



X-RAY AND HOSPITAL WASTE

As today's throwaway society continues to consume escalating amounts of products, we also generate more and more waste, magnifying our impact on the planet and needlessly using large stores of precious natural resources such as oil, gas, wood and minerals. Most of this waste is buried in landfill, causing serious environmental problems including water pollution from water and waste mixing together to create a toxic cocktail of chemicals that may reach the water table, and air pollution through the emission of greenhouse gases.

If we continue to degrade and over-use our planet's resources, the earth's future generations will be faced with serious environmental and health consequences. In the past, resources were treated as abundant but now we realise their limitations. For example, the cutting of timber is not limited by the number of sawmills as it once was, but by the remaining forests.

Zero Waste is a design principle that aims to change the way resources and materials currently flow through society to help create sustainability: its ultimate goal is to minimise and eventually eliminate waste. The best ways to do this are isolated as:

- Reduce consumption
- Ensure the manufacture of products allow them to be reused, repaired, recycled or composted with ease
- Maximise recycling
- Minimise all other waste

In order for Zero Waste to be successful, subsidies for waste disposal and raw material extraction to create products should be eliminated whilst holding manufacturers responsible for their products and packaging from production to end-use or hopefully possible uses such as recycling (therefore putting the onus on businesses to provide sustainable products). The goal of Zero Waste is to promote clean and sustainable product manufacture and to prevent pollution.

Preventing waste by reducing the amount and types of materials that are discarded is the most important and proactive action that any individual or business can take as it helps to change people's mindsets regarding waste and is the most cost effective and environmentally beneficial method of reducing materials to landfill and moving toward a zero waste society.

WHAT CAN I DO?

Hospital staff should be aware of their hospital's Waste Management Plan and if there isn't one, now is the time to start asking questions! When staff discard non-contaminated waste into the contaminated clinical waste stream, the hospital is paying for specialized disposal at high costs. Health care institutions that practice waste reduction have been able to significantly reduce costs as well. For example, Beth Israel Medical Center in New York now saves \$600,000 per year due to their reduction of clinical waste disposal. This case study highlights the importance of segregation of different waste types.

- Reducing solid waste, of course, also results in cost savings and reusable products aid greatly in this regard. Disposable items that can be replaced by durable supplies include:
 - Dietary services, for example food trays, covers, crockery and cutlery
 - Linen services, for example surgical/patient gowns, nappies, drapes, and mattress liners
 - Building and Housekeeping: Refillable bulk dispensers for cleaning products, refillable soap and lotion containers

If you are interested in developing a waste management plan for a health care facility, guidelines and templates are available at <http://www.health.nsw.gov.au/public-health/ehb/index.html> by clicking on buildings, Development and Health, then 'Waste Management in Health Care Facilities'

MORE INFORMATION

- <http://www.h2e-online.org/> - Hospitals for a Healthy Environment has many great case studies of waste avoidance and reduction in hospitals.
- <http://www.audit.nsw.gov.au/> - The Audit Office of NSW provides a report on Managing Hospital Waste and how different hospitals deal with it around NSW
- <http://cleanerproduction.curtin.edu.au/industry/health/specific-hospital-wastes.pdf> - a great fact sheet providing a snapshot of the key issues involved in health care waste.
- <http://www.noharm.org/> - Health Care Without Harm campaigns for environmentally friendly health care
- <http://www.ciwmb.ca.gov/BIZWASTE/factsheets/hospital.htm> - showcases waste reduction activities for hospitals