Water Quality in California

What It Is
KidsData.org reports the number of water quality violations by type: Maximum Contaminant Level (MCL) violations and monitoring and recording violations as indicators of water system quality. These data do not indicate the severity of the violations.

Why This Topic Is Important
Clean, safe drinking water is essential to child health and learning (1, 2). Access to high-quality drinking water at home, schools, and child care facilities can encourage children to drink more water and can limit their exposure to harmful contaminants (1, 2, 3). Exposure to contaminants in drinking water can result in numerous adverse health effects for children, such as gastrointestinal issues, liver or kidney damage, impaired cognitive functioning, neurological damage, and cancer (1, 3). Children are especially vulnerable to the effects of environmental contaminants (1). A 2015 report estimates that childhood conditions related to environmental hazards cost California $254 million annually (4).

While the majority of Californians are provided drinking water that meets regulatory quality standards, many still do not have reliable access to safe, affordable water (5). In particular, communities of color, low-income communities, and rural areas may have less access to safe drinking water when compared to other communities (5, 6, 7).

How Children Are Faring
In 2015, California counties were issued 1,533 Maximum Contaminant Level (MCL) violations, meaning contamination in drinking water supplies exceeded public health limits. This is an increase from 2005, when 921 MCL violations were recorded. Risk of exposure to harmful chemicals through drinking water varies widely across California counties. Among the 55 counties with data in 2015, only three had no MCL violations, ten had three violations or fewer, and five counties had more than 100 such violations each.

Drinking water monitoring and recording violations occur when public water systems fail to meet water testing requirements or to report test results correctly. Statewide, there were 1,711 such violations in 2015. All but two counties with data on this measure had at least one monitoring or recording violation in 2015, while 4 counties had more than 100 violations each.
Maximum Contaminant Level (MCL) Violations, 2015; Showing Counties

**Definition:** Number of water quality violations for public water systems, by type of violation (e.g., in 2015, 1,533 Maximum Contaminant Level (MCL) violations were issued in California). MCL violations occur when contaminant levels in drinking water supplies exceed limits set by the California Dept. of Public Health. Monitoring and reporting violations occur when a public water system fails to have its water tested as required or fails to report test results correctly.

**Data Source:** State Water Resources Control Board, Annual Compliance Report Datasets (Nov. 2016)

[research on this topic:](https://www.kidsdata.org/topic/83/water-quality/summary)