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| **Current UK procedures to screen new immigrants for tuberculosis (TB) fail to detect more than 70 per cent of cases of latent infection, according to a new study published in [The Lancet Infectious Diseases](http://www.thelancet.com/journals/laninf/article/PIIS1473-3099(11)70069-X/abstract" \t "_blank" \o "The Lancet Infectious Diseases link opens in a new window).**  TB is caused by a bacterial infection which is normally asymptomatic, but around one in 10 infections leads to active disease, which attacks the lungs and kills around half of people affected.  Today’s research showed that better selection of which immigrants to screen with new blood tests can detect over 90 per cent of imported latent TB.  These people can be given a course of antibiotic treatment to prevent them from developing the active form of the disease.  This would reduce both the spread of the disease and the health costs of treating people with active TB.  The incidence of TB has risen dramatically in Britain over the last decade, increasing by almost 50 per cent between 1998 and 2009.  Much of this increase has been driven by a 98 per cent increase in cases among people who move to the country from overseas.  Foreign-born individuals account for nearly three quarters of the country’s TB cases, and have a 20 times higher incidence of TB than people born in the UK.  The current UK policy requires that all immigrants from countries with a TB incidence higher than 40 in 100,000 per year have a chest X-ray on arrival to check for active TB, although very few immigrants have active TB on arrival.  However, a substantial proportion of immigrants are carriers of latent TB which though initially silent and non-infectious, often progresses to full- blown, infectious active TB within a few years of arrival in the UK.  The research team from Imperial College London analysed results from over 1,200 recent immigrants at centres using [new blood tests](http://www3.imperial.ac.uk/newsandeventspggrp/imperialcollege/newssummary/news_21-10-2008-10-27-33) to screen for latent TB in London, Leeds and Blackburn.  The investigators found that a fifth of recent immigrants from the Indian Subcontinent and almost 30 per cent from Sub-Saharan Africa are carriers of latent TB and that national screening policy, which does not include immigrants from the Indian Subcontinent, has been missing 70 per cent of imported latent TB.  The researchers also assessed how cost-effective it would be to lower the threshold so that people from more countries are screened.  They found that including immigrants from the Indian Subcontinent for screening would detect 90 per cent of latent TB cases, and would cost little more than what is spent on screening now, relative to the number of active TB cases prevented.  [Professor Ajit Lalvani](http://www1.imperial.ac.uk/medicine/people/a.lalvani/), Director of the [Tuberculosis Research Unit](http://www1.imperial.ac.uk/nhli/respiratory/respinfect/tbimmunology/) at Imperial College London, who led the study, said: “Our findings indicate that immigrants arriving in the UK from countries with high burdens of TB have a high prevalence of latent tuberculosis infection, which is strongly associated with tuberculosis incidence in their country of origin.  “UK national guidance for which groups to screen has hitherto missed most immigrants with latent infection.  We’ve shown that by changing the threshold for screening, and including immigrants from the Indian Subcontinent, we could pick up 92% of imported latent TB.  “By treating people at that early stage, we can prevent them from developing a serious illness and becoming infectious.  Crucially, this wider screening could substantially reduce TB incidence while remaining cost-effective.  Our findings provide the missing evidence-base for the new national strategy to expand immigrant screening.”  The study was funded by the [Wellcome Trust](http://www.wellcome.ac.uk" \t "_blank" \o "Wellcome Trust link opens in a new window) and the [Medical Research Council](http://www.mrc.ac.uk" \t "_blank" \o "Medical Research Council link opens in a new window).  **See also:**   * [*The Lancet Infectious Diseases* article](http://www.thelancet.com/journals/laninf/article/PIIS1473-3099(11)70069-X/abstract) * [Wellcome Trust](http://www.wellcome.ac.uk/" \t "_blank) * [Medical Research Council](http://www.mrc.ac.uk/" \t "_blank)   *Imperial College is not responsible for the content of external internet sites*   * [Centre for Respiratory Infection](http://www1.imperial.ac.uk/medicine/about/institutes/centre_respiratory_infection/" \t "_blank) * [Tuberculosis Immunology Group](http://www1.imperial.ac.uk/medicine/about/divisions/nhli/respiration/respinfect/tbimmunology/" \t "_blank) * [Faculty of Medicine](http://www1.imperial.ac.uk/medicine" \t "_blank)   **For further information please contact:**  Sam Wong  Research Media Officer  Imperial College London  Email: [sam.wong@imperial.ac.uk](mailto:sam.wong@imperial.ac.uk" \t "_blank" \o "sam.wong@imperial.ac.uk  link opens in a new window)  Tel: +44(0)20 7594 2198  Out of hours duty press officer: +44(0)7803 886 248  **Notes to editors:**  1. Journal reference: M. Pareek et al. “Screening of immigrants in the UK for imported latent tuberculosis: a multicentre cohort study and cost-effectiveness analysis.” The Lancet Infectious Diseases, published [online](http://www.thelancet.com/journals/laninf/article/PIIS1473-3099(11)70069-X/abstract" \t "_blank" \o "online  link opens in a new window) 22 April 2011.  2. About Imperial College London  Consistently rated amongst the world's best universities, Imperial College London is a science-based institution with a reputation for excellence in teaching and research that attracts 14,000 students and 6,000 staff of the highest international quality. Innovative research at the College explores the interface between science, medicine, engineering and business, delivering practical solutions that improve quality of life and the environment - underpinned by a dynamic enterprise culture.  Since its foundation in 1907, Imperial's contributions to society have included the discovery of penicillin, the development of holography and the foundations of fibre optics. This commitment to the application of research for the benefit of all continues today, with current focuses including interdisciplinary collaborations to improve global health, tackle climate change, develop sustainable sources of energy and address security challenges.  In 2007, Imperial College London and Imperial College Healthcare NHS Trust formed the UK's first Academic Health Science Centre. This unique partnership aims to improve the quality of life of p atients and populations by taking new discoveries and translating them into new therapies as quickly as possible.  Website: [www.imperial.ac.uk](http://www.imperial.ac.uk)  3. About the Wellcome Trust  The Wellcome Trust is a global charitable foundation dedicated to achieving extraordinary improvements in human and animal health. It supports the brightest minds in biomedical research and the medical humanities. The Trust’s breadth of support includes public engagement, education and the application of research to improve health. It is independent of both political and commercial interests.  Website: [www.wellcome.ac.uk](http://www.wellcome.ac.uk" \t "_blank" \o "www.wellcome.ac.uk link opens in a new window)  4. About the Medical Research Council  For almost 100 years the Medical Research Council has improved the health of people in the UK and around the world by supporting the highest quality science. The MRC invests in world-class scientists. It has produced 29 Nobel Prize winners and sustains a flourishing environment for internationally recognised research. The MRC focuses on making an impact and provides the financial muscle and scientific expertise behind medical breakthroughs, including one of the first antibiotics penicillin, the structure of DNA and the lethal link between smoking and cancer. Today MRC funded scientists tackle research into the major health challenges of the 21st century.  Website: [www.mrc.ac.uk](http://www.mrc.ac.uk" \t "_blank" \o "www.mrc.ac.uk link opens in a new window) |