

What makes cities healthy, equitable and environmentally sustainable?

Lessons from Latin America



Learning from Latin America's Cities for a Healthier Future

Starting in April of 2017, the Dornsife School of Public Health at Drexel University and partners throughout Latin America and in the United States will work together to study how urban environments and urban policies impact the health of city residents throughout Latin America. The findings will inform policies and interventions to create healthier, more equitable, and more sustainable cities world-wide. The five-year project is funded by the Wellcome Trust as part of its *Our Planet, Our Health* initiative, which focuses on research examining the connections between the environment and human health.

For the first time in history, more than 50% of the world's population lives in cities, and it is estimated that by 2050 that percentage will reach 70%. The complex social, natural, and built environments in cities bring many benefits to human health, but also pose serious risks to both health and the environment. The ways in which cities are built, organized and governed has important implications for human well-being, health, and environmental sustainability. Healthy and sustainable cities are those that invest in dealing innovatively and proactively with the challenges of economic growth, climate change, food security, environmental hazards, and their impact on health and equity. However, evidence on the best urban policies to promote health, health equity, and environmental sustainability is lacking.

Latin America provides a unique opportunity to study the links between urban living and health. At 80% urban, it is among the most urbanized regions of the world. The cities of the region are heterogeneous in size as well as in social and environmental features. The region has often been at the forefront of innovative urban policies with possible health and environmental impacts. By studying cities in Latin America, the project will provide policymakers around the world with vital information to improve the health of city residents and the environmental sustainability of cities.

Project Aims and Activities

Based at the Urban Health Collaborative at the Dornsife School of Public Health, the project brings together an interdisciplinary team including 11 institutions in Latin America, 3 institutions in the United States and several international organizations. This international team will collaborate to achieve the four overarching aims of the project:

- 1 ***To quantify the contributions of city and neighborhood-level factors to differences in levels of health and health inequalities among and within cities.***

This aim focuses on examining **how elements of a city's physical and social environment** (including aspects such as infrastructure, segregation by income or education, pollution, transportation options, food availability, and violence) **impact the health of that city's residents**, including their health behaviors, the illnesses they experience and at what age and how they die. To do this, researchers will pull together available data (such as census data, built environment features, pollution levels, vital statistics, and survey data) and analyze them to see how various factors relate to health and health equity.



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2 *To evaluate the health and environmental impact of city and neighborhood-level policies and interventions by capitalizing on natural experiments.*

This aim focuses on examining **how urban policies and interventions may impact the health of city residents and the environmental quality of cities**. These interventions could include improvements to housing, the creation of bike lanes and pathways, the establishment of pedestrian-only zones, or the creation of taxes that impact how people eat or consume tobacco. Researchers will evaluate interventions and policies that were established previously, and conduct evaluations of policies and interventions that are going to be enacted in the near future.

3 *To employ systems thinking and formal systems simulation models to better understand the dynamic relations between the urban environment, health and environmental sustainability and identify the plausible impacts of selected policies.*

To achieve this aim, researchers will work with stakeholders using systems thinking techniques to build “systems maps” that describe **how various factors are interrelated and jointly affect health and environmental sustainability**. They will use these maps to stimulate thinking about how interventions in these systems can improve outcomes. In a second stage, they will create simulated cities and neighborhoods and use these virtual worlds to explore how various policies may affect health and the environment.

4 *To engage with the scientific community, the public, and policy makers to disseminate findings and translate them into policies and interventions.*

This aim will focus on **rapidly translating research findings into clear and actionable knowledge** for policymakers, the public, and the scientific community. In this way, the project can ensure that its findings are disseminated efficiently and effectively so that civil society, policymakers and governments can invest in and build cities that are healthy, equitable, and sustainable.

Our Team

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