WHO-EM/FCS/009/E

Report on the

Regional consultative meeting on poison control centres: current situation and perspectives in the Eastern Mediterranean Region

Egypt, Cairo 19–20 October 2003



World Health Organization Regional Office for the Eastern Mediterranean Cairo 2004

© World Health Organization 2004

All rights reserved.

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 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. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

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.

The World Health Organization does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

Publications of the World Health Organization can be obtained from Distribution and Sales, World Health Organization, Regional Office for the Eastern Mediterranean, PO Box 7608, Nasr City, Cairo 11371, Egypt (tel: +202 670 2535, fax: +202 670 2492; email: DSA@emro.who.int). Requests for permission to reproduce WHO EMRO publications, in part or in whole, or to translate them – whether for sale or for noncommercial distribution – should be addressed to the Regional Adviser, Health and Biomedical Information, at the above address (fax: +202 276 5400; email HBI@emro.who.int).

Document WHO-EM/FCS/009/E/07.04/102

CONTENTS

1.	INT	RODUCTION	I	
2.	CURRENT SITUATION AND PERSPECTIVES ON POISON CONTROL			
	2.1	Global overview	1	
	2.2	Regional overview	2	
	2.3	Existing tools for poison control centres	2	
	2.4	Chemical incident surveillance system	2	
3.	COI	COUNTRY PRESENTATIONS		
	3.1	Сургия	3	
	3.2	Egypt	3	
	3.3	Jordan	3	
	3.4	Morocco	4	
	3.5	Oman	4	
	3.6	Saudi Arabia	4	
	3.7	Sudan	4	
	3.8	Syrian Arab Republic	4	
	3.9	Tunisia	5	
4.	GRO	OUP SESSIONS	. 5	
5.	CONCLUSIONS		6	
6.	REC	RECOMMENDATIONS		
	Апл	exes		
١.	PROGRAMME			
2.	LIS	LIST OF PARTICIPANTS 10		

WHO-EM/FCS/009/E

1. INTRODUCTION

Participants from nine countries of the WHO Eastern Mediterranean Region took part in the Regional Consultative Meeting on Poison Control Centres, held at the Regional Office for the Eastern Mediterranean (EMRO), in Cairo on 19–20 October 2003.

Dr Abdullah Assa'edi, Assistant Regional Director, delivered a message on behalf of Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean. In his message, Dr Gezairy referred to the Rio Summit and the importance of poison control centres as a component of implementing the sound management of chemicals. In 2000, the Regional Committee for the Eastern Mediterranean had issued resolution EM/RC47/R.9, in which it urged Member States to, among other things, develop and strengthen poison information and control centres to ensure appropriate prevention and treatment of poisoning. The International Programme on Chemical Safety (IPCS) has prepared a number of important tools to support poison control centres.

Following introduction of the participants Dr Mohamed Elmi, Regional Adviser, Food and Chemical Safety, presented the objectives and expectations of the meeting, reminding participants of their role as temporary advisers to provide advice as to the current situation and perspectives for poison control in the Region. Dr Elmi served as Chairman and Dr John Haines served as Rapporteur. (The meeting programme and list of participants can be found in Annexes 1 and 2.)

2. CURRENT SITUATION AND PERSPECTIVES ON POISON CONTROL

2.1 Global overview

Ms Tempowski, International Programme on Chemical Safety (IPCS), gave an overview of the global situation with respect to poisoning and vulnerability to chemical risks, presenting an overview of the global pattern of poisoning, discussing issues of vulnerability to poisoning, and describing the global situation with respect to poison control centres. Poisoning is a global health problem, for which more research is needed concerning vulnerable subpopulations for whom improved protection is required and more effort needed establishing and strengthening poison control facilities throughout the world.

In the discussion note was taken of the role of poison control centres in relation to patient management and poisoning awareness and prevention. Currently much of the global data on poisoning are found in anglophone literature, and it is important for francophone and other centres to make available their data. It was observed that some centres would require an official request from WHO to provide annual reports, and note was taken of the harmonized format for poison control centre annual reports that is incorporated into the IPCS Poison Information Database Management System (INTOX) package.

2.2 Regional overview

Dr Elmi gave an overview of the situation in the Region, referring to a 2000 Regional Committee resolution (EM/RC47/9) in relation to chemical safety issues and the priorities for the 2004–2005 biennium. It was observed that less than half of the countries of the Region have adequate poison control centres; only a few countries have dedicated national poison control information centres; and a large number of countries still need to establish national poison control or information centres. Among the constraints suggested were the lack, in most countries, of coordination among different responsible authorities and within ministries and authorities; the lack of existence of multisectoral committees for chemical safety matters and limited public awareness of the problems of chemicals. Participants were asked to advise on how to improve poison control centres of the Region, indicating the constraints and identifying the priorities for the coming biennium in the area of chemical safety, focusing on poison control centres.

In the discussion the lack of intersectoral coordination in most countries of the Region was confirmed, although usually there were mechanisms for controlling the importation and use of pesticides. The importance was stressed of good access to data, including that on chemical products, and the value to centres of the Region in the collection of harmonized comparable data relating to human exposures to chemical hazards, both for the improvement of patient management, of prevention and for toxicovigilance. Very often there was poor registration of poisoning cases at hospitals. The need for improved public awareness of chemical risks and of training of those working in poison control facilities was also noted.

2.3 Existing tools for poison control centres

The various tools and databases available to poison control centres through the IPCS were reviewed, including the INTOX data management system, the INTOX database and the INCHEM database and an indication was given as to how to obtain and use these tools. Multilingual standard data collection formats, controlled and defined vocabulary with authority lists, and internationally harmonized classifications are used in the INTOX system in three integrated databases: on cases, on substances and on chemical products. Attention was called to the availability through the IPCS INTOX program of harmonized formats and tools for recording and management of poisoning related data, but it was recognized that these need to be provided in the Arabic language. Note was taken of the existence of local databanks in Morocco on plants and domestic products, as well as the use of geographical information system (GIS) technology in Egypt.

2.4 Chemical incident surveillance system

The IPCS chemical incident surveillance system and network of networks were reviewed with reference to a 2002 Health Assembly resolution WHA55.16, "Global public health response to natural occurrence, accidental release or deliberate use of biological and chemical agents or radionuclear material that affect health". The 56th World Health Assembly resolution in May 2003 called for a revision of the international health regulations, covering all public health emergencies of international concern. The WHO global alert and response

system that has been established and the networking arrangements were described. Examples of international public health chemical alerts were given, as well as challenges.

In the discussion it was observed that the international health regulations will provide an effective tool to stimulate reporting of chemical incidents, and that IPCS provides an Internet site for chemical alerts.

3. COUNTRY PRESENTATIONS

3.1 Cyprus

Priority is being given to harmonization with the European Union (EU) regulations, as the country prepares for accession in 2004, which tends to divert human resources away from the tasks of running the national drug information and poison control centre, which was established in 1997. The work of the centre, information resources available and the main studies undertaken were outlined, including the most frequent substances involved in poisoning cases and suggested measures to be taken. In the discussion it was noted that occupational health was reasonably well protected, although no studies had been conducted on chronic poisoning.

3.2 Egypt

The situation in Egypt was reviewed with respect to chemical safety and the development of poison control facilities. Two centres have existed for many years, one at Ain Shams University in Cairo, and the other in Alexandria, (a third centre was subsequently set up); however, following advice from a WHO mission in 1997, the Ministry of Health and Population decided to establish poison information centres in a further five governorates (Minya, Dakhlia, Beheira, Ismailia and Sohag) equipping centres with PC hardware and relevant software (IPCS INTOX and INCHEM databases). Due to certain constraints so far only two centres are being established: in Minya and Dakhlia, including the staff training. Chemical safety activities of various ministry departments were described, including the development of a chemical database, and recommendations for action given.

3.3 Jordan

A chemical information centre was established at the Ministry of Health in 1994 and considerable guidance was provided through WHO to the development of chemical safety activities in Jordan. The work in the area of occupational health and recently the preparation of a revised national chemicals management profile (with the support of the United Nations Institute for Training and Research) was described. Plans are being made to establish a poison control centre at the University Teaching Hospital in Amman.

3.4 Morocco

The national poison control centre in Rabat was initiated as an information centre in 1975. Laboratory facilities were added in 1994, and the centre now serves as the national poison and pharmacovigilance centre. The facilities of the centre and poisoning cases in Morocco were described. A high number of scorpion stings (30%) are observed. The problems of pesticide poisonings were also discussed and chemicals' legislation, as well as the relevant international conventions of which Morocco is a signatory. The identified problems facing the centre included lack of intersectoral partnership, insufficient legislation, the failure of manufacturers to provide composition data of their products to the centre and the lack of a centralized system for health surveillance.

3.5 Oman

A situation analysis of poisoning in Oman was undertaken in 2000, and the infrastructure for poison control facilities established. Coordination was good with the key Ministries of Agriculture and Environment, as well as among the main laboratory services (forensic and environment). Capacity was being built and staff recruited and trained to enable the poison information service to operate around the clock. The IPCS INTOX system is being used with the standardized formats for case data collection at hospitals and primary healthcare centres, staff at which are training in completing the formats, which are faxed to the poison information centre.

3.6 Saudi Arabia

The presentation described the work on poison control in Saudi Arabia, where a network of 20 poison centres has been established, seven of which are well-equipped regional centres that include analytical toxicological laboratory services. Some 10 000 accidental poisoning cases and a similar number of cases of substance abuse are recorded annually (with about 30 deaths recorded annually). The resources available to centres, including personnel, and the regulations relating to chemicals and certain coordinating mechanisms were described as well as some of the relevant international activities in which Saudi Arabia takes part.

3.7 Sudan

It was explained that while no poison control facilities currently exist in the Sudan, there were plans within the context of public health protection from chemical, microbiological and natural poisoning hazards.

3.8 Syrian Arab Republic

It was indicated that the national centre in the Syrian Arab Republic was established in 1995 and provides an information and laboratory toxicological service, but as yet there is no clinical centre as part of the service. The centre operates around the clock and distributes antidotes. A summary of the poisoning situation in the country was presented, noting that 40% of accidental cases are in children. The main problems for the centre, besides shortage of resources, including tools, are lack of clinical toxicology training among medics, lack of good communication with government departments and lack of a network for data collection.

3.9 Tunisia

The presentation described the Medical Centre of Emergency and Intensive Care in Tunis, which was established in 1974 and subsequently further developed into a centre for emergency medicine in the 1980s. This centre provides the full range of poison control facilities for Tunisia. The work of the centre was outlined along with a detailed retrospective epidemiological study of poisoning cases in Tunisia for 2000, and comparisons with earlier partial studies. It was concluded that some 71% of cases are in the age range of 20 to 40 years, with a sex ratio of 47 males per 53 females. 41% of cases are accidental and 59% intentional; pharmaceuticals, caustics and pesticides account for 44.6%, 15.5% and 13.3% of cases respectively. The poisoning incidence rate is 102 cases per 100 000 population and a death rate of one per 100 000.

4. **GROUP SESSIONS**

Two working groups were established to provide guidance for the Region: Group 1 to ascertain: the priority substances that were of main concern in the Region in relation to toxic risks; the main circumstances of poisoning; and the high-risk sub-populations, and Group 2 to decide on the infrastructure required to be developed or strengthened to promote poison control activities in the Region.

Group 1 identified as high priority in the Region for protection against toxic risks:

- Psychotropic drugs and paracetemol;
- Pesticides (particularly organophosphates, carbamates and rodenticides);
- Household chemicals;
- Scorpion stings;
- Hydrocarbons (particularly kerosene in domestic use).

The main circumstances of poisoning in the Region vary, as follows:

- In urban areas in the home (particularly in relation to the use of household products, pharmaceuticals and pesticides);
- In rural areas the use of pesticides and scorpion stings;
- In the occupational setting chronic exposures to chemicals (as yet poorly studied).

High risk groups in the population in respect of toxic exposures are considered to be:

- Children under 5 years old in the home;
- Young adults (16 to 25 years of age) attempting suicide or misusing pharmaceuticals, leisure products and drugs of abuse;
- Females in the home.

Group 2 took note of the IPCS guidelines on poison control and the infrastructure requirements for establishing poison control facilities, which need to be adapted to local circumstances, such as provision of reference books relating to local plants and animals involved in poisoning cases.

5. CONCLUSIONS

In conclusion, the regional consultative meeting emphasized the importance of poison control centres as an essential component of implementing sound management of chemicals in the context of sustainable development. They provide key elements in health surveillance of diseases of chemical etiology and in toxicovigilance, with the identification of emerging chemical risks in the community, as well as in combating and response to chemical emergencies. They may provide a broad spectrum of information on chemicals and their related health and environmental hazards, as well as information management capacity, particularly in relation to the collection and analysis of local observational data related to chemicals, contributing to the scientific evidence base required by countries to manage chemicals in an environmentally sound manner and to prevent negative impacts on health. Poison control centres may play an important role in enhancing public awareness of toxic risks and how to reduce them, and in the toxicology education of health and other professionals. Furthermore, a well coordinated poison control programme may make an important contribution to achieving the United Nations Millennium Development Goals, as well as to meeting the obligations of countries in the implementation of various multilateral environmental agreements and conventions related to chemicals.

6. **RECOMMENDATIONS**

To Member States

- 1. As part of their national programmes for sound management of chemicals and waste, all countries should establish or strengthen poison control facilities to promote coordinated action to prevent toxic exposures, manage poisoned patients and to respond to chemical incidents.
- 2. Activities should be developed through consultation and cooperation among all stakeholders in the spirit of the declarations of both the Rio Summit and the Johannesburg Summit on Sustainable Development. Countries should encourage all stakeholders, from both the public and private sectors, to cooperate fully with the provision and exchange of information and data required for efficient and effective poison control activities, such as the establishing and updating of databases on local commercial products, on chemical incidents and on natural plant and animal toxins.
- 3. As a minimum all countries should ensure a well-functioning national poison control centre, officially recognized and legally constituted, with recognized reporting mechanisms and an independent operating budget, and associated with a public health structure. Larger countries may need more than one centre to cover different regions or

sociocultural groups; but centres should be closely networked and their activities coordinated.

- 4. Countries should aim for centres to have related information, treatment and analytical facilities, to ensure appropriate health surveillance, and prevention and management of exposures to chemicals, as well as the health sector support to chemical emergency preparedness, response and follow-up.
- 5. Facilities should conform with the requirements proposed by WHO in its guidelines on poison control, including up-to-date infrastructure and access to relevant information and, where appropriate, analytical equipment and reagents, and patient management requirements including pharmaceuticals and related antidotes.
- 6. Smooth import and export procedures should be put in place to promote rapid access to equipment and pharmaceuticals such as antidotes, in an emergency.
- 7. All countries should review their networking arrangements to support poison control activities both within and among countries of the Region, with a view to improving regular exchange of information and experience, to promoting research into and studies of toxic exposure problems, particularly those specific to the Region, and to improving local patient management.
- 8. Countries should review how they can take a more active part in contributing internationally to improving the information evidence base in the area of chemical risk assessment, through the collection and sharing of internationally harmonized data such as on human toxicology cases, on chemical incidents and through annual reports of the work of poison centres.
- 9. Benefit should be taken of existing networking arrangements provided through international programmes, such as the IPCS/INTOX internet discussion groups for poison control and chemical incident experts, and the open web networks, such as INFOCAP to promote capacity building for sound management of chemicals.

To EMRO

- 10. EMRO should assist Member States in developing programmes and establishing and strengthening the relevant infrastructure, including laboratory services, for poison control and chemical emergency preparedness, response and follow-up, and in promoting harmonized data collection and its use in sound management of chemicals and in chemical risk-reduction activities at national and local levels. Action should be considered at country level with the WHO representative in consultation with relevant authorities, particularly Health, Environment, Labour, Industry, Civil Defence and Transport.
- 11. EMRO, in consultation with the other relevant international organizations of the IOMC and WHO country representatives, should review where assistance could be given to

Member States through their poison control activities in their commitments to international and multilateral environmental agreements relating to chemicals and waste, such as the Basel Convention (on transport of hazardous waste), Rotterdam (on the prior informed consent procedure), Montreal (on protection of the ozone layer), and Stockholm (on persistent organic pollutants), as well as the Chemicals Weapons Convention and the implementation of the globally harmonized system of classification and labelling of chemicals.

- 12. EMRO should promote the establishment and strengthening of facilities for training of health sector and other professionals involved in poison control activities in countries of the Region. Further, consideration should be given to the sharing among countries of public awareness promotional material, as well as of professional training material in support of poison control activities.
- 13. EMRO should assist in the provision of poison control activity tools, such as information management systems, guidance documents and databases (particularly in relation to the regional situation, such as on products traded among countries and on the local natural plant and animal toxins), and training materials in the languages of the Region.
- 14. EMRO should also consider ways in which rapid international provision of equipment and pharmaceuticals in a chemical emergency can be promoted.
- 15. EMRO should promote the development of international studies and research in the Region to better understand local issues related to both acute and chronic exposure to chemicals, such as pesticides and natural toxins, and in relation to vulnerable groups such as children, workers and women of childbearing age, with a view to improving prevention and patient management.

Annex 1

PROGRAMME

Sunday, 19 October 2003

- 08:30-09:00 Registration
- 09:00–10:00 Opening session
 - Message of Dr Hussein A. Gezairy, Regional Director, WHO/EMRO
 - Introduction of participants
 - Objectives and expectations of the meeting
- 10:30-11:00 Overview of the global situation on poisoning and vulnerability, WHO/PCS
- 11:00-11:30 Overview of the regional situation on poisoning and vulnerability to chemical risks, EMRO
- 11:30-12:15 Existing tools for poison control centres (databases i.e. INTOX, PIM, INCHEM, EHC, HUG, WHO/PCS
- 12:15-13:00 Discussion
- 14:00-14:45 Chemical incident surveillance system and network of networks, WHO/PCS 14:45-15:00 Discussion
- 15:00-16:00 Country presentations: Group 1 Egypt, Libyan Arab Jamahiriya, Morocco, Tunisia
- 16:15-16:25 Discussion
- 16:25-17:25 Country presentations: Group 2 Jordan, Sudan, Syrian Arab Republic
- 17:25-17:35 Discussion

Monday, 20 October 2003

08:30-09:00	Summary of Day 1 discussions
09:00-11:00	Countries' presentations: Group 3 - Cyprus, Oman, Saudi Arabia
11:00-11:10	Discussion
11:10-12:10	Group work
13:00-14:30	Group work presentations
14:30-15:00	Discussion
15.20 16.00	

15:30-16:00 Closing session

Annex 2

LIST OF PARTICIPANTS

CYPRUS

Mr Joannis Kkolos Pharmacist Ministry of Health Nicosia

EGYPT

Dr Zeinab Youssef Director, Occupational Health Department Ministry of Health and Population **Cairo**

JORDAN

Dr Isa Ababneh Director, Occupational Health Department Ministry of Health Amman

LIBYAN ARAB JAMAHIRIYA

Dr Taher Abdelaziz Khalifa Forensic Medicine Department of Medical School **Tripoli**

MOROCCO

Dr Amina Rhalem Centre Antipoison et Pharmacovigilance Rabat

OMAN

Dr Salim Al-Wahaibi Director, Department of Environmental Health and Malaria Eradication Ministry of Health **Muscat**

SAUDI ARABIA

Dr Ahmed Ben Elias Qassem Expert and Director of Poisoning Centre Makkah Al Mokaramah Region Ministry of Health **Riyadh**

SUDAN Dr Abdel Raouf Sulaiman Mustafa Director of National Poison Control Centres Federal Ministry of Health Khartoum

SYRIAN ARAB REPUBLIC Dr Kinda Bakjaji Head of National Poison Control Centre Damascus

TUNISIA

Dr Mouldi Amamou Director, Medical Centre for Emergency and Intensive Care c/o Ministry of Public Health **Tunis**

WHO SECRETARIAT

Dr Abdullah Assa'edi, Assistant Regional Director, WHO/EMRO Dr Said Arnaout, Acting Director, Health Protection and Promotion WHO/EMRO Ms Joanna Tempowski, International Programme on Chemical Safety, WHO/HQ Dr Mohamed Elmi, Regional Adviser, Food and Chemical Safety, WHO/EMRO Dr John Alan Haines, Short term consultant, WHO/EMRO Mrs Hala Amer, Secretary, Food and Chemical Safety, WHO/EMRO