What is the incubation period of TB?



Tuberculosis (TB) is a major global concern, responsible for the most deaths due to an infectious etiological agent. According to the <u>WHO 2017 TB report</u>, a quarter of the global population is latently infected with *Mycobacterium tuberculosis* (M.tb), of which approximately 5-10% of these individuals will develop TB (in their lifetime). One pertinent question, is when will these individuals develop TB? Do they develop TB during M.tb primary infection (after recent M.tb exposure)? Or is it due to reactivation of previously dormant M.tb?

A recent Analysis by Behr et al., "Revisiting the timetable of tuberculosis", highlights the need for improved understanding of the timeline of TB progression and its implications for TB elimination strategies. In this analysis article, Behr et al., discuss various longitudinal studies that illustrate that majority of TB disease manifests within two years post M.tb exposure. This of particular importance in high endemic countries, where majority of cases are due to newly acquired M.tb infection. Highlighting the need to for improved immunological understanding that lead to better diagnostic tools that can distinguish individuals with primary from those with remote infection, as well as individuals with higher risk of developing TB.

The authors also noted, that in low TB incidence settings, M.tb reactivation which has a longer incubation is responsible

for most of the TB cases observed in elderly individuals. A response to Behr et al., by Jon C Emery, expressed concern over understating the importance of such individuals. Stating that when countries transitions from high to low incidence settings, we shall need new tools to identify individuals with remote infection that may progress to TB.

Overall, Behr et al., highlights the importance in understanding the incubation period of TB in effectively informing research studies and designing public health strategies that aim to eradicate TB.

Journal Article: Behr *et al.*, 2018. Revisiting the timetable of tuberculosis. BMJ

*Also listen to the BMJ podcast about this article.

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