

BREATHE



Let's end TB and AIDS by 2030

“It has never been more urgent for us to come together to end HIV and tuberculosis. We achieve the most when we work together, using all of our strengths, harnessing all of our collective potential to end HIV and tuberculosis for a healthier world as part of the Sustainable Development Goals.”

MICHEL SIDIBÉ

Executive Director of UNAIDS

TB is preventable and curable

Breathe in

Tuberculosis (TB) bacteria are spread from person to person through the air. TB most often affects the lungs. About one quarter of the world's population has latent TB infection, yet only 5–15% will actually fall ill with the disease.

People with compromised immune systems, such as people living with HIV, people who have diabetes or people who are malnourished, have a much higher risk of falling ill. In 2016, 10.4 million people developed TB disease— approximately 40% were not diagnosed.

The risk of developing TB disease is estimated to be between 16 and 27 times greater among people living with HIV than among people without HIV infection.

TB continues to be the top infectious killer worldwide, claiming more than 4500 lives a day. In 2016, 1.7 million people died from TB, including approximately 374 000 people living with HIV. TB is the leading cause of death among people living with HIV.

The emergence of drug-resistant TB poses a major threat and could jeopardize efforts to end TB. Around 600 000 people developed drug-resistant TB in 2016. Only one person in five needing multidrug-resistant TB treatment was treated.

Breathe out

TB is preventable and curable. Since 2000, around 53 million lives have been saved through effective diagnosis and treatment. The treatment success rate for people newly diagnosed with TB was estimated at 83% in 2015. TB treatment is cheap and highly effective. On average, treatment can give people in the middle of their productive life around 20 additional years of life. This results in substantial economic and health returns. People living with HIV who don't have TB symptoms should start preventive treatment for TB in areas with high rates of TB. In 2016, around 1.3 million people living with HIV started preventive treatment for TB, up from 27 000 in 2006.

However, the treatment of TB is antiquated, long and toxic, and the side-effects often lead people to stop taking their medicines. This lack of adherence has led to a rise in antibiotic resistance. Many breakthroughs can be achieved by investing in diagnostics, vaccines and medicine, including preventive medicine, to treat TB, including multidrug-resistant TB.

World leaders have committed to end TB and AIDS by 2030; however, current actions and investments fall far short of what is needed. Around US\$ 9.2 billion is needed for an effective response to TB in low- and middle-income countries. In 2017, US\$ 6.9 billion was available, a shortfall of US\$ 2.3 billion. In 2016, US\$ 19.1 billion was available for the AIDS response in low- and middle-income countries. UNAIDS estimates that US\$ 26.2 billion will be required for the AIDS response in 2020. Filling the funding gaps as well as investing in research and innovation will save lives and yield significant returns.

TIMELINE OF HIV AND TB

Tuberculosis (TB) is the leading cause of illness and death among people living with HIV. TB can be cured.

1988 WHO and the Union recommend a joint approach to tackling TB and HIV.

2005 Malawi uses a model for delivering antiretroviral therapy based on the TB model incorporating the DOTS principles. People with TB are offered HIV testing and given priority for antiretroviral therapy if eligible. During the year, 47% of registered people with TB accept HIV testing, 69% test positive and 92% start HIV treatment.

2006 WHO convenes an urgent meeting to discuss the implications of a deadly outbreak of extensively drug-resistant TB among people living with HIV in South Africa. Extensively drug-resistant TB is resistant to the most important first- and second-line anti-TB drugs.

2009 guidelines recommend that everyone who is living with HIV should receive antiretroviral therapy regardless of their CD4 count.

2003 An estimated 3% of people with TB are tested for HIV.

2004 Globally, the rate of new TB cases peaks at 143 (range 136–151) cases per 100 000 population.

1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000

1982 The World Health Organization (WHO) and the International Union against Tuberculosis and Lung Diseases (the Union) sponsored the first World TB Day on 24 March, 100 years to the day since Robert Koch discovered the TB bacillus, the cause of TB. Dr Koch's discovery opened the way to diagnosing and curing TB.



1986 The first reports of high HIV prevalence among people with TB in Africa from Zaire (the Democratic Republic of the Congo). Subsequent cases confirmed across sub-Saharan Africa.



1983 The first reports of an association between TB and HIV among people with AIDS in Haiti.



1995 Data show that people living with HIV with active TB have higher viral loads and die sooner than people without TB.

1997 New worries arise in the TB response. In 35 countries surveyed, researchers find multi-drug-resistant TB rates exceeding 2% in about one third of the countries surveyed. The highest rates were in the countries of the former USSR (including the Baltic countries), Argentina, India and China.



1995–2008 The overall TB burden falls as more people with TB successfully treated in DOTS strategy for TB control), with up to 6 million people cured.

1990–2004 The number of TB cases stabilizes or falls steadily in many parts of the world. In sub-Saharan Africa, the rate of new TB cases rises dramatically, fuelled by the HIV prevalence among adults exceeds 5%.

New WHO
commend
with TB who
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2010 A study published in the *American Journal of Tropical Medicine and Hygiene* suggests that the Gambian pouched rat could be trained to detect the TB bacillus. Researchers hope that this 1.5 kg mammal, with a highly developed sense of smell, could one day be part of routine first-line screening for TB. The rats are already helping to detect landmines.



2010 WHO endorses a new TB testing tool that does not require trained laboratory technicians. It can also diagnose TB and multidrug-resistant TB cases in less than two hours.



2016 600 000 people develop drug-resistant TB.

2016 A total of 10.4 million people fall ill with TB and 1.7 million people die from TB, including approximately 374 000 people living with HIV.

2016 WHO recommendations announced to speed up detection and improve treatment outcomes for multidrug-resistant TB through use of a rapid diagnostic test and a shorter, cheaper treatment regimen.

2016 United Nations Political Declaration on Ending AIDS includes working towards the target of reducing TB-related deaths among people living with HIV by 75% by 2020 and commitment to funding and implementing to achieve the 90-90-90 TB targets.

2030

Sustainable
Development Goal
target date to end
AIDS and TB.



2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

2002-2007

Data from Botswana indicate a decline in the number of TB cases reported nationwide that coincides with rapid roll-out of antiretroviral therapy. Improvements in Botswana's national TB programme during this same period, including case detection and reporting, mean that this decline probably reflects a true reduction in TB infections due to antiretroviral therapy.

2006

Jorge Sampaio, the former President of Portugal, is appointed as the United Nations Secretary-General's first Special Envoy to Stop Tuberculosis.

2015 Eric P. Goosby appointed as the United Nations Special Envoy on Tuberculosis.

2015 TB death rate nearly half what it was in 1990.

2015

Millennium Development Goal 6 target date to combat HIV/AIDS, malaria and other diseases.



2017 WHO Global Ministerial Conference on Ending TB, at which 120 national delegations adopt the Moscow Declaration to End TB.

2017 For the first time, the number of people living with HIV accessing treatment exceeds the number of people not on treatment.

TB response shows a cumulative total of 36 million
OTS programmes (the internationally recommended
n deaths averted.

ost parts of the world, except for
the HIV epidemic, especially where

2018 in September.
First United Nations General Assembly
High-Level Meeting on Tuberculosis.

2000-2016 An estimated 53 million lives were saved through TB diagnosis and treatment between 2000 and 2016.

Breathe new life into the TB/HIV movement

UNAIDS is calling on all partners for unprecedented political will and bold action to end TB and AIDS.

Five important actions for TB/HIV:

- ▶ **Give a new impetus to the response to TB and HIV** by impelling political and civil society leaders to champion the universal right to live free from TB and HIV, building on existing rights and health and social movements.
- ▶ **Empower communities to demand their right to health.** Affected communities must call on governments to improve living standards, including by accessing nutritious food, breathing clean air, completing their education and fostering an enabling economic environment, all of which will help to reduce the burden of TB/HIV.
- ▶ **Ensure rights-promoting and non-discriminatory service delivery for all,** especially for the people at higher risk of TB and HIV, such as children and marginalized populations, to protect them against catastrophic health expenditures in the context of universal health coverage. Thus, duty of care extends beyond health to include safe workplaces and places of detention.
- ▶ **Engage ministers of finance to approach health as an investment, not an expenditure.** While the above actions carry some financial outlays, assessments of returns on investment in health have demonstrated their long-term value to societies and economies. An efficient and effective response to HIV and TB will require working across all ministries and sectors to mobilize sufficient domestic financing to strengthen health systems.
- ▶ **Innovate for new medicines and vaccines.** Greater partnerships between the public and private sectors are urgently needed to accelerate innovation that leads to the discovery, development and rapid uptake of new tools to prevent and treat TB and HIV, as are strategies for shorter and less-toxic TB regimens.

TUBERCULOSIS AND HIV

IN 2016, 10.4 MILLION PEOPLE FELL ILL WITH TB AND 1.7 MILLION DIED FROM THE DISEASE



People living with HIV are up to **21 times** more likely to fall ill with **TB**

ANNUAL GLOBAL FUNDING FOR TUBERCULOSIS IS **US\$ 2.3 BILLION** SHORT OF WHAT IS REQUIRED



TB IS THE **LEADING CAUSE OF DEATH** AMONG PEOPLE LIVING WITH HIV

UNAIDS IS WORKING WITH PARTNERS TO REDUCE TB-ASSOCIATED DEATHS AMONG PEOPLE LIVING WITH HIV **BY 75% BY 2020**



In 2016, approximately **374 000** people died from AIDS-related TB

TB IS CURABLE: **53 MILLION** LIVES HAVE BEEN SAVED SINCE 2000

SIMPLE, AFFORDABLE AND EFFECTIVE HIV/TB PROGRAMMES

All people living with HIV should have access to:

- Antiretroviral Therapy
- TB diagnostics and treatment
- Regular TB screening
- TB preventive therapy (if no TB symptoms)

All people living with TB should have access to:

- HIV testing and antiretroviral therapy
- TB treatment
- HIV prevention options



A big year ahead for TB

The year 2018 is critical as progress is pushed forward towards ending the global TB and AIDS epidemics by 2030 as part of the Sustainable Development Goals.

In September 2018, world leaders will come together in New York, United States of America, for the first-ever United Nations General Assembly High-Level Meeting on Tuberculosis to demonstrate their political leadership and commitment to ending TB by 2030.

The main challenges in the response, including the need for equity and to ensure that vulnerable groups, including people living with HIV, have access to services, will be addressed at the meeting, as will the need to make better prevention, testing and treatment services available through primary health-care services and the urgent need to mobilize resources.

The United Nations General Assembly High-Level Meeting on Tuberculosis is an opportunity for United Nations Member States to affirm their commitment to ending TB by adopting an ambitious and robust political declaration. It is also an opportunity to reaffirm their commitment to ending AIDS as the two are inextricably linked. This political declaration will reinforce global action and encourage new investments in programming, research and innovation.

To achieve the Sustainable Development Goals and end the AIDS and TB epidemics by 2030, TB and HIV services must be scaled up in unison and programmes fully integrated to ensure that no one is left behind.



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