Tuberculosis (TB) is an airborne, infectious disease caused by bacteria which primarily affect the lungs. While both preventable and curable, TB remains one of the world’s major causes of illness and death and in 1993, the World Health Organization (WHO) declared TB to be a global health emergency.

- One-third of the world’s population, or two billion people, carry the TB bacteria, more than 9 million of whom become sick each year with “active” TB which can be spread to others. “Latent TB” disease cannot be spread.
- TB disproportionately affects people in resource-poor settings, particularly those in Asia and Africa. More than 90% of new TB cases and deaths occur in developing countries, posing significant challenges to the livelihoods of individuals and developing economies as TB primarily affects people during their most productive years.
- TB deaths in 2007, one in four of which was HIV-related, twice as many as previously recognized.

The Global Tuberculosis Epidemic

- Twenty-two countries are considered “high-burden countries (HBCs),” which account for approximately 80% of new TB cases each year; most HBCs are in Africa and Asia. India, China, Indonesia, South Africa, and Nigeria have the highest number of new TB cases in the world.
- The TB incidence rate (139 per 100,000 population) appears to have peaked in 2004, but is declining at a rate less than 1% per year. Incidence is declining in all regions except Europe.
- TB prevalence (206 per 100,000) and death rates (27 per 100,000) are declining globally and in all six WHO regions.
- The global case detection rate under DOTS programs in 2007 was 63%, short of the global target of 70%. The treatment success rate reached the global target of 85% in 2006.
- If current trends remain, the internationally-agreed upon targets of the UN Millennium Development Goals (MDGs), to halt and reverse the incidence of TB by 2015, appear to be within reach. The additional MDG targets—halving TB prevalence and death rates by 2015—may be within reach in some regions, although not in Africa or Europe.

**Figure 1: The 22 High Burden TB Countries (HBCs)**

**Figure 2: TB Incidence, Prevalence and Deaths by Region, 2007**

<table>
<thead>
<tr>
<th>WHO Region</th>
<th>Incidence</th>
<th>Prevalence</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. in thousands (%)</td>
<td>Per 100,000 Pop</td>
<td>No. in thousands</td>
</tr>
<tr>
<td>Global Total (22)</td>
<td>9,273 (100%)</td>
<td>139</td>
<td>13,723</td>
</tr>
<tr>
<td>Africa (9)</td>
<td>2,879 (31%)</td>
<td>363</td>
<td>3,766</td>
</tr>
<tr>
<td>Americas (1)</td>
<td>295 (3%)</td>
<td>32</td>
<td>348</td>
</tr>
<tr>
<td>E. Mediterranean (2)</td>
<td>583 (6%)</td>
<td>105</td>
<td>772</td>
</tr>
<tr>
<td>Europe (1)</td>
<td>432 (5%)</td>
<td>49</td>
<td>456</td>
</tr>
<tr>
<td>South-East Asia (5)</td>
<td>3,165 (34%)</td>
<td>181</td>
<td>4,881</td>
</tr>
<tr>
<td>Western Pacific (4)</td>
<td>1,919 (21%)</td>
<td>108</td>
<td>3,500</td>
</tr>
</tbody>
</table>

- Africa, with 3 million new TB cases, accounts for almost a third of the global total, and has the highest incidence and prevalence rates of any region (see Figure 2). Fourteen of the 15 countries with the highest incidence rates in the world, and 9 of the 22 HBCs, are in Africa. In 2007, Africa’s case detection rate was the lowest in the world.
- The Americas is one of least affected regions in the world, with the lowest TB incidence and prevalence rates, and only one HBC–Brazil. The region’s case detection rate was the second highest in the world, although its treatment success rate (75%) was below the 85% global target and has been declining since 2002.
- Eastern Mediterranean had the highest incidence and prevalence rates, and only one HBC–Afghanistan. The region’s case detection rate was second highest in the world, although its treatment success rate (75%) was below the 85% global target and has been declining since 2002.
- Europe has 432,000 new TB cases in 2007, ranks low in incidence and prevalence rates, but has low case detection rate (58%).

Current Global Snapshot

- TB is found in every country in the world, but the majority of TB cases are concentrated in developing countries, particularly those in Asia and Africa.
- In 2007, an estimated 13.7 million people were living with (active) TB, including 9.3 million new cases. There were an estimated 1.8 million TB deaths in 2007, one in four of which was HIV-related, twice as many as previously recognized.
TB and HIV are frequently referred to as co- or dual-epidemics due to their high rate of co-infection. The HIV epidemic has been largely responsible for the resurgence of TB starting in the 1980s, as HIV weakens the immune system, increasing the likelihood that an individual will become infected and develop active TB. Additionally, TB is harder to diagnose and progresses more rapidly in someone with HIV. A weakens the immune system, increasing the likelihood that an individual with HIV will contract TB. As a result, TB is a leading cause of death among people with HIV, especially in developing countries.

• An estimated 1.4 million of the 9.3 million new TB cases were also HIV positive in 2007.

• 79% of co-infections were in Africa, the region hardest hit by HIV. South Africa alone accounted for 31% of the total number of HIV-positive TB cases in the Africa region.

• Of the 1.8 million people who died from TB in 2007, an estimated 456,000 were HIV positive.

Drug Resistant TB
Drug-resistant TB has emerged as a major challenge facing TB-control efforts. The number of drug-resistant TB cases has risen in recent years, and resistant cases have been identified across the world. There are two forms of drug-resistant TB: multidrug-resistant TB (MDR-TB), which fails to respond to standard first line drugs, and extensively drug-resistant TB (XDR-TB), which fails to respond to both first and second line drugs. MDR-TB and XDR-TB result from inconsistent or partial treatment, incorrect prescribing, and/or shortages or interruptions in the drug supply chain.

• In 2007, there were an estimated 511,000 cases of MDR-TB, the highest to date. By the end of 2008, XDR-TB had been reported in 55 countries and territories. In an outbreak in South Africa, 52 out of 53 people infected with XDR-TB died within an average of 3 weeks of being diagnosed.

• The highest numbers of MDR-TB were found in India, China and the Russian Federation. In some areas of the former Soviet Union, more than 15% of new cases were MDR-TB.

• Treatment of MDR-TB can take much longer and be up to 100 times more expensive than standard TB treatment.

The U.S. Government Response
The U.S. government’s involvement in global TB efforts was relatively limited until the late 1990s. USAID, the lead government agency on international TB control, first began its program in 1998. Over time, U.S. efforts to address TB have expanded and funding has increased. The 2003 passage of the President’s Emergency Plan for AIDS Relief (PEPFAR) explicitly included TB in its mandate, authorizing bilateral funding to address the disease (although no funding amounts were specified) and multilateral support to the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), an independent, international financing institution created in 2001, which in turn provides grants to countries to address TB (as well as HIV and malaria). In 2004, USAID announced an expanded TB response plan and in 2008, the reauthorization of PEPFAR included specific funding levels for TB ($4 billion over 5 years).

• USAID currently focuses its efforts in more than 40 countries including 18 of the 22 HBCs. Total U.S. government funding for TB between FY 1998 to 2009, almost all of which is provided by USAID, was more than $900 million.

The Global Response to TB
In 1982, the WHO and the International Union Against Tuberculosis and Lung Disease (IUATLD) sponsored the first “World TB Day,” although attention to TB by the international community did not increase until more recently, in part due to the relatively recent availability of DOTS, first introduced and recommended as the global strategy for TB control in the mid-1990s. Since then, new coalitions, initiatives, and funding mechanisms have emerged. The Stop TB Partnership, an international network of public and private entities working to eliminate TB, was created in 1998; the WHO is a lead agency in the partnership and serves as its Secretariat. Other expanded efforts include: the UN MDG targets adopted by all nations in 2000, to halt and reverse TB incidence, prevalence, and deaths by 2015; the inclusion of TB as one of three diseases targeted by the Global Fund; and the 2006 launch of WHO’s renewed “Stop TB Strategy.”

• Funding for TB has risen significantly, although a gap remains. Since its inception, the Global Fund has approved almost $2 billion in grants to TB related initiatives and over $230 million to TB-HIV efforts in more than 100 countries.

• The private sector, including foundations and corporations, has also played an increasing role, particularly The Bill & Melinda Gates Foundation which has committed $768 million to TB to date, with additional funding provided to the Global Fund.

Still, the total cost to implement The Global Plan to Stop TB over a 10 year period (2006–2015) is estimated to be $56 billion compared to a global financial commitment for TB control during this period of $25 billion, leaving a funding gap of $31 billion.

1 For more information on TB see www.kff.org.
3 USAID. “2008 Tuberculosis Facts.”
9 WHO. “Status Analysis: Impact of AIDS on TB.”
10 USAID. “Fast Facts: Tuberculosis; February 2009.”
11 USAID. “Expanded Response to Tuberculosis; September 2004; updated, January 2009.”
12 USAID. “Expanded Response to Tuberculosis; September 2004; updated, January 2009.”
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16 USAID. “Expanded Response to Tuberculosis; September 2004; updated, January 2009.”
17 USAID. “Expanded Response to Tuberculosis; September 2004; updated, January 2009.”
18 WHO. “2006 Cervical Cancer Fact Sheet.”
19 USAID. “2008 Tuberculosis Facts.”
21 Personal communication, Bill & Melinda Gates Foundation, February 2009.