



39th Union World Conference on Lung Health (2008)

Global threats to lung health: the importance of health system responses

ABSTRACT SUBMISSION: Summary of your abstract

Final deadline for abstract submission/validation: 10 March 2008

[Help](#) | [Aide](#)

Name: Dr James Lewis

[preview](#) | [sample](#)

Please check your details carefully, particularly the abstract, before validating.

Full name; Job; Institution Dr JJC Lewis; Researcher; LSHTM
Mailing address Keppel Street
 WC1E 7HT; London; United Kingdom
Tel; Fax (+); (+27) 116382502
e-mail james.lewis@lshtm.ac.uk
Union member CU-0615403

[Access corresponding author data](#)

Authors J Lewis,^{1,2} V Chihota,² G Churchyard,^{1,2} A Grant,¹ L Coetzee,² T Crawford,² M Luttig,² D Muller,² F Popane,² K Fielding¹
Affiliations ¹LSHTM, London, United Kingdom; ²Aurum Institute for Health Research, Johannesburg, South Africa

[Access authors and affiliations](#)

Topic / Subtopic C: Epidemiology
 01: Tuberculosis in high burden countries
Keywords incidence, risk factors, gold mines

[Access topic and keywords](#)

Title Factors associated with incident TB in the South African gold mines: a cohort study embedded within Thibela TB

Text (Here is your text as it will appear in print if accepted. Please check it carefully before validation.)

Background: Thibela TB is a cluster randomized trial to evaluate community wide isoniazid preventive therapy (IPT) in South African gold mines. Understanding current TB epidemiology will be key to interpreting study findings.

Objectives: To estimate incidence of and risk factors for TB in control clusters.

Methods: The cohort comprised a random sample of workers from two control clusters, excluding any on TB treatment, recruited May 06-Feb07 and followed to 1 Sep 07. Incident TB was defined as individuals starting TB treatment identified routinely by the mine health service. HIV status was determined by self-report.

Results: Among 2249 participants (median age 41 years [IQR 34-46], 97% male, 8% previously treated for TB), HIV result was given by 54% (of whom 12% pos, 88% neg). 38 started TB treatment during 1948.5 pyrs, incidence 2.0 per 100 pyears (95% CI: 1.4, 2.7). TB incidence was higher for those aged 40+ years (IRR=2.4, 95% CI: 1.1, 4.9) and working in the industry for 15+ years (IRR=2.5, 95% CI: 1.2, 5.3), but not associated with living in a hostel (IRR=1.0, 95% CI: 0.5, 1.9) or working underground (IRR=0.7, 95% CI: 0.2, 2.2). TB incidence was also higher for those with self-reported previous TB (IRR=2.8, 95% CI: 1.2, 6.4), any radiological evidence of prior TB (IRR=3.6, 95% CI: 1.7, 7.6) or silicosis (IRR=5.0, 95% CI: 2.3, 11.0). BCG vaccination was not protective (IRR=1.7, 95% CI: 0.7, 4.1). There were trends towards an association of TB contact in the past year (IRR=1.8, 95% CI: 0.9, 3.7) and HIV positivity (IRR=1.8, 95% CI: 0.4, 8.4) with outcome. The HIV positive sub-group was too small to permit analysis of IPT and ART yet.

Conclusion: Despite a strong TB control programme, TB incidence remains high with several strong risk factors. This highlights the need for innovative control strategies, such as community wide IPT.

[Access title and text](#)

[Create table](#)

[Upload figure](#)

Please note that only one table or figure is permitted for each abstract.

Thank you for submitting your abstract via the online system.
 We appreciate your participation and look forward to seeing you in Paris

[Back to your abstract list](#)