

Water quality guidelines in Canada

Protecting your health and the environment



What does a coho salmon in British Columbia have in common with a 10-year-old boy in Alberta, a herd of cattle in Manitoba, a great blue heron in New Brunswick and a girl swimming in a lake in Newfoundland?

Water, of course! Like you and me, they each use a little bit of Canada's water supply to meet their needs, every day.

Obviously each of these users has different needs in terms of the type of water required—salty or fresh, treated or not. But we all need access to clean water in order to survive!

Keeping Canada's water supplies clean and accessible is a challenge for every level of government and each individual. Generally speaking, the federal government works with the provinces and territories to develop national, scientifically-based, voluntary guidelines for water quality—whether that water is destined for a cow in Manitoba or to quench your thirst. The provinces and territories use these guidelines when creating their own enforceable standards, objectives, or guidelines.

Guidelines are the result of federal, provincial, and territorial collaboration. This brochure introduces you to each of the six types of voluntary guidelines developed by national task groups. Health Canada and Environment Canada are the federal departments which act as the technical secretariats to working groups reporting to the Committee on Environmental & Occupational Health and the Canadian Council of Ministers of the Environment, respectively. These latter groups have final say over the guidelines in their area.

Current guideline values can be found on the websites noted in the information box below.

To find out more about how these guidelines might be enforced or applied in your area, contact your provincial department of health or environment.

For more details about the *Guidelines for Canadian Drinking Water Quality* or the *Guidelines for Recreational Water Quality*, contact Health Canada:

Website: www.hc-sc.gc.ca/waterquality
E-mail: water_eau@hc-sc.gc.ca
Tel: (613) 946-3615
Fax: (613) 952-2574

For more details about all other guidelines for water quality, contact Environment Canada:

Website: www.ec.gc.ca/ceqg-rcqe
E-mail: ceqg-rcqe@ec.gc.ca
Tel: (819) 953-1550
Fax: (819) 953-0461

Also visit the CCME web site at www.ccme.ca

Guidelines for Canadian Drinking Water Quality

These guidelines help protect the health of Canadians by establishing maximum acceptable concentrations for substances found in water used for drinking. To date, guidelines have been established for more than 85 physical, chemical, and biological attributes of water quality. The guidelines apply to all public and private drinking water supplies and to treated or finished water as it emerges from the tap.



Guidelines for Recreational Water Quality

These guidelines help protect the health of Canadians using water for recreational activities like swimming and diving, white water sports, sailing, canoeing, and fishing. The guidelines deal mainly with potential health hazards such as infections transmitted by disease-causing micro-organisms and injuries resulting from impaired visibility in murky waters, but they also relate to aesthetics and nuisance conditions.



Canadian Water Quality Guidelines for the Protection of Aquatic Life

These guidelines help protect all plants and animals living in our lakes, rivers, and oceans by establishing limits for parameters that can affect water quality, such as toxic chemicals, temperature and acidity. If levels of substances are within guideline limits, one would not expect to see negative effects in the environment. The guidelines are based on toxicity data for sensitive species of plants and animals found in Canadian waters and act as science-based benchmarks for protecting aquatic life in Canada.



Canadian Water Quality Guidelines for the Protection of Agricultural Water Uses

Irrigation guidelines help protect sensitive crop species that may be exposed to toxic substances such as pesticides or herbicides when watered. They are based on maximum irrigation rates and the sensitivity of crops to pollutants. Similarly, the Canadian Water Quality Guidelines for Livestock Water are based on how livestock are affected by parameters, such as toxic chemicals in their drinking water, how much water they drink, and whether the contaminant accumulates in the animals' bodies.



Canadian Sediment Quality Guidelines for the Protection of Aquatic Life

These guidelines help protect aquatic organisms that live in or on the sediment that forms on the bottom of lakes and rivers. Good quality sediment provides habitat and food for aquatic life. Many toxic chemicals entering lakes and rivers end up in the sediment. Some of these substances may leave the sediment, returning to the water or entering the food web.



Canadian Tissue Residue Guidelines for the Protection of Wildlife Consumers of Aquatic Biota

These guidelines help protect wildlife species, such as mammals and birds, that eat fish, shellfish, aquatic plants, and other aquatic organisms that might be contaminated with toxic chemicals. The guidelines give the highest concentration of a chemical in the body tissues of aquatic organisms that is not expected to result in negative effects in wildlife.

