



# LAUNCHING MERCURY-REDUCTION EFFORTS

**T**he Catholic health care ministry is called to protect the well-being of community members; in accordance with this mission, it must ensure that it is not *harming* people's health—directly or indirectly—by degrading the environment.

As research reveals the many ways that *environmental* health affects *human* health, Catholic facilities are recognizing that they must attend not only to the medical needs of their patients; they must also examine their own impact on the environment to ensure that they are not having a negative effect on their communities.

"Within hospitals, we have been slow to realize that ecology is part of our mission," said Sr. Janet Corcoran, OSF, vice president, mission services, Marian Medical Center, Santa Maria, CA. "We are now seeing that we are called to be stewards of God's creation, to honor and respect the sacredness of creation." Sr. Janet explained that in the past, most hospitals were not very engaged in environmentalism. "Now we're starting to look at ourselves," she said.

Once a facility has examined its environmental impact and determined that it is harming the health of its communities through pollution, its administrators must dedicate themselves to making real and significant changes in the way they operate, according to those who are now leading ecology initiatives in Catholic health care facilities.

Pierre Gonyon, hazardous substance specialist, safety department, Saint Joseph Mercy Health System, Ann Arbor, MI, said his facility uses a six-step process to develop its mercury-reduction initiative and other environmental programs. Through them, the facility:

*To Be  
Effective,  
Ecology  
Programs  
Need the  
Support and  
Involvement  
of  
Management  
and Staff*

BY JULIE MINDA

- Builds support for its ecological initiatives among managers and staff
- Evaluates the organization's operations, identifying environmental problem areas
- Develops solutions for each problem
- Writes policies to support the needed changes
- Communicates with staff about the new initiatives
- Implements the solutions

As Gonyon moves through the facility conducting this process, he assembles an *ad hoc* environmental team for each affected department. In this way, he ensures that staff members who will be involved in or touched by the initiative are represented on the team.

## **BUILDING SUPPORT**

To secure facility-wide support for new environmental programs, ecology teams must build relationships with staff members of the departments likely to be affected. It is especially important to get "buy-in" from the facility's administrative team, medical staff leaders, safety committee, and the supply chain management department, Gonyon said. During this phase of planning, the ecology team also should identify clinicians who are especially supportive of environmental initiatives. These individuals can serve as "champions" of the program.

"It is essential to get support early on," Gonyon said. Agreeing, Sr. Janet emphasized that the support of the organization's leadership team is key to ensuring the success of environmental programs. "Our president, Charles Cova, is encouraging and supportive of our environmental initiatives," she said. "That's where it all starts."

## **EVALUATING OPERATIONS**

Once the environmental initiative has received the backing of key departments, the organization

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must begin a comprehensive assessment of the facility's operations in order to identify areas of concern.

It is best to begin this phase with a plan outlining which departments will be evaluated and how the assessment will take place. Some facilities use surveys, others use check-off lists, and still others hold face-to-face meetings and area inspections to determine what products the department is using and how these materials are processed after use. The assessment should be a collaborative process.

Gonyon made collaboration a priority in spearheading a mercury-reduction effort at Saint Joseph Mercy. Because mercury has been shown to be harmful to humans, animals, and other life forms, many health care providers are eliminating the element from their facilities or at least reducing its use. From the outset, Gonyon's team engaged staff members of the affected departments in planning for the mercury-reduction initiative. Patient care units, the laboratory, the pharmacy, and maintenance were some of the Saint Joseph Mercy departments involved. Departments on the main hospital campus, as well as those at satellite facilities, leased spaces, and other off-site locations, were included in the discussions.

During the assessment phase, Gonyon and the ad hoc team evaluated various pieces of medical

equipment, such as thermometers, sphygmomanometers, and gastrointestinal tubes; devices such as thermostats, fluorescent lights, and barometers; and chemicals—ranging from lab test reagents to housekeeping cleansers to vaccines—to identify mercury sources.

#### DEVELOPING SOLUTIONS

Once a facility's environmental team has conducted a thorough assessment of the organization's handling of materials and has identified opportunities for improvement, it must work with each department involved to develop new approaches.

During this phase, the team should look at the entire life cycle of the products used at the facility—from creation to use, and from use to disposal—to determine whether those products are environmentally friendly. The team can meet with vendors, set up product evaluations, conduct Internet research, and use other methods to identify alternatives to harmful products. Once safe alternatives are identified and implemented, the purchasing department must block any further purchase of the hazardous product.

"Now there is so much information available on environmentally friendly products," said Gonyon. "There are many alternatives, many very good products." He noted that the Hospitals for a Healthy Environment website (see p. 26) provides an extensive amount of information on alternatives to health care products containing mercury and other hazardous substances. "Chances are good that less hazardous products will cost less and also save the organization money on disposal costs," Gonyon said. "Environmentally friendly solutions are often cost-effective," concurred Sr. Janet. "They save money."

In addition to helping identify products to be "switched out," the environmental team also can assist departments with reducing waste through recycling, reuse, and other methods. A cost-benefit analysis should be conducted as solutions are evaluated. Savings related to reduced waste should be figured into these calculations. When Saint Joseph Mercy's departments assessed product alternatives during the mercury-reduction initiative, for instance, they did not look at the "sticker price" of items alone. They also calculated the cost of recycling or disposing of products, training staff to use materials, and recalibrating or repairing equipment.

#### CREATING POLICIES FOR CHANGE

After identifying alternatives to environmentally unsafe practices and products, the ecology team

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### Environmental Responsibility and Catholic Health Ministry

Catholic health care facilities are using a variety of approaches to reduce their negative impact on the environment. Among these efforts are:

- Reducing or eliminating mercury and setting up "roadblocks" to the ordering of mercury and other hazardous materials by their purchasing departments
- Recycling batteries, toner cartridges, aluminum cans, paper, cardboard, fluorescent light tubes, and other products
- Discontinuing waste incineration
- Ensuring that construction and demolition projects are handled in an ecologically sound manner. For instance, some facilities are using a demolition "checklist" to ensure that mercury-containing devices and other hazards are disposed of properly
- Arranging buy-back and reuse programs with vendors to reduce the amount of discarded product
- Implementing a utility-management initiative in which water and electricity use is maximized
- "Adopting" local parks and roadways for clean-up and beautification
- Composting "green waste"
- Observing Earth Day in April, hoping thereby to involve employees and community members in environmentalism

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must develop a transition plan for implementing the needed changes. New policies and procedures must be documented in a written policy that is supported by the facility's leadership team.

When Saint Joseph Mercy launched its mercury-reduction initiative, for example, Gonyon and his ad hoc team wrote procedures for controlling staff exposure to the substance, for avoiding spills, and for handling the contaminated waste during the transition. The team also put in place a policy to ensure that materials management staff would avoid purchasing products containing mercury. In addition, the team developed protocols to ensure that, if and when Saint Joseph Mercy buildings are demolished, mercury in them will be contained. For instance, demolition contractors will be required to identify mercury-containing items, such as thermostats and plumbing traps, and ensure that they are collected and properly disposed of before demolition occurs.

Gonyon and the team also created a phase-out plan for replacing products containing mercury with mercury-free alternatives.

### COMMUNICATING WITH STAFF MEMBERS

Informing staff members throughout the facility of new environmental programs is essential to ensuring compliance, Gonyon said. Management teams, safety committees, physicians, and other staff members must have a clear understanding of how their departments will be involved in implementing environmental plans. "You don't want to just show up and take their old devices without letting them know in advance," Gonyon explained. "Change is disruptive. You need to communicate why the change is important."

Training sessions, open meetings, and newsletter updates are a few of the ways environmental team members can keep staff members informed of the status of implementation. Periodic updates are necessary even after an environmental program is well underway.

Ongoing training and communication not only keep ecology initiatives on track, they also can bring about broader cultural change in a facility. "Through education, we're trying to move people to be more respectful of the Earth," said Sr. Janet.

### IMPLEMENTING PLANS

As plans to reduce or eliminate hazards are implemented, the environmental team should maintain contact with the materials management and safety teams and with the other involved departments to ensure that product phase-outs and replacements happen smoothly, new procedures are effective, and patient care is not disrupted. Solutions can be tweaked if concerns are raised. When Saint Joseph Mercy implemented its mercury-reduction plan, Gonyon worked closely with affected departments, helping them recycle old materials and train staff to use new products.

If environmental teams secure the support and resources they need, they will develop a culture of environmental awareness that permeates their facilities. At organizations with this type of culture, environmental responsibility is a priority; it is tracked and measured, and every department is held accountable for addressing it.

"As health care providers, we need to be concerned about environmental health," said Sr. Janet. "We can't sit back. We must keep challenging ourselves to do better." □

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of health promotion and service to the community, including the reduction of medical waste, will attract nurses with an ecological ethic. There has never been a better time to engage nurses on environmental accountability in their workplaces and communities. □

### NOTES

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5. See Andrew M. Pope, Meta A. Snyder, and Lillian H. Mood, *Nursing, Health, and the Environment*, National Academies Press, 1995, p. 8; also available at [www.nap.edu/books/030905298X/html/R1.html](http://www.nap.edu/books/030905298X/html/R1.html).
6. Kathy Gerwig, "Waste Management & Health Care," available at Health Care Without Harm, [www.noharm.org/details.cfm?type=document&id=492](http://www.noharm.org/details.cfm?type=document&id=492).
7. Mark Rossi and Ted Schlettler, "PVC and Healthcare," available at Health Care Without Harm, [www.noharm.org/details.cfm?type=document&id=489](http://www.noharm.org/details.cfm?type=document&id=489).
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12. Health Care Without Harm, "Green Purchasing," available at [www.noharm.org/greenPurchasing/pecs](http://www.noharm.org/greenPurchasing/pecs).
13. American Nurses Association, "Nurses Say Health and Safety Concerns Play Major Role in Employment Decisions," available at [www.nursingworld.org/pressrel/2001/pr0907b.htm](http://www.nursingworld.org/pressrel/2001/pr0907b.htm).

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