

INDOOR ENVIRONMENT: HEALTH ASPECTS OF AIR QUALITY, THERMAL ENVIRONMENT, LIGHT AND NOISE



Preface

The World Health Organization (WHO) and the United Nations Environmental Programme (UNEP) are striving to ensure greater consideration of environmental health measures in the planning and development of human settlements and housing. The preparation of environmental health criteria and guidelines is useful to decision makers and professional personnel not only in the health sector, but in such sectors as housing, public works and socioeconomic planning. It can serve as an underpinning for health promoting regulation of the built environment, and as a source of guidance about health promoting measures for design, construction and maintenance practitioners including architects, planners, engineers and builders.

The focus of this book is on the four important physical-chemical factors of the indoor environment. In recent years there has been a growing awareness of the health significance of the indoor environment by public health scientists, as well as those of other concerned fields. This has been sparked by the recognition that (a) some factors of the indoor environment may manifest adverse health effects which exceed those of the outdoor environment (e.g. air quality), and (b) vulnerable segments of the population (e.g. children, the elderly) depending upon latitude and season may spend a high proportion of time indoors and are thus disproportionately exposed to any adverse health conditions.

An effort has been made to include the most current scientific information about how the four physical-chemical factors relate to, and impact on health. Information has been drawn on a wide latitudinal scale from a great variety of sources. In this sense the book will be applicable to involved agencies and personnel in all countries. The last chapter contains guidance about how the guidebook may be used, and approaches that could be taken to accelerate improved practices for health promoting indoor environments. The information should be particularly useful in developing countries where application of new and updated knowledge has lagged behind the regulatory and construction practices of developed countries. It is hoped that this book will help to increase awareness of the health implications of the indoor environment, and the practical measures which can be taken to avoid hazards and create health promoting conditions; and further, that it will stimulate consideration of needed policies and actions on the part of relevant national sector agencies.

The idea for this book arose from discussions between representatives of the United Nations Center for Human Settlements (UNCHS), UNEP and WHO, which highlighted the need for new and improved ways of dealing with environmental conditions in low-income settlements. A WHO/UNEP Technical Panel on Environmental Health Aspects of Housing and Urban Planning which met in Moscow, USSR, in April 1985 selected this topic as a priority subject for an information and guideline document. A Working Group met in Moscow in November 1985 to consider the orientation of the document, and to prepare an annotated outline. Subsequently, the Panel in a meeting in Leningrad, USSR, in October 1986 reviewed and provided guidance on the early drafts. A list of the Panel and Working Group members is