

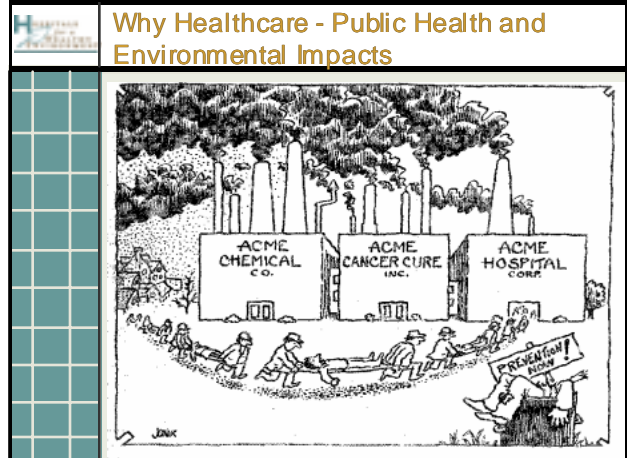


Hawaii Hospitals

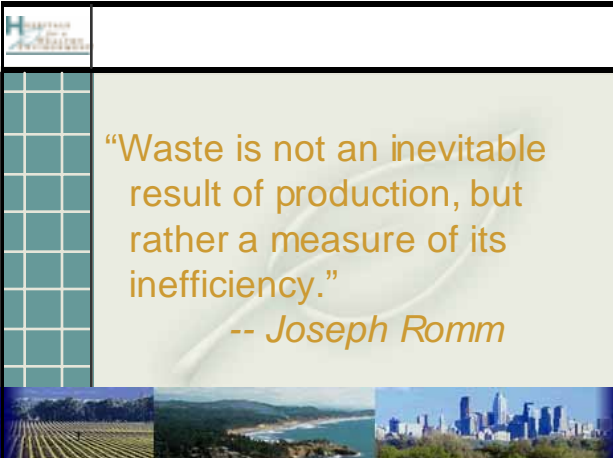
HOSPITALS for a HEALTHY ENVIRONMENT

Partners in Greening Healthcare

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Why Healthcare - Public Health and Environmental Impacts

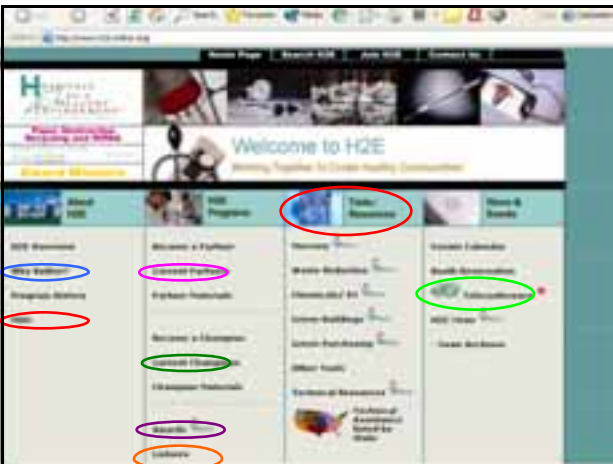
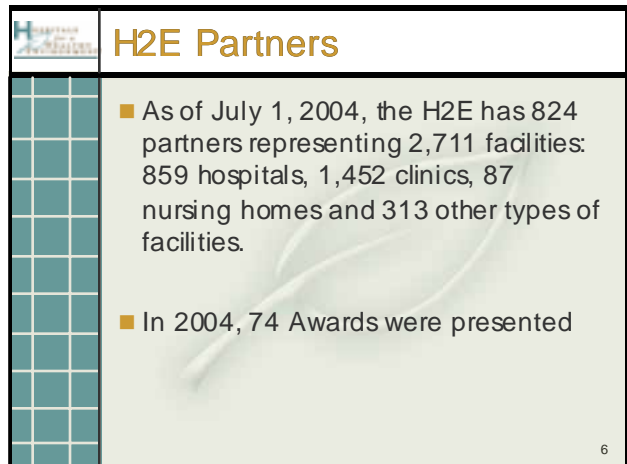


“Waste is not an inevitable result of production, but rather a measure of its inefficiency.”
-- Joseph Romm



H2E GOALS

- Virtually eliminate mercury waste by year 2005
- Reduce total waste volume by produced by the healthcare industry, 50% by 2010
- Identify and reduce PBT chemicals and other hazardous substances in hospitals through pollution prevention and waste reduction
- Changing the environmental culture of healthcare...

H2E Partners


- As of July 1, 2004, the H2E has 824 partners representing 2,711 facilities: 859 hospitals, 1,452 clinics, 87 nursing homes and 313 other types of facilities.
- In 2004, 74 Awards were presented

H2E Champions

- As of July 1, 2004 H2E has 83 champions.
 - Set system wide goals and activities
 - Work with members to support the work
- Health Systems:
 - Catholic Health Association, Sutter Health, Veterans Health Administration, Kaiser Permanente, HCA
- Hospital Associations:
 - New Hampshire, Texas, Arkansas, Michigan...
- Group Purchasing Organizations
 - Novation, AmeriNet, Consorta, Premier

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State H2E Programs



The AHA and state associations realize that the work has to be done so members need support

There are billions of dollars in savings to be had...

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Opala – trash in Hawaiian





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Tripler Army Medical Center

- Policy/Commitment: Tripler is committed in pursuing all avenues to minimize the environmental impact and improve the health and safety of our employees and neighbors. Through the use of P2 techniques, we continually evaluate our ongoing operations to identify areas where toxic pollutants may be minimized or eliminated. Our ultimate priority will be to reduce or eliminate the use of hazardous materials and generation of toxic pollutants at the source or, when possible, reuse and recycle.
- Scope: Tripler actively recycles laboratory solvents (xylene and ethanol), lead acid batteries, silver, green waste, food waste, office paper and cardboard, toner cartridges, and cooking oil. Tripler provides medical treatment to Hawaii's military community.
- Results: Averaging 40% solid waste reduction; 176 tons per year in recycled material.
- Benefits: Enhance a team effort approach with the local community to preserve the Hawaiian Islands, improve employee morale and cost savings.
- Challenges: Waste reduction takes a team effort through the cooperation and support of the Staff at Tripler Army Medical Center and the Command leadership in Headquarters, Chief - Preventive Medicine Service and Chief - Logistics Division. We formed the Functional Management Team for the Environment of Care.
- Savings: Estimated cost savings of \$256,000 annually.
- http://www.opala.org/recycling_businesses/partnership_for_env.htm#trip1e

MERCURY FREE BY 2005

H2E Making Medicine Mercury Free Awards

www.h2e-online.org/awards











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Understand your Waste Streams –

There are generally six categories of waste are used to describe hospital waste:

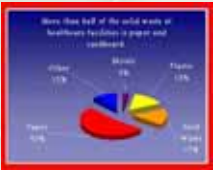
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Infectious Waste - also known as red bag waste or regulated medical waste – a portion of medical waste that has significant potential to transmit disease
- 
Hazardous Chemical Waste – Waste that may cause or contribute to increase mortality or increased illness, or pose a present or potential hazard to human health or to the environment when improperly managed.
- 
Recyclable/Reusable Materials – materials that can be diverted from disposal through recycling or reuse.
- 
Solid Waste – also known as garbage, trash, rubbish – waste that is not infectious or hazardous, and cannot be recycled or reused.
- 
Radioactive Waste – waste, due to its radioactivity, that must be handled and disposed according to strict federal laws.
- 
Chemotherapy Waste – hazardous drugs that must be source segregated and disposed of according to state and federal regulations.

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Hospital Waste Facts

Solid waste comprises the largest portion of a healthcare facility's waste, about 70-80 percent.

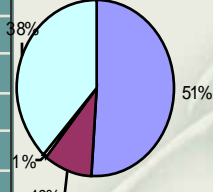
About half of a hospital's solid waste stream is paper and cardboard (45%). These wastes can be easily reduced and recycled.



Healthcare institutions that have engaged in full-fledged waste reduction efforts have realized disposal cost savings of 40-70 percent.

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250 bed facility ~ total waste cost \$315,000



- Solid Waste: ~ 1200 tons @ \$70-\$120/ton = \$96,000
- RMW: ~ 225 tons @ \$600-\$1000/ton = \$180,000
- Hazardous Chemical Waste: ~19 tons @ \$1K-3K/ton = \$38,000
- Recycling: Assumes breakeven costs. Avoided landfill cost of \$72,000!

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Waste management worksheet

	Solid Waste*			Recycling			Benefit	RMW			Hazardous Waste			Total		
	lbs	tons	Cost	lbs	tons	Cost		lbs	tons	Cost	lbs	tons	Cost	lbs	tons	Cost
Jan	0	0.00	\$0	0	0.00	\$0	\$0	0	0.00	\$0	0	0.00	\$0	0	0.00	\$0
Feb	0	0.00	\$0	0	0.00	\$0	\$0	0	0.00	\$0	0	0.00	\$0	0	0.00	\$0
March	0	0.00	\$0	0	0.00	\$0	\$0	0	0.00	\$0	0	0.00	\$0	0	0.00	\$0
April	0	0.00	\$0	0	0.00	\$0	\$0	0	0.00	\$0	0	0.00	\$0	0	0.00	\$0
May	0	0.00	\$0	0	0.00	\$0	\$0	0	0.00	\$0	0	0.00	\$0	0	0.00	\$0
June	0	0.00	\$0	0	0.00	\$0	\$0	0	0.00	\$0	0	0.00	\$0	0	0.00	\$0
July	0	0.00	\$0	0	0.00	\$0	\$0	0	0.00	\$0	0	0.00	\$0	0	0.00	\$0
Aug	0	0.00	\$0	0	0.00	\$0	\$0	0	0.00	\$0	0	0.00	\$0	0	0.00	\$0
Sept	0	0.00	\$0	0	0.00	\$0	\$0	0	0.00	\$0	0	0.00	\$0	0	0.00	\$0
Oct	0	0.00	\$0	0	0.00	\$0	\$0	0	0.00	\$0	0	0.00	\$0	0	0.00	\$0
Nov	0	0.00	\$0	0	0.00	\$0	\$0	0	0.00	\$0	0	0.00	\$0	0	0.00	\$0
Dec	0	0.00	\$0	0	0.00	\$0	\$0	0	0.00	\$0	0	0.00	\$0	0	0.00	\$0
TOTAL	0	0.00	\$0	0	0.00	\$0	\$0	0	0.00	\$0	0	0.00	\$0	0	0.00	\$0

<http://www.h2e-online.org/pubs/WasteMgtTemplate.xls>

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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



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10 Steps to Reducing RMW



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

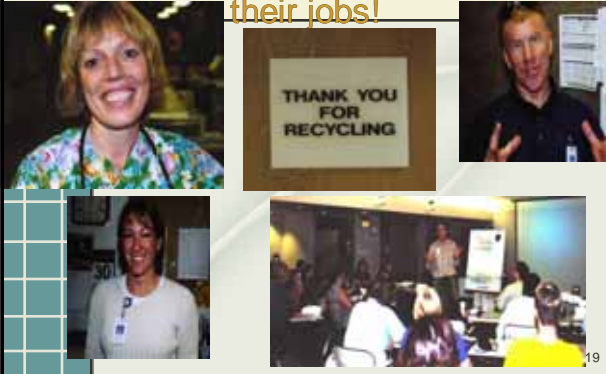
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Empowering our workforce



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Employees support and participate in environmental protection as part of their jobs!



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http://www.h2e-online.org/test/grnpurch/prod_cleaners.htm



Why Green Purchasing?

- H2E Champions: Consorta, AmeriNet, Premier, VHA/Novation (HealthTrust Purchasing Group)
- Develop demand for greener products and services
- Help meet environmental goals through markets rather than mandates
- Recycled Products Made in Hawaii
 - http://www.opala.org/recycling_at_home/recycled_products.html

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A(aloha)-Bay: An E-mail Bulletin Material Exchange



- **Why Material Exchanges are Important?** The "A-Bay" saves resources in avoiding purchasing costs, avoided purchasing costs, avoided landfill cost and landfill space.
- E-mail the "A-Bay" with a list of items wanted or to give away. For in-house use only. Include the item(s) description, condition, quantity, and who interested parties should call or e-mail for pick-up arrangements.
- "Monitor" the "A-Bay" for postings of available or wanted items.

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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.

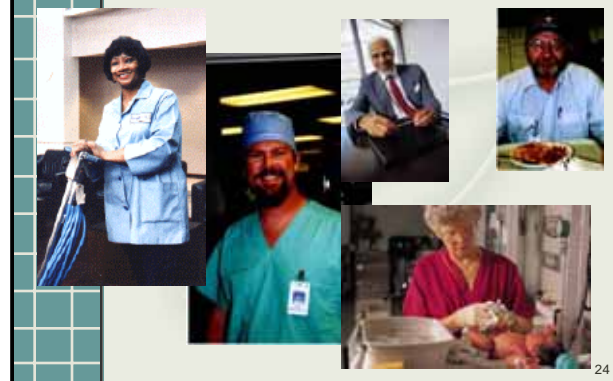
H2E Environmental Leadership Award is the premier H2E award given annually to facilities that are setting the "industry standard" for environmental programs and policies. These facilities have active, ongoing waste and mercury-use elimination programs that will serve as models for other hospitals across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



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

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People Change the Culture



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