Commie Plot

FLUORIDE: COMMIE PLOT OR CAPITALIST PLOY?

Part 2 of a series on the early history of fluoride, by Joel Griffiths

Cows crawled around the pasture on their bellies, ...

... inching along like giant snails. So crippled by bone disease they could not stand up. this was the only way they could graze. Some died kneeling after giving birth to stunted calves. Others kept on crawling until no longer able to chew because their teeth had crumbled down to the nerves, they began to starve ...[1]

These were the cattle of the Mohawk Indians on the New York-Canadian St. Regis Reservation during the period 1960-75, when industrial pollution devastated the herd; and along with it, the Mohawks' way of life. Crops and trees withered, birds and bees fled from this remnant of land the Mohawk still call Akwesasne, "the land where the partridge drums." Today, nets cast into the St. Lawrence River by Mohawk fishers bring up ulcerated fish with spinal deformities. Mohawk children, too, have shown signs of damage to bones and teeth.[2]

In 1980, the Mohawks filed a $150 million lawsuit for damage to themselves and their property against the companies responsible for the pollution: the Reynolds Metals Co. and the Aluminum Co. of America (ALCOA). But five years of legal costs bankrupted the tribe and they settled for $650,000 in damages to their cows;[3] the court, however, left the door open for a future Mohawk suit for damage to their own health. After all, commented human rights lawyer Robert Pritchard, *"What judge wants to go down in history as being the judge who approved the annihilation of the Indians by fluoride emissions?"*[4]

Fluoride emissions? Fluoride, as in toothpaste? Well, yes. Fluoride was the pollutant primarily responsible for the Akwesasne devastation.[5]

For nearly 50 years, the U.S. government and media have been telling the public that fluoride is safe and beneficial; it is supposed to reduce cavities, especially in children. Manufacturers add it to toothpaste, municipalities put it in the public's drinking water. The only people who question the safety of fluoride, says the government, are quacks and lunatics; particularly of the far-right-wing variety.

But fluoride has another side the government never mentions. It is a toxic industrial pollutant; one of the oldest and biggest of them all. For decades, U.S. industrial plants have rained heavy doses of waste fluoride on people, such as the Mohawks. The nation, however, has been successfully conditioned to think of fluoride solely as a benevolent substance and to dismiss as a crackpot, anyone who claims otherwise.

In recent years, because of rampant environmental damage, some of the worst fluoride pollution plants; such as those at Akwesasne; have been forced to reduce their emissions, but not terminate them. At Akwesasne, cows still live only half their normal lifespan.[6] Nationwide, fluoride remains one of industry's largest pollutants. By the Environmental Protection Agency's (EPA) last estimate, at least 155,000 tons a year were being released into the air by U.S. industrial plants.[7]

Emissions into water; lakes, rivers, and oceans; have been estimated to be as high as 500,000 tons a year

While people living near and/or working in heavy fluoride-emitting industrial plants have received the highest doses, the general population has not been spared either. Fluoride is not biodegradable; whatever comes around stays around, gradually accumulating in the environment, in the food chain, and in people's bodies, where it settles in bones and teeth.[8] If this general increase in fluoride dose were proved harmful to humans, the impact on industry which pollutes both air and water would be major. The nation's air is contaminated by fluoride emissions from the production of iron, steel, aluminum, copper, lead and zinc; phosphates (essential for the manufacture of all agricultural fertilizers); plastics; gasoline; brick, cement, glass, ceramics, and the multitudinous other products made from clay; electrical power generation and all other coal combustion; and uranium processing.

[9]

As for water, the leading industrial fluoride polluters are the producers and processors of glass, pesticides and fertilizers, steel and aluminum, chemicals, and metals.[10] The metal processing industries include copper and brass, as well as titanium, super alloys, and refractory metals for military use.[11]

The list of polluters extends across industry from basic to strategic. Industry and government have long had a powerful motive for claiming an increased dose of fluoride is safe for the population. Maintaining this position has not been easy because, of industry's largest pollutants, fluoride is by far the most toxic to vegetation, animals, and humans.[12] In fact, it's one of the most toxic substances known.[13]

"Airborne fluorides," reports the U.S. Department of Agriculture, *"have caused more worldwide damage to domestic animals than any other air pollutant."*[14] As for vegetation, as early as 1901, studies *"found that fluoride compounds are much more toxic than the other compounds that are of significance in the industrial smoke problem."*[14]

Fluoride pollution has caused aquatic damage of similar magnitude.[16] In other words, there have been many Akwesasnes.

"Man [sic] is much more sensitive than domestic animals to fluoride intoxication the medical term for poisoning]."[17]

"It might be economically feasible to reduce industrial fluoride emissions further," says Fred L. Metz of the EPA's Office of Toxic Substances, *"but eliminating them would probably be impossible."*[18]

Of the highly toxic elements that are naturally present throughout the earth's crust; such as arsenic, mercury and lead; fluoride is by far the largest in quantity.[19] Normally, only minute amounts of these elements are found on the earth's surface, but industry mines its basic raw materials from deep in the earth and brings up vast tonnages; none in greater quantity than fluoride.

Historically, perhaps no other pollutant has posed a greater threat to industrial expansion. As early as 1850, fluoride emissions from the iron and copper industries poisoned crops, livestock, and people. By the turn of the century, consequent lawsuits and burdensome regulations threatened the existence of these industries in Germany and England.[20] They saved themselves by introducing the tall smokestacks which reduced damage by dispersing the fluorides and other toxins into the upper air.

In twentieth century America, however, enormous industrial plants and new technologies increased fluoride emissions so that even tall stacks could not prevent gross damage for miles around. Following the period of explosive industrial expansion known as *"industry's roaring 20s"*, the magnitude of industry's fluoride dilemma became starkly apparent.

International reports of fluoride damage mushroomed in 1933 when the world's first major air pollution disaster struck Belgium's Meuse Valley: several thousand people became violently ill and 60 died. The cause was disputed, but investigations by prominent scientists, including Kaj Roholm, the world's leading authority on fluoride hazards, placed the blame on fluoride.[21],/p>

Here and abroad, health scientists were beginning to regard fluoride as a poison, pure and simple. The trend toward its removal from the environment was potentially disastrous from industry's point of view. *"Only recently, that is, within the last ten years, has the serious nature of fluoride toxicity been realized,"* wrote Lloyd DeEds, senior toxicologist with the U.S. Department of Agriculture (USDA) in 1933. *"It is a well established fact that chronic intoxication [poisoning] may manifest itself in man as recognized abnormalities only after constant, or at least frequent, exposure over many years ... The possibility of fluoride hazard should ... be recognized in industry ... where this element is discharged into the air as an apparently worthless by-product."*[22]

It was abundantly clear to both industry and government that spectacular U.S. industrial expansion; and the economic and military power and vast profits it promised; would necessitate releasing millions of tons of waste fluoride into the environment. Furthermore, two large new industries would be adding to the dose: fluorocarbon chemicals (the aerosol propellants and refrigerants now depleting the ozone layer) and aluminum, slated for a crucial economic and military role during the upcoming Second World War. By 1938 the aluminum industry, which then consisted solely of ALCOA, had been placed on a wartime schedule. And fluoride was the aluminum industry's most devastating pollutant.[23]

U.S. future industrial expansion, then, would be accompanied by complaints and lawsuits over fluoride damage on an unprecedented scale; the most threatening aspect of which was harm to human health. Damage to animals and the environment might be tolerated and easily paid off; if, however, serious injury to people were established, lawsuits alone could prove devastating to companies, while public outcry could force industry-wide government regulations, billions in pollution control costs, and even mandatory changes in high-fluoride raw materials and profitable technologies.

This inter-war period saw the birth of the military-industrial complex, with its concomitant public disinformation campaigns. It also saw a federal blitz campaign to convince the public fluoride was safe and good for them. The kick-off was the 1939 announcement by Alcoa-funded scientist Gerald J. Cox: *"The present trend toward complete removal of fluoride from water and food may need some reversal."*[24]

New evidence of fluoride's safety began emerging from research centers plied with industry 's largess. Notable among these was the University of Cincinnati's Kettering Laboratory, whose specialty was investigating the hazards of industrial chemicals. Funded largely by top fluoride-emitters such as ALCOA, the Kettering Lab quickly dominated fluoride safety research. A book by Kettering scientist and Reynolds Metals consultant E.J. Largent, for example, written in part to *"aid industry in lawsuits arising from fluoride damage,"* became a basic international reference work.[25]

The big news in Cox's announcement was that this *"apparently worthless by-product"* had not only been proved safe (in low doses), but actually beneficial: it might reduce cavities in children. A proposal was in the air to add fluoride to the entire nation's drinking water. While the dose to each individual would be low, *"fluoridation"* on a national scale would require the annual addition of hundreds of thousands of tons of fluoride to the country's drinking water.

Government and industry; especially ALCOA; strongly supported intentional water fluoridation. Undoubtedly, most proponents were sincere in their belief that the procedure was safe and beneficial. At the same time, it might be noted that fluoridation made possible a master public relations stroke; one that could keep scientists and the public off fluoride's case for years to come. If the leaders of dentistry, medicine, and public health could be persuaded to endorse fluoride in the public's drinking water, proclaiming to the nation that there was a *"wide margin of safety,"* how were they going to turn around later and say industry's fluoride pollution was dangerous?

As for the public, if fluoride could be introduced as a health enhancing substance that should be added to the environment for the children's sake, those opposing it would look like quacks and lunatics. The public would question attempts to point out its toxicity or its unsavory industrial connections.

With such a powerful spin operating, fluoride might become a virtually *"protected pollutant,"* as writer Elise Jerard later termed it.[26] One thing is certain, the name of the company with the biggest stake in fluoride's safety was ALCOA; whose name is stamped all over the early history of water fluoridation.

Throughout industry's *"roaring 20s"*, the U.S. Public Health Service was under the jurisdiction of Treasury Secretary Andrew W. Mellon, a founder and major stockholder of ALCOA. In 1931, the year Mellon stepped down, a Public Health Service dentist named H. Trendley Dean was dispatched to certain remote towns in the West where drinking water wells contained high concentrations of natural fluoride from deep in the earth's crust. Dean's mission was to determine how much fluoride people could tolerate without obvious damage to their teeth; a matter of considerable concern to Alcoa. Dean found that teeth in these high fluoride towns were open discolored and eroded, but he also reported that they appeared to have fewer cavities than average. He cautiously recommended further studies to determine whether a lower level of fluoride in drinking water might reduce cavities without simultaneously damaging bones and teeth, where fluoride settles in humans and other animals.

Back at the Mellon Institute, Alcoa's Pittsburgh industrial research lab, this news was galvanic. ALCOA-sponsored biochemist Gerald J. Cox[27] immediately fluoridated some lab rats in a study and concluded that fluoride reduced cavities and that: *"The case should be regarded as proved."*[28] In a historic moment in 1939, the first public proposal that the U.S. should fluoridate its water supplies was made; not by a doctor, or dentist, but by Cox, an industry scientist working for a company threatened by fluoride damage claims.[29] Cox began touring the country, stumping for fluoridation.

Initially, many doctors, dentists, and scientists were cautious and skeptical, but then came World War II, during which industry's fluoride pollution increased sharply because of stepped-up production and the extensive use of ALCOA aluminum in aircraft manufacture.

Following the war, as expected, hundreds of fluoride damage suits were filed around the country against producers of aluminum, iron and steel, phosphates, chemicals, and other major polluters.[30] The cases settled in court involved only damage to livestock or vegetation.

Many others were settled out of court, including those claiming damage to human health, thus avoiding legal precedents. In one case, for the first time in the U.S. an Oregon federal court found in Paul M. and Verla Martin v. Reynolds Metals (1955) that the couple had sustained *"serious injury to their livers, kidneys and digestive functions"* from eating *"farm produce contaminated by [fluoride] fumes"* from a nearby Reynolds aluminum plant.[31] Soon thereafter, no less than the Aluminum Company of America (ALCOA) and six other metals and chemical companies joined with Reynolds as *"friends of the court"* to get the decision reversed. According to a local paper, a Reynolds attorney *"contended that if allowed to stand, the verdict would become a ruling case, making every aluminum and chemical plant liable to damage claims simply by operating [emphasis added]."*[32] Despite extensive medical testimony for Reynolds from Kettering Lab scientists, the Martins kept on winning. Finally, in a time-honored corporate solution, Reynolds mooted the case by buying the Martins' ranch for a hefty price.

The postwar casualties of industrial fluoride pollution were many; from forests to livestock to farmers to smog-stricken urban residents; but they received little more than local notice. National attention had been diverted by fluoride's heavily publicized new image. In 1945, shortly before the war's end, water fluoridation abruptly emerged with the full force of the federal government behind it. In that year, two Michigan cities were selected for an official *"15-year"* comparison study to determine if fluoride could safely reduce cavities in children, and fluoride was pumped into the drinking water of Grand Rapids.

Other early experiments were performed, not only without publicity, but without the knowledge of the subjects. The scientific value of these experiments; and their ethics; were dubious in the extreme. In Massachusetts and Connecticut, for example, the first fluoridation experiments (1945-46) were conducted on indigent, mentally retarded children at state-run schools. According to the 1954 congressional testimony of Florence Birmingham, a trustee of the Wrentham (Massachusetts) State School for Feebleminded Children, her school's administration learned only by accident that fluoride was being put in the drinking water.[33]

The trustees immediately voted to stop the fluoridation, Birmingham testified, *"but to my shocked surprise, we were told by the [Massachusetts Department of Health] that it was not an experiment and the fluoridation continued on. ... I found in the files a letter revealing that [a health department representative] had come to the institution school and in a conference with administration officials warned them that there should be no publicity on the fluoride program there ..."*

The federally sanctioned experimenters did not seem concerned that these children might accidentally receive a toxic overdose of fluoride. *"The method used in putting fluoride in the water,"* said the president of the school employees' union, *"... is enough to cause panic at the institution ... A boy patient does it ...He knows what it is for he said, 'Come up with me and I can show you how I can take care of you if I get mad at you.'"*[34]

Meanwhile, in 1946, despite the fact that the official 15-year experiment in Michigan had barely begun, six more U.S. cities were allowed to fluoridate their water. The fluoridation bandwagon had begun to roll.

At this juncture, Oscar R. Ewing, a long-time ALCOA lawyer who had recently been named the company's chief counsel; with fees in the then-astronomical range of $750,000 a year[35]; arrived in Washington. Ewing was presumably well aware of ALCOA'S fluoride litigation problem. He had handled the company's negotiations with the government for the building of its wartime plants.[36]

In 1947, Ewing was appointed head of the Federal Security Agency (later HEW), a position that placed him in charge of the Public Health Service (PHS). l Under him, a national water fluoridation campaign rapidly materialized, spearheaded by the PHS. Over the next three years, additional cities were fluoridated including the control city in the original two-city Michigan experiment, thus wiping out the most scientifically objective test of safety and benefit before it was half over.

The government's official reason for this unscientific haste was *"popular demand."* And indeed, these 87 cities had become so wild for fluoridation that the government claimed it wasn't fair to deny them the benefits. By then, in fact, much of the nation was clamoring for fluoridation. This enthusiasm was not really surprising, considering Oscar Ewing's public relations strategist for the water fluoridation campaign was none other than Sigmund Freud's nephew Edward L. Bernays,[37] *"The Original Spin Doctor"*, as a Washington Post headline recently termed him.[38] Bernays, also known as the father of public relations, *"pioneered the application of his uncle's theories to advertising and government propaganda. The government's fluoridation campaign was one of his most stunning and enduring successes.*

In his 1928 book Propaganda, Bernays explained *"the structure of the mechanism which controls the public mind, and how it is manipulated by the special pleader [i.e., public relations counsel] who seeks to create public acceptance for a particular idea or commodity ...*[39] *Those who manipulate this unseen mechanism of society constitute an invisible government which is the true ruling power of our country ... our minds are molded, our tastes formed, our ideas suggested, largely by men we have never heard of."*

"If you can influence the [group] leaders," wrote Bernays who had many confidential industrial clients, "either with or without their conscious cooperation [emphasis added], you automatically influence the group which they sway..."[40]

Describing how, as PR man for the Beech-nut Bacon Company, he influenced leaders of the medical profession to promote sales, Bernays wrote, *"The new salesman [would] suggest to physicians to say publicly that it is wholesome to eat bacon. He knows as a mathematical certainty that large numbers of persons will follow the advice of their doctors because he understands the psychological relationship of dependence of men on their physicians."*[41]

Substitute *"dentists"* for *"physicians"* and *"fluoride"* for *"bacon"* and the similarities are apparent. Almost overnight, under Bernays' mass mind-molding, the popular image of fluoride; which at the time was being widely sold as rat and bug poison; became that of a beneficial provider of gleaming smiles, absolutely safe, and good for children, bestowed by a benevolent paternal government. Its opponents were permanently engraved on the public mind as crackpots and right-wing loonies.

Fluoridation attracted opponents from every point on the continuum of politics and sanity. The prospect of the government mass-medicating the water supplies with a well-known rat poison to prevent a non-lethal disease flipped the switches of delusionals across the country; as well as generating concern among responsible scientists, doctors, and citizens.

Moreover, by a fortuitous twist of circumstances, fluoride's natural opponents on the left were alienated from the rest of the opposition. Oscar Ewing, as Federal Security Agency administrator, was a Truman *"fair dealer"* who pushed many progressive programs such as nationalized medicine. Fluoridation was lumped with his proposals. Inevitably, it was attacked by conservatives AS a manifestation of *"creeping socialism"*, while the left rallied to its support. Later during the McCarthy era, the left was further alienated from the opposition when extreme right-wing groups, including the John Birch Society and the Ku Klux Klan, raved that fluoridation was a plot by the Soviet Union and/or communists in the government to poison America's brain cells.

It was a simple task for promoters, under the guidance of the *"original spin-doctor"*, to paint all opponents as deranged; and they played this angle to the hilt. For example, one widely distributed dossier on opponents *"listed in alphabetical order reputable scientists, convicted felons, food faddists, scientific organizations, and the Ku Klux Klan."*[42]

Actually, many of the strongest opponents originally started out as proponents, but changed their minds after a close look at the evidence. And many opponents came to view fluoridation not as a communist plot, but simply as a capitalist-style con job of epic proportions. Some could be termed early environmentalists, such as the physicians George L. Waldbott and Frederick B. Exner, who first documented government-industry complicity in hiding the hazards of fluoride pollution from the public. Waldbott and Exner risked their careers in a clash with fluoride defenders, only to see their cause buried in toothpaste ads.

Exner's voluminous files were a source of pivotal evidence in lawsuits decided against industry and against fluoridation promoters. In 1978, following his death, his files were destroyed in a mysterious fire.[43]

But all the opponents, credible and cracked alike, were run over by the fluoridation bandwagon. In 1950 the Public Health Service, along with leaders of dentistry, medicine, and practically everything else, officially endorsed fluoridation, and the transformation of fluoride's image was complete. Since then, two thirds of the nation's reservoirs have been fluoridated, and about 143,000 tons of fluoride are pumped in yearly to keep them that way.[44] Meanwhile, the government continues to campaign for *"universal fluoridation."*

Which brings us to the last benefit to industry from fluoridation: Companies forced to reduce their emission can recoup some of the expense by selling the waste to cities for water fluoridation. And most of the fluoride added to drinking water has been recycled waste, particularly from the fertilizer industry.[45]

Since the 1950s, fluoride as industrial toxin has remained largely unknown to the public, replaced by fluoride as children's friend and creator of beautiful smiles. The 1930s trend toward its removal from the environment has been reversed with a vengeance. For example, in 1972 the newly formed EPA did a survey of atmospheric fluoride polluters. It found that five of the top six typically didn't bother to control their fluoride emissions at all and weren't measuring emissions.[46] The most lax was the iron and steel industry, which, according to the report, was also the biggest fluoride emitter.[47]

And why should these industries worry, as regulatory agencies have maintained; ever since water fluoridation; that industrial fluoride emissions are harmless to humans? As the EPA report stated: *"The fluorides currently emitted [by industry] may damage economic crops, farm animals, and materials of decoration [i.e., flowers and ornamental plants] and construction [i.e. buildings, statuary and glass] ...*

"... However, the potential to cause fluoride effects in man is negligible."[48] Or, as another EPA report puts it, *"It is clear that fluoride emissions from primary aluminum plants have no significant effect on human health. Fluoride emissions, however, do have adverse effects on livestock and vegetation."*[49] In other words, the stuff withers plants, cripples cows, and even eats holes in stone, but it doesn't hurt people. Nature ever surprises.

When it comes to water pollution, of course, industry has even less reason to fear conviction for damage to human health. The government's fluoridation studies have supposedly established beyond a doubt that hundreds of thousands of tons of fluoride a year can be poured directly into the nation's drinking water supplies with a *"wide margin of safety"*[50] for humans. So industrial fluoride emitters only have to worry about the fish when they poison nearby bodies of water. The same concentrations added to human drinking water for cavity prevention can be fatal to freshwater fish.

When new scientific evidence threatens fluoride's protected pollutant status, the government immediately appoints a commission, typically composed of several veteran fluoride defenders and no opponents; usually, these commissions dismiss the new evidence and reaffirm the status quo. When one didn't in 1983, the government simply altered the findings. It's an instructive tale.

In 1983, the Public Health Service convened a panel of World-class experts *"to conduct a pro forma review of safety data on fluoride in drinking water."* A panel transcript of the private deliberations revealed its members discovering that much of the vaunted evidence of fluoride's safety barely existed.[51] The 1983 panel recommended caution, especially in regard to fluoride exposure for children,[52] but its chair, Jay R. Shapiro, then with the National Institutes of Health, was aware that recommendations which conflicted with government fluoride policy might run into trouble. In an attached memo, Shapiro remarked, *"[Because the report deals with sensitive political issues which may or may not be acceptable to the PHS [Public Health Service], it runs the risk of being modified at a higher level ..."*[53]

Shapiro was prescient. When Surgeon General Everett Koop's office released the official report a month later, the panel's most important conclusions and recommendations had been thrown out, apparently without consulting its members. *"When contacted"*, wrote Daniel Grossman, *"...members of the panel assembled by the Public Health Service expressed surprise at their report's conclusions: They never received copies of the final; altered; version."* EPA scientist Edward Ohanian, who observed the panel's deliberations recalled being 'baffled' when the agency received its report."[54]

All the government's alterations were in one direction and any conclusion suggesting low doses of fluoride might be harmful was thrown out. In its place, the government substituted this blanket statement: *"There exists no directly applicable scientific documentation of adverse medical effects at levels of fluoride below 8 ppm [parts per million]."*[55]

This contradicted the panel's final draft, which firmly recommended that *"the fluoride content of drinking water should be no greater than 1.4-2.4 ppm for children up to and including ace 9 because of a lack of information regarding fluoride effect on the skeleton in children (to age 9), and potential cardio toxic effects [heart damage]..."* All that, and more, was tossed out by the government.[56]

To quote from the transcript of the panel's meeting:

Dr. Wallach: *"You would have to have rocks in your head, in my opinion, to allow your child much more than 2 ppm."*

Dr. Rowe: *"I think we all agree on that."*[57]

But in 1985, basing its action on the altered report issued by Surgeon General Koop, EPA raised the amount of fluoride allowed in drinking water from 2 to 4 ppm for children and everybody else.

What are the effects of the decades-long increase in fluoride exposure on the nation's health? The best answer is, given the size and pervasiveness of the motive for bias and the extreme politicization of science on this question, no one knows. Recently, scientists have taken a new look, especially at the most likely place to find fluoride damage: human bones, where it accumulates. In the past two years, eight epidemiological studies by apparently disinterested scientists have suggested that water fluoridation may have increased the rate of bone fractures in females and males of all ages across the U.S.[58]

The latest study published in the Journal of the American Medical Association (JAMA) found that *"low levels of fluoride may increase the risk of hip fracture in the elderly."*[59] These results, if correct, would also implicate industrial fluoride pollution. Another group likely to show damage from fluoride is young males. Since 1957, the bone fracture rate among male children and adolescents has increased sharply in the U.S.

According to the National Center for Health Statistics.[60] The U.S. hip fracture rate is now the highest in the world, reports the National Research Council.[61] *"... Clearly"*, wrote JAMA in an editorial, *"it is now appropriate to revisit the issue of water fluoridation."*[62]

Fluoride and cancer, too, have been linked by the government's own animal carcinogenicity test.[63] Evidence that fluoride is a carcinogen has cropped up since at least the 1940s, but the government has dismissed it all. A 1956 federal study found nearly twice as many bone defects (of a type considered possibly pre-malignant) among young males in the fluoridated city of Newburgh, New York, as compared with the unfluoridated control city of Kingston; this finding, however, was considered spurious and was not followed up.[64] For a long time, the government avoided performing its official animal carcinogenicity test; which, if positive, would require regulatory action against fluoride. It had to be pushed into doing that.

In 1975, John Yiamouyiannis, a biochemist and controversial fluoridation opponent, and Dean Burk, a retired National Cancer Institute (NCI) official, reported a 5 to 10 percent increase in total cancer rates in U.S. cities which had fluoridated their water supplies.[65] Whether scientifically valid or not, the paper did trigger congressional hearings in 1977, at which it was revealed, incredibly, that the government had never cancer tested fluoride. Congress ordered the NCI to begin.

Twelve years later, in 1989, the study was finally completed. It found *"equivocal evidence"* that fluoride caused bone cancer in male rats.[66] The NCI was immediately directed to examine cancer trends in the U.S. population that might be fluoride-related. The NCI found that nationwide evidence *"...of a rising rate of bone and joint cancer at all ages combined, due mainly to trends under the age of 20, was seen in the 'fluoridated' counties but not in the 'non-fluoridated' counties ... The larger increase in males under the age of 20 seen in the aggregate data for all bone and joint cancers is seen only in the 'fluoridated' counties"*[67]

The NCI also did more detailed studies focused on several counties in Washington and Iowa. Once again, *"When restricted to percent under the age of 20, the rates of bone and joint cancer in both sexes rose 47 percent from 1973-80 to 1981-87 in the fluoridated areas of Washington and Iowa and declined 34 percent in the non-high fluoridated areas. For osteosarcomas [bone cancers] in males under 20 [emphasis added], the rate increased 70 percent in the fluoridated areas and decreased four percent in the non-fluoridated areas."*[68] *But after applying sophisticated statistical tests, the NCI concluded that these findings, like those in Newburgh in 1956, were spurious.*

It was commission time again.

The new commission, chaired by venerable fluoridation proponent and U.S. Public Health Service official Frank E. Young, concluded in its final report that *"...its year-long investigation has found no evidence establishing an association between fluoride and cancer in humans."* As for the evidence on bone fractures, the commission merely stated, *"further studies are required."* And finally, as always: *"The U.S. Public Health Service should continue to support optimal fluoridation of drinking water."*[69]

"If fluoride presents any risks to the public at the levels to which the vast majority of us are exposed", intoned U.S. Assistant Secretary for Health, James G. Mason, when releasing the report, *"those risks are so small that they have been impossible to detect. In contrast, the benefits are great and easy to detect. That is, fewer cavities in children."*[70]

There are signs, however, that 50 years of official unanimity on this subject may be disintegrating. Referring to the government's animal study, James Huff, a director of the U.S. National Institute of Environmental Health Sciences, told a 1992 meeting he believes *"that the reason these animals got a few osteosarcomas [bone cancers] was because they were given fluoride ... Bone is the target organ for fluoride."* In other words, the findings were not *"equivocal"* but solid.

"Perhaps we need to learn more about this chemical", said Huff.[71]

Others feel more than enough has already been learned. William Marcus, an EPA senior science adviser and toxicologist was indignant. *"In my opinion"*, he said, *"fluoride is a carcinogen by any standard we use. I believe EPA should act immediately to protect the public, not just on the cancer data, but on the evidence of bone fractures, arthritis, mutagenicity and other effects."* Marcus adds that a still-unreleased study by the New Jersey State Health Department has found that the bone cancer rate is six times higher; among young males; in fluoridated communities.

"The level of fluoride the government allows the public is based on scientifically fraudulent information and altered reports",[72] charges Robert Carton, an EPA environmental scientist and past president of its employee union, Local 2050, National Federation of Federal Employees. The EPA union has been campaigning for six years against what it terms the *"politicization of science"* at the agency, citing fluoride as the archetypal case. *"People can be harmed simply by drinking the water"*, Carton warns.[73] A subcommittee headed by Congressman Ted Weiss (NY) is investigating the government's handling of the evidence on fluoride's safety. And there the matter rests; until the next commission.

Does fluoridation reduce cavities in children? Almost everyone feels certain that it does, but only because trusted authorities have told them so, and those authorities in turn received their information from leaders who, as the original spin-doctor noted, must be influenced if you want to make the public believe something.

Actually, over the years, many health professionals; especially abroad, have decided the beneficial effects of fluoride are mostly hokum; but open debate has been stifled; if not strangled. Repeatedly dentists and doctors who were regarded as paragons of professional excellence; when they supported fluoride; have been vilified and professionally ostracized after they changed their minds. During the early 1980s, New Zealand's most prominent fluoridation advocate was John Colquhoun, the country's chief dental officer. Then he decided to gather some results. *"I was an ardent fluoridationist, you see. I wanted to show people how good it was ..." "When as chair of the Fluoridation Promotion Committee, I gathered these statistics ... I observed that ... the percentage of children who were free of dental decay was higher in the unfluoridated part of most health districts in New Zealand"*[74] The national health department refused to allow Colquhoun to publish these findings, and he was encouraged to resign.

Now Colquhoun writes that *"new evidence ... suggests that the harmful effects of water fluoridation are more real than is generally admitted while the claimed dental benefit is negligible."*[75]

A more recent example is Canadian physician Richard G. Foulkes, who is currently being accused by his former colleague, Brent Friesen, chief medical officer of Calgary, B.C., of *"a classical case of manipulation of information and selective use ... to promote the quackery of anti-fluoridationists."* In 1973, as a special consultant to the health minister of British Columbia, Foulkes had authored a report recommending mandatory fluoridation for the province. But, after reviewing the evidence, he has concluded that *"fluoridation of community water supplies can no longer be held to be safe or effective in the reduction of tooth decay ... Even in 1973, we should have known this was a dangerous chemical."*[76] He adds that *"there is, also, a not-too-subtle relationship between the objective [the promotion of fluoridation] and the needs of major industries..."*[72]

"I was conned", Foulkes thinks, *"by a powerful lobby."*[78]

Joel Griffiths is a medical writer who lives in New York city

References (please note that these are from a scanned document and may contain inaccuracies).

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30. Waldbott, op. cit., pp. 296-301; Exner, op. cit., p. 4. Fluoride has also been the worst pollutant in the phosphate and iron industries (Exner, pp.3, 6) re: iron and steel see, Engineering and Cost, EPA, op. cit., pp.111 5940.

31. "Three in Fume Suit, " The Oregonian (Poland), September 17,1955.

32. 'Seven Enter Fluoride Case," The Oregonian, October 15, 1957.

33. Hearings before the Committee on Interstate and Foreign Commerce, U.S. House of Representatives, 83rd Congress, Second Session on H.R. 2341, May 25 27, 1954, pp. 46-48.

34. Ibid The accuracy of Birmingham's testimony concerning the Wrentham school was confirmed by John Small, Information Specialist, Fluorides and Health, National Institute of Dental Research. Interview with author

35. Birmingham testimony, Op. cit, p. 51. Newspaper accounts from the period also refer to Ewing as At COAX "chief counsel." Later ASIA responding lo charges that it had been behind the fluoridation scheme, claimed that Ewing was just another of its many lawyers and that his fees had been much lower. Undisputed, however, is that Ewing was an extremely wealthy corporate lawyer and that his major client was Alcoa.

36. "Aluminum," November 10,1941.

37. Birmingham testimony, op. [?] [?] [?] by Bernays, at age 100, in a 1991 interview with author.

38. 'The Original Spin Donor. " Washington Post, November '3, 1991, p. B 1.

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