



Brief Comments on the Report:
Evidence on the Carcinogenicity of Fluoride and Its Salts
(July 2011)

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OEHHA Report



- It is commendable that the OEHHA Report (Evidence on the Carcinogenicity of Fluoride and Its Salts, OEHHA July 2011) considered up-to-date peer-reviewed evidence relevant to the OEHHA *standard* of whether fluoride has been “**clearly shown through scientifically valid testing according to generally accepted principles to cause cancer.**”
- The Report and more recent publications provide the evidence that Fluoride and Its Salts do not meet that standard.

Statements from the OEHHA Report

- Statements are made in the OEHHA Report demonstrating that fluoride and its salts do not clearly cause cancer.
- For example, on page 5: “...the current body of epidemiologic research on the carcinogenicity of fluoride remains inconclusive.”

Statements from the OEHHA Report

- Additionally, while there are “Some positive findings in animal carcinogenicity studies”, the two positive studies lacked replication and the “possible contribution of retroviral infection reported could not be ruled out.”

Other Studies



Do Not Clearly Show That Fluoride Causes Cancer

- With regard to mutagenicity and clastogenicity, the OEHHA Report states that:

“A mix of positive and negative results have been reported across test systems, with positive findings more often associated with higher concentrations of fluoride.”

Cellular Immune Response



- The statement of the OEHHA Report on cellular immune response effects of fluoride is only suggestive regarding the influence on inflammation, which *may* play a role in carcinogenesis.
- There are 33 such “*may*” statements in the Report

New Publications



Since the OEHHA Report

- The recent publication of an analysis on the second set of cases and controls from the Harvard study (Kim et al 2011), has provided evidence of a lack of association between fluoride in bone and osteosarcoma.
- The authors of that study will provide further testimony.

Kim FM, Hayes C, Williams PL, Whitford GM, Joshipura KJ, Hoover RN, Douglass CW; the National Osteosarcoma Etiology Group.

An Assessment of Bone Fluoride and Osteosarcoma.

J Dent Res. 2011 Oct;90(10):1171-1176. Epub 2011 Jul 28.

New Publications



Since the OEHHA Report

- The recent report by the European “Scientific Committee on Health and Environmental Risks” (SCHER) concluded that:
“...epidemiological studies do not indicate a clear link between fluoride in drinking water, and osteosarcoma and cancer in general. There is no evidence from animal studies to support the link, thus fluoride cannot be classified as carcinogenic.”

SCHER. Critical review of any new evidence on the hazard profile, health effects, and human exposure to fluoride and the fluoridating agents of drinking water. 16 May 2011

No Other Authoritative Body Has Concluded that Fluoride is a Carcinogen

The OEHHA Report states:

“Fluoride was reviewed by the U.S. EPA (2007) and classified in Group D (inadequate evidence of carcinogenicity).”

“Fluoride has not been classified as to its potential carcinogenicity by the U.S. Food and Drug Administration, NTP, the National Institute for Occupational Safety and Health, or IARC.”

The U.S. Food and Drug Administration has determined that the available data do not support a conclusion that exposure to fluoride in FDA-regulated products causes cancer.
(Comments to OEHHA)

Conclusions

The OEHHA Report states:

- **“Overall, the current body of epidemiologic evidence on the carcinogenicity of fluoride is considered inconclusive.”**
- With regard to “Mechanistic and other relevant data considerations”, no definitive statements are made about the carcinogenicity of fluoride.
- *In vitro* and *in vivo* studies in bacteria, animal and human cells, animals and humans yielded some positive and some negative results.

Summary

Fluoride and its salts has *not* been “**clearly shown through scientifically valid testing according to generally accepted principles to cause cancer.**”

OEHHA *standard*