

# **SOCIAL DETERMINANTS OF HEALTH SECTORAL BRIEFING SERIES 1**



**HOUSING: SHARED INTERESTS IN  
HEALTH AND DEVELOPMENT**



# **SOCIAL DETERMINANTS OF HEALTH SECTORAL BRIEFING SERIES 1**

**HOUSING: SHARED INTERESTS IN  
HEALTH AND DEVELOPMENT**



## Acknowledgements

The Social Determinants of Health (SDH) Sectoral Briefing Series is being produced by WHO Headquarters in partnership with the Regional Office for the Western Pacific.

*Housing: shared interests in health and development* was produced under the overall direction of Rüdiger Krech (Director, Ethics, Equity, Trade and Human Rights) in collaboration with Henk Bekedam (Director, Health Sector Development). The principal writers were Daniel Albrecht, Nicole Valentine, Matthias Braubach, Michael Lennon, Nathalie Roebbel, Carlos Dora, Anjana Bhushan and Britta Baer.

The following external reviewers gave important suggestions for the improvement of the several drafts: Amir Johri, David Jacobs and Miloon Khotari. Responsibility for any omissions or errors rests with the authors alone.

Key inputs on human rights were provided by Helena Nygren-Krug.

Editorial production was managed by Daniel Albrecht and Nicole Valentine. The paper was copy edited by Diana Hopkins.

## WHO Library Cataloguing-in-Publication Data

Housing: shared interests in health and development.  
(Social determinants of health sectoral briefing series, 1)

1.Housing - economics. 2.Housing - standards. 3.Socioeconomic factors. 4.Public health. I.World Health Organization.

ISBN 978-92-4-150229-0

(NLM classification: WA 795)

## © World Health Organization 2011

All rights reserved. Publications of the World Health Organization are available on the WHO web site ([www.who.int](http://www.who.int)) or can be purchased from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: [bookorders@who.int](mailto:bookorders@who.int)).

Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to WHO Press through the WHO web site ([http://www.who.int/about/licensing/copyright\\_form/en/index.html](http://www.who.int/about/licensing/copyright_form/en/index.html)).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

Printed by the WHO Document Production Services, Geneva, Switzerland

Design and layout: [paprika-annecy.com](http://paprika-annecy.com)

## PREFACE

Public health is built on effective interventions in two broad domains: the biomedical domain that addresses diseases; and the social, economic and political domain that addresses the structural determinants of health. Effective health policy needs to tackle both domains. However, less rigorous and systematic attention has been paid to health issues in social, economic and political domains in recent decades.

Increasingly complex social, economic and political factors are affecting health and health policy-making. One area of complexity relates to health inequities. As emphasized by the WHO Commission on Social Determinants of Health, the social gradient in health is driven by policies in other sectors. Hence, looking at population well-being from the perspective of health and health equity rather than disease demands a new approach to intersectoral collaboration and an imperative to participate earlier in policy processes. Some of the new responsibilities for public health include:

- understanding the political agendas and administrative imperatives of other sectors;
- creating regular platforms for dialogue and problem solving with other sectors;
- working with other arms of government to achieve their goals and, in so doing, advancing health and well-being<sup>1</sup>.

By providing information on other sectors' agendas and policy approaches, and their health impacts, and by illustrating areas for potential collaboration, the *Social Determinants of Health Sectoral Briefing Series* (the Series) aims to encourage more systematic dialogue and problem solving, and more collaboration with other areas of government.

Examples of intersectoral action for health – current and historical – reveal that health practitioners are frequently perceived as ignoring other sectors' goals and challenges. This creates barriers to intersectoral work, limiting its sustainability and expansion. In order to avoid this perception, instead of starting from the goals of the health system (e.g. health, health equity, responsiveness, fairness in financial contributions), the *Series* focuses on the goals of other sectors. Rather than concentrating on traditional public health interventions (e.g. treatment, prevention, protection), the *Series* uses the goals of other sectors to orient its analysis and explore areas of mutual interest.

The target audience for the *Series* is public health officers, who are not experts on determinants of health but who have responsibilities for dealing with a broad range of development issues and partners. Each briefing will focus on a specific policy area, summarizing and synthesizing knowledge from key informants from health and other areas, as well as from the literature. They will present arguments and highlight evidence of impacts and interventions, with special emphasis on health equity. They will make the case to health authorities for more proactive and systematic engagement with other sectors to ensure more responsive and cohesive government that will meet broader societal aspirations for health, equity and human development.



Dr. Rüdiger Krech  
Director  
Department of Ethics, Equity, Trade and Human Rights  
World Health Organization

<sup>1</sup> WHO and Government of South Australia. *Adelaide Statement on Health in All Policies*. Adelaide, 2010.

# THE HOUSING SECTOR

## Mutually reinforcing interests

Millions of people struggle every day with poor housing, overcrowding, lack of affordability, and lack basic services connected to their homes. Poor transportation services between areas of home and work, and for social activities, often create barriers to accessing employment and social opportunities. These issues present challenges to housing policy-makers and have implications for the health and well-being of populations. As stated in the Adelaide Statement on Health in All Policies, "well-designed, accessible housing and adequate services can successfully address fundamental determinants of health for disadvantaged individuals and communities".

For the housing sector, paying attention to the health impacts of its policies can yield huge benefits. Indeed, housing interventions that consider citizens' quality of life create better living conditions and improve housing policies' sustainability. For the health sector, improving determinants of health such as housing is key in reducing health-care costs. In England, poor housing, damp and mould, cold, overcrowding, fires, and domestic injuries as a result of falls on floors cost the National Health Service (NHS) up to £600 million a year (Braubach, Jacobs & Ormandy, 2011).

## Global housing trends

The world is increasingly urban, thus changing the context of housing and settlements. For the first time, in 2008, more people lived in cities than in rural areas. Today, one billion people live in informal settlements

('slums'). In less than two decades it is expected that this number will double. However, many cities have poor or no planning systems to cope with the magnitude of urbanization. A similar trend affecting housing worldwide is the demand for and the increasing price of energy. Energy-efficient housing is a key mechanism to mitigate climate change but, from the health equity perspective, the acute challenge lies in the affordability of energy. As is often the case, the disadvantaged are most affected by the negative health impacts of housing conditions, which reinforce their vulnerability to ill-health.

## Housing goals: more than shelter

Table 1 summarizes the objectives of government involvement in the housing sector, which are described in terms of eight policy goals. A core assumption of best practice in housing policy-making takes into consideration that housing is more than shelter. From this viewpoint, housing policies, therefore, need to embrace environmental, social and economic rights that allow dwellers to improve their quality of life (Bonney, 2007). The housing goals selected in Table 1 reflect this breadth, and in so doing also cover issues that are dealt with at the local level as part of urban planning or transport. When considering housing determinants of health, health experts should consider the comprehensive character of housing, exploring opportunities for joint work at a variety of levels.

**Table 1. A set of policy goals commonly addressed in the housing sector**

	GOAL	DESCRIPTION
1	<b>Sound construction:</b> Dwellings provide adequate shelter from natural elements and hazardous substances.	Dwellings should be of sound construction, in a reasonable state of repair, weatherproof and adequately ventilated.
2	<b>Safety and security:</b> Housing ensures personal and household privacy, safety and security.	Housing should allow occupants to live without fear of intrusion, provide safety, and allow safe entry and exit.
3	<b>Adequate size:</b> Dwellings provide space appropriate to household size and composition.	Dwellings should have space for individual and common purposes within accepted crowding ratios, and allow separations between uses.
4	<b>Basic services available:</b> Reasonable levels of basic services are available at the dwelling.	Clean water, sanitation, waste disposal, access infrastructure and power should be available.
5	<b>Affordability:</b> Housing costs are reasonable and affordable.	Accommodation costs should be within accepted affordability limits to secure housing for all.
6	<b>Accessibility:</b> The location of the dwellings allows access to social services, services and space for activities of daily life, and economic opportunities.	Residential locations allow access to opportunities for education, purchasing or growing food, purchasing other necessities for daily living, recreation, and employment.
7	<b>Tenure:</b> Tenure arrangements ensure reasonable continuity of occupation.	Terms of occupation provide stability for individuals, households, communities and areas or neighbourhoods.
8	<b>Protection from climate change:</b> Dwellings protect occupants from climate change.	Dwellings should protect people from extreme weather events and contribute to the reduction of greenhouse gas emissions.



### The historical perspective

Public decision-makers recognized the links between housing conditions and health during the early days of the Industrial Revolution and the emergence of public health as a discipline in most European cities. Since the 1850s, poorly constructed units, overcrowding, and lack of basic services have moved many local authorities to seek to improve housing conditions in many cities. In the late 1890s, several countries adopted 'tenement laws', which introduced the first housing codes and standards. This collaboration between sectors was demonstrated by the fact that "a vast number of these housing laws made health authorities the primary enforcers of housing codes. Counting on the professional expertise of health inspectors and visiting nurses, in cities like New York, London and Paris health departments were given the legal authority to inspect and enforce housing standards" (Lopez, 2009).

The concept, the reasons for intervention, and the nature of public action in the housing sector have evolved over time. Nowadays, adequate housing is considered a human right and is included in the 1948 Universal Declaration of Human Rights as well as subsequent human rights instruments. It is of such importance that the human right to adequate housing is recognized by all states of the world. The concept is not equated merely with having a roof over one's head, but as the right to live somewhere in security, peace and dignity. Thus, current public intervention in the housing sector is grounded in public health considerations and in human rights law.

### The economic perspective

Housing is an engine for most economies. For example, in the United States in 2001, the Millennial Housing Commission reported how the residential housing stock represented more than one third of the country's tangible assets. Spending on utilities, furnishings, appliances and landscaping amounted to 7% of GDP (MHC, 2002). Equally important is how the provision of affordable housing specifically, stimulates employment and economic growth (Wardrup et al. 2011).

New housing developments also add to public revenues. In 2001 home building generated about US\$65 billion in combined taxes and fees in the United States (MHC, 2002). Housing finance systems have the potential to impact greatly, either positively or negatively, on national economies. Although in the late 1990s housing finance regulations contributed to the recovery from a global recession (MHC, 2002), one of the lessons of the 2008 global financial crisis was that poorly regulated housing financial markets can inflict great damage on the housing sector, which ultimately impacts on households and their health status.

### Stakeholders

The most important actor in the delivery of housing in the majority of countries is the private for-profit construction industry. This group comprises builders that often perform all the activities necessary to produce new units (e.g. land acquisition, design, finance, construction, and property management), and a myriad of smaller businesses that supply goods and services to the builders. Another important group is the architects who design and often implement new housing standards.

In most countries the housing sector represents a sizeable portion of the labour market. Although an important source of employment, jobs in construction are frequently characterized by more hazardous and

precarious employment conditions – often affecting minority groups or other marginalized groups. Consumers make up an important group driving the sector. Consumers' purchasing power shapes the size of the housing market, its capacity and the way it diversifies in order to supply affordable housing for all socioeconomic groups. In many countries affordability and housing market diversification are critical factors that determine the emergence of informal housing markets, the growth of informal settlements and slums, and other related factors, such as the rise in informal builders and small-scale building enterprises. Other actors servicing consumers and housing markets are financial institutions and capital investors, mortgage lenders and insurance companies.

**Government intervention.** The societal importance of housing as a human right, as a key factor in national economies, as a source of income security for workers, and as a contributor to public health and well-being makes the case for government intervention. Often governments play a regulatory role in this sector for example by enacting zoning regulations, devising legislated housing standards, adopting measures to provide financial or tax incentives to promote affordable housing, or by regulating financial markets that impact on mortgage lending. In most countries government's role goes beyond regulatory measures and includes a subsidiary role to directly provide housing to groups commonly excluded from housing markets (e.g. social housing, provision of rental voucher schemes). Yet, differences are significant in that social housing can be 2–3% of the total stock and does not always provide for households that cannot afford market prices. Other government functions, usually assigned to local authorities, consist of urban planning and the execution of urban revitalization programmes or informal settlements upgrading. Regulatory standards monitoring is another area commonly assigned to local governments.

### SCOPE AND LIMITATIONS

The bulk of the global burden of disease and the major causes of health inequities, which are found in all countries, arise from the conditions in which people are born, grow, live, work, and age. These conditions are referred to as *social determinants of health* - shorthand that encompasses the social, economic, political, cultural and environmental determinants of health. The most important determinants are those that produce stratification within a society - *structural determinants* - such as the distribution of income, discrimination (e.g., on the basis of gender, class, ethnicity, disability, or sexual orientation), and political and governance structures that reinforce inequalities in economic power. Discrepancies in social position arising from these mechanisms shape individual health status and outcomes through their impact on intermediary determinants such as material living conditions, psychosocial factors, and the health system itself.

Recognizing this spectrum, and given the nature of public policy challenges in housing, the Housing Briefing takes a national perspective, but makes reference to implementation at sub-national levels of government. While contexts and governmental structures differ across countries, many actions to address housing challenges at the local level also implicate urban planning and transport divisions. The scope of actions described specifically exclude, for reasons of space, global economic interests and the organization of labour in the construction industry.

# GOAL 1. DWELLINGS PROVIDE ADEQUATE SHELTER FROM NATURAL ELEMENTS AND HAZARDOUS SUBSTANCES

DWELLINGS SHOULD BE OF SOUND CONSTRUCTION, IN A REASONABLE STATE OF REPAIR, WEATHERPROOF AND ADEQUATELY VENTILATED

## Housing challenges and policy responses

Despite the fact that shelter is a basic human need, the housing sector is increasingly confronted with the reality of substandard dwellings. Such dwellings arise because they are poorly designed, constructed and maintained. In order to tackle this problem, governments commonly develop building standards to ensure people are provided with better quality shelters and are protected from cold and heat. These standards are often set out in legislated building codes. Housing authorities – frequently at the local level – are in the frontline when it comes to dealing with substandard dwellings and normally have the power to impose rent controls and public housing provisions, and to carry out regeneration and upgrading initiatives to improve urban areas.

A growing global problem is the growth of informal settlements, where buildings are usually constructed with unsuitable materials or to inadequate standards. In these circumstances, when implementing urban regeneration processes, many countries approve flexible building standards that are gradually improved over time. Another problem related to this goal is ‘neighbourhood decline’, which is often the result of underinvestment and the absence of economic opportunities, resulting in reduced physical standards associated with increasing poverty, reduced access to services, and negative impacts on social cohesion. Housing professionals often address these challenges by monitoring housing stock quality and needs, conducting stock condition surveys, and devising policy responses such as standards and inspections (see more in Goals 4–7).

## Some health impacts and pathways

**Indoor biological agents.** Structural and plumbing deficiencies are a source of water intrusion and provide a way for rodents, cockroaches

Most carbon monoxide (CO) exposure occurs in the home (CDC, 2005) and in the form of indoor air pollution (IAP), which globally kills around 1.6 million people a year (see below on the equity impacts of IAP). Volatile organic compounds (VOCs) are chemical gases at normal temperature. Household items, for example furniture, carpets, paint, varnish, wax, disinfecting materials, cosmetics and degreasing products, can contain VOCs, which include toluene, styrene, xylene, benzene, trichloroethylene, formaldehyde and other aldehydes. Elevated indoor concentrations of VOCs may trigger symptoms of ‘sick building syndrome’ (e.g. headaches, fatigue, and eye and upper respiratory irritation).

Formaldehyde is a component of some building materials, like particleboard and plywood adhesives, and may be found at high levels in many new buildings. At higher levels, the risk of cancer, and respiratory and other problems, is pronounced (NCHH, 2009). Asbestos, a construction material now banned in many countries, is still posing threats, especially in relation to the renovation and rehabilitation of old buildings. Radon gas is the leading cause of lung cancer among non-smokers overall with 21 000 deaths annually in the United States (EPA, 2003). A decay product of uranium, radon is colourless and odourless. It occurs in soil and rock, and moves through porous building foundations and water systems where groundwater is the main water supply.

## SOCIAL DETERMINANTS AND EQUITY FOCUS

In the last few decades, progress in controlling chemical agents has been remarkable, yet inequities persist, making these agents in low-income families’ homes a large source of exposures. Three billion people are exposed daily to indoor air pollution (IAP) with high concentrations of CO and other pollutants due to reliance on solid

预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_28693](https://www.yunbaogao.cn/report/index/report?reportId=5_28693)

