

# Healthy Cities in a global and regional context

**RODERICK J. LAWRENCE<sup>1\*</sup> and COLIN FUDGE<sup>2</sup>**

<sup>1</sup>*Faculty of Economic and Social Sciences, Human Ecology Group, Institute for Environmental Sciences, University of Geneva, Geneva, Switzerland and* <sup>2</sup>*RMTI University, Melbourne, Australia*

*\*Corresponding author. E-mail: [roderick.lawrence@unige.ch](mailto:roderick.lawrence@unige.ch)*

---

## SUMMARY

Since the beginning of the WHO European Healthy Cities Network in 1987, the global and regional contexts for the promotion of health and well-being have changed in many ways. First, in 2000, the United Nations Millennium Goals explicitly and implicitly addressed health promotion and prevention at the global and regional levels. Second, the concern for sustainable development at the Rio Conference in 1992 was confirmed at the World Summit in Johannesburg in 2002. During the same period, in many regions including Europe, the redefinition of the roles and responsibilities of national, regional and local governments, reductions in budgets of public administrations, the privatization of community and health services, the instability of world trade, the financial system and employment, migration flows, relatively high levels of unemployment (especially among youth and young adults) have occurred in many countries in tandem with negative impacts on specific policies and programmes that are meant to promote health. Since 1990, the European Commission has been explicitly concerned about the promotion of health, environment and

social policies by defining strategic agendas for the urban environment, sustainable development and governance. However, empirical studies during the 1990s show that urban areas have relatively high levels of tuberculosis, respiratory and cardiovascular diseases, cancer, adult obesity, malnutrition, tobacco smoking, poor mental health, alcohol consumption and drug abuse, sexually transmitted diseases (including AIDS), crime, homicide, violence and accidental injury and death. In addition, there is evidence that urban populations in many industrialized countries are confronted with acute new health problems stemming from exposure to persistent organic pollutants, toxic substances in building structures, radioactive waste and increasing rates of food poisoning. These threats to public health indicate an urgent need for new strategic policies and research agendas that address the complex interrelations between urban ecosystems, sustainable development, human health and well-being. The WHO Healthy Cities project is one important vector for achieving this objective at both global and regional levels.

*Key words:* cities; devolution; European strategic policy; global context

---

## INTRODUCTION

This article reviews the broad, changing global and European context of the WHO European Healthy Cities Network (WHO-EHCN) over the first three phases (1987–2002). The first section defines what is meant by urban health. The second section reviews the relevance of focusing on the multiple determinants of health in cities. This stems from the fact that urbanization has been a key feature of demographic,

economic and other societal trends throughout the 20th century in Europe and other regions. These trends can be characterized by a steady increase in urbanization and decentralization, the globalization of the free-market economy and the reduction in public spending in many sectors. These trends are then discussed with respect to developments in the 1990s. During that decade, global strategies were launched by many international agencies and the European Union to develop agendas for health,

sustainable development and governance. These strategies have been consistent with the key principles of the WHO-EHCN. The third section of this article presents the European context, which has been marked by significant political and economic changes (characterized by the demolition of the Berlin Wall and the end of USSR) as well as liberalization of the economy, decentralization of political authority and administrative responsibilities at the same time as a growing commitment in applying key principles of sustainable development at both national and local levels. Finally, the challenges and future directions are presented in order to highlight the significant stake that cities have acquired during the late 20th century in regional, national and local economic development. The conclusion suggests that the Healthy Cities project can be one vector, coupled with others such as local Agenda 21, by which local authorities can promote the health and well-being of citizens.

### **URBAN HEALTH: KEY DIMENSIONS AND RELEVANCE FOR HEALTH PROMOTION**

In the 19th and 20th centuries, many people in most countries migrated from rural to urban areas; by 2008, city populations surpassed those of rural areas. In the European Region, about 80% of the population lives in cities. During the 20th century, the number, population and total surface area of cities grew on a previously unknown scale (United Nations Commission on Human Settlements, 2001). This trend is expected to continue during the 21st century. Some have argued that the 20th century corresponded to a period of urban revolution that has transformed the physical and social dimensions of daily life including housing, transport and other characteristics of metropolitan areas. For example, access to health services is often improved in urban neighbourhoods, and this is rare in rural areas. Urban life has other important health benefits including easier access to job markets, education, cultural and leisure activities. However, in the early 21st century, urban areas also have relatively high levels of tuberculosis, respiratory and cardiovascular diseases, cancer, adult obesity, malnutrition, tobacco smoking, poor mental health, alcohol consumption and drug abuse, sexually

transmitted diseases (including AIDS), crime, homicide, violence and accidental injury and death. In addition, in the 1990s, mental health was recognized as an integral component of urban health, and the promotion of both physical and mental health were accepted as complementary objectives for national and local policy-makers and professionals (Galea and Vlahov, 2005).

Urban health is vast and complex (Lawrence, 2000). The health status of populations in specific urban areas is not only the result of many material and immaterial constituents but also of the relationships between them. Hence, several concepts and methods need to be examined to understand both the constituents and the relationships between them. For example, a constituent should not be isolated from the context in which it occurs. Instead, ecological approaches ought to be applied to understand both the constituents and the relationships between them (Lawrence, 1999, de Leeuw, 2009). Understanding the multidimensional nature of urban health requires considering all the constituents and their combined effect over time.

These constituents include four interrelated sets of determinants of health: environmental, social, economic and technological. Environmental determinants include ambient air quality, ambient noise levels, soil and water quality and solid waste disposal. Social determinants include crime, violence and community discord as well as lack of education and training, especially for immigrants, women and children. Economic determinants include affordable housing, food and water, employment opportunities and equality of access to diverse kinds of resources. Technological determinants include industrial, transport or other kinds of accidents, the processing of mass-produced foods and the use of toxic materials in the built environment.

These four main sets of determinants vary over short and also relatively long periods of time. Their dispersion and effects are complex, and the exposure of different groups of urban populations (such as children, elderly people and unemployed people) to such determinants needs to be understood. Biologically inherent mechanisms of the transmission of disease are mediated by the social and environmental circumstances of urban neighbourhoods. The health of urban populations must therefore be interpreted in terms of both individual and

social differences by explicitly accounting for age, gender, socioeconomic class, occupational status and the geographical distribution of the population (Galea and Vlahov, 2005).

In health promotion, health is not considered an abstract condition, but as the ability of an individual to achieve her or his potential and to respond positively to the challenges of daily life. This interpretation is pertinent for urban health, because the environmental, economic and social conditions in specific urban neighbourhoods may influence human relations, induce stress and positively or negatively affect the health status of social groups, households and individuals (Lawrence, 2000). This interpretation also implies that the health care sector has limited capacity to improve the health and well-being of populations and that close collaboration with other sectors would be beneficial.

## **GLOBAL AND REGIONAL CONTEXT AND TRENDS**

The United Nations held a series of global conferences during the 1990s. Collectively, these conferences indicate that the urban environment has been increasingly recognized as the locus of challenges, threats and opportunities related to environmental, economic and social conditions, which directly or indirectly influence people's health and well-being. In June 1992, Agenda 21 (United Nations Department of Public Information, 1993) was adopted as a non-binding agreement by 178 government representatives at the United Nations Conference on Environment and Development in Rio de Janeiro in June 1992. Agenda 21 interprets concerns about environmental conditions and people's needs, including their health, within a broad economic and social framework. The first principle of Agenda 21 affirms that 'human beings are at the centre of concern for sustainable development. They are entitled to a healthy and productive life in harmony with nature'. The same document emphasizes that 'the primary health needs of the world's population are integral to the achievement of the goals of sustainable development'.

The declarations and programmes of action adopted at these global conferences recognize that the vast scale and complexity of problems

in human settlements exceed the capacity and the resources of national and local authorities. This recognition has led to calls for broad-based partnerships between the public sector, private enterprises and civil society. This viewpoint set the stage for the Second United Nations Conference on Human Settlements (Habitat II) in Istanbul in 1996. Two documents were issued at the Conference. First, the Istanbul Declaration on Human Settlements defines seven priorities governments agreed to address including: unsuitable consumption and production patterns, especially in industrialized countries; unsuitable population changes; homelessness; unemployment; lack of basic infrastructure and services; growing insecurity and violence; and increased vulnerability to disasters (United Nations Commission on Human Settlements, 1996a).

Second, the Habitat Agenda was intended to lead to concerted action at all levels about key issues related to human settlements. Most of these issues were also debated at one or more of the global conferences held in the 1990s prior to Habitat II. The issues are equitable human settlements; eradicating poverty; the quality of life provided by the built environment; the fundamental role and function of the family; citizens' rights and responsibilities; partnerships between countries and between sectors in specific societies; solidarity with disadvantaged and vulnerable groups; increased financial resources; and health care and services to improve the quality of life (United Nations Commission on Human Settlements, 1996b).

## **Millennium goals and implications for health promotion**

The United Nations Millennium Declaration comprises eight main goals that ought to be achieved by 2015. These goals form a blueprint accepted by 191 countries and all the world's leading development institutions. The goals are: eradicate extreme poverty and hunger; achieve universal education; promote gender equality and empower women; reduce child mortality; improve maternal health; combat HIV/AIDS, malaria and other diseases; ensure environmental sustainability; develop a global partnership for development (United Nations, 2000). Clearly, all eight goals are explicitly or indirectly related to health promotion and prevention and they underline the high priority

attributed to health in the context of development agendas, in general, and sustainable development, in particular. This institutional context in tandem with WHO-EHCN is a clearly defined framework for health promotion by the application of the Rio Declaration slogan, 'Think Globally – Act Locally'.

### **Urbanization, societal trends and health impacts**

Between 1990 and 2000, the world population increased from 5.27 to 6.06 billion (15%). During the same period, the urban population increased by 25% versus 8% for the rural population. In 1990, 43.5% of the world population lived in urban areas, and by 2008 this share had increased to more than 50%. These figures do not show significant regional differences; for example, population growth in Africa is almost twice the world average (United Nations Commission on Human Settlements, 2001).

Global demographic and epidemiological statistics indicate that health status, health services and life expectancy are better in urban than in rural areas *when data are aggregated at the global level*. However, in the European Region, the life expectancy of urban populations is usually lower than national averages. In addition, research in the 1990s on differences between urban areas shows that the urban populations with the fewest resources suffer the worst of both worlds in terms of communicable and non-communicable diseases (United Nations Commission on Human Settlements, 2001).

Since the 1980s, several demographic trends in western European countries have affected urban development, the quality of life in cities and the health status of some specific groups. First, significant socio-demographic trends have altered the size and composition of households. An increasing number of elderly people live alone, and the number of single-parent households is growing. Both these kinds of households have specific requirements for housing that are readily accessible to community and health care services as well as urban infrastructure, especially efficient public transport (WHO Regional Office for Europe, 2000).

Second, the structure of the employment market in cities has changed considerably. This includes an increasing number of unskilled and manual workers who cannot find full

employment. In addition, part-time employment among women has increased. Consequently, a growing share of the workforce receives relatively low wages and work in precarious jobs. Young adults have been affected by these trends, which have contributed to increasing the number of homeless youth and adults in many countries (Organization for Economic Co-operation and Development, 1996).

Third, in southern and eastern Europe, migration from rural to urban settlements has been a major reason for population growth in cities. In the 1980s and 1990s, some western European cities experienced an alternating cycle of growth and decline in the form of population concentration followed by decentralization. In recent years, this reverse cycle has spread from the larger to the smaller cities and from north-western to south-eastern Europe. Since 1989, migration flows from eastern to western European countries have increased, and some cities have accommodated exceptionally high numbers of refugees and migrants. These trends, especially during a period of economic recession, have heavily burdened social, health and welfare services in the host cities as well as the housing and employment markets.

Fourth, governments across European countries have introduced policies to reduce public spending, repay debts and apply new principles of public management to make public authorities more effective. Consequently, during the 1990s, many municipal authorities reduced expenditure on housing and urban infrastructure and cut allowances for welfare, health and community care (Organization for Economic Co-operation and Development, 1996).

### **Partnerships: implications for health promotion**

Today, many cities are confronted with serious environmental, economic and social problems—high unemployment, social and spatial segregation, social exclusion, economic instability, crime, the general quality of life, negative impacts on health and pressures on natural and historic assets. In addition, cities are handling wider global and societal changes due to the globalization of the economy and financial crises, changes in household demographics and family structure, and new technological innovations.

During the 1990s, many national authorities and local governments formed partnerships with non-governmental and community-based organizations, as well as private enterprises, to tackle acute problems and promote the quality of life (Green, 1998). Partnerships are a key component of the Healthy Cities movement and they imply cooperative links between various departments, agencies and institutions both in and beyond the sectors of health and social services. These partnerships can achieve their objective only if commitment to the allocation of human and monetary resources for intervention is sustained. Defining these interventions in terms of the specific conditions in urban areas requires systematic data collection and information available to policy-makers and professionals. These official sources of data and information can be used in tandem with innovative research to disseminate indicators and statistics that monitor trends and improve the understanding of urban health of all groups in civic society (Lawrence, 1995).

### **Devolution: who is responsible for health promotion?**

In 1994, at the Second European Conference on Environment and Health held in Helsinki, urban health was attributed a high priority for the first time. This decision by ministers responsible for the environment and health from 51 European countries reflects and reinforces a growing concern worldwide about the health status of residents in urban areas. Until the 1990s, these problems were generally tackled by national policies and resource allocation. However, this shifted substantially in the 1990s; these national roles and responsibilities were decentralized to local authorities, which have been granted an increasingly important role in defining and implementing policies and programmes to promote health. The implementation of Healthy Cities projects and Local Agenda 21 has reflected this shift.

Today, national governments have less influence on housing, urban planning and the local urban economy than they did two decades ago, when most decisions about urban development were made at the national level. Decentralization, or devolution, was common in the 1990s, applying the principle of subsidiarity endorsed by the United Nations Conference on Environment and Development in Rio de

Janeiro in 1992. Devolution can only be effective if the new roles and responsibilities of local authorities and municipal services are financially supported by the transfer of appropriate resources from the national to the local level (Green, 1998).

The political changes in Europe during the past 15 years have been significant, including the replacement of the USSR and the Socialist Federal Republic of Yugoslavia as well as Czechoslovakia by two new sovereign states. This substantial reform has changed the relations between central and local government and reinforced the authority of local governments. Other political and social movements in the European Region have included public calls for increased roles and responsibilities at the regional and local levels, for autonomy and sometimes for independence (Green, 1998).

### **EUROPEAN STRATEGIC POLICY, PRACTICES AND RESEARCH AGENDAS**

More than 80% of the European population lives in towns and cities, making them the cultural, economic and innovative centres of Europe. They function as the generators of local, regional and national economies and collectively, European global competitiveness. They are also the centres of European social and cultural development and the location and the cause of many environmental problems. Towns and cities have undergone what some commentators consider a renaissance. However, many of the localities confront serious problems—high unemployment, social and spatial segregation, social exclusion, concerns over their future economy, crime, the general quality of life, negative effects on health, pressure on natural and historical assets and an increasing inability to achieve access and mobility within and between cities (Fudge, 2003). Today, cities are handling wider global and societal changes resulting from the globalization of markets, shifts in demography and family structure and technological innovation. European cities are facing up to these challenges which are reshaping their futures. These issues have become even more demanding and complex to resolve across Europe as the European Union has expanded to its current 27 member states that are at different stages of development with different resources and governance systems.

### European urban policies for a sustainable future

Since 1990, the European Community (now the European Union) has sought to consolidate its actions for environmental protection and reorientation of environment policy to promote sustainable development in towns and cities. These policy shifts have key implications for the urban environment (European Union Expert Group on the Urban Environment, 1996). Integration of urban challenges with environmental policy and, by implication, health has been extensively pursued. An integrated approach was first advocated in the Fourth Environmental Action Programme of the EU, 1988–1992. This led to the publication of the Green Paper on the urban environment and also to the European Council establishing the Expert Group on the Urban Environment in 1991.

The Green Paper on the urban environment (European Commission, 1990) outlines the rationale for detailed consideration of the urban environment. This was a response to pressure from three sources—the concern of several European cities that preoccupation with rural development within the European Commission was overshadowing the interests of urban areas, the commitment of the Commissioner for the Environment at that time and a resolution from the European Parliament urging more studies on the urban environment. The Green Paper on the urban environment is a significant milestone in thinking about the urban environment in Europe, mainly because it advocated a holistic view of urban problems and policy integration to solve them.

The Green Paper on the urban environment sparked a number of debates. The most intense, perhaps, concerned different views on urban form and the relationship between notions of compact cities and sustainable future. Although the urban form and density of cities are clearly important, discussions since have widened the debate to consider how cities and their hinterlands, regions and urban society are to be governed and managed to achieve a sustainable future. The Expert Group on the Urban Environment developed the European Sustainable Cities Project in 1993, which led to a wider policy discussion in the European Commission with an urban focus (European Union Expert Group on the Urban Environment, 1996). The European Sustainable Cities and Towns Campaign, launched in Aalborg in 1994, includes over 2000 local authorities as

well as the major European networks of local authorities, Eurocities, Council of European Municipalities and Regions, World Federation of United Cities (FMCU-UTO), Energie-Cités, Climate Alliance, International Council for Local Environmental Initiatives and WHO.

In 1997, the European Commission published *‘Towards an urban agenda in the European Union’* (European Commission, 1997). This established a process of consultation that culminated in the European Urban Forum in Vienna, in 1998, where the urban action plan *‘Sustainable urban development in the European Union: a framework for action’* was discussed (European Commission, 1998). This framework is organized under four substantive policy aims: strengthening economic prosperity and employment in towns and cities; promoting equality, social inclusion and regeneration in urban areas; protecting and improving the urban environment: towards local and global sustainability; and contributing to good urban governance and local empowerment.

This policy advance did not have the same momentum following the European Urban Forum 1998. It took the Third European Conference on Sustainable Cities and Towns in Hanover in 2000, the preparations for the World Summit on Sustainable Development and the interests of the EU Commissioner for the Environment Margot Wallström to move the urban environment policy agenda forward again (European Commission, 2000). Nevertheless, towns and cities through the European Sustainable Towns and Cities Campaign (including the work of the WHO-EHCN) maintained their pressure and interest in European policy throughout this period. This has strengthened with the involvement of towns and cities in the countries acceding to the EU, some of which require considerable support with this complex agenda.

Since 2001, the EU Expert Group on the Urban Environment has prepared a number of advisory reports for the European Commission to support the development of the statement on the Thematic Strategy on the Urban Environment, one of seven priority policy arenas in the Sixth Environmental Action Programme of the EU. The reports published advise on European common indicators of sustainability (European Union Expert Group on the Urban Environment, 2003a), sustainable

land use (European Union Expert Group on the Urban Environment, 2003b), sustainable urban management, sustainable urban design, sustainable urban construction, sustainable urban transport and a report on research and training. They draw together practice from across Europe and from research, identify barriers to progress and the mainstreaming of good practice and have contributed to recommendations to the Commission to be incorporated into the statement on the Thematic Strategy on the Urban Environment.

In this respect, urban and health policies should be integrated and the European Commission has the evidence that prevents integrative approaches in policy and implementation. Even in countries such as Sweden explicit links between public health and urban policy are not widely recognized (Fudge and Rowe, 2000). This objective reflects reorganizations within the Directorate-General for Environment of the EU that integrated urban and health matters in one institutional unit; the specific interests and priorities of the European Union Commissioner for the Environment; and A European environment and health strategy from the European Commission (European Commission, 2003a, b). This document demonstrates a commitment to environment and health and foreshadowed an action plan for the period 2004–2010 that was launched at the Fourth Ministerial Conference on Environment and Health in Budapest in 2004. However, this strategy is relatively weak in recognizing the relationship between urban and health policy in Europe and their interrelationship and could learn from the 15 years of experience of the WHO-EHCN and from leaders on environmental economic and social integration.

Following the extensive work of the European Union Urban Environment Expert Group and the considerable consultation by the Directorate-General for Environment, there were hopes that the Urban Environment Strategy Statement would provide policy leadership for Europe in supporting member states and towns and cities in confronting the urgent issues of cities and the environment including public health. The Communication from the Commission to the Council of Ministers and the European Parliament (COM [2005] 718 final) seemed, however, to be a disappointment and a missed opportunity (European Commission, 2005). While technical guidance on integrated

environmental management, sustainable urban transport plans, exchanges of good practice, demonstration projects, more networks, a thematic portal for local authorities, capacity building funds through the LIFE + instrument are promised along with European Union policy integration, there is no direct legislative support, few new resources and a great deal of ‘hope’ value. For urban policy leadership in Europe, we need to rely on the collaboration of member states, local authorities, the urban networks and research communities.

## **CHALLENGES AND FUTURE DIRECTIONS**

Systemic analysis of the multiple determinants of health has become an increasingly important priority for scientists, professionals and policy makers during the last two decades. Urban health has been integrated into public health only by a limited number of professionals. Following a decade of rapid economic, technological and political change, it is increasingly recognized that many factors including industrial-agricultural food products, global climate change and globalization are also important determinants of health of urban populations (Galea and Vlahov, 2005). Recent trends provide new opportunities and challenges for improving the health of citizens in the 21st century by applying a broad ecological perspective (Lawrence, 1999).

In order to reinforce the contribution of the WHO-EHCN, it is necessary to strengthen the impact of achievements in two ways. First, by giving a higher priority to those action plans that facilitate health promotion and prevention using specific projects that are either area-based or targeted at specific population groups. In fact, combinations of these two approaches should be applied more often in the future. Second, the dissemination of concrete examples of good practices should be increasingly addressed to all sectors of civic society. Too often achievements have not been publicized to serve as a beacon for mainstreaming good practices.

Healthy living environments have been a societal objective since the dawn of urban civilizations between 8000 and 9000 years ago. Some cities and towns have existed for thousands of years, whereas others were founded, grew, then declined and were abandoned. Both the

sustainability of cities and towns and the health and quality of life of citizens should not be taken for granted.

## FUNDING

This article is based on an evaluation commissioned by the WHO Regional Office for Europe.

## REFERENCES

- de Leeuw, E. (2009) Evidence for Healthy Cities: reflections on practice, method and theory. *Health Promotion International*, **24**, i19–i36.
- European Commission. (1990) *Green Paper on the Urban Environment*. Office for Official Publications of the European Communities, Luxembourg, 1990 (CB-CO-90-276-EN-C).
- European Commission. (1997) *Towards an Urban Agenda in the European Union*. European Commission, Brussels, 1997 (COM(97)197 Final).
- European Commission (1998) *Sustainable Urban Development in the European Union: A Framework for Action*. European Commission, Brussels, 1998 (COM(98)605 Final).
- European Commission. (2000) *The most significant stock-taking of local sustainability Europe wide: lessons learned and future directions at the turn of the century*. Third European Conference on Sustainable Cities & Towns, Hannover, Germany, 9–12, February 2000. European Sustainable Cities & Towns Campaign, Brussels.
- European Commission. (2003a) *Environment 2010: our future, our choice – The Sixth Environmental Action Programme*. European Commission, Brussels.
- European Commission. (2003b) *A European Environment and Health Strategy*. European Commission, Brussels, 2003 (COM(2003)338 Final).
- European Commission. (2005) *CEC Communication from the Commission to the Council and the European Parliament on Thematic Strategy on the Urban Environment*. Brussels, COM [2005] 718 final.
- European Union Expert Group on the Urban Environment. (1996) *European Sustainable Cities*. Office for Official Publications of the European Communities, Luxembourg.
- European Union Expert Group on the Urban Environment. (2003a) *European Common Indicators – Development, Refinement, Management and Evaluation. Final Report*, European Commission, Brussels.
- European Union Expert Group on the Urban Environment. (2003b) Expert Group on the Urban Environment. *Towards more sustainable urban land use: advice to the European Commission for policy and action*. European Commission, Brussels.
- Fudge, C. (2003) Defusing the demographic time bomb: urban design for longer life. *Urban Design Quarterly*, **87**, 28–32.
- Fudge, C. and Rowe, J. (2000) *Implementing Sustainable Futures in Sweden*. Swedish Council for Building Research, Stockholm.
- Galea, S. and Vlahov, D. (2005) *Handbook of Urban Health: Populations, Methods and Practice*. Springer, New York.
- Green, G. (1998) *Health and Governance in European Cities: A Compendium of Trends and Responsibilities for Public Health in 46 Member States of the WHO European Region*. European Hospital Management Journal Ltd, London.
- Lawrence, R. (1995) *Meeting the Challenge: Barriers to Integrate Cross-sectoral Urban Policies*. In Rolén, M. (ed.), Urban policies for an Environmentally Sustainable World. The OECD–Sweden Seminar on the Ecological City, 1–3 June 1994. Swedish Council for Planning and Co-ordination of Research, Stockholm, pp. 9–37.
- Lawrence, R. (1999) Urban health: an ecological perspective. *Reviews on Environmental Health*, **14**, 1–10.
- Lawrence, R. (2000) Urban health: a new research agenda? *Reviews on Environmental Health*, **15**, 1–11.
- Organisation for Economic Co-operation and Development. (1996) *Strategies for Housing and Social Integration in Cities*. OECD, Paris.
- United Nations. (2000) *Millennium Development Goals Report*. United Nations, New York.
- United Nations Commission on Human Settlements. (1996a) *Istanbul Declaration on Human Settlements*. United Nations Commission on Human Settlements, Nairobi.
- United Nations Commission on Human Settlements. (1996b) *Habitat Agenda*. United Nations Commission on Human Settlements, Nairobi.
- United Nations Commission on Human Settlements. (2001) *The State of the World's Cities 2001*. United Nations Commission on Human Settlements, Nairobi.
- United Nations Department of Public Information. (1993) *United Nations, Earth Summit – Agenda 21*. United Nations Department of Public Information, New York.
- WHO Regional Office for Europe. (2000) *Transport, Environment and Health*. WHO Regional Office for Europe, Copenhagen (WHO Regional Publications, European Series, No. 89).