Health Care Waste Management
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As a **background**, health-care activities produce infectious wastes which lead to adverse health effects and are a risk for patients, health care workers, waste handlers and communities. Used syringes and needles contain residual blood and blood-borne pathogens and may transmit diseases when re-used without reprocessing or through accidental needle sticks. Little attention is paid to ensure the budgeting and financing for managing infectious waste.

We aim at **developing clear guidance, policies, recommendations** for safety of health workers and all. The guiding principles of the Policy paper on safe health-care waste management are to prevent the health risk associated with exposure to HCW by promoting sound management policies and to reduce the exposure to toxic pollutants associated with the combustion process through the promotion of appropriate practices. It also acknowledge that until countries in transition and developing countries have access to health-care waste management options that are safer to the environment and health, incineration may be an acceptable response when used appropriately. Key elements of appropriate operation of incinerators include effective waste reduction and waste segregation, placing incinerators away from populated areas, satisfactory engineered design, construction following appropriate dimensional plans, proper operation, periodic maintenance, and staff training and management.

To **support implementation** a WHO health care waste web Site available at: [http://www.healthcarewaste.org](http://www.healthcarewaste.org) or [http://www.who.int/water_sanitation_health](http://www.who.int/water_sanitation_health) offers technical options, costing tools, country information, contacts and 142 reference documents. This includes a pocket size document on the management of waste from injection activities which is very practical and it includes two similar posters. This poster summarize the strategies proposed for the management of waste from injection activities with on top what is done today with on site and off site treatment and the lower part of the poster show the use of needle removers. A device not yet approved by WHO for its potential risk of needle stick injuries for injection providers. Anyhow it has an added value to prevent needle stick injuries among waste handlers and communities. A study in Bangladesh on routine activities should soon tell us its level of safety. Meanwhile WHO has developed pre qualification specifications on injection related equipment including needle remover aimed at providing recommendation for the purchase of equipment, as this equipment is already introduced by MoH in a number of countries (e.g. India). Also to mention that recycling or reprocessing of plastic syringes into other utensils represents a return value (e.g. in India where it works well).

**Partnership** is also a key function. In June 07 at WHO Geneva a 3-day meeting on HCWM supported by the Gates Foundation brought together 50 participants from 30 nationalities with country representatives, UN, NGOs, industry, WHO country and regional members. An informal HCWM alliance was set up, it was an opportunity to provide the group with an update on project and activities, to discuss the content of the new version of the WHO reference document on the safe management of wastes from health-care activities, discuss the new costing tool and develop WHO core principles for achieving safe and sustainable management of health-care waste.

The **WHO core principles** recognize that safe and sustainable management of health-care waste is a public health imperative and a responsibility of all. Improper management of health-care waste poses a significant risk to patients, health-care workers, the community and the environment. This problem can be solved. The right investment of resources and commitment will result in a substantive reduction of disease burden and corresponding savings in health expenditures. The **WHO core principles require** that all associated with financing and supporting health-care activities should provide for the costs of managing health-care waste. This is the duty of care. Manufactures also share a responsibility to take waste management into account in the development and sale of their products and services. The establishment and sustained maintenance of sound systems for health-care waste management depend on the availability of resources.
This is directed to governments, donors and partners, NGOs, private sectors and all concerned institutions. Whoever sign up has to express its commitment to WHO and this will be listed on the WHO web site on health care waste management.

A number of activities are taking place in countries.

The 06/07 Objective of the health-care waste component of the Global Alliance for Vaccine and Immunization is that by the end of 2007, 60% countries receiving GAVI support (36 countries - half of them being is Sub-Saharan African countries) have adopted national policy and developed plans on Health-care waste management. The project is so far on track. Madagascar has started to implement its national plan. The targeted 2008 objective is 90%. Activities to support the implementation of policies in a number of settings to demonstrate success has been proposed for the 2008 GAVI workplan. Meanwhile, in 2007 and under the WHO leadership, PATH is developing a tool to measure the status of injection waste disposal. This will be pilot tested in Uganda and the tool is aimed at being replicable in other countries.

Management of injection waste from campaign with the use of centralized facilities such as cement factories. A very successful experience in Ivory Coast in 2005 where centralized sites for treatment had been selected.

Global Environmental Facility project - 2006 - 2010
The Global Environmental Facility project (GEF) on Health Care Waste Management is to demonstrate and promote best techniques and practices for reducing health care waste to avoid environmental release of dioxins and mercury. The project involve UNDP as implementing agency, UNOPS as executing agency, WHO and Health Care Without Harm (HCWH) as principal cooperating agencies. The participating countries are: Argentina, India, Latvia, Lebanon, The Philippines, Senegal and Vietnam (+ Tanzania). The project implementation has not started yet.

Three Expanded Costing Assessment Tool have been developed and they differentiates between low, middle and high income countries, they deal with various size categories of HCFs, allows several treatment options, allows centralized and/or decentralized treatment and computes potential revenues from the sale of sterilized plastic parts for re-melting. They provide sharps costs per syringe, key indicative value of sharps waste generation rates in kg / bed per day and more.

In conclusion, there are on-going and better structured dynamics taking place which demonstrate that despite the enormous challenge that safe waste management represents, this is not an hopeless battle to ensure safety.