**Fluoride – Talking Points**

**The Department of Health and Senior Services supports safe levels of fluoride in community water sources as an important health measure that provides up to 25% reduction in tooth decay.**

**Fluoride is safe and beneficial at the right concentrations:**

Recently, the safety of fluoride has been questioned as a public health tool because of a report that focused on very high levels of fluoride in community water sources in other countries.

* In the United States, the recommended levels are 0.7 milligrams per liter (mg/L).
* The report focused on fluoride levels of 1.5 mg/L and higher and suggested that children in those communities had lower average IQ scores.
* The report had limited data quality. Of the 74 studies included, more than 80% were rated as having a “high risk of bias,” which means the studies have flaws that make results misleading.
* Most studies included in the report were conducted in China, with other studies being from Canada, Denmark, Iran, India, Mexico, New Zealand, Pakistan, Spain and Taiwan.
* There were no United States studies included in the report.
	+ Experts like the American Dental Association, National Academy of Sciences and American Academy of Pediatrics have reviewed the study and concluded:
* There is no new or conclusive evidence provided that should drive change in the fluoride strategy within the United States.
* Fluoride is beneficial to oral health and prevents tooth decay at the right levels of 0.7 mg/L.
* Community water fluoridation at the right level is recognized as one of the top 10 greatest public health efforts because it has been so effective at preventing tooth decay.
* Community water fluoridation at a carefully targeted level has been part of the American public health system for 80 years.
* The U.S. National Toxicology Report from August 2024 said, “...evidence do not provide clarity on the association between fluoride exposure and cognitive or neurodevelopmental human health effects.”

**The toxicity is in the amount:**

Many substances are healthy and beneficial when taken at the right doses but may cause harm at too low or too high doses. Fluoride, like any naturally-occurring substance needed for a healthy human body, needs to be given at the right amount.

* + Too little fluoride increases risk of tooth decay, which can cause a variety of health risks. Too much fluoride, which is not the case of community water fluoridation in the United States, may be associated with adverse effects including damage to teeth and bones.

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* + Basic elements and electrolytes that our bodies require to function can be toxic at a high enough dose.
* Everyday minerals such as iron, potassium and salt (NaCl), and even water and oxygen are all essential to health and life. But, they will cause serious health effects at too high of a level.
	+ **Examples (only use specifics if asked or needed):**
* Oxygen (O) is essential to our bodies, but too much can be fatal.
	+ - * Too much oxygen causes oxygen poisoning and oxygen toxicity.
			* Water (H2O) is essential to our bodies, but too much can be fatal.
			* Too much water causes health problems because it dilutes the amount of electrolytes in your body, like salt, potassium, calcium, magnesium and more.
			* Iron (Fe) is essential to our bodies, but too much can be fatal.
			* Too much iron causes gastrointestinal and organ damage.
			* Salt (NaCl) is essential to our bodies, but too much can be fatal.
			* Too much salt increases risk for heart disease and stroke.
			* Potassium (K) is essential to our bodies, but too much can be fatal.
			* Too much potassium can cause cardiac arrest, muscle weakness and paralysis.