There's Gotta Be a Better Way:

Reducing the Use of Toxic and Untested Chemicals in Products

Lara Sutherland

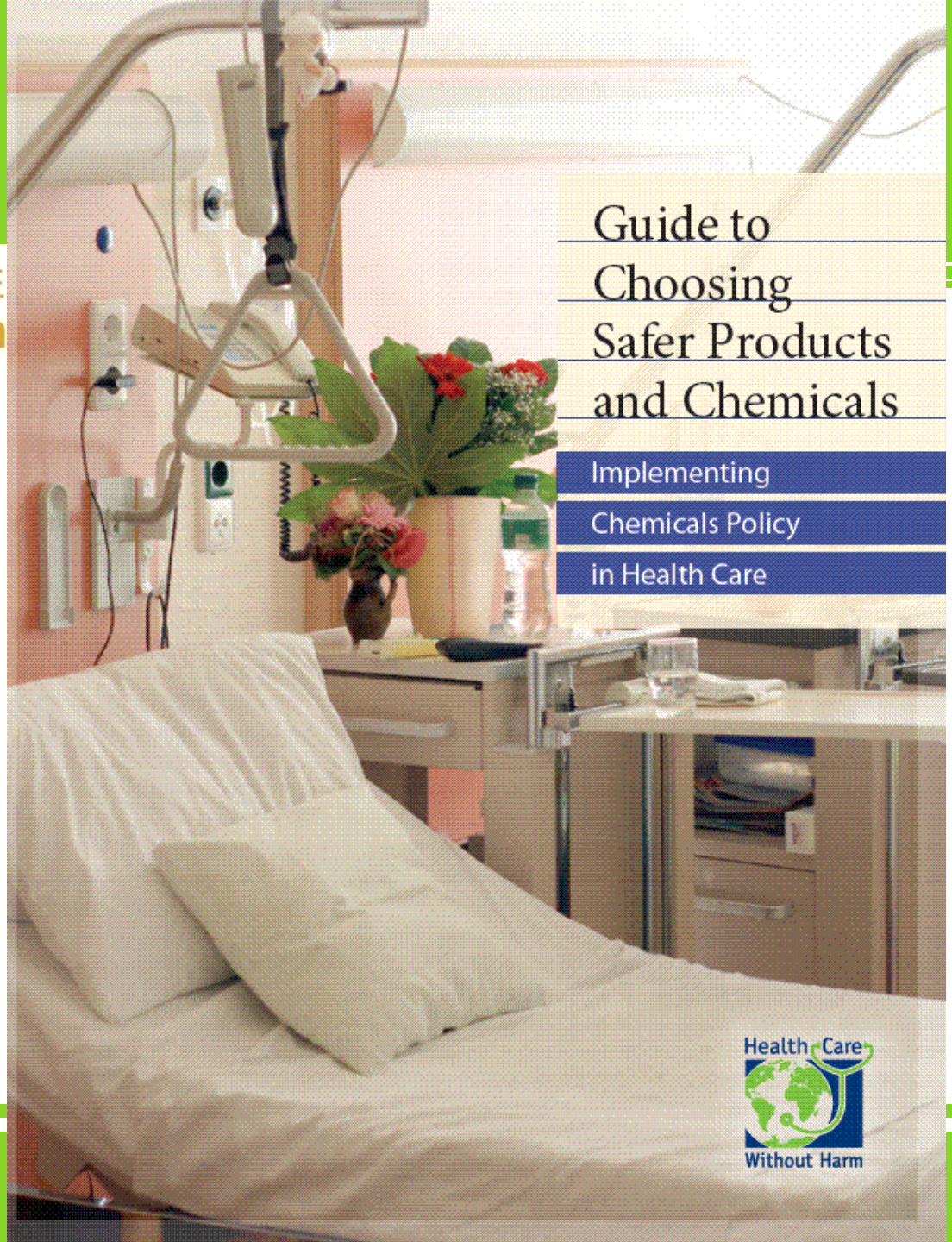
Practice GreenHealth

Health Care Without Harm

PRACTICE Greenhealth

Health Care Without Harm

PRACTICE Greenhealth



Today's Agenda

- Why should we take action to address toxic and untested chemicals in products?
- Steps institutions can take to address toxic and untested chemicals in products
- Strategies: Supply Chain and Advocacy Strategies

What do we know about chemicals?

True/False Game

Stand up and move to “True” or “False” area

Watch for word tricks

True

False

True or False?

All chemicals must have some testing for toxicity or environmental impact completed before being allowed on the US market.

FALSE

EPA can only require testing if existing information indicates risk.

True or False?

Approx. half of chemicals listed as available in US commerce now have a full set of basic toxicity test results publicly available.

FALSE

A full set of basic toxicity information is available for only 7% of these chemicals.

True or False?

California maintains a list of chemicals known to the state to cause cancer or reproductive toxicity.

TRUE

California maintains the Proposition 65 list.

True or False?

Products containing cancer-causing agents cannot be sold in California.

FALSE

Products containing listed carcinogens where consumers might be exposed must be labeled as such.

True or False?

California's list of chemicals known to the state to cause cancer or reproductive toxicity includes *all chemicals in commerce that may cause cancer*.

FALSE

List does not include untested chemicals that may cause cancer.

True or False?

The EPA maintains a central list of *all* chemicals in commerce that may be hazardous or cause disease through toxicity.

FALSE

There is no central list of hazardous chemicals in commerce.

True or False?

If all manufacturers stop using chemicals *known to be* hazardous, there will be no hazardous chemicals in the products we buy.

FALSE

Untested chemicals may be hazardous.

True or False?

Products containing toxic chemicals are strictly regulated so that no toxic chemicals are emitted to the environment during the entire product life-cycle.

FALSE

Many products emit or release toxic chemicals during use or after disposal.

True or False?

In the US, manufacturers are *not* required to disclose all ingredients in a product.

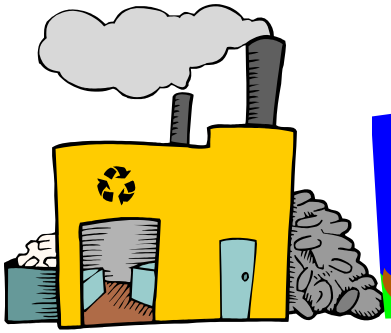
TRUE

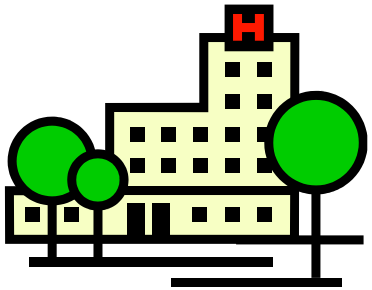
Material Safety Data Sheets including only ingredients the manufacturer deems hazardous.

Material Safety Data Sheet

- MSDS must list *hazardous* ingredients above 1% (0.1% for carcinogens).
- No enforcement of MSDS accuracy or definition of “hazardous.”
- Aberdeen Proving Ground found very high inaccuracy in MSDSs.

How do Chemicals End Up in the Environment?

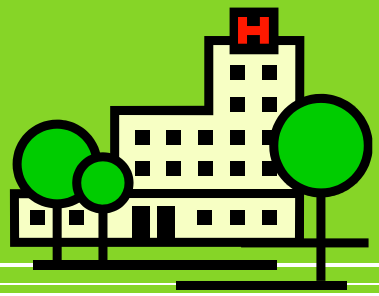




?

Health Care Without Harm

PRACTICE Greenhealth



What do we know?

- Chemicals can disperse from products into the environment
- Untested chemicals present in products
  - No way to know what products contain untested chemicals
- Known toxic chemicals in products
  - Also often unidentifiable

Supply Chain Strategy

- By seeking suppliers that share your environmental goals, you can use your purchasing dollars to support a shift in the marketplace.
  - Mercury thermometers
  - Cleaners

Environmentally Preferable Purchasing

- EPP is the process of selecting products and services whose environmental impacts have been considered and found to be preferable to those of comparable alternatives.
- “Considered,” not “Exhaustively Evaluated”

Known Toxic Chemicals

- What are you doing to address:
  - Mercury
  - Latex
  - PVC/DEHP
  - Halogenated (Brominated) Flame Retardants
  - Carcinogens

Targeted Chemical Approach

Targeted Chemical Strategy

- Identify targeted chemicals
- Ask suppliers for disclosure regarding targeted chemicals
- Where products otherwise equal, prefer products without targeted chemicals.

Health Care Without Harm

PRACTICE Greenhealth

VII. Suggestions for Tiered Priority Chemicals

1. Suggestion for Tier One Chemicals.

Organizations may wish to start with only a few chemicals or a short list of chemicals. See Appendix 1 for links to recommended lists.

Persistent, Bioaccumulative, Toxic Chemicals (PBTs) are a good choice for Tier 1 prioritization. Rationale: PBT chemicals are prioritized for phase out in many authoritative government programs because any PBTs released in the environment can contaminate the earth for years. Ecosystems cannot easily degrade persistent chemicals. These chemicals can travel by atmospheric transport far from their sources. Bioaccumulative chemicals build up in the food chain—animals cannot excrete them as quickly as they take them in. This effect can magnify exponentially up the food chain.

Asthmagens are chemicals that can trigger or induce asthma. Rationale: It is well-documented that patients, staff and visitors to hospitals and clinics are at some risk of experiencing an asthma attack. The presence of asthmagens and other respiratory toxicants poses threats particularly to people who are already ill. The prevalence of asthma in children and adolescents has risen by 25-75% per decade since 1960. Asthma in the workplace is the most commonly cited occupational lung condition. Workplace exposures result in decreased performance, lost work time and significant costs for health care. Prioritizing workplace hazards for reductions and elimination can result in improved performance, better patient outcomes, and decreased costs. Health Care Without Harm has developed a list of chemicals known to be associated with asthma in health care.[13]

Emerging Chemicals and Materials of Concern. These chemicals are usually persistent, bioaccumulative toxic chemicals, but concerns about them are too new for them to have been added to most authoritative lists. Emerging materials of concern could include some nanomaterials. **Rationale:** US PBT lists are *not* regularly updated, so they often miss chemicals that have recently been identified as problematic. Some of these chemi-

What are the limitations of using established chemical lists?

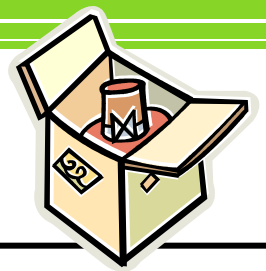
As described above, using lists of targeted chemicals is only one part of a comprehensive chemicals policy, because lists are always inherently incomplete and not comprehensive. Lists are incomplete for the following reasons:

- *Omission of untested chemicals.* Lists of chemicals with specific health risks (i.e. lists of carcinogens, or lists of reproductive toxicants) do not contain chemicals that have not been tested for this risk. A list of carcinogens contains only chemicals that have been *tested* for carcinogenicity, and for which there are a sufficient number of studies for scientists to be confident in the conclusions. Since most chemicals have never been tested for carcinogenicity, these lists are inherently limited.
- *Use of political, volume, environmental presence, or other criteria for inclusion.* Most lists use criteria other than toxicity or environmental attributes to determine which chemical gets on the list. Often these criteria are not explicit or are not applied equally to all chemicals, because the list was determined in the course of international negotiations or there is a public petition process to change the list.
- *No list for some endpoints.* For some toxicity endpoints, such as aquatic toxicity, no group has developed a list.
- *No list developed for the purpose of addressing chemicals in the supply chain.* All the lists described in Appendix 1 were developed for purposes other than implementing a supply chain chemicals policy. Some lists will be time-consuming for suppliers to review because they contain many items that are not relevant to this purpose—such as pharmaceuticals or they include hazards associated with activities, such as working under UV lamps. Most established lists do not specifically target toxic materials that may be rare elsewhere but tend to be used in health care.
- *No authoritative list for some endpoints.* For some endpoints, authoritative lists, such as those established by government bodies, are not available because there is no regular mechanism for establishing and maintaining such lists. For some of these endpoints, other groups have developed lists, and we note these in Appendix 1.

Standard Chemical Disclosure

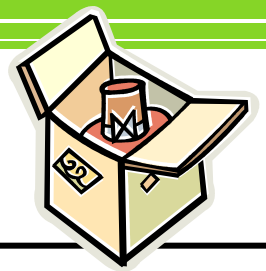
- Mercury
- Phthalates
- Halogenated flame retardants and other halogenated organics (chemical class)
- Persistent, Bioaccumulative Toxic chemicals (EPA Waste Min list)
- Carcinogens and Reproductive Toxicants (Prop. 65)

Which product is preferable?



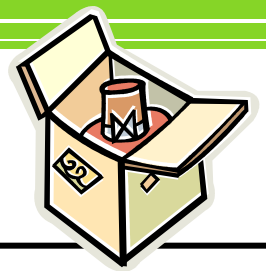
Product 1	Product 2
No mercury	No mercury
No phthalates	No phthalates
No halogenated organic	No halogenated organic
No listed PBT	No listed PBT
No listed carc/repro	Listed carc/repro
$2/gallon	$2/gallon

Which product is preferable?



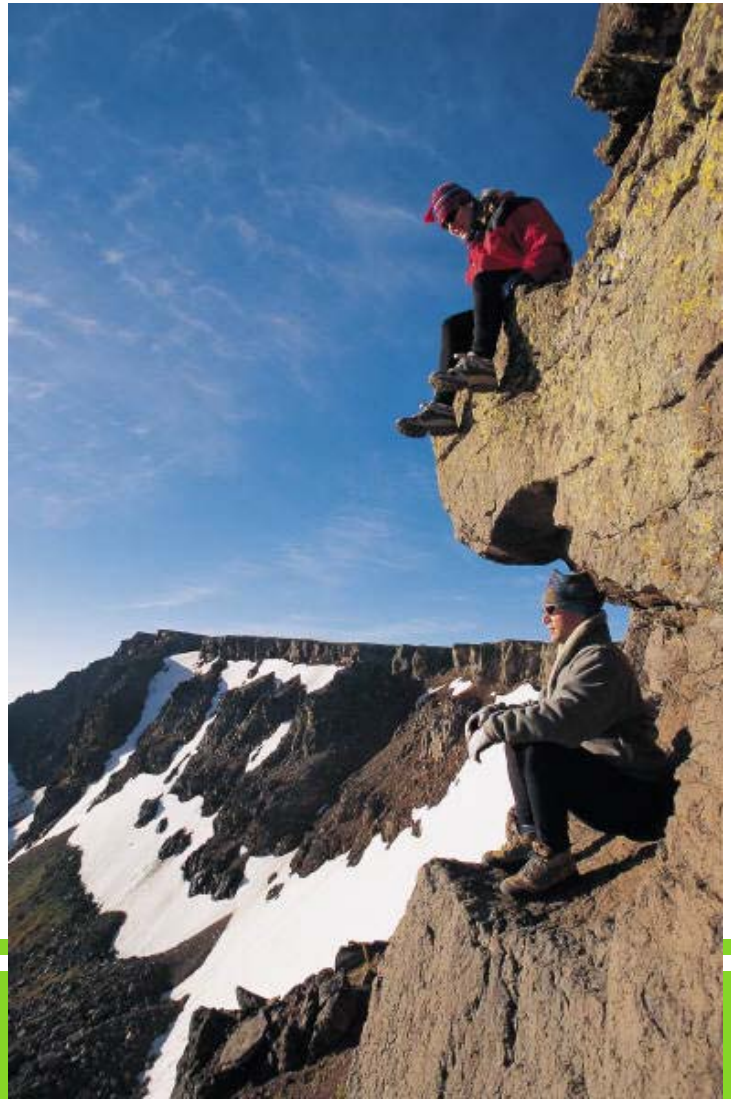
Product 1	Product 2
No mercury	No mercury
Contains phthalates	Contains phthalates
No halogenated organic	No halogenated organic
No listed PBT	No listed PBT
No listed carc/repro	No listed carc/repro
$25/case	$25/case

Which product is preferable?

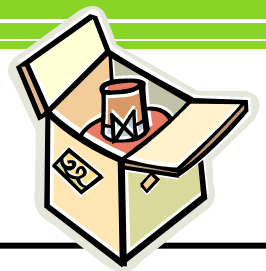


Product 1	Product 2
Contains mercury	No mercury
No phthalates	No phthalates
No halogenated organic	No halogenated organic
No listed PBT	No listed PBT
No listed carc/repro	Listed carc/repro
$2/gallon	$2/gallon

Data Gap Strategy

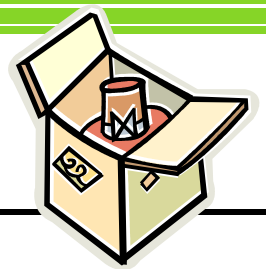


Which product is preferable?



Product 1	Product 2
No mercury	No mercury
No phthalates	No phthalates
No halogenated organic	No halogenated organic
No listed PBT	No listed PBT
No listed carc/repro	No listed carc/repro
Neurotoxicant	No neurotoxicant

Which product is preferable?



Product 1	Product 2
No mercury	No mercury
No phthalates	No phthalates
No halogenated organic	No halogenated organic
No listed PBT	No listed PBT
No listed carc/repro	No listed carc/repro
26 untested ingredients	No untested ingredients
Unknown Repro Toxin	No untested ingredients

Health Care Without Harm

PRACTICE Greenhealth

C1.1.1 SUPPLY CHAIN STRATEGY 1: NARROWING DATA GAPS

Supplier Questions

V. Suggested data gap supplier/manufacturer general questions with yes/no or essay answers

Choose some or all.

Topic	Example Question
Chemical Inventory	*Materials/Chemical Identification.* Have you inventoried all chemicals and materials used and generated in the production of the products you sell, across all product lines? [Please describe any progress you have made.]
Public Disclosure	*Full Public Ingredient Disclosure.* Do you publicly disclose full ingredient and materials lists for all your products, beyond what is required on Material Safety Data Sheets? [Please explain.]
Confidential Disclosure	Are you willing to give us full ingredient and materials lists for all your products available on this contract?
Toxicity Testing	*Review of Toxicity Testing.* Has a Screening Information Data Set (SIDS) screen or equivalent dossier of tests and screens been completed for all chemicals and materials used in all your products? [Please explain your progress.] (Information on SIDS is available in the Manual for Investigation of HPV Chemicals at http://www.oecd.org/document/7/0,2340,en_2649_34379_1947463_1_1_1_1,00.html)
Review Before Use	*Precautionary Review.* Does your company review all proposed new uses of chemicals and materials, such as nanomaterials, to determine if less toxic or safer alternatives are available, before the new chemical or material is used? [Please explain what criteria you use.]
Active Search for Replacements	*Targeted Replacement.* Are you targeting particular chemicals and materials of concern for elimination from your products? (Such as toxic metals, halogenated chemicals, polyvinyl chloride (PVC) plastic or persistent bioaccumulative toxicants.) [If so, please list chemicals you have targeted for elimination or reduction or URL where list is available.]
Review Before Use	Does your company avoid introducing the use of chemicals and materials that have shown evidence of toxicity, persistence, or bioaccumulation? [Please describe your screening method.]
Review Before Use	Does your company avoid introducing the use of chemicals and materials that do not have sufficient toxicity testing or that have not been evaluated for persistence or bioaccumulation?

Small Group Exercise

- Groups should include at least one person from each group:
  - Yellow: Procurement & Specifiers
  - Red: Provider
  - Purple: Advocacy Organizations
  - Green: Supplier

Data Gap Exercise

- You are a healthcare facility creating a supplier questionnaire for janitorial cleaners
- You have already addressed targeted chemicals and other environmental issues
- You want to address data gaps
- Create a form for the contract bidders to fill out.

Rules

- You have10 minutes to create a form
- Create a form that a Supplier can fill out in 5 minutes
- You don’t have to address every possibility
- You can use Guide and copy questions, but don’t have to use Guide

Trade Forms

- Trade your form with neighboring group
- Fill out the form you got. (5 minutes!)
- Supplier representatives, think about what you could reasonably answer and what you don’t know.

Report Back

- Why did you choose your question(s)?
- What challenges will suppliers have filling the form out?
- How can this information be used?
- How could this be improved?

How Can Vendors Answer These Questions?

- Vendors are often unable to obtain answers to these questions from the manufacturers of the products they sell.
- Vendors have told us they want a central source for chemical toxicity testing information.

Role of Government

- Should untested chemicals be allowed on the market?
- Would chemical testing requirements make it easier for health care facilities to evaluate products?
- Should the government create incentives for safer products to come to market?

Advocacy Strategy

- Some health care systems and GPOs have advocated in their states or at the national level for:
  - PBT chemical phaseout
  - More thorough testing requirements

Advocacy Strategy

Health care organizations have:

- Testified before regulatory agencies
- Sent letters of support for regulatory action

Guide to Safer Products and Chemicals

- Let us know how useful this guide is for you.
- Give us feedback for the next edition.
- We can help you develop a strategy for your institution.