

# Tree-lined streets mean lower rates of childhood asthma

May 1 2008

---

Children who live in tree lined streets have lower rates of asthma, suggests research published ahead of print in the *Journal of Epidemiology and Community Health*.

The researchers base their findings on rates of asthma rates for the disease among 4 to 5 year olds, and hospital admissions for the disease among children up to 15, from 42 health service districts of New York City, USA.

US rates of childhood asthma soared 50% between 1980 and 2000, with particularly high rates in poor urban communities.

In New York City, asthma is the leading cause of admission to hospital among children under 15.

The medical data were then plotted against city data on the number of trees in each area, sources of pollution, racial and ethnic make-up, and population density.

The City had an average of 613 street trees per square kilometre, and 9% of young children had asthma.

Asthma rates in this age group fell by almost a quarter for every standard deviation increase in tree density, equivalent to 343 trees per square kilometre.

This pattern held true even after taking account of sources of pollution, levels of affluence, and population density, all factors likely to influence the results.

But tree density had no impact on admissions to hospital for asthma among older children, after taking other influential factors into account.

The findings do not mean that the number of trees in any city is directly related to asthma rates among individuals, caution the authors.

But trees may help curb asthma rates by encouraging children to play outdoors more or by improving air quality, they say.

New York City is also planning to plant 1 million extra trees by 2017, which could provide the perfect opportunity to discover exactly what impact tree density has on asthma, they add.

Source: British Medical Journal

Citation: Tree-lined streets mean lower rates of childhood asthma (2008, May 1) retrieved 27 April 2024 from

<https://medicalxpress.com/news/2008-05-tree-lined-streets-childhood-asthma.html>

<p>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.</p>
--