



Safer Chemicals and Environmentally Preferable Purchasing (EPP)

Joint UCB/USGBC Workshop: Driving Safer Design with Information and Policy
February 20, 2014

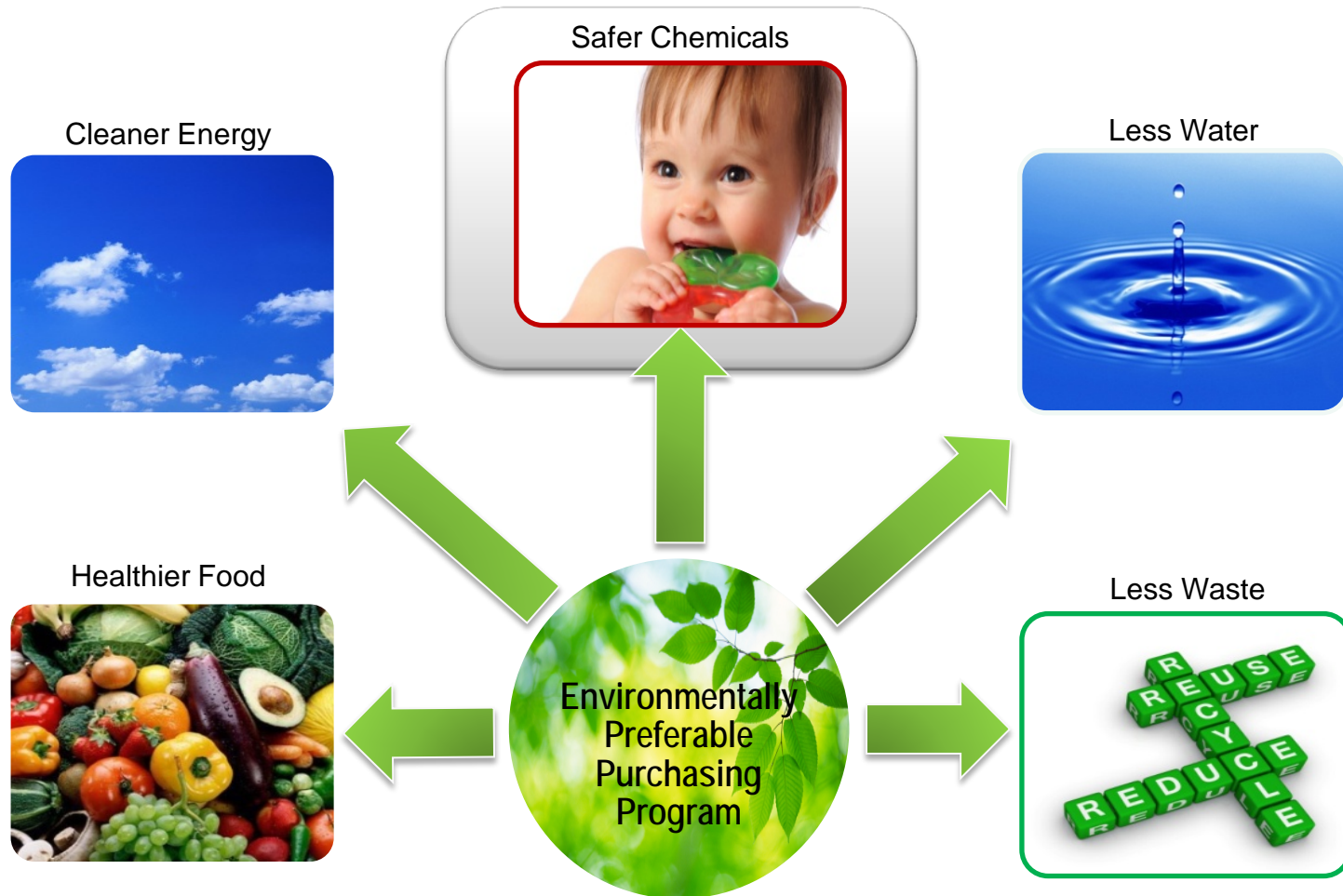
Vanessa Lochner, EPP Director

What is EPP?

Environmentally Preferable Purchasing (EPP)

- The purchase of products and services, the environmental impacts of which have been considered and found to be less damaging to the environment and human health when compared to competing products and services

EPP Attributes



Chemicals in Commerce

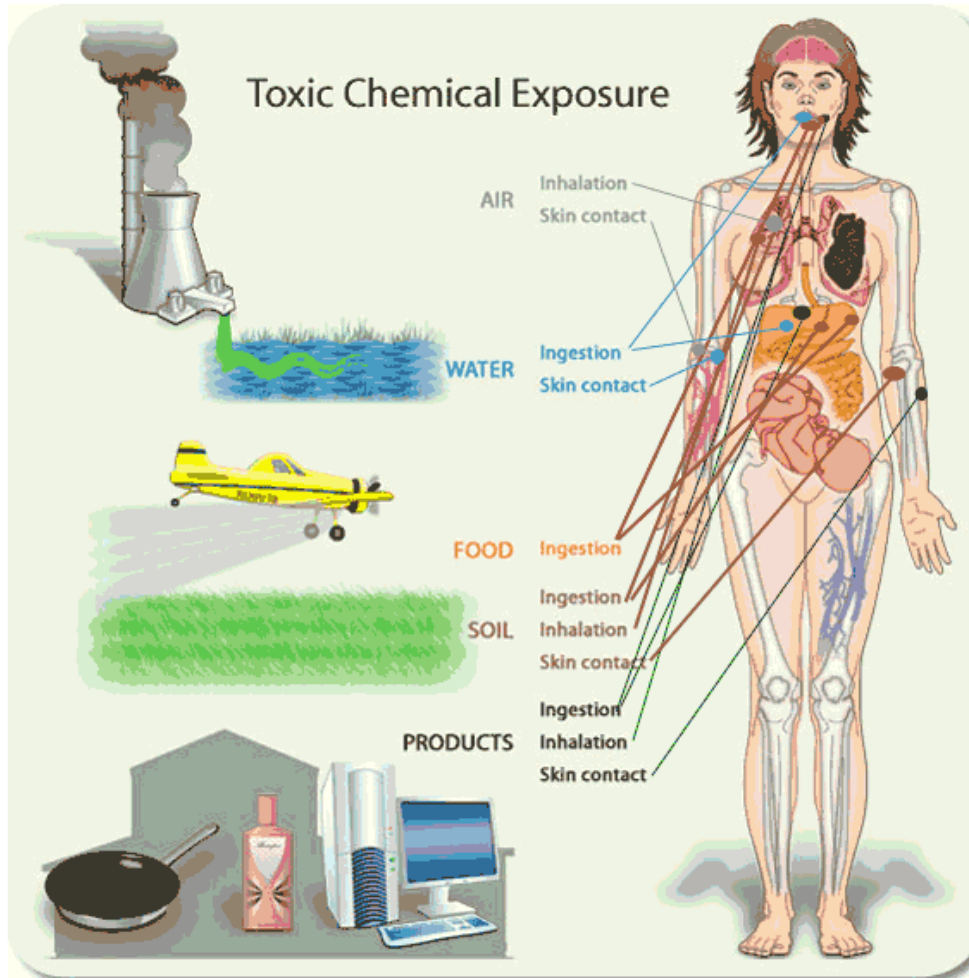
- Approximately 85,000 chemicals in United States commerce
- 2,000 new chemicals each year
- Few chemicals used by the industry are tested for safety, not required by regulation
- Only 5 chemicals have been banned or restricted by the EPA in 34 years

Exposure

Medical
Products

Skin Care
Products

Cleaners and
disinfectants



Building
Materials

Pesticide
Use

Equipment
and Furniture

Image Source: <http://www.completesense.com/gkconcerns.html>

1. World Resources Institutes, The 1994 Information Please Environmental Almanac
2. Lance A. Wallace, The Total Exposure Assessment Methodology (TEAM) Study: Summary and Analysis, Volume 1. Washington, DC. EPA, 1987.
3. Same as above
4. Nancy Sokol Green, Poisoning Our Children (The Noble Press, 1991)

Harmful Effects on Human Health

- Hormone system damage
- Early pubescence

Product chemical additives and components



- Neurological disorders
- Decreased IQ

- Cancer
- Seizures

- Reproductive system disorder
- Birth defects

Source: http://www.noharm.org/lib/downloads/chemicals/Chemical_Contamination_Cost.pdf
European Commission
National Research Council
Mt. Sinai School of Medicine Center for Children's Health and the Environment
Environment Canada

What Part of Our Chronic Disease Problem Comes from Chemicals?

1% of chronic disease*

3% of developmental disabilities**

5% of childhood cancer***

10% of diabetes, Parkinson's Disease and neurodevelopmental disabilities****

30% of childhood asthma***

Source: http://www.noharm.org/lib/downloads/chemicals/Chemical_Contamination_Cost.pdf

*European Commission

** National Research Council

***Mt. Sinai School of Medicine Center for Children's Health and the Environment

****Environment Canada

Kaiser Permanente Safer Chemical Strategies

- Environmentally Preferable Purchasing Policy
- Safer Chemicals Organizational Guideline
- Sustainability Scorecard for Medical Products
- Safer Chemicals Targeted Products

EPP Policy

History

In 2006, the EPP policy was created in support of Kaiser Permanente's mission to improve the health of our members and the communities we serve. The policy, which went into effect in May of 2006, requires that the principles of EPP be applied to all major purchasing decisions.

The EPP policy mandates the following specific environmental criteria for all purchasing decisions:

Avoid products containing:	Promote the purchase of:	Encourage suppliers to:
<ul style="list-style-type: none">• Persistent bioaccumulative toxic (PBT) compounds• Bisphenol-A (BPA)• Carcinogens, mutagens and reproductive toxic chemicals• Halogenated flame retardants• Chlorine-containing flame retardants• Latex• Mercury• Phthalates (e.g. plasticizer DEHP (di-2-ethylhexyl phthalate))• Polyvinyl chloride (PVC)• Volatile organic compounds (VOCs) and semi-volatile organic compounds	<ul style="list-style-type: none">• Building products, materials and furnishings that do not adversely impact indoor air quality• Building products, materials and furnishings that are approved by National Facilities Services Planning & Standards• Products with high post-consumer recycled content• Products that are readily recycled, reprocessed, and/or reused• Products that are latex-free• Products that do not contain or contain a reduced amount of toxins• Products that have "Take Back" provisions• Paper products that are chlorine-free	<ul style="list-style-type: none">• Package units in minimal packaging that is recyclable, non toxic or bio-based• Transport products with minimal packaging, move to bio-based packaging• Manufacture products that use less energy and water during normal use• Manufacture products that use less water and energy during manufacturing• Manufacture products with attributes listed (i.e., chlorine-free, latex-free, non-toxic)

Organizational Guideline

Chemicals

To advance an economy where the production and use of chemicals are not harmful for humans as well as for our global environment and its non-human inhabitants, Kaiser Permanente adopts the following five guiding principles for chemicals:

1. Understand product chemistry
2. Assess and avoid hazards
3. Commit to continuous improvement
4. Support specified industry standards
5. Inform public policies

Kaiser Permanente Sustainability Scorecard for Medical Products

Corporate Level Questions

Corporate-level questions apply to your company's total performance. Including but not limited to headquarters, owned, operated, or leased manufacturing facilities, subsidiary manufacturing facilities, and partner manufacturing facilities.

(Answer Type)

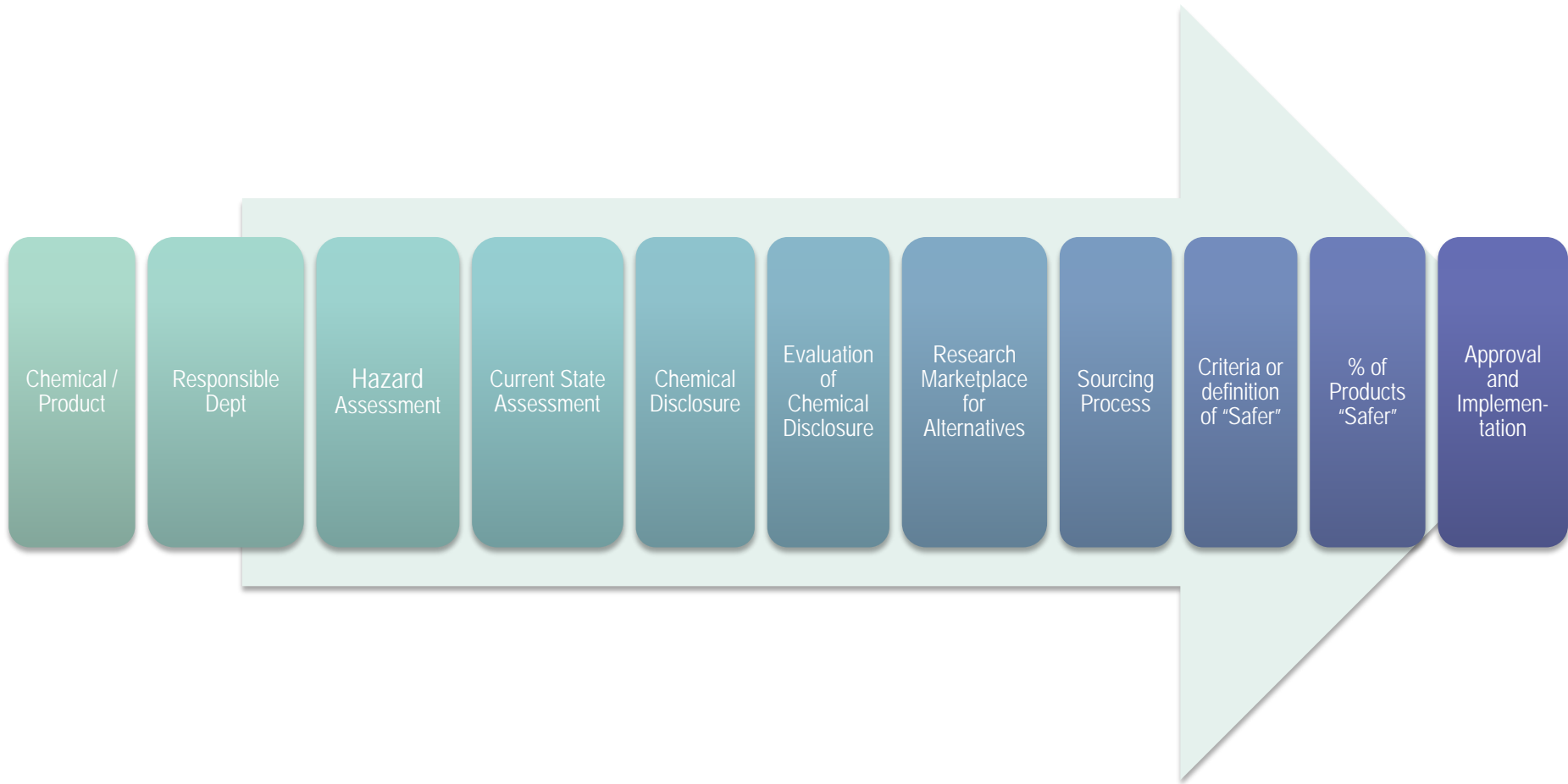
General	1	Please attach your company's environmental or sustainability statement or policy.	Attachment
	2	Does your company have an established environmentally preferable purchasing and supply chain program? If so, please describe.	Y/N, description
	3	Does your company have a goal to steadily increase employee access to local, sustainable food in your cafeterias and vending areas?	Y/N
	4	Has your company published a sustainability report? If yes, for how many years?	Y/N, # of years
	5	Do you participate in any public reporting, such as through the Global Reporting Initiative (GRI, www.globalreporting.org), Ceres, or similar programs? If yes, please list.	Y/N, list
	6	What percent of total facilities that manufacture products sold by your company and its subsidiaries are certified under ISO 14001?	%
	7	In the previous fiscal year (FY), what was the monetary value (in US dollars) of significant fines (including those currently under appeal), and total number of non-monetary sanctions, for non-compliance with local, national, or international environmental laws and regulations?	\$, #
Natural Resources/Waste	8	In the previous FY, what percent of total waste generated by your company and its subsidiaries was recycled or reused? ¹⁰	%
	9	What percent of total weight or volume of manufacturing input material is recycled material? ⁵ (Use GRI estimation methods to obtain answer)	%
	10	Do you offer any end-of-life product take-back programs, including electronics? If so, please list all items you take back for responsible recycling, donation, or reuse, and outline the process for participating in the program.	Y/N, list
Energy/Climate	11	Do your internal and take-back recycling programs exclusively use qualified or certified e-Stewards (http://e-stewards.org/certification-overview/) to ensure proper handling of all electronic products and materials through final disposition?	Y/N
	12	Have you measured and taken steps to reduce your company's and its subsidiaries' greenhouse gas emissions (GHG)? For how many years? Have you opted to report your GHGs and climate change strategy to the Carbon Disclosure Project (CDP)?	Y/N, # of years, Y/N
	13	In the previous FY, what percent of energy your company and its subsidiaries consumed was derived from eligible renewable sources? ⁸	%
	14	Does your company require the purchase of EPEAT-registered electronic products for internal use? (www.epeat.net)	%
	15	Does your company require the purchase of EnergyStar-rated electronic products for internal use? (www.energystar.gov)	%
Chemicals	16	Are all entities managing your distribution and transportation EPA Smartway Partners? If so, provide a weighted average of their scores. (http://www.epa.gov/smartway/basic-information/index.htm)	Y/N, weighted avg
	17	Do you have a commitment to know all of the chemical and material ingredients, above 100ppm, of products sold by your company and its subsidiaries in the United States? If yes, is the list publicly available or available through a third party?	Y/N

SKU-Level Questions

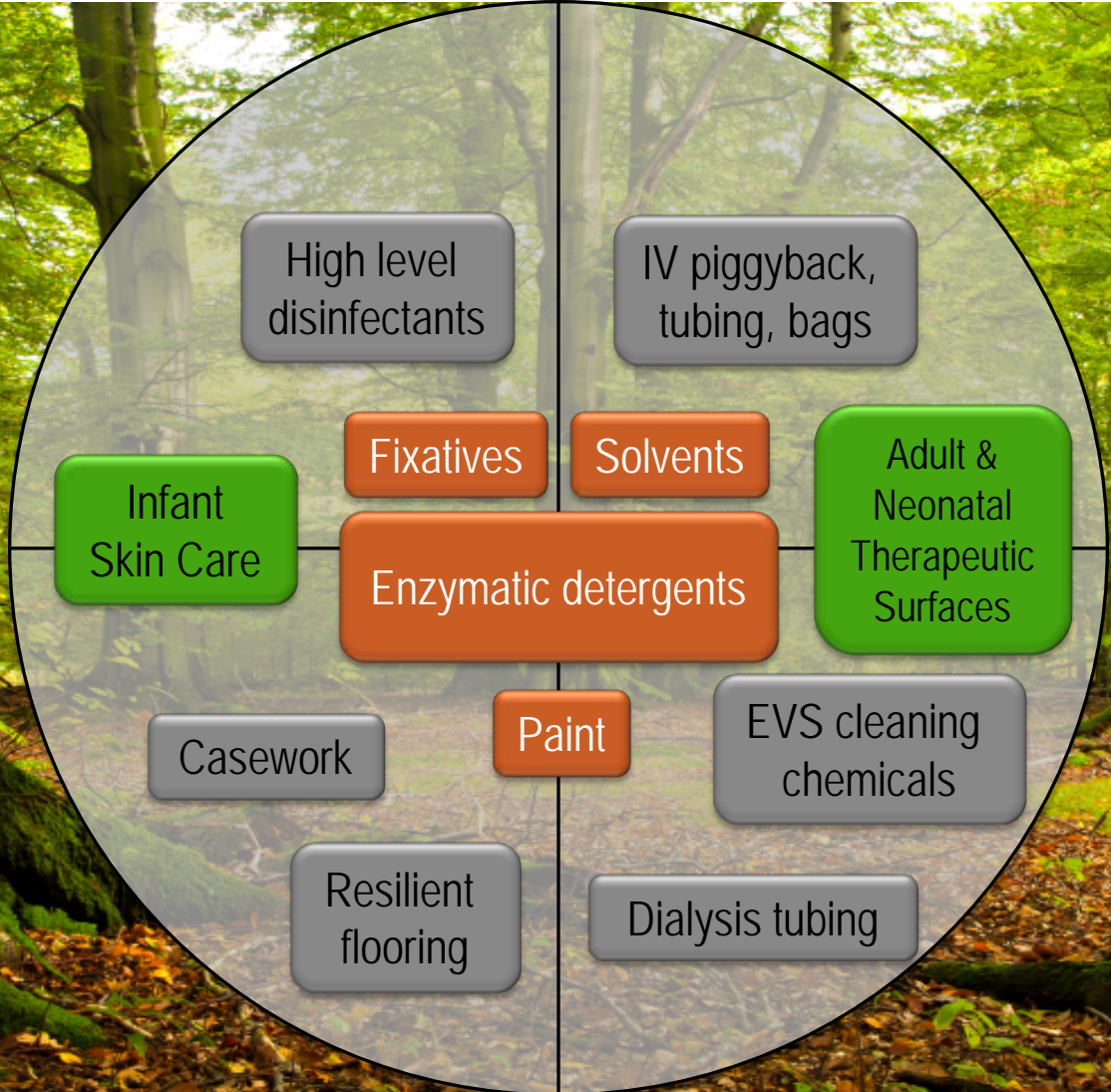
Input "1" for yes and "0" for no

SKU	Product Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Product code for environmentally preferable alt.	
		Designed or sized for neonatal or pediatric applications	Free of intentionally added latex in any material touched by patients or practitioners	All homogenous electronic parts compliant with all EU RoHS Directive's restricted limits (excluding exemptions) ⁹	Free of intentionally added Bisphenol A or Bisphenol A derived chemicals (including thermal paper) ²	All homogenous materials contain less than 1000 ppm of bromine and chlorine-based compounds ³	Free of Polyvinyl Chloride	Free of any intentionally added phthalate, including DEHP ⁶	Free of any intentionally added California Prop 65 Chemical greater than threshold or warning level ⁷	If no to (A), List Chemical Abstracts Service (CAS) #'s (separated by ",")	Does not create OR become hazardous waste on its own or when aggregated ⁴	Free of intentionally added antimicrobial/antibacterial agent ¹	Designed for multi-use (i.e. reprocessabl e or for use on multiple patients)	Product and packaging are labeled clearly with material type identification codes	Contains more than 10% post-consumer recycled content	Primary Packaging - Contain more than 10% post-consumer recycled content	Secondary Packaging - Contain more than 30% post-consumer recycled content	Product code for environmentally preferable alt.

The Process

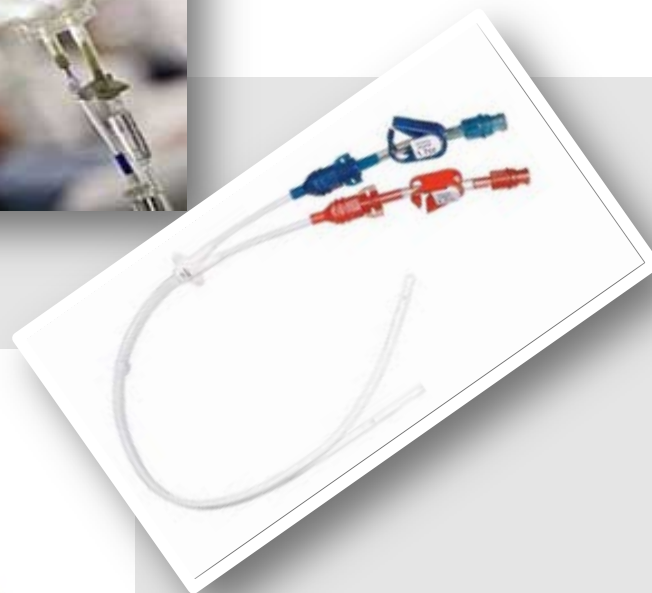


Targeted Products



Kaiser Permanente's Implemented Successes

- Latex-free Exam Gloves
- Mercury-free Thermometers and Sphygms
- PVC-free Carpeting/resilient flooring
- Implemented Sustainability criteria for fabrics
- DEHP/PVC-free IV Bags and Tubing
- PVC-free and DEHP-free Split-Tip Chronic Dialysis Catheters



Challenges

- Availability of chemical information
 - Chemical ingredients
 - Hazards
- Greenwashing
- Alternatives
 - Safer alternative may not be available
 - Alternatives may not have been tested



Industry Movement



+ Leaner Energy

+ Less Waste

+ Safer Chemicals

+ Healthier Food

+ Smarter Purchasing

Thank you

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