Navigating the Science: Systematic Reviews & Evaluating Scientific Evidence for Environmental Exposures

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**Mission:** To create a healthier environment for human reproduction and development by advancing scientific inquiry, clinical care, and health policies that prevent exposures to harmful chemicals in our environment.
Our Challenge
How early is too early for puberty?

THE INCREDIBLE SHRINKING CHILDHOOD

By Elizabeth Weil
How Low Can It Go?

The ever-earlier onset of puberty is reshaping the legendary Leipzig boys choir.

By ELIZABETH WEIL

PHOTOGRAPHS BY RINEKE DIJKSTRA
Prevalence of chronic conditions among children and youth

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Cohort 1 (n=2337)</th>
<th>Cohort 2 (n=1759)</th>
<th>Cohort 3 (n=905)</th>
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<tbody>
<tr>
<td>1988 to 1994</td>
<td>27.8%</td>
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<td>1994 to 2000</td>
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<td>51.5%</td>
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<tr>
<td>2000 to 2006</td>
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<td>51.5%</td>
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Federal reserve data on chemical production is only offered as relative production, which is unit-less. A specific reference year is chosen and values are calculated relative to that year's production. In this particular data set 2007 is the reference year and is assigned a value of 100.

Data from: U.S. Federal Reserve Board, Division of Research and Statistics
87,000 chemical substances registered for use in U.S. commerce
Environmental Chemical and Physical Agents

Interaction among influences

Nutrition

Life Experience

Social and Built Environment
Everywhere, Everyday, and Everyone

Outdoor environment

Home/Indoor

Workplace

Food supply

Personal care products
43 Toxic Chemicals in Pregnant Woman in the US

Environmental chemicals can cross the placenta
How the first nine months shape the rest of your life

The new science of fetal origins

BY ANNE MURPHY PAUL
The evidence that links exposure to toxic environmental agents and adverse reproductive and developmental health outcomes is sufficiently robust, and the American College of Obstetricians and Gynecologists and the American Society for Reproductive Medicine join leading scientists and other clinical practitioners in calling for timely action to identify and reduce exposure to toxic environmental agents while addressing the consequences of such exposure.
Improve Knowledge

Make knowledge meaningful and actionable
UCSF - Research and Innovation
All That Matters

Work Matters
When you work with or around what you know really matters

Cuestiones de
Cómo proteger a nuestros hijos de las sustancias tóxicas

Toxic Matters
Protecting Our Families from Toxic Substances

Food Matters
Your health starts with what you eat
Can We “Shop Our Way Out” of the Problem?
MEET MOLLY GRAY.


Still contains

Bisphenol A

Mercury

Phthalates

Perfluorinated compounds

toxic chemicals.
“Because individuals alone can do little about exposure to harmful environmental toxic agents, the authoritative voice of health care professionals in policy arenas is critical to translating emerging scientific findings into prevention-oriented action on a large scale.”
Actions Matter – Policy

PBDEs in Pregnant Women

June 2006, California State bans PBDEs

39%
UCSF Can Be a Leader

• UCSF integrates environment into their mission for advancing health worldwide and to prevent disease

• Research on sources and exposures to environmental chemicals and subsequent effects on health

• Strategic plan to integrate environment health into health curriculum and training of health care professionals

• Research translation to improved clinical care and public policy, including identifying solutions