Knowledge about the links between urban environments and health can inform action to promote urban health and health equity and contribute to the environmental sustainability of cities. However, the complexity of policymaking and implementation processes and a lack of collaboration between researchers and policymakers challenge the effective translation of knowledge to policy (KtP). Concrete actions can improve how the research community engages with policymakers and other actors to promote KtP translation for urban health.

Key messages for the research community

- Conduct research that is relevant to policy concerns, including rigorous evaluations of existing or new policies and interventions.
- Engage with policy processes, acting on windows of opportunity and targeting communication and dissemination to current priorities.
- Adjust the focus, format, framing and timing of communications to reflect the needs and capacities of target audiences, while making use of effective knowledge brokers.
- Build and maintain relationships with local “champions,” policymakers, and other policy-relevant actors, and include these actors in research design, implementation and dissemination.
- Be aware of the political, economic and social factors that influence KtP translation in a given context.
- Leverage global, regional, national and local priorities to promote evidence-based action, identifying synergies where possible.
Knowledge to Policy for Urban Health

What is Knowledge to Policy translation?

Knowledge to Policy translation (KtP) refers to the processes through which formal or informal knowledge can inform policymaking to address societal challenges. Successful KtP actions support the application of knowledge in policy deliberations, resulting in effective, evidence-based policies that respond to the context and priorities of a given situation. [1]

How is KtP relevant to urban health?

Environmental and social factors interact with complex, multi-sectoral decision-making in cities to affect health. Effective KtP for urban health integrates a wide range of knowledge to support the development of evidence-based policies; creation or modification of administrative processes or structures to better connect knowledge producers with policymakers; monitoring and adjustment of existing policies or interventions; and/or scaling up of effective programs. [2, 3] KtP translation can support decision-making by public and non-governmental actors, in health and other sectors, and is critical to achieving the Sustainable Development Goals and other regional and global commitments. [4]

What obstacles for KtP exist in Latin America and elsewhere? [5,6]

Barriers related to **knowledge production**, including a lack of capacity and structures to support policy-relevant research, misalignment of research and policy cycles, and limited experience among researchers in engaging with policymakers.

Barriers related to **policymaking**, including competing incentives (e.g., special interests, public perception, election cycles, or political instability) or a lack of technical capacity for interpreting and applying research results.

**Communication**-related barriers, including formatting of research outputs that is inappropriate for policy use, focus that is inconsistent with policy agendas, or timing that fails to account for policy cycles.

Barriers related to **linkages between research and policy**, including a lack of effective structures or mechanisms for co-production or sustained communication between researchers and policymakers, which can lead to missed opportunities or even mutual mistrust.

Barriers related to the **actions of other stakeholders**, including competing ideas and misaligned incentives, lack of engagement, absence of appropriate knowledge brokers or other intermediaries, or ineffective use of media.
**Key Terms**

**Health**: A state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity. [7]

**Urban Health**: The health and well-being of people living in cities and urban areas, as influenced by multiple characteristics of the urban social and built environment, and by policies related to land use and planning, transport, housing, employment and income, education, energy, water and sanitation, and other sectors. [8]

**Social Determinants of Health**: The daily conditions in which people grow, live, and work, and the social and economic structures, systems, policies and processes that affect people’s health throughout their lives.

**Determinants of Urban Health**: Characteristics of the social or physical environment of a city or urban area that influence health or health equity outcomes among the population.

**Knowledge Broker**: An individual or group/organization that acts as an intermediary between knowledge producers (e.g., researchers) and users (e.g., policymakers).[9]

**Knowledge Production**: Knowledge is produced via formal (designed) or informal (experiential) processes and undergoes continual synthesis and interpretation. [10]

**Policy Agenda**: The set of actions and issues under consideration by policymakers at any given moment. Policy agendas are rarely determined by the quantity or quality of available knowledge, but are influenced by critical incidents, civil society activism, proposals from policy entrepreneurs, and the decisions of political leaders to champion specific issues. [11]

**Policy Processes**: Policies are created through iterative processes of negotiation between and among policymakers and other stakeholders.

**Policy Windows**: Moments in time that represent key opportunities when KtP processes can influence policy agendas. Policy windows can arise from newsworthy events, budget renewals, government crises, international agreements, or priority-setting exercises, among others. [11]
Figure 1 is a simplified representation of KtP translation. Knowledge is produced, synthesized and organized through formal and informal processes. Policy results from the interactions of policymakers with each other and with other stakeholders. Linkages between knowledge producers and policymakers allow for knowledge to inform policy, and vice versa. The timing and format of communication acts as a filter, determining what knowledge is available to policymakers, and the extent to which this knowledge is accurately interpreted and applied. Knowledge and policy processes occur within a broader societal context of mutual relationships among many stakeholder groups, each of which produce and apply knowledge in different ways, and each of which can influence policymaking. Table 1 lists five key areas for intervention, drawing on this basic structure.

Figure 1. Knowledge to Policy Translation
### Table 1. Areas of intervention for promoting Knowledge to Policy Translation

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Area of Intervention</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Knowledge Production" /></td>
<td>Knowledge Production</td>
<td>Actions and strategies to affect the relevance, accessibility and applicability of knowledge for policymaking.</td>
</tr>
<tr>
<td><img src="image" alt="Policymaking" /></td>
<td>Policymaking</td>
<td>Interventions that modify the capacities, incentives or obligations of policymakers in ways that make them more likely to seek, process and apply knowledge effectively.</td>
</tr>
<tr>
<td><img src="image" alt="Knowledge-Policy Linkages" /></td>
<td>Knowledge-Policy Linkages</td>
<td>Interventions that create or strengthen explicit connections between knowledge producers and policymakers, including legal, administrative or regulatory frameworks or processes that support research co-production and co-implementation.</td>
</tr>
<tr>
<td><img src="image" alt="Communication" /></td>
<td>Communication</td>
<td>Interventions that optimize the characteristics, techniques and timing of communication to improve knowledge relevance, accessibility, reception and application.</td>
</tr>
<tr>
<td><img src="image" alt="Action via Other Stakeholders" /></td>
<td>Action via Other Stakeholders</td>
<td>Actions and strategies that capitalize on the capacities and influence of other stakeholders to strengthen the application of knowledge for policy.</td>
</tr>
</tbody>
</table>
SALURBAL Policy Evaluations

One important way SALURBAL acts to improve KtP translation is by supporting policy evaluations designed to document and better understand policy impacts on health. These efforts respond to demand from policymakers for concrete evaluations of existing and emerging policies, establish direct linkages between researchers and local policy actors, and frame and communicate results targeted to a policy audience, in order to inform future policymaking and interventions for urban health.

TransMiCable
Bogotá, Colombia

Cable cars are an energy- and cost-effective mode of transportation offering connectivity for the isolated, informal hillside settlements common in Latin American cities. Since December 2018, the TransMiCable cable car system has connected the low-income, peripheral neighborhood of Ciudad Bolivar to central Bogotá.

SALURBAL researchers have developed an assessment plan with local partners and conducted over 2,000 baseline interviews. Using questionnaires, accelerometers, and cellular apps, the research team is examining how the intervention and associated urban improvements affect a variety of health determinants and indicators, including transport accessibility, travel behavior, physical activity, respiratory diseases, social cohesion, homicides, and self-reported quality of life.

Results will illuminate the specific health impacts of non-traditional transport interventions, an important piece of the Latin American urban policy agenda. Partnership with local policymakers during this window of opportunity increases the likelihood that knowledge gained will effectively inform transport policy and development in Bogotá and elsewhere.
The Chilean Ministry of Housing and Urbanism’s Regeneration of Housing Complexes Program works to improve social housing conditions and the surrounding social and built environments. While such interventions are expected to improve quality of life, little is known about their specific health impacts.

SALURBAL researchers are working with the local community and ministerial partners to assess general health, respiratory conditions, and mental health, as well as housing and neighborhood conditions, at baseline and over a three-year period (2018-2021), and build a knowledge base to support future policy design.

The research team has confronted challenges related to aligning timelines for investigation with public policy implementation, and of establishing and maintaining trust with local partners to ensure the continuity of data collection over time. These experiences provide knowledge to support the development of future policy evaluations.

Road traffic accidents are among the three leading causes of death among children and adolescents in Mexico. [12] The Vision Zero strategy, implemented in Mexico City starting in 2015, seeks to reduce traffic-related injuries and death by enforcing stricter speed limits.

The argument that slower traffic increases air pollution has been raised to justify public and private resistance to the new restrictions, suggesting a need to better understand this intervention’s concrete benefits and unintended consequences. SALURBAL researchers are working with city government officials to assess the effectiveness and impacts of the new regulations, monitoring crash rates, fatalities and air pollution. Results of this study will provide an important knowledge base for informing similar future policies and interventions.

Another key goal of this work is to inform the general public, leveraging public opinion to shift incentives for policymakers and facilitating the application of scientific knowledge to the implementation of effective public health policy measures.
Other SALURBAL Knowledge to Policy Translation Activities

Aim 4 of the SALURBAL project seeks to engage with the scientific community, policymakers, the private sector, civil society, and the public to disseminate findings and support their translation into policies and interventions for healthier, fairer, more sustainable cities. Specific activities are designed to close the gaps between research, policy and practice and to promote research co-design and implementation.

A dedicated Policy Group works to identify diverse actor groups for whom project findings have particular relevance, incorporate these actors in research and evaluation processes, and develop targeted outputs and communications. Stakeholder workshops and policy engagement events coordinated in parallel with project meetings and Knowledge to Policy Forums engage local and regional actors to disseminate project results and co-produce strategies forestablishing urban health as a key consideration for decision-making across sectors and scales.

KtP for Health in Latin American Cities: Regional Case Studies

The New Urban Health Model of El Salvador
El Salvador

Research partner:
International Council for Science: Regional Office for Latin America and the Caribbean (ICSU-ROLAC)

Policy Partner:
Ministry of Public Health of El Salvador (MINSAL)

The New Urban Health Model of El Salvador was launched in 2018 to allow researchers and government agencies to jointly review existing programs, identify gaps and address key challenges related to urban health. The Model involved the creation of a new interdisciplinary and inter-ministerial Urban Health Working Group in the context of national health reform, which seeks to strengthen direct linkages between knowledge producers and policymakers, ensuring that each group understands and can best respond to the other’s needs and priorities.
The Healthy Municipalities, Cities and Communities Movement (HMCCM) connects municipal governments with representatives of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) to raise awareness among local authorities about the health implications of public sector action.

The movement empowers public actors to apply a health-in-all-policies approach and encourages the development of strategies and commitments to prioritize and improve health. By strengthening policymakers’ capacity to seek and apply knowledge to effectively address urban health issues, HMCCM supports the incorporation of health evidence in municipal planning and decision-making processes.

Recreational Ciclovía and Recreovía
Bogotá, Colombia

Since 1974, Bogotá’s Ciclovía has provided a weekly space for recreation, physical activity, leisure and social interaction, today extending to 120 km and incorporating the Recreovía program, which offers exercise classes and health check-points. Sustained by public and private funds and multi-sectoral and multi-institutional collaboration, the program has been officially incorporated within multiple national and city development plans. Historically, the program has been faced with wavering financial and political support, and continued success has rested upon a combination of public activism, and the timely and effective communication of knowledge to policymakers regarding the health and other benefits provided by the program.
Sugary Drink Tax
Mexico

Research partner:
National Institute of Public Health (INSP)

Policy partner:
National government of Mexico

In 2014, Mexican authorities implemented an excise tax on all non-alcoholic sugar-sweetened beverages (SSB), bolstered by the timely communication of compelling scientific knowledge about SSB’s role in the overconsumption of added sugar. [13] By 2015, purchases of taxed SSBs decreased by an average of 7.63%, and the tax is expected to produce changes in health outcomes such as obesity and diabetes.[14,15] In this context, the research community will continue to play a critical role in developing objective assessments of the effectiveness of this policy over time and supporting the development of other knowledge-based policies to address obesity in the country and throughout the region.

Ni Una Menos
Regional

Action via other stakeholders
Civil society movement and social media protest

The Ni Una Menos movement emerged in Argentina in 2015 as a popular protest of violence against women and resulted in organized mass protests and strikes across Latin America. Fueled largely by social media campaigns, the movement has raised awareness among the public about women’s health, placed pressure on policy agendas throughout the region, motivated new research and data collection in this area and the establishment of new working groups and observatories, and generated an environment in which relevant research can have greater impact. Ni Una Menos illustrates the potential impacts of public action on knowledge production and policy responses to address public health issues.
Recommendations for Improving Knowledge to Policy Translation [18,19]

- Design research with policy impact in mind
- Emphasize cost-benefit analyses, policy evaluations, and other applied research
- Take advantage of natural experiments
- Identify potential unexpected and undesired outcomes of interventions to guide development of mitigation measures
- Consult with policy actors to identify critical issues and the tools and information required to inform policy
- Seek and emphasize synergies between research and national, regional and global policy agendas
- Integrate local knowledge in research

- Ensure that the research community is provided regular opportunities for input to policymaking
- Partner with researchers early to allow for rigorous evaluations, and work with the research community to evaluate policy impacts after implementation
- Train policymakers to source and interpret scientific evidence

- Track policy debates and policy agendas to identify windows of opportunity within which evidence can have greater impacts
- Present results that are relevant to policymakers, emphasizing key messages and recommendations
- Adjust the focus, format, framing, and timing of communication materials to the needs and capacities of the target audience
- Identify and exploit key actors, tools and avenues for communication
- Consider political, economic and social factors that facilitate or hinder KtP translation

- Establish and cultivate relationships and trust with policymakers, positioning knowledge to be available when needed
- Identify opportunities for co-production of knowledge between researchers and policymakers
- Advocate for new structures or mechanisms to promote direct communication between researchers and policymakers (for example, advisory boards, working groups, science-policy engagement events)

- Identify and build relationships with key actors within and beyond the policy community
- Make use of knowledge brokers to effectively coordinate knowledge to policy translation
- Build and maintain relationships with local “champions”
- Understand the positions, incentives, goals and constraints of non-academic stakeholder communities
2018 SALURBAL Knowledge to Policy Forum

SALURBAL’s first “Knowledge to Policy” Forum was held in November 2018 in Mexico City. The two-day meeting convened policy actors from over 20 organizations and 11 SALURBAL researchers. Participating institutions spanned multiple sectors and scales. Forum outputs led to a set of recommendations for the project and other urban health research efforts across the region, which informed this document as well as SALURBAL strategies for improving research translation and policy engagement.

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References


Salud Urbana en América Latina (SALURBAL), Urban Health in Latin America, is a five-year project that studies how urban environments and urban policies impact the health of city residents throughout Latin America. SALURBAL’s findings inform policies and interventions to create healthier, more equitable, and more sustainable cities worldwide. SALURBAL is funded by the Wellcome Trust.

The Urban Health Network for Latin America and the Caribbean (LAC-Urban Health) seeks to promote regional and multisectoral collaboration in order to generate evidence on the drivers of urban health and health equity and translate this evidence into policies to improve health across cities in Latin America and the Caribbean.

Learn more about LAC-Urban Health and SALURBAL

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