## **Does Fluoride Cause Cancer?**

America has been preventing tooth decay with fluoridated water for 70 years. Community water fluoridation is safe, effective and benefits everyone equitably. That's the conclusion of <u>every major</u> <u>health organization</u> in the United States. About 75% of U.S. communities enjoy fluoridated water.

A public health practice that touches the lives of so many people must be thoroughly tested for safety. Health effects of fluoride in drinking water have been studied for more than 70 years. A large body of evidence continues to prove that fluoridation poses no risk to health, despite claims to the contrary.

Here is a sample of the valid scientific evidence from around the world showing that fluoride does not cause cancer.

- A U.S. Public Health Service <u>review</u><sup>1</sup> of data and research concluded that "Expert panels which reviewed this international body of literature agree that there is **no credible evidence** of an association between either natural fluoride or adjusted fluoride in drinking water and human cancer."
- A 2014 <u>review</u><sup>2</sup> of evidence by the Royal Society of New Zealand found that claims that fluoride contributes to the risks of cancer are **not supported by the scientific evidence**.
- In 2011, the California <u>Office of Environmental Health Hazard Assessment</u> voted unanimously that an extensive review of scientific evidence **did not support** classifying fluoride as a cause of cancer.<sup>3</sup>
- International <u>studies</u><sup>4</sup> reviewed by the World Health Organization <u>International Agency for</u> <u>Research on Cancer</u> "have shown **no consistent tendency** for people living in areas with high concentrations of fluoride in the water to have higher cancer rates than those living in areas with low concentrations or for cancer mortality."
- A 2011 <u>review</u><sup>5</sup> by the European Commission's Scientific Committee on Health and Environmental Risks (SCHER) **found no link** between fluoride and cancer, and classifying fluoride as a cancer-causing agent.
- A 2011 <u>study</u><sup>6</sup> published by the <u>International</u> and <u>American</u> Associations for Dental Research using extremely precise test methods **found no link** between fluoride and bone cancer.

After decades of study, no link has been found between fluoride and cancer. The weight of international scientific evidence, and decades of experience in the United States and elsewhere, have demonstrated the safety and effectiveness of community water fluoridation.

## For more information, see:

- <u>American Cancer Society</u>
- Centers for Disease Control and Prevention, <u>Scientific Reviews and Reports: Assessing the</u>
  <u>Evidence</u>
- <u>National Cancer Institute</u>
- <u>National Cancer Registry of Ireland</u>
- U.S. Public Health Service <u>Recommendation for Fluoride Concentration in Drinking Water for the</u> <u>Prevention of Dental Caries</u>
   U.S. Health and Human Services, <u>Statement on the Evidence Supporting the Safety and</u>
  - Effectiveness of Community Water Fluoridation.
- Water Research Foundation, <u>State of the Science: Community Water Fluoridation</u>

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fluoridation\_Aug\_2014\_corrected\_Jan\_2015.pdf. Accessed January 25, 2016.

<sup>4</sup> International Agency for Research on Cancer. <u>IARC Monographs on the Evaluation of the Carcinogenic Risks to Humans</u>, <u>Supplement 7</u>, Lyon, France: World Health Organization; 1987.

https://ec.europa.eu/health/scientific\_committees/environmental\_risks/docs/scher\_o\_139.pdf. Accessed July 19, 2018.

<sup>5</sup> European Commission Directorate-General for Health and Consumers, Scientific Committee on Health and Environmental Risks. Critical review of any new evidence on the hazard profile, health effects, and human exposure to fluoride and the fluoridating agents of drinking water. Brussels, Belgium: European Commission; 2010.

http://ec.europa.eu/health/scientific\_committees/environmental\_risks/docs/scher\_o\_139.pdf, Accessed April 21, 2016. <sup>6</sup> Kim FM, Hayes C, Williams PL, et al. An assessment of bone fluoride and osteosarcoma. J Dent Res. 2011;90(10):1171-1176.http://journals.sagepub.com/doi/abs/10.1177/0022034511418828, Accessed July 19, 2018.

<sup>&</sup>lt;sup>1</sup> US Department of Health and Human Services. Review of Fluoride: Benefits and Risks: Report of the Ad Hos Subcommittee on Fluoride of the Committee to Coordinate Environmental Health and Related Programs. Washington DC: US Public Health Service; 1991. <u>http://health.gov/environment/Reviewoffluoride/</u>, Accessed January 25, 2016. <sup>2</sup> Health effects of water fluoridation: a review of the scientific evidence. Royal Society of New Zealand website. <u>http://www.royalsociety.org.nz/media/2014/08/Health-effects-of-water-</u>

<sup>&</sup>lt;sup>3</sup> California Office of Environmental Health Hazard Assessment. Proposition 65. Meeting Synopsis and Slide Presentations Carcinogen Identification Committee Meeting Held on October 12, 2011.

http://oehha.ca.gov/prop65/public\_meetings/cic101211synop.html. Accessed January 25, 2016.