Closing the Exposure Assessment Gap: A Case Study of Phthalates

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Exposure assessments are essential for meaningful chemical regulation

- Most federal environmental laws regulate chemicals and pollutants based on risk.

- Risk is generally calculated by multiplying a chemical’s toxicity (the dose at which it causes, or does not cause, a particular response) and anticipated exposures.

- If regulators do not account for all exposures, they will understate risk and underregulate the chemical.

https://www.health.ny.gov/environmental/chemicals/chemicals_and_health/biomonitoring.htm
Federal agencies conduct flawed exposure assessments

- Limited monitoring and biomonitoring data
- Heavily reliant on under-protective default assumptions
- No ability to detect many chemicals in the environment
- Failure to consider aggregate exposures across routes and pathways
- Failure to consider cumulative exposures to multiple chemicals and non-chemical stressors

Phthalate risk evaluations under TSCA

- EPA currently evaluating seven phthalates under the Toxic Substances Control Act ("TSCA")
- Known co-exposures to multiple anti-androgenic phthalates from multiple exposure pathways (diet, drinking water, consumer products, cosmetics, outdoor air, indoor dust, etc.)
- Women of color have some of the highest exposures and the highest levels of phthalates within their bodies
- EPA admits a "lack of data for all phthalates concentrations in all environmental media"
Panelist introductions

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