Recycling and Waste Reduction: A Guide for Wisconsin Healthcare

This guide will help healthcare facilities meet Wisconsin's recycling law requirements and reap the benefits of applying the waste hierarchy of reduce, reuse and recycle. Paying attention to waste pays off because disposal fees, lost resources, energy costs and environmental costs add up quickly.



Waste Reduction and Recycling: It's the LAW!

Wisconsin's Waste Reduction and Recycling Law (chapter 287, Wis. Stats.) and local recycling ordinances apply to healthcare facility waste as well as "walk-in" waste from patients and visitors. The state requires all businesses, including healthcare facilities, to do the followina:

- provide separate containers for the materials banned from landfills and incinerators.
- regularly educate the occupants and users about the recycling program at their facility, and
- arrange for the collection and delivery of the recyclables to a recycling processing facility.

This fact sheet offers suggestions for healthcare, including recommended space allocations. To learn more about Wisconsin's recycling law, visit **dnr.wi.gov** and search "**Recycle**."

It's also the OPPORTUNITY

Reducing wastes: VHY WAIT

- conserves resources:
- saves money;
- avoids potential fines;
- improves public relations and staff morale;
- improves safety;
- meets criteria for third party accreditation; and
- qualifies your facility for prestigious environmental awards and recognition.

Special thanks and recognition to the Wisconsin healthcare facilities pictured throughout this publication for providing examples of best management practices.

Take Four Steps to Reduce Waste

Get both top management and employee support.



Find a champion among your top managers who can integrate recycling into facility procedures and provide the time, material and equipment needed. Solicit ideas from employees at all levels. Educate employees about how to reduce and recycle waste as part of their job duties.



Select staff to implement and monitor the plan.



Select staff to manage your recycling and waste reduction plan. In a small facility, select an individual who can effectively undertake this task. In larger facilities, form a small team of staff members from various departments such as infection control, facilities, safety, housekeeping and purchasing.

Comply with HIPAA when recycling paper

The Health Insurance Portability and Accountability Act (HIPAA) requires businesses to protect patient confidentiality when discarding healthcare data. HIPAA-compliant systems can actually boost your recycling rate. Shredding paper is not necessarily required; it is acceptable to recycle un-shredded paper if you use locked containers and work with recyclers who are HIPAA-compliant.

For more information about recycling paper under HIPAA, visit the Healthcare Environmental Resource Center (www. hercenter.org) and search for "Paper Recycling" or "HIPAA."



Analyze your waste streams.

⊿	Α	В	С	D	E	F	G	H	1
1	Yearly Tot	als							
2	Month	Total Weight	Pulls	Pulls	Total Weight	P-listed		Waste Stream Dist	ribution
3	January	173	16	28	265	0.143		Total Weight	2735
4	February	270	24	18	190	0.164		%Non Hazardous	57%
5	March	310	25	20	205	0.17		%Hazardous	43%
6	April	225	22	14	150	0.128		P-Listed	0%
7	May	265	22	18	175	0.162			
8	June	255	24	20	195	0.65			
9	July	50	6	1	7	0.05			
10	August								
11	September								
12	October								
13	Novemeber								
14	December								
15	Total	1548	139	119	1187				
16									

Photo: Gundersen Health System, LaCrosse

Monitor your waste streams to identify what and how much is being discarded in each department in your facility. Enter this information in a waste/ cost database. Talk with your custodial staff and waste haulers about collection methods, waste container needs, frequency of collection and the cost of collecting the various types of waste. Ask your waste vendor to help you optimize disposal

Data is a powerful tool. If you don't know what you have, how can you prioritize your action plans, justify your programs or report on your success?

costs. Avoid fixed fee contracts; your disposal costs should go down when you divert wastes to recycling.

A Self-Assessment guide can help you evaluate your waste streams, identify opportunities for improvement and enhance your environmental and waste programs. Here is one specifically for healthcare: **practicegreenhealth.org/pubs/selfasmt.pdf**.



Develop a waste reduction and recycling program specific to your facility.



Identify one or more ways to reduce waste in each department where waste is generated. Focus on waste that is generated in large quantities. Try to eliminate or reduce waste that is likely to negatively affect the environment (e.g., mercury, PVC plastic, pharmaceuticals). Consider using more durable, longer-lasting equipment or products that can be laundered, repaired or reused. Draft a plan that includes specific objectives, clear goals, a timeline for phasing in reduction and recycling practices, expected costs and savings, ways to involve staff, a budget, and a monitoring system. Integrate your facility's recycling efforts into its medical waste reduction plan (see ss. NR 526.16-.22, Wis. Adm. Code).



What must be recycled in Wisconsin?

- Aluminum, glass, steel and bi-metal containers (tin)
- Plastic containers #1 and #2
- Magazines and catalogs
- Newspaper and office paper
- Corrugated cardboard
- Computers, televisions, desktop printers, computer monitors and other accessories, DVD players, VCRs and DVRs, fax machines, and cell phones
- Major appliances
- Yard waste
- Lead acid automotive batteries, automotive waste oils, and waste tires
- Used oil filters

For a list of materials banned from landfills visit **dnr.wi.gov** and search "**What to recycle**."



U.S. Healthcare facilities generate nearly two billion pounds of paper and cardboard waste every year. This is the largest category of waste in the annual total of five billion pounds of waste of all types from the healthcare sector.

—Source: Healthcare Environmental Resources Center



Use the Waste Hierarchy to Save

Following the waste hierarchy (reduce, reuse, recycle) is not difficult or expensive. Many materials can be reused or recycled, and easy changes can reduce the amount generated. Implementing simple practices such as those listed below can both decrease costs and protect the environment.

Medical Supplies and Purchasing

- When possible, work with vendors that have little or no packaging for their products.
- Buy in bulk to reduce packaging waste.
- Purchase or ask suppliers to provide sturdy, high-quality storage and shipping containers which may be reused or refilled.
- Search "Pharmaceutical Waste Reduction" online for ideas and tools to reduce medication waste.

Patient Care

 Use reusable linens for patient and surgical gowns, diapers and mattress pads because linens increase patient comfort and lower costs when compared with disposable items.

 Use washable plates, eating utensils and glasses for patients' meals and cafeteria food.

 Minimize the use of milk cartons by installing bulk milk dispensers and using washable glasses.

 Avoid disposable basins and other patient care items.



Custodial/Housekeeping

- Have appropriate waste and recycling containers paired together and properly labeled in all office, vending, food service, reception and patient care areas.
- Place infectious waste containers or small infectious waste bags away from other waste receptacles.
- Install air dryers in bathrooms to replace paper towels.
- Use microfiber mops.
- Buy concentrated cleaning supplies in bulk.
- Visit NIOSH on Cleaning and Custodial Services at www.cdc.gov/niosh/topics/cleaners/
- When updating equipment, donate items like beds, furniture, drapes and cabinets to other facilities. Install fluorescent lights or, better yet, LED lights wherever possible.
- Switch from disposable to reusable infectious waste containers.
- Recycle clean and dry stretchy plastic wrap and film, such as shrink wrap and plastic bags and keep separate from other plastics. Visit dnr.wi.gov and search "recycling plastic film" for more information.



- Use e-mail to eliminate paper memos and correspondence.
- Print on both sides of paper.
- Maintain a centralized and/or electronic filing system.
- Work with your hauler/recycler to determine how paper and containers should be sorted. Then set up a system to collect and recycle all types of paper, from high grade to cardboard.
- Buy recycled paper and envelopes.
- Recycle all your business electronic waste (see

dnr.wi.gov and search "electronics recycling."





Follow These Wisconsin Healthcare Examples

Nursing Home

This Wisconsin nursing home has 120 patient beds with a staff of about 160 employees.

This nursing home's recycling containers are:

- provided for patients and guests, primarily for aluminum cans, plastic bottles, and newspapers;
- located in soiled utility rooms, one large container per unit;
- used for aluminum, tin and plastic waste generated in dining areas; and
- used for all non-confidential materials (e.g., newspapers and magazines) in office areas.

Confidential papers are put into a locked container and kept separate. Its waste contract specifies that recyclables are removed free of charge. While the nursing home does not make or lose money with the recycling practices, it does avoid landfill disposal costs.



Clinic system

These Wisconsin affiliated clinics serve between 3,000 and 60,000 patients per year.

The clinics:

- use reusable plastic totes within the system;
- use Procedure Based Delivery System (PBDS) instead of separate packaging cones in
- recycle or reuse medical supplies where applicable;
- buy non-mercury equipment and reduce or eliminate mercury in reagents and solutions;
- use standard purchasing criteria to prefer reusables and environmentally safe disposal;
- train their staff through annual education fairs and system-wide newsletters.

The Waste and Environment Committee has increased recycling by improving signage and providing more recycling containers throughout its facilities.



Hospital

Licensed for 158 beds, this Wisconsin hospital has a staff of about 1,000 employees.

The facility's CEO and major department directors are committed to recycling. The CEO invests money in recycling where needed and encourages staff to attend in-services about recycling and waste management.

The hospital **reduces** waste by:

- using only china service for meals and snacks;
- using room service for patients and visitors, so food is delivered on china only;
- donating extra food to a local food bank: and
- monitoring the waste stream to reduce the amount of "trash" they must pay to have hauled away.

It **reuses** by donating items no longer in use (e.g., beds, furniture, curtains, surgical supplies, lockers and file cabinets) to facilities overseas.

It **recycles** all paper, cardboard, plastic, tin, aluminum, glass, light bulbs, batteries, oil, anti-freeze, electronics, kitchen grease, pallets and crates. It has groups of recycling containers at all entry points, in lobbies and in vending/ food service areas.



Allocate Enough Space

All public buildings, including healthcare facilities, must provide adequate separation and temporary storage of recyclable materials. The recommended space allocations are:

	Space Allocation (cu.ft./1000 sq.ft. floor area)				
Facility type	Weekly pickup	Monthly pickup			
Hospital	13.5	60			
Clinic, without meals served	8	36			
Nursing home	4.5	20			
Residential, multifamily dwelling (e.g., assisted living)	9	40			

Source: "Expanding, Renovating or Building a New Business? Save Space for Recyclables" www4.uwm.edu/shwec/recyclingtoolkit/PDF/BuildingANewBusiness.pdf

Recycle Construction and Demolition Waste

It seems that healthcare facilities are continually remodeling these days. Most construction and demolition wastes can be recycled, and many projects have recycling rates of 80% or more. Before your next remodeling or construction project, review *Planning Your Demolition or Renovation Project: A Guide to Hazard Evaluation, Recycling and Waste Disposal* (WA651). Visit **dnr.wi.gov** and search "**Demolition, construction and renovation"**.



Ask for Help

- **Waste vendors** are required by law to comply with Wisconsin's recycling law. Ask them for ideas about how you can recycle more. If they don't have ideas, consider other vendors when you negotiate your next contract.
- **Consultants** can offer fresh perspectives.
- **Associations** such as Associated Recyclers of Wisconsin and The Plastics Recycling Council may be able to help you recycle new materials.
- **Local municipalities** may be willing to work with you, and may know of recyclers in your area.
- **DNR recycling specialists** can help you develop programs that comply with the recycling law.







For More Information

Go to DNR's website **dnr.wi.gov** search for **"recycling**" or "**healthcare waste**."

Call your local DNR office and ask for the recycling specialist, or contact the Waste and Materials Management Program at DNRWasteMaterials@wisconsin.gov.



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