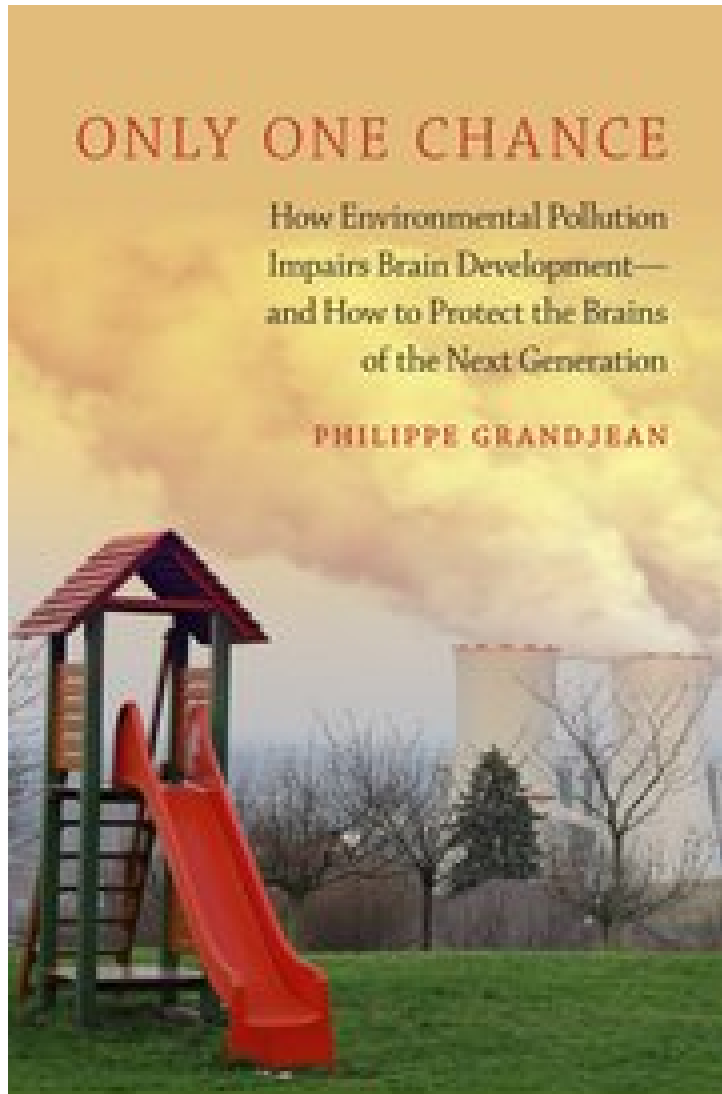


CHE partnership call

Tuesday, March 24th, 2015

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A High Price to Pay:

Burden of Disease and Cost of
Endocrine Disrupting Chemicals
in the European Union

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EDCs and chemical brain drain: Focus on neurodevelopment

Vulnerability
is the price we pay
for our complex brain

Early development
is particularly
vulnerable

Developmental
damage is likely
permanent



Neurobehavioral Deficits, Diseases, and Associated Costs of Exposure to Endocrine-Disrupting Chemicals in the European Union

Martine Bellanger, Barbara Demeneix, Philippe Grandjean, R. Thomas Zoeller, and Leonardo Trasande

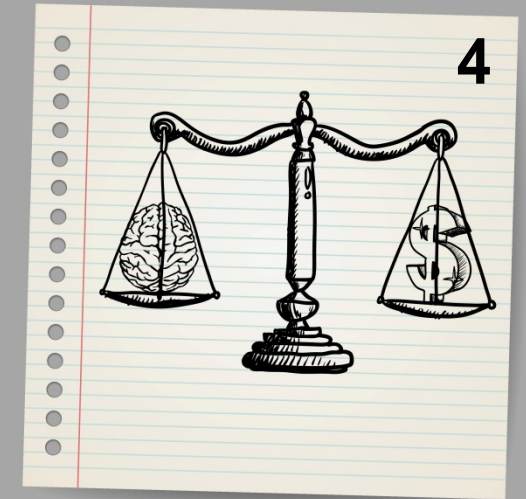


Benefits of preventing EDC exposure

- Calculated as costs avoided
- Using the human capital method
- Direct costs due to treatment, etc.
- Indirect costs, such as *lost lifetime income*

How to calculate the value of IQ

- Projected life-time earnings
- Future earnings converted to present-day value by discounting (3% per year)
- **EU: ~€10,000 (US: ~\$15,000) per IQ pt**
- Other benefits (intangible/direct) ignored





Annual costs in Europe for IQ losses (millions)

Due to mercury

- **Total EU:** ~9,300*
- **US:** ~4,000^

Due to EDCs (mainly OPs)

- **Total EU:** ~132,000#
- **US:** ~50,000"



* Bellanger et al., 2013

^ Grandjean et al., 2012 using \$15,000/IQ pt

Bellanger et al., 2015 + Trasande et al., 2015

" Bellinger, 2012 using \$15,000/IQ pt

