

YES!



WE CAN END TB

NHLS' role and contribution to TB elimination in South Africa

In 2021, more than 304,000 (832/day) people in South Africa contracted tuberculosis (TB) and 56,000 (153/day) died as a result of this preventable and treatable disease. Despite these alarming figures, the country has seen a more than 50% drop in new infections and a nearly two-thirds drop in associated deaths since 2009. The COVID-19 pandemic exacerbated the TB challenge and had a negative impact on national gains and TB services. The number of TB tests administered nationally decreased by 23% between 2019 and 2020, from 2,076,726 to 1,605,529 tests. The number of patients with laboratory diagnoses declined by 25%, from 207,401 to 155,946. To reverse these losses, the National TB Recovery Plan was created to intensify and accelerate efforts to get back on track to meet the END TB targets.

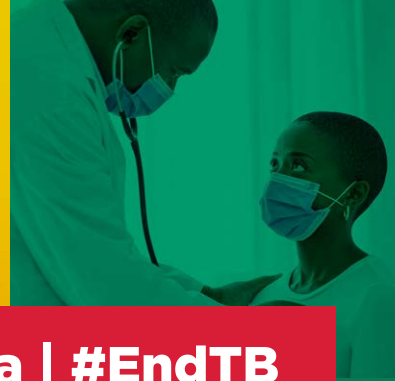
Key objectives of the TB Recovery Plan were to:

- Find people with undiagnosed TB disease in communities;
- Strengthen linkage to care for people diagnosed with TB for early treatment initiation;
- Strengthen retention in TB care; and
- Strengthen TB prevention efforts.

The NHLS is an important partner in the National Tuberculosis Programme, providing the most advanced and sensitive diagnostic capability to support and strengthen control and management efforts.

NHLS support to the TB Recovery Plan through:

- **Finding people in communities who have undiagnosed tuberculosis:** The plan called for an additional 1,000,000 Xpert tests to be performed nationally, and the NHLS has been able to support this effort despite global supply shortages. Nationally, 2,560,950 tests were conducted, representing 86% of the target by the end of February 2023.
- **Strengthen the link between people diagnosed with TB and treatment initiation:** As part of the plan, on August 8, 2022, the NHLS, with the support of the Centre for TB NICD, implemented the automated sending of SMS to people undergoing Xpert laboratory testing for presumptive TB. The service's success is heavily reliant on capturing the client's mobile number. Continuous engagement with both the National Tuberculosis Programme and our laboratory stakeholders has resulted in a gradual increase in the success of this service, from an initial 27% SMS attempted to 42% of those receiving an Xpert test from inception to February 2023, with an average of 79% successfully delivered. Building on the SMS service, the NHLS is currently supporting the efforts of the planned National Health Hotline, which had and currently serves as a direct line to the general public for the Covid-19 service, and had been primarily operated by the NHLS and BPESA, to further support linkage to care and strengthen retention in care by improving contact with clients who have a positive test.



#WorldTBDay2023 | #LetsEndTBKaofela | #EndTB

#YesWeCanEndTB

NHLS continues to improve TB laboratory services through the following initiatives:

- **Xpert MTB/XDR assay implementation:** Ongoing efforts to ensure that patients diagnosed with tuberculosis receive the most advanced diagnostics for adequate and timely management. The NHLS, through the combined efforts of its divisions, the Centre for TB/NICD and NHLS Priority Programme with the support of the wider TB consultation group and National Clinical Advisory Committee (NTP/NDoH), has introduced the Xpert MTB/XDR assay (a WHO-endorsed technology) for patients with rifampicin-resistant TB to further determine resistance to key drugs used for treatment, with the goal of improving turnaround time and assisting clinicians in making appropriate management decisions. The Port Elizabeth laboratory conducted the first test on March 16, 2023, with a select network of laboratories following to support the national service.
- **Diversification of primary TB molecular testing platforms:** In addition to the GeneXpert, the NHLS will introduce two additional WHO-endorsed assays to its primary TB testing services via a competitive bid, including the BD MAX™ MDR-TB (Becton Dickinson, Franklin Lakes, New Jersey, USA) for medium throughput laboratories and cobasMTB and cobasMTB-RIF/INH (Roche, Basel, Switzerland) for high throughput laboratories. This introduction will increase capacity to meet future testing targets mandated by the National Strategic Plan for Tuberculosis.
- **Phenotypic testing for TB:** The NHLS is one of the first laboratories in a high-burden country to support phenotypic testing for new and repurposed drugs Bedaquiline and Linezolid, thereby supporting the National TB Programme's all-oral treatment regimen for drug-resistant TB in South Africa. With the impending introduction of newer shorter treatment regimens for drug-resistant TB, these tests have been expanded to include all rifampicin-resistant TB diagnosed in our laboratories.

The NHLS will continue to engage and collaborate with all stakeholders to eradicate TB.

For more information contact:



1 Modderfontein Road, Sandringham
Johannesburg, South Africa



011-386-6000



Enquiries@nhls.ac.za