



SHORTER PAEDIATRIC MDR-TB REGIMENS

IN SOUTH AFRICA

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Paediatric DR-TB in South Africa

National profile — 2024 (WHO estimates)

249 000

Total TB incidence
(389/100,000)

~14 000

Drug-Resistant TB cases
(increasing estimate)

~7%

Children in the
national TB cohort

54%

TB patients
also living with HIV

National DR-TB Network

- 758 DR-TB service sites across 95% of sub-districts
- 3,700 facilities diagnosing and treating DS-TB
- All presumptive TB tested by TB-NAAT (GeneXpert / BD MAX / Roche cobas)

~94%

of all TB in SA
diagnosed by NHLS



Treatment coverage fell to 74% (~5%). TB mortality remains 54,000/year — 1 in 5 people with TB in South Africa die. Children aged 0–4 represent 50% of the paediatric DR-TB cohort.

Enhancing Case Finding of Paediatric DR-TB



Universal TB-NAAT

- All children with presumptive TB tested by NAAT at first contact
- GeneXpert, BD MAX, Roche cobas deployed nationally
- >90% of results available within 40 hours
- ~3.8 million tests completed in FY2025–26



Community & Facility-Based

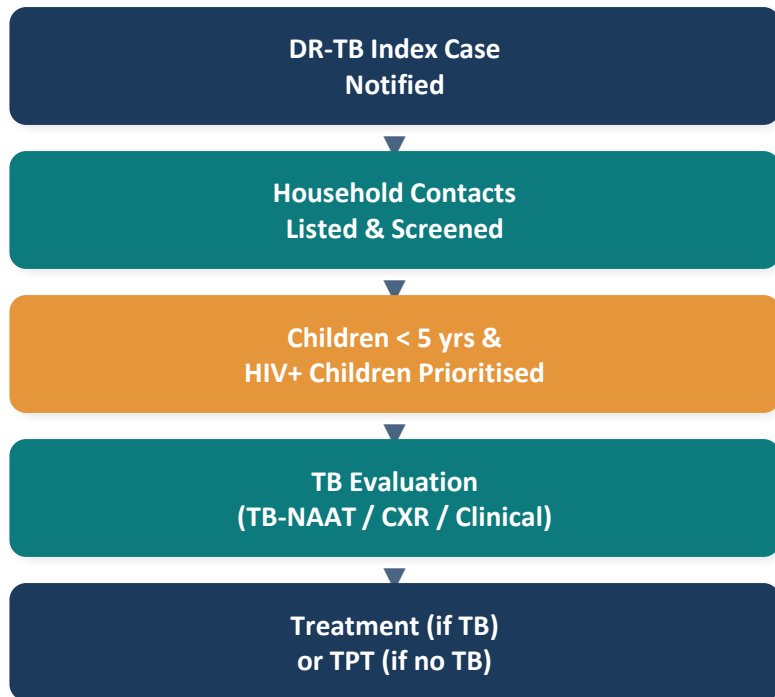
- Integration with IMCI and primary care platforms
- Household TB screening linked to index case notification
- School and community outreach in high-burden districts
- Child-friendly specimen collection protocols



Data & Surveillance

- Unified national dataset via NHLS TrakCare LIS
- Real-time DR-TB cascade monitoring by province
- Paediatric DR-TB sub-analysis within national cohort
- Electronic treatment initiation and outcome tracking

Contact Investigation for Paediatric DR-TB



National Contact Investigation Policy

- All household contacts of DR-TB index cases investigated
- Children < 5 years receive expedited evaluation regardless of symptoms
- Children living with HIV screened regardless of age
- Symptom screening + tuberculin skin test / IGRA where feasible
- CXR and TB-NAAT for all symptomatic children
- Linkage to TPT with 6Lfx for eligible children (no TB disease)
- Monthly follow-up for contacts on TPT
- Electronic register links contacts to index cases for tracking

6Lfx: Levofloxacin TPT for DR-TB Contacts

South Africa has adopted 6 months of levofloxacin (6Lfx) as preventive therapy for close contacts of fluoroquinolone-susceptible DR-TB

Eligibility Criteria

- Close contact of confirmed DR-TB (RR/MDR-TB) case
- TB disease excluded by full clinical evaluation
- Index case fluoroquinolone-susceptible (or FQ resistance not confirmed)
- No prior exposure to fluoroquinolones > 1 month
- Applicable to all age groups including infants
- Children with HIV are prioritised regardless of contact duration

Regimen & Monitoring

- Duration: 6 months of daily levofloxacin
- Weight-based dosing per national paediatric TB guidelines
- Monthly clinical review and adherence support
- Symptom screening at each review visit
- If TB develops during TPT: switch to full DR-TB treatment
- Monitoring for arthralgias, GI side effects, and QTc if indicated
- Completion documented in electronic TB register

DR-TB regimens in Use: Children < 15 Years

Non-severe disease – treat for 6 months

BDLLfxC

If fluoroquinolone susceptible:

Bedaquiline · Delamanid · Linezolid (2 months) · Levofloxacin · Clofazimine

If fluoroquinolone resistant:

BDLTrdC

Bedaquiline– Delamanid – Linezolid (2 months +) – Terizidone - Clofazimine

Severe disease – treat for 9 months

BDLLfxC

If fluoroquinolone susceptible:

Linezolid may be given for 2 months +

If fluoroquinolone resistant:

BDLTrdC

Bedaquiline– Delamanid – Linezolid (2 months +) – Terizidone -Clofazimine

Children Diagnosed & Started on Treatment

Comparative cohorts: Jan 2018 – Aug 2023 vs Sep 2023 – Jul 2025

Jan 2018 – Aug 2023

N = 1,751

1,518

RR/MDR-TB
(86.7%)

74

Pre-XDR
(4.2%)

61

XDR-TB
(3.5%)

Regimen distribution:

55% on short 9–11 month · 44% individualised · <1% short 6-month

50% of paediatric DR-TB patients are aged 0–4 years

~40% of children on
bedaquiline-based regimens

Sep 2023 – Jul 2025 (post-guideline)

N = 598

526

RR/MDR-TB
(88.0%)

17

Pre-XDR
(2.8%)

13

XDR-TB
(2.2%)

Regimen distribution:

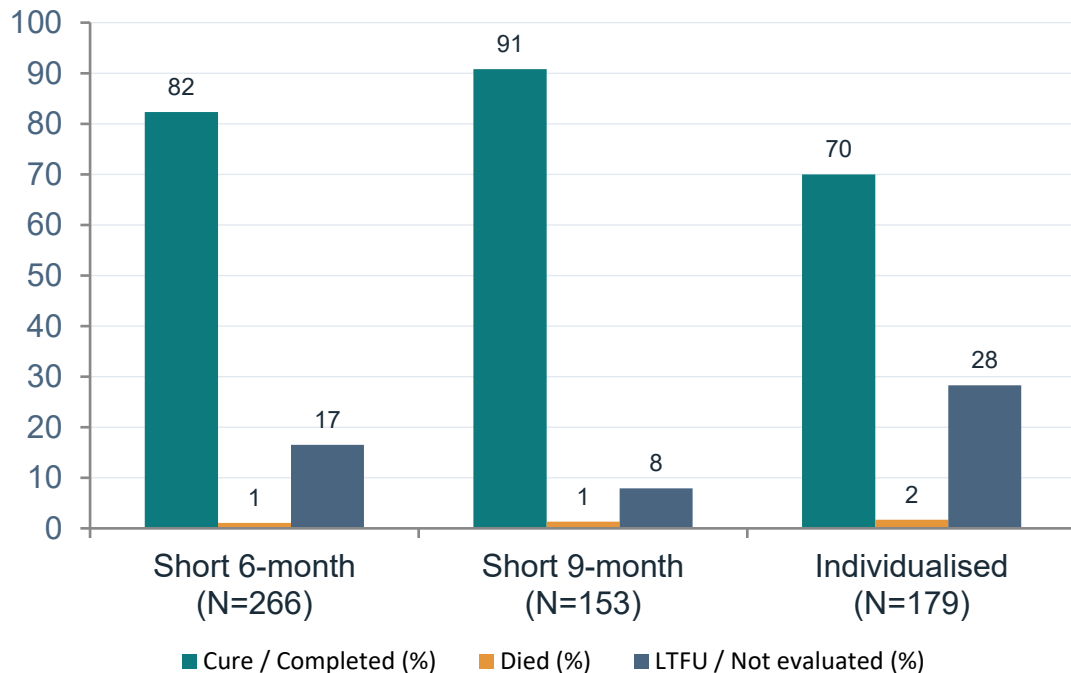
44.5% on short 6-month · 25.6% short 9-month · 29.9% individualised

50% of paediatric DR-TB patients are aged 0–4 years

80% of children on
bedaquiline-based regimens

Treatment Outcomes: Children < 15 Years

Cohort Sep 2023 – Jul 2025 · N = 598



82.3%

Success on
6-month regimen

90.8%

Success on
9-month regimen

60%

Success in
pre-XDR / XDR (N=30)



88% on LZD · Hb ≤ 8 g/dL in 5.8%
Active monitoring essential

CONCLUSION

South Africa's Progress in Paediatric DR-TB

-  Universal TB-NAAT has transformed case finding — all children with presumptive TB tested at first contact
-  Contact investigation links household DR-TB contacts directly to TPT (6Lfx) or treatment
-  6Lfx implemented as national TPT policy for close contacts of fluoroquinolone-susceptible DR-TB
-  Rapid guideline adoption: BDLLfxC introduced as 6-month regimen for eligible children <15 yrs in 2025
-  44.5% of children now on short 6-month regimen; 80% on bedaquiline-based regimens
-  Treatment success of 82–91% on shorter regimens; LTFU and LZD toxicity monitoring remain key challenges