

Nitrate Pollution Could Be Causing 12,500 Cancer Cases Each Year

A new report from the Environmental Working Group calls out the unintended health effects of water and agricultural pollution.

June 18, 2019 By [Casey Halter](#)

A new report by the Environmental Working Group (EWG) raises concerns about the quality of the U.S. water supply, suggesting that nitrate pollution may be causing up to 12,594 cases of cancer every year, according to [a recent press release](#) from the nonprofit.

The study, published this week in the journal *Environmental Research*, is one of the first to zero in on the potential health effects of nitrates. Nitrate is a compound that is formed naturally when nitrogen combines with oxygen or ozone.

If consumed in high enough concentrations, nitrates can be harmful to human health. According to environmental experts, nitrates are increasingly finding their way into the U.S. drinking water supply via runoff from fertilized agricultural land, water treatment plants, leakage from sewers and septic tanks, erosion and more.

For the report, EWG scientists estimated the number of cancer cases in each state that could be attributed to nitrate contamination of public water systems between 2010 and 2017. They found that during this study period, approximately 81 million people had a mean drinking water nitrate level of 1 milligram/liter and above, while 6 million people had a mean level of 5 mg/L.

Currently, the Environmental Protection Agency (EPA) federal drinking water standard for nitrate, which was first set in 1962, is 10 mg/L. However, the EWG study notes that several well-regarded epidemiological studies have linked nitrate in drinking water with cancer and other serious health issues at levels less than one tenth of the current legal limit.

In the study, 80% of EWG's estimated cases were occurrences of colorectal cancer; ovarian, thyroid, kidney and bladder cancer accounted for the remaining 20%. Nitrate in tap water has also been linked with serious neonatal issues. What's more, the report estimated that the cost of treating tens of thousands of nitrate-related cancer cases could be costing the U.S. up to \$1.5 billion a year.

"Nitrate contamination of drinking water is a serious problem, and especially severe in the nation's

farm country,” said Olga Naidenko, PhD, EWG senior science adviser and one of the study’s lead authors. “Now, for the first time, we can see the staggering consequences of this pollution.”

Currently, EWG scientists estimate the level at which there would be no adverse health effects from nitrates in drinking water would be 0.14 mg/L, about 70 times lower than the EPA’s current legal limit. The EPA said in [a statement to CBS News](#) that it would not be adjusting its standards but “will continue to monitor research on nitrates and other drinking water contaminants and will determine the next steps as appropriate in future reviews of drinking water standards.”

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<http://beta.docker.cancerhealth.com/article/nitrate-pollution-causing-12500-cancer-cases-year>