

What Can Latin American Local Governments Do to Improve Public Health?



Health outcomes can vary significantly across cities within the same country, and within neighborhoods of the same city in Latin America and the Caribbean. This variation is partly explained by aspects of the urban environment that can be shaped through local policy.



Public infrastructure investments, especially those in water, sanitation, and public transportation, have well-documented positive effects on local public health.



Lower-cost interventions can also improve local health outcomes. These include zoning policies to protect people from negative externalities, the enforcement of road safety regulations, and the building of open public spaces to promote walkability and healthy lifestyles.

CONTEXT

The place where people live matters for their physical well-being. Even within the same country, residents of different cities can have on average better or worse health. Moreover, in the region, most preventive and curative healthcare occurs in cities, and individuals' health-related lifestyle decisions take place in—and are constrained by—urban environments. Local governments can shape these conditions and thus have a significant impact on their citizens' health. To facilitate these efforts, this study reviews how health outcomes vary across cities in Latin America and surveys the policy options available to local governments in the region to influence these outcomes.

PROJECT

This study reviews recent research on public health in Latin American cities. It first explores differences in health outcomes across cities of the same country, and within neighborhoods in the same city. The study then focuses on what can explain these differences, including aspects of the natural environment, socioeconomic conditions of the population, access to healthcare, the negative “externalities” of urban congestion, and conditions that facilitate healthy lifestyles. Lastly, it discusses the policy instruments that governments—particularly those at the local level—can use to improve local health conditions.

Key concept



EXTERNALITIES

In Economics, an externality refers to a cost or a benefit, inflicted on third parties, as a byproduct of self-interested behavior.

RESULTS

There are large disparities in outcomes across cities of the same country. The gap between the highest and lowest life expectancies in urban areas in Argentina, Chile, and Ecuador, for example, is about two to three years, similar to the country-level gap between the United States and Brazil in 2015. The life expectancy gap among urban areas is much wider in larger countries of the region, reaching 13 years in Brazil and 17 years in Mexico—comparable to the country-level gap between the United States and Haiti in 2015. Large differences in health outcomes can also be found across neighborhoods of the same city.

Part of these differences can be explained by residential segregation by income. Specifically, health is closely related to individuals' socioeconomic conditions, and individuals of the same socioeconomic conditions frequently reside close to each other. However, the characteristics of the place where people live can itself shape the health of the residents, for better or for worse.

While some of the elements of the urban environment that affect public health—such as natural atmospheric conditions—are outside of local governments' control, other elements can be shaped through local policy. This is notably the case for urban infrastructure. Access to water and sanitation, for example, is positively related to local life expectancy ([Figure 1](#)), open public spaces are conducive to healthy lifestyles, and urban transit projects can also bring about important health benefits. Another important driver of local health outcomes is the presence of urban externalities such as traffic congestion, pollution, and the spread of transmissible diseases.

Key Concept



RESIDENTIAL SEGREGATION

The tendency of members of the same socioeconomic group to reside in close proximity to one another and separately from other socioeconomic groups.

POLICY IMPLICATIONS

Sanitation and drinking water investments are two local policies that have a proven positive impact on public health. Access to sewerage reduces the incidence of open defecation, which leads to greater infant mortality, particularly in places with high population density. In the same vein, supplying more potable water led to lower local infant mortality in Argentina, Brazil, and Colombia, and a lower incidence of diarrhea and typhoid fever in other countries.

Public investments in mass transit can also help improve local health. A recent study looked at 58 new subway systems which were opened between 2001 and 2016 around the world and found that in high-pollution cities these openings led to a 4% reduction of particulate matter, which would prevent between 22 and 34 infant deaths per year in large cities. Another study, focusing on Latin American cities, shows that when the availability of mass transit improves, there is a significant decrease in infant mortality rates.

Expanding the provision of potable water, sanitation, and public transportation usually involves large, expensive, multi-year projects. However, there are a variety of lower-cost interventions that can also improve local health outcomes. Zoning policies, for example, can protect local populations from being exposed to air pollution produced by vehicles and industrial factories or from biological hazards associated with proximity to open waste disposal sites. The enforcement of regulations related to road safety, such as laws on drinking alcohol or on the use of helmets by motorcycle riders, can help significantly reduce injuries and fatalities. Local policymakers can also promote healthy lifestyles through policies like building public parks and other open spaces, and urban planning that promotes walkability. These interventions tend to have a larger impact on low-income people who have less access to privately-provided facilities.

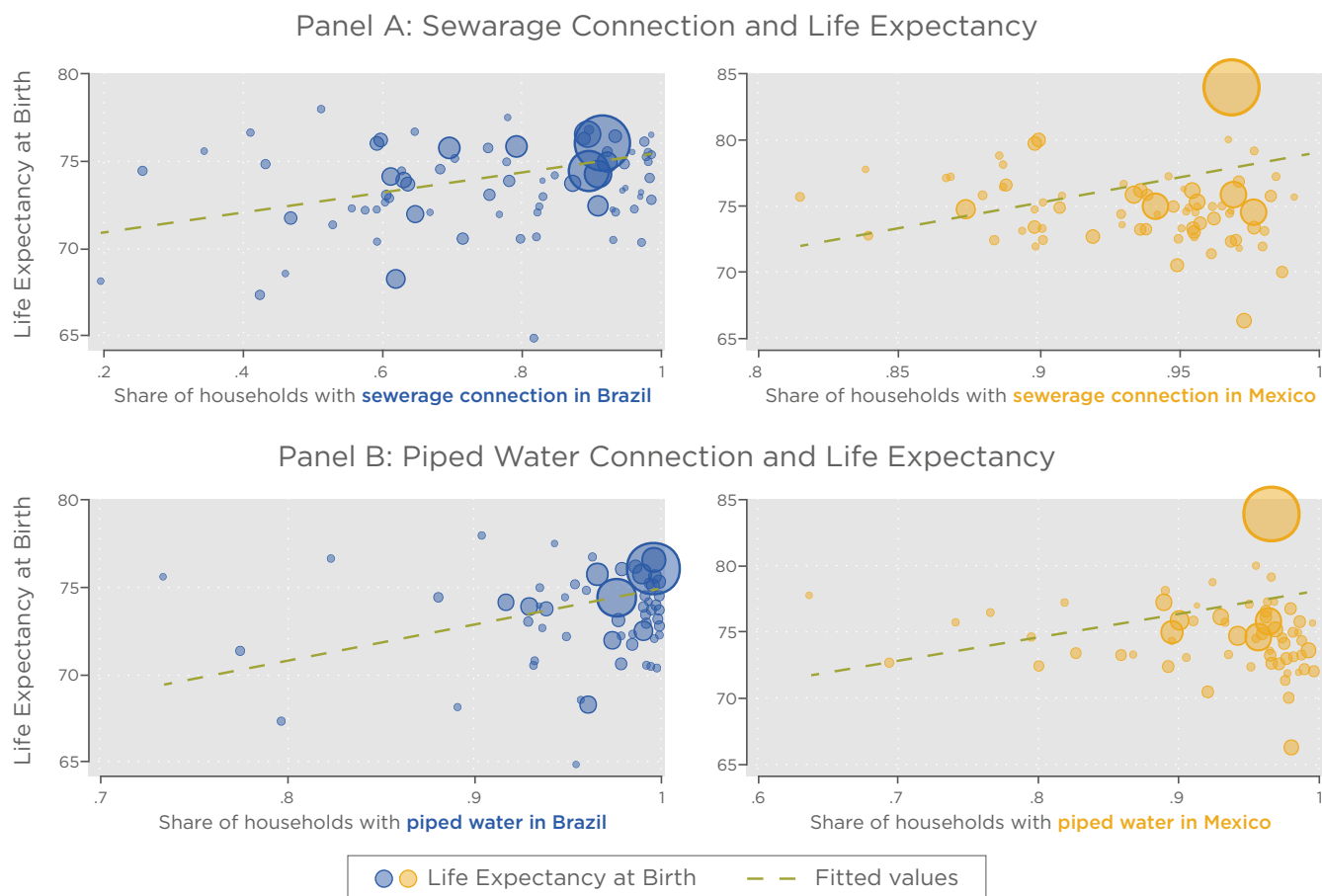
Key concept



LIFE EXPECTANCY

The number of years that a person of a particular population group can expect to live, typically calculated as the average age at which the members of that group die.

Figure 1. Correlates of Life Expectancy Across Cities in Two Latin American Countries



Note: Author's calculations using data from 81 cities of Brazil, and 63 cities of Mexico, with populations of at least 200,000, from [Chauvin \(2021\)](#). Cities are weighted by their population. City definitions are adjusted to make them comparable across countries. Life expectancy is computed using standard life tables as defined by WHO (2014). Population and mortality data are taken from the National Institutes of Statistics, IBGE in Brazil and INEGI in Mexico.



FULL STUDY

[Chauvin, Juan Pablo. 2021. "Cities and Public Health in Latin America."](#)

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