# FACT SHEET TB/HIV Coinfection and Drug-Resistant TB

- Someone in the world is newly infected with TB bacilli every second.
- One-third of the world's population is currently infected with the TB bacillus.
- 5-10 percent of people who are infected with TB bacilli (but who are not infected with HIV) become sick or infectious at some time during their life.
- It is estimated that 1.7 million deaths resulted from TB in 2004.

## Tuberculosis

Tuberculosis 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 – and such cases are known as silent or "latent" infections. When the lung disease becomes "active," the symptoms include cough that last for more than two or three weeks, weight loss, fever, loss of appetite, 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 on average between 10 and 15 people every year. However, people infected with TB bacilli will not necessarily become sick with the disease. The immune system "walls off" the TB bacilli which, protected by a thick waxy coat, can lie dormant for years. When someone's immune system is weakened, the chances of becoming sick are greater.

## Linkages between TB and HIV

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 bacilli who is HIVnegative. TB is a leading cause of death among people who are HIV-positive. It accounts for about 13 percent of AIDS deaths worldwide. In Africa, HIV is the single most important factor determining the increased incidence of TB in the past 10 years.

### Multidrug-Resistant and Extensively Drug-Resistant TB

Multidrug-Resistant TB (MDR-TB) describes strains of tuberculosis that are resistant to at least the two main first-line TB drugs—isoniazid and rifampicin. Extensively Drug-Resistant TB (XDR-TB) is MDR-TB that is also resistant to three or more of the six classes of second-line drugs.

Resistance to anti-TB drugs in populations is a phenomenon that occurs primarily due to poorly managed TB care. Problems include incorrect drug prescribing practices by providers, poor quality drugs or erratic supply of drugs, and also patient non-adherence.

XDR-TB poses a grave public health threat, especially in populations with high rates of HIV and where there are few health care resources.

### Source: World Health Organization, 2006 (www.who.int/tb/en/)