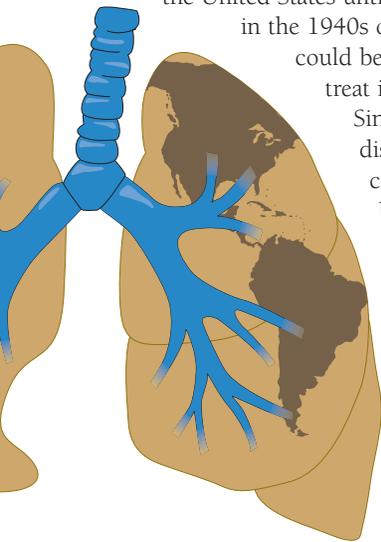


Tuberculosis: a global threat

Some bacteria are harmless, but some can be deadly. **Tuberculosis (TB)** is an example of a disease caused by a potentially deadly type of bacteria. In fact, TB was one of the leading causes of death in the United States until the development in the 1940s of antibiotics that could be used to effectively treat it.

Since then the disease declined consistently in the United States until the mid-1980s. The occurrence of TB has been on the rise ever since, especially among people who may be malnourished or may have compromised immune

systems, such as people infected with human immunodeficiency virus (HIV),



WHAT IS TB?

TB is a disease caused by the body's attempt to control the multiplying and spreading of the bacterium *Mycobacterium tuberculosis*. Though the bacteria usually cause disease in the lungs, TB can infect many parts of the body (or spread from the lungs to other parts of the body). In some cases, people are not aware that they have become infected because their bodies respond so effectively to the infection and the infected areas heal. In some people the bacteria remain dormant and can become active again if their immune system becomes weakened or if they become malnourished.

people with drug or alcohol problems, or people with diabetes. The latest concern worldwide is that new strains of TB have developed that are resistant to the antibiotics used so successfully in the past. These resistant strains pose a public health hazard for many countries around the globe.

In an article in the August 18, 1999, issue of *JAMA*, researchers estimate that for 1997, in the 212 countries they studied, almost 32% of the total population was infected with the bacteria that causes TB. Of those people with TB disease, 23% will die as a result of the disease. The rate of death from TB in some countries with high rates of HIV infection is estimated to be greater than 50%.

WHAT ARE THE SYMPTOMS OF ACTIVE TB?

The symptoms of the disease depend on where in the body the bacteria are multiplying. For TB disease of the lungs (the most common site of TB in the United States), the symptoms include

- Coughing that lasts more than 2 weeks (sometimes bringing up blood or bloody mucus)
- Difficulty breathing
- Chest pain

Overall symptoms of TB disease include

- Unexplained weight loss
- Feelings of being run down and easily fatigued
- Fever and sweating (in some cases, especially at night)
- Loss of appetite

If you are experiencing any of the above symptoms, you should see your doctor as soon as possible. It may be necessary for you to be tested for TB infection.

SUCCESSFUL TREATMENT OF TB:

- Take any and all drugs your doctor prescribes, following the schedule he or she has given, to avoid the development of an antibiotic-resistant strain of TB.
- Keep all scheduled appointments with your doctor. (The treatment can last for 6 to 9 months, and close cooperation between patient and doctor is a key to success.)
- Make sure your doctor is aware of any side effects or complications you are experiencing during treatment.
- Avoid any activities that may compromise your immune system, such as drinking alcohol in excess or taking illegal drugs.
- Get plenty of rest.
- Maintain a well-balanced diet with plenty of fruits and vegetables.

FOR MORE INFORMATION:

- The American Lung Association
800/LUNG-USA or
www.lungusa.org
- National Institute of Allergy and Infectious Diseases (NIAID)
Send postcard to:
NIAID Office of Communications and Public Liaison
31 Center Drive, MSC 2520
Bethesda, MD 20892-2520 or
www.niaid.nih.gov

INFORM YOURSELF:

To find this and previous *JAMA* Patient Pages, check out the AMA's Web site at www.ama-assn.org/consumer.htm. A previous *JAMA* Patient Page on tuberculosis was published on November 18, 1998.

Additional Sources: *AMA Family Medical Guide*, *Centers for Disease Control and Prevention*, *AMA Encyclopedia of Medicine*

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