

# STANDARD DEVIATIONS: Keeping a Perspective

Greetings,

Coronavirus is all the rage. It dominates our news, our conversations, and our lives. But in terms of consequence to our health and the world, coronavirus is just another drop in the bucket.

Tomorrow is **World Tuberculosis Day**. Each year, we recognize World TB Day on March 24. This annual event commemorates the date in 1882 when Dr. Robert Koch announced his discovery of *Mycobacterium tuberculosis*, the bacillus that causes tuberculosis (TB).

Up to **13 million people in the United States have latent TB infection**. Here is a respiratory disease that dwarfs COVID-19. This bacterial malady is spread from person to person through the air. TB usually affects the lungs, but it can also affect other parts of the body, such as the brain, the kidneys, or the spine. The TB bacteria are put into the air when a person with TB disease of the lungs or throat coughs, sneezes, speaks, or sings. People nearby may breathe in these bacteria and become infected. Sound familiar?

Worldwide, 10 million people acquired TB in 2018 (last year of stats) and 1.5 M died. Nearly 500,000 cases are drug-resistant type TB.

The common tests we utilize these days are the tuberculin skin test that we geezers recall being administered each year by our employee health nurse and read a few days later with a ruler, and the standard now, the QuantiFERON®–TB Gold In-Tube test (QFT–GIT).



We also perform a bunch of lab work on these patients. The Acid-Fast Bacillus (AFB), Nucleic Acid Amplification Test (NAAT), and sputum culture all add to our workload. Consider the ancillary testing that accompanies the care for a TB infection (chest X-ray, susceptibility testing, et al) and our burden for treating the chronically ill, and you can see that TB is still a player in our healthcare paradigm.



Tuberculosis is a deadly disease. Our work puts us in proximity to risks of exposure. The testing we perform for diagnosis and monitoring of TB is the stuff I worry about. As laboratory professionals we need to be vigilant in our efforts to practice good biosafety technique and that applies to all types of exposures.

The work we perform at the bench does not and should not discriminate by the popularity of a certain disease. Likewise, our recognition of risk and the mitigations we practice (e.g. infection control, social distancing, respirator use, hand hygiene, etc.) should be uniform and common practice when we think about our safety, lab safety and the steps we follow every day.

World TB Day should be a reminder that our concerns are larger than coronavirus. There are many diseases that have much larger profiles and impacts. Cancers, heart disease, arbovirus, malaria, neglected tropical diseases, and, yes, influenza, coronavirus and all infectious diseases deserve our attention and awareness.

Have a great week and be safe,

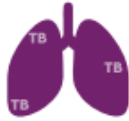
Bryan



## TAKE ON

# LATENT TB INFECTION

Up to 13 million people in the U.S. have latent tuberculosis (TB) infection.



### Latent TB Infection

Latent TB infection means TB germs are in the body, but not enough to cause sickness or spread germs to others.



### TB Disease

If TB germs become active & multiply, latent TB infection can turn into TB disease.



**1 in 10**

Without treatment, 1 in 10 people with latent TB infection will develop TB disease.

## PEOPLE WHO SHOULD BE TESTED FOR TB INFECTION INCLUDE:



Contacts of people with TB disease.



People from countries where TB disease is common.



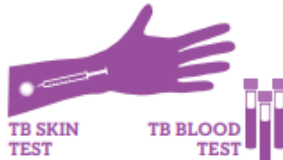
People with health problems that make it hard to fight TB disease.



HOSPITALS SHELTERS CORRECTIONAL FACILITIES

People who spend time in places where TB is more common.

## TREATING LATENT TB INFECTION PREVENTS TB DISEASE.



TB SKIN TEST TB BLOOD TEST

A skin test or blood test can find TB infection.



1 dose 1 time per week 12 weeks

Shorter regimens help patients finish treatment.



Treating latent TB infection is less costly than treating disease.

## ELIMINATING TB REQUIRES EXPANDING TESTING & TREATMENT OF LATENT TB INFECTION. CDC WORKS TO:



Engage Affected Communities & Medical Providers.



Promote Effective Testing & Treatment Options.



Develop New Guidance & Tools.

To learn more about latent TB infection: [www.cdc.gov/tb](http://www.cdc.gov/tb)  
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Centers for Disease Control and Prevention  
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

