



Information bulletin

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## Customer Factsheet TVC in Mains-fed Water Coolers

The BWCA is an industry association and accreditation body that:

- promotes water and hydration for employee health, productivity and wellbeing
- provides an informed choice between bottled or mains-fed coolers
- requires strict standards of hygiene, cooler installation and sanitisation

### Introduction

Customers may have water from their cooler tested for many reasons. One of the most common complaints received in relation to water testing is, 'Please come and service my cooler as we have been advised not to use it due to a high (or abnormal) TVC level'.

### What is a TVC ?

TVC stands for Total Viable Count, also called HPC (Heterotrophic Plate Count), or shown as CFU (Colony Forming Unit). It is a count of the generally harmless, environmental bacteria which will grow in the water in your cooler.

### Why does water from my cooler have a 'higher' TVC than my mains water?

Mains water is treated by the utilities supplier and contains residual disinfectant, usually chlorine. This stops bacteria growing in the water. Mains-fed coolers are fitted with carbon filters which 'polish' the water, improving its taste, odour and appearance. However this involves removing the chlorine, which then allows the bacteria in the mains water to grow. Hence the TVC will increase.

### What does a 'high' or 'abnormal' TVC mean?

A result may be flagged as 'high' by a water testing company which has set its own standards for TVC, based on regulations which are not applicable to water coolers.

A result can only be called 'abnormal' if it is compared against a history of results taken from the same cooler at the same interval after sanitisation each time. A much higher result than usual would be worth investigating, including comparison with TVC in the incoming mains water supply.

### Are the TVC bacteria harmful?

TVC bacteria are harmless unless you are an infant, or you have been told that you must boil your drinking water for medical reasons.

## What does the law say?

There are no TVC standards for drinking water at the point of use.

There ARE standards for particular bacteria such as E.coli. If these are found then there may have been dangerous contamination of the water, which must be investigated.

## What is a normal TVC level?

'Normal' will vary from cooler to cooler as it will depend on many factors, including:

- TVC in the mains water supply (test at the cooler connection point to compare)
- How much the cooler is used and whether it is turned off for periods
- Hygiene of users and environment
- How well you clean the cooler between sanitisations.

For a cooler in use, it is not unusual to see a TVC of thousands or even tens of thousands per ml.

## Should I try to reduce the TVC?

There is no need to try to reduce the count. These are harmless bacteria. You might drink more than 500,000 of these bacteria per ml of milk within its shelf life, and eat millions in a salad. TVC bacteria could build up to a level which causes an off- taste in the water, but this is unlikely to happen in a cooler which has its 6 monthly service by your BWCA supplier member.

However, to keep the water quality at its best it is important to:

- Make sure that there are no 'dead legs' in the mains supply near the cooler
- Keep the cooler turned on at all times (as you would your fridge)
- Use the cooler every day or dispense up to 5 litres at least once a week to refresh the system
- Empty and clean the drip tray
- Clean the taps frequently with food -safe sanitiser spray or wipes

## What are the benefits of using a BWCA Member?

Your BWCA supplier member must follow the 'BWCA Code of Practice'.

This means that they will install and service within water regulations, using best practices, approved products and following the manufacturer recommendations.

All BWCA members are independently audited to ensure you receive the highest level of service.

## Summary

- Where only TVC bacteria are found, there is no need for an additional cooler service
- TVC bacteria are harmless
- It is normal for water coolers to have a much higher TVC than mains water
- Mains-fed water coolers can be used by everyone except those who must have boiled drinking water
- Keep your cooler turned on at all times
- Use the cooler every day or dispense up to 5 litres at least once a week to refresh the system
- Clean the taps and drip tray frequently using food- safe sanitiser spray or wipes
- Always choose a BWCA supplier member.

## Still worried?

Call your BWCA supplier member, who will be happy to advise you further and answer any questions.

[www.bwca.org.uk](http://www.bwca.org.uk)