



2024 Iowa Water Fluoridation Census

The Iowa Water Fluoridation Census offers detailed information on fluoride levels in public water systems across the state. It is a resource for local public health officials, dental and medical professionals, and community members to support informed decision-making about oral health.

Community water fluoridation is the process of adjusting the natural level of fluoride in drinking water to the optimal concentration of 0.7 mg/L¹ to help prevent tooth decay. While most water sources — including ground, surface, and seawater — contain some fluoride, levels are typically too low to effectively protect against tooth decay.

Tooth decay remains one of the most common chronic diseases, affecting individuals of all ages. About one in five people has untreated tooth decay, which can negatively impact employment, social development, self-esteem, and overall quality of life.

Facts about Community Water Fluoridation

- Fluoride is the 13th most common mineral found in the Earth's crust².
- Every \$1 invested in fluoride saves \$32 in dental treatment costs³.
- Children in fluoridated communities average two fewer cavities than those living in similar communities without fluoridation⁴.
- Fluoridation reduces tooth decay by at least 25% in adults and children³.

¹ <https://www.federalregister.gov/documents/2011/01/13/2011-637/proposed-hhs-recommendation-for-fluoride-concentration-in-drinking-water-for-prevention-of-dental>

² <https://www.cdc.gov/fluoridation/faq/index.html>

³ <https://www.cdc.gov/fluoridation/about/index.html>

⁴ <https://thecommunityguide.org/findings/dental-carries-cavities-community-water-fluoridation.html>

Community Water Fluoridation Definitions

Public Water Supply: A system that provides water for human consumption that has at least 15 service connections or serves at least 25 people at least 60 days during the year. Examples of public water systems include cities, homeowners' associations, mobile home parks, nursing homes, and rural water supplies.

Adjusted: A water system that adds fluoride to achieve optimal fluoride level of 0.7 mg/L.

Natural: A water system that has a natural fluoride concentration at or above 0.6 mg/L. No fluoride is added to the system.

Non-Adjusted: A water system that has a natural fluoride level at or below 0.59 mg/L. No fluoride is added. The system does not purchase water from another system.

Consecutive: A water system that purchases water from another water system. The consecutive water system has a water plant but does little or no treatment to the water. These water systems are optimally fluoridated if the original (i.e. parent) system is optimally fluoridated. No additional fluoride is added to the consecutive system.

Multi-Source: A water system that receives water from numerous sources. It may get water from two or three other water systems and also provide some water through its own wells. The fluoridation status depends on the fluoridation status of the different water systems. No additional fluoride is added.

Defluoridated: A water system that has very high natural fluoride levels. The finished water fluoride concentration delivered to consumers is reduced either by a treatment process which removes fluoride from the water or water with high fluoride is blended with waters with a low fluoride concentration. One system in Iowa is Defluoridated.

Information about Iowa's Water Fluoridation Census

The fluoride levels in this report show a snapshot in time. If a water system adjusts its fluoride levels, daily testing is required. By law, these daily results must be submitted to the Department of Natural Resources (DNR). The Iowa Department of Health and Human Services' Community Water Fluoridation Coordinator works with water system operators and the DNR to collect and report this data to the Centers for Disease Control and Prevention (CDC) through the Water Fluoridation Reporting System (WFRS).

The public can view this information on the CDC's "My Water's Fluoride" website. For systems that do not add fluoride, are connected to another water source (consecutive systems), or rely on natural fluoride, testing is only required every 3 to 9 years, and monthly fluoride reports are not required to be sent to the DNR.

Iowa's Community Water Fluoridation Data

Community Water Systems in Iowa in 2024		
	Total Number of Systems	Population Served
All Water Systems	1,070	2,666,813
Fluoridated		
Adjusted	131	1,477,240
Natural	202	325,955
Defluoridated	1	1,533
Consecutive	208	428,821
Multi-Source	10	133,919
Total	552	2,367,468
Non-Fluoridated		
Non-Adjusted	484	284,100
Consecutive	34	15,245
Total	518	299,345

2024 Community Water Fluoridation Update

In 2024, there were 1,070 public water systems serving 2,666,813 Iowa residents. One hundred thirty-one systems adjusted their fluoride level, serving 1,477,240 people; 484 systems did not adjust their fluoride level and served 284,100 people.

In Iowa 88.8% of residents received fluoridated water from public water systems. Of these residents, less than half (44.3%) were served by systems maintaining the optimal level of fluoridation (0.6-1.0 mg/L¹). This range is shown to be the most effective in preventing tooth decay.

To find the fluoride level in a community's drinking water visit the [CDC's My Water's Fluoride Website](#). The data used by this site is updated monthly by the Iowa Department of Health and Human Services. For additional information on Iowa's water fluoridation, decay rates, and dental professional shortage areas, see the ArcGIS [CWF Impact Map](#).