



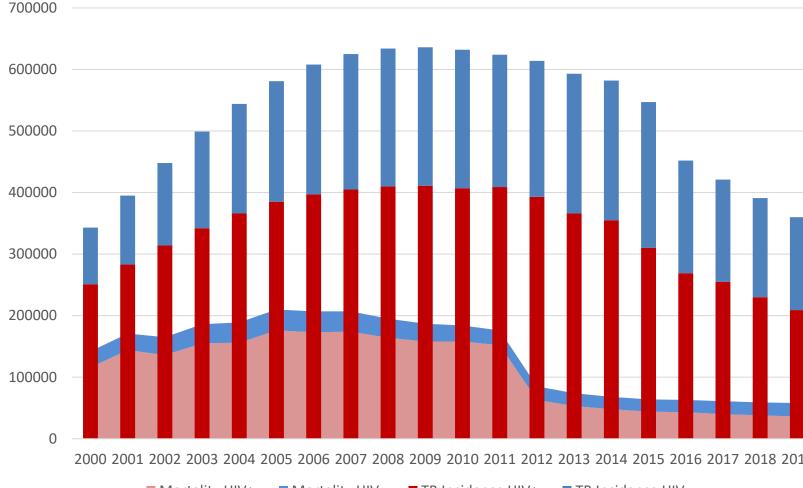
TB Screening guidelines

South Africa Perspective

Salome Charalambous



SA TB incidence & mortality



- 43% decline in estimated TB incidence since 2009
 - 49% in HIV+ Ο
 - 33% in HIV-Ο
- Sharp decline in mortality since 2011 (176,000 to 58,000)
 - 76% in HIV+ \bigcirc
 - 8% in HIV- \bigcirc
 - Stable over last few years Ο

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Mortality HIV+

- Mortality HIV-■ TB Incidence HIV+
 - TB Incidence HIV-



Educational

Fund

RIAS

Educational **TB Prevalence survey - 2018**

CXR not done

0.4% 234 cases identified: Estimated Prevalence: 852/100 000 **Estimated missing cases: 154 000** 35.0% Symptoms & abnormal CXR suggestive of TB 57.8% Abnormal CXR suggestive of TB only 6.8% Symptoms only science & innovation NATIONAL INSTITUT World Health Department: rganization **Division of the National Health Laboratory Service** Science and Innovation REPUBLIC OF SOUTH AFRICA

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RIAS

More half of the cases had an abnormal CXR only

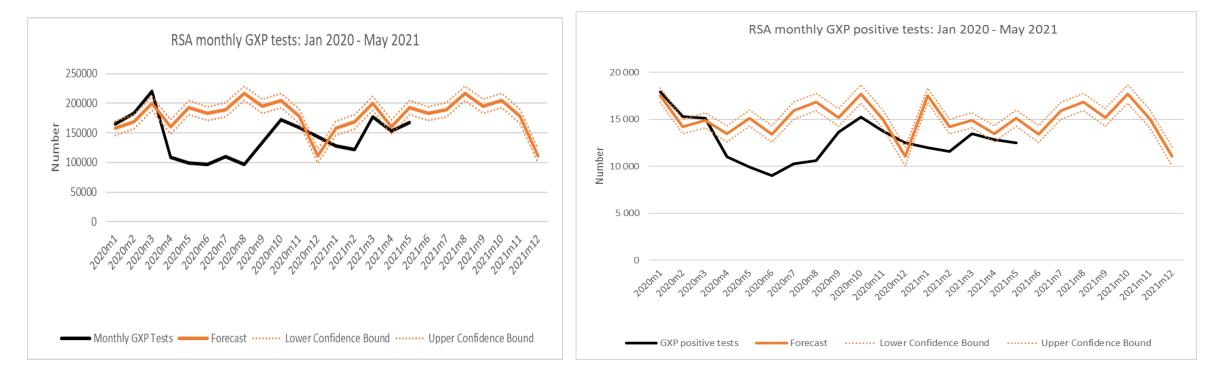
6.8% had TB symptoms only



Educational Fund **SIAS** GXP testing volumes and Positive tests

Monthly GXP tests

Monthly GXP positive tests





Educational Fund **SIAS**

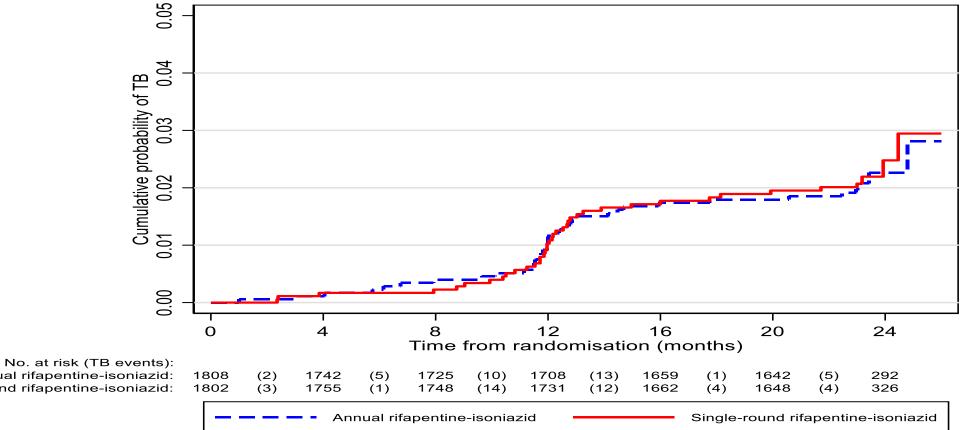
 Cluster randomized trial: routine testing of all high TB-risk individuals: HIV positive, Previous TB, TB contacts

Yield by risk factor	HIV+ n=21734	TB Contact n= 12492	Prior TB n=1573	Overall Yield n=30513	Overall Yield Excluding Prior TB N=28402	Overall yield in patients without symptoms N=21829
Positive Xpert Ultra (including trace)	6.9%	9.3%	15.7%	7.8%	7.3%	6.2%
Positive Xpert Ultra (excluding trace)	4.2%	6.7%	11.1%	5.2%	4.9%	3.7%

 TUTT demonstrated 17% increase in yield in TUTT compared to SOC clinic
Lebina, CROI 2021

WHIP₃TB Trial

Evaluating the effectiveness of weekly rifapentine plus isoniazid for 3 months compared with periodic rifapentine plus isoniazid for 3 months and 6 months of daily isoniazid in HIV-positive individuals



Annual rifapentine-isoniazid: Single-round rifapentine-isoniazid:



TUBERCULOSISFOUNDATION

Churchyard, CROI 2020





TB detected at the month 12 and 24 screen

	Month 12	Month 24
Culture MTB positive or Xpert positive* N (%)	30	5
Symptomatic N (%)	4 (13.3%)	0
Abnormal CXR N (%)	4/29 (13.8%)	1/4 (25%)

TB screen was done using symptoms, chest radiograph and sputum for liquid culture * 28 are culture positive and 2 are Xpert positive



Churchyard, CROI 2020





Educational Fund **Post COVID-19 TB Response plan RIAS**

- Combined COVID-TB Testing
- Targeted Universal Testing
- Increased contact tracing
- Introduction of digital CXRs at facilities
- Roll-out of TB LAM testing at facilities
- CCMDD for TB and TPT



Acknowledgements

- G Churchyard
- V Chihota
- K Velen
- P Naidoo
- H Moultrie
- N Martinson
- H Haussler
- L Lebina

