



## Chlorine Cancer and Heart Disease

*By Medical College of Wisconsin research team*

**"We are quite convinced, based on this study, that there is an association between cancer and chlorinated water."**

The addition of chlorine to our drinking water began in the late 1800s and became the standard in water treatment by 1904. For the most part, it remains the standard today. We do not use chlorine because it is the safest or even the most effective means of disinfection, we use it because it is the cheapest. In spite of all our technological advances, we essentially still pour bleach in our water before we drink it. The long-term effects of chlorinated drinking water are just now being recognized.

**One of the most shocking components to all of these studies is that up to 2/3 of our harmful exposure to chlorine is due to inhalation of steam and skin absorption while showering.**

**According to the U.S. Council of Environmental Quality, "Cancer risk among people drinking chlorinated water is 93% higher than among those whose water does not contain chlorine."**

**The steam we inhale while showering can contain up to 50 times the level of chemicals that tap water contains, due to the fact that chlorine and most other contaminants vaporize much faster and at a lower temperature than water.**

Dr. Joseph Price wrote a highly controversial book in the late sixties titled Coronaries/ Cholesterol/ Chlorine and concluded, "Nothing can negate the incontrovertible fact, the basic cause of atherosclerosis and resulting entities such as heart attacks and stroke, is chlorine."

Dr. Price later headed up a study using chickens as test subjects, in which two groups of several hundred birds were observed throughout their span to maturity. One group was given water with chlorine and the other water without chlorine. The group raised with chlorine, when autopsied, showed some level of heart or circulatory disease in every specimen; the group without had no

incidence of disease. The group with chlorine, under winter conditions, showed outward signs of poor circulation: shivering drooped feathers and a reduced level of activity. The group without chlorine grew faster and larger and displayed vigorous health. This study was well received in the poultry industry and is still used as a reference today. As a result, most large poultry producers now use dechlorinated water. "It would be a common sense conclusion that if regular chlorinated tap water is not good enough for the chickens, then it probably is not good enough for us humans!"

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A good amount of well-founded concern about chlorine currently exists. When chlorine is added to our water, it combines with other natural compounds to form Trihalomethanes (chlorination byproducts), or THMs. These chlorine byproducts trigger the production of free radicals in the body, causing cell damage, and are highly carcinogenic. According to the Environmental Defense Fund, "Although concentrations of these carcinogens (THMs) are low, it is precisely these low levels that cancer scientists believe are responsible for the majority of human cancers in the United States."

**Simply stated chlorine is a pesticide, as defined by the U.S. EPA, whose sole purpose is to kill living organisms.**

**"Women with breast cancer have 50% to 60% higher levels of organochlorines (chlorination byproducts) in their breast tissue than women without breast cancer."**

When we consume water containing chlorine, it kills some part of us, destroying cells and tissue inside our body. Dr. Robert Carlson, a highly respected University of Minnesota researcher whose work is sponsored by the Federal Environmental Protection Agency, sums the dilemma by claiming, "The chlorine problem is similar to that of air pollution." He later adds, "Chlorine is the greatestcripler and killer of modern times!"

Breast cancer, which now affects one in every eight women in North America, has recently been linked to the accumulation of chlorine compounds in the breast tissue. A study carried out in Hartford Connecticut, the first of its kind in North America, found, "Women with breast cancer have 50% to 60% higher levels of organochlorines (chlorination byproducts) in their breast tissue than women without breast cancer."

One of the most shocking components to all of these studies is that up to 2/3 of our harmful exposure to chlorine is due to inhalation of steam and skin absorption while showering.

A warm shower opens up the pores of the skin and allows for accelerated absorption of chlorine and other chemicals in water. The steam we inhale while showering can contain up to 50 times the level of chemicals that tap water contains, due to the fact that chlorine and most other contaminants vaporize much faster and at a lower temperature than water. Inhalation is a much more harmful means of exposure, as the chlorine gas (chloroform) we inhale travels directly into our blood stream. When we drink contaminated water, the toxins are partially filtered out by our kidneys and digestive system. Chlorine vapors are known to be a strong irritant to the sensitive tissue and bronchial passages inside our lungs; they were used as a chemical weapon in World War II. The inhalation of chlorine is a suspected cause of asthma and bronchitis, especially in children; such cases have increased 300% in the last two decades.

**Note:** The contaminants mentioned in this article are not necessarily in your tap water. However, if chlorine is present in the water it is most certain that other contaminants are also. Chlorine combines with organic substances forming Trihalomethanes including Chloroform. The most common volatile compounds in drinking water supplies as found by the EPA are as listed: trichloroethylene, tetrachloroethylene, carbon tetrachloride, benzene, 1,1,1-trichloroethane, 1,2-dichloroethane, ethylene chloride, 1,1-dichloroethylene, bis-1,2-dichloroethylene, vinyl chloride, trans-1,2-dichloroethylene, chlorobenzene, dichlorobenzene, & trichlorobenzene.