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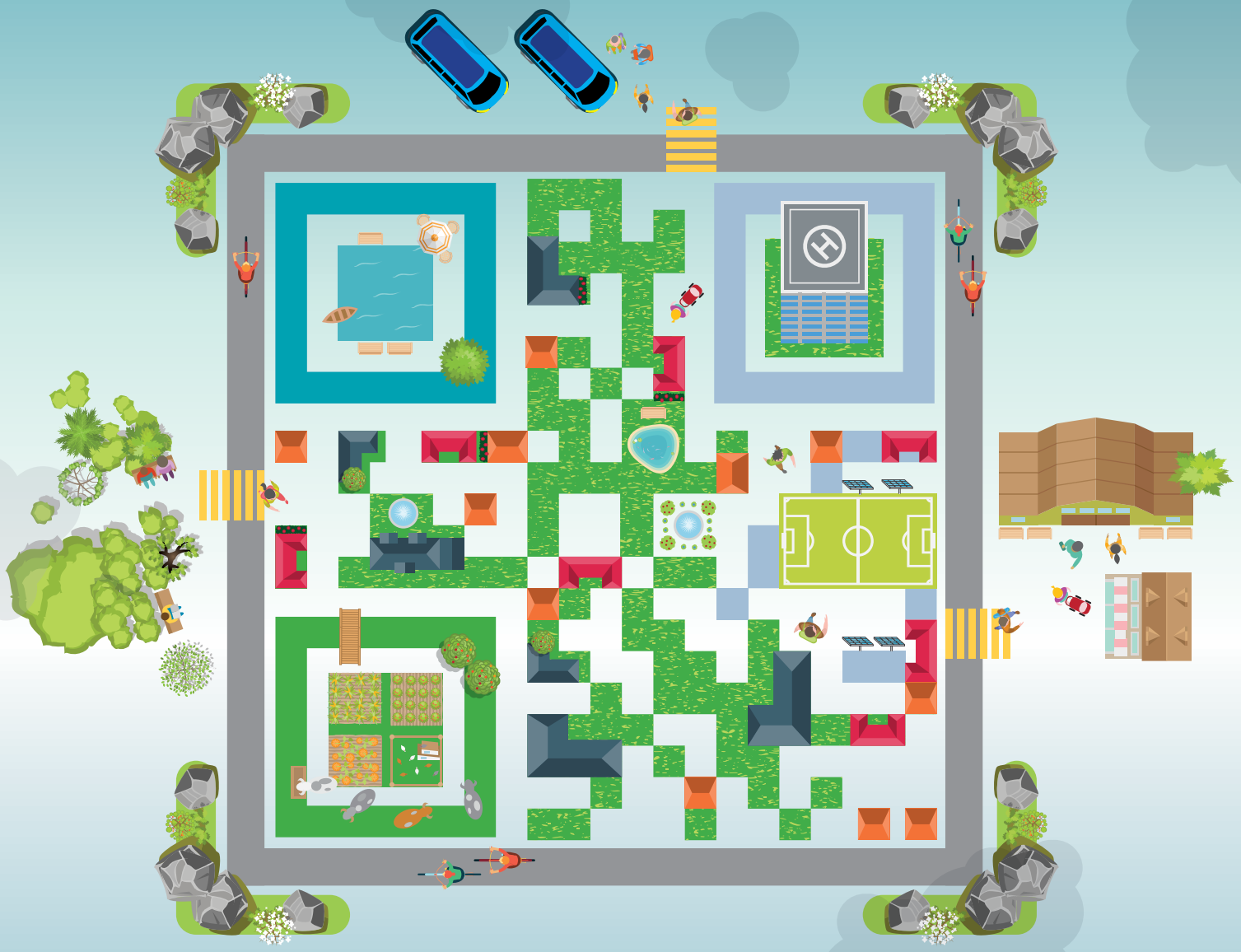

Integrating health in urban and territorial planning:

A sourcebook

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ABBREVIATIONS

FAO	Food and Agriculture Organization
HEART	Health Equity Assessment and Response Tool
HEAT	Health Economic Assessment Tool for cycling and walking
HIA	health impact assessment
HiAP	Health in All Policies
IG-UTP	International Guidelines on Urban and Territorial Planning
ISOCARP	International Society of City and Regional Planners
LMICs	low- and middle-income countries
NCD	noncommunicable disease
NGO	nongovernmental organization
OECD	Organisation for Economic Co-operation and Development
SDGs	Sustainable Development Goals
UHC	universal health coverage
UHI	Urban Health Initiative
UK	United Kingdom of Great Britain and Northern Ireland
UN-Habitat	United Nations Human Settlement Programme
UNICEF	United Nations Children's Fund
USA	United States of America
UTP	urban and territorial planning
WASH	water, sanitation and hygiene
WHO	World Health Organization

GLOSSARY

Agglomeration economies: Competitive advantages that accrue to businesses from location in a large urban centre, e.g. access to a larger market for labour and for components and for the sale of products. Also, there are advantages of access to capital and knowledge.

Climate change: A change in the state of the climate that can be identified (e.g. using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer.

Governance: The political and administrative management of places that involves partnerships (formal or informal) between governments at different levels but also the private sector and civil society organizations.

Heritage: Includes both tangible heritage, such as historic buildings, public spaces or landscapes, as well as intangible heritage, such as cultural practices and traditions.

Infrastructure: An interconnected network of physical artefacts and organizational structures that supply basic services to humans living in a built environment.

New Urban Agenda: A blueprint for sustainable urbanization, the New Urban Agenda was the product of Habitat III, launched in 2016, 1 year after the launch of the Sustainable Development Goals (SDGs).

Participatory budgeting: A way of reaching decisions on spending priorities by rounds of public consultation to inform municipal budgets. As a democratic process, it gives citizens a direct say in where and how money should be spent on their behalf by their municipality.

Resilience: The ability of a system or a place and its people to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient way.

Sustainable Development Goals (SDGs): Succeeding the Millennium Development Goals, 17 SDGs were launched as the core of the 2030 Agenda for Sustainable Development in 2015.

Vulnerability: Conditions that reduce the ability of a place and its people to prepare for, withstand or respond to a hazard.

Urban and territorial planning (UTP): Urban and territorial planning can be defined as a decision-making process aimed at realizing economic, social, cultural and environmental goals through the development of spatial visions, strategies and plans and the application of sets of policy principles, tools, institutional and participatory mechanisms and regulatory procedures.

FOREWORD

The way we plan and build our cities defines our quality of life. It affects not only the quality of our living spaces and transport, but also the air we breathe, the water we drink, and our access to nutritious food, education, health care services and employment.

Over the years, we have learned valuable lessons about urban and territorial planning, which has developed into a multisectoral discipline. It is now commonplace to consider environmental, social, health and well-being as key determinants when planning cities. One of the main challenges today is to ensure that urban and regional leaders have the knowledge and guidance to integrate health and well-being into their planning processes.

Integrating health in urban and territorial planning is a sourcebook for urban planners, city managers, health professionals, and all those interested in the basis for our collective well-being. This sourcebook is the latest result of the close and longstanding collaboration between UN-Habitat and the World Health Organization, also demonstrated by the 2016 publication, *Global report on urban health: equitable healthier cities for sustainable development.*

The sourcebook – for urban leaders, health and planning professionals – provides the health dimension in the practice and implementation of urban and territorial planning. It is designed as a tool to assist national governments, local authorities, planning professionals, civil society organizations and health professionals, by helping to improve planning frameworks and practice through the incorporation of health considerations, at all levels of governance and across the spatial-planning continuum.

The sourcebook is meant to complement and support the implementation of the International Guidelines on Urban and Territorial Planning (IG-UTP) for improved environments and well-being. The guidelines, approved by the UN-Habitat Governing Council in 2015, are a set of universal planning principles for the improvement of planning and management at all levels. The IG-UTP advocate for urban and territorial planning as an integrated and participatory decision-making process to plan and manage our cities and territories in a holistic manner.

This sourcebook builds on the extensive work of the World Health Organization with regard to urban health and health across sectors, offering practical guidance on how to integrate health into urban planning and governance. It is a useful tool for those involved in implementing the United Nations' New Urban Agenda, which sets global standards for sustainable urban development. It is a step further in the understanding that health is not only an outcome but also an essential input for urban and territorial planning, articulated in the 2016 World Health Organization document entitled *Health as the pulse of the New Urban Agenda*.

The sourcebook also shows how an integrated approach to health can influence decisions on sectors such as housing, transport, energy, and water and sanitation. More importantly, it considers how they are all linked to the 2030 Agenda for Sustainable Development.

Health features prominently in the inter-linkages between and among the Sustainable Development Goals, including Goal 11, on sustainable cities and communities, cutting across almost all others and across traditional policy and disciplinary silos.

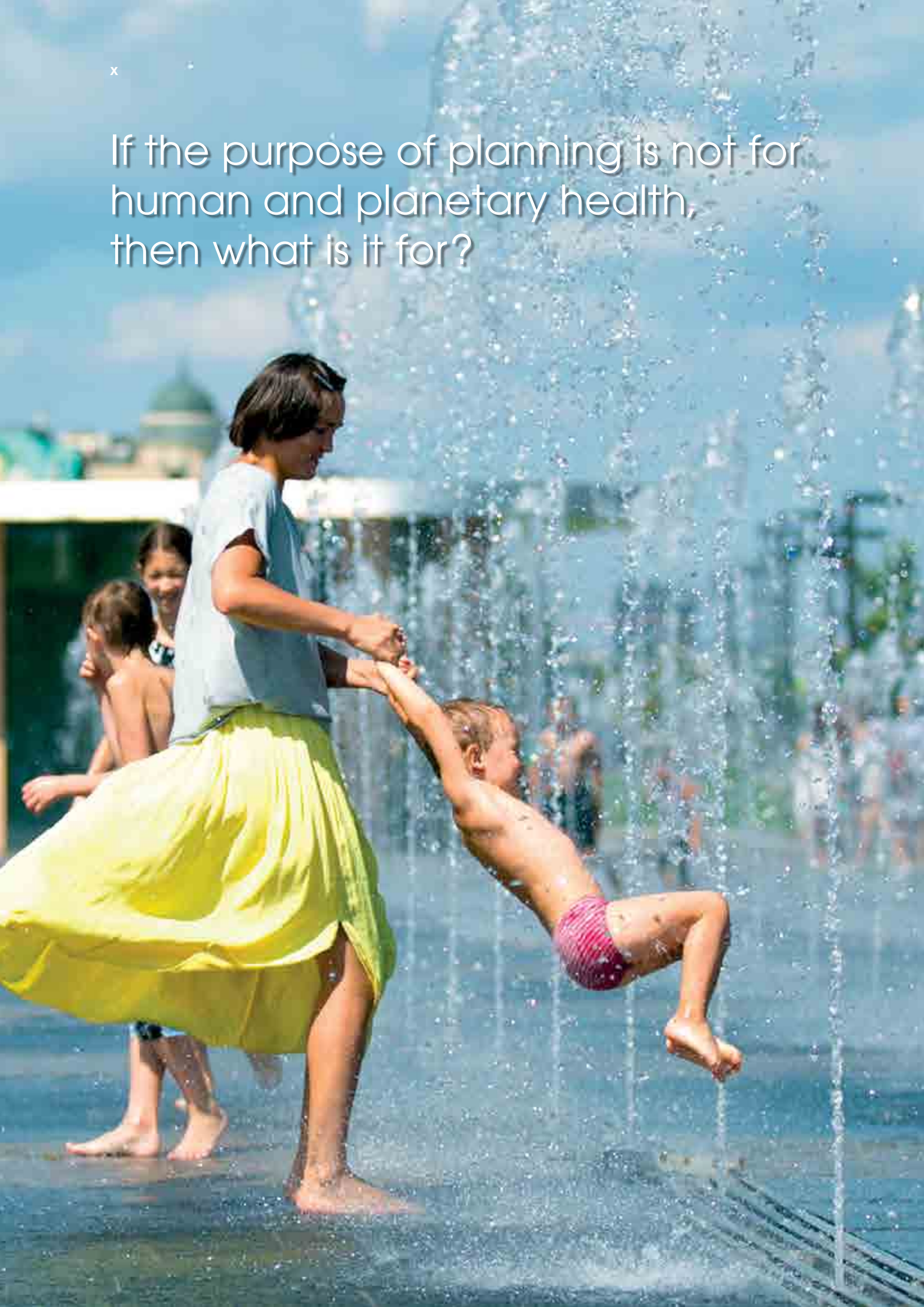
The sourcebook articulates how public health professionals are crucial to good urban and territorial planning. They have a valuable and unique set of skills to bring to the table and can help ensure that routine urban and territorial planning activities, such as economic development or transport planning, are focused on delivering population health and well-being.

We encourage you to make use of this sourcebook so that together we can improve our urban environment, our health and our well-being through the realization of the New Urban Agenda and the Sustainable Development Goals, so that no one and no place is left behind.

Ms Maimunah Mohd Sharif
Executive Director
UN-Habitat

Dr Tedros Adhanom Ghebreyesus
Director-General
World Health Organization

If the purpose of planning is not for human and planetary health, then what is it for?



EXECUTIVE SUMMARY

Urban and territorial planning (UTP) is a critical enabler for health and well-being in cities and regions, and our health is influenced by many factors beyond the health sector. Planning has a central role in the prevention of diseases in the 21st century, as urban policies define the air we breathe, the quality of spaces we use, the water we drink, the way we move, our access to food, and also the treatment of diseases through adequate access to health care for all. Planning decisions can create or exacerbate major health risks for populations, or they can foster healthier environments, lifestyles and create healthy and resilient cities and societies.

At the same time, health is not only an indicator for monitoring progress in UTP, but an essential element to ensure sustainable development. Placing health and well-being at the centre of the planning process can foster good livelihoods, build resilient and vibrant communities, and give voice to vulnerable groups, while enabling progress to reduce inequalities in urban areas.

This sourcebook aims to detail why health needs to be part of UTP and how to make this happen. It brings together two vital elements we need to build habitable cities on a habitable planet:

- Processes to guide the development of human settlements – in this document referred to as "urban and territorial planning (UTP)"; and
- Concern for human health, well-being and health equity at all levels – from local to global, and from human to planetary health.

This sourcebook identifies a comprehensive selection of existing resources and tools to support the incorporation of health into UTP, including advocacy frameworks, entry points and guidance, as well as tools and illustrative case studies. It does not provide prescriptions for specific scenarios – these should be determined by context, people and available resources. These resources and tools can be used by everyone involved in the planning process. Whether you are an urban planner, mayor, developer, architect, landscape architect, engineer, researcher or public health professional, doctor, nurse, community health worker or local community activist, this document aims to inform and inspire you, while also providing practical information on how to take action.

Planning and public health have complementary skill sets, including: design-driven problem-solving; a common ancestry in early sanitation and air quality activity; shared values (such as a whole population focus); and similar work methods (assessing trends and long-term outcomes). They both embrace an integrated and holistic approach.

Working together, planning and public health professionals can ensure that health promotion, disease prevention and better health equity through good UTP is a central component of communicable and noncommunicable disease reduction and management responses.

This sourcebook provides the processes needed to harmonize UTP with concern for human health and brings together these two vital professions. It also highlights additional tools, literature resources for decision-makers, urban leaders, planners and health professionals.

Chapters 1–4 provide an introduction to health in UTP – clarifying who should be involved (national governments, local authorities, civil society and associations, and professionals and their associations); why and how health with UTP can work for all; and what we should be doing to make health in planning work. This section highlights the actors' and decision-makers' responsibilities and power of influence, followed by an in-depth chapter on the reasons and benefits.

At national and global levels, the SDG agenda demands a high degree of coordination and collaboration across sectors to reap multiple benefits, requiring governments at these levels to involve far more stakeholders than those traditionally associated with spatial approaches to infrastructure and resource planning.

Chapter 5 outlines guidance on how to include health in UTP and discusses the principal health inputs to all planning phases (diagnosis, formulation, implementation, and monitoring and evaluation) that are needed from health professionals to contribute to the planning process.

As part of this process, this section introduces four dimensions of planning for health:

- basic planning and legislative standards to avoid risk to health;
- planning codes to limit environments that detract from healthy lifestyles or exacerbate inequality;
- spatial frameworks to enable healthier lifestyles; and
- urban and territorial processes to capture the multiple co-benefits of building in health.

This section gives concrete examples of applications for each of these dimensions. In terms of planning codes, for instance, two examples given are to restrict hot food takeaways near schools and to limit car-oriented isolated developments.

Additionally, this section illustrates how UTP and design can offer small steps to health and health equity even when challenges appear, e.g. working in the absence of good planning legislation and with limited resources. It points to relevant tools and resources for decision-makers, including planning system assessment tools.

Moving further, Chapter 6 provides guidance on approaching health in UTP with an assets-based approach to bring actors and decision-makers together, explains steps and key techniques, and describes scenarios where people, places and processes can be considered assets.

Assets-based approaches need to bring actors and decision-makers together around a positive baseline, recognizing health as an enabler and an outcome in the process. Rather than putting problems at the centre, these approaches place the emphasis on the community's and locality's assets, alongside unmet needs. The first step is to identify existing assets that have or may have a health-determining role. For UTP these will include natural and built environment assets among other potential assets. The second step is to review if, and how, these assets can be put to use or better use.

Collaboration and participation must underpin this approach since its aim is also to foster the agency of local people in the communities affected by an activity or proposal. The approach also strengthens place-based and community leadership to build support among constituents – or public will. Here, planners and built environment professionals are trained in developing and articulating territorially based interventions, while public health professionals are trained in evidence-based solutions and advocacy. This approach views communities not as recipients or beneficiaries of a particular intervention, but as co-creators.

All this should be centred around improved health literacy and a Health in All Policies (HiAP) framework, which is the governance mechanism for translating this understanding into planning processes and measures; both HiAP and health literacy go hand-in-hand. As literacy about the wider determinants of health spreads through actors and decision-makers, adding a health perspective into policy can embed that literacy into the planning system.

Chapter 7 then moves onto identifying entry points to lead to effective actions towards integrating health and UTP, using health as a catalyst for action across a range of entry points. It sets out the characteristics of a good entry point in a given situation that would lead to effective action, and provides examples of taking four different types of entry points for health to engage as an input and outcome in urban design and territorial planning (not at all an exhaustive list):

- by setting (e.g. public spaces, movement corridors like routes to school, cycling paths and active transport);
- by outcome (e.g. increasing physical activity, increasing locational access to health care);
- by principle (e.g. road danger reduction, life-course strategies); or
- by sector (e.g. housing and health, local economy and health).

Chapter 8 outlines tools available to assist with the appraisal and analysis of health and health equity, including existing tools to support health impact assessment (HIA), cumulative risks and comparative risk assessments, spatial epidemiology, citizen science, as well as city dashboards and city profiling.

If the purpose of planning is not for human and planetary health, then what is it for?

Ultimately, this sourcebook reflects on this fundamental question. Whilst UTP is not the answer to all health problems, it is definitely a vehicle for its improvement, and ultimately, for achieving the New Urban Agenda and the many targets associated with urban health in the SDGs.

Putting human and planetary health (back) into planning can also be used as a catalyst for improving planning systems worldwide. There are many opportunities and resources available to incorporate health into UTP and everyone can, and is encouraged to, take action and start planning for health and well-being, making the best use of those resources and opportunities.

From medical doctors to engineers, from architects to community health workers, from mayors to public health authorities, everyone involved should be proud to play their part as a member of the wider public health community and join forces to fulfil the collective vision of healthy, safe, inclusive, equitable cities for all.

1 HEALTH IN URBAN AND TERRITORIAL PLANNING

This sourcebook brings together two vital elements needed to build habitable cities on a habitable planet:

- Processes to guide the development of human settlements – in this document referred to as "urban and territorial planning (UTP)"; and
- Concern for human health, well-being and health equity at all levels – from local to global, and from human to planetary health.

This sourcebook provides advocacy, frameworks, entry points, guidance, tools and case studies. What it cannot provide is a prescription of what to do in any specific situation – that will be determined by context, people and resources. However, it does tell you *why* health needs to be part of UTP and *how* to make this happen.

1.1 Who is this guidance for?

No single agent or even identifiable coalition of agencies can act on their own to fully determine the outcomes of UTP. Urban governance, development and management all have their parts to play. There are many actors and decision-makers who influence urban environments or are concerned with population health. There are also many community organizations who represent those whose lives are affected by urban environments. This sourcebook seeks to reach out to these agents, advocating the importance of using a "health lens" in UTP for everyone involved. The benefits of using a health lens include:

- Reducing the overall burden of disease through non-health budgets, thus supporting universal health coverage (UHC) ambitions.
- Encouraging the health sector, including its leaders, to contribute to more equitable and fairer urban transformations.
- Unlocking additional support and resources to address climate change and the SDGs through engagement of the public health professions with their well-respected voice, and their range of population-focused skills.

Whether you are an architect, urban developer or planner, landscape architect, mayor, engineer, researcher or public health professional, medical doctor, nurse, community health worker or local community activist, this document aims to inform and inspire you, while also providing practical information on how to take action.

1.2 Why is this important?

In tackling the growing burden of disease and health inequalities, the opportunities, risks and challenges to health arising from urbanization need to be addressed. Addressing these issues through urban planning and design is not easy, since human settlements are nested in terms of scale, complex in terms of resource

relationships and in a constant state of change. However, it is possible to influence location, spatial pattern, and local design of place-based features and amenities in the built environment for the benefit of health and health equity. This is applicable to all countries: to high-income countries, where we see a rise of noncommunicable diseases (NCDs) even in the face of strong urban planning systems; and to low- and middle-income countries (LMICs), where inadequate UTP regulation and practices increase the risk of both communicable diseases and NCDs – especially for people living in informal settlements. Whatever the country income level, we can find health inequalities and unsustainable resource use. Although these may have many causes, integrating health in UTP must be considered when looking at solutions.

Disease can be prevented by focusing our attention on the design, creation and management of environments in which people live. A global assessment of the burden of disease from environmental risks (Box 1) clearly indicates the role of the built environment in health, and underscores why we need to harness UTP in the service of health. For any single disease or injury, the

Box 1

Why we need to harness urban and territorial planning in the service of health

Communicable diseases	
Disease or injury	**Main urban and territorial planning intervention areas**
Respiratory illnesses and infections	Household and ambient air pollution, housing improvements, handwashing
Diarrhoeal diseases	Water, sanitation and hygiene, agricultural practices
Intestinal nematodes	Water, sanitation and hygiene, management of wastewater for irrigation
Malaria	Environmental modification and manipulation to reduce vector breeding sites and reduce contact between humans and disease vectors, contextually mosquito-proof drinking water storage
Trachoma	Access to domestic water supplies, latrines
Schistosomiasis	Excreta management, safe water supply
Chagas disease	Management of peri-domestic areas and housing improvements
Lymphatic filariasis	Modification of drainage and wastewater ponds, freshwater collection and irrigation schemes
Onchocerciasis	Water resource management projects (particularly dams)
Leishmaniasis	Housing, cleanliness of the peri-domestic environment
Dengue	Management of water bodies around the house, removing standing water, adequate waste management
Japanese encephalitis	Agricultural practices
Tuberculosis	Exposure of occupational groups to airborne particles; possibly exposure to polluting household fuel smoke; house ventilation to reduce transmission
Hepatitis A and E	Safe water supplies, appropriate sanitation, and food hygiene

Box 1 (continued)

Noncommunicable diseases	
Disease or injury	**Main urban and territorial planning intervention areas**
Cancers	Household and ambient air pollution, second-hand tobacco smoke, UV radiation, and chemicals. Physical activity fostered by supportive environments can reduce some cancer risk
Mental, behavioural and neurological disorders	Floods, earthquakes and fires (linked to housing, flood management, climate change); forced resettlement (e.g. through development projects); noise (for insomnia); poor air quality and odours (for headaches); open, green and public spaces (for mental health)
Cataracts	Household air pollution
Cardiovascular diseases	Household and ambient air pollution, second-hand tobacco smoke, exposure to lead, stressful working conditions including commuting
Chronic obstructive pulmonary disease	Household air pollution, ambient air pollution
Type II diabetes	Environmental factors favouring physical activity and healthy food environments
Asthma and allergenic reactions	Air pollution, second-hand tobacco smoke, indoor exposure to mould and dampness
Musculoskeletal diseases	Prolonged sitting at work (or commuting); need to carry large quantities of water or firewood over significant distances for domestic use
Congenital anomalies	Mothers' exposure to second-hand tobacco smoke, chemicals
Drownings	Community and occupational safety around water bodies and water supplies
Risk factors for noncommunicable diseases	
Disease or injury	**Main urban and territorial planning intervention areas**
Physical inactivity	Prolonged sitting at the workplace, travel modes, transport infrastructure and land-use patterns, availability and accessibility of safe and suitable parks and open spaces
Hypertension	Stressful commuting for work or education, urban noise, inactive environments, unsafe public space and outdoor environments. Lack of perception of safety
Unintentional injuries	
Disease or injury	**Main urban and territorial planning intervention areas**
Road traffic injuries	Design of roads, land-use planning; traffic intensification in development areas with big infrastructure projects; prioritization of pedestrians and cycling; and public transit
Falls	Safety of housing, work, public transit and open space environments

Source: Adapted from *Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks* (Prüss-Ustün et al, 2016). Also includes updates from *Safer water, better health, 2019 update* (WHO, 2019a). This table is a product of a comprehensive meta-synthesis of key evidence relating diseases and injuries to the environment.

effective scale of intervention at which UTP can act might be any one or a combination of the multiscale continuum: supranational and transboundary level; national level; city-region and metropolitan level; city and municipal level; and neighbourhood level.

In all countries, the worrying rise in NCD places extra and often avoidable burdens on health care systems already under pressure. Evidence shows that UTP can reduce the risks to health from both communicable disease and NCD, promote healthy living and well-being, and help to reduce rising health inequality.

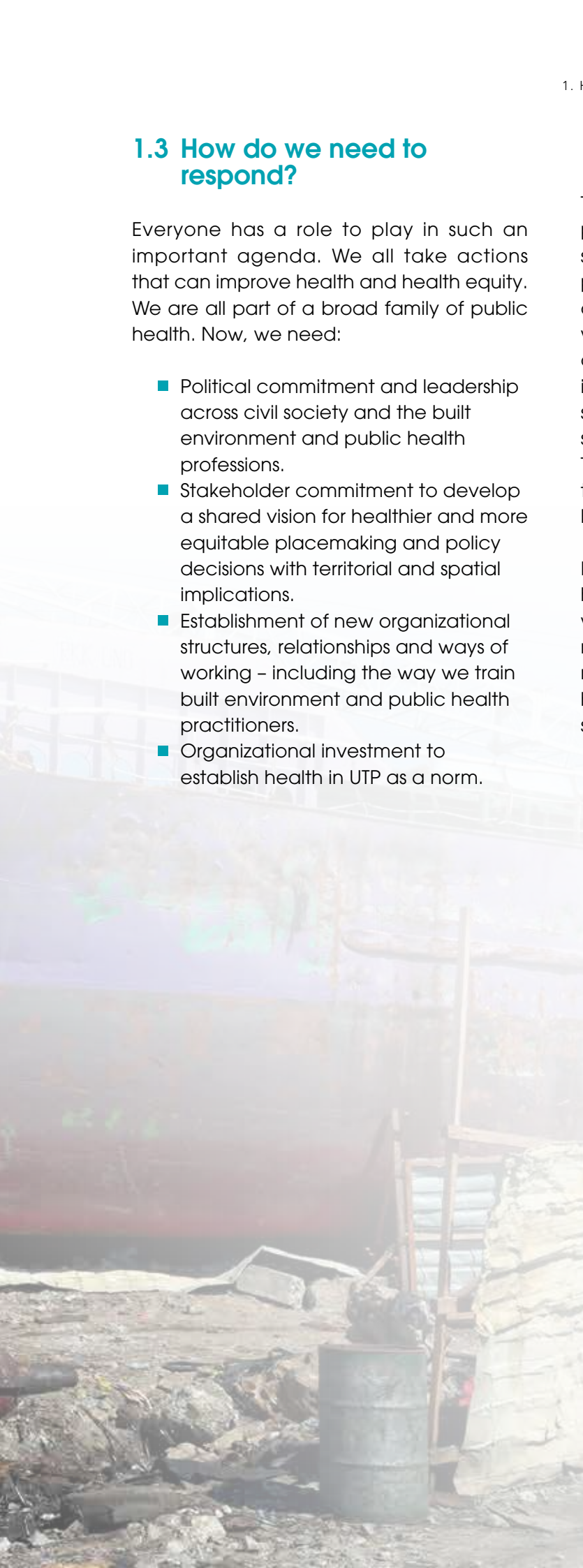
UN-Habitat and WHO have come together to jointly provide guidance for integrating health within the practice and implementation of UTP. This sourcebook serves to support the International Guidelines on Urban and Territorial Planning (IG-UTP) (UN-Habitat, 2015) and builds on other key documents such as the *Global report on urban health: equitable healthier cities for sustainable development* (WHO, 2016a) and *Health as the pulse of the New Urban Agenda* (WHO, 2016b). This sourcebook:

- Confirms UTP as a key framework for coordinating better population health and heath equity outcomes.
- Shows how health is both an input and an outcome for UTP in the delivery of the New Urban Agenda.
- Provides examples of how a health-driven approach can offer better coordination of efforts towards the achievement of SDG 3 (the "health" goal) and SDG 11 (the "cities" goal) and include multiple benefits across a wide range of other SDGs.
- Supports the implementation of UN-Habitat's IG-UTP by using health as a cross-cutting theme.

1.3 How do we need to respond?

Everyone has a role to play in such an important agenda. We all take actions that can improve health and health equity. We are all part of a broad family of public health. Now, we need:

- Political commitment and leadership across civil society and the built environment and public health professions.
- Stakeholder commitment to develop a shared vision for healthier and more equitable placemaking and policy decisions with territorial and spatial implications.
- Establishment of new organizational structures, relationships and ways of working – including the way we train built environment and public health practitioners.
- Organizational investment to establish health in UTP as a norm.



1.4 What should we be doing?

Tackling health through UTP demands a place-based response. Whatever the spatial scale, and however simple or complex the problem, the solution will need to come from and be situated in "locality". Locality starts with the people and includes the resources and all other aspects of the local context, in addition to the physical elements of the space. As such there is no single "what we should do" that can be universally applied. That is why this guidance concentrates on the *how*, i.e. what needs to be done should be developed locally.

However, there are some key principles that help UTP achieve better results for health, well-being and health equity that are repeatedly found in the many published reports and frameworks. These principles have been found to be applicable in most situations:

- **Foster adequate levels of compactness and better connected places:** creating economically and socially viable local communities with accessible local amenities providing opportunities for everyday physical activity through mobility for all.
- **Create urban environments that are more socially inclusive:** involving people in making places that cater for a variety of needs, through the life-course and in different circumstances, promoting informal interaction through public open space.
- **Design human settlements that are less demanding on resources and more resilient:** using nature-based solutions, innovative technologies and good practices of production, consumption and disposal to promote health, protect the environment and improve resilience to climate change and natural disasters.

2 WHAT HEALTH CAN BRING TO URBAN AND TERRITORIAL PLANNING

The argument that UTP can contribute to health is well made and often made – with better health and health equity as outcomes. To cement this partnership, in this guidance we also ask what health can bring to UTP. Health can be a valuable input into UTP, as well as an outcome. For example, population health as a theme acts as a potent catalyst and enabler for more people-centred planning. If public health professionals are involved early on in a planning process, they can contribute up-to-date, localized health and equity data and support evidence-informed design solutions.

Together, planning and public health can be effective in covering and bringing into alignment virtually all SDG targets.

Actors and decision-makers at all levels and from many sectors have a role in designing healthy, resilient cities. They also have a duty to recognize the importance of strengthening community participation. The local community has a pivotal role in contributing knowledge about the experience and use of their living environments – without them, local buy-in and outcomes are weakened.

The following chapter targets four key stakeholder groups: national governments, local authorities, civil society organization and associations, as well as professionals and their associations. It highlights the responsibilities and power of influence these groups have, followed by an in-depth chapter on the reasons and benefits.

2.1 National governments

At supranational and national levels, UTP has a tradition of involving those associated with spatial approaches to infrastructure and resource planning. The SDG agenda now demands a higher degree of coordination and collaboration so as to achieve multiple benefits. Collaboration on spatial projects involving public health can help combat the siloed and disparate forces that constantly hinder such interventions, whereby different sectors set conflicting goals. We now need to strengthen strategic and spatially focused systemic public health practice at supranational and national level for UTP.

Human settlements, seemingly physically separated from the environment, do not exist in isolation. The health of all urban populations is dependent on a matrix of natural processes both locally and across the globe. The lifestyles available to those populations are strongly influenced by spatial planning, which affects the ability to choose healthy behaviours and is enabled by national spatial policy. As such, UTP can support the delivery of national plans to combat communicable diseases and NCDs and address major public health concerns, such as childhood obesity or elderly social isolation.

> "National governments, in cooperation with other spheres of government and relevant partners, should: Promote the use of spatial planning as a facilitating and flexible mechanism rather than as a rigid blueprint. Spatial plans should be elaborated in a participatory way and their various versions made accessible and user-friendly, so that they are easily understood by the population at large."
>
> IG-UTP, p.24 (UN-Habitat, 2015).

Cross-boundary data with trends must include population health and health equity information, as well as the resource- and ecosystem-based determinants of health to provide a basis for agreeing common goals across sectoral boundaries, at supranational and national levels. Acting at national level and across boundaries is especially important for large-scale ecosystem resources that support health, and for major coordination, assessment and monitoring of infrastructure projects such as railways, airports, coastal areas, dams and watershed programmes.

> "Disaggregated health indicators can help document how citizens benefit from urban investments in infrastructure and environmental and social protection. […] Vulnerable populations can receive additional protection when health risks are fully considered in urban planning."
>
> *Health as the pulse of the New Urban Agenda*, p.7 and p.9 (WHO, 2016b).

Nationally and regionally, the relationship and polycentricity of nearby urban settlements and management of urban-rural relationships need careful consideration of health impacts. National governments have a role in ensuring that the correct data are available, and the correct responsibilities are enabled, for strategic planning in situations that demand coordination between different cities that are functionally linked (polycentric), or in areas where there needs to be coordination between a city authority and the administration areas in its rural hinterland (peri-urban).

2.2 Local authorities

Managing a city-region, city or district involves coordinating policy across a wide variety of environmental, social and economic domains to achieve successful outcomes. Public health and planning, working together, can better support that vital link between "people" and "place".

> "Local authorities, in cooperation with other spheres of government and relevant partners, should: Provide political leadership for the development of urban and territorial plans, ensuring articulation and coordination with sectoral plans and other spatial plans and with neighbouring territories, in order to plan and manage cities at the appropriate scale."
>
> IG-UTP, p.10 (UN-Habitat, 2015).

In terms of settlement planning and development, local authorities can act as major game changers. They control the scale where major national policies converge with local territorial realities. Local authorities have the potential to strengthen urban-rural linkages and break administrative thematic barriers, as many have their own in-house planning and public health staff.

2.3 Civil society organizations and associations

In many cases civil society actors have the closest interaction with everyday environments and places under review. Thus, they provide a key contribution, supporting local authorities in identifying needs and priorities, raising public awareness, ensuring continuity in long-term objectives of urban and territorial plans, and strengthening community participation for local buy-in and for local knowledge on process and place.

> "Civil society organizations and their associations, this stakeholder group includes a wide range of actors from small grassroots and community-based initiatives to global nongovernmental organizations."
>
> IG-UTP, p.14 (UN-Habitat, 2015).

Public health draws much of its strength from being close to people's lives and everyday lived experiences. Local people and their formal or informal associations can often be best placed to point out what needs to be changed to enable healthier lives and more inclusive communities.

Local communities and the organizations representing them may hold key knowledge vital to unlock better public health in their locality, but may also be the least powerful, especially if made up of often marginalized and disadvantaged communities. The professionals involved have a duty to go beyond consultation and enable and facilitate the active engagement of local people in the planning process.

> "The 'right to the city' includes the right to access spaces that promote social cohesion, support healthy lifestyles and deliver economic benefits as well as the right to transform the city by legitimizing leadership from within the community. Considering health impacts can promote fuller participation in urban decision-making by various stakeholders and members of different communities."
>
> *Health as the pulse of the New Urban Agenda,* p.11 (WHO, 2016b).

2.4 Professionals and their associations

Public health professionals are central to good UTP and now need to be accepted as key actors and decision-makers. They have a valuable and unique set of skills to bring to the table. The key outcome of traditional thematic areas for UTP, such as economic development or transport planning, is to deliver population well-being. However, this goal can get distorted or even lost in the siloed world of sectoral working. Public health professionals can help develop the outcome-focused monitoring processes to keep these complex policy areas on track.

The work of urban and territorial planners has a decisive impact on health, and they need to be seen and view themselves as part of the wider public health workforce. Planning and public health encompass complementary skill sets, design-driven problem-solving, a common ancestry (in early sanitation and air quality activity), shared values (such as a whole population focus) and similar work methods (assessing trends and long-term outcomes). Both embrace an integrated and holistic approach.

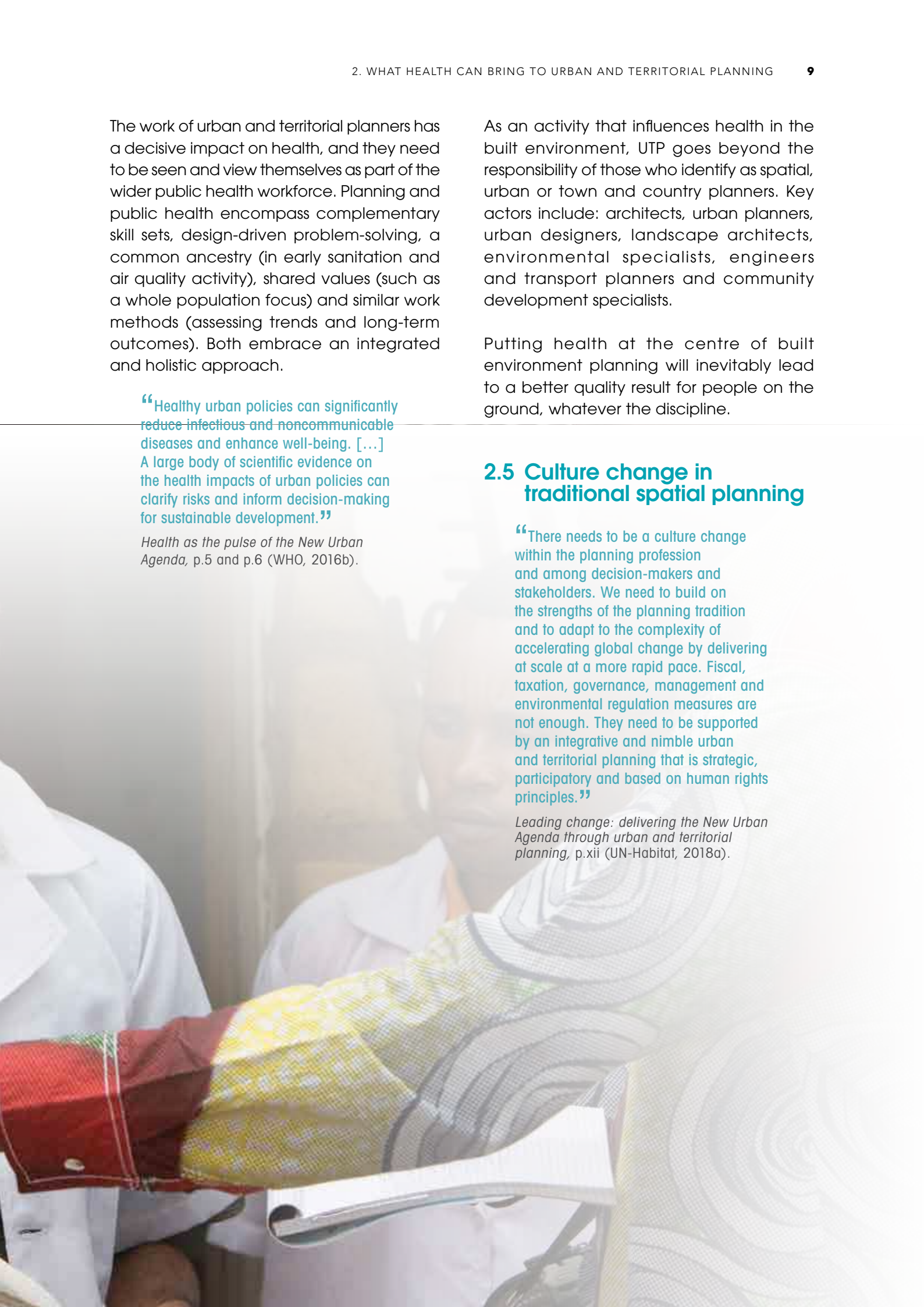
> "Healthy urban policies can significantly reduce infectious and noncommunicable diseases and enhance well-being. […] A large body of scientific evidence on the health impacts of urban policies can clarify risks and inform decision-making for sustainable development."
>
> *Health as the pulse of the New Urban Agenda,* p.5 and p.6 (WHO, 2016b).

As an activity that influences health in the built environment, UTP goes beyond the responsibility of those who identify as spatial, urban or town and country planners. Key actors include: architects, urban planners, urban designers, landscape architects, environmental specialists, engineers and transport planners and community development specialists.

Putting health at the centre of built environment planning will inevitably lead to a better quality result for people on the ground, whatever the discipline.

2.5 Culture change in traditional spatial planning

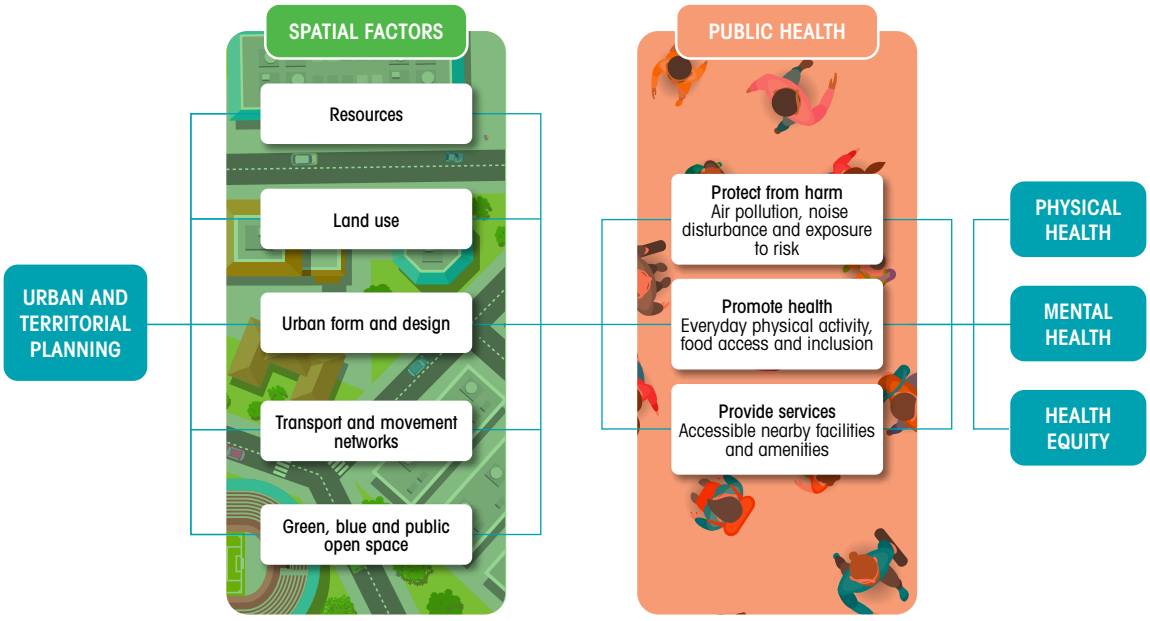
> "There needs to be a culture change within the planning profession and among decision-makers and stakeholders. We need to build on the strengths of the planning tradition and to adapt to the complexity of accelerating global change by delivering at scale at a more rapid pace. Fiscal, taxation, governance, management and environmental regulation measures are not enough. They need to be supported by an integrative and nimble urban and territorial planning that is strategic, participatory and based on human rights principles."
>
> *Leading change: delivering the New Urban Agenda through urban and territorial planning,* p.xii (UN-Habitat, 2018a).



3 WHY INTEGRATE URBAN AND TERRITORIAL PLANNING WITH HEALTH?

The most important asset of any city is the health of its people, which is essential for fostering good livelihoods, building a productive workforce, creating resilient and vibrant communities, enabling mobility, promoting social interaction and protecting vulnerable populations (WHO, 2016b).

At the same time, the "causes of the causes" of ill health (the upstream determinants) are of increasing concern to the international health community. At the local level, fragmented settlement patterns, uncontrolled urbanization, unsustainable patterns of production and consumption, food system insecurity, and poor urban air quality all take their toll on human well-being in urban areas. Risks and challenges to health are also arising from global phenomena such as climate change, and ecosystem and biodiversity loss. Adverse health impacts are exacerbated by increasing inequalities and, in many cases, demographic change. These urgent challenges reveal the extent of influence our approaches to UTP have on people's health. Urban and territorial planning influences how we use and access resources, land-use patterns, urban form and urban spatial design, biodiversity and nature, transport investments, i.e. the very nature and form of urban development, including important urban-rural dimensions; all of which are determinants of health outcomes and health equity (Fig. 3.1).



Source: Adapted from Lan al., 2018.

Fig. 3.1 How spatial factors impact on health and health equity

Box 2

Inequity in health

The impact of the urban environment on health and, in particular, inequity in health, has been widely documented. Evidence shows that while public services, including health and health service provision, tend to be better in urban than in rural areas, these differences often mask wide disparities between more and less disadvantaged populations.

Differences in health across the population can be observed in any city. Genetic and constitutional variations lead to variations in the health of individuals, as they would for any other physical characteristic. Older people tend to be sicker than younger people, because of the natural ageing process.

Three features, when combined, turn a mere difference in health into an inequity in health. A difference in health that is **systematic, socially produced** (and, therefore, modifiable) and **unfair** is an inequity in health. Inequity is unfair because we know how to reduce inequities with available solutions and to not take action is unjust. Furthermore, inequities are avoidable and preventable. See the Urban Health Equity Assessment and Response Tool (HEART) (Resource 39).

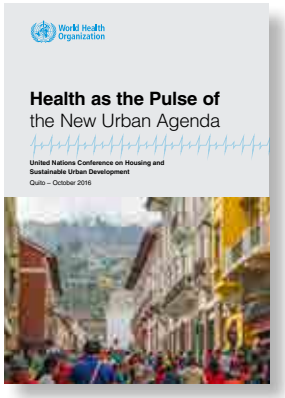
Promoting health and preventing disease for the most vulnerable can:
- protect all populations
- save money in future health care expenditures and disease-related disability.

3.1 Alignment of health and sustainable development in the urban agenda

Urban and territorial planning is an important pillar of the New Urban Agenda and the attainment of the SDGs. In 2015, UN-Habitat published the International Guidelines on Urban and Territorial Planning. These guidelines set the foundation for a different way of thinking about the way cities are governed, planned and developed. As conceptualized by UN-Habitat, UTP has a three-pronged approach: urban planning and design; rules and regulations; and municipal finance. This sourcebook primarily addresses the first of these – urban planning and design.

The terminology and scope of urban planning and design will vary from country to country, as well as the degree to which urban planning and design are regulated, how well they are regulated and the degree to which informal drivers play a part. Urban planning and design may cover spatial planning, town and country planning, land-use planning, nature conservation and designations, urban design and form, street design and transport network design, as well as estate layout.

The WHO responded to the New Urban Agenda in *Health as the pulse of the New Urban Agenda* (WHO, 2016b), acknowledging the interrelationship between the urban environment and health. *Health as the pulse of the New Urban Agenda* recognized the relevance of health for the SDGs that lie outside SDG 3 (health and well-being), and, with SDG 3, it highlighted



the importance of urban governance and planning as upstream determinants of health and health equity. The WHO Urban Health Initiative (UHI) (WHO, 2020), implemented in close collaboration with UN-Habitat and other partners, offers the tools, knowledge and a model process for cities and regions to facilitate the incorporation of health into planning and decision-making processes.

This sourcebook builds on these foundations by providing a health lens through which to view UTP. Urban and territorial planning is a broad term for the many processes and wide range of actors and decision-makers, both formal and informal, which ultimately determine the development of the built environment at all scales; from the large-scale, national or multinational infrastructure of railways, water management and energy, to city-scale projects, down to renewal/renovation or other initiatives in neighbourhoods, streets and parks.

> "By 2050, the world's urban population is expected to nearly double, making urbanization one of the twenty-first century's most transformative trends. Populations, economic activities, social and cultural interactions, as well as environmental and humanitarian impacts, are increasingly concentrated in cities, and this poses massive sustainability challenges in terms of housing, infrastructure, basic services, food security, health, education, decent jobs, safety and natural resources, among others."
>
> *New Urban Agenda: Quito declaration on sustainable cities and human settlements for all,* p.3 (United Nations, 2017).

3.2 Urban and territorial planning affects people's health

We know that urban policies can affect the air we breathe, the quality of the spaces in which we live, work and play, the water we drink, the way we move about, as well as our access to healthy, nutritious foods and to health care services. However, worldwide,

Box 3

Examples of why urban and territorial planning is important for health

Unhealthy environments: In 2012, 12.6 million people died globally as a result of living or working in an unhealthy environment – nearly 1 in 4 of total global deaths. Environmental risk factors, such as air, water and soil pollution, chemical exposures, climate change, and ultraviolet radiation, contribute to more than 100 diseases and injuries (Prüss-Ustün et al, 2016). Heading this list are stroke, ischaemic heart disease, diarrhoea and cancers. The environmentally mediated disease burden is much higher in lower income countries, except for certain NCDs, such as cardiovascular diseases and cancers, where the per capita disease burden is greater in the developed world. In a rapidly urbanizing world, a large share of this health burden relates to urban environments that are poorly planned, managed and maintained.

Air pollution: In 2016, 7 million global deaths were attributable to the joint effects of household and ambient air pollution (WHO, 2018a); this includes deaths from cardiovascular diseases, chronic respiratory diseases and lung cancer. Around 91% of the world's population was living in places where the WHO air quality guidelines levels were not met (WHO, 2018b). People face disability and premature death from illnesses caused by air pollution, yet barely 1 in 10 cities worldwide meet pollution control targets.

Physical inactivity: Worldwide, 1 in 4 adults, and 3 in 4 adolescents (aged 11–17 years), do not currently meet the global recommendations for physical activity set by WHO. As countries develop economically, levels of inactivity increase. In some countries, levels of inactivity can be as high as 70%, due to changing patterns of transportation, increased use of technology and urbanization (WHO, 2018c). The global cost of physical inactivity was estimated to be INT$ 54 billion per year in direct health care (in 2013), with an additional INT$ 14 billion attributable to lost productivity – representing of 1–3% of national health care costs.

Poor nutrition: In 2014, more than 1.9 billion adults worldwide (18 years and older) were overweight, while 462 million were underweight. More than 600 million were obese. In the same year, 42 million children under the age of 5 were overweight or obese. Meanwhile, 156 million children were affected by stunting (low height-for-age) and 50 million children were affected by wasting (low weight-for-height). Poor nutrition continues to cause nearly half of deaths in children under 5, while LMICs now witness a simultaneous rise in childhood overweight and obesity – increasing at a rate 30% faster than in richer nations (WHO, 2019b).

Housing conditions: Health conditions related to housing – such as poor access to water, poor indoor environmental quality and exposure to dangerous substances or hazards, or to infectious diseases – present an important health burden. For instance, poor water, sanitation and hygiene (WASH) conditions were responsible for 829 000 deaths from diarrhoeal disease worldwide in 2016. Moreover, in Europe, about 15% of all new childhood asthma can be attributed to indoor dampness, and almost 110 000 people die every year as a result of injuries at home or during leisure activities (WHO, 2018d).

Inequity: While evidence of the "urban advantage" suggests that city populations often enjoy better health than their rural counterparts, there are substantial differences in health opportunities and outcomes in urban areas. To put that in perspective, urban data in 79 countries showed that children in the poorest one fifth of urban households are twice as likely to die before their fifth birthday compared with children in the richest one fifth. In some places, this ratio is greater than five (WHO, 2016a).

Climate breakdown: Even with global warming reaching just 1.5 °C, 350 million more people could be exposed to deadly heat stress by 2050, with the number of heat-stressed megacities doubling from today's levels (Ebi et al, 2018).

Noise and mental health: The results of a WHO study indicate that at least 1 million healthy years of life are lost every year from traffic-related environmental noise in western Europe alone (WHO Regional Office for Europe & JRC, 2011). In addition to auditory damage, noise is a non-specific stressor that has been shown to have an adverse effect on human health, especially following long-term exposure. The burden of disease from environmental noise lies mainly in cardiovascular disease, cognitive impairment in children, sleep disturbance, tinnitus and annoyance. Sleep disturbance and annoyance, mostly related to road traffic noise, constitute the bulk of this burden.

the health of populations in cities and their surrounding areas are threatened by the deteriorating quality of both the built and natural environment (e.g. air pollution, noise and water contamination). The causes lie in the use of polluting fuels and technologies, inadequate solid and liquid waste management and poor design of buildings. Framed as part of a bigger picture, much of this is due to unsustainable sectorial and siloed policy processes (UN-Habitat, 2017). Even now, the lack of adequate infrastructure for basic water and sanitation services, a provision which is so intrinsic to UTP, is linked to major infectious diseases and to striking health inequalities in many cities. Some 3 in 10 people worldwide, or 2.1 billion, lack access to safe, readily available water at home, and 6 in 10, or 4.5 billion, lack safely managed sanitation (WHO & UNICEF, 2017).

In addition to communicable diseases in poor urban environments still prevalent in many areas, urbanization is driving NCD epidemics, which in turn can undermine the resilience and sustainability of cities. The consumption, living and working patterns of urban residents have the potential to drive an increase in NCDs in cities. Noncommunicable diseases already account for nearly 70% of global deaths each year (WHO & UNDP, 2016) with rapid and unplanned urbanization being a major factor. This is a burden for people and additional costs for health care.

> "Noncommunicable diseases are now the largest cause of death and disease worldwide, and numbers are on the rise. Ever more people require treatment, and health-care costs are growing. Achieving a healthy and sustainable environment is a key ingredient for preventing disease and enabling viable health care."
>
> *Preventing noncommunicable diseases (NCDs) by reducing environmental risk factors,* p.1 (WHO, 2017).

Preventable risk factors, such as physical inactivity, unhealthy diet, the harmful use of alcohol and tobacco consumption, have long been recognized risks to health at the individual level, and are often the subject of public health policy. However, at a population level, many risk factors for many preventable NCDs, as well as well-known communicable diseases, lie in the realm of factors in everyday living which limit people's ability to make choices to live healthier lives (Grant et al, 2017). Examples include limited access, poor quality or absence of open public spaces or whole districts built without taking into account the need for people be able to access local amenities by walking, not to mention places with high levels of air pollution due to poor urban planning.

The impact is uneven across the population, and women, children and those already marginalized through poverty face additional risk. The urban environment also provides a captive market for unhealthy foods and beverages, and the propagation of unhealthy behaviours, such as tobacco and gambling addictions; and again, exposure to risk is uneven across the population with a higher concentration of risk in neighbourhoods where populations are already facing deprivations.

Of course, there are many other important environmental risks that can be influenced by UTP, such as second-hand tobacco smoke, exposure to chemicals, radiation and noise, and occupational risks (WHO, 2017).

> "By readdressing the way cities and human settlements are planned, designed, financed, developed, governed and managed, the New Urban Agenda will help to end poverty and hunger in all its forms and dimensions; reduce inequalities; promote sustained, inclusive and sustainable economic growth; achieve gender equality and the empowerment of all women and girls in order to fully harness their vital contribution to sustainable development; improve human health and well-being; foster resilience; and protect the environment."
>
> *New Urban Agenda: Quito declaration on sustainable cities and human settlements for all,* p.3 (United Nations, 2017).

4 URBAN AND TERRITORIAL PLANNING AND HEALTH AS NATURAL ALLIES

As an approach – be it at transnational, national, city-region, city or district level – UTP provides a framework to allow actors and decision-makers to align their various inputs and processes to agree and achieve multiple outcomes. Correctly applied, an alliance of stakeholders can minimize conflict and unintended negative consequences, found all too commonly when working in silos.

Working together, planning and public health can ensure that health promotion, disease prevention and better health equity through good UTP are central components of the communicable disease and NCD reduction and management responses. Cost-effective initiatives at multiple spatial levels can prevent diseases and promote health while delivering wider societal benefits (WHO & UNDP, 2016). Health needs to be thought of as an essential input to the UTP processes as well as an outcome (Table 4.1).

Table 4.1 Health as an input and an outcome for urban and territorial planning

How can health unlock new opportunities for urban and territorial planning?	How can urban and territorial planning contribute to health?
Health as an input: • Contributing with health professionals' skills, expertise and resources, including data and statistics • Bringing on board new partners and collaborations for UTP • Using a "health lens" to merge agendas such as climate change, ecosystem services and resource use in urban policy to empower and enable stronger collaborations • Providing "health and well-being" as an aspirational vision for a nation, region, town or city • Developing the messages and communications channels to highlight the links between health and UTP, and creating demand for healthier policies and interventions • Helping to deepen the knowledge of how spatial planning can control disease vectors and influence disease transmission, including for emerging infectious diseases • Anticipating changes in the patterns of disease distribution due to climate change so that housing, city and regional planning can be designed preventatively	**Health as an outcome:** • Reducing the burden of disease and improving the context for UHC, including access to health care • Helping to tackle the spatial and environmental "causes of the causes" of illness and health inequity • Raising level of heath literacy specifically via awareness of communities, politicians and professionals of the upstream causes that result in adverse downstream health outcomes • Ensuring that health outcomes are considered alongside commitments to other goals in areas such as economic vitality, climate change and infrastructure delivery and in the training of all built environment specialists • Helping to deliver national health plans such as those on NCDs

Table 4.1 (continued)

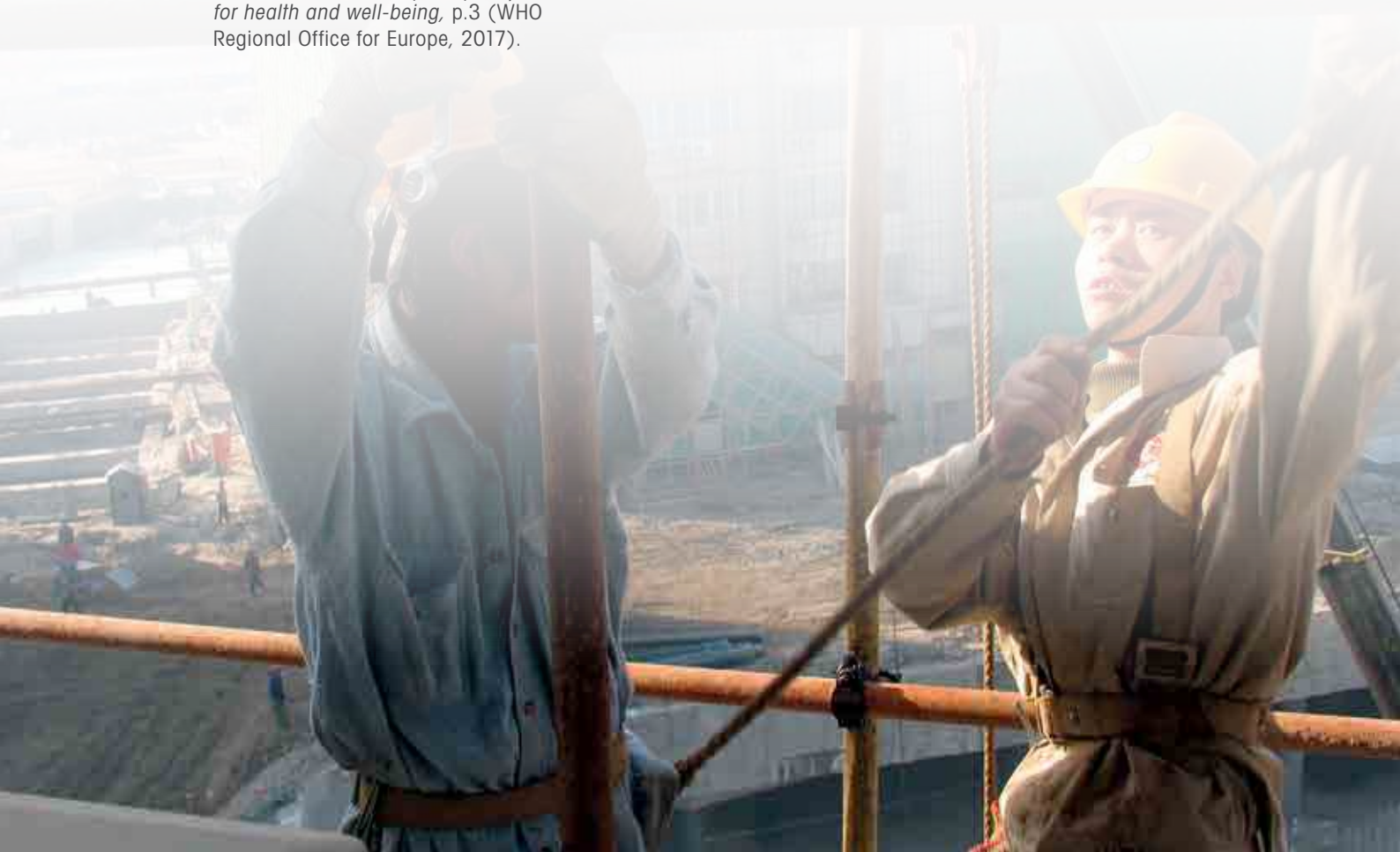
How can health unlock new opportunities for urban and territorial planning?	How can urban and territorial planning contribute to health?
The health sector should: • Provide a credible voice in advocacy for healthier UTP by identifying gaps in data to demonstrate the relationship between health and the built environment and be a critical team member in collecting necessary data • Lead by example and use public health objectives and SDGs to guide planning and development for their own estate, land holdings and operations • Provide health data, statistics and knowledge of public health issues to influence evidence-informed decisions and then track and monitor the success of UTP interventions	**Those involved with urban and territorial planning should:** • Actively bring public health voices into territorial and spatial decision-making processes • Develop project and policy appraisal and monitoring that ensures the impacts of proposals on population health and health equity count in decision-making • Support the health of all citizens by enabling the full exercise of their rights both to access city services and opportunities, and to be engaged in transforming the city through citizen involvement and community action

"Health and well-being for all at all ages and the determinants of health are at the heart of the United Nations 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs). The SDGs are universal, integrated, interdependent and indivisible. Achieving this challenges governments, the United Nations system, the private sector, civil society and many other stakeholders to work together in a transformative way."

The roadmap to implement the 2030 Agenda for Sustainable Development, building on Health 2020, the European policy framework for health and well-being, p.3 (WHO Regional Office for Europe, 2017).

"By readdressing the way cities and human settlements are planned, designed, financed, developed, governed and managed, the New Urban Agenda will help to . . . improve human health and well-being; foster resilience; and protect the environment."

New Urban Agenda: Quito declaration on sustainable cities and human settlements for all, p.3 (United Nations, 2017).



Using a health lens in UTP offers an opportunity to bridge gaps that lead to adverse health outcomes and to address disparities in health equity. Together, the professions involved in health and UTP can provide a set of tools, an evidence base, and a range of population-level skills and competencies that work across the horizontal and vertical dimensions of planning towards a set of common goals.

The IG-UTP aim to foster sustainable urban and territorial development through five qualifiers. Health again has a role in each one of these qualifiers, as an input and as an outcome (Table 4.2).

Table 4.2 Fostering sustainable urban and territorial planning – the five qualifiers

Health as an input	Health as an outcome
1. Planning more compact places	
Mitigating any risk to health from what may be seen as "crowding" and allaying associated fears. Providing local data on health impacts and evidence for risk mitigation strategies for situations where high densities can lead to adverse health outcomes.	Supporting active mobility, public transport and social interactions and reduce use of energy and resources.
2. Planning more socially inclusive places	
Ensuring that diversity is supported in placemaking through spatial planning variety such as in land parcel size, forms of land tenure, and size of housing. The health workforce can mobilize action and inspire communities to join planning and enjoy places.	Supporting the well-being and resilience of vulnerable sub-populations, across the life-course and across socioeconomic and cultural groups. Reducing inequalities and ensuring adequate access to health.
3. Planning better connected places	
Vulnerable populations and resources that support health are not distributed evenly. Health data can assist in identifying where better connections need to be made, and at many scales.	Facilitating better health through access to economic opportunities, amenities and services. Reducing individual and family stress of long commutes and promoting active travel. Reducing community severance.
4. Planning places that are more resilient to climate change and natural disasters	
Supporting action to help reduce vulnerability to human and material loss by climate-induced disasters, including through changes in health care facilities and health care preparedness and response to disasters. Highlighting the links between health and climate damaging environmental risk factors, such as air pollution. Providing data and guidance where climate-related health risks, e.g. heat stress and food insecurity (at the bigger scale), place populations or sub-populations at risk.	Both direct and indirect health benefits, for example, through well-designed and accessible green, blue and public open spaces which also acts as buffer zones and functional landscapes. Designing health benefits into nature-based solutions for ecosystem services, climate mitigation and resilience. Focus on near-term solutions that will immediately deliver on health while also reducing climate change, such as air pollution mitigation.
5. Institutionally integrated planning	
Increasing capacity for vertical and horizontal integration and participation through the development of health decision support tools and approaches, to inform and integrate decision-making processes for land use with other relevant sectorial policies and interventions. Examples include: HiAP, health and health equity impact assessment and a number of specific health risk calculation tools.	More effective management and responsiveness of planning, focusing on responses to health risk and health equity, as well as the distribution of health impacts and the appropriate vertical and horizontal integration to address them. Better integration of routine assessment of potential health benefits/risks and evaluation of health impacts of urban environment interventions with the planning system.

4.1 Sustainable Development Goals and health

Health is threaded throughout the 17 SDGs, and not restricted to SDG 3 (health and well-being). Some of these relationships are indicated in Fig. 4.1. It is also recognized at a high level that "non-communicable diseases threaten the resiliency and sustainability of cities" (WHO & UNDP, 2016, p.2). The strong reciprocal links that exist between UTP and health protection and supporting heathier lives (health promotion) also provide a basis whereby many of the targets in SDG 11 (sustainable cities and communities) support population health.

Source: Based on *Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks*, p.96 (Prüss-Ustün et al, 2016).

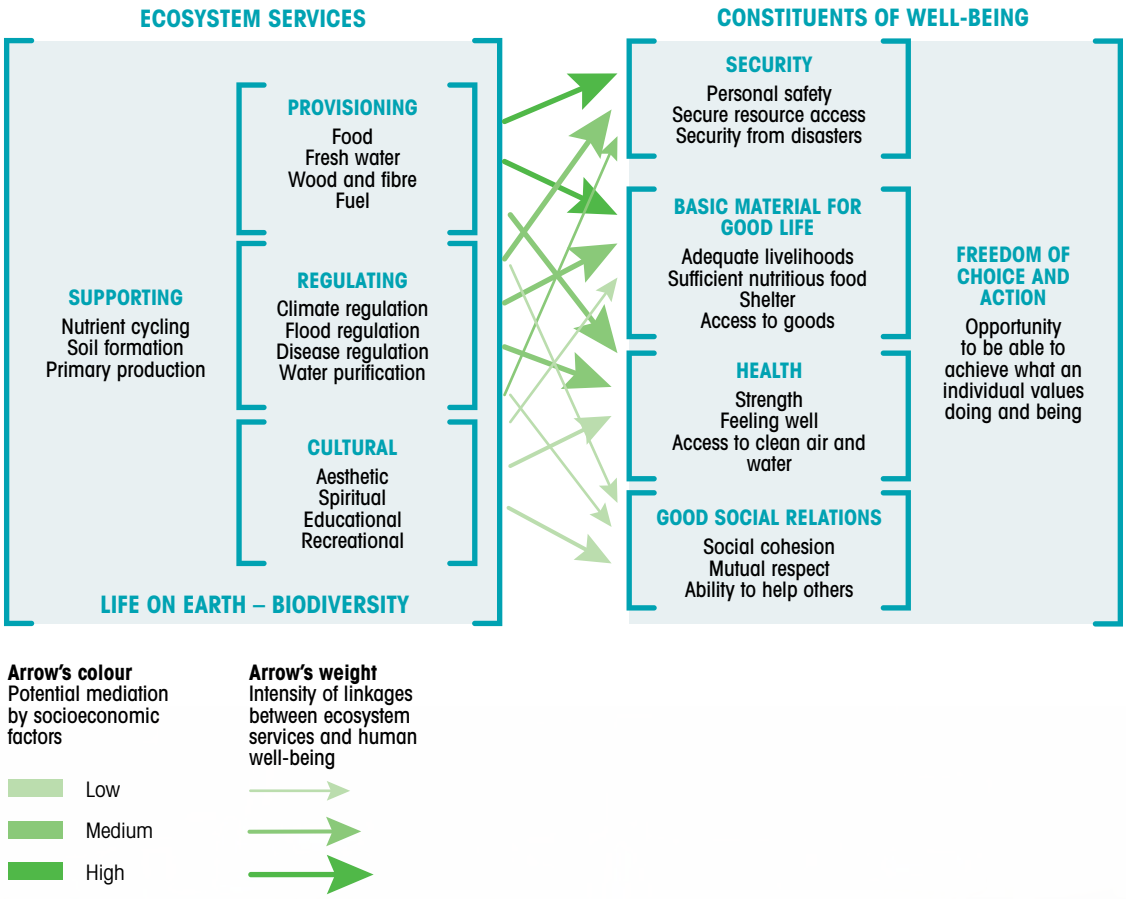
Fig. 4.1 Sustainable Development Goals and environment-health links

"The New Urban Agenda reaffirms our global commitment to sustainable urban development as a critical step for realizing sustainable development in an integrated and coordinated manner at the global, regional, national, subnational and local levels, with the participation of all relevant actors. The implementation of the New Urban Agenda contributes to the implementation and localization of the 2030 Agenda for Sustainable Development in an integrated manner, and to the achievement of the Sustainable Development Goals and targets, including Goal 11 of making cities and human settlements inclusive, safe, resilient and sustainable."

New Urban Agenda: Quito declaration on sustainable cities and human settlements for all, p.4 (United Nations, 2017).

4.2 Cities and urban lifestyles influence the health of people and the planet

Human settlements, easily thought of as physically separated from the environment, do not exist in isolation. Cities and urban lifestyles influence the health of humans, animals and ecosystems, which, in turn, influence one another. The health of the urban population is dependent on a matrix of natural processes locally and across the globe, and in turn the lifestyles and behaviours of those populations affect the ability of those processes to do that job. International attention is rightly being focused on the ability of the planet and planetary systems to maintain human health. The determinants of health relevant to territorial policy, particularly at supranational and national level, are well illustrated in the *Millennium ecosystem assessment: ecosystems and human well-being health synthesis* (WHO, 2005) through showing how ecosystem services relate to well-being outcomes (Fig. 4.2).



Source: Millennium ecosystem assessment: ecosystems and human well-being health synthesis (WHO, 2005).

Fig. 4.2 Ecosystem services contribute to well-being outcomes

> “Ecosystems are the planet’s life-support systems – for the human species and all other forms of life. Human biology has a fundamental need for food, water, clean air, shelter and relative climatic constancy. Other health benefits include those derived from having a full complement of species, intact watersheds, climate regulation and genetic diversity. Stresses on freshwater sources, food-producing systems and climate regulation could cause major adverse health impacts.”
>
> *Millennium ecosystem assessment: ecosystems and human well-being health synthesis,* p.1 (WHO, 2005).

Urban and territorial planning, especially at national and city-region scale, need to be deployed as a bulwark of health protection and support for population well-being.

4.3 Health equity

Health inequalities are often a reflection of wider inequities. These are part of complex and systemic societal issues. However, we repeatedly find a link between environmental degradation in cities and health inequity, whereby often the most severe environmental health impacts tend to fall on the shoulders of the lowest income households and those already vulnerable to other deprivations. A major report from the Americas (PAHO, 2018) listed 12 recommendations for tackling equity and health inequalities. Although the report is based on geographically defined work, the recommendations have widespread applicability; each recommendation has implications for adopting equitable approaches within UTP.

Table 4.3 Recommendations for addressing equity and health inequality with implications for urban and territorial planning and design

The 12 recommendations with implications for urban and territorial planning and design

Achieving equity in political, social, cultural and economic structures	Auditing and supporting equity in societal structures and systems relating to UTP
Protecting the natural environment, mitigating climate change and respecting relationships to land	Ensuring that UTP operates well and equitably with respect to the natural environment, mitigating climate change and respecting relationships to land
Recognize and reverse health equity impacts of ongoing colonialism and structural racism	Supporting active representation; decolonization in all aspects of the planning and development control systems
Equity from the start – early life and education	Developing child-friendly spatial policy at city, neighbourhood and building scales
Decent work	Equitable location, distribution and access to safe and healthy places of work
Dignified life at older ages	Developing age-friendly spatial policy at city, neighbourhood and building scales
Income and social protection	Designing environments to offer a wide variety of opportunities for economic development, decent work and strengthened communities
Reducing violence for health equity	Designing for defensible space and community surveillance
Improving environment and housing conditions	Developing and enforcing good environmental and building standards and codes
Equitable health systems	Equitable location, distribution and access to health and care services
Governance arrangements for health equity	Accepting health equity audit of all planning policy
Fulfilling and protecting human rights	Addressing land-based rights in spatial strategies

Source: Adapted from *Just societies: health equity and dignified lives* (PAHO, 2018).

5 HOW TO INCLUDE HEALTH IN URBAN AND TERRITORIAL PLANNING

The agenda for mutual and cross-cutting support between UTP and health is very wide. It traverses multiple scales, numerous stakeholders and many sectors. A complicating factor is that, as independent fields, both planning and health have developed their own terminologies and methods. This can serve to frustrate attempts at joint working. First, we need to start learning how to speak each other's language, then we can also develop a shared language!

Success will depend on our ability to invoke the full potential of combining health with UTP. It is a combination that can act as a thread, connecting and strengthening the delivery of many SDGs, a combination that merges benefits for people – in terms of health and well-being – with action on the most pressing environmental and human health problems faced in every country due to climate change and habitat loss. Each aspect of our urban and rural environments acts as, or influences,

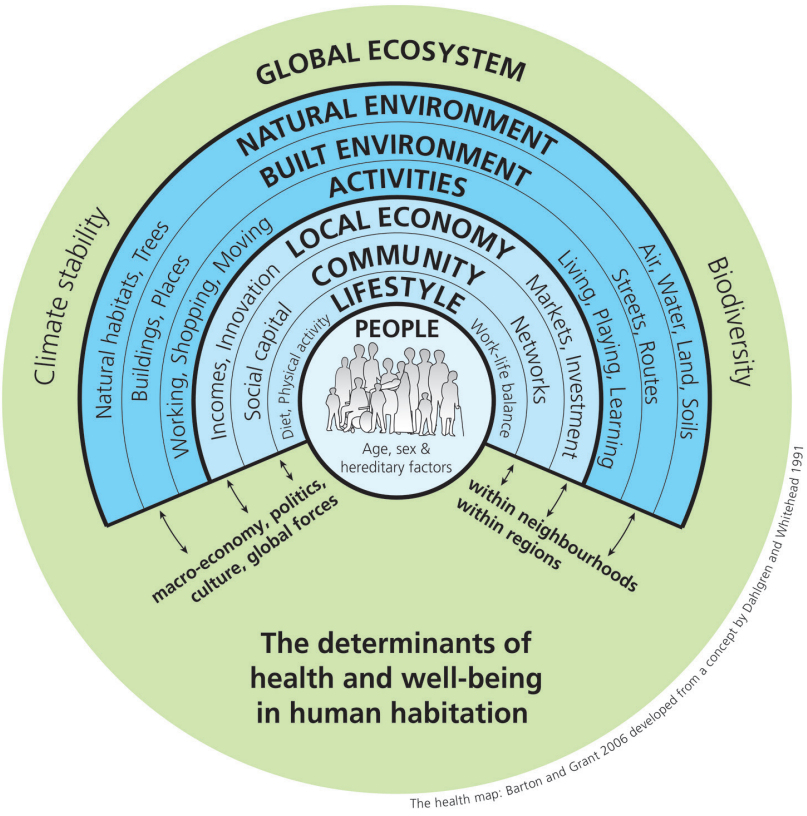


Fig. 5.1 The wider determinants of health and well-being relevant to urban and territorial planning in human habitation

a determinant of people's health and at the same time impacts the global ecosystem (Fig. 5.1). Urban and territorial planning is the joint mechanism for governance and stewardship that can control changes to our environment.

The advantage of such a wide agenda is that there are many circumstances in which to initiate or accelerate action. We are calling these different circumstances "entry points". How to act in any given locality also depends on many contextual factors and pre-conditions. Some of these relate to the different nature of statutory planning systems found in different countries and how well they operate. In later sections, there are more details on pre-conditions (Chapter 5) and entry points (Chapter 7).

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Resource 1 (EVIDENCE)

Spatial planning for health: an evidence resource for planning and designing healthier places

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/729727/spatial_planning_for_health.pdf

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Resource 2 (TOOLKIT)

Building healthy places toolkit: strategies for enhancing health in the built environment

https://centerforactivedesign.org/buildinghealthyplacestoolkit

scan here

Resource 3 (OVERVIEW)

Urban-rural linkages: guiding principles and framework for action to advance integrated territorial development

https://urbanrurallinkages.files.wordpress.com/2019/09/url-gp-1.pdf

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Resource 4 (OVERVIEW)

The role of cities in improving population health: international insights

https://www.kingsfund.org.uk/publications/cities-population-health

5.1 Four dimensions of planning for health

Spatial planning is very compatible with the public health aim of improving the health, well-being and health equity at a whole population (or defined sub-population level). These classic elements of the public health approach are all relevant to UTP:

- **Disease and illness prevention:** typical planning interventions include sanitation, housing regulations in regard to dampness and warmth, injury prevention and reducing pollution hazard and exposure.
- **Health promotion and curative dimensions:** typical planning interventions include provision of cycling infrastructure, local food growing and healthy food access strategies, access to nearby nature and public open spaces and social inclusion measures.
- **Ecological public health:** typical planning interventions include biodiversity action plans, climate-linked energy plans, spatial strategies to reduce resource and energy consumption, local food systems and resilience strategies.

There are opportunities to support all of these elements though UTP. Experience from "healthy urban planning" in cities (Grant, 2015) has helped highlight four basic dimensions in planning for health.

Table 5.1 The four dimensions of planning for health in urban and territorial planning

Dimensions of planning for health

Dimension 1

Basic planning and legislative standards to avoid risk to health

Examples
- Enforce water and sanitation standards
- Ensure adequate management of chemicals and other hazardous substances

Dimension 2

Planning codes to limit environments that detract from healthy lifestyles or exacerbate inequality

Examples
- Restrict "hot food takeaways" near to schools
- Limit car-oriented, isolated developments
- Provide good-quality, low-cost homes in the right places

Dimension 3

Spatial frameworks to enable healthier lifestyles

Examples
- Encourage city compactness and development near to transport hubs
- Provide citywide access to safer walking, nature, public spaces, cycling and/or public transport

Dimension 4

Urban and territorial processes to capture multiple co-benefits of "building in" health

Examples
- Work with multiple partners to strengthen co-benefits through systemic holistic approaches. Examples include: active travel, slow city, age-friendly or child-friendly initiatives; peri-urban and urban food systems, city-to-sea, and regional economic resilience strategies

5.2 Health in all planning phases

Urban and territorial planning refers to a host of different kinds of activity covering a wide range of geographic scales and timeframes. In each country the operation of UTP will be distinct. In most countries it will be operated at many geographic scales and have legal, quasi-legal, policy and even informal instruments and procedures.

At the biggest scale, supranational planning might cover large transport, energy and water projects, and at the smallest scale, planning could specify the location and detailed design of a line of street trees or a single bench. Timescales match these extremes with 50-year visioning and trend analysis, 20- to 25-year strategic plans, 10– to 15-year delivery and implementation plans, and 2- to 3-year projects to even short-term and temporary interventions, including tactical urbanism. Every country will have a series of formal processes to match this vast range of activity, and in many cases informal processes occur too. At every scale, these activities can benefit from health inputs. With formal processes, health practitioners will usually need expert guidance from planners to help them to engage at the right time and in the prescribed manner.

Whatever the scale or timeframe, planning processes proceed iteratively and sequentially through a series of phases. Four clear phases can be recognized: diagnosis, formulation, implementation, and monitoring and evaluation. Ideally, each phase is developed with stakeholder co-production. Public health needs there to be actors and decision-makers at each stage. Public health practitioners have two key inputs for each phase (Fig. 5.2). It is the responsibility of spatial planners to reach out and bring in public health expertise for each of these tasks.

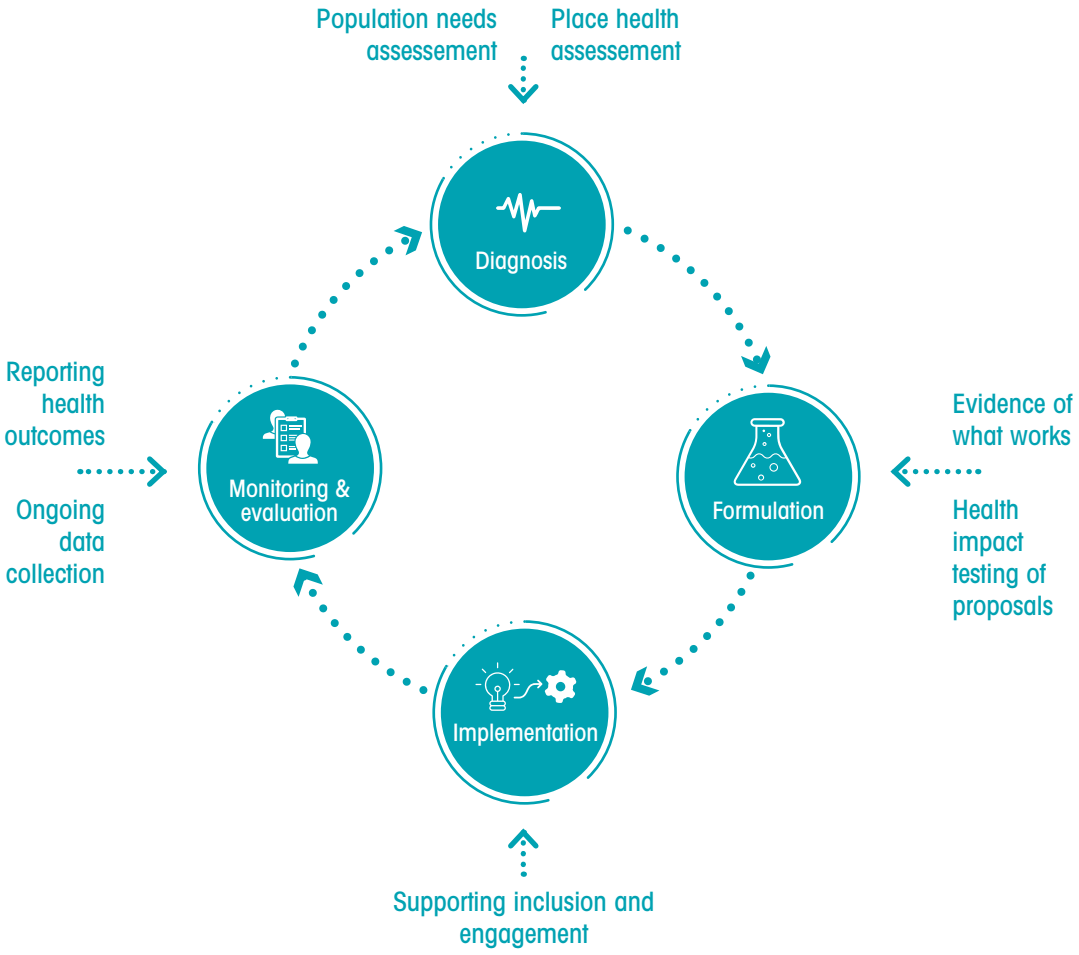


Fig. 5.2 Health as an input for each of the four phases of the planning process

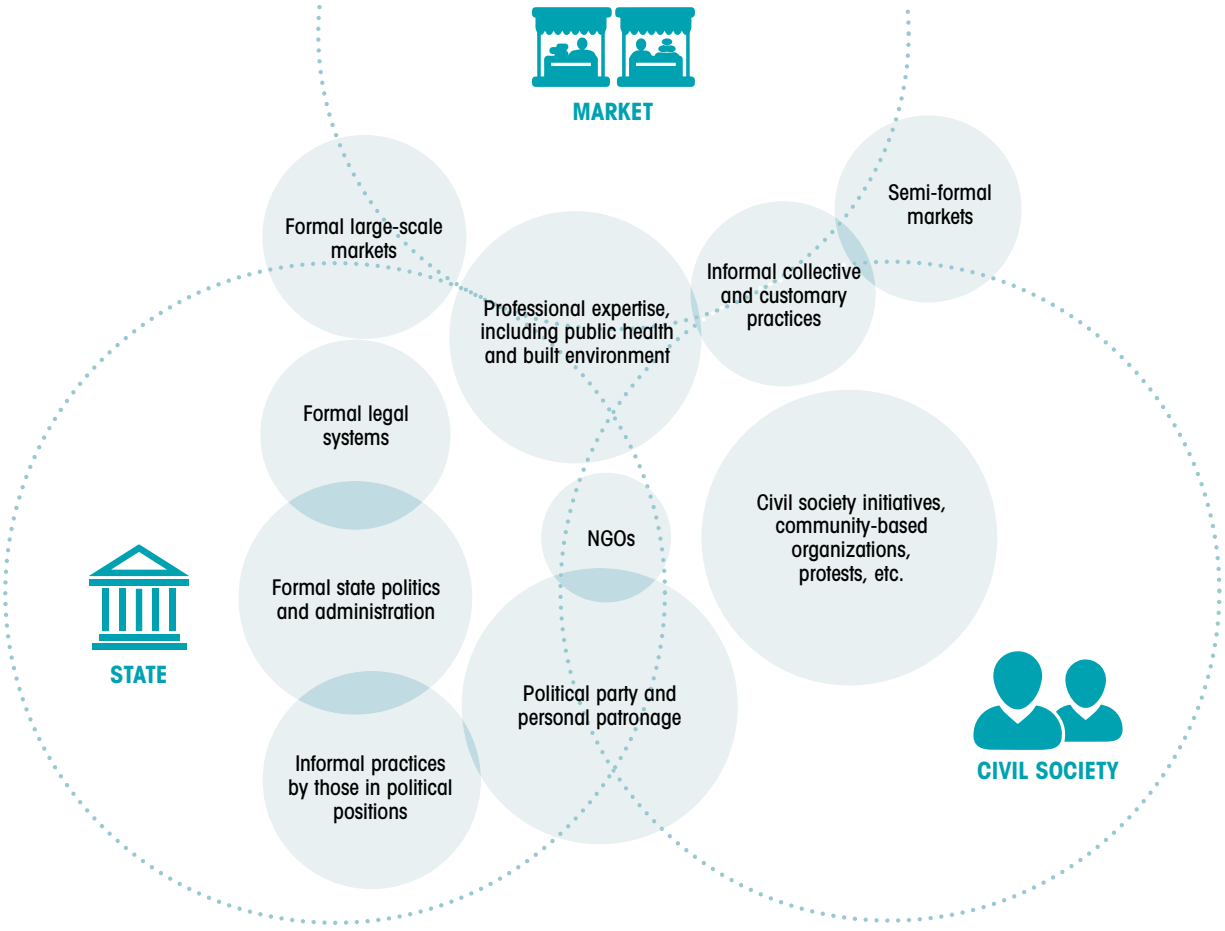
5.3 Urban and territorial planning contexts and health (pre-conditions)

What planning for health looks like will vary from country to country. There is no universal, deterministic answer for the right density of housing, spatial pattern, plot size or building height for health. Similarly, at an international level, there is no prescriptive solution for how best to use the UTP system to support health.

The broad institutional, formal and informal contexts for UTP includes actors and decision-makers from the market, the state and civil society (Fig. 5.3). Depending on the country and the situation, power may lie wholly with one stakeholder or be shared in a variety of ways. The processes that stakeholders enter into, or choose not to enter into, will also vary.

The International Society of City and Regional Planners (ISOCARP) publishes an international manual of planning practice covering 135 countries – each has a different planning system. Inevitably, some countries' systems will be better suited to incorporating health as an input and delivering health as an output than others; depending on the context of UTP in the country, and the quality of both formal and informal processes (ISOCARP, 2015).

Generally, four district planning traditions are recognized: regional economic planning, comprehensive integrated approaches, land-use management, and urbanism. In an analysis of planning instruments in use in 34 Organisation for Economic Co-operation and Development (OECD) countries, only one country used instruments drawn from a single tradition, most mixed two



Source: Adapted from *Planning sustainable cities: global report on human settlements* (UN-Habitat, 2009).

Fig. 5.3 The broad institutional, formal and informal contexts for urban and terrestrial planning

traditions and several blended three (Silva & Acheampong, 2015).

Adding more layers of complexity, within each of these traditions, we find:

- different types or emphasis on the instruments at national and local level and balance between strategic, masterplan, regulatory and fiscal (taxes, fees and costs) and incentive-based instruments;
- different degrees of horizontal and vertical coordination and variations in the mechanisms used; and
- variety in the balance between flexibility and certainty offered in the national planning systems.

Outside the planning system there are differences in the national governance structures, with four main typologies recognized: centralized unitary states; decentralized unitary states; regionalized unitary states; and federal states determining the many ways that UTP operates on the ground. In particular, national governance structure influences the levels of authority and competence for spatial planning between national level and subnational levels.

The following major factors will also have a profound influence on the way the UTP operates, including who holds power and how that power is held:

- urbanization and demographic trends
- city size and spatial forms
- urban economic contexts
- location and vulnerability to natural and human made disasters
- land rights traditions.

5.4 Working in the absence of good planning legislation and with limited resources

Health outcomes can be adversely affected in the absence of good planning legislation, or lack of resources to make changes to unhealthy urban areas. Good urban legislation is the basis of effective planning outcomes and is a pillar of sustainable urban development.

> "Urban law provides a framework in which to mediate and balance competing public and private interests, especially in relation to land use and development; to create a stable and predictable framework for public and private sector action; to guarantee the inclusion of the interests of vulnerable groups; and to provide a catalyst for local and national discourse."
>
> *Planning sustainable cities: global report on human settlements,* p.215 (UN-Habitat, 2009).

The corollary is that where there is weak legislation or weak infrastructure for its implementation, this can result in inappropriate red tape and allow inequalities in power (financial, political, technical and cultural) to distort planning away from supporting the health of local populations and towards concentrating land value for those already in control of resources. Structural changes are vital in the long term, but this section outlines immediate functional foci which can assist in the short term and have also been shown to support the longer term legislative changes that are necessary.

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Resource 5 (SELF AUDIT)

UN-Habitat planning law assessment framework

https://unhabitat.org/planning-law-assessment-framework

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Resource 6 (SELF AUDIT)

Reforming urban laws in Africa: a practical guide

https://www.africancentreforcities.net/wp-content/uploads/2017/06/ULR-Report_FINAL_LR.pdf

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Resource 7 (SELF AUDIT)

Slum Upgrading Legal Assessment Tool

unhabitat-ig-utp@un.org

Supporting health at the most fundamental level requires a focus on the minimum standards and enforceable measures needed to secure basic level risk management and health and safety. In many situations, appearance of buildings, and even the building materials used, can be irrelevant to achieving these standards. Good planning legislation does not include draconian or "blind" regulations that give rise to costs that households and businesses cannot afford.

Help ensure more equitable access to planning processes

A first step in ensuring more equitable access to the planning process is to identify the conditions that are conducive to achieving better results, rather than simply stating the desired outcome, either expressly or by implication. Conditions that enable the authorities – officials and politicians – to implement legislation with realism and sensitivity to the impact of their actions on communities and livelihoods are vital. Strong civil society organizations can play an important role in mitigating power imbalances. They can exert influence and assert rights to make decision-makers more appreciative of the limits of their powers and more accountable to the general public (Berrisford, 2013).

In these situations, too, the multiplicity and rigidity of laws and regulations compel citizens to pursue informal routes to conduct land and property transactions, to do business, to acquire the means of a livelihood, and even to access basic services. As a result, parallel systems flourish, and urban legal informality becomes the norm (UN-Habitat, 2012).

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Resource 8 (TRAINING)

Designing and implementing street-led citywide slum upgrading programmes: a training module companion

http://capacitybuildingunhabitat.org/wp-content/uploads/Trainings%20and%20publications/2018_05_17/training_module_slum_upgrading.pdf

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Resource 9 (OVERVIEW)

Addressing health of the urban poor in South-East Asia Region: challenges and opportunities

https://apps.who.int/iris/handle/10665/204753

Tactical urbanism

We are starting to see examples of change mediated by a lighter, quicker, cheaper experimental approach with the community of users involved, in contrast to standard high-cost and high-commitment, top-down led initiatives (see Table 5.2 for examples). Where this happens, the value of co-generation of local solutions by public health, planners and the community is being recognized. This strategy can be useful for pilot projects and for testing ideas and options with the public. These projects and ideas may be low-tech implementations or be a step on the way to winning support for more substantial investment. Tactical urbanism is also referred to as using the city as a "laboratory for change". Such solutions have been successful where political will requires an initial demonstration project to justify a change of policy, where there are not enough resources to undertake a permanent change or where there are resources and momentum for bottom-up change in the community – but little buy-in higher up.

Table 5.2 Differences between conventional approaches and tactical urbanism

Users	Conventional approaches: consultees	Tactical urbanism: co-creators
Methods employed	Survey-analysis-design-build, comprehensive renewal	Urban tinkering, living labs, ephemeral interventions, loose-fit solutions, participatory urban change events
Idealized design process	In-depth professional analysis with public consultation leading to an implemented permanent solution	Professional analysis supported by trials of solutions by and with users with immediate and continual feedback and modification as required
Relationship of design to implementation	Final design signed off before implementation starts on site	Final outcome unknown before implementation; elements of playfulness and testing ideas on site
Change in function	Long-term and highly resourced permanent improvement or change in function	Reversible and low-cost repurposing shift in function
Materials	Tailor-made or proprietary materials	Modified local materials, reuse of waste or discarded materials, experimentation and adaptation with familiar elements used in unfamiliar ways
Management	Clear client-consultant-contractor contracts and relationships	Adaptive, consultant as facilitator of change rather than sole designer
Capital	Mostly financial and manufactured.	More human and social and may include crowd-funding and microfinance
Risk approach	Linear thinking, high predictability fail-safe	Non-linear, high uncertainty safe to fail
Governance	Tends to be top-down	Adaptive, both top-down and bottom-up, more participatory
Outcomes	Permanent scheme delivered	Permanent or temporary scheme delivered Social capital outcomes of inclusion and "ownership" of the implemented scheme sought

Source: Developed from a concept in Elmqvist T, Siri J, Andersson E, Anderson P, Bai X, Das PK et al. Urban tinkering. *Sustainability Science.* 2018;13:1549–1564. Table 1.

Example

Design enquiry workshops and participatory planning events

Partly in response to costly drawn out planning processes, many forms of rapid design and planning workshops have been developed through practice and are well documented. These need careful setting up and are best run and facilitated by those familiar with the process. For some, the goal is to support multi-professional teams collaborate and rapidly come forward with sketch solutions. For others, the focus is on channelling community participation to provide rapid solutions to local issues. At the extreme end of the spectrum, a community planning event can lead to change on the ground there and then.

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Resource 10 (TOOLKIT)

Rapid Planning Studio – concept note. Rapid Planning Studio – workshop schedule

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Case study 1

Kenya – Nairobi Placemaking Week

Placemaking Week Nairobi is an annual event held to celebrate Nairobi's public spaces and community-led initiatives that are revolutionizing the use and experience of streets, public open spaces and the city at large. The event leverages the expertise, experience and interests of various grassroots organizations, businesses, nongovernmental organizations (NGOs), professionals, academic institutions and civil society organizations to heighten awareness of the value of public spaces, raise their status and invite Nairobians to take part in public life.

The main objective of Placemaking Week is to transform the streets of downtown Nairobi into a working urban laboratory. This is essentially to raise the profile of public spaces and the status of people who use them. Additionally, it optimizes both pedestrian and vehicular traffic to promote walkability and better air quality.

This main objective is supplemented by the following:

- To activate public spaces and streets through a variety of low-cost, high-impact interventions, including coordinated pop-up activities.
- To celebrate Nairobi's public spaces and streets, raise their profile and create awareness of their importance.
- To promote cross-sector dialogue about quality of life in the city, and foster partnerships and collaborations for public spaces.
- To advocate for a healthier, safer and more inclusive and vibrant city through safe, walkable and pedestrian-oriented streets, with a focus on downtown Nairobi.

6 AN ASSETS-BASED APPROACH WITH PEOPLE AT THE CENTRE

An assets-based approach has a long history in community development. A similar approach can be applied to creating healthier environments with, and for, local people. With health as an outcome, assets-based approaches are closely linked to the theory of "salutogenesis", which highlights the factors that create and support human health rather than those that cause disease (Morgan et al, 2010). Assets-based approaches need to bring actors and decision-makers together around a positive baseline. Rather than putting problems at the centre, the approach places the emphasis on the community's and locality's assets, alongside unmet needs. At its simplest, the first step is to identify existing assets that have or may have a health-based role. For UTP these will include natural and built environment assets and potential assets. The second step is to review if, and how, these can be put to use or better use. Collaboration and participation must underpin this approach since its aim is also to empower communities.

A wide range of techniques is available for taking an asset-based approach, including

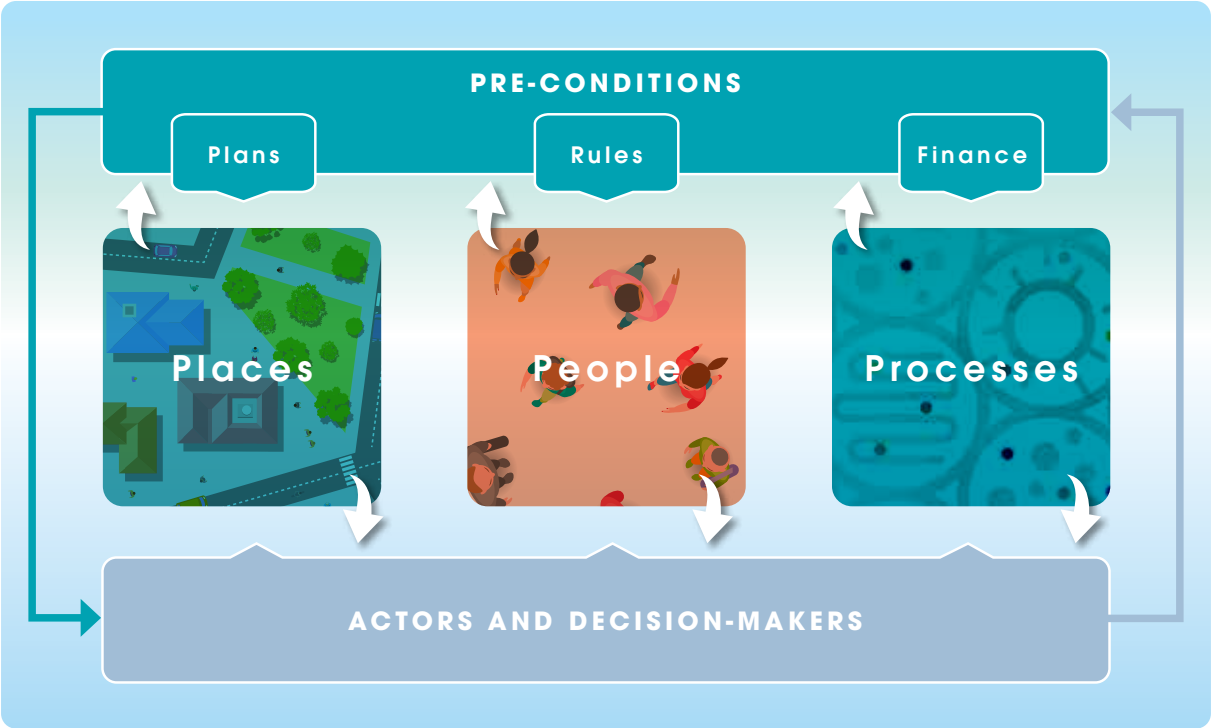

Fig. 6.1 Three assets for healthier more equitable urban and territorial planning

asset mapping, co-production and various community-led, community engagement and community development methods. The inclusion, in addition to people and processes, of local physical and spatial assets that influence the wider determinants of health and health equity, is key to a UTP approach.

6.1 People are assets

Actors and decisions-makers are often mentioned in UTP. In a collaborative project, these are not necessarily fixed jobs, but roles that different people may move into and out from. There will, of course, be some fixed organization jobs, but a key factor in any successful initiative is the people – their skills, commitment, knowledge and leadership. In a community setting these may manifest not as "hard" professional attributes, recognized through speaking with specialist terminology, but flowing in a "softer" way and easily overlooked by professionals. Local people-based assets need to be identified and honoured and may need to be cultivated (Foot & Hopkins, 2010).

Many valid interventions, even when tested and proven, never get taken up because those with the power to act lack the political will to do so. Before you can expect political decision-makers to use their authority to pass a policy or fund an initiative, often you first need to build support among their constituents. This is building public will. Planners and built environment professionals are trained in developing and articulating territorially based interventions, while public health professionals are trained in evidence-based solutions and advocacy. Planners and public health professionals, acting together, can wield a powerful range of skills to harness that public will.

Community participation needs to be sought and strengthened. Centring involvement on local people's health, family health and community health can open the door.

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Resource 11 (INITIATIVE)

Bending the curve on urban diabetes: new research approaches and innovative interventions for tackling diabetes in your city

http://www.citieschangingdiabetes.com/content/dam/cities-changing-diabetes/magazines/CCD-BriefingBook-2017-BendTheCurveOnUrbanDiabetes.pdf

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Resource 12 (WEB RESOURCE)

City at eye level

https://thecityateyelevel.com/

After implementation, interventions need monitoring and evaluation to measure progress and to ensure results. Best practice also allows for iterative adjustment as new conditions arise. Both those involved in planning and public health can often access the trend data and longer term metrics that are needed for evaluation and ongoing development.

Building capacity through widespread leadership and health literacy

What really makes a difference is when people feel confident enough to take the initiative, innovate and instigate change. In relation to this, the term "adaptive capacity" is starting to be used. This approach sees stakeholder involvement – both professionals and community voices becoming stronger. It means being more comfortable acquiring and interpreting both ongoing and longitudinal data and undertaking learning and evaluation as the process unfolds; challenging policies and plans that are creating health inequities, and developing the policies and plans needed to reverse them. Attention to leadership and heath literacy as collaborative mandates could help seed the context for this kind of capacity to emerge.

Leadership can take many forms and arise in many circumstances. Here we are talking about soft leadership as a people-based asset. Place-based leadership is vital in UTP for health. Leadership is often thought of in terms of a mayor, governor, councillor or political leadership. However, anyone who has a stake in improving health, at a household, neighbourhood or community level can take some leadership role in projects, as well as supporting the leadership of others (Hambleton, 2015). This can be especially important when formal structures lead to a very unbalanced distribution of power. Of course, bold or strong community leadership will not solve weak consultation, poor engagement practices or unfair decision-making authority, but it may mobilize people to challenge these.

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Resource 13 (TRAINING)

Build public & political will

https://www.countyhealthrankings.org/key-activities/18392#key-activity-6

Community leadership: this is community leadership by local people in the communities affected by an activity or proposal and voluntary organizations and other local agencies who support them. Both the New Urban Agenda and the SDGs necessitate a move away from treating local people as beneficiaries towards an approach of fostering their agency. The "right to the city" ambition articulated in the *New Urban Agenda* (United Nations, 2017, p.5) is expressed as a model of urban development that includes all citizens. In order to enact UTP for health, this needs to go beyond previous notions of consultation or involvement by legitimizing leadership from within the community through inclusion and having an active voice in the process. Leadership from groups often marginalized, for example by age, gender or ethnicity, is especially useful.

Health as the pulse of the New Urban Agenda (WHO, 2016b) focuses on nine areas for urban health and well-being. Leaders in each of all these areas must include urban health and health equity in their priorities:

- transport and mobility
- land-use planning and landscape design
- food systems
- energy
- housing
- clean water and waste management
- workplaces
- slum upgrading
- greening strategies.

Professional leadership: this is professional leadership from both public health and planning professionals who may be public servants, appointed by local authorities, governments or consultants, or in third sector organizations. This involves not just working for communities but working with them to exchange knowledge and strengthen the collective capacity to influence the development process. For better health equity, the planning profession will have to see its role as less an impartial arbiter of the public good and more of as an enabler, making sure that people have access to the knowledge, evidence and competencies required to incorporate health in the planning process. The health sector should adopt the task of ensuring a range of local voices can engage with formal and informal planning processes.

Spreading health literacy

Health literacy has been defined as the cognitive and social skills that determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health (Nutbeam, 2000). For UTP, we need to apply this not to individual patients in a health care system, but to the professional and community actors and decision-makers who together have influence over management, design and governance of the places where people "live, work and play".

> "A high health literacy of decision-makers and investors supports their commitment to health impact, co-benefits and effective action on the determinants of health."
>
> *Shanghai declaration on promoting health in the 2030 Agenda for Sustainable Development,* p.2 (WHO, 2016c).

Tackling urban-related issues starts with awareness of the many impacts that everyday living urban environments have on health and health equity. Health literacy is vital and bold leadership involves spreading awareness of the spatial determinants of health and health equity. Only then can issues be prioritized in the political realm and action taken.

Example

Using ambassadors to raise levels of health literacy in each target group

National governments, local authorities, civil society and professionals and their professional institutes can all serve as ambassador and agents to raise levels of health literacy on one another while also ensuring health literacy continue to improve at their own realm.

6.2 Places are assets

Physical spaces, natural or built, can act as local or regional assets for health and health equity. A census-like survey of an asset class can often reveal unused potential. A space becomes called a "place" as it acquires its own identity.

Example

Places that can deliver health and health equity

Streets and roads; public spaces such as civic squares and neighbourhood/pocket parks; regional nature corridors and nature based-assets; land with soil of food-growing quality; regional or local water bodies and watercourses; local community or public buildings; neighbourhood shelter belts and tree corridors.

See Section 7.2 for further examination of a place-based approach.

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Resource 14 (DESIGN GUIDE)

Active design guidelines: promoting physical activity and health in design

https://centerforactivedesign.org/guidelines/

6.3 Processes are assets

National, regional, municipal and local processes and measures should also be reviewed as part of an assets-based approach. In any location, but especially where statutory planning is weak, a planning process that is in place and working may be an asset. However, these assets are unlikely to have been optimized to deliver health and health equity.

Using a Health in All Policies approach

A health literacy approach develops understanding, while a HiAP approach is the governance mechanism for translating this understanding into planning processes and measures. They go hand-in-hand. As literacy about the wider determinants of health spreads through actors and decision-makers, so adding a health perspective into policy can embed that literacy into the planning system.

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Resource 15 (BRIEFING)

Noncommunicable diseases: what municipal authorities, local governments and ministries responsible for urban planning need to know

https://apps.who.int/iris/handle/10665/250228

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Resource 16 (TRAINING)

Health in All Policies: training manual

https://apps.who.int/iris/bitstream/handle/10665/151788/9789241507981_eng.pdf

Table 6.1 Typical planning measures and mechanisms that can deliver health and health equity

Planning processes and measures	Topic and examples with implications for health
Plans and strategies	Resource management plans at the largest scale such as cross-boundary strategic water, energy and biodiversity planning. City-region spatial strategies, including regional housing growth strategies, climate action plans and green and blue network strategies. Adequate land-use zoning. Integrated national, regional and local transport systems. New settlement development strategies. Rural-city food and peri-urban agriculture systems.
Management plans	Waste and wastewater treatment and management plans. National nature conservation and biodiversity management. Citywide park, public space, urban tree or nature management plans.
Implementation processes	National and local territorial and local planning processes. Health impact scoping and appraisal, monitoring and evaluation.
Design guidelines	Urban design guidelines, including neighbourhood design codes, public space design principles and street and highway design codes.
Baseline data gathering	Health needs assessment of existing or proposed population and trends. On-site assessment of existing places for health and health equity with the community.
Design appraisal	Participatory and desktop health and health equity impact appraisal of proposals and options.
Rules and regulations	Building standards (daylight, air ventilation, insulation, noise etc.). Take-away food exclusion zones around schools. Policies for provision of rainwater harvesting systems, rooftop farming and flood storage. Car parking standards and required secure cycle storage provision.
Planning guidelines and standards	Housing standards at national or local levels. Access to health facilities and recreational facilities (distance). Percentage of people with access to clean water. Walkable city structure. Citywide fresh air aisles. Housing density guidance in relation to facilities.

7 CHOOSING YOUR ENTRY POINT

Health is considered a thematic entry point for UTP. But how do we identify the entry points we need in a given situation that will lead to effective action? What makes a good entry point?

A good entry point:

Resonates with all actors and decision-makers: bringing, in combination, national governments, local authorities, planning and public health professionals (researchers, academics and practitioners) and their associations and civil society partners together to collaborate through identifying alignment of purpose with exiting plans and objectives.

Results in co-benefits across the widest range of SDGs: promoting action that benefits climate and equity as core issues while seeking multiple benefits across the SDG agenda, ranging from ecosystem services to economic interests.

Provides access to a range of different types of interventions: embracing the wide range of techniques that can embed health in national, regional, metropolitan, city-municipality and neighbourhood projects and processes such as urban policy or spatial frameworks, area-based strategies and programmes, and transport, design and governance.

Health is both an enabler and an outcome. Considering both serves as a useful catalyst for action across a range of entry points. Together with pandemics, climate mitigation, habitat loss, and equity and inclusion are important entry points. These issues are discussed elsewhere in this sourcebook and have not been expanded as separate entry points in this section.

Table 7.1 is not exhaustive and serves to indicate the concept of entry points, some of which are outlined further below.

7.1 Entry points summary

This section introduces the useful concept of "entry points", with a few examples. There are many different angles from which an entry point can be sought. The message is to find an entry point for health, whatever the national, regional or local UTP process. Use it to add value and to build alliances so that health as an input can contribute to better outcomes for all, and health as an outcome becomes everyone's business.

If these are entry points for health, health is an input. However, remember that the goal is to achieve health and health equity as outcomes. This must be explicitly defined and monitored using specified health indicators over a given timeframe. Note: this will generate more data beyond models on the costs saved through disease prevention by implementing healthy urban initiatives.

Table 7.1 Entry points for health to engage as an input and outcome in urban design and territorial planning

Entry points

By setting

Public spaces
Squares, parks and gardens, streets, plazas

Movement corridors
Local streets, routes to school, cycling and active transport, regional transport networks

Green and blue space
Habitat networks, riverbanks, beaches and coast, woodlands, migration corridors

Amenities
Schools, hospitals, markets, airports, transport hubs

Estates
Housing estates, business parks, commercial districts, town centres, campuses

By outcome

Increasing everyday physical activity

Better air quality

Increasing food security and healthier nutrition

Reducing heath inequalities

Tackling the diabetes trend at city level

Increasing locational access to health care

By principle

Road danger reduction
Vision Zero approach, slower speed zones, filtered permeability, school locality measures

Social and environmental justice
Climate justice, community action, citizen-led renewal, participatory impact assessment

Life-course strategies
Child-friendly, age-friendly, dementia-friendly places, places for teenagers

Healthy cities
HiAP, healthy urban planning, mayoral commitments

By sector

Housing and health

Local economy and health

Transport and health

Water and health

Healthy food systems

7.2 By setting

Public health has a long tradition of using a settings-based approach; this dovetails perfectly with UTP at a number of scales. This entry point can be most useful at the more people-centred scales of urban design and architecture. For example, key settings for health in UTP include public spaces, schools and residential estates.

Example

Public spaces

Public spaces are places which are accessible and enjoyable by all, without a profit motive, and take on various spatial forms (INU, 2013). Issues of distribution, quality, location, access and management of public open space impacts on human health and health equity directly, and through the wider determinants of health. Public spaces are one of the key levers to fully implement the New Urban Agenda and the focus of a specific target under SDG 11. Safe, accessible and inclusive public spaces can contribute to promoting public health in rapidly urbanizing cities and towns. Public space assessments can also provide information regarding networks of public space, accessibility (who accesses the spaces), inclusiveness (who uses the spaces), noise levels, waste/rubbish issues, green coverage, etc.

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Resource 17 (TOOLKIT)

Global public space toolkit: from global principles to local policies and practice

https://www.localizingthesdgs.org/library/82/Global-Public-Space-Toolkit--From-Global-Principles-to-Local-Policies-and-Practice.pdf

scan here

Resource 18 (DESIGN GUIDE)

Turning spaces into places – handbook

https://unhabitat-kosovo.org/un_habitat_documents/turning-spaces-into-places-handbook/

scan here

Resource 19 (WEB RESOURCE)

Ciclovia Recreativa (Open Streets) implementation and advocacy manual

https://cicloviarecreativa.uniandes.edu.co/english/introduction.html

Box4

Provision of local open public space is a key to supporting health and health equity

All citizens, regardless of their role, are users of public spaces. All have the right to access and enjoy public spaces in complete freedom, within the rules of civic coexistence. In cities, ever more complex and diverse, this requires democratic processes, dialogue and regard for diversity.

Public spaces are all places publicly owned or of public use, accessible and enjoyable by all for free and without a profit motive. Each public space has its own spatial, historic, environmental, social and economic features.

The management of public space is a prevalent responsibility of local authorities. In order to be discharged successfully, this role requires the active collaboration of citizens, civil society and the private sector.

Open public spaces consist of outdoor environments (e.g. streets, pavements, squares, gardens, parks).

In extension plans of newly urbanizing cities, whose population will double over the next 10–20 years (Africa and Asia), it is very important to guarantee sufficient amounts of well-connected and adequately proportioned public spaces.

Source: Extracts from the Charter of Public Space (INU, 2013).

Example

Neighbourhoods

Neighbourhoods are the building blocks of towns and cities. People live most of their lives in their local neighbourhood and for some, e.g. children and older people, the neighbourhood is even more significant. Both in terms of people's health and the health of the planet, if we are unable to make neighbourhoods healthy and sustainable places, then we will not have healthy and sustainable cities.

scan here

Resource 20 (BRIEFING)

A new strategy of sustainable neighbourhood planning: five principles

https://smartnet.niua.org/sites/default/files/resources/a_new_strategy_of_sustainable_neighbourhood_planning_five_principles.pdf

scan here

Resource 21 (TOOLKIT)

Healthy built environment linkages toolkit

http://www.bccdc.ca/health-professionals/professional-resources/healthy-built-environment-linkages-toolkit

scan here

Resource 22 (BRIEFING)

Urban informal settlement upgrading and health equity

https://www.researchgate.net/publication/308674541_Urban_Informal_Settlement_Upgrading_and_Health_Equity

Case study 2

Brazil – *Polimi para Rocinha* project, Rio de Janeiro

Informal settlements offer great potential for addressing several environmental risk factors in an integrated manner. In Rocinha, the largest single favela in Brazil, located in Rio de Janeiro, the *Polimi para Rocinha* project offered a system of integrated projects aimed at the simultaneous improvement of the environment through social involvement and improvement of "urban metabolism". The project addressed a range of health enhancing features, including actions to improve Rocinha's morphological structure, ecosystem services, waste management and energy. With its organic morphology and extremely high density, Rocinha could play a key role in the city's urban environmental management, with successful infrastructure and interventions to prevent disease and promote health potentially replicated to other parts of the city.

For more information, please see: *Compendium of inspiring practices: health edition* (UN-Habitat, 2018b).

Example

Local streets

Local streets are a particular form of public space, and occupy a distinctive position within communities, operating as both unplanned central places and routes for movement. Streets with shops and employment can be a critical instrument for economic growth, and the locus for some of the highest levels of social interaction and activity. High streets therefore play an important role in the health of local communities and have both direct and indirect impacts on health.

Case study 3

Belgium – walkability score tool, Flanders

Despite the numerous health benefits of physical activity – such as walking, either for leisure or commuting – many people do not achieve WHO recommended levels of physical activity. A highly walkable neighbourhood, characterized by high residential density, diverse land-use mix and street connectivity, can enable more walking among citizens. However, very few practical tools are available to policy-makers to assess neighbourhood walkability scores in order to prioritize neighbourhood environmental interventions. In Flanders, Belgium, a practical and objective walkability scoring tool has been developed to support employees of local governments – including spatial planners, health promotors and politicians – on how to make neighbourhoods more walkable in an evidence-based manner. The tool is part of a larger project on healthy public spaces, which focuses on topics such as stimulating a healthy food environment and a healthy climate, and aims to discourage smoking, to reduce noise and air pollution, and to promote physical activity.

For more information, please see: *Compendium of inspiring practices: health edition* (UN-Habitat, 2018b).

scan here

Resource 23 (DESIGN GUIDE)

Healthy high streets: good place-making in an urban setting

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/699295/26.01.18_Healthy_High_Streets_Full_Report_Final_version_3.pdf

scan here

Resource 24 (DESIGN GUIDE)

Streets for walking and cycling: designing for safety, accessibility, and comfort in African cities

https://www.itdp.org/publication/africa-streets-walking-cycling/

scan here

Resource 25 (DESIGN GUIDE)

Streets as tools for urban transformation in slums: a street-led approach to citywide slum upgrading

https://unhabitat.org/sites/default/files/download-manager-files/Streets%20as%20Tools%20for%20Urban%20Transformation%20in%20Slums.pdf

(a)

(b)

Resource 26 (NETWORK)

Ciclovia Recreativa in Latin America and Open Streets in South Africa

(a) https://www.nationalgeographic.com/environment/2019/03/bogota-colombia-ciclovia-bans-cars-on-roads-each-sunday/

(b) https://openstreets.org.za/

Example

Green and blue spaces

Green and blue spaces are often also public spaces. In daily life people may occupy or move through a variety of public spaces: streets, squares, car parks, gardens, parks and markets. Some will be dominated by vegetation such as parks, gardens and greenways, some by water, such as lakes and coastal areas, and others may be dominated by hard surfaces, such as civic squares, plazas and courtyards. Bringing in or enhancing nature can be a way of developing these spaces for health. Green natural environments can have a positive effect on people's physical and mental health. In many parts of the globe, clinicians are now prescribing "a walk in nature" to patients to prevent cardiovascular conditions, anxiety, and increase happiness, including for those with diabetes, a mental illness, stress, heart disease. Urban and territorial planning needs to play its part in ensuring that nearby, accessible and well-managed natural areas exist, both for the well population and for those needing these treatments.

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Resource 27 (BRIEFING)

Urban green spaces: a brief for action

http://www.euro.who.int/en/health-topics/environment-and-health/urban-health/publications/2017/urban-green-spaces-a-brief-for-action-2017

scan here

Resource 63 (ANALYTICAL TOOL)

GreenUr: green space and urban planning tool

https://www.who.int/sustainable-development/urban/guidance-tools/en/

7.3 By outcome

Outcome targets may be specified in a number of ways, for example by SDG or national and local political ambitions. Health itself at international, national and local level is often the subject of several committed outcome targets. Repeating the message from other sections of this sourcebook, the more actors and decision-makers subscribe to an outcome or cluster of outcomes the more likely these are to be achieved.

Example

Increasing everyday physical activity

Physical activity has multiplicative health, social and economic benefits. Promoting physical activity through UTP is instrumental in tackling the global burden of NCDs, helping to deliver national plans on NCDs and addressing major public health concerns, such as childhood obesity or elderly social isolation (WHO, 2018c). Policies that improve road safety, promote compact urban design and prioritize access by pedestrians, cyclists and users of public transport to destinations and services would also help deliver sustainable urban mobility plans (usually regional and local outcomes) and directly support action against climate change. Physical activity is important across all ages and should be integrated into multiple daily settings – from schools and workplaces to streets and other public spaces – to ensure gains in health equity. Investment in policies to increase physical activity through, for example, more walking, cycling, active recreation, sport and play, can contribute to achieving many of the SDGs and protect urban ecosystems (WHO, 2018c).

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Resource 24 (DESIGN GUIDE)

Streets for walking and cycling: designing for safety, accessibility, and comfort in African cities

https://www.itdp.org/publication/africa-streets-walking-cycling/

scan here

Resource 28 (TOOLKIT)

Promoting non-motorized transport in Asian cities: policymakers' toolbox

https://unhabitat.org/promoting-non-motorized-transport-in-asian-cities-policymakers-toolbox

scan here

Resource 29 (INITIATIVE)

Global action plan on physical activity 2018–2030

https://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf

Example

Improving air quality

Air pollution is currently the greatest environmental risk to health – it is widespread and affects almost all cities and countries. Many solutions exist to reduce air pollution, including on transport, energy and land-use options. Tackling air pollution links to targets under SDGs 3, 7 and 11 and concomitantly helps deliver on NCD reduction and on climate change mitigation, since pollutants such as black carbon and ozone have a direct and immediate impact on both. Improving air quality would also have an important impact on food production, as air pollution affects is linked to crop loss, therefore affecting crop productivity.

scan here

Resource 30 (TOOLKIT)

Clean Household Energy Solutions Toolkit (CHEST)

https://www.who.int/airpollution/household/chest/en/

scan here

Resource 31 (INITIATIVE)

BreatheLife global campaign

https://breathelife2030.org/breathelife-cities/

scan here

Resource 64 (ANALYTICAL TOOL)

AirQ+: software tool for health risk assessment of air pollution

http://www.euro.who.int/en/health-topics/environment-and-health/air-quality/activities/airq-software-tool-for-health-risk-assessment-of-air-pollution

Case study 4

Colombia – air quality management plan for the Aburrá Valley metropolitan area, Medellín

The Aburrá Valley is in the south-centre of the Antioquia region, in the middle of the Andes mountain range in Colombia. The valley has many pollution challenges mainly given its unsustainable urban growth in past decades. Air pollution levels, for instance, are far higher than the targets set by WHO. To solve this problem, the Air Quality Management Plan – PIGECA (2017–2030) was developed, aiming to improve the quality of the air in the metropolitan area of the Aburrá Valley, to protect public health and the environment, and promote sustainable metropolitan development. The plan intends to implement actions that improve air quality for the 3.8 million inhabitants of the 10 municipalities by 2030. A set of goals has been set for selected years (i.e. 2019, 2023, 2027 and 2030) to facilitate monitoring of the implementation. The plan is an important instrument for environmental and public health.

For more information, please see: *Compendium of inspiring practices: health edition* (UN-Habitat, 2018b).

Example

Food security and healthier nutrition

Obesity and stunting create major risks to health, and often co-exist in low-resource settings. A healthy diet is only possible if people have access to healthy foods where they live and work. Urban planning can address "food deserts" – typically low-income areas where fresh food is unavailable, and only unhealthy, heavily processed foods, high in sugar, fat and carbohydrates, are accessible and affordable. Effective zoning and land-use planning can support local food businesses and urban agriculture at every stage of the food cycle, from growing to processing, distribution and composting. In many countries, food transport (including the return journeys of empty food lorries) makes up a significant proportion of road transport miles, and much food goes to waste owing to inadequate refrigerated storage capacity and distribution networks. Integrated urban planning can remove these bottlenecks and support the development of local, equitable and healthy food systems (WHO, 2016b).

scan here

Resource 32 (SELF AUDIT)

Social network analysis for territorial assessment and mapping of food security and nutrition systems (FSNS): a methodological approach

http://www.fao.org/3/I8751EN/i8751en.pdf

scan here

Resource 33 (NETWORK)

City region food systems programme

http://www.fao.org/in-action/food-for-cities-programme/approach/need-for-sustainable-and-resilient-crfs/en/

scan here

Resource 34 (EVIDENCE)

Interventions on diet and physical activity: what works: summary report

https://www.who.int/dietphysicalactivity/whatworks/en/

Case study 5

United Kingdom – planning healthy weight environments, England

A third of children in England are overweight or obese, with this increasing trend showing younger generations are becoming obese at an earlier age and staying obese for longer. At the same time, the duty of local government authorities in the United Kingdom to promote the health of their population established by the Health and Social Care Act of 2012 and National Planning Policy Framework opens up opportunities for action.

Making use of a systems approach at the local government level, a strategic programme developed a multidisciplinary approach working closely with urban planners and public health practitioners, as well as other built environment professionals in the transport and urban regeneration areas. The programme provided direct support to local authority partners in order to tackle obesity through upstream interventions of the planning system by means of policy and planning decisions. The programme has also indirectly influenced the healthy design of housing developments, potentially impacting more than 25 000 households. Likewise, the programme encouraged active monitoring through statutory plans and monitoring mechanisms, enabling continuous long-term tracking of improvements.

For more information, please see: *Compendium of inspiring practices: health edition* (UN-Habitat, 2018b).

7.4 By principle

A principle goes beyond an outcome. It is a high-level commitment. To record progress it may be measured by a number of outcomes. An example at the national level is Sweden's Vision Zero. At the city-level, examples include child-friendly city and age-friendly environment commitments. In projects, commitments that place social and environmental justice or inclusion and participation at the centre provide a strong entry point for health equity.

Example

Social and environmental justice

Inequities in health, avoidable health inequalities, arise because of the circumstances in which people grow, live, work and age, and also result from the systems put in place to deal with illness. The physical conditions in which people live, although shaped by political, social and economic forces, are mediated by the quality, or lack of, UTP. Social and environmental justice is not only about protection and clean-up, but also about creating quality living environments and environmentally healthy communities. This can be for marginalized or disadvantaged communities or for marginalized or disadvantaged groups of individuals who may often be overlooked. At a national and supranational level, climate justice is rising up the agenda as many of the impacts of climate change become manifest, following a similar pattern to other injustices, whereby the impact is more severe on already vulnerable or marginalized people. Unless care is taken, the distribution of citywide improvements can exacerbate health inequalities. For example, a study has shown that regarding the cycle lane network in Bogotá, the wealthiest urban neighbourhoods had the best access (Parra et al, 2018).

Box 5

Vision Zero

Vision Zero (begun in Sweden in 1997) proposed that Sweden should have the same approach to traffic safety as is found in workplace safety, with a commitment to eliminating injury, and no fatalities. It was backed by the Minister for Transport, and Vision Zero was passed as an Act of Parliament in 1997. At that time, seven people per 100 000 were killed on the roads in Sweden; in 2015, fewer than three people per 100 000 were killed.

scan here

Resource 35 (ANALYTICAL TOOL)
Health Equity Assessment Toolkit
https://www.who.int/gho/health_equity/assessment_toolkit/en/

scan here

Resource 36 (WEB RESOURCE)
Global Land Tool Network
https://gltn.net/

scan here

Resource 37 (DESIGN GUIDE)
Block by Block methodology
https://www.blockbyblock.org/resources/

scan here

Resource 38 (DESIGN GUIDE)
Inclusive healthy places. A guide to inclusion and health in public space: learning globally to transform locally
https://gehlinstitute.org/work/inclusive-healthy-places/

scan here

Resource 39 (TOOLKIT)
Urban HEART: Urban Health Equity Assessment and Response Tool
https://apps.who.int/iris/handle/10665/79060

Example

Child-friendly environments

The principle of a child-friendly environment has a strong and popular resonance and there are many international examples. The healthy development of children as supported through their everyday environments – going to schools, playing out with friends, going to the park or playground – sets a foundation for health in later life. This approach calls for seeing urban environments through the lives of children and their parents and carers.

scan here

Resource 40 (BRIEFING)

Don't pollute my future! The impact of the environment on children's health

https://www.who.int/ceh/publications/don-t-pollute-my-future/en/

scan here

Resource 41 (DESIGN GUIDE)

Shaping urbanization for children. A handbook on child-responsive urban planning

https://www.unicef.org/publications/index_103349.html

scan here

Resource 42 (DESIGN GUIDE)

Cities alive: designing for urban childhoods

https://www.arup.com/perspectives/cities-alive-urban-childhood

Case study 6

South Africa – neighbourhood upgrading in informal settlements, Western Cape

Through a holistic approach, the neighbourhood upgrading in informal settlements, by the Violence Prevention through Urban Upgrading initiative, is helping to address the challenges in living conditions of many South Africans, including lack of access to water and sanitation or proof of address, particularly in informal settlements. These efforts address a multitude of health issues, including access to drinking water, sanitation and waste removal, child well-being and development and access to public services and health professionals via community databases and proof of address. In close collaboration with the communities, the initiative has been able to voice community needs and help develop the channels and infrastructure for constructive engagement with the local authority and other stakeholders. Since 2015, the initiative has trained community members to collect and capture data from households, manage community databases and proof of address details and distribute information on request to community members and other stakeholders.

For more information, please see: *Compendium of inspiring practices: health edition* (UN-Habitat, 2018b).

Example

Age-friendly environments

An ageing population is a trend in many cities. Age-friendly environments foster healthy and active ageing. This can make it possible for people, as they age, to continue to stay in their homes and participate in and contribute to their communities. A supportive environment that facilitates activity outdoors can reduce health care support in later life.

scan here

Resource 43 (TOOLKIT)

Measuring the age-friendliness of cities

https://apps.who.int/iris/bitstream/handle/10665/203830/9789241509695_eng.pdf

scan here

Resource 44 (INITIATIVE)

Age-friendly environments in Europe. A handbook of domains for policy action

http://www.euro.who.int/__data/assets/pdf_file/0011/359543/AFEE-handbook.PDF

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Resource 45 (NETWORK)

WHO Global Network for Age-friendly Cities and Communities

https://www.who.int/ageing/projects/age_friendly_cities_network/en/

"Social justice is a matter of life and death. It affects the way people live, their consequent chance of illness, and their risk of premature death. We watch in wonder as life expectancy and good health continue to increase in parts of the world and in alarm as they fail to improve in others. A girl born today can expect to live for more than 80 years if she is born in some countries – but less than 45 years if she is born in others. Within countries there are dramatic differences in health that are closely linked with degrees of social disadvantage. Differences of this magnitude, within and between countries, simply should never happen."

Closing the gap in a generation: health equity through action on the social determinants of health (WHO, 2008).

7.5 By sector

Planning can provide the platform and a framework for the integration of various sector wide policies and programmes. Such an approach is often itself termed "spatial planning". Examples of sectors with a spatial component include housing, education, transport, retail, and mobility and economic policies. Initiatives in any of these can provide entry points for health.

Example

Housing and health

Healthy housing is shelter that supports a state of complete physical, mental and social well-being, relying on the immediate housing environment, and the extent to which this provides access to services, green space, and active and public transport options, as well as protection from waste, pollution and the effects of disaster, whether natural or human made (WHO, 2018d). For housing to be adequate, the following seven criteria must be met: security of tenure; availability of services, materials, facilities and infrastructure; affordability; habitability; accessibility; location; and cultural adequacy. Also, with around 40% of urban growth worldwide today in slums and nearly 1 billion people living in urban slums or informal settlements, there is an even bigger need to address the health risks associated with housing through a systems approach (WHO, 2018d).

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Resource 46 (EVIDENCE)

WHO Housing and health guidelines

https://www.who.int/sustainable-development/publications/housing-health-guidelines/en/

scan here

Resource 47 (DESIGN GUIDE)

A practical guide to designing, planning, and executing citywide slum upgrading programmes

https://unhabitat.org/a-practical-guide-to-designing-planning-and-executing-citywide-slum-upgrading-programmes

scan here

Resource 48 (TOOLKIT)

Gentrification and neighborhood change toolkit: helpful tools for communities

https://www.buildhealthyplaces.org/content/uploads/2018/04/Gentrification-and-Neighborhood-Change-Toolkit.pdf

Example

Local economy and health

Local economies are circular with high social and environmental benefits. Local economies help to: effectively reduce disparities between territories; foster social cohesion from the bottom up; generate local business opportunities and jobs; and aim to include all marginalized communities, especially women and youth in public decision-making processes. The social and environmental benefits from circular economies have positive and direct health impacts for communities and especially for marginalized communities. Health and well-being contribute to economic and social progress and, in turn, economic security and social cohesion are two key determinants of health (WHO Regional Office for Europe, 2018).

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Resource 49 (WEBTOOL)

City Prosperity Initiative

https://www.buildhealthyplaces.org/content/uploads/2018/04/Gentrification-and-Neighborhood-Change-Toolkit.pdf

scan here

Resource 50 (BRIEFING)

Health in the green economy: health co-benefits of climate change mitigation – transport sector

https://apps.who.int/iris/handle/10665/70913

scan here

Resource 51 (BRIEFING)

Participatory budgeting

https://pb.unhabitat.org/

Example

Transport and health

Public transport has a major impact on health and health equity – and that influence on health is growing globally, along with increased mobility of people and goods. Action towards sustainable mobility can yield large, immediate public health benefits while cleaning the environment and reducing the upward trajectory of greenhouse gas emissions from the transport sector, since many of the pathways to reduce CO_2 emissions are closely linked to policies towards sustainable mobility and better land-use planning (GIZ & WHO, 2011). These policies can contribute decisively to help the shift from private vehicles to walking, cycling and public transport; improving transport infrastructure to reduce community severance and cut emissions; and avoiding unnecessary and long journeys. Improved mobility for women, children, elderly and the poor can also substantially improve health equity, since these groups traditionally have less access to private vehicles and struggle to move around the city for their daily activities (GIZ & WHO, 2011).

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Resource 52 (TRAINING)

Urban transport and health. Module 5g. Sustainable transport: a sourcebook for policy-makers in developing cities

https://www.who.int/hia/green_economy/giz_transport.pdf?ua=1

scan here

Resource 53 (DESIGN GUIDE)

Building healthy corridors: transforming urban and suburban arterials into thriving places

https://uli.org/wp-content/uploads/ULI-Documents/Building-Healthy-Corridors-ULI.pdf

scan here

Resource 54 (OVERVIEW)

Urban mobility plans: national approaches and local practice. Moving towards strategic, sustainable and inclusive urban transport planning. Sustainable urban transport technical document #13

http://www.transferproject.org/wp-content/uploads/2017/09/Urban-Mobility-Plans.pdf

scan here

Resource 65 (ANALYTICAL TOOL)

Health and Economic Assessment Tool (HEAT) for cycling and walking

http://www.euro.who.int/en/health-topics/environment-and-health/Transport-and-health/activities/guidance-and-tools/health-economic-assessment-tool-heat-for-cycling-and-walking

Case study 7

Israel – health benefits through mobility and urban renewal of the city centre, Jerusalem

Jerusalem is one of the largest cities in Israel as well as a city with geographically sprawling neighbourhoods and a steadily growing population. In recent years, the city centre has undergone a change in land use, transforming from a residential area to an economic district hosting most of the government institutions. Despite all this change, the city centre was deteriorating and being affected by an insufficient and inefficient transport system. Thanks to the action and leadership of the Ministry of Transport and the city's municipalities, the situation started to change with improvements in public transport and changes in the public spaces into accessible, safe spaces. Health considerations were incorporated and assessed as part of these efforts, which also left a legacy of lessons learned for urban planners, authorities and citizens alike in Jerusalem, such as the fact that integrated infrastructure projects can create a systematic impact, greater than originally intended.

For more information, please see: *Compendium of inspiring practices: health edition* (UN-Habitat, 2018b).

8 HEALTH APPRAISAL, ANALYSIS AND DATA TOOLS

This section outlines tools that are available to assist with the appraisal of health and health equity. Given that UTP is involved with decisions about physical infrastructure with implications for several generations, robust testing *before* implementation is imperative. These tools must be applied iteratively in the development of policies, plans or projects, allowing options to be assessed and new solutions to emerge.

8.1 Health impact assessment

Health impact assessment (HIA) can be defined as a means of assessing the health impacts of policies, plans and projects and the distribution of those effects within the population. It uses quantitative, qualitative and participatory techniques. Health impact assessment helps decision-makers make choices about alternatives and improvements to prevent disease/injury and to actively promote health (WHO, 2019c). It assumes that policies, programmes and projects have the potential to change the determinants of health. Changes to health determinants then lead to changes in health outcomes or the health status of individuals and communities (NHS, 2017). In practice, the wide range of approaches to HIA fall broadly into two camps. Either statutorily defined techniques, e.g. coming from the school of environmental appraisal and environmental impact assessment or, often more, participatory and iterative health appraisals, feeding into the development of prospective proposals and plans. Both are of value and can fit into UTP processes. Advice from successful local experiences should be sought on the most appropriate choice for specific contexts.

> "As health determinants are largely influenced by societal drivers other than the health sector, it is an obvious consequence to advocate that health should be considered adequately by all sectoral policies, programmes, and projects in order to secure health, minimize health risks, and maximize health opportunities. Impact assessment, conceived with the goal of exercising foresight, anticipating consequences of policies and plans, and managing the decision process, is therefore ideally suited to address the public health challenges. In other words: health is an essential element in any impact assessment approach."
>
> *Health in impact assessments: opportunities not to be missed,* p.3 (WHO Regional Office for Europe, 2014).

Whatever the technique, value is added by including a wide variety of stakeholders in the process and drawing on the best available qualitative and quantitative evidence to improve the well-being of places and populations (PEW, 2019). The inclusion of local communities provides policy-makers with data and information that are typically hard to get, grounded in the realities of the local environment and rich in experience (Cave et al, 2017).

The statutory HIA approach can be standalone or a sub-element of a wider environmental impact assessment. Care must be taken in using this approach, as it is not always possible to carry it out in a way that is compatible with the iterative design and policy development processes of UTP; and participatory elements might be lacking. However, prospective impact assessment is emerging as an approach for pursuing foresight in policy and decision-making. In some countries environmental impact assessment and strategic environmental assessment are relied on as well-developed techniques. However, human health may not be always covered adequately.

> "The health sector, by crafting and promoting health impact assessment (HIA), can be regarded as contributing to fragmentation among impact assessments. Given the value of impact assessments from a societal perspective, this is a risk not to be taken lightly … The need … and justification for separate HIA cannot automatically be derived from the universally accepted significance of health; rather, it should be demonstrated whether and how HIA offers a comparative advantage in terms of societal benefits …"
>
> *Health in impact assessments: opportunities not to be missed,* p.115 (WHO Regional Office for Europe, 2014).

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Resource 55 (OVERVIEW)

Health in impact assessments: opportunities not to be missed

http://www.euro.who.int/__data/assets/pdf_file/0011/261929/Health-in-Impact-Assessments-final-version.pdf

scan here

Resource 56 (WEB RESOURCE)

Health impact assessment

https://www.who.int/hia/en/

scan here

Resource 57 (TRAINING)

UN-Habitat health focused planning system assessment

unhabitat-ig-utp@un.org

In some situations, carrying out an additional and separate impact assessment for health adds to a plethora of other topic-based impact assessments. This can result in a tick-box exercise with little impact. However, whether a standalone process or not, the appraisal of health and health equity effects is essential when making pragmatic decisions. Health and sustainability impact appraisal are complementary. They can be carried out together at all scales, from a proposed regional strategy or infrastructure strategy, to a masterplan or scheme layout, to evaluation of detailed drawings.

Health impact assessments can add value at all phases of planning and policy processes. There is an increasing literature on HIA in UTP, as well as relevant and recent case studies.

scan here

Resource 58 (BRIEFING)

Health impact assessment can inform planning to promote public health

https://planning-org-uploaded-media.s3.amazonaws.com/document/Health-Impact-Assessment-Can-Inform.pdf

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Resource 59 (ANALYTICAL TOOL)

Measuring mental health outcomes in built environment research: choosing the right screening assessment tools

https://www.urbandesignmentalhealth.com/uploads/1/1/4/0/1140302/mental_health_assessment_tools_for_built_environment_research.pdf

8.2 Cumulative risks and comparative risk assessments

Spatial planning has some useful techniques dealing with complexity and acknowledging the repercussions that a given intervention may have in several aspects of daily living due to the many interlinkages in the environment. Public health objectives are also familiar with identifying and addressing the cumulative risks faced by people and

communities, including occupational risks, but also risks at household and community levels. There is growing knowledge on how to use comparative risk assessment methods to derive the net health impact of combined exposures in everyday living environments. These methods apply detailed exposure and relative risk estimates assessing the burden of disease in a given area and have been used to inform planning and decision-making processes around urban and territorial interventions. These methods commonly feature as part of the assessment phase of health-related impact assessments, particularly when there is interest in calculating some quantitative estimates for the health impact as well as the distribution of that health impact over the population.

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Resource 61 (TRAINING)

City Resilience Action Planning Tool

http://dimsur.org/

scan here

Resource 62 (ANALYTICAL TOOL)

Low carbon living co-benefits calculator

https://thud.msd.unimelb.edu.au/tools-and-models/co-benefits-calculator

8.3 Online analytical tools

There are already several online analytical decision-support tools for quantitative assessment. This document includes only a few, as this is a fast-moving field with updates and additional tools in continual development. Details of SDG health and health-related target indicators are compiled by the WHO's Global Health Observatory (https://www.who.int/gho/en/). The WHO is also developing a collection of tools to support decision-making in planning and designing urban environments (https://www.who.int/sustainable-development/urban/guidance-tools/en/).

scan here

Resource 63 (ANALYTICAL TOOL)

GreenUr: green space and urban planning tool

https://www.who.int/sustainable-development/urban/guidance-tools/en/

scan here

Resource 64 (ANALYTICAL TOOL)

AirQ+: software tool for health risk assessment of air pollution

http://www.euro.who.int/en/health-topics/environment-and-health/air-quality/activities/airq-software-tool-for-health-risk-assessment-of-air-pollution

scan here

Resource 65 (ANALYTICAL TOOL)

Health and Economic Assessment Tool (HEAT) for cycling and walking

http://www.euro.who.int/en/health-topics/environment-and-health/Transport-and-health/activities/guidance-and-tools/health-economic-assessment-tool-heat-for-cycling-and-walking

8.4 Spatial epidemiology

Spatial epidemiology is the study of spatial variation in disease risk or incidence. Risk patterns in health and health inequalities tend to have both a temporal and a spatial component. Spatial epidemiology combines methods from epidemiology, statistics and geographic information science.

Planners and public health professionals both regularly engage in spatial analyses, such as using geographic information systems. Through the layering of health data with the analysis of physical attributes, novel techniques are emerging which support a better understanding of the exposures and thus enable mitigation through policy and physical planning to be explored.

scan here

Resource 66 (TOOLKIT)

The Health Impact Project's cross-sector toolkit for health

https://www.pewtrusts.org/en/projects/health-impact-project

scan here

Resource 67 (WEB RESOURCE)

WHO global air pollution platform and database

https://www.who.int/health-topics/air-pollution

8.5 Citizen science

Citizen science is proving a key resource for data and capacity building for urban stakeholders. This approach is developing rapidly. Local, up-to-date and relevant case studies should be sought. Below are just a few examples of hundreds more becoming available.

scan here

Resource 68 (WEB RESOURCE)

SDI Know Your City: community-driven data on slums

http://knowyourcity.info/

scan here

Resource 69 (ANALYTICAL TOOL)

Hush City mobile phone application

http://www.opensourcesoundscapes.org/hush-city/

8.6 City dashboards and city profiling

City dashboards provide all actors and decision-makers, including citizens, public sector workers, researchers and companies, with comparative data for a basket of key aspects of a city. Health and non-health sector indicators are sometimes integrated on these dashboards. These may contain real-time information, time-series data and interactive maps. City dashboards could allow for benchmarking against other comparable cities as well as enable users to gain up-to-date intelligence about the city to support evidence-informed decision-making through aiding diagnosis, analysis and monitoring. Users must take care in the construction and interpretation of the indicators as inequities may be masked within highly aggregated data.

scan here

Resource 70 (WEB RESOURCE)

City Health Dashboard

https://www.cityhealthdashboard.com/

scan here

Resource 71 (SELF AUDIT)

City Resilience Profiling Tool

http://urbanresiliencehub.org/wp-content/uploads/2018/02/CRPT-Guide.pdf

9 THE HEART OF URBAN DEVELOPMENT

This concluding section emphasises the important role that health needs to play in improving the legal systems and processes of UTP itself. Through evidence, advocacy, examples and tools, this document has emphasised how UTP is a critical enabler for health and well-being in cities and regions and how our health is influenced by many factors beyond the health sector.

9.1 Health as an enabler for an improved planning system

If health really is the "pulse of the New Urban Agenda", then UTP is the circulatory system taking that pulse of health into all aspects of human settlements. If the purpose of planning is not for human and planetary health, then what is it for?

Putting human and planetary health (back) into planning needs to be used as a catalyst for improving planning systems worldwide. This sourcebook has looked at themes, processes and products in UTP – this final section concludes with a key takeaway – the impact that health can have on planning systems themselves.

Health in UTP is not only about securing better health outcomes. The approach demands new inputs and enablers; this must inevitably lead to a chain of change both in the participants and in the planning system itself (Table 9.1).

Table 9.1 Changes to urban and territorial planning triggered by using a health lens

Health provides new inputs	Health changes the participants	Health improves the planning system
Bringing a new cadre of professional expertise into UTP Providing a new set of population-level tools for assessing impacts on risk to health from "business as usual" planning and design options Providing a rich evidence base and set of empirical skills to inform decisions Building capacity for health literacy amongst professionals and communities through training, mentoring and coaching	Urban planning stakeholders (professional, policy and community): • understand how the health sector can contribute to UTP • understand how UTP can support health and well-being • better understand existing health need, place-based situations and how to develop robust solutions	Improved planning systems through performance targets aligned to achieving health and health equity More effective planning for improved population outcomes across a range of health and well-being targets Ability to meet a wider range of SDG targets through UTP interventions A legacy of joint tools, approaches, relationships and understanding

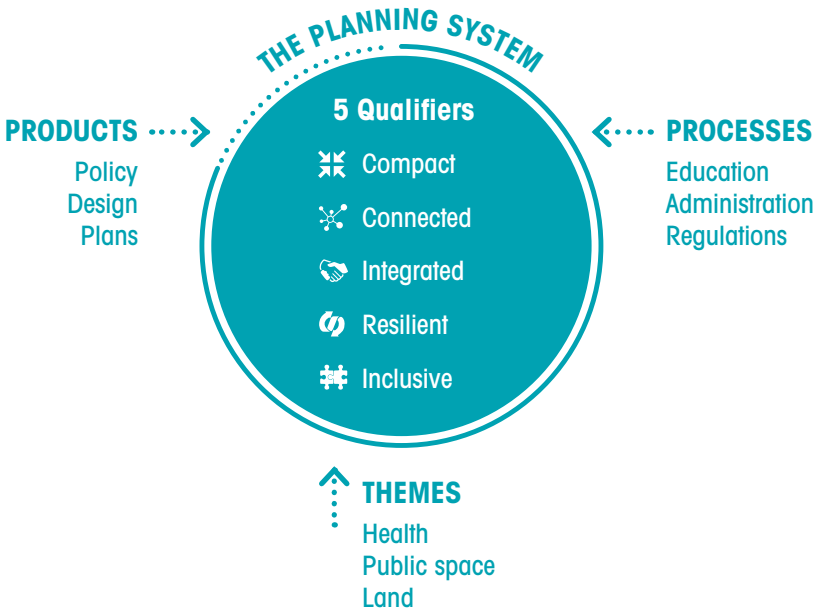

Fig. 9.1 Health's role in the improvement of planning systems

Referred to in this guidance as "health literacy", changing the formal education of the professionals involved in UTP to recognize the impacts of their actions on population and planetary health may well lead to the most significant and long-lasting change to the planning system as health has an important role to play in improving the processes, themes and products of the planning system (Fig. 9.1).

9.2 A panacea for better health?

Whilst UTP is not the answer to all health problems, it is definitely a vehicle for improvement and, ultimately, achieving the New Urban Agenda and the many targets associated with urban health in the SDGs. The IG-UTP can serve as a framework to enable integration of the health and planning sectors and foster collaborative work serving mutual benefit.

There are so many entry points for joined-up working; no matter what scale or focus, everyone can, and is encouraged to, take action and start planning for health through the most pragmatic and immediate entry point. Using all means necessary to mainstream participatory planning approaches to strengthen health literacy and the interaction between UTP and health and well-being is vital.

Health is an urgent global development agenda for all countries and cities. It calls out for collaborations among diverse communities of practice: governments at all levels, policy-makers, built environment and public health. It calls out to practitioners and the scientific community and, importantly, civil society. Urban development is critically important for health and welfare, and UTP is about creating the context for healthier lives. Everyone involved should be proud to take their part as members of the wider public health community.

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APPENDIX 1: DETAILED DESCRIPTION OF RESOURCES AND TOOLS

Further details of each resource listed in the sourcebook can be found below. The listing or resources follows the order in which they are introduced topic by topic in the main text.

There are many different types of resource and each is unique in nature. However, to assist with selection and use they have been listed as belonging to one of the following 11 categories.

ANALYTICAL TOOL
Tool for use in quantitative analysis

BRIEFING
Briefing for a specific approach

DESIGN GUIDE
Design process with rationale and instructions

EVIDENCE
Comprehensive subject specific evidence base

INITIATIVE
Reports on successful initiatives

NETWORK
Networks of policy and action

OVERVIEW
Broad overview of a subject area

SELF AUDIT
Tool to assist with baseline appraisal and analysis

TOOLKIT
Comprehensive stepwise instructions, with associated policy and evidence

TRAINING
Training packages

WEB RESOURCE
Source of online information and links for policy and action

Resources and tools	Source and description
How to include health in urban and territorial planning	
Resource 1 (EVIDENCE) **Spatial planning for health: an evidence resource for planning and designing healthier places** scan here https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/729727/spatial_planning_for_health.pdf	Public Health England (2017). The primary target audience of this tool is local public health professionals, but also planners working in local authority settings. The review identifies, critically appraises and summarizes existing review-level evidence of associations between the built and natural environment and health outcomes. The review is centred on five aspects of the built and natural environment: neighbourhood design, housing, healthier food, natural and sustainable environment, and transport. **Audience:** The findings are designed to be suitable for both public health practitioners and planning professionals, facilitating two-way communication between disciplines. **Good for:** Arising from the English context, this resource would be valuable for many cities and towns in the world where people's choices for healthier lifestyles are limited by the built environment.
Resource 2 (TOOLKIT) **Building healthy places toolkit: strategies for enhancing health in the built environment** scan here https://centerforactivedesign.org/buildinghealthyplacestoolkit	Washington, DC: Urban Land Institute (2015). Resource and reference document providing specific evidence-supported design and programming recommendations that relate to health. **Audience:** For built environment professionals, developers and public health practitioners who are seeking to shape buildings and projects in ways that enhance and promote health. **Good for:** Arising from the USA, this resource would be valuable for guiding development in cities and towns in the world where there is an ambition to optimize health outcomes.
Resource 3 (OVERVIEW) **Urban-rural linkages: guiding principles and framework for action to advance integrated territorial development** scan here https://urbanrurallinkages.files.wordpress.com/2019/09/url-gp-1.pdf	UN-Habitat (2018). A multilevel, multistakeholder guidance framework and tool to strengthen urban-rural linkages in national and subnational policies and programmes. Protection and promotion of health by balancing urban, peri-urban and rural health challenges are included in the guiding principles to provide social protection and do no harm. **Audience:** Policy-makers at all governance levels, programme managers, private sector and civil society actors and implementation partners of local and subnational governments. **Good for:** Incorporating into public policy and programme provision for social services across the urban-rural continuum such as coordinated health, nutrition and sanitation plans, reduction of spatial and social inequities in quality health services, and mainstreaming efforts to create healthy and safe environments in integrated, resilient and sustainable UTP.

Resources and tools	Source and description
Resource 4 (OVERVIEW) **The role of cities in improving population health: international insights** scan here https://www.kingsfund.org.uk/publications/cities-population-health	Naylor C, Buck D, London: The King's Fund (2018). Examines cities as playing a growing role in population health improvement with the enormous potential to be health-generating places. The report is based on 50 interviews with leaders from 14 cities and draws on international case studies. It concludes that improving population health depends on many factors, including: coordinated action at multiple levels, bold political leadership, empowered citizens, effective use of planning powers and regulatory measures. **Audience:** Those wanting to explore how cities and their leaders can maximize opportunities to improve population health including public health practitioners. **Good for:** A wide range of cities covering high-income countries and LMICs.
Working in the absence of good planning legislation and with limited resources	
Resource 5 (SELF AUDIT) **UN-Habitat planning law assessment framework** scan here https://unhabitat.org/planning-law-assessment-framework	UN-Habitat (2017). The planning law assessment framework is a self-assessment tool to be used during focus groups for the preliminary identification of strengths and weakness of an urban planning system. The framework looks at all the laws, regulations and decrees applicable in a city, enacted at different levels. It takes into account only black letter law but will stimulate the discussion on eventual discrepancies. This process is useful to change mindsets, learning process, to create constituency creation; it could be the first step to pursue a reform process. **Audience:** Wide range of users of planning law in a given jurisdiction. It is recommended to have experts and specialists in planning law leading the assessment. The methodology should take the form of focus groups, interviews and expert group meetings. **Good for:** Rapid assessment to identify the strengths and weaknesses of an urban planning law and guiding a process to agree on actions that are needed to address the identified gaps.
Resource 6 (SELF AUDIT) **Reforming urban laws in Africa: a practical guide** scan here https://www.africancentreforcities.net/wp-content/uploads/2017/06/ULR-Report_FINAL_LR.pdf	African Centre for Cities, Cities Alliance, Urban LandMark and UN-Habitat (2017). This guide focuses on the law-making implementation challenge: how to make progress with an intention to make better laws for towns and cities in Africa. It proposes an approach to urban law-making that is grounded in an understanding of the local context. Produced largely by the African Centre for Cities, experience from senior practitioner researchers of urban law-making is combined to provide a practical guide for officials and other practitioners. The guide is also available in French and Portuguese. **Audience:** Wide range of interest groups and officials. **Good for:** Better understanding of the laws determining how cities work, how the legal system works and how the government works at different levels.
Resource 7 (SELF AUDIT) **Slum Upgrading Legal Assessment Tool** scan here unhabitat-ig-utp@un.org	UN-Habitat (2019) (in production). This legal assessment tool provides urban managers and other stakeholders with a framework to understand how and if their legal and regulatory framework supports participatory citywide slum upgrading or not. It is a self-assessment tool to be used during focus groups, to identify strengths and weakness of the current urban planning system and guide opportunities for citywide slum upgrading. It can provide a clarifying process to make clear what frameworks might need to be revised as part of a longer term reform process and also serve as an entry point to change mindsets and build capacity around legal and regulatory frameworks for participatory citywide slum upgrading. **Audience:** Urban managers and other key stakeholders. **Good for:** Robust domestic legal analysis, supported by a participatory discussion which outlines the strengths and opportunities or impediments of current legal and regulatory frameworks for slum upgrading.

Resources and tools	Source and description
Resource 8 (TRAINING) **Designing and implementing street-led citywide slum upgrading programmes: a training module companion** scan here http://capacitybuildingunhabitat.org/wp-content/uploads/Trainings%20and%20publications/2018_05_17/training_module_slum_upgrading.pdf	UN-Habitat (2013). This training module introduces a practical strategy for improvement of streets through citizen participation as a strategic spatial intervention for citywide slum upgrading. The approach fosters incremental improvement of the physical and socioeconomic conditions in slums and informal settlements and promotes urban regeneration, transformation and their integration into the overall city planning agenda. **Audience:** Wide range of actors and decision-makers, including public health practitioners. **Good for:** Especially useful for participatory planning, advocacy and case-making.
Resource 9 (OVERVIEW) **Addressing health of the urban poor in South-East Asia Region: challenges and opportunities** scan here https://apps.who.int/iris/handle/10665/204753	WHO Regional Office for South-East Asia (2011). An overview of the health of the urban poor in Member States of the WHO South-East Asia Region focusing on health protection. It addresses the built environment determinants of health including land use, food access, housing, transport and domestic energy sources. **Audience:** Policy-makers, programme managers and public health and planning professionals. **Good for:** Making the case for a strategic framework of multisectoral action and showing the connected urban action needed covering a range of SDG goals and targets, including climate change. Applicable to slums and the problems of rapid and unplanned urbanization.
Tactical urbanism	
Resource 10 (TOOLKIT) **Rapid Planning Studio – concept note. Rapid Planning Studio – workshop schedule** scan here unhabitat-ig-utp@un.org	UN-Habitat (2016). Rapid Planning Studio aims at strengthening planning capacity of participating municipalities for sustainable urban development and providing a clear planning methodology and an actionable roadmap to supply serviced land for rapid urban growth. A workshop integrating the three basic pillars – urban legislation, urban finance and economy, and urban planning and design – of sustainable urban development simulating a full planning process in a rapid, 3-day format. **Audience:** Municipal staff and community activists. **Good for:** Applicable worldwide. Harnessing the knowledge, talents and energies of all parties to discuss citywide urban analysis and profiling, strategic planning, urban transformation and public spaces, focusing specifically on answering the challenges of participating municipalities regarding planned city extensions.
An assets-based approach, with people at the centre (people are assets)	
Resource 11 (INITIATIVE) **Bending the curve on urban diabetes: new research approaches and innovative interventions for tackling diabetes in your city** scan here http://www.citieschangingdiabetes.com/content/dam/cities-changing-diabetes/magazines/CCD-BriefingBook-2017-BendTheCurveOnUrbanDiabetes.pdf	Cities Changing Diabetes (2017). This briefing presents highlights from research and diabetes action pilots in eight cities worldwide. The approach demonstrates how urban planning needs to be embedded as a solution to this health challenge. The focus is obesity, the single most significant driver of diabetes. Pitched against an objective to hold the rise of diabetes prevalence to 10% globally; a model is presented on what must be done to reduce obesity by 25% globally by 2045. **Audience:** Policy-makers, programme managers and public health and planning professionals. **Good for:** Setting goals and establishing an action plan for response to a rise in diabetes and offering an approach for cities, towns and communities to set goals and take action.

Resources and tools	Source and description
Resource 12 (WEB RESOURCE) **City at eye level** scan here https://thecityateyelevel.com/	STIPO, The Netherlands. This is a worldwide programme with many partners. The website has many resources including open source books, some put together in partnership with UN-Habitat. **Audience:** Community, businesses, the public sector and public health practitioners. **Good for:** Shared working through seeing a place through the eyes of a child.
Building capacity through widespread leadership and health literacy	
Resource 13 (TRAINING) **Build public & political will** scan here https://www.countyhealthrankings.org/key-activities/18392#key-activity-6	Population Health Institute, University of Wisconsin-Madison. Activity 6 – Act on what's important: key activities; county health rankings. An online course delivered as a suite of advice and frameworks for promoting policy, systems and environmental changes to improve community health for the long term. The section featured here specifically looks at how to develop public and political will. **Audience:** Policy-makers, programme managers and public health and urban planning professionals. **Good for:** Advocacy and developing public and political support especially for disadvantaged and marginalized communities.
Spreading health literacy (places are assets)	
Resource 14 (DESIGN GUIDE) **Active design guidelines: promoting physical activity and health in design** scan here https://centerforactivedesign.org/guidelines/	New York City (2011). Citywide manual for modern city centres promoting physical activity and health. **Audience:** Everyone involved with built environment design, including architects, planners, urban designers, transportation planners and landscape architects and building sponsors in public or private sectors. **Good for:** Anywhere in the world, especially city centres with potential to promote physical activity and well-being through the design of the built environment.
Using a Health in All Policies approach (processes are assets)	
Resource 15 (BRIEFING) **Noncommunicable diseases: what municipal authorities, local governments and ministries responsible for urban planning need to know** scan here https://apps.who.int/iris/handle/10665/250228	WHO & UNDP (2016). A short advocacy briefing focusing on addressing NCDs through urban planning. **Audience:** Municipal authorities, local governments and ministries responsible for urban planning. **Good for:** Dealing with a broad range of health challenges and widely applicable cities at any stage of development. Support for HiAP and SDG approaches.

Resources and tools	Source and description
Resource 16 (TRAINING) **Health in All Policies: training manual** scan here https://apps.who.int/iris/bitstream/handle/10665/151788/9789241507981_eng.pdf	WHO (2015). A comprehensive training manual for HiAP work with the aim for workshop participants to gain the most from a learning-by-doing, participatory approach. **Audience:** Training routeways are provided for politicians and senior policy-makers (2 days) and for policy and programme managers (3 days). **Good for:** Establishing a shared approach through the guided group discussions and activities which allow participants to build on and apply their knowledge and experience. Applicable worldwide.
Choosing your entry point (by setting): public spaces	
Resource 17 (TOOLKIT) **Global public space toolkit: from global principles to local policies and practice** scan here https://www.localizingthesdgs.org/library/82/Global-Public-Space-Toolkit--From-Global-Principles-to-Local-Policies-and-Practice.pdf	UN-Habitat (2015). The structure chosen for this work rests on three elements: why, what and how: the case for public space; goals, constraints, principles and policies; and turning good principles into actions. The toolkit has been designed to be available to all and easily accessible. The text is illustrated by brief quotes and practical examples of cases on past or ongoing public space initiatives. A web-based version, which is intended to grow and be enriched with contributions from local and global actors, can be found at: www.urbangateway.org/publicspace **Audience:** City authorities with interest for practitioners and community activists. **Good for:** Widely applicable including informal settlements in LMICs.
Resource 18 (DESIGN GUIDE) **Turning spaces into places – handbook** scan here https://unhabitat-kosovo.org/un_habitat_documents/turning-spaces-into-places-handbook/	UN-Habitat (2013). The handbook outlines key underlying design characteristics of "good public places" by introducing some global concepts and local examples. It aims to stimulate discussion, generate ideas, collective thinking and raise awareness amongst decision-makers about placemaking versus space-maintaining. The handbook develops some design principles and techniques and contains inspiring examples of what can be achieved. **Audience:** Mayors, urban planners, developers, and all those concerned with the development of towns and cities, and with the quality and importance of public spaces. **Good for:** Explaining what placemaking is, and how placemaking impacts people's lives and how it can be achieved.
Resource 19 (WEB RESOURCE) **Ciclovia Recreativa (Open Streets) implementation and advocacy manual** scan here https://cicloviarecreativa.uniandes.edu.co/english/introduction.html	Universidad de los Andes, Colombia. Guidance and case studies from Ciclovía Recreativa. This is an initiative for the temporary opening of streets to residents to enjoy them as safe and pleasant spaces for walking, jogging, skating or cycling. Ciclovía Recreativa projects differ from permanent bike routes because they promotes temporary spaces where the principal use is not for transport, but for recreation. In general, Ciclovía Recreativa occurs on a fixed day of the week (often Sundays and in some cases on holidays) and has an average duration of 6 hours. Also available in Spanish. **Audience:** Urban planners, communities and public health practitioners. **Good for:** Planning, implementing and evaluating Ciclovía Recreativa/Open Streets initiatives.

Resources and tools	Source and description
Choosing your entry point (by setting): neighbourhoods	
Resource 20 (BRIEFING) **A new strategy of sustainable neighbourhood planning: five principles** scan here https://smartnet.niua.org/sites/default/files/resources/a_new_strategy_of_sustainable_neighbourhood_planning_five_principles.pdf	UN-Habitat (2014). In supporting sustainable neighbourhoods, these principles seek to: promote high-density urban growth, alleviate urban sprawl and maximize land efficiency; promote sustainable, diversified, socially equal and thriving communities in economically viable ways; encourage walkable neighbourhoods and reduce car dependency; optimize use of land and provide an interconnected network of streets which facilitate safe, efficient and pleasant walking, cycling and driving; foster local employment, local production and local consumption; provide a variety of plot sizes and housing types to cater for the diverse housing needs of communities, at densities which can ultimately support the provision of local services. **Audience:** Local decision-makers, planners, public health professionals and communities. **Good for:** Worldwide application for advocacy and communication of key health principles for local neighbourhood planning, design and regeneration.
Resource 21 (TOOLKIT) **Healthy built environment linkages toolkit** scan here http://www.bccdc.ca/health-professionals/professional-resources/healthy-built-environment-linkages-toolkit	Vancouver, BC: Provincial Health Services Authority (2018). This 80-page toolkit is very comprehensive and describes how population health is influenced by the design of our neighbourhoods, housing, transportation systems, natural environments and food systems. It brings together research-based key messages that correlate land-use planning decisions, impacts on the built environment and population health. Health professionals and others working to assist local governments and provide well-informed and credible recommendations will find this resource useful to draw from. Also available in French. **Audience:** The toolkit has been written for health professionals to assist them in articulating well-informed and credible responses within local government planning processes and decision-making. It can also be used by other stakeholders, such as planners, who may find the health evidence provided is helpful to build the case for healthier placemaking. **Good for:** The toolkit has been created to generate conversations and real-world adaptation by outlining a rationale for why the built environment is important for health. Although coming from a high-income country, the principles are widely relevant and can be adapted to many global situations.
Resource 22 (BRIEFING) **Urban informal settlement upgrading and health equity** scan here https://www.researchgate.net/publication/308674541_Urban_Informal_Settlement_Upgrading_and_Health_Equity	Corburn & Sverdlik (2016). This text looks at upgrading initiatives of informal settlements in the Global South and the health implications. There is a discussion of how urban health inequalities can be reduced by responsive governance and participatory, multisectoral upgrading initiatives in informal settlements (or slums) and of pathways between upgrading and health equity and a critical review of a range of published evaluation. It concludes by proposing more nuanced, mixed-methods evaluations that can better reveal how upgrading projects can influence health and support well-being in informal settlements. **Audience:** Public health practitioners and regeneration interests. **Good for:** Informal settlements.

Resources and tools	Source and description
Choosing your entry point (by setting): local streets	
Resource 23 (DESIGN GUIDE) **Healthy high streets: good place-making in an urban setting** scan here https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/699295/26.01.18_Healthy_High_Streets_Full_Report_Final_version_3.pdf	Public Health England (2018). This report synthesises the latest and most relevant evidence. Specifically, the report examines how important features of the high street can positively impact on social cohesion, and on mental and physical health. It provides street design principles. **Audience:** Local decision-makers, planners, urban designers, landscape architects, public health practitioners and other professionals involved in creating high streets. **Good for:** Making high streets more inclusive, safe and healthy and that promote social integration, particularly in areas of high deprivation. Applicable to any highly built-up environments in cities or neighbourhoods; smaller high streets in suburbs are also covered.
Resource 24 (DESIGN GUIDE) **Streets for walking and cycling: designing for safety, accessibility, and comfort in African cities** scan here https://www.itdp.org/publication/africa-streets-walking-cycling/	UN-Habitat/Institute for Transportation and Development Policy (2018). The guide emphasizes designing for safety, accessibility and comfort in African cities. These cities are fundamentally walking and cycling cities, but often lack the infrastructure and design to make these activities safe and comfortable. This design book provides detailed guidance on how to address these issues. **Audience:** City planners, engineers and architects across Africa. The findings are designed to be suitable for both public health practitioners and transport and planning professionals, facilitating two-way communication between disciplines. **Good for:** Better design of roads, provision of safe and more convenient pedestrian crossings and separation between high-speed vehicles and people to make walking and cycling safer.
Resource 25 (DESIGN GUIDE) **Streets as tools for urban transformation in slums: a street-led approach to citywide slum upgrading** scan here https://unhabitat.org/sites/default/files/download-manager-files/Streets%20as%20Tools%20for%20Urban%20Transformation%20in%20Slums.pdf	UN-Habitat (2014). The focus is on the streets and urban layout of settlements, as the drivers of transformation and regeneration. It reviews citizens' involvement in participatory planning and re-emphasises the importance of mapping through participatory enumeration and locally acceptable forms of social and physical mapping. It covers: basic infrastructure provision, e.g. water supply, sanitation, drainage; land allocation for resettlement and new housing provision; and ensuring security of land tenure within slums, ultimately leading to regularization and legalization. The approach is an incremental one to integrating slums using plenty of examples. **Audience:** City authorities, community activists and public health practitioners. **Good for:** Informal settlements in LMICs.
Resource 26 (NETWORK) **Ciclovia Recreativa in Latin America and Open Streets in South Africa** scan here https://www.nationalgeographic.com/environment/2019/03/bogota-colombia-ciclovia-bans-cars-on-roads-each-sunday/ scan here https://openstreets.org.za/	Ciclovía Recreativa/Universidad de los Andes, Colombia. What started as an initiative in Bogotá, Colombia, then spread to hundreds of towns and cities in many countries. The activity is a time-limited period (weekly and/or on major public holidays) when specific major roads are closed to traffic so that residents have the space for jogging, running, skating, cycling and aerobics. It started as a way of encouraging fitness but now its social benefits of providing spaces to meet with friends, family and fellow city dwellers of all ages are also recognized. The name Ciclovía arises from the seven cycle-friendly routes in Bogotá covering 121 km that the first initiative encompassed. **Audience:** Mayors and local politicians, local people and public health practitioners. **Good for:** Bringing activity and social connections into cities without major infrastructure costs.

Resources and tools	Source and description
Choosing your entry point (by setting): green and blue spaces	
Resource 27 (BRIEFING) **Urban green spaces: a brief for action** scan here http://www.euro.who.int/en/health-topics/environment-and-health/urban-health/publications/2017/urban-green-spaces-a-brief-for-action-2017	WHO Regional Office for Europe (2017). This briefing presents the key findings of a review of research evidence and practical case studies on urban green space interventions and provides implications for practice. It covers urban green spaces and their benefits, and planning and design involving the community and stakeholders. It promotes monitoring and evaluation. It also describes potential risks and challenges to be considered and avoided with a set of key messages and further reading. **Audience:** To support urban policy-makers and practitioners. **Good for:** Global application for cities, towns and local neighbourhoods when designing urban green spaces to maximize social and health benefits. **See also:** Resource 63 (ANALYTICAL TOOL): **GreenUr: green space and urban planning tool**
Choosing your entry point (by outcome): increasing everyday physical activity	
Resource 28 (TOOLKIT) **Promoting non-motorized transport in Asian cities: policymakers' toolbox** scan here https://unhabitat.org/promoting-non-motorized-transport-in-asian-cities-policymakers-toolbox	UN-Habitat (2013). This is a comprehensive briefing and design manual with several practical survey and audit tools. The health focus is improving air quality. However, a shift to cycling and walking will increase physical activity. Contains case studies and options for solutions. **Audience:** Transport and public health professionals working in or with cities. **Good for:** Auditing and action planning in cities in LMICs that are facing a rise in personal motorized transport with the consequent increase in health impacts from pollution. **See also:** Resource 24 (DESIGN GUIDE): **Streets for walking and cycling: designing for safety, accessibility, and comfort in African cities**
Resource 29 (INITIATIVE) **Global action plan on physical activity 2018–2030** scan here https://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf	WHO (2018). A widely applicable plan for action to support everyday physical activity developed through a worldwide consultation process involving governments and key stakeholders across multiple sectors including health, sports, transport, urban design, civil society, academia and the private sector. **Audience:** Action points for city leaders, stakeholders and Member States. **Good for:** Focusing action on what will best support active lives. Presents the urban environment as an essential part of active lives. Provides five actions for creating active environments broken down into steps for each stakeholder group.
Choosing your entry point (by outcome): better air quality	
Resource 30 (TOOLKIT) **Clean Household Energy Solutions Toolkit (CHEST)** scan here https://www.who.int/airpollution/household/chest/en/	WHO. For clean and safe interventions in the home. Helps health sector professionals and policy-makers implement the recommendations found in WHO guidelines on indoor air quality and household fuel combustion. It provides resources to guide the energy planning process, using evidence from WHO databases and training materials. **Audience:** Public health professional and planners working in countries with health risks from household fuel combustion. **Good for:** Contains tools for assessment of the current state of household energy use, air pollution and health impacts. It facilitates the design of policies that promote the adoption of clean household energy at a local, programmatic or national level.

Resources and tools	Source and description
Resource 31 (INITIATIVE) **BreatheLife global campaign** scan here https://breathelife2030.org/breathelife-cities/	WHO, Climate and Clean Air Coalition, UNEP, World Bank. A network programme for cities, regions and countries who are committed to bringing air quality to safe levels by 2030. The initiative links partners together and supports action through providing a range of tools and sharing experience. **Audience:** Primarily multiple actors and decision-makers in municipalities. **Good for:** Worldwide relevance in helping maintain municipalities' focus on achieving better urban air quality. **See also:** Resource 64 (ANALYTICAL TOOL): **AirQ+: software tool for health risk assessment of air pollution**
Choosing your entry point (by outcome): food security and healthier nutrition	
Resource 32 (SELF AUDIT) **Social network analysis for territorial assessment and mapping of food security and nutrition systems (FSNS): a methodological approach** scan here http://www.fao.org/3/I8751EN/i8751en.pdf	Food and Agriculture Organization (FAO) (2018). This work embodies a territorial approach to food security and nutrition policy, but also has strong links to the wider determinants of health and sustainability. This work is part of a broader effort of the FAO to support countries to improve the inclusiveness and sustainability of food security and nutritional systems. It aims to contribute to work on food systems and nutrition indicators, city-region food systems and rural-urban linkages. **Audience:** All actors and decision-makers needing to understand and influence the inclusiveness, governance and efficiency of food systems from a food security and nutrition point of view. **Good for:** Globally applicable methodological approach to analyse the social, institutional and economic dimensions of food systems and their relationships with food security and nutrition outcomes, as well as to assess the spatial patterns of food systems.
Resource 33 (NETWORK) **City region food systems programme** scan here http://www.fao.org/in-action/food-for-cities-programme/approach/need-for-sustainable-and-resilient-crfs/en/	FAO. A suite of online guidance, tools and information that offers concrete policy and programme opportunities through which rural and urban areas and communities in a given city-region can be directly linked. Directly addresses the wider determinants of health and sustainability through a territorial approach. Assessment and improvement of city-region food systems to help achieve better economic, social and environmental conditions in both urban and nearby rural areas. **Audience:** Local governments in any country, including public health practitioners and local food activists. **Good for:** The programme provides assistance in identifying and understanding gaps, bottlenecks and opportunities for sustainable planning, informed decision-making, prioritizing investments, designing sustainable food policies and strategies to improve local food systems.
Resource 34 (EVIDENCE) **Interventions on diet and physical activity: what works: summary report** scan here https://www.who.int/dietphysicalactivity/whatworks/en/	WHO (2009). A summary of tried and tested diet and physical activity interventions that aim to reduce the risk of chronic NCDs. In terms of UTP, interventions in the following categories are included: policy, environment, workplace, schools, mass media, the community, primary health care, older adults and religious settings. **Audience:** Policy-makers and stakeholders. **Good for:** Public health promotion – diet and physical activity interventions to reduce the risk of chronic NCDs. Outlines interventions that use existing community social structures, such as schools or weekly meetings of older adults.

Resources and tools	Source and description
Choosing your entry point (by principle): social and environmental justice	
Resource 35 (ANALYTICAL TOOL) **Health Equity Assessment Toolkit** scan here https://www.who.int/gho/health_equity/assessment_toolkit/en/	WHO. The toolkit is a software application that facilitates the assessment of within-country health inequalities. It can be used on desktops, laptop computers and mobile devices. It enables users to *explore inequality* in a setting of interest (e.g. a country, province or district) to determine the latest situation of inequality and the change in inequalities over time. It also allows users to *compare inequality* in the setting of interest with other settings. **Audience:** Public health practitioners and spatial planners. **Good for:** Assessing inequalities using disaggregated data and summary measures and advocacy through visualizing results via a variety of interactive graphs, maps and tables.
Resource 36 (WEB RESOURCE) **Global Land Tool Network** scan here https://gltn.net/	Global Land Tool Network with UN-Habitat. The Global Land Tool Network is an alliance of international partners committed to increasing access to land and tenure security for all, with a particular focus on the poor and women. It uses a rights-based approach. The network's partners include international civil society organizations, research and training institutions, bilateral and multilateral organizations, and international professional bodies. **Audience:** LMICs and any rapidly expanding city with land-rights issues. **Good for:** A suite of land rights-based tools covering a range of subject areas.
Resource 37 (DESIGN GUIDE) **Block by Block methodology** scan here https://www.blockbyblock.org/resources/	Block by Block. Block by Block began in 2012 with the idea of integrating the computer game Minecraft into public space planning to get community members more involved. The approach is easy to use, and people of all ages, backgrounds and education levels can pick it up quickly. **Audience:** Community and neighbourhood residents, including children and youth. Using a videogame to collect data and do planning charettes motivates children and youth to get involved. **Good for:** LMICs; an effective, and cost-effective way to visualize a three-dimensional environment, in a format designed for rapid iteration and idea sharing and advocacy. Helps neighbourhood residents model their surroundings, visualize possibilities, express ideas, drive consensus and accelerate progress.
Resource 38 (DESIGN GUIDE) **Inclusive healthy places. A guide to inclusion and health in public space: learning globally to transform locally** scan here https://gehlinstitute.org/work/inclusive-healthy-places/	Gehl Institute (2018). A participatory tool for evaluating and creating inclusive, healthy public places that support health equity. This framework supports inclusion to advance health equity through public spaces. The framework is built around four guiding principles for shaping and assessing public space projects. Only one principle addresses physical space, reflecting the need for practitioners to look beyond physical design and placemaking to create change. The process considers context, process and sustainability. The framework allows users to adapt and apply the approach to their situation in different ways. **Audience:** Community, business and public sector. Mixed groups of actors and decision-makers including professionals with communities who are vulnerable and often marginalized. **Good for:** Adaptable to a very wide applicability and relevant to different situations for improvement of public space towards inclusion and health.

Resources and tools	Source and description
Resource 39 (TOOLKIT) **Urban HEART: Urban Health Equity Assessment and Response Tool** scan here https://apps.who.int/iris/handle/10665/79060	WHO & WHO Centre for Health Development, Kobe, Japan (2010). The tool guides users through a standardized procedure of gathering relevant evidence and planning efficiently for appropriate actions to tackle health inequities. Case studies demonstrate how it has galvanized both city governments and communities to recognize and take action on health inequities. **Audience:** Local policy-makers and communities. It is envisaged that cities in varied contexts can locally adapt and institutionalize the process, while maintaining its core concepts and principles. **Good for:** It is designed for ease of use and to link evidence to action.
Choosing your entry point (by principle): child-friendly	
Resource 40 (BRIEFING) **Don't pollute my future! The impact of the environment on children's health** scan here https://www.who.int/ceh/publications/don-t-pollute-my-future/en/	WHO (2017). Broad and evidence-based briefing on environmental risk in childhood, focusing on specific diseases; it concludes with the information that reducing environmental risks could prevent a quarter of childhood deaths and disease. It also provides a review of the SDGs in relation to childhood risk and disease. **Audience:** Public health practitioners. **Good for:** Particularly good review of communicable disease risk to children in built environments.
Resource 41 (DESIGN GUIDE) **Shaping urbanization for children. A handbook on child-responsive urban planning** scan here https://www.unicef.org/publications/index_103349.html	United Nations Children's Fund (UNICEF) (2018). This handbook on child-responsive urban planning provides details for creating thriving and equitable cities where children live in healthy, safe, inclusive, green and prosperous communities. By focusing on children, this publication provides guidance on the central role that urban planning should play in achieving the SDGs. **Audience:** All those accountable in the urban planning process, including city officials, real estate industry leaders, community leaders and planning, transport and public health practitioners. **Good for:** Applicable for global perspectives and local contexts for all cities. It provides a highly accessible presentation of concepts, evidence and technical strategies to bring children to the foreground of urban planning.
Resource 42 (DESIGN GUIDE) **Cities alive: designing for urban childhoods** scan here https://www.arup.com/perspectives/cities-alive-urban-childhood	London: Arup (2017). This report highlights why and how city stakeholders should start to create child-friendly urban environments. It begins by highlighting the changing urban context, then sets out five core challenges of urban childhoods: traffic and pollution; high-rise living and urban sprawl; crime, social fears and risk aversion; isolation and intolerance; and inadequate and unequal access to the city. **Audience:** All those accountable or having an interest in the urban planning process. **Good for:** The report explores the benefits that child-friendly practices can bring, illustrated by case studies from around the world.

Resources and tools	Source and description
Choosing your entry point (by principle): age-friendly	
Resource 43 (TOOLKIT) **Measuring the age-friendliness of cities** scan here https://apps.who.int/iris/bitstream/handle/10665/203830/9789241509695_eng.pdf	WHO (2015). The tool is based on the perspectives and inputs of older people, care givers and service providers collected in 33 cities across all six WHO regions: Africa, Americas, Eastern Mediterranean, Europe, South-East Asia and Western Pacific. The publication focuses on eight key domains of urban life that encompass determinants of health and well-being: outdoor spaces and buildings; transportation; housing; respect and social inclusion; civic participation and employment; social participation; community and health services; and communication and information. **Audience:** Public health practitioners and age-friendly communities of interest. **Good for:** Providing a baseline for the promotion of age-friendly urban policies in cities worldwide.
Resource 44 (INITIATIVE) **Age-friendly environments in Europe. A handbook of domains for policy action** scan here http://www.euro.who.int/__data/assets/pdf_file/0011/359543/AFEE-handbook.PDF	WHO (2017). A handbook based on lessons learned from existing age-friendly initiatives in Europe. It builds on relevant locally and regionally developed tools that are now available, with evidence from research. The handbook links actions to create more age-friendly environments to the broader context of European health and social policies for ageing populations. There is a focus is on the inter-connectedness and synergies between eight domains and how they can work together to address common goals such as increasing social inclusion, fostering physical activity or supporting people living with dementia. **Audience:** Multisectoral partners in local governments and communities who work with them. **Good for:** Demonstrates how local governments can create age-friendly environments.
Resource 45 (NETWORK) **WHO Global Network for Age-friendly Cities and Communities** scan here https://www.who.int/ageing/projects/age_friendly_cities_network/en/	WHO. The network was established to foster the exchange of experience and mutual learning between cities and communities worldwide. **Audience:** Multisectoral partners in local governments and communities who work with them. Cities and communities in the network are of different sizes and are located in different parts of the world. **Good for:** Support for acting on the desire and commitment to promote healthy and active ageing and a good quality of life for older residents.
Choosing your entry point (by sector): housing	
Resource 46 (EVIDENCE) **WHO Housing and health guidelines** scan here https://www.who.int/sustainable-development/publications/housing-health-guidelines/en/	WHO (2018). Covers key areas of housing such as crowding, indoor temperature, accessibility, home injuries and summarizes other relevant WHO guidelines. The guidelines encompass general considerations for policy and good practice recommendations for addressing health problems. **Audience:** Purposely designed for a broad audience in both the developed and developing world. The main target audience is policy-makers responsible for housing-related policies and regulations, enforcement measures. **Good for:** Reducing risk factors, while recognizing the importance of key interventions. Initiating intersectoral collaboration that seeks to support healthy housing from a government perspective.

Resources and tools	Source and description
Resource 47 (DESIGN GUIDE) **A practical guide to designing, planning, and executing citywide slum upgrading programmes** scan here https://unhabitat.org/a-practical-guide-to-designing-planning-and-executing-citywide-slum-upgrading-programmes	UN-Habitat (2014). This guide for citywide slum upgrading and local projects provides a comprehensive manual with tips and tools from practical experience. It is an accessible tool for practitioners, leading them through UN-Habitat steps towards a successful citywide slum-upgrading programme. **Audience:** Actors and decision-makers, including communities, public health and planners, involved with informal settlements and slums. **Good for:** Accessible quick guide section provides an important reference tool for practitioners to help address the most pressing problems and the most important considerations in slum upgrading.
Resource 48 (TOOLKIT) **Gentrification and neighborhood change toolkit: helpful tools for communities** scan here https://www.buildhealthyplaces.org/content/uploads/2018/04/Gentrification-and-Neighborhood-Change-Toolkit.pdf	NP Voorhees, University of Illinois at Chicago (2015). This toolkit argues that it is possible to have development without displacement and shows how to achieve this. Published as a supplement to *The socioeconomic change of Chicago's community areas (1970–2010)*, the toolkit presents strategies for addressing the pressures of gentrification in a community during different phases of gentrification: before it happens, as it is happening, and after a neighbourhood has been gentrified. **Audience:** A starting point for municipal collaboration with community residents, non-profit organizations, local businesses, elected officials and developers. **Good for:** Helping to ensure that gentrification does not lead to population displacement, many of the tools and lessons could be widely applicable outside the USA.
Choosing your entry point (by sector): local economy	
Resource 49 (WEBTOOL) **City Prosperity Initiative** scan here https://www.buildhealthyplaces.org/content/uploads/2018/04/Gentrification-and-Neighborhood-Change-Toolkit.pdf	UN-Habitat. UN-Habitat's City Prosperity Initiative is a global initiative that has been applied in over 400 cities across the world. It provides an innovative approach to urban measurements and assists decision-makers to design clear policy interventions. In terms of health, some of the categories, such as equity and inclusion, and the ability to compare across cities could be of use. **Audience:** Decision-makers in cities covered by this programme and mayors and city leaders wanting to join the programme. **Good for:** Overview of some of the higher level indicators that are relevant to healthy UTP.
Resource 50 (BRIEFING) **Health in the green economy: health co-benefits of climate change mitigation – transport sector** scan here https://apps.who.int/iris/handle/10665/70913	WHO (2012). This document is part of WHO's *Health in the green economy* series. It describes how many climate change measures can be "win-wins" for people and the planet. These policies can yield large, immediate public health benefits while reducing the upward trajectory of greenhouse gas emissions. The document is very comprehensive with case studies, and applicable to all countries. As well as plenty of background material, it outlines health benefits of transport-related greenhouse gas reduction strategies. **Audience:** Widely applicable globally for city and national policy-makers across climate, transport, planning and public health sectors. **Good for:** Assessing, planning and financing healthy transport interventions.

Resources and tools	Source and description
Resource 51 (BRIEFING) **Participatory budgeting** scan here https://pb.unhabitat.org/	UN-Habitat. The tool uses technology to include citizens in the decision-making process for their city's budget. The benefits derive from the tool's short-term results and concrete outcomes for those involved. For example, participatory health budgeting can lead to prioritization of and investment in public health issues addressing citizens' real needs. **Audience:** National governments, local authorities. **Good for:** Identify common interests and concerns and linking people for joint action in public health, transparency in public health expenditure, encouraging accountability and responsibility of politicians.
Choosing your entry point (by sector): transport	
Resource 52 (TRAINING) **Urban transport and health. Module 5g. Sustainable transport: a sourcebook for policy-makers in developing cities** scan here https://www.who.int/hia/green_economy/giz_transport.pdf?ua=1	GIZ & WHO (2011). A training module and sourcebook for practical orientation, focusing on best practices in planning and regulation with examples of successful experiences in developing cities. It provides an overview of the key pathways by which transport can influence health, and the scale of transport-related health risks in OECD and developing countries. It then discusses instruments that are available to assess and counter transport-related health risks. **Audience:** Policy-makers in developing cities in transport, planning and public health sectors. **Good for:** Offering some principles that can be used to guide the development of healthy transport systems. The sourcebook can be printed and provided to officials involved in urban transport. It can be easily adapted to fit a formal short-course training event on urban transport.
Resource 53 (DESIGN GUIDE) **Building healthy corridors: transforming urban and suburban arterials into thriving places** scan here https://uli.org/wp-content/uploads/ULI-Documents/Building-Healthy-Corridors-ULI.pdf	Urban Land Institute (2017). This guide explores strategies for transforming commercial corridors (through roads dominated by commercial premises on each side), into places that support the health of the people who live, work and travel along them. This report is the result of a 2-year project that involved partnerships with four communities in the USA that are working to improve a specific corridor in ways that positively affect health. This report serves as a resource and reference for those who are undertaking corridor redevelopment efforts. It highlights the importance of health in decision-making processes; and it provides guidance, strategies and insights for reworking corridors in health-promoting ways. **Audience:** Local businesses, communities and urban regeneration interests and actors. **Good for:** Although the examples come from the USA, the principles and many lessons will be applicable in other high and middle-income countries in low-density urban contexts.

Resources and tools	Source and description
Resource 54 (OVERVIEW) **Urban mobility plans: national approaches and local practice. Moving towards strategic, sustainable and inclusive urban transport planning. Sustainable urban transport technical document #13** scan here http://www.transferproject.org/wp-content/uploads/2017/09/Urban-Mobility-Plans.pdf	GIZ (2014). Urban mobility plans are used as a planning tool and policy instrument to guide the development of transport in urban areas and surroundings. This document reviews urban mobility planning from several countries, showing a shift away from the traditional, infrastructure-oriented approach towards sustainable and people-oriented planning. National guidelines for urban mobility planning provide orientation to local authorities. In several countries, such as Brazil, France and India, the development of urban mobility plans has become an obligatory requirement for receiving national government funds for local transport projects to promote health. **Audience:** Local policy-makers and planners who want to shape urban mobility processes and policies in an effective and inclusive manner. Policy-makers and experts at national level shaping state-of-the art national policy frameworks for urban transport planning. **Good for:** Worldwide applicability for supporting low-carbon and active travel. **See also:** Resource 65 (ANALYTICAL TOOL): **Health and Economic Assessment Tool (HEAT) for cycling and walking**
Health appraisal, analysis and data tools (health impact assessment)	
Resource 55 (OVERVIEW) **Health in impact assessments: opportunities not to be missed** scan here http://www.euro.who.int/__data/assets/pdf_file/0011/261929/Health-in-Impact-Assessments-final-version.pdf	WHO Regional Office for Europe (2014). This publication aims to provide a detailed view on HIAs. Five key types of impact assessment, namely environmental impact assessment, strategic environmental assessment, social impact assessment, sustainability assessment, and HIA, are presented, and key questions are discussed. How can the various assessments contribute to promoting and protecting human health? How can further integration of health support the various forms of impact assessments? **Audience:** Policy-makers and researchers. **Good for:** Gaining a broad understanding at the potential for impact assessments to better protect and promote health.
Resource 56 (WEB RESOURCE) **Health impact assessment** scan here https://www.who.int/hia/en/	WHO. Main site and repository of information from the WHO about HIA. **Audience:** For a range of environmental and health policy-makers worldwide. **Good for:** Background, resources and examples on HIAs.
Resource 57 (TRAINING) **UN-Habitat health focused planning system assessment** scan here unhabitat-ig-utp@un.org	UN-Habitat (in development). The assessment is a brief healthy planning assessment for national planning systems. This has been run as a workshop by UN-Habitat and is still in development. As a participatory workshop it allows participants to start to gain an overview of their planning system in terms of the degree to which it might be supportive of health outcomes. **Audience:** Planners and public health practitioners and policy-makers. **Good for:** Scoping the strengths and weaknesses of a planning system with reference to how it supports population health.

Resources and tools	Source and description
Resource 58 (BRIEFING) **Health impact assessment can inform planning to promote public health** scan here https://planning-org-uploaded-media.s3.amazonaws.com/document/Health-Impact-Assessment-Can-Inform.pdf	Health Impact Project & the American Planning Association (2016). This brief introduces planning directors and staff as well as policy-makers to HIA, a process that brings public health considerations into decision-making. It describes how HIAs can add value across a range of topics and summarizes the findings from a review of 134 planning-related HIAs conducted in the USA between 2004 and 2014. **Audience:** Planners and public health practitioners. **Good for:** Explaining the role of HIA in planning with examples.
Resource 59 (ANALYTICAL TOOL) **Measuring mental health outcomes in built environment research: choosing the right screening assessment tools** scan here https://www.urbandesignmentalhealth.com/uploads/1/1/4/0/1140302/mental_health_assessment_tools_for_built_environment_research.pdf	Centre for Urban Design and Mental Health. The centre curates and creates research and dialogue to inspire, motivate and empower policy-makers and urban practitioners to build mental health into their projects for a healthier, happier urban future. **Audience:** Policy-makers, architects, transport planners, urban planners, developers, designers, engineers, geographers, and others who want to design better mental health into cities. **Good for:** Design decision in relation to mental health.
Health appraisal, analysis and data tools (cumulative exposures and risks)	
Resource 60 (WEB RESOURCE) **Propensity to Cycle Tool** scan here http://www.pct.bike/	Propensity to Cycle project The Propensity to Cycle project was designed to assist transport planners and policy-makers to prioritize investments and interventions to promote cycling. It answers the question, "where is cycling currently common and where does cycling have the greatest potential to grow?" The tool can be used at different scales; all data so far and the project itself is based in England and Wales. **Audience:** Transport professionals and researchers seeking new methodologies to support the promotion of cycling interventions. **Good for:** Decision support in promoting cycling-based investments and policies.
Resource 61 (TRAINING) **City Resilience Action Planning Tool** scan here http://dimsur.org/	Technical Centre for Disaster Risk Management, Sustainability and Urban Resilience with UN-Habitat. Known as CityRAP, this tool is used for training technicians in small to intermediate sized cities in sub-Saharan Africa. CityRAP enables communities to understand and plan actions aimed at reducing risk and building resilience through the development of a resilience framework for action. It is designed as an enabling rather than prescriptive tool, as the core principle is fostering ownership by local government and communities. The tool's design allows local governments to adapt and implement it with minimal external intervention. It draws on participatory methods, such as local government self-assessments, participatory risk mapping exercises and cross-sectorial action planning, to leverage local knowledge for understanding and planning resilience. **Audience:** City managers and municipal technicians in local governments and urban stakeholders. **Good for:** The tool includes a set of trainings, exercises and activities directed at municipalities that want to kick-start their resilience action planning.

Resources and tools	Source and description
Resource 62 (ANALYTICAL TOOL) **Low carbon living co-benefits calculator** scan here https://thud.msd.unimelb.edu.au/tools-and-models/co-benefits-calculator	University of Melbourne. The aim of the project is to develop and trial a prototype low-carbon precinct co-benefits calculator for use by urban planners and designers. The calculator estimates co-benefits associated with a range of alternative precinct designs and transport/land-use configurations across health, productivity and pollution associated with greenhouse gases and particulate emissions. The calculator will estimate population health status (with respect to chronic disease and injury) and productivity at a precinct (or greater) level. **Audience:** Government regulators, developers, precinct planners, designers and local government officials. **Good for:** Estimate the population health and productivity effects of various precinct design scenarios.
Health appraisal, analysis and data tools (online analytic tools)	
Resource 63 (ANALYTICAL TOOL) **GreenUr: green space and urban planning tool** scan here https://www.who.int/sustainable-development/urban/guidance-tools/en/	WHO. GreenUr calculates the impact of urban green spaces on health exposure, including cardiovascular disease. GreenUr is a flexible geographic information system plugin. **Audience:** Planning and public health professionals interested in quantitative assessments of green space effects on health. **Good for:** Decision support.
Resource 64 (ANALYTICAL TOOL) **AirQ+: software tool for health risk assessment of air pollution** scan here http://www.euro.who.int/en/health-topics/environment-and-health/air-quality/activities/airq-software-tool-for-health-risk-assessment-of-air-pollution	WHO. AirQ+ performs calculations that allow quantification of the health effects of exposure to air pollution, including estimates of the reduction in life expectancy. It can estimate the effects of short-term changes in air pollution and the effects of long-term exposures. **Audience:** Public health professionals working in or with cities. The tool is designed for use in Europe although other areas may find it useful to review the methods used. **Good for:** AirQ+ can be used for cities, countries or regions to estimate how much of a particular health effect is attributable to selected air pollutants compared to the current scenario; and what would be the change in health effects if air pollution levels changed in the future?
Resource 65 (ANALYTICAL TOOL) **Health and Economic Assessment Tool (HEAT) for cycling and walking** scan here http://www.euro.who.int/en/health-topics/environment-and-health/Transport-and-health/activities/guidance-and-tools/health-economic-assessment-tool-heat-for-cycling-and-walking	WHO. Estimates the value of reduced mortality that results from regular cycling or walking. This is intended to be part of comprehensive cost–benefit analyses of transport interventions or infrastructure projects. It is based on best available evidence, with parameters that can be adapted to fit specific situations. However, its default parameters are valid for the European context. The tool calculates the answer to the following question: if x people cycle or walk y distance on most days, what is the economic value of mortality rate improvements? **Audience:** Transport and public health professionals working in or with cities. **Good for:** Wide range of uses, including planning a new piece of cycling or walking infrastructure: it models the impact of different levels of cycling or walking, and attaches a value to the estimated level when the new infrastructure is in place; or to value the mortality benefits from current levels of cycling or walking, such as benefits from cycling or walking to a specific workplace, across a city or in a country; or to estimate the mortality benefits from achieving national targets to increase cycling or walking, or to illustrate potential cost consequences of a decline in current levels of cycling or walking. This is largely validated for European cities, however, other cities will find the methodology useful and may be able to adapt the tool using their own data.

Resources and tools	Source and description
Health appraisal, analysis and data tools (spatial epidemiology)	
Resource 66 (TOOLKIT) **The Health Impact Project's cross-sector toolkit for health** scan here https://www.pewtrusts.org/en/projects/health-impact-project	Pew Charitable Trusts with RWJF. A wealth of resources and toolkit to promote healthier communities through cross-sector collaboration. The cross-sector toolkit for health contains resources that help communities, agencies and other organizations take action to improve public health. The toolkit offers a collection of HIAs, guides and other research to support policy-makers' efforts to consider health when making decisions across sectors, such as housing, planning and education. **Audience:** Civil society and multidisciplinary teams. **Good for:** Health impact in planning projects in the USA.
Resource 67 (WEB RESOURCE) **WHO global air pollution platform and database** scan here https://www.who.int/health-topics/air-pollution	WHO. Key information and monitoring source for cities on ambient and household air pollution. **Audience:** Cities worldwide. **Good for:** Access to a wide range of urban and rural resources to support healthier air quality.
Health appraisal, analysis and data tools (citizen science)	
Resource 68 (WEB RESOURCE) **SDI Know Your City: community-driven data on slums** scan here http://knowyourcity.info/	Slum Dwellers International. This tool has been developed by Slum Dwellers International, a network of community-based organizations of the urban poor in 32 countries and hundreds of cities and towns across Africa, Asia and Latin America. Know Your City is a global network of knowledge that is owned by the communities it serves and has become the basis of a platform that supports an informed and united voice of the urban poor. It is becoming one of the largest repositories of informal settlement data in the world. **Audience:** Anyone needed to share or access urban in Africa, Asia and Latin America including researchers, policy-makers, local governments and national governments. **Good for:** Informal settlement data.
Resource 69 (ANALYTICAL TOOL) **Hush City mobile phone application** scan here http://www.opensourcesoundscapes.org/hush-city/	Hush City. Hush City is a mobile phone application that can be used by citizens to analyse and construct a local sound map with decibel levels and photos to identify, access and evaluate "everyday quiet areas" in neighbourhoods. It can be a useful tool to bring people together to collaborate in baseline mapping and exploring the role of sound, which has implications for urban stress and well-being. **Audience:** Civil society and multidisciplinary teams. **Good for:** Citizen supported data sourcing and mapping sound levels in different locations and at different times with simultaneous qualitative user information survey and quantitative capture. **See also:** Resource 38 (DESIGN GUIDE): **Inclusive healthy places. A guide to inclusion and health in public space: learning globally to transform locally**

Resources and tools	Source and description
Health appraisal, analysis and data tools (city dashboards)	
Resource 70 (WEB RESOURCE) **City Health Dashboard** scan here  https://www.cityhealthdashboard.com/	City Health Dashboard. An online tool with 37 measures of health, factors that shape health, and drivers of health equity for 500 cities in the USA. The aim being to equip cities with a one-stop resource for comprehensive, reliable data to help them build healthier and more equitable communities. **Audience:** City authorities in the USA. **Good for:** To provide city leaders with an array of regularly refreshed data to support health-related decision-making.
Resource 71 (SELF AUDIT) **City Resilience Profiling Tool** scan here  http://urbanresiliencehub.org/wp-content/uploads/2018/02/CRPT-Guide.pdf	UN-Habitat. This tool provides a cross-cutting diagnostic for resilience-based urban development. By outlining the general context of the city, including all relevant stakeholders and plausible shocks and stresses, and providing a framework for data collection, it allows a preliminary identification of gaps and opportunities over a series of different aspects regarding the city's structure and functionality, thereby providing a baseline for future actions. **Audience:** Local government working with UN-Habitat. **Good for:** The tool has been designed to collect information and provide a resilience profile that is applicable to a wide range of city scales, geographies and types.

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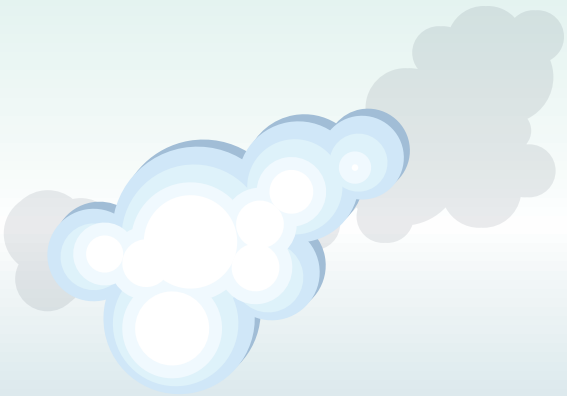

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