Environmental Health – Preventive Care

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It started with a ... in 1996
Country education and training workshops
The Accuracy of Alternatives to Mercury Sphygmomanometers

AUTHOR:
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Mercury in Dental Amalgam and Resin-Based Alternatives: A Comparative Health Risk Evaluation

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www.noharm.org
More trainings

- Brazil
- Chile
- China
- Ecuador
- Indonesia
- Latvia
- Lebanon
- Nepal
- Nicaragua
- Senegal
- Syria
- Tanzania
- Thailand
- Vietnam
TOWARD THE TIPPING POINT

WHO-HCWH Global Initiative to Substitute Mercury-Based Medical Devices in Health Care

A Two-Year Progress Report
...and brought us to the Minamata Convention in 2013
You can’t heal people on a sick planet!
Right to Environmental Health and Access to Health Care
HCWH Mission

Health Care Without Harm works to transform the health sector worldwide so that it becomes ecologically sustainable and a leading advocate for environmental health and justice across the globe.
What is HCWH doing?

- Making the link between the environment and health
- Evolving the Hippocratic Oath
- Leveraging the purchasing power of healthcare
- Activating health messengers for broader societal transformation
- Implementing a disease prevention agenda
Definition of Environmental Health

Environmental health is concerned with the aspects of the natural and built environment that affect human health.

"Environmental health addresses all the physical, chemical, and biological factors external to a person, and all the related factors impacting behaviors. It encompasses the assessment and control of those environmental factors that can potentially affect health. It is targeted towards preventing disease and creating health-supportive environments." (WHO Definition)
Strategic Assumptions on Environmental Health

1. Environmental factors are a key driver in human health outcomes.

2. Climate change is becoming a “meta driver” for environmental health.

3. The health care sector itself is a major contributor to the deterioration of environmental health conditions.

4. Improvement in environmental factors can have as large or even larger impact on health outcomes than improvements in treatment technologies and resources.

5. The health care sector has a moral obligation, and good business reasons, to be a force in improving environmental health. If it leveraged the full force of its business and political assets to this end, it could have a substantial and measurable global impact.
Environmental Factors = ¼ of global burden of disease - WHO
Hospitals Can Lead by Example and Promote Public Health by Reducing their Environmental Footprint
Healthcare’s Environmental & Human Health Impacts

Mercury
- Medical waste incineration
- Coal fire plants

Dioxins
- Persistent, bioaccumulative and toxic chemicals generated from incineration of medical waste

Toxicity and Indoor Air Quality
- Mercury, lab chemicals, cleaning chemicals, pesticides, pharmaceuticals

Chemicals of Concern
- DEHP in IV bags and tubes

Climate
- Energy intensive, 5% of EU Carbon

Nurses have one of the highest rates of asthma of any health profession
“Climate change is the biggest global health threat of 21st century.”

“The impacts will be felt all around the world – and not just in some distant future but in our lifetimes and those of our children.”

The Lancet
Climate change amplifies existing health risks

- Heat-related illnesses and death
- Extreme weather-related injuries and mortality
- Aggravated chronic illnesses
- Infectious diseases: vector-, zoonotic-, water- and food-borne diseases
- Asthma, respiratory allergies, and chronic respiratory disorders
- Malnutrition and child development complications
- Stress-related and mental health disorders
- Population displacement and migration
- Instability and conflict

Source: Sabbir, Wikimedia Commons
“The health sector must add its voice – loud and clear…we must fight to place health issues at the center of the climate agenda. We have compelling reasons for doing so. Climate change will affect, in profoundly adverse ways, some of the most fundamental determinants of health: food, air, water.”

- Dr. Margaret Chan, Director General of the World Health Organization, December 2007
According to the World Health Organisation, air pollution caused 7,000,000 deaths in 2012. That's 1 in every 8 deaths.
HEALTHY HOSPITALS
HEALTHY PLANET
HEALTHY PEOPLE

Addressing climate change in health care settings

Discussion Draft
HCWH EUROPE DEMANDS

HEALTH CARE WITHOUT HARM EUROPE

our climate demands:

- 40% energy savings reduction target
- 55% greenhouse gas (GHG) emission reduction target
- 45% increased renewable energy target
1996: HCWH Network launched – 28 orgs focused on incineration and mercury

1997: HCWH International Programme Launch

2001: First CleanMed US Conference

2003: Hospitals for a Health Environment (H2E) Launch

2004: First CleanMed Europe Conference Vienna

2007: H2E restructured as Practice Greenhealth

2008: Europe bans Hg thermometers and other instruments

2011: Global Green and Healthy Hospitals Agenda launched

2012: Minamata Convention banning the global use of mercury in health care is signed

2013: Healthier Hospitals Initiative (HHI) launched

Global Green and Healthy Hospitals (GGHH) network launched
PUBLICATIONS

- Annual Review 2013
- EDCs in Healthcare Leaflet (6 languages)
- Nanomedicine Report
- Unused Pharmaceuticals Report
Pharmaceutical Resource Center

Objective: Keep track of scientific articles, reports and books related to pharmaceuticals in the environment

Status: To be made into a campaign site that will incorporate news, videos and events
Factsheets

The era of nanomedicine

Nanomedicine refers to the study of nanoparticles and nanomaterials with dimensions of 1-100 nanometers. The nanoparticles are engineered to have unique medical effects based on their size and structure. Nanomedicine can be used to treat diseases, deliver drugs, and improve the delivery of drugs to targeted areas. Nanomedicine is also used to develop new medical devices and technologies. Nanomedicine has the potential to revolutionize healthcare.

What is nanomedicine?

Nanomedicine is an application of nanotechnology. Nanotechnology refers to materials that are 1-100 nanometers in size. Nanomaterials are engineered to have unique medical effects based on their size and structure. Nanomaterials can be used to deliver drugs, improve drug delivery, and develop new medical devices. Nanomedicine has the potential to revolutionize healthcare.

Nanomedicine products are already on the market.

Nanoparticles are already on the market, including nanoparticles used in cancer imaging and therapy. Nanomaterials are also being used in medical devices such as stents and dental implants.
HCWH Europe Members
Social Responsibility in Procurement
Stockholm County Council
Substances to be Phased-Out

- Alkyl phenol ethoxylates
- **Arsenic and its compounds** *Exception: 0.1% in brass alloy in*
- **Azo dye substances**
- Lead and its compounds
- Brominated Flame retardants (*Exception: medical devices and construction equipment*)
- CFC (Chlorofluorocarbons)
- Cyclohexane
- Diflubenzuron
- Hydrofluoric acid (*Exception: Hydrofluoric acid less than 7%*)
- Formaldehyde
- Phthalates
- FTOH (Flouro-telomer alcohol)
- Certain Dye substances
- Glutaraldehyde (*Exception: Use for fixation of preparations*).
- HCFC (Hydrochlorofluorocarbons)
- Heptane
- **Hydroquinone**
- **Cadmium and its compounds**
- Chlorhexidine *Exception: Medical use.*
- Chloroparaffins C10-13
- Colophonium and modified colophonium
- Copper

- **Chromium (VI) compounds**
- Sodium dichromate (dihydrate)
- Potassium dichromate
- **Mercury and its compounds**
- Perfume substances
- Pentachlorophenol
- Permethrine
- PFAS (Perfluorinated substances)
- Piperonyl butoxide
- Polycyclic aromatic hydrocarbons
- Pirimicarb
- PVC
- Pyrethrins I and II
- Silver and its compounds (*Exception (silver): Medical equipment and dressings)*
- *Exception (silver chloride – labs)*
- Organic tin compounds
- Triclocarban
- Triclosan
- Tris-(1-aziridinyl) phosphine
- oxide
- Zinc compounds
Energy label BUND - Germany

Energy certificate for five years, criteria: reduce CO2 by 25% in five yrs, cont. Energy reduction of energy use, long-term optimal energy consumption, energy management
Over 133 000 MWh energy saved  23 000 MWh/a electricity and 110 000 MWh/a heat
Over 55 000 tonnes of CO2 saved (~ annual output of 1400 households in DE)
Hospitals save 100K – 2.1M EUR/year
Global Green and Healthy Hospitals

Agenda: 10 Goals

- Leadership
- Chemicals
- Waste
- Energy
- Water
- Transportation
- Food
- Pharmaceuticals
- Buildings
- Purchasing
Case Studies

These case studies serve to celebrate GGHH members' work and document what they have achieved. They can also serve as the basis for generating publicity that highlights what is possible and to motivate others to join the effort.

Leadership

- Argentina Community Gardening at the Italian Hospital of San Justo, Buenos Aires. Download case study (in Spanish)
Communities dedicated to each of the 10 GGHH Agenda goals with:

- Discussion Forums
- Global Teams of Experts
- Tools and Resources
- Case Studies
- Multi-lingual capability
GGHH Connect- New Tools and Resources

Guidance Documents
- Overview of each goal
- Suggested action items and projects
- Strategies and tips for implementation
- Additional resources for learning/research

Self-Assessment Checklists
- Baseline picture for new members
- Suggested project focus areas
- Track progress year after year
Welcome To GGHH Connect!

Streams

My Communities

Looking For Help?

Read our How to Guides, get in touch with our Help Desk, find technical assistance, ask questions, learn more here.
New EU Directive Procurement 2014/24/EU

• The choice to procure sustainable is with authority

• Scope depends on national transposition Article 67(2), 57(4) and 71(6)(b)

• New meaning of ‘most economical advantageous tender’ Article 67

• Labels as ‘means of proof’ Article 43

• Exclusion criteria – Article 57

• MS responsibility to comply with existing environmental, social and labour laws Article 18 (2)

• Link to subject matter Article 67(3)
Clean Med Conferences

May 2015 Portland, Oregon - US
http://www.cleanmed.org/

October 2015 Copenhagen - DK
http://www.cleanmedeurope.org/

Thank you!  www.noharm.org
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