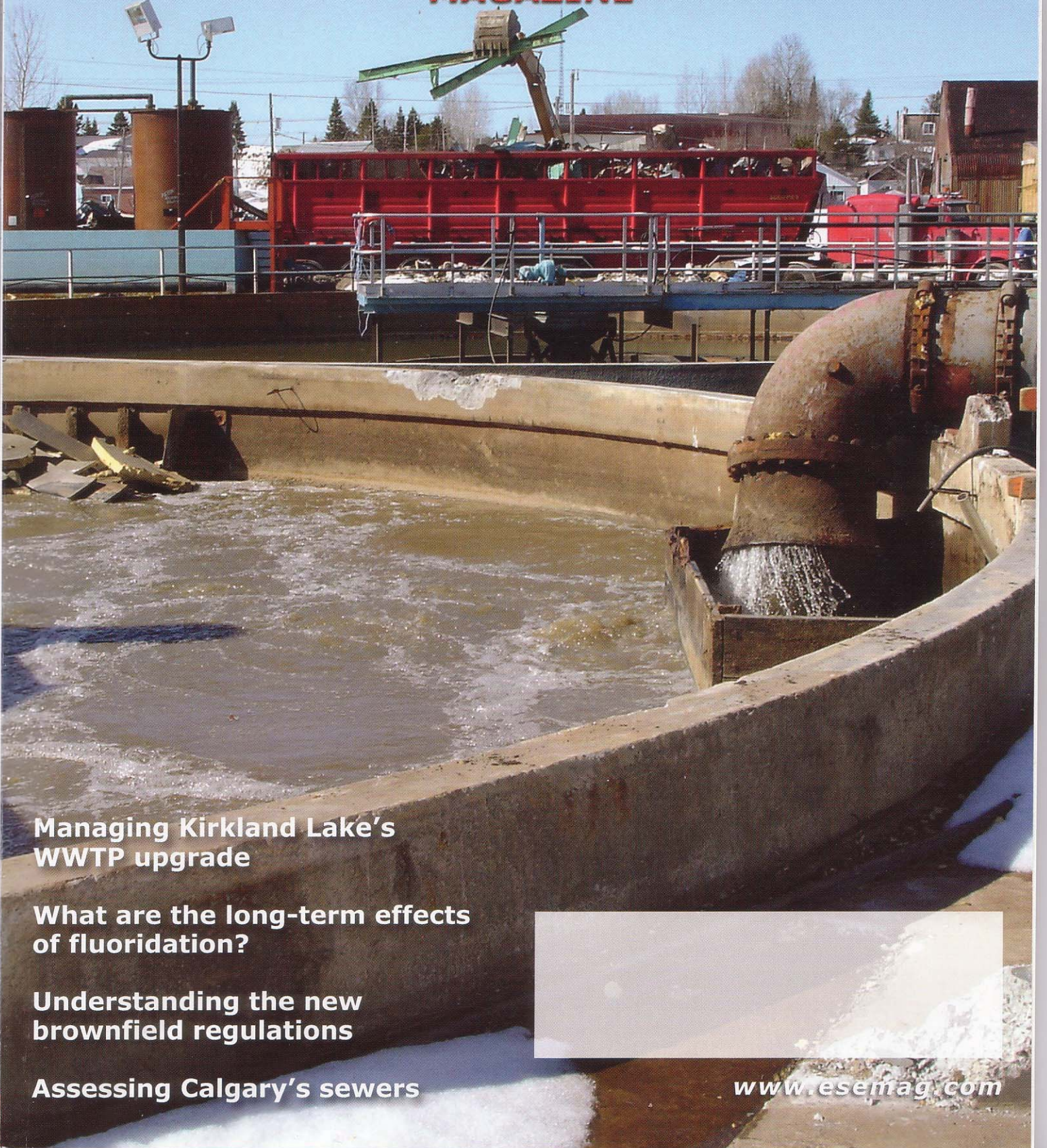


# **Environmental & Science Engineering** MAGAZINE

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# Does artificial water fluoridation mean no golden years for the elderly?

By Sheldon Thomas

The question that we all ask of ourselves is: "What condition will I be in when I reach old age?" The reasonable among us realize that our own life-choices and actions will greatly determine our health and our quality of life in those years after sixty five. What we have less control of are the practices and actions of others that affect us.

Artificial water fluoridation is one of those practices. Ostensibly introduced as a public health measure to reduce the number of dental cavities among whole population groups, the practice got underway without any rigorous toxicology studies, or completed clinical trials. The missing scientific examination was, fortunately, undertaken by impartial researchers.

Their findings paint a completely different picture of the safety of fluoridation chemicals, and of the claimed health benefits of ingesting them for many years. There is substantial credible evidence that water fluoridation will undermine the chances of surviving into old age with a sound body and a sharp mind.

## The Boomers

The Baby Boomer generation will, for the most part, turn 65 in a few years. The percentage of elderly in the population will grow markedly from that point. With that projected increase in numbers, the 'age-related' problems that commonly affect the elderly will soon enough begin to place massive stress on the provincial and municipal health care systems, and on the families of the elderly.

What if many of the age-related ailments that we have grown so accepting of have nothing to do with *normal* aging? This is no ordinary generation entering its golden years. The birth of all those Boomers near-exactly coincides with the introduction of artificial water fluoridation.

The 2006 National Research Council of the Academy of Sciences report on Fluoride in Drinking Water has designated kidney patients, diabetics, seniors and babies as 'susceptible sub-popula-



tions' that are especially vulnerable to harm from ingested fluorides.

## Increased bone fractures in the elderly

The elderly are at increased risk of bone fracture injury because of the long-term bio-accumulation of fluoride in their bones.

Fluoride seeks out calcium in the body, and there are great calcium reserves in the skeletal system. Most of the fluoride in the body, about 99%, is contained in bone. Where water is fluoridated, bones are high in fluoride by old age. Studies based upon autopsies of deceased elderly have revealed as much as 8000 ppm/kg fluoride in bone ash.

Fluoride will seriously weaken the bone structure of the elderly. The action of fluoride causes the bone to lose elasticity, the tensile strength required to resist bending fractures. There is solid evidence that hip fractures increase significantly in fluoridated communities. Increases appear to range from 40-100%, depending on the age of the subjects.

## Fluoride, cancer and the elderly

As a result of water fluoridation, entire communities, not just the elderly, may face more cancers than would otherwise be the case. In 1990, the US Public Health Service's National Toxicology Program conducted a well-designed study that showed sodium fluoride to cause cancer *at cumulative doses, comparable to those ingested by humans over a number of years.*

The risk of developing cancer increases dramatically with age. Indications are that 88% of new cases of cancer will occur in people over the age of 50. Approximately 40% of Canadians will develop cancer in their lifetime.

These are *not* acceptable figures. A 2-out-of-5 chance of developing cancer is not a normal expectation of aging. Something is causing this, and many believe the staggering increase of synthetic chemicals created and introduced since World War II is to blame.

Dr. Dean Burk, Ph.D., former chief  
*continued overleaf...*

chemist and head of National Cancer Institute Research, believed that the growth of cancers was linked to abrupt environmental change. He was convinced artificial water fluoridation was one of those abrupt changes.

### Bone cancer

Fluoride's particular affinity for the calcium reserves in bone explains its link to bone cancers. Fluoride is a 'mitogen' - meaning it can stimulate the proliferation of bone-forming cells called 'osteoblasts'. Osteosarcoma is a cancer caused by an abnormal proliferation of osteoblasts.

Bone cancer appears to have two peaks, first in adolescence (15 to 19) and second with the on-set of old age (50+). In 1992, Dr. Paul Cohn conducted a thorough, peer-reviewed and large human population study for the State Board of Health in New Jersey. He found that males aged 10-19 were nearly seven times more likely to get bone cancer if they lived in a fluoridated community, than if they lived in a non-fluoridated community. The general population in Cohn's fluoridated study

area was five times as likely to develop bone cancer. General population would include the elderly.

### Thyroid disease: poor prognosis for the aged

In 1955, a report in the New England Journal of Medicine indicated a 400 percent increase in thyroid cancer in San Francisco since that city began fluoridating its drinking water just five years earlier. Fluoride is well known to interfere with the functioning of the thyroid gland which produces vital hormones which control metabolism. An impaired thyroid will lead to diminished mental and physical ability.

Fluoride displaces iodine in the thyroid, greatly depressing thyroid function and rendering a person hypothyroid from iodine deficiency. With age comes a progressively greater accumulation of fluoride in the body. Inevitably, this points to the elderly as being particularly affected by hypothyroidism.

Hypothyroidism has become epidemic on this continent. One out of three is likely to suffer from it by mid-life. Those affected can become overly-tired,

cold-sensitive, overweight, and depressed. They often endure arthritis-like symptoms, hair loss, infertility, atherosclerosis (hardening of the arteries) and periods of prolonged illness.

In the elderly, thyroid disease is very common. At autopsy, finding a "normal thyroid gland" is rare, testifying to the incredible high prevalence of thyroid disorders among the elderly.

### Fluoride and aging

If the human body were likened to an engine, the engine management module would be the body's enzymes. Fluoride is a powerful enzyme poison. Austrian researchers proved in the 1970s that as little as 1 ppm fluoride concentration can disrupt DNA repair enzymes by 50%. When DNA can't repair damaged cells, we get old .. fast.

By its corruption of enzymes, fluoride robs the body of its natural ability to fend off external pathogens. Fighting infection is a battle often lost by the elderly. According to the Institute of Medicine, "there appears to be a direct relationship between increasing age and susceptibility to infections. Factors that

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may contribute to the predisposition of the elderly to infections include impaired immune function.”

#### Water fluoridation and Alzheimer's

The Boomer generation has been tagged with a second nickname, 'Generation Alzheimer's'. "Alzheimer's is a tragic epidemic that has no survivors. Not a single one," says Harry Johns, president and CEO of the Alzheimer's Association. "It is as much a thief as a killer. Alzheimer's will darken the long-awaited retirement years of the one out of eight baby boomers who will develop it".

Why this generation? Why did Alzheimer's spike so suddenly across a single generation? What was so different in that immediate time period after the Second World War? Water fluoridation was just getting underway as the war ended. As a never-seen-before program of fluoride mass medication using communal drinking water supplies, it was perhaps the one thing that could immediately, physically, and permanently affect so many newborn across this continent.

Aluminum accumulation in brain tissue has long been linked to Alzheimer's Disease. Recent studies have shown that fluoride enables aluminum to enter the brain, and accumulate in brain tissue. Aluminum is often present in finished drinking water. Aluminum salts are the preferred water industry treatment chemicals used to help clarify raw intake water. Invariably, trace amounts of aluminum remain in the finished drinking water.

Unfortunately, it is chemically impossible for fluorine not to combine with aluminum when the two encounter each other. The formation of fluoride compounds is basic chemistry. The fluorine atom is the most chemically reactive and electronegative of all the elements. An aluminum atom has three extra electrons in its valence shell. The fluorine atom will bind to any atom with a spare electron. That union will form an 'alumino-fluoride complex' as soon as fluorine ion is added to the finished water at the plant. Alumino-fluoride complex is neurotoxic.

It is, therefore, a near-certainty that fetuses, babies, children, adolescents, adults and the elderly will ingest alumino-fluoride neurotoxins for as many years as they consume fluoridated water.

#### Conclusions

The numbers of reasonably robust, clear-thinking elders is shrinking. It seems a rarity to meet someone over 75 who is independent, current with world affairs and capable of voicing a learned opinion, and is still able to tend to their own needs. What we see, instead, is a rich and prospering elder care industry, and a health care system that is taxed to the limit to tend to the numbers of sick, diseased and disabled elderly.

Did water fluoridation cause all of the above? The best answer would be no. But too many studies indicate that water fluoridation may have played a big role in the surprising frailty of those now entering their 'golden years'.

*Sheldon Thomas is the founder of 'Clear Water Legacy' (www.clearwaterlegacy.com), and a former Manager of Water Distribution for the City of Hamilton, Ontario.*



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