

TREES AND OUR HEALTH

Explore Current Research on How Trees Improve Public Health

Importance of Nearby Nature

Metro nature - including trees, parks, gardens, and natural areas - enhances the quality of life in cities and towns. The experience of nature improves human health and well-being in many ways. Urban forests reduce a variety of health issues, such as respiratory diseases and skin cancer, and promote an active lifestyle, which can reduce obesity.

Health is not just an outcome of what goes into your body, but what is experienced outside of it as well.

Trees & Human Health: Research

Dr. Kathleen Wolf at the University of Washington has led the way in reviewing studies, conducting her own research, and compiling the information into a research compendium website called

Green Cities: Good Health. <https://depts.washington.edu/hhwb/>

A literature review of 201 authoritative studies about urban trees and human health can be broken down into a few big categories:



Urban greenspaces promote walking and other outdoor activities.



Nearby nature provides cooler temperatures and lowers detrimental Urban Heat Island effects.



Urban greenspaces can reduce particulate matter related mortality by 2.7% - 8.7%

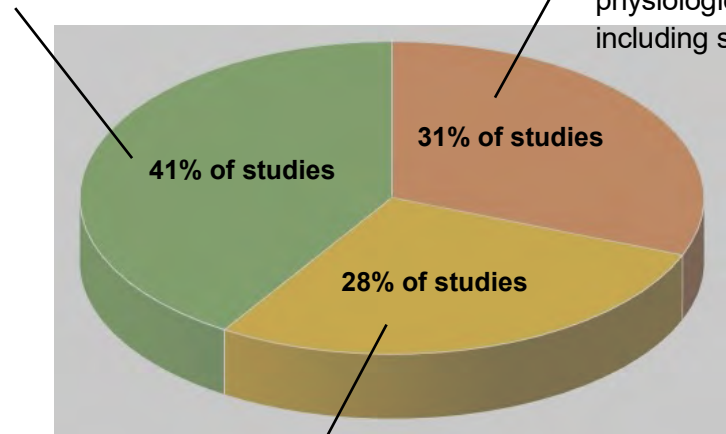
Source: [Planting Healthy Air, TNC 2016](#)

Reducing Harm:

Trees mitigate conditions that can compromise health, including air pollution, noise, and extreme heat.

Restoring Capacities:

Trees promote improved psychological and physiological functioning, including stress recovery.



Building Capacities:

Trees facilitate conditions of wellness for both individuals and communities, such as encouraging physical activity and providing settings for social interaction.

Source: Wolf, K.L., S.T. Lam, J.K. McKeen, G.R.A. Richardson, M. van den Bosch, and A.C. Bardekjian. 2020. Urban trees and human health: A scoping review. *International Journal of Environmental Research and Public Health* 17(12):4371.



Reducing Harm

The positive human health effects of air pollution removal by community trees and forests across the United States is \$6 billion annually.

Nowak, D., et al. Environmental Pollution, Vol. 193, Oct. 2014, pp. 119-129.

Restoring Capacities

Exposure to nearby nature can effectively reduce stress, particularly if initial stress levels are high. Simply having a view of nature produces recovery benefits.

Roe, J.J., C.W. Thompson, P.A. Aspinall, M.J. Brewer, E.I. Duff, D. Miller, R. Mitchell, and A. Clow. 2013. Green Space and Stress: Evidence From Cortisol Measures in Deprived Urban Communities. International Journal of Environmental Research and Public Health 10, 9:4086-4103.

Building Capacities

Research confirms that the availability of parks, trails, and nature can positively affect attitudes toward being active and encourage physical activity and shows that when people exercise in natural environments, they do so for longer and at greater intensities.

Wolf, K.L. 2008. City Trees, Nature and Physical Activity: A Research Review. Arborist News 17, 1:22-24.

Prescribing Nature

In 2010, the Washington, DC Department of Health and the American Academy of Pediatrics launched the DC Park Rx program to encourage physicians to “prescribe” nature to patients to increase physical activity and prevent chronic disease and obesity, especially among the city’s lower income residents. <https://www.parkrx.org/>



MORE INFORMATION:

Healthy Trees Healthy Lives: healthytreeshealthylives.org/

Vibrant Cities Lab: www.vibrantcitieslab.com/human-health/

Green Cities Good Health, Univ. of Washington: depts.washington.edu/hhwb/



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