

Statement on Fluoride Paper

September 11, 2012

-- When considering the risks and benefits of fluoride exposure, the level of intake needs to be considered.

--Possible risks to brain development in children have been studied in China, but this possible hazard has not received much, if any, consideration in the U.S.

--Our study summarized the findings of 27 studies on intelligence tests in fluoride-exposed children; 25 of the studies were carried out in China. On average, children with higher fluoride exposure showed poorer performance on IQ tests. Fluoride released into the ground water in China in some cases greatly exceeded levels that are typical in the U.S.

--In general, complete information was not available on these 27 studies, and some limitations were identified.

--All but one of the 27 studies documented an IQ deficit associated with increased fluoride exposure.

--These results do not allow us to make any judgment regarding possible levels of risk at levels of exposure typical for water fluoridation in the U.S. On the other hand, neither can it be concluded that no risk is present. We therefore recommend further research to clarify what role fluoride exposure levels may play in possible adverse effects on brain development, so that future risk assessments can properly take into regard this possible hazard.

--[Anna Choi](#), *research scientist in the Department of Environmental Health at HSPH, lead author*, and [Philippe Grandjean](#), *adjunct professor of environmental health at HSPH, senior author*

Need more information? Please refer to the feature story on the Harvard School of Public Health website. You are welcome to quote from it for your story.

Link to HSPH feature story:

Impact of Fluoride on Neurological Development in Children

<http://www.hsph.harvard.edu/news/features/fluoride-childrens-health-grandjean-choi/>

Link to study: "Developmental Fluoride Neurotoxicity: A Systematic Review and Meta-Analysis," Anna L. Choi, Guifan Sun, Ying Zhang, Philippe Grandjean, *Environmental Health Perspectives*, 2012,120(10):1362-1368.

<http://ehp.niehs.nih.gov/wp-content/uploads/2012/09/ehp.1104912.pdf>