

FACTS ABOUT WATER

Why is the World Health Organization's Guidelines for Drinking-water Quality adopted as the Hong Kong Drinking Water Standards?

Over the years, the government has been supplying drinking water in full compliance with the World Health Organization's Guidelines for Drinking-water Quality (WHO Guidelines).

The WHO Guidelines are prepared and updated through the participation of numerous authoritative institutions and hundreds of experts from a wide range of developed and developing countries, and represent the consensus opinion based on worldwide scientific and medical studies. The WHO Guidelines are authoritative, scientific and evidence-based and many developed countries worldwide make reference to them to monitor and control the quality of treated water.

Having taken into account the expert consultants' findings and consulted the International Expert Panel on Drinking Water Safety appointed by the Development Bureau, the government has announced in September 2017 to adopt the WHO Guidelines as the Hong Kong Drinking Water Standards.

Regular review will also be conducted to ensure that the Hong Kong Drinking Water Standards to be consistent with the international practice and adequate for application in local context.

Is the tap water at my home potable?

The quality of water treated by Water Supplies Department (WSD) treatment works is as good as that of many highly-developed countries and regions. However, the quality of tap water can be affected by the condition of maintenance of inside service of the building. You can drink tap water without boiling on condition that the management office of your building carries out proper upkeep procedures including regular cleansing of water storage tanks, proper maintenance of inside service and frequent monitoring of water quality to maintain the original water quality standard.

When water is delivered to consumers' taps via inside plumbing, the quality may not be the same as the quality of water produced by the treatment works. It is because unlined galvanized pipes were widely used in Hong Kong in the past. These pipes began to corrode after being in use for several years. Discoloured water results after water has been stagnant

inside the pipe for a certain period of time.

As far as is known, we suffer no harmful effects from drinking water with traces of dissolved iron. In fact, the average person's daily intake of iron from consumption of food far exceeds that from drinking such water. Under normal circumstances, this aesthetic problem can usually be overcome by running the tap for a few seconds. For the more serious cases, replacement of the water pipes may be necessary.

When water has been standing in pipes for a long time, sediment may build up. Run the tap for at least two minutes after long periods of stagnation (for instance, after several hours or overnight) before using it for drinking or cooking. As hot water increases the amount of impurities that may leach from pipes and fittings, avoid using water from hot water taps for drinking or cooking.

Since 23 December 1995, the use of unlined galvanized pipes has been prohibited. To avoid corrosion of pipes, other pipe materials such as lined galvanized steel pipes, copper pipes, stainless steel pipes and polyethylene pipes are recommended.

The maintenance of water storage tanks is also very important. Therefore, you should monitor the management office of your building to make sure that they regularly clean the water storage tanks and maintain the water supply system in good condition. If you have doubts about the cleanliness of the supply system in your building, you should consider boiling water for drinking.

Villagers relying on wells or streams for drinking should always boil the water for drinking.

Why water supply from Water Supplies Department (WSD) becomes turbid and yellowish when the supply resumes from a period of suspension?

When water supply from WSD resumes from a period of suspension, the sediments inside water mains may be stirred up resulting in water supply with slightly higher turbidity than normal. The contents of sediments accumulated in water mains are mainly lime, traces of iron or minerals but these sediments will not pose risks to our health or safety of water supply. In case the incident occurs, the WSD will flush our water mains at the fire hydrants in the affected areas so as to drain away the water until its clarity resumes normal. If the situation persists, the WSD will arrange water wagons to provide temporary water supply to the public in the affected areas. Management Offices of premises can also inspect their roof tanks and inside service. If water with high turbidity is observed, the Management Offices can drain the roof tanks to allow the intake of clear water as soon as possible.

Why does tap water at my home appear milky? Is there something wrong with the water quality?

Water in the plumbing system under pressure will contain more dissolved air. When the pressure drops, the dissolved air in water will be released into the water body forming numerous air bubbles, which makes the water look like milky in colour. When this condition occurs, try allowing the tap water to run for a moment or let the water stand in a container for a while. The water will become clear again as the air bubble escapes. Such phenomenon will not affect the quality of the drinking water.

Is Hong Kong's treated water safe for consumption?

Hong Kong's drinking water is safe.

Average chloroform (a substance considered as possibly carcinogenic to human) levels in our water have remained less than 50 µg/litre for a long time, which is far lower than the WHO guideline value of 300 µg/litre.

In our daily life, the chance of contact with carcinogenic substances through other channels is greater than that of drinking water. According to scientific research, the chance of getting cancer is less than 1 in 100 000 if you drink 2 litres of water containing 300 µg/litre chloroform every day for 70 years continuously.

Why does the tap water contain a smell of chlorine?

As the majority of Hong Kong people are living in high-rise buildings, it may take a long time for the final water from treatment works to go through the roof tanks before supplying to the consumers. A small amount of residual chlorine is maintained in the water to keep it free from bacterial infection during its journey in the distribution system. This minimal amount of chlorine will disappear if the water is boiled.