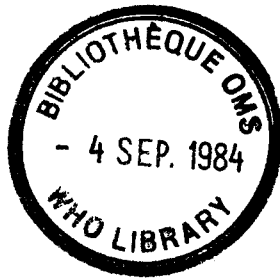


World Health Organization
Regional Office for Europe
Copenhagen



Public Health in Europe 19

Environmental health services

A survey of
administrative and legal provisions

Edited by

Robert B. Dean

Consultant, Promotion of Environmental Health
WHO Regional Office for Europe

ISBN 92 890 1155 6

© World Health Organization 1983

Publications of the World Health Organization enjoy copyright protection in accordance with the provisions of Protocol 2 of the Universal Copyright Convention. For rights of reproduction or translation, in part or *in toto*, of publications issued by the WHO Regional Office for Europe application should be made to the Regional Office for Europe, Scherfigsvej 8, DK-2100 Copenhagen Ø, Denmark. The Regional Office welcomes such applications.

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 Secretariat 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.

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.

PRINTED IN BELGIUM

CONTENTS

	<i>Page</i>
<i>Foreword</i>	vii
General review	1
Albania	7
Algeria	11
Austria	17
Belgium	21
Bulgaria	27
Czechoslovakia	33
Denmark	39
Finland	45
France	53
German Democratic Republic	61
Germany, Federal Republic of	67
Greece	75
Hungary	79
Iceland	87
Ireland	93
Italy	101
Luxembourg	107
Malta	113
Monaco	117
Morocco	121
Netherlands	125

Norway	131
Poland	137
Portugal	143
Romania	149
San Marino	155
Spain	157
Sweden	165
Switzerland	173
Turkey	181
Union of Soviet Socialist Republics	187
United Kingdom	193
Yugoslavia	203
European Communities	209
International organizations	215

Foreword

Environmental health has been defined by WHO as being the control of all those factors in the physical environment that exercise or may exercise a deleterious effect on physical development, health or survival.

This far-reaching definition encompasses a very wide range of activities and involves the work of many different disciplines. The method of organization of such a service will depend in part on the system of government of the country concerned. This publication is the outcome of a survey of the environmental health services in the WHO European Region. The survey demonstrates that no two countries within the European Region have identical structures, and it is apparent that no one central organization in any of the countries surveyed is totally responsible for the overall implementation of all the elements of their environmental health programmes.

This division of responsibility among ministries, agencies, secretariats and provincial and local governments, etc. necessitates some system of linkage, yet all too often the system in use shows insufficient cohesion and coordination. The resultant duplication of activities by the various organizations, and the fact that duties tend to be overlooked whenever no clear analysis of tasks and division of responsibilities exists, causes a loss of overall efficiency and a correspondingly low level of cost-effectiveness.

While countries are striving to attain their goals in the International Drinking Water Supply and Sanitation Decade, the survey has highlighted, for example, that although responsibilities are often clearly defined in the urban sector, this is not so in the rural areas. While the installation of rural water supply systems is often the responsibility of a central authority, that same authority is not responsible for village wastewater or excreta disposal. These problems, vital if the chain of infection is to be broken, are often left to local authorities to resolve. In many of the countries in the south of the Region local resources are all too slight to meet the needs. A clearly defined national policy is required, preferably multisectoral with a precise division of responsibilities, if progress is to be made.

Environmental monitoring is a basic component of an environmental health programme. Water, food and air can all be vehicles for the transmission of infection or toxic contaminants to man. Regular monitoring with efficient field sampling techniques and accurate laboratory analysis using harmonized methods, followed by a systematic evaluation of the results, are essential. A comprehensive legal structure is needed, with regulations that define permissible levels of contaminants, if the important follow-up action on unsatisfactory samples is to be effective. This survey shows, however, that monitoring

is often divided among various agencies, none of which has overall responsibility for coordinating the results or setting standards to cover all the routes of intake (air, water, food, tobacco, occupational exposure, etc.) of toxic substances into the body. Only rarely are standards based on local conditions of exposure backed up by the biological monitoring of tissue and epidemiological surveillance. Indeed, the trend is to rely on multinational standards or guidelines, employing a safety factor to cover local variations.

Standards for lead in water, air, petrol, paint and food, for example, are the responsibility of up to five different agencies, each of which may monitor its own medium, while the monitoring of soil around the home – a major source of intake by smaller children – may be no one's responsibility. Many other examples of divided responsibility can be found.

The reasons for dispersed authority lie in the legislative history of the countries surveyed. Agencies and ministries have been set up over the years on an ad hoc basis to deal with water, food, industrial resources, occupational exposure, etc., as each one came to be seen as a problem. The responsibility for monitoring was frequently assigned to an existing body that was already dealing with supply or distribution, sometimes with the requirement that the health aspects be coordinated with the ministry responsible for public health. Even when several agencies have been combined under one ministry responsible for the environment, certain strongly entrenched departments have successfully resisted efforts to transfer their activities to that authority. In fact, a division of responsibility may exist even within a ministry if it is organized with separate departments for air, water supply, waste disposal, etc.

The survey shows that there is no universal way of coordinating environmental health services. Each country must use a system that conforms to its basic legal and legislative principles if it is to be effective. Some systems may be better than others, but all seem capable of improvement.

This publication is the second of a projected series of surveys on services in the European Region. The first, Food safety services (*Public Health in Europe*, No. 14), was published in 1981. Further surveys in progress cover water services, training facilities for sanitary engineering, and occupational health services. Surveys on chemical safety in Europe appear in the *Health Aspects of Chemical Safety* series: Emergency response to chemical accidents (*Interim document No. 1*) and Legislation and administration (*Interim document No. 5*). Another survey due to appear in this series is on programmes and courses in toxicology in Europe.

The Regional Office would appreciate receiving criticism and comments on this publication from readers, with a view to the preparation of an updated second edition. Correspondence should be addressed to: Director, Environmental Health Service, WHO Regional Office for Europe, Scherfigsvej 8, DK-2100 Copenhagen Ø, Denmark.

General review

The measures that the countries in the European Region of WHO take to protect environmental health and the services they maintain for this purpose vary considerably, and it is difficult to discern a feature common to them all. This is not surprising, because the systems they now operate have not been created in their present form but have evolved, in some cases over a long time, in response to national needs.

The system of government of a country, its geographic characteristics and size, its political philosophy, its economic situation and its stage of development affect the way that environmental health services have developed and how they function.

In contrast to public health and food safety services, which have a history stretching back more than a century, the problems of the environment as a whole have been recognized for only about two decades. Certain aspects of the environment, notably water pollution and emissions from chemical works, have been the subject of legislation that dates back to the nineteenth century but only recently has an attempt been made in a few countries to consider the environment as an integrated whole.

Many countries are trying to consolidate responsibility for environmental services with varying degrees of success. It should be remembered that while protection of the environment in theory works to the general benefit, the measures taken to this end are inevitably considered detrimental to certain interests and will therefore be resisted. The result, in many cases, has been a highly fragmented set of laws and regulations with exceptions and special conditions introduced to secure overall approval.

Legislation and Administration

The complexity of environment legislation and the differences of opinion as to what should be included under environmental health services have been handled in this work by the use of a categorical division into sections, i.e. water, air, noise, solid and hazardous waste, and radiation. Other aspects of environmental health have been omitted either because only a few countries recognize them in their laws and regulations or because their health aspects are tenuous, e.g. oil pollution at sea.

In the majority of countries in the European Region the administration of laws and issuance of regulations is highly centralized. Local governments at district, county, city and commune levels are expected to implement the regulations of the central government. About a third of the countries,

however, have some form of federal government consisting of from 2 to 26 independent political units which may be called states, cantons, Länder, autonomous republics, districts, municipalities, etc. The central government has supreme authority in certain limited areas, which may or may not include health and the environment, and all other legislative authority is the responsibility of the local government. The central government may, however, retain the power to coordinate regulations between the various states. In addition, both systems may delegate local matters to municipalities or communes.

In this work the term "commune" is used in the French sense as the government of an area that typically contains one major community and the adjacent countryside. Municipalities refer to towns and cities which may or may not have independent commune status but do not include significant non-urban areas. Counties may or may not have jurisdiction over cities within their borders.

All of the governments in the Region have some form of legislature and a collection of ministers with responsibility for various aspects of the environment. Less than half have ministries that include "environment" in their titles. Nearly as many assign environmental regulation to the ministry responsible for health, while others assign environmental questions to the ministries for forestry, agriculture or the interior, or to a council representing several ministries that coordinates environmental services. In some cases the ministry dealing with the environment has very little power and serves only to collect data. In others it may have more power than the ministry responsible for commerce.

With few exceptions the ministry responsible for the environment does not have authority over all aspects of environmental health. Instead, some aspects that were regulated before the environment was recognized as an entity that is subject to legislative control, remain in the ministry or other authority in which they were originally placed. The earliest regulations concerning environmental health were those dealing with public health, or controlling water pollution or factories producing nuisances, and in many countries some aspects remain in ministries to which they have historically belonged. In Sweden, for example, a country that has a highly developed environmental conscience, the responsibility for environmental questions is vested in the Ministry of Agriculture, where it is consolidated under the National Environmental Protection Board, a powerful agency.

In the USSR, four ministries and three state commissions have responsibility for various aspects of water while many other aspects of the environment are assigned to the ministry responsible for health. There are few countries that assign all environmental services to a single ministry. The common situation is that separate ministries have responsibility for water, air and other aspects of environmental health services. Frequently the responsibility is broken down still further, separate ministries being responsible for one or more facets of, for example, water, i.e. water supply, water purity, wastewater disposal, inland navigation, and coastal and marine pollution.

The survey that was conducted to obtain information for this volume has therefore revealed a very complex picture. The information obtained is necessarily rather general; to have looked for detailed data would have been impracticable. Nevertheless, it should lead to a better understanding of the ways in which the countries of Europe seek to protect their people from the adverse effects of environmental pollution. In this work, emphasis is placed on health effects that are related to the environment while the improvement of amenities and protection of nature have not been dealt with explicitly.

Water

In the majority of countries in the Region, the responsibility for assuring the safety of water supplies was assigned, in the nineteenth century, to the department of health, where it still remains. In a few countries, the responsibility appears to lie with the ministry responsible for public works, which also has responsibility for the management of water supplies. In several countries, the ministry responsible for health shares responsibility with the ministry responsible for water supplies. In a few countries, strong regional authorities are responsible for all aspects of water supply, sewage treatment and disposal, inland navigation, drainage, land reclamation, irrigation and even the recreational use of water. Sewage treatment and disposal is normally a municipal responsibility under the guidance or direction of one or more ministries, including those responsible for health, the interior, public works, the environment, agriculture or forestry, or of a water agency. The responsible ministry is likely to be that which also has responsibility for lakes and rivers.

Coastal pollution in so far as it involves bathing beaches is usually a responsibility of the health ministry, but in some countries the ministry responsible for navigation or fisheries, or the coastguard, may have the greatest role.

Air

Early air pollution legislation arose in the industrialized countries as a response to excessive fumes from chemical works. In the United Kingdom the Alkali and Clear Air Inspectorate, which was set up to deal with chemical fumes from the newly developed alkali plants, still has a strong role to play in the suppression of industrial emissions.^a Air pollution services are often fragmented, with pollution from factories governed by a different

^a Emissions and immissions. In this work, the old English word "immissions" (which come from heaven) is not used to translate the German word *Immissionen*, which is more closely related to the American term "ambient air quality" but includes noise and radiation as well. The term "emissions" refers to gases liberated by factories, motor vehicles or chimneys, and does not include noise or radiation, whereas these factors are included in the German term *Emissionen*.

ministry than that responsible for pollution from motor vehicles. Countries with a strong environmental department or ministry, however, usually assign most aspects of air pollution to that department. Although administration of air pollution legislation and regulation is frequently assigned to municipalities or other local government, the standards to be met are usually set by the central government. Emissions from motor vehicles are usually the responsibility of the minister in charge of transportation. The European Communities, the United Nations Economic Commission for Europe (ECE) and the Council for Mutual Economic Assistance (CMEA) have issued standards designed to provide uniformity of specifications for motor vehicles that apply both to noise and to emissions.

A special aspect of air pollution, i.e. the pollution of indoor air by tobacco smoking, is regulated in some countries by the authority responsible for health. In Sweden, this is the responsibility of the National Environmental Protection Board. Regulations range from labels pointing out the health hazards for the smoker to prohibitions against smoking in public places in order to protect the health of non-smokers.

Noise

The control of noise is more likely to be assigned to municipalities than is the control of air or water pollution. Standards for noise may be set by the ministry responsible for health, or for the environment, but many countries depend on local nuisance laws to control objectionable noise in the streets. The control of noise from motor vehicles is usually assigned to the ministry responsible for traffic and usually takes the form of type specifications for vehicles sold in the country.

Solid and Hazardous Waste

The collection and disposal of urban solid waste is almost always a municipal responsibility. Guidance may come from the ministry responsible for the environment or for health. Responsibility for the disposal of hazardous waste may often fall to two or more ministries. The earlier national legislation in this area referred to agricultural pesticides, which were regulated by the ministry responsible for agriculture or food. The recent awareness of the risks from hazardous chemicals in the environment has led to a spate of literature including the results of a survey on administration and legislation in Europe, which are incorporated into Interim Document 5 of the Chemical Safety Series issued by the WHO Regional Office for Europe in 1982. Legislation to coordinate control of hazardous chemicals is highly fragmented in most countries. The principal authority may lie with the ministry responsible for health, the environment, agriculture, the interior, labour, traffic or industry, or with an ad hoc commission representing several

ministries. Even a definition of hazardous waste could not be agreed upon by a WHO working group in 1981.^a

Radiation

The ministry responsible for health is most likely to issue safety standards for ionizing radiation in the environment. This assignment can frequently be traced back to the early concern for medical uses of X-rays. A few countries assign responsibility for radiation to the ministry of the interior. Standards vary little among countries in the Region, thanks to the efforts of the International Commission on Radiological Protection (ICRP) of the United Nations.

The risks to the public from nonionizing radiation are recognized by regulations in only a few countries in the Region. Several countries have regulations to protect workers, and a few extend these to cover ultraviolet radiation received by patients in hospitals and clinics. There are a few regulations aimed at the use of lasers, and a few concerned with microwave radiation, but in general there has been little concrete action to protect the public from the improper use of nonionizing radiation.

Bibliography

The major source of information used in preparing this survey was the *International digest of health legislation* published by WHO in Geneva. This is abbreviated in the text to *IDHL*, with a volume number and the first page number of the reference. Other reference works for specific countries are mentioned in footnotes. The work *European environmental law* by Dr S. Ercman (Berne, Bubenberg-Verlag AG, 1977) has been useful, as has a series of monographs on the law and practice relating to pollution control in different countries, prepared for the Commission of the European Communities and published by Graham & Trotman Ltd, London, 1976. Staff and consultants of the WHO Regional Office for Europe have also contributed essential details for several of the countries. An attempt has been made to include pertinent legislation and regulations up to the end of 1980. For some countries it has been possible to include significant material from 1981 as well.

^a Suess, M.J. & Huismans, J.W., ed. *Management of hazardous waste*. Copenhagen, WHO Regional Office for Europe, 1983 (WHO Regional Publications, European Series, No. 14).

