

FLUORIDATION WHITE PAPER  
Prepared by the  
NEW JERSEY SECTION, AMERICAN WATER WORKS ASSOCIATION  
MAY 2005

The American Water Works Association (AWWA) is the premier organization representing the water supply industry in the United States and throughout North America. The New Jersey Section of AWWA counts among its members the leading municipal and investor-owned water suppliers throughout the State of New Jersey as well as numerous professional organizations, individuals and suppliers who have dedicated themselves to the provision of safe, reliable drinking water supplies for the residents of our great State.

- **AWWA supports fluoridation of water supplies in a safe, effective and reliable manner within limits prescribed by public health officials subject to local decision-making processes.**
- **The New Jersey Section of AWWA is opposed to State mandated fluoridation that would override local decisions regarding the addition of fluoride to community public drinking water supplies.**
- Fluorine is a naturally occurring element. Fluoride is a negatively charged fluorine atom.
- Trace amounts of fluoride occur naturally in water.
- Fluoride, when administered at low levels of concentration, is proven to help prevent tooth decay.
- Since 1945, American water systems have added fluoride to their water supplies. This process is known as "fluoridation".
- Water supplies across the United State naturally contain low concentration levels of fluoride.
- The three primary agents used in fluoridation are sodium fluoride (sodium and fluoride atoms bonded together), sodium fluorosilicate (sodium, silicon and fluoride) and fluorosilic acid (hydrogen, silicon and fluoride).
- The American Dental Association (ADA) endorsed fluoridation in 1950, reaffirming its endorsement in 1997. The American Medical Association endorsed fluoridation in 1951, and reaffirmed its endorsement in 1996. The U.S. Public Health Service has also endorsed fluoridation.
- As part of its "Healthy People 2000" project, the Center for Disease Control and Prevention (CDC) set a goal of increasing the level of the American population serviced by fluoridated water systems to 75 percent by the year 2010.
- In 1995, the U.S. Surgeon General estimated that 62 percent of Americans -- approximately 167 million people-- had access to fluoridated water.
- Drinking water's fluoride content is limited under federal law. The level of fluoride deemed acceptable by the U.S. Environmental Protection Agency (USEPA) is 4 milligrams per liter (mg/L). The CDC has established the "optimal level" for fluoride content in drinking water to be the in the range of 0.7 mg/L to 1.2 mg/L.

- Despite fluoridation's benefits to dental health, exposure to high levels of fluoride can cause dental fluorosis, a condition which leads to mottled tooth enamel, tooth discoloration, and in some cases erosion of effected teeth to the gumline.
- The US Department of Health and Human Services has **not** recognized a causal link between low-level fluoride exposure and occurrences of cancer, brain damage or osteoporosis.
- The USEPA has found a link between prolonged exposure to **high**-level fluoride concentration and skeletal fluorosis, a condition similar to osteoporosis, as well as digestive and nervous system disorders.
- Although the amount of fluoride and duration of exposure necessary to cause such ailments differs from person to person, there is no data linking these ailments to the level of fluoride in drinking water.