

## Introduction

The articles in this issue are a selection of position papers presented at a WHO Regional Office for Europe (WHO/EURO) Consultation held in Berlin (West) from 21-25 November 1988, at the request and with the help of the Ministry of Environmental Protection and Reactor Safety of the Federal Republic of Germany. The Consultation had been convened to establish guidelines for WHO/EURO to follow in the development of its programme dealing with information on the environment and health. A wide range of professional disciplines was represented, including toxicology, statistics and epidemiology, occupational health, data base management, health services research and health policy.

The papers presented in this issue demonstrate the range of types of information on environment and health available internationally, nationally, sub-regionally and locally within the 32 Member States of the European Region. The members of the Consultation were challenged to develop a unified database for information on the state of the environment and the state of public health in Europe as a tool for environmental health management. Based on these presentations, the participants unanimously agreed that a single unified database was both impossible and undesirable. Instead, they felt strongly that at least three separate areas of information management need to be dealt with and that each of these should be the focus of separate coordinated international activities under WHO/EURO aegis.

Of the three suggested programmes, the most fundamental reflects the need to find out what information is available and where it is held. There is no need or utility for a single, permanent database that contains actual information; there is simply too much information available, much of unknown quality. The goal should be instead to develop a "Metadatabase", a publicly accessible directory of addresses of information holders with detailed description of the data stored and means of access thereto. The arguments for such an approach are convincing, since it becomes clear on reading the papers in this issue that any attempt to deal with the information requirements of the overall problem of managing the environment from the point of view of public health risk must begin with an understanding of what it is that we already know. The metadatabase programme was initiated by a consultation (Munich, 8-10 May 1989), the papers from which are to be published in a subsequent issue of this journal.

The second suggested programme was to develop a geographical information system (GIS) allowing the production of thematic maps and leading to a description of the extent of homogeneity or heterogeneity of risk factors (e.g. concentrations of environmental pollutants on appropriate scales) and similarly,

for health outcomes or disease rates. The third programme should study the origins of such heterogeneities found in health status by means of small area studies, together with the development of specific epidemiological programmes based on the observations of geographic variations in local health status. These two latter programmes are to be the subject of forthcoming consultations.

The current rapid pace of political and environmental events in Europe has brought the general need for environment and health information and the specific development of a unified environmental and health information system as recommended by the Berlin (West) Consultation into a new and sharper perspective. On 8–9 December 1989, environment and health ministers from 29 of the Member States of the Region ratified the European Charter on Environment and Health, which, *inter alia*, underlined the individual's rights to information and his/her responsibilities in participating in an informed manner in environmental and health management. During the ratification process, the majority of ministers made statements to the effect that there appeared to be mounting evidence that the state of the environment was affecting public health, at least in some localities and for certain sensitive sub-populations at high risk. This statement was coupled with requests for quantitative determinations of the extent of such effects, to be accompanied by suggestions for assignment of priorities for remedial action.

Concurrently, public awareness and concern over global problems such as the consequences of greenhouse warming and the potential for highly local effects of environment on health have placed the need for adequate, accurate and accessible information high on public and private agendas. At the same time, the new openness of Eastern Europe has been accompanied by the admission that this part of the Region has been the scene of a number of environmental catastrophes of long duration that have had, and will continue to have measurable effects on public health locally, and in some cases, sub-regionally. These events have overtaken the initial intent of the environment and health information system programme and impose an added requirement that WHO/EURO rapidly becomes capable of identifying existing and emerging environmental hazards that have or will pose risks to public health. Furthermore, it will be necessary to establish reliable values for baseline levels for numerous environmental risks and health status factors, so that changes due to deterioration of the environment can be monitored and improvements due to management programmes can be followed.

The interaction between the environment and public health is expected to be complex, with contributions coming from external factors (e.g. chemicals), personal lifestyle (e.g. smoking and other habits that regulate individual exposures and risks), the quality of and ease of access to public and primary health care, and individual biological variations in sensitivity. The management of environmental health is therefore a multisectoral problem, and it relies primarily on the availability of adequate and accurate information for priority setting and action.

The goals of the programme of environmental health information systems for Europe can only be met if individual, corporate and administrative holders and producers of information join in a unified effort. By publishing these contribu-

tions to the Berlin (West) Consultation, WHO/EURO hopes to stimulate further interest within the Region, to share in existing knowledge and to share the task of managing the environment as a resource for public health. Readers are encouraged to contact individual authors or their organizations, or the Environment and Health Service of WHO/EURO if they would like detailed information concerning the programmes described, or if they wish to collaborate in such programmes and thereby contribute to the development of a European Network for Environmental Health Information Systems.

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