



## CHLORINATION OF WATER SUPPLIES



CHLORINE IS THE MOST WIDELY USED DISINFECTANT FOR DRINKING WATER IN AUSTRALIA.

### WHY IS CHLORINE ADDED TO THE WATER?

Chlorine is used as a disinfectant, that is, to kill harmful micro-organisms that may be present in the water supply and to prevent micro-organism regrowing in the distribution systems.

It is used in most Australian capital cities and many smaller water supplies. Chlorine is relatively inexpensive, easy to use, effective at low dose levels against a wide range of infectious micro-organisms and can protect water within the pipe system.

### WHY CAN I TASTE OR SMELL CHLORINE IN MY WATER?

To be sure that disinfection is maintained throughout the water mains, small amounts of chlorine are allowed to stay in the water supplied to your tap. This may result in a smell of chlorine when you turn your tap on or a slight taste of chlorine in the water. Chlorine will dissipate over time, so by keeping a jug of water in the fridge for a few hours, the chlorine taste can be eliminated.

### WHAT LEVEL OF CHLORINE IS IN DRINKING WATER SUPPLIED BY HUNTER WATER?

The concentration of chlorine in drinking water supplied by Hunter Water ranges from 0 to about 1.5 mg/L.

### WHY THIS LEVEL?

This is within the recommendations of the National Health and Medical Research Council (NHMRC) Australian Drinking Water Guidelines. Based on health considerations, the guideline for chlorine is that the chlorine residual should be less than 5 mg/L.

### IS CHLORINE SAFE?

Chlorine itself in drinking water, at concentrations below the health guidelines, is harmless to human health.

However, chlorine can react with organics in some water supply systems to form disinfection by-products, which may be harmful. In the water supplied by Hunter Water, however, the levels of disinfection by-products are well below the National Health and Medical Research Council's (NHMRC) Australian Drinking Water Guidelines.

### DID YOU KNOW?

CHLORINE HAS A LONG HISTORY OF SAFE USE IN WATER AROUND THE WORLD.