



Science Informing Healthy Choices

Working toward a toxic-free future for children

Jane Houlihan

Research Director
Healthy Babies Bright Futures
October 2017

...2008 press teleconference held by the Phthalate Esters Panel of the American Chemistry Council, Dean Finney, a consultant with more than forty years experience working with phthalates, including thirty-eight years with Eastman Chemical, a manufacturer of phthalates, asserted without modification that phthalates “do not migrate” or “off gas.”²⁸

Elizabeth Grossman
“Chasing Molecules” 2009

What if chemicals stayed in the
products they are part of,
and didn't migrate.

Or what if green chemistry was the rule
- no hazardous chemicals
in use...

NOTHING STAYS PUT, NOT EVEN LINT

c&en

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The great lint migration

How tiny synthetic fibers released from clothing are ending up in the environment and in our food

By Melody M. Bomgardner

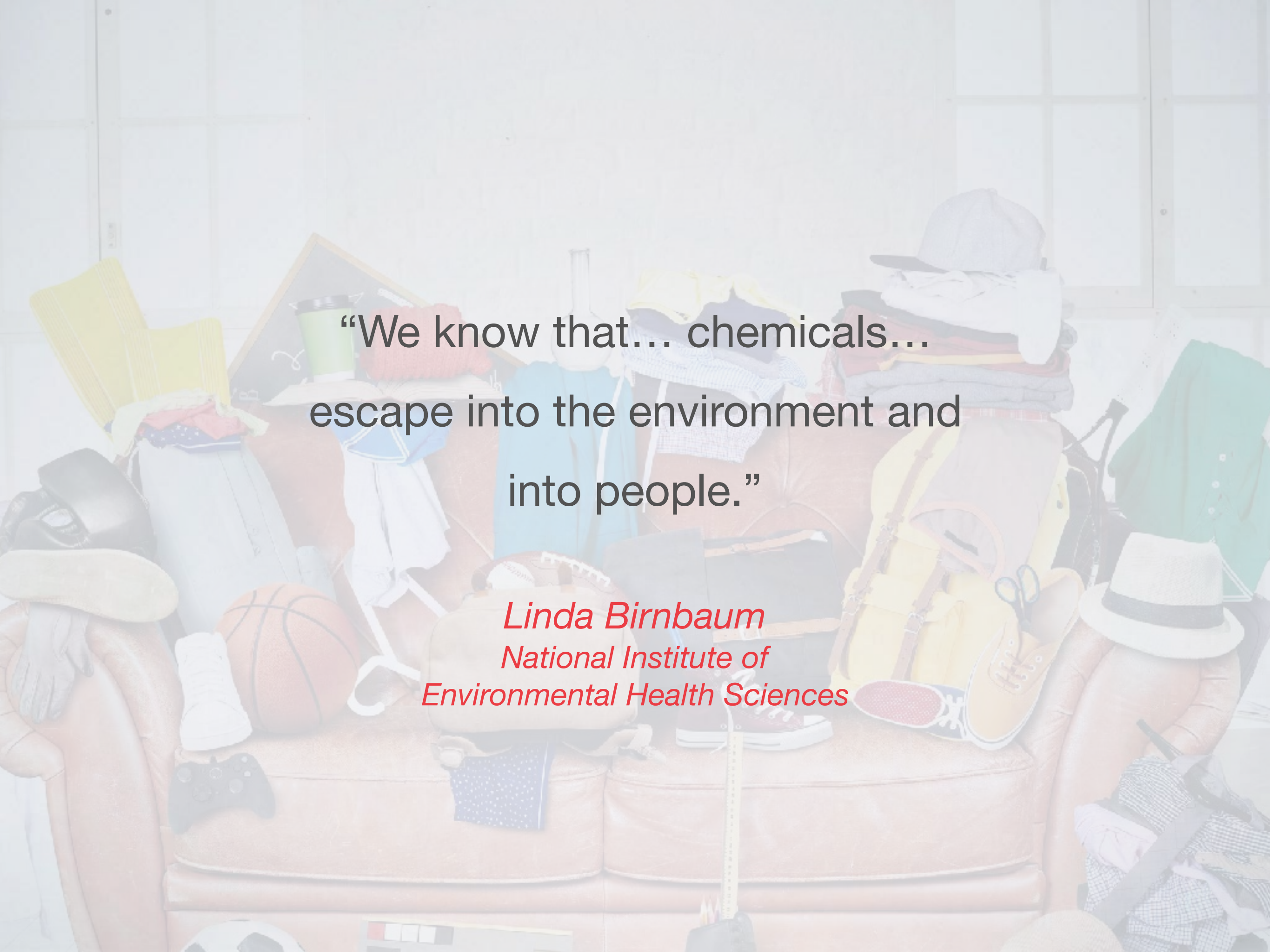




300,000 items in a home

1,000 chemicals in drinking water

10,000 additives allowed in food

A photograph of a cluttered room, likely a dormitory or a storage area. In the foreground, a brown leather sofa is covered with various items: a basketball, a black game controller, a measuring tape, a yellow backpack, a pair of yellow sneakers, a pair of blue sneakers, a white hat, and a pair of white socks. Behind the sofa, there is a pile of clothes, including a blue jacket, a red sweater, a yellow shirt, and a grey cap. To the left, there is a green coffee cup, a black bag, and a pair of yellow shoes. In the background, a window with a grid pattern is visible. The overall scene suggests a collection of personal belongings and items that have been left behind or discarded.

“We know that... chemicals...
escape into the environment and
into people.”

*Linda Birnbaum
National Institute of
Environmental Health Sciences*



Life's most transformative times

20 teens, 16 hormone disrupting chemicals

triclosan

isopropylparaben

diethylhexyl phthalate (3 variants)

benzylparaben

diethyl phthalate

ethylparaben

galaxolide

butylparaben

butylbenzyl phthalate

methylparaben

dibutyl phthalate

dimethyl phthalate

musk ketone

propylparaben

Life's most transformative times



Earth's most remote places

**Deepest ocean trenches:
PCBs, flame retardants**



Earth's most remote places



Life's most vital foods



PBDEs in breast milk

75 times

higher than in Europe

Life's most vital foods



**Earth's most pristine
places**



**Papua New Guinea:
High levels of PCBs,
Mercury, Lead**

**Earth's most pristine
places**



**Earth's most protected
and vulnerable places**



287 chemicals

**Earth's most protected
and vulnerable places**

Industrial pollution is global -
found in Earth's most remote,
pristine, vulnerable, and protected
places.



Earth's most political
places



Regulated becomes regulator

EPA Administrator

Office of Chemical Safety and
Pollution Prevention - Director

Office of Chemical Safety and
Pollution Prevention - Deputy
Assistant Administrator



Rollbacks

“52 environmental regulations on their way out under Trump”

Ban of hazardous pesticide


Wetland and tributary protections

Coal ash discharge regulations

Environmental mitigation for federal projects

48 more overturned, in progress, or in dispute





“Children worldwide
are being exposed to
unrecognized toxic chemicals
that are silently eroding intelligence,
disrupting behaviors, truncating future
achievements and damaging societies”

Grandjean and Landrigan 2014



What now?

WHAT NOW

Power of data

Power of collaboration

Power of communication



Power of data

APRIL 3, 2007

TIME

Is
Truth
Dead?

TIME.COM



DEPLACED
for
SCIENCE

SCIENCE
SERVING
THE
COMMON
GOOD

SCIENTISTS
SERVING
THE
COMMON
GOOD

Trust
Scientific
Facts
Not
Alternative
Fact

MARCH FOR SCIENCE



“Millions might lose health coverage?”

Washington Post, March 12

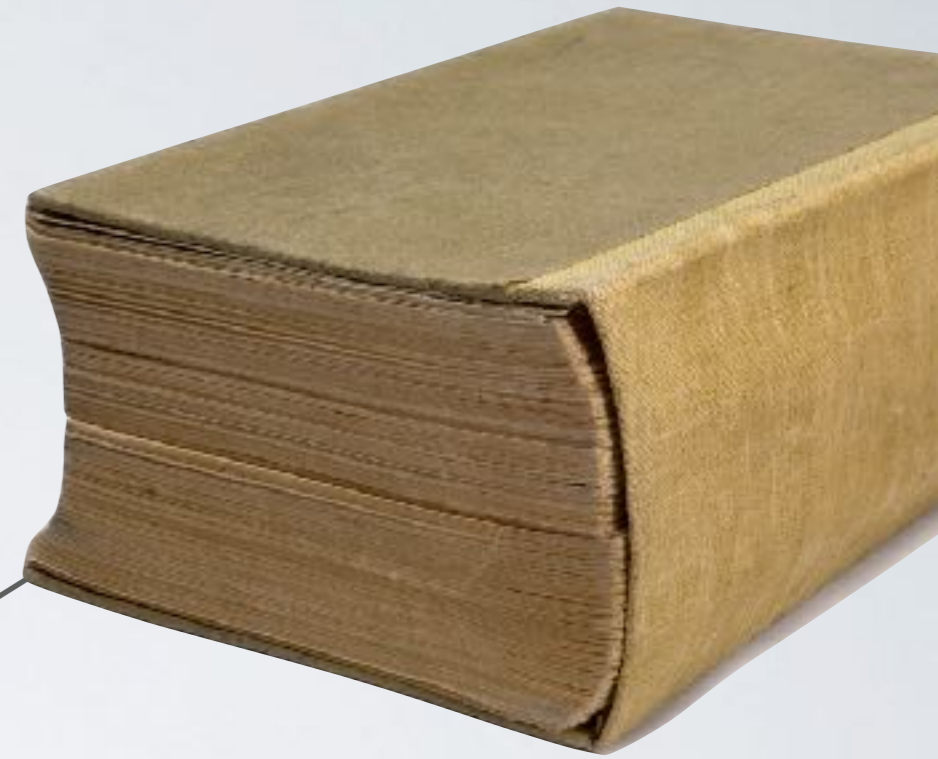
“Affordable Care Act revision would reduce insured numbers by 24 million, CBO projects”

Washington Post, March 13

**“Armed with information,
we can guide regulators
and policymakers to make
responsible decisions.”**

EDC-2, 2015

USING DATA TO CHANGE THE COSMETICS INDUSTRY

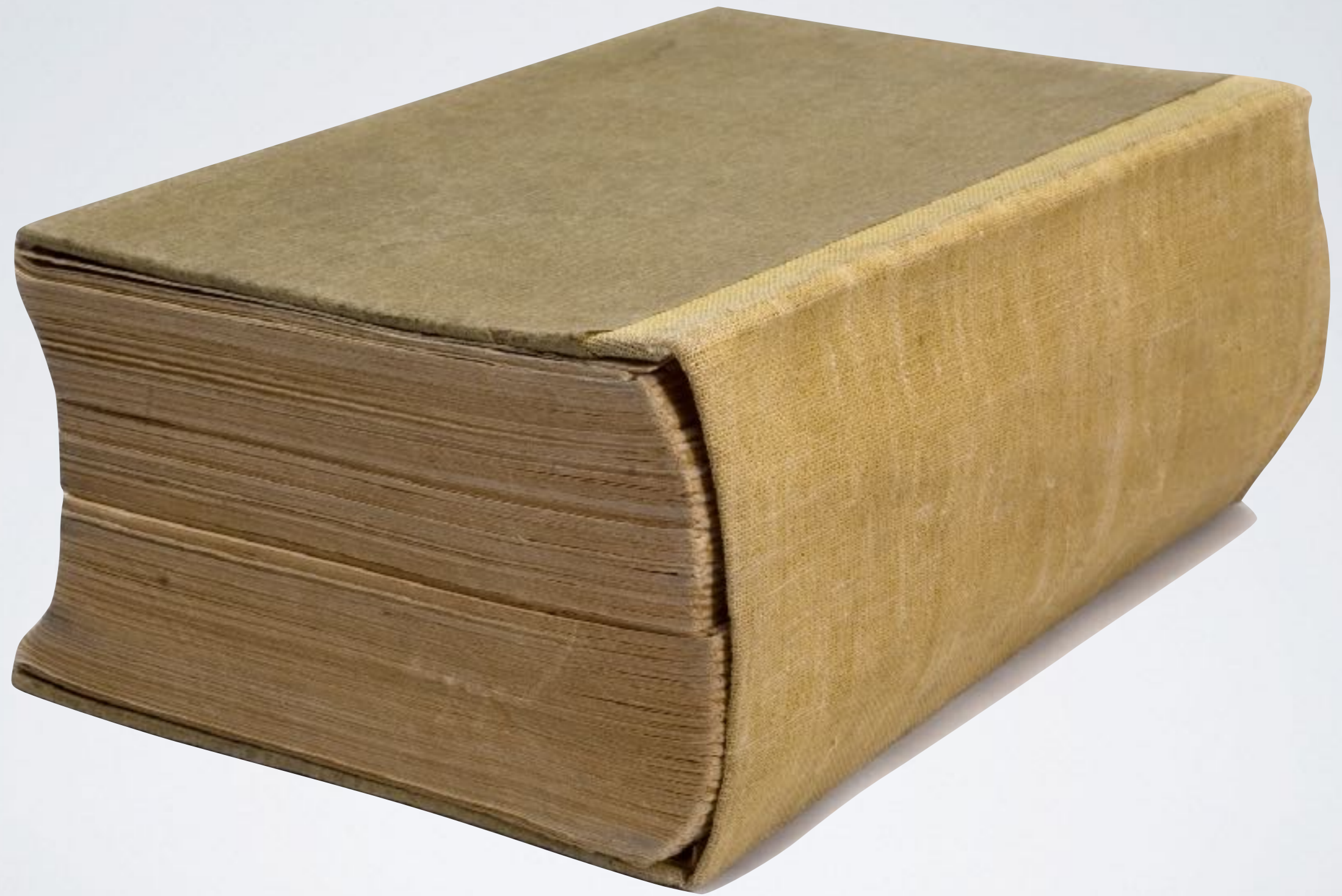


Federal Food, Drug and Cosmetic Act

343.5 pages, **Food & Drug** safety

1.5 pages, **Cosmetic** safety





FDA AUTHORITY OVER COSMETICS

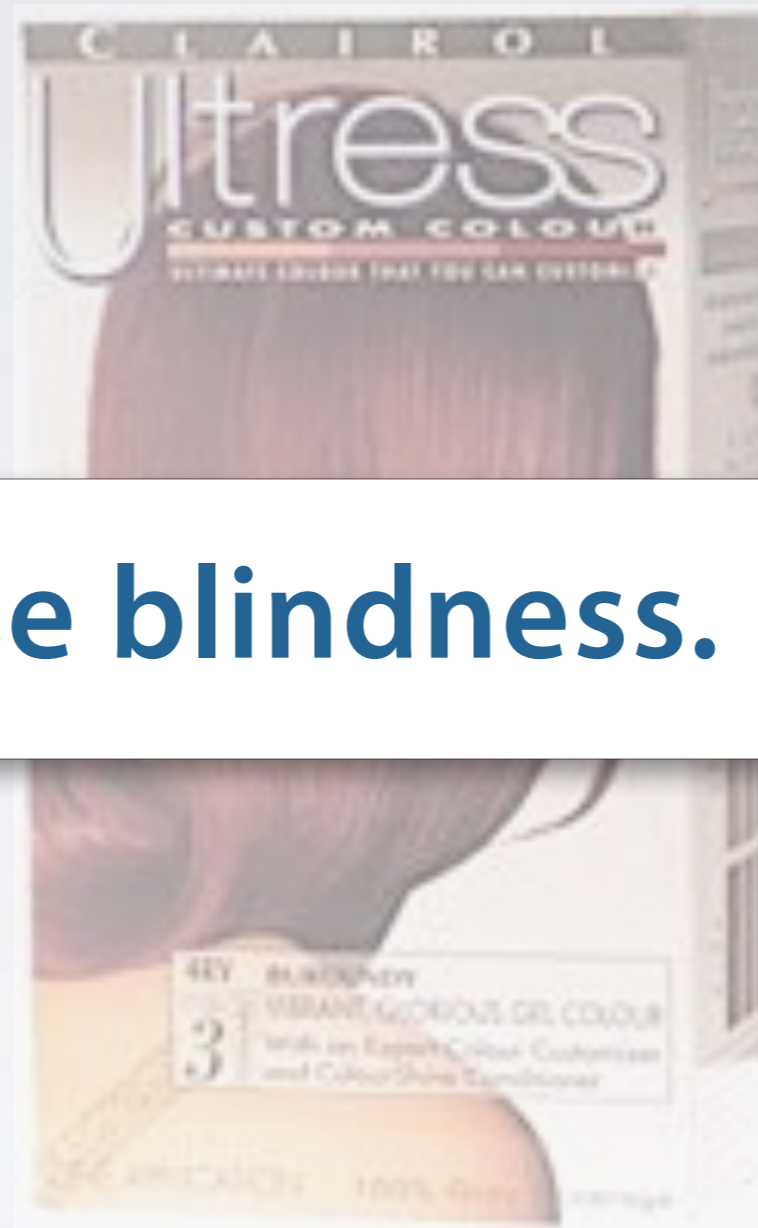
//

FDA **cannot require companies to do safety testing** of their cosmetic products before marketing.

FDA is **not permitted to require recalls** of cosmetics.

If FDA wishes to remove a cosmetic product from the market, it must first **prove in a court of law** that the product may be injurious to users, improperly labeled, or otherwise violates the law. //

- U.S. Food and Drug Administration



... may cause blindness.



Keep out of reach of children



Do not use without consulting a doctor if child has asthma or allergies or if there is a family history of either. Serious breathing problems could occur.



Contains lead... Keep this product out of children's reach... Wash hands thoroughly after each use.

FEDERAL LAW:
SAFETY STANDARD FOR
COSMETICS

**WARNING - The safety of
this product has not been
determined.**





SKIN DEEP 2004

Skin Deep

News about the safety of popular health & beauty brands

a project of Environmental Working Group



BROWSE POPULAR PRODUCTS

[EWG HOMEPAGE](#) // [SKIN DEEP HOME](#) // [ABOUT](#) // [HELP](#) // [DONATE](#)

MAKEUP SKIN CARE HAIR CARE NAIL CARE EYE CARE DENTAL & ORAL CARE PERFUME/ COLOGNE

- Other Product Types -

WHY THIS MATTERS
FACT SHEETS
WHAT YOU CAN DO

Search

Products

GO

advanced search

custom shopping list



PERSONAL FAVORITES

0 Items

GO

The lowest concern shampoo brands

Other views: brands: [highest concern](#) | [lowest concern](#) products: [highest concern](#) | [lowest concern](#)

Select another product category: - Select a product type -

Showing results 1 - 10 of 151 • [Next 10](#) • [>>](#) • [View All](#) • Show per page

	Brands - lowest concern to highest concern	Shampoo Products in the Database	Ingredients Used In Shampoo Products	Compact Signer? (about)	Relative Concern in Product Type
1	Terressentials (see products brand report)	5	23	Yes	Low
2	Keys Soap (see products brand report)	2	10	Yes	Low
3	J. P. Durga (see products brand report)	1	10	Yes	Low
4	Dr. Bronner's (see products brand report)	1	7	Yes	Low
5	Shea Moisture (see products brand report)	1	12	No	Low

90% of ingredients used in personal care products have not been screened for safety by the gov't, the industry or any other publicly accountable institution

- Analysis of data in Skin Deep

500 products with
ingredients banned in other
countries

- Analysis of data in Skin Deep

INDUSTRY SPEEDS UP ITS SELF REGULATION



**Industry
safety
panel's first
28 years**

**9 days of review
per chemical**

**The
last 4
years**

**1.7
days**

COMPANIES REFORMULATE

Disney

bisphenol A

Cover Girl

dibutyl phthalate

Paula Dorf

mercury

Oxybenzone

19% ↓

UVA protection in sunscreen

2.4X ↑

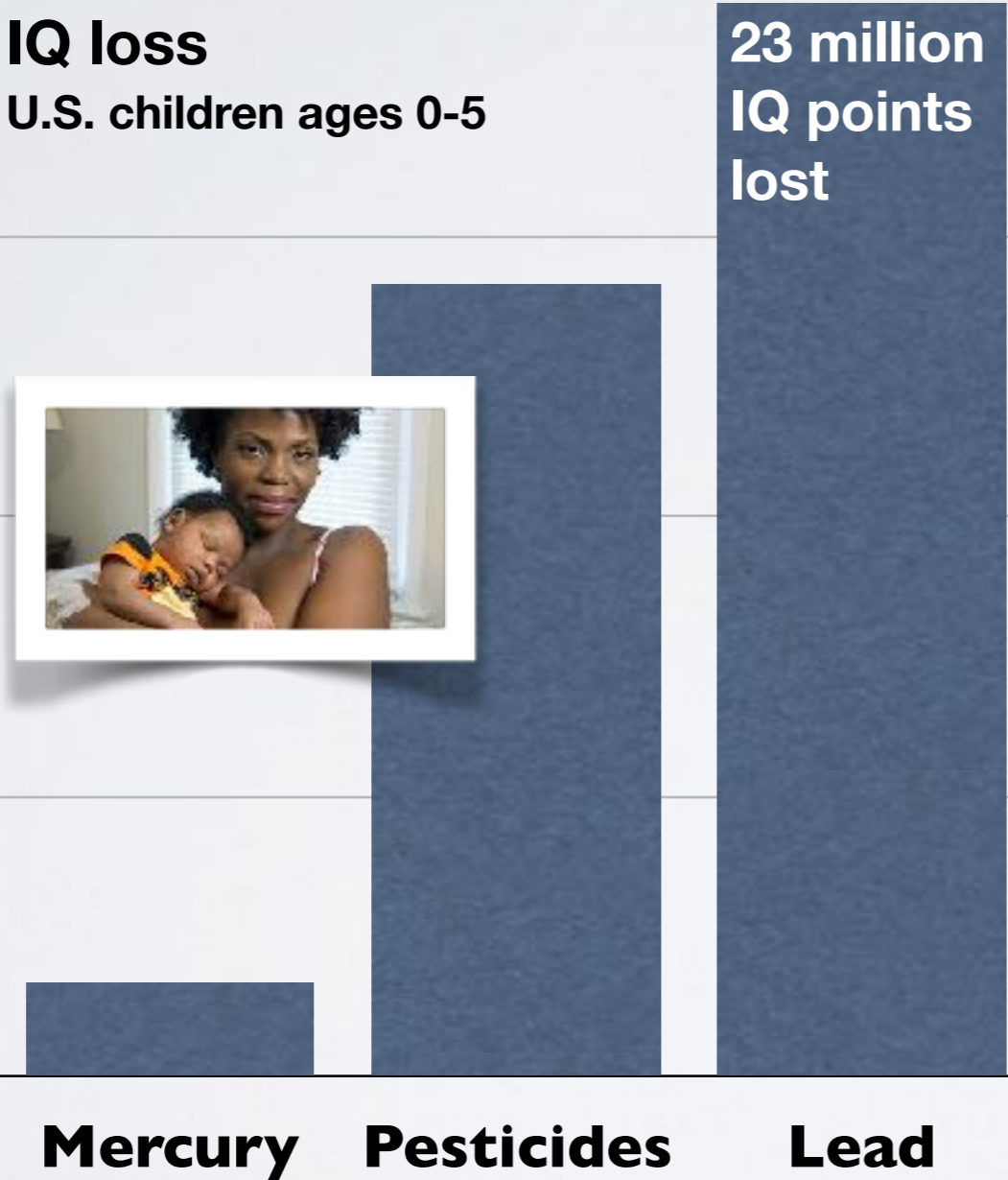
**Chemicals known to cause cancer,
birth defects, brain damage**

37% ↓

DATA CAN REVEAL THE GREATEST OPPORTUNITIES FOR CHANGE

IQ loss

U.S. children ages 0-5



Lead rises to the top for health impacts, policy options, and partnership opportunities.



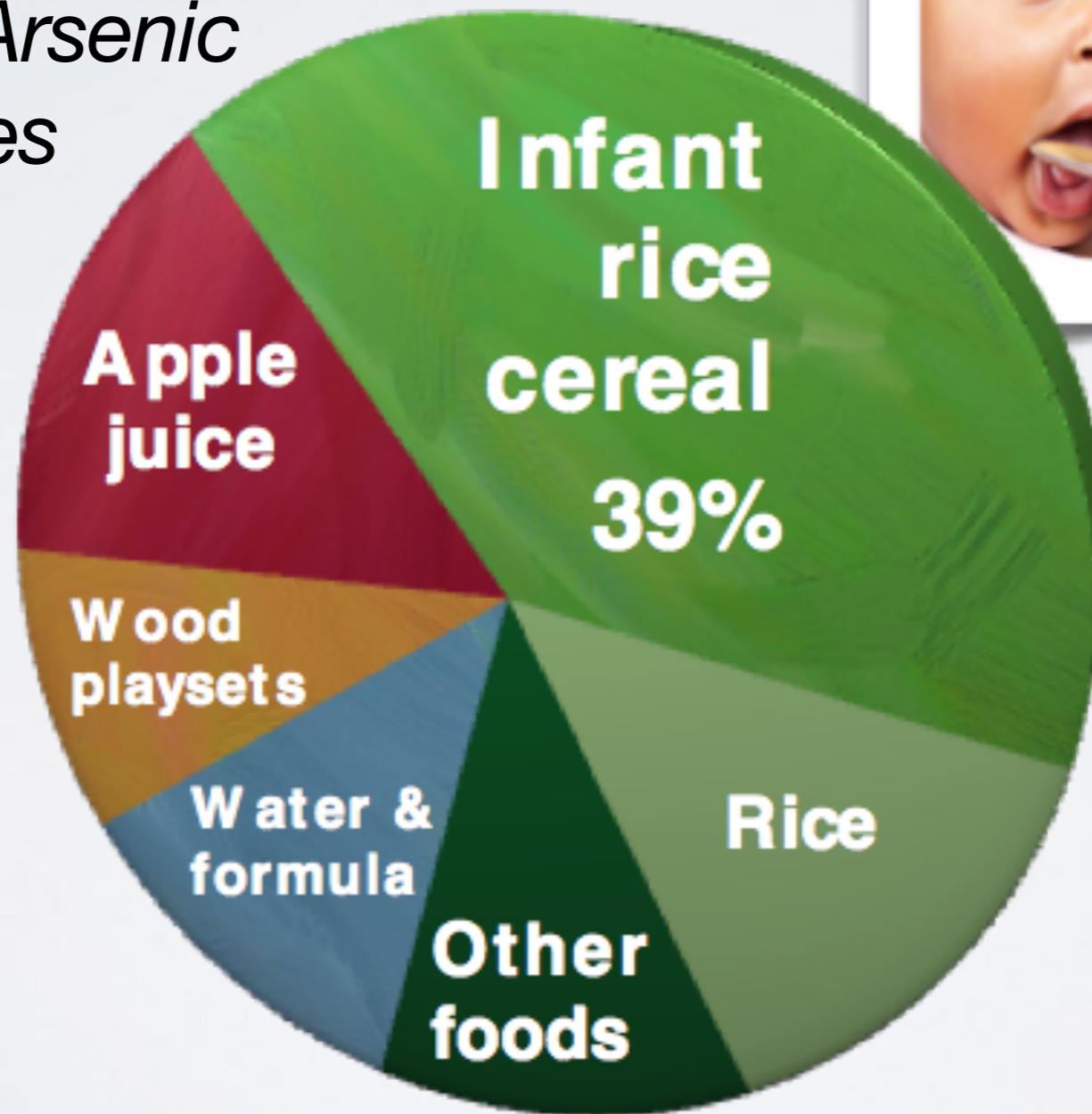
DATA FILLS CRITICAL GAPS
THAT BLOCK PROGRESS

*National Lead in Water
Testing Program*

- Partnering with the Virginia Tech (the Flint lab)
- 1000 families nationwide

DATA: IDENTIFYING THE MOST SIGNIFICANT EXPOSURE SOURCES

Infants' Arsenic Exposures



**Exposure:
Top source is
rice cereal**

POWER OF DATA

Especially powerful in an era of
alternative facts.

Empowers scientists and
advocates with effective defense
and offense.



Power of collaboration

COLLECTIVE POWER OF RESEARCH

EDC-1
2009

485 studies cited

EDC-2
2015

1322 studies cited

“ The evidence is **more definitive** than ever before – EDCs disrupt hormones in a manner that harms human health. ”



EXPECT DISRUPTION

“This community of experts has formed a united front to state the undeniable: that EDCs pose a threat to human health and to the ecosystems of the earth.”

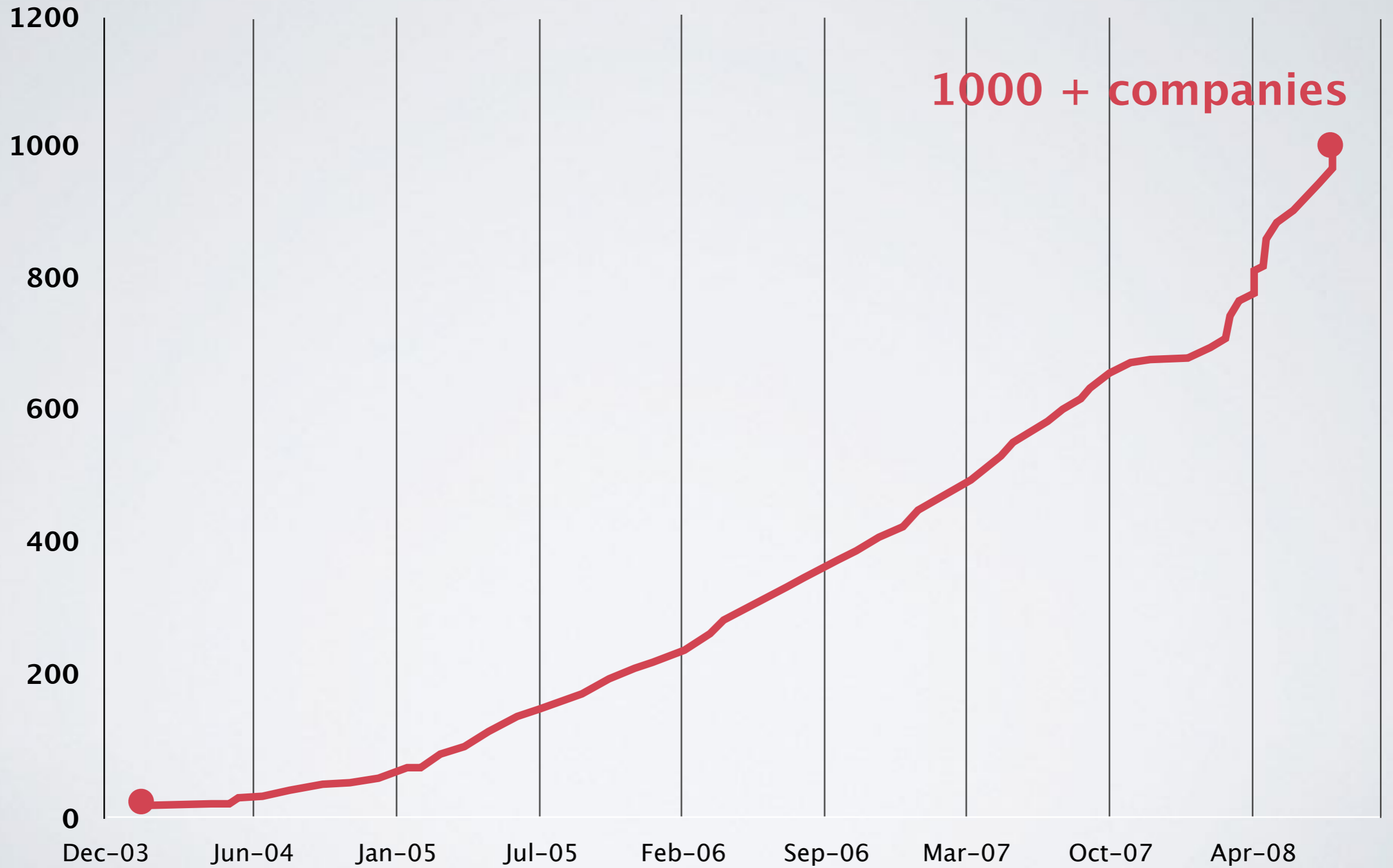
“Journal editors trade blows over toxicology
— Debate flares around European regulation of bisphenol A and other endocrine disrupters”
Nature, 2013

TENDR Call to Action

“action is urgently needed if we are to protect healthy brain development so that current and future generations can reach their fullest potential”



CAMPAIGN FOR SAFE COSMETICS



COLLECTIVE ACTION DRIVES CHANGE

L'Oreal, Revlon

Will meet EU standards in U.S.

OPI, Orly, Sally Hansen

Remove “toxic trio” from their nail polish

Johnson & Johnson

Removing formaldehyde from baby products globally

J&J, L'Oreal

No more triclosan: Phase-out or policy

FDA

Ban of common toxic antibacterials

Procter and Gamble

Disclosing all fragrance ingredients

STRATEGIC PARTNERSHIPS



*Lead in
Homes
Initiative*

- 10 cities
- 500 homes
- 10 community-based partner organizations

*“ Together we can
make a difference. ”*

*Janie Fields
Children’s Environmental Health Initiative*

Communication



“ The goal is to provide
inspiring information that
moves people to action *”*

Guy Kawasaki
Author and venture capitalist

“ If you don't give people information, they'll make up something to fill the void. *”*

Carla O'Dell

American Productivity and Quality Center

SKIN DEEP 2004

Skin Deep

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SKIN DEEP 2011

EWG's Skin Deep® Cosmetics Database

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EWG's Skin Deep®
Cosmetics Database

What's in your makeup?

Check to see if it's safe.

Search more than 65,000 products...

GO

Latest Tweet from EWG Who's heading top... National Take Your Parents to Lunch Day: October 12, 2011 <http://ow.ly/6SJFF> about 4 hours ago

Featured research



What's in your sunscreen?

Most sunscreens aren't safe and effective. Find the best

Children's products



Choose safe ingredients for young skin

Shampoo, body wash, diaper cream, lotion... it adds up

Top shampoos



Lather up with better brands

Skip the fragrances and cancer-causing contaminants

Safer cosmetics



Safer cosmetics

Manufacturers may use almost any ingredient in products. The government needs to take action

SKIN DEEP 2017



ewg.org | [About SkinDeep®/Methodology](#) | [Legal Disclaimer](#) | [Build Your Own Report](#) | [FAQ](#)

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EWG VERIFIED™



EWG VERIFIED™
products are starting to
hit shelves – see which
ones make the mark!

🔍 Search 65,351 products...

Search

Smarter Choices, Healthier Living

Coming This Spring: EWG's 2017 Sunscreen Guide

Companies: To have your sunscreen products included in this year's guide, e-mail skindeep@ewg.org for submission instructions. The deadline for submitting formulations is **March 17**.



LEARN MORE

Get your **FREE** copy of
EWG's Quick Tips for
Choosing Safer Personal
Care Products!

GET THE GUIDE

Essential Tips and Facts

See that long list of ingredients on the back of the bottle? Some probably aren't as safe as you'd hope.

- 1 Top tips for safer products
- 2 Frequently asked questions (FAQs)
- 3 Why Skin Deep®?

// Women used to think they were putting on makeup. Because of Skin Deep... now they think they're putting on chemicals. //

**Cosmetic Trade
Association President 2009**

THE POWER OF COMMUNICATION
SPURS SWEEPING ACTION ON TOXIC FLAME
RETARDANTS FROM CPSC

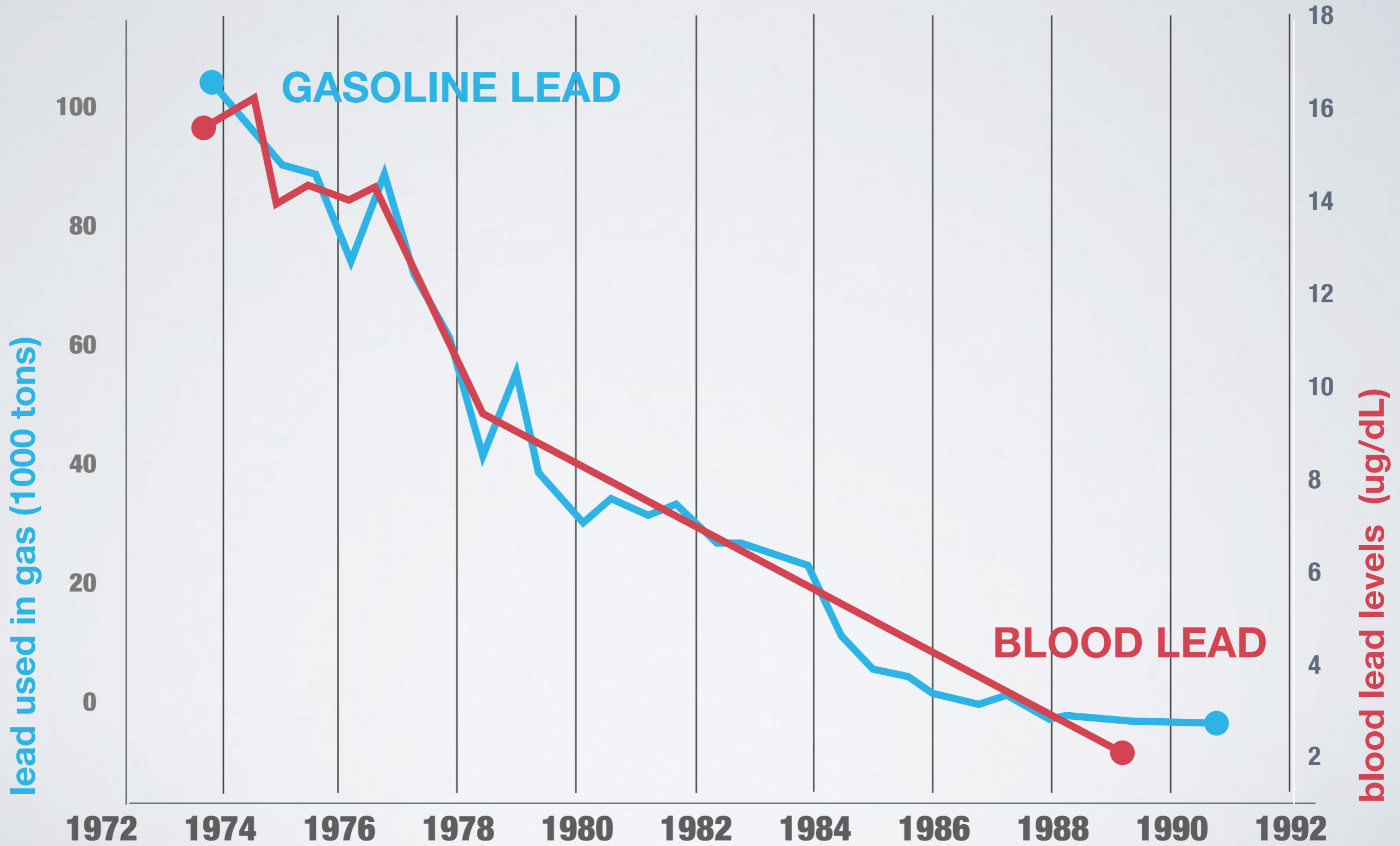


- “For the first time a federal agency is moving to outlaw an entire class of toxic flame retardants”
- Children’s products, mattresses, electronic casings, furniture

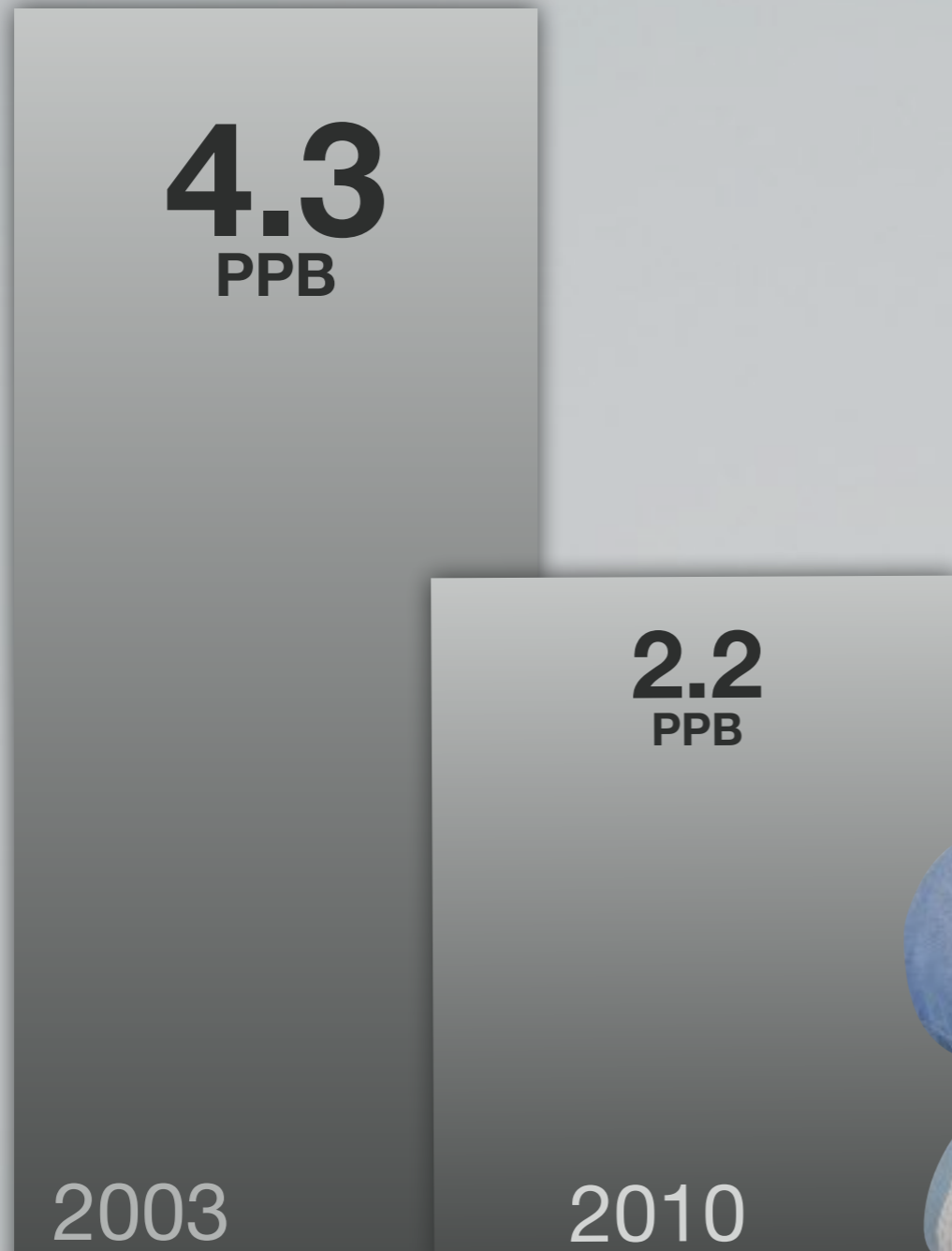
Success



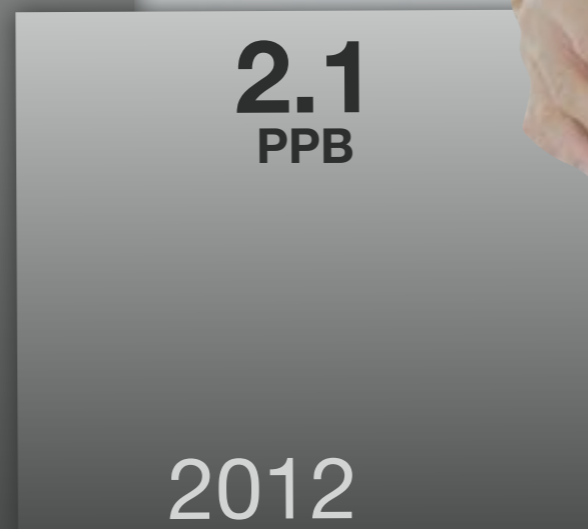
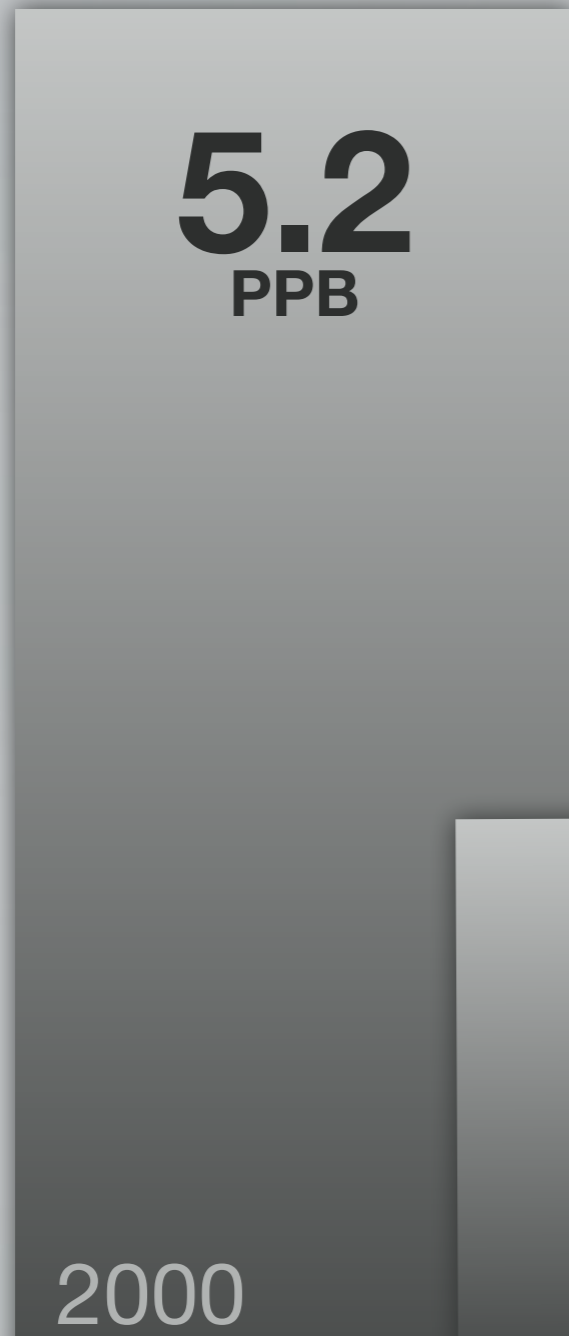
LEAD



BPA



TEFLON CHEMICAL PFOA



PHTHALATE PLASTICIZERS

DEP, DBP,
DBzP, DEHP

reduction:
20-50%

2001

2010



FLAME RETARDANTS IN BREAST MILK

4 PBDEs

-39%

2003-05

2009-12





Success except...

*They picked **that** for a
substitute?*

SUBSTITUTIONS IN A REGULATORY VACUUM

DEHP, DBP, DEP, DBzP

DnOP, DiDP, DiNP

DBP

Triphenyl phosphate

BPA

BPS, BPF

PBDE

Chlorinated Tris TDCIPP

PFOS, PFOA

C-6 compounds

Parabens

**Iodopropynyl
butylcarbamate**



CERTIFICATION PROGRAMS



NEEDED: ORDER, FACTS, AND A
STRONG SAFETY NET

THE NEWS WE READ AND CREATE



Power of optimism

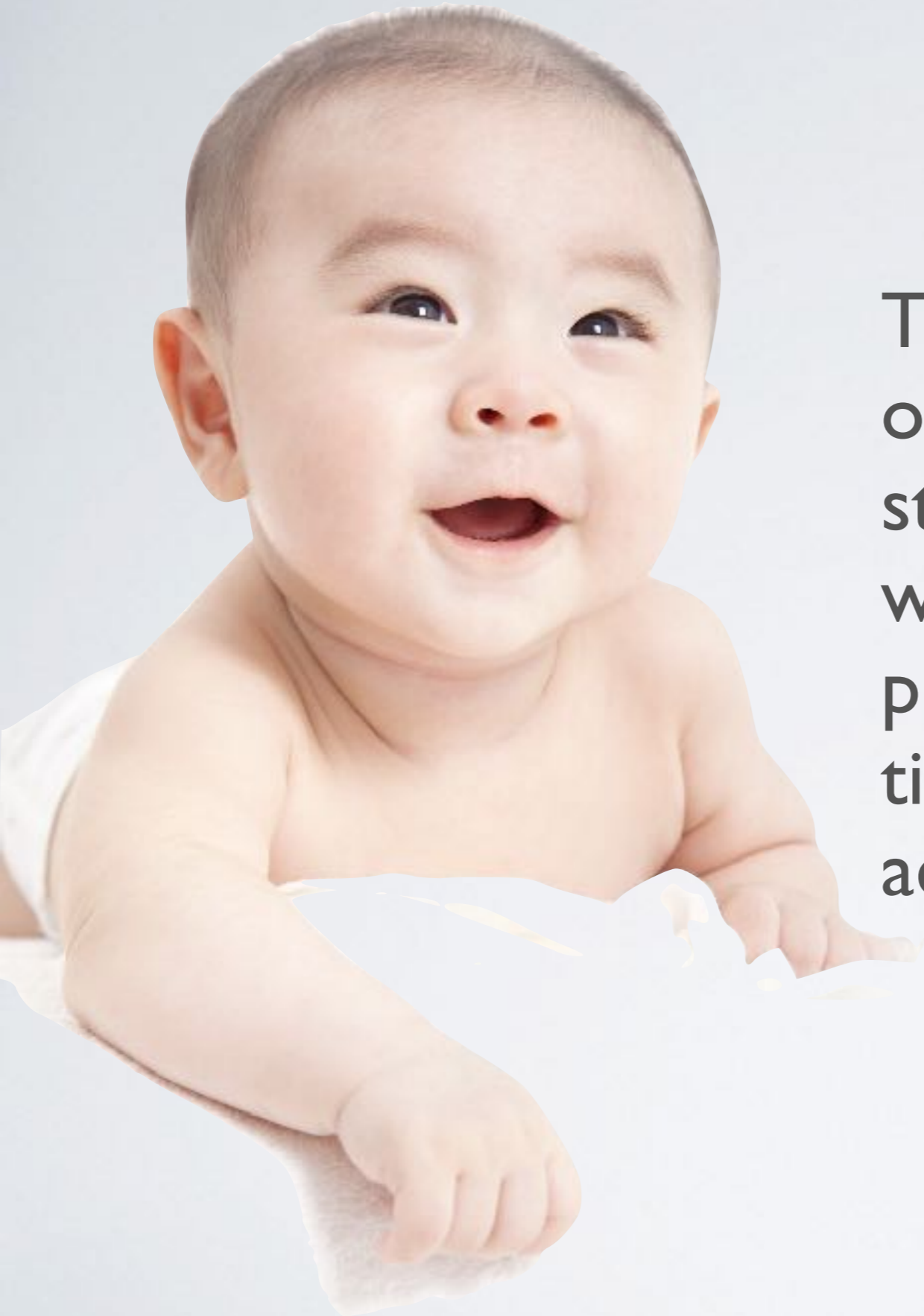


TOP 3 TIPS

Celebrate success (and consider a news fast)

Get inspired by optimistic visions (like Tomorrow the documentary)

Get to work!



This world demands the qualities of youth: not a time of life but a state of mind, a temper of the will, a quality of imagination, a predominance of courage over timidity, of the appetite for adventure over the love of ease.

Robert F. Kennedy

