

HEALTH CARE WASTE REDUCTION



Thurston County Solid Waste

Waste reduction, the combination of waste prevention and recycling efforts, makes good financial sense. In addition to financial advantages, waste prevention benefits the environment, benefits society, and your company establishes itself as a good community citizen, providing immeasurable, lasting rewards.

Health Care Waste Reduction

TIPS FROM THURSTON COUNTY SOLID WASTE

Waste reduction begins by understanding what is being purchased, how goods are used, and then is put to use by finding ways to eliminate, reduce, reuse, and recycle materials. A good strategy is to target the largest components in the waste stream, and implement the easy waste reduction steps first. Below are some ideas to help you identify waste reduction opportunities at your business.

WASTE PREVENTION

General Waste Prevention

- Determine if cloth towels can be used and later used as rags.
- Use cloth diapers.
- Use worn diapers as cleaning rags.
- Eliminate duplicate admissions kits.
- Replace disposable admissions kits (water pitchers, glasses, and bed-pans) with reusables in patient rooms.
- Use washable linens, bed pads, under-pads, gowns, and emesis basins.
- Convert blankets, mattress pads, and quilts into pot holders (done by volunteers).
- Set up a system where nursing staff evaluate personal care items such as aspirin packets, tissues, shampoo, baby wipes, and diapers for reuse (following infection control guidelines) instead of automatically disposing them.
- Eliminate unused items from custom surgical packs (once a pack is opened, unused items are discarded).
- Consider switching from disposal to reusable medical instruments (e.g., stainless steel trays, laparoscopic instruments).

Kaiser Permanente's Northwest Region switched from disposable to cloth diapers. Any hospital making this change needs to follow procedures for infection control and skin care. Kaiser found that there was no change in costs. In addition, there was no adverse effect on patient or staff safety. It also decreased the amount of trash being thrown away.

- Contact the manufacturer when one item in a surgical tray is causing the whole pack to outdate early.
- Mend gown ties so they last longer.
- Convert surgical drapers into biopsy cloths.
- Sanitize and reuse plastic fracture pans.

Pharmacy

- Use the first-in, first-out system to rotate chemical stocks, pay attention to expiration dates.
- Buy drugs in container sizes that permit formulation of daily doses with the least quantity of excess product leftover.

The New York City Department of Sanitation estimates that a 1,000-bed hospital switching from disposable to reusable containers for sharp medical instruments would achieve:

- **An annual cost savings of \$175,000.**
- **Prevent 2,500 pounds of waste per year.**

X-ray

- Reduce photographic contaminants, like wastewater containing photographic chemicals and silver from film produced by imaging equipment.
- Extend the life of fixing baths by adding ammonium thiosulfates (double the allowable concentration of silver buildup in the bath).
- Add acetic acid to fixing baths to keep the pH of the bath optimally low.
- Do not mix used X-ray fixer and developer: dedicate separate containers and treatment methods.
- Collect used X-ray fixer and store in a closed plastic container labeled “Hazardous Waste – Used Fixer” with the date fixer was first added. Contact a recycling service when enough fixer has accumulated (usually 5-10 gallons).
- Install a silver recovery unit at the end of the X-ray processing unit.
- Evaluate changing to a non-toxic X-ray developer.

Custodial

- Renegotiate contracts with haulers of “red bag” or regulated medical waste to provide clean and reusable containers.

- Eliminate plastic trash bag liners in administrative areas.
- Buy most cleaning substances in 55-gallon drums that are refilled by the supplier.
- Use concentrated cleaning solutions that staff mix as needed.
- Use washable mop heads instead of disposable ones.

Cafeterias

- Use washable plates, eating utensils, glasses, and cups for cafeteria and patient service.
- Sell reusable mugs with no-spill lids, then offer discounts to patrons using their own mugs.
- Start up a “Think Before You Use” campaign to decrease use of disposable items such as napkins and condiments.
- Place rubber mats around bus and dish washing stations to reduce china and glass breakage.

PURCHASING

General

- Select or ask vendors to follow packaging preference criteria of no packaging or minimal packaging; consumable, returnable, refillable, reusable packaging; and recyclable packaging/recycled material in packaging.
- Improve ordering practices so perishable products don't become outdated or unusable.

Legacy Good Samaritan Hospital in Portland, Oregon (a 341-bed facility) purchased several hundred permanent waterproof mattresses to replace about 96 percent of disposable “egg-carton” foam mattresses. The initial purchase was significant but the decision paid for itself in just 1 year.

- **Saving in purchasing costs per year: \$80,710**
- **Disposal savings per year: \$817**
- **Waste prevention in pounds per year: 16,350**

- Cut down on multiple subscriptions of medical publications by asking staff to share journals and magazines.
- Provide decubitus-care mattresses instead of foam “egg-carton” mattresses.

- Purchase washable surgical and isolation gowns and sterilizations trays.
- Purchase reusable pillows.

Cafeterias

- Switch to a milk dispenser for patients instead of individual milk cartons.
- Buy products in bulk and store in stay fresh containers on display instead of selling individually wrapped products such as muffins and cereals.
- Purchase products that come in recyclable packaging such as tin and aluminum.

RECYCLING

General Recycling

- To preserve confidentiality while recycling look into confidential document shredding and recycling services.
- Investigate recycled content and the recyclability of products.
- Assess the need for recycling stations near vending machines, in waiting rooms, or in other common areas to accommodate visitors. Be sure the recycling stations are clearly labeled, consistent, and user-friendly.
- Request recyclable tote containers from suppliers, whenever possible, to reduce chemical drum waste and disposal costs.

Cafeteria

- Set up recycling containers at the dish disposal/tray collection area so that materials are sorted for recycling rather than thrown away.

COMPOSTING

Food Service

- Contact your waste hauler about collection service for food scraps, food-solid paper, and yard debris that can be commercially composted.
- Provide organics collection containers, with clear signage, for guests and food vendors.
- Consider using compostable flatware and food containers when you cannot use durable dishware.

OUTREACH

Internal

- Keep employees informed and involved – provide regular updates to employees and management about waste reduction efforts. Everyone likes to hear a good word, and employees need to know that their commitments help achieve program goals. Positive communication and employee recognition (via newsletters, email announcements, recognition events) are critical to long-term success of waste reduction programs.
- Allow people involved with your business a chance to suggest ways to reduce waste. Consider operating a suggestion system that offers recognition for good waste reduction ideas.
- Have an annual employee training workshop to keep employees informed about reuse and recycling policies and procedures.
- Train new employees. Let them know they are expected to use resources carefully and to fully participate in waste reduction programs. Explain how to prevent waste and how to recycle materials.

External

- Let the public know about your waste reduction efforts. Send news releases about your efforts to local papers, and trade and environmental publications.
- Join the Environmental Protection Agency's (EPA) WasteWise program. The WasteWise program is a free program open to businesses, schools, local governments, and non-profit organizations of all sizes and from all industry sectors. WasteWise helps to meet goals to reduce and recycle municipal solid waste and selected industrial wastes. By participating in WasteWise your business can:
 - Reduce purchasing and disposal costs.
 - Access a toll-free helpline for technical assistance.
 - Receive an Annual Climate Profile describing greenhouse gas reduction.
 - Obtain public recognition in WasteWise publications, case studies, and meetings.
 - Network in member and regional forums.
 - Receive WasteWise Awards that recognize outstanding achievements.
 - Acquire outreach and educational materials.

For more waste reduction ideas and assistance visit the “Business Waste Reduction” link of www.ThurstonSolidWaste.org or call (360) 867-2491.