

Fighting tuberculosis on university campuses

Tuberculosis (TB) is one of the world's deadliest infectious diseases, despite being curable and preventable (1). Cases of TB are declining in England, but rates are still high in the UK compared to Western Europe. Reports show that approximately three-quarters of TB cases in the UK occur in people born outside the country, and with the UK consistently ranking as one of the most popular locations for higher education, it is essential that foreign students from high TB risk countries are screened for TB infection (2). TB testing and treatment protects the health of these students and limits the potential transmission and spread of the disease (3).

TB infection is caused by the bacterial complex *Mycobacterium tuberculosis*. During an active TB infection, the disease is extremely dangerous and highly contagious. However, TB can be identified in its latent form and treated before it poses a threat. People with latent TB infection (LTBI) do not feel sick or show symptoms. However, LTBI can progress to active TB when a person's immune system is compromised by conditions like diabetes, cancer or certain medications. The WHO estimates that nearly a quarter of the world's population could have LTBI and are at risk of developing active TB during their lifetime (4). Accurate testing is essential to properly detect LTBI and limit the spread of TB, with the goal of eradicating the disease.

More prevalent than you may think

In recent years, TB outbreaks continue to occur across a number of educational institutions, including primary and secondary schools in Dagenham, Manchester and Devon. The UK is a popular destination for international students, and the risks of TB are amplified in congregate settings like university dormitories.

Foreign students who are from countries where TB is more common are required to take part in the UK pre-entry screening program, which primarily looks for active pulmonary TB (7). Many universities and colleges provide guidance to incoming students on TB testing, and the use of new, efficient and less subjective tests can help to identify LTBI, so that preventive treatment can be initiated quickly and efficiently to keep their campuses safe from reactivation of TB.



Tuberculosis: Not just a disease of the past

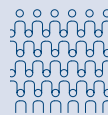


Many people consider TB a disease from another time. Previously known as "consumption," it is written about in historical novels and discussed in textbooks.

However, it shouldn't be just seen as a 'disease of the past'. The 'end' of TB as an epidemic and major public health problem is still a distant reality (4).



TB remains the biggest infectious killer worldwide. It took the lives of about 1.6 million in 2017, despite being preventable, treatable and curable. The infection is highly contagious and spread when a person with TB coughs or sneezes (5).



In 2017, 5,102 people were diagnosed with TB in England, and 71% of cases were among people born outside of the UK (6).

“At the University of Nottingham Health Service, we screen all international students at our dedicated Fresher’s Fair” said Sue Belton, a TB Nurse Specialist from Cripps Health Centre in Nottingham. “All students identified as being from a high-risk country for TB are asked to complete a screening questionnaire and have their blood taken for a QuantiFERON® TB test by one of our team of nurses/HCAs.”

“Last year we identified 330 students as being from high-risk countries and 14% were shown to be positive for latent TB infection. We have a good working relationship with the TB clinic at Nottingham University Hospitals and the consultant and TB nurses will operate a clinic from our premises to treat those shown to have latent TB infection.”

Belton added, “We hope that by providing this service, it will improve the public health of Nottingham as a whole”.

Protect your students with a modern TB blood test

College and university TB prevention programs across the UK are replacing the century-old tuberculin skin test with modern blood tests, known as IGRAs, as their preferred method for detecting infection in students and staff. Utilizing a TB blood test on your campus is a simple solution for busy students and staff, providing accurate results with one visit and fewer false positives than the skin test. Preventive treatment can be accurately targeted to those in need.

Blood tests like QIAGEN’s QuantiFERON®-TB Gold Plus (QFT®-Plus) are recognized by Public Health England and World Health Organization for their high specificity and efficiency in detecting latent TB, especially among individuals previously vaccinated with the Bacillus Calmette–Guérin (BCG) vaccine (8, 9). Unlike the tuberculin skin test, TB blood tests do not cross-react with BCG, resulting in fewer false-positives and quicker identification of students with true LTBI.

Implementing QuantiFERON-TB Gold Plus testing is beneficial to your college’s health center and wider campus community. The TB blood test is convenient – requiring only a single visit – and can be done in physician offices, student health centers and laboratory service centers. TB blood tests are also cost-effective and covered by insurance providers, allowing for easy implementation at your college or university.

Learn more at www.QuantiFERON.com/studentsUK.

References:

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QuantiFERON-TB Gold Plus (QFT-Plus) is an in vitro diagnostic aid for detection of *Mycobacterium tuberculosis* infection. QFT-Plus is an indirect test for *M. tuberculosis* infection (including disease) and is intended for use in conjunction with risk assessment, radiography, and other medical and diagnostic evaluations. QFT-Plus package inserts, up-to-date licensing information and product-specific disclaimers can be found at www.QuantiFERON.com.

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Estimated TB incidence rates, 2017

