

Background Information on Global and European TB Epidemics

- One-third of the world's population is currently infected with the TB bacillus.
- Approximately two million people die annually of TB globally; in 2005, 65,700 people in the European region died from TB.
- In 2004, an estimated 424,000 people had multidrug-resistant TB (MDR-TB).
- The countries of the former Soviet Union account for 72 percent of all cases of TB reported in the European region. Greece, Sweden, and the United Kingdom also reported significant increases in TB infections in recent years.

Tuberculosis

Tuberculosis (TB) is a disease that usually attacks the lungs but can affect almost any part of the body. A person infected with TB does not necessarily feel ill – such cases are known as silent or “latent” infections. When the lung disease becomes “active,” the symptoms include a cough that lasts for more than two or three weeks, weight loss, fever, night sweats and coughing up blood.

Like the common cold, it spreads through the air. Only people who are sick with TB in their lungs are infectious. When infectious people cough, sneeze, talk or spit, they propel TB germs, known as bacilli, into the air. A person needs only to inhale a small number of these to be infected. Left untreated, each person with active TB disease will infect approximately 10 to 15 people every year. However, on average, globally, most of the people infected with TB bacilli do not become sick with the disease. If someone has a weak immune system, the chances of becoming sick are much greater.

Multi- and Extremely Drug-Resistant TB

When TB is improperly treated, strains of the bacteria can become resistant to the major anti-TB drugs. Examples of improper treatment include health workers who provide the wrong dosage of anti-TB drugs, poor quality or erratic supply of drugs, and patients who do not take the full course of treatment. The standard treatment regimen for basic TB requires daily consumption of anti-TB drugs for approximately six months.

Drug-resistant strains are especially deadly and can infect other people. They are far more difficult – though not impossible – to treat and cure. Multidrug-resistant TB (MDR-TB) describes strains of TB that are resistant to at least the two main first-line TB drugs - isoniazid and rifampicin.

Extremely drug-resistant TB (XDR-TB) is MDR-TB that is also resistant to three or more of the six classes of second-line drugs. As of March 1, 2007, cases of XDR-TB have been found in 28 countries, including Italy, China, and India. In South Africa, researchers reported that 85 percent of people with XDR-TB die; many of those patients are also grappling with HIV/AIDS.

Linkages Between TB and HIV/AIDS (TB-HIV co-infection)

HIV/AIDS and TB are so closely connected that the term “co-epidemic” or “dual epidemic” is often used to describe their relationship. HIV and TB form a lethal combination, each speeding the other's progress. HIV weakens the immune system. Someone who is HIV-positive and infected with TB bacilli is many times more likely to become sick with TB than someone infected with TB who is HIV-negative. TB is also more difficult to diagnose and more complicated to treat among people who are HIV-positive; this leads to delays in treatment of TB and increased risk of spreading TB to other people.

More Information on TB in Europe

While Europe represented only about 5% of global TB cases in 2005, other indicators stand out in comparison to other regions. Levels of coverage for DOTS — the WHO's internationally recognized strategy for control — and TB case detection in Eastern Europe are among the lowest in the world. This means that services are not adequately available, and that even when they are available, people who need the services are not accessing them. In fact, only 46% of all infectious cases of TB in the lungs are detected by DOTS programs in the European Region.

Rates of MDR-TB in Central and Eastern Europe and the former Soviet Union are among the highest in the world. Moreover, aggregated data from the European Region reveal the highest rate of treatment failure (7%), and the second-highest rate of death as a treatment outcome (6%). This could mean that patients are being treated with the wrong drugs, that their TB is drug resistant, or that they do not have adequate support to adhere to their treatment.

TB disproportionately affects people who, for reasons related to income poverty, legal status, or other forms of social exclusion, face challenges in these areas. Indeed, rising rates of TB in Europe occur in the broader context of increasing socio-economic inequality. Evidence shows that during the last 20 years, social inequalities have increased, and the gap in health between the top and the bottom of the social scale has widened in Western and Eastern European countries.ⁱ

TB/HIV co-infection is a growing problem, particularly in regions with a higher HIV prevalence rate, as well as in places where the same populations are most vulnerable to TB and to HIV. Injecting drug users (IDUs) who share needles, for example, are vulnerable to HIV infection, and because they are engaged in behavior that has been criminalized, are more likely to be imprisoned. Once in a crowded prison, they are more likely to get TB.

Source: Unless otherwise indicated, all statistics are from the World Health Organization, 2007 (www.who.int/tb/en/)

ⁱ Council of Europe Committee of Ministers. Adaptation of health care services to the demand for health care and health services of people in marginal situations. Rec (2001) 12. Explanatory memorandum. 23; Costings C., Stegeman I, Bensaude de Castro Friere S, Weyers S. Closing the Gap, Strategies for Action to Tackle Health Inequalities. Eurohealthnet. May 2007. 6.