

## TB ? forgotten perhaps, but still a threat

Tuberculosis doesn't make headlines very often. The lack of news could mislead people into thinking it is not a concern. World TB Day, falling on March 24 each year, is designed to raise awareness that tuberculosis today is actually an epidemic in much of the world. Globally, it is the second-most common cause of death from infectious disease, after HIV/AIDS. It is responsible for the deaths of nearly 1.5 million people each year, mostly in developing countries.

In 1882, when Dr. Robert Koch announced that he had discovered the tuberculosis bacillus, TB was raging through Europe and the Americas. It caused the death of one out of every seven people. Koch's discovery opened the way towards diagnosing and curing TB.

Canada has comparatively low rates of TB, with about 1,600 new cases a year. In Simcoe Muskoka between 2000 and 2013, there were just 43 cases of TB. Testing, effective treatment and public health measures keep the level of infection low.

### Testing for TB

Many people receive a TB skin test as part of employment or school requirements, or for health reasons. A TB skin test shows whether or not a person has ever been infected with the TB bacteria. A positive skin test could reflect an infection that occurred years before. It does not necessarily mean that a person is sick with active TB or that he or she will spread it to others. In fact, 90 per cent of people infected will never become sick with TB, are not contagious and cannot pass the bacteria to someone else. This kind of TB is called latent (non-contagious) TB.

If a skin test is positive, the doctor will follow up by ordering a chest X-ray to make sure that the person does not have active, contagious TB. The doctor will also ask about symptoms of active TB, including a persistent cough, weight loss (usually dramatic), loss of appetite, fevers, night sweats, and extreme fatigue.

Even if there is no evidence of active TB, the doctor may still suggest that a person take an antibiotic for several months as a preventive measure. This antibiotic will kill the latent TB bacteria in the body and will essentially eliminate the 10 per cent risk of developing active and contagious TB at some point in the future.

### Treating TB

Treating active TB takes a long time—usually six to nine months—and is provided free in Ontario. Drug treatment begins immediately upon a diagnosis of TB. Sometimes it is started even when TB is suspected but not yet confirmed. A patient with tuberculosis must take their medications consistently to avoid developing a drug-resistant strain of the bacteria in their bodies. After about three weeks of taking the medication, the patient will usually no longer be infectious to others; a sputum test can confirm this. After treatment is completed, a patient no longer has TB disease.

Public health plays a key role in TB prevention and treatment, in co-operation with physicians. When an active case is identified, public health will investigate close contacts of the individual to determine if any other persons have become infected. If these contacts develop a latent TB infection, they will be offered preventive medication to keep them from becoming sick. Those taking medications will be monitored by public health throughout their treatment.

**By Dr. Colin Lee**