

Each pound at birth lowers risk of developing TB

January 7 2010

(PhysOrg.com) -- Just one more pound may help a newborn avoid tuberculosis later in life.

Researchers at the University of Michigan looked at how much protection additional birth weight added against developing the disease years later. They found that every 1.1 pounds of birth weight decreases the risk of developing [tuberculosis](#) later by 46 percent among identical twins.

The association between birth weight and developing tuberculosis is much stronger for males than females, with girls only about 16 percent less likely to develop tuberculosis for every 1.1 pounds (500 grams) of [birth weight](#), said Eduardo Villamor, study author and associate professor at the U-M School of Public Health. The risk decreased by 87 percent for infant males with each pound.

Villamor worked with colleagues at the Karolinska Institute in Sweden and began the research while at Harvard. The findings are important because tuberculosis infects about one-third of the planet's population, and is second only to HIV in deaths caused by a single infection. [Low birth weight](#) of babies is a larger problem in developing countries, but it occurs everywhere, he said.

It's too early to say if insufficient prenatal growth causes clinical tuberculosis, but the findings suggest that may be the case, Villamor said. The fact that researchers studied twins and could control for many

genetic and environment factors that influence the development of TB supports the causal relationship.

The study also helps understand the developmental origins of health and disease, Villamor said, which is an emerging field.

"Prenatal exposure to environmental insults, including maternal malnutrition, could program what happens later on in terms of our immune responses to infection, possibly through programming of the [immune system](#)," Villamor said. "This study is an example of that."

The study, "Evidence for an effect of fetal growth on the risk of tuberculosis," is set to appear in the Feb. 1 edition of the *Journal Infectious Disease*.

Provided by University of Michigan

Citation: Each pound at birth lowers risk of developing TB (2010, January 7) retrieved 24 April 2024 from <https://medicalxpress.com/news/2010-01-pound-birth-lowers-tb.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.