The environmental movement is coming of age among U.S. Catholic healthcare providers. In the past few years Catholic hospitals and systems across the country have committed significant time and resources to assessing the environmental impact of the services they provide and finding ways to reduce the volume of waste they generate and energy they consume. They are also teaching employees and local community members how to be ecologically responsible citizens.

In part, the new urgency with which Catholic providers are confronting environmental issues is a response to governmental pressure and public perceptions. The publicity surrounding the washups of medical wastes on the East Coast in 1988 led to legislation requiring the Environmental Protection Agency to study the problem and to create standards for tracking and handling medical wastes (see James Studnicki’s article, p. 68). At the same time, growing fears that hospitals do not manage hazardous waste responsibly have damaged providers’ public image.

To a certain extent, then, external pressures have forced Catholic hospitals to address environmental issues. But internal pressures have had an effect as well. In a surprising number of cases, successful programs to reduce waste and conserve resources have begun at the grassroots level, with the effort of committed individuals (see Box, p. 66). These efforts took hold because people within the organization who wanted to make a difference were able to find each other, work together, and spread their enthusiasm to others.

**A Model Program**

At Sacred Heart General Hospital, Eugene, OR, recycling cardboard and wastepaper has been a standard practice in some departments since the early 1980s. But the hospital’s recycling efforts did not move into full gear until 1989, when Environmental Services Supervisor Jimi Duke launched a campaign to reduce the amount of waste the hospital generated.

Sacred Heart was in the process of installing personal computers in offices throughout the facility, and Duke realized that this would also increase the amount of paper used. “We had been recycling for some time,” she explains, “but only in a few departments. I thought it was time to try to get more people involved from different parts of the hospital.”

In March of that year, Sacred Heart’s Environmental Services Department kicked off the recycling campaign with an announcement in the hospital’s newsletter, *HeartBeat*. The department introduced its recycling logo (designed by Duke), listed materials that could be recycled, and asked for volunteers to serve as recycling coordinators in various hospital departments.

Duke decided the best approach would be to simply open the door and let those who were interested in recycling come to her. “I knew that if they contacted me, they cared,” she explains.

Sacred Heart staff responded immediately. Within months, the number of recycling stations throughout the hospital grew from 15 to 75, while an average of two employees a week volunteered to become coordinators.

As the number of people involved in recycling increased, so did ideas for what Sacred Heart employees could do to cut wastes and recycle used materials. Responding to employee questions and suggestions, Duke soon expanded the hospital’s list of recyclables to include such items as plastics, Styrofoam, glass, metal, toner cartridges, broken wooden pallets, grease, and oil. Community Relations Director Jennifer Ulum helped keep the ball rolling by regularly publishing environmental tips in *HeartBeat* and by...
updating hospital employees on the progress of Sacred Heart’s recycling efforts. In addition, Duke and members of the community relations staff set up recycling displays in Sacred Heart’s main lobby during Oregon’s Recycling Awareness Week and throughout April as part of its observance of Earth Day.

With its recycling campaign up and running, Sacred Heart began to implement other measures to make the hospital more environmentally responsible. In 1990 the hospital switched from disposable to cloth diapers, converted to unbleached coffee filters, and began using recycled paper in the print shop when economically feasible. In addition, Sacred Heart installed energy-efficient light bulbs, switched to latex rather than oil-based paint for most applications, and replaced disposable “egg crate” foam mattress covers with reusable mattresses. Also in 1990 Sacred Heart made bus passes available to all employees free of charge.

In the program’s first year, Sacred Heart increased the amount of material recycled by more than 300 percent. It now recycles about 200 tons of paper and cardboard and more than 12 tons of tin and glass annually. Departments throughout the hospital collect about twelve 55-gallon drums of recyclable plastic each day.

The recycling program has also proven to be an economic success. The switch to reusable mattresses alone saves the hospital more than $32,000 a year (and eliminates more than 8 tons of refuse). And the revenues and cost savings generated by Sacred Heart’s recycling efforts net the hospital approximately $20,000 annually.

Another measure of the program’s achievement has been the recognition it has received. In 1990 both the Eugene Downtown Rotary Club and the Eugene Business Committee for Earth Day honored Sacred Heart for its recycling efforts. And in 1991 the Association of Oregon Recyclers named Sacred Heart the Company/Organization Recycler of the Year.

Recently Sacred Heart took yet another step in improving its environmental performance when it discontinued off-site incineration of medical wastes. The hospital now contracts with Stericycle, Inc., Morton, WA, which collects the
wastes and decontaminates them using a process called electrothermal deactivation. Stericycle will be able to recycle a significant percentage of the waste after it is treated.

**Informed Decisions**

Because recycling programs like Sacred Heart’s tend to develop their own momentum, they can make environmentally sound decisions seem relatively simple. But even such an apparently straightforward issue as when and how to use recycled paper can become surprisingly complex when it is studied carefully, as staff at the home office of Wheaton Francisan Services, Inc. (WFSI), Wheaton, IL, discovered.

In 1990 the WFSI public relations staff organized a task force to explore the use of recycled paper. “We suspected from the start that there were big differences among the products that vendors offered,” explains Donna Madden, WFSI vice president—public relations.

The task force discovered early on that a complete conversion to use of recycled paperstock at the corporate office would not be possible. For example, they found that most recycled papers which approach letterhead quality are composed of as little as 10 percent recycled paper and that none of the recycled papers currently available comes in the broad range of weights WFSI would need. The task force also found that recycled paper can throw off a large amount of dust and lint, which can cause ink-application problems in formal printing jobs and increase maintenance costs on in-house copiers and computer printers.

Availability can also be a problem. An organization choosing a certain stock runs the risk that it will be discontinued shortly thereafter. In addition, many high-quality recycled papers are available only in large-lot orders directly from the paper mill, and since most mills ship only once per month, printing orders can be held up for a long time. Finally, mills often have difficulty keeping up with the demand for recycled paper.

Task force members concluded that the public relations department needed to develop a coherent policy that called for the use of recycled paper whenever possible. To be acceptable, recycled paperstock would have to:

- Be available in the full range of weights needed and in envelopes of various sizes
- Have a color palette compatible with WFSI’s Corporate Identity Program
- Have enough recycled content to be worthwhile environmentally
- Be feedable through a photocopier or computer printer without jamming
- Be reasonably affordable
- Be available on a continuing basis in all of WFSI’s geographic regions

In addition to establishing these criteria, the task force made a commitment to continue researching the availability of recycled paperstocks. It also concluded that the public relations department should attempt to contract with professional printing vendors willing to research and work with recycled papers.

According to Madden, getting a clear idea of what was possible in the use of recycled papers was well worth the effort. It enabled the staff to establish a practical policy on the use of recycled papers, and the research heightened their awareness of the importance of adjusting corporate office procedures to reduce wastes. In addition to increasing its use of recycled paper, the WFSI corporate office now:

- Targets mailings according to various codes on its master mailing list, rather than simply sending everything to everybody
• Issues a holiday greeting in the regular system publication instead of sending out corporate Christmas cards
• Surveys executives at WFSI to identify which publications they subscribe to and eliminate duplicate subscriptions

Madden adds that efforts to preserve the planet are a fundamental part of the WFSI mission, which is nurtured by a "long-standing tradition based on the global consciousness of the Wheaton Franciscans."

**HAZARDOUS WASTE: A SYSTEM APPROACH**

Undoubtedly the most pressing environmental issue facing providers today is how to manage and dispose of hazardous wastes and how to identify and control other potential environmental hazards.

The problem includes, but goes far beyond, what are commonly referred to as "medical" wastes (e.g., cultures and stocks, blood and blood products, pathological waste, sharps). Hospitals also use, and must properly maintain, underground and aboveground storage tanks. Older hospitals may have used large amounts of asbestos as insulation, as pipe wrap, or in ceiling tiles, and they must also determine whether old electrical transformers contain polychlorinated biphenyls (PCBs). In addition, providers regularly use a number of substances (e.g., mercury, formaldehyde, chemotherapeutic drugs and agents) that require special handling and tracking.

Because the potential environmental threats are so widespread, the dangers so difficult to assess, and the federal and state laws stipulating providers' responsibilities and liabilities so complex, most individual hospitals must turn to outside help to determine where they may be at risk and how to address those risks. In response to this need, a number of U.S. Catholic healthcare systems have developed their own environmental audit materials or facilitated members' access to materials already available. Systems have also played a leading role in alerting members to the need to take action on these matters.

**Environmental Questionnaire** In 1990 Mercy Health Services (MHS), Farmington Hills, MI, assembled an extensive environmental questionnaire for its members. "The survey gave us baseline data on just about every environmental issue hospitals confront," explains MHS safety analyst MaryAnn Northcote, who compiled most of the document.

The survey allowed MHS's risk management services team to develop a detailed environmental portrait of the system's member facilities. It also provided the facilities themselves an opportunity to perform an organized self-assessment of their environmental status.

In addition to a section requesting general information, the six-part survey included sections to be completed by department managers in maintenance, housekeeping, laboratory, nursing, and radiology. In all, the document requested information on more than 100 items.

MHS is also putting together an environmental loss control manual for its members. The completed document will contain chapters explaining risk control procedures for each of the following areas:

• Medical waste
• Hazardous waste
• Chemotherapeutic waste
• Radiological waste
• Underground storage tanks
• Water (supply water, waste water)
• PCBs
• Incineration and air pollution

Northcote stresses that accurate information and helpful resources are a must for hospital risk control and safety managers. She recommends that hospital employees who work with toxic materials have ready access to a resource such as the *Pocket Guide to Chemical Hazards* (National Institute for Occupational Safety and Health, Washington, DC, 1990). Another book she has found helpful is *Toxic Program Commentary*, first published in 1990 and updated quarterly by STP Special Technical Publishers, Vancouver, British Columbia.

**Hospital Waste Teleconference** In another approach to helping members take action on medical and hazardous waste issues, the Daughters of Charity National Health System (DCNHS), St. Louis, sponsored a teleconference on hospital waste management and other environmental issues in May 1991.

The conference, which was cosponsored by Baxter Healthcare and Waste Management, Inc., and broadcast from St. Thomas Hospital in Nashville, featured presentations on the current regulatory environment, hospital environmental

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This article covers only a fraction of the efforts Catholic providers are now making to preserve the environment. Please let us know what you are doing. Fill us in on innovative programs, radical ideas, or just plain hard work at your facility. Call or write Phil Rheinecker or Michelle Hey at the Catholic Health Association, 4455 Woodson Road, St. Louis, MO, 63134 (314-427-2500). A follow-up article next fall will report on continuing environmental efforts in Catholic healthcare facilities.
studies being planned for the laboratory, the emergency room, radiology, standard patient rooms, intensive care units, and other areas.

**Preparing for the Future**

Increasing levels of public concern are focusing attention on the hospital as a source of medical wastes. The EPA is now directed to uncover the true health hazards associated with infectious medical wastes. More stringent documentation, disclosure requirements, and regulation are sure to follow. Hospital managers can prepare for future regulation and manage their medical waste generation, handling, and disposal activities more cost-effectively. The hospital medical waste audit is the first step in this process.

The author wishes to thank Dennis C. Werner and Peter Wolff, of the University of South Florida’s Department of Health Policy and Management; and Ben Pethie, Carol Heinen, Mary Herbert, Lori Hindenlang, and Paula McGuinnis, of St. Joseph Hospital, for their assistance in the medical-surgical waste audit.

**NOTES**


