

# Community Water Fluoridation



**Tooth decay is one of the most common chronic diseases among American children. One of four children living below the federal poverty level experience untreated tooth decay.<sup>1</sup>**



**Tooth decay and its complications are preventable.<sup>2</sup>**

**Community water fluoridation (CWF) is “the controlled addition of a fluoride compound to a public water supply to achieve a concentration optimal for dental caries prevention.”<sup>2</sup>**

## **Safe**

- The safety and benefits of fluoride are well documented and have been reviewed comprehensively by several scientific and public health organizations.<sup>3-5</sup>
- No convincing scientific evidence has been found linking community water fluoridation (CWF) with any potential adverse health effect or systemic disorder such as an increased risk for cancer, Down syndrome, heart disease, osteoporosis and bone fracture, immune disorders, low intelligence, renal disorders, Alzheimer’s disease, or allergic reactions.<sup>4,6</sup>
- Documented risks of CWF are limited to dental fluorosis, a change in dental enamel that is primarily cosmetic in its most common form. In the United States today, most dental fluorosis is of the mildest form, with no effect on how teeth look or function.<sup>7</sup>

## **Effective**

- The US Community Preventive Services Task Force issued a strong recommendation in 2001 and again in 2013 for CWF for the prevention and control of tooth decay.<sup>6,8</sup>
- Water fluoridation prevents tooth decay by providing frequent and consistent contact with low levels of fluoride, ultimately reducing tooth decay by about 25% in children and adults.<sup>9-12</sup>
- Schoolchildren living in fluoridated communities on average have 2.25 fewer decayed teeth compared with similar children not living in fluoridated communities.<sup>6</sup>

## **Reduce Disparities**

- CWF has been identified as the most cost-effective method of delivering fluoride to all members of the community regardless of age, educational attainment, or income level.<sup>13,14</sup>

## **Cost-Saving**

- By preventing tooth decay, CWF has been shown to save money, both for families and the health care system.<sup>11,15</sup>
- The return on investment for CWF varies with size of the community, increasing as the community size increases. CWF is cost-saving—even for small communities.<sup>15,16</sup>

## **Public Health Achievement**

- Because of its contribution to the dramatic decline in tooth decay over the past 70 years, CDC named CWF 1 of 10 great public health achievements of the 20th century.<sup>13</sup>
- In 2012, more than 210 million people, or nearly 75% of the U.S. population served by public water supplies, drank water with optimal fluoride levels to prevent tooth decay.<sup>17</sup>

## **International Fluoride Use**

- Nearly all developed countries practice fluoridation, just not always through water. Instead, salt is often used as the primary way of providing fluoride to the public.<sup>18</sup>
- The World Health Organization supports fluoridation of water, salt, and milk as a way to reduce dental decay.<sup>19,20</sup>

## References

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