

Get Back on Track To End the Epidemics

#endtheepidemics



GFAN sounds an alarm!

Without action, the epidemics of HIV, TB, and malaria will persist and potentially resurge.

Get Back on Track to end the epidemics of HIV, tuberculosis, and malaria

Global Fund Advocates Network - July 2018

Contents

Executive Summary	III
Hazards in the global epidemic response	9
Spotlight on HIV	18
Spotlight on TB	23
Spotlight on malaria	26
Acknowledgements	29
Endnotes	30



GFAN unites voices and efforts from all over the world to support a fully funded Global Fund to Fight AIDS, Tuberculosis and Malaria

Ending the three epidemics is possible. **But there is a warning.** Significant increases in international funding are needed, immediately, if the global goal to end the three epidemics is to be met.

Executive Summary

In 2015, through the Agenda for Sustainable Development, the world committed to end the three epidemics of HIV, tuberculosis (TB), and malaria by 2030.

These three infections are leading global causes of premature deaths and disability. Campaigns against the three diseases have saved lives and have contributed greatly to broad capacity for health care in every country. A major push to finally end the three epidemics could deliver enormous humanitarian, development, economic, and security benefits for the world.

Significant increases in international funding are needed, immediately, if the global goal to end the three epidemics is to be met.

Ending the three epidemics is possible. The world has the medicines, evidence-informed and effective interventions, and other tools to make consistent progress. Total world investment across all health priorities has been increasing, driven in large part by increased spending from governments in low- and middle-income countries. And, since 2001, positive momentum against all three diseases has led to some major achievements:

- ✓ Life-saving HIV treatment had been provided to 20.9 million people by the end of 2016, far more than half of all people living with the virus, and the number of people newly infected each year has dropped by half during the past decade.
- ✓ Global rates of TB cases have been driven down by 1.5% annually, and there has been a 30% decrease in TB-related deaths since 2002, saving more than 50 million lives.
- ✓ Annual malaria incidence rates have been cut by 37% worldwide since 2000, and annual malaria mortality rates have been cut by 60%. This progress translates into almost 7 million lives saved, most of them infants and children.

These successes are remarkable, but there are doubts they can be sustained and accelerated as needed. In this report, the Global Fund Advocates Network (GFAN) sends a warning:

New data show that the world is not on target to end the three epidemics and will not meet 2030 targets without significant increases in funding.

A summary of recent data and trends underscores the challenges:

- ! **HIV** is the leading global cause of early death among women ages 15–49 and causes over 5% of disability among adults ages 15–49. A total of 37.6 million people now live with HIV, and 1.8 million become newly infected every year.
- ! **TB** is the world's most lethal infectious disease, with over 10 million new cases each year, an estimated 1.8 million deaths annually, over a quarter of the world's population carrying latent TB infection, and many more at risk for infection and illness.
- ! **Malaria** infected an estimated 216 million people in 2016, killing 445,000 people, including 285,000 children under the age of five. Malaria remains a major killer of children, taking the life of a child every two minutes.



These infectious diseases are dynamic and ready to resurge quickly wherever public health efforts begin to falter.

Troubling signs indicate that the world's response to the three epidemics has lost momentum, putting at risk the progress made during the past decade, with tragic costs to people's lives, economies, health security, and sustainable development:

Adolescents and young women remain at high risk for all three diseases, just as the world's largest-ever generation of young people come of age in low- and middle-income countries.

Key populations for each of the epidemics continue to be neglected by health systems and confronted by deep social, legal, and economic disparities that contribute to poor health.

Community-led and community-based programs are severely under-resourced, even though communities affected by HIV, TB, and malaria are crucial actors in promoting and supporting health, addressing structural causes of health risks and health disparities, holding health systems and governments accountable, and ensuring sustainability and effectiveness of health efforts.

Authoritarian and regressive political forces in many countries are undermining the rule of law and respect for human rights, impairing people's ability to seek health care or organize and advocate for their health and rights.

All three epidemics are experiencing growing drug resistance, and actions to forestall further resistance – such as targeted health services, expansion of community-based health support, and roll-out of new drugs and diagnostics – are not at sufficient scale.

Access to medicines and health is under threat by some influential for-profit interests. Some pharmaceutical companies, along with politicians and trade negotiators working for the interests of the for-profit sector, are taking actions to extract maximum profits and prevent use of TRIPS flexibilities. Such actions come at the expense of national budgets and out-of-pocket spending by patients and households, and in many cases at the expense of people's access to affordable medicines and advancement of public health.

International development assistance for health from the world's wealthiest countries has plateaued, with insufficient levels of aid allocated to responses against the three epidemics and destructive withdrawal of external aid from low- and middle-income countries.

Many low- and middle-income countries are not ready to fully scale up programs against the epidemics because of weak health systems; lack of appropriately targeted programs, including community-based programming; and domestic political and economic challenges in mobilizing resources for health.

GFAN sounds an alarm

Without action, the epidemics of HIV, TB, and malaria will persist and potentially resurge.



Global institutions, including the Global Fund to Fight AIDS, Tuberculosis and Malaria, the World Health Organization (WHO), UNAIDS, the Stop TB Partnership, and the RBM Partnership to End Malaria (formerly known as Roll Back Malaria) have set ambitious targets.

But data now show that the world will not meet those global targets set for 2020. Global strategies, sustainable development targets, and political slogans have diverged from the realities faced in implementing countries.

If the world only maintains current levels of investments and programming against the three epidemics, global targets for 2025 and 2030 will be unattainable.

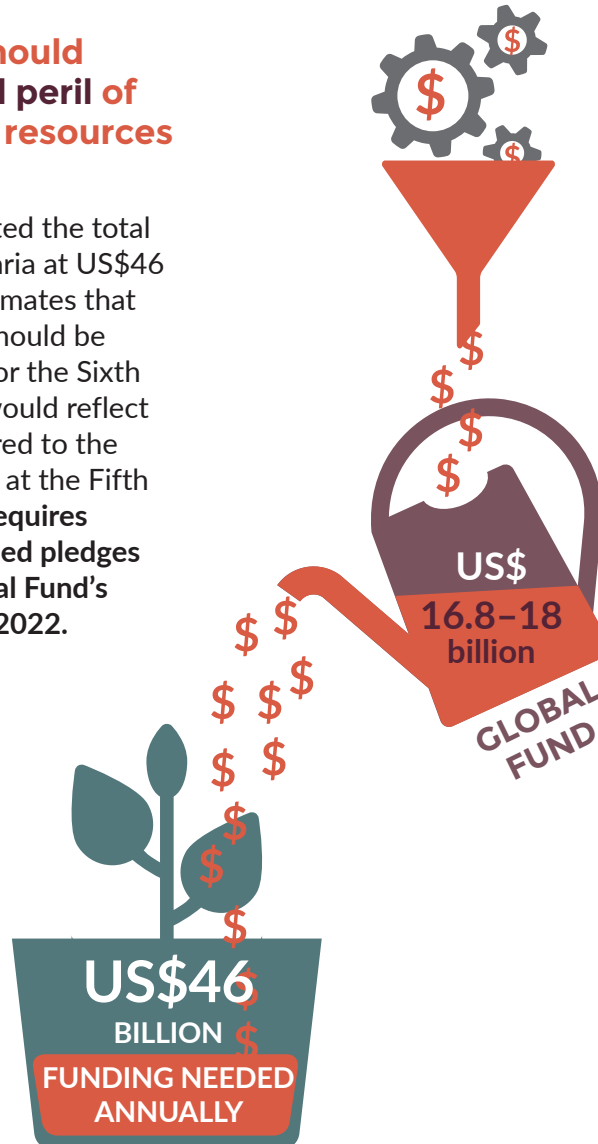
Flat or declining funding from international donors, with an assumption of progress through greater efficiencies and increased domestic investment in implementing countries, will drive the world off-course in its attempts to control and end the epidemics. Flat funding pushes the world off-track.

The world risks losing control of all three epidemics. Uncontrolled and potentially worsened epidemics will cost countless lives, undermine economic and human development, and threaten the health security for all people on the planet.

GFAN as a global health coalition **calls for immediate action** to get back on track to end the three epidemics.

1. Donor governments and implementing countries should recognize the urgency and peril of the situation and mobilize resources without delay.

The technical partners have estimated the total funding need for AIDS, TB and malaria at US\$46 billion annually, of which GFAN estimates that at least US\$16.8 to US\$18 billion should be invested through the Global Fund for the Sixth Replenishment (2020-2022). This would reflect a minimum increase of 22% compared to the US\$11.9 billion announced pledges at the Fifth Replenishment (2017-2019). **This requires donor governments making increased pledges – as early as possible – to the Global Fund’s imminent replenishment for 2020-2022.**



2. Policy experts and decision makers must acknowledge, articulate, and draw attention to the ways in which HIV, TB and malaria efforts are off-track and update strategies to bring epidemic responses back on course to ending the three epidemics.

3. Global technical partners, notably WHO, UNAIDS, and the Stop TB and the Roll Back Malaria partnerships, must re-examine current progress and challenges and recalculate current epidemic trajectories and global resource needs.

4. The Global Fund, given its record of success and central role in financing epidemic responses, should be ambitious in setting replenishment targets for the 2020-2022 funding cycle and be forceful in communicating the costs of inaction.

5. Advocates should boldly demand increases in international aid for health, including for programs against HIV, TB and malaria, and should press all governments to build resilient and sustainable systems for health and commitments to health for all.

Advocating for increased funding for the Global Fund

The Global Fund to Fight AIDS, Tuberculosis and Malaria is now developing an investment case and a sixth replenishment process to mobilize resources to meet its targets over the three years 2020–2022.

The investment case and replenishment process will be informed by epidemic response targets and investment need calculations produced by WHO, UNAIDS, the Stop TB Partnership, and the RBM Partnership to End Malaria. The Global Fund anticipates launching its investment case and replenishment process at the end of 2018 or beginning of 2019.

In its most recent fifth replenishment, which raised pledges for the years 2017–2019, the Global Fund was able to secure donor commitments of approximately \$13 billion. This was a significant and important amount of funding but represented only a part of the full investment need determined by technical partners.

Advocates should encourage the Global Fund and all international funding agencies to set ambitious targets for programming and investment to end the three epidemics.

Please visit the GFAN website at www.globalfundadvocatesnetwork.org to learn more about upcoming opportunities for advocacy, including:

July 2018

[International AIDS Conference \(AIDS2018\)](#)

September 2018

[United Nations High-Level Meeting on TB \(TB HLM\)](#)

October 2018

[World Health Summit](#)

October 2018

[Union World Conference on Lung Health](#)

November 2018

[Global Fund's 40th Board Meeting](#)

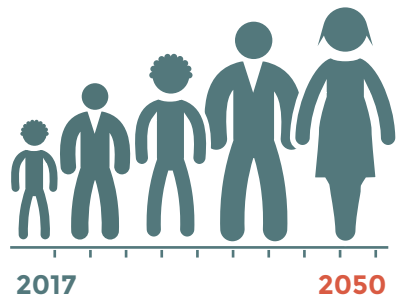
November and December 2018

[G20 summit](#)

Other national and regional meetings and processes involving GFAN advocates

Add your voice! The time for action is now.

Hazards in the global epidemic response



The total population of young people aged 15 to 24 is projected to rise from 1.2 billion in 2017 to 1.4 billion in 2050.

A new generation of adolescents and young women is at risk

The world's largest-ever generation of young people is coming into adulthood, with by far the majority living in low- and middle-income countries. The total population of young people aged 15 to 24 is projected to rise from 1.2 billion in 2017 to 1.4 billion in 2050.

The future of world security and sustainable development depends on the success of this new generation. As historically important as this generation is, its members are at risk.

At current trajectories over 20% of this new generation will be underemployed, under-educated, and living with minimal income and shelter.¹ As many as 1 in 10 could be living in countries made fragile by conflict or environmental disaster. Importantly, over two-thirds of the world's young people aged 15 to 24 during the coming years – including 400 million youth in sub-Saharan Africa and 400 million in South and Southeast Asia – will be living in countries where they are at relatively high risk of infection, illness, and early death from HIV, TB, and/or malaria. Health systems in most countries in these regions are not currently sensitized, structured, or funded at scale to meet adolescents' and young women's health needs in the clinic or in community settings.

- Every year, over 350,000 adolescent girls (10–19 years) and young women (15–24

Every year, over
350,000
adolescent girls (10–19 years) and
young women (15–24 years)
become newly HIV infected in
low- and middle-income countries



years) become newly HIV infected in low- and middle-income countries. Although global rates of new HIV infections are falling, rates among adolescents and young women remain high in many locations, signaling potential for resurgence of HIV epidemics as cohorts of young people expand. Programs are not yet in place to ensure that all of those young people have access to comprehensive sexual and reproductive health services and combination HIV prevention options, education and economic opportunity, and autonomy in negotiating sex and marriage.²

- New analyses have calculated that adolescents and young adults ages 10–24 years account for 17% of all TB cases – over 1.7 million cases each year.³ Many of these young women and men are living in poor communities and crowded housing, placing them and their peers at risk for TB. Too many people in those communities are not reached by health programs that educate people about TB, actively identify potential



10,000 women and 200,000 infants die annually as a result of malaria infection during pregnancy ⁴

cases, help reduce people's exposure, and link people to care.

- Every year, 125 million young women around the world are at risk from malaria during pregnancy. It is estimated that 10,000 women and 200,000 infants die annually as a result of malaria infection during pregnancy.⁴ First-time mothers – often young women in high-burden countries – are especially vulnerable. Yet current efforts to offer preventive malaria treatment during pregnancy, known as intermittent preventive treatment in pregnancy (IPTp), and preventive treatment for children during seasonal malaria outbreaks, known as IPTc or seasonal malaria chemoprevention (SMC), are reaching only a fraction of the women and children in need.

The emerging generation of young people should not live in fear of losing their health and lives from infectious disease and should not face loss of access to education, work, and opportunity due to illness or disability.

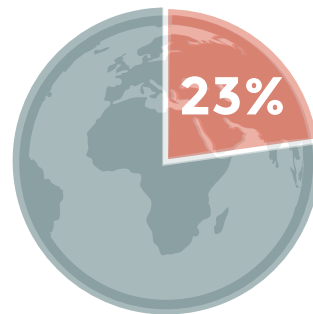
Full investment in the health of adolescents and

young women through the Global Fund and other financing programs is needed to prevent needless costs to people's health and lives and reinforce economies, health security, and sustainable development.

Key and vulnerable populations for the three epidemics are neglected by health programs

For each of the three epidemics of HIV, TB, and malaria, specific groups of people are particularly vulnerable to infection and lack of access to treatment, prevention, or other health services. Reaching these populations is key to combatting epidemics and improving public health, as well as being a central matter of realizing human rights and justice.

- In much of the world, rates of HIV are highest among key populations – people who inject drugs, sex workers, transgender people, prisoners, and gay men and other men who have sex with men – and their sexual partners.



23% of the world's population – 1.7 billion people – carry latent TB



A child still dies every 2 minutes from malaria

According to recent data, key populations and their sexual partners accounted for 80% of new HIV infections outside of sub-Saharan Africa and 25% of new infections in sub-Saharan Africa.⁵ Many live in countries where criminal laws, punitive law enforcement, and neglect and repression by their governments create barriers to effective HIV services. Younger people and adolescents in these key populations are at particular risk of not being reached by HIV prevention and treatment programs.

- Approximately 23% of the world's population – 1.7 billion people – carry latent TB, and certain populations face a higher risk of developing active TB, including people living with HIV, people who are malnourished, prisoners and migrants.⁶ Poverty and stigma present barriers to many of these highest-risk people from being reached with TB education, case detection, and comprehensive care.
- A child still dies every 2 minutes from malaria, a preventable disease.⁷ Furthermore, malaria rates throughout the world are higher among the economically poorest populations, including mobile and migrant populations, people in humanitarian crises, and indigenous and rural

communities. These populations are being made ever more vulnerable by armed conflict and population displacement, social and political upheaval, environmental change, and weak health systems that do not provide good access to prevention interventions or diagnosis and treatment for migrants, refugees or the poor. The world is far from ensuring universal health coverage for exactly these populations.

Efforts are underway, through the Global Fund and other institutions, to identify, estimate the size of, and address the needs and demands of, key and vulnerable populations for the three diseases. The Global Fund is notable as an international financing mechanism in using its investments and technical support to catalyze the scale-up of high-quality interventions for key populations, and for its use of its structures and funding processes, including country coordinating mechanisms (CCMs) and country dialogues, to increase key and vulnerable population participation in updating country priorities and strategies.⁸

However, key and vulnerable populations largely remain neglected in responses to the three epidemics, even in countries where the Global Fund is a significant donor. In many low-income countries, international development assistance is increasingly allocated to health systems and purchase of medicines and commodities, leaving many populations without targeted community-level programming for health and facing rights-related barriers to services. In middle-income countries, donors are withdrawing international development assistance for health without capacity and willingness by national governments to replace these investments in ways that will sustain health programs for those most at risk.

As a result, programming for key and vulnerable populations is nowhere near the scale needed to reduce disproportionately high rates of HIV, TB, and malaria.

High-income countries need to increased investments, through the Global Fund and other global institutions and financing sources, to sustain and reinforce programming to help key and vulnerable populations throughout the world to access services and realize health and human rights.

Human rights are under attack

Human rights are central to the achievement of the world's Sustainable Development Goals (SDGs), including ending of the three epidemics.^{9,10} The very goals of universal health coverage and epidemic control are manifestations of a human rights principle of justice and 'leaving no one behind'.

People's individual capacity for health is also heavily influenced by human rights, such as through their:

- **autonomy and empowerment to seek health information and services;**
- **power to confront stigma and discrimination in health and community settings;**
- **ability to access housing, education, employment, and economic security; and**
- **ability to seek police protection and legal recourse in the face of unethical treatment or violence.**

NEW DATA IN 2018 shows that fundamental human rights are under attack:

Leading global measures of human rights have reported worsening rights-related situations in every region of the world.^{11,12,13}

Rankings of people's capacity to participate in and influence their own governments show a decline in 89 countries around the world during 2017, including setbacks in major countries in Asia, most notably India and Indonesia, and Africa, such as the Democratic Republic of the Congo and Ethiopia.¹⁴

The rights and equality of women are not improving, and neither are the human rights of many key and vulnerable populations including lesbian, gay and transgender people, sex workers, people who use drugs, prisoners, mobile and migrant populations, people in humanitarian crises, and indigenous people. For example, a total of **60 countries were reported in 2017 to have experienced a decrease in gender equality over the previous year.**¹⁵

Campaigns to prevent and treat HIV, TB, and malaria are continually reporting setbacks in their local programming due to rights violations of key and vulnerable populations, including violations of people's political, civil, economic, social, and cultural rights.

To make progress against the three epidemics, the world needs immediate scaled-up investment in programs to reduce human rights-related barriers to health services. This should include expanded community-level programming to inform and empower people about their rights, trainings and monitoring of health care workers, trainings and oversight for law enforcement and legal justice officials about rights-related barriers to services, and advocacy to improve laws and policies to increase access to health.

The Global Fund and human rights

The Global Fund provides a model for how global health programs can invest in human rights and gender equality. The Global Fund requires all grantees to contractually commit to respecting core human rights standards that include non-discriminatory access to services for all and respect and protection for informed consent, confidentiality and the right to privacy in health services

The Global Fund is also now expanding its investments in programs that directly address human rights barriers to health services.

For more information, see the Global Fund's Focus on Human Rights at www.theglobalfund.org/media/1224/publication_humanrights_focuson_en.pdf.

Drug resistance threatens progress

The global efforts to control HIV, TB, and malaria are all threatened by emergence of resistance to available treatment and prevention strategies. New data show the following:

- WHO has documented high levels of HIV resistance to efavirenz and nevirapine in Africa, Central America and Southeast Asia, undermining the effectiveness of the two most affordable and widely used drugs used in HIV treatment.¹⁶ People throughout the world are told to start HIV treatment as soon as they are diagnosed, and yet many health systems cannot ensure them access to a steady, affordable, life-long supply of medicines; cannot offer viral load testing to monitor treatment success; and are not funding community-based programs to support people in adhering to treatment. Consequently, a high risk exists for rising rates of HIV treatment failure and increased costs for sustaining and scaling up treatment.
- **In 2016, at least 5% of the world's TB cases were drug resistant:** 600,000 new cases had resistance to rifampicin, the most effective first-line drug. Most (490,000) of these cases were multidrug-resistant (MDR-TB) to both isoniazid and rifampicin, and approximately 30,000 TB cases were extensively drug-resistant (XDR-TB), meaning resistant to four commonly used anti-TB drugs. XDR-TB cases have been confirmed in more than 120 countries around the world.^{17,18} **Approximately 4 million people with active TB around the world remain undiagnosed or untreated,** and millions of others are



ANNUAL GLOBAL COST for treatment and care of TB is:

\$13 billion

The GLOBAL FINANCIAL TARGET for research and development for new diagnostics, drugs and vaccines is

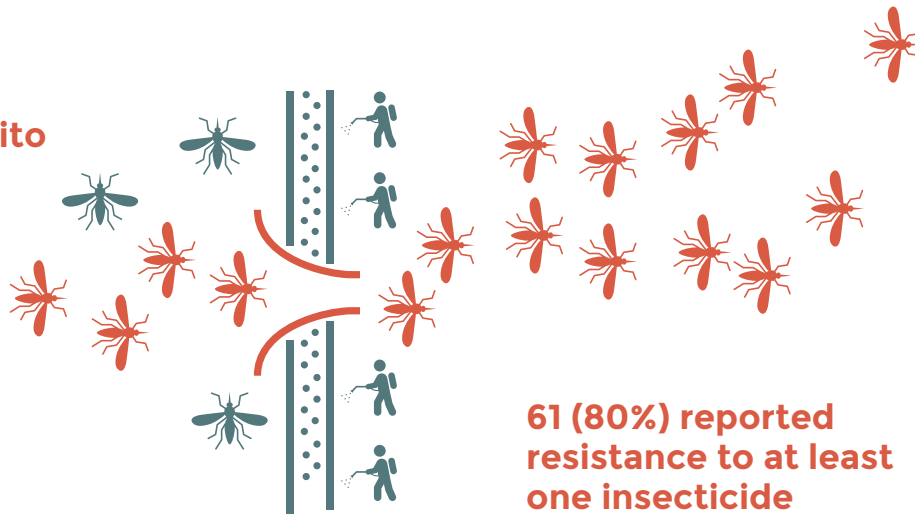
\$2 billion



diagnosed and prescribed TB treatment, but do not have sufficient access to health care and treatment adherence support to ensure that they succeed in treatment, raising the risks of further development of drug resistance. Experts estimate that only 60% of drug-resistant cases are currently being identified and treated each year and roll-out of two newer medicines, bedaquiline and delamanid, for the treatment of MDR-TB has reached only 16% of people who need this treatment.¹⁹ The global financial target for resources needed for prevention, treatment and care for TB is \$13 billion and the global financial target for research and development for new diagnostics, drugs and vaccines is \$2 billion. Ending TB will not be possible unless gaps in both areas are eliminated.

- Drug and insecticide resistance remain dual and emerging threats to progress against malaria. Of 76 countries tracking mosquito resistance to insecticides, 61 (80%) reported resistance to at least one insecticide, with mosquito resistance to pyrethroids, the leading class of insecticides, reported in numerous countries in sub-Saharan Africa as well as Central and Southeast Asia.²⁰

Of 76 countries tracking mosquito resistance to insecticides



Artemisinin, the leading drug in malaria treatment, is facing resistant strains of the malaria parasite in the Greater Mekong region; spread of this resistance to other countries in Africa, Asia and Latin America would require development of effective alternative treatments and would result in increased costs and setbacks for the global effort.

- monitoring of patients for treatment success and potential drug resistance, and offering them adjusted treatment regimens as needed;
- strengthening of procurement and supply of medicines and diagnostics; and
- development of new drugs and diagnostics to forestall further resistance.²¹

Increased investments are needed now in these interventions for all three diseases to prevent emergence of drug resistance and costly resurgence of all three epidemics.

Medicines and other health supplies must be made accessible and affordable

Governments and international institutions,

including financing mechanisms such as the Global Fund, have an important responsibility to ensure that medicines and other health technologies are globally available, accessible and affordable for public health.

Tragically, people are dying because of lack of medicines and health supplies. Health systems in most countries are struggling to reliably and affordably procure and deliver medicines and other health supplies. Inconsistent and insufficient supply of medicines and other health commodities, which often leads to stock-outs and treatment interruptions, puts lives at risk and endangers the progress made against the diseases.²² The cost of medicines and other supplies is also a pressing issue for an increasing number of middle-income countries that do not have access to international development assistance or competitively negotiated volume-based pricing of medicines obtained through globally or regionally pooled procurement mechanisms.

Further, some pharmaceutical corporations and other for-profit companies, along with politicians and trade negotiators working for the interests of the for-profit sector, support advocacy in many countries for laws and policies that guard high-priced products against competition and prioritize profits over public health.²³ As examples:²⁴

- Innovator pharmaceutical companies routinely exclude high-burden, commercially attractive middle-income countries such as China and Russia from voluntary licenses and discount pricing programs, thereby reducing opportunities for affordable and equitable access to low-cost drugs for key health issues.

Historical experience with each of the diseases has shown that emergence of resistance can cause costly setbacks for epidemic control efforts and increased cases of illness and deaths. Drug resistance can be prevented and overcome through several strategies, including:

- provision of optimal treatment regimens that are least susceptible to resistance;
- patient support and peer support in clinics and community settings for treatment literacy, adherence, and success;

- International medicine access mechanisms such as the Medicines Patent Pool (MPP) have been unable to include these same middle-income countries in their negotiations and deals, despite their high burden of key infectious diseases. Generic companies participating in MPP processes often are prohibited from manufacturing in or selling to those countries, which limits access to low-cost medicines.
- In development of new free trade agreements, negotiators for the European Union and the United States have pushed hard for extended patent terms, data exclusivity protections, and limited parallel importation, all of which can harm market competition and accessibility and affordability of medicines.

People in middle-income countries are particularly vulnerable in the context of withdrawal of international development assistance. As countries become ineligible for international aid because of overall economic development, many are losing access to global pooled procurement mechanisms; are asked or required by donor agencies to cover an increasing share of medicine costs; and face challenges such as lack of national registration of optimal regimens, failed tenders and/or high prices due to low volume demand, and budgetary pressures to revert to less expensive but sub-optimal drugs and other health commodities.

Some international entities, such as the Global Fund and the Stop TB Partnership Global Drug Facility, are playing a central role in ensuring affordable quality-assured medicines, diagnostics, prevention supplies, and other technologies for many countries around the world. Each of these institutions is helping to ensure bulk purchasing of

crucial medicines, diagnostics, and other supplies and technologies to support large-scale demand, country capacity for procurement and supply, and negotiation of lower prices through pooled procurement than can be obtained by individual countries. These institutions are also supporting innovative international procurement mechanisms and community-based monitoring of the supply and accessibility of commodities at hospitals and clinics.²⁵ However, such mechanisms are not accessible to all countries and people, they depend on participation by producers, and their support is under-resourced.

The uncertain accessibility and affordability of medicines and other health commodities constitutes a threat to the future of the response to the HIV, TB, and malaria epidemics.

The world needs to recommit to global accessibility and affordability of life-saving medicines and related health technologies.

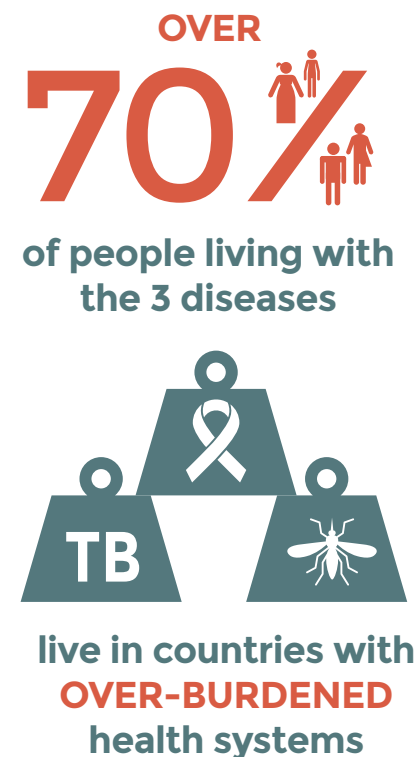
Increased funding commitments are urgently needed

As of 2015, all countries, wealthy, poor and in-between, spent a cumulative total of \$9.7 trillion on health, or a global average of \$1,332 per person per year.²⁶ Governments, largely through taxes, contributed 61% of this amount, out-of-pocket spending from individuals and households contributed 23%, and prepaid private coverage, largely through employers, contributed 18%.

Most global health spending is in high-income countries, but many low- and middle-income

countries, including most countries heavily affected by HIV, TB and/or malaria, have been increasing their overall levels of domestic financing for health.

As economies of low-income countries grow and they become reclassified by the World Bank as middle-income, donor governments have been withdrawing international development assistance, including aid for health, on the assumption that people in middle-income countries are no longer in need of assistance. Total international aid for health began to plateau in 2011, and aid for health has been entirely withdrawn from many countries since then, sometimes with disastrous results.



NEW DATA indicate that international assistance remains an important part of health programming in many low- and middle-income countries.

The 27 low-income countries of sub-Saharan Africa, heavily burdened with high rates of HIV, TB and malaria, will struggle to achieve total health spending of over \$300 per capita by 2040.

Experts project that **international aid will still be required for at least 15% of total health spending in sub-Saharan Africa and will be significant in other parts of the world as well.**^{27,28}

Many of the world's 109 middle-income countries, home to over 70% of the world's people, over 70% of the world's poorest people, and over 70% of people living with HIV, TB and malaria, are struggling with over-burdened health systems, domestic political constraints, and challenges to gender equity and human rights (as described above), indicating continued need for international collaboration in addressing crucial gaps in health.

In 2017, in low and middle-income countries, international aid accounted for			
Disease	Percentage of spending	International assistance	Total spending
HIV	40%	\$9 billion	\$17.9 billion
TB	16%	\$1.1 billion	\$6.9 billion
Malaria	69%	\$1.9 billion	\$2.7 billion

Evidence also indicates that international assistance remains ESSENTIAL for HIV, TB, and malaria programs in low- and middle-income countries.²⁹

International aid accounts for: 40% of spending on HIV in low- and middle-income countries (\$9 billion of \$17.9 billion in 2017³⁰), 16% of spending on TB (\$1.1 billion of \$6.9 billion in 2017^{31,32}), and 69% of spending on malaria (\$1.9 billion of \$2.7 billion in 2017^{33,34}).

It is unrealistic to hope or expect that high-income countries can swiftly step away from international assistance to control these epidemics. Withdrawal and reductions of international aid have already had negative impacts in several countries. Global institutions have documented that the need for international assistance remains crucial for epidemic responses in every country, including for community-led and community-based health programming for health promotion, patient support and linkage to care, work to advance rights and reductions of health disparities, and advocacy to hold health systems and governments accountable.

^{35,36,37}

Total international aid for health is a tiny portion – half of one percent – of total world spending on health, and an even small fraction of overall government budgets. Meeting the full cost of controlling global epidemics is entirely feasible and would yield high returns for people's lives, economies, health security, and sustainable development.

Current levels of international assistance to combat the three epidemics are not enough to ensure success. The under-resourcing of the response to the three epidemics threatens millions of lives and security and economic development in every region of the world.

High-income countries need to urgently accelerate investments, through the Global Fund and other global institutions and mechanisms, to expand and sustain programming related to the three epidemics.

Get Back on Track!

US\$ 46 billion needed annually to end HIV, TB and malaria in low- and middle-income countries

At least US\$16.8 to US\$18 billion should be invested through the Global Fund for the Sixth Replenishment (2020-2022), which reflects an increase of at least 22% compared to the US\$11.9 billion announced pledges at the Fifth Replenishment (2017-2019).

	What is spent now? In low- and middle-income countries (latest year)		Annual need in 2020-2022 In low- and middle-income countries	
	Total investment	Total international aid	Total investment needed	Total international aid needed
HIV	\$17.9 billion	\$8.9 billion (of which \$1.7 billion through the Global Fund)	\$26.2 billion in 2020 \$22.3 billion in 2030	\$11.6 billion by 2020 (of which at least \$2 to 2.5 billion through the Global Fund)
TB	\$6.9 billion	\$1.1 billion (of which \$800 million through the Global Fund)	\$14 billion	\$2.2 billion annually by 2020 (of which at least \$1.6 billion through the Global Fund)
Malaria	\$2.7 billion	\$1.9 billion (of which \$1.1 billion through the Global Fund)	\$6.5 billion by 2020 \$8.7 billion by 2030	\$4.5 billion by 2020 (of which at least \$2 to 2.5 billion through the Global Fund)
Total	\$27.5 billion (of which \$15.6 billion spent by LMIC)	\$11.9 billion (of which \$3.6 billion through the Global Fund)	\$46 billion by 2020	\$18 billion annually by 2020 (of which at least \$5 to 6 billion annually through the Global Fund)

These calculations are based on existing data produced by technical partners as of July 2018.

The World Health Organization, UNAIDS, the Stop TB Partnership, and the RBM Partnership to End Malaria are all currently updating their calculations of programming needs, epidemic control targets, and related costs and investment targets for the global response to the three epidemics.

In preparation of the Sixth Replenishment, the Global Fund Secretariat is also developing calculations of its resource needs and fund replenishment targets, coordinating with technical partners.

The numbers used in the “total international aids” column and the overall disease split is informed by feedback from the Global Fund Secretariat. GFAN welcomes new estimates from the Fund and partners that will hopefully make an honest and compelling case for an ambitious level of investments.

The HIV-related numbers in this table are calculated from UNAIDS Fast Track reports published in 2014 and 2016 and from the IHME report Financing Global Health 2017.

The UNAIDS calculation of \$11.6 billion in international aid needed by 2020 is a level 30 percent higher than the US\$8.9 billion of international aid in 2016; a corresponding increase for investments through the Global Fund would result in a target of US\$2 billion per year in 2020-2022, while a more ambitious increase to respond to the challenges described in this report would result in a target of US\$2.5 billion per year.

The TB-related numbers in the table are calculated from the Global Plan to End TB 2016-2020 produced by the Stop TB Partnership and from the IHME report Financing Global Health 2017.

The Global Plan calculation of US\$13 billion needed by 2020 is a level 88 percent higher than the US\$6.9 billion spent in 2017; even after accounting for potential increases in domestic spending in LMICs, an increase of at least 20 percent is needed in international assistance, with a corresponding proportional 20 percent increase for investments through the Global Fund, resulting in a target of \$1 billion per year in 2020-2022.

The malaria-related numbers in the table are calculated from the World Health Organization World Malaria Report 2017 and from the IHME report Financing Global Health 2017.

The WHO calculation of US\$6.5 billion needed by 2020 is a level 240 percent higher than the \$2.7 billion spent in 2017; a corresponding increase for international aid would result in US\$4.5 billion spent in 2020.

Even after accounting for potential increases in bilateral programs such as the President’s Malaria Initiative, an increase of 40 to 80 percent is needed in investments through the Global Fund to respond to the challenges described in this report, resulting in a target of US\$2 to US\$2.5 billion per year in 2020-2022.

Spotlight on HIV



A total of
37.6 million
people are living with
the virus, and
1.8 million
become newly infected
every year.

Despite impressive global progress, HIV continues to be one of the world's leading cause of illness and premature deaths. HIV is the leading cause of early death among women ages 15–49 and causes over 5% of disability among adults ages 15–49. A total of 37.6 million people are living with the virus, and 1.8 million become newly infected every year.

Major global successes against HIV have been achieved. Over half of all people living with HIV – 20.9 million people – have been initiated on HIV treatment. The annual number of people dying from HIV each year has dropped from 1.9 million in 2005 to 1 million in 2016, while the number of people infected each year has dropped by half over the past decade. Seven countries, including one high-prevalence country (Botswana), have reported achieving their full '90-90-90' targets,³⁸ and several other high-burden countries – including Haiti, Malawi, Rwanda, Eswatini (formerly known as Swaziland), and Uganda – may likely reach these levels of coverage during the coming one to three years.

Building on this progress, experts have set global 'fast-track' goals of achieving the 90-90-90 targets for testing, treatment and viral suppression in all countries by 2020 and targets of 95-95-95 for the same measures by 2030.³⁹ Additional goals have been set to scale up key HIV prevention interventions, including condom distribution, harm reduction programs for people who use drugs, voluntary medical male circumcision, pre-exposure prophylaxis (PrEP), and provision of HIV treatment to HIV-positive pregnant women to ensure their health and prevent infection of infants. Ambitious goals have also been defined for key and vulnerable populations, including scaling up comprehensive HIV prevention and treatment services to achieve universal coverage for all adolescent girls and young women globally by 2020.⁴⁰

Achievement of these coverage targets would potentially result in a 90% reduction in annual HIV infections – down to fewer than 200,000 new infections per year by 2030 -- and a 90% reduction in annual HIV-related deaths (fewer than 200,000



Epidemic models calculate that achievement of the Fast-Track targets by 2030 could avert 28 million HIV infections, saving over 10.8 million lives and avoiding vast costs in disability and health care.

HIV-related deaths per year).⁴¹ Epidemic models calculate that achievement of the Fast-Track targets by 2030 could avert 28 million HIV infections, saving over 10.8 million lives and avoiding vast costs in disability and health care.

Tragically, the world is off-track, currently unlikely to meet the 2020 targets for funding or program scale-up for HIV. Progress is incomplete and uneven in every region of the world and annual new HIV cases, though declining, are unlikely to drop below 1 million without accelerated efforts.⁴² The results will almost certainly fall short of all countries achieving the 90-90-90 targets for testing, treatment and viral suppression by 2020, and reducing annual new HIV infections down to 500,000 people by 2020.

Getting back on course requires urgent attention to several issues.

OFF-TRACK!

The health of adolescent girls and young women

Of the **1.8 million people who become newly infected with HIV every year, nearly 1 million are women and girls.** A disproportionate number of these new HIV infections – over 350,000 each year – occur in adolescent girls (10–19 years) and young women (15–24 years), and over half of these are in the highest-burden countries of East and Southern Africa.^{43,44}

The world's countries committed in 2016 to scale up HIV-related programming so that by 2020 annual HIV infections in adolescent girls and young women would be reduced to below 100,000 per year, 90% of adolescent girls and young women at high risk of HIV infection would be reached with comprehensive prevention services, 90% of young people in need would have access to sexual and reproductive health services and combination HIV prevention options, and all countries would eliminate gender inequalities and end all forms of violence and discrimination against women and girls.⁴⁵

At current levels of effort, such ambitious and vital progress against HIV will not happen. Evidence in many countries points to ongoing barriers for adolescent girls and young women in accessing sexual and reproductive health services, education and economic opportunity, and autonomy in negotiating sex and marriage.^{46,47} Barriers to gender

equality and the rights of women and girls are not falling easily.⁴⁸ Evidence also shows that global progress in reducing rates of HIV infections is due largely to successes in reductions in cases among newborns and older adults and weakest among adolescents and young adults, in part because health systems are not yet capable of adequately reaching adolescent girls and boys with HIV testing, treatment, care and support.⁴⁹

Now, the world's largest-ever generation of young people is entering adolescence and young adulthood in sub-Saharan Africa. As of 2018, approximately 40%–45% of sub-Saharan Africa's population is below the age of 14, about to enter in to the age when HIV risks are greatest, and yet programming is not in place at sufficient scale to prevent HIV and other sexually transmitted infections and to promote and ensure sexual and reproductive health.

Intensive and innovative HIV programs for adolescent girls and young women have been proven to reduce rates of new HIV infections by 25%–40%.⁵⁰ However, these interventions have been implemented in fewer than 10% of districts in only 10 countries.^{51,52} Accelerated funding is needed, through the Global Fund and other global institutions and mechanisms, if the HIV response is to hope to control the epidemic.

OFF-TRACK!

The health of key and vulnerable populations

Key populations for HIV – including men who have sex with other men, sex workers, transgender people, and people who inject drugs, all people who are often socially, politically, and economically marginalized or criminalized – account for 80% of new HIV infections outside of sub-Saharan Africa.

Global commitments for HIV include that all key populations will be reached with comprehensive HIV prevention and harm reduction services by 2020, steps needed to achieve significant and ongoing reductions in HIV infections among these populations in all low-prevalence countries with concentrated HIV epidemics.

Sufficient progress in meeting these commitments is not happening. HIV infection rates among men who have sex with other men and transgender people remain stubbornly high and even increasing in many parts of the world. Increases in HIV infection rates are also documented among people who inject drugs.⁵³ Most people at highest risk for HIV in key populations live in countries classified by the World Bank as 'middle income' in regions such as West Africa, Eastern Europe, Latin America, South Asia, and Southeast Asia. Many of these countries' health systems lack funding and programming to reach key and vulnerable populations with quality HIV-related prevention, treatment, and care, including harm reduction and other services to address specific population needs.

Furthermore, key populations are especially at risk in the worsening human rights environments documented in many countries.^{54,55,56,57,58}

In countries as diverse as Brazil, Mexico, Pakistan, Indonesia, Vietnam, Russia, and Ukraine, reductions in international support for HIV programs have had a negative impact on HIV services and engagement of key and vulnerable populations in health.⁵⁹ The result has been slower progress in efforts to diagnose and treat people and prevent new infections. In regions such as Eastern Europe, where international assistance for health has been withdrawn, some countries have seen a rapid resurgence of HIV epidemics among key populations.^{60,61}

To get on track, international funding needs to be directed to key populations wherever they live and to provide a 'safety net' of support for HIV-related health programming wherever significant health disparities exist.

OFF-TRACK!

Drug resistance

Underinvestment in the HIV response is creating a crisis of drug resistance. People throughout the world are told to start HIV treatment as soon as they are diagnosed, and yet health systems cannot ensure them access to a life-long supply of medicines. Funding is lacking for viral load testing to monitor treatment success or community-based programs to support people in adhering to treatment.

As of 2017, WHO has documented high levels of HIV resistance to efavirenz and nevirapine in Africa, Central America and Southeast Asia, undermining the effectiveness of the two most affordable and widely used non-nucleoside reverse transcriptase inhibitor (NNRTI) drugs used in HIV treatment.⁶² To date, rates of resistance among other classes of drugs – nucleoside reverse transcriptase inhibitors (NRTIs), protease inhibitors, and integrase inhibitors – remain relatively low (below 5%) and many countries are changing first-line regimens accordingly. But the root causes of emergent drug resistance – challenges of medicine supplies, diagnostics, and community-based supports – are not being addressed fully. The global ART scale-up effort risks starting millions of people on HIV treatments and then seeing rising rates of treatment failure.

Major investments are needed in expanded viral load testing, improved national procurement and supply chains, and community-based HIV treatment adherence support.

OFF-TRACK!

Global access to affordable quality medicines



HIV advocates have had many hard-won successes in advancing the global availability, accessibility, and affordability of HIV treatments, diagnostic tests, and other commodities such as condoms and contraceptives. Funding entities such as the Global Fund have contributed to this success through supporting large-scale demand, reinforcing country procurement and supply systems, and negotiating lower prices for HIV treatments through internationally pooled procurement. A year's supply of HIV treatment now costs about \$75 per person in low- and middle-income countries that have access to generic treatment combinations.

This access to affordable HIV treatments and related diagnostic and monitoring technologies is under threat.

Almost 60% of people with HIV live in the 109 countries classified as middle-income. Many of these countries have seen drastic reductions in international development assistance for health and many are also not eligible for competitively priced medicines offered through global patent-pool licensing.⁶³

In too many middle-income countries, the priorities of public health and universal health care access are confronting powerful political and economic forces that value corporate profits, international trade relationships, and intellectual property protections over public interests. Countries that have used their right to challenge patents and implement public health safeguards included in trade-related intellectual property (TRIPS) agreements have faced severe pressures and sanction threats from developed countries.^{64,65} Other challenges such as drug registration and low volumes are also creating challenges for countries, whether low or middle income, in procuring HIV medicines with domestic funds.

The presumption that national governments in middle-income countries can and will ensure access and affordability of HIV medicines is frequently false, especially in contexts where people living with HIV are stigmatized, criminalized, or economically and politically marginalized and where abusive patent monopolies block market entry of more affordable generic medicines.

Continued advocacy at national and global levels is needed, along with international financing, to promote access to medicines and prevent an emerging crisis.

OFF-TRACK!

International and domestic financing of the HIV response

HIV prevention and treatment programs are among the most cost-effective public health interventions, because they avert costs of intensive health care for people progressing to AIDS, avoid the loss of adults who are otherwise primary workers and caregivers in their communities, and prevent a cascade of onward infections. Experts calculate that scale-up of HIV treatment in high-prevalence communities, including treatment for prevention, costs less than \$200 for each year of life lost to disability or early death (DALY), and that every DALY averted yields a measurable economic return of over \$3,000 per capita in saved costs and increased productivity.^{66,67,68}

The world's experts also recommend, and countries have committed to, a significant investment in HIV prevention and community-based services. The United Nations targets in 2016 included a commitment to at least a quarter of HIV spending invested in HIV prevention; at least 6% of all HIV spending focused on social enablers such as HIV advocacy, community and political mobilization, community monitoring, outreach programs and public communications; and at least 30% of all HIV-related service delivery being community-based or community-led.^{69,70} In addition, health experts have recommended routine use of trade-related intellectual property (TRIPS) flexibilities to achieve affordable prices for medicines and other commodities to help countries expand HIV programming within limited national budgets.⁷¹



To reach the 90-90-90 targets by 2020 there needs to be a **37% increase over current spending**

According to UNAIDS, to reach the 90-90-90 targets by 2020, total domestic and international investments in HIV programs in low- and middle-income countries need to increase to at least \$26 billion annually, translating to more than \$75 billion during the three-year period 2020–2022, and representing a 37% increase over current spending.⁷²

However, despite the clear value and benefit of HIV programs and the global targets for HIV prevention and community-based programming and funding, many countries struggle to reach these goals because of health system structures and constraints; prevailing policy, legal, and political environments; and lack of political will.^{73,74} Domestic government and household spending in low- and middle-income countries, which totaled \$12 billion (60% of total) in HIV-related financing as of 2016, now accounts for most of the global investments against HIV, but HIV expenditures account for only 1% of national health investments by low- and middle-income countries.⁷⁵

At current levels of programming and investment, the world is facing tens of millions of people needlessly infected and potentially an irreversible loss of momentum and ability to control resurgent epidemics.^{76,77}

International aid will be central to achieving global targets for HIV spending and service coverage. The UNAIDS Fast-Track strategy describes a need for international assistance of \$11.6 billion annually by 2020, an increase from the \$7 billion spent in 2016.⁷⁸ Most of this international assistance -- \$6.5 billion -- is needed to sustain and scale up HIV programming in 31 low-income countries, mostly in sub-Saharan Africa, with an additional \$5.1 billion needed for targeted HIV programming across 85 middle-income countries.^{79,80}

Total international assistance for HIV programming in 2017 was only 60% of what experts say is required and has plateaued during the past five years.⁸¹ The U.S. government, the world's largest contributor to the HIV effort, has scaled back its goals, dropping its 2014 hope of epidemic control in 50 countries by 2018 to aiming in 2017 for epidemic control in only 13 countries.⁸² UNAIDS estimates that, even with a projected increase in domestic spending in low- and middle-income countries to \$14.6 billion by 2020, there will be an approximate annual \$6 billion gap for HIV programs in 2020.⁸³

Withdrawal of international aid for HIV from middle-income countries and insufficient HIV program funding in low-income countries has driven the global HIV response off-course.^{84,85,86,87,88} Funding shortfalls are creating gaps within budget portfolios, and are forcing governments to make difficult choices, each with deep implications for people's lives and epidemic control. Significant gaps are opening in funding of prevention and health promotion, funding of health care systems to deliver quality clinical care, funding of community-based and community-led health programming, provision of second-line and third-line regimens and scaling up of treatment for all who need it.⁸⁹

Flat funding for the HIV response may cause the world to lose control of epidemics in every region.

Immediate action is needed to increase investments and get the global HIV response back on target.



Total international assistance for HIV programming in 2017 was only 60% of what experts say is required and has plateaued during the past five years

Spotlight on TB

In 2016, approximately 1.7 billion people – 23% of the world’s population – were carrying latent TB infection and an estimated 10.4 million people fell ill with active TB.^{90,91}

Although more than 6 million of the 10.4 million active TB cases were diagnosed, at least 4 million people were not diagnosed or treated.⁹² An estimated 1.8 million people died because of TB, including 400,000 who were HIV-positive.

Over 80% of the world’s TB burden is carried by people in 22 countries. These countries include some of the world’s largest middle-income countries: China, India, Indonesia, Pakistan, Brazil, Nigeria, and Russia, and also some of the world’s poorest, such as the Democratic Republic of the Congo and Mozambique. Mortality rates from TB

are highest in sub-Saharan Africa, with case fatality ratios estimated to be higher than 25% in over 20 countries.⁹³

Through a massive global effort that has invested over \$5 billion since 2002, rates of TB testing and treatment have increased. **The number of people becoming ill with TB each year has been driven down by 1.5% annually, and there has been a 30% decrease in TB-related deaths since 2002, saving over 50 million lives.**

Public health experts call for an acceleration of the effort to control and end TB epidemics, with goals by 2020 of reaching 90% of all people in need with TB treatment; achieving 90% treatment success among those reached; and reducing TB cases by 20% and TB deaths by 35% compared to 2015.^{94,95} By 2030, as part of the SDGs, world leaders have committed to a target of achieving an 80% reduction in new TB cases each year and a 90% reduction in deaths.⁹⁶

Crucial to these goals will be extensive community outreach for active case funding, systematic screening and early detection of TB among people at high risk, preventive treatment for all people living with HIV and others at high risk, and treatment of all people testing positive for TB.^{97,98,99}

The world is not on target. Getting on track requires urgent attention to several issues.

OFF-TRACK!

Diagnosing and treating all cases of active TB

A global priority in controlling the TB epidemic is to diagnose and treat all people who have active TB, including the 4 million people each year who are ‘missed’ by health systems each year and millions of others who are diagnosed but do not have sufficient access to health care and support to ensure that they succeed in treatment.^{100,101,102}

Extensive community outreach is needed for active case funding, systematic screening and early detection of TB among people at high risk.¹⁰³ The risk factors for developing active TB are well known, and include factors such as HIV, malnutrition, occupational exposure (e.g., in prisons, mines, and healthcare clinics), or other risk factors such as tobacco and alcohol use and diabetes. Many of these people at highest risk have insufficient access to health services because of low economic means, limited social independence, or because of the limited reach of health systems.

The **22 highest-burden countries are not yet sufficiently resourced to find the 4 million people each year who are currently missed by TB screening and treatment programs.** Leaving these people undiagnosed and untreated endangers their health and fuels ongoing TB transmission in their families and communities.

HIV is a particular risk for TB:

An estimated 1.2 million people living with HIV fell ill with active TB in 2016.

Perhaps a third of the 37.6 million people living with HIV are at high risk for active TB and are recommended for routine TB screening and preventive TB treatment.

Africa is home to approximately 75% of people coinfecting with HIV/TB, many of them women and girls. They and many others coinfecting are currently living or have lived in contexts such as poor or rural communities or prisons or other confined settings, where routine screening, preventive TB treatment, and access to care are unavailable or unreliable.

In other high-burden countries such as Pakistan and Russia, people coinfecting with HIV/TB face high levels of stigma, discrimination, criminalization, and poverty because of risk factors such as drug use or incarceration, and thus do not have access to regular screening and preventive treatment for TB.

The world is currently only reducing annual rates of TB by 1.5% per year, which is steady progress but not at the 10% annual reductions needed to meet global goals.

As noted by WHO in its 2017 Global TB Report, annual 10% decreases in TB incidence have only been documented as resulting from TB control efforts in the context of national universal health coverage combined with broader social and economic development, such as seen in countries in western Europe during the 1950s and 1960s.

With enough domestic and international investment, intensive public health efforts in sub-Saharan Africa and South and Southeast Asia could reach most people at highest risk for TB with regular screening and prevention. Systematic screening, early detection, and preventive treatment for TB are highly effective in identifying and preventing illness, especially when targeted to those at highest risk such as people known to be HIV-positive, people exposed in settings such as prisons or mines, or people who are malnourished or with other risk factors.

Current levels of domestic and international funding are not at the needed scale in any of the 22 highest-burden countries.

Increased investment, including through the Global Fund, is needed to achieve an end to TB by 2030.

OFF-TRACK!

Access to TB medicines and diagnostics and prevention of drug resistance

In 2016, at least 5% of the world's TB cases were drug resistant, mostly due to a lack of routine TB screening and incomplete or improper TB treatment. Approximately 600,000 new cases had resistance to rifampicin, the most effective first-line drug. Most (490,000) of those cases were multidrug-resistant (MDR-TB) to both isoniazid and rifampin, and approximately 30,000 TB cases were extensively drug-resistant (XDR-TB), meaning resistant to four commonly used anti-TB drugs. XDR-TB cases have been confirmed in more than 120 countries around the world.^{104,105}

Experts estimate that only 60% of drug-resistant cases are currently being identified and treated each year. Roll-out of two newer medicines, bedaquiline and delamanid, for the treatment of MDR-TB has reached only 16% of people who need these medicines.¹⁰⁶ An estimated 95% of people in need of specialized treatment for drug-resistant TB – over 500,000 people in 2016 – lack access to the necessary medicines.¹⁰⁷

This emerging drug resistance is a major threat to the global TB response. Not only do people who contract MDR-TB or XDR-TB require longer more expensive treatment and care and have worse health outcomes, but countries must redirect limited resources to the more intensive treatment and care required, which can weaken broader efforts for TB prevention and control.

OFF-TRACK!

Scale up of preventive TB treatment

Achieving global TB targets requires annual reductions in TB incidence rates of between 4% and 5% per year by 2020 and 10% per year by 2025, and a reduction of mortality rates to below 10% of cases by 2020 and 6.5% of cases by 2025.

TB medicines, especially isoniazid and rifampicin, are globally accessible and affordable largely because of global pooled procurement through the TB Global Drug Facility. Established in 2001, the TB Global Drug Facility now purchases and delivers over 24 million TB treatment courses to 133 countries every year. By doing that, it has helped to create a predictable and sizeable market for potential pharmaceutical producers and has negotiated low costs and steady supplies for countries for faster local drug registration and more efficient national procurement. Yet several TB medicines that can be affordably produced at generic prices are not yet accessible at those lower prices in many high-burden countries because of patent restrictions and limited reach of pooled procurement mechanisms.^{108,109}

The world's countries must accelerate investments to ensure worldwide routine rapid TB, HIV and other screening for key populations, treatment of all people testing positive for TB, research to validate optimized shortened regimens, and detection and treatment of all MDR-TB and XDR-TB. The TB Global Drug Facility also needs full funding as a cornerstone of strengthened efforts expand accessibility and affordability of TB medicines.

OFF-TRACK!

International and domestic financing of the TB response

Full funding of a scaled-up effort against TB is projected to be about \$13 billion per year, with most of this required in the 22 highest-burden countries.^{110,111}

If the total \$13 billion annual funding goal were achieved, experts calculate that each year:

> 1.5 million
Lives will be saved

7 million
people will not become ill from TB

an anticipated
\$1.2 trillion
in economic **RETURN ON INVESTMENT**

There is a huge gap between that amount and current funding levels. Spending on TB by low- and middle-income countries reached a record level of \$6.9 billion in 2017.¹¹² International assistance contributed an additional \$1.1 billion or 14% of the total, an essential part of the global investment against TB.

Yet the total 2017 investment – approximately \$8 billion – is less than two-thirds of what experts say is required to end TB epidemics.

Meeting worldwide investment needs estimates of \$13 billion per year implies the world's wealthiest countries contributing at least \$1.3 billion, including at least \$850 million allocated through the Global Fund, an 18% increase over Global Fund resources for TB in 2017. If the total \$13 billion annual funding goal were achieved, experts calculate that each year more than 1.5 million lives will be saved, 7 million people will not become ill from TB, and there will be an anticipated \$1.2 trillion in economic return on investment.

The world's countries must mobilize the annual \$13 billion in investment against TB without delay.

FIVE KEY ASKS for the September 2018 UN High-Level Meeting on TB:

- 1 Reach** all people by closing the gaps on TB diagnosis, treatment and prevention
- 2 Transform** the TB response to be equitable, rights-based, and people-centered
- 3 Accelerate** development of essential new tools to end TB
- 4 Invest** the funds necessary to end TB
- 5 Commit** to decisive and accountable global leadership, including regular UN reporting and review

For more information about key advocacy issues and demands related to TB and the upcoming United Nations High Level Meeting, please visit the GFAN website at:

http://www.globalfundadvocatesnetwork.org/campaigns/un-high-level-meeting-on-tb/community-resources-for-the-tb-hlm/#.Wya_aVMvxE4

Spotlight on malaria

Nearly half of the world's population – about 3.2 billion people – are at risk of malaria.¹¹³ In 2016, an estimated 216 million cases of malaria occurred worldwide, and approximately 445,000 people died because of the infection. **Over 300,000 of those deaths were among children under the age of five.** A total of 91 countries reported malaria transmission in 2016, but countries of sub-Saharan Africa had 88% of the world's malaria cases and 90% of the world's deaths.

Through a major global health effort during the past 18 years, the world has made progress in controlling malaria. A total of 582 million insecticide-treated mosquito nets (ITNs) were distributed globally during 2014–2016, including 505 million in Africa alone. Approximately 4 million buildings in high-burden African countries were treated with indoor residual spraying (IRS) to control mosquito populations. An estimated 312 million rapid diagnostic tests (RDTs) for malaria were delivered globally in 2016, with 269 million of these going to Africa, and an estimated 409 million treatment courses of artemisinin-based combination therapy (ACT) were procured by countries in 2016.

As a result of such efforts, **annual malaria cases have dropped by 42% since 2000, and annual malaria deaths have been cut by 60%. This translates into nearly 7 million lives saved, most of them infants and children.** Kyrgyzstan and Sri Lanka were certified by WHO as malaria free in 2016, and thousands of deaths were prevented in countries such as Ethiopia, India, and Nigeria. Elimination of malaria transmission by 2030 is now a goal for 35 countries, and experts have set targets of a 90% reduction in malaria cases and malaria deaths in the remaining 56 countries and preventing 3 billion malaria cases and over 10 million deaths. These ambitious goals have been taken up by global and regional initiatives that are promoting collaboration across borders in regions such as Central America, West and Central Africa, Southern Africa, and Southeast Asia.^{114,115}

Despite these achievements, WHO in its 2017 World Malaria Report warns that global progress made against malaria since 2000 is now stalling and that further progress is not certain, placing millions of people at risk of resurgent epidemics.

Malaria is a disease prone to fast resurgence if investments in malaria control are not sustained or reduced. In 61 countries during the past century, especially in the late 1960s when malaria programs were scaled back due to lack of funding and political commitment, malaria resurged, increasing by 10-fold in many cases during a period of five years or less.^{116,117} People lose partial immunity to malaria when not



Nearly half of the world's population - about **3.2 billion people** are at risk of malaria

continually exposed, and so resurgence of malaria after years of control can be especially costly in causing widespread illness in newly susceptible populations. The only way to prevent this from happening is an acceleration of the effort to completely eliminate malaria transmission in the 35 countries where it is most possible and then focus resources on achieving and sustaining malaria control in the remaining 56 countries.

The world is not on target. Action is needed now to meet international targets in the face of plateauing global funding, substantial coverage gaps, competing political priorities and the emergence of drug and insecticide resistance. Getting back on track requires urgent attention to several issues.

OFF-TRACK!

Substantial coverage gaps in Africa

More than 30 countries have significant gaps in malaria prevention and treatment. They include large African countries with high rates of malaria, such as the Côte d'Ivoire, the Democratic Republic of the Congo, Mozambique, Nigeria, and Tanzania, and smaller yet extremely low-income and resource-constrained countries such as Burundi, the Central African Republic, Niger, and Guinea-Conakry. Some notable challenges in such countries include the following:

- **Although 80% of African households now have at least one insecticide-treated net (ITN), nearly half (46%) of people are not yet sleeping under a net and therefore are not benefitting from this protection.**
- In African clinics, nearly 90% of fevers suspected as malaria are now tested. This is positive for those who make it to see a health worker, but too many people are not accessing health care when they have a fever. Experts calculate that **in 2016, more than two-thirds (39%) of African children who fell ill with fevers did not get access to any form of health care, and thus were not tested for malaria.**¹¹⁸

Issues of drug and insecticide resistance also highlight the urgent need to further scale up malaria prevention and treatment programs to maintain control of epidemics and prevent resurgence:

- Pyrethroids, until recently the leading class of insecticide used on bed nets and in indoor residual spraying, are becoming less effective for mosquito control in many high-burden African countries because of mosquito resistance. Switches are required to more expensive organophosphate insecticides.¹¹⁹
- Current methods for mosquito control, notably insecticide-treated nets and indoor residual spraying, only reduce mosquito populations that feed and rest indoors. Yet mosquito populations that can feed and rest outdoors are not affected by these prevention methods. Even in the best-case scenario of universal bed net coverage, novel strategies are needed to target malaria transmission carried out by outdoor-biting mosquitoes.
- Furthermore, artemisinin, the leading drug in malaria treatment, is facing resistant strains of the malaria parasite. If this trend is not controlled, artemisinin will need replacement by yet-to-be-developed alternative treatments, which will potentially increase the cost and difficulty of achieving universal treatment coverage.

Accelerated investment is needed now to close the gap in malaria prevention and treatment, especially in Africa.

OFF-TRACK!

Prevention for women, children, and other vulnerable populations

In all regions of the world, malaria control programs are needed to improve the health of women, children, and key and vulnerable populations, by improving people's living situations to better protect them from mosquitoes and expanding access to basic health services as an essential part of public health.

Children under the age of five and pregnant women are biologically more susceptible to falling ill from malaria and suffer the highest rates of malaria-related illness. Their vulnerability translates to days of caring for sick family members, days of missed work and school, and greater economic insecurity. All women and children also face barriers in accessing appropriate prevention, treatment, and care, and bear a disproportionate burden from malaria (and thus disproportionate need):

- In 2016 in the highest-burden countries of Africa, some 4 million pregnant women were given at least three doses of preventive treatment (IPTp) to protect them from malaria during pregnancy. However, the coverage achieved that year represented only 19% of pregnant women in the countries reporting and only 11% of the estimated 35 million pregnant women in Africa who could benefit from IPTp each year.

- In countries of the Sahel region of Africa with highly seasonal malaria, a major campaign in 2016 reached 15 million children with preventive treatment to protect them from malaria during the months when malaria is most likely to be transmitted. But this success showed the distance yet to be travelled, for this preventive treatment campaign reached only 54% of the children in the region who could have benefitted from that intervention.

Throughout the world, malaria rates are also higher among the economically poorest populations, including mobile and migrant populations, people in humanitarian crises, and indigenous and rural communities. Susceptibility and high rates are often driven by environmental circumstances that increase exposure to mosquitoes, reduce access to prevention interventions or diagnosis and treatment, and cause poor nutrition and weakened immune systems that increase susceptibility to illness.

People in humanitarian emergencies and in fragile states are particularly vulnerable to malaria because of the breakdown of health services, displacement of health workers, movement of non-immune people to endemic areas, and concentrations of people in high-risk, high-exposure settings.^{120,121} Examples of malaria-related vulnerability in cases of conflict or political, social, or environmental upheaval include recent malaria outbreaks in the Rohingya refugee camps in Bangladesh, Nigeria (Borno State), South Sudan, and Yemen; the rapid spread of malaria cases in Venezuela as people flee national economic and social crises; and persistently high rates of malaria-related illness and deaths in

West and Central African countries such as the Central African Republic, the Democratic Republic of the Congo, and Guinea-Conakry.

Intensified and expanded programming is needed to address malaria among the world's women, children, and other vulnerable populations.

OFF-TRACK!

International and domestic financing of the malaria response

In high-burden countries, malaria costs countless days lost to illness, days absent from school or work, and household costs and health system costs related to illness. **Preventing a case of malaria costs only an average of \$5–\$8, making it one of the world's most cost-effective public health interventions, second only to routine immunizations. Cost-benefit analyses suggest a 40:1 return on malaria-related investments, with every dollar spent on malaria control resulting in as much as \$36 in economic gain.**^{122,123} In some parts of Africa, it has been postulated that lifting the heavy burden of malaria-related illness from households, health systems, and economies could boost national economies by over 1%.¹²⁴

Analysis shows that the projected gains during 2019–2030 of achieving the 2030 targets set by the RBM Partnership to End Malaria, when compared to reverting to 2007 levels of effort, would be 3.7 million fewer malaria deaths (including 2.5 million fewer deaths among children), 2 billion fewer malaria cases, 1 billion fewer working days

lost to illness, and over \$4 trillion in increased economic output and \$5 billion in savings to health systems and households.

Malaria control is thus a high priority toward achieving the SDGs, especially for countries in sub-Saharan Africa. In 2016, approximately \$2.7 billion was invested in efforts to control malaria. Nearly a third of this investment was from malaria-endemic countries – mostly middle-income countries of Asia and Latin America – for health programs inside their own countries. Over two-thirds of global investment (\$1.9 billion) was contributed from the world's wealthiest countries, with most of this, about \$1 billion, directed through the Global Fund.

WHO and other global health experts calculate that \$6.5 billion is needed annually by 2020, with a total of \$100 billion needed by 2030, to achieve the significant and steady reductions in malaria cases and deaths and elimination of malaria transmission in target countries called for by global strategies.

Global investments in 2016 of \$2.7 billion were less than half (41%) of what experts calculated as the sum needed.

Significant increases in international funding are needed to get back on track toward ending malaria epidemics.

Acknowledgements

This document, Get Back on Track, was commissioned by International Civil Society Support (ICSS) for the Global Fund Advocates Network (GFAN).

All data in this document are from the Global Fund, UNAIDS, the Stop TB Partnership, or the RBM Partnership to End Malaria unless otherwise cited.

Many individuals were involved in this document's conceptualization and review. Many thanks especially to: Kerstin Akerfeldt, Brook Baker, Dave Burrows, Chris Collins, Revanta Dharmarajah, Khalil Elouardighi, María Encinas, David Gold, Sergey Golovin, Julia Greenberg, Jamila Headley, Katy Kydd Wright, Erica Lessem, Arturo Marcano, RD Marte, Rosemary Mburu, Caroline Maxwell, Othman Mellouk, Olive Mumba, Michael O'Connor, Rachel Ong, Jean Pasteur, Alysa Remtulla, Peter van Rooijen, Joan Tallada, Ivan Varentsov, Gregory Vergus, and Alix Zuinghedau. Thanks also to the staff of the Global Fund for their review and comments. The lead writer of this document is Sam Avrett and design and layout is by Fruit Design LLC.

Endnotes

- 1 See www.un.org/development/desa/family/ and www.unicef.org
- 2 Global Fund. HER: HIV Epidemic Response. 2018. www.theglobalfund.org/en/her/
- 3 Snow KJ, Nelson LJ, Sismanidis C, et al. Incidence and prevalence of bacteriologically confirmed pulmonary tuberculosis among adolescents and young adults: a systematic review. *Epidemiology and Infection* 1–8. 2018. <https://doi.org/10.1017/S0950268818000821>
- 4 RBM Partnership to End Malaria. Investing in malaria in pregnancy in Sub-Saharan Africa. 2014. www.unicef.org/health/files/Malaria_infographic_final.pdf
- 5 Foundation for AIDS Research (amfAR). HIV statistics. 2018. www.amfar.org/worldwide-aids-stats/
- 6 Stop TB Partnership. Leave no one behind: Key population briefs. 2016. www.stoptb.org/news/stories/2016/ns16_018.asp
- 7 AfricaCheck. 2016. <https://africacheck.org/reports/does-an-african-child-die-from-malaria-every-30-seconds/>
- 8 Global Fund funding model. www.theglobalfund.org/en/funding-model/
- 9 United Nations. The 2030 Agenda for Sustainable Development. 2015. <https://sustainabledevelopment.un.org/post2015/transformingourworld>
- 10 Danish Institute for Human Rights. Human rights and the 2030 agenda for sustainable development. 2018. www.humanrights.dk/our-work/sustainable-development/human-rights-sdgs
- 11 United Nations Office of the High Commissioner of Human Rights. Universal human rights index. 2018. uhri.ohchr.org/en
- 12 Danish Institute for Human Rights. UPR-SDG data explorer. www.humanrights.dk
- 13 Reporters Without Borders. World press freedom index. 2018. <https://rsf.org/en/ranking>
- 14 The Economist. Democracy Index. 2018. www.economist.com/graphic-detail/2018/01/31/democracy-continues-its-disturbing-retreat
- 15 World Economic Forum. The Global Gender Gap Report. 2017. www.weforum.org/reports/the-global-gender-gap-report-2017
- 16 World Health Organization. HIV Drug Resistance Report. 2017. www.who.int/hiv/pub/drugresistance/hivdr-report-2017/en/
- 17 World Health Organization. Global Tuberculosis Report. 2017. www.who.int/tb/publications/global_report/en/
- 18 Global Alliance for TB Drug Development. Drug resistance: A response to antimicrobial resistance includes tackling TB. 2018. www.tballiance.org/why-new-tb-drugs/antimicrobial-resistance
- 19 Cox V, Brigden G, Crespo RH, et al. Global programmatic use of Bedaquiline and Delamanid for the treatment of multidrug-resistant tuberculosis. *IJTL*. 2018. www.ncbi.nlm.nih.gov/pubmed/29562988
- 20 World Health Organization. Questions and answers about the global plan for insecticide resistance management in malaria vectors. 2016. www.who.int/malaria/media/insecticide_resistance_management_qa/en/
- 21 Funding for research and development to develop, test and roll out new health products including drugs, diagnostics and vaccine for HIV, TB and malaria is inadequate. For example, The Global Plan to End TB calls for \$9 billion for TB R&D between 2016 and 2020; however, TB research currently receives only one-third of this target annually—and the majority is provided by just five funders. For more information, see <http://gfinder.policycuresresearch.org/>
- 22 Global Fund. Sourcing and management of health products. www.theglobalfund.org/en/sourcing-management/
- 23 United Nations. Report of the United Nations Secretary-General’s High-Level Panel on access to medicines. 2016. www.unsgaccessmeds.org/reports-documents
- 24 International Treatment Preparedness Coalition. Global summit refocuses the fight for access to medicines. 2018. <http://itpcglobal.org/global-summit-refocuses-fight-access-medicines/>
- 25 As one example of effective monitoring of accessibility of medicines and health services, in Russia, ITPCru, a regional network of HIV treatment activists, developed a website, www.pereboi.ru, through which people throughout the country can report on shortages of HIV, HCV and tuberculosis medications. In 2017, patients and providers were able to use this site to report 509 disruptions in the supply of HIV medicines and diagnostics across 45 regions of the Russian Federation, generating evidence then used by advocates to gain attention and support from national and regional authorities. See <http://itpcru.org/2018/04/18/analiz-zakupok-arv-preparatov-rf-v-2017-godu/>
- 26 Institute for Health Metrics and Evaluation (IHME) data accessed 2018. IHME calculations of international development assistance for health are downloadable at: <http://ghdx.healthdata.org/record/development-assistance-health-database-1990-2017> **These data can be viewed on an interactive visualization site:** <http://ihmeuw.org/4g6n> IHME calculations of domestic government spending on HIV per country per year can be downloaded here: <http://ghdx.healthdata.org/record/global-hiv-aids-spending-2000-2015> **and can be explored on a visualization site at:** <http://ihmeuw.org/4g6o>
- 27 Global Burden of Disease Health Financing Collaborator Network (2018) Trends in future health financing and coverage: future health spending and universal health coverage in 188 countries, 2016–40.
- 28 The SDG targets call for an additional \$274 billion per year (\$41 per person) in LMICs to save 97 million lives, increase human life expectancy in LMICs by 3.1–8.4 years, and otherwise make progress to meeting the SDG 3 targets by 2030. - Stenberg K, Hanssen O, Edejer TT, et al. (2017) Financing transformative health systems towards achievement of the health Sustainable Development Goals: a model for projected resource needs in 67 low-income and middle-income countries. *Lancet*. July 2017.
- 29 The Global Fund works intensely with implementing governments to increase domestic financing for health, offering 15 percent or more of a country’s grant allocation as a co-financing incentive. This funding becomes accessible when countries commit additional funds to their own health response. According to the Global Fund Investment Case in 2016, every USD\$100 million contribution to the Global Fund supports USD\$300 million in domestic investment toward the three diseases.
- 30 Global Burden of Disease Health Financing Collaborator Network (2018) Spending on health and HIV/AIDS: domestic health spending and development assistance in 188 countries, 1995–2015.
- 31 The Paradigm Shift 2016-2020: Global Plan to End TB, Stop TB Partnership and UNOPS, 2015
- 32 WHO Global Tuberculosis Report 2017
- 33 According to the World Health Organization. World Malaria Report, 2017, governments of endemic countries are contributing 31% of total funding to the malaria effort, with 69% contributed from international sources.
- 34 Institute for Health Metrics and Evaluation (IHME). Financing global health, 2017. pp 53-59. www.healthdata.org/sites/default/files/files/policy_report/FGH/2018/IHME_FGH_2017_fullreport.pdf
- 35 Global Fund Advocates Network. Ready, Willing, and Able? Challenges Faced by Countries Losing Global Fund Support. 2015. www.globalfundadvocatesnetwork.org/resource/ready-willing-and-able-challenges-faced-by-countries-losing-global-fund-support/#.WbZ6sshJbIU
- 36 Aidspan. More is known about the impact of the new allocation methodology. 2016. www.aidspan.org/gfo_article/more-known-about-impact-new-allocation-methodology
- 37 Global Fund. Building resilient and sustainable systems for health through Global Fund investments, March 2017. www.theglobalfund.org/media/4759/core_resilientsustainable_systemsforhealth_infonote_en.pdf
- 38 The targets associated with ‘90-90-90’ refer to 90 percent of people living with HIV knowing that they have the virus, 90 percent of those diagnosed with HIV having access to HIV treatment, and 90 percent of those treated for HIV achieving sustained viral suppression. These targets are at the core of the UNAIDS Fast-Track agenda introduced in 2014.
- 39 UNAIDS. Fast track strategy 2014 and update 2016. www.unaids.org/en/resources/documents/2016/un aids_fast-track_update_investments_needed

- 40 United Nations General Assembly. Political declaration on ending AIDS. 2016. www.unaids.org/en/resources/documents/2016/2016-political-declaration-HIV-AIDS
- 41 UNAIDS. Fast track strategy 2014 and update 2016. www.unaids.org/en/resources/documents/2016/unaids_fast-track_update_investments_needed
- 42 UNAIDS. Ending AIDS: Progress toward the 90-90-90 targets. 2017. www.unaids.org/en/resources/documents/2017/20170720_Global_AIDS_update_2017
- 43 UNAIDS. When women lead, change happens. 2017. www.unaids.org/en/resources/documents/2017/when-women-lead-change-happens
- 44 Global Fund. HER: HIV epidemic response for women and girls. 2017. www.theglobalfund.org/en/her/
- 45 United Nations General Assembly. Political declaration on ending AIDS. 2016. www.unaids.org/en/resources/documents/2016/2016-political-declaration-HIV-AIDS
- 46 UNAIDS. Ending AIDS: Progress toward the 90-90-90 targets. 2017. www.unaids.org/en/resources/documents/2017/20170720_Global_AIDS_update_2017
- 47 Stop AIDS. Women's economic empowerment and HIV. 2017. <https://stopaids.org.uk/resources/womens-economic-empowerment-and-hiv/>
- 48 World Economic Forum. The global gender gap report. 2017. www.weforum.org/reports/the-global-gender-gap-report-2017
- 49 International AIDS Society. Clinical models of HIV care for adolescents. 2016. www.iasociety.org/Web/WebContent/File/meeting_report_clinical_models_care_adolescent_2016.pdf
- 50 U.S. PEPFAR. Fact sheet: PEPFAR Latest Global Results. 2018. www.pepfar.gov/documents/organization/276321.pdf
- 51 PEPFAR. PEPFAR latest global results. December 2017. www.pepfar.gov/funding/results/
- 52 HealthGap. Deadly impact: How flat funding is undermining U.S. global AIDS programs. 2018. ww.healthgap.org/deadly_impact_report
- 53 UNAIDS. Ending AIDS: Progress toward the 90-90-90 targets. 2017. www.unaids.org/en/resources/documents/2017/20170720_Global_AIDS_update_2017
- 54 United Nations Office of the High Commissioner of Human Rights. Universal human rights index. 2018. uhri.ohchr.org/en
- 55 Danish Institute for Human Rights. UPR-SDG Data Explorer. www.humanrights.dk
- 56 Reporters Without Borders. World press freedom index. 2018. <https://rsf.org/en/ranking>
- 57 The Economist. Democracy Index. 2018. www.economist.com/graphic-detail/2018/01/31/democracy-continues-its-disturbing-retreat
- 58 Global Fund. Focus on human rights. December 2015. www.theglobalfund.org/media/1224/publication_humanrights_focuson_en.pdf
- 59 Nobody Campaign. Nobody can disappear from the fight against AIDS. 2018. www.nobodycandisappear.org/
- 60 According to IHME data accessed in March 2018, only 5 of 19 Eastern European countries were receiving more than \$100 million in international development assistance for health: Kyrgyzstan, Moldova, Tajikistan, Ukraine, and Uzbekistan.
- 61 Open Society Foundations. Lost in translation: Three case studies of Global Fund withdrawal in South Eastern Europe. December 2017. www.opensocietyfoundations.org/sites/default/files/lost-in-translation-20171208.pdf
- 62 World Health Organization. HIV drug resistance report. 2017. www.who.int/hiv/pub/drugresistance/hivdr-report-2017
- 63 International Treatment Preparedness Coalition. Global summit refocuses the fight for access to medicines. 2018. <http://itpcglobal.org/global-summit-refocuses-fight-access-medicines/>
- 64 For example, see the annual "Special 301 report" produced by the Office of the United States Trade Representative at <https://ustr.gov/sites/default/files/files/Press/Reports/2018%20Special%20301.pdf>
- 65 For additional reading and case studies, see <http://makemedicinesaffordable.org/en/strategy/challenging-trips-plus/> and <http://itpcglobal.org/global-summit-refocuses-fight-access-medicines/>
- 66 Horton S, Gelband H, Jamison D, et al. (2017) Ranking 93 health interventions for low- and middle-income countries by cost-effectiveness. *PLoS ONE* 12(8): e0182951. <https://doi.org/10.1371/journal.pone.0182951>
- 67 UNAIDS. How AIDS changed everything. MDG6: 15 years, 15 lessons of hope from the AIDS response. 2015. www.unaids.org/sites/default/files/media_asset/MDG6Report_en.pdf
- 68 UNAIDS Lancet Commission. Defeating AIDS. 2015. www.thelancet.com/commissions/defeating-aids-advancing-global-health
- 69 United Nations General Assembly. Political declaration on ending AIDS. 2016. www.unaids.org/en/resources/documents/2016/2016-political-declaration-HIV-AIDS
- 70 UNAIDS. Stronger together: From health and community systems to systems for health. 2016. www.unaids.org/sites/default/files/media_asset/JC2788_stronger_together_en.pdf
- 71 United Nations. Report of the United Nations Secretary-General's High-Level Panel on access to medicines. 2016. www.unsgaccessmeds.org/reports-documents
- 72 UNAIDS. Fast track strategy update. 2016. www.unaids.org/en/resources/documents/2016/unaids_fast-track_update_investments_needed
- 73 Oberth G, Torres MA, Mumba O, and O'Connor M. A quarter for prevention? Global Fund investments in HIV prevention interventions in generalized African epidemics. *Universal Journal of Public Health* 5(5): 231-241, 2017. www.globalfundadvocatesnetwork.org/wp-content/uploads/2017/08/UJPH5-17609872.pdf
- 74 Burrows D, Oberth G, Parsons D et al. Transitions from donor funding to domestic reliance for HIV responses. *Aidspan and APMGlobal Health*, 2016. www.globalfundadvocatesnetwork.org/wp-content/uploads/2016/04/Aidspan-APMG-2016-Transition-from-Donor-Funding.pdf
- 75 Kaiser Family Foundation and UNAIDS. Donor Government Funding for HIV in Low- and Middle-Income Countries in 2016. <http://les.k.org/attachment/Report-Donor-Government-Funding-for-HIV-in-Low-and-Middle-Income-Countries-in-2016>
- 76 McGillen, JB., Sharp A, Honermann B, et al. "Consequences of a changing US strategy in the global HIV investment landscape." *AIDS*. 2017 Nov 28; 31(18): F19-F23. www.ncbi.nlm.nih.gov/pmc/articles/PMC5690304/
- 77 HealthGap. Deadly impact: How flat funding is undermining U.S. global AIDS programs. 2018. ww.healthgap.org/deadly_impact_report
- 78 Kaiser Family Foundation and UNAIDS. Donor government funding for HIV in low- and middle-income countries in 2016. July 2017. www.kff.org/global-health-policy/report/donor-government-funding-for-hiv-in-low-and-middle-income-countries-in-2016/
- 79 The UNAIDS Fast Track strategy recommends continued international assistance for HIV programming in middle-income countries, allocated and targeted according to the magnitude of need in key and vulnerable populations, and comprising approximately 55 percent of HIV spending (\$4.5 billion annually) across 43 lower middle-income countries and 12 percent of HIV spending (\$1.4 billion annually) across 42 upper middle-income countries.
- 80 Resch S, Ryckman T, and Hecht R. Funding AIDS programmes in the era of shared responsibility: an analysis of domestic spending in 12 low-income and middle-income countries. *The Lancet Global Health*, Vol.3, No.1, e52-e61. 2015.
- 81 Institute for Health Metrics and Evaluation (IHME) data accessed 2018.
- 82 HealthGap. Deadly impact: How flat funding is undermining U.S. global AIDS programs. 2018. ww.healthgap.org/deadly_impact_report
- 83 UNAIDS. Right to health report. 2017. www.unaids.org/en/20171120_right_to_health_report
- 84 Nobody Campaign. Nobody can disappear from the fight against AIDS. 2018. www.nobodycandisappear.org/
- 85 HealthGap. Deadly impact: How flat funding is undermining U.S. global AIDS programs. 2018. ww.healthgap.org/deadly_impact_report

- 86 Eurasian Harm Reduction Network. The impact of transition from global fund support to governmental funding on the sustainability of harm reduction programs. www.harm-reduction.org/library/impact-transition-global-fund-support-governmental-funding-sustainability-harm-reduction-romania
- 87 Eurasian Harm Reduction Network. Action plan to reverse destructive HIV financing trends in middle-income countries. 2017. www.harm-reduction.org/sites/default/_les/pdf/mics-actionplan__nal_dec_17.pdf
- 88 Burrows D, Oberth G, Parsons D et al. Transitions from donor funding to domestic reliance for HIV responses. *Aids* and *APM Global Health*, 2016. www.globalfundadvocatesnetwork.org/wp-content/uploads/2016/04/Aidspan-APMG-2016-Transition-from-Donor-Funding.pdf
- 89 Global Fund. Technical review panel (TRP) report. October 2017.
- 90 World Health Organization. Global Tuberculosis Report. 2017. www.who.int/tb/publications/global_report/en/
- 91 Houben RMGJ, Dodd PJ (2016) The Global Burden of Latent Tuberculosis Infection: A Re-estimation Using Mathematical Modelling. *PLoS Med* 13(10): e1002152. doi:10.1371/journal.pmed.1002152
- 92 World Health Organization. Finding the missing TB cases. 2017. www.who.int/tb/areas-of-work/children/missing_childhoodtb_cases.pdf
- 93 World Health Organization. Global Tuberculosis Report. 2017. www.who.int/tb/publications/global_report/en/
- 94 World Health Organization. End TB Strategy. www.who.int/tb/post2015_strategy/en/
- 95 Stop TB Partnership. Paradigm shift: The global plan to end TB. 2015. www.stoptb.org/global/plan/
- 96 United Nations General Assembly. Political declaration on ending AIDS. 2016. www.unaids.org/en/resources/documents/2016/2016-political-declaration-HIV-AIDS
- 97 Suthar AB, Zachariah R and Harries AD. Ending tuberculosis by 2030: can we do it? *Int J Tuberc Lung Dis* 20(9):1148–1154. 2016. www.ncbi.nlm.nih.gov/pubmed/27510238
- 98 Reid A, Grant AD, White RG, et al. Accelerating progress towards tuberculosis elimination: the need for combination treatment and prevention. *Int J Tuberc Lung Dis*. 2015 Jan;19(1):5-9. www.ncbi.nlm.nih.gov/pubmed/25519784
- 99 Treatment Action Group. An activist's guide to the TB LAM test. 2017. <http://treatmentactiongroup.org/content/activists-guide-tb-lam-test>
- 100 World Health Organization. Finding the missing TB cases. 2017. www.who.int/tb/areas-of-work/children/missing_childhoodtb_cases.pdf
- 101 Getahun H. Setting the scene: ENGAGE-TB approach for integrated community-based TB activities and finding the missing TB cases. 2018. www.who.int/tb/features_archive/setting_the_scene_getahun_11apr18.pdf
- 102 International Civil Society Support (ICSS) and Global Fund Advocates Network (GFAN). Summary of civil society priority concerns and recommendations regarding the Political Declaration and UN High Level Meeting on TB. April 2018. www.globalfundadvocatesnetwork.org/wp-content/uploads/2018/05/TB-HLM-Community-Consultation-Matrix.pdf
- 103 Malar J and Smyth C. Stop TB Partnership Consultation on Finding Missing People with TB through Integrated Community-based TB Service Delivery. 2018. www.who.int/tb/features_archive/addis_agenda_11to13apr2018.pdf
- 104 World Health Organization. Global Tuberculosis Report. 2017. www.who.int/tb/publications/global_report/en/
- 105 TB Alliance. Drug resistance: A response to antimicrobial resistance includes tackling TB. 2018. www.tballiance.org/why-new-tb-drugs/antimicrobial-resistance
- 106 Cox V, Brigden G, Crespo RH, et al. (2018). Global programmatic use of bedaquiline and delamanid for the treatment of multidrug-resistant tuberculosis. *Int J Tuberc Lung Dis*. 2018 Apr 1;22(4):407-412. www.ncbi.nlm.nih.gov/pubmed/29562988
- 107 Médecins Sans Frontières. MSF response to the WHO Global TB Report. 2017. www.msffaccess.org/about-us/media-room/press-releases/m%C3%A9decins-sans-fronti%C3%A8res-response-world-health-organization
- 108 For more information, see: www.theguardian.com/global-development-professionals-network/2014/jul/07/tb-south-africa-patents-drug-resistance-phumeza-tisile-medicins-sans-frontieres and www.fixthepatentlaws.org/wp-content/uploads/2016/09/MSF-FTPL-report-final-version.pdf (pp 48 - 51 on MDR TB drugs) and www.lawyerscollective.org/news/indian-civil-society-pushes-government-use-compulsory-license-mdr-tb-drugs
- 109 Estimated generic prices were \$8–\$17/month for bedaquiline, \$5–\$16/month for delamanid, \$11–\$34/month for pretomanid, \$4–\$9/month for linezolid, \$4–\$9/month for sutezolid, \$4–\$11/month for clofazimine and \$4–\$8/month for moxifloxacin. These estimated generic prices were 87%–94% lower than the current lowest available prices for bedaquiline, 95%–98% for delamanid and 94%–97% for linezolid.
- 110 World Health Organization. Global Tuberculosis Report. 2017. www.who.int/tb/publications/global_report/en/
- 111 International Union Against Tuberculosis and Lung Disease. Briefing note for the United Nations High-Level Meeting on TB. 2018. www.theunion.org/news-centre/introduction/TheUnion_HLM_Briefing-Note.pdf
- 112 Institute for Health Metrics and Evaluation (IHME) data accessed 2018.
- 113 Unless otherwise notes, all statistics are derived from the WHO World Malaria Report (2017), the WHO Global Technical Strategy for Malaria (2015), and the 2015 Roll Back Malaria Action and Investment to defeat Malaria (AIM) Strategy 2016 -2030.
- 114 President's Malaria Initiative. Expansion to five new countries in West and Central Africa. 2018. <https://borgenproject.org/pmi-expansion-new-countries/>
- 115 Unitaid. Unitaid sharpens and intensifies its interventions against malaria. April 2018. <https://unitaid.eu/news-blog/unitaid-sharpens-and-intensifies-its-interventions-against-malaria>
- 116 Cohen, J. M. et al. Malaria resurgence: a systematic review and assessment of its causes. *Malar. J.* 11, 122 (2012). https://media.springernature.com/full/springer-static/image/art%3A10.1186%2F1475-2875-11-122/MediaObjects/12936_2012_Article_2184_Fig5_HTML.jpg
- 117 Newby G, Bennett A, Larson E, 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. [www.thelancet.com/journals/lancet/article/PIIS0140-6736\(16\)00230-0/supplemental](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)00230-0/supplemental)
- 118 As one strategy to increase the numbers of children tested for malaria, Unitaid and others are investing in rapid diagnostic tests. See <https://unitaid.eu/investment-area/malaria-diagnostics>
- 119 The World Health Organization, Unitaid, and other agencies are working to deliver affordable new insecticides and insecticide-treated nets. See <https://unitaid.eu/news-blog/new-insecticide-used-fight-malaria/>
- 120 World Health Organization. Malaria: The control in humanitarian emergencies: An inter-agency field handbook. Second Edition Field Handbook. http://apps.who.int/iris/bitstream/handle/10665/90556/9789241548656_eng.pdf;jsessionid=21014D5117ED2BAB1E3C1D32B8194332?sequence=1
- 121 Fund for Peace. Fragile states index 2018. <http://fundforpeace.org/fsi/>
- 122 Copenhagen Consensus. Here's how to wipe malaria off the map. 2015. www.copenhagenconsensus.com/post-2015-consensus/news/heres-how-wipe-malaria-map
- 123 Purdy M., Robinson M., Wei K. and Rublin D. The economic case for combating malaria. *Am. J. Trop. Med. Hyg.* 89, 819-823 (2013). www.ncbi.nlm.nih.gov/pubmed/24197172
- 124 Gallup JL and Sachs JD. The economic burden of malaria. Centre for International Development at Harvard University. Working Paper 52. 2001. www.ncbi.nlm.nih.gov/pubmed/11425181

Get Back on Track To End the Epidemics

#endtheepidemics

The Global Fund Advocates Network (GFAN) was established in 2011 to unite voices and efforts from all over the world to support a fully funded Global Fund to Fight AIDS, Tuberculosis and Malaria.

GFAN builds on and brings together existing structures, expertise, and experience that has been developed and gathered since 2002 in support of the Global Fund, working with advocates, activists, and affected communities in the South and the North, as well as Friends of the Fund organizations.

To learn more about advocacy opportunities to support fully funded efforts against HIV, TB and malaria, please visit www.globalfundadvocatesnetwork.org

