Am I at risk for exposure to tuberculosis? Ask an expert
by Dr. Catherine A Curley/Case Western Reserve University
Wednesday May 20, 2009, 12:50 PM

Question: I will be staying with an elderly family member for a couple of days who has recently tested positive for a tuberculosis skin test. Will I be at risk from this exposure? If I am at risk for tuberculosis, after returning from this visit, is it safe for me to be around my new grandson who was born prematurely? Or will I expose him to the disease as well?

Answer: Tuberculosis is an infection caused by a germ called Mycobacterium tuberculosis. Tuberculosis is an infectious disease that is spread through the air when a person with the disease coughs.

A person may become infected with tuberculosis when they breathe the air droplets from the person who is sick with the disease. Most persons exposed to tuberculosis will never become sick from the tuberculosis disease. In fact, only about 10 percent of persons exposed to tuberculosis ever become ill.

Testing for TB
The tuberculosis skin test is performed to see whether the immune system recognizes the tuberculosis infection.

A positive tuberculosis skin test suggests that the individual has been in contact with tuberculosis in the past. It does not tell us whether the individual is sick with the tuberculosis disease.

After a skin test is positive the individual will have a chest x-ray and an examination by a physician to determine whether there is any sign of active infection. In most individuals there is not.

When a person has a positive tuberculosis skin test, but there is no evidence of active tuberculosis, this is called latent tuberculosis infection. This type of infection is often found in parts of the world where tuberculosis is more common. In the United States it is not unusual for older persons to have latent tuberculosis infection because tuberculosis was a common disease in the United States until the 1970s and 1980s.

Two forms of tuberculosis infection.

Latent tuberculosis infection: Not everyone who becomes infected with tuberculosis becomes sick with the disease itself. This is because the body’s immune system is able to keep the number of tuberculosis germs low enough to prevent the active disease from developing. The infection at this point is called latent tuberculosis infection. This is much more common than active tuberculosis.

Characteristics of latent tuberculosis include:
- No symptoms (don’t feel sick)
- Cannot spread the infection to others
- Diagnosed with a positive TB skin test
Am I at risk for exposure to tuberculosis? Ask an expert - Health and Fitness | Ohio Medi...  Page 2 of 5

Up to 10 percent can develop into active TB disease in the future, but treatment is available to prevent active TB disease.

Active tuberculosis disease: If the TB germs become too numerous for the immune system to contain, the person becomes sick with active tuberculosis disease.

Symptoms of active tuberculosis include:
- Cough for more than 3 or 4 weeks
- Unintended weight loss
- Unexplained fever, chills, and night sweats for more than 3 weeks
- Coughing up blood

Characteristics of active tuberculosis include:
- Have symptoms (feel sick)
- Can spread to others
- Diagnosed with lab tests and chest x-ray

Treatment is available for the active TB disease.

Should you be worried?
In answer to the specific question you asked, if your relative has had a recent normal chest x-ray (i.e. within 3 months), and does not have any of the symptoms of active tuberculosis, then there is no problem being around them for you or the baby.

In addition, tuberculosis is only spread through the air. It is not transmitted on clothing or surfaces. So you could not bring the infection home with you after visiting your relative, even if this person was sick with tuberculosis.

See more in Netwellness