



UCL POLICY BRIEFING – JUNE 2012

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KEY MESSAGES

For building and urban form designers, engineers and policymakers, supporting and developing healthy cities means:

- understanding how proposed designs directly contribute to the development of healthy cities
- considering unintended consequences by working and drawing on a multidisciplinary framework of professionals.

The UCL–Lancet Commission: Shaping Cities for Health

Policy briefing: Implications for buildings and urban form

Summary

The UCL–Lancet Commission’s *Shaping Cities for Health* report advanced an approach based on complexity thinking in order to understand how urban environments and interventions influence urban health.

It focused on the inter-related domains of sanitation and water management; the promotion of urban agriculture; transportation and mobility; the **urban heat island effect**; and **building standards** (as they affect indoor environmental quality). This policy briefing focuses on the final two of these issues.

For practitioners and policymakers working in the context of building and urban design, engineering and construction, these issues impact upon, and are affected by, the work undertaken in urban development and regeneration activities.

Buildings and health

Building standards offer a significant opportunity to deliver energy efficiencies that are beneficial to health and wellbeing.

Building design provides an excellent example of the potential **health benefits arising as a result of social and economic policies**, such as those relating to development goals and climate protection through reduction in greenhouse gas (GHG) emissions.

In high-income urban settings, a key measure in reducing GHG emissions is improved domestic energy efficiency through insulation, control of ventilation, and efficiency of the heating and other appliances. In low-income settings, improving the indoor environment and deploying cleaner, more efficient heating and cooking technology could yield substantial health gains while contributing to global GHG reductions.

Mitigation measures offer an opportunity to both reduce the risks of climate change and – if well-chosen and implemented – deliver substantial, near-term improvements in health. Conversely, improper interventions can have a negative impact on health.

The **standards** by which buildings are constructed offer an opportunity for better building performance in both environmental and energy terms. Given the potential health benefits of energy efficiency, city-level policies for energy efficiency and energy systems can be an important catalyst to improve health.

Urban form and health

Strategies to address the urban heat island must minimize the negative impacts while retaining any benefits to avoid increasing the overall health burden.

Changing the urban form is implicated in a range of feedback loops with potentially adverse consequences for urban residents. For example, urban forms influence the local climate, which can impact on health through modified temperatures – particularly under extreme weather conditions which pose a unique challenge for urban areas and growing populations.

The **urban form affects urban temperatures** – an effect known as the ‘urban heat island’ (UHI) – increasing the heat-related health risk to urban populations. The starting point for the development of UHI-related strategies should be to determine the net impact and plan to minimize the negative impacts whilst retaining the benefits (eg reduced cold-related mortality). Strategies which focus on the reduction of the UHI may, in isolation, have the unintended consequence of increasing the overall health burden.

Interventions that seek to address the UHI will vary from city to city, but through the use of appropriate tools and assessment techniques, policies that seek to address the urban heat island should identify and quantify their effectiveness in the context of planning, building, energy and health.

What this research means for practitioners

The commission developed a set of key recommendations to support healthy cities. Those focusing on buildings and urban form include:

- city governments should work with a wide range of stakeholders to **build a political alliance** for urban health
- attention to **health inequalities** within urban areas should be a key focus of planning the urban environment
- planning frameworks for cities should explicitly incorporate **urban health goals** and policies aimed at improving urban health
- progress towards effective action on urban health will be best achieved through **local experimentation** in a range of projects, supported by evaluation and self-reflection.

The complexity approach considers the inter-related facets and interconnected networks of the built environment and how they evolve in an attempt to understand and address aspects of urban health.

Further information

For links to the UCL–Lancet Commission’s full report published in *The Lancet*, commission membership, further briefings for professionals and policymakers, and upcoming events, see the Healthy Cities website (www.ucl.ac.uk/healthy-cities).

The UCL–Lancet Commission’s key recommendations

- 1 **City governments should work with a wide range of stakeholders to build a political alliance for urban health.** This should involve all those able to deliver urban change for health in active dialogue; in particular, health officials and practitioners need to be in dialogue with urban planners and managers at all levels.
- 2 **Attention to health inequalities within urban areas should be a key focus of planning the urban environment.** This will necessitate community representation in arenas of policymaking and planning for urban health and may require local government to support less well-resourced and less well-organised sections of the urban population.
- 3 **Action needs to be taken at the urban scale to create and maintain the ‘urban advantage’ in health outcomes through changes to the urban environment.** Planning frameworks for cities should explicitly incorporate urban health goals and policies aimed at improving urban health, as a signal to key decision-makers of the importance of action for urban health.
- 4 **Policymakers at national and urban scales would benefit from undertaking a complexity analysis to understanding the inter-relationships between interventions affecting the urban environment and urban health outcomes,** identifying where there are bi-directional relations of causality, feedback loops and tensions between objectives, and being alert to the unintended consequences of their policies.
- 5 **Progress towards effective action on urban health will be best achieved through local experimentation in a range of projects, supported by evaluation and self-reflection.** This should involve practitioners and communities in active dialogue and mutual learning. Tools such as impact assessments and indicator sets should be used judiciously to support such evaluation.

BACKGROUND: SHAPING CITIES FOR HEALTH

The majority of the world’s population live in cities. With current high rates of urbanisation, the World Health Organisation has recognised the need to understand how urban environments influence health outcomes and benefits as an urgent priority.

In response the UCL–Lancet Commission on Healthy Cities met from November 2009 to June 2011, bringing together a cross-disciplinary team of experts with the aim of understanding the dynamics involved in delivering better health outcomes through interventions in the urban environment in cities across the world. The resulting report, published in *The Lancet* on 16 May 2012, was a major output from the UCL Grand Challenge of Sustainable Cities (GCSC), which seeks to rally the breadth of our expertise – in partnership with external agencies – to address aspects of the major problems facing cities in the 21st century.

The UCL Grand Challenges are those areas in which we are facilitating cross-disciplinary interaction – within and beyond UCL – and applying our collective strengths, insights and creativity to overcome problems of global significance. Along with GCSC, the other UCL Grand Challenges are of Global Health, Intercultural Interaction and Human Wellbeing. See the UCL Grand Challenges website (www.ucl.ac.uk/grand-challenges).