

Vuka! Let's unite towards a TB-free world!

9th SA
TB
Conference
8 - 11 June 2026



Barriers to TB Preventive Therapy Uptake Among Contacts in a High-Burden District: Evidence from West Rand, South Africa

Authors: S. Modisane, P. Kayembe, O.Oladoyinbo, N. Mhlabane

Speaker: Ms S. Modisane

Background

- Tuberculosis Preventive Therapy (TPT) is a cornerstone intervention for preventing progression from TB infection to active TB disease.
- The World Health Organization recommends TPT for household contacts exposed to infectious TB cases, especially children and vulnerable populations.
- Globally, millions of people remain at risk of developing TB disease despite being eligible for preventive therapy.
- South Africa continues to face a high burden of TB and TB/HIV co-infection, making effective prevention strategies critically important.
- Improving TPT uptake is essential for reducing TB incidence, interrupting transmission, and achieving End TB Strategy targets.

Problem Statement / Rationale

- Routine programme data from West Rand District demonstrate persistent gaps in TPT initiation among eligible contacts.
- Low uptake limits the effectiveness of TB prevention efforts and contributes to continued disease transmission within communities.
- Demand-side barriers such as refusal of testing, refusal of TPT, and caregiver concerns continue to affect programme performance.
- System-level barriers including poor contact tracing, incomplete documentation, and household mobility further weaken implementation.
- District-level evidence is needed to inform targeted interventions and strengthen patient-centred TB prevention strategies.

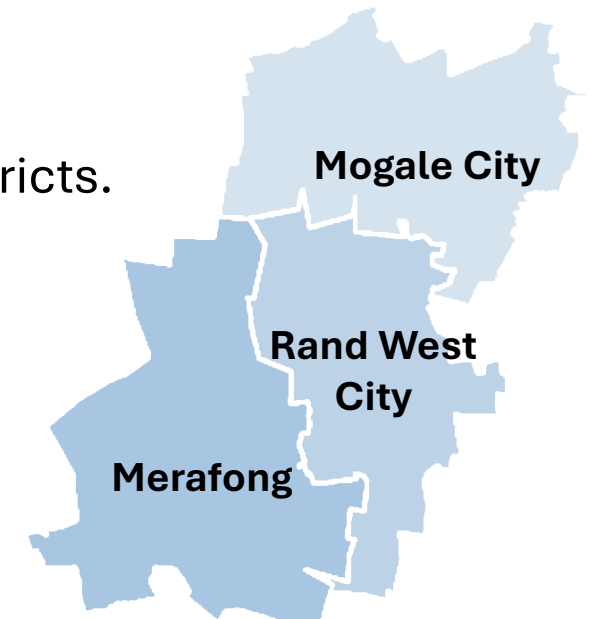
Objective(s)

Primary Objective:

- Assess TPT uptake among TB contacts aged ≥ 5 years and under 5 years in West Rand District during 2024.

Secondary Objectives:

- Compare TPT uptake across Merafong, Mogale, and Rand West sub-districts.
- Assess quarterly trends in TPT performance.
- Identify key barriers contributing to TPT non-initiation.
- Generate recommendations for improving TPT implementation and programme outcomes.



Methods

- **Study Design:** Retrospective descriptive analysis of routine TB programme data.
- **Study Setting:** West Rand District, Gauteng Province, South Africa.
- **Study Period:** January–December 2024 (Q1–Q4).
- **Study Population:** TB contacts aged ≥ 5 years and under 5 years eligible for TPT.
- **Data Sources:** DHIS reports, TPT registers, facility TB registers, and district programme reports.
- Programme data were reviewed collaboratively with district TB teams and WBPHCOT staff.
- Analysis included descriptive statistics, quarterly trend analysis, and sub-district comparisons.

Results: TPT Uptake Among Contacts Aged ≥ 5 Years

- Annual TPT uptake among contacts aged ≥ 5 years was 72%, below the national target of $\geq 90\%$.
- Merafong achieved strong performance with uptake of 93.9%, exceeding district averages.
- Mogale and Rand West consistently demonstrated lower uptake across several reporting quarters.
- Sharp quarterly declines in uptake contributed significantly to poor annual programme performance.
- The findings suggest inconsistent implementation of TB prevention activities across sub-districts.

TPT Uptake Among TB Contacts Aged ≥ 5 Years, West Rand District, 2024

Sub-District	Eligible Contacts (≥ 5 yrs)	Initiated on TPT	TPT Uptake (%)
Merafong	164	154	93.9%
Mogale City	320	228	71.3%
Rand West City	280	189	67,5%
District Total	764	550	72.0%

Results: TPT Uptake Among Contacts Under 5 Yrs



- Annual TPT uptake among contacts under five years was 69.7%, remaining below programme expectations.
- Substantial variation in uptake was observed across the three sub-districts.
- Merafong consistently achieved stronger programme performance compared to Mogale and Rand West.
- Lower uptake in Mogale and Rand West reflected challenges in tracing, counselling, and continuity of care.
- The findings indicate ongoing weaknesses in paediatric TB prevention services despite strong treatment systems.

Quarterly TPT Uptake Trends Among Contacts Aged ≥5 Years, West Rand District, 2024

Quarter (2024)	District TPT Uptake (%)	Key Observation
Q1	High	Strong early-year performance
Q2	Moderate	Uptake decline in Mogale and Rand West
Q3	Moderate	Continued sub-district inequities
Q4	Lower	Sharp decline in under-performing areas

Results: Key Barriers to TPT Initiation

- Refusal of TB testing was frequently reported among contacts aged ≥ 5 years.
- Several contacts declined TPT despite receiving negative TB screening results.
- Incomplete or inaccurate contact information reduced the effectiveness of household tracing activities.
- Many contacts could not be found during follow-up household visits.
- Among children under five years, caregiver refusal and missed follow-up visits were major contributors to non-initiation.
- Eligibility changes following confirmation of active TB disease also affected TPT initiation rates.

Documented barriers to TPT Initiation Among Contacts Aged ≥ 5 Years

Barrier Category	Documented Reason
Demand-side	Refusal of TB screening
Demand-side	Refusal of TPT after negative TB test
System-level	Incomplete or inaccurate contact information
System-level	Contact not found at home during follow-up

Interpretation of Findings

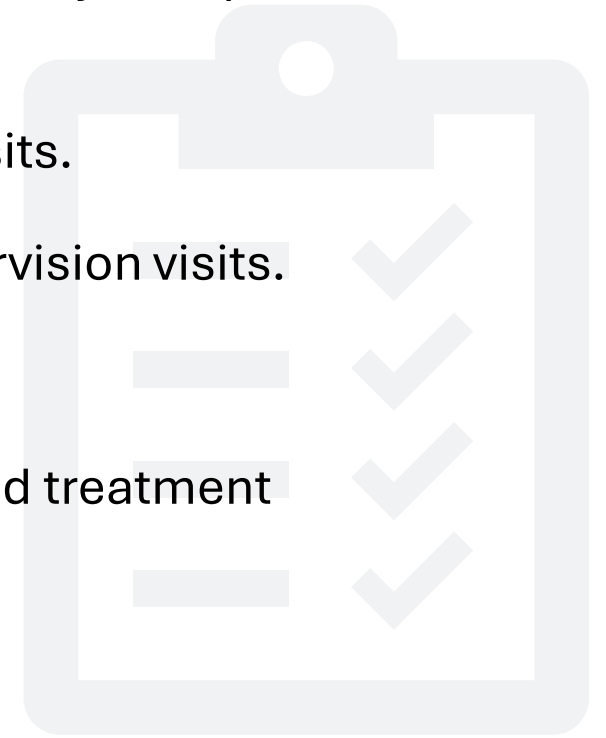
- TPT uptake in West Rand District remains below target because of both demand-side and health system barriers.
- Programme weaknesses appear particularly severe in Mogale and Rand West sub-districts.
- High-performing areas such as Merafong demonstrate that stronger uptake is achievable using existing district resources.
- Caregiver understanding, trust, and acceptance of preventive therapy remain critical determinants of programme success.
- Strengthening patient-centred counselling and community engagement could substantially improve TPT uptake.

Programmatic and Policy Implications

- Strengthen community-based counselling and education regarding the benefits and safety of TPT.
- Improve household contact tracing systems and verification of contact information.
- Expand integration of TPT services into Ward-Based Primary Healthcare Outreach Team activities.
- Strengthen routine monitoring systems and standardise TPT documentation tools across facilities.
- Provide targeted mentorship and support to low-performing facilities and sub-districts.
- Enhance collaboration between healthcare facilities, CHWs, and district TB programme teams.

Recommendations

- Strengthen training of healthcare workers and WBPHCOT teams on TPT counselling and contact tracing.
- Develop culturally appropriate educational materials to improve community acceptance of TPT.
- Introduce digital systems for tracking contacts and missed follow-up visits.
- Conduct routine sub-district performance reviews and supportive supervision visits.
- Expand home-based TPT initiation and follow-up services.
- Strengthen patient-centred approaches to improve continuity of care and treatment adherence.



Conclusion & Key Take-Home Messages

- TPT uptake among both adult and paediatric contacts remains below national programme targets.
- Demand-side barriers such as refusal of testing and refusal of preventive therapy continue to undermine programme outcomes.
- Health system challenges including poor tracing and incomplete documentation contribute to missed prevention opportunities.
- Sub-district variation highlights the importance of localised and targeted interventions.
- Strengthening counselling, caregiver engagement, and patient-centred community services is essential to improve TB prevention outcomes.

Vuka! Let's unite towards a TB-free world!

9th SA
TB
Conference
8 - 11 June 2026



Acknowledgements

- West Rand District Health Office
- Healthcare workers and TB programme teams
- Community health workers and tracing teams
- District management and programme coordinators
- South African TB Conference organisers



References:

1. World Health Organization. Global Tuberculosis Report 2023.
2. World Health Organization. WHO Operational Handbook on Tuberculosis Prevention. 2020.
3. National Department of Health South Africa. Paediatric TB Guidelines. 2022.
4. National Department of Health South Africa. Annual TB Programme Performance Report. 2024.
5. West Rand District Health Office. Routine TB Programme Data Report Q1-Q4 2024.

WEST RAND
HEALTH DISTRICT