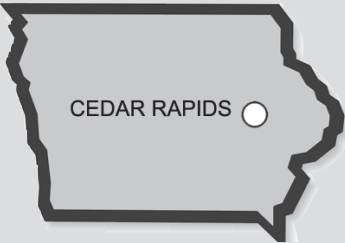


Mercy Medical Center



Mercy Medical Center has offered a full-range of health care services to the surrounding community since its founding by the Sisters of Mercy in 1900. Employing more than 2200 staff and operating 321 patient beds, the hospital is especially well known for its Hall Radiation Center. The center recently acquired a TomoTherapy HI-ART system making it the only facility in the state of Iowa able to precisely target cancers from 360 degrees. The hospital is undergoing extensive renovations in its inpatient tower providing spacious, private rooms.

Eric Neverman, Biomedical Engineering, University of Iowa

Project Background

Mercy Medical Center strives to optimize the health of the communities it serves. Mercy currently recycles paper, cardboard, fluorescent bulbs, cooking oil and uses green cleaning chemicals. The facility has led the way in mercury reduction and is currently virtually mercury free.

Incentives to Change

Regulated medical waste (RMW) is often improperly segregated, creating unnecessary expenditures for the facility. Other hospitals addressing the issue have reported significant savings and a reduction in regulatory burden. Recyclable wastes throughout the hospital were included in a comprehensive recycling program. This program reduces disposal costs and often generates new revenue for the hospital.

Results

Regulated Medical Waste Reduction

An initial audit found nearly 50 percent of the RMW was segregated improperly. A presentation addressing the topic was delivered to more than 150 nurses throughout the summer and informational signs were placed near each biohazard container in the hospital.

Battery Recycling

Battery collection containers and an accompanying sign were placed in more than 36 central locations throughout the hospital. During the first month more than 135 lbs. of batteries were collected and designated as universal waste.

Solvent Recovery

Formalin, xylene, and alcohol can be recycled within the laboratory. A source reduction of more than 1,100 gallons of these chemicals will occur each year, drastically reducing both purchase and disposal costs.

Reusable Sharps Containers

Reusable sharps containers handled by an outside company remove 12 tons of plastic from the waste stream each year. An additional reduction of employee risk and product handling occurs, creating additional savings for the facility.

LDPE Pallet Wrap Recycling

LDPE wrap can be recycled when segregated from municipal waste. The product is collected and baled. More than a half ton of product will be diverted from the landfill each year, generating a new source of revenue for the hospital.

Newspaper Recycling

Only 22 percent of newspaper brought into the hospital is recycled. A comprehensive newspaper program will generate revenue for the facility as well as reduce municipal and confidential waste disposal costs for the hospital.

Sterile Wrap Recycling

Sterile wrap encloses surgical instruments before autoclaving to protect them during storage. The product is removed and disposed of before/during surgical procedures.

Material Reuse Program

Excess equipment and furniture intended for reuse is stored in a warehouse on the hospital campus. Waste is generated when new products are purchased rather than reusing materials already available. A program enabling end users to view the warehouse contents is intended to prevent this practice.

Project	Annual Cost Savings	Environmental Results	Status
RMW SEGREGATION (25% REDUCTION)	\$9,143	13 tons reduced to MSW	Implemented
BATTERY RECYCLING	\$76	1.43 tons diverted from landfill	Implemented
SOLVENT RECOVERY	\$13,971	Source Reduction: Saves 14,970 gallons water 1,100 plastic jugs (86 lbs) 1,100 gallons solvent	Recommended
REUSABLE SHARPS CONTAINERS	\$12,631	12 tons diverted from landfill	Recommended
LDPE RECYCLING	\$121	0.65 tons diverted from landfill	Recommended
NEWSPAPER RECYCLING	\$1,710	7.47 tons diverted from landfill	Recommended
STERILE WRAP RECYCLING	\$480	6.19 tons diverted from landfill	Recommended
MATERIAL REUSE	Unknown	Material diverted from landfill	Implemented

