



Waste

Key actions

1. Management of domestic, clinical and hazardous waste should be reported at Board level by all NHS organisations as a key part of their sustainability reporting.
2. Boards should undertake a balanced risk assessment of all waste, and its associated costs and carbon including those related to single issue, use and disposal policies in contrast to sterilisation and re-use policies.
3. All Trusts should ensure they have the necessary skills to manage waste legally, efficiently and cost effectively.
4. All Trusts should monitor the quantity and cost of all waste streams and set trajectories to monitor, manage and reduce them over time.
5. The DH and the NHS SDU will consider appropriate targets to:
 - Reduce waste from clinical areas / hazardous waste
 - Reduce domestic waste to landfill
 - Increase recycling.

Vision

In a low carbon NHS, waste is minimised, and managed to consistently comply with legislation, and is recycled or composted routinely

Introduction

Waste in the NHS continues to increase and ERIC data¹ (see table) shows that in 2007/08 waste cost the NHS £71.2 million.

¹ ERIC data 2007/08 [Online] Available at: <http://www.hefs.ic.nhs.uk/> [Accessed 09 January 2009]

Waste type	Tonnage
High temperature incineration	124,000
Non burn technology	47,000
Landfill	401,000
WEEE	4,806

Source: ERIC data 2007/08, Department of Health

Inefficiently managing waste costs the NHS money that could otherwise be spent on direct patient care. With ever more stringent waste legislation, regulation and guidance being imposed by the UK government and the EU, there will be increasing pressure to manage waste effectively and explicitly within the NHS.

Although NHS waste is responsible for only 1% (0.1 Mt CO₂) of total NHS carbon emissions², when all greenhouse gases are taken into account waste is responsible for up to 3% of total greenhouse gas emissions.

Although domestic waste is by far the largest proportion of NHS total waste, clinical/hazardous waste is the most costly to dispose of: £380-450 per tonne for non-burn alternative technology (i.e. autoclave/microwaves etc) and £800-1,000 per tonne for hazardous/pharmaceutical waste high temperature incineration. As waste created by the NHS continues to rise, both by tonnage and by disposal cost, this is an area where investment in sound management can save money and reduce carbon emissions. The most important principle in waste management is to apply the waste hierarchy of reduce, reuse, recycle, energy recovery – with disposal being the least favourable option. Waste strategies should start with the more desirable end of the hierarchy: reducing the purchase of materials that produce waste i.e. the procurement process, which generates the waste in the first place.

NHS organisations should refer to HTM 07-01 Safe Management of Healthcare Waste³ for guidance about how to manage all their healthcare waste.

NHS organisations should aspire to match and exceed the targets set by the SOGE targets⁴ in managing the different waste streams, although it is acknowledged that these targets are not directly relevant to NHS clinical activity. The NHS SDU and the DH will consider waste targets which are more

² Taking the Temperature-Towards an NHS response to Global Warning, 2007. London: NHS Confederation and NEF

³ Health Technical Memorandum 07-01: Safe Management of Healthcare Waste, 2006. (HTM 07-01) Department of Health: London: HMSO

⁴ Sustainable Operations of the Government Estate; Targets, 2006 [Online] Available at: <http://www.defra.gov.uk/sustainable/government/gov/estates/targets.htm> [Accessed 07 January 2009]

appropriate for the NHS. NHS organisations that want to lead in waste reduction will be adjusting their procurement practices, recycling high levels of their domestic waste, and to set a target for reducing their domestic and clinical/hazardous waste with a view to reducing this significantly over the next five years.

NHS Trusts procurement departments should be ensuring that waste is minimised at source by following the Procuring for Health and Sustainability 2012: sustainable procurement action plan, and the principles of the Sustainable Public Sector Procurement Initiative (PASA 2008).

One third of waste produced in the UK is construction waste.⁵ Every NHS organisation should play its part in halving the amount of construction, demolition and excavation waste going to landfill by 2012 (compared to 2008), by setting requirements for waste reduction, recovery and the use of recovered materials in its procurement of construction works.

Many NHS organisations are leading the field in innovative waste management solutions. Trusts that monitor and record how much waste they are producing are much better placed to reduce waste and to take advantage of opportunities to improve recycling. Partnerships between Trusts, local authorities, and business partners have resulted in new methods of working such as the 'London Procurement Project', where 70 trusts came together for a collaborative contract to deal with waste. This consortium brought a new supplier into the market that is able to recycle treated clinical waste into a plastic by-product which can be reused in the healthcare sector.

Recycling

One in every 100 tonnes of domestic waste generated in the UK comes from the NHS, with the vast majority going to landfill⁶.

The New Economics Foundation calculates that recycling all the paper, cardboard, magazines and newspapers produced by the NHS in England and Wales could save up to 42,000 tonnes of CO₂.⁷ This is equivalent to the savings made by replacing over half a million 100W incandescent light bulbs with 20W energy-saving bulbs, or taking around 17,000 cars off the road⁸.

Drugs

The National Audit Office (NAO) has calculated that drugs wastage represents a significant cost for the NHS of at least £100 million a year⁹. In

⁵ WRAP's Net Waste Tool enables construction project teams to quantify the potential to cut waste, the costs of waste and associated carbon impacts [Online] Available at: www.wrap.org.uk/nwtool [Accessed 17 February 2009]

⁶ Taking the Temperature-Towards an NHS response to Global Warning, 2007. London: NHS Confederation and NEF

⁷ Taking the Temperature-Towards an NHS response to Global Warning, 2007. London: NHS Confederation and NEF

⁸ Taking the Temperature-Towards an NHS response to Global Warning, 2007. London: NHS Confederation and NEF

⁹ National Audit Office Report Prescribing Costs in Primary Care, 2007[Online] Available at: http://www.nao.org.uk/publications/0607/prescribing_costs_in_primary_c.aspx [Accessed 08 January 2009]

response, the DH have commissioned research to examine the scale and cost of medicines wasted. The findings from this research are expected to be published during 2009.

Single use versus decontamination and sterilisation

Responses to the draft strategy have highlighted a desire amongst NHS staff to reduce the use and disposal of single use items. To pursue this, further work is needed to review current practices and to ensure all standards and legislation governing staff and patient safety are met, in accordance with DH Health Technical Memoranda (HTM) 01-01 series - Decontamination of reusable medical device, whilst taking account of associated waste and carbon emissions reduction issues.

IT Waste

Fully functioning but obsolete IT can be recycled to benefit organisations and communities in other parts of the world. Organisations such as Aid for Hospitals Worldwide operate one such scheme, although there is some evidence that Trusts find difficulty in storing large quantities of equipment on their own site that are required to make the scheme workable.

The NHS SDU will explore with partners whether a centralised system could be established to receive and store this equipment where all Trusts would contribute to the running costs.

Food waste

Most NHS organisations make every effort to reduce food waste. Although zero waste is unattainable, in 2005/2006, 13 million patient meals were wasted (untouched or un-served). NHS organisations should firstly aim to reduce waste and then work in partnership with their local authorities to develop schemes and capacity to dispose sustainably of NHS food waste through mechanisms such as anaerobic digesters which can convert food waste into energy.

Monitoring

NHS organisations should contract with waste management companies who are able to provide them with robust data on quantities of waste collected and disposed of as a result of their healthcare activities. NHS organisations should monitor and record these via the NHS ERIC data system.

Individual organisations should set a baseline year and a set of Board approved waste reduction trajectories for all waste streams (domestic, clinical and hazardous).