

WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR EUROPE

WELTGESUNDHEITSORGANISATION
REGIONALBÜRO FÜR EUROPA



ORGANISATION MONDIALE DE LA SANTÉ
BUREAU RÉGIONAL DE L'EUROPE

ВСЕМИРНАЯ ОРГАНИЗАЦИЯ ЗДРАВООХРАНЕНИЯ
ЕВРОПЕЙСКОЕ РЕГИОНАЛЬНОЕ БЮРО

26503

EUR/ISR/CEH 004
1973r

ORIGINAL: ENGLISH



TRAINING COURSE ON MANAGEMENT OF HAZARDOUS WASTE FROM HOSPITALS
AND RESEARCH LABORATORIES

[REPORT]

Jerusalem, Israel
27 February - 3 March 1989

1989

EUR/HFA target 23

All rights in this document are reserved by the WHO Regional Office for Europe. The document may nevertheless be freely reviewed, abstracted, reproduced or translated, but not for sale or for use in conjunction with commercial purposes. Any views expressed by named authors are solely the responsibility of those authors.

Alle Rechte an diesem Dokument liegen beim WHO-Regionalbüro für Europa. Das Dokument darf jedoch außer zu Verkaufszwecken oder in anderem kommerziellen Zusammenhang ohne vorherige Genehmigung rezensiert, in Auszügen gebracht, vervielfältigt oder übersetzt werden. Die in dem Dokument zum Ausdruck gebrachten Ansichten geben ausschließlich die Meinung der namentlich angeführten Autoren wieder.

Tous les droits relatifs à ce document sont réservés par le Bureau régional de l'OMS pour l'Europe. Il peut cependant être commenté, résumé, reproduit ou traduit sans autorisation, pour autant qu'il ne s'agisse pas d'un usage lié directement ou indirectement à des fins commerciales. Les vues exprimées par des auteurs nommément désignés n'engagent que la responsabilité de ces derniers.

Европейское региональное бюро ВОЗ оставляет за собой все права, связанные с настоящим документом. Тем не менее его можно свободно рецензировать, реферировать, воспроизводить или переводить. Не разрешается лишь продажа документа, либо иное его использование в коммерческих целях. Всю ответственность за любые, выраженные в подписанных авторами статьях, несут сами авторы.

TARGET 23

Protection from hazardous wastes

By 1995, all Member States should have eliminated major known health risks associated with the disposal of hazardous wastes.

Index:

hazardous waste
MEDICAL WASTE
HOSPITALS
LABORATORIES
ISRAEL

A training course on Management of Hazardous Waste from Hospitals and Research Laboratories was organized by the WHO Regional Office for Europe at the request of the State of Israel, and took place at Kibutz Ma'ale HaChamisha, near Jerusalem, from 27 February to 3 March 1989. It was the first of its kind ever held by WHO and has given WHO a unique opportunity to address a worldwide problem. The course brought together some 90 participants from a great variety of positions and disciplines throughout Israel, and representing 28 hospitals, all six Israeli universities, six research institutes, three ministries, four central and regional public health laboratories and four other establishments. Two visiting participants from Yugoslavia also attended.

At the beginning of the course it was apparent that the interest and perspective of most participants were focused solely on their own area of responsibility. Radiologists were concerned with radioactive waste, laboratory directors were concerned with the management of chemicals, etc. This narrow viewpoint changed during the course. In fact, the most significant accomplishment of the course was the broadening of the parochial awareness of the participants to include all the types of hazardous waste generated at their facilities.

The course's three workshops consolidated this gain by bringing together the diverse talents of the participating professionals for discussion and negotiation, and for the preparation of a written model programme for waste management.

In their lectures, the international faculty (Annex 3) identified the waste management principles that are generally applicable to all types of health care waste. By using uniform terminology, the faculty members facilitated the development of a dialogue among the course participants, regardless of their area of specialization. The lectures (Annex 1) were reinforced by detailed case study presentations, and this created an environment in which the participants discussed and examined their own knowledge and responsibilities in a context that included other departments in their institutions.

The faculty felt that the lasting impact of this type of course lies in the development of a macromanagement concept for the safe handling of hazardous health care waste and research laboratory waste.

The availability of a common terminology and a written model programme (produced by the participants under the guidance of the faculty, and reflecting the particular internal needs of the host country) has the potential to reduce administrative and regulatory burdens that might otherwise be uncoordinated and possibly conflicting.

The presence of regulators, waste generators, and waste disposers at this course, with its open forum, facilitated communication and understanding among them all. As a result, regulations and procedures that need to be amended or newly developed should be much simpler and just as effective.

Another easily predictable benefit is the dialogue that has begun and will continue among this diverse group of professionals. A new national asset has been created here from previously untapped talent to solve a national problem.

In the light of this experience, a model of a basic course structure has been prepared (Annex 2) which combines lectures with group work, making the best use of the time available. This model would serve as a basis for future courses, although changes could be introduced to suit specific circumstances, demands and budget.

Annex 1

FACULTY LECTURES

Management and safety committee commitment to programmes, and waste minimization and reduction.

Public concerns about medical, chemical and radioactive wastes.

Risks from medical waste to health care and research workers.

Risks to workers from chemical and radioactive wastes.

Categories of waste - segregation methods for internal handling.

Special handling problems of medical, chemical, and radioactive wastes, and glass/sharps/etc.

Management requirements for a policy framework, programme of work, and training protocols.

A working model for on-site incineration.

Waste pretreatment needs for off-site disposal.

Disposal options: landfill versus incineration and local incineration versus regional incineration.

Packaging and shipping requirements for medical, chemical, and radioactive wastes.

Education of employees with regard to segregation and proper handling of waste.

Education of the general public with regard to health hazards and proper disposal methods.

COURSE WORKSHOPS

Waste management methods currently used for, and volumes of waste generated by, medical centres, other health care facilities, public health laboratories, and research establishments.

Development of a model programme for waste minimization and disposal potentials.

Group discussions between regulators, participants and faculty members.

Annex 2

MODEL OF A BASIC COURSE STRUCTURE

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
<u>Day of arrival</u>						
<u>Breakfast time</u>				Meeting of faculty and leaders of workshops.		
<u>Morning activities</u>	<p>Faculty meets regulators for private background session. Course opening:</p> <ul style="list-style-type: none"> - WHO introduction - greetings - introduction of WHO faculty - overview of programme. <p>Lectures: Regulatory requirements of: - Ministry of Health - Ministry of Environment - Other ministries.</p>	<p>Lectures: Waste minimization, reduction, and segregation:</p> <ul style="list-style-type: none"> - infectious - chemical - radioactive - other; <p>Waste handling at source: - infectious - chemical - radioactive - other; <p>Risks to health care workers.</p> </p>	<p>Lectures: Packing and shipping of waste for internal transport:</p> <ul style="list-style-type: none"> - infectious - chemical - radioactive - other; <p>On-site treatment and disposal of waste: - infectious - chemical - radioactive - other; <p>Workers' training and continued education.</p> </p>	<p>Lectures: Regional and off-site treatment of waste:</p> <ul style="list-style-type: none"> - infectious - chemical - radioactive - other. <p>Workshops: Finalize work on draft model programmes.</p>	<p>Study tour for WHO faculty.</p>	<p>Departure of WHO faculty and secretariat.</p>
<u>Lunch time</u>	Possibly, official greeting by host government.			Meeting of faculty and leaders of workshops.		
<u>Afternoon activities</u>	<p>Lectures: Public concerns; Waste management framework; Types of health care waste:</p> <ul style="list-style-type: none"> - infectious - chemical - other. <p>Organize workshops.</p> <p>Review by faculty of current local practices and regulations; review of course participants, their background and interests.</p>	<p>Workshops: Begin work on draft model programmes.</p>	<p>Field trip (by bus):</p> <ul style="list-style-type: none"> - hospital laboratory - disposal site - other sites of interest. 	<p>Final session: Presentation of draft model programme; Workshops reports; Course summation; Distribution of certificates.</p> <p>Closure ceremony.</p>		
<u>Dinner time</u>	Social hour before dinner.					
	Faculty meets national organizing committee.					

Annex 3

INTERNATIONAL FACULTY MEMBERS

- Mr John R. Bleckman
Engineering Consultant on Hospital Waste Management, Bayside, NY, USA
- Dr Stewart C. Bushong
Professor of Radiological Sciences, Department of Radiology, Baylor
College of Medicine, Texas Medical Center, Houston, TX, USA
- Mr John Clemons
Safety Director, Boston University Medical Center, Boston, MA, USA
- Mr Bjorn O. Fremming
Chief Engineer, Haukeland Hospital, Bergen, Norway
- Dr Anke Rot
Head, Hospital Department, Bureau of Chief Medical Officer, Ministry of
Welfare, Health and Cultural Affairs, Leidschendam, Netherlands

ISRAEL ORGANIZING COMMITTEE

- Mr Uri Aloni
Department of Environmental Health, Ministry of Health, Jerusalem, Israel
(Coordinator)

WHO REGIONAL OFFICE FOR EUROPE

- Dr Michael J. Suess
Regional Officer for Environmental Health Hazards (Course organizer)