

Seasonal Taste and Odour in Tap Water

Seasonal Taste and Odour in Drinking Water is not a Threat to Public Health

During certain times of the year, mainly early spring or late summer and early fall, some residents may notice a musty / earthy taste or odour to their drinking water. Depending on the weather temperatures, these tastes and odours could persist in drinking water for a couple of weeks.

Many municipalities in Ontario, like Niagara, which obtain their water supply from surface water sources experience this problem periodically. While changes in the taste and odour may be unpleasant for some with a sensitive sense of taste and smell, these changes only affect the aesthetic qualities of the water and does not impact water safety.

Causes of Musty Taste and Odour

Taste and odour occurrences are a natural phenomenon caused by seasonal biological changes in the source water, which produces odour-causing chemical compounds, called geosmin and 2-methylisoborneol. Even very tiny concentrations of these compounds can result in the earthy / musty taste and odours in water.

Standard lab tests detect limits for both of these compounds at three parts per trillion but some persons can taste / smell them at concentrations of one part per trillion. Some persons can detect these changes even when levels are so low they are undetectable through standard testing.

During these episodes, tap water supplied via the municipal water supply systems remains safe to drink. Our water treatment plants are designed with processes to reduce the effects of taste and odour but these may not eliminate it entirely.

Ways to Reduce Tastes and Odours

Residents who experience taste and odour issues with their tap water can use water pitcher filter systems (e.g. Brita) to help reduce or eliminate the tastes and odours. Storing water in a loosely sealed glass container in the refrigerator for a period of time before drinking can also help.