Healthier Hospitals

A PRACTICE GREENHEALTH PROGRAM

Leading communities to a healthier future

Healthier Hospitals
Healthy Interiors Goal

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Objectives

1. Healthier Hospitals Background
1. Growing concern - healthy interiors
1. Drivers behind greener furnishings
1. Specifying Healthy Interiors Resources
1. Next Steps and why this is good for your company

Do No Harm

https://vimeo.com/142891043

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PRACTICE Greenhealth

Mission and Goals

Health Care Without Harm

Our mission is to **transform health care** worldwide so that it reduces its environmental footprint, becomes a **community anchor** for sustainability and a leader in the global movement for **environmental health and justice.**

1. *Protect Public Health from Climate Change*
2. *Transform the Supply Chain*
3. *Build Leadership for Environmental Health*

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THE CENTER FOR HEALTH DESIGN™

Small Selection of Engaged Health Systems

“Where there is credible evidence that a material might result in harm to the environment or public health, we work to replace it with safer alternatives.”

Kathy Gerwig, Kaiser Permanente

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Advocate Health Care
Inspiring medicine. Changing lives.

Beaumont® | HEALTH SYSTEM

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Leading Communities to a Healthier Future

HHI has a real impact on the health and safety of patients, staff and communities

PREVIOUS PAUSE NEXT

CHALLENGES

- Engaged Leadership
- Healthier Food
- Leaner Energy
- Less Waste
- Safer Chemicals
- Smarter Purchasing

The Spark Blog

Archive

21 AUG

Top three Myths About Using Social Media

Upcoming Events

All Events

No upcoming events.

- **1307 hospitals enrolled in U.S. and Canada**
- **25% of hospitals committed to Safer Chemicals Challenge**

Market Influence

Total Number of Hospitals in the United States	5,686
Practice Greenhealth and HH-enrolled hospitals	1,865
Percentage of total U.S. hospitals in PGH and HH	33%
Hospitals enrolled in Safer Chemicals Challenge	294

Why Safer Chemicals?

Growing Concern for Healthy Interiors

- Flame retardants
- Formaldehyde
- Perfluorinated chemicals
- PVC
- Antimicrobials

WHO 2016 Report

- 1.3 million lives + 43 million disability adjusted life years

- Report only covers a small number of chemical exposures

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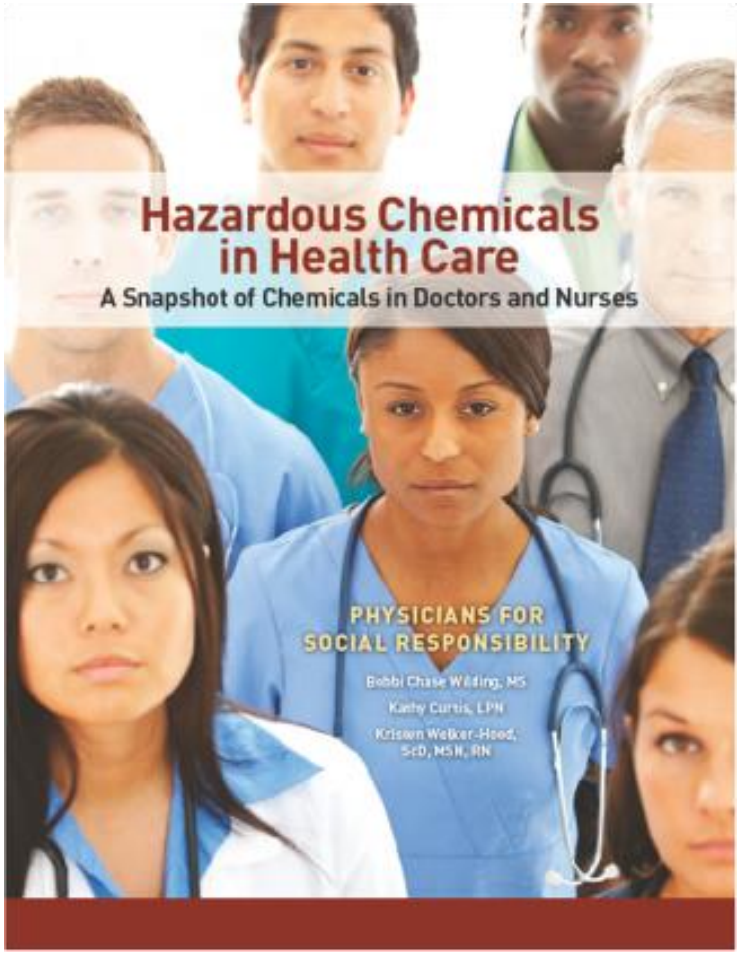
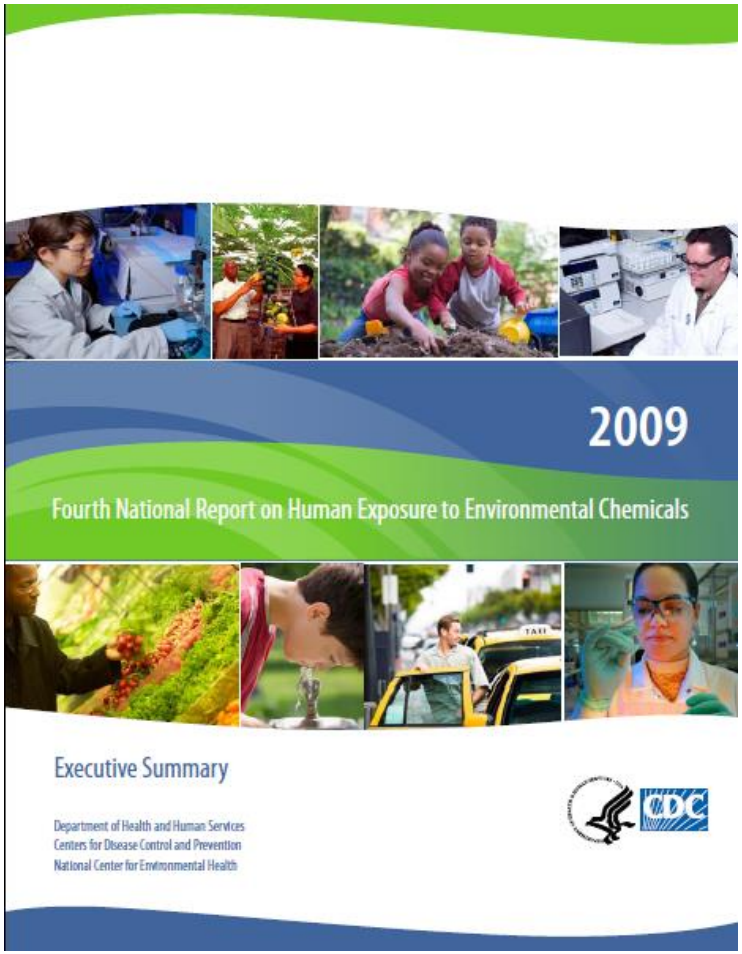
Widespread Exposure



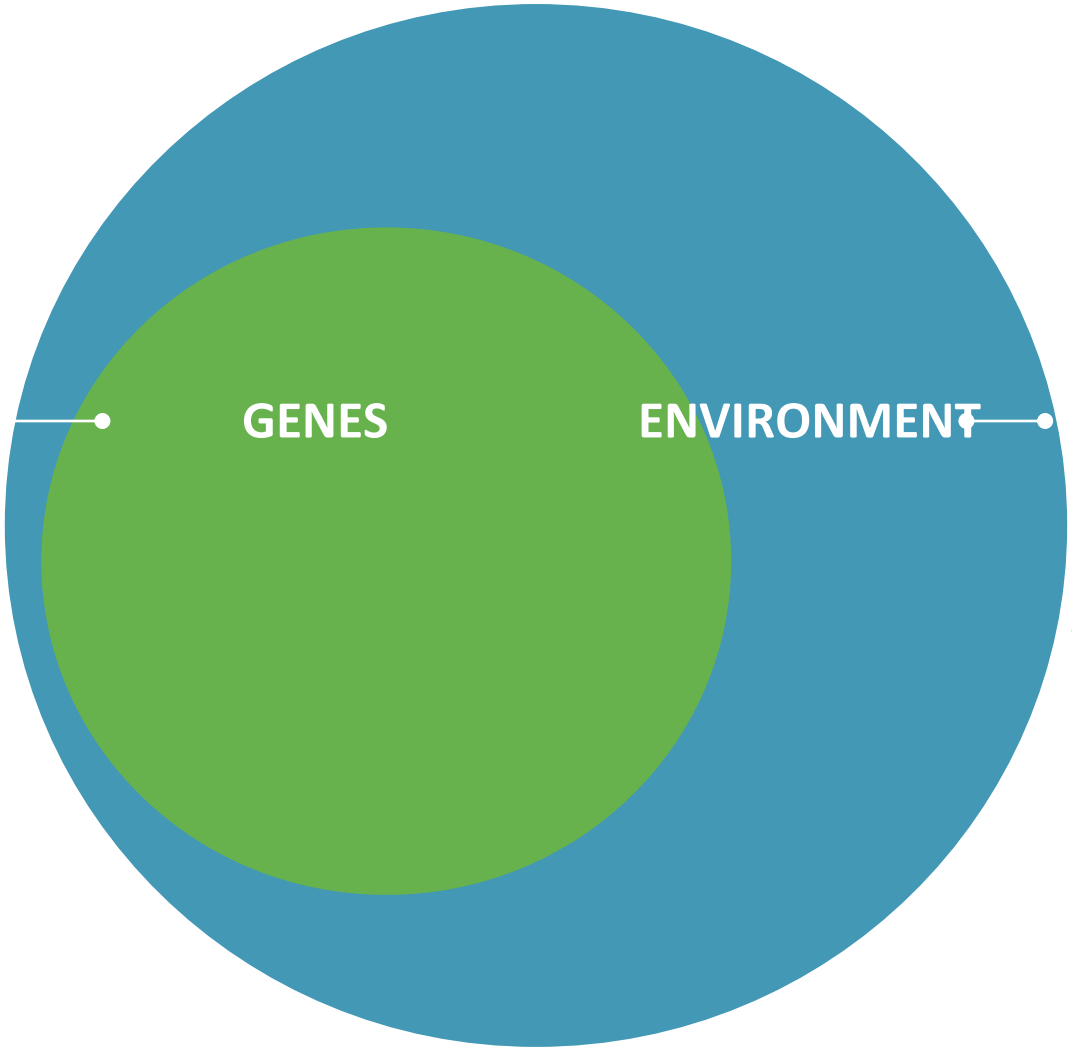


Multiple Routes of Exposure

- Inhalation
- Cross placenta transfer
- Breast feeding
- Dermal
- Ingestion

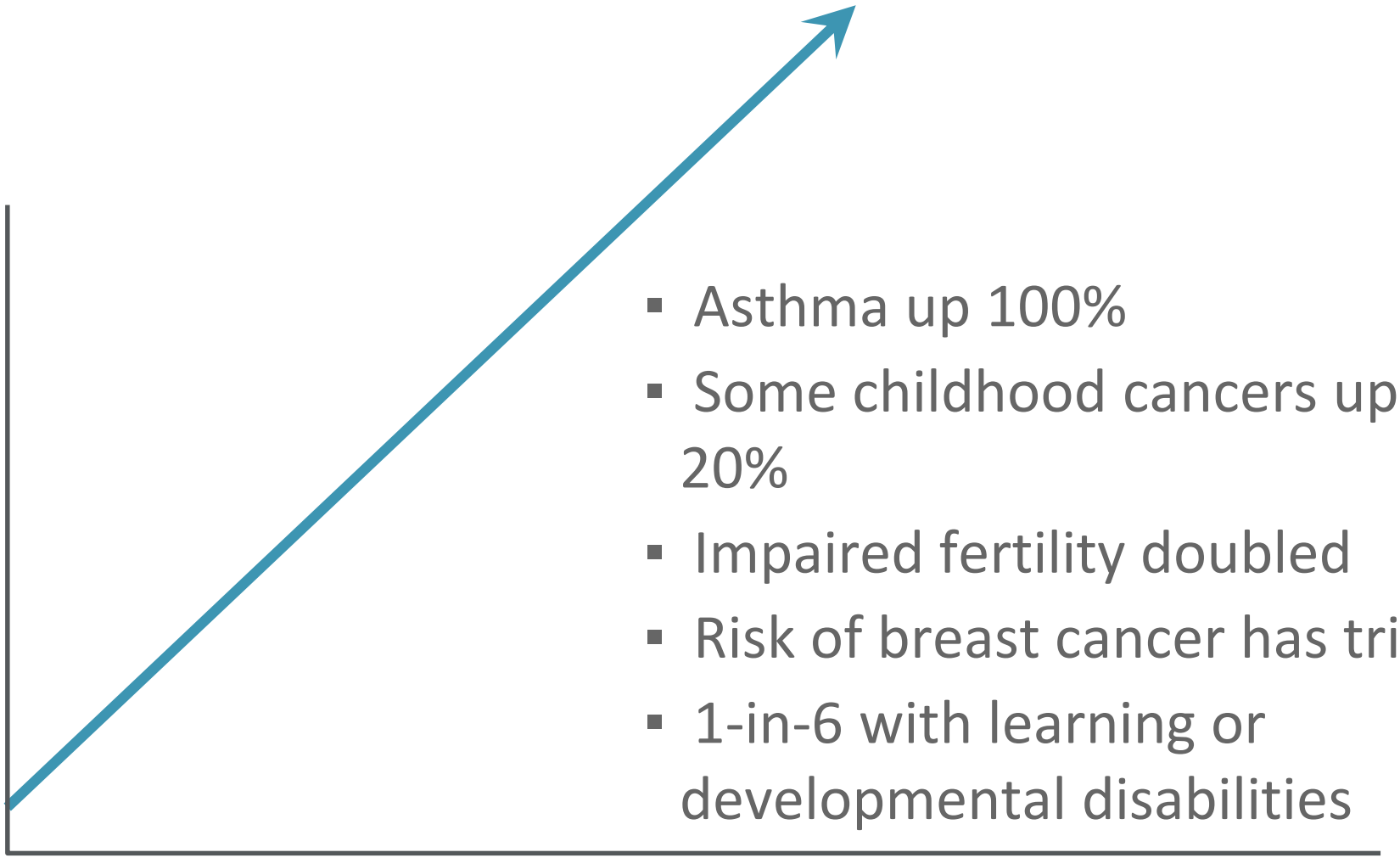
Genes & Environment Interact

Genes and environment are in continuous conversation



Psychosocial stressors
Nutrition
Toxic chemicals
Radiation
Infections
Physical agents

Diseases Linked to Environmental Exposure on the Rise



- Asthma up 100%
- Some childhood cancers up 20%
- Impaired fertility doubled
- Risk of breast cancer has tripled
- 1-in-6 with learning or developmental disabilities

“There has also been an explosion of knowledge about special vulnerabilities and differential exposures that children and pregnant women have to environmental toxicants. A growing body of research indicates potential harm to child health from a range of chemical substances.”

American Academy of Pediatrics Policy Statement, 2011

A first ever **national survey of nurses'** exposures suggests there are **links between serious health problems** such as cancer, asthma, miscarriages and **birth defects** and these exposures. The survey included **1,500 nurses** from all 50 states.

http://www.ewg.org/sites/nurse_survey/analysis/summary.php

Drivers

LEED Materials Credits (MR)

Cradle to Cradle (C2C)

Living Building Challenge – Red List

WELL Building Standard

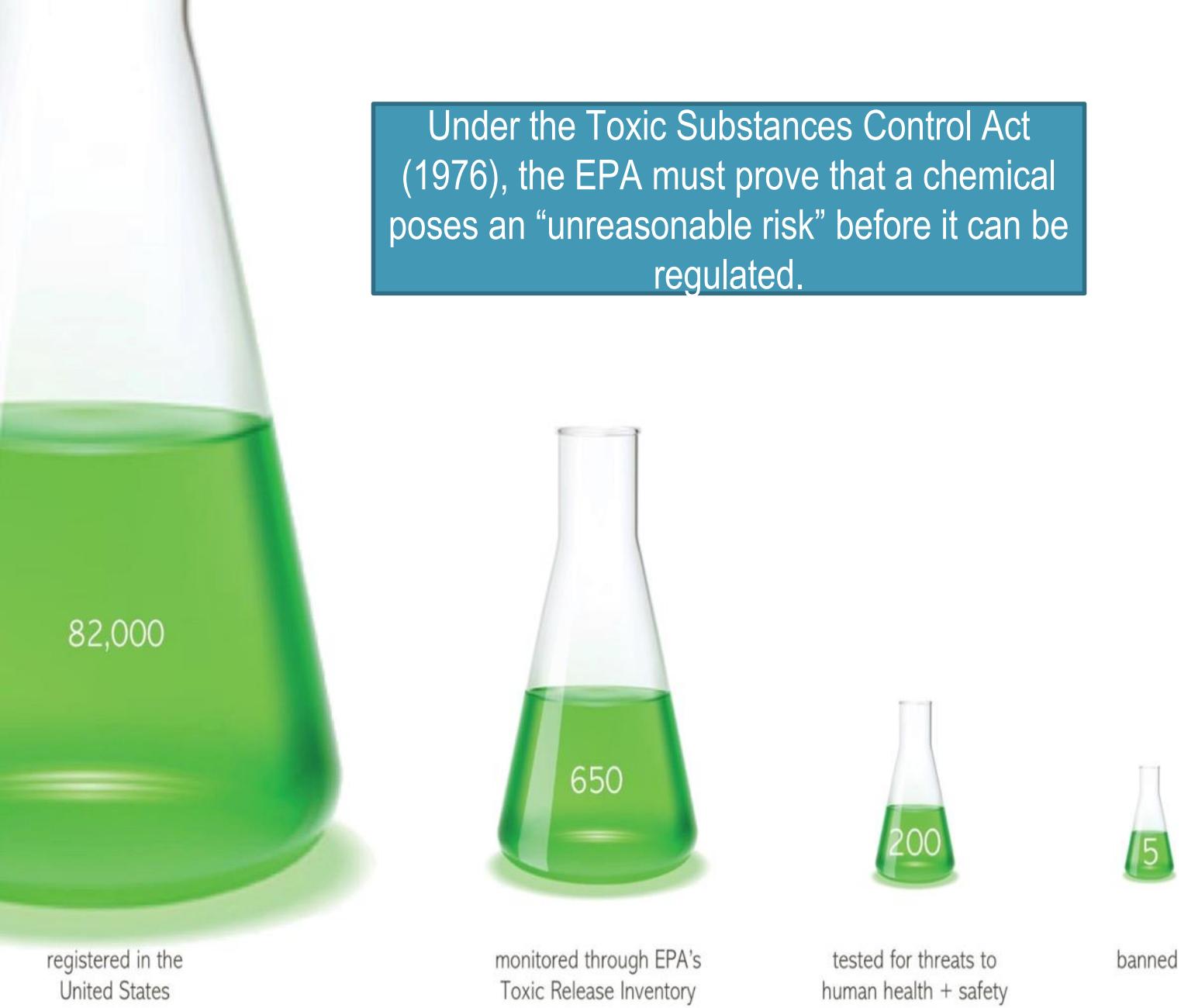
BIFMA “level”

Perkins + Will “Precautionary List”

GreenScreen

Health Product Declaration

Under the Toxic Substances Control Act (1976), the EPA must prove that a chemical poses an “unreasonable risk” before it can be regulated.



Chicago Tribune

QUESTIONS? CALL 1-800-TRIBUNE | SUNDAY, MAY 6, 2012 | BREAKING NEWS AT CHICAGOTRIBUNE.COM

TRIBUNE WATCHDOG

Playing with fire

A deceptive campaign by industry brought toxic flame retardants into our homes and into our bodies. And the chemicals don't even work as promised.

By Patricia Callahan and Sam Roe
Tribune reporters

CONSUMER PRODUCT SAFETY COMMISSION PHOTO

UP IN FLAMES: Government scientists found that chairs containing flame retardants, like this

Being a green company also means being held to the highest degree of **corporate transparency**."

– Steve Wasik, CEO of Sigg Switzerland

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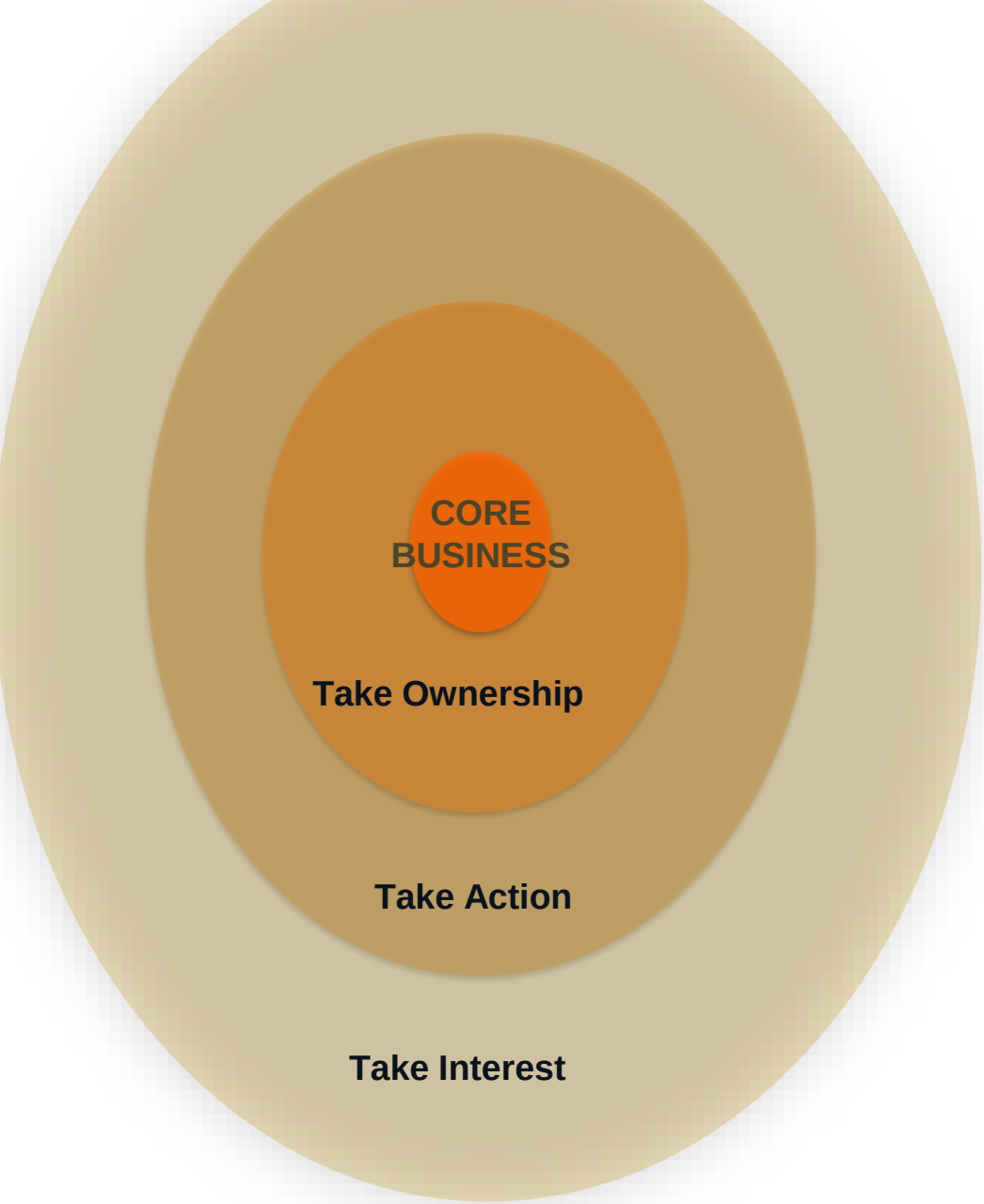
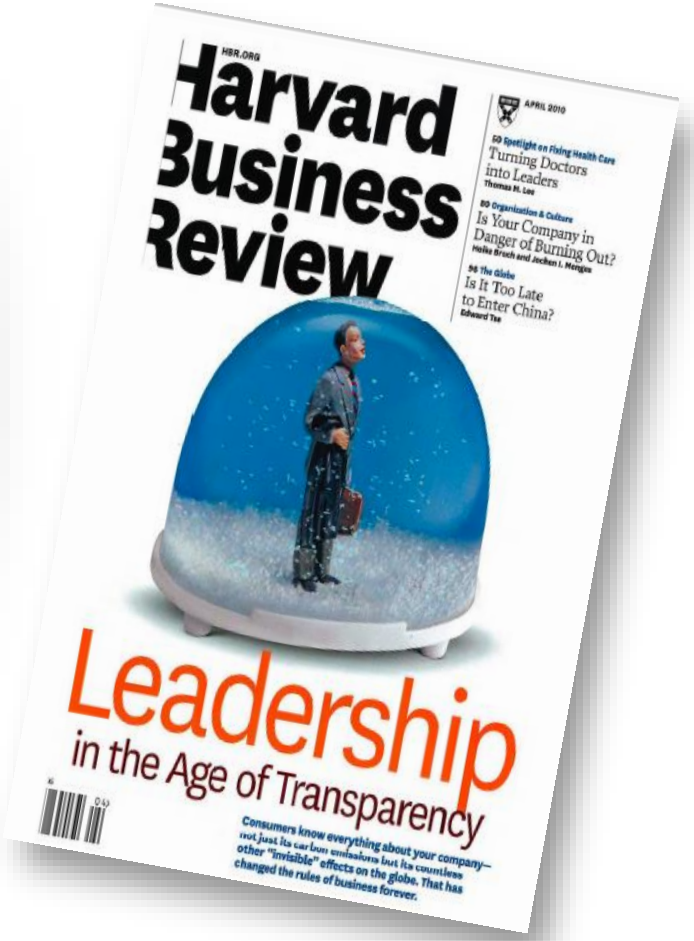

CORE BUSINESS
Take Ownership
Take Action
Take Interest


HBR.ORG
Harvard Business Review
APRIL 2010
Turning Doctors into Leaders
Is Your Company in Danger of Burning Out?
Is It Too Late to Enter China?
Leadership in the Age of Transparency
Consumers know everything about your company—not just its carbon emissions but its countless other "invisible" effects on the globe. That has changed the rules of business forever.

- Formaldehyde
- PFCs
- PVC
- Flame Retardants
- Antimicrobials

Why Healthy Interiors?

Healthy Interiors Goal

Ensure that 30 percent of the annual volume of furnishings and furniture purchases (based on cost) eliminate the use of formaldehyde, perfluorinated compounds, polyvinyl chloride (PVC), antimicrobials, and all flame retardants

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Furniture and Furnishings

- Seating (chairs, stools, sofas, benches, etc.)
- Beds (including mattresses)
- Surfaces (tables, desks, etc.)
- Built-in and modular casework
- Storage (cabinets, filing cabinets, dressers, drawers, etc.)
- Shelving (bookshelves, built-in shelves, etc.)
- Systems (walled desks with seating)
- Cubicle curtains and window coverings
- Panels and partitions

* Electronic components of furniture are exempt from the goal

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HH Chemicals Found in Health Care

Flame retardants: Electronics, Building insulation, Furniture, Wires/Cabling

PVC: Mattress coverings, Furniture, Fabrics, Flooring, Wall coverings

Formaldehyde: Furniture, Fabrics, Adhesives for multiple wood products

PFCs: Furniture, Fabrics, Carpeting

Antimicrobials: Furniture, Fabrics, Bedside tables, Flooring, Door handles

Flame Retardants

Rationale

- Known health effects of well-studied flame retardants:
  - Reproductive, neurocognitive, and immune system impacts
- Persistence, bioaccumulation, toxicity throughout life cycle
- Emerging health and safety concerns about alternatives
- Very significant data gaps
- Flame retardants showing up in dust

Guidance

- Must contain less than 1000 ppm of intentionally added flame retardants by weight of homogenous material where code permits

Polyvinyl Chloride (PVC) or Vinyl

Rationale

- Can create persistent, bioaccumulative, and toxic byproducts in manufacture and at end of life
- Carcinogenic and highly toxic chemicals in manufacture
- Requires use of additives (lead, phthalates)

Guidance

- Products must not contain PVC
- Small components exemption: > 1% of product by weight

Formaldehyde

Rationale

- Known human carcinogen
- Gastrointestinal or liver toxicant
- Reproductive toxicant
- Respiratory toxicant, asthma trigger
- Prop 65 carcinogen

Guidance

- Products must meet CA Section 01350 (*CA Department of Public Health (CDPH): Standard Method for Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers*) or an equivalent standard

Perfluorinated Compounds (PFCs)

Rationale

- Most manufactures moved from C8 to C6 chemistry (Shorter-Chain PFCs)
- Persistent in environment and bioaccumulative in people and wildlife
- Long half-life in animals (some less than C8s but they differ), not known for humans
- Adverse outcomes include kidney and testicular cancer, thyroid disruption, elevated total cholesterol, obesity
- Emerging Health Information
  - Endocrine disruptors
  - Carcinogenic
  - Reproductive and developmental toxicant

Guidance

- Must not use stain or water repellant treatments that contain PFCs

Antimicrobials

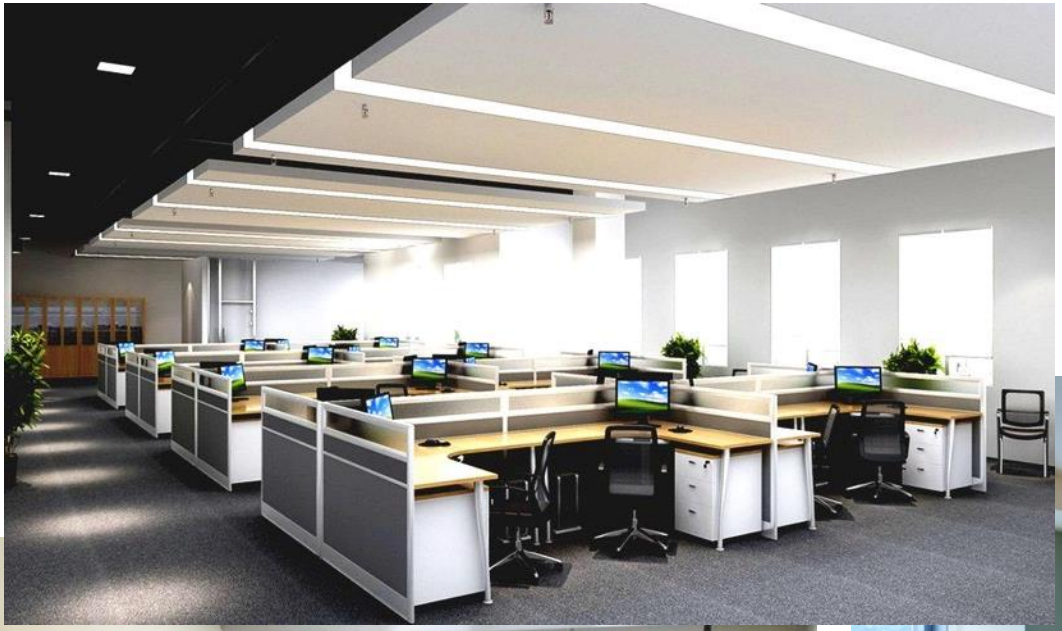
Rationale

- Based on current research, very limited evidence that the addition of antimicrobials to furnishings reduces rate of hospital-acquired infections (HAIs)
  - Emerging research on the efficacy of copper on high-touch surfaces
- Antimicrobials can have toxic properties without adequate data on health impacts
- Can lead to development of antimicrobial resistant organisms
  that may pose greater hazards

Guidance

- Must not contain triclosan, triclocarban, or antimicrobials without evidence of demonstrated efficacy in a clinical setting
- Requires evidence in a clinical setting of a reduction in HAIs

HH Chemicals Found in Institutional Furnishings



Guidance

Guidance to Achieve HH Safer Chemicals Challenge for Healthy Interiors

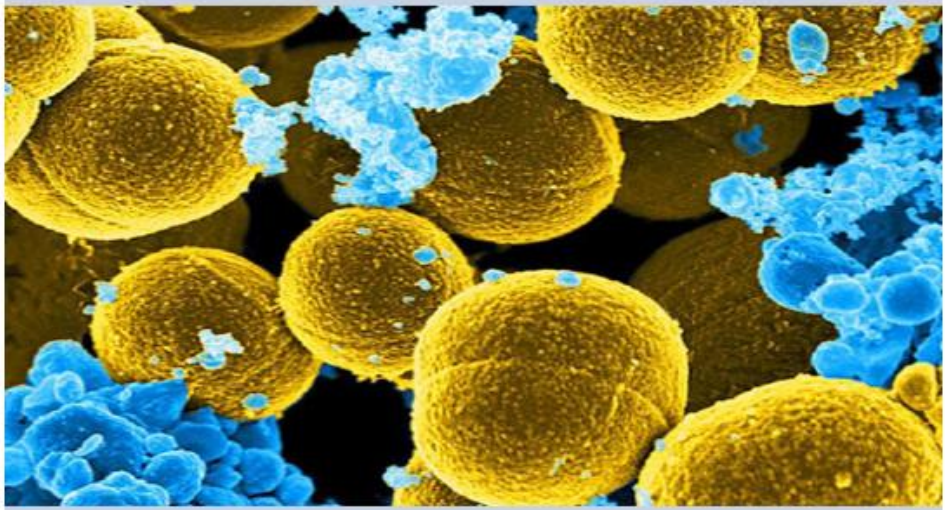
Version 2.0

December 2015

This document provides guidance for institutions and suppliers wishing to meet the requirements for the Healthy Interiors goal of the Healthier Hospitals Safer Chemicals Challenge, Version 2.0.

allseating
Allsteel
Carnegie
DESIGNTEX
DAVID EDWARD
enviroleather by LDI
Gressco
Gunlocke
HAWORTH
HermanMiller
HBF
HON
KI
Kimball Office
Knoll
LA-Z-BOY CONTRACT FURNITURE
knú CONTRACT
NATIONAL Furniture with Personality
naturepedic
OFS BRANDS
playscapes
SitOnIt • Seating
STANCE | HEALTHCARE Symbol of Strength
Steelcase
Stinson
stryker

Antimicrobials in Hospital Furnishings: Do They Help Reduce Healthcare-Associated Infections?



Ted Schettler MD, MPH

March 2016

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A PERKINS+WILL WHITE PAPER /

Healthy Environments:
What's New (and What's Not) With PVC

NOVEMBER 16, 2015

Healthy Building Network
Perkins+Will

PERKINS+WILL

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Imagine Cancer treatment centers built without materials linked to cancer

265 hospital pilots
Basis for LEED

Pediatric clinics free of chemicals that trigger asthma

Hospitals with healthy food, fresh air, sunlight

Why?

- Hospitals/businesses are making **purchasing decisions with new considerations.**

- Businesses are having to operate in a new era of **radical transparency**.

- **People matter.**

Next Steps: Join us!

Safer Chemicals

HHI Admin - Date: 12/3/2015 - 12:05 pm

Photo courtesy of HDR; © 2010 Farshid Assassi

Connect with HH

HH Challenges

- Engaged Leadership
- Healthier Food
- Leaner Energy
- Less Waste
- Safer Chemicals
  - Webinars and Sharing Calls
  - List of Furniture and Materials that Meet the HH Healthy Interiors Goal

http://healthierhospitals.org/hhi-challenges/safer-chemicals

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Questions?

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Appendix

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TB 133 vs. TB 117-2013

TECHNICAL BULLETIN 133	TECHNICAL BULLETIN 117-2013
Addresses public buildings or public assembly areas	Non- public occupancy or assembly buildings OR those public occupancy buildings that are fully sprinklered
Large open flame test	Smolder test
Typically met with FRs in fabric, foam, and/or barrier materials	Can be met without FRs
20%-30% more expensive to meet than TB 117-2013	Less expensive to meet than TB 133

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