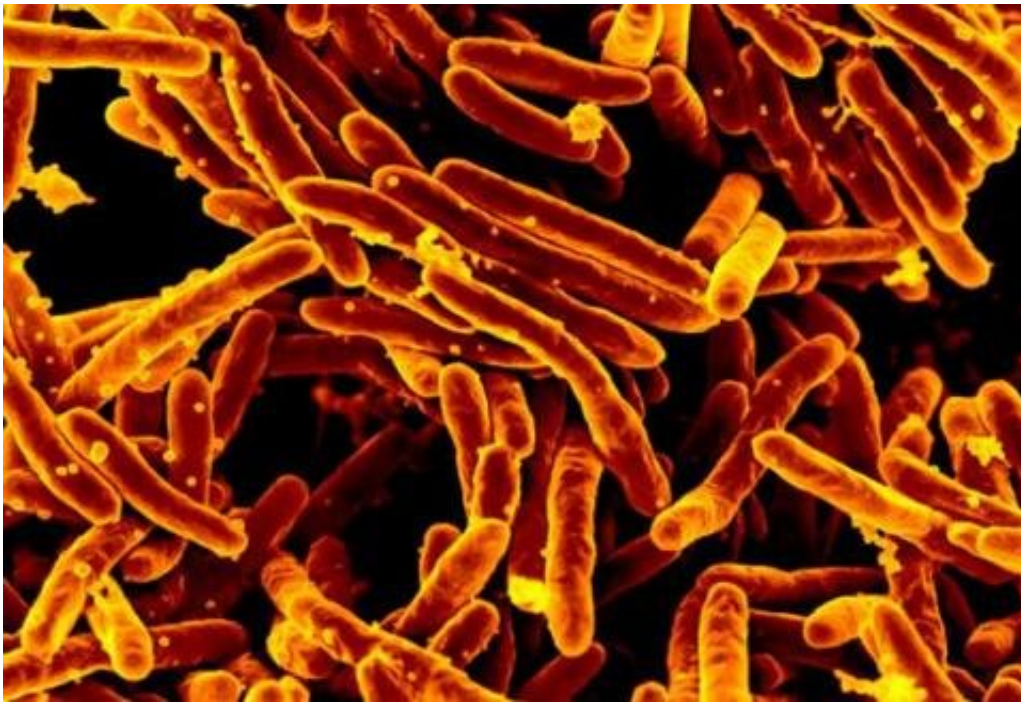


Nordic researchers: A quarter of the world's population at risk of developing tuberculosis

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Scanning electron micrograph of *Mycobacterium tuberculosis* bacteria, which cause tuberculosis. Credit: NIAID

A new study from Aarhus University Hospital and Aarhus University, Denmark, has shown that probably 1 in 4 people in the world carry the tuberculosis bacterium in the body. The disease tuberculosis is caused by the bacterium *Mycobacterium tuberculosis*, which affects more than 10 million people every year, and kills up to 2 million, making it the most deadly of the infectious diseases.

In addition, many are infected with the [tuberculosis bacterium](#) without having active disease, which is called latent [tuberculosis](#). This number has so far been estimated on the basis of assumptions on how many a patient with active tuberculosis may infect, but there has not been an empirical basis for these assumptions.

Now, researchers from Denmark and Sweden have used a new method to describe the occurrence of latent tuberculosis infection. The researchers have reviewed 88 [scientific studies](#) from 36 different countries, and on the basis of this epidemiological evidence they have estimated a prevalence also in those countries where no studies are available, additionally they have calculated the approximate total global prevalence.

The study emphasizes that it will be extremely difficult to reach the goal of eliminating tuberculosis by 2035, which is the aim of the WHO. At any rate, the objective cannot be achieved without treating the large incidence of latent tuberculosis, since all infected people are at risk of developing active tuberculosis disease later in life, says Christian Wejse, an infectious disease specialist at Aarhus University Hospital and Associate Professor at Aarhus University, Denmark.

It has previously been estimated that somewhere between one-third and one-fourth have [latent tuberculosis](#), but the new study, which is based on tests from 351,811 individuals, indicates that it is between one-fifth and one-fourth, depending on the test method used. The study thus documents a significant occurrence of tuberculosis infection in the world today, albeit slightly less than previously thought.

More information: Adam Cohen et al, The global prevalence of latent tuberculosis: a systematic review and meta-analysis, *European Respiratory Journal* (2019). [DOI: 10.1183/13993003.00655-2019](https://doi.org/10.1183/13993003.00655-2019)

Provided by Aarhus University

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