



Millions vaccinated, and no syringe burnt

New report about safe disposal of syringes released at international meeting of immunisation groups, governments

In a first-of-its-kind demonstration in the world, Health Care Without Harm (HCWH) and the Philippine Department of Health (DOH) teamed up to show it is possible to vaccinate millions of children and safely dispose of all the syringes without polluting the air by burning them. The Philippine Follow-up Measles Campaign 2004, called *Ligtas Tigdas 2004*, conducted during the month of February, provided measles vaccines to about 18 million children, and generated approximately 20 million syringes.

"The Philippine Measles Campaign experience is the largest mass immunisation programme that handled its medical waste without any incineration or open burning," said Philippine Health Secretary Manuel Dayrit. In 1999, reacting to health and en-

vironmental concerns, the Philippines became the first country to ban the burning of all waste, including medical waste. It is now the first country to deal with waste from a nationwide vaccination programme without resorting to incineration or open burning.

A report of the project was presented on July 8, 2004, at the Washington DC conference of the Global Alliance for Vaccines and Immunization (GAVI), a partnership of governments, vaccine manufacturers, NGOs, research institutes, UNICEF, WHO, the Bill & Melinda Gates Foundation and the World Bank.

"Immunisation programmes are expanding around the world, which is a good thing. But we need to make sure we don't solve one health problem by creating new health problems," said Merci Ferrer, HCWH Asia Coordinator. "Burning medical waste is bad for people. Incineration pollutes the air with dioxin, a known human carcinogen, and other harmful toxins such as mercury and lead. This project proves there are safer ways to handle the waste."

The launch of this report was timely, coinciding as it did with the launch of the Stockholm Convention on Persistent Organic Pollutants, which entered into force in May. "Under the Stockholm Convention, countries must reduce and ultimately eliminate pollutants such as dioxins, which are formed by burning medical waste," said report author Jorge Emmanuel.

The report, *Waste Management and Disposal during the Philippine Follow-up Measles Campaign 2004*, is available at <http://www.noharm.org>

INDIA FILE

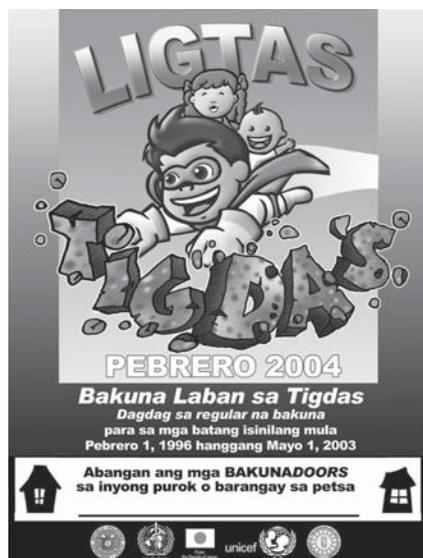
Indian Medical Association's Policy Statement on Safe Injections

The Indian Medical Association (IMA) has issued a 'Policy Statement on Safe Injections'. At a press conference held at its Headquarters in New Delhi, the IMA, an apex body of medical professionals, made three recommendations:

- 1 Make rational use of injections;
- 2 Prescribe injection drugs only when non-injectible alternatives do not exist; and
- 3 Practice safe injection and waste disposal procedures.

With more than 150,000 members in over 1,600 branches spread across the country, the association carries considerable weight amongst the medical community in India. It is now launching a massive awareness campaign on the issue aimed at its entire membership. The campaign will include five national workshops (to be organised with the support of PATH India and other partners) which will involve representatives of all states and Union Territories of India.

The IMA Policy Statement can be viewed at <http://uqconnect.net/signfiles/Files/IMAINjectionPolicyStatement.pdf>



India File

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World Bank says 'no' to incineration

The World Bank has ruled out the use of incineration as a method of disposal of biomedical waste, in the course of an assessment of a major public health programme in Tamil Nadu.

The Tamil Nadu Health Systems Project has been designed to address constraints to access, utilisation and quality of health services, and thereby contribute to improving the health outcomes in the state. It is slated to significantly improve the effectiveness of the health system, both public and private, through improved service delivery, particularly for the poor, disadvantaged and tribal groups, and through interventions to address key health challenges, including non-communicable diseases.

The environmental assessment conducted specifically addresses the healthcare waste management system to be implemented, consistent with Biomedical Waste (Management and Handling) rules. The system has been developed within the action plan for the safe disposal of hospital waste, in accordance with the government's guidelines, and those of the State Pollution Control Board. Incineration, the assessment clearly states, will not be included in the management and disposal of hospital waste.



Mitigation measures suggested by the assessment include:

- ▲ human tissue, body parts, and placenta to be stored in safe containers at selected storage sites, and transported in covered vehicles for deep burial;
- ▲ medical wastes such as cotton, gauze, etc, to be stored in drums with plastic liners at selected storage sites, and transported to secure landfills;
- ▲ medical wastes such as needles, glass, etc, to undergo treatment with hypochlorite, stored, to be shredded, or recycled as possible;
- ▲ microbiological and other pathological wastes, including liquid wastes, to be treated with hypochlorite and be discarded;
- ▲ X-ray deposits (silver nitrate) to be stored, prior to final disposal;
- ▲ heavy chemicals to be stored after undergoing hypochlorite treatment.

The assessment requires hospital management to ensure planned sanitation through training, the use of protective clothing and equipment, effective occupational health, includ-

ing immunisation, programmes, and hand washing facilities.

Source: Tamil Nadu Health Systems Project environmental assessment; June 1, 2004

Hospital dumping body parts in dustbin

A portion of a severed limb found its way onto a Chennai Corporation lorry clearing garbage from the Royapettah Government Hospital recently.

Sanitary workers at the hospital and the driver said the limb was one of many body parts which were picked up from an open dustbin in the hospital backyard. (The part, wrapped in a polythene cover and kept aside by a sanitary worker, was shown to this reporter.)

The Corporation workers alleged that the hospital had

been regularly dumping body parts along with garbage for more than a year. "We removed everything, from severed parts to aborted fetuses. It takes us at least three days to eat properly after being marked for duty here," a worker said.

A hospital official admitted that a severed limb found its way into the garbage bin today, but denied that body parts were being dumped regularly. "They [sanitary workers] are trying to blow it out of proportion," he said after he came to know that Corporation employees had spoken to this newspaper.

Asked how the hospital disposed of body parts and other organic waste, the official said they were chemically treated and buried in a disposal pit in the hospital. But the pit had to be closed recently as it had got saturated.



Endorsing the workers' view, the local councillor, P.T. Sivaji of the Dravida Munnetra Kazhagam, charged the hospital with endangering the lives of sanitary workers

as well as patients.

The sanitary workers who cleared the garbage with the severed limb, took it to a garbage transfer station at Pudupet. From there, it reached the dumping ground at Kodungaiyur.

A government official, on condition of anonymity, said a comprehensive solution to treating bio-medical waste continued to be elusive for city hospitals. A common facility for treating bio-medical waste at a site near Chengalpattu remains on paper.

By Karthik Subramanian,
The Hindu, January 9, 2004

Book your Training Manual now!

Srishti/Toxics Link is producing a Training Manual on biomedical waste management issues, targeted at healthcare workers. The Manual is being produced to provide a convenient, up-to-date training resource that will allow trainers to increase awareness on waste management and related issues at every level in their organisation.

The Manual will have six sections, each with slides on a particular topic. Descriptive notes have been provided with the slides to help provide trainers with a narrative structure.

Please write to anu@toxicslink.org to book your copies of the Training Manual now – we expect copies to be ready by mid-October 2004.

**HOSPITAL WASTE
SICKENING THE
COMMUNITY**

LAHORE: The major public and private hospitals and laboratories in the city produce 3 tonnes of waste daily. Most of this comes from government hospitals and is dumped into city government containers, putting citizens at risk of diseases.

Sources said that none of the government hospitals has proper collection, storage or disposal facilities. There is also a concern that costly apparatus which is meant to be used once is sometimes re-used. Orthopaedic implants and dental implants sometimes get picked up by doctors and are sold.

Plastic waste, such as tubes and syringes, is picked up by rubbish scavengers from SWM dumping sites and sold. Drug addicts often buy or sometimes steal used syringes. Waste is also dumped into the Rabi river, leading to contaminated river water that causes diseases.

According to a study done by Shalimar Hospital, there is an annual demand for about 750 million syringes. Pakistan imports 250 million syringes; the remaining 500 million syringes are produced locally “under suspect conditions”.

The city government is soon to submit proposals on better hospital waste management to the Chief Minister. The recommendations will include that hospital waste should be documented and weighed, and that its disposal must be supervised by hospital committees. The disposal of hospital waste in SWM containers should be banned.

By Shoaib Ahmed, Daily Times, July 8, 2004

Disposal of cytotoxic waste in hospitals

Glenn McRae outlines the issues and procedures involved

Prior to looking at waste disposal there are a whole series of steps in the management of chemo drugs: inventory management, preparation, storage, administration, waste segregation, that result in minimising the amount and type of material that needs special disposal. The WHO guide (Safe Management of Wastes from Health Care Activities) provides some reference to these agents, as well as pollution prevention protocols. Less frequently, larger quantities of waste may result from:

- (1) Expired product: Inventory control should be in place to avoid this. In the event this happens it is essential that work be engaged in contracts for “return to manufacturer.” Some agents may have a manufacturer specified deactivation agent that can be procured. There should, of course, be regulation on how such highly toxic wastes are disposed of and these should be followed.
- (2) A dose that was made up and either the patient died before it was administered, or during the administration the patient could not tolerate the

treatment. In these cases what you are usually left with is a “cocktail” – possibly a mixture of several different agents – all of which need special treatment for disposal and none of which are likely to be able to be saved for a late administration to another patient. These events do not happen frequently.

Recommendations for a management plan

Note: regulations governing the management of these wastes specifically, or toxic hazardous chemical wastes should be consulted first.

Chemotherapy bulk wastes

“Bulk” chemo waste refers to residual wastes that are visible in a form that is a “flowing” liquid.

- ▲ Collection for **bulk** chemotherapy wastes, from preparation of doses, from patient no-shows, or other situations, from expired chemo, from discontinued medications
- ▲ Should be disposed of as a chemical hazardous waste, not as a biohazardous waste. A disposal container marked “Chemo Waste: Toxic” should be maintained in the pharmacy near the preparation hood. All containers still having observable contents should be put in a zip lock bag and placed in the container. A log should be kept.

This should be treated as a “satellite accumulation” site, and the material should be held in this area until collected by an authorised hazardous waste vendor or special agent of the hospital.

▲ Sharps (syringes used to transfer chemo drugs in the preparation) should be collected in a special sharps container marked “Chemo Waste: Toxic.” The syringe and needle should be collected together.

▲ Proper spill kits should be available; training for spill response and hazard awareness training should be documented for personnel in all areas of preparation, use and storage.

▲ In some cases it is acceptable to return as unused product through Reverse Distribution Program for credit and proper disposal – check with the manufacturer to see if this is an option.

Glenn McRae, Ph.D, is a consultant to Health Care Without Harm. He can be contacted at glennmcrac@aol.com Health Care Without Harm is an international coalition working to transform the healthcare industry so that it is no longer a source of harm to the people and environment.

MERCURY TO BE BANNED FROM BABY VACCINES

LONDON: Mercury will be banned from vaccines given to babies, the UK Department of Health announced this amid fears of links between the metal and autism. Doctors nationwide are being contacted over changes to the infant vaccine programme for eight-week-old children. The inoculations will be replaced by a five-in-one jab at two months of age.

The changes are expected to take place next month. The new inoculation will combat diphtheria, tetanus, whooping cough, hib and polio.

The whooping cough vaccine had contained a form of mercury called thiomersal.

By James Sturcke, The Independent, Aug 7, 2004

WASHING HANDS STILL NOT A PREVALENT PRACTICE

BOSTON: Nearly two years ago, the US Center for Disease Control and Prevention told every hospital in the country that their doctors, nurses and other health-care workers needed to do a better job of washing their hands to cut down on patient infections. Several Boston hospitals launched all-out campaigns to encourage more hand-washing, and posted observers to count the number of times workers missed opportunities to wash up.

But Brigham and Women's Hospital, which has one of the most successful hand hygiene programmes around, still only reached 80 percent compliance in some intensive care units.

Susan Marino, an infection control prac-

HUMAN AFFAIRS

MEERUT

Janhit Foundation, an NGO working in the city of Meerut in Uttar Pradesh, organised a half-day workshop in Meerut to discuss bio-medical waste and related issues.

During the meeting, which was held on June 19, 2004, the Nursing Homes Forum and the Medical Association of the city stressed on the need for training and sought the intervention of organisations such as Toxics Link and Janhit to help them set up model hospitals, following good waste management practices, in the city.

Toxics Link, which has extensive experience in the field, has offered to provide support in training and capacity-building of NGOs and other groups keen to take up these activities there.

tioner at the Brigham, said workers can be lulled into thinking that latex gloves offer enough protection. But if they inadvertently touch dirtied gloves as they're taking them off, all the germs end up on their bare hands, and they need to wash again.

Another problem infection control experts face as they roll out hand-washing initiatives is that no one knows for sure just how many infections better hand hygiene will eliminate. The Swiss study showed that boosting the compliance rate from 48 percent to 66 percent hospital-wide cut patient infection rates in half over a four-year period.

By Peter DeMarco, Boston Globe, July 13, 2004

KOLKATA

DISHA organised a two-day workshop in Kolkata on 'Bio-medical Waste Management in West Bengal: Problems and Prospects' on August 8 and 9, in collaboration with Toxics Link and with the support of Health Care Without Harm (HCWH).

On the first day, an NGO meet was held to discuss the basic issues of BMWM, problems of incineration, existing practices, centralised bio-medical waste treatment facilities, and strategy planning on ways ahead.

The second day saw a stakeholders' meeting with participation of the NGOs. Policy matters and existing practices in West Bengal were discussed, with the aim of developing coordination among the implementation authorities.

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You or your organisation can be a part of the Health & Us – Medwaste Action Network (HuMAN) by becoming an Active Member (involved with HuMAN on a regular basis) or a Member in Principle (no active participation but endorsing HuMAN principles).

Contact us at the Delhi address given alongside, and provide us with the following information:

1. Name
2. Occupation and designation
3. Address, phone, fax and e-mail
4. Past experience of / interest in medical waste

Once we have this information, we will send you more details on membership