

Selected Resources: Preventing and reducing the use of toxic chemicals at work

Prepared for the workshop: *Chemical hazards -- preventing and reducing the use of toxic chemicals at work*

National Worker Safety and Health Summit -- October 27, 2012¹

Topic	Source	Title/info	URL, etc.
Alternatives assessment	Department of Toxic Substances Control (DTSC)	The California department's recent regulations aim to reduce the use of toxic chemicals in consumer products throughout the life cycle. They require manufacturers to analyse products for less toxic substances or processes. This workshop is linked to that effort.	http://www.dtsc.ca.gov/PollutionPrevention/AAWorkshop.cfm
	Lowell Center for Sustainable Production	<i>Alternatives assessment framework of the Lowell Center for Sustainable Production.</i> (2006)	http://www.sustainableproduction.org/downloads/FinalAltsAssess06_000.pdf
	Toxics Use Reduction Institute (TURI)	<i>Five chemicals alternatives assessment study (Executive summary),</i> (2006)	http://www.turi.org/library/turi_publications/five_chemicals_study
Cancer	CAREX Canada	Developing estimates about carcinogen exposures in Canada, for prevention programs. Creating a Canadian Workplace Exposure Database. Use mapping tools to develop environmental and occupational exposure estimates.	www.carexcanada.ca/
	National Toxicology Program	Cancer test results, fact sheets and more for a variety of substances that are or may be carcinogenic. Publish the regular reports about carcinogens.	http://ntp.niehs.nih.gov/
	President's Cancer Panel, National Cancer Institute	<i>Reducing environmental cancer risk. What we can do now.</i> (2008 - 2009 annual report)	http://deainfo.nci.nih.gov/advisory/pcp/pcp.htm
Chemicals policies	European Agency for Safety and Health at Work	Information about standards, legislation and resources in countries in the European Union.	europe.osha.eu.int

¹ Prepared by [Dorothy Wigmore](#) with help from Eileen Senn, Mike Wilson, [Trying ChemHAT on](#), and others; Version 3: November, 2012

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Chemicals policies	European Commission -- Environment	See their regulation about recycling of waste electrical and electronic equipment (WEEE, aka Directive 2002/96/EC) that compliments the RoHS regulation.	http://ec.europa.eu/environment/waste/weee/index_en.htm
	European Environment Agency (particularly the precautionary principle)	Start with the report <i>Late lessons from early warnings: the precautionary principle 1896–2000</i> . Then go to the “home” part of the website for other materials.	reports.eea.eu.int/environmental_issue_report_2001_22/en
	European Union activities	Look at the Registration, Evaluation, Authorisation and Restriction of Chemical Substances (REACH) and Globally Harmonized System of Classification and Labelling of Chemicals (GHS), amongst other things. See their databases for high volume chemicals and priority substances (with REACH programme).	REACH: http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm GHS: http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html
	Finnish Institute of Occupational Health (FIOH)	National institute looks at all kinds of health and safety hazards. Produces useful tools. Lots available in English.	www.ttl.fi/en/Pages/default.aspx
	Lowell Center for Sustainable Production	<i>State leadership in formulating and reforming chemicals policy. Actions taken and lessons learned.</i> (July, 2009)	http://www.chemicalspolicy.org/downloads/StateLeadership.pdf
	National Institute of Occupational Health (Statens arbeidsmiljøinstitutt, Norway)	The Institute (STAMI for short in Norwegian) is organised under the Ministry of Labour and Social Inclusion. Its researchers and other staff generate, apply and communicate knowledge about work and health for all sectors. (The country has some of the most progressive health and safety laws and standards in the world. At the website, either search for “English” under “Sak her” or use the “English” button under each topic.)	www.stami.no
	Pollution Probe (Canada) and Environmental Defense	<i>Not that innocent: A comparative analysis of Canadian, European Union and United States policies on industrial chemicals</i>	http://www.pollutionprobe.org/Reports/Report_Denison_NotThatInnocent.pdf

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Chemicals policies	Strategic Approach to International Chemicals Management (SAICM)	A policy framework to foster sound chemicals management, supported by progressive environmental and labour groups. Has done important work as part of the Third Session of the International Conference on Chemicals Management (ICCM3), held in Nairobi in September, 2012, including an important position about electronics products	http://www.saicm.org/index.php?ql=h&content=home
Green chemistry	UC Berkeley Center for Green Chemistry	Education in green chemistry, funded by the National Science Foundation and California EPA. Does toxicity testing for chemists and provides technical assistance about chemicals policy issues. Lots of useful links.	http://bcgc.berkeley.edu
	California EPA	Green chemistry initiatives, including regulatory efforts. See the <i>Safer Consumer Products Regulations</i> site for details about the regulations that are supposed to take effect in 2013.	http://www.dtsc.ca.gov/PollutionPrevention/GreenChemistryInitiative/index.cfm
	E.P. A. Green chemistry	The U.S. EPA information about green chemistry -- the design of chemical products and processes that get rid of, or reduce the use and generation of, hazardous substances.	www.epa.gov/greenchemistry www.glgc.org
	Great Lakes Green Chemistry Network	GLGCN has materials, holds free webinars, lots of useful connections.	http://www.glgc.org/
	Michigan Green Chemistry Clearinghouse	With GLGCN, holds webinars and other events. Check the education and toolbox categories for lots of helpful information.	http://migreenchemistry.org/
	Lowell Center for Sustainable Production	<i>Gathering chemical information and advancing safer chemistry in complex supply chains. Case studies of Nike, S.C. Johnson and Hewlett-Packard.</i> (September, 2009)	http://www.mn-ei.org/projects/images/ChemReg/BkgrdGreenChem/GC3summaryreportcasestudies.pdf
	Warner Babcock Institute for Green Chemistry	Works a lot with the Lowell Center for Sustainable Production about specific chemical formula changes.	http://www.warnerbabcock.com

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Information about chemicals	Agency for Toxic Substances and Diseases Registry (ATSDR)	ToxFAQs are information summaries about hazardous substances. The fact sheets are supposed to be quick and easy-to-understand guides. They deal with exposure to hazardous substances found in hazardous waste sites (and elsewhere) and related health effects.	www.atsdr.cdc.gov/toxfaqs/index.asp
	California Environmental Protection Agency (Cal/EPA) and Office of Environmental Health Hazard Assessment (OEHHA)	"Cumulative Impacts: Building a Scientific Foundation." The report presents scientific evidence for cumulative effects, a new screening methodology framework for use by the Cal/EPA boards and departments, and next steps in its implementation.	For report and public comments: http://oehha.ca.gov/ej/cipa093010.html
	ChemHAT	The Chemical Hazard and Alternatives Toolbox, is a new internet database designed to offer easy-to-use information for workers to protect themselves, their families and their co-workers. What makes it unique is the simple way information is presented and the alternatives information that will be added. Still being developed.	www.chemhat.org
	Cleaning Product Ingredient Inventory	The American Cleaning Institute (formerly the Soap and Detergent Association) released this list in September, 2012. It names 900+ ingredients in laundry, dish care and surface cleaning products. To find out what's in a particular product, see the second link at the right.	http://www.aciscience.org/IngredientInventory.aspx http://www.cleaninginstitute.org/clean_living/locating_cleaning_product_ingredients.aspx
	Collaborative on Health and the Environment (CHE)	An international partnership that wants to strengthen scientific and public dialogue about the impact of environmental factors on human health and catalyze initiatives to address these concerns. Includes more than 3,500 individuals and organizations in 45 countries and 48 states, committed to improving human and ecological health. Holds regular free webinars, with background information.	http://www.healthandenvironment.org

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Information about chemicals	EPA Integrated Risk Information System (IRIS)	IRIS is a human health assessment program. It evaluates quantitative and qualitative information about effects from exposure to environmental contaminants (which can be occupational exposures too). You don't need to understand a lot about toxicology, but need some knowledge of health effects.	www.epa.gov/iris/index.html
	Health Product Declaration Forum	Will provide free information about the contents of building materials. Developed by the Healthy Building Network and BuildingGreen, this is an open standard that provides a transparent and standardized format to report this information.	http://www.hpddworkinggroup.org/
	National Institute for Occupational Safety and Health (NIOSH)	Chemical-related resources, including <i>NIOSH Pocket guide to chemical hazards</i> , and Prevention through Design (PTD) materials	http://www.cdc.gov/niosh/topics/chemical.html , www.cdc.gov/niosh/npg/default.html http://www.cdc.gov/niosh/topics/ptd/
	Occupational Safety and Health Administration (OSHA)	OSHA has lots of information about specific chemicals and the processes and industries in which they are used. Their web pages include what OSHA standards, directives and interpretations apply, relevant standards from standards organizations, how to recognize the hazard, examples of possible solutions, related topics, and publications and other resources. Start with the general index.	http://www.osha.gov/SLTC/index.html
	Pesticide Action Network (North America)	Lots of information about pesticides, with connections to international/non-North American sources. Good for alternatives, as well as detailed information about specific "active ingredients" in products.	www.pesticideinfo.org

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Information about chemicals	PluM Database	A free, open-access resource from various lists around the world, providing information about the known hazards of thousands of chemicals. It is designed to help chemical users -- workers, businesses and the public -- identify known chemical hazards in workplaces, products, processes, and supply chains. Still being developed.	http://plm.berkeley.edu/
	RISCTOX	A comprehensive database of hazardous substances, prepared by ISTAS (Union Institute of Work, Environment and Health). A self-managed trade union technical foundation, it's supported by the Spanish Trade Union Confederation CCOO. The database of more than 100,000 chemicals aims to provide clear, organized and concise information about their health and environmental hazards. Includes European Union classification and regulation information, and a "black list". Available in English and Spanish. Can print off information about individual chemicals on "cards".	http://www.istas.net/risctox/
	Scorecard	Scorecard has detailed information about more than 11,000 chemicals. This includes all chemicals used in large amounts in the United States and all those regulated under major environmental laws. Search for information using the chemical's name (or any common synonym) or standard identification number. Connect to environmental justice and other community activities.	www.scorecard.org/chemical-profiles/
	Skin Deep	Independent source of information about the ingredients of cosmetics and personal care products. Very helpful for consumer products in general, as well as chemical hazards.	http://www.ewg.org/skindeep/

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Information about chemicals	Tox Net	Information about toxic effects of hazardous chemical exposures. Many toxicology and environmental and occupational health databases. Some start with jobs; others with specific chemicals. Includes the Hazardous Substances Data Bank (HSDB), mapping programs and Household Products database. From National Library of Medicine. Also see ToxTown site.	www.toxnet.nlm.nih.gov http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB http://toxtown.nlm.nih.gov/
Life cycle approaches	United Nations Environment Programme	Lots of useful materials, including a <i>Resource Kit on Sustainable Consumption & Production</i> and a Life Cycle Initiative programme. Available in several languages.	www.unep.fr/pc/sustain/10year/SCP_Resource_Kit.htm (for the <i>Resource kit</i>) lifecycleinitiative.unep.fr/ (Life Cycle Initiative)
MSDSs	New Jersey Hazardous Substance Fact Sheets	New Jersey Department of Health puts out these “right to know” documents. Generic and very detailed information. English versions for more than 1,600 specific chemicals and Spanish for more than 800 chemicals. Language is clearer than most. Formatted like MSDSs. Has a glossary.	http://web.doh.state.nj.us/rtkhsfs/indexfs.aspx
	The MSDS FAQ	Provides all kinds of information about material safety data sheets (MSDSs) and links to a lot of sites that include MSDSs. You may find something better than the one in your workplace.	http://www.ilpi.com/msds/faq/index.html
Other organizations and methods	BizNGO	The Business-NGO Working Group promotes the creation and adoption of “safer” chemicals and sustainable materials as part of working towards a healthy economy, healthy environment, and healthy people. Has principles about safer chemicals and sustainable plastics and a protocol for alternatives assessment.	www.bizngo.org
	Blue-Green Alliance	U.S. strategic partnership between labor unions and environmental organizations. Dedicated to expanding the number and quality of jobs in the green economy. Started by the United Steelworkers and the Sierra Club, it now includes other unions and organizations.	www.bluegreenalliance.org

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Other organizations and methods	BlueGreen Canada	USW- Environmental Defence alliance. Advocates for working people and the environment focussed on global trade, toxic chemicals used in commercial activity, creation of green manufacturing jobs, and climate change strategies to address climate change.	www.bluegreencanada.ca
	Canadian Centre for Occupational Health and Safety (CCOHS)	An independent source of information about many health and safety issues, including chemicals. Governed by a tripartite board (labour, employers, governments). Has a database of many MSDSs for products in Canada, information about what to consider for substitutes (free) and the hazards of specific substances. Many services are free.	www.ccohs.ca
	Clean Production Action (CPA)	International non-governmental organisation. Works with some very large companies, unions, etc. Deals with extended producer responsibility, green chemistry, “clean production” and more. Working to ban brominated fire retardants, found in many products. The “Green Screen” offers a way to analyse chemical hazards and categorize them to avoid the most toxic and use the least toxic.	www.cleanproduction.org http://www.cleanproduction.org/Greenscreen.Applications.php
	Good Guide	Describes itself as a way to find “safe, healthy, green & ethical products based on scientific ratings”. Has information about more than 145,000 food, toys, personal care and household products. Founded in 2007 by a University of California at Berkeley professor of environmental and labor policy.	http://www.goodguide.com/
	International POPs Elimination Network (IPEN)	A global network of more than 700 public interest non-governmental organizations working together to eliminate persistent organic pollutants (POPs). Plays an important role in chemical policy discussions. Has several work groups focused on specific topics. Search the website for their publications, international policy statements, and more.	http://www.ipen.org

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Other organizations and methods	SOBANE	An approach to prevent chemicals and other health and safety hazards, developed by Jacques Malchaire in Belgium. (SOBANE = screening, observation, analysis and expertise.) The find and fix hazards methods involves workers and supervisors to look for hazards, fix what can be done immediately and analyse further as needed. Available in most European languages.	http://www.deparisnet.be/SOBANEeng.html
	Story of Stuff project	For extended producer responsibility (EPR) and other ideas to get rid of toxic substances, see the various “stuff” stories. Includes one about electronics that integrates occupational and environmental health. Available in 13 languages,	http://storyofstuff.com/
	Towards Tomorrow	Has a great links page, with everything from the 12 principles of green chemistry to climate change and environmental justice.	towardtomorrow.org/
Priority substances	California EPA and Office of Environmental Health Hazard Assessment (OEHHA)	Proposition 65 list of substances known to cause cancer or reproductive effects. Reviewed and updated regularly.	http://www.oehha.org/prop65.html
	International Chemical Secretariat (Chemsec)	A non-profit organization of four environmental organisations set up in 2002. Their goal: a toxic free environment by 2020. Trying to get broad acceptance of the key principles of precaution, substitution, polluter pays and right-to-know. See their Substitute It Now (SIN) list and work about the European Union Directive 2002/95/EC -- RoHS (Restriction of the use of certain hazardous substances in electrical and electronic equipment).	http://www.chemsec.org/

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Reducing the use of toxic substances	Dorothy Wigmore	<i>An environmental scan of toxic use reduction activities in Canada. A report commissioned by the National Committee on Environmental and Occupational Exposures, Primary Prevention Action Group, Canadian Partnership Against Cancer.</i>	Report: http://www.partnershipagainstcancer.ca/wp-content/uploads/FINAL-TUR-REPORT-WITH-CHANGES.pdf Appendices: http://www.partnershipagainstcancer.ca/resources-publications/primary-prevention/healthy-public-policy/ . Or via http://www.wigmorising.ca
	Green purchasing or procurement	Buying “green” products -- for cleaning, furniture, carpets, desks, food, energy, etc. -- is part of a prevention-oriented health and safety program. European Union (EU) directives build market demand for green products.	cleanproduction.org/Steps.Products.Green.php europa.eu.int/comm/environment/gpp (European Union)
	Health Care Without Harm	An international coalition in 52 countries. Works to protect health by reducing pollution in health care workplaces. Many alternatives for hazards from mercury to latex to electronics and pesticides and cleaners.	www.noharm.org
	Lowell Center for Sustainable Production	Based at the University of Massachusetts, Lowell, and working with the Toxics Use Reduction Institute (TURI). Has projects about specific sectors (e.g. hospitals). Looks at chemicals, ergonomics and other health and safety and environmental issues.	www.sustainableproduction.org
	Lowell Center for Sustainable Production	<i>Best practices in product chemicals management in the retail industry.</i> (December, 2009)	http://www.sustainableproduction.org/downloads/UMassLowellRetailersReport.pdf
	P2 Gems	From the Massachusetts Toxics Use Reduction Institute (TURI - www.turi.org). Pollution prevention (P2) is a strategy to reduce or eliminate hazards at the source. It is also called source reduction. Has technical and process tools and links to relevant organizations.	www.p2gems.org/

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Reducing the use of toxic substances	Pharos database	Database for selecting the least toxic/ unhealthy building products. Project of the Healthy Building Network. Not a certification or label, it provides critical health and environmental data about the manufacture, use, and end of life of building materials specified and used every day. Behind it is a database that could be used for other purposes too.	http://www.pharosproject.net/
	Substitute It Now (SIN) list	The ChemSEC list of 300+ chemicals that should be banned or eliminated from use as soon as possible.	http://sinlist.org/
	Sustainable Hospitals Project	Based at the Lowell Center for Sustainable Production. Its staff has done a lot about alternatives for things used in hospitals and elsewhere (e.g. batteries, latex, environmentally-preferable purchasing, office supplies).	www.sustainablehospitals.org
	Toxics Use Reduction Institute	Subscribe to the weekly <i>Greenlist Bulletin</i> . Check out the cleaners database for less toxic options for specific applications. Search their website for inspiration.	http://www.turi.org
Social network	Wiser Earth	Described as the helping “the global movement of people and organizations working toward social justice, indigenous rights, and environmental stewardship connect, collaborate, share knowledge, and build alliances”. Includes editable international directory of non-governmental organizations (NGOs) and socially responsible organizations, solutions database, discussion groups, etc.	http://www.wiserearth.org
Use of chemicals	Substances in Preparations in Nordic Countries (SPIN)	A database about the use of substances in products in the Nordic Countries. Includes the relatively-new SPIN Exposure Toolbox.	http://195.215.251.229/Dotnetnuk e/Home/tabid/58/Default.aspx

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Worker-friendly materials	<i>Barefoot Research</i>	Tools for doing your own detective work. Developed to help empower workers, protect their health and well being, and improve their level of basic security. The practical guide provides workers, employers and committees with tools to reach these goals, especially mapping, surveys, etc. Available free in paper, CD-ROM or to download.	www.ilo.org/public/english/protect ion/ses/info/publ/barefoot.htm - line
	European Trade Union Technical Bureau for Health and Safety	Lists projects and publications. Provides access its newsletter and access to its database of more than 6,000 references.	www.etuc.org/tutb
	Hazards Group	Independent magazine and on-line publication in the U.K. Aimed at union health and safety activists but very useful for others. Award-winning site has materials about mapping, ergonomics, stress, violence and other health and safety topics. Many international connections.	www.hazards.org
	International Labour Organisation (ILO) -- "Decent work" and "Safe work" international campaigns	Tripartite agency of employers, governments and unions. A specialized part of the United Nations. In general, <i>seeks the promotion of social justice and internationally recognized human and labour rights.</i> See the key health and safety parts of their website (may not be user-friendly but worth the effort). Resources in different languages include hazard information, training materials and posters.	www.ilo.org/public/english/decent.htm www.ilo.org/public/english/protect ion/safework/index.htm
	Labor Occupational Health Program, University of California at Berkeley	A public service program at the University of California, Berkeley. Works with unions, workers and employers to reduce occupational injury, illness and death. Fact sheets, training, posters, booklets, and much more on safety and health issues. Also available in Spanish.	http://www.lohp.org/
	Labor Occupational Safety and Health Program, University of California, Los Angeles	Promotes health and safe workplaces and environments using teaching and education, research, and policy advocacy. Training materials, fact sheets, posters, booklets and more.	http://www.losh.ucla.edu/

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Worker-friendly materials	National COSH Network	The national network of committees on occupational safety and health (COSH) promotes safe and healthy working conditions for all through organizing and advocacy. Network of groups across the US provide quality information and training about hazards on the job and workers' rights. See their resources section for materials (some in Spanish) and the "About us" for local COSH groups.	http://www.coshnetwork.org/
	Toxic Free Canada	Vancouver-based group focuses on toxics and "greener" substitutes. Its <i>Cancersmart Consumer Guide</i> is very popular and has been up-dated; the alternative cleaners booklet is very practical. Other publications include topics such as endocrine disruptors and wood waste. Some are available in presentations that can be downloaded.	www.toxicfreecanada.ca