

Public Drinking Water Safety in U.S

U.S Public Drinking Water Regulations

EPA and SWDA

The American public drinking water system is regulated by U.S. Environmental Protection Agency (EPA) and they set legal limits for over 90 contaminants in drinking water. The EPA monitors the tap water safety in accordance with the Safe Drinking Water Act (SWDA established in 1974) which allows each state to set and enforce their own standards.

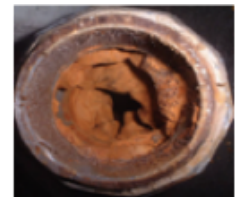


Growing Concerns over Water Safety

More than
80,000
Violations

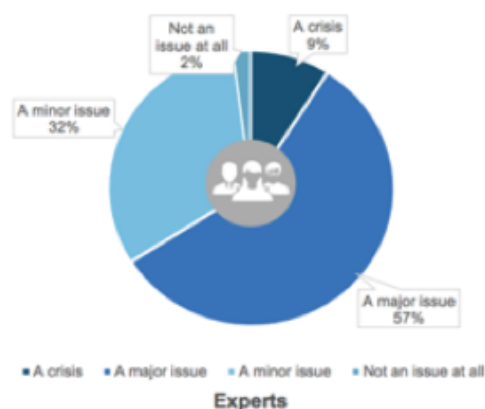
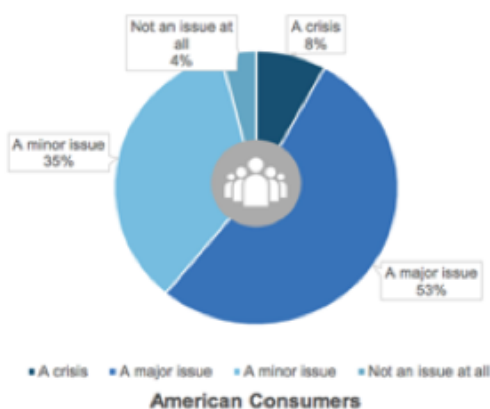
More than **80,000** violations of the SDWA in at least **18,000** communities across the country in 2015. The EPA took formal enforcement against only **13 percent** of these violations.

Aging Pipes: In addition to the violations, the American Water Works Association and the EPA have noted that the coming years will be a critical period in terms of drinking water safety as water pipes and treatment plants that were built in the mid 20th century are reaching the end of their useful lives.



7 million people in 27 states are drinking water with elevated levels of the chemical that the EPA classifies as a "likely carcinogen" according to Environmental Working Group (EWG).

Not only the pipes were aging in U.S, but also the regulation itself; SWDA was last modified in 1986 and 1996, meaning that the current law has not been updated over 20 years. In 2017, EWG released an expansive database of the nation's drinking water. They have found 250 contaminants above health guidelines in the nation's drinking water, and the EPA regulates only 100 of the chemicals.



53% (57%) American consumers (experts) answered water problems are "major issue".

(Nestlé Waters Survey May 2017: Question: "Do you believe water problems in the U.S. today are...?" Answers: "A crisis", "A major issue", "A minor issue" and "Not an issue at all".)



Some of the concerning contaminants that have been found in the tap water are **chromium-6** and **total trihalomethanes**.

Contaminant: case of 1,4-dioxane

- 1,4-dioxane is a carcinogen and unregulated by the EPA.
- Humans are at increased cancer risk from levels of 1,4-dioxane **exceeding 0.35 parts per billion (ppb)** in daily drinking water over the course of a lifetime.

17 times

Some consumers are getting about 17 times that amount of 1,4-dioxane in their tap water.

California: 2.5 million people exposed

North Carolina: 1.2 million

New York: 700,000

The highest concentrations of 1,4-dioxane are often found in low-income and minority neighborhoods.



What's more concerning is that California has a "notification level" of 1 ppb, at which point water utilities are required to notify government agencies, but not necessarily the public. Furthermore, the policy is purely advisory and not enforceable.

In February (2017), New York Governor Andrew Cuomo called on the EPA to establish a legally enforceable standard for 1,4-dioxane.

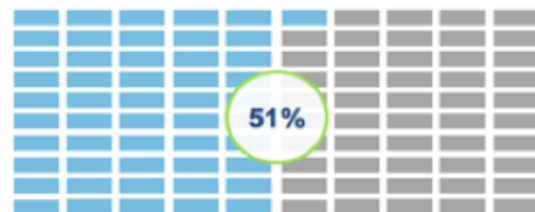
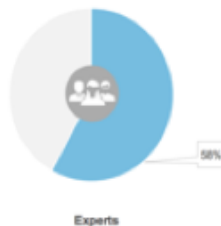
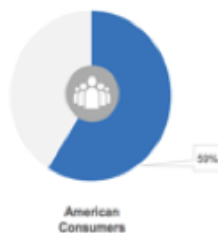
U.S Government Response to Water Safety

Budget cuts to drinking water programs and grants total more than \$600 million

The recently proposed budget for the EPA aims to "ensure that all Americans are protected from exposure to hazardous environmental risks where they live, learn, work, and enjoy their lives." Nevertheless, the President Trump's response was to cut \$16 million from the drinking water program. The EPA needs more resources to enforce and strengthen the existing drinking water regulations and to protect drinking water from unregulated contaminants.

American consumers and experts are concerned over access to clean water in the future, and most people feel "the country needs a significant water infrastructure overhaul". A demand for water purification equipment based on RO (Reverse Osmosis), UV (Ultraviolet) or carbon-based filtration technologies is expected to increase.

To advance, majority believe the U.S. needs a significant water infrastructure overhaul vs. gradual change



More than half of American consumers expect water crises like the one in Flint, Michigan to happen more often in the next decade



What is the biggest concern to you about drinking water? This needs to be a significant overhaul in water infrastructure in the U.S. to allow it to keep up with changing times and demands. 59% of American consumers believe the U.S. needs a significant overhaul in water infrastructure in the next decade. Learn more at nestle-waters.com

(Nestlé Waters Survey May 2017)