



*Better Health. Better Environment. Sustainable Choices.*

## Fact sheet 2

# Cities

## Urban planning and health

*This fact sheet should be read in conjunction with the fact sheets on air pollution, noise, transport and waste which represent urban challenges to be tackled at the local scale, but are not covered in detail in this fact sheet.*

### Summary

Urban planning has a direct impact on health and well-being through the provision of services – such as energy, waste management, water, housing, green spaces and public facilities - and the creation of health-supportive and resilient environments. At the same time, urban living can be associated with environmental and social challenges, such as: a lack of natural resources, environmental pollution, an unhealthy urban lifestyle, crime and social exclusion. Given high urban population densities, urban interventions can support and promote health and well-being for residents, and sub-national actors should thus be supported in the development and application of sustainable and healthy urban planning approaches.

### Overview

- ▶ More than 80% of the European population is expected to live in urban areas by 2030. While urban living continues to offer many opportunities, including potential access to better health care, jobs and education, today's urban environments can concentrate health risks and introduce new hazards. Urban planning decisions made by local and sub-national actors therefore play a pivotal role in both promoting and protecting the health and well-being of urban dwellers, and in assuring that all population groups benefit equally from urban services.
- ▶ At the same time, planning decisions need to prepare for, and adapt to, major demographic and social changes, including ageing of the population, a growing burden of non-communicable disease, climate change, and migration. They also need to factor in emerging scientific evidence on the important role played by urban green and blue spaces in promoting health and well-being and reducing inequalities.
- ▶ Healthy urban planning is an intersectoral task requiring a common planning approach that is:
  - centred on health and well-being;
  - provides a strategic approach for managing urban pressures, such as noise, air pollution, traffic density, water and sanitation, low-quality housing, industrial pollution, waste, a lack of green spaces, and social exclusion; and
  - reduces or prevents such pressures through thoughtful urban planning and redevelopment (see Fig. 1).



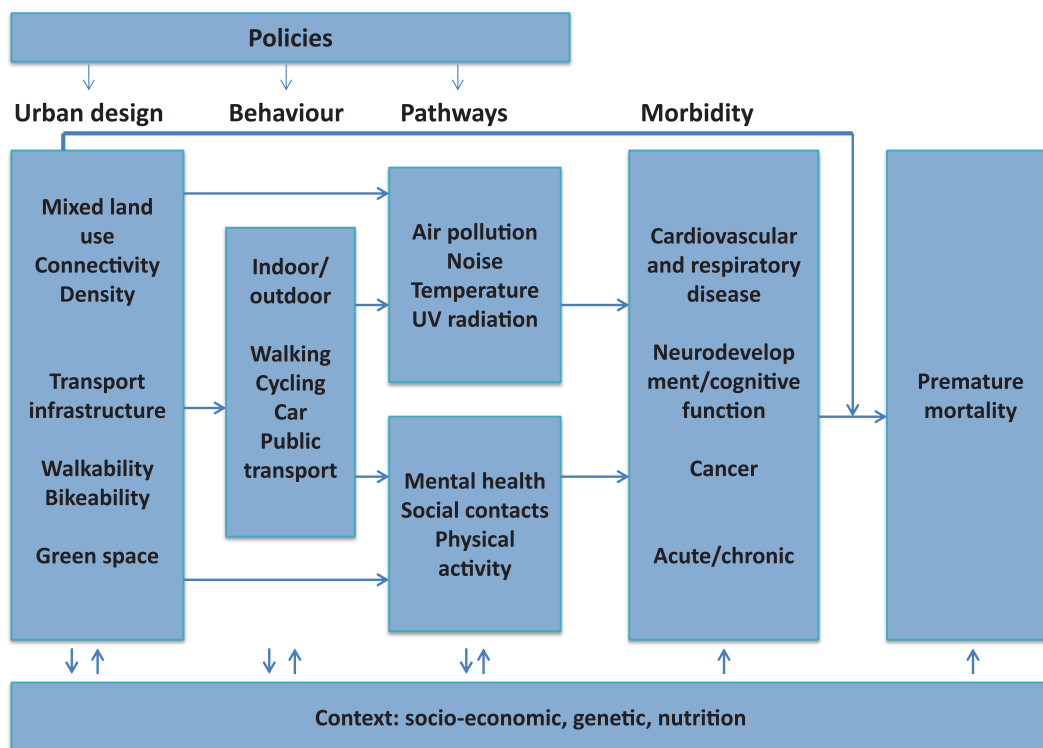


Tools and practical guidance on effective urban solutions are therefore much needed. To support national and local authorities, sustainable and healthy urban development has been included as a key objective in various international agreements, such as the European Health 2020 policy framework, Sustainable Development Goals, New Urban Agenda of the UN, and the EU Urban Agenda priorities.

◀ **Masaryk Square.**

**Source:** Statutory City of Ostrava, Czech Republic

**Figure 1:** Inter-linkages and pathways linking policies to urban infrastructure, behaviour and health effects.



**Source:** Nieuwenhuijsen MJ. Urban and transport planning, environmental exposures and health new concepts, methods and tools to improve health in cities. *Environ Health*. 2016;8;15 Suppl 1:38. doi: 10.1186/s12940-016-0108-1.

**Key messages**

Exposure to environmental risks varies considerably in cities and generates both environmental and health inequalities.

Urban planning and intersectoral approaches provide suitable opportunities to address the environmental, social and health impacts of urban settings by bringing together various sectoral planning tracks and establishing a common vision.

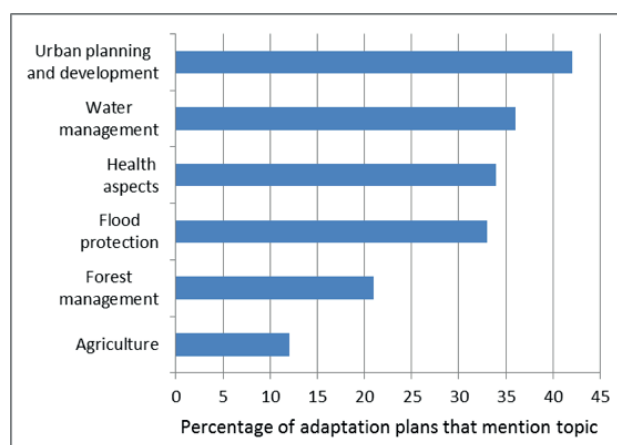
Sustainable urban planning approaches go beyond the mere provision of clean environments and need to consider a wide range of urban features.



In effect, a healthy city:

- strictly enforces environmental regulations, monitors key environmental parameters, and immediately tackles environmental hazard conditions that endanger health and well-being.
- combines sustainable urban development with climate change adaptation and mitigation measures (see Fig. 2).
- assures that environmental conditions and quality of life are equal across the city, and that public services are easily accessible for all.
- promotes active lifestyles through the provision of attractive outdoor areas, green spaces and active transport networks (see Fig. 3).
- provides social and public housing.
- adopts planning and design principles that enable the participation of vulnerable groups, such as children, the elderly and persons with functional disabilities.
- provides public services, such as public transport, water supply and sanitation, energy supply, waste collection and management, and access to healthy food.
- promotes social participation and interaction, and prevents segregation and exclusion.

**Figure 2:** Urban planning and management aspects in climate change adaptation plans



**Source:** Urban adaptation to climate change in Europe 2016 - Transforming cities in a changing climate. Copenhagen: European Environment Agency; 2016.

**Figure 3:** Share of land for green urban areas and sports and leisure facilities, 2012

Brussels	13,2
Sofia	
Prague	12,6
Berlin	14,9
Paris	23,2
Rome	4,8
Riga	15,0
Luxembourg	5,6
Budapest	8,2
Amsterdam	14,9
Bucharest	7,5
Bratislava	3,7
Stockholm	24,1

**Source:** Urban Audit [database]. Luxembourg: Eurostat; 2017 (<http://ec.europa.eu/eurostat/web/cities/data/database>, accessed 2 May 2017).

## Key Facts

- Modelling studies for urban temperatures over the next 70 years project that, in urban areas where the green cover is reduced by 10%, urban temperatures could increase by 8.2 °C above current levels. A 10% increase in green space is also associated with a reduction in diseases equivalent to an increase of five years of life expectancy.
- Trees and shrubs in Greater London are estimated to remove 229 tons of particulate matter (PM10) per year and therefore create savings in the health care sector.
- Every year, more than 100 000 deaths occur in the WHO European Region due to inadequate housing conditions, many of which could be prevented.
- Cities exhibit high levels of social and environmental inequalities. Less wealthy households may suffer from inadequate homes and indoor cold two to three times more frequently, and have significantly lower access to adequate water supply and sanitation.
- In 2012, a survey of 200 cities in Europe showed that 35% had neither a climate change mitigation plan nor an adaptation plan. 37% had only a mitigation plan, while, while 28% had both a mitigation plan and adaptation plan.



### “Best Buys”

Public health and environment policies and interventions often have a wide social return on investment. Examples in the WHO European Region indicate that the magnitude of savings can be more than double the amount invested, such as: health care savings from interventions preventing homelessness; medical and societal savings triggered by speed cameras in urban settings; and savings in health care costs through ‘green gyms’. Removing housing inadequacies in the EU would pay back €2 for every €3 invested in one year, through lower health care costs and better social outcomes.

**Pocket park in Copenhagen, Denmark**



**Source:** WHO/M. Braubach

Among the interventions that work, the following are considered relevant for all national and sub-national actors:

1. Environmental protection measures and health-based standards for air quality, noise, drinking water, housing, and urban design help tackle urban problems and may especially benefit disadvantaged groups.
2. Local health targets and city-wide objectives can help to facilitate intersectoral action towards a common objective and make all municipal sectors accountable for achieving healthy settings with a high quality of life.
3. Environmental monitoring enables the provision of data to identify urban challenges and disparities, and derive priorities for action.
4. A wide range of tools, guides and instruments has been developed to support multi-sectoral planning approaches for the creation of healthy and sustainable urban settings. Impact assessments and strategic environmental assessments are helpful mechanisms that include health at an early planning stage.
5. Examples of technical interventions to improve urban environments are: local restrictions on the movement of polluting vehicles (e.g. environmental zones); the provision of effective public and active transport options; the establishment of incentives for sustainable choices and lifestyles; and the promotion of mixed-use neighbourhoods to avoid long travel distances for daily needs.

### Key references

New Urban Agenda. Adopted at Habitat III in Quito, Ecuador. Nairobi: UN Habitat; 2016 (<https://habitat3.org/the-new-urban-agenda/>, accessed 2 May 2017).

Health as pulse of the new urban agenda. Geneva: World Health Organization; 2016

(<http://apps.who.int/iris/bitstream/10665/250367/1/9789241511445-eng.pdf?ua=1>, accessed 2 May 2017).

Urban green space interventions and health. A review of impacts and effectiveness. Copenhagen: WHO Regional Office for Europe; 2017 ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0010/337690/FULL-REPORT-for-LLP.pdf](http://www.euro.who.int/__data/assets/pdf_file/0010/337690/FULL-REPORT-for-LLP.pdf), accessed 5 May 2017).

Environmental burden of disease associated with inadequate housing. Copenhagen: WHO Regional Office for Europe; 2011 ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0017/145511/e95004sum.pdf](http://www.euro.who.int/__data/assets/pdf_file/0017/145511/e95004sum.pdf), accessed 2 May 2017).

Urban adaptation to climate change in Europe 2016 – Transforming cities in a changing climate. Copenhagen: European Environment Agency; 2016 (<https://www.eea.europa.eu/publications/urban-adaptation-2016>, accessed 2 May 2017).

## Sixth Ministerial Conference on Environment and Health

13–15 June 2017, Ostrava, Czech Republic