Implementing a hospital PVC recycling program

Factsheet



Introduction

Plastics can account for up to a third of a hospital's general waste. It is estimated that of all the plastic generated by a hospital, approximately a quarter is PVC medical product such as intravenous bags, face masks and oxygen tubes. It is estimated that Australia consumes around 50 million PVC intravenous bags each year.

PVC used in these common medical devices is recyclable (Recycling ID Code 3) and easily recycled by staff in theatres, wards, intensive care, renal and day surgery. This factsheet outlines the business case for participating in the PVC Recycling in Hospitals program and how to implement it in your hospital.

General waste disposal

Hospitals typically pay for three elements for the disposal of general waste:

- a fee for every kilogram of waste sent to landfill (including the State landfill levy)
- a fee for hiring waste bins and/or a compactor
- a fee for each 'bin lift' by the waste contractor.

Where PVC is not recycled it would be disposed of through general waste at a financial cost. The exact cost of general waste disposal will vary depending on a hospitals waste contract and for commercial reasons the unit cost of waste disposal cannot be disclosed in this factsheet. Hospital staff can source waste cost data from their Sustainability Officer, Support Services, or Hotel Services.

The business case for recycling PVC

Through the PVC recycling in hospitals program, a significant percentage of PVC consumed within a hospital can be diverted from landfill to recycling at a lesser cost, or cost-neutral. The cost varies by location and in some instances may be free. Where there is a cost it is no more than \$10 per 240 litre bin lifted, with no bin rental or weight charges. A standard 240 litre recycling bin will hold around 40 kilograms of PVC, resulting in a cost of around \$0.25 per kilogram of recycled PVC.

Recycling PVC has environmental and social benefits. The energy required to recycle PVC is around 85 per cent less than producing virgin PVC and with savings of around 1.8kg carbon emissions per kilo of medical product recycled. All PVC collected from Australian hospitals is processed and manufactured into new products in Australia. Due to the success of the program it is being replicated in England, South Africa and Canada.

Implementing a hospital PVC recycling program

This diagram overleaf sets out the steps to implement a PVC recycling program in your hospital. It is likely that each hospital will require support from management, support services and infection control. It is recommended that hospitals start with one area, such as renal, where there is high volume and capacity to separate PVC items and then build on the successes to expand it further to suitable areas such as theatres, recovery wards, ICU and day surgery. Where a hospital has a sustainability officer they can assist in championing the program, promoting outcomes and expanding the program across the health service.







Health and Human Services



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