

GLOBAL FUND REPLENISHMENT

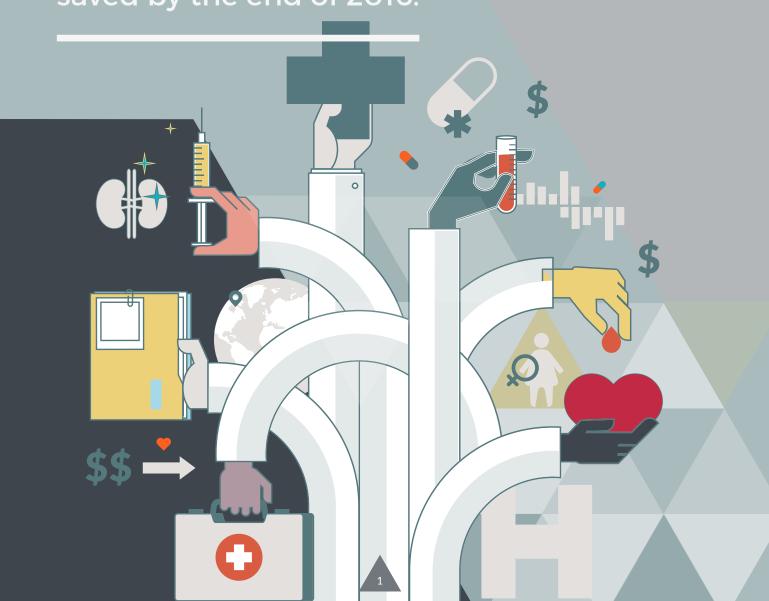
2016

INTRODUCTION
OVERVIEW OF INVESTMENTS
AND RESOURCE NEEDS
HIV
TUBERCULOSIS
MALARIA
THE COST OF INACTION
THE COST OF INACTION 1:
UNNECESSARY INCREASED INFECTIONS AND DEATHS
HIV
TUBERCULOSIS
MALARIA
CONCLUSION
THE COST OF INACTION 2:
HOW DRUG RESISTANCE THREATENS TO ROLL-BACK GAINS
HIV
TUBERCULOSIS
MALARIA
CONCLUSION
THE COST OF INACTION 3:
IGNORING KEY AND VULNERABLE POPULATIONS
AND COMMUNITIES
HIV
TUBERCULOSIS
MALARIA
CONCLUSION
CONCEDSION
THE COST OF INACTION 4:
THE ECONOMIC CASE FOR ACTION
HIV
TUBERCULOSIS
MALARIA
CONCLUSION
CURRENCY FLUCTUATIONS:
STAYING AHEAD OF THE GAME
CONCLUSION

TABLE OF CONTENTS

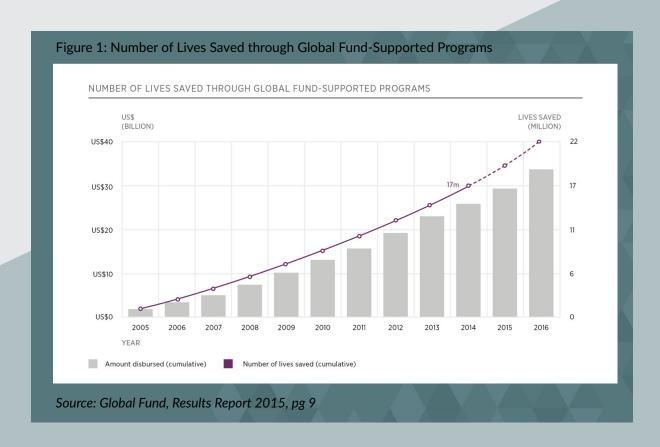
Introduction

Since 2002, the Global Fund to Fight AIDS, TB and Malaria ("the Global Fund") estimates that it has saved 17 million lives and is on course to reach 22 million lives saved by the end of 2016.



The Promise and Opportunities in Meeting HIV, TB and Malaria Targets

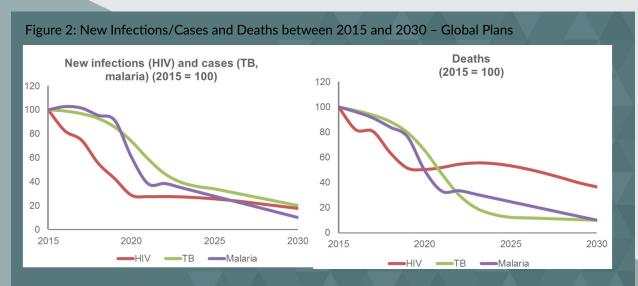
Since 2002, the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund) estimates that it has saved 17 million lives and is on course to reach 22 million lives saved by the end of 2016. The graph below illustrates a steady climb that is aligned with cumulative increasing investments.



The opportunities for continued and greater progress are many. The Global Fund is now engaged in its Fifth Replenishment process and has set a goal of raising a minimum USD\$13 billion to meet its targets over the coming three years. In preparation for the Replenishment, the Global Fund developed an Investment Case¹ that describes those targets, what can be accomplished if the targets are met and what the costs would be.

The Global Fund's technical partners – UNAIDS, Roll Back Malaria, the World Health Organization and Stop TB Partnership – have each developed strategic plans for the three diseases: HIV, tuberculosis (TB) and malaria. Each of the strategic plans are structured to end the epidemics by 2030. These plans include specific targets along with estimates of the costs required to reach them. The combined domestic and external funding need for HIV, TB and malaria is estimated at USD\$97 billion for the three-year period beginning in 2017 in countries where the Global Fund invests.

The table below shows the expected decline in new infections/cases and deaths between 2015 and 2030 based on projections underlying the plans established by partners. This highlights the significant gains that could be made by 2020 and the importance of the next five years in achieving the 2030 goals.

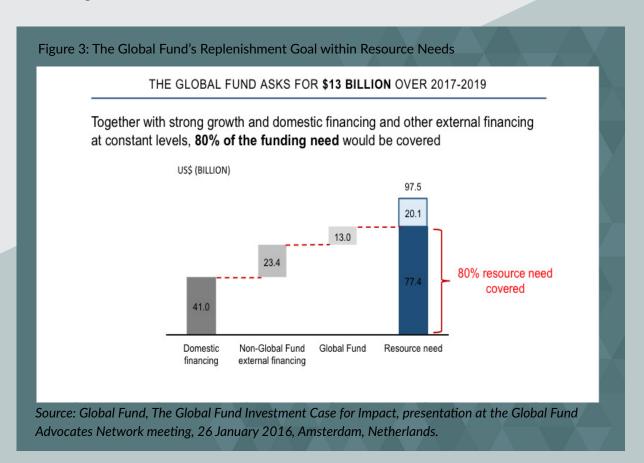


Source: The Global Fund. Investment Case for the Global Fund's 2017-2019 Replenishment. The Right Side of the Tipping Point For AIDS, Tuberculosis and Malaria. December 2015. Pg 14



Global Fund Replenishment 2017 - 2019

For the replenishment process, the Global Fund has set a goal of US\$13 billion. In its Investment Case, the Global Fund estimates that this amount – combined with significant increases in domestic financing and with other external funding remaining steady, and with advances in implementation – would reach 80 percent of the total need to meet the stated targets for the three diseases.



According to the Global Fund's Investment Case, a **US\$13 billion** contribution for the Fifth Replenishment would:

Save up to 8 million lives through programs supported by the Global Fund, leading to 30-32 million lives saved cumulatively by 2020;

8 MILLION LIVES

Avert up to **300 million** new infections across the three diseases;

300 MILLION INFECTIONS

Lead to broad economic gains of up to **US\$290 billion** over the coming years and decades, based on partner estimates.

\$290 BILLION



As the Global Fund embarks on a new replenishment process, it is important to not only analyze the potential of meeting the proposed funding targets, but also to look at the costs of not meeting these investment goals.

The focus of this document is to examine the cost of inaction if governments do not commit the estimated resource levels needed to meet the 2020 and 2030 targets to end the HIV, TB and malaria epidemics.

The failure to commit the required resources now will not only undermine the strong progress made to date by the Global Fund, it will increase disease rates and deaths as well as increase costs over time.

The failure to fully fund the Global Fund now is the most expensive option in the longer term.





Overview of investments and resource needs

HIV

Targets and cost estimates for HIV were developed by UNAIDS and disseminated through the Fast-Track – Ending the AIDS epidemic by 2030 report ii released in 2014, with further information provided through the UNAIDS report How AIDS changed everything – MDG6: 15 years, 15 lessons of hope from the AIDS response.iii

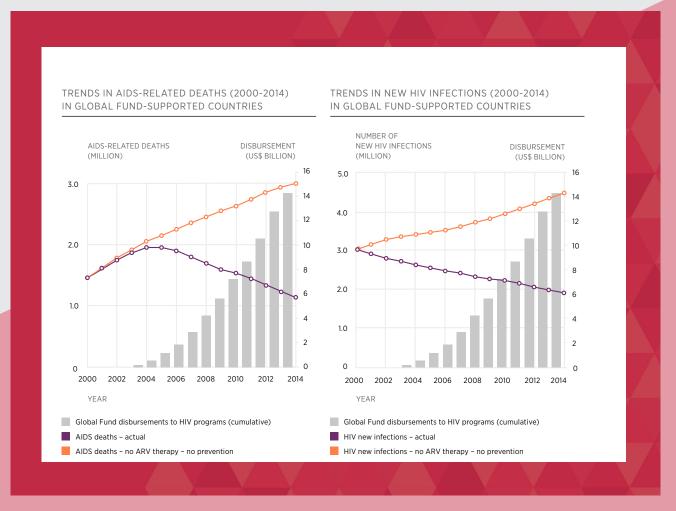
Investments in the global AIDS response continue to generate concrete results. The number of new HIV infections has been reduced by 35% since 2000. Annual new HIV infections declined to approximately 2 million in 2014 (compared to 3.1 million 14 years ago). In 83 countries, the number of new HIV infections has notably decreased or has remained the same.

Contrast the 2 million new HIV infections with the 6 million that would have occurred in 2014 if the AIDS response had been maintained at the 2000 level: that is three times less than what it could have been. In total, global efforts have averted around 30 million new HIV infections cumulatively since 2000.

The number of AIDS-related deaths also continues to decline, with approximately 1.5 million people dying of AIDS-related causes in 2013, down 35% from the peak in 2005. Treatment scale-up continues to expand. The number of people receiving antiretroviral therapy increased from 7.5 million in 2010 to over 15 million in 2015.

Progress through Investment

The Global Fund's role in the overall progress made to date has been substantial.



We have seen more than a 40% reduction in deaths in countries where the Global Fund has invested. The above graph shows how many deaths would have occurred without investments in HIV programs. The credit for this achievement goes to the collective work of the unique partnership that the Global Fund has mobilized reaching results no one thought possible in 2000. In this effort, the increase in access to antiretroviral (ARV) therapy – from 4% coverage in 2005 to 40% coverage in 2014 – has been a key contributing factor.

The number of people on ARV therapy in programs supported by the Global Fund has reached 8.1 million, with steady increases each year. The Global Fund's ability to negotiate prices allows a pooled procurement mechanism to deliver HIV drugs at much lower cost: a one-year supply of ARVs now costs less than USD\$100. Production of generic ARVs has been and will be a key factor in the price reduction.

Also, the number of new HIV infections is falling. Between 2000 and 2014, the number of new HIV infections declined by 36% in Global Fund-eligible countries and modeling shows that averting infections can accelerate with increased investment. Critical in this context is the expansion of prevention of mother-to-child transmission, reaching 73% coverage in 2014. Thanks to Global Fund investments more than 5.1 billion condoms have been distributed – still a highly effective prevention tool.

Over 75% of high-impact countries with Global Fund programs were able to reduce the incidence of HIV by 50% or more. Reversing the spread of HIV has been one of the Millennium Development Goals and this has been achieved in many countries.

Investing for Continued Progress

In 2014, UNAIDS disseminated its Fast-Track strategy, an ambitious plan that, if successfully implemented, would end the HIV pandemic as a public health threat by 2030.

By 2020 / 2025

By 2030 / 2035

HIV Fast Track / UNAIDS Strategy

By 2020:

- Fewer than 500,000 new infections and 500,000 AIDS related deaths
- 90% of people living with HIV know their status
- 90% of those people tested will be on treatment
- 90% of those on treatment will be virally suppressed

By 2030:

 90% reduction in new infections and deaths, compared with 2010

The Fast-Track strategy builds on the agreement in the scientific community that we have the tools and know-how to end the AIDS epidemic. UNAIDS argues however that we need to accelerate the pace to achieve the 2020 targets required to end the AIDS epidemic by 2030, especially in high-burden countries. Without increasing interventions and instead maintaining coverage at 2013 levels, the epidemic would still outrun the response, increase the long-term need for treatment and therefore dramatically increase future costs. For example, if we only reach the 2020 targets in

2030, delays would result in 3 million more new HIV infections and 3 million more AIDS-related deaths between 2020 and 2030.

The Global Fund is a key mechanism in the Fast-Track approach and its investments would between 2014 and 2020 contribute to:

Reduction of AIDS-related deaths by 43-55%

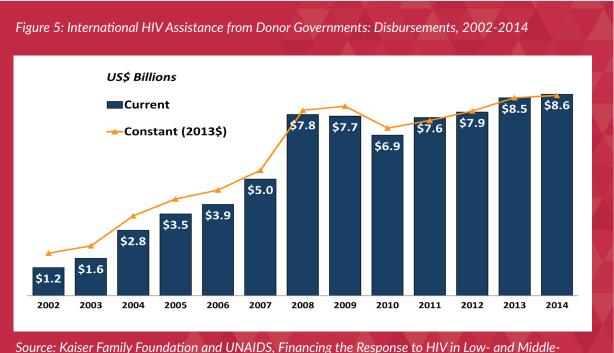
Reduction of incidence by 69-73%

Scale-up of ARV therapy coverage to 64-80% of the 2020 target iv

Needed Resources

From 2002-2013, donors placed a priority on health, relative to some other sectors, with funding for health increasing as a share of total Official Development Assistance (ODA) each year from 2011-2013. The health sector saw the third largest increase, after multi-sectoral and economic infrastructure projects. Additionally, 2013 marked the first year since 2003 where every health sub-sector's funding (HIV, TB, malaria, etc.) increased. HIV/AIDS accounted for the largest share of health assistance (35.3%), although it declined from prior year levels.

In 2014, all donor government disbursements for HIV totaled USD\$8.64 billion (see Figure 4), a less than 2% increase (USD\$149 million) above 2013 levels (USD\$8.49 billion). While funding had risen sharply in the prior decade, it then stabilized and declined. Funding began to rise again recently with 2014 levels being the highest to date. However, after adjusting for inflation and exchange rate changes, the increase between 2013 and 2014 was marginal (1%). Increases in funding over the past 10-year period were significantly less in constant dollars than in current dollar spending. When domestic contributions are included, the total estimated amount available for the HIV response in low- and middle-income countries was USD\$19.1 billion in 2013. Globally, an additional USD\$ 8-12 billion needs to be available annually by 2020 to meet the Fast-Track Targets for 2020 and 2030.



Income Countries: International Assistance from Donor Governments in 2014, July 2015, pg 2.

The Fast-Track report estimates that the total resource need for HIV in the 116 eligible countries is USD\$66.1 billion over 2017–2019. This includes costs for behavior change and biomedical interventions, program enablers (planning and coordination, monitoring and evaluation, surveillance, information systems), social enablers (public awareness, policy change) and development synergies (support for orphans and other vulnerable children, gender equality, health systems strengthening). The strategy calls for rapid scale-up of HIV prevention and treatment tools to end the epidemic by 2030, and thus associated costs are high in the first years of the strategy, but taper beginning in 2020 as prevention and treatment efforts reduce new infections over time.

"The 2030 Agenda for Sustainable Development is underpinned by the concepts of inclusion, equity and social justice. Consistently applying these concepts to the AIDS response is critical to a Fast-Track approach. Compared with the 2014 coverage of HIV services, a comprehensive Fast-Track approach in line with the UNAIDS 2016–2021 Strategy will avert an additional 17.6 million HIV infections and 10.8 million AIDS-related deaths between 2016 and 2030."

UNAIDS, Global AIDS Update, May 2016 vi

Ahead of the 2016 United Nations High-Level Meeting on Ending AIDS, UNAIDS provided an update of the global investment needs based on higher targets for combination HIV prevention services, adoption of the WHO's Consolidated guidelines on the use of antiretroviral drugs for treating and prevention HIV infection vii, as well as efficiency gains caused by further reductions in the prices of ARV medicines and the streamlined package of care - the latter causing the greatest effect. It is now estimated that domestic and international investment in low- and middle-income countries will need to increase by about one-third, from USD\$19.2 billion in 2014 to USD\$26.2 billion by 2020

Conclusion

As much as the results achieved so far demonstrate that we are on the right track towards ending AIDS, it is clear that our collective response in the coming 5-10 years will be decisive. The Fast-Track strategy requires front-loading of investments: ending AIDS and reduced costs in the future will only be achieved through increased investments in the next few years. In its updated resource estimates, UNAIDS clearly states that achieving the increased overall resources by one third to USD\$26.2 billion by 2020, must include a fully funded Global Fund in 2017-2019 with at least USD\$13 billion.

Tuberculosis

Targets and cost estimates were developed by the Stop TB Partnership and disseminated in The Global Plan to End TB 2016-2020 (the Global Plan), with further information provided through the World Health Organization's Global Tuberculosis Report 2015 and End TB Strategy

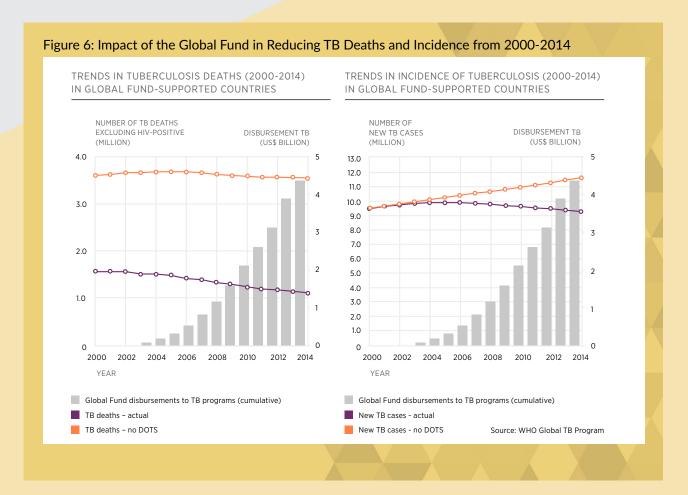
Tuberculosis (TB) has now surpassed HIV as the world's deadliest infectious disease, killing three people every minute. VIII Each year, over 9 million people develop TB and 1.5 million die from the disease. IX Of the over 9 million who develop TB each year globally, at least 3 million people are not diagnosed, treated or enrolled in national TB programs. While TB incidence globally has been reported to be declining at a rate of 1.5% annually, recently conducted prevalence surveys in a number of high-burden countries revealed that the TB burden was much higher than estimated in the past.

Currently, approximately 80% of all investments in the fight against TB worldwide come from the Global Fund. Additionally, TB accounts for more than half of all the estimated lives that have been saved through Global Fund programs since its inception in 2002.

Progress through Investment

Since 2002, the Global Fund has invested over USD\$4.6 billion in TB programming, which has resulted in 15 million people being tested and treated for TB and, as already mentioned, is the largest international donor in the global TB response.

Countries supported by Global Fund investments have seen a 29% decline in TB deaths since 2002 thanks to increased access to diagnosis and treatment. Specific attention has been focused on the 22 highest burden countries, some of whom would have seen three times as many deaths due to TB in 2014 alone without Global Fund interventions. xi



Estimates state that, not including funding for research and development, USD\$8 billion is required annually to combat TB in the 22 highest burden countries. It was projected in 2013 that USD\$6 billion in domestic resources could be mobilized on an annual basis by 2015, which would leave a gap of USD\$2 billion to be filled by international donors. In 2015, based on country self-reports, the total available funding for TB prevention, diagnosis and treatment was USD\$6.6 billion, 87% of which (USD\$5.8 billion) came from domestic sources and USD\$0.8 billion was leveraged by international donors. xiii

Investing for Continued Progress

In 2015, the Stop TB Partnership launched the Global Plan to End TB 2016-2020, drawing on the overarching goals of the WHO's End TB Strategy and outlining what it will take to achieve them. Fully funding the recommendations in the Global Plan will require a total of USD\$65 billion between 2016 and 2020, USD\$29.4 billion of which would be specifically for implementation in Global Fund-eligible countries. If this funding goal is achieved, 10 million lives will be saved, 45 million people will be prevented from getting TB, 29 million people with TB will receive treatment and there will be an anticipated USD\$1.2 trillion in economic return on investment. xiiii

The Global Plan costing estimates include direct costs (first- and second-line drugs, multidrug-resistance management, labs and collaborative TB/HIV activities) and indirect costs (program support and health systems utilization), which were calculated for the following interventions: increasing active case finding; increasing access to high-quality TB services; improving diagnostics, particularly by scaling up use of GeneXpert; improving multidrug-resistant TB management; and providing prophylactic TB treatment for all HIV-positive patients. xiv

The Global Fund's newest Strategy 2017-2022 outlines the approaches necessary to accelerate progress against TB. They will all require not only an increase in available funding and updated country-level policies, but also a shift in the way we view and address the disease as a whole. Scaling-up the response will mean involving key and affected populations at every level, including opportunities for meaningful participation in National Strategic Plan development processes and leveraging increased domestic resources.

It will also mean strengthening health systems with an overarching goal of attaining universal health coverage and addressing TB and HIV together to help decrease co-infection rates. The promotion and protection of human rights and gender equality will need to be integral aspects of all health policies, and new partnerships will need to be formed amongst the scientific community and private sector to spur innovation and develop desperately needed new tools to fight this ancient disease.

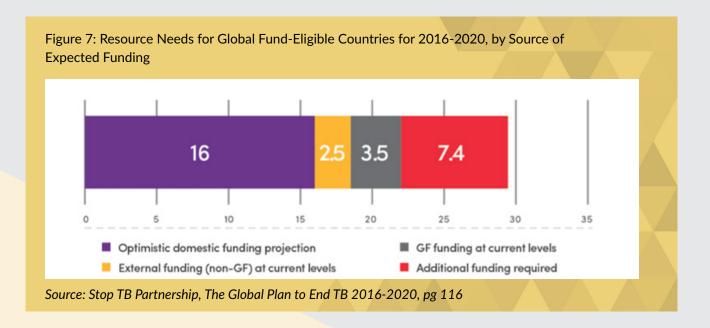
Some of the Global Fund-supported countries that have seen the greatest success in turning the tide on TB are those who have been able to decentralize and reform their healthcare delivery systems. They have been able to ensure that the external resources coming in are distributed optimally across the country, while also leveraging domestic funds and being open to adopting new tools and technologies.

Needed Resources

Meeting the goals of the Global Plan and Global Fund Strategy will require a significant scale-up of current investment levels, in both external donations and domestic resources.

The Global Fund's Investment Case ** states that the cost to implement the standard scenario in countries where the Global Fund invests is estimated at USD\$17.7 billion over 2017-2019. For Global Fund-eligible countries, with even the most optimistic domestic funding forecasts and with external funding maintained at current levels, an additional USD\$7.4 billion must be mobilized between 2016 and 2020 in order for countries to reach the 2020 milestones.

From 2013-2015, the total annual expenditure for TB was approximately USD\$6.74 billion, significantly less than what is sought for 2016 and beyond. The chart below shows the resources needed (in USD\$ billions) for Global Fund eligible countries for 2016-2020.



Without a significant increase in resources, including a fully funded Global Fund, it is not possible to reach the targets described in the Global Plan.

At existing levels, there is already a gap of approximately USD\$2 billion annually between TB budgets and available funding. Without any scale-up, the baseline cost of TB would increase steadily due to the large number of people still requiring TB care, combined with increasing costs per case. For countries that are able to accelerate their efforts and achieve the recommended higher rate of investment, they will see a steady decline in the amount of funds needed in future years, as the rate of infection and number of people requiring care declines. *vi

If funding levels do not increase to meet the substantial demand, the annual costs for fighting TB will continue to rise. If the trend of the past five years continues, costs can be expected to reach at least USD\$8.6 billion by 2020. **vii* However, if funding levels are increased to the levels recommended in the Global Plan, it could mean saving as many as 840,000 lives in the same time period.

Maintaining the status quo of investment and engagement levels when it comes to TB will do nothing but risk reversing all of the progress that has been made. With no increase in funding, the number of new cases as well as the number of deaths due to TB will remain at the same levels they were in 2014. xviii

Reaching the Global Fund's financing goal of USD\$13 billion will not only mean rejecting the status quo when it comes to TB, it will mean accelerating toward eradication at never before seen rates. By 2020, TB deaths will be reduced by 21%, TB incidence will also be reduced by 21%, case detection will be increased to 75% and, most notably for donors, countries will already begin seeing return on their investments.xix

TB End TB Strategy/ Global Plan to End TB

By 2020 / 2025

By 2030 / 2035

By 2020:

20% and 35% decline in TB incidence rate and TB deaths respectively, compared with 2015

By 2025:

- At least 90% of all people with TB diagnosed and all placed on appropriate treatment
- As part of this approach, at least 90% of key populations reached
- At least 90% of all people diagnosed with TB treated successfully

By 2030:

90% reduction in new infections and deaths, compared with 2010

Conclusion

None of the goals outlined in the Stop TB Partnership's Global Plan to End TB nor the WHO's End TB Strategy are at all feasible without increased investment in the Global Fund. All of the modelling that explains how we can end TB within our lifetime relies on robust Global Fund financing and implementation.

Progress made against TB in recent years has been significant, but is still much too slow, and too reliant on existing methods and technologies. The Global Fund is by far the most influential and impactful external donor to TB, and the best chance the world has at putting an end to TB.

Malaria

Targets and cost estimates presented in this section of the report have been developed by the WHO and Roll Back Malaria Partnership and are articulated in the WHO Global Technical Strategy for Malaria (2015) and Action and Investment to defeat Malaria (AIM) 2016 -2030 – for a malaria free world (2015), respectively.

Despite recent progress against the disease, malaria remains one of the most severe public health problems worldwide. About 3.2 billion people – nearly half of the world's population – are at risk of malaria. ** According to the World Health Organization (WHO) there were roughly 214 million malaria cases in 2015 and an estimated 438,000 malaria deaths. **xi* It is a leading cause of death and ill-health in many affected countries, with children and pregnant women particularly vulnerable.

In 2015, over two-thirds of all malaria deaths were in children under five.xxii By the end of 2015, 96 countries and territories had ongoing malaria transmission with Sub-Saharan Africa carrying a disproportionately high share of the global malaria burden; in 2015, the region was home to 88% of malaria cases and 90% of malaria deaths.xxiii

Progress through Investment

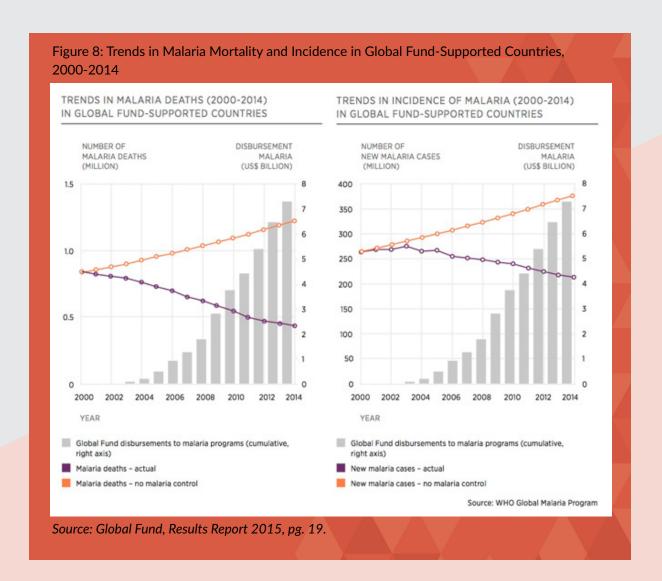
The past 15 years have seen unprecedented progress in malaria prevention and control. Malaria deaths have been cut by 60% since 2000, translating into 6.2 million lives saved, the vast majority of them children. **xiv* The Millennium Development Goal target to have halted and begun to reverse the incidence of malaria by 2015 has been met, with new malaria cases dropping by 37% between 2000 and 2015. **xv*

Global Fund-supported programs have played a key role in helping to drive the remarkable progress seen in reversing malaria mortality and incidence since 2000.

Since its creation in 2002, the Global Fund has become a critical partner in the fight against malaria. Strong and consistent donor support for investments in the Global Fund have resulted in it becoming the largest single source of international financing to tackle malaria: currently representing more than half of the global malaria budget. **xvi* As of September 2015, the Global Fund has invested more than USD\$7 billion towards the global malaria control effort. Key investments and associated results are outlined below:

Mosquito nets are just one tool, however, and the Global Fund is a key source of funding for various malaria commodities. This includes other preventive measures such as indoor residual spraying commodities. By the end of 2015, indoor residual spraying – in which the insides of buildings are coated with insecticides to help prevent malaria – was carried out 58 million times by programs supported by the Global Fund. *xix*

Through Global Fund-supported programs, access to artemisinin-based combination therapies (ACTs) and to rapid diagnostic tests has improved dramatically. In countries where the Global Fund invests, cases of malaria treated rose 19% to hit a cumulative total of 515 million by the end of 2014. *** In 68 malaria-affected countries supported by Global Fund grants, the rate of death for children under the age of five went down by about one-third between 2003 and 2013. *** Malaria prevention and treatment contributed to that progress, with remarkable gains in countries such as Tanzania, Mozambique and Uganda.



Global Fund investments have also stimulated the use of innovative approaches to eliminate malaria. For example, the Regional Artemisin-resistance Initiative (RAI) is a USD\$100 million grant to advert the spread of artemisinin resistance and accelerate elimination of P. falciparum malaria in the Greater Mekong Sub-region. Funded by the Global Fund, the RAI supports piloting a new approach of mass drug administration in "hot spots" in hard-to-reach border populations along Thailand and Myanmar. **xxiii*

Investing for Continued Progress

Investment in the malaria fight is one of the best buys in global health, second only to routine immunization. **xxiii* The tools are cost-effective and the return on investment is high. **xxiv* Beyond the financial return, investing in malaria control and elimination also generates unprecedented socioeconomic, development, humanitarian and equity benefits. **xxv*

The cost of malaria – 40% of public health spending in most affected countries – goes far beyond public health impact. **xxvi* The disease takes a high toll on households and health care systems and impedes economic development. It is estimated that that malaria reduces GDP growth by up to 1.3% in some African countries. **xxvii* Malaria also accounts for considerable loss days of productivity among the adult population, absenteeism from schools and workplaces, and increased household expenditure on health.

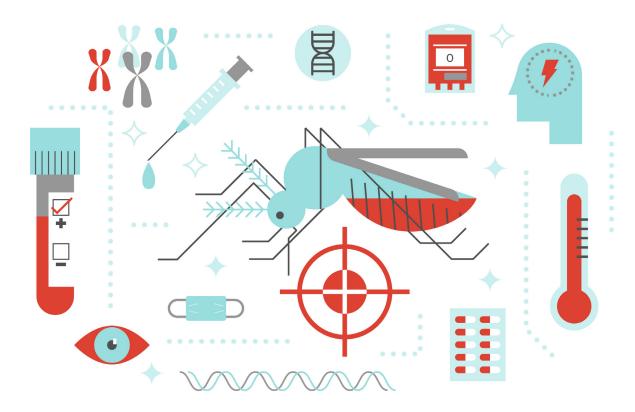
Needed resources

A paper published in the Lancet in April 2016 identified the greatest threat to malaria elimination and the prevention of reintroduction as a reduction of political and financial commitment. **xxviii The findings are timely in highlighting the cost of inaction in a Global Fund replenishment year.

While malaria financing has increased substantially since 2000, it continues to fall far short of the amounts required to achieve the 2030 malaria goals. According to the Roll Back Malaria Partnership, just over USD\$100 billion is needed to reach these targets. **xxix* An additional USD\$10 billion is required to fund research and development for innovations in malaria, including new drugs and insecticides. *I This investment will deliver a significant return: nearly 3 billion malaria cases will be averted and over 10 million lives saved. **I

To achieve the globally agreed first milestone of reducing malaria mortality and incidence rates by at least 40% by 2020, annual investments in the global malaria fight must increase to USD\$6.4 billion by 2020. *III An estimated USD\$8.5 billion will be needed over the next fifteen years to adequately support the malaria-eliminating countries in their efforts to achieve elimination and prevent re-introduction of malaria. *IIII

This means current donors will need to grow their ODA commitments on malaria funding starting immediately, while structuring their contributions in ways that incentivize financing from affected countries and reward progress towards elimination.



Conclusion

Investments channeled through the Global Fund are already supporting such an approach to incentivize financing. Since the rollout of the New Funding Model, domestic financing for HIV, tuberculosis and malaria has increased by an estimated 150%. xliv Implementing countries have also stated that the Global Fund's requirement for counterpart financing has been valuable in unlocking more resources for health – including malaria prevention and control – in their countries. xlv This shows that, despite the current resource gap, there are good prospects for increasing investment in malaria through a mixture of domestic and external financing and that a fully funded Global Fund has a critical role to play in realising this potential.

The Cost of Inaction

The Global Fund says in its Investment Case that "every contribution matters" – and to underscore that point, the Global Fund analyzed what difference every USD\$100 million contribution can make in the fight against the three diseases and the catalytic role those investments would play.

Every USD\$100 million contribution to the Global Fund would:

Save up to 60,000 lives through programs supported by the Global Fund;

60,000 LIVES

Avert up to 2.3 million new infections across the three diseases;

2.3 MILLION NEW INFECTIONS

Support partners in domestic investment of USD\$300 million toward the three diseases; and

\$300 MILLION

Spur USD\$2.2 billion in long-term economic gains. xlvi

2.2 billion

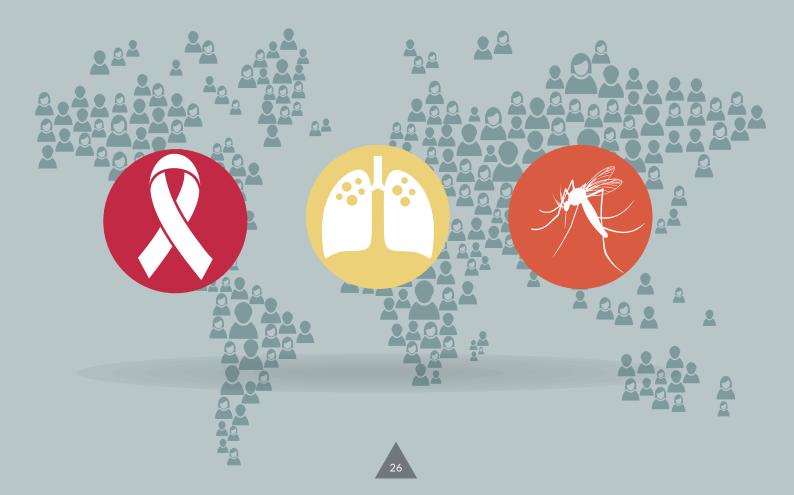
While much harder to calculate, if investments can save lives, prevent new infections and spur greater investments and economic gains then the lack of investments or a flat-lining of investments would have the opposite, negative effect.

This section examines four critical areas and the cost of inaction for each: increased infection and deaths, drug resistance, the impact on key and vulnerable communities, and the economic impact of not investing.

The Cost of Inaction 1: Unnecessary Increased Infections and Deaths

As mentioned previously, programs supported by the Global Fund partnership had saved 17 million lives by the end of 2014 and are on track to reach 22 million lives saved by the end of 2016. Overall deaths caused by AIDS, TB and malaria have reduced by more than one-third since 2002 in countries where the Global Fund invests. ****

For all three diseases, one of the key costs of inaction to fully fund the Global Fund would be unnecessary, increased infections.



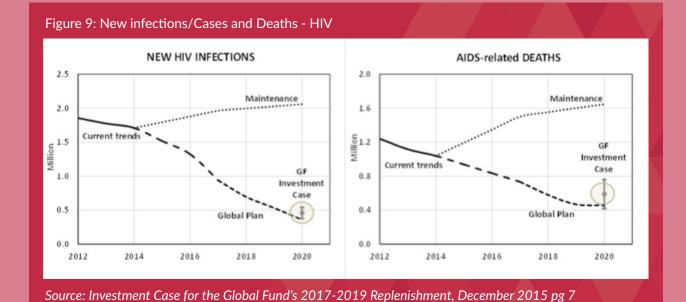
HIV

According to the modeling done by UNAIDS in the Fast-Track report, increasing the pace of scale-up of HIV treatment and prevention services over the next six years is pivotal to global prospects for bringing the AIDS epidemic to an end. The failure to fully fund the HIV response, including the Global Fund, over the next six years and maintenance of the 2014 level of service coverage will prolong the epidemic and in many countries the epidemic will rebound and grow. Compared to 2014, the Fast-Track approach however will avert 17.6 million preventable HIV infections and 10.8 million AIDS-related preventable deaths from 2016 to 2030. xiviii

The Global Fund's role in contributing to meeting these targets is a primary one, as illustrated in the table below, which describes the impact of a fully-funded Global Fund replenishment on HIV infection and AIDS death rates in Global Fund-eligible countries.

The number of people on ARV therapy through Global Fund-supported programs had reached 8.1 million by the end of 2015 which already surpassed the Global Fund Strategy target for 2016 of 7.3 million. As the Global Fund investment case states, this represents coverage of 40% of all those infected worldwide, a rapid acceleration from just 21% in 2010. XIIX

The following graph also clearly shows that we are on the right trend: new HIV infections and deaths are on a downward trend. However, maintenance levels of funding will have the reverse effect and would actually increase infections and deaths.

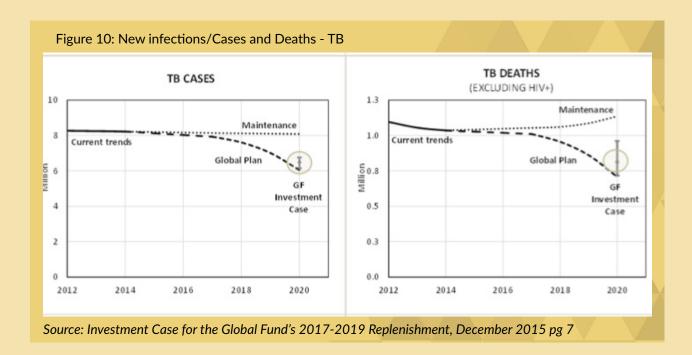


Tuberculosis

Fully funding the recommendations in the Global Plan - which includes funding the Global Fund – will result in 29 million people treated for TB, 10 million lives saved, and 45 million people prevented from falling ill from TB. Maintaining current investment levels will not only stall progress against the disease and miss the 2020 targets in the End TB Strategy, but will also lead to an increased number of infections and treatment costs that will continue to skyrocket. ¹

Through Global Fund investments, 13.2 million people have received TB treatment which is an impressive statistic but falls short of the 21 million treatment goal set in the 2012-2016 Global Fund Strategy. Without increased investment, the rate of TB mortality will decline at a rate so slow it would take 170 years to achieve the same success that we could be seeing less than 20 years from now.

The tables below indicate the increased numbers of TB cases and deaths that would result from a failure to meet the Global Fund investment targets and, similarly to HIV, particularly in the case of TB deaths, maintenance levels of funding would quickly cause an upsurge in TB deaths.



Malaria

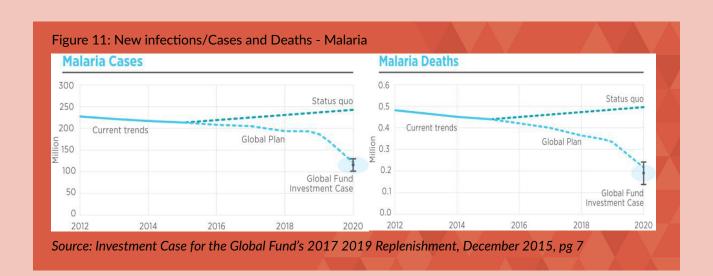
When it comes to malaria, the cost of inaction has been described as catastrophic. Without an increase in Global Fund funding (and other funding sources), it will not be possible to sustain universal coverage of malaria prevention, diagnosis and treatment tools and this will put lives in danger and risk a resurgence of malaria cases and deaths.

Lessons from the 1950s and 1960s, provide ample evidence that when prevention measures are not maintained, resurgence of infection, illness and death caused by malaria is inevitable. Recent outbreaks of malaria in countries that had been malaria-free and resurgences in countries that have made important progress in reducing malaria morbidity and mortality rates in the past decade, highlight the continual threat of re-establishment and resurgence as well as the need for vigilance to ensure that these areas of transmission are promptly identified and rapidly contained.

As the coverage of malaria interventions drops, dramatic resurgence ensues. This can lead to even higher prevalence than at baseline because, as the number of cases drops, people's acquired immunity to malaria declines, leaving them more vulnerable to clinical disease and severe illness. ^{liv}

This means it is critical that malaria interventions supported by the Global Fund are sustained and adequately resourced: many of the long-lasting insecticidal nets (LLINs) that have proved effective in preventing malaria will need to be replaced during the next Global Fund replenishment cycle. If the identified funding gaps are not filled, there is likely to be a significant resurgence in malaria, including outbreaks and epidemics such as was seen in 2010 in Rwanda.

By the end of 2015, the Global Fund's Results Report shows that through Global Fund investments, 548 million mosquito nets were distributed, surpassing the initial goal of 390 million. The table below shows what increased investments in the Global Fund and its partners can achieve with increased funding and the cost of inaction (dotted line indicating a status quo).

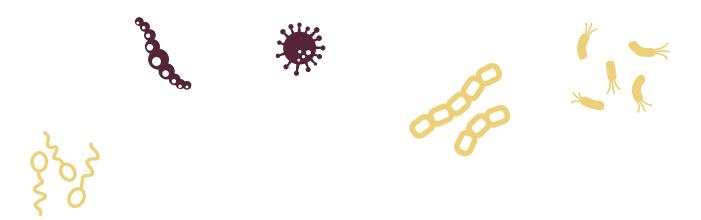


Conclusion

As Mark Dybul, the Executive Director of the Global Fund, reminds us we are at a historic opportunity to become better people and societies built on the firm foundation of an inclusive human family. Achieving progress above and beyond what was hoped for was, as he puts it, "relatively easy" because "the need was so great that almost anything we did had impact." ^{IV}

Yet the global plans and the Investment Case for the Global Fund clearly show we no longer can afford to maintain current funding levels: the status quo would be, quite literally, deadly.





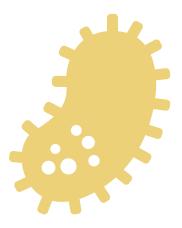
The Cost of Inaction 2: How Drug Resistance Threatens To Roll-back Gains

Drug resistance is the result of mutations that cause resistance to the so-called "first-line treatment": in other words, the best or most commonly used treatments do not work for an individual. In May 2016, a new report was issued in the UK that estimates that by 2050, drug-resistant infections could kill more people than cancer and cost the world \$100 trillion in economic output. ^{Ivi}

In HIV, TB and malaria the threat of drug resistance has become an increasingly worrying sign. Malaria has gone through several waves of drug resistance, requiring investment in new treatments to fight resurgences. Drug-resistant TB alone is currently responsible for 33% of all microbial resistance deaths. Prevention of HIV resistance usually requires guaranteed supply or - when this could not be delivered - alternative, more expensive treatment. The drug-resistant strains of TB and HIV can be transmitted onwards and for all three diseases drug resistance is a threat to existing and future investments.









HIV

Intermittent availability of drugs and services directly increases the risk of treatment failure, the development of drug resistance and the transmission of drug resistant HIV.

The failure to fully fund the global HIV response will have consequences beyond limitations in the ability to scale up and provide primary prevention and treatment to more people in need. Anti-retroviral drugs to treat HIV are extremely effective over the course of a lifetime, provided the individual taking the drugs is strictly adhering to their regimen. Intermittent ARV use leads to the development of drug resistance, meaning the drugs stop working. First-line ARV regimens are by far the least expensive. Once drug resistance develops, more expensive second- and third-line regimens must be used. HIV can develop resistance to all these drugs if not taken properly. Drug-resistant HIV can then be transmitted to others.

An underfunded HIV response, including the funding of community systems for health, will threaten the availability of adequate and consistent drug and diagnostic supplies and the quality and availability of linkage to care, social support and crucial adherence support services. Intermittent availability of drugs and services directly increases the risk of treatment failure, the development of drug resistance and the transmission of drug resistant HIV. This, in turn, will increase the need for more expensive second- and third-line treatment regimens.

Already transmission of drug-resistant HIV (HIVDR) is a concern. In July 2015, the WHO reported that 30% of national HIV surveys showed transmitted HIVDR to non-nucleoside reverse transcriptase inhibitors (NNRTI) – the primary type of drug used in first-line HIV treatment regimens - at levels between 5% and 15% (considered moderate by the WHO). Surveys also showed that as of 2010, 6.8% of individuals initiating ARV therapy had reduced susceptibility to one or more first-line ARV drugs. East Africa had the highest reported average rate of increase in prevalence of any drug resistance mutation at 29% per year since rollout. As scale up increases, the danger of increased transmission of HIVDR increases as well. The need for effective adherence support and treatment literacy services is essential to prevent this. However, these services have never been adequately funded and they are often the first services to be cut as funding levels decrease.

WHO surveys of acquired HIVDR also evaluated retention of patients on ARVs 12 months after treatment initiation: 31% of clinics failed to achieve the WHO-recommended target of at least 70% of people with viral load suppression at 12 months. Overall, ARVs failed in about 10% of patients surveyed during the first year. Recent analysis of data from four of six surveys of HIVDR in infants less than 18 months of age showed resistance to NNRTIs as high as 62%. Although available global data suggest that HIVDR levels generally remain manageable, recent publications signal increasing levels of HIVDR amongst recently diagnosed individuals: 16% in Angola; 22% in Cuba; and 16% in Papua New Guinea. [Viii]

A recently published modeling exercise lix projected the need for second-line antiretroviral therapy in adults in sub-Saharan Africa up to 2030. The results suggest that by 2020 the number of adult patients receiving second-line ARV therapy will be at least double that in 2014. By 2030, it is expected that more than 4 million people in sub-Saharan Africa will be in need of second-line ARV therapy. Irrespective of the future scale-up of ARV therapy and the strategies of management of patients, the demand for second-line ARV therapy will increase. Donors and countries in sub-Saharan Africa should prepare for a substantial increase in the need of second-line drugs during the next few years.



Tuberculosis

In 2014 alone, 480,000 people around the world developed drug-resistant TB (DR-TB) and approximately 190,000 people died from it. ^{IX} DR-TB can take different forms, namely multidrug-resistant (MDR), which is resistant to at least two first-line TB drugs, and extensively drug-resistant (XDR), which is resistant to at least four first-line drugs.

The Global Fund has consistently led the way on defeating DR-TB: between its inception in 2002 and 2005, 7,600 people with DR-TB were treated by Global Fund supported programs. By 2010, that number had risen to 52,000 and then more than quadrupled by 2014 to 210,000. ^{lxi}

There are a number of different ways that a drug-sensitive strain of TB can become drug-resistant, though most often the blame is misplaced on the patient who is accused of not properly following their treatment regimen. While true that not completing a full course of treatment can cause drug resistance, the fault lies largely within the under-supported healthcare systems that do not have the capacity to handle the six month-long treatment regimen that requires daily supervised visits from patients.

The growth of drug-resistant tuberculosis is posing a continuous challenge to the effort against the disease; 3.5% of new and 20.5% of existing TB cases were estimated to have had MDR-TB in 2013 and that number is rising, not falling. In addition to the human tragedy these cases represent, they also drain limited TB budgets as the treatment cost for DR-TB can amount to 200 times that of ordinary TB cases.

Unless this challenge is addressed now, decades of progress will be undone and the billions of dollars invested in fighting TB will be wasted. According to the UK's 2014 Antimicrobial Resistance (AMR) Review, DR- TB will be responsible for 300 million premature deaths over the next 35 years and will cause a 2-3.5% drop in GDP by 2050. ^{|xii|} Currently, only 1 in 5 people with MDR-TB are diagnosed and able to access treatment and only half of those are cured. Estimates are that MDR-TB will cost the global economy a collective \$17 trillion in lost productivity by 2050. ^{|xiii|}

Malaria

As with HIV and TB, the threat of drug resistance in malaria treatment is also growing. In the 1950s, resistance to chloroquine began in Cambodia. In the 1960s, it happened again with a drug called fansidar. In each case, resistance has spread worldwide: neither drug is still widely used.

Plasmodium falciparum, the deadliest form of the malaria parasite, is responsible for the vast majority of the mortality and morbidity associated with malaria infection. Artemisinin Combination Therapies (ACTs) are currently the frontline treatments against P. falciparum malaria. Ixiv Artemisinin is considered to have revolutionized the treatment of malaria and, although these treatments are working well in many parts of the world, the emergence of artemisinin resistance in the Greater Mekong sub-region threatens to roll back gains.

As the threat of antimalarial drug resistance grows, there is increasing pressure to sustain the efficacy of existing treatments, develop alternative treatments, as well putting in place preventative measures such as bed nets. In order to stay ahead of drug and insecticide resistance and reach the 2030 malaria goals, an additional USD\$10 billion is required to fund research and development for innovations in malaria.

While the Global Fund does not invest directly in research and development, the Global Fund's envelope for regional grants did invest USD\$100 million to a regional artemisinin resistance initiative focusing on responding to resistant malaria in the Mekong sub-region and to enhance the impact of the Global Fund's investments over the last decade.

A recent study published in the New England Journal of Medicine confirms that resistance to the current frontline antimalarial, artemisinin, is now present in Eastern Myanmar, Thailand and Southern Vietnam, as well as Western Cambodia. The paper also provides worrying indications of emerging resistance in Central Myanmar, Southern Laos and North-eastern Cambodia.

"Should drug resistance continue to spread or emerge in Africa, thousands if not millions more lives will be at risk, years of effort and investment could be lost. It may still be possible to prevent the spread of artemisinin resistant malaria parasites by eliminating them, but that window of opportunity is closing fast.... Antimalarial resistance must become a global public health priority, without delay, to avoid dramatic reverses in the gains we've made against this deadly disease over the past decade."

Professor Nicholas White, senior author of the study and Chairman of the Bangkok-based Mahidol Oxford Tropical Medicine Research Unit (MORU) $^{\rm lxvi}$

A successful Global Fund replenishment will allow the Global Fund to continue to support efforts to control artemisinin resistance. Without such support, drug resistance could spread to other regions of the world and the most important treatment intervention for malaria could be lost.



Drug resistance is a significant issue in meeting the needs - and increases the cost and difficulty of reaching - key and vulnerable HIV, TB and malaria communities. The cost of inaction will not only lead to millions of additional deaths each year, but also have severe ramifications for the global economy for decades to come.

The Cost of Inaction 3: Ignoring Key and Vulnerable Populations and Communities

The Global Fund Advocates Network (GFAN), in partnership with ICASO and the Free Space Process, recently published a technical paper "Key Populations and the Global Fund: Delivering Key Results" about why key and vulnerable populations need a fully funded Global Fund and why the Global Fund needs their leadership. ^{Ixvii}

Through a series of case studies, interviews and quotes the authors assert how a fully funded Global Fund is critical and how key and vulnerable population networks are key to achieving the results essential to reaching the people most in need and to ending the epidemics.



HIV

In the HIV response key populations are particularly vulnerable to HIV and normally include: women and girls, men who have sex with men (MSM), people who inject drugs (PWID), transgender people, sex workers, prisoners, refugees and migrants, people living with HIV, adolescents and young people, orphans and vulnerable children and populations of humanitarian concern.

Gay men and other MSM are 19 times more likely to be living with HIV than other people in the general population. ^{Ixviii} People who inject drugs have a 28 times higher HIV prevalence than the general population. HIV prevalence among sex workers is 12 times greater than the general population. Transgender women are 49 times more likely to be living with HIV than other adults of reproductive age. ^{Ixix}

The proportion of estimated new infections among these populations is around 30% globally. However, in 88 out of 159 countries, over 50% of estimated new infections are among key populations. UNAIDS reports that more than 90% of new HIV infections in central Asia, the Middle East and North Africa in 2014 were among people from key populations and their sexual partners. ^{IXX} Ending the HIV epidemic is only possible if services for key populations are adequately funded.

Data compiled by UNAIDS from 136 low- and middle- income countries shows that investment in 2013 in programs for sex workers, MSM and PWID accounted for just 1.4% of total AIDS spending and just 7.5% of spending on prevention programs. In countries where the HIV epidemic is concentrated in key populations, spending on targeted programs accounted for only 2.6% of the total and 12% of prevention investments. Ixxi

Out of 136 low- and middle-income countries, only 57% reported spending on programs targeting sex workers. For MSM and PWIDs, the figures were 51% and 38%, respectively; however, it is not clear whether no funding was targeted for key populations in countries that did not report on their specific allocations or if those countries failed to report what was allocated. Where spending is reported, international donors often disproportionally fund the AIDS response for key populations, with less than 20% coming from national government budgets. Domestic funding levels to provide services to key populations will need to drastically increase as countries transition away from external funding eligibility.

While it is clear that funding targeted for key populations is insufficient, how much is being spent remains unclear. A comprehensive analysis of 119 proposals received by the Global Fund and reviewed by its Technical Review Panel, reveal that the link between recognizing key population issues and needs and actually requesting funding to address them is too often missed. İxxiii The Global Fund's emphasis on key and vulnerable populations has had some positive impact in moving governments along, sometimes in places where they might otherwise not have. For example, since the introduction of the New Funding Model, several countries have included harm reduction components in their grants for the first time including Benin, Burkina Faso, Burundi, Chad, Democratic Republic of Congo, Djibouti, Senegal, Sierra Leone and South Sudan. Ixxiv

The Global Fund has a critical role to play in mobilizing domestic funding for key and vulnerable populations, supporting the transition to local ownership and improving the legal and policy environment.



Tuberculosis

TB is often considered to be a disease of poverty, but more than that, it is an opportunistic disease. While often a result of poverty, its airborne nature means it is a threat to everyone, regardless of socioeconomic status or geography.

On the other hand, TB actually drives poverty, by putting enormous financial strain on patients seeking treatment, and resulting in substantial lost wages while undergoing treatment. lxxv

Amongst those made most vulnerable by TB are: those who have increased exposure due to where they live or work (this includes sex workers, miners, hospital visitors, health care providers, prisoners and people who live in urban slums or in buildings with poor ventilation), those with limited access to quality TB services (including women, children, migrant workers, refugees or internally displaced persons, indigenous populations, LGBTQ and anyone who lives in hard-to-reach areas) and people who are at increased of TB because of biological or behavioural factors (such as people living with HIV, those with diabetes or silicosis, people who inject drugs or use tobacco and anyone who is undernourished). IXXXVI

Building on leadership from the Stop TB Partnership to engage key and vulnerable communities, the Global Fund has made some unique investments based on regional proposals. In Southern Africa, the Southern Africa Development Community member states are involved in a unique, cross-border program that looks at miners who have been affected by TB as a key population and migrant population. In South Africa, more than one-third of the country's total Global Fund grant goes to programs specifically targeting key and vulnerable populations, including TB programs in mining communities and prisons. This makes the Global Fund the single biggest investor in key and vulnerable populations in all of South Africa. Ixxviii

Malaria

Like with HIV and TB, for the malaria response, key and vulnerable populations vary depending on the region but generally include mobile and migrant populations (both internal and cross border), ethnic minorities, forest goers, pregnant women and children.

In particular, the cost of inaction in malaria has a clear gender dimension. The impact of malaria is disproportionately felt by women (particularly pregnant women) and children, who are at the greatest risk of contracting malaria in both high- and low-endemic regions for biological and social reasons lxxix. Pregnant women in malaria-endemic areas have an up to 50% higher risk of infection during pregnancy compared with non-pregnant women and malaria in pregnancy is a significant contributor to maternal mortality and is a major cause of anaemia which contributes to maternal death at delivery due to haemorrhage and causes stillbirths, preterm birth and low birth weight increasing the risk of neonatal deaths. lxxx

Global Fund programs are helping to address these challenges. In Ethiopia, for example, a program on integrated training for 32,000 health extension workers has resulted in significant improvements in maternal and child services. There has been an increase of 57% of pregnant women with at least one antenatal visit and a 70% reduction in malaria incidence. ^{lxxxi}

Investments in key and vulnerable populations are key to delivering results in the fight against the 3 diseases.

Investments in key and vulnerable populations are key to delivering results in the fight against the three diseases. The Global Fund is considered to play a key role in amplifying key and vulnerable population voices and leadership and places them at the heart of its work. DEXXII

The Global Fund has had some success in leveraging increased domestic resources; for example, a recent analysis of 13 upper-middle income countries found that the Global Fund's willingness-to-pay policy (WTP – the main tool used by the Global Fund to leverage domestic resources through co-financing) had a positive impact on domestic funding towards key populations: nine of the 13 countries dedicated some or all of their WTP commitments towards key and vulnerable population programming.

In fact, the majority of Global Fund grants in middle-income countries are allocated toward services for key populations. Underfunding the Global Fund, therefore, will have a disproportionate impact on these groups. These are populations that are already severely underserved. The same stigma and discrimination that keeps key populations from seeking out and receiving treatment and prevention services keeps governments from providing adequate resources to serve these populations.

Without a fully funded Global Fund, it will not be able to continue its leading role in investing in rights- and evidence-based interventions or its catalytic role to improve national responses, both roles which are key to meet the global targets set out by partners.

The Cost of Inaction 4: The Economic Case for Action

The Global Fund's Investment Case reports that the technical partners' global plans would contribute to an estimated combined USD\$290 billion in economic gains if their plans are implemented in full. |xxxiii The Investment Case also analyzed what each

USD\$100 million in investment through the Global Fund could spark in terms of economic returns: USD\$300 million in domestic resources and USD\$2.2 billion in long-term economic gains. In addition to the life-saving and community-strengthening impacts of a fully funded Global Fund, if donors could achieve the Fifth Replenishment ask of USD\$13 billion it would have significant long-term economic impact and would leverage even more investments.



HIV

"The return on investment in the fight against AIDS is high; when survival gains are valued in monetary terms as part of a full income approach to economic welfare – as was done for the Lancet Commission on Investing in Health report – each lifeyear gained in low-income and middle-income countries has an estimated value equal to 2-3 times GDP per person; our modeling suggests that scaling up to the most ambitious scenario would generate benefits of USD\$1157 billion between now and 2030."

A UNAIDS and Lancet Commission: Defeating AIDS - Advancing global health |xxxv

In its MDG6 report, UNAIDS estimates that the full income return on investment is USD\$1 investment for USD\$17 economic benefits. ^{bxxxvi} When including potential productivity gains, the incremental benefits accumulate to USD\$2.6 trillion or 14 times the cost of USD\$176 billion.

The cost of inaction however will be huge if countries continue with the existing coverage levels of services: they will lose the opportunity to save 21 million lives and an additional 28 million people would be living with HIV by 2030. The number of people on treatment will be drastically reduced, meaning that the important prevention benefit that comes from earlier use of ARV treatment cannot be realized, resulting in both increased infection rates and increased morbidity and mortality. Instead of averting these deaths and new infections, continuation of current coverage levels will mean that the world will have to pay an additional USD\$24 billion every year for ARV therapy by 2030.

Tuberculosis

A five-year delay in investment would have potentially catastrophic results, including 8.4 million additional TB cases and 1.4 million additional deaths (on top of the 1.5 million deaths currently occurring annually), as well as USD\$5.3 billion in additional TB treatment costs and USD\$181 billion in lost productivity. ||xxxxv||||

Thus the total estimated cost of inaction should we not follow the Global Plan's investment model is more than USD\$185 billion, and that number will only continue to rise in coming years. Even a one-year delay in investment would amount to USD\$1.6 billion in additional TB treatment costs and 2.4 million more people would contract TB. |xxxix| The fight against TB is reliant on the development of new tools and treatments. Failure to invest in the necessary research and development now will only result in higher treatment costs as infection rates continue to rise.

Malaria

When malaria comes back, it comes back with a vengeance. Waning political commitment and decreasing budgets have historically been associated with massive malaria resurgences. **C Failure to achieve the global milestones - starting with the need to raise USD\$6.5 billion per year by 2020 - has been calculated to be catastrophic both in terms of lives lost and financially. **Ci It would also mark a failure to protect the unprecedented investment that has been made to date.

Analysis shows the staggering costs that will result over the 2016-2030 timeframe if current malaria intervention coverage levels are allowed to revert to 2007 levels (i.e. before the first Global Malaria Action Plan was launched): xcii

USD\$1.2 trillion forgone economic output

USD\$5.2 billion direct costs to health systems and households

1 billion lost working days annually

2 billion additional malaria cases

3.7 million additional deaths

Even though the costs of achieving the joint 2030 goals are high, the returns on the investment will be unprecedented. A cost-benefit analysis based on the costing methodology used in the WHO Global Technical Strategy for Malaria demonstrates that the benefits increase incrementally with the attainment of the 2020 and 2025 milestones, averting close to 3 billion malaria cases and saving more than 10 million lives by the time the 2030 targets are realized.

A different cost-benefit assessment conducted on the goals and targets of the post-2015 development agenda also found robust evidence that the economic benefits of reversing the spread of malaria and reducing annual malaria deaths by 95% would be 15 times higher than the costs, an ROI that it classified as "phenomenal". xciii



The numbers are clear: total resource estimates to reach the 2030 goals for the three diseases from all sources is in the tens of billions of dollars and, collectively, while we have been making progress, we are not investing sufficiently to get ahead of the curve.

To paraphrase the oft-quoted UNAIDS Executive Director, Michel Sidibé: we can pay now, or we can pay later. One way or another we will pay. If we invest in fully funding the Global Fund and the full responses set out in the global plans, we will end the diseases and we will see phenomenal returns on our investments.

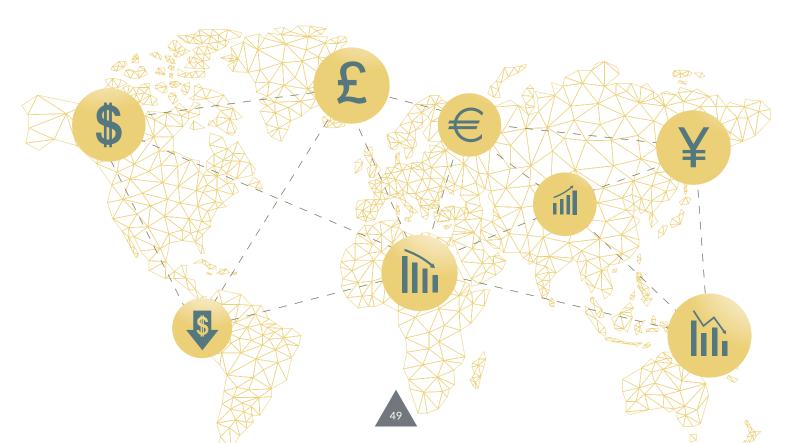
Currency Fluctuations: Staying Ahead of the Game

Fluctuations in currency exchange rates have had a negative impact on both the sources and use of Global Fund contributions. **cviii* Decreases in the values of currencies against the US dollar have resulted in significant decreases in the value of pledges from donor countries, leaving the Global Fund with less money to distribute than initially planned.

If non-USD pledges from Fourth Replenishment are converted using today's rates the difference is about USD\$1.129 billion (slightly more than 17%). Another way to say this is that to reach USD\$13 billion we would need an overall increase of USD\$2.7 billion compared to the overall Fourth Replenishment outcome at today's rate, which comes to around USD\$10.3 billion (as USD\$2.7 billion is 21% of the USD\$13 billion target).

Similarly, currency valuation decreases have an impact on the use of funds by grantee countries. When currency rates decline against the US dollar, implementing countries can end up with less funding than they anticipated, although this may be mitigated through using other donor currencies with a better exchange rate against the local currencies.

These facts underscore the need for a successful replenishment process outcome of at least USD\$13 billion.



The Global Fund as a financing mechanism is widely considered to be among the great success stories of the progress made towards the Millennium Development Goals.

However, significant increased financing is needed to maintain current treatment regimens, to find new ways to address the changing nature of the diseases including drug-resistance, to develop vaccines to prevent future infections and to scale-up to reach those still without access to community and health systems.

In 2013, the Global Fund placed its resource needs for the three-year period ending in December 2016 at USD\$15 billion. The world failed to meet that target, and yet the Global Fund continued to deliver results. However, as already quoted in this paper, the Executive Director of the Global Fund has said that achieving impact was relatively easy because the need was so great that almost anything we did had impact.

The Global Fund need for this replenishment has been set lower at USD\$13 billion and yet the Investment Case clearly shows that lower or flat-lined investments have literal life and death consequences for people living with or at risk of the three diseases.

Key and vulnerable populations, networks groups and civil society have questioned the lower replenishment target: the gains made over the past few years seem particularly vulnerable to complacency. This report builds on the Global Fund's Investment Case to show just how real the cost of inaction could be and asserts the broadly-held position among civil society active around the Global Fund that it needs to have ambitious funding targets and to encourage donors to meet and exceed them.

Insufficient investments will mean more infections, more lives unnecessarily lost, more difficulties providing treatment if drug resistance gains a stronger foothold and rapidly escalating economic costs. Those who will suffer the most from insufficient investments will be those who are most at risk: key and vulnerable populations.

The cost of inaction is real to hundreds of millions of people and their families, their livelihoods and their communities. We can work together to end the epidemics now or feel the greater burden of our inaction later.

Endnotes

2016-2020, The Paradigm Shift. http://stoptb.org/ assets/documents/global/plan/GlobalPlanToEndTB http://www.globalfundadvocatesnetwork.org/wp-TheParadigmShift 2016-2020 StopTBPartnership.pdf content/uploads/2015/12/GF-Investment-Case-December-2015.pdf xvii The Stop TB Partnership, Global Plan to End TB 2016-2020, The Paradigm Shift. http://stoptb.org/ http://www.unaids.org/en/resources/ assets/documents/global/plan/GlobalPlanToEndTB documents/2014/JC2686_WAD2014report TheParadigmShift_2016-2020_StopTBPartnership.pdf iii http://www.unaids.org/en/resources/ xviii The Global Fund, Investment Case for the Global documents/2015/MDG6 15years-Fund's 2017-2019 Replenishment. http://www. 15lessonsfromtheAIDSresponse theglobalfund.org/documents/publications/other/ Publication_InvestmentCase_Summary_en/ iv **GF Investment Case** xix The Global Fund, Investment Case for the Global http://kff.org/global-health-policy/report/ Fund's 2017-2019 Replenishment. http://www. donor-funding-for-health-in-low-middle-incometheglobalfund.org/documents/publications/other/ countries-2002-2013/ Publication_InvestmentCase_Summary_en/ vi Global AIDS Update, UNAIDS, May 2016 http://www. WHO, World Malaria Report 2015 p. v unaids.org/sites/default/files/media_asset/global-AIDS-update-2016_en.pdf xxi WHO World Malaria Report, 2015, p. 8 vii http://www.who.int/hiv/pub/arv/policy-brief-WHO World Malaria Report, 2015. P. 8 xxii arv-2015/en/ xxiii WHO World Malaria Report, 2015. P. 2; p-8-9 viii The Stop TB Partnership, Global Plan to End TB 2016-2020, The Paradigm Shift. http://stoptb.org/ WHO, World Malaria Report 2015 p. 8, p.13 xxiv assets/documents/global/plan/GlobalPlanToEndTB_ TheParadigmShift_2016-2020_StopTBPartnership.pdf WHO, World Malaria Report 2015 p. 8 XXV WHO. Global Tuberculosis Report ix http://www.publications.parliament.uk/pa/cm201213/ xxvi 2015. http://apps.who.int/iris/ cmselect/cmintdev/126/126we03.htm bitstream/10665/191102/1/9789241565059_eng. pdf?ua=1 xxvii Global Fund Results Report 2015, page 17. The Stop TB Partnership. http://www.stoptb.org/ Global Fund Results Report 2015, page 17. xxviii global/fund/ xxix https://www.eda.admin.ch/dam/deza/en/documents/ http://www.theglobalfund.org/ xi partnerschaften-auftraege/216416-factsheet-gfatm_ documents/publications/annual_reports/ EN.pdf Corporate_2015ResultsReport_Report_en/ Global Fund Results Report 2015, page 17. XXX WHO. Global Tuberculosis Report xii 2015. http://apps.who.int/iris/ Global Fund Results Report 2015, page 22. xxxi bitstream/10665/191102/1/9789241565059_eng. pdf?ua=1 http://www.theglobalfund.org/en/blog/2016-02xxxii 25_A_Partnership_to_End_Malaria_in_the_Mekong/ The Stop TB Partnership, Global Plan to End TB xiii 2016-2020, The Paradigm Shift. http://stoptb.org/ xxxiii Roll Back Malaria Partnership, World Malaria Day assets/documents/global/plan/GlobalPlanToEndTB_ 2016 Factsheet. TheParadigmShift_2016-2020_StopTBPartnership.pdf xxxiv Roll Back Malaria Partnership, World Malaria Day xiv The Stop TB Partnership, Global Plan to End TB 2016 Factsheet. 2016-2020, The Paradigm Shift. http://stoptb.org/ assets/documents/global/plan/GlobalPlanToEndTB_ Purdy, M., Robinson, M., Wei, K. & Rublin, D. The XXXV $The Paradigm Shift_2016-2020_Stop TBP artnership.pdf$ economic case for combating malaria. Am. J. Trop. Med. Hyg. 89, 819-823 (2013).

the Tipping Point for AIDS, Tuberculosis and Malaria.

The Stop TB Partnership, Global Plan to End TB

December 2015

xvi

The Global Fund. Investment Case for the Global

Fund's 2017-2019 Replenishment. The Right Side of

ΧV

- xxxvi Attaran A, Narasimhan V. Roll back malaria? The scarcity of international aid for malaria control. Malar J. 2003;2:8
- xxxvii Gallup and Sachs, (2001); The Economic Burden of malaria. Centre for International Development at Harvard University. Working Paper 52.
- xxxviii Gretchen Newby, Adam Bennett, Erika Larson et al. The path to eradication: a progress report on the malaria-eliminating countries. The Lancet, Vol. 387, No. 10029, pp. 1775–1784, 23 April 2016.
- xxxix Roll Back Malaria Partnership. Action and Investment to defeat Malaria 2016 2030 (AIM). Investing for a Malaria Free World. Geneva, 2015.
- xl Roll Back Malaria Partnership. Action and Investment to defeat Malaria 2016 – 2030 (AIM). Investing for a Malaria Free World. Geneva, 2015.
- xli Roll Back Malaria Partnership. Action and Investment to defeat Malaria 2016 2030 (AIM). Investing for a Malaria Free World. Geneva, 2015.
- xlii UCSG Global Health Group's Malaria Elimination Initiative (MEI). Shrinking the Malaria Map. University of California San Francisco. Infographic. 2016. http://www.shrinkingthemalariamap.org/news-blog/news/malaria-free-world-possible-within-generation-according-lancet-paper. Accessed 5 May 2016.
- xliii A malaria-eliminating country describes a country that is in the process of moving from controlled low-endemic malaria to elimination.
- xliv Aspiration to Action: what will it take to end malaria?
- xlv Global Fund Results Report 2015, page 37.
- xlvi The Global Fund. Investment Case. December 2015 pg 6.
- xlvii The Global Fund. Investment Case. December 2015 pg 11.
- xlviii Global AIDS Update, UNAIDS, May 2016 http://www. unaids.org/sites/default/files/media_asset/global-AIDS-update-2016_en.pdf
- xlix The Global Fund. Investment Case. pg 11
- I The Stop TB Partnership, Global Plan to End TB 2016-2020, The Paradigm Shift. http://stoptb.org/assets/documents/global/plan/GlobalPlanToEndTB_TheParadigmShift_2016-2020_StopTBPartnership.pdf
- li The Global Fund. Strategy Framework 2012-2016: Investing for Impact.
- lii Roll Back Malaria Partnership. Action and Investment to defeat Malaria 2016-2030 (AIM). Geneva, 2015

- liii http://www.publications.parliament.uk/pa/cm201213/ cmselect/cmintdev/126/126we03.htm
- liv Lubell, Y. et al. Artemisinin resistance-modelling the potential human and economic costs. Malar.J. 13, 452 (2014)
- lv Dybul, M. Overcoming Challenges in Global Health. Huffington Post. May 24th 2016. http://www.huffingtonpost.com/amb-mark-dybul/overcoming-challenges-in-global-health_b_10113960.html
- Ivi O'Neill, J. Review on Antimicrobial Resistance: Tackling drug-resistant infections globally. May 2016 http://amrreview.org/
- lvii http://www.who.int/hiv/pub/drugresistance/hiv-resnet_annualmeeting2015/en/
- Iviii (Alfonso JM, Plos One, 2012); (Machado LY, AIDS Res Hum Retroviruses, 2013); (Evelyn Lavu, IAS 2015 poster No MOPED723)
- lix Estill et al. The need for second-line antiretroviral therapy in adults in sub-Saharan Africa up to 2030: a mathematical modelling study. Lancet, February 15, 2016 http://dx.doi.org/10.1016/ S2352-3018(16)00016-3
- Ix The Stop TB Partnership, TB Fact Sheet. http://www.stoptb.org/assets/documents/global/plan/plan2/
 General%20TB%20Factsheet%20-%20November%20
 2015%20final.pdf
- lxi www.theglobalfund.org/.../annual_reports/ Corporate_2015ResultsReport_Report_en/
- lxii http://amr-review.org/sites/default/files/AMR%20 Review%20Paper%20-%20Tackling%20a%20crisis%20 for%20the%20health%20and%20wealth%20of%20 nations_1.pdf
- lxiii https://www.cdc.gov/globalaids/in-the-news/whmdr/cdc-global-mdr-tb-fact-sheet.pdf
- lxiv http://www.wwarn.org/about-us/malaria-drugresistance
- Ixv Elizabeth A Ashley et al. Spread of Artemisinin
 Resistance in Plasmodium falciparum Malaria.
 Advanced online publication in New England Journal of Medicine. July 31 2014; 371:411-23. DOI: 10.1056/
 NEJMoa1314981
- lxvi http://www.wwarn.org/news/news-articles/lateststudy-confirms-further-spread-and-emergenceantimalarial-resistance
- Ixvii GFAN, ICASO and FSP Key Populations and the Global Fund: Delivering Key Results. June 2016
- lxviii http://www.unaids.org/en/resources/documents/2015/ MDG6_15years-15lessonsfromtheAIDSresponse

- Ixix UNAIDS Gap Report, 16 July 2014, http://www.unaids.org/sites/default/files/media_asset/UNAIDS_Gap_report_en.pdf.
- Ixx UNAIDS Gap Report, 16 July 2014, http://www.unaids.org/sites/default/files/media_asset/UNAIDS_Gap_report_en.pdf.
- lxxi How AIDS Changed Everything, p. 434
- Ixxii UNAIDS Global Report 2015
- Ixxiii The Global Fund to Fight AIDS, Tuberculosis and Malaria (2015). Global Fund Presentation at Community, Rights and Gender Special Initiative Partners Forum. 18 August 2015, Bangkok, Thailand.
- lxxiv GFAN, ICASO and FSP Key Populations and the Global Fund: Delivering Key Results. June 2016
- lxxv http://middleeast.thelancet.com/pdfs/journals/lancet/ PIIS0140-6736(15)00324-4.pdf
- lxxvi The Stop TB Partnership, Global Plan to End TB 2016-2020, The Paradigm Shift. http://stoptb.org/assets/documents/global/plan/GlobalPlanToEndTB_TheParadigmShift_2016-2020_StopTBPartnership.pdf
- Ixxvii GFAN, ICASO and FSP Key Populations and the Global Fund: Delivering Key Results. June 2016
- Ixxviii GFAN, ICASO and FSP Key Populations and the Global Fund: Delivering Key Results. June 2016
- lxxix http://www.rollbackmalaria.org/microsites/wmd2015/_docs/Malaria_Evidence%20for%20Advocacy_April_2015.pdf
- lxxx Roll Back Malaria Partnership. The Contribution of Malaria Control to Maternal and Newborn Health, July 2014.
- lxxxi Global Fund Results Report 2015, page 28.
- Ixxxii GFAN, ICASO and FSP Key Populations and the Global Fund: Delivering Key Results. June 2016
- Ixxxiii The Global Fund, Investment Case 2015 pg 21
- Ixxxiv The Global Fund, Investment Case 2015 pg 22
- lxxxv http://www.unaids.org/sites/default/files/media_asset/ MDG6Report_en.pdf
- lxxxvi http://thelancet.com/journals/lancet/article/PIIS0140-6736(15)60658-4/fulltext

- Ixxxvii The Stop TB Partnership, Global Plan to End TB 2016-2020, The Paradigm Shift. http://stoptb.org/assets/documents/global/plan/GlobalPlanToEndTB_TheParadigmShift 2016-2020 StopTBPartnership.pdf
- Ixxxviii The Stop TB Partnership, Global Plan to End TB 2016-2020, The Paradigm Shift. http://stoptb.org/assets/documents/global/plan/GlobalPlanToEndTB_TheParadigmShift_2016-2020_StopTBPartnership.pdf
- lxxxix The Stop TB Partnership, Global Plan to End TB 2016-2020, The Paradigm Shift. http://stoptb.org/assets/documents/global/plan/GlobalPlanToEndTB_TheParadigmShift_2016-2020_StopTBPartnership.pdf
- xc Gretchen Newby, Adam Bennett, Erika Larson et al. The path to eradication: a progress report on the malaria-eliminating countries. The Lancet, Vol. 387, No. 10029, pp. 1775–1784, 23 April 2016.
- xci Roll Back Malaria Partnership. Action and Investment to defeat Malaria 2016 2030 (AIM). Investing for a Malaria Free World. Geneva, 2015.p29.
- xcii Roll Back Malaria Partnership. Action and Investment to defeat Malaria 2016 – 2030 (AIM). Investing for a Malaria Free World. Geneva, 2015.p30. Calculations are provided in Appendix D.
- xciii RBM Partnership, ACTION AND INVESTMENT TO DEFEAT MALARIA 2016-2030, For a Malaria-Free World, September 2015.
- xciv The Global Fund, 34th Board Meeting, 2015 F3 forecast/Mid Term Plan (pledges & contributions, grant expenses & disbursements), ALM, GF/B34/15 Geneva, Switzerland 16-17 November 2015



information on malaria presented here.