

10 Worst Cities in America for Drinking Water

Unknown to most Americans, a surprising number of U.S. cities have drinking water with unhealthy levels of chemicals and contaminants. In fact, some organizations and state environmental agencies that collect and analyze water data say the level of chemicals in some Americans' drinking water not only exceeds recommended health guideline but the pollutants even exceed the limits set by the U.S. Environmental Protection Agency (EPA), the national legal authority in these matters.

The website [24/7 Wall St.](#) examined the quality of water supplies in most major America cities, using data collected from multiple sources for five years (ending in 2009) by Environmental Working Group (EWG), based in Washington, D.C. The fact that the data covered a half-decade is important because it shows that the presence of certain chemicals is persistent.

Cities in Kansas, Louisiana, Mississippi, Tennessee and Georgia provided insufficient data to be included in EWG's database. Some other major cities outside of these states also failed to submit information, including Detroit, Salt Lake City and Washington, D.C.

Test results from EWG's national database covered "a total of 316 contaminants in water supplied to 256 million Americans in 48,000 communities in 45 states." According to the data, among the contaminants were 202 chemicals that aren't subject to any government regulation or safety standards for drinking water.

Based on the EWG's methodology, 24/7 Wall St. came up with its 10 worst cities list. These cities' water quality rank is based on three metrics, in order of increasing importance:

- The percentage of chemicals found based on the number that were tested for
- The total number of contaminants found
- The most dangerous average level of a single pollutant.

Here's that list, in descending order, with the city's water utility in parenthesis:

10. Jacksonville, Fla. (JEA)

Located on the northeast coast of Florida, Jacksonville is the state's largest city. According to EWG, 23 different toxic chemicals were found in Jacksonville's water supply. The chemicals most frequently discovered in high volumes were trihalomethanes, which consist of four different cleaning byproducts -- one of which is chloroform. Many trihalomethanes are believed to be carcinogenic. Over the five-year testing period, unsafe levels of trihalomethanes were detected during each of the 32 months of testing, and levels deemed illegal by the EPA were detected in 12 of those months. During at least one testing period, trihalomethane levels were measured at nearly twice the EPA legal limit. Chemicals like arsenic and lead were also detected at levels exceeding health guidelines.

9. San Diego (San Diego Water Department)

Located on the Pacific in Southern California, San Diego is the country's eighth-largest city. According to California's Department of Public Health, San Diego's drinking water system contained eight chemicals exceeding health guidelines as well as two chemicals that exceeded the EPA's legal limit. In total, 20 contaminants have been found. One of those in excess of the EPA limit was trihalomethanes. The other was manganese, a natural element that's a byproduct of industrial manufacturing and can be poisonous to humans.

8. North Las Vegas (City of North Las Vegas Utilities Department)

North Las Vegas's water supply mostly comes from groundwater and the Colorado River, and doesn't contain chemicals exceeding legal limits. However, the water supply did contain 11 chemicals that exceeded health guidelines set by federal and state health agencies. The national average for chemicals found in cities' water exceeding health guidelines is four. North Las Vegas had a total of 26 contaminants, compared with the national average of eight. The water contained an extremely high level of uranium, a radioactive element.

7. Omaha (Metropolitan Utilities District)

The land-locked city of Omaha gets its water from the Missouri and Platte Rivers, as well as from groundwater. Of the 148 chemicals tested for in Omaha, 42 were detected in some amount, 20 of which were above health guidelines, and four of those were detected in illegal amounts. These were atrazine, trihalomethanes, nitrate and nitrite, and manganese. Atrazine is an herbicide that has been shown to cause birth defects. Nitrate is found in fertilizer, and nitrite is used for curing meat. Manganese was detected at 40 times the legal limit during one month of testing.

6. Houston (City of Houston Public Works)

Houston is the fourth-largest U.S. city. It gets its water from sources such as the Trinity River, the San Jacinto Rivers and Lake Houston. Texas conducted 22,083 water quality tests between 2004 and 2007 on Houston's water supply, and found 18 chemicals that exceeded federal and state health guidelines, compared to the national average of four. Three chemicals exceeded EPA legal health standards, against the national average of 0.5 chemicals. A total of 46 pollutants were detected, compared to the national average of eight. The city water has contained illegal levels of alpha particles, a form of radiation. Similarly, haloacetic acids, from various disinfection byproducts, have been detected.

5. Reno (Truckee Meadows Water Authority)

Reno gets most of its water from the Truckee River, which flows from Lake Tahoe. Of the 126 chemicals tested for in Reno over four years, 21 were discovered in the city's water supply, eight of which were detected in levels above EPA health guidelines, and three of these occurred in illegal amounts. These were manganese, tetrachloroethylene and arsenic. Tetrachloroethylene is a fluid used for dry cleaning and as an industrial solvent, and is deemed a likely carcinogenic by the International Agency for Research on Cancer. Arsenic is a byproduct of herbicides and pesticides, and is extremely poisonous to humans. During at least one month of testing, arsenic levels were detected at roughly two and a half times the legal limit.

4. Riverside County, Calif. (Eastern Municipal Water District)

Riverside county is a 7,200-square-mile area located north of San Diego, part of California's "Inland Empire." The county is primarily located in desert territory, and so the water utilities draw their supply from the Bay Delta, which is miles to the north. The water in Riverside County contained 13 chemicals that exceeded recommended health guidelines over the four tested years, and one that exceeded legal limits. In total, 22 chemicals were detected in the district's water supply. The contaminant exceeding legal health standards was tetrachloroethylene.

3. Las Vegas (Las Vegas Valley Water District)

Located in the Mojave desert, Las Vegas gets its water from the Colorado River through miles-long intake pipes. While its water doesn't exceed the legal limits for any single type of contaminant, Las Vegas's water has a large range of pollutants. Of the 125 chemicals tested for over a five-year period, 30 were identified in some amount, and 12 were found in levels that exceeded EPA health guidelines. These chemicals included radium-226, radium-228, arsenic and lead. The two radium isotopes are commonly found around uranium deposits and are hazardous to human health, even in small quantities.

2. Riverside, Calif. (City of Riverside Public Utilities)

Riverside, with a population slightly greater than 300,000, gets most of its drinking supply from groundwater. Regulators in the city of Riverside, which has a different water-treatment facility than the rest of Riverside County, detected 15 chemicals that exceeded health guidelines and one that exceeded legal standards. In total, 30 chemicals were found. Since 2004, the water has almost consistently been riddled with alpha particle activity, traces of bromoform (a form of trihalomethane) and uranium, causing an unusually unhealthy water supply.

1. Pensacola, Fla. (Emerald Coast Water Utility)

Located on the Florida Panhandle along the Gulf of Mexico, Pensacola is Florida's westernmost major city. Analysts say it has the worst water quality in the country. Of the 101 chemicals tested for over five years, 45 were discovered. Of them, 21 were discovered in unhealthy amounts. The worst of these were radium-228 and -226, trichloroethylene, tetrachloroethylene, alpha particles, benzene and lead. Pensacola's water was also found to contain cyanide and chloroform. The combination of these chemicals makes Pensacola's water supply America's most unhealthy.