

HALTING THE CHILD BRAIN DRAIN

Why we need to tackle global mercury contamination



Mercury & health: Halting the child brain drain

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Campaign partners



Health Care Without Harm Europe

✓ **Members** include hospitals and healthcare systems, medical and nursing professionals, community groups, health-affected constituencies, labour unions, and environment and health organisations.

✓ **Aims to transform the healthcare industry** so that, without compromising patient safety or care, it is **ecologically sustainable** and no longer a source of harm to people and the environment.

Health and Environment Alliance

✓ **Network** of citizens', patients', women's, health professionals' and environmental organisations.

✓ **Aims to improve health through public policy** that promotes a **cleaner and safer environment**.



Existing Body Burden:

EU Impact Assessment 2003

- Estimated **3 - 15 million people in Europe** at “Reference Dose” level
- In **Arctic & Mediterranean** some at **10x** that level, with definite impacts on fetal brain development **potentially 6 IQ points loss**
- But in Europe **insufficient data** on exposure only rough estimates.

What are the implications?



What might this be costing us?

From Mt Sinai Study 2005

- IQ loss affects **300.000 – 600.000** children / year estimated **8.7 billion in lost earnings.**
- Affects between **10-15 % of children born.**
- Range from **one-fifth to as much as 24 points.**
- Even 1.6 IQ point drop could cost **31.800 €** in lifetime earnings

Probably equivalent for Europe, if not greater?

Implications for the rest of the world?!!



Mercury and Health Campaign objectives and activities

Raise awareness about health effects of mercury contamination

Advocate for a swift reduction of mercury pollution in EU & worldwide.



→ **Fact sheet series (8)**

→ **Hair testing technical report**



→ **“Halting the child brain drain”
report**



→ **Policy input into EU Mercury
Strategy**





Mercury hair sampling survey, 2006

- ✓ **Illustrative snapshot**
- ✓ **Protocol and data analysis:**
Institute Provincial de Hygiene and Bacteriology of Hainaut
- ✓ **Target group:** Women of child-bearing age (18-45 year-old), health professionals, politicians, key leaders
- ✓ **Volunteers** recruited through national coordinators **in 21 countries**
- ✓ **266 samples received, 252 analyzed**



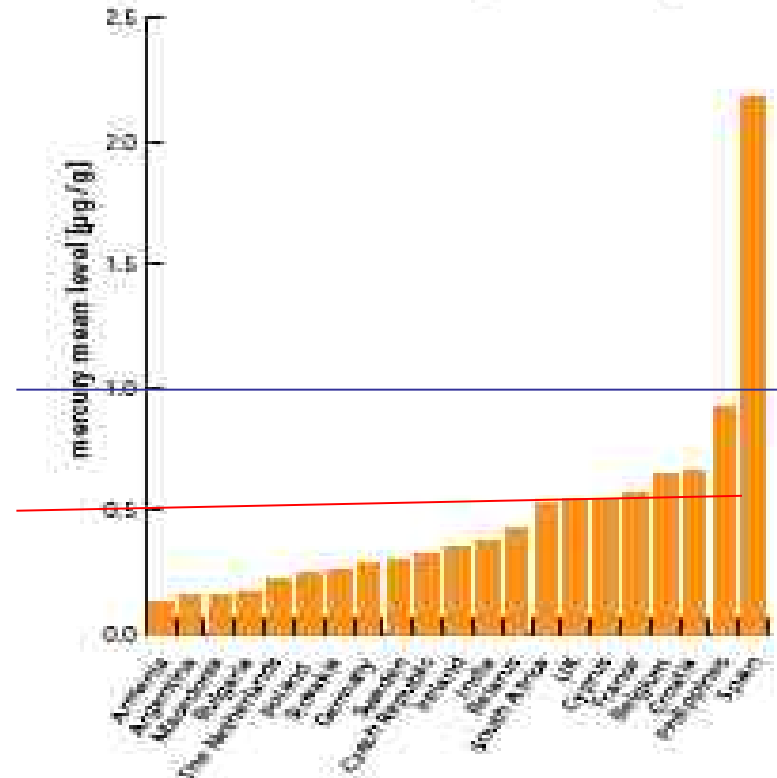
Photo of leading Euro Parliamentarian on Environment and Health, Frederique RIES



Results: Mercury Levels in Hair

- ✓ 95% of women presented detectable levels
- ✓ Link with fish consumption
- ✓ 15% of women had elevated levels above the 1 $\mu\text{g/g}$ of mercury

FIGURE 3. Mean values of mercury in hair samples





Solutions

- ✓ **Policy changes** to speed up reductions in the use of mercury (e.g. global ban).
- ✓ **Education** of the population about the current risks, prevention interventions and provision of tools (biomonitoring).
- ✓ **Promotion of alternative technology transfer** and financial help
- ✓ to Global South.



To find out more about HEAL / HCWH Recommendations...

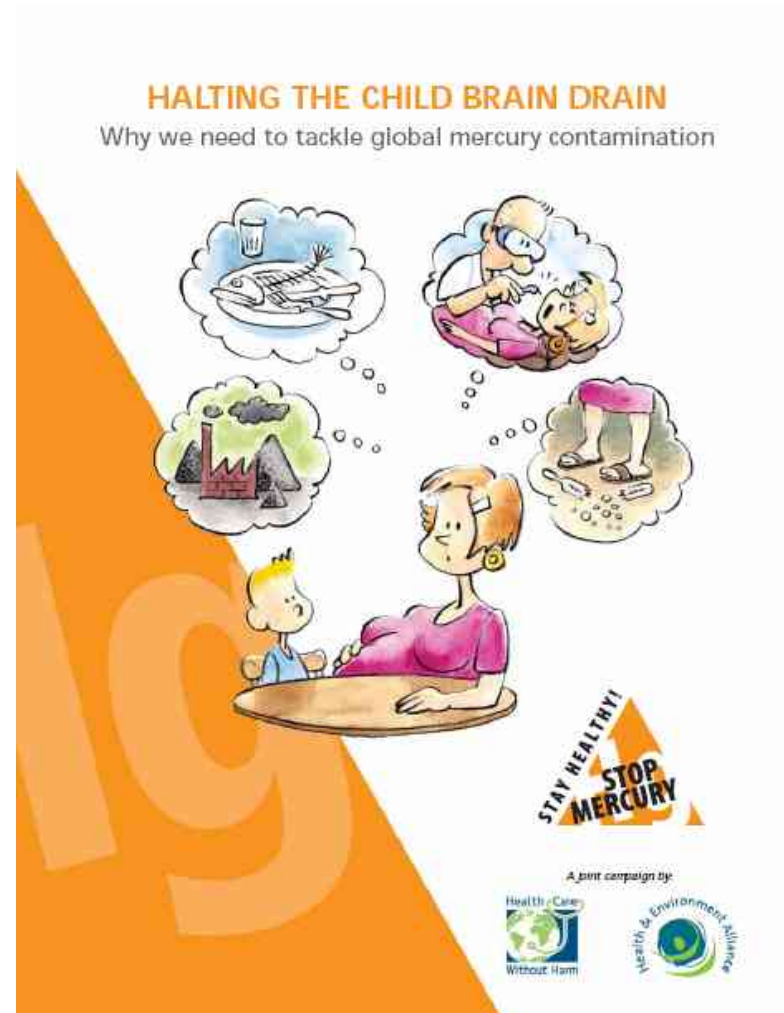
Halting the Child Brain Drain:

English and German

Fact Sheets

- Health*
- Healthcare
- Fish Consumption*
- Vaccines*
- Dental Amalgams
- Mercury Spills
- Blood Pressure Instruments

*available in French, German, Spanish





Let's think ahead

“In time, it is likely that the scientific consensus will conclude that there is no safe level of foetal exposure”

Peter Orris,
Professor Public Health
University of Illinois



Thank you!

Visit our mercury campaign webpage:

www.env-health.org/stopmercury/



www.env-health.org



www.noharm.org/europe

