

Environmental Programs at DHMC are more than just recycling and waste management programs, although these are cornerstones of the Program. Waste and pollution prevention means we're trying to make less waste in the first place and what we do generate, we need to manage in the most responsible way possible. Employee participation is fundamental to the success of these programs.

**Segregate Your Waste.** Every employee is expected to make the proper decisions about where and how to dispose of different types of waste, particularly where safety issues are concerned.

**Minimize the use of hazardous materials.** Think twice about the amount you need or whether you need to use them at all. Material substitution – is there a less hazardous alternative?

**Manage infectious waste properly.** Do not put non-infectious waste in tan autoclave or red pathological bags. It is expensive to manage solid waste as infectious waste!

**Reduce your solid waste.** Use only what you need and leave the rest for others to use. Find ways to be less wasteful in your department and share your ideas.

**Reuse.** Use reusable serving ware in the cafeteria. Use a reusable mug for your take-out drinks. Reuse your take-out box before you throw it out. Use the online material exchange, called DHMC Trading Post, or drop reusable items off at the REDU room. Your trash may be another person's treasure!

**Recycle** whatever can be recycled according to the DHMC Recycling Program! See the intranet site or the last page of this document for details.

Failure to comply with the DHMC Waste Management Policy, particularly as it applies to the waste generator's responsibility for proper waste disposal practices may result in corrective action. Human Resources Manual, Section 3-1.

**PREVENT WASTE.** Make the unnecessary creation of waste your pet peeve!

Definitions:

There are generally four categories of waste that are used to describe hospital waste, as follows:

**Infectious Waste** (also known as Regulated Medical Waste (RMW) or bio-hazardous waste) – A portion of medical waste that can transmit disease. We do not use the term "red bag waste" since we do not use red bags for general collection. We reserve the term "hazardous waste" for chemical hazards.

**Hazardous (Chemical) Waste** – Waste that, due to its characteristics, pose a hazard to human health or to the environment when improperly managed. Chemicals are considered hazardous if they are toxic, flammable, reactive or corrosive.

**Recyclable/Reuseable Materials** – Any material that can be diverted from the landfill through recycling or reuse.

**Solid Waste** (also known as garbage, trash, rubbish, municipal solid waste or MSW) – Waste that is not infectious or hazardous, and cannot be recycled or reused.

Safety and Environmental Programs staff want to know if you find potentially unsafe incidents or improper waste disposal such as a needle in the wrong place, bloody waste in the regular garbage or other potential problems. Please call the SEP office at 5-7233 to report unsafe practices. We must hear from you to investigate.

Infectious waste (sharps or bloody waste) placed in clear solid waste bags is potentially dangerous to the staff handling the trash. Accidents, injuries, and missed work days resulting from mismanaged trash do happen.

If you have an on the job injury, whether it's a needle stick, fall, slip, splash or spill, please report it to your supervisor, and fill out an incident report form.

Environmental Programs are cost effective. DHMC should not be literally tossing away resources. Waste prevention allows us to save money by avoiding additional purchases and avoiding disposal costs.

Infectious waste minimization programs have saved hundreds of thousands of dollars per year since the 1995 incinerator shut-down. Clinicians are making better infectious waste segregation decisions.

Mismanaging trash is expensive! Disposing ordinary trash as infectious wastes increases the use of more expensive autoclave bags and needle boxes, increases handling and labor, and involves the unnecessary use of the steam autoclave.

Landfilling recyclable or reusable materials is an unnecessary expense. Through DHMC waste reduction education and waste management programs, the total cost of DHMC's waste management program has dropped substantially.

DHMC is committed to waste reduction at the source and to recycling. Significant volumes of materials are being diverted from the landfill every year through this commitment, thus avoiding costly landfill tipping fees. Because employees care and are proud of waste reduction and recycling, these programs are making a difference at DHMC.

#### CONTAMINATION IN RECYCLABLES

Potentially recyclable materials are landfilled every day because they are contaminated. When trash is placed in recycling bins the recyclables are "contaminated" and cannot be recycled. PLEASE be aware of the recycling bin labels and follow directions. Help spread the word and keep DHMC recycling!

#### Why Recycle Paper?

Paper products are the largest single component of the recycling and solid waste streams. Recycling old paper to make new paper uses 50% less energy and water, and 95% less air pollution than making paper from virgin trees.

#### Why Recycle Glass?

The manufacture of glass from recycled glass requires 32% less energy, 50% less water pollution, and 20% less air pollution than manufacturing glass from raw materials.

#### Why Recycle Plastic?

Plastics are made from limited supplies of non-renewable resources such as natural gas and crude oil. Plastics will not biodegrade. Approximately 60% of beach and waterway pollution is plastic.

#### Why Recycle Metals?

Recycling aluminum saves 90% of the energy required to make the product from raw materials. Recycled steel and tin cans save 74% of the production energy. Metal mining and processing are energy intensive and have a very negative impact on the environment.

#### OBJECTIVES of Hazardous Materials Management Program

- Process all hazardous materials according to federal and state regulations.
- Substitute with less hazardous or non-hazardous materials, where possible.
- Minimize the use of materials containing hazardous components.
- Eliminate materials containing hazardous materials, when possible.

Material Safety Data Sheets (MSDS) are required, by law, for every hazardous chemical in the workplace. MSDS's provide health, safety and handling information.

The HITS Manual contains all pertinent hazardous chemical information:

1. OSHA's Hazard Communication Standard, Section B-1. Includes handling, labeling, storage and other compliance and safety information.
2. A departmental inventory of hazardous materials used in the department, Section E
3. An MSDS for each hazardous Material in the department, Section F or in separate binder
4. Department Specific Policies (DSPs) specific the chemical and/or hazards found in each department.

Questions regarding handling, disposal, policies or procedures concerning the use of hazardous materials should be directed to the Hazardous Materials Technician in the Office of Safety and Environmental Programs at 5-7233

If a new chemical is introduced into the workplace, inform the Hazardous Materials Technician.

You have the Right-To-Know about chemicals in the workplace. Protect yourself. Learn about the chemicals you work with.

#### Disposal Information

**BOTTOM LINE** - Ask Questions before you toss or dump! Questions regarding disposal of hazardous materials should be directed to the Hazardous Materials Technician in the Office of Safety and Environmental Programs at x7233

Hazardous waste must not be placed in sharps containers, clear trash bags, tan autoclave bags, or blue trash carts.

Liquid hazardous waste must not be disposed in a sink.

Rinse empty hazardous materials containers (glass, plastic or metal) three times with water before recycling or disposal. Clearly label container **TRIPLE RINSED**. The container should be recycled, if possible. If it cannot be recycled, it should be placed in the ordinary trash.

#### WHAT IS INFECTIOUS OR "MEDICAL" WASTE?

Infectious Waste is defined as solid or liquid wastes that have a significant potential for transmitting infection if not handled or treated properly. Many people fear medical waste but only a small percentage is actually infectious.

The use of Universal Precautions applies when handling any type of infectious waste, meaning any and all potentially infectious waste should be treated as if it were capable of producing disease. Infectious waste is either autoclaved on-site and then landfilled, or incinerated off-site.

Refer to the "Bloodborne Pathogens - EXPOSURE CONTROL PLAN" in the HITS Manual, Section C-1, for detailed information about handling infectious materials and waste - SECTION 12 - Infectious Waste Handling: containment, standards of practice, labeling of wastes.

## INFECTIOUS WASTE MINIMIZATION

Infectious waste management costs are three times higher than regular solid waste costs. You can help reduce waste costs by only treating truly infectious waste as medical waste.

Ask the question: IS THIS WASTE INFECTIOUS? If so, use the appropriate container (sharps containers for sharps and tan bags for non-sharps). If not then treat the waste as solid waste, or recyclable. Autoclaving pizza boxes and medical packaging is not cost effective. And placing infectious waste in the wrong container is a serious safety concern.

YES! - INFECTIOUS WASTE

Put ME in a TAN Bag or Follow OTHER Instructions

Cultures and stocks of infectious agents, blood, products of blood, anything caked, soaked or dripping in blood, body tissue, waste from patients on isolation precautions.

Prevent leaks and spills. If necessary, double bag at the point of generation before the bag leaves the area.

Pour liquid blood or other body fluids down a designated "dirty" sink, drain, or toilet followed by a flush of copious amounts of water. Precautions MUST be taken to avoid splashing and spills.  
Infectious Waste - Special Waste Streams Handling and Collection

### Sharps Disposal

Objectives: improve employee safety, minimize injuries, reduce liability, ensure regulatory compliance and decrease the cost of waste handling. Did you know that staff members still find needles and other sharps in the garbage, in tan bags, in linen, in recycling, and on the floor?

Respect your co-workers -- put needles in rigid sharps containers.

Never leave sharps for someone else to dispose.

Do not overfill sharps containers more than 3/4 full. Replace overfilled containers.

### Red Bag Lined Infectious Waste Cardboard Boxes

Treatment: Sent off-site for incineration.

### Waste Streams

1. Pathological Waste - Human tissue greater than a quarter generated primarily in the Pathology Laboratory.
2. Infectious Waste Generated Off-Site. Follow general infectious waste definitions and handling procedures.

Notes: This waste stream is relatively expensive, therefore, it is important that this waste stream be appropriately managed and minimized. Non-infectious waste should not be disposed of in these boxes. Sending non-infectious waste such as packaging materials and other waste out for incineration is not a wise use of DHMC's waste management resources.

Radioactive Waste is a special waste category that deserves its own policy. Please refer to the Radiation Safety Manual for more information.

REDU Room Located in Bldg. 2, level 2 service elevator lobby, is available to make recycling more accessible to all DHMC employees. All items listed on the DHMC Recycling Guidelines are collected in the Recycling Center. Items left in the Recycling Center are not to be taken home unless specifically labeled.

**BRINGING IN RECYCLABLES OR WASTE FROM HOME:** While the DHMC Recycling Program wants to see every possible piece of paper or bottle recycled, DHMC is not a permitted collection facility and therefore cannot accept waste/recyclables generated off-site.

#### OTHER WASTE MINIMIZATION PROGRAMS

**LINEN SERVICES: - REUSABLE LINENS PROGRAM:** Linen Services has been working with other departments to reduce the use of disposable products by replacing them with reusables. They have converted such products as OR towels, Surgeons gowns, and incontinent pads and are always looking for other opportunities to convert from disposables to reusable linens. If interested, please contact Inventory & Logistics.

**LABORATORY SOLVENT STILL RECOVERY UNITS:** Since 1995, the Hospital Lab has recycled through an in-house distillation system an average of 1785 gallons per year of solvents that would otherwise have been disposed of as hazardous wastes.

**SILVER RECOVERY IN RADIOLOGY:** Radiology recycles all x-ray film and captures silver for recycling from their silver recovery units.

**FLUORESCENT LIGHTBULB AND BATTERY RECYCLING:** All fluorescent lightbulbs are collected for 100% recycling from the aluminum end caps to the mercury and other hazardous components. Batteries are recycled where the technology exists to do so, otherwise they are safely managed as hazardous waste.

**PLASTIC BAGS AND STRETCH WRAP:** Plastic "films" collected in the Waste Management Center are baled and recycled.

**ZIPLOC BAGS from PHARMACY:** Pharmacy collects and re-uses clean ziploc bags used for distributing meds to inpatients. Call the Pharmacy for more information.

#### PLEASE BREAK DOWN YOUR CARDBOARD BOXES:

1. Breaking down boxes insures that they are empty. DHMC has lost important items, not meant for disposal, because they were discarded with the cardboard.
2. Moving blue carts around with only a few boxes in them is a huge waste of time and energy. It also causes shortages of blue carts in the system.
3. Housekeeping Staff spend an inordinate amount of time breaking down boxes making it difficult to do their primary job of cleaning. If you need a tool to help break down the boxes, please call Housekeeping (ext. 5912, beeper 9209).