

The Deadly Intersection Between TB and HIV

Tuberculosis (TB) is a disease that is spread from person to person through the air, and it is particularly dangerous for people infected with HIV. Worldwide, TB is the leading cause of death among people infected with HIV.

An estimated 10-15 million Americans are infected with TB bacteria, with the potential to develop active TB disease in the future. About 10 percent of these infected individuals will develop TB at some point in their lives. However, the risk of developing TB disease is much greater for those infected with HIV and living with AIDS. Because HIV infection so severely weakens the immune system, people dually infected with HIV and TB have a 100 times greater risk of developing active TB disease and becoming infectious compared to people not infected with HIV. CDC estimates that 10 to 15 percent of all TB cases and nearly 30 percent of cases among people ages 25 to 44 are occurring in HIV-infected individuals.

This high level of risk underscores the critical need for targeted TB screening and preventive treatment programs for HIV-infected people and those at greatest risk for HIV infection. All people infected with HIV should be tested for TB, and, if infected, complete preventive therapy as soon as possible to prevent TB disease.

Intersection of Two Global Epidemics

- Approximately 2 billion people (one-third of the world's population) are infected with *Mycobacterium tuberculosis*, the cause of TB.
- TB is the cause of death for one out of every three people with AIDS worldwide.
- ▼ The spread of the HIV epidemic has had a significant impact on the TB epidemic—one-third of the increase in TB cases over the last 5 years can be attributed to the HIV epidemic (Source: UNAIDS).

The Continued Threat of Multidrug-Resistant TB



Every nation must face the challenge of combating multidrug-resistant (MDR) TB. People infected with HIV and living with AIDS are at greater risk of developing MDR TB. MDR TB is extremely difficult to treat and can be fatal. While the number of cases has decreased in the United States over the past few years, MDR TB has now been reported in 45 states and the District of Columbia. To prevent the continued emergence of drug-resistant strains of TB, treatment for TB must be improved in the United States and across the globe. Inconsistent or partial treatment is the main cause of TB that is resistant to available drugs. The most effective strategy for ensuring completion of treatment is Directly Observed Therapy, and its use must be expanded.

Another challenge that individuals co-infected with HIV and TB face is the possible complications that can occur when taking HIV treatment regimens along with drugs commonly used to treat TB. Physicians prescribing these drugs must carefully consider all potential interactions.

Addressing the Dangers of the Interconnected TB/HIV Epidemics Requires Expanded Efforts

TB control is an exercise in vigilance; the goal of controlling and eventually eliminating TB requires a targeted and continuous effort to address the prevention and treatment needs for those most at risk, including HIV-infected individuals. Efforts to eliminate TB are therefore essential to reducing the global toll of HIV.

For more information...

CDC National AIDS Hotline:

1-800-342-AIDS Spanish: 1-800-344-SIDA Deaf: 1-800-243-7889

CDC National Prevention Information Network:

P.O. Box 6003 Rockville, Maryland 20849-6003 1-800-458-5231

Internet Resources:

National Center for HIV, STD, and TB Prevention: http://www.cdc.gov/nchstp/od/nchstp.html Divisions of HIV/AIDS Prevention: http://www.cdc.gov/hiv NPIN: http://www.cdcnpin.org Division of TB Elimination: http://www.cdc.gov/nchstp/tb

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