Pollution Gets Personal
Reporting Personal Exposures When Health Effects are Uncertain

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www.silent springs.org
Pollution looks like...
New science measures *in-visible* pollution in people, personal space ...
For emerging contaminants

- Early exposure measurements precede knowledge of...
  - Human health effects
  - Sources
    “None of these chemicals come with a return address.”
  - Toxicity, mechanism of action
With science uncertain...

- Could reporting individual results to study participants do more harm than good?
CBPR values

- Mutual respect, open communication
- Knowledge is power
- Co-ownership of data
- Information for action
- Research right to know (or not know)
Household Exposure Study

- 170 homes
- 150 compounds
- 89 EDCs
- Air
- Dust
- Urine

Rudel et al., ES&T, 2003
Brody et al., AJPH, 2009
Individual report-back

- Begins with consent
- What we know/don’t know
- Multi-level, verbal and visual
- Community, individual exposure reduction
How to read your results

Each ○ represents one other home in the study

− is the sample from your home

X is the EPA Guideline

DEHP common uses: Plastics, inks, insect repellent, cosmetics, rubbing alcohol, liquid soap, detergents, lacquers, munitions, industrial lubricant.

Chemical abbreviation (di(2-ethylhexyl) phthalate)

Brody et al. AJPH, 2007
Interviews with participants

- Participants wanted their results
- Report-back increased trust and pride in contributing to science and community
- Dramatic conceptual shifts: pollution is redefined and it’s personal
- Frustration at knowledge gaps
- Evolving interpretations, brainstorming
- Motivation to reduce exposure
Researcher experiences

Report-back draws researchers to:

- Explain outliers
- The temptation to reassure
  - “…there’s no evidence that…”
  - Outdated EPA guidelines
- Consider public health and good vs. bad worry
- Rethink health “literacy” to design for universal capacities
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A HEALTHIER FUTURE
View a brief introduction to Silent Spring Institute’s research on the links between the environment and breast cancer, environmental health issues and the emerging field of green chemistry.

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Silent Spring Institute researches the links between the environment and women’s health, especially breast cancer.

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Fresh Water, Salt Water: Rx in H2O, The Cape and Islands NPR Station
Cape Cod ponds’ pollution explored, Cape Codder

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Brody quoted in peer-reviewed article about gaps in media coverage of environmental links to breast cancer
Environmental justice partners win lawsuit blocking Chevron permit
New book highlights Silent Spring Institute’s role in environmental breast cancer research

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