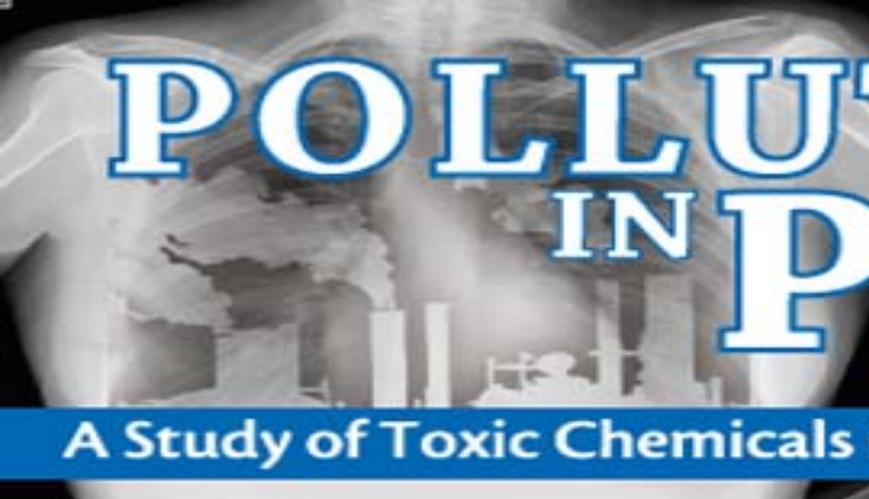


POLLUTION IN PEOPLE

A Study of Toxic Chemicals in Oregonians

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Director





POLLUTION IN PEOPLE

A Study of Toxic Chemicals in Oregonians

Tested 10 Oregonians for the presence of 6 classes (29 total chemical) of toxic chemicals in their bodies.

The Chemicals

- PCBs: coolants and lubricants banned in 1970s
- Mercury: heavy metal
- Organophosphate Pesticides: insecticide used mainly in agriculture
- Perfluorinated compounds (PFCs): chemicals that make materials stain and stick resistant.
- Phthalates: plasticizers used in PVC and personal care products
- Bisphenol-A: hard polycarbonate plastic building block

The People

- Alan Bates, MD
 - Ashland/Medford Physician, Democratic State Senator
- Vicki Berger
 - Salem, Republic State Representative
- Doug Stamm
 - Portland, Executive Director Meyer Memorial Trust
- Don Sampson
 - Pendleton, ED of Confederated Tribes Umatilla Indian Reservation
- Cathy Bloome
 - Portland mother of two young children
- Danya Rumore
 - 2006-2007 Oregon State Cross Country and Track Team

The People

- Linda Hornbuckle
 - Portland area Gospel singer
 - Jeff VonAllman
 - Portland area firefighter
 - Doug Phillips
 - Central Oregon Business Leader
 - Donalda Dodson
 - Salem, Public Health professional, Environmental Quality Commission
-
- Participants had at least 9 and as many as 16 toxic chemicals in their body.
 - Every participant had phthalates, PCBs, mercury, and PFCs in their body.

The Problem

- **The incidence of chronic disease is rising:**
 - **Asthma, learning and developmental disabilities, birth defects, diabetes, ALS, Parkinson's disease, and some cancers.**
- **Scientific evidence indicates that toxic chemicals are contributing to this epidemic.**

The Chemicals

- **PCBs:** coolants and lubricants banned in 1970s
 - Cancer, immune system damage
- **Mercury:** heavy metal
 - Neurotoxin
- **Organophosphate Pesticides:** insecticide used in agriculture
 - Nervous system damage
- **Perfluorinated compounds (PFCs):** Teflon and Scotchgard chemicals
 - Cancer and liver damage
- **Phthalates:** plasticizers used in PVC and personal care products
 - Reproductive damage
- **Bisphenol A:** hard polycarbonate plastic building block
 - Low-dose endocrine disruptor

The Problem

- The incidence of chronic disease is rising:
 - Asthma, learning and developmental disabilities, birth defects, diabetes, ALS, Parkinson's disease, and some cancers.
- Scientific evidence indicates that toxic chemicals are contributing to this epidemic.
- **These chemicals are in our air, water, food, schools, workplaces, everyday products and, ultimately, in our bodies.**

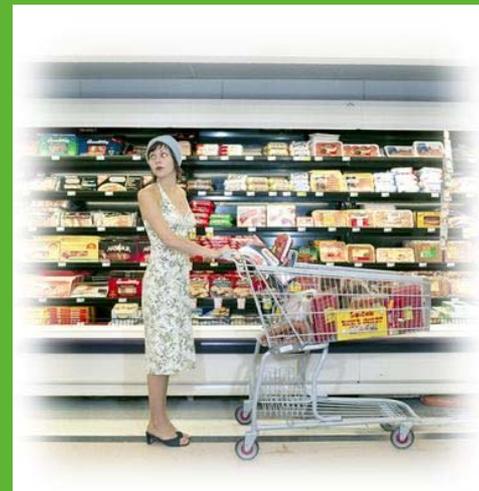
The Chemicals

- **PCBs: coolants and lubricants banned in 1970s**
 - Bioaccumulate and biomagnify
 - Exposure from fatty fish, dairy fat, breast milk
 - Highest exposure in youngest participant
- **Mercury: heavy metal**
 - Bioaccumulate and biomagnify
 - Exposure mainly from fish
- **Organophosphate Pesticides: insecticides**
 - Fresh Produce
 - Highest exposure in participants who eat the most fresh produce

Emerging Contaminants

~Sources of Exposure

- **Consumer Products**
 - 5000 chemicals in cosmetics
 - 3200 chemicals added to food
 - 1010 chemicals in 11700 consumer products



The Chemicals

- **PFCs: Teflon and scotchgard chemicals**
 - Persistent in environment
 - Grease resistant coatings (pizza boxes, microwave popcorn), stain resistant carpeting, teflon
 - Tested for 13 PFCs: 2 found in all 10 participants
- **Phthalates: plasticizers**
 - Fragrant personal care products, RC #3, plastic toys
 - All 10 participants had at least 4 detected, 7 participants tested positive for six of the seven
- **Bisphenol-A: hard polycarbonate plastic building block**
 - #7 plastics, baby bottles, food and beverage can liners, dental sealants
 - 8 participants had detectable BPA.

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Price of Pollution

Costs of Environmentally Related Disease in Oregon

- Oregon spends at least \$1.57 billion per year on preventable disease caused by pollution.
 - Hospitalization, physician visits, lost earning potential, and lost work days are some of the direct and indirect costs reflected in this calculation.

Typically decision makers consider only the upfront costs of implementing environmental health protection measures designed to reduce pollution, ignoring the financial impacts of inaction.

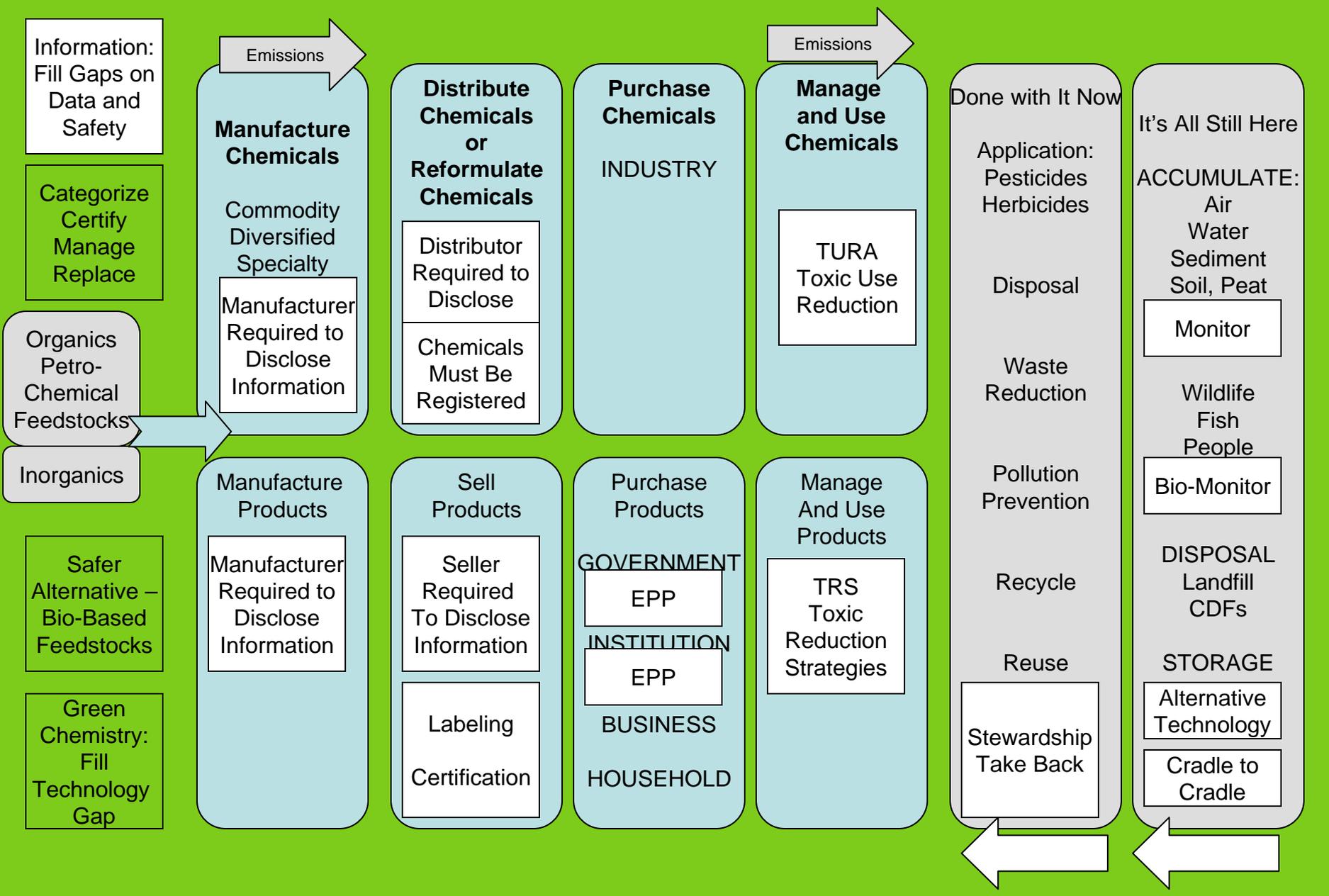
The Goal

Build public awareness and demonstrate the need for comprehensive chemicals policy reform.

Solution

We need common-sense chemical policies that ensure that only the safest chemicals are used in products, manufacturing, and agriculture.

1. Require that complete information on chemical ingredients be provided for all products
2. Categorize all chemicals into levels of concern; manage these chemicals based on hazards; and substitute chemicals of highest concern with safer alternatives.
3. Establish policies, practices, and incentives that result in safer products.





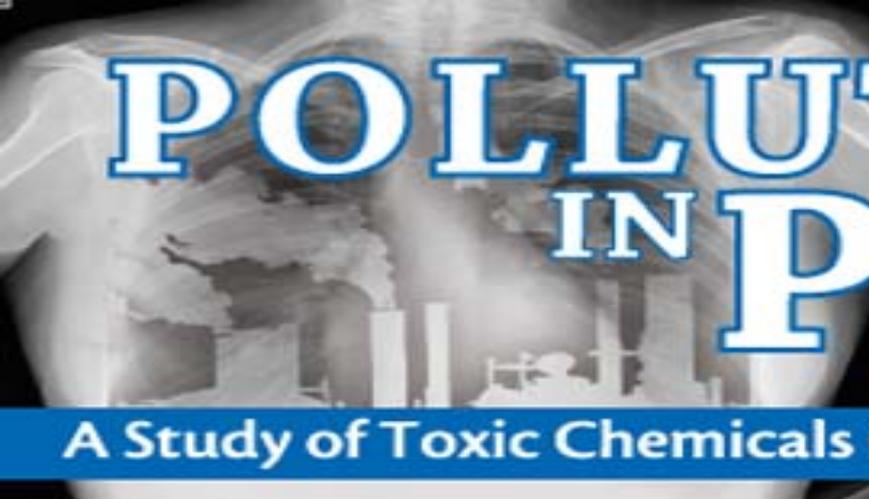
OEC's Upstream Approaches to Water Quality

Pollution Prevention

Comprehensive Chemical Reform

Sustainable Agriculture

Low Impact Development



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Thank You!

www.oeconline.org

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