contribute expertise on lymphatic filariasis elimination and to provide a mechanism to coordinate GSK’s donation of albendazole to be co-administered with Mectizan for LF elimination. These internationally recognized experts serve on a rotating basis for 3- to 6-year terms. Their collective expertise includes public health, tropical diseases, ophthalmology, parasitology, entomology, program implementation, social science, and other disciplines.

Now known as the Mectizan Expert Committee/Albendazole Coordination, they meet in the spring and fall of each year. The spring meeting is reserved for MEC members and other participants invited to address specific agenda items. The fall meeting is expanded to include broad participation from partners including country representatives, NGOs, donors, etc. In 2021 all MEC/AC gatherings were virtual.

In 2021 the MEC/AC included: MEC Chair Prof. Gilbert Burnham (USA); LF expert Prof. Yaya Coulibaly (Mali); behavioral health scientist Dr. Alison Krentel (Canada); parasitologist Dr. Tom Nutman (USA); entomologist and parasitologist Prof. B.E.B. Nwoke (Nigeria); parasitologist Dr. Sébastien Pion (France); LF expert Dr. Kapa Ramaiah (India); epidemiologist and mathematical modeler Dr. Wilma Stolk (the Netherlands); and ophthalmologist Dr. Tony Ukety (Democratic Republic of the Congo).

Learn more about the MEC and their affiliations at https://mectizan.org/MEC

The MEC/AC continued to hold its meetings virtually in 2021.
Even before the Pandemic, CDDs Were Experts at Overcoming Obstacles

Community drug distributors, known as CDDs, are the backbone of the Mectizan Donation Program. Each year thousands of local volunteers lead the distribution of Mectizan and albendazole and, in some communities, other NTD interventions.

But it’s not as simple as dropping off a package. CDDs—who are not necessarily professional healthcare workers—are trained in the safe management of medications, careful record-keeping, appropriate dosing, choking prevention and other patient safety measures, and communication skills to mobilize communities and to prevent misinformation. They rely on their personal knowledge of the community’s geography and culture to encourage people to accept treatment.

Maryam in Nigeria is one of those people. She received training in the village schoolroom and then set out with colleagues on a mission to distribute Mectizan and albendazole in her native Kebbi State. “We are giving these medicines out today,” she said, “so that the future generation will not even know that there is something like oncho.” Like the treatments she distributes, Maryam’s newfound skills will last a lifetime.

“I want to break the transmission,” explains Maryam.

Learn more about Maryam and others involved in Mectizan distribution in Nigeria.

https://tinyurl.com/Kebbi-MDP
Maintaining a Smooth-Running Supply Chain

Mectizan is donated free of charge to eligible countries where river blindness and/or lymphatic filariasis are endemic.

The application is just the first of many steps to getting treatments to people who need them. The supply chain for delivering Mectizan to endemic countries is highly complex, involving many stakeholders.

The Mectizan journey begins with the Ministry of Health’s submission of the Joint Request for Selected Preventive Chemotherapy Medicines (JRSM) to both WHO and MDP. Upon review and approval by the Mectizan Expert Committee (for initial applications) or MDP (for re-applications), Merck & Co., Inc. is notified to initiate shipment. Mectizan tablets are manufactured by MSD* in the Netherlands. Working in partnership with Fareva in France, MSD then packages and ships the medicine to the national drug warehouse in the beneficiary country. The donation agreement stipulates that Mectizan must be imported free of customs duty and fees; in 2021 unexpected clearance fees caused delays in some countries.

From there, the country program takes over and the medicine is transferred down to the district or sub-district level. At this point, health workers must transport allotments to each village, no matter how remote. A process that begins as an email often ends on a bicycle or boat!

In addition to the typical logjams in any supply chain, throughout 2021 our country partners were forced to address issues created by the pandemic—from lack of international transport carriers, to port shutdowns, to slowness of local administration. Some countries were unable to fulfill their 2021 MDA goals. Since the tablets have a 3-year shelf life, many countries saved their shipments for 2022 catch-up campaigns. We look forward to reporting good news about high treatment coverage in 2022.

*Merck & Co., Inc. is known as MSD outside the United States and Canada.
Monitoring & Evaluation: A Critical Step on the Road to Elimination

When national river blindness and LF elimination programs reach the point where they suspect transmission has been interrupted or the disease is no longer a public health problem, they implement transmission assessment surveys (TAS) using biological diagnostics to determine whether treatment can be safely stopped.

These assessments, which occur multiple times during the post-treatment surveillance period, are part of the monitoring and evaluation (M&E) process—a critical step on the road to elimination as it validates whether mass drug administration is achieving or has achieved its goals.

The M&E process involves:

1. Epidemiological surveys to detect the presence in children of antibodies for onchocerciasis or the circulating antigen of lymphatic filariasis; and
2. Entomological surveys using polymerase chain reaction (PCR) testing on black fly specimens collected in many sites of an endemic focus to determine whether there are onchocerciasis parasites in the vector, a sign of ongoing transmission in the focus.

To build capacity, it is important that countries have quality-assured laboratories and well-trained technicians to run the tests.
Appreciation for the World Health Organization

The World Health Organization (WHO) provides invaluable technical assistance along the road to river blindness and lymphatic filariasis elimination.

The last mile is the longest. It is at this stage when, after countries have achieved many years of consistently high treatment and geographic coverage, they are ready to begin the official process of verification of elimination of transmission of river blindness or validation of elimination of LF as a public health problem. This is a long and rigorous affair, and for good reason. Premature declaration of elimination could lead cash-strapped countries to abandon MDA and monitoring and evaluation while transmission is ongoing in undetected hot spots. This could lead to the disease returning to areas where it was thought to have been previously eliminated, a phenomenon known as recrudescence.

In 2021, Niger prepared for verification
Niger is currently working on its dossier for the official verification of elimination of river blindness transmission and may soon become the first country in Africa to be verified by WHO. This would be a remarkable milestone after decades of elimination efforts in Niger, starting with larviciding with support from WHO’s Onchocerciasis Control Program in the 1970s, which was the frontline intervention until Mectizan was donated in 1987.
What’s Ahead for MDP

MDP is 100% committed to providing Mectizan for river blindness and lymphatic filariasis elimination in Africa—as much as needed, for as long as needed.

We also remain committed to fulfilling our obligations for the ongoing IDA strategy to accelerate elimination of lymphatic filariasis in eligible countries.

Coming up in 2022, a new agreement to receive Mectizan will be shared for ratification by our country partners. The agreement, to be renewed every five years, clarifies the donation conditions and responsibilities of signatory parties.

We look forward to celebrating more countries as they eliminate these debilitating diseases. Stamping out oncho and beating LF will free people from unnecessary suffering so that they can live healthy, productive, and prosperous lives. We will continue to work alongside our partners, collaborating to identify and address problems, develop innovative solutions, create new synergies, and work together to achieve equitable and sustainable access to medicines and health care across the globe.

Future Milestones

ONCHO GOALS: The 2021-2030 WHO NTD Road Map targets for verification of elimination of river blindness transmission:

- **2020**: 4 countries (12%)
- **2023**: 5 countries (13%)
- **2025**: 8 countries (21%)
- **2030**: 12 countries (31%)

LF GOALS: The 2021-2030 WHO NTD Road Map targets for validation of elimination of LF as a public health problem:

- **2020**: 19 countries (26%)
- **2023**: 23 countries (32%)
- **2025**: 34 countries (47%)
- **2030**: 58 countries (81%)

The release in early 2021 of the World Health Organization’s Neglected Tropical Disease Road Map provided new targets and milestones for the elimination of river blindness and lymphatic filariasis.
The Mectizan Donation Program is an international program to eliminate river blindness and lymphatic filariasis, primarily funded by Merck & Co., Inc.,* with support from GlaxoSmithKline.

Through the Mectizan Donation Program, Merck & Co., Inc. donates Mectizan® for the elimination of the transmission of onchocerciasis and for the elimination of lymphatic filariasis (LF) as a public health problem. For the elimination of LF where onchocerciasis is co-endemic in Africa and Yemen, Mectizan is co-administered with albendazole, donated by GSK. In countries eligible for “triple therapy,” Mectizan and albendazole are co-administered with diethylcarbamazine (DEC) to accelerate LF elimination in some communities.

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