



Focus of the Month

Poison control in SEAR: A hidden issue?

Over three million people in countries of South-East Asia are victims of pesticide poisoning each year, according to recent WHO estimates.¹ Of these, 1 750 000 are suicide attempts, 1 290 000 are unintentional poisonings and 65 000 are fatal.

Poisonings occur from natural toxins of animal or plant origin and food toxicants. However, household products, pharmaceuticals, pesticides, industrial chemicals and hazardous wastes are increasingly significant sources of poisoning in SEAR. The most vulnerable are children, women, workers in the informal sector, and poor farmers.

Although SEAR countries have in total 17 functioning Poisons Information Centres – with a capacity to respond to 5000 cases per year – and a small regional pool of professional toxicology experts, most of these focus on poisoning prevention, and case management depends on the commitment of the individual.

In the past decade or so, several important WHO/SEARO activities have been undertaken to help countries, notably Bangladesh, Indonesia, Myanmar, Nepal and Sri Lanka. These include information and awareness campaigns, capacity building workshops in toxicology, use of harmonized data collection systems, protocols and guidelines, and laboratory improvements. However, these appear inadequate. The data on poisoning cases remains generally poor and limited to hospital data. There is no collection of poisoning cases occurring at the community level. Reporting a case of poisoning may have legal implications and this leaves the victim's relative to report the incident. At the same time, none of the existing poison centres works full time.

¹"Preventing Disease through Healthy Environments", WHO, 2006.



The lack of attention to this issue has many causes. Low awareness and political concern stem from the fact that all cases are laced with stigma and social disdain and most poisonings are intentional. The consequences are insufficient funding to attract skilled professionals and to provide training and knowledge updating.

Poor and/or inadequate facilities are also a major challenge. While some centres do have up-to-date equipment (sometimes too sophisticated), maintenance costs, spare parts and reference standards are major hurdles. Many facilities even lack quality assurance and accreditation.

The way forward

Fundamentally, poisoning needs to be looked at in a more holistic and preventative manner, beyond mere case management. Poisonings are the outcome; the root causes need to be identified and recognized first. This would

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Debt trap is a death trap - Pesticide suicide in India: In the past five years, over 10 000 farmers in India have committed suicide by swallowing lethal doses of pesticide*, most of whom are illiterate and extremely poor. Attracted by cheap loans from pesticides traders, they borrowed heavily to raise cotton on small plots of land. Yet whitefly, boll weevils and caterpillars still multiplied and destroyed their crops. The average yield of cotton fields in Andhra Pradesh fell by more than 50% in just one year. Nearly half the pesticides used in India go into protecting cotton, the most important commercial crop in the country. However, pests are increasingly immune to a range of pesticides. According to the Ministry of Agriculture, the crop losses in Andhra Pradesh arose from the repeated application of excessive amounts of chemicals – a practice actively encouraged by pesticides traders. Reducing the number of suicides requires saving the farmers from the debt-trap. In July 2006, India's Prime Minister announced a waiver of overdue interests and rescheduling of agricultural credits over 3-5 years with a one-year moratorium. He also announced an additional flow of credits for 2006-07 for the affected areas. Interest rates, between 40% and 50% in the private sector, are to be lowered for the public sector from over 12% to 7%. Extracted from http://news.bbc.co.uk/2/hi/south_asia/3855517.stm.

*2006 UN report on the Extent of Chronic Hunger and Malnutrition

support the life cycle approach to chemicals management promoted by UNEP that recognizes risks from manufacturing, transportation, storage, distribution, sale, use, consumption, and disposal. Also necessary is the recognition that poisonings are not only the result of technical and human failure, but also of social, economic and mental health factors.

Thus, addressing illiteracy and debt entrapment common to many farmers in SEAR are key factors in reducing the burden of disease related to pesticide use. Operationally, this holistic approach will require "piggy backing" on community initiatives such as occupational health and safety, mental health, women's health, and

protecting children's environmental health. Measures to reduce reliance on pesticides will only be successful with collaboration from all partners.



For example, Integrated Pest and Vector Management aims not only to reduce the load and availability of pesticides, but also pollution from chemicals in general and, in the longer term, to provide more environmental sustainability. (For information on Integrated Pest Management in Thailand, see <http://thailand.ipm-info.org/index.htm>.)

EH News

Reducing health risks for children from ozone layer depletion



The OzonAction Education Pack, reported in EH Update No. 2, was released on 16 September 2006. This tool, produced by UNEP, UNESCO and WHO, aims to teach schoolchildren simple steps

to protect themselves from solar UV health risks. In addition to awareness building, the kit aims at achieving sustained behavioural change. (For more information visit the website www.unep.fr/ozoneaction).

SolarChill Cooler – high promise for vaccine coverage and saving lives



The same three UN partners, together with the Danish Technological Institute, Greenpeace International, PATH, and the German Cooperation Agency's unit "Proklima", presented a prototype of a solar-powered vaccine cooler to His Excellency the President of India at an official event on 1 November 2006.

Kerosene refrigerators have been used for vaccine storage in electricity-stressed remote area for decades. Yet they are unreliable in maintaining temperature, and environmentally unfriendly due to emissions from kerosene

combustion. The 100 000 kerosene refrigerators in use today around the world for vaccine storage emit close to 90 million kilograms of CO₂ each year. The 6 000 solar vaccine coolers used in parts of the world have proven more reliable than their kerosene counterparts.



HE President of India receiving the first SolarChill Vaccine Cooler at the Presidential Palace, New Delhi, India.

Other advantages of SolarChill are that it is devoid of lead batteries, has better insulation, emits no ozone-depleting substances, keeps temperature stable, lasts longer and costs a third of the kerosene counterpart. (For more information contact Mr R M Shende at rmshende@unep.fr.)

Is clean air losing out in Delhi?

A new assessment by the Centre for Science and Environment, India, on trends in peak pollution levels since 1998 has revealed that pollution in winter – despite a climb-down until 2003 – as begun to rise once again. The months of September and October 2006 showed a rapid build-up of pollution. With a 105% increase in the total personal vehicle registration in the last ten years (diesel cars during the same period have increased by a whopping 425%), air quality gains from the phase out of 12 000 diesel buses may be losing out, despite the forced introduction of CNG in 2002. (see www.cseindia.org/.)

Toxic mud in Indonesia threatens shrimp farms

In eastern Java, Indonesia, a giant lake of mud was bubbling up from deep in the Earth and spreading out over villages south of the city of Sidoarjo in early September 2006.



Photo credit: Sydney Morning Herald
Source: www.smh.com.au

Damage to an oil and gas exploration well resulted in an outpouring of mud and gas that has forced at least 10 000 people to evacuate the devastated area. The threat of contamination of waters and shrimp farms from the overflow of the mud lake is also a concern for people downstream of site. (For more information, contact Mr Shamsul Huda at hudams@who.or.id).

Ship-breaking and health – yet another forgotten concern

Ship dismantling, a task that was once carried out in Europe, has now moved mainly to Asian countries, where dismantling is much cheaper. However, this method seems to be costing Asian countries in terms of life. The dismantling is carried out with minimal protection and inappropriate machinery, and often with children as helpers. Many workers have been killed by explosions or suffocation due to lack of on-the-job protection. Many more are likely to develop mesothelioma in years to come due to exposure to asbestos use in ship building. Most of the Poly Chlorinated Biphenyls (PCBs) linked to ship manufacture are in solid matrix form and found in paints, gaskets, insulation materials, electrical wiring, etc. PCBs were popular and used in various applications prior to 1979 because of their stability and fire retardant properties. The introduction of environmental and safety laws in most European countries has triggered a race to find countries where occupational health and safety standards are less enforced.



Source: www.blogeko.info

The presence of obsolete vessels on the Asian coastline since early 2006 has generated concerns, notably in Bangladesh and India. In India, the officially appointed *Technical Committee of Experts* reported that every sixth worker handling asbestos in the ship-breaking industry has shown signs of asbestosis from chest X-rays. The annual incidence of fatal accidents in the last decade in the ship-breaking industry is six times higher than that in the mining industry (2/1000 against 0.34/1000 workers) (For more information on hazards in the ship-breaking industry, contact Dr H. Saiyed at Saiyedh@searo.who.int. See also the WHO policy paper on asbestos: www.who.int/occupational_health/publications/asbestosrelateddiseases.pdf)

SDE news

WEDC emphasizes capacity building and professional development

The 32nd Water, Engineering and Development Centre (WEDC, UK) conference was held in Colombo, Sri Lanka, on 13-17 November 2006. Its theme was "Sustainable Development of Water Resources, Water Supply and Environmental Sanitation". The focus was on best practice and lessons learned on the sustainable use of water resources, the sustainable supply of potable water to rural, urban and displaced communities, environmentally friendly sanitation strategies and how these can assist in improving health, sustaining livelihoods and alleviating poverty. The Institution of Engineers, Sri Lanka, which celebrated its centennial this year, very professionally co-hosted the event.

For WHO, the sessions on Rainwater Harvesting, Community Management, Water Quality and Water Safety Plans, Total Sanitation and Ecological Sanitation were of particular interest. Papers will shortly be available at <http://wedc.lboro.ac.uk/conferences/conference.php>. WHO sponsored a contingent of 21 participants from 7 SEAR countries to share their views. Mr Han Heijnen, WHO-Nepal, presented a paper entitled, "Health and Hygiene Aspects of Rainwater for Drinking".



WHO stall at the exhibition.

An outcome of the session was a decision to develop short fact sheets on Frequently Asked Questions (FAQs) on microbial quality, biofilms in tanks, length of safe storage, etc. WHO also participated in the exhibition and attracted a sizeable number of enthusiastic visitors.

SDE welcomes two new colleagues



Dr Habibullah Sayeid (India) joined SEARO for a five-month assignment on Occupational and Environmental Health from 20 November 2006. He will prepare a regional situation analysis establishing the main risk factors, issues and challenges affecting workers' health in SEAR with particular emphasis on the informal and high-risk sectors, vulnerable groups and underserved populations. He will also help review and revise existing regional actions for workers' safety for the medium term, based on the current regional strategy on occupational health. (E-mail: saiyedh@searo.who.int)



Mr Dominique Maison has joined the WHO Environmental Health team in Jakarta to help promote the Public Health Intervention for control of avian influenza virus spread. His assignment will focus on the National Healthy Food Market programme that encompasses, inter alia, biosecurity at critical stages of the food supply chain to prevent and control the spread of avian influenza. (E-mail: maisond@who.or.id)

We say farewell to Mahesh Talwar



Mr M.K. Talwar, currently secretary to Regional Adviser, Water Sanitation and Health, retires on 30 November 2006 after a 33-year stint of dedicated service to SEARO. The SDE team wishes Mr Talwar a happy and peaceful retired life.

Visits and Missions

Her Royal Highness Princess Chulabhorn Mahidol of Thailand visited the WHO Regional Office for South-East Asia on 10 November 2006. Her Royal Highness is the founder president of the Chulabhorn Research Institute (CRI), Bangkok, which was designated as a WHO Collaborating Centre for Capacity Building and Research in Environmental Health Science and Toxicology in

December 2005. This visit provided an opportunity to further strengthen the bonds of collaboration between WHO and CRI.

A three-member technical team from CRI also visited the Regional Office on 9 November 2006 to outline the specifics of future collaboration on areas such as capacity building, collaborative research on children's environmental health, and networking with environmental toxicology-related regional and global collaborating centres.

Upcoming Events

- A WHO Regional Workshop to implement integrated management of disease vectors, Vector Control Research Centre, Pondicherry, India, 18-21 December 2006. For details, contact Mr Alexander von Hildebrand at hildebranda@searo.who.int
- The 39th Annual Convention of Indian Water Works Association will be held in Mumbai, India on 1-3 February 2007. Contact Dr S.V. Dahasahasra, Chief Engineer at svd@mahajeevan.com
- A Workshop on Community Based Adaptation will be held on 11-15 January 2007, organized by the International Institute for Environment and Development. For details, contact Dr Saleemul Huq, saleemul.huq@iied.org or visit www.iied.org.

Useful links

- www.EnvironmentalHealthNews.org is published daily by *Environmental Health Sciences*
- Subscribe for free monthly alerts: <http://www.conferencealerts.com/addsub.mv>

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