

Announcement

## **PATH scientist: New tools are still urgently needed to better detect tuberculosis**

[UNITAID report notes the need for better tests to replace smear microscopy](#)

On July 21, UNITAID [released](#) its [Tuberculosis Diagnostics Technology Landscape report \[PDF\]](#), authored by PATH scientist Dr. David Boyle, Scientific Director for the [PATH Diagnostics Program tuberculosis \(TB\) portfolio](#). The report, now in its fifth edition, reviews current and potential technologies and challenges to improved access to better TB diagnostics.

Rapid, accurate diagnosis of TB, a curable disease that killed 1.8 million people in 2015 (World Health Organization), is critical for ensuring timely treatment and preventing further transmission. An estimated 10.4 million people fell ill with TB in 2015. However, over 4.3 million (40%) of cases were either never diagnosed or not reported to national TB programs. WHO notes that only 125,000 (20%) of the estimated 580,000 people with drug resistant TB were diagnosed and subsequently enrolled in treatment.

Worldwide, many people do not have easy access to low cost and accurate diagnostic tools that can rapidly detect pulmonary TB. Most countries still rely on smear microscopy, the primary diagnostic test currently used to diagnose TB infection, which lacks the necessary sensitivity needed to detect more cases. Furthermore, significant gaps exist in tools for diagnosing TB in those most at risk of mortality, such as young children and people living with HIV.

In 2016 and 2017, the WHO recommended the use of 5 new diagnostic products. While this is encouraging, significant gaps remain in diagnostic tools as only two of these are specifically intended to improve upon smear microscopy. However, the product pipeline for new TB diagnostics is promising--more than 50 companies are marketing or actively developing products to improve the diagnosis of TB. The report describes the status of current, emerging, and potential technologies that may help fill the gap in TB diagnostic tools.

The report was written by Dr. Boyle with technical input from Dr. Madhukar Pai (McGill University) the Foundation for Innovative New Diagnostics (FIND), and UNITAID. Funding for this work was provided by UNITAID.

For more information about PATH's tuberculosis portfolio, contact [dboyle@path.org](mailto:dboyle@path.org).

Read the [UNITAID Tuberculosis Diagnostics Technology and Market Landscape report — 5th Edition, 2017](#). [PDF]

[UNITAID statement on report](#)