

# China halves tuberculosis prevalence in just 20 years

March 17 2014

---

Over the last 20 years, China has more than halved its tuberculosis (TB) prevalence, with rates falling from 170 to 59 per 100 000 population. This unrivalled success has been driven by a massive scale-up of the directly observed, short-course (DOTS) strategy, from half the population in the 1990s to the entire country after 2000, according to findings from a 20-year-long analysis of national survey data, published in *The Lancet*.

"One of the key global TB targets set by the Stop TB Partnership aims to reduce [tuberculosis](#) prevalence by 50% between 1990 and 2015. This study in China is the first to show the feasibility of achieving such a target, and China achieved this 5 years earlier than the target date", says study leader Dr Yu Wang from the Chinese Center for Disease Control and Prevention in Beijing, China.

"Huge improvements in TB treatment, driven by a major shift in treatment from hospitals to local public health centres implementing the DOTS strategy, were largely responsible for this success."

China is a major contributor to the TB pandemic, with 1 million new TB cases every year, accounting for 11% of all new cases globally. Two national surveys of tuberculosis prevalence in 1990 and 2000 showed that levels of TB were reduced by around 30% in the 13 provinces where the DOTS programme was adopted. However, national TB prevalence fell by just 19% over the decade.

Another survey was done in 2010 to re-evaluate the national TB burden, providing an opportunity to assess the effect of the nationwide expansion of the DOTS programme. Nearly 253 000 individuals aged 15 years and older were surveyed in 2010 at 176 investigation points chosen from all 31 mainland provinces. The results show that between 2000 and 2010, national TB prevalence fell by 57%—tripling the reduction of the previous decade.

During this time, 87% of the total decrease in prevalence was among cases already diagnosed with TB before the survey. The increase of known TB cases treated using DOTS rose from 15% in 2000 to 66% in 2010, and contributed to lower proportions of treatment default (from 43% to 22%) and retreatment (from 84% to 31%).

According to the authors, "The DOTS programme has been much more effective in reducing the prevalence of tuberculosis in known cases than in new cases. Because the prevalence in known cases is already very low, future reduction in tuberculosis prevalence is likely to slow substantially unless control efforts in addition to the DOTS strategy are implemented, especially in earlier case detection and treatment and use of new instruments."

Writing in a linked Comment, Giovanni Battista, Director of the WHO Collaborating Centre for Tuberculosis and Lung Diseases in Italy, and Giovanni Sotgiu from the University of Sassari-Research in Italy, point out that because many developing countries have already improved TB treatment using the DOTS strategy, "Long-term, rapid reduction in the tuberculosis burden leading to tuberculosis elimination will need additional efforts, including adoption of new instruments in diagnosis (rapid molecular testing for drug-susceptible and drug-resistant tuberculosis) and treatment (new drugs effective against drug-resistant cases), systematic diagnosis and treatment of latent tuberculosis infection, and better access to care by high-risk populations (including

free diagnosis and [treatment](#), and social protection mechanisms preventing income loss)."

**More information:** [www.thelancet.com/journals/lan...](http://www.thelancet.com/journals/lan...)  
[\(13\)62639-2/abstract](#)

Provided by Lancet

Citation: China halves tuberculosis prevalence in just 20 years (2014, March 17) retrieved 6 May 2024 from <https://medicalxpress.com/news/2014-03-china-halves-tuberculosis-prevalence-years.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.