Focus On: **Tuberculosis (TB)**

The Global Public Health organization of Johnson & Johnson is focused on supporting global efforts to help end TB and combat antimicrobial resistance (AMR) by broadening access to treatment, supporting efforts to help find the "missing millions" of people with undiagnosed TB and reinvesting in R&D to support the development of new drugs and regimens.



THE CHALLENGE

There are approximately 2 billion people infected with TB worldwide, and in 2021 alone, there were approximately 10.6 million new cases of active TB disease. Of those cases, four million went undiagnosed or untreated.1 Despite being preventable and curable, TB was one of the world's deadliest infectious diseases in 2021, second only to COVID-19, killing 1.6 million people.1 The COVID-19 pandemic exacerbated this challenge, disrupting alreadyfragile systems for TB treatment and care around the world and leading to 700,000 fewer people being tested and treated for TB in 2021 compared to pre-pandemic levels. Underserved communities bear the largest burden, with more than 95 percent of TBrelated deaths occurring in low- and middleincome countries.1

The continued rise of drug resistance is compounding this challenge: in 2021, there were nearly half a million estimated new cases of multidrug-resistant TB (MDR-TB), which accounts for nearly one-third of all deaths from antimicrobial resistance (AMR).1 A third of the world's MDR-TB cases occur in two countries: India and China.1

OUR RESPONSE

Johnson & Johnson has been a committed partner in the fight against TB - from the lab to the last mile of healthcare – for more than two decades. In 2012, we received accelerated U.S. Food and Drug Administration (FDA) approval for the first TB medicine with a novel mechanism of action in nearly half a century, and in 2020, we introduced a pediatric formulation of this medicine. Today it is recommended by the World Health Organization (WHO) as a core component of all-oral treatment regimens for nearly all DR-TB patients and is included on the WHO's Essential Medicines List.

Over the last 10 years, we have collaborated to help ensure that our MDR-TB medicine is available, affordable and accessible to patients in need, including through the Stop TB Partnership's Global Drug Facility (GDF), while undertaking a range of stewardship activities to ensure future TB patients can benefit in the face of rising AMR.

Additionally, we have forged collaborations in support of global efforts to help find the "missing millions" of children and adults who go undiagnosed, and therefore untreated. These efforts, including community engagement, awareness-building and active case finding, are designed to encourage early health-seeking behavior.

We are also reinvesting to advance TB R&D from early-stage to late-stage clinical trials, both in our own labs and by collaborating within consortia, to develop the shorter, safer and simpler drugs and treatment regimens needed to outpace rising AMR and end TB once and for all.

These efforts are part of a comprehensive 10-year TB initiative, launched at the United Nations High Level Meeting on TB in 2018, which will enable us to achieve our ambitious Health for Humanity 2025 goals of reaching an accumulative 700,000 patients with our medicine by 2025, potentially averting six million new infections, and developing at least one new TB drug or regimen by 2030.

BY THE NUMBERS

600K+

Courses of MDR-TB medication delivered from first approval in Dec 2012

158

Countries accessing our medicine, including all of the 30 highestburden countries

Countries in which our medicine has been approved, where more than 90% of people with MDR-TB live

75%

Of people diagnosed and treated for DR-TB are on an all-oral regimen containing our medicine

10-YEAR COMMITMENT HIGHLIGHTS

As part of our 10-year TB initiative, Johnson & Johnson is working closely with governments, national TB programs and local partners in high-burden countries to help end TB across three kill pillars:



TREATMENT ACCESS

Working in collaboration over the last 10 years to facilitate access to our MDR-TB medicine around the world, including through the Stop TB Partnership's Global Drug Facility (GDF), where it is available to more than 135 low- and middle-income countries.

Responsibly stewarding and ensuring the appropriate use of our medicine, including through medical education for more than 240,000 healthcare providers, safety monitoring and management, antibiotic resistance testing and surveillance, and quality-assured supply continuity – with the goal of enabling children and adults diagnosed with DR-TB to continue to receive effective care.



PATIENT FINDING

Collaborating to help find the "missing millions" of people with undiagnosed TB by deploying our unique expertise in behavioral science in a concerted effort to drive health-seeking behavior and early diagnosis of TB at the community level, helping ensure people diagnosed with TB receive the treatment and care they need.



DISCOVERY & DEVELOPMENT

Reinvesting significantly in the development of new TB drugs and regimens, from early discovery to late-stage clinical trials – both in our own labs and by spearheading collaborations with leading global health organizations around the world.

How We Collaborate

Working alongside more than 50 partners, Johnson & Johnson helps convene and engage people affected by TB, governments, multilaterals and global health institutions, global donors, as well as the broader private sector and civil society in the fight against TB. This ranges from bilateral projects to larger multi-stakeholder and multi-sectoral collaborations – and we always put people and communities of those affected by the disease at the center of everything we do.

OUR PARTNERSHIPS

Johnson & Johnson is engaged in a wide range of TB collaborations to help drive impact in high-burden countries, including:



Delivering Our Medicine

Since 2015, Johnson & Johnson has worked with the Stop TB Partnership's Global Drug Facility to deliver our MDR-TB medicine to those in need, including through a 4-year donation program from 2015-2019 in collaboration with USAID and JSC Pharmstandard, ultimately donating more than 100,000 courses of medicine around the world. Today, our medicine is available to more than 135 low- and middle-income countries through the GDF, a model which was recognized by the Access to Medicine Foundation as a "best practice."

Empowering Youth

Johnson & Johnson, together with governments and partner organizations in high burden countries, such as China, India, Indonesia, the Philippines and South Africa, is supporting initiatives that leverage our unique patient insights and empower a generation of youth to end TB. Through social media, chat bots, artificial intelligence mapping, community engagement and more, Johnson & Johnson is engaging young people, who are both highly affected and highly connected, to drive health-seeking behavior change in themselves and those around them, and ultimately, to encourage people with the disease to seek the treatment and care they need.

Reaching More Children

Children and adolescents diagnosed with TB are among the most vulnerable and underserved populations in this global epidemic. Johnson & Johnson has supported initiatives with organizations like PATH in Vietnam for the Breath for Life program, Aquity Innovations in South Africa and with USAID in high-burden countries to identify and treat children and adolescents with TB.

Ending WorkplaceTB

Launched in 2020, the Global Fund to Fight AIDS, TB and Malaria, the Stop TB Partnership, World Economic Forum, Johnson & Johnson and other private sector organizations came together to leverage the untapped potential of private businesses in high TB-burden countries and roll out awareness, detection and treatment programs to reach employees, their families and communities.

Improving Case Finding

Together with the Global Fund, Johnson & Johnson collaborated on a new program in Indonesia called Project in Sight, launched in 2021, which aimed to further understand challenges and barriers in TB diagnosis and catalyze solutions to improve efforts to identify and engage people living with DR-TB.

Innovating to Meet New Challenges

In response to the continued impact on TB services as a result of the COVID-19 pandemic, Johnson & Johnson is working in collaboration with National TB Programs to help support the continuity of care in high-burden countries, streamline the provision of DR-TB services and strengthen linkages in the DR-TB care continuum.

The Future of TB Care

Transforming the Fight Against TB

Despite the positive impact of our efforts, we cannot end the TB epidemic with today's tools alone. Achieving the global goal of ending TB and addressing the urgent threat of antimicrobial resistance will ultimately require significant innovation. We have made important progress, but must continue striving for shorter, safer and simpler treatment options for people living with all forms of TB.

As an industry leader, Johnson & Johnson is both spearheading global R&D partnerships and accelerating discovery research in our labs to chart a new way forward in the fight against TB.

Innovating in the Lab

Together with leading global health organizations, we are advancing R&D to discover and develop novel treatments for TB:

INNOVATIVE HEALTH INITIATIVE (IHI)

Through a series of initiatives as part of the EU's IHI AMR Drug Accelerator, Johnson & Johnson is both leading and actively supporting several formal consortia of academic institutions, public research organizations and pharmaceutical companies to discover and develop new compounds to treat TB, from early discovery to late-stage clinical trials.

PROJECT TO ACCELERATE NEW TREATMENTS FOR TUBERCULOSIS (PAN-TB)

As a founding member of a collaboration with non-profit, private sector and philanthropic organizations, including the Bill & Melinda Gates Foundation, Johnson & Johnson is accelerating the research and development of novel, universal, short-duration TB drug regimens by progressing two investigational TB combination treatment regimens into Phase 2 clinical development.

AMR ACTION FUND

Johnson & Johnson invested \$100 million in 2020 to help create the \$1 billion AMR Action Fund alongside more than 20 of our peers. This groundbreaking industry initiative, which made its first investments in 2022, will accelerate innovative antibiotic candidates with the aim of bringing 2 to 4 new antibiotics to patients by the end of the decade.

Advancing Early-Stage Research

In 2021, Johnson & Johnson launched the J&J Centers for Global Health Discovery, a global network of research partnerships that bring together the talent and scientific excellence of renowned academic institutions with that of Johnson & Johnson to stimulate and speed up early-stage R&D for entrenched and emerging pandemic threats. The first of these Centers was launched at the London School of Hygiene & Tropical Medicine, which is specifically focused on advancing the development of nextgeneration drug regimens needed to end TB.

ABOUT J&J GLOBAL PUBLIC HEALTH

Through a dedicated global public health (GPH) organization that combines R&D, global access strategies and programs, and local operations, Johnson & Johnson is putting the world's most vulnerable and underserved at the heart of everything we do—measuring our success in lives improved. As a team of innovators, we are committed to pioneering and sustainably delivering meaningful and transformational products.

Upholding the rich heritage of Johnson & Johnson, we are taking on the toughest challenges, and, ultimately, we hope to do our part to close the gap of inequity and pave the way to a healthier, more equitable future.

