

The Rio Declaration placed human beings at the centre of concerns for sustainable development. The goal of international agreements on chemicals and waste management is therefore to protect human health as well as the environment. A critical indicator of the successful implementation of these agreements is a reduction in the frequency of human exposures to the chemicals concerned, and a consequent reduction in their impact on human health. Conversely, evidence of continuing harm to health can indicate implementation failures at national level. It can also point to the need for additional substances to be considered under these agreements. The involvement of the health sector is therefore crucial to the success of international agreements on chemicals and waste management.

### ***Health sector roles in chemical safety***

#### *Strategic Approach to International Chemicals Management (SAICM)*

SAICM provides a new mechanism for synergy between the environment and health sectors in safe chemicals management. WHO, through the International Programme on Chemical Safety (IPCS), is working with the health sector to ensure its participation in this new approach. For SAICM PrepCom.1 IPCS was able to present the views of 56 Member States on the health aspects of chemical safety that should be included under SAICM.

#### *Poisons centres*

Poisons centres form an important part of a country's capacity for safe chemicals management. If adequately resourced they can be synergistic bodies in their own right since their activities contribute to meeting needs across a number of the international agreements on chemicals and waste management. For example, poisons centres compile information on chemical hazards, which they provide to the public as well as to health professionals and government bodies. They assist in mitigating the effects of exposure to chemicals by advising on the diagnosis and management of those exposures. They advise on the health aspects of chemical accidents. They also document and store the details of exposures to chemicals, which, in some countries, may be the only available information of this kind. Poisons centres are uniquely placed, therefore, to monitor the pattern, incidence and severity of exposures to chemicals and to detect new trends and emerging problems. Poisons centre data can contribute to the evidence base needed to judge the effectiveness of chemical safety conventions such as Rotterdam and Stockholm and the need for new chemicals to be considered under the conventions.

#### *Use of human data for hazard and risk assessment*

Data about human exposure to chemicals can complement and validate that derived from animal studies for risk assessment and risk management purposes and can be used to strengthen the evidence base for inclusion of chemicals under international agreements. These data can be derived from poisoning cases, occupational exposures and chemical incidents. A recent IPCS workshop involved representatives from the risk assessment community, from industry, from poisons centres, and specialists in occupational health, clinical toxicology and chemical incident management. The workshop concluded that there

were benefits from the more effective collection, sharing and use of human effects and exposure data. A follow-up workshop will initiate development of guidelines for the use of such data.

### *Epidemiology of Pesticide Poisoning*

The IPCS Pesticides Data Management System will enable the recording, collecting and analysing of information on pesticide exposures and poisonings in an internationally standardized way. This has been developed after a series of workshops involving representatives from countries that see many cases of pesticide poisoning. Data collected through this system can be used by countries to compile evidence to justify inclusion of additional hazardous pesticide formulations under the Rotterdam Convention. The IPCS Pesticides Databank and the Multilevel Course on Safe Use of Pesticides and Diagnosis and Management of Pesticide Poisonings provide information and educational tools that promote the safe use of pesticides and the correct management of pesticide poisoning. The training tools will be pilot tested in 2004 in selected countries.

### *Chemical incidents and outbreaks*

IPCS is collaborating with the department of Communicable Disease Surveillance and Response at WHO in an integrated Global Alert and Response system to assist Member States to identify and manage events and outbreaks of illness, whether of chemical, infective or unknown etiology.

IPCS has set up a network, called ChemiNet, that pools human and technical resources from institutions and agencies in Member States as well as from international organizations (e.g. Inter-Organization Programme for the Sound Management of Chemicals (IOMC) Participating Organizations, Organization for the Prohibition of Chemical Weapons (OPCW) and the UN Office for the Coordination of Humanitarian Affairs (UN OCHA). This network can provide assistance to Member States in dealing with the public health and medical aspects of chemical incidents and emergencies.

### *Globally Harmonized System of Classification and Labelling of Chemicals (GHS)*

IPCS is participating in the UN ECOSOC Sub-Committee's working group on precautionary statements to assist in developing medical and first aid instructions that are consistent with current medical practice. To this end IPCS will shortly hold a workshop involving clinical toxicologists and other medical specialists to consider these instructions.

Data on the effects of chemicals on health are still lacking to a large degree, yet these data are vital to provide evidence for the burden of disease caused by chemicals. Without such data it is difficult for both the health sector and the non-health sector to set priorities for action to protect health and the environment.