Mark Nieuwenhuijsen • Haneen Khreis
Editors

Integrating Human Health into Urban and Transport Planning
A Framework

Springer
Contents

Part I Introduction and Key Concepts

1 Urban and Transport Planning, Environment and Health .................. 3
Mark Nieuwenhuijsen and Haneen Khreis

2 Health, Sustainable Development Goals and the New Urban Agenda .................................................. 17
Joan Clos and Rosa Surinach

3 Sustainable Cities, Policies and Healthy Cities .......................... 31
Garett Sansom and Kent E. Portney

4 Livable Cities: Concepts and Role in Improving Health .................. 51
Suzanne H. Crowhurst Lennard

5 Healthy Cities: A Political Movement Which Empowered Local Governments to Put Health and Equity High on Their Agenda......... 73
Agis D. Tsouros

6 Human Ecology in the Context of Urbanisation .......................... 89
Roderick J. Lawrence

Part II Planning and Development

7 The Human Habitat: My, Our, and Everyone’s City ......................... 113
Bianca Hermansen, Bettina Werner, Hilde Evensmo, and Michela Nota

8 Superblocks for the Design of New Cities and Renovation of Existing Ones: Barcelona’s Case .................................................. 135
Salvador Rueda
Informal Settlements and Human Health
Jason Corburn and Alice Sverdlik

Complex Systems Modeling of Urban Development: Understanding the Determinants of Health and Growth Across Scales
Luis M. A. Bettencourt

Implementing Car-Free Cities: Rationale, Requirements, Barriers and Facilitators
Mark Nieuwenhuijsen, Jeroen Bastiaanssen, Stephanie Sersli, E. Owen D. Waygood, and Haneen Khreis

Planning for Healthy Cities
Marcus Grant

Part III Accessibility and Mobility

Land Use Policy, Travel Behavior, and Health
Bert van Wee

Complex Urban Systems: Compact Cities, Transport and Health
Mark Stevenson and Brendan Gleeson

Advancing Health Considerations Within a Sustainable Transportation Agenda: Using Indicators and Decision-Making
Josias Zietsman and Tara Ramani

Measure Selection for Urban Transport Policy
Anthony D. May

(Un)healthy Bodies and the Transport Planning Profession: The (Im)mobile Social Construction of Reality and Its Consequences
António Ferreira

Part IV Environmental Exposures, Physical Activity and Health

Built Environment and Physical Activity
Billie Giles-Corti, Lucy Gunn, Paula Hooper, Claire Boulange, Belén Zapata Diomedi, Chris Pettit, and Sarah Foster

Urban Form and Road Safety: Public and Active Transport Enable High Levels of Road Safety
Paul Schepers, Gord Lovegrove, and Marco Helbich

Green Space and Health
Payam Dadvand and Mark Nieuwenhuijsen
21 Air Pollution in Cities: Urban and Transport Planning Determinants and Health in Cities ................................................................. 425
   Barbara Hoffmann

22 Noise in Cities: Urban and Transport Planning Determinants and Health in Cities ................................................................. 443
   Peter Lercher

23 Heat Islands/Temperature in Cities: Urban and Transport Planning Determinants and Health in Cities ......................................... 483
   Xavier Basagaña

Part V Society and Participation

24 Aiming at Social Cohesion in Cities to Transform Society .................. 501
   Mikael Stigendal

25 Establishing Social Equity in Cities: A Health Perspective ............... 515
   Carme Borrell, Mercè Gotsens, and Ana M. Novoa

26 Participating in Health: The Healthy Outcomes of Citizen Participation in Urban and Transport Planning .............................................. 535
   Ersilia Verlinghieri

27 On the Front Line of Community-Led Air Quality Monitoring ........... 563
   Muki Haklay and Irene Eleta

Part VI Health Impact Assessment and Policies

28 Transport Policy Measures for Climate Change as Drivers for Health in Cities ................................................................. 583
   Haneen Khreis, Andrew Sudmant, Andy Gouldson, and Mark Nieuwenhuijsen

29 The Role of Health Impact Assessment for Shaping Policies and Making Cities Healthier ................................................................. 609
   Mark Nieuwenhuijsen, Haneen Khreis, Ersilia Verlinghieri, Natalie Mueller, and David Rojas-Rueda

30 Health Impact Assessment of Active Transportation ........................ 625
   David Rojas-Rueda

31 Barriers and Enablers of Integrating Health Evidence into Transport and Urban Planning and Decision Making ......................... 641
   Rosie Riley and Audrey de Nazelle

32 Translating Evidence into Practice .................................................. 655
   Marcus Grant and Adrian Davis
33 Using Conceptual Models to Shape Healthy Sustainable Cities ................................................................. 683
George Morris, Brigit Staatsen, and Nina van der Vliet

34 Integrating Human Health into the Urban Development and Transport Planning Agenda: A Summary and Final Conclusions ........................................................................................................ 707
Mark Nieuwenhuijsen and Haneen Khreis

Index ......................................................................................................................................................... 719