

# CATHOLIC HEALTHCARE MINISTRY

## ENVIRONMENTAL RESPONSIBILITY



...environmental justice is a moral issue...

*Faced with the widespread destruction of the environment, people everywhere are coming to understand that we cannot continue to use the goods of the earth as we have in the past.... [A] new ecological awareness is beginning to emerge.... The ecological crisis is a moral issue.*

Pope John Paul II,  
*The Ecological Crisis:  
A Common Responsibility*, 1989

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# Introduction

Catholic health care views our work as a ministry to the community. Its mission is to heal the sick, serve the poor and vulnerable, and lead by example. We follow in the footsteps of Jesus, who not only healed the sick, but who also challenged and transformed the social norms of society through his life and actions. Through our strength as more than 2,000 Catholic health care sponsors, systems, facilities, and related organizations, we have the power and responsibility to transform health care to make it more environmentally responsible and safe.



Concern for environmental issues grows out of Catholic social teaching, which calls us to promote and defend human dignity at every stage of life, and our special commitment to care for vulnerable persons. Environmental hazards are particularly harmful to developing children – before and after birth – and to poor, frail, and sick persons.

We have learned that hospitals are significant sources of pollution in communities because of the waste generated through modern health care delivery. Nationwide, hospitals produce 7,000 tons of waste per day. According to the U.S. Environmental Protection Agency (EPA), medical waste incinerators are the third largest source of dioxin emissions and the fourth largest source of mercury emissions into the environment. Our environmental footprint has health consequences not just for our patients, but also for our staff and the communities we serve.





As health professionals, we are committed to “first, do no harm.” We are committed to serve the community and be a good neighbor. Our ministry requires us to take steps to reduce the environmental burden of health care delivery.

But there are also financial reasons we should be environmentally responsible. Waste is lost money. The more we can reduce waste, the more we can save money. Our hospitals and

other care facilities are finding ways to reduce, reuse, and recycle waste, saving thousands of dollars. We can leverage our significant buying power to transform materials procurement so that the products we use are more consistent with our environmental goals and are cost-competitive as well. By acting strategically, the Catholic health ministry can lead by example to transform health care delivery to be less wasteful and polluting.

This booklet lays out environmental challenges associated with health care delivery and how Catholic health care administrators, staff, and boards can act together to make the environment safer and cleaner. It provides practical and proven actions that can be undertaken by any Catholic health facility. Through our strength, we can continue to lead others in health care as we minister to the patients and communities we serve.





## Catholic Teaching And Environmental Concerns

Our tradition tells us that the principal element of Catholic social teaching is the dignity of the person. As pointed out by U.S. Catholic bishops in their 1981 pastoral letter *Health and Health Care*, "For the church, health and the healing apostolate take on special significance because of the church's long tradition of involvement in this area and because the church considers health care to be a basic human right which flows from the sanctity of human life."

Our rich tradition of social teaching calls on us to care for the sick and vulnerable, the unborn, and all of creation. In *Putting Children and Families First*, the U.S. Catholic bishops stated, "For generations, the Catholic community has reached out to children.... We have defended their right to life itself and their right to live with dignity, to realize the bright promise and opportunity of childhood. Now we renew this commitment and build on it. We seek to bring new hope and concrete help to a generation of children at risk." Through our involvement in the Catholic Coalition for Children and a Safe Environment, the Catholic health ministry reaffirms its commitment to both environmental stewardship and to caring for the most vulnerable among us.

As part of our health care ministry, we have a special obligation to care for all of creation and to be good stewards of the Earth. In their 1992 pastoral, *Renewing the Earth: An Invitation to Reflection and Action on Environment in Light of Catholic Social Teaching*, the U.S. Catholic bishops wrote, "At its core, the environmental crisis is a moral challenge. It calls [on] us to examine how we use and share the goods of the earth, what we pass on to future generations, and how we live in harmony with God's creation." As a Catholic health ministry, we must leave a better environmental legacy to our children.





## Populations Sensitive to Pollution

Although anyone can be affected by environmental conditions, some are more at risk because of their stage in life, economic status, or overall health condition.

- **Young:** The bodies and minds of the unborn, infants, and children are still developing, and they don't have the same defenses as adults; pound for pound, they eat, breathe, and drink more than adults and take in more toxins in the process.
- **Old:** Elderly bodies are deteriorating and have experienced a lifetime of exposure to pollution; they are most likely to have cardio-pulmonary dysfunction.
- **Sick:** Those already weakened by immune deficiencies, cancer, and dysfunctional cardio-pulmonary systems are more likely to be affected by environmental pollution and toxins.
- **Poor:** They have less access to quality health care, may have poor nutritional health, are more likely to live in polluted areas, and often have substandard housing.

The U.S. Catholic Bishops also recognized the interconnectedness of environmental quality and justice for the poor and unborn when they wrote in *Renewing the Earth*, "The whole human race suffers as a result of environmental blight, and generations yet unborn will bear the cost for our failure to act today. But... it is the poor and the powerless who most directly bear the burden of current environmental carelessness. Their lands and neighborhoods are more likely to be polluted or to host toxic waste dumps, their water to be undrinkable, their children to be harmed."

As we work to protect the sanctity of all life, we must reduce the chemicals in our environment that disrupt learning, development, and reproduction. The womb is our first environment. Our bodies are full of chemicals and metals because of the food we eat, the air we breathe, the water we drink, and the places we live and work. According to the Centers for Disease Control and Prevention, an estimated 1 in 10 women have levels of mercury high enough to affect an unborn

child's ability to learn and concentrate. Breast milk has hundreds of chemicals in it that taint the best food source we can give our children. Lead, which is stored in the bones, is mobilized during pregnancy so that a child is born with much of its mother's lead. We are learning more about a host of potent chemicals that may be reducing male fertility as well. As we reduce the chemicals that pollute our bodies, we work to preserve the sanctity of all life.





Over the past decade, the Catholic health care ministry has become increasingly aware of the larger environmental implications of health care delivery and has made a commitment to reduce its burden. We have:

- Joined with others, including Health Care Without Harm and Hospitals for a Healthy Environment (H2E), to increase our understanding of the problems and how to address them.
- Asked Group Purchasing Organizations to provide environmentally preferable purchasing plans that deliver less damaging alternative products to hospitals and other health care facilities.
- Engaged our organizations to find ways to reduce waste and pollution, while saving money and being better environmental stewards.
- Committed, as a ministry, to reduce the use of mercury in our institutions.
- Joined with other national Catholic organizations as part of the Catholic Coalition for Children and a Safe Environment to “practice what we preach” within our scope of influence of health care delivery to protect children and the environment.



You can learn more about the resources available to you at the end of this booklet. But first, we need to understand more about health care’s contribution to environmental degradation and what we can do about it.





# How Health Care Can Harm

## How Catholic Facilities are Responding

St. Elizabeth Health Partners in Covington, KY, estimates it saves \$98,000 through recycling programs and donates about two tons of unused, prepared food to area food banks. St. Peter's Health Care Services in Albany, NY, has saved \$300,000 by using a third-party vendor to reprocess selected medical devices, such as certain catheters, compression devices, scalpels, wands, and scissors, and by buying back reprocessed equipment at a reduced price.

Marian Medical Center in Santa Maria, CA, solicits employee suggestions for improving its ecological program and rewards employees who submit ideas. The hospital also cut its energy costs by \$60,000 by reducing energy use 13 percent.

### *Non-Medical Waste*

Health care uses a great deal of paper and plastic disposable products in routine care and administration. Nationwide, hospitals create over 7,000 tons of waste every day. Health Care Without Harm estimates 53 percent of hospital solid waste by volume is paper and cardboard, 17 percent is food and organic matter, 15 percent is plastic, and 15 percent is metals or other waste. Health care is always looking for ways to reduce costs, and facilities are beginning to see that by reducing waste, they save thousands of dollars.

It is important to educate and involve staff members in environmental programs and make it easy to recycle and segregate trash throughout the facility. It is also important to find alternatives that reduce waste production when possible and audit the waste stream so that you can find where problems still exist and address them.

### *Medical Waste Incineration*

For decades, hospitals turned to incineration to address their waste problems. However, medical waste incinerators are one of the largest sources of mercury and dioxin emissions. They produce both toxic air emissions and toxic ash residue, which can contaminate water sources if not disposed of properly. There are a host of other toxic chemicals and metals in medical waste as well.

Dioxin is a class of chemicals created by burning chlorinated waste, and it is one of the most potent pollutants known to humans. According to the EPA, dioxin may cause a lifetime cancer risk 1,000 times higher than the acceptable risk level. While human exposure is primarily through eating meat, fish, and dairy, children exposed to dioxin in utero and through breast-feeding are most sensitive. Dioxin exposure has been linked to disrupted sexual development, birth defects, damage to the immune system, IQ deficits, and developmental delays. Incinerating plastics is the primary source of health care dioxin emissions.

Mercury, a potent neurotoxin, is especially harmful to the unborn, infants, and children. According to the EPA, there is up to 50 times more mercury in medical waste than in municipal waste, and hospitals contribute 4 percent to 5 percent of the total wastewater





mercury load. Mercury is found in some thermometers, blood pressure cuffs, esophageal dilators, measurement devices in medical laboratories, fluorescent lighting, and batteries. Fever thermometers account for 10 percent of mercury in the municipal waste stream. In 2001, the U.S. Food and Drug Administration released advisories for pregnant and nursing women to avoid eating shark, swordfish, tilefish, and king mackerel because they contain enough mercury to damage a developing fetus and young child.

### ***PVC Plastics and DEHP***

Vinyl, or polyvinyl chloride (PVC), is used widely in health care delivery – from IV and blood bags, plastic tubing, bedpans, and patient ID bracelets to plastic wrap, vinyl-coated notebook binders, flooring, and wallpaper. PVC has higher chlorine content than any other plastic, and it therefore creates much more dioxin when manufactured and burned.

Compounding the problem, Di (2-ethylhexyl) Phthalate (DEHP) is added to many PVC products to make the plastic supple. However, DEHP does not bind to PVC and may leach out when it comes in contact with liquids, lipids, or heat. This makes it a poor choice for medical devices and equipment. DEHP is especially dangerous for male babies and can cause sexual reproductive problems. At a minimum, hospitals should try to eliminate all PVC and DEHP products from maternity, pediatric and neonatal ICU departments.

Bags, tubes, and gloves account for 98 percent of disposable PVC health care products, according to Health Care Without Harm. Office supplies and food preparation is the second area of concern. Alternatives for most of these products are cost competitive to products containing PVC and DEHP, and a growing variety of products are coming to market as demand for PVC-free and DEHP-free products grows. Consorta, a Group Purchasing Organization used by many Catholic health facilities, has developed an extensive environmental preferable purchasing program that provides products that reduce or eliminate toxic waste, and it labels PVC products to help facilities track PVC use and reduction.

In addition, some hospitals also are looking at building materials, such as flooring and wallpaper, with an eye to PVC. Kaiser Permanente is looking into PVC-free alternatives for flooring and other building materials for new construction and renovations nationwide.

St. Elizabeth Health Partners in Covington cut costs by \$17,000 by switching from waste incineration to sterilization and shredding, reducing medical waste volumes by 80 percent through the switch.

A number of Catholic medical facilities, including Pittsburgh Mercy Health System, Pittsburgh; Saint Joseph Mercy Health System, Ann Arbor, MI; Dominican Hospital, Santa Cruz, CA; and Saint Joseph's Hospital of Atlanta, are involved in mercury reduction efforts, including community thermometer exchanges. Catholic health care systems have agreed to work together as a ministry to encourage mercury reductions throughout Catholic health care.



# How Your Organization Can Reduce Its Environmental Footprint

As we have learned, health care delivery can create a real burden on the environment. Some Catholic health ministries have begun to take action, and your organization can join with them to lead a health care transformation. Every action, no matter how small, can make a difference. As we commit as a ministry to reduce waste and pollution from health care, together we lead by example as we care for all of creation.

## *Reduce Plastic*

Plastic use is pervasive in health care, and conducting an audit provides a baseline understanding of the plastic products in your facility, especially products containing PVC and DEHP. Next, facilities might:

- Target disposable PVC items first, especially those used in neonatal ICUs, maternity, and pediatric departments. Phase out PVC office supplies when possible.
- Set up a recycling program for plastic products that are easily recyclable (#1 and #2 plastics).
- Look for products that can be returned to the manufacturer, such as printer cartridges.
- Purchase PVC-free office furnishings and construction materials when renovating or building new wings or buildings.
- When buying durable medical products, specify that they should be PVC-free.

## *Reduce Paper*

Because paper and cardboard are such significant sources of waste – and easy to recycle in many areas – efforts to reduce paper are especially fruitful. Your facility can:

- Support aggressive waste-minimization and recycling efforts.
- Use both sides of paper when possible.
- Avoid paper products that cannot be recycled when alternatives exist.
- Separate paper and non-medical waste from medical waste for disposal.





### ***Eliminate or Reduce Mercury***

There is significant momentum to address mercury emissions associated with health care. A mercury audit will identify potential sources in your institution. In addition, your facility could:

- Join the H2E listserv to share information and learn strategies to reduce or eliminate mercury in your institution.
- Take the “Making Medicine Mercury-Free Pledge” through H2E, joining with hundreds of medical facilities committed to reducing – and eventually eliminating – medical uses of mercury.
- Implement a Mercury-Free Purchasing Policy. Encourage materials managers to learn about alternatives. Check with your Group Purchasing Organization to see if it has an environmental preferable purchasing program that includes mercury-free products.
- Hold a mercury thermometer exchange in the community and discontinue sending mercury thermometers home with parents of newborns and other patients.
- Dispose of fluorescent lights responsibly, being careful to separate them as mercury waste.
- Hold a battery round-up, collecting batteries from employees and their families for proper disposal.



### ***Purchase with the Entire Lifecycle in Mind***

As your facility becomes more familiar with the potential sources of pollution from health care, you will likely look at routine products in new ways. You can prevent pollution by selecting products that are less destructive and more sustainable in the first place. For instance:

- Seek out paper products that have higher recycled content, which saves energy as well as trees in production.
- “Process Chlorine-free” paper uses alternatives to chlorine bleach to whiten paper, and therefore eliminates dioxin emissions at paper mills.
- Look for products that are easier to recycle or can be returned to the manufacturer for reprocessing.
- Buy PVC-free and DEHP-free products when alternatives exist.



## Working With Other Organizations

The Catholic health ministry has become more committed to environmental stewardship through its participation in several national efforts. As part of the Catholic Coalition for Children and a Safe Environment, Catholic health ministries have joined with national Catholic organizations working in schools, charities, women's organizations, and rural communities to learn more about how each can integrate our care for creation into the work we are already doing. By joining in national alliances focused on health care delivery, we have learned more about what health care systems and facilities can do to care for the environment and our patients better. You can join with us and hundreds of other facilities by supporting the following work:



### ***Health Care Without Harm***

Health Care Without Harm is an international coalition of hospitals and health care systems; medical and nursing professionals; community groups; health-affected constituencies, such as the Breast Cancer Fund; and environmental

health, environmental, and religious organizations. Its mission is to transform health care worldwide – without compromising patient safety or care – so that health care is ecologically sustainable and no longer a source of harm to public health and the environment. Since the organization's inception in 1996, over 375 groups in 42 countries have joined Health Care Without Harm, including the Catholic Health Association and several Catholic health systems.





### ***Goals of Health Care Without Harm include:***

- Working with a broad range of constituencies, developing effective collaboration and communication among campaign allies
- Promoting policies, practices, and laws that eliminate medical waste incineration, minimize the toxicity and amount of waste generated, and use safer products
- Phasing out PVC plastics and other persistent toxic chemicals used by health care facilities
- Phasing out the use of mercury in all aspects of health care
- Developing health-based standards for waste management that conform to principles of environmental justice



### ***Hospitals for a Healthy Environment***

H2E is a partnership that grew out of a 1998 Memorandum of Understanding between the EPA and the American Hospital Association (AHA). The Memorandum sets goals for hospital pollution prevention. In 2001, the partnership grew to include Health Care Without Harm and the American Nurses Association (ANA). Currently, there are 43 champion organizations that have committed to recruit health partners, including the Catholic Health Association and several Catholic health systems. Over 3,600 facilities participate in the H2E compact.

The Memorandum lays out a comprehensive vision that includes:

- Virtually eliminating mercury waste from hospitals and health care by 2005
- Reducing waste by 33 percent by 2005 and a 50 percent reduction by 2010
- Sharing information and conducting trainings on environmental responsibility through seminars and software distribution
- Providing and reviewing industry pollution prevention information
- Developing a model chemical waste minimization plan cooperatively that reduces persistent chemicals and other hazardous substances in hospitals
- Acknowledging and fostering leadership through an AHA environmental leadership council and through awards and recognition of successful pollution prevention activities.

## *Group Purchasing Organizations*

Most health facilities buy through a Group Purchasing Organization, and in October 2002, four top Group Purchasing Organizations that buy supplies for more than 70 percent of health care facilities announced their commitment to provide environmentally preferable purchasing programs. These companies include Premier, Novation, Broadlane, and Consorta, which together represent about \$30 million [THIS NUMBER SEEMS LOW] in medical purchasing power. Most Group Purchasing Organization environmental plans focus on all practicable ways to eliminate mercury and PVC plastic, reduce wasteful packaging, and support increased recycled content and products that can be recycled.



The Catholic Health Association has been working closely with Consorta, which operates in more than half of all Catholic hospitals and has Catholic-sponsored shareholders. In December 2002, Consorta announced it would:

- No longer allow products containing mercury to be offered through any group contract unless no viable substitute exists.
- Support PVC and DEHP product labeling and offer alternatives through its environmentally preferable purchasing program.
- Continue to support targeted efforts to minimize the volume and toxicity of medical waste, to reduce packaging, and to increase recycled content of products.

## Conclusion

Catholic health ministries have committed to use their influence to change health care in this country. Already, some Catholic facilities and systems have become national models of environmental stewardship through their actions. But more can be done. As a ministry, we can lead by example, caring for the poor and vulnerable as we care for creation. Every action we take matters, no matter how small. Together, as 2,000 Catholic health systems and facilities, we can make a big difference.

# Resources

## ***Health Care Without Harm***

[www.noharm.org](http://www.noharm.org) or 202/ 234-0091

Health Care Without Harm is an international coalition of over 375 organizations committed to reducing the environmental harm from health care. The organization offers extensive materials and information on its website, including Going Green: A Resource Kit for Pollution Prevention in Health Care.

## ***Hospitals for a Healthy Environment***

[www.h2e-online.com](http://www.h2e-online.com) or 312/ 422-3860

H2E is a compact led by the EPA, AHA, HCWH, and the ANA. The organization offers extensive materials on waste reduction strategies and mercury elimination, including guidelines on how to conduct a mercury audit.

## ***Sustainable Hospitals Project***

[www.sustainablehospitals.org](http://www.sustainablehospitals.org) or 978/ 934-3386

A project by the University of Massachusetts Lowell has extensive product information relating to latex, mercury, needles, PVC, and other potential hazards. It also has a catalog of alternative products and better practices resources.

## ***Catholic Health Association (CHA)***

[www.chausa.org](http://www.chausa.org) or 202/296-3993

CHA has established a team of leaders, the Partnership for Environmental Responsibility, which is working to unite the Catholic health ministry behind key environmental goals. It is open to all Catholic health care providers. In addition, CHA can connect you with other Catholic health facilities that have begun to reduce their environmental footprint.

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