

# MEDICAL WASTE: SEGREGATION AND REDUCTION



Medical waste experts recommend that any waste management strategy begin with an emphasis on segregation and reduction, rather than a choice of treatment technologies. Since hospital waste is composed of many different types of waste, each requiring different handling, segregation is the key to designing a system that safeguards worker health, minimizes costs, and minimizes environmental impacts.

## Why Segregate?

- \* Infectious waste can cost five times as much to treat as regular, non-infectious waste. Since 85% of the waste from hospitals falls in the latter category, segregation allows a facility to minimize the cost of treating infectious waste by minimizing the amount of infectious waste.
- \* Sharps are dangerous to hospital personnel, waste handlers, and scavengers. To reduce the possibility of infection, handling of sharps must be minimized and they must be contained in puncture-proof containers from point of use to final disposal.
- \* Hazardous waste such as mercury, chemotherapy drugs and nuclear medicine must be separated and dealt with appropriately to avoid large-scale environmental contamination.
- \* Segregation allows the recycling of paper, cardboard, metals, etc. which saves money and reduces the environmental burden of increased demand.
- \* Segregation also allows the identification of problematic parts of the waste stream e.g. non-recyclables which can then be minimized through purchasing.

## Why Reduce?

- \* Reduction is important at three levels: reduction of waste toxicity by not purchasing toxics; volume reduction means less handling of waste and therefore greater worker safety; and volume reduction also lowers disposal costs.
- \* Hospitals are a major source of environmental mercury. Eliminating the use of mercury products in hospitals would greatly reduce the incidence of mercury poisoning.
- \* PVC production and disposal are two of the major sources of dioxin. Hospitals use large quantities of PVC, for which good, non-toxic alternatives exist. Eliminating PVC in hospitals would significantly lower levels of dioxin production.
- \* Substituting reusable for disposable items with the exception of syringes and needles reduces waste volume and costs without affecting patient care or infection rates.