

# Global Diabetes Epidemic Hampers Tuberculosis Control

by Jessica Berman

The growing number of Type 2 diabetes cases worldwide will make it difficult to control and eliminate tuberculosis.

[Experts have found a connection](#) between the two diseases, reminiscent of HIV and TB.

For reasons that are still unclear, Type 2 diabetes increases the risk of developing tuberculosis. In a [series of articles](#) in the journal *The Lancet Diabetes and Endocrinology*, [researchers report](#) that 15 percent of adult TB cases worldwide are due to diabetes, translating to more than 1 million infections.

More than 40 percent of diabetes-associated TB cases are in India.

Renout van Crevel, a researcher and professor of international health at Nijmegen Medical Center in the Netherlands, said diabetes triples the chances of developing tuberculosis. With diabetes reaching epidemic proportions, van Crevel said that will make TB control efforts increasingly difficult.

“There are now 380 million diabetes patients worldwide. Twenty years from now it will be 580 million. And this increase is especially taking place in Africa, where the incidence of TB is the highest,” said van Crevel.

Van Crevel likens the relationship between diabetes and TB to that of HIV and tuberculosis. Having one disease increases the risk of acquiring the second.

With HIV, a severely compromised immune system sets the stage for an active TB infection.

With diabetes, the cause of the increased risk is less clear. Van Crevel suggested something is happening metabolically in those with Type 2 diabetes that makes them vulnerable to tuberculosis.

Once infected with TB, diabetics also are much harder to treat, according to Van Crevel.

“TB treatment -- there is more failure, there is more relapse, there is more toxicity when the patient is also suffering from diabetes. So for the individual patient, there is more issues when these two diseases come together, just like HIV and TB let us say.”

But the news is not all bad. Experts report public health efforts to help patients prevent and control diabetes with good diet and exercise could potentially reduce the number of TB cases by 15 percent or more by 2035 over current expected reductions in the tuberculosis rate.