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EXAMINING FEDERAL AND STATE APPROACHES

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I. INTRODUCTION

The production and use of hazardous chemicals continues to grow, with hundreds of chemicals identified in blood, urine, and tissues of humans. Hazardous chemicals are also identified in the ambient air of workplaces, schools, communities, and in drinking water and food supplies.[1] Chemical exposures have been linked to many recognized public health problems including cancer, cardiovascular disease, asthma, and obesity.[2] Workers in industrial and agricultural settings, and socially disadvantaged populations, face disproportionately greater chemical exposures.[3] Moreover, sensitive subpopulations such as children, pregnant women, and individuals with chronic medical conditions, face increased risks from exposures.[4]

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[1] *Scientists Sound the Alarm for Our Health*, THE ALLIANCE FOR A HEALTHY TOMORROW 4, http://www.healthytomorrow.org/attachments/1_scientists_sound_alarm_may07_final.pdf (last visited Nov. 21, 2013); *see also* Lawrie Mott et al., *Our Children at Risk: the Five Worst Environmental Threats to Their Health*, NAT'L RESOURCES DEF. COUNS., http://www.nrdc.org/health/kids/ocar/chap5.asp (last visited Nov. 21, 2013).

[2] *2012 Environmental Justice Strategy and Implementation Plan*, U.S. DEP'T OF HEALTH AND HUM. SERVICES 1, 7, 42 (Feb. 2012), http://www.hhs.gov/environmentaljustice/strategy.pdf.

[3] *Id.* at 12–3.

[4] *Id.*

Although knowledge about the impact of chemical exposure on public health has advanced dramatically in the last few decades, the primary federal law governing chemical safety,[5] the Toxic Substances Control Act (TSCA),[6] has not been amended significantly since its adoption in 1976.[7] Lisa Jackson, the former Administrator of the United States Environmental Protection Agency (EPA), identified comprehensive reform of the TSCA as a priority for President Barack Obama's administration, insisting that the current law fails to provide the EPA with the authority it needs to ensure chemicals are safe.[8] Chemical manufacturers, food processors, high tech companies, and other industrial interests, however, have challenged legislative efforts to reform the federal framework.[9]

In response to chemical exposure concerns, states have studied the science of toxic chemicals, enacted restrictions on individual chemicals or classes of chemicals, and worked together to assess risk and prioritize action.[10] Some state governors have issued executive orders that direct executive agencies

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[5] *Id.* at 8–11 (citing various initiatives, beginning in the 1970s, which have furthered knowledge of the impact of chemical exposures).

[6] Toxic Substances Control Act (TSCA), 15 U.S.C. §§ 2601–2697 (2012).

[7] *Chemicals Policy Reform*, ENVTL. DEF. FUND, http://www.edf.org/health/policy/chemicals-policy-reform (last visited Nov. 21, 2013).

[8] Press Release, U.S. EPA, EPA Administrator Jackson Unveils New Administration Framework for Chemical Management Reform in the United States (Sept. 29, 2009), *available at* http://yosemite.epa.gov/opa/admpress.nsf/0/D07993FDCF801C2285257640005D27A6.

[9] *See generally*, Sheila Kaplan, *Reform of Toxic Chemicals Law Collapses as Industry Flexes Its Muscles*, POL. DAILY (Oct. 13, 2010), http://www.politicsdaily.com/2010/10/13/reform-of-toxic-chemicals-law-collapses-as-industry-flexes-its-m/ (indicating various stakeholders that have challenged federal regulation of toxic chemicals).

[10] Katie Greehaw, *States Taking the Lead to Curb Toxic Chemical Exposure*, CENTER FOR EFFECTIVE GOV'T (Oct. 22, 2013), http://www.foreffectivegov.org/node/12756.

to focus their efforts on toxics.[11] State legislators have also passed legislation targeting specific substances in products such as toys, jewelry, and cosmetics.[12] Recently, some states have moved toward a more comprehensive approach to regulating chemicals in consumer products by asking regulators to review all chemicals and identify those that are particularly hazardous to the public's health.[13]

This article examines both federal and state policy approaches for addressing chemical exposures, with particular focus on those laws that are most relevant to consumer and household exposures. Part II outlines the federal framework for regulating chemicals and briefly describes three major federal statutes.[14] Part III identifies recent state efforts to protect health by restricting or regulating these types of chemicals.[15] Part IV analyzes selected legal issues, including preemption and the constitutional boundaries required by the Supremacy Clause, and the Interstate Commerce Clause as construed by courts examining states' attempts to protect the health and safety of their residents.[16] Part V offers a discussion of The National Conversation on Public Health and Chemical Exposures in an effort to explore and offer recommendations on programmatic and policy approaches to better prevent harmful chemical exposures.[17] This article concludes by offering practical solutions to offer effective, collaborative opportunities that respect constitutional and jurisdictional bounds while safeguarding public health.[18]

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[11] *See infra* notes 206–215 and accompanying text.

[12] *See infra* note 180 and accompanying text.

[13] *See* ME. REV. STAT. ANN. tit. 38, § 1692 (Supp. 2012).

[14] *See infra* Parts II.B, II.C, II.D and accompanying text.

[15] *See infra* Part III and accompanying text.

[16] *See infra* Part IV and accompanying text.

[17] *See infra* Part V and accompanying text.

[18] *See infra* Part VI and accompanying text.

II. FEDERAL FRAMEWORK

Congress has attempted to address public concern about the adverse health impact of chemicals since at least 1906, when the Pure Food and Drug Act was first enacted.[19] Four years later, Congress passed the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to prevent adulterated or mislabeled pesticides.[20] In 1912, Congress established the Public Health Service, in part to investigate and study human illness spread by polluted navigable waters.[21] Over the next 100 years, many more laws, amendments, and other statutory provisions joined these early enactments.[22] Along the way, Congress authorized numerous federal departments, cabinet-level agencies, and independent commissions to research chemical exposures, set specific standards, and oversee their implementation.[23]

President Nixon created the EPA in 1970, citing the need for "a strong, independent agency . . . to make a coordinated attack on the pollutants which debase the air we breathe, the water we drink, and the

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[19] Pure-Food Act, ch. 3915, 34 STAT. 768 (1906).

[20] *Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)*, U. S. ENVTL. PROTECTION AGENCY, http://www.epa.gov/agriculture/lfra.html (last visited Feb. 11, 2013) ("The first pesticide control law was enacted in 1910 . . . [and] was primarily aimed at protecting consumers from ineffective products and deceptive labeling."); *see also* NICHOLAS P. CHEREMISINOFF & MADELYN L. GRAFFIA, ENVIRONMENTAL HEALTH & SAFETY MANAGEMENT: A GUIDE TO COMPLIANCE 11 (1995) ("The first federal legislation to control chemical pesticides was passed in 1910 . . . [and] was aimed against adulterating or misbranding chemical pesticides to protect consumers.").

[21] *See* John Parascandola, *Public Health History*, COMMISSIONED OFFICERS ASS'N OF THE USPHS INC., http://www.coausphs.org/phhistory2.cfm (last modified Jan. 17, 2012).

[22] *See, e.g.*, *Laws and Executive Orders*, U.S. ENVTL. PROTECTION AGENCY, http://www2.epa.gov/laws-regulations/laws-and-executive-orders (last visited Nov. 7, 2013). An exhaustive list of such statutes can be found on this website. *Id.*

[23] *See infra* notes 24, 38, 78 and accompanying text.

land that grows our food."[24] Since the creation of the EPA, Congress has generally charged the agency with implementing many of the laws designed, in part, to protect public health, including the Clean Air Act (CAA),[25] the Clean Water Act (CWA),[26] the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA),[27] the Safe Drinking Water Act (SDWA),[28] the Resource Conservation and Recovery Act (RCRA),[29] the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA),[30] and the Toxic Substances Control Act (TSCA).[31]

With the exception of TSCA, these EPA programs are based on a cooperative federalism model.[32] That is, each law provides for individual states to assume primary enforcement authority (primacy) upon a federal administrative finding that the state has laws at least as protective as the federal requirements, and that the state possesses the capacity needed to implement and enforce those requirements.[33] These federal

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[24] *See The EPA: A Retrospective*, U.S. ENVTL. PROTECTION AGENCY, http://www2.epa.gov/aboutepa/epa-retrospective (last visited Feb, 11, 2013).

[25] Clean Air Act, 42 U.S.C. §§ 7401–7431 (2012).

[26] Clean Water Act, 33 U.S.C. §§ 1251–1274 (2012).

[27] Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. §§ 136–136y (2012).

[28] Safe Drinking Water Act, 42 U.S.C. §§ 300f–300j–26 (2012).

[29] Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901–6992k (2012).

[30] Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601–9675 (2012).

[31] TSCA, 15 U.S.C. §§ 2601–2697 (2012).

[32] Robert L. Glicksman, *From Cooperative to Inoperative Federalism: The Perverse Mutation of Environmental Law and Policy*, 41 WAKE FOREST L. REV. 719, 719–20 (2006).

[33] *See, e.g.*, John P. Dwyer, *The Practice of Federalism Under the Clean Air Act*, 54 MD. L. REV. 1183, 1224 (1995) ("States that want to assume administrative responsibilities under federal environmental statutes . . . must establish agencies with an adequate number of trained staff and adequate resources and legal authority.").

statutes allow the states to enact greater health protective standards than the federal government has set, and to regulate additional pollutants or contaminants.[34] In no case may a state, whether it has primacy or not, enforce a state law less stringent than the federal law.[35] Specific to FIFRA, a state may not require pesticide labeling different from, or in conflict with, federal labeling requirements.[36]

A. The Role of Public Health

The EPA is not alone in its oversight of the many environmental hazards to health hazards. The United States Department of Health and Human Services (HHS) also exercises authority to protect human health from environmental hazards.[37] The United States Food and Drug Administration (FDA), a subset of the HHS, has the statutory charge of overseeing the Federal Food, Drug, and Cosmetic Act (FDCA).[38] Congress also directed the FDA—in coordination with the EPA—to implement the Food Quality Protection Act by reviewing chemical contamination of, and setting health protective tolerances for, food and drink, with a particular focus on protecting against pre-natal and childhood exposures to endocrine-disrupting pesticides.[39]

HHS's Agency for Toxic Substances and Disease Registry (established by CERCLA) assesses the presence and nature of health hazards at specific Superfund sites, to help prevent or reduce further

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[34] *See, e.g.*, FIFRA, 7 U.S.C. § 136v(a) (allowing any state to "regulate the sale or use of any federally registered pesticide" in that state, but only to the extent the state regulation is more prohibitive than permitted in FIFRA.).

[35] *See id.*

[36] *Id.* § 136v(b).

[37] *Environmental Justice at HHS*, U.S. DEP'T OF HEALTH AND HUM. SERVICES, http://www.hhs.gov/environmentaljustice/ (last visited Oct. 30, 2013).

[38] Federal Food, Drug, and Cosmetic Act, 21 U.S.C. §§ 301–399a (2012).

[39] Food Quality Protection Act of 1996, Pub. L. No. 104-170, 110 Stat. 1489 (1996).

exposure and the illnesses that result from such exposures, and to expand the knowledge base about health effects from exposure to hazardous substances.[40] In addition, the National Center for Environmental Health at the Centers for Disease Control and Prevention (CDC) assesses health risks and implements programs to prevent illnesses related to harmful environmental exposures.[41]

The National Institute of Environmental Health Sciences (NIEHS) works "to reduce the burden of human illness and disability, by understanding how the environment influences the development and progression of human disease."[42] In addition, Congress gave the independent Consumer Product Safety Commission (CPSC)[43] oversight of the Federal Hazardous Substances Act (FHSA)[44] and the Consumer

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[40] AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY, http://www.atsdr.cdc.gov/ (last visited Dec. 26, 2012).

[41] NAT'L CTR. FOR ENVTL HEALTH, CENTERS FOR DISEASE CONTROL AND PREVENTION, http://www.cdc.gov/nceh/ (last visited Dec. 26, 2012).

[42] *Your Environment—Your Health*, NAT'L INST. OF ENVTL HEALTH SCI., http://www.niehs.nih.gov/health/materials/niehs_overview.pdf (last visited Oct. 21, 2013).

[43] Congress created the three-member CPSC two years after EPA was formed, and charged the independent agency with "protecting the public from unreasonable risks of injury or death associated with the use of the thousands of types of consumer products [including] . . . household chemicals." *About CPSC*, U.S. CONSUMER PRODUCT SAFETY COMMISSION, http://www.cpsc.gov/en/About-CPSC/ (last visited Oct. 23, 2013); *see also Contact Information*, U.S. CONSUMER PRODUCT SAFETY COMMISSION, http://www.cpsc.gov/en/About-CPSC/Contact-Information/ (last visited Oct. 23, 2013) (Follow "Contact Us" hyperlink; then, in "How Can We Help You? Frequently Asked Questions and Answers" select from drop down: "When was CPSC created?"). For insight into some of the political struggles of the commission and its resulting lack of consumer protection, *see generally Protecting Our Children: Current Issues in Children's Product Safety: Hearing Before the House Subcommittee on Commerce, Trade & Consumer Protection*, 110th Cong. (2007) (statement of E. Marla Felcher, PhD., Kennedy School of Government, Harvard University).

[44] Federal Hazardous Substances Act, 15 U.S.C. §§ 1261–1278 (2012).

Product Safety Improvement Act (CPSIA).[45] Within this array of agencies and programs working to limit and manage environmental hazards and the health risks they pose, the TSCA, the FHSA, and the CPSIA are the most relevant to consumer product safety.

B. Toxic Substances Control Act (TSCA)

Enacted in 1976, the TSCA was designed to identify and control chemicals that pose an "unreasonable risk" to human health or the environment.[46] Title I of the TSCA encompasses any "chemical substance,"[47] with exceptions for tobacco,[48] nuclear materials,[49] pesticides,[50] foodstuffs,[51] drugs,[52] cosmetics,[53] and medical devices.[54] Title I authorizes the EPA to require that chemical processors or manufacturers test a substance already in commerce if the EPA determines that the substance poses "an unreasonable risk of injury to health or the environment;" existing data is insufficient

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[45] Consumer Product Safety Improvement Act of 2008, Pub. L. No. 110-787, 122 Stat. 3016 (2008).

[46] *See* TSCA, 15 U.S.C. § 2601(a) (2012) (congressional findings that regulating chemicals and chemical mixtures is important to protect health and the environment); *see also* LINDA-JO SCHIEROW, CONG. RESEARCH SERV., RL31905, THE TOXIC SUBSTANCES CONTROL ACT (TSCA): A SUMMARY OF THE ACT AND ITS MAJOR REQUIREMENTS, Summary, 1 (2013) [hereinafter Schierow] (providing historical overview leading to TSCA enactment).

[47] TSCA, 15 U.S.C. § 2602(2)(A) (2012).

[48] *Id.* § 2602(2)(B)(iii).

[49] *Id.* § 2602(2)(B)(iv).

[50] *Id.* § 2602(2)(B)(ii).

[51] *Id.* § 2602(2)(B)(vi).

[52] *Id.*

[53] *Id.*

[54] *Id.*

to accurately predict exposure effects, and sufficient data about exposure effects can only be achieved by testing.[55]

To use a new chemical, or use an existing chemical for a new use, a manufacturer or processor must provide the EPA any information about the substance's health or environmental effects (pre-manufacturing notice (PMN)) at least ninety days before use.[56] The EPA then has forty-five days to evaluate the chemical's potential risk.[57]

Under this provision, the EPA conducts reviews on more than 1,000 new chemicals each year.[58] Between 1979 and 2003, the EPA received approximately 36,600 PMNs.[59] Upon a finding of "unreasonable risk" posed by either an existing or a proposed new chemical, the EPA must prohibit, restrict, or otherwise regulate the chemical.[60] In addition to addressing chemicals generally, the TSCA specifically directs the EPA to control risks associated with polychlorinated biphenols (PCBs).[61] Later amendments similarly address asbestos in buildings,[62] radon gas,[63] and lead-based paint[64] in homes.

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[55] *Id.* § 2603(a)(1)(A)(i)–(iii); Schierow, *supra* note 46, at 2.

[56] TSCA, 15 U.S.C. § 2604(b)–(d).

[57] *Id.* § 2604(e)(1)(B).

[58] Schierow, *supra* note 46, at 4.

[59] Battelle, *Overview: Office of Pollution Prevention and Toxics Programs*, CHEMICALS POL'Y & SCI. INITIATIVE 10 (Dec. 24, 2003), http://www.chemicalspolicy.org/downloads/TSCA10112-24-03.pdf.

[60] TSCA, 15 U.S.C. § 2605(a); Schierow, *supra* note 46, at 2, 4–5.

[61] TSCA, 15 U.S.C. § 2605(e); Schierow, *supra* note 46, at 5.

[62] Asbestos Hazard Emergency Response Act of 1986, Pub. L. No. 99-519, 100 Stat. 2970 (codified at 15 U.S.C. §§ 264–2656 (2012)); Asbestos School Hazard Abatement Reauthorization Act of 1990, Pub. L. No. 101-637, 104 Stat. 4589 (codified at 20 U.S.C. §§ 4011–4022 (2012)); *see also* Schierow, *supra* note 46, at 1–2.

The TSCA, for the most part, does not preempt non-federal action and expressly allows the states to establish or continue some chemical regulation.[65] However, the law does preempt states in two key areas.[66] First, if EPA requires testing of a specific substance for a particular reason, a state or political subdivision is preempted from requiring tests of that substance for a similar reason.[67] Second, if EPA regulates a chemical to protect against a particular health concern, the states may not regulate that chemical to protect against the same health concern, unless the state regulation is identical to the EPA regulation, is pursuant to another federal law, or bans the substance outright.[68] A state concerned about preemption may apply to the EPA for an exemption, which the EPA may grant if the state requirement does not require violating the EPA requirement, provides a "significantly higher" level of protection than the EPA requirement, and does not "unduly burden interstate commerce."[69]

C. Federal Hazardous Substances Act (FHSA)

In 1972, Congress gave the Consumer Product Safety Commission (CPSC or Commission) responsibility for the Federal Hazardous Substances Act (FHSA), which aims to protect children from

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[63] Act of Oct. 28, 1988, Pub. L. No. 100-551, 102 Stat. 2755 (codified at 15 U.S.C. §§ 2661–2671 (2012)) (amending the Toxic Substances Control Act); Act of Nov. 5, 1990, Pub. L. No. 101-508, § 10202, 104 Stat. 1388 (codified at 15 U.S.C. 2665 (2012)) (amending the Toxic Substances Control Act); *see also* Schierow, *supra* note 46, at 1, 8.

[64] Residential Lead-Based Paint Hazard Reduction Act of 1992, Pub. L. No. 102-550, 106 Stat. 3897 (codified at 42 U.S.C. §§ 4851–4856 (2012)); *see also* Schierow, *supra* note 46, at 1, 9–11.

[65] TSCA, 15 U.S.C. § 2617(a)(1).

[66] *Id.* § 2617(a)(2).

[67] *Id.* § 2617(a)(2)(A).

[68] *Id.* § 2617(a)(2)(B).

[69] *Id.* § 2617(b).

hazardous household substances.[70] Extensively amended since Congress first enacted the law in 1960, [71] the FHSA requires cautionary labeling on household and children's products if those products contain hazardous substances that are susceptible to human exposure.[72] Under the FHSA, a substance is hazardous if, alone or in a mixture, it is toxic, corrosive, an irritant, a strong sensitizer, flammable or combustible, "or builds up pressure that may cause substantial injury or substantial illness."[73] Such injury or illness must be a proximate result of normal or foreseeable handling or use, "including reasonably foreseeable ingestion by children."[74] If the CPSC determines label precautions cannot adequately protect children from a product's statutorily defined hazards, the Commission may ban that product from commerce.[75] Violators face criminal prosecution, with a misdemeanor conviction resulting in a maximum $500 fine, ninety days imprisonment, or both.[76] "Any person who knowingly violates" the FHSA can receive a maximum civil penalty of $5,000 for each offense, with a $1,250,000 limit for any related series of violations.[77]

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[70] Susan L. Cohen, Note, *Exports of Hazardous Products from the United States: An Analysis of Consumer Product Safety Commissio Policy*, 19 GEO. WASH. J. INT'L L & ECON. 123, 127 (1985).

[71] Federal Hazardous Substances Labeling Act, Pub. L. No. 86-613, 74 Stat. 372 (1960) (codified at 15 U.S.C. §§ 1261–1278 (2012)), *amended by* Consumer Product Safety Commission Improvements Act of 1976, Pub. L. No. 94-284, 90 Stat. 503 (codified at 15 U.S.C. §§ 1261–1262 (2012)).

[72] *Id.;* Cohen, *supra* note 70, at 124.

[73] FHSA, 15 U.S.C. § 1261(f)(1)(A) (2012).

[74] *Id.* § 1261(f)(1)(A)(vi).

[75] *Id.* § 1261(q)(1).

[76] *Id.* § 1264(a). Criminal prosecution is limited to the federal government. *Id.* § 1268.

[77] *Id.* § 1264(c)(1).

D. Consumer Protection Safety Improvement Act (CPSIA)

The CPSC also oversees the CPSIA.[78] This 2008 law restricted the use of certain chemicals in children's products.[79] More specifically, the law reduces the amount of lead legally permitted in products designed for children under twelve years of age from 600 parts per million 180 days after enactment to 300 parts per million one year after enactment.[80] Children's toys cannot contain more than one-tenth of one percent of three types of phthalates.[81] The law temporarily restricted three other types of phthalates to the same limit[82] pending final CPSC determination of health effects from exposure to this second grouping of phthalates and evaluation of their chemical alternatives.[83]

Through these three laws (TSCA, FHSA, CPSIA), implemented by two different agencies (EPA, CPSC), Congress has attempted to provide public health protection from hazardous chemicals,

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[78] Consumer Product Safety Act, Pub. L. No. 92-573, 86 Stat. 1207 (1972), *amended by* Consumer Product Safety Improvement Act of 2008, Pub. L. No. 110-314, 122 Stat. 3016 (2008) (codified at 15 U.S.C. § 2051–2089 (2012)).

[79] 15 U.S.C. § 2057c(a).

[80] 15 U.S.C. § 1278a(a); *Section 101: Children's Products Containing Lead: Lead Paint Rule*, U.S. CONSUMER PRODUCT SAFETY COMMISSION, http://www.cpsc.gov/ABOUT/Cpsia/sect101.html (last visited Dec. 14, 2012).

[81] 15 U.S.C. § 2057c(a). The specific compounds are di-(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP), and benzyl butyl phthalate (BBP). *Id.*

[82] The temporarily restricted substances are diisononyl phthalate (DINP), diisodecyl phthalate (DIDP), and di-n-octyl phthalate (DnOP). *Id.* § 2057c(b)(1).

[83] *Id.* § 2057c(b)(2); CPSC action must follow no later than 180 days after a statutorily created Chronic Hazard Advisory Panel "examine[s] all of the potential health effects (including endocrine disrupting effects) of the full range of phthalates." *Id.* § 2057c(b)(2)(B)(i).

particularly those chemicals in the products Americans use daily.[84] Additionally, several states and local jurisdictions have taken measures to provide additional regulation of hazardous chemicals.[85] Those efforts are described in more detail in Part III below.[86]

III. SELECTED STATE EFFORTS

Many states are familiar with statutes that authorize actions related to hazardous substances due to the health effects they may cause.[87] As noted, the CAA, CWA, RCRA, CERCLA, and SDWA are founded on federal-state partnership.[88] In addition, when Congress enacted the FHSA, consumer advocates across the country pushed for state counterpart statutes, and more than a dozen states enacted similar provisions.[89] In most cases, however, states have not used the authorities contained in the FHSA statutes for many years, or even decades.[90]

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[84] TSCA, 15 U.S.C. §§ 2601–2697 (2012); Federal Hazardous Substances Labeling Act, 15 U.S.C. §§1261–1278 (2012) ; Consumer Product Safety Improvement Act, 15 U.S.C. §§ 2051–2089 (2008).

[85] *See infra* Part III and accompanying text.

[86] *See infra* Part III and accompanying text

[87] *See* Robert F. Service, *A New Wave of Chemical Regulations Just Ahead?*, 325 SCI. 692, 693 (Aug. 7, 2009), http://www.chemicalspolicy.org/downloads/2009-0807Scienceonchemicalregs.pdf [hereinafter Service].

[88] *See infra* notes 25–32 and accompanying text.

[89] *See, e.g.*, COLO. REV. STAT. § 25-5-503 (2013); 430 ILL. COMP. STAT. ANN. 35/1–35/16a (West 2008); IND. CODE ANN. § 16–41–39.4–7 (West Supp. 2013); MD. CODE ANN., HEALTH-GEN. § 22-501–22-508 (LexisNexis 2009); MASS. ANN. LAWS ch. 94B, § 2 (LexisNexis 2000); MICH. COMP. LAWS. ANN. § 286.451–286.463 (West 2008); MONT. CODE ANN. § 50-30-201–50-30-307 (2013); N.H. REV. STAT. ANN. § 339–A:1–339–A:11 (2009); N.D. CENT. CODE § 19-21-01–19-21-10 (2009); OHIO REV. CODE ANN. § 3716.01–3716.99 (2006); OR. REV. STAT. § 453.001–453.185 (2011); S.C. CODE ANN. § 23-39-10–23-39-120

(*continued*)

After this significant slumber, states began approaching chemical regulation in diverse ways.[91] As Dr. Joel Tickner noted, "[t]he states are way ahead of the federal government at this point."[92] Given the public concern about the adverse health impacts of chronic exposures to many unknown and unregulated chemicals, it is not surprising that state-level action is building around the country.[93]

Many of these state approaches reflect the application of the Precautionary Principle [94] to public health protection.[95] As commonly described, the Precautionary Principle insists on protective action even in the face of incomplete or imperfect information.[96] "When an activity raises threats of harm to human

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(2007); TENN. CODE ANN. § 68-131-101–68-131-114 (2013); TEX. HEALTH & SAFETY CODE ANN. § 501.001–501.113 (West 2008); WIS. STAT. ANN. § 100.37 (West 2008).

[90] For example, Oregon enacted its FHSA counterpart in 1971.OR. REV. STAT. § 453.001–453.185 (2011). Based on personal interviews with thirty-year-plus veteran state employees in the agency responsible for implementing the law, however, this author could identify only one possible occasion when Oregon used its statutory authority—to order retailers to remove sharp-tipped lawn darts from Christmas shopping shelves following several significant child injuries associated with the game. *See Following Recent Injury CPSC Reissues Warning: Lawn Darts are Banned and Should be Destroyed*, UNITED STATES CONSUMER PRODUCT SAFETY COMMISSION (May 15, 1997), http://www.cpsc.gov/en/newsroom/news-releases/1997/following-recent-injury-cpsc-reissues-warning-lawn-darts-are-banned-and-should-be-destroyed.

[91] *See* Service, *supra* note 87, at 693.

[92] *Id*.

[93] *Id.*

[94] *The Precautionary Principle*, UNITED NATIONS EDUC., SCI. AND CULTURAL ORG., COMEST 7, 7 (Mar. 2005), http://unesdoc.unesco.org/images/0013/001395/139578e.pdf [hereinafter *The Precautionary Principle*].

[95] *See id*.

[96] *The Precautionary Principle*, *supra* note 95, at 7–8.

health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically."[97]

A. Maine

In April 2008, Maine became the first state to adopt a comprehensive regulatory approach to toxic chemicals.[98] It allows state regulators to collect information about chemical use and prohibit the sale of children's products that contain "priority chemical[s]" when safer alternatives are available.[99]

1. Identification of Priority Chemicals

The identification of priority chemicals is a result of Maine's multi-step chemical categorization and regulation process.[100] The law requires the Maine Department of Environmental Protection to work with both the Maine Department of Health and Human Services and the Maine Center for Disease Control and Prevention to publish a list of chemicals of "high concern."[101] A chemical should be included on this list "only if it has been identified by an authoritative governmental entity on the basis of credible scientific evidence as being: . . .[c]arcinogen, a reproductive or developmental toxicant or an endocrine

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[97] *Wingspread Conference on the Precautionary Principle*, SCI. & ENVTL. HEALTH NETWORK (Jan. 26, 1998), http://www.gdrc.org/u-gov/precaution-3.html.

[98] H.P. 1432, L.D. 2048, 123d Leg., 1st Spec. Sess. (Me. 2008), (codified at ME. REV. STAT. ANN. tit. 38, §§ 1691–1699–B (Supp. 2012)).

[99] ME. REV. STAT. ANN. tit. 38, § 1696(1) (Supp. 2012).

[100] *Id.* § 1693–A–1694.

[101] *Id.* § 1693(1).

disruptor; . . . [p]ersistent, bioaccumulative and toxic; or . . . [v]ery persistent and very bioaccumulative."[102] In developing the list, the departments can consider:

> 1. Chemicals identified as "Group 1 carcinogens" or "Group 2A carcinogens" by the World Health Organization, International Agency for Research on Cancer.
>
> 2. Chemicals identified as "known to be a human carcinogen" and "reasonably anticipated to be a human carcinogen" by the secretary of the United States Department of Health and Human Services pursuant to the Public Health Service Act . . . ;
>
> 3. Chemicals identified as "Group A carcinogens" or "Group B carcinogens" by the United States Environmental Protection Agency;
>
> 4. Chemicals identified as reproductive or developmental toxicants by:
>
> > A. The United States Department of Health and Human Services, National Toxicology Program . . . and
> >
> > B. The California Environmental Protection Agency. Office of Environmental Health Hazard Assessment . . . ;
>
> 5. Chemicals identified as known or likely endocrine disruptors through screening or testing conducted in accordance with protocols developed by the United States Environmental Protection Agency . . . ;
>
> 6. Chemicals listed on the basis of endocrine-disrupting properties in Annex XIV, List of Substances Subject to Authorisation . . . of the European Parliament; [or] . . .

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[102] *Id.*

7. [Those chemicals being] [p]ersistent, bioaccumulative and toxic . . . identified by:

A. The State of Washington Department of Ecology. . . or

B. The United States Environmental Protection Agency. . . .[103]

Once a substance is listed as a chemical of high concern, it may be identified as a priority chemical so its use in consumer products can be regulated.[104]

> "[T]he commissioner [of Environmental Protection] may designate a chemical of high concern as a priority chemical if the commissioner finds, in concurrence with the Department of Health and Human Services, Maine Center for Disease Control and Prevention [that any of the following conditions are satisfied]:
>
> A. The chemical has been found through biomonitoring to be present in human blood, including umbilical cord blood, breast milk, urine or other bodily tissues or fluids;
>
> B. The chemical has been found through sampling and analysis to be present in household dust, indoor air or drinking water or elsewhere in the home environment; or . . .

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[103] H.P. 1432, L.D. 2048, 123d Leg., 1st Spec. Sess. (Me. 2008) (codified at ME. REV. STAT. ANN. tit. 38, § 1699–B (Supp. 2012)). Group 1 carcinogens include asbestos, cadmium, and polychlorinated biphenyls (PCBs). *Agents Classified by the IARC Monographs, Volumes 1–109*, WORLD HEALTH ORG., INT'L AGENCY FOR RES. ON CANCER 1 (2013), http://monographs.iarc.fr/ENG/Classification/ClassificationsGroupOrder.pdf. Group 2A, those substances "probably carcinogenic to humans," include inorganic lead compounds. *Id.* at 7; *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Preamble*, WORLD HEALTH ORG., INT'L AGENCY FOR RES. ON CANCER, 1, 22 (2006), http://monographs.iarc.fr/ENG/Preamble/CurrentPreamble.pdf.

[104] ME. REV. STAT. ANN. tit. 38, § 1694 (Supp. 2012).

D. The chemical is present in a consumer product used or present in the home.[105]

The statute requires the Commissioner of the Department of Environmental Protection (commissioner) to designate at least two priority chemicals by January 2011.[106] The first chemicals identified as priority chemicals were bisphenol A[107] and nonylphenol and nonylphenol ethoxylates.[108] The commissioner must review the list of chemicals of high concern at least every three years, and may add or remove substances from the list of high-priority chemicals or designate additional priority chemicals.[109]

2. Sale of Products Containing Priority Chemicals

Once the commissioner has designated a priority chemical, manufacturers and distributors of children's products for sale in Maine that contain the priority chemical are subject to a substantial set of requirements.[110] First, they must provide written notice to the Department of Environmental Protection (department) that identifies "the children's product, the number of units sold or distributed for sale in the State or nationally, the priority chemical or chemicals contained in the children's product, the amount of such chemicals in each unit of children's product and the intended purpose of the chemicals in the children's product."[111]

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[105] *Id.* § 1694(1).

[106] *Id.* § 1694(2).

[107] 06-096 CODE ME. R. ch. 882 § 3 (2013).

[108] *Id.* at ch. 883 § 3.

[109] ME. REV. STAT. ANN. tit. 38, § 1693–A(3) (Supp. 2012).

[110] *See id.* §§ 1695-1696.

[111] *Id.* § 1695(1).

The department can also require additional information, such as:

> A. Information on the likelihood that the chemical will be released from the children's product to the environment during the children's product's life cycle and the extent to which users of the children's product are likely to be exposed to the chemical;
>
> B. Information on the extent to which the chemical is present in the environment or human body; and
>
> C. An assessment of the availability, cost, feasibility and performance, including potential for harm to human health and the environment, of alternatives to the priority chemical and the reason the priority chemical is used in the manufacture of the children's product in lieu of identified alternatives.[112]

The Board of Environmental Protection (board)—a seven-member body charged with issuing Department rules—reviews the information on priority chemicals in children's products.[113] The board then has the option to prohibit the manufacture, sale, or distribution of a children's product that contains a priority chemical within the state if it finds that "[d]istribution of the children's product directly or indirectly exposes children and vulnerable populations to the priority chemical; and . . . [o]ne or more safer alternatives to the priority chemical are available at a comparable cost."[114] If a number of safer

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[112] *Id.* § 1695(2).

[113] *Id.* § 1696(1); *BEP Information Sheet*, BOARD OF ENVTL. PROTECTION 1,1 (Mar. 2013), http://www.maine.gov/dep/bep/info/BEP%20rulemaking%20March%202013.pdf.

[114] ME. REV. STAT. ANN. tit. 38, § 1696(1) (Supp. 2012).

alternatives exist, "the board may prohibit the sale of children's products that do not contain the safer alternative that is least toxic to human health or least harmful to the environment."[115]

A safer alternative is a chemical "that, when compared to a priority chemical that it could replace, would reduce the potential for harm to human health or the environment or that has not been shown to pose the same or greater potential for harm to human health or the environment as that priority chemical."[116] The board can "[p]resume that a safer alternative is available if the . . . children's product containing the priority chemical has been banned by another state . . . [or] is an item of apparel or a novelty; and . . . if the [safer] alternative is sold in the United States."[117] The board also can presume that a safer alternative is available "if the alternative is not a chemical of concern."[118]

Once the board prohibits the sale, manufacture, and distribution of a children's product, manufacturers and distributors must file a compliance plan with the state or seek a waiver within 180 days from the commissioner.[119] The compliance plan must identify the prohibited children's product and "[s]pecify whether compliance will be achieved by discontinuing sale of the children's product in the State or by substituting a safer alternative in the product . . . ."[120] If an alternative will be used, the manufacturer or distributor must identify the safer substance and submit a timetable for substitution.[121]

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[115] *Id.*

[116] *Id.* § 1691(12).

[117] *Id.* § 1696(2)(B)–(D).

[118] *Id.* § 1696(2)(A).

[119] *Id.* § 1696(3).

[120] *Id.* § 1696(3)(A), (B).

[121] *Id.* § 1696(3)(C).

The commissioner has the discretion to grant waivers of prohibited products if the commissioner finds "that there is a need for the children's product in which the priority chemical is used and there are no technically or economically feasible alternatives for the use of the priority chemical in the children's product."[122] The commissioner may grant waivers for up to five years and can renew for an additional five years if "technologically or economically feasible alternatives remain unavailable."[123]

If the state suspects a children's product is being sold in violation of the law, the department can require the product's manufacturer or distributor to certify its compliance with the law, and either attest that the children's product does not contain a priority chemical, or notify retailers that the sale of the product is prohibited.[124] Manufacturers and distributors must then provide the state with the list of names and addresses of the retailers who were notified.[125]

Maine's law does not apply to retailers unless the retailer "knowingly sells" a prohibited item that contains a priority chemical.[126] "[P]riority chemicals used in or for industry or manufacturing" are not covered under this law.[127] In addition, the requirements do not apply to motor vehicles,[128] items already regulated under Maine's Mercury-Added Products and Services Statute,[129] telecommunications

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[122] *Id.* § 1696(5).

[123] *Id.*

[124] *Id.* § 1699–A(2).

[125] *Id.*

[126] *Id.* § 1697(5).

[127] *Id.* § 1697(2).

[128] *Id.* § 1697(3).

[129] *Id.* § 1697(6).

devices,[130] or food and beverage packaging unless "intentionally marketed or intended for the use of children under three years of age."[131]

3. Safer Chemicals Clearinghouse

The Maine legislature also authorizes the department to cooperate with other states and governmental entities in an interstate clearinghouse to promote safer chemicals in consumer products.[132] The state classifies existing chemicals in commerce into five categories:[133] "chemicals of high concern; chemicals of concern; chemicals of potential concern,[134] chemicals of unknown concern;[135] and chemicals of low concern."[136]

The department can use the interstate clearinghouse "to organize and manage available data on chemicals . . . to produce and inventory information on safer alternatives . . . to provide technical assistance to businesses and consumers . . . and to undertake other activities in support of state programs

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[130] *Id.* § 1697(7).

[131] *Id.* § 1697(8).

[132] *Id.* § 1698.

[133] *Id.*

[134] A "chemicals of potential concern" is defined as "a chemical identified by an authoritative governmental entity on the basis of credible scientific evidence as being suspected of causing an adverse health or environmental effect . . . ." *Id.* § 1691(5).

[135] A "chemicals of unknown concern" is defined as "a chemical for which insufficient data are available to classify it as a chemical of high concern, a chemical of concern, a chemical of potential concern or a chemical of low concern." *Id.* § 1691(6).

[136] *Id.* § 1698. A "chemicals of low concern" is defined as "a chemical for which adequate toxicity and environmental data are available to determine that it is not a chemical of high concern, a chemical of concern, a chemical of potential concern or a chemical of unknown concern." *Id.* § 1691(4).

to promote safer chemicals."[137] Finally, the law requires the department to develop a program to educate and help consumers and retailers identify "children's products that may contain priority chemicals."[138]

The Maine legislature did not authorize specific appropriations to carry out these provisions.[139] However, the department, through the governor, is allowed to accept "donations, grants, and other funds to carry out" the law's requirements.[140]

B. California

In 2008, the California Green Chemistry Initiative (initiative) became law.[141] The initiative requires the Department of Toxic Substances Control (department) to adopt two sets of regulations before January 1, 2011; however, the department had to submit the proposed regulations to the California Environmental Policy Council (council) for review.[142] The council approved the rules on Green Chemistry Hazard Traits (Chapter 54) on January 19, 2012, but has yet to approve the regulations on Safer Consumer Product Alternations (Chapter 53).[143] Chapter 54 establishes a process "'to evaluate and specify the hazard traits,

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[137] *Id.* § 1698.

[138] *Id.* § 1699.

[139] *See generally id.* §§ 1691–1699–B.

[140] *Id.* § 1699–B.

[141] Chris M. Amantea, *California's Green Chemistry Initiative Has a Long REACH*, L.A. DAILY J., Apr. 22, 2013.

[142] *See* CAL. HEALTH & SAFETY CODE § 25252.5(a) (West Supp. 2013).

[143] As of June 1, 2012. *Notice of Adoption of Title 22, California Code of Regulations Adoption of Sections 69401 Through 69407.2 Green Chemistry – Hazard Traits*, OFF. OF ENVTL. HEALTH HAZARD ASSESSMENT, http://oehha.ca.gov/multimedia/green/gc011912.html (last visited Nov. 15, 2013); *See* Email from Emily V. Tipaldo, Manager, Regulatory and Technical Affairs, American Chemistry Council, to Krysia Von Burg, Regulations Coordinator, Cal. Dept. of Toxic Substance Control (Oct. 11,

(*continued*)

toxicological and environmental endpoints, and any other relevant data to be included' in the Toxics Information Clearinghouse . . . ."[144] This process includes consideration of "[t]he volume of the chemical in commerce in [the] state[;] . . . the potential for exposure to the chemical in a consumer product[;] [and the] potential effects on sensitive subpopulations, including infants and children."[145] The process evaluates chemicals and their alternatives, including the chemical's "traits, characteristics and endpoints."[146] The department must also "reference and use, to the maximum extent feasible, available information from other nations, governments, and authoritative bodies that have undertaken similar chemical prioritization processes . . . ."[147]

1. Green Chemistry Hazard Traits

Chapter 54 seeks to "establish a process for evaluating chemicals of concern in consumer products, and their potential alternatives, to determine how best to limit exposure or to reduce the level of hazard"[148] and "the "availability of potential alternatives and potential hazards posed by those alternatives, as well as an evaluation of critical exposure pathways."[149] Consideration must be given to:

(A) Product function or performance[;]

2012), *available at* http://www.alston.com/files/docs/American%20Chemistry%20Council%20SCP%20Comment%20Letter.pdf (indicating that, as of July 27, 2012, the Safer Consumer Product Regulations Act was not yet enacted).

[144] CAL. CODE REGS. tit 22, § 69401 (2013); *see also* CAL. HEALTH & SAFETY CODE § 25252 (West Supp. 2013).

[145] CAL. HEALTH & SAFETY CODE § 25252(a)(1)–(3) (West Supp. 2013).

[146] *Id.* § 25252(b)(1); CAL. CODE REGS. tit 22, § 69401 (2013).

[147] CAL. HEALTH & SAFETY CODE § 25252(b)(2) (West Supp. 2013).

[148] *Id.* § 25253(a)(1).

[149] *Id.* § 25253(a)(2).

(B) Useful life[;]

(C) Materials and resource consumption[;]

(D) Water conservation[;]

(E) Water quality impacts[;]

(F) Air Emissions[;]

(G) Production, in-use, and transportation energy inputs[;] (H) Energy efficiency[;]

(I) Greenhouse gas emissions[;]

(J) Waste and end-of-life disposal[;]

(K) Public health impacts, including potential impacts to sensitive subpopulations, including infants and children[;]

(L) Environmental impacts[; and]

(M) Economic effects.[150]

The regulations pursuant to this section should also specify the "range of regulatory responses."[151] The law lists options, including: requiring no action, requiring industry to provide additional information about the chemical or its alternatives, imposing labeling requirements, imposing restrictions or outright prohibitions on the use of the chemical in consumer products, imposing requirements "that control access to or limit exposure to the chemical of concern," requiring the "manufacturer to manage the product at the end of its useful life, including recycling or responsible disposal," requiring industry "to fund green

[150] *Id.* § 25253(a)(2)(A)–(M).

[151] *Id.* § 25253(b).

chemistry challenge grants when no feasible safer alternative exists," or any other outcomes the department deems necessary.[152] However, the law does not define chemicals that should qualify as chemicals of concern, nor does it specify which chemicals of concern should be evaluated in consumer products or how to prioritize those evaluations.[153]

The initiative requires the department to perform "multimedia life cycle evaluation[s]" on the regulations. [154] The initiative defines this as "the identification and evaluation of a significant adverse impact on public health or the environment, including air, water, or soil, that may result from the production, use, or disposal of a consumer product or consumer product ingredient."[155] The multimedia evaluation must "be based on the best available scientific data, written comments submitted by interested persons, and information collected by the department . . . ."[156] It is intended to address the effects associated with "[e]missions of air pollutants, including ozone-forming compounds, particulate matter, toxic air contaminants, and greenhouse gases[;] . . . [c]ontamination of surface water, groundwater and soil[;] . . . [d]isposal or use of the byproducts and waste materials[;] . . . [w]orker safety and impacts to public health[; and] [o]ther anticipated impacts to the environment."[157] The department DTSC must consult with a variety of state departments and agencies, including "the State Department of Public

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[152] CAL. HEALTH & SAFETY CODE § 25253(b)(1)–(9) (West Supp. 2013).

[153] *See generally id.* § 25252.

[154] *Id.* § 25252.5(a).

[155] *Id.* § 25252.5(g). The department does not have to subject the regulations to a multimedia life-cycle evaluation if the council conclusively determines, after an initial evaluation, that the proposed regulations will not have any "significant adverse impact on public health or the environment." *Id.*

[156] *Id.* § 25252.5(b).

[157] *Id.* § 25252.5(b)(1)–(5).

Health, the State and Consumer Services Agency, the Department of Homeland Security, [and] the Department of Industrial Relations" when creating the multimedia life-cycle evaluation.[158]

The council received both sets of regulations prior to the January 1, 2011 deadline.[159] However, the initiative provides that if the regulations have "a significant adverse impact on the public health or the environment, or alternatives exist that would be less adverse," the council must recommend alternative measures.[160] Upon receiving these recommendations, the department has within sixty days to revise the regulations in order "to avoid or reduce the adverse impact."[161] Otherwise, the affected agencies must take appropriate action that will mitigate the adverse impact.[162]

2. Green Ribbon Science Panel

The initiative also establishes a Green Ribbon Science Panel, consisting of members with expertise in "[c]hemistry[,] . . . [c]hemical engineering[,] . . . [e]nvironmental law, . . . [t]oxicology[,] . . . [p]ublic policy[,] . . . [p]ollution prevention[,] . . . [c]leaner production methods[,] . . . [e]nvironmental health[,] . . . [p]ublic health[,] . . . [r]isk analysis[,] . . . [m]aterials science[,] . . . [n]anotechnology[,] . . . [c]hemical synthesis[,] . . . [r]esearch[, and] . . . [m]aternal and child health."[163] It advises the department about "scientific and technical matters" associated with chemicals of concern, "developing green chemistry and chemicals policy recommendations," prioritizing

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[158] *Id.* § 25252.5(e).

[159] *Id.* § 25256.1 (indicating the statutory requirement that the regulations be received by that date).

[160] *Id.* § 25252.5(c).

[161] *Id.* § 25252.5(d).

[162] *Id.*

[163] *Id.* § 25254.

chemicals based on "hazard traits and toxicological end-point data," and adopting regulations.[164] The department convened the panel in 2009 and they have met regularly since that time.[165]

A major industry concern with the proposed law was how the state would handle trade secrets.[166] The final version of the initiative included language that allows industry—when giving information about products or chemicals to the department—to identify specific information as a trade secret.[167] State agencies would not be able to release the information to the public, subject to the limitations of the statute.[168] The disclosure requirements do not apply to "hazardous trait submissions for chemicals and chemical ingredients" required by the statute.[169] The department is also required to establish a publicly accessible Toxics Information Clearinghouse for "the collection, maintenance, and distribution of specific chemical hazard trait and environmental and toxicological end-point data."[170] The department determines design requirement standards and the "data quality and test methods that govern" the information included in the clearinghouse.[171]

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[164] *Id.* § 25255(a)–(d).

[165] *Id.* § 25254; Green Ribbon Science Panel, CAL. DEP'T OF TOXIC SUBSTANCES CONTROL, http://www.dtsc.ca.gov/PollutionPrevention/GreenChemistryInitiative/GreenRibbon.cfm (last visited Nov. 11, 2013).

[166] *Transparency Gone Wild: The Risks of Trade Secrets Exposure Under California's Safer Consumer Products Regulations*, MCKENNA LONG & ALDRIDGE LLP (Sept. 30, 2013), https://www.mckennalong.com/publications-advisories-3409.html.

[167] CAL. HEALTH & SAFETY CODE § 25257(a) (West Supp. 2013).

[168] *Id.*

[169] *Id.* § 25257(f).

[170] *Id.* § 25256.

[171] *Id.* § 25256.2(a).

The department must also "consult with other states, the federal government, and other nations to identify available data . . . [and] regional, national, and international data sharing arrangements" are encouraged.[172] However, the statutes do not include specific appropriations to carry out these mandates.[173]

C. Washington

In April 2008, the State of Washington passed a law similar to, but less comprehensive than Maine's law, limiting its focus to children's products.[174] The United States Congress preempted the first part of the act addressing lead, cadmium, and phthalates in children's products by passing the CPSIA in August 2008.[175] The federal Consumer Product Safety Commission enforces a prohibition of these chemicals.[176]

The second part of Washington's law requires the state to compile a list of priority chemicals of high concern based on the potential exposure to children or developing fetuses, and to submit reports and policy recommendations to the legislature.[177] Regulations pursuant to this law were adopted in 2011, which requires manufacturers of children's products, beginning in August 2012, to report to the Washington Department of Ecology if their products contain any of the sixty or so high priority chemicals listed.[178] The department does not have the authority to ban or restrict these chemicals, but may impose civil penalties on manufacturers that violate the reporting requirements.[179]

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[172] *Id.* § 25256.3.

[173] *See generally id.*

[174] *Compare* WASH. REV. CODE ANN. §§ 70.240.010–240.060 (West 2011), *with supra* Part III.A and accompanying notes.

[175] WASH. REV. CODE ANN. § 70.240.020 (West 2011); Consumer Product Safety Improvement Act of 2008, Pub. L. No. 110–314, 122 Stat. 3016 (codified at 15 U.S.C. §§ 1278a, 2057c (2012)).

[176] *See* 15 U.S.C. §§ 1278a, 2057a.

[177] WASH. REV. CODE ANN. § 70.240.030 (West 2011).

[178] WASH. ADMIN. CODE §§ 173-334-010–173-334-130 (2011).

D. Connecticut

In June 2008, Connecticut passed a statute directing the administrator to "compile . . . and from time to time amend, a list of toys and other articles which are intended for use by children and which are classified as banned hazardous substances . . . ."[180] The Connecticut law also requires the administrator, in consultation with the Commissioners of Public Health and Environmental Protection, a list of safer alternatives to the toxic substances.[181] In addition, the legislature authorized the Commissioner of Energy and Environmental Protection to:

> [P]articipate in an interstate clearinghouse to
>
> (1) classify chemicals existing in commercial goods into one of the four following categories:
>
> (A) High concern,
>
> (B) moderate concern,
>
> (C) low concern, or
>
> (D) unknown concern;
>
> (2) organize and manage available data on chemicals, including, but not limited to, information on uses, hazards and environmental concerns associated with chemicals;

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[179] *Id.* § 173-334-120(4).

[180] CONN. GEN. STAT. ANN. § 21a-336(c) (West Supp. 2013).

[181] *Id.* § 21a-348.

(3) produce and inventory information on safer alternatives for specific uses of chemicals and model policies and programs related to such alternatives; [and]

(4) Provide technical assistance to businesses and consumers relating to safer chemicals.[182]

E. Minnesota

In 2009, Minnesota enacted legislation, which requires the Department of Health (department) to consult with the Pollution Control Agency to identify chemicals of high concern to be designated as priority chemicals.[183] A chemical may be classified as "high concern" if it is likely to:

(1) harm the normal development of a fetus or child or cause other developmental toxicity;

(2) cause cancer, genetic damage, or reproductive harm;

(3) disrupt the endocrine or hormone system;

(4) damage the nervous system, immune system, or organs, or cause other systemic toxicity;

(5) be persistent, bioaccumulative, and toxic; or

(6) be very persistent and very bioaccumulative.[184]

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[182] *Id.* § 22a-902.

[183] MINN. STAT. ANN. §§ 116.9401–116.9403 (West Supp. 2013).

[184] *Id.* §116.9401(e)(1)–(6).

The department must create and revise a list of chemicals of high concern every three years.[185] When generating its list, the department must "consider chemicals listed as a suspected carcinogen, reproductive or developmental toxicant, or as being persistent, bioaccumulative, and toxic, or very persistent and very bioaccumulative by a state, federal, or international agency."[186] The department must consider whether:

> (1) [the chemical] has been identified as a high-production volume chemical by the [EPA]; and [whether]
>
> (2) it "meets any of the following criteria:"
>
> > (i) the chemical has been found through biomonitoring to be present in human blood, including umbilical cord blood, breast milk, urine, or other bodily tissues or fluids;
> >
> > (ii) the chemical has been found through sampling and analysis to be present in household dust, indoor air, drinking water, or elsewhere in the home environment; or
> >
> > (iii) the chemical has been found through monitoring to be present in fish, wildlife, or the natural environment.[187]

The department must reissue the list of priority chemicals whenever a new priority chemical is added to the list.[188] The state is authorized to participate in interstate clearinghouses with other states to

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[185] *Id.* § 116.9402(a), (b).

[186] *Id.* § 116.9402(c).

[187] *Id.* § 116.9403(a).

exchange information on chemicals in consumer products and information on safer alternatives to such chemicals.[189] Minnesota participates in this clearinghouse with nine other states.[190]

F. Massachusetts

The Massachusetts Toxics Use Reduction Act[191] was originally passed in 1989 to reduce the use of, release of, and exposure to toxic or hazardous substances.[192] The act recognizes six means of reducing the use of toxic substances: "1. [i]nput substitution . . . ; 2. [p]roduct reformulation . . . ; 3. [p]roduction unit redesign or modification . . . ; 4. [p]roduction unit modernization . . . ; 5. [i]mproved operation and maintenance of production unit equipment . . . ; or 6. [r]ecycling, reuse, or extended use of toxics . . . ."[193]

These reduction methods are intended to reduce overall use of toxic substances without causing the risks associated with their use to be borne by any single sector.[194] The goal of the act was to reduce levels of toxic substances by 50% in ten years.[195] The Department of Environmental Protection (department)

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[188] MINN. STAT. ANN. §116.9403(b) (West Supp. 2013).

[189] *Id.* § 116.9407.

[190] *IC2 Membership*, NORTHEAST WASTE MGMT. OFFICIALS' ASS'N, http://www.newmoa.org/prevention/ic2/membership.cfm (last visited Nov. 11, 2013).

[191] MASS. ANN. LAWS ch. 21I, § 1 (LexisNexis 2007).

[192] *U.S. State Chemicals Policy*, LOWELL CENTER FOR SUSTAINABLE PRODUCTION CHEMICALS POL'Y AND SCI. INITIATIVE, http://www.chemicalspolicy.org/chemicalspolicy.us.state.php (last visited Dec. 26, 2012).

[193] MASS. ANN. LAW ch. 21I, § 2(1)–(6) (LexisNexis 2007).

[194] *Id.* § 2.

[195] *Id.* § 13(A).

administers the act, which inspects, develops, and enforces regulatory standards for reducing the use of toxic substances.[196]

The act authorizes the department to create "an administrative council on toxics use reduction."[197] The council is required to identify state and federal laws related to safety and toxic substances, with the intent to streamline the regulatory and reporting processes within the state.[198]

The act creates the Toxics Use Reduction Institute at the University of Massachusetts Lowell.[199] This institute conducts research and disseminates information to encourage reductions in toxic substances use.[200] The institute works with other agencies and offices to certify individuals as toxic substances reduction planners, and trains other organizations and bodies in toxic substances reduction strategies.[201] The institute must consult with the Science Advisory Board, which is associated with the institute.[202]

Large quantity toxic users must submit a report of all hazardous substances used and produced at their facilities to the Department of Environmental Protection on an annual basis.[203] Such users must also

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[196] *Id.* § 3.

[197] *Id.* § 4.

[198] *Id.* § 4(A).

[199] *Id.* § 6.

[200] *Id.* § 6(C)–(D).

[201] *Id.* §§ 6(H), 6(E).

[202] *Id.* § 6(J).

[203] *Id.* § 10.

create toxic substances reduction plans, which must be updated in even-numbered years.[204] The department must charge an annual toxic substances use fee to employers.[205]

G. State Executive Branch Efforts

The governors of a few states have issued executive orders directed at toxic chemicals. In 2006, the Governor of Maine issued an executive order requiring its Department of Environmental Protection to provide the public information about safer alternatives and other ways to reduce use of toxic chemicals.[206] The Governor's order also identified lead, mercury, and brominated flame retardants specifically, and creates a governor's task force to promote safer chemicals to identify and promote safer alternatives to toxic chemicals in all consumer goods within the state.[207]

The Governor of Michigan signed an executive order in 2006 directing the Department of Environmental Quality to work with the state's departments and agencies to encourage the research, development, and implementation of innovative chemical technologies; promote the use of chemical technologies that reduce or eliminate the use or generation of hazardous substances during the design, manufacture, and use of chemical products and processes; and encourage the use of safer, less toxic, or non-toxic chemical alternatives to hazardous substances.[208] As a result of this order, the Department of

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[204] *Id.* § 11.

[205] *Id.* § 19.

[206] Me. Exec. Order No. 16 FY 06/07 (June 27, 2006).

[207] *Id.*

[208] Mich. Exec. Directive No. 2006-6 (Oct. 17, 2006).

Environmental Quality established a Green Chemistry Program to promote and coordinate research, education, and technology transfer efforts.[209]

In 1999, the Governor of Oregon issued an executive order directing the Department of Environmental Quality to identify any efforts that could be undertaken in the state to identify, track, and eliminate all new releases of persistent, bioaccumulative and toxic pollutants (PBT) in the environment by 2020.[210] The Governor for the State of Washington issued a similar executive order in 2004 aimed specifically at brominated flame retardants, requiring its Department of Ecology to collaborate with public health colleagues to identify actions to reduce environmental and health threats posed by those compounds.[211] In addition, the order requires Washington's procurement office to make available to all state agencies non-toxic or less toxic equipment, supplies, and other products.[212] More recently, the Governor of Oregon signed an executive order designed to promote and facilitate investments in green chemistry.[213] In addition to mandating that the state adopt low toxicity product purchasing guidelines and develop an inter-agency toxics reduction strategy, the order also directs state agencies to collaborate with and identify existing green chemistry solutions and research needs in at least two industry sectors.[214] Furthermore, the order requires state agencies to develop green chemistry incentives and innovation tools by collaborating with industry and academic representatives.[215]

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[209] *Id.*

[210] Or. Exec. Order No. EO-99-13 (Sept. 24, 1999).

[211] Wash. Exec. Order No. 04-01 (Jan. 28, 2004).

[212] *Id.*

[213] Or. Exec. Order No. 12-05 (Apr. 27, 2012).

[214] *Id.*

[215] *Id.*

Like their legislatures, state executive agencies are working together to leverage areas of expertise and stretch thin resources. In Oregon, the State Health Authority and the Department of Environmental Quality meets regularly to identify and discuss opportunities to collaborate on budget packages, communications vehicles, and policy proposals.[216] In addition, state agency officials meet regularly with their counterparts in other states to compare issues and responses, share resources, and learn from each other.[217]

H. Interstate Chemical Clearinghouse

States are also working together on technical implementation of policies enacted at the state level. The Interstate Chemical Clearinghouse (IC2) is a collaboration of states, municipalities, and tribal governments focused on sharing information, processes, and methodologies to efficiently implement

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[216] *See generally id.* (explaining the duties of the DEQ and DAS under the executive order). At the time of the writing of this article, author Gail Shibley served as Administrator of Oregon's Environmental Public Health Office. As such, she was a frequent participant in these regular roundtable meetings, and also regularly meets with the director of the Department of Environmental Quality to continue to strengthen the state's public health environmental protection connection.

[217] *See National Conversation on Public Health and Chemical Exposures*, AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY, http://www.atsdr.cdc.gov/nationalconversation/ (last visited Nov. 7, 2012). At the time of the writing of this article, author Gail Shibley was a member of the State Environmental Health Directors (SEHD) caucus of the Association of State and Territorial Health Officials. SEHD meets monthly and maintains both ad-hoc and standing work groups on issues like climate change, indoor air quality and safe water. The author also represents SEHD on a broader national CDC-led discussion about chemical exposures and public health. *See State Environmental Health Directors (SEHD) Fact Sheet 2011*, ASTHO, http://www.astho.org/Programs/Environmental-Health/State-Environmental-Health-Directors/_Materials/SEHD-Fact-Sheet-2011/ (last visited Nov. 9, 2013).

state-level chemical policies.[218] IC2 projects include alternative assessment methodologies, database clearinghouses for both chemicals and consumer products, and other technical aspects of state-level policy implementation.[219] Each of the states that have adopted legislation or policy to promote safer chemicals participates in an interstate workgroup seeking to identify safer alternatives.[220] This workgroup includes state agency staffs from "California, Connecticut, Massachusetts, Michigan, Minnesota, New Jersey, New York, Oregon, and Washington" to discuss their state's approach to safer chemical regulation and devise methods to work cooperatively on state chemicals policy.[221]

I. Local Legislative Efforts

Individual cities and counties continuously work to protect the public's health from exposure to toxic chemicals. In 2004, the Buffalo, New York City Council enacted an ordinance aimed at reducing PBTs.[222] The ordinance requires the city to identify and purchase products that do not contain or release PBTs.[223] In 2001, Erie County, New York enacted a similar ordinance that requires county departments

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[218] *IC2 Fact Sheet*, NORTHEAST WASTE MGMT OFFICIALS' ASS'N, http://www.newmoa.org/prevention/ic2/about/factsheet.cfm (last visited Dec. 10, 2012).

[219] *Id.*

[220] *Update on State Efforts to Regulate Chemicals*, BEVERIDGE & DIAMOND, P.C. (Feb. 2, 2011), http://www.bdlaw.com/news-1070.html.

[221] *Id.*

[222] BUFFALO, N.Y. COMMON COUNCIL, RES. FOR PBT-FREE PURCHASING (Dec. 28, 2004), *available at* http://www.chej.org/ppc/docs/toxic_chemicals/Persistent%20Toxic%20Chemicals/Buffalo_NY_%20PBT_%20Resolution/PBT%20Buffalo%20PBT-Free%20Purchasing%20Policy.pdf.

[223] *Id.*

to purchase products containing little to no amount of PBTs.[224] When no safer substitutes are available, the departments must include a provision in purchase contracts to encourage manufacturers to recycle products containing PBTs.[225]

In 2002 and 2007, respectively, the cities of Seattle, Washington and Bellingham, Washington also enacted ordinances with provisions that restrict the purchase of products containing PBTs.[226] In 2006, Olympia, Washington enacted an ordinance that, in addition to including purchasing provisions, required the city to investigate removing city pipes containing polyvinyl chloride (PVC) from all drinking water and other projects.[227]

Marin County, the city and county of San Francisco, the city of Santa Rosa, and the city of Berkeley, are among the political subdivisions to enact code provisions to address toxics in California. In 1988, the Berkeley City Council enacted ordinances that forbid the use of chlorofluorocarbons (CFCs) and

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[224] ERIE COUNTY, N.Y., ENVTL. MGMT COUNCIL, RES. FOR PBT PURCHASING (2001), *available at* http://www.newmoa.org/prevention/ic2/projects/chempolicy/index.php.

[225] *Id.*

[226] BELLINGHAM, WASH. CITY COUNCIL, RES. NO. 2007–05 (Apr. 2, 2007), *available at* http://www.newmoa.org/prevention/ic2/projects/chempolicy/legislationdocs/Washington/WA_Bellingham.pdf; CITY OF SEATTLE, WASH., RES. NO. 30487 (July 1, 2002), *available at* http://www.newmoa.org/prevention/ic2/projects/chempolicy/legislationdocs/Washington/WA_Seattle30487.pdf.

[227] CITY OF OLYMPIA, WASH., RES. NO. M–1621 (Jan. 3, 2006), *available at* http://www.newmoa.org/prevention/ic2/projects/chempolicy/legislationdocs/Washington/WA_Olympia.pdf. The inclusion of PVC is both insightful and troubling. Occupational PVC exposure has been causally linked to cancers for many years, yet millions of Americans drink daily from water taps served by PVC pipes. *See* PAUL D. BLANC, HOW EVERYDAY PRODUCTS MAKE PEOPLE SICK: TOXINS AT HOME AND IN THE WORKPLACE 71-74 (2007).

polystyrene foam in food packaging.[228] In 1991, the Berkeley City Council passed another ordinance regarding CFCs.[229] This ordinance recognizes the deleterious nature of CFCs and halons on the atmosphere and forbids their use, with some exceptions.[230] San Francisco adopted the Precautionary Principle in 2003 as a guide for decision-making, and in 2005, the city enacted ordinances to allow the Precautionary Principle to inform purchasing decisions by the city.[231] The Santa Rosa City Council adopted an ordinance that promotes "environmentally preferable purchasing."[232] Similar to the City of Berkeley, Marin County, California has also enacted ordinances that prohibit the use of polystyrene foam food and beverage containers by food establishments.[233] Marin County officials passed these ordinances in 2009.[234]

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[228] BERKELEY, CAL., MUN. CODE tit. 11, ch. 11.58, §§11.58.010–11.58.130, ch. 11.60, §§11.60.010–11.60.150 (2012), *available at* http://codepublishing.com/ca/berkeley/.

[229] *Id.* ch. 62, §§ 11.62.010–11.62.130.

[230] *Id.*

[231] *See* S.F., CAL. ENVTL. CODE, ch. 1, §§ 100–04 (2003), *available at* http://www.amlegal.com/nxt/gateway.dll?f=templates&fn=default.htm&vid=amlegal:sanfrancisco_ca; *See id.* ch. 2, §§ 200–10.

[232] SANTA ROSA, CAL., RES. NO. 28230 (Jan. 29, 2007), *amending* SANTA ROSA, CAL., POLICY NO. 000-32 (2013), *available at* http://ci.santa-rosa.ca.us/doclib/Documents/Annual%20Review%202007%20GP%20only.pdf.

[233] MARIN CNTY., CAL., CODE OF ORDINANCES tit. 7, ch. 7.25, §§ 7.25.010–7.25.050, *available at* http://library.municode.com/index.aspx?clientID=16476&stateID=5&statename=California.

[234] *Id.*

Sarasota, Florida adopted a resolution that promotes the use of the Precautionary Principle for household and outdoor chemicals.[235] In Ohio, the cities of Cincinnati and Columbus also passed codes requiring environmentally preferable purchasing.[236]

In 2006, Multnomah County, Oregon adopted a toxics reduction ordinance that included a toxics reduction plan based on the Precautionary Principle, and formed a city/county toxics reduction steering committee responsible for submitting annual staff reports to the county board of commissioners.[237]

In Wisconsin, Dane County,[238] Douglas County,[239] and the cities and villages of Ashland,[240] Stoughton,[241] Superior,[242] Madison,[243] DeForest,[244] Racine,[245] Cambridge,[246] and Sun Prairie[247] prohibit the sale or distribution of mercury thermometers.[248]

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[235] SARASOTA, FLA., BD. OF CNTY. COMM'R, RES. ADVISING THE CITIZENS TO USE PRECAUTIONS IN USING HOUSEHOLD AND OUTDOOR CHEMICALS TO LESSEN ENVTL DAMAGE AND POSSIBLE EFFECTS ON HUMAN HEALTH ESPECIALLY CHILDREN (2010), *available at* http://www.newmoa.org/prevention/ic2/projects/chempolicy/legislationdocs/Florida/FL_Sarasota%20County.pdf.

[236] CINCINNATI, OHIO, ORDINANCE NO. 141 (May 4, 1994), *available at* http://www.newmoa.org/prevention/ic2/projects/chempolicy/legislationdocs/Ohio/OH_Cincinnati.pdf; COLUMBUS, OHIO, COLUMBUS CITY CODES, § 329.31 (2006), *available at* http://www.newmoa.org/prevention/ic2/projects/chempolicy/index.php.

[237] MULTNOMAH CNTY, OR., RES. NO. 06-073 (May 11, 2006), *available at* https://multco.us/file/28410/download.

[238] DANE CNTY, WIS., BD. OF SUPERVISORS, RES. NO. 56, 2000–01 (July 26, 2000), *available at* http://www.chemicalspolicy.org/legislationdocs/Wisconsin/WI_DaneCountyMercury.pdf.

[239] DOUGLAS CNTY, WIS. BD OF SUPERVISORS, ORDINANCE NO. 3.9 (Oct. 18, 2001), *available at* http://wi-douglascounty.civicplus.com/DocumentCenter/Home/View/56.

[240] ASHLAND, WIS. COMMON COUNCIL, ORDINANCE NO. 406 §§ 406.10–406.40 (May 2002), *available at* http://www.newmoa.org/prevention/ic2/projects/chempolicy/index.php.

[241] STOUGHTON, WIS. CITY COUNCIL, ORDINANCE NO. O-39-00 (Oct. 10, 2000), *available at* https://www.municode.com/library/wi/stoughton/codes/code_of_ordinances?searchRequest=%7B%22searchText%22:%22chapte

(*continued*)

It is essential that the federal and state governments collaborate to conduct research and create solutions though regulatory action in order to accomplish the large task of protecting the public from harmful chemical exposures.

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[242] SUPERIOR, WIS., CODE OF ORDINANCES ch. 74, § 74-3 (2008), *available at* http://library.municode.com/index.aspx?clientId=13990.

[243] MADISON, WIS., ORDINANCE NO. 12, 774 (Mar. 13, 2001), *available at* http://www.newmoa.org/prevention/ic2/projects/chempolicy/index.php (creating MADISON, WIS., MUNICIPAL CODE ch. 7, § 7.27 (2001)).

[244] VILL. OF DEFOREST BD., WIS., ORDINANCE NO. 2000–43 (Sept. 19, 2000), *available at* http://www.vi.deforest.wi.us/vertical/sites/%7B5DDB5418-8268-440C-BD18-45CB7768531A%7D/uploads/CHAPTER_12_am__14-001_eff__1-17-14.pdf (creating VILLAGE OF DEFOREST BOARD, WIS., MUNICIPAL CODE ch.12, § 12.045 (2000)).

[245] RACINE, WIS. COMMON COUNCIL, ORDINANCE NO. 9-01 (Mar. 20, 2001), *available at* http://www.newmoa.org/prevention/ic2/projects/chempolicy/legislationdocs/Wisconsin/WI_Racine.pdf (creating RACINE, WIS. COMMON COUNCIL, MUNICIPAL CODE ch. 66, § 66-901 (2001)).

[246] VILL. OF CAMBRIDGE, WIS., CODE OF ORDINANCES tit. 9, ch. 9.16, § 9.16.030 (2008), *available at* http://library.municode.com/index.aspx?clientId=16104.

[247] SUN PRAIRIE, WIS., CODE OF ORDINANCES, tit.8, ch. 8.52, § 8.52.010–8.52.030 (2004), *available at* http://library.municode.com/index.aspx?clientId=13968.

[248] *See supra* notes 240–247.

IV. SELECTED LEGAL ISSUES

A. Preemption

States considering action to protect health and regulate toxic chemicals in their jurisdictions must successfully maneuver through statutory and constitutional boundaries. The most important barrier that states must consider is preemption.

1. Origins and Categories of Federal Preemption

The federal preemption doctrine evolved from the Supremacy Clause of the United States Constitution, which states that the Constitution and laws of the federal government "shall be the supreme Law of the Land."[249] Generally speaking, preemption falls into two categories: express and implied.[250] The United States Congress expressly preempts state law when it specifically excludes states from legislating in a certain area, such as cigarette labeling and advertising.[251] However, legislation may implicitly preempt state law through the statute's "structure and purpose."[252]

Implied preemption is generally divided into two subcategories: field preemption and conflict preemption.[253] Field preemption is when "federal law so thoroughly occupies a legislative field" or when Congress has enacted such a "complete scheme of regulation" that the states can reasonably infer that

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[249] U.S. CONST. art. VI, cl. 2; *see also Cipollone v. Liggett Group, Inc.*, 505 U.S. 504, 516 (1992).

[250] *Gade v. Nat'l Soild Wastes Mgmt. Ass'n*, 505 U.S. 88, 98 (1992).

[251] "No requirement or prohibition based on smoking and health shall be imposed under State law with respect to the advertising or promotion of any cigarettes the packages of which are labeled in conformity with the provisions of this chapter." 15 U.S.C. § 1334(b) (2012).

[252] *Jones v. Rath Packing Co.*, 430 U.S. 519, 525 (1977).

[253] *Gade*, 505 U.S. at 98.

Congress intended to leave no room for the states to supplement the federal law.[254] Conflict preemption occurs when a state law conflicts in some way with federal law.[255] Conflict preemption is further divided into two subcategories: "physical impossibility" and "obstacle."[256] State law is preempted under the physical impossibility prong when it is impossible to comply with both the federal and state law.[257] A state law is preempted under the obstacle prong when it is "an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."[258] In addition to federal statutes, properly promulgated federal regulations may also preempt state action.[259] However, the United States Supreme Court has noted reluctance to infer preemption based on the regulation of a federal agency that interprets Congress' preemptive intent.[260]

2. Federal Regulation and State Health Protections: Medtronic, Inc. v. Lohr

The clearly established presumption is that "the historic police powers of the States" are not superseded by federal law "unless that was the clear and manifest purpose of Congress."[261] "The purpose of Congress is the ultimate touchstone."[262] "States traditionally have had great latitude under their police

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[254] *Cipollone*, 505 U.S. at 516; *Hines v. Davidowitz*, 312 U.S. 52, 66 (1941).

[255] *Gade*, 505 U.S. at 98.

[256] *Id.*

[257] *Fla. Lime & Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 142–43 (1963).

[258] *Hines*, 312 U.S. at 67.

[259] *Fla. Lime*, 373 U.S. at 142.

[260] *Id.*

[261] *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947).

[262] *Retail Clerks Int'l Ass'n v. Schermerhorn*, 375 U.S. 96, 103 (1963).

powers to legislate as 'to the protection of the lives, limbs, health, comfort, and quiet of all persons.'"[263] State-based action under the federal Food, Drug, and Cosmetic Act (FDCA) is an example related to health protection.[264] Congress designed the FDCA to be a comprehensive regulatory framework for diverse food, drug, and cosmetic products made or sold anywhere in the country, and charged the Food and Drug Administration (FDA) with the law's oversight.[265] Still, under the FDCA, courts have rejected industry challenges to state-based action.

In *Medtronic, Inc. v. Lohr*,[266] for example, a woman sued in state court on four common law negligence and strict liability theories after her Medtronic pacemaker failed, requiring emergency surgery.[267] After removing the suit to federal court, the defending corporation moved for summary judgment, arguing that the FDCA, as amended by the Medical Devices Act (MDA), preempted state-based claims.[268] Medtronic based its defense on the MDA's preemptive provision that, "no State . . . may establish or continue in effect . . . any requirement (1) which is different from, or in addition to, any

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[263] *Metro. Life Ins. Co. v. Mass.*, 471 U.S. 724, 756 (1985) (quoting *Slaughter-House Cases*, 83 U.S. 36, 62 (1872) (quoting *Thorpe v. Rutland & Burlington R. Co.*, 27 Vt. 140, 149 (1855))); *see also Fort Halifax Packing Co. v. Coyne*, 482 U.S. 1, 21 (1987) ("pre-emption should not be lightly inferred [in collective bargaining] since [it is] within the traditional police power of the State."), *accord Hawaiian Airlines, Inc. v. Norris*, 512 U.S. 246, 252 (1994) (citing *Fort Halifax Packing Co.* in holding that the federal Railway Labor Act did not preempt Hawaii's Whistleblower Protection Act).

[264] 21 U.S.C. §§ 301–399f (2012).

[265] *See, e.g., FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 164–65 (2000) (Breyer, J., dissenting) (discussing legislative history of the Food, Drug, and Cosmetic Act).

[266] 518 U.S. 470 (1996).

[267] *Id.* at 480-81; s*ee also Lohr v. Medtronic, Inc.*, 56 F.3d 1335, 1340 (11th Cir. 1995) (citing the claims as "(1) negligent design; (2) negligent manufacture; (3) negligent failure to warn; and (4) strict liability in tort"). *Id.*

[268] *Medtronic*, 518 U.S. at 481.

requirement applicable under this chapter to the device, and (2) which relates to the safety or effectiveness of the device . . . .[269]

The district court agreed with the defendant and dismissed all claims.[270] On appeal, the Eleventh Circuit analyzed the MDA's preemption language by comparing the "State . . . requirement[s]" that formed the basis of Lohr's suit with "MDA-imposed requirements."[271] The Eleventh Circuit, citing its own precedent, as well as that of the First, Third, Fifth, Seventh, Eighth and Ninth Circuits, found that common law actions are "state requirements" under the MDA provision and are thus subject to preemption.[272] The court also relied on a Supreme Court interpretation of seemingly similar language that broadly swept common law claims within a federal tobacco statute's preemption provision.[273] However, the Eleventh Circuit found reasonable the FDA's interpretation of the statute's "any requirement" provision to require preemption of any "*specific* requirement[]."[274] The court held that the FDA interpretation meant preemption was "'restricted by nature' to a particular process, procedure, or device."[275]

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[269] *Id.*; 21 U.S.C. § 360k(a) (2012).

[270] *Lohr*, 56 F.3d at 1341.

[271] *Id.* at 1342.

[272] *Id.*

[273] *See id.* at 1343-44 (citing *Cipollone v. Liggett Group, Inc.*, 505 U.S. 504, 521 (1992) (finding the tobacco statute's preemption of any state "'requirement or prohibition' sweeps broadly and suggests no distinction between positive enactments and common law . . . .")).

[274] *Id.* at 1344–45.

[275] *Id.* at 1346.

Applying this framework to Lohr's claims, the Eleventh Circuit stressed its purposefully narrow focus, defining the question in a way that limited the usefulness of proffered legal authority.[276] Ultimately, the court upheld the dismissal of all but the plaintiff's lesser claim of negligent design, finding that the FDA had not imposed specific design requirements on the precise device model at issue.[277]

The corporate defendant appealed and was granted certiorari to the United States Supreme Court.[278] There, Medtronic asserted the MDA preemption provision mandated preemption of the single remaining claim.[279] This argument was unsuccessful.[280]

Finding Medtronic's argument "not only unpersuasive, [but] implausible," the Supreme Court unanimously ruled the MDA did not preempt the state-based negligent design claim.[281] However, the Court did not stop there. A majority then overturned the Eleventh Circuit's dismissal of Lohr's negligent manufacturing and labeling claims as well, finding that relevant federal requirements were "entirely generic," and thus did not meet the necessary confines of the FDA's preemption interpretation.[282] Absent statutory language reflecting congressional intent to leave consumers without any judicial remedy, and given the FDA's reasonable regulation limiting preemption to specific federal requirements regarding a

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[276] *Id.*at 1347.

[277] *Id.* at 1347.

[278] *Medtronic Inc. v. Lohr*, 518 U.S. 470, 484 (1996).

[279] *Id.* at 486.

[280] *See id.* at 487.

[281] *Id.*

[282] *Id.* at 497, 501.

particular device, the Court found the statute did not preempt *any* state-based common law claims.[283] In a concurring opinion, Justice Breyer further analyzed the case according to "ordinary principles of 'conflict' and 'field' preemption."[284] Specifically, Justice Breyer found the state tort claims did not create any actual conflict with federal statutory or regulatory provisions.[285] Likewise, Justice Breyer found no indication that either the federal legislative or executive branches intended the federal government to fully occupy any pertinent regulatory field.[286]

3. Protection of State Police Powers

Other cases also provide important insights about how states may act to protect the public's health through regulating chemicals in consumer products. For example, in finding that federal law did not preempt state causes of action in *Wyeth v. Levine*,[287] Justice Stevens relied on the "two cornerstones of [the Court's] pre-emption jurisprudence."[288] The first cornerstone was the *Medtronic* statement that

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[283] *Id.* at 287–88. In so finding, the Court cited Karen Silkwood's claim for punitive damages against the nuclear power plant guilty of negligently allowing Silkwood to be contaminated with plutonium. *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238 (1984). One reason *Silkwood* may be particularly noteworthy in the context of state protections against toxic chemicals exposure is that the federal government so heavily regulates nuclear power plant safety. *See Silkwood*, 464 U.S. 238 at 240-41. Indeed, the Court had earlier found federal law preempted state regulation of power plant safety. *Pac. Gas & Elec. Co. v. State Energy Res. Conserv. & Dev. Comm'n*, 461 U.S. 190, 206–09 (1983).

[284] *Medtronic*, 518 U.S. at 507 (Breyer, J. concurring).

[285] *Id.* at 508.

[286] *Id.*

[287] 555 U.S. 555 (2009).

[288] *Id.* at 565.

Congressional purpose is "the ultimate touchstone" in any preemption analysis.[289] The second cornerstone was that courts must not assume federal law supersedes states' historic police powers, "unless that was the clear and manifest purpose of Congress."[290] This second cornerstone is, like the first, applicable in all preemption cases, but is especially apt when Congress has "legislated . . . in a field which the States have traditionally occupied."[291]

Even when Congress uses express preemptive language, however, courts may struggle to determine the precise jurisdictional boundaries Congress intended.[292] Thus, similar to an implied preemption analysis, courts analyze the specific facts before them by looking to legislative and regulatory history.[293] Courts have found specific instances in which the TSCA preempts certain county and city ordinances regarding regulation of chemicals in consumer products.[294] States must be mindful of the facts that courts

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[289] *Id.* (quoting *Medtronic*, 518 U.S. at 485).

[290] *Id.* (citing *Medtronic*, 518 U.S. at 485).

[291] *Id.* (citing *Medtronic*, 518 U.S. at 485).

[292] *R.F. v. Abbott Labs.*, 745 A.2d 1174, 1187 (N.J. 2000) (citing 1 LAURENCE H. TRIBE, AMERICAN CONSTITUTIONAL LAW § 6-28, 1177 (3d ed. 2000)).

[293] *See Abbott Labs.*, 745 A.2d at 1187 (citing ERWIN CHEMERINSKY, CONSTITUTIONAL LAW: PRINCIPLES AND POLICIES § 5.2, 285 (1997)); s*ee also Wyeth*, 555 U.S. at 566 ("In order to identify the 'purpose of Congress,' it is appropriate to briefly review the history of federal regulation of drugs and drug labeling.").

[294] *See* Edward A. Nolfi, Annotation, *State or Local Regulation of Toxic Substances as Pre-empted by Toxic Substances Control Act*, 84 A.L.R. FED. 913, 915–19 (1987). The A.L.R. identifies and discusses seven cases brought within four federal circuits dating to 1981; all but one of the local ordinances were found preempted while two state-based claims were not preempted. *Id.* 915–18. Neither of the state claims involved state statute: one was a common law nuisance claim, the other challenged a regulation. *Id.* at 918–19. The regulatory challenge was upheld on appeal, but on abstention grounds involving contemporaneous state criminal prosecution against the regulated entity, not on the substance of the challenger's claim. *Potomac*

(*continued*)

have found compelling in those cases but, to date, courts have not found the TSCA to preempt any state level efforts based on the merits.[295] The twin requirements of clear congressional intent and the presumption that states' historic police powers are *not* to be preempted provide a powerful combination on which to base state policies regulating chemicals. Historically, state responsibility indisputably includes the right to protect public health and safety, as well as the right reduce or eliminate harmful chemical exposures. The federal government should protect this area from federal preemption. As described below, the courts should require express congressional intent to preempt and, when so expressed by Congress, courts should draw preemption boundaries as narrowly as practicable within the statutory text.[296]

B. Interstate Commerce Clause

The Constitution reserves for the federal government the authority to regulate interstate commerce.[297] Even when Congress has not enacted legislation affecting a specific commercial outcome, the "[Interstate] Commerce Clause prevents the [s]tates from erecting barriers to the free flow of interstate commerce."[298] Thus, even when no federal statute or regulation preempts state action, states must be

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Elec. Power Co. v. Sachs, 802 F.2d 1527, 1532 (4th Cir. 1986); s*ee also* 50 AM. JUR. 3d *Proof of Facts* § 25, 274–76 (1999) (identifying and discussing two of the same TSCA preemption cases). *See supra* Part II.B for a closer examination of the TSCA,

[295] *See* Nolfi, *supra* note 294, at 915–19.

[296] *See supra* Part IV.

[297] U.S. CONST. art. I, § 8, cl. 3. ("The Congress shall have the Power To . . . regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes. . . .").

[298] *Raymond Motor Transp., Inc. v. Rice*, 434 U.S. 429, 440 (1978) (citing *Cooley v. Bd. of Wardens*, 53 U.S. 299, 319 (1851)). This cabin on a state's power to act, even in the absence of congressional action, is commonly referred to as the Dormant (or Negative) Commerce Clause. 15A AM. JUR. 2d *Commerce* § 1, 450 (2011).

mindful to not restrict or unduly interfere with interstate commerce. As the Supreme Court has stated, the Constitution does not specify the boundaries of state actions that may run afoul of the Commerce Clause.[299] In other words, no state may economically isolate itself from the rest of the country.[300] Courts will thus find that state law violates the Commerce Clause when it provides in state companies with a commercial advantage over foreign (out-of-state) companies.[301]

Therefore, if state-based action affects the chemical industry and others, one can plausibly argue that restricting certain chemicals impermissibly interferes with commerce. In response, a court would likely balance the state's asserted interest against the regulation's commercial impact.[302] In conducting this analysis in *Kassel v. Consolidated Freightways Corp. of Delaware*,[303] the Supreme Court found Iowa's prohibition of sixty-five foot double tractor trailers violated the Commerce Clause because it effectively

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[299] *City of Phila. v. New Jersey*, 437 U.S. 617, 623 (1978) ("The bounds of these restraints appear nowhere in the words of the Commerce Clause, but have emerged gradually in the decisions of this Court giving effect to its basic purpose.").

[300] *H.P. Hood & Sons, Inc. v. Du Mond*, 336 U.S. 525, 537–38 (1949). *Accord Baldwin v. G.A.F. Seelig, Inc*., 294 U.S. 511, 527 (1935) ("Neither the power to tax nor the police power may be used by the state of destination with the aim and effect of establishing an economic barrier against competition with the products of another state or the labor of its residents.").

[301] *See, e.g., Boston Stock Exch. v. State Tax Comm'n*, 429 U.S. 318, 329 (1977) (articulating the fundamental principle in a State tax case, that "a tax which discriminates against interstate commerce . . . by providing a direct commercial advantage to local business" violates constitutional restraints); s*ee also Walling v. Michigan*, 116 U.S. 446, 455 (1886) (ruling that a state tax that "operat[es] to the disadvantage of the products of other States when introduced into the first . . . State, is, in effect, a regulation in restraint of commerce among the States . . . .").

[302] TODD B. TATELMAN, CONG. RESEARCH SERV., RS 22041, LEGAL ISSUES CONCERNING STATE AND LOCAL AUTHORITY TO RESTRICT THE TRANSPORTATION OF HAZARDOUS MATERIALS BY RAIL 5 (2005).

[303] 450 U.S. 662 (1981).

shifted traffic and safety burdens into surrounding states.[304] The plurality in *Kassel* cautioned that a state's assertion of public health and safety protection will not "insulate a state law from Commerce Clause attack."[305] A state regulation is properly invalidated if it only marginally furthers the "salutary purpose" of public health and safety, while substantially interfering with commerce.[306] In the concurring opinion, Justice Brennan disagreed that such weighing of benefits and burdens was necessary, given as Iowa expressly acknowledged that the law did not enhance public safety.[307] Indeed, evidence persuasively showed that the longer trucks were equally as safe as shorter trucks.[308] Therefore, the concurrence concluded that Iowa's law violated the Commerce Clause because the state's actual purpose was an impermissible deflection of through-traffic onto neighboring highways.[309]

Similarly, a party wishing to contest a state's chemical regulation could argue that the law, as with the Iowa law in *Kassel*, results in constitutionally impermissible burden shifting. However, such an argument seems unlikely, in the context of state action, to restrict products containing toxic chemicals. First, for this argument to be pertinent, a state would have to regulate chemicals while identifying no health or safety concern, when, in fact, states are regulating chemicals in consumer products to protect public health and safety.[310] Unlike the trucks in *Kassel*, consumer products are not the per se object of the

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[304] *Id.* at 671.

[305] *Id.* at 670.

[306] *Id.*; s*ee also Raymond Motor Transp., Inc. v. Rice*, 434 U.S. 429, 443 (1978).

[307] *Kassel*, 450 U.S. at 681–82 (Brennan, J., concurring).

[308] *Id.* at 672.

[309] *Id.* at 686–87 (Brennan, J. concurring).

[310] *See, e.g.*, s*upra* Part III.

states' concern.[311] Rather, states are taking aim at the chronic exposure to toxic chemicals found in consumer products.[312] States are not attempting to regulate products that do not contain these chemicals of concern.[313] Thus, the industry's argument in *Kassel* cannot apply to state regulation of chemicals in consumer products.

Second, a party arguing the logic of *Kassel* to oppose states' chemical regulation may have to cede safety concerns related to increased exposure to its products, just as the *Kassel* plurality acknowledged the unfair burden that results when a state pushes traffic safety concerns out of its own borders into those of its neighbors.[314] That is, the product in *Kassel* was the through-state truck traffic.[315] In contrast, chemical regulation involves consumer goods designed for sale and consumption anywhere.[316] Because a company surely wants to sell as many of its products as possible, including in neighboring states, a company could hardly argue that neighboring states face any offensive burden the Court found relevant in *Kassel*.[317]

Thus, unless language in a state statute or regulation has the effect of favoring in-state companies or enterprises (by, for example, placing lesser informational or financial burdens on in-state chemical manufacturers), the Interstate Commerce Clause should not be an impediment to state action that protects

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[311] *See, e.g.*, s*upra* Part III.A.2. The applicable statutory regulations in Maine prohibit the manufacture, sale, or distribution of products *that contain priority chemicals*, thereby implying that products without such chemicals are not of concern. *Id.*

[312] *See, e.g.*, s*upra* Part III.A–III.F.

[313] *Id.* (discussing state laws which regulate products that contain certain toxic chemicals; by implication, products without such chemicals are not of the states' concern).

[314] *Kassel*, 450 U.S. at 671, 686 (Brennan, J. concurring).

[315] *See id.* at 665–67.

[316] *See e.g.* s*upra* Part III.A.2 The applicable statute in Maine identifies for regulation children's products sold or distributed for sale in the State or nationally. *See* ME. REV. STAT. ANN. tit. 38, § 1693–A(3) (Supp. 2012).

[317] *Kassel*, 450 U.S. at 671, 686 (Brennan, J. concurring).

against harmful exposures to chemicals. Combined with properly strict judicial review of congressional preemption language, as discussed above and in Part V below,[318] states likely have adequate constitutional room to regulate chemicals in consumer products.

V. THE NATIONAL CONVERSATION ON PUBLIC HEALTH AND CHEMICAL EXPOSURES

The 2009–2011 *National Conversation on Public Health and Chemical Exposures* explored policy approaches to better prevent harmful chemical exposures.[319] This effort was "a collaborative project, supported by [the CDC] and the Agency for Toxic Substances and Disease Registry (ATSDR) . . . [with a] vision that chemicals are used and managed in ways that are safe and healthy for all people."[320] "Through the National Conversation . . . thousands of people from across the United States participated in developing an Action Agenda with recommendations to help government agencies and other organizations strengthen their efforts to protect the public from harmful chemical exposures."[321] The project's Policies and Practices Work Group made specific, action-oriented policy and law-based recommendations for government agencies and the private sector to better prevent harmful chemical exposures and spur the development and use of safer alternatives.[322]

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[318] *See supra* Parts IV.A.3, V.

[319] *About the National Conversation on Public Health and Chemical Exposures*, THE NAT'L CONVERSATION ON PUB. HEALTH AND CHEM. EXPOSURES, http://www.nationalconversation.us/about (last visited Dec. 26, 2012) [hereinafter *About the National Conversation on Public Health and Chemical Exposures*].

[320] *Policies and Practices Work Group Final Report*, THE NAT'L CONVERSATION ON PUB. HEALTH AND CHEMICAL EXPOSURES 1 (Nov. 2010), http://www.resolv.org/site-nationalconversation/files/2011/02/Policies_and_Practices_Final_Report.pdf [hereinafter *Policies and Practices Work Group*].

[321] *About the National Conversation on Public Health and Chemical Exposures*, *supra* note 319.

[322] *Policies and Practices Work Group*, *supra* note 320, at 1, 5.

Consistent with many of the emerging state and local policy approaches outlined in this Article, "[t]he Policies and Practices Work Group calls for a shift of emphasis of chemicals policy away from management of exposures and risk, and toward a prevention focus, including the development, adoption, and evaluation of safer alternatives."[323] The group noted that "while elements of a primary prevention approach are embedded in current chemicals policy and legal authorities, prevention . . ." should be further integrated in the policies and practices of EPA, OSHA, CDC, ATSDR, and other government agencies.[324] The group found that by integrating a prevention focus in all chemical policies and practices, government agencies at all levels could "drive decisions that are more effective and protective of public and worker health."[325] Many of the work group's recommendations (see Table 1) were reflected in the National Conversation Leadership Council's Action Agenda chapter on prevention.[326]

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[323] *Id.* at 4, 27.

[324] *Id.*

[325] *Id.*

[326] *Chapter 1: Protect Public Health by Preventing Harmful Chemical Exposures*, THE NAT'L CONVERSATION ON PUB. HEALTH AND CHEM. EXPOSURES, http://www.nationalconversation.us/action-agenda/chapter-1-prevention (last visited Dec. 26, 2012).

Table 1: Recommendations from the Prevention Chapter of the National Action Agenda on Public Health and Chemical Exposures. (The Action Agenda can be found here: www.nationalconversation.us.)

Rec. 1.1	The executive and legislative branches of federal, tribal, state, and local governments should promote the substitution of hazardous chemicals with less toxic alternatives through use of policy incentives, investment in research and development, enhanced efforts to develop effective hazard screening methods, and dissemination of information for personal decision making.
Rec. 1.2	Congress should reform the Toxic Substances Control Act (TSCA) and state legislatures should pass appropriate legislation to align with this Action Agenda's recommendations and to facilitate prompt action to eliminate or reduce harmful exposures to toxic chemicals.
Rec. 1.3	All executive and legislative branches of federal, tribal, state, and local governments should improve child health protection by requiring explicit consideration of children's unique vulnerabilities, susceptibilities, exposures, and developmental stages (including in utero), and of the places where children live, learn, and play, as part of ensuring that protecting the health of vulnerable populations is foremost in all policies and

	practices. Congress should make permanent the Federal Interagency Task Force on Children's Environmental Health, the EPA Children's Health Protection Advisory Committee (CHPAC), and the EPA Office of Children's Health Protection (OCHP).
Rec. 1.4	Federal agencies should put increased emphasis on public health principles and better coordinate primary prevention activities across the federal government to address chemical exposures.
Rec. 1.5	Federal agencies should work in consultation with the public and private sectors to 1) develop standard scientific criteria and protocols for applying the precautionary approach to both existing and new chemicals, and 2) design, assess, and promote safer chemical processes and products.
Rec. 1.6	NIOSH and OSHA should improve worker protection by 1) strengthening health-based exposure recommendations, 2) improving hazard communication, and 3) encouraging adoption of a chemicals management systems approach to purchasing, using, and disposing of chemicals.
Rec. 1.7	Federal agencies should ensure that industrial and federal facilities and agricultural operations comply with environmental health regulations, laws, and policies.

Rec. 1.8	Federal agencies should consult with the public and private sectors to develop an overarching decision-making paradigm for regulating toxic substances and protecting public health that incorporates precautionary decision making and allows for consideration of all pertinent information about risk.

VI. CONCLUSION

The public's health is at risk from chronic exposure to potentially toxic chemicals found in everyday products, from food and drink containers to cosmetics, and personal care products.[327] More and more, states are recognizing the link between these exposures and troubling health effects that society must then manage and finance.[328] Though it was expressly designed to identify and address health risks due to chemicals in commerce, consumer advocates assert neither the TSCA nor other consumer safety and environmental protection laws adequately protect human health in this area,[329] possibly due to insufficient statutory limitations or lack of budgetary resources necessary for effective administrative oversight. Many states have responded by choosing to establish and implement more stringent regulation.[330]

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[327] *See supra* Parts I, III.

[328] *See supra* Part III.

[329] *Id.* Consumer advocates across the country have pushed for state counterpart statutes, thereby implying that the Federal statutes do not provide sufficient protection. *Id.*

[330] *Id.*

Within the confines of the Supremacy Clause and the Interstate Commerce Clause, states have the constitutional authority to regulate chemicals in order to protect health.[331] In *Medtronic v. Lohr* and other rulings, the Supreme Court has articulated that a proper Supremacy Clause analysis presumes that the federal government has not preempted the states' historic power to protect public health unless Congress clearly manifests such intent.[332] Therefore, absent express statutory language or direct conflict with federal law, state laws restricting or otherwise regulating chemicals should clear a Supremacy Clause review.[333] In addition, states can meet Interstate Commerce Clause requirements by ensuring chemical regulations do not operate to favor in-state companies.[334] Without a showing of such favoritism, the only other Interstate Commerce Clause challenge to new state regulation would be that the regulation impermissibly burdened other states.[335] But such a challenge would require the chemical industry or others affected by the new regulation to show that the regulation impermissibly burdened other states with increased health or safety problems, in effect forcing the chemical industry to argue against the safety of its own products.[336]

States have unique and powerful contributions to make to the national and international effort to ensure chemicals in consumer products do not harm human health. The scope and complexity of this effort is enormous. Today's marketplace is global in scope, the borders of scientific understanding are

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[331] *See supra* Parts IV.A–IV.B.

[332] *See supra* Part IV.B.

[333] *Id.*

[334] *Id.*

[335] *Id.*

[336] *Id.*

forever expanding, and technology is rapidly and continually changing. It is clear that no single government actor can occupy the entire field.

The federal government has a critical role to play in harmonizing national approaches with our global trading partners, advancing research, setting and ensuring enforcement of precautionary health-protective standards, sharing data and information, and encouraging and supporting states. The states have an equally critical role to play as laboratories of innovation,[337] continuing to advance policies to protect the public's health, and helping lead chemical policy reform.

[337] *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting).