



# Maryland H2E News Roundup



March 2011

## A Greener Operating Room? Hospitals Across Maryland are Taking it on Today!



Greening the OR is one of the biggest issues in health care sustainability today. It's an obvious target: it generates 42% of patient related revenue, and, based on case studies, the OR is estimated to generate 20-30% of the total waste of the hospital. That is a huge number, and the problem of tackling it is finally garnering attention. But can OR waste be reduced without compromising patient safety or costing the hospital more money?

The answer is yes. In an article published in *Archives of Surgery* this February, three Hopkins researchers [describe](#) a study they conducted "to identify leading practices to promote environmentally friendly and efficient efforts in the provision of surgical health care." Dr. Makary, associate professor of surgery at the Johns Hopkins University School of Medicine, and who led the study, said in a press release, "There are many strategies that don't add risk to patients but allow hospitals to cut waste and reduce their carbon footprints. If we're going to get serious as a country about being environmentally conscious, we need to look at our biggest institutions. When an individual decides to recycle or dispose of waste differently, it has an impact. But when a hospital decides as an organization to go green, the impact is massive."

The Hopkins team identified 5 strategies that a hospital could adopt:

1. Cutting down on and separating operating room waste;
2. Reprocessing single-use medical devices (SUDs);
3. Considering the environment when making purchasing decisions;
4. Improving energy consumption; and
5. Improved management of pharmacy waste.



Easier said than done? Maybe, but across Maryland, it's getting done and then some. At MD H2E's 3<sup>rd</sup> annual *Environmental Excellence in Health Care* conference, two nurses spoke about the OR greening initiatives they were part of at their respective hospitals. Kate Painter, Executive Director of Surgical Services at Carroll Hospital Center, described the hospital's various angles of attack. Their waste management system offers fluid waste management and smoke evacuation in one unit. The system collects surgical waste fluid within a totally closed system, then disposes of it with little human intervention, reducing operator exposure and reducing hazardous waste tonnage in the operating room. Carroll Hospital Center also collects SUDs for reprocessing, utilizes reusable containers, and more. They also recycle blue wrap: 200-300 pounds per month. Another initiative reuses plastic bags from packs by putting charts for transport for Isolation patients in them.

**Continued on page 5**

## UMMC Finds Home for Batteries!

The University of Maryland Medical Center would like to thank the MD H2E community for helping to find a new home for 50 pounds of lithium thionyl chloride batteries. After putting a message on the MD H2E list serv, UMMC received a over a dozen leads on how to reuse/recycle the batteries!

"A big thank you to the EPA (Region 3), who will be putting these batteries to use. EPA also thanked UMMC for "forward thinking". Through this process, UMMC saved a considerable amount of money in avoided disposal costs, and avoided the environmental impacts associated with disposal. A big thanks to MD H2E for building a great network for all of us out there trying to do the right thing."

— **Denise Choiniere, Sustainability Manager, UMMC**

## MD H2E Trailblazer Education Series

### **You are invited to attend Anne Arundel Medical Center's Journey to LEED Certification**

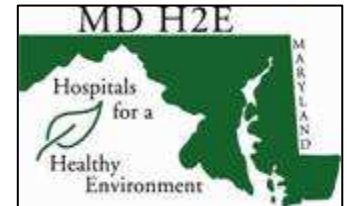
**March 23rd, 1:00 – 4:00 pm**

Come learn about Anne Arundel Medical Center's award-winning green initiatives!



#### **On the menu:**

USGBC and LEED for Health Care  
Energy and Water Conservation  
Recycling Programs  
Green Guide for Health Care



#### **USGBC and LEED for Health Care**

Starting off the event is Lorraine Doo of the US Green Building Council. She will discuss LEED certification and the new LEED guide for Health Care.

#### **Green Guide for Health Care**

AAMC will discuss its role as a pilot project for the *Green Guide for Health Care*, a quantifiable sustainable design toolkit created in part by Health Care Without Harm.

#### **Energy and Water Conservation**

In building its new eight-story tower in accordance with LEED requirements, AAMC will save a significant amount of energy and water than a conventional building would. Fossil fuel consumption will be reduced up to 20% with use of an efficient HVAC system, dehumidification system, and more.

The new tower is also designed and built to reduce expected water usage by 33%. Step ponds have been designed to treat storm water runoff to reduce the flow of pollutants to the Chesapeake Bay. The green roof also minimizes water runoff. 80% of the 24,000 plants on campus were grown locally.

#### **Recycling Programs**

AAMC already has a program in place to recycle batteries and light balusters. This fall, a hospital-wide, commingled recycling program will be implemented. During construction of the new tower, 92.6% of the demolition materials were recycled. Recycled concrete was also used in building the tower.

#### **The speakers:**

Lorraine Doo, United States Green Building Council  
Charlotte Wallace, RN, EARTH Advisors, Chair, AAMC  
Carolyn Core, Sr. Vice-President, Corporate Services, AAHS

**Journey to LEED Certification, Anne Arundel Medical Center  
Health Sciences Pavilion, 7th floor  
2000 Medical Parkway  
Annapolis, Maryland 21401**

Please RSVP to [trailblazer@son.umaryland.edu](mailto:trailblazer@son.umaryland.edu) by March 16<sup>th</sup>  
Priority is given to employees from any hospital or health system.  
~ Snacks will be provided ~

**Webinar Series about  
LEED for Healthcare  
Rating System:  
March 17 & March 31,  
hosted by USGBC!**

**See page 7 for details.**

## Greater Baltimore Medical Center Embarking on \$1M Renovation

Greater Baltimore Medical Center is undergoing a \$1 million renovation that includes enhancements to its lobby, gift shop, waiting areas, and corridors. The [GBMC](#) renovations come as other Greater Baltimore hospitals add new wings and get face-lifts to get new patients. These include a [new pediatric clinic](#) at Sinai Hospital and [new operating rooms](#) at Baltimore Washington Medical Center.

"Patients like to see modern architecture and modern facilities," says Michael A. Forthman, vice president of facilities and support services at GBMC.

The Towson hospital has hired Towson architecture firm [Rubeling Inc.](#) to design the new look. Renovations and additions account for about two-thirds of the workload for the company. It has performed work on behalf of Randallstown Community Center, Hockessin Athletic Club and Wellness Center, and Glenelg Country School. Prosys Inc., of White Marsh, is the project manager for the renovations. The lobby and gift shop makeover will be completed in three months.

The lobby renovation involves flipping the location of the information desk with that of the radiology waiting space. After the renovation, the information desk will be directly across from the main entrance and will feature welcome signage, a decorative metal canopy, and accent lighting. Privacy screens will surround the radiology waiting area and heightened ceilings will hopefully open up the space.

The hospital chose ceramic tile for the floors, which can last 20 years, Forthman says. "It's definitely a concern of ours to use good products with a long life cycle." Another set of renovations will begin at the hospital in July. This time, the 285-bed hospital will redo the cafeteria and a unit of its nuclear medicine department. Forthman says he is not sure yet how much these renovations will cost, but it will probably be less than the first phase.

Writer: Julekha Dash



## Going Green Could Cut Hospital Costs

February 22, 2011 — 10:14am ET | By [Sandra Yin](#)



Dr. Makary at MD H2E's annual conference, 2010.

Despite assumptions to the contrary, reducing your operating rooms' carbon footprint doesn't have to cost your facility more. In an article in the February issue of the *Archives of Surgery*, a Johns Hopkins team contends that going greener could help hospitals reduce waste and costs.

Nearly 70 percent of hospital waste is generated by operating rooms and labor-and-delivery suites. At least some of the waste relates to choices made. That's why overhead lights in operating rooms often wolf down energy, instead of sipping it. Sterilized equipment gets opened, but never used. And those red medical waste bags are filled with harmless waste that could be more cheaply disposed.

"There are many strategies that don't add risk to patients but allow hospitals to cut waste and reduce their carbon footprints," study lead author Dr. Martin A. Makary, an associate professor of surgery at the Johns Hopkins University School of Medicine, said in a statement.

For the rest of the article, and additional resources, go to:

[http://www.fiercehealthcare.com/story/going-green-could-cut-hospital-costs/2011-02-22?utm\\_medium=nl&utm\\_source=internal](http://www.fiercehealthcare.com/story/going-green-could-cut-hospital-costs/2011-02-22?utm_medium=nl&utm_source=internal)

## NIOSH Seeks Insights from Healthcare Workers on Chemical Health and Safety Practices.

The National Institute for Occupational Safety and Health (NIOSH) invites healthcare personnel to participate voluntarily in an online survey about health and safety practices in working with hazardous chemicals on the job. **The survey is open until March 26, 2011.** The voluntary survey can be accessed at [www.niosh-healthcare-survey.org](http://www.niosh-healthcare-survey.org). You will be asked for an organization key which is: **HCWS**. Individual responses will be kept confidential, and no personal identifiers will be recorded. The survey will take about 30 minutes to complete.

Results of the survey will help NIOSH better understand the extent to which healthcare personnel may be exposed to chemical agents such as antineoplastic agents, anesthetic gases, surgical smoke, high level disinfectants, chemical sterilants, and aerosolized medications, and the circumstances of potential exposures. Results will also help NIOSH to better learn and understand current practices for reducing potential exposures, to identify gaps in current knowledge about those practices, and to design further research in collaboration with our partners for addressing those gaps.

"Safeguarding healthcare workers from potential occupational hazards is an essential part of providing good jobs for these dedicated men and women, and for furthering high-quality patient care," said NIOSH Director John Howard, M.D. "We look forward to a robust voluntary response to this survey. The results will help NIOSH and its partners design next steps in the research essential for addressing the workplace health and safety needs of this important and growing U.S. workforce." Information to help access the voluntary survey, if needed, is available from a toll-free Help Desk, 1-888-219-5667. For further information about the survey, contact the NIOSH Project Staff: Jim Boiano at [jboiano@cdc.gov](mailto:jboiano@cdc.gov), tel. (513) 841-4246, or Andrea Steege, [asteege@cdc.gov](mailto:asteege@cdc.gov), tel. (513) 841-4538.

NIOSH is the federal agency that conducts research and makes recommendations for preventing work-related injuries, illnesses, and death. NIOSH has a strategic program of research to better identify, understand, and address potential safety and health hazards for the healthcare industry. NIOSH also works with diverse partners to stimulate, design, and carry out research for the healthcare and social assistance sector under the National Occupational Research Agenda, NORA.

## Join Your Peers with EVS Green Careers

A few Maryland hospitals are already participating in this program!

From the website <http://www.h-cap.org/evs-green-careers/>:

Healthcare Career Advancement Program (H-CAP) is developing a new green career ladder for environmental service workers for cleaner, greener hospitals and opportunities for advancement. The national program created by H-CAP and its partners in will help shape entry level training and education for this new pathway to environmental sustainability in the healthcare industry.

Environmental service workers are not only learning ways to support the triple bottom line of the healthcare industry (people, profits and the planet), they are also being introduced to the basic science, math, and theory of green healthcare. These educational programs will help them advance into post secondary education and new career opportunities. Through a process of labor management collaboration and systems change, new jobs will also be created to support environmental sustainability and provide an advancement opportunity to incumbents in healthcare.



## Greening the OR, Continued from page 1.



Janel Parham, Liaison Nurse, Perioperative Services, Sinai Hospital, also spoke at MD H2E's annual conference in 2010. Parham emphasized the importance of staff and administrative buy-in, stakeholder input, an interdisciplinary team, and having reasonable expectations. Parham pointed out that much of the waste in the OR is disposed of as regulated medical waste, which costs 5 to 10 times more in disposal fees than regular waste. Sinai therefore focused on:

- Waste Separation and Recycling
- Blue Wrap Recycling
- Neptune System
- SRI Surgical Reusables

Since instituting the Neptune fluid management system in 2007, Sinai has been able to reduce labor, risks of exposure for the staff, and time needed to turn over the rooms. The Neptune system will also reduce red bag waste by roughly 86%. Since September 2008, Sinai Hospital recycled 16,230 pounds of blue wrap. Parham also oversees hard plastic and non-confidential paper recycling initiatives as well.

They aren't the only hospitals in Maryland getting in on this: UMMC is instituting a sharps container recycling program, which will have the potential to remove 63,000 pounds of plastic from UMMC's waste stream and reduce the total number of pounds of plastic incinerated by the medical center each year by 234,000 pounds. In 2009, UMMC recycled 11,928 pounds of blue wrap and other operating room plastics.

There are many different ways to green the OR. What could work at your hospital? Check out the resources below to find help, guidance, and inspiration!

## Greening the OR Resources

1. **Practice Greenhealth is offering help with Greening the OR, even to nonmembers:**

<http://www.practicegreenhealth.org/educate/greening/greening-the-or/>

2. **The upcoming AORN conference, which starts March 18th, has a Greening the OR pre-conference:**

<http://online.myiwf.com/myaorncongress/Sessions.aspx?SessionId=11003-3116&MapIt=1&floor=>

3. **"Best Practices for a Sustainable Operating Room," by Joan Plisko, MD H2E:**

[http://www.ascenths.com/docs/Ascent\\_Rr\\_Aug10.pdf](http://www.ascenths.com/docs/Ascent_Rr_Aug10.pdf)

4. **For more description of Janel Parham and Kate Painter's initiatives, check out MD H2E's October News Roundup:**

<http://e-commons.org/mdh2e/files/2010/07/MD-H2E-October-2010-News-Roundup.pdf>

5. **In 2008, MDE funded a project with MD H2E that involved audits at six hospitals to identify and reduce sources of mercury and certain PVC-type plastics. Case study information is also available on "blue wrap" plastic recycling and reusable sharps containers:**

[MD H2E Case Studies](#)

## Greening the Operating Room: An Opportunity for Maryland Hospitals to Participate!



### **Question: What do these practices all have in common?**

- Adjusting HVAC control schedules for energy efficiency
- Fluid management systems
- Medical device reprocessing
- Medical equipment donation & recovery
- OR kit reformulation
- Regulated medical waste segregation & reduction & plastic recycling
- Reusable hard cases for surgical instruments
- Reusable surgical linens
- Waste anesthetic gas (WAG) capture & reclamation

### **Answer: They are all methods that can help “green” the Operating Rooms at your hospital!**

As hospitals across the country look for ways to reduce environmental impact, it makes sense to start with the departments that have the largest environmental footprints. The operating room (OR) is one of the largest users of supplies within the hospital as well as one of the largest producers of waste. Case studies have estimated that between 20-30% of the total waste generated by the hospital comes from the OR. A number of leading healthcare institutions have begun to tackle this problem by identifying a set of best practices that can reduce costs while also reducing waste, energy, and worker and patient exposure to hazardous chemicals.

### **Maryland Hospitals Hear This:**

**The Greening the Operating Room Initiative is a **FREE** collaborative effort, organized and run by Practice Green Health.**

See: <http://www.practicegreenhealth.org/educate/greening/greening-the-or/> or

Contact [John Ebers](#), Associate Director, Sustainability Education & Training and Greening the OR Project Manager at [jebers@practicegreenhealth.org](mailto:jebers@practicegreenhealth.org) or 888-688-3332, ext. 18.

## Webinar Series about LEED for Healthcare Rating System March 17 & March 31, hosted by USGBC

(1.5 GBCI and AIA CE hours per session)

Register by March 1 for the exclusive member discounted price of \$75 for the series:

<https://video.webcasts.com/events/pmny001/viewer/index.jsp?eventid=37514>

**March 17, 2011 and March 31, 1:00—2:30 p.m.**

### Learning objectives:

- Define the unique needs for green building in the healthcare industry
- Articulate the unique issues for applying green building to healthcare facilities
- Distinguish between LEED for New Construction and LEED 2009 for Healthcare
- Summarize key credit intents and requirements related to LEED 2009 for Healthcare

### Price:

Session 1: Member Price: Session 1: \$44; Non-Member Price: Session 1: \$55

Session 2: Member Price: Session 2: \$60; Non-Member Price: Session 2: \$75

Series: Member Series Price: \$83.20; Non-Member Series Price: \$104

**Please note that sessions will be available as an archived version 5 business days after they air live.**

Join us for the March meeting of  
the Maryland Nurses Association

## Environmental Health Committee Meeting



Tuesday, March 22<sup>nd</sup>, 2011

6:00-8:00 p.m.

Maryland Nurses Association

21 Governor's Court, Suite 195

Baltimore, MD 21244

The Environmental Health Committee creates a community of nurses interested in making positive changes for the environment and health. Join us for a lively discussion of how nurses can make health care safer for patients, staff and the community, and explore ideas for the future of the committee. Ideas from the last meeting include:

- Improving occupational health for nurses
- Greening healthcare facilities
- Environmental policy & advocacy
- Community health promotion
- Planning an environmental health conference

If you are not able to attend in person, the Teleconference number is: 1 (800) 351-4871, Pass code: 19886970#

*(Membership in the MNA is not required to attend this event)*

*RSVP to Karin Russ, Nursing Outreach Coordinator at: [kruss003@son.umaryland.edu](mailto:kruss003@son.umaryland.edu)*

## Sustainable Foods Update

### Still Time in March to Buy Sustainable Chicken for National Nutrition Month

There is still time to join the 2011 campaign to buy local sustainable meat and poultry during the month of March to celebrate National Nutrition Month. This campaign has been designed to encourage institutions, businesses, their employees, their students, and consumers to go beyond buying local vegetables and fruit to also purchase meat, poultry and other animal protein foods produced by local farmers using sustainable agricultural practices. With [recent media attention](#) in Maryland on the use of arsenic compounds in poultry feed, this campaign serves to educate food service professionals and consumers in Maryland and throughout the country about large-scale poultry production practices. It also provides an opportunity for you to try sustainably produced chicken, support your local farmers if possible, and gives you local and national resources on where to buy sustainably produced chicken.

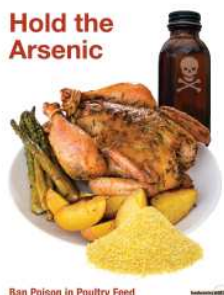


Louise Mitchell and Holly Emmons, interviewed by WAMU

To participate and sign the pledge to buy sustainable chicken please click [here](#).

### Union Hospital's Holly Emmons, Provides Testimony in Annapolis

Legislation in Maryland is seeking to ban arsenic in poultry production. Hospitals and other supporters of this bill say arsenic contaminates the meat and poultry waste which pollute our farms and Chesapeake Bay Water System; not to mention its negative health effects on the human body including cancer, diabetes and heart disease. For more information visit [www.foodandwaterwatch.org](http://www.foodandwaterwatch.org) or receive a sample letter to write to your legislator at [sustainablefoods@son.umaryland.edu](mailto:sustainablefoods@son.umaryland.edu).



### Sustainable Meat, Local Producers: A New Paradigm for Institutional Purchasing



Thurs May 5

7:30 am — 3:00 pm

### Ten Oaks Ballroom and Conference Center

Clarksville, MD

This conference will address the barriers, identify solutions and share best practices to establish new institutional purchasing practices for local sustainable meat and poultry.

**Who Should Attend:** Food service directors, chefs, production/purchasing managers, dietitians from hospitals, nursing homes and other institutions, local beef, pork and poultry producers using sustainable agricultural practices, processors, distributors, food service contractors, group purchasing organizations, food safety inspectors, government agencies, non-profit organizations and other interested stakeholders.

For more information, visit:

<http://e-commons.org/mdh2e/sustainable-foods/may5conference-localsustainablemeat/>



## MD H2E Proudly Presents the Trailblazer Education Series



**March 23rd 1-4 p.m., Building a LEED Silver Tower,  
Anne Arundel Medical Center**



**April 19th Noon-3p.m., LED Lighting and Waste Life Cycles, LifeBridge  
Health**



**May 24th 8:30-11 a.m., Environmental Management Systems, Franklin  
Square Hospital Center**



**June 21st 1-3 p.m., Integrated Pest Management,  
Springfield Hospital Center**

To register, please send e-mail to [trailblazer@son.umaryland.edu](mailto:trailblazer@son.umaryland.edu)  
For questions, please contact Molly Englund: [englund@son.umaryland.edu](mailto:englund@son.umaryland.edu)

### What is Maryland H2E?

Maryland H2E is a technical assistance and networking initiative that promotes environmental sustainability in health-care. Participants include hospitals, clinics, nursing homes, and other ancillary health care providers in MD. Our staff now includes:



- Joan Plisko, PhD, Technical Director, [plisko@son.umaryland.edu](mailto:plisko@son.umaryland.edu), 410-706-2107
- Louise Mitchell, PT, Sustainable Foods Program Manager, [lmitch001@son.umaryland.edu](mailto:lmitch001@son.umaryland.edu), 410-706-1924
- Karin Russ, MS, RN, Nursing Outreach Coordinator, [kruss003@son.umaryland.edu](mailto:kruss003@son.umaryland.edu), 410-706-1389
- Molly Englund, Communications Coordinator [englund@son.umaryland.edu](mailto:englund@son.umaryland.edu), 410-706-6832
- Priya Saha, Sustainable Foods Coordinator [saha@son.umaryland.edu](mailto:saha@son.umaryland.edu) 410-706-3077

### Practice Greenhealth Webinars



March 23rd, 2 pm (Eastern)  
**Green Design and Construction Series:  
LEED for Healthcare  
A Toolkit Overview and Introduction to New  
Credits**

To Register and Purchase Webinars, go to:  
[www.practicegreenhealth.org/tools/webinars/](http://www.practicegreenhealth.org/tools/webinars/)

Access to Practice Greenhealth webinars is a fee-based service, and is one of many member benefits.

You can learn more about the fees and benefits of membership by going to our website. See:  
<http://www.practicegreenhealth.org/community/>