

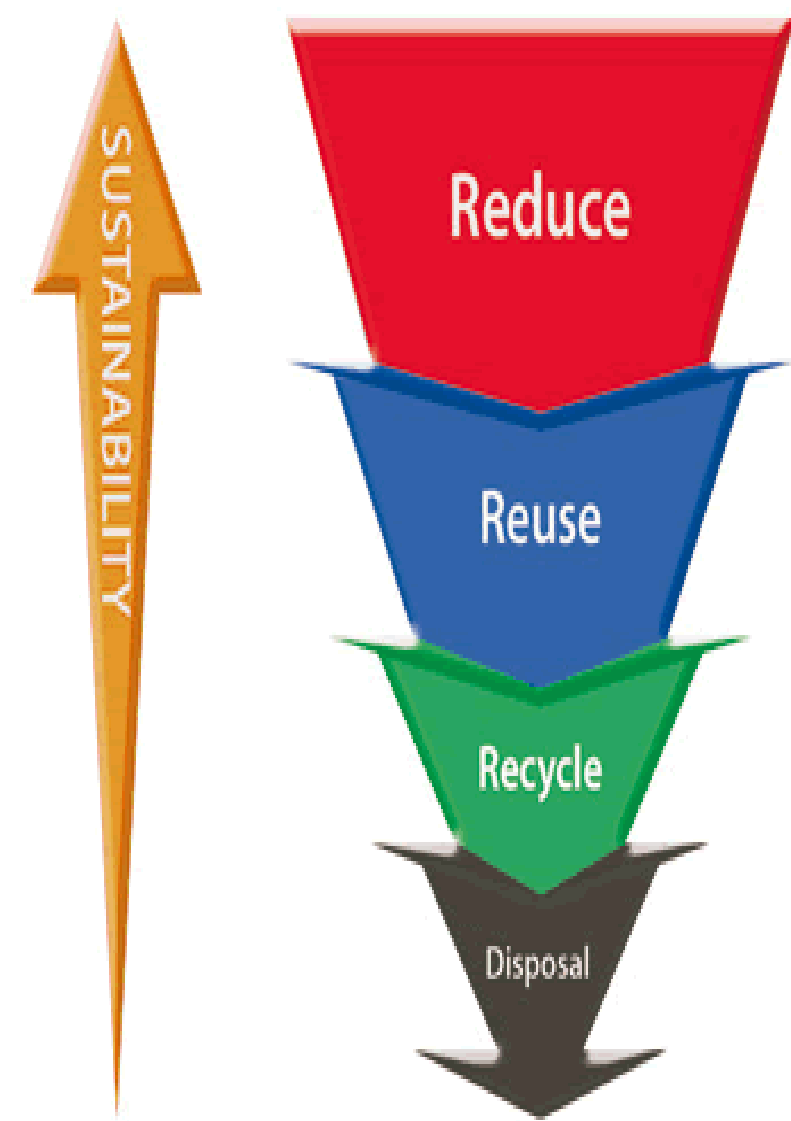
Bringing the 3 R's into the Renal Unit

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Can we as hospital professionals bring the 3 R's into the renal work place?

Can we contribute to a more sustainable environment?

Do we have more important things to deal with?


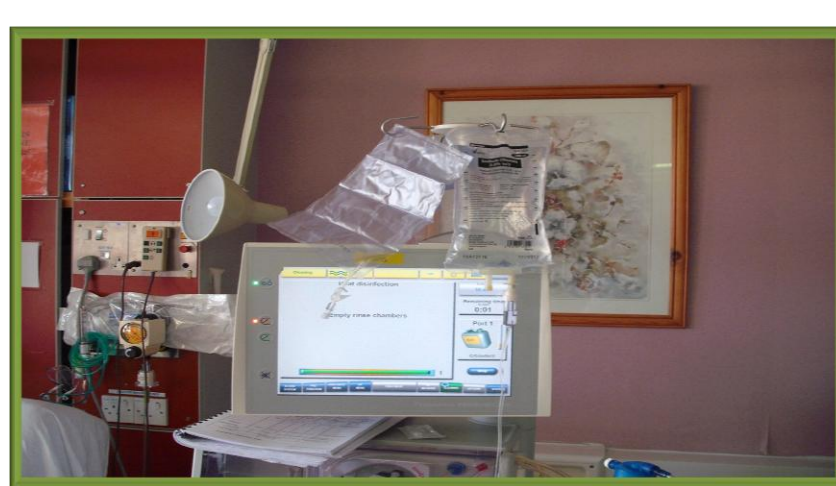





NHS Scotland continues to send approximately 30,000 tonnes/year of domestic waste to landfill costing over £2million a year⁽¹⁾. Waste management costs are rising due to changes in health and safety regulations and the increasing costs associated with disposing of waste in landfill sites. Reusing, Recycling and Reducing are evidenced methods to reduce the environmental impact of disposing of waste and reduce costs.

Increased knowledge about climate change and carbon emissions has led to a change and shift of attitude in Fife Renal Services.

To contribute to NHS Fife's environmental plan⁽²⁾, the Renal Service has embarked on a project to bring the 3 R's – **Reduce, Reuse, Recycle** into the Renal Service. Funding awarded through **the Renal Projects Awards 2009 - NHS Education for Scotland (NES)** has allowed a nurse dedicated time, to lead on the development of a **Waste Management Programme**. The implementation and evaluation of this exciting new innovative programme allows Fife Renal Services to contribute to the reduction of their carbon footprint, divert waste from landfill and maximise on the benefits of recycling.

Current practices were audited in the haemodialysis outpatient unit, which provides approximately 14,000 treatments yearly. Through a series of **WasteWatchingWeeks** several areas were highlighted where waste improvements could be made, resulting in simple changes of practice that takes full advantage of the benefits of the 3 R's

	<div>RECYCLE</div> <div>DIALYSATE CANISTERS</div> <div>Before: 15,000 sent to Landfill/year</div> <div>Now: Recycle 15,000 canisters in Partnership with Fife Council</div> <div>Four 1280lts bins provided</div> <div>Weekly uplift</div> <div>Savings £382.50</div> <div>CO₂ emissions 2.2 tonne</div>
	<div>REDUCE</div> <div>FRESENIUS 5008 HDF</div> <div>Before: 10,764 litres 0.9% NaCl /year</div> <div>Now: Procedure changed to online facility for reinfusion</div> <div>No longer require:- - NaCl - Priming sets - Drainage bags</div> <div>Savings £18,594.72</div> <div>CO₂ emissions 5.3 tonne</div>
	<div>REDUCE</div> <div>FRESENIUS 4008 HD/HDF</div> <div>Before: 3120 litres 0.9% NaCl/year</div> <div>Now: Decreased bag size - 500mls</div> <div>Decreased -1560litres/year</div> <div>Savings £1310.68</div> <div>CO₂ emissions 1.5 tonne</div>
	<div>REDUCE</div> <div>CLINICAL WASTE</div> <div>Before: 13.794 HD treatments/year Clinical waste per treatment = 2.9kgs</div> <div>Now: Improved segregation</div> <div>Procedure for disposal of Bicarbonate/B-Bags and NaCl through Domestic Waste</div> <div>Reduction of Clinical waste per treatment = 0.9kgs</div> <div>Savings £4,138.20</div> <div>CO₂ emissions 6.8 tonne</div>
	<div>RECYCLE</div> <div>DOMESTIC WASTE</div> <div>Before: 4.1 tonne Domestic waste sent to landfill</div> <div>Proposal: Partnership working with Recycle Fife</div> <div>Implementation of bins for recycling into unit, for:- - Recycling of all paper - Recycling of all plastic</div> <div>Weekly uplift</div> <div>Savings £425.30</div> <div>CO₂ emissions 4.1 tonne</div>

Renal treatments produce a vast amount of waste every year. Through careful segregation and disposal, environmental and financial savings are achievable.

Adopting a minimal waste culture provides significant changes. These initiatives have resulted in a saving of 20 tonnes of carbon dioxide emissions and cost savings of £24,800⁽³⁾.

Reducing, Recycling and Reusing promotes positive energy reductions, develops good practice and will help provide a sustainable future renal service.