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# ENVIRONMENTAL Fact Sheet

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DWGB-5-3

2020

## Proposing To Add Fluoride To A Public Water System

The U.S. Centers for Disease Control and Prevention recommends that appropriate concentrations of fluoride be present in public water supplies. Fluoride has been demonstrated to be safe and cost-effective in reducing tooth decay through every stage of life and for all people.

Fluoride occurs naturally in the environment. Many bedrock wells in New Hampshire have sufficient natural fluoride. Well water should be tested to assess the presence of naturally-occurring fluoride before recommending supplements. Ten New Hampshire communities add optimal levels of fluoride (0.7 +/-0.1 mg/L) to the public water system to facilitate the balance between tooth enamel build-up and breakdown in primary and permanent teeth, thus reducing the incidence of tooth decay in the population.

### Legal Requirements When Proposing to Add Fluoride in a Public Water System

New Hampshire statutes specify procedures by which supplemental fluoridation of public water supplies can be accomplished. These procedures are spelled in the following statutes:

General Fluoridation	RSA 485:14
Fluoridation for city water systems	RSA 44:16
Fluoridation for town water systems	RSA 31:17-a
Fluoridation for district water systems	RSA 52:23

In summary, these statutes require that the proposal to fluoridate be subject to a vote and that majority approval is needed to begin fluoridation. The same procedure could also be used to discontinue fluoridation that is already occurring. Whatever the outcome of the vote, there is a three-year moratorium before a fluoridation question can be brought up again.

### Design Review and Operational Oversight

If local voter approval is given, the water system must submit the design for its chemical addition system to NHDES for approval. The proposal should identify the fluoride chemical to be used, the necessary chemical feed equipment, safety features to prevent an overfeed of the chemical, and the monitoring equipment to be used to ensure the proper fluoride concentration is achieved and maintained.

Once the fluoride addition begins, a monitoring schedule will be established by NHDES to ensure that the proper amount of fluoride is being added. The program also requires monthly submission of treatment record-keeping and periodic field inspection of the equipment by NHDES staff. In addition, NHDES requires that the system operator have the proper operator certification grade for that treatment process.

### **Public Water Systems That Add Fluoride**

In New Hampshire, 12 communities (serving approximately 260,000 people) add fluoride to their public water systems. A list of these public water systems is available in the fact sheet DWGB-5-1, "New Hampshire Public Water Systems Adding Fluoride."

### **Naturally Occurring Fluoride in Water Systems**

Fluoride occurs naturally at elevated levels in approximately 3% of bedrock wells in New Hampshire. Water systems with fluoride greater than 2 mg/L (secondary standard) are required to issue an annual public notice to users. Systems with fluoride greater than 4 mg/L (primary standard) are required to reduce levels with treatment or blending. Fluoride has no taste or odor. Only a laboratory test can identify the presence of elevated fluoride.

### **Controversy**

Fluoridation of drinking water can be a controversial issue. Typical concerns include the concept of mass dietary supplementation when individual methods of fluoride supplementation are available, the safety of adding a chemical that at high concentrations is a poison, the relatively low percentage of water consumed versus that treated, and other contentions that fluoridation exposure is not safe.

The New Hampshire Division of Public Health Services, the New Hampshire Dental Society, and the US CDC all advocate fluoridation of drinking water as the most cost-effective method of prevention of tooth decay and overall improvement in oral health (Ringelberg 1992). For more information on the health benefits of community water fluoridation, contact the Division of Public Health Services at (603) 271-4501.

### **Professional References for Fluoridation**

NH Dental Society	American Dental Association	US Centers for Disease Control & Prevention
23 South State St	211 East Chicago Ave	1600 Clifton Rd
Concord, NH 03301	Chicago, IL 60611-2678	Atlanta, GA 30333
(603) 225-5961	(312) 440-2500	(404) 639-3311
<a href="http://www.nhds.org">www.nhds.org</a>	<a href="http://www.ada.org">www.ada.org</a>	<a href="http://www.cdc.gov">www.cdc.gov</a>

### **For More Information**

Please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or [dwgbinfo@des.nh.gov](mailto:dwgbinfo@des.nh.gov) or visit our website at [www.des.nh.gov](http://www.des.nh.gov).

Note: This fact sheet is accurate as of September 2019. Statutory or regulatory changes or the availability of additional information after this date may render this information inaccurate or incomplete.