



MEDWASTE UPDATE

Srishi

Volume 6 No 1 March 2002
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Destined To Kill: The Rebirth Of Syringes!

The waste generated from hospitals and medical institutions is a major source of environmental and public health problems and startling reports on reuse of medical waste being generated from metro cities of India leaves one wondering about the problems the smaller cities are grappling with.

A look in the waste collection charts of the metro city Kolkatta reveals the fact that hospitals are not supplying the waste to civic authorities. Documents show that in a week The Kolkatta Municipal Corporation had collected 309 bags of clinical waste from five medical colleges having bed strength of above 500. Civic officials allege syringes and IV fluid bottles from government hospitals are sold to illegal dealers and amputated limbs are sold to medical students. The city police and KMC, in a drive conducted by them, have arrested four person selling used syringes.

The situation in Mumbai is no different, as brought out in the study conducted by students of Sophia Polytechnic. The study has brought out startling revelations that improperly discarded gloves, syringes, IV fluid bags and catheters are picked up ragpickers and eventually sold to wholesalers who clean, repackage and resell them. Used injection vials and

medicine bottles are washed cursorily and resold by small time pharma companies in packages deceptively similar to the original. Much of this illegal activity takes places in Dharavi area, Asia's largest slum.

Another eye opener study that exposes the horrendous procedures that occur in the recycling of hospital waste was brought out by a recent inspection conducted by officials of the Vigilance cell and the Andra Pradesh Pollution Control Board at the Osmania General Hospital. The inspection found that ragpickers were collecting and selling disposed syringes for recycling. It was also observed that syringes and needles were not mutilated before they were discarded. Ragpickers were selling these needles at the nearby Begum Bazaar.

New Delhi too, faces the same problem where in several cases, safai karmcharis who don't realise the danger this kind of waste poses, sell whatever they can to scrap dealers .A senior DPCC official said that some of these karmacharis make more than a month's salary in a day. Also some of the lazy employees just dump the waste in the nearest municipal dhalao.

The reuse of medical equipment, especially syringes, is a major cause of infection According to a WHO report,HBV can survive in a syringe in dry conditions for a week or more, some new studies are revealing similar scaring facts about HIV. Worldwide, more than 8 million Hepatitis B,more than 2.3 million Hepatitis C and more than 80,000 HIV infections are estimated to occur yearly from the re-use of syringe needles without sterilisation. Keeping these figures in mind, surely reuse is the deadliest weapon to kill any civilization.

Source: The Statesman,1st Feb 2002
Times News Network 21st Jan 2002
The Times of India (Mumbai) 27th Feb 2002
The Statesman (New Delhi) 31st March 2002



Withdrawal of disinfectant hit by safety fears

A commonly used disinfectant, which has been the subject of reports of skin problems and asthma, is being withdrawn from use.

Cidex made by Johnson and Johnson, is to be taken off the UK market by May 1st this year. Cidex is one of the brand names for Glutaldehyde, a toxic colourless, oily liquid also available as an aqueous solution.

Glutaldehyde is harmful if inhaled or swallowed and irritating to the eyes and respiratory tract. It can also cause severe damage to the skin and eyes.

But the company says that their product is safe, and is simply being replaced with a more effective product. UK's Health and Safety Executive raised concerns over the use of the disinfectant after reports of various health problems from staff exposed to it. The chemical hit headlines 14 months ago when thousands of nurses were called for medical tests after possible exposure to a faulty batch.

Good for nurses'

Source: BBC News/Health

Jon Richards, of the health care workers Union, which had campaigned for years to get the substance banned said that the move was a good news for nurses' health.

David Harris, European Regulatory and Quality Systems Director for Johnson and Johnson Wound Management Worldwide said "Cidex, Activated Glutaldehyde Solution has been and continues to be used safely and effectively by hospitals around the world as disinfecting and sterilising solution for more than 30 years. As with all sterilants and disinfectants Cidex must with handled with care and certain precautions against exposure observed."

The Company is now introducing a faster and more effective product-Cidex OPA High Level Disinfectant Solution in the UK market. The transition will take place on a

gradual basis. The active ingredient, ortho - phthaldehyde, has a very low vapor threshold and inhalation potential is minimal.



Study on Dioxins in India: Alarming figures

Study By: KS Kumar, Kannan, et al

Dioxins and Furans are toxins released from incineration of medical waste. According to USEPA 0.006pg/kg of body weight of these toxins is enough to cause toxicity. Concentrations of polychlorinated dibenzo-p-dioxins (PCDDs), dibenzo furans (PCDFs), and non- and mono-ortho -substituted polychlorinated biphenyls (dioxin like PCBs) were measured in tissues of humans, fishes, chicken, lamb, goat, predatory birds and Ganges river dolphins collected from various locations in India. Concentration of PCDDs and PCDFs were generally greater than those of PCDFs in human tissues, fish, animal fat and dolphin. Among fish, meat

and wildlife samples analysed, concentrations of PCDDs/DFs were found in the following order: country chicken < goat/lamb fat < fish < river dolphins < predatory birds. Hepta -CDDs and OCDD were the major PCDD homologues found in humans, fish, meat products, and dolphins. This is the first study, which documents Dioxin levels in India. And it is alarming to see that the contamination almost matches those found in industrialised countries and is much higher than other developing countries in Asia.

DETAILED REPORT IN THE NEXT ISSUE

WORLD WIDE

The City Council of Buenos Aires city (with population of 5 million people) has just passed a law that bans incineration of medical wastes in the city. Furthermore, the law bans the incineration of medical waste produced by public hospitals. This means: not only will incineration of medical wastes be banned



in Buenos Aires, but for public hospitals of the city, the wastes can't be burned anywhere and the government has to contract other technologies for this treatment.

NEW PVC-FREE DATABASE NON-TOXIC ALTERNATIVES AVAILABLE FOR MOST HEALTH CARE PRODUCTS

EricaWeir

Denmark, –
PVC plastic is an environmental and public health hazard because dioxin and other persistent organic pollutants can be emitted into air, water, and land during its manufacture and incineration. In addition, PVC products can leach toxic additives during use, and thus may harm patients receiving certain medical treatments. PVC has come under scrutiny by the European Commission since 1997 resulting in the release of the Green Paper in July 2001 that highlights the dangers associated with its disposal, and in April 2001 the European Parliament adopted a resolution calling on the Commission "to introduce rapidly a policy on the replacement of soft PVC, in so far as the current risk analysis of phthalates indicates that it is desirable to reduce the exposure of people and the environment".

Environmentally preferable alternatives are now available for nearly all uses of PVC plastics in health care, according to

an online database published by Aarhus County. Grenaa Central Hospital, Denmark, substituted 95 percent of its PVC-products with safer alternatives without compromising safety and care, and found many of the alternatives to be a more cost effective.

Link: www.aaa.dk/pvc



NATION WIDE

Site chosen for common bio-medical waste facility

Express News Service

Chennai, Feb 15th 2002-04-03

The Indian Medical Association (IMA) has selected a site to establish a common bio medical waste facility at Thenmelpakkam village near Singarperumal Koli. The common bio-medical waste facility will consist of an autoclave, shredder, compactor, incinerator and a sanitary landfill, according to a press release from the Tamil Nadu Pollution Control Board. Health care units had been asked not to put up individual incineration plants as most of the health care units are located in crowded residential areas.

Moving beyond boundaries: Interstate Centralised Facilities

Times of India 20th Feb 2002.

A Delhi based company India Waste Energy Development Limited (IWELD) has signed a MoU with Haryana unit of Indian Medical Association to provide common facilities for disposal of bio-medical waste in Haryana.

India to sign Stockholm Convention

PTI Wednesday, 6th March 2002

New Delhi, Union Minister for Environment and Forest Mr T.L. Ballu announced that India has decided to sign the Stockholm Convention, a landmark treaty, which focuses on reducing and eliminating release of 12 of the most dangerous Persistent Organic Pollutants (POPs).

Toxic chemicals Dioxin and Furans released by incineration are among the list of 12 POPs. With India deciding to sign the Stockholm Convention, it shall have to take measures to reduce the releases of Dioxin and Furans with the goal of their continuing minimization and where feasible ultimate elimination. India will have to develop an action plan (and subsequently implement and evaluate) current and projected releases including the development and maintenance of source inventories and release estimates. The signatories will also have to promote the application of available, feasible and practical measures

that can achieve a realistic and meaningful level of release reduction or source.

EVENTS

A two-day workshop on Hospital waste management was held in Lucknow. The workshop organised jointly by the WHO and the Vivekanand Polyclinic was deliberated on the toxic and industrial wastes.



FORTHCOMING

Toxics Link Environment & Health Public Lecture Series

To understand the politics, the science and the economics of asbestos, Toxics Link is organizing a one-day skill share with some of the leading international experts in the field of asbestos and occupational health in New Delhi. Barry Castleman, an internationally acclaimed occupational health expert, would deliver a public lecture "Story of Asbestos" at IIC, Conference Room No-1 on 11th April 2002 at 6:30pm.

Seminar on Hospital Waste Management

Fifth National Seminar on "Hospital Clinical Waste" organized by Indian Society of Health Administrators (ISHA) 104 (15/37, Cambridge Road Cross, Ulsoor, Bangalore) from May 15-18, 2002.

Contact Person: Dr. Ashok Sahni

NEW PUBLICATION

Information Pack On Waste

To enhance its outreach amongst people's communities and interested groups, Srishti along with Toxics Link has brought out a package on medical, municipal and toxic waste. The package has various publications and materials that can be used independently or together. The kit contains a series of 12 illustrated handouts, bookmarks, book labels and stickers on municipal waste. Biomedical waste too has been addressed innovatively through a colourful poster that talks about the perils of biomedical waste and its effective management.

To obtain the kit, contact us.

INTERACTIVE



Move Towards Safer Injections: Emerging Options

With the growing number of immunization being given annually sharps waste has also increased and has prompted people to look for safe disposal of this waste. There is now an attempt to do away with the convention needle injection by using jet injectors and thus eliminate sharps waste

Multi-dose jet injectors deliver a pressurized, fine stream of vaccine that is able to penetrate the skin. Seroconversion rates after vaccination by jet injection are usually comparable to, and often higher than, the rates attributed to delivery of vaccines by standard syringes for both intramuscularly and subcutaneous vaccines. Since 1952, jet injectors have been used to deliver over 2 billion doses of vaccine. After a jet injector was linked to an outbreak of hepatitis B in California, safety issues have been increasingly scrutinized. In 1996, WHO advised against using multi-dose jet injectors for vaccination. Second-generation jet injector devices are now being developed with features such as a disposable protector cap, which will reduce the possibility of transmitting blood borne pathogens when compared to earlier devices. Potential benefits of jet injectors, particularly in mass immunization campaigns, include increased coverage rates, more efficient delivery of vaccine, and elimination of sharps waste.

By: Nancy Muller

Program Officer
Program for Appropriate Technology In
Health, Seattle.

Health &Us- Medical Action Network

With this issue of our newsletter we hope to profile the HU-Man members as an attempt towards better understanding of their organizations and the kind of work that they do.

All India Institute of Public Health Engineers

An active member of the Hu-Man network the primary area of work for this organization is Environmental Engineering and promotion of Public health by means of training, organisation of courses, seminars and awareness programs and assistance to Government departments. They also provide consultancy services to State Health Services Department in the fields of data collection, analysis, planning training and awareness, implementation and monitoring of Bio-medical waste management system through SHSDP -II Project. AIIPHE has been working in the field of bio-medical waste management since 1972.

GAU BRAHMA KSHETRA

Represented by Dr. R C Gupta, this organisation from Allahabad,UP works towards the economics of the non-milking cows and also for bioremediation of hospital waste .The organization has been working in this field for 21 years and has published articles in various magazines. The organization intends to develop appropriate environmentally friendly technology for medical waste management.

Health & Us –Medwaste Action Network(HUMAN) is a national group of individuals and organizations, dedicated to the cause of making health care in India environmentally safe and safe from a health perspective .If you are working on medical waste and related issues, you or your organization can become a part of this coalition by becoming an active member or a member in principle .Contact us with the following information

1.Name

2.Occupation and Designation

3.Address/phone/Fax/Email

4.Past experience/Interest in medical waste. Once you have sent us this information, we will send you a more comprehensive form to sign on as member



About Our Organisation

Srishti is a non-profit organisation working on the environmental issues of waste and its management .As a part of our research, we have initiated a campaign towards better medical waste management throughout the country .Our emphasis is on moving away from polluting technologies towards safer ones. We have been working on issues of occupational health and safety and waste management practices with authorities and policy makers within and outside health care institutions.

Shri Anil Agarwal, an eminent environmentalist & founder Centre for Science &Environment and editor of Down To Earth ,died on January 2,2002 a man of great energy and passion, he put the environmental cause in the national & international agenda. We deeply condole his demise

TO,

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