HALTING THE CHILD BRAIN DRAIN

Why we need to tackle global mercury contamination



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why we need to tackle global mercury contamination

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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.



Campaign objectives and activities

To raise awareness about the health effects of mercury contamination and to advocate for a swift reduction of mercury pollution in the EU and worldwide.



→ Fact sheet series:

Mercury and Health Mercury and Vaccines Managing Small Mercury Spills Dental Amalgams (forthcoming) Mercury and Fish Consumption Mercury in Health Care Substituting Mercury Sphygmos





- → Survey report
- \rightarrow "Halting the child brain drain" report
- → Policy input into EU Mercury Strategy





Mercury hair sampling survey

✓ Protocol and data analysis:

Institute Provincial de Hygiene and Bacteriology of Hainaut

✓ Volunteers recruited through national coordinators in 21 countries

✓266 samples received

 ✓ Target group: Women of child-bearing age (18-45 year-old), health professionals, politicians, key leaders





Mercury hair sampling survey



Mean values per country in ug/g:

Origin country	Number of participants	Mean value
Armenia	11	0.13
Argentina	8	0.16
Macedonia	19	0.16
Bulgaria	6	0.17
The Netherlands	8	0.22
Poland	24	0.25
Slovakia	9	0.26
Germany	17	0.29
Sweden	5	0.3
Czech Republic	10	0.33
Ireland	18	0.35
India	10	0.37
Belarus	11	0.43
South Africa	3	0.53
UK	12	0.54
Cyprus	9	0.55
France	8	0.57
Belgium	36	0.65
Croatia	10	0.66
Philippines	9	0.92
Spain	9	2.18



Mercury hair sampling survey: Conclusions

- ✓ Elevated levels
- $\checkmark~$ Link with fish consumption
- $\checkmark~95\%$ of women presented detectable levels
- ✓ 15% of women had elevated levels above the 1 μ g/g of mercury in hair. This is a dose below which there is not likely to be a neurological impact on their children.

(The US National Research Council (1997) has set the most protective limit, or 'reference dose', of 0.7 µg/kg body weight per week, which the US EPA calculated would correspond to a level in hair of 1 µg/gram)





Significance of low level exposures

- ✓ Human foetus much more vulnerable
 ✓ Developing brain most susceptible
 ✓ Any neurological damage irreversible
 Therefore
- Women who eat a lot of fish (species with high contents of mercury = predatory species) can put their offspring at risk



Recommendations for the EU

✓ Policy changes to speed up reductions in the use of mercury (e.g. global ban).

✓ Education of the population about the current risks and provision of tools (biomonitoring).

Promotion of alternative technology transfer

and financial assistance

to Global South countries.





Thank you!

Visit our mercury campaign webpage:

www.env-health.org/stopmercury/



www.env-health.org



www.noharm.org/europe

