

# Sustainable cities → Health at the Heart of Urban Development

Health-focused urban design can roll back the epidemic of noncommunicable diseases (NCDs), making cities a bedrock for healthy lifestyles – as well as climate-friendly and resilient. WHO's new Urban Health Initiative provides a model for the health sector to contribute to healthy urban planning and policies.

## A “health-centric” approach to planning and development

Health is a city's most important asset. Yet most of the 3.5 billion people living in cities – half of humanity – suffer from inadequate housing and transport, poor sanitation and waste management, and air quality failing WHO guidelines. Pollution and congestion, shifts from fresh to processed foods, and a dearth of space for walking, cycling and exercise also combine to make cities epicentres of the NCD epidemic and drivers of climate change.

As most future urban growth will take place in developing cities, urban expansion needs to be planned from the “ground up” to make cities centres of health and well-being – with durable housing in accessible neighbourhoods, efficient energy and transit networks, robust water, waste and sanitation systems, and ample green spaces – preventing disease and protecting the climate.

WHO's new Urban Health Initiative creates a paradigm shift in health systems approaches by focusing on urban environment that is the prerequisite for healthy lifestyles – and disease prevention.

The initiative builds a new cadre of health policy leadership positioned to assess and advocate for development that leads to healthier, greener and cleaner cities. This contributes to attainment of a range of SDG goals and the New Urban Agenda of Habitat III.

## Major impacts on health, development and climate

Most of the top 10 causes of death (2015)<sup>1</sup> are directly or indirectly influenced by faulty urban design and planning policies.

- Heart attack (1), stroke (2), chronic respiratory disease (4), lung cancers (5) – more than a quarter to one-third of deaths are caused by air pollution – with urban traffic, waste, industry, cooking, heating and power production, as leading sources.
- Pneumonia (3) – air pollution causes more than one half of deaths.
- Diabetes (6) – linked to obesity and physical inactivity common in car-dependent cities lacking robust transit and walking/cycling networks, as well as urban fresh food markets.

## Healthy cities – key to SDG attainment

Action in cities can drive progress towards multiple SDGs:

■ Reduce air pollution (SDGs 3.9 and 11.6)

■ Combat noncommunicable diseases (NCDs) and related risks like obesity (SDG 3.4)

■ Access to public transport with special attention to women, children, persons with disabilities and older persons (SDG 11.2)

■ Sanitation and waste management (SDGs 3.9 and 11.6)

■ Equity (SDG 10)

■ Access to safe public and green spaces, particularly for women, children, older persons and persons with disabilities (SDG 11.7)

■ Climate action – climate resilience (SDG 13)



- Diarrhoeal diseases (8) and Tuberculosis (9) are closely related to poor sanitation and waste management and unhealthy housing.
- Traffic injuries (No. 10) Pedestrians and cyclists, including children, older people and the poor are exposed to traffic injury due to lack of safe, rapid transit, walking and cycling.

Poor urban waste management also perpetuates transmission of vector-borne and diseases, including dengue fever as well as Zika and Ebola, two emergent health challenges. Urbanization also is linked to soaring rates of depression, anxiety and other mental disorders, exacerbated by noise, lack of green spaces, and crowding, as well as poverty, poor working conditions and other stressors.

Cities produce 75% of carbon emissions, while urban populations are among the most vulnerable to climate change.<sup>2</sup> Coastal cities suffer from sea level rise and storms. Inland, cities may experience temperatures 3–5° C higher than surrounding rural areas due to the “heat island” effect of large concrete expanses and lack of green cover. Direct climate change costs to health are expected to reach US\$ 2–4 billion/year by 2030.<sup>3</sup>

# WHO's response: building health sector leadership in urban development

## 1. Monitoring urban air pollution levels as a key health indicator

In 2016, 98% of cities in low- and middle income countries and 56% of cities high-income countries with more than 100 000 inhabitants failed to meet *WHO air quality guidelines*. Improving air quality is thus a key indicator of sustainable cities. The WHO Urban Ambient Air Pollution Database is a unique resource monitoring SDG 11.6.2.

## 2. Improved tools for local decision-makers

WHO's new online *AirQ+* tool enables urban health and air quality experts to quantify both deaths and hospitalizations due to local air pollution exposures. Tools such as *HEAT* (health economic assessment of transport for walking and cycling) allow policy-makers to estimate health improvements and related economic savings of increased physical activity due to walking and cycling. New adaptations of these and other tools will make them easier to deploy in low and middle income cities, which tend have far less data available.

## 3. Guidance for a healthier urban environment

WHO's report on *Health as the Pulse of the New Urban Agenda* applies a "health-centric" lens to urban development trends and offers a pathway for building healthier cities. WHO's work on transport in its *Health in the Green Economy* series and *Urban Transport and Health – handbook for policy-makers* – explains how healthy transport and land use development can be a "backbone" for healthy, low-emissions cities. Tools and materials are available on the WHO site *Cities and Health*.

## 4. Urban Health Initiative

WHO's Urban Health Initiative is working in low- and middle-income cities to foster health sector leadership in the urban transformation. The initiative focuses on three main areas of activity:

- Cross-sector stakeholder consultations including health, other key urban sectors and civil society, and dialogue on health impacts, issues and "best buys".

### Piloting the Urban Health Initiative – Accra Ghana

In Accra, Ghana, WHO is testing its new approach to urban health and development. The pilot is in collaboration with the ministries of health and environment, the Climate and Clean Air Coalition, Government of Norway, World Bank, UN Habitat and other UN agencies, and civil society groups such as the ICLEI network of local authorities and the Global Alliance of Clean Cookstoves.

The initiative is training health professionals to assess health costs and benefits of interventions in the transport, municipal solid waste and home energy sectors, and identify the optimal package of strategies. A BreatheLife communications campaign will also be piloted in Accra to increase awareness about air pollution in East Africa and communicate about local successes globally.

## Ladder of urban transformation – Urban Health Initiative

Health and economic arguments provide urban leaders with incentive to act; changes in air pollution and related policies monitored and tracked, using WHO Global Urban Ambient Air Pollution database

Urban leaders and champions engaged to communicate costs of inaction, including through the global BreatheLife Campaign, intensifying demand for action

Alternative scenarios based on policy options tested or considered locally to estimate potential health and economic impacts

Tools for assessing health and economic arguments such as WHO's AirQ+, HEAT and One Health adapted and used locally

Health policy-makers build competencies in assessing health and economic impact of policies and in advising other sectors on urban environmental health risks

Current policies with major impacts on air pollution and health are mapped along with key stakeholders in urban health and urban development sectors and civil society

- Health sector training in tools for air pollution burden of disease assessment, health impact assessment and economic comparisons of costs and benefits of alternative development scenarios (e.g. for urban transport, energy and waste management).
- Advocacy and communication about urban policies that promote health and prevent disease.

## 5. Advocacy for change – the BreatheLife cities network

WHO is building a network of "BreatheLife Cities" ([www.breathelife2030.org](http://www.breathelife2030.org)) that are committed to achieving WHO air quality goals and reducing climate emissions. The BreatheLife campaign is in partnership with UN Environment and the Climate and Clean Air Coalition to reduce short-lived climate pollutants. Over two dozen cities have joined the network, including cities in Jalisco State, Mexico; Greater Manchester Region, UK; and Chile. The campaign is now expanding through Europe, Asia and Africa.

### For more information:

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<http://www.breathelife2030.org>

### Endnotes:

- 1 [http://www.who.int/gho/mortality\\_burden\\_disease/causes\\_death/top\\_10/en/](http://www.who.int/gho/mortality_burden_disease/causes_death/top_10/en/)
- 2 <http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-11-sustainable-cities-and-communities/targets/>
- 3 <http://www.who.int/mediacentre/factsheets/fs266/en/>