

## OVERVIEW

Tuberculosis (TB) is a contagious disease which, like the common cold, is spread through air. If left untreated, the disease has devastating effects. With the continued threat of HIV and AIDS, TB has re-emerged as a critical global health issue today.

- In 2009, there were 9.4 million new cases of TB
- TB killed 1.7 million people in 2009, which is equivalent to over 4,700 people a day
- Sub-Saharan Africa has the highest incidence, prevalence and mortality rate of TB
- 22 countries, identified as high-burden countries (HBCs) account for approximately 80% of all new TB cases arising each year
- India, China, Nigeria, Bangladesh, and Indonesia have the highest burden of TB in absolute numbers
- TB and HIV are a lethal combination: TB is a leading cause of death among HIV-infected people
- TB can be affordably treated; in the high burden countries, first-line drug costs range from \$13-61
- 3.3% of new TB cases are cases of multi drug-resistant TB (MDR-TB), the highest rates of which are found in Eastern Europe and the former Soviet Union

## TUBERCULOSIS: THE PROBLEM

One of the world's most devastating infectious diseases, tuberculosis (TB) affects people of prime working age, resulting in great loss to businesses, communities and national economies.

The problem of TB is exacerbated by two factors: its lethal connection to the HIV epidemic and the emergence of drug-resistant (MDR- and XDR-TB) forms of the disease. Globally, 1.1 million of the 9.4 million new cases of TB in 2009 were in HIV-positive people. TB/HIV co-infection is particularly problematic in certain countries; in 2009, 58% of tested TB patients were HIV positive in South Africa and 79% in Zimbabwe. Of the 1.7 million deaths from TB in 2009, 380,000 were among people with HIV.

The global burden of MDR-TB is estimated at 3.3% of all new TB cases. The most recent WHO MDR-TB survey in 2010 reported the highest rates ever of MDR-TB, with Eastern Europe, the former Soviet Union and Russia containing the highest concentrations of drug-resistant TB. China and India have the largest actual numbers of persons with MDR-TB. The increasing burden of drug-resistant TB is aggravated by the great challenges of accurate diagnosis and appropriate case management.

*For information on the basics of TB transmission, risk factors, prevention and treatment, please visit GBCHealth's TB 101 e-learning module [here](#).*

## HOW TB AFFECTS BUSINESS

A 2004 Executive Opinion Survey conducted by the World Economic Forum of over 10,000 business leaders worldwide revealed that nearly one-quarter of respondents believed that TB was currently affecting their business. In sub-Saharan Africa, the numbers are far greater – with 62% of leaders reporting some type of impact from the disease. Nearly one-third of respondents to the 2007 version of the survey indicated that TB would affect their business in the next five years.

In the workplace, TB causes workflow disruption, reduction in productivity, increases in direct costs related to care and treatment of employees, and indirect costs, such as the replacement and retraining of workers who fall ill or die. When TB spreads within a community, effects take hold of both consumers and employees. On a larger scale, an unhealthy population will have less money available to invest in productive activities, thus inhibiting economic growth.

## WHAT CAN BUSINESS DO?

### WORKPLACE

#### *Elements of a Workplace TB Program*

Fortunately, companies can mitigate the impact of TB on their business through effective workplace programs that include the following elements: a

corporate TB policy, education and awareness-raising on the disease, proper case management and on-going program monitoring and evaluation.

Company TB policies should recognize TB as a workplace issue, ensure non-discrimination and confidentiality and promote social dialogue. To prevent or reduce workplace transmission of TB, companies should ensure that employees with confirmed, active TB are offered immediate access to medical services, and provided paid leave until recovery to a non-infectious state is achieved, which in most cases is a matter of a few weeks.

Employers should also ensure that workplaces are equipped with proper environmental controls to minimize the spread of TB bacteria, including proper sunlight illumination and ventilation as well as air disinfection and filtering devices. As overcrowded housing facilitates transmission, every attempt should be made to house employees who live at the company site in appropriate quarters.

Education and training efforts may include an introduction to the company's TB control program and policy. Messages should disseminate knowledge on recognizing the signs and symptoms of TB, and should stress the importance of early diagnosis and treatment adherence.

Effective TB case management includes the use of diagnostic methods and treatment regimens in line with national and/or international standards. WHO recommends the use of directly observed therapy to increase treatment adherence. Through this approach, health-care professionals or even trained laypersons from the community supervise patients taking TB medications.

Companies can also facilitate treatment completion by offering transportation to the local clinic for daily therapy, or providing therapy on-site at the company itself. Supportive care – including vitamins and advice and support for good nutrition – is also critical.

#### **Leverage Existing Resources**

While developing a workplace TB program does require a certain level of corporate commitment, there are a number of existing resources and partners businesses can leverage in order to simplify and accelerate engagement on this issue. In other words,

**companies do not have to go about this alone.** National TB Programs (NTP) are critical in-country partners who can provide technical expertise as well as access to TB medications. WHO and Stop TB's global framework to address TB – known as the DOTS strategy – provides an overarching guide to expand and enhance TB treatment (see this page). Finally, business groups including GBCHealth as well as National Business Coalitions (NBCs) can help facilitate effective program development that is tailored and aligned with corporate priorities.

#### **Integrate TB into Existing Workplace Programs**

In the past decade, business has demonstrated an unprecedented commitment to addressing HIV in the workplace, with positive health outcomes resulting. This is especially true in certain parts of the world where the HIV epidemic has been particularly devastating, such as sub-Saharan Africa. As TB and HIV infection occur hand-in-hand, it is critical that existing HIV programs – and any new ones – also concurrently address TB. Examples of joint interventions include: education on both diseases as well as screening of HIV+ individuals for TB and vice-versa. A combined approach ensures that maximum health benefits are attained, in an efficient and effective manner. Likewise, companies can also integrate TB into other existing health programs, including general employee wellness programs and targeted maternal health and chronic disease interventions.

*For further information on jointly addressing HIV and TB, please refer to the GBCHealth Issue Brief on HIV and TB co-infection.*

#### **FOLLOW THE DOTS**

The first step of the WHO 'Stop TB Strategy' is to pursue high-quality DOTS expansion and enhancement. Following the five steps of the DOTS approach (Directly Observed Therapy, Short-course) will help your business reach its goals in fighting TB.

1. Political commitment with increased and sustained financing.
2. Case detection through quality-assured bacteriology.
3. Standardized treatment with supervision and patient support.
4. An effective drug supply and management system.
5. Monitoring and evaluation system and impact measurement.

## COMMUNITY

TB is an airborne disease and, as such, its impact easily transcends the “factory walls.” At the most basic level, companies can extend their workplace programs into the surrounding community, ensuring that the local population has the same access to education, screening and diagnosis and treatment as do employees. Often times this type of expansion can be supported by other, non-corporate stakeholders, who can bring additional financial resources and technical expertise to the program. Examples of such stakeholders include donors like the Global Fund, and PEPFAR (The President’s Emergency Plan for AIDS Relief). These types of co-investment arrangements are collaborative efforts between private, public and civil society and are a cost-effective method to implementing community programs.

## CORE COMPETENCE

Companies large and small can also fight TB by utilizing their core business competencies. Skills like strategic planning, IT and communications, logistics, human resources management, product distribution and marketing can all be creatively applied to strengthen various aspects of TB prevention and control. Many large multinational companies already have crucial infrastructure — health clinics, medical staff, information dissemination systems — that can also be leveraged against TB.

## ADVOCACY & LEADERSHIP

Business leaders can lend their powerful voices to the TB cause in a number of different ways. At the company level, senior management can emphasize the importance of addressing TB through the workplace, community and core competency approaches highlighted above. CEOs and other executives can advocate outside of the company as well. These influential individuals can become spokespersons for TB within the business community, encouraging other companies to ramp up engagement on the issue. They can also help call attention to TB among donors, governments and policy makers, helping to amplify the voice of an already strong and passionate community of TB advocates.

## BENEFITS TO BUSINESS

### *A Healthy Workforce*

Particularly in high-burden countries like India, China, Russia and heavily impacted regions like sub-Saharan Africa, workplace TB programs can help guarantee a stable and productive workforce. Improved health from investing in TB control includes reduced healthcare costs and absenteeism, increased labor productivity, and lower recruitment and training costs, as a result of fewer workers leaving for health reasons. Furthermore, by contributing to the rise in health status of a population, an estimated 4% increase in average income is seen for each additional year of life expectancy improvements.

### *A Healthy Economy*

Studies have shown that health improvements gained from combating TB can influence economic development, which ultimately means a conducive environment for business. Reduced spending on healthcare leaves more money available for productive activities, and increased life expectancy can lead to increased savings and an inflow of foreign direct investment. One study found that implementing sustained DOTS, where there is no DOTS in the 22 high burden countries can result in a benefit-cost ratio of 92 and an economic gain of around \$1.6 trillion.

### *Increase Impact & Efficiency*

By integrating TB education, screening and treatment, into existing HIV programs, companies can increase health outcomes for both diseases. TB is the number one killer of HIV+ individuals; progress in the fight against HIV means addressing TB as well. Since both diseases are intertwined, implementing efforts together is a cost-effective way to reduce the prevalence of HIV and TB.

### *Reputation-Building*

Research shows that consumers prefer to buy from socially responsible companies, and may demonstrate greater loyalty over longer periods to such brands. Businesses involved in the TB fight have an opportunity to be seen as real leaders, supporting a deadly disease that has been neglected for far too long. Strength a reputation as a good corporate citizen by demonstrating efforts against TB, and sharing results with other businesses and partners.

## BEST PRACTICE EXAMPLES

The following examples show how companies across various industries, both individually and collectively, can address TB.

### Anglogold Ashanti

Mining giant AngloGold Ashanti has documented the positive impact of its TB program on the company bottom-line. The company estimates that each case of TB among unskilled employees in its operations in the Vaal River and West Vilts regions of South Africa costs US\$ 410 in lost shifts. Through its workplace program, AngloGold spends about US \$90 per employee each year, but saves US \$105 through the prevention of active TB among HIV-positive employees.

### Chevron

In the Philippines, Chevron is coordinating an innovative TB awareness campaign aimed at Jeepney (taxi/minibus) drivers in Makati City, Metro Manila. The campaign is called *Labanan ang TB para TsUPER Healthy (Fight TB so Drivers Can Be Healthy)* and consists of educational poster displays in all Caltex/Chevron gas stations and 13 Jeepney terminals. Chevron's partners for this initiative are the Makati Health Office's 28 public TB clinics and the public Jeepney association.

### Collective Action: Health@Home Kenya

Health at Home/Kenya is a multi-year collective-action initiative coordinated by GBCHealth that brings HIV testing, TB screening, and malaria bed nets into the homes of millions of Kenyans living in remote regions. By mobilizing partners in the private and public sector into dedicated work teams, the initiative is fueled by a mix of resources, know-how and technologies. Company actors include among others, the Abbott Fund, Accenture, Bristol-Myers Squibb Foundation, and The Coca-Cola Company, while on-the-ground implementation is managed by the Eldoret, Kenyan-based AMPATH, working closely with the Kenyan government and PEPFAR. The power of collective action has brought the initiative to scale, generating visible results and an outstanding success rate.

### Critical Path to TB Drug Regimens (CPTR)

To accelerate the development of new combination treatments for TB, a number of pharmaceutical companies have banded together to pool resources and expertise in an important cross-sector initiative called the *Critical Path to TB Drug Regimens (CPTR)*.

Through CPTR, Johnson & Johnson, Sanofi, Pfizer, AstraZeneca, Bayer, and Novartis, in collaboration with the Bill and Melinda Gates Foundation, TB Alliance and Critical Path Institute, have agreed to share drug compounds and test new drug combinations to find the optimum regimen. This innovative collective action has the potential to shorten development time by years, demonstrating the power of private sector collaboration.

## RECAP: ENTRY POINTS FOR BUSINESS TO ADDRESS TB

### Workplace

- Develop comprehensive workplace TB programs including a corporate TB policy, education and training, case management, and monitoring and evaluation.

### Community

- Increase programmatic impact by extending workplace programs into the community.

### Core Competence

- Use company expertise to fight TB, whether it be products, skill sets or marketing acumen.
- Leverage existing infrastructure in company efforts.

### Advocacy & Leadership

- Start by advocating internally to engage employees.
- Take a stand against TB in areas of operation.
- Take advantage of high-profile events to speak out on the issue and build alliances.

## REFERENCES AND RESOURCES

- Case Study: AngloGold Ashanti*, GBC Case Study Database, 2007.
- Global Investments in TB Control: Economic Benefits*, Health Affairs, 2009
- Global Tuberculosis Control – epidemiology, strategy, financing*. World Health Organization, 2009
- Multidrug and extensively drug-resistant TB (M/XDR-TB)*, Tuberculosis, WHO, 2010
- Tackling Tuberculosis: The Business Response*, World Economic Forum, 2008.
- The Global Plan to Stop TB 2006-2015*, Stop TB Partnership, 2006.
- The Millennium Development Goals Report*, UN, 2010.
- Tuberculosis disease report*, Global Fund to Fight AIDS, TB & Malaria, 2006
- Tuberculosis Facts*. WHO/Stop TB. 2009.

### About GBCHealth

GBCHealth is a global coalition of over 200 private sector companies and top NGOs leading the business fight for improved global health. GBCHealth supports members by developing comprehensive workplace policies; supporting community programs; leveraging core competencies; facilitating leadership and advocacy by business leaders; and brokering partnerships. GBCHealth also manages the private sector delegation to the Global Fund to Fight AIDS, Tuberculosis and Malaria, serving as an entry-point for corporate collaboration and engagement with the Fund and its recipients worldwide.

GBCHealth has offices in New York, Johannesburg, Beijing, Nairobi and Moscow. For more information on GBCHealth, please visit [www.gbchealth.org](http://www.gbchealth.org).