Public Health England

Protecting and improving the nation's health

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**By email**

Joy Warren
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Our ref: 24/08/lh/378

13 September 2017

Dear Miss Warren

**Re: concentration of fluoride in drinking water**

Thank you for your email dated 24 August 2017. Your request for information has been handled under the Environmental Information Regulations (EIR).

You asked:

*1. Has PHE considered reassessing the need to fluoridate drinking water at 1 mg fluoride/litre of water in view of the increased and increasing prevalence of fluoride in a child's environment? Note that the USA and the Republic of Ireland have both reduced the concentration down to 0.7mg F/litre. Why is the UK lagging behind?*

*2. Has PHE thought to observe the recommendation of the World Health Organisation and aggregate all sources of fluoride before setting or continuing with the original 'optimum' concentration of fluoride which is currently added to drinking water?*

*3. Because the application of fluoride varnish is increasing throughout areas of England where small disadvantaged children are being given fluoride treatments, has PHE yet thought to review the need to add fluoride to our drinking water? There can only be one reason for adding fluoride to our drinking water and that is to prevent dental decay in small disadvantaged children and they are increasingly receiving fluoride varnish treatments. Older children, teenagers, adults and those who have no teeth do not have enamel capable of being influenced by systemic fluoride and, according to Childsmile, (http://www.child-smile.org.uk/professionals/about-childsmile/childsmile-and-fluoride-varnish.aspx) permanent teeth are not capable of being damaged by fluoride after the age of 4:*

*"There would also be very little chance of fluorosis, even with two doses given in quick succession as, after the age of 4 years, most of the adult teeth [under the gum] will have already calcified." The implication is that if the teeth have calcified under the gum, systemic fluoride cannot have any influence on strengthening the surface of the enamel organ either.*

*4. In fact, the saliva theory is currently favoured by dental professionals and researchers and when saliva comes into contact with teeth, this is a topical effect and not a systemic effect. Thus the original reason for water fluoridation has disappeared. Now, the saliva theory is all very well but when, according to the NDNS 2014, small children only drink one-third of a litre of water a day, they are circulating a mere 0.0067 mg fluoride/litre saliva, this being 224,000 times lower concentration than in toothpaste at 1,500 ppm fluoride. Is UK Government via PHE content to go along with Local Authorities spending Council Tax on ensuring that small children circulate fluoride at a concentration of fluoride which is 224,000 times less than that found in fluoridated toothpaste?*

We have reviewed your request and cannot respond under FOI / EIR as it does not contain any request for information held by Public Health England. However, a reply to your enquiry of 2 February 2017, (case ref 616) may be helpful in relation to your enquiry and we enclose this.

If you have any queries regarding the information that has been supplied to you, please refer your query to me in writing in the first instance. If you remain dissatisfied and would like to request an internal review, then please contact us at the address above or by emailing foi@phe.gov.uk

Please note that you have the right to an independent review by the Information Commissioner's Office if a complaint cannot be resolved through the PHE complaints procedure. The Information Commissioner's Office can be contacted by writing to Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire SK9 5AF.

Yours sincerely

Freedom of Information Officer