

What Do Regulatory Authorities Say About Hexavalent Chromium?

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National and international regulatory agencies have set drinking water standards to protect the public from all forms of hexavalent chromium (Cr6) in drinking water.

- **The Environmental Protection Agency (EPA) has set a drinking water standard of 100 parts per billion (ppb) for total chromium.** This includes all forms of chromium, and the EPA standard assumes 100 percent hexavalent chromium.
- **In 2020, the World Health Organization (WHO) issued a final background document that recommends retaining the current WHO guideline value for total chromium (50 ppb) based on “the newer, high-quality data from chronic drinking water carcinogenicity studies” noting that the “overall weight-of-evidence supports a threshold MOA.”**
- **In 2019, the Food Safety Commission of Japan published a risk assessment of Cr6 in drinking water, concluding genotoxic mechanisms were unlikely to contribute to the tumors in rodents, and finding a threshold can be established.**
- **In 2018, Health Canada issued a final maximum acceptable concentration of 50 ppb for total chromium, finding the weight of evidence, including review of the large body of peer-reviewed published mode of action (MOA) studies, supports a non-mutagenic, threshold MOA for intestinal tumors.**
- **In 2016, the Texas Commission on Environmental Quality (TCEQ) published its final support document setting a reference dose of 0.003 mg/kg/day (about 100 ppb) for hexavalent chromium to be protective of both cancer and non-cancer effects. This hexavalent chromium reference dose is identical to that used by EPA in developing the current maximum contaminant level (MCL) for total chromium of 100 ppb. The TCEQ support document concludes that the weight of the evidence indicates that the threshold approach is the most scientifically defensible approach.**

Drinking Water Standards by Agency



Health
Canada



50 ppb

100 ppb

