From our <u>Tipsheet Series</u>:

Go Confidently.



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Despite important advances to cure the disease, TB continues to be a major global health concern.

How to come back with memories, not TB

By Shirley Cheng, MPH

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In 1882, the German doctor Robert Koch discovered the bacteria Mycobacterium Tuberculosis which causes Tuberculosis (TB). Despite important advances to cure the disease, TB continues to be a major global health concern – three persons die every minute. The World Health Organization (WHO) has designated March 24 of every year as <u>World Tuberculosis Day</u> in order to raise public awareness of this infection (pulmonary TB being the most contagious) and to highlight the challenges we face to control multi-drug-resistant Tuberculosis (MDR-TB) and extensively drug-resistant TB (XDR-TB).

Air travel and pulmonary tuberculosis

Travellers may recall the 2007 Tuberculosis scare caused by a passenger who travelled by plane to various international destinations including the US, France, Greece, Italy, the Czech Republic, and Canada while he was suspected of having extensively drug-resistant Tuberculosis. Some travellers who flew on the same planes accused him of selfishly putting their lives in danger. It was also the first case where the US Centers for Disease Control and Prevention (CDC) quarantined a person infected with TB. It raised many questions about the risk of contracting TB in an aircraft – as a result of travelling in a confined space for a prolonged period of time – and highlighted how easily infectious diseases can be potentially transmitted through international travel.

The airline industry follows the <u>WHO Tuberculosis and Air Travel</u> guidelines which indicate that people with infectious TB must postpone long distance travel while those with multi-drug-resistant Tuberculosis must postpone all air travel. Some countries have their own DO NOT FLY list at their border services for public health reasons. Quarantine officers from the Public Health Agency of Canada, for example, work in major international airports to prevent infectious diseases and outbreaks. According to the WHO, no active TB case has been identified due to exposure on a commercial aircraft so far. This is because airplanes are built with HEPA (High-Efficiency Particulate Air) filter systems on board which kill germs when air is circulated in the aircraft. Travellers can rest assured that under normal conditions, cabin air is cleaner than the air in most buildings. Furthermore, aircraft ventilation systems are operating as long as the doors are closed even if the plane is on the tarmac. WHO advises ground delays should be kept to a maximum of 30 minutes.

So what are the risks of contracting TB when someone sitting beside you is coughing or sneezing? What precautions can you take to protect yourself?

Tuberculosis is an airborne disease. Symptoms include weight loss, fever, excessive coughing, loss of appetite, fatigue, and night sweats. Sometimes TB may be misdiagnosed as bronchitis or pneumonia. TB becomes infectious when a person with active TB releases

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Photo by Adama Ciesielski, Freeimages.com

the bacteria into the air through coughing or sneezing. Others nearby may breathe the air containing the bacteria into their lungs and become infected. TB is not spread by sharing cutlery, dinner plates, drinking cups, or toilet seats.

The critical steps for controlling and preventing TB are to make sure that persons with active TB get proper and timely treatment. If you have active TB, you'll need to be isolated until the culture test results are negative. Once you are no longer contagious, you can resume your normal activities and travel. To prevent drug resistance to the infection, you need to take the full course of medication for a minimum of 6 months which can take up to one year or more to complete.

As a frontline public health practitioner working directly with TB patients and their families, I often got questions asking: Why did I or a loved one get TB? Can I let my parents / grandparents / child fly back to visit relatives back home? What are the air travel restrictions for people affected by TB? The answer is that persons who have lived in, or traveled to areas where TB is endemic, are at greater risk of developing Tuberculosis. Persons can fly back to their home country after their sputum results turn up negative and they follow an established treatment regime.

Income, housing conditions, lack of access to health services, social exclusion and other social determinants of health also play a role in TB infection. For example, data shows how healthy newcomers who have latent TB are at risk of becoming infectious within the first five years of immigrating. Unequal access to employment, education, and wealth distribution are all key factors contributing to physical and psychological stress.

If you are a TB carrier ask your local public health department official who is in charge of infection control, or your treating physician, to issue a letter explaining your health status and confirming that you are fit for travel in case you get asked at the border about your medications.

I hope this information reassures you that there is no need to panic about TB and instead, enjoy your vacation to the fullest.

For more information on TB:

World Health Organization Public Health Agency of Canada Centers for Disease Control and Prevention Bill & Melinda Gates Foundation

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