

PARTNERSHIP FOR SUSTAINABLE HEALTHCARE

HOSPITALS
for a
HEALTHY
ENVIRONMENT™



**Pollution Prevention (P2) for
Healthcare**

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www.h2e-online.org

Historical Perspective

- EPA Voluntary Partnership with Healthcare Began in 1998 as H2E.
- Enlisted some 1,170 partners representing 6,431 healthcare facilities as members of H2E.
- Now H2E is a 501(c)(3) Non-Profit organization that receives some funding from EPA.

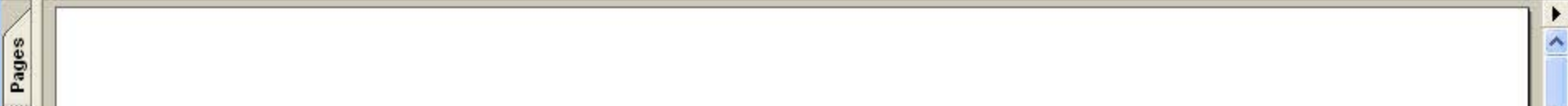
Objectives

- Background
- Issues
- Tools and Resources
- Data Collection
- Communication
- Celebrating Successes!



Why a Commitment to the Environment?

- Safety
- Liability
- Community Relations
- Cost Savings
- Indoor Air Quality
- Environmental Impact
- Regulatory Compliance
- Mission Statement
- Healing Environment
- Commitment to Health




The Hospitals for a Healthy Environment Newsletter
Creating a national movement for environmental sustainability in health care
Volume 3, Issue 7 **July 2006**



Letter from the Director

H2E becomes a not-for-profit organization!

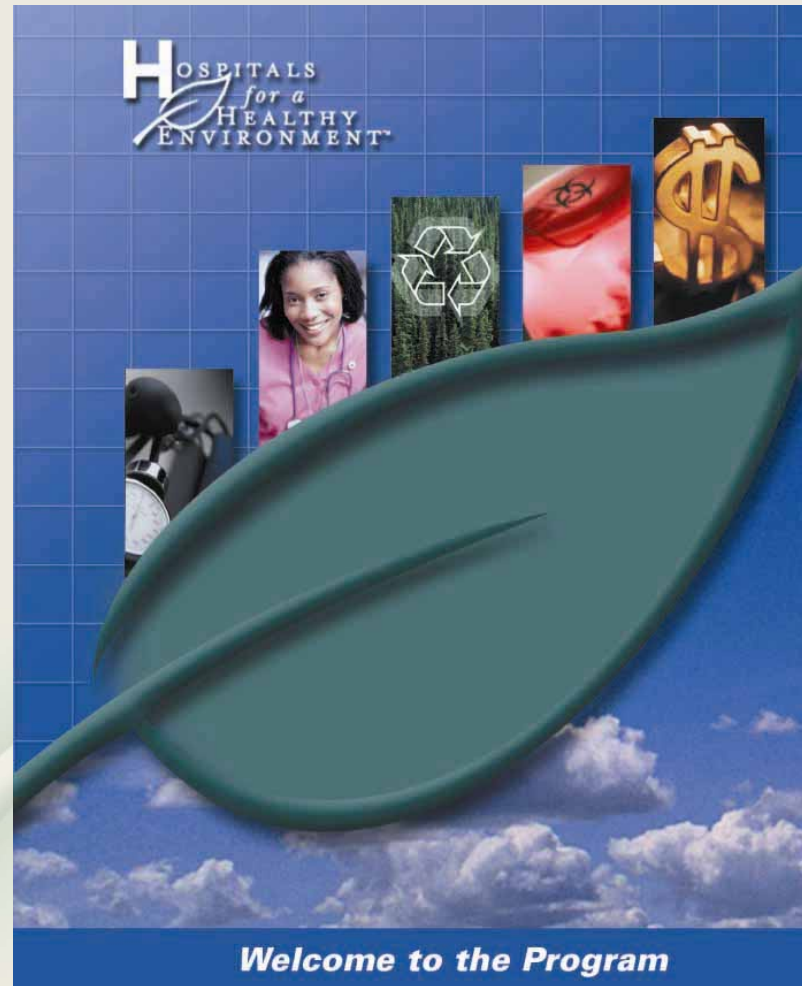
In February 2006, H2E transitioned from a program primarily funded by the US Environmental Protection Agency to an independent not-for-profit organization. As we continue to provide pollution prevention assistance to the health care field.

QuickTime™ and a TIFF (Uncompressed) decompressor are needed to see this picture.

**Moving Forward –
 New H2E Programs in 2006**

Learn how new changes at H2E affect you

H2E Welcome Packet





=H2E Challenge=
Be Mercury Free

[Click here](#)

Welcome to H2E
Working Together To Create Healthy Communities!

[About H2E](#) [H2E Programs](#) [Tools/ Resources](#) [News & Events](#)

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[U](#)

NEW [Award Winner Photos](#)



[Awards](#) **NEW**

[Become a Partner](#)

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[Become a Champion](#)

[Current Champions](#)

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[Waste Reduction](#) **NEW**

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 [Technical Assistance listed by State](#)

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[H2E News](#) **NEW**

[News Archives](#)

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[Making Medicine Mercury Free](#)

H2E Partners

- In June 17, 2004, the H2E program had 775 partners representing 2,703 facilities: 846 hospitals, 1,447 clinics, 101 nursing homes and 309 other types of facilities.
- Partner Pledge - work to eliminate mercury and reduce waste, and prevent pollution.

H2E Partners Continued

- In May 19, 2005, the H2E Program had 1,020 partners representing 4,333 facilities: 1,123 hospitals, 2,080 clinics, 582 nursing homes and 548 other types of facilities.
- Partner Pledge- work to eliminate mercury and reduce waste, and prevent pollution.

H2E Partners Continued

- In of August 1, 2006, the H2E Program had 1,215 partners representing 5,649 facilities: 1,381 hospitals, 2,941 clinics, 531 nursing homes and 796 other types of facilities.
- Partner Pledge- work to eliminate mercury and reduce waste, and prevent pollution.

H2E Partners for Change

- As of March 29, 2007, the H2E Program had 1,340 Partners representing 11,589 health care facilities including 1,604 hospitals, 3674 clinics, 5,288 nursing homes, and 1,023 other types of facilities.

H2E Champions

In April 2004, H2E had 75 champions and as of May 2005, there were 97 champions. H2E Champions promote the H2E program and implement waste reduction activities at their own facilities.

- GPOs such as Novation, Premier and Consorta, and AmeriNet
- State Hospital Associations
- Vendors such as Sodexho, Vanguard and Baxter
- State Pollution Prevention Agencies
- State Nurses Associations
- Healthcare Professional Organizations such as ASHE, AHRMM and ASHES

State H2E Programs and Conferences



www.deq.state.va.us/p2/vh2e





- [Program Summary & VH2E Goals](#)
- [Commitment Pledge to](#)
 - [Reduce Mercury](#)
 - [Reduce Waste](#)
 - [Reduce Toxicity](#)
- [VH2E Charter Members](#)
- [VH2E Partners](#)
- [National H2E Program](#)
- [List of Resources](#)

...or VH2E is Virginia's voluntary partnership to minimize the environmental impacts of the healthcare industry. VH2E was developed in support of the national *Hospitals for a Healthy Environment* program.

The healthcare industry is a significant waste generator of both solid and toxic wastes. Unbenounced to most of us, the equipment, procedures, and medicines used in healthcare facilities can result in environmental releases of mercury, dioxins, and a wide range of other toxic materials. Patients and hospital workers run the greatest risk of exposure to these elements. The good news is that reducing these risks is relatively easy - there are alternatives that work just as well, if not better, than their toxic predecessors!

VH2E is a voluntary partnership for all Virginia healthcare facilities. VH2E partners have made a voluntary commitment to begin the process of reducing their environmental impacts. To join, facilities simply fill out and sign the [VH2E Commitment Pledge](#). For more information about VH2E, see the program [Summary](#) and supporting documents of contact The Virginia DEQ's [Tom Griffin](#) or at 804-698-4545.

BENEFITS: state-level recognition, state-specific resources, vendors, technical assistance and compliance assistance and can be a forum for finding local solutions to issues.

Hospital conferences have been held in Georgia, Florida, South Carolina and now Kentucky.

The H2E Listserv has over 700 participants from the health care sector, technical assistance providers and clinicians

From: Anderson, Jeannette **To:** H2E -- Hospitals for a Healthy Environment listserve
Subject: [h2e] disposable thermometers for VRE & isolation patients? **Cc:**

H2E -- Hospitals for A Healthy Environment listserve
 (h2e@h2e.talklist.com)
 Hi,

I am looking for information on an economical, accurate, disposable thermometer that could be used in place of mercury devices for VRE & isolation patients.....anyone have this info??

Thanks!
 Jeannette

From: Meister, Martha **To:** h2e
Subject: [h2e] Solid Waste Compactors **Cc:**

H2E -- Hospitals for A Healthy Environment Listserve
 (h2e@email.sparklist.com)

I have 2 questions I would like input on.

- 1) How many tons, of what is considered "Dry Weight," have others consistently pulled out of their 30 yd compactors.
- 2) If you could purchase any compactor out on the market, which one would it be? This compactor would have to be hauled from a "tight" loading area.

Thanks for any input I can receive on both of the above questions
 Martha Meister

From: Charles A. Kulp **To:** h2e
Subject: [h2e] Reuseable Sharps Systems **Cc:**

H2E -- Hospitals for A Healthy Environment listserve
 (h2e@email.sparklist.com)
 I'm looking for feedback on Reuseable Sharps Systems. Looking for possible vendor choices.


Specifically, the Daniels system from Australia.

Pros, Cons, Satisfaction, Dissatisfaction.
 Price, Performance, Value.
 Etc.

Other Systems?

Off list:
kulp@med-dispose.com

Free Monthly Teleconferences

2003/4 Teleconference Calendar*	
Jan 10	Mercury - meeting the MOU Challenge
Feb 14	Waste Management Cost Reductions - RMW Reduction
Mar 14	Recycling and Management of Universal Wastes
Apr 11	HIPAA - Paper Destruction, Recycling and HIPAA
May 09	Practical Tips to Starting or Enhancing your Recycling Programs
Jun 13	JCAHO - Using Environmental Programs as Performance Improvement Initiatives
Jul 11	EPP - Low Hanging Fruit and other EPP Success Stories
Aug 08	Green Buildings: Materials and Maintenance
Sep 12	Identifying and Managing Hazardous Pharmaceutical Waste
Oct 10	Greener Cleaners/Disinfectants
Nov 14	Nurses - the Role of Nurses in Implementing Environmental Improvements
Dec 12	H2E Awards - How and Why to Apply
Jan 16	 New Recycling -- Tips and Tricks to a Comprehensive Recycling Program
Feb 13	Waste Minimization - C&D Recycling and Composting

* Click on the title for details about the call.

Check out upcoming calendar at:

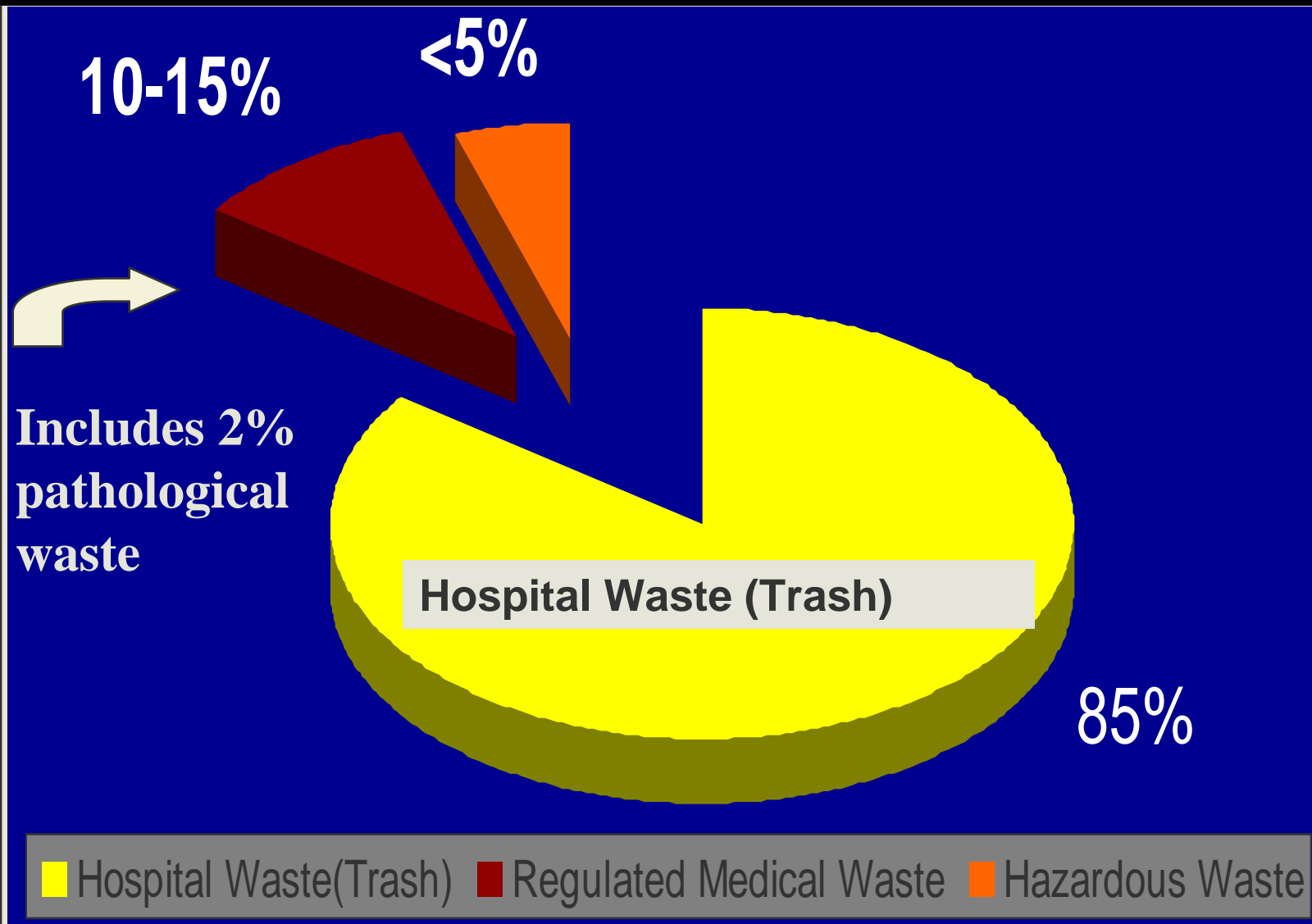
<http://www.h2e-online.org/events/teleconf/index.cfm>

MERCURY FREE BY 2003?

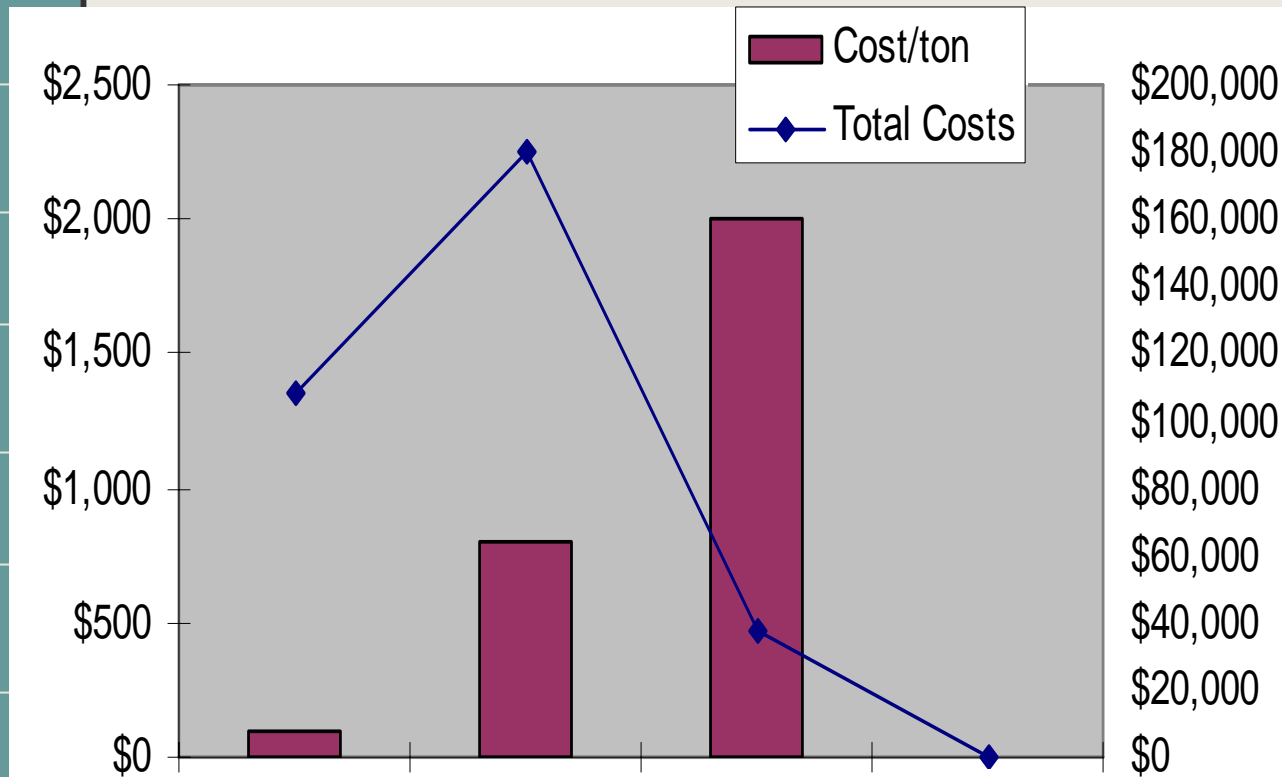
H2E Making Medicine
Mercury Free Awards
[www.h2e-online.org/
awards](http://www.h2e-online.org/awards)



Comprehensive Waste Program



...Design materials and systems that promotes and facilitates waste minimization and segregation
... Understand waste issues



4



Waste Segregation – Best Practices

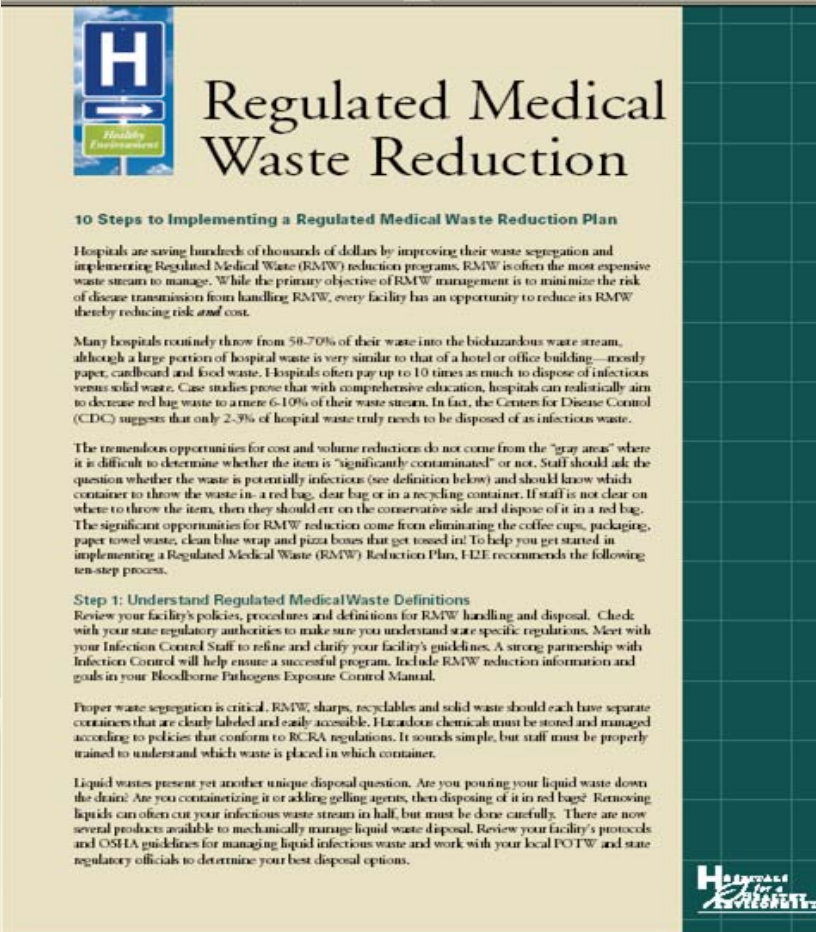
Implement an Infrastructure
Conducive to Waste
Minimization-

Color coded, strategically
placed and well labeled
containers for:

- Solid Waste
- Infectious Waste
- Hazardous Waste
- Recycling
- Universal Wastes
- Others



10 Steps to Reducing RMW



Regulated Medical Waste Reduction

10 Steps to Implementing a Regulated Medical Waste Reduction Plan

Hospitals are saving hundreds of thousands of dollars by improving their waste segregation and implementing Regulated Medical Waste (RMW) reduction programs. RMW is often the most expensive waste stream to manage. While the primary objective of RMW management is to minimize the risk of disease transmission from handling RMW, every facility has an opportunity to reduce its RMW thereby reducing risk *and* cost.


Many hospitals routinely throw from 50-70% of their waste into the biohazardous waste stream, although a large portion of hospital waste is very similar to that of a hotel or office building—mostly paper, cardboard and food waste. Hospitals often pay up to 10 times as much to dispose of infectious versus solid waste. Case studies prove that with comprehensive education, hospitals can realistically aim to decrease red bag waste to a mere 6-10% of their waste stream. In fact, the Centers for Disease Control (CDC) suggests that only 2-3% of hospital waste truly needs to be disposed of as infectious waste.

The tremendous opportunities for cost and volume reductions do not come from the “gray areas” where it is difficult to determine whether the item is “significantly contaminated” or not. Staff should ask the question whether the waste is potentially infectious (see definition below) and should know which container to throw the waste in—a red bag, clear bag or in a recycling container. If staff is not clear on where to throw the item, then they should err on the conservative side and dispose of it in a red bag. The significant opportunities for RMW reduction come from eliminating the coffee cups, packaging, paper towel waste, clean blue wrap and pizza boxes that get tossed in! To help you get started in implementing a Regulated Medical Waste (RMW) Reduction Plan, H2E recommends the following ten-step process.

Step 1: Understand Regulated Medical Waste Definitions
Review your facility's policies, procedures and definitions for RMW handling and disposal. Check with your state regulatory authorities to make sure you understand state specific regulations. Meet with your Infection Control Staff to refine and clarify your facility's guidelines. A strong partnership with Infection Control will help ensure a successful program. Include RMW reduction information and goals in your Bloodborne Pathogens Exposure Control Manual.

Proper waste segregation is critical. RMW, sharps, recyclables and solid waste should each have separate containers that are clearly labeled and easily accessible. Hazardous chemicals must be stored and managed according to policies that conform to RCRA regulations. It sounds simple, but staff must be properly trained to understand which waste is placed in which container.

Liquid wastes present yet another unique disposal question. Are you pouring your liquid waste down the drain? Are you containerizing it or adding gelling agents, then disposing of it in red bags? Removing liquids can often cut your infectious waste stream in half, but must be done carefully. There are now several products available to mechanically manage liquid waste disposal. Review your facility's protocols and OSHA guidelines for managing liquid infectious waste and work with your local POTW and state regulatory officials to determine your best disposal options.



<http://www.h2e-online.org/pubs/tensteps/Rmw10steps.pdf>



Tools/Resources

Green Purchasing

[H2E Home](#) > [Tools/Resources](#) > [Green Purchasing](#)

- About H2E
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 - Technical Resources
- News & Events

Green Cleaners and Other Environmental Service Products

Several state and local governments and other institutions have found that switching to "greener cleaners" has improved indoor air quality, reduced complaints among janitorial staff and saved money.

[EPA's EPP Database](#) [EXIT H2E](#)

The EPA EPP database is designed for federal purchases, but it can be used just as well for purchasing in general. You can [search the EPP Database by product name](#), or [select an "aisle" to find all products of a certain type](#). We suggest you browse the the following aisles to find green cleaner and other environmental service products information:

- [Cleaning supplies and equipment \(household use\)](#) [EXIT H2E](#)
- [Cleaning supplies and equipment \(industrial use\)](#) [EXIT H2E](#)
- [Health care products](#) [EXIT H2E](#)

[Cleaning Products Purchasing Decision Wizards](#) [EXIT H2E](#)

A Web based tool developed by EPA to view brand name products available on federal contracts that meet particular environmental or health criteria.

[Linen Service](#)

[Linen Management](#)

A short article on linen loss, red bagging of soiled laundry/linen and dispensing linen and scrubs.

J. David Edwards, Textile Care Manager

VA Medical Center

1 Freedom Way

Augusta, Georgia 30904

[American Reusable Textile Association](#) [EXIT H2E](#)

[Cleaning for Health: Products and Practices for a Safer Indoor Environment](#) [EXIT H2E](#)

Green Buildings



✓ *Carpet Tile*



✓ *Linoleum*



✓ *Polyolefin*



✓ *Wood/ Solid Surface*



✓ *Plaster*

Material Choices:
Natural

- *Recyclable*
- *Durable*
- *Renewable*
- *Conducive to green cleaning*
- *Low emitting materials*

Compliance and P2 Assistance



HEALTHCARE ENVIRONMENTAL RESOURCE CENTER

About HERC

Hazardous Waste

Medical Waste

Universal Waste

Recycling

Mercury

Water/Sewer

Air Emissions

Facility
Management

Health/Safety

Glossary

Welcome to the Healthcare Environmental Resource Center

A new Compliance Assistance Center for the Health Care sector will be opening in late 2004.

For more information, contact:

Paul Chalmer
NCMS
[Paul Chalmer](#)
(734) 995-4911

or

Chen Wen
EPA, Office of Pollution Prevention and Toxics
[Chen Wen](#)
(202) 564-8849



JCAHO Project Compliance Assistance Center

Meeting JCAHO Standards with Pollution Prevention

The Joint Commission for the Accreditation of Healthcare Organizations (JCAHO) requires health care facilities to meet performance standards in specific areas. The standards are set to achieve maximum performance for activities affecting the quality of care at the facility. To meet standards, health care facilities must develop performance improvement initiatives. These initiatives help the facility continuously improve and remain competitive.

Pollution prevention (P2) activities make great performance improvement initiatives. They can help you achieve JCAHO standards and meet rules, regulations and goals. They also promote the health of the public—keeping in line with the basic premise of health care. *Meeting JCAHO Standards with Pollution Prevention*, developed by the Minnesota Technical Assistance Program (MnTAP), outlines pollution prevention activities that achieve JCAHO standards included in the *Comprehensive Accreditation Manual for Hospitals (CAMH)*—JCAHO's most frequently used accreditation program—and the rules regulations and goals listed below.

JCAHO CAMH Standards

The following standards have been condensed. For complete standards, refer to your CAMH, or contact JCAHO at 630/792-6000.

EC.1, EC.1.2: The organization plans for a safe environment and implements its plan.

EC.1.3, EC.2.3: The organization plans for managing hazardous materials and waste and implements its plan.

EC.1.5, EC.2.5: The organization plans for fire prevention and implements its plan.

EC.2, EC.2.2: The organization plans for employee safety and implements its plan.

EC.2.8: Personnel have appropriate knowledge and skills regarding the proper management and disposal of hazardous materials.

EC.4: The organization improves conditions in the environment.

GO.2: Performance improvement is financially sound.

PL.1: Performance improvement is system wide.

PL.1.2: Performance improvement is consistent with the organization's mission as it relates to community health.

PL.2: Improved and new processes are well designed and consider patient safety.

RI.1.2.2: Patient understands outcomes of care including unanticipated outcomes.

TX.3.4.2: Medication recall system provides for safe disposal of recalled and discontinued medications.

Rules, Regulations and Goals

- Clean Air Act
- Clean Water Act
- Community Right to Know
- Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)
- Food and Drug Administration (FDA) public health notification: PVC devices containing the plasticizer DEHP
- Hazardous Materials Transportation Act
- Hazardous Spill Response (HAZWOPER)

- Hospitals for a Healthy Environment (H2E) goal: Nearly eliminate mercury by 2005.
- H2E goal: Reduce volume and toxicity of all types of waste 30 percent by 2005 and 60 percent by 2010.
- National Fire Protection Association Life Safety Code
- Occupational Safety and Health Administration (OSHA) Hazard Communication/Employee Right to Know
- P2 Act of 1990
- Resource Conservation and Recovery Act (RCRA)
- Spill Prevention Control Countermeasure (SPCC) Plans
- State Infectious/Regulated Medical Waste Regulations
- State requirements for pesticide applicators
- Universal Waste Rule

The first column of this document lists a P2 activity that can be adopted as a performance improvement initiative. This column gives tips on how to accomplish the initiative and outlines why the activity is important. The middle column describes how the initiative meets JCAHO standards. The third column lists rules, regulations and goals that your facility may meet by carrying out the performance improvement initiative.

Assistance

For help meeting JCAHO standards using pollution prevention, contact Catherine Zimmer, MnTAP health care specialist, at 612/624-4635 or 800/247-0015 from greater Minnesota.

How can your facility comply with HIPAA and still recycle paper???

H2E Objectives in Meeting HIPAA Compliance:
The Hospitals for a Healthy Environment program attempts to help health care facilities meet the intent of HIPAA in a manner that promotes environmental performance and that is financially responsible and sustainable. This document is to be used by H2E Partners as a tool to help develop policies and procedures to perform their own facility assessments to ensure confidentiality.

* This document focuses on paper destruction. Attachment A includes a table briefly describing electronic media data destruction alternatives.

Disclaimer: The suggestions outlined in this and other H2E-HIPAA documents are not legally binding but are intended as guidance documents.

H2E Guidance Document

Confidential Paper Document Disposal and Resource Conservation In Compliance with the Health Insurance Portability and Accountability Act (HIPAA) OF 2002

HIPAA Standards require health care organizations to establish written policies and procedures, as well as security measures to protect the privacy of patient information as they pertain to the "end-of-life" disposal and destruction of confidential paper documents.* The purpose of this guidance is to help you:

- Understand the basic requirements for protecting privacy of confidential documents under HIPAA;
- Assess your facility's confidential paper disposal/destruction program's readiness for compliance with HIPAA requirements;
- Evaluate options for "end-of-life" disposal and destruction of confidential documents, and develop an environmentally responsible and fiscally prudent option for your facility;
- Develop and implement policies and procedures as they pertain to the "end-of-life" disposal and destruction of confidential paper documents.

Document Outline:

I. Understanding HIPAA and Document Destruction Options

- What documents are protected by HIPAA?
- What HIPAA says and doesn't say about the management and disposal/destruction of confidential paper
- Confidential document destruction options

Attachment B: Sample Certificate of Destruction

Attachment C: Due Diligence - Annual Audit of Confidential Paper Recycling

II. Perform a facility assessment

- Perform a facility assessment to help determine policy and procedural requirements, operations and infrastructure requirements
- Develop facility-wide policy for compliance with confidential material disposal guidelines
- Policy worker codes of conduct concerning violations of policy

Attachment D: Sample Facility Assessment

III. Developing and Implement Policies and Procedures

- Develop chain of custody policies and procedures from point of origin to confirmation of point of destruction, include specific responsibilities for generator, handler, staff at points of transfer, haulers and/or recyclers.
- Considerations for choosing a vendor

Attachment E: Considerations of Shredding On-site

Attachment F: Sample Administrative Policy and Procedures

Attachment G: Sample Confidentiality Agreement facility and vendor

Attachment H: Sample "General Terms and Conditions" with facility and vendor

Recognition and Award Categories

H2E Partner Recognition

is given annually to Partner facilities that have met their self-identified H2E goals for the previous year.

Making Medicine Mercury-Free Award is a one-time award given to facilities that have met the challenge of becoming virtually "mercury free."

H2E Partners for Change Award

is given annually to facilities that have made significant progress toward reducing waste, preventing pollution, and eliminating mercury.

H2E Environmental Leadership Award is the premier H2E award given annually to facilities that are setting the "industry standard" for environmental programs and policies. These facilities have active, ongoing waste and mercury-use elimination programs that will serve as models for other hospitals across the country.



John Leigh of Dartmouth-Hitchcock receiving award from Mac Robinson at AHA's Annual Meeting

Celebrating Your Achievements



Contact: Kelly Heekin,
Media Coordinator
202-234-0091, ext. 11



Tips On Getting Press

Congratulations! You've just taken an important step toward improving the environment and public health through your involvement in H2E. It is time to tell your story to your staff and broader community. Following are some tips on getting the media to cover your story.

Write a Press Release

The reverse side has a sample press release that you can use as a template to customize your press release. Add details about your programs and accomplishments, along with quotes from your spokesperson about how and why you are involved in this important H2E initiative.

Tip: The more of a "news hook" you can provide, the better chance your story will be published. Some examples of news hooks include: a prominent community member praises your efforts, your staff works with local students to educate the community about mercury fever thermometers, or you reach a landmark environmental goal such as a significant reduction in waste.

Identify and Pitch to Reporters

If your organization has a public affairs department, give them a copy of the press release and background information on the H2E Program, and they can take it from there.

If you are posting the release yourself, first identify reporters who are likely to cover the story (your organization might have a press list already compiled) and fax or e-mail the press release to them. It is a good idea to make follow-up calls to reporters to ensure they received the information and talk to them about why it is important to inform the community about your organization's environmental achievements.

Have Resources Handy

The following resources will be useful in making your efforts to promote your facility a success:

- **Fact sheets.** Have on hand a list of facts and additional resources, for instance, a factsheet that provides the basic information about why mercury is an environmental and public health threat.
- **Public Affairs.** Designate someone from your facility to speak to the press and make sure they have all the necessary information. You might also want to identify some other spokespersons, such as a doctor to provide quotes about the health effects of mercury or a local politician who can discuss your positive impact on the community.
- **Images.** Some publications might request visual images, such as photographs of your project or of a person at your facility. Colorful charts depicting your progress are also helpful.
- **Talking points.** Have three to four points in mind that you most want to publicize, and stick to those points when speaking to reporters. You might want to emphasize the achievements your facility has made and why a commitment to the environment is important to you.
- **Other Media.** Send your press release through other information channels. Post it to your website, e-mail it through listservs, put it out on your intranet, print it in your newsletters, and post it around your facility so employees can feel proud of their accomplishment.

-continued reverse side-

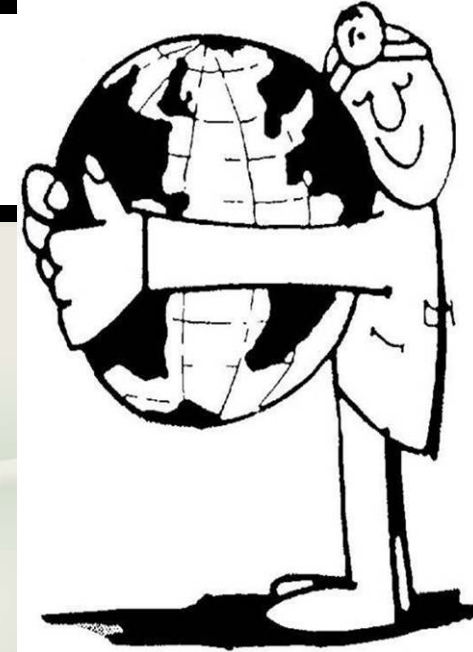
Change... requires shift in mindset and enlightened leadership



Call for Assistance:

- Janet Brown, Partner Coordinator
H2E, New York, NY.
- Phone: 212/941-2486, 347/393-3809
- Priscilla Oliver, Ph.D.
Regional EPA, PSH Coordinator
Atlanta, GA
- 404/562-8292
- Email: Janet.brown@h2e-online.org
oliver.priscilla@epa.gov

H2E Program Contacts



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800-727-4179

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www.h2e-online.org

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- **Janet Brown**, Partner Coordinator
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 - cell 347-393-3809
- **Sarah O'Brien**, Champion Coor.
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 - (802) 479-0317
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- **Jolie Patterson-Rosst**, Awards Coordinator
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