

Beth Israel Deaconess Medical Center lauds internal recycling, air quality efforts

Located in the heart of one of the nation's most prestigious medical addresses, Boston's Beth Israel Deaconess Medical Center is nationally renowned for its environmental improvement efforts, having been recognized as a Partner for Change in 2002 by Hospitals for Healthy Environment.

But the medical center also has made a point of recognizing its own internal departmental efforts. In 2005, the hospital instituted its annual Environmental Action Award program to showcase those efforts, according to Jane Matlaw, director of community relations, who conceived the idea.

"We're quite proud of the environmental efforts across our entire enterprise, and in particular, the leadership demonstrated by three of our departments in particular," Matlaw said.

The top Environmental Action Award in 2005 went to Beth Israel Deaconess's Environmental Services department for a highly successful paper and cardboard recycling project. Runner-up awards went to the hospital's Maintenance Operations, Infection Control and Information Systems Asset Management and Inventory Control departments.

Here's a brief look at their accomplishments:

Recycling success

More than 300 employees in BIDMC's Environmental Services department were part of a team that endeavored to reduce costs – and waste.

The goals of the team's paper recycling program were to offer recycling options to medical center employees, provide a place to dispose of confidential patient information and reduce the overall cost of waste disposal, according to Jim Graham, director, Hotel Services, and project leader.

The project was a natural progression of BIDMC's program with "Save That Stuff," a paper and cardboard recycling effort launched in 2002. For the first two years of the program, Environmental Services was responsible for managing the recycling bins and ensuring that they would be emptied on a regular schedule. By 2004, the medical center had recycled 283 tons of paper and 355 tons of cardboard. With the onset of HIPAA privacy regulations that took effect in 2004, the department was allocated one additional full-time employee to provide the service for the entire main campus. Meanwhile, many Environmental Services employees continued to help with the program while performing their normal duties, Graham said.

Since 2004, Beth Israel Deaconess has recycled an additional 400 tons of paper and 337 tons of cardboard. Since the effort began in 2002, the program has diverted 1,375 tons of paper and cardboard from its solid waste stream, saving the hospital more than \$150,000.

Clearing the air

Several years ago, mounting concerns about outside air quality and its potential for negatively impacting on patient care prompted the hospital's maintenance operations and infection control departments to collaborate on solutions. Its goal was simple: Improve indoor air quality in the most cost efficient way possible.

One thing was clear: The team wanted to exceed existing air quality standards promulgated by the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), said Phil Muse, maintenance operations supervisor and project leader. Those standards set minimum final filtration levels of 95 percent efficiency at 3 microns.

Working with departments within the medical center as well as BIDMC's air filter supplier, the team first researched various existing filter options. The team then reviewed test data on six different types of filters. "We found that filters differed significantly in construction, filter media, pressure drops and dust holding capacity," said Muse.

The team then selected a new type of air filter that fit within the hospital's budget, introducing the filters into the hospital's air handling systems as the existing filter life cycle expired. The new filter was then installed.

Within the first year of implementing the program, the hospital began to surpass the ASHRAE air quality standard; two years later, Beth Israel Deaconess exceeded the standards, improving to 98 percent efficiency at 0.3 microns as a minimum standard for all inpatient areas.

For their efforts, the team was honored with first runner-up in BIDMC's 2005 Environmental Action Awards program.

The bigger picture

Beth Israel Deaconess's environmental leadership efforts span over several decades.

In recent years, the hospital has taken on higher profile efforts aimed at improving the environment. For example, the medical center is among more than 50 healthcare facilities that are part of WasteWise, an EPA program that targets the reduction of municipal solid waste, and participates in the EPA's Energy Star Partnership, a comprehensive energy-efficiency program for commercial and industrial buildings. The partnership focuses on reducing waste and improving building performance by using high-efficiency energy technologies. By 1999, participating organizations had prevented 50.6 billion pounds of carbon dioxide from being released into the atmosphere as a result of their energy-efficiency upgrades, the equivalent of removing the pollution from 1.9 million cars, or planting 2.6 million acres of trees annually.

Harvard Medical School, through which Beth Israel serves as a teaching hospital, also has extensive environmental quality programs, including its Center for Health and the

Global Environment, which was founded in 1996 to expand environmental education at medical schools and further investigate and promote awareness of the human health consequences of global environmental change. In 2005, the center honored former Vice President Al Gore with its annual Global Environmental Citizen Award. The award, given annually to the citizen who does outstanding work towards protecting the global environment, was given to Gore for his efforts in addressing global climate change.

Return to:

[GreenLink newsletter](#)

[Green Corner home page for more success stories](#)