

Tuberculosis Screening for Healthcare Workers

QuantiFERON[®]-TB Gold Plus



Sample to Insight



What is tuberculosis (TB) infection?

TB infection is caused by airborne transmission of *Mycobacterium tuberculosis* from person to person. TB infection occurs in a spectrum that ranges from latency (latent TB infection; LTBI) to active tuberculosis. LTBI is the most common form and is a carrier state, is not contagious, and does not make a person feel sick. However, LTBI can transform into active, contagious TB and is dangerous to one's health and community. For those diagnosed with TB infection, there is a chance that the TB bacteria may cause infectious TB disease in the future, so you are likely to be offered treatment to prevent progression to TB disease. This can, in turn, prevent the spread of TB to others.

Why am I being screened for TB infection?

Healthcare workers are at higher risk of developing TB infection compared with the general population (1,2). Spread of TB is amplified in congregate settings, such as healthcare institutions, and can occur from healthcare workers to patients, patients to healthcare workers and between healthcare workers. Even employees with brief patient contact and members of staff without patient care responsibilities may be exposed to TB through droplets from a person with TB disease (2). Transmission of TB bacteria in healthcare settings has been reported in virtually every country of the world, regardless of how much TB exists in the local community (3).

Your employer has requested that you be screened for the presence of TB infection for your own safety as well as that of colleagues, patients, visitors and others in your healthcare community.

What is QuantiFERON-TB Gold Plus (QFT®-Plus)?

QFT-Plus is an indirect blood test that can help detect TB infection. QFT-Plus is a major scientific advance over the 100-year-old skin test (Mantoux or tuberculin skin test [TST]), giving greater accuracy and a more reliable result in a single visit.

In what situations should QFT-Plus be used?

QFT-Plus can be used in all situations in which the skin test has been used in the past. QFT-Plus can also be used to confirm a positive skin test result.

What are the benefits of QFT-Plus?

Easy and practical

- QFT-Plus requires only one visit — so you won't have to return to the clinic to have skin test results examined
- Your provider may combine blood tests for extra convenience

Highly accurate

- QFT-Plus is >98% specific — ensuring that the results you receive are accurate (4)
- QFT-Plus is unaffected by BCG vaccination — your test results will not be affected if you have been immunized against TB (5)

What does QFT-Plus involve?

QFT-Plus is convenient and only involves collection of a blood sample, which is then sent to a laboratory for analysis.

How are QFT-Plus results interpreted?

QFT-Plus is one of the many tools your doctor may use to determine whether TB infection is present. In addition to your QFT-Plus result, your doctor will take into account essential information such as your medical history, your risk of exposure to TB, and other clinical results that may be ordered. Your occupational health department personnel are in the best position to advise you on what a QFT-Plus result means in your situation. In most circumstances, however:

- A **positive** QFT-Plus result suggests that TB infection is likely
- A **negative** QFT-Plus result suggests that TB infection is unlikely
- An **indeterminate** result, which is uncommon, may suggest the need for further investigation or repeating the test

Are there any risks with having a QFT-Plus test?

No, there are no risks associated with having the test apart from the slight discomfort of having a blood sample taken.

This pamphlet was designed for general education purposes to help answer your questions about QFT-Plus. It should not be considered the exclusive source for this type of information.

Please talk to your doctor or nurse about your questions and concerns.

References:

1. Pai, M. et al. JAMA (2005). **293**, 2746-55.
2. Diel, R. et al. Respir Res (2005). **6**, 35.
3. Baussano, I. et al. Emerg Infect Dis (2011). **17**, 488-94.
4. QuantiFERON-TB Gold Plus (QFT-Plus) Package Insert, 1083163 Rev. 04. February 2016.
5. Vinton P, et al. Infect Control Hosp Epidemiol (2009). **30**, 215-21.

QuantiFERON-TB Gold Plus (QFT-Plus) is an in vitro diagnostic aid for detection of *Mycobacterium tuberculosis* infection (including disease) and is intended for use in conjunction with risk assessment, radiography and other medical and diagnostic evaluations. QFT-Plus results alone cannot distinguish active TB disease from latent infection. QFT-Plus Package Inserts, available in multiple languages, as well as up-to-date licensing information and product-specific disclaimers can be found at www.QuantiFERON.com.

For more information on QFT-Plus, please visit
www.QuantiFERON.com/HCW

Trademarks: QIAGEN®, Sample to Insight®, QFT®, QuantiFERON® (QIAGEN Group).
PROM-11274-001 1108037 09/2017 © 2017 QIAGEN, all rights reserved.

Ordering **www.qiagen.com/shop**

Technical Support **support.qiagen.com**

Website **www.QuantiFERON.com**