

U.S. State and Market Leadership on Food Contact Chemicals

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Summary of the Case

- The U.S. federal safety system is badly broken
- Consider, per- and polyfluoroalkyl substances (PFAS) and *ortho*-phthalates, for example

Three sets of actors are closing the gap in U.S. federal leadership and will increasingly drive positive change:

- ✓ Food industry market leaders
- ✓ Third-party standard-setting bodies
- ✓ State and local public policy makers



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The U.S. Food-Contact Chemical Safety System is Badly Broken



Fixing the Oversight of Chemicals Added to Our Food: Findings and Recommendations of Pew's Assessment of the U.S. Food Additives Program (2013)



Trasande L, Shaffer RM, Sathyanarayana S; AAP COUNCIL ON ENVIRONMENTAL HEALTH. Food Additives and Child Health. *Pediatrics*. 2018; 142(2)

~ 5,000 indirect food additives not safety assessed in decades

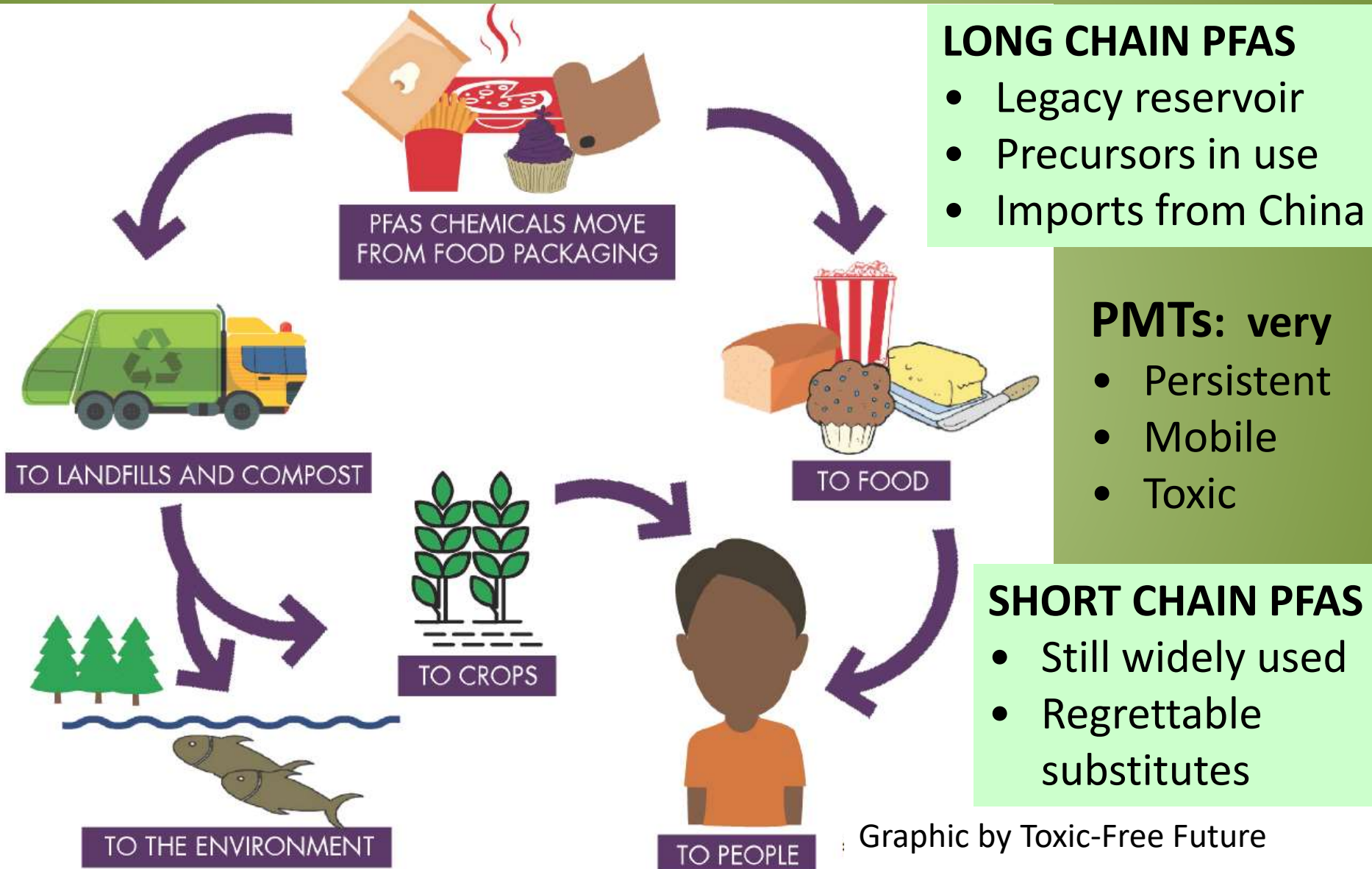
~ 1,000 self-certified by industry as Generally Recognized as Safe

- Close the GRAS loophole
- Modernize FDA's food additive science
- Ensure that existing additives are safe
- Establish a fee-based funding program to pay for the review process

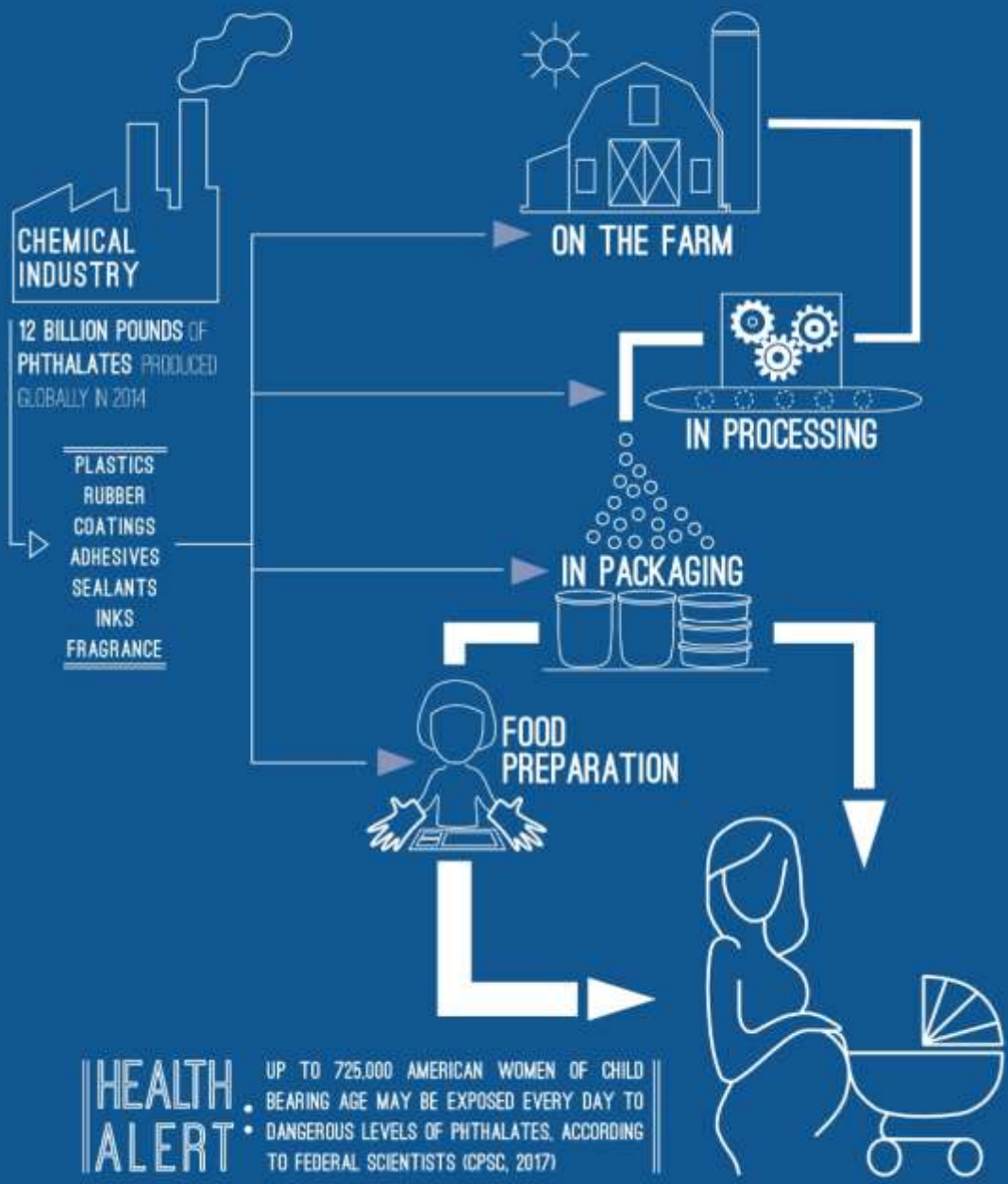


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PFAS, the Forever Chemicals, in Food



HOW ARE PHTHALATES GETTING INTO OUR FOOD?



ortho-Phthalates the Everywhere Chemicals

- Demonstrable health risks
- EDCs: low-dose concern
- High production volume & widespread use, still

US Food Contact Use	Test + (%)
Conveyor Belts	100
Cap Gaskets – Bottle Caps	60
Teat Cup Liners (Inflations)	50
Plastic Tubing	80 / 9
Cap Gaskets – Jar Lids	17
Inks, Adhesives & Coatings	?
Film Wrap (Cling Film)	0

Source: Carlos et al. (2018), Pure Strategies /Ecology Center (2018)

The Chemicals in Your Mac and Cheese

PHTHALATES

12 July 2017



The New York Times

Analysis by VITO (Flemish Institute for Technological Research) commissioned by U.S. NGOs

Table 1. Macaroni & Cheese Powder Had Highest Phthalates of Products Tested

Products Tested	Product Description	Number of Varieties Tested	Concentration of TOTAL Phthalates Average and Range, in $\mu\text{g}/\text{kg}$ or parts per billion (ppb)					
			In FAT (measured)			In PRODUCT (calculated)		
			Avg.	Low	High	Avg.	Low	High
Cheese Powder	Macaroni and Cheese, dry mix	10	940	365	2,523	106	34	218
Processed Cheese	Slices	5	569	180	1,223	105	38	216
Natural Cheese	Hard, Shredded, String & Cottage	15	216	< 55 *	567	53	< 17 *	203

Market Leadership – PFAS



TABLE 1: RESULTS OF SCREENING RETAILER FOOD-CONTACT MATERIALS FOR LIKELY PFAS TREATMENT

ITEM CATEGORY	Ahold Delhaize	Albertsons	Kroger	Trader Joe's	Whole Foods (Amazon)	TOTAL BY PRODUCT CATEGORY
Take-out container		0/2	1/1		4/5	5/8
Bakery or deli paper	1/6	1/7	1/11	0/6	1/8	4/38
Single-use plate	1/3	0/2	0/1	0/1		1/7
Tray for cook-at-home food	0/1	0/1	0/1	0/3	0/2	0/8
Baking or cooking supplies	0/4	0/5	0/4	0/2	0/2	0/17
TOTAL BY RETAILER	2/14	1/17	2/18	0/12	5/17	10/78

Corporate Chemical Policies



- 4th largest retail grocer in the United States
- Largest on East Coast
- Nearly 2,000 stores
- 6 billion annual orders

Announced a new sustainable chemistry commitment in Sept. 2019:

Restricts Chemicals of Concern

- PFAS
- Bisphenols
- Phthalates
- and more
- Will focus on ensuring more sustainable substitutes

Scope and Verification

- Applies to private brand products, and their **food packaging**
- Will expand supplier testing in 2020
- Will participate in Chemical Footprint Project to track progress



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Vinyl plastic gloves dominate the fast food restaurant market

Restaurant Glove Material		Gloves Sampled
Vinyl	Polyvinyl chloride (PVC)	40 (63%)
Poly	Polyethylene (PE)	20 (32%)
Nitrile	Nitrile butadiene rubber (NBR)	3 (5%)
Vinyl gloves were collected from 38 of 56 locations (68%) of 15 restaurant chains		



PHTHALATES still used in some gloves

at some stores of McDonalds, Wendy's, and Burger King

Market Leaders switched to polyethylene gloves with no plasticizer chemicals e.g.

- DEHT
- DINP
- DIDP
- DPHP
- DEHP



One-third of U.S. distributors sold some vinyl gloves with phthalates

Vinyl Glove Distributors	Vinyl Gloves with Phthalates	Vinyl Gloves Tested	# of Foreign Suppliers
Food Handler / Bunzl	3	6	10
Inteplast Group	2	4	11
Omar	2	8	n/a
Akers Industries	1	1	1
Gordon Food Service	1	1	n/a
Prime Source	1	1	4
AMMEX	1	3	6
511 Foodservice	1	3	2
AmerCareRoyal	1	7	13
Tronex Safety	1	10	n/a
22 Other Distributors	0	53	n/a
TOTAL: 32 Distributors	14	101	47

Third-Party Standards - PFAS



- Leading certifier of compostable products and packaging in U.S.
- Promotes best practices for recovery and diversion of organic waste to composting

- By March 31, 2019, all companies must not exceed 100 parts per million total fluorine in certified products based on testing by an approved laboratory
- By December 31, 2019, certification of products containing any intentionally added fluorinated chemicals in formula will be discontinued, based on statements that must be submitted



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Restricted Substances Lists (RSLs)



- A technical committee of the Institute of Packaging Professionals
- Raises food quality and safety awareness for food packaging industry

Published “Food Packaging Product Stewardship Considerations”

- Provides voluntary guidance to packaging suppliers on best practice
- Lists many chemical substances that either:
 - Should not be used intentionally (if suitable alternative exists) or
 - Should minimize use (no more than needed for technical effect)
- May go beyond regulatory requirements
- Being adapted by food brands and food supply chain managers



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Policy Leader – Washington state

In 2018, the Legislature passed the first law in country to phase-out all PFAS in food packaging



By Jan. 1, 2020, the Department must determine whether safer alternatives to PFAS are available for specific applications

By Jan. 1, 2022, no person may use or sell food packaging with intentionally added PFAS if safer alternatives are deemed available for that application

If not yet available, the deadline is reset two years after finding that safer alternatives are available, with an annual review and report required



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Policy Leader - California

- The cities of San Francisco and Berkeley passed local laws to prohibit the sale and use of compostable food serviceware with PFAS



The State's Safer Consumer Products Program adopted a 2018-2020 Priority Product Work Plan that:

- * Commits to evaluating potential Priority Products and associated Candidate Chemicals in the FOOD PACKAGING category for possible regulatory action



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Policy Leader – State of Maine (Pt. 1)

In June 2019, the Legislature passed a far-reaching Toxics in Food Packaging Act that will, by Jan. 1, 2022:



- Phase out PFAS in food packaging, if safe alternatives are found available
- Prohibit all *ortho*-phthalates in food packaging and food service gloves
- Applies to companies with more than \$1 billion in national food sales, which provide most food eaten by Americans
- Amends an existing 1989 law that banned heavy metals in packaging

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Policy Leader – State of Maine (Pt. 2)

The law also enacts the first comprehensive food contact chemical policy at the U.S. state level that:

- Authorizes designation of up to ten **Priority Food Contact Chemicals** by chemical class
- Authorizes **use reporting** by manufacturers to disclose use of Priority Food Contact Chemicals
- Authorizes requiring manufacturers to conduct or pay for an **alternatives assessment**
- Authorizes a sales prohibition to **phase out** use of Priority Food Contact Chemicals in food packaging



Thank You!

"Dis-moi ce que tu manges, je te dirai ce que tu es."

Tell me what you eat and I will tell you what you are

Anthelme Brillat-Savarin, *Physiologie du Gout, ou Meditations de Gastronomie Transcendante, 1826*

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