

November 15, 2011

Board of Health – Public Hearing on Fluoridation

Transylvania County Library Rogow Room

Reference: Transylvania County Board of Health – November 15, 2011 Minutes & Attachments

**Comments reflected below are derived from a digital recording of the public hearing. Although this document is referenced as a transcript, it is not represented as a verbatim text. Poor sound quality for portions of the recording and background noise compromised the ability to capture each spoken word. We have typically used parentheses and a (?) in any portions of the text where the words spoken are in question.. Time increments noted in the text correspond with the digital recording.*

Note: Mark Creasman is the current chairperson for the Transylvania County Board of Health.

Mark Creasman: We'll now open the public hearing on the topic of fluoridation. We have instructions on what to do...I'd like to read those for you. (Mr. Creasman reads the special order for the public hearing with the noted revision to allow 5 minutes per speaker given the limited number of speakers present – see attachments for the special order provisions).

That said, we'll progress to our first speaker which is Jim Null who resides at 69 Grove Circle, Brevard.

Jim Null: Could I pass for now?

5:30

Mark Creasman: Yes sir. The next one signed up is Kathleen Barnes...Sunny Acre Lane in Brevard.

Kathleen Barnes: Hi.

Mark Creasman: Hello Ms. Barnes.

Kathleen Barnes: I'm Kathleen Barnes. I'm an author of health books. I've written 16 books on various health subjects. I'm also a member of the Transylvania Wellness Alliance and I'm also a health advocate. I think that the issue of fluoride is very serious and one that should be given serious consideration and I'm going to present to you tonight some scientific evidence against fluoride and the fluoridation of water...and perhaps suggest to you that fluoride is...that the health risks associated with fluoridated water are sufficiently intense that we should look at other sources of fluoride for the prevention of dental caries. In July 2005, the Environmental Working Group said over the last ten years, a large body of peer reviewed science has raised concerns that fluoride may present unreasonable health risks particularly among children at levels routinely added to tapwater in American cities. The U. S. Environmental Protection Agency in 2001 said...in summary we hold that fluoridation is an unreasonable risk. The U.S. National Research Council in 2006 said carefully conducted studies of exposure to fluoride and emerging health parameters of interest in terms of endocrine effects and brain function should be performed in

populations in the United States exposed to varying concentrations of fluoride. And finally, a thing I think that's really important to look at here is the various risks that fluoride presents, one of them is dental fluorosis. Now the Centers for Disease Control and Prevention says that 32% of all American children now have some level of dental fluorosis with 2-4% of those children having moderate to severe stages. And according to Dr. Hardy Limeback who is the head of preventive dentistry at the University of Toronto...it is illogical to assume that tooth enamel is the only (issue?) affected by low daily doses of fluoride ingestion. Also, fluoride has some pretty dramatic effects on various other bodily systems including the kidneys. The fluoride which is accumulated in the skeletal system can cause or exacerbate renal osteodystrophy, a bone disease commonly found among people with advanced kidney disease and I suggest that in an aging population in this county that should be a concern. Also fluoride in the brain (?) has the ability to damage the brain...represents one of the most active areas for fluoride research...fluoride toxicity research today. Concern about fluoride's impact on the brain has been fueled by 18 human studies from China, Mexico, India and Iran. Reported IQ deficits in little children exposed to excess fluoride by 4 human studies indicated that fluoride can enter and damage the fetal brain. And a growing number of animal studies find damage to brain tissues in levels as low as 1 ppm...impairment of learning and memory among fluoride treated groups. According to the U.S. National Research Council, it's apparent that fluorides have the ability to interfere with functions of the brain. Fluoride and bone disease...excessive exposure to fluoride is a well known cause of a bone disease called skeletal fluorosis and especially in its early stages, it's a difficult disease to diagnose and can be readily confused with various forms of arthritis including osteoarthritis and rheumatoid arthritis and as we know in our society today we're finding very high levels of these diseases. In advanced stages, fluorosis can resemble a multitude of bone and joint diseases. In individuals with kidney disease, fluoride exposure can contribute to it or exacerbate renal osteodystrophy. Fluoride and cancer..according to the National Toxicology Program, the preponderance of evidence from laboratory *in vitro* studies indicates that fluoride is a mutagenic compound. Many substances which cause mutagenic damage also cause cancer. Fluoride has been found to cause bone cancer (osteosarcoma) in government animal studies and rates of osteosarcoma among young males living in fluoridated areas have been found to be higher than young males living in unfluoridated areas. Osteosarcoma, while rare, is a very serious cancer and carries with it a high probability of death. It is true from the 1930's and 40's when fluoridation of water became very common in American public water systems as well as around the world, it did slow the level of dental caries...of cavities...mostly in children, but also adults. I suggest to you that these negative effects of fluoride can be easily prevented by simply using fluoridated toothpaste. Studies over and over say that ingested fluoride does not really protect the teeth from dental caries. It is topically applied and topically applied can be as simple as fluoridated toothpaste which is a much simpler and safer alternative and I strongly suggest that we keep the fluoride out of our water in Brevard. Thank you.

11:35

Mark Creasman: Thank you. Our next speaker is Alvaro Lopez from Broad Street.

Alvaro Lopez: Hello my name is Alvaro Lopez ...I'm a dentist here in Brevard. After hearing the (?) we just heard, I noticed a few things missing. What I take issue mostly with is the

concentration of fluoride and the effects that are being noticed. 1 ppm which is what's recommended in drinking water will not have the impact that's been suggested. Another thing is that these studies remain unnamed. I think if we're going to give this due consideration, we'd have to look at those studies and their completion to see what it is exactly they say rather than taking bits and pieces of them to support one point or another. My main concern is that keeping fluoride out of the water will definitely result in an increase in caries among children. That aside from the discomfort, pain and negative impact on health...will also have an impact on the mostly young families who have the young children who would be drinking this water. It would also have an impact on how much the state spends in programs like Medicaid and NC Health Choice that tend to pay for those services. So from my point of view, fluoride belongs in our water. Thank you.

13:43

Mark Creasman: Thank you very much. Our next speaker is Ann Buchman from Riversedge Road.

Ann Buchman: Thank you. Hi...I'm Ann Buchman, I'm a 6 year resident of Brevard. This board because of your composition obviously has been educated on the medical issues associated with the ingestion of fluoride. I kind of want to draw some distinctions between ingestion and topical including the negative effect on teeth through fluorosis. You also probably learned that the supportive evidence about fluoride for tooth protection is related to topical application. I've done my own research as well and I support the position that fluoride does not belong in the water supply and I'll leave any more medical conversation about it to the medical experts. What I will expand on tonight that is in my area of expertise which is the impact this decision could have on Brevard business. I am a marketing executive at Gaia Herbs which is a national wellness company that is located here in Brevard and its part of my job to follow the trends in health and wellness that are important to consumers. In the last week alone there have been 3 national news agencies that have released stories about the negative effects of fluoride on municipal drinking water. These reports are seen by tens of thousands if not millions of individuals, many of whom already live here and many more that may look to Brevard as their home or place of business. Continual coverage of this issue is educating the public about the negative effects associated with having this chemical waste product added to our water and the impact it has on their health. So why does adding fluoride to our water supply make Brevard less attractive to the public and who stands to lose? And I say the first is families and children. The ADA and the CDC have now recommended that infants not receive fluoridated water for drinking nor for making their formula since fluoridated water contains 250 times more fluoride than mother's milk. The specific quote was that research evidence suggests that mixing powdered/liquid infant formula concentrate with fluoridated water on a regular basis may increase the chances of child developing enamel fluorosis. Furthermore families will now need to pay the additional expense to buy bottled water so they won't have to contribute to their children's tooth decay.....something that's particularly difficult for low income families. The second was tourism. The largest market for Brevard is tourism and it's a health conscious consumer that is that target. They come here for (spirits?) and for recreation. Knowing there is fluoride in the water that they drink while exploring Brevard goes against the image of Brevard being a clean and sustainable town in the mountains. Third...non-profit assistance

agencies...we've got several safe houses, shelters and clinics in the county that are set up to serve the health and safety needs of the population. The inclusion of a chemical waste product in one of the staples that is provided...food, clothing and shelter... is inconsistent with the mission of these organizations. And last, but not least...local business. The Chamber membership is filled with restaurants and bakers and coffee brewers and caterers...many who focus on organic and sustainable food choices and other businesses that have heavy water use. And I invite this group to think about...how do you think the newly committed Brevard Brewing Company who is finally putting to use a large in town storefront that's been vacant for up to 2 years that the water in their craft brewed beer will be tainted with fluoride. And how will the parents ...considering the more than one dozen summer camps in Brevard that have been there for years... feel about their children drinking fluoridated water during their stay? I say that this will impact their business. I may not be privy to the economics behind the issue, but I would hope the city is not considering fluoride inclusion because of the size of the subsidies that are traditionally paid to communities who do so. I hope that the small profit that the county might make for putting this chemical waste product in our water stream would not be worth more than the health of our current and future residents and business owners. If the Council ultimately makes the unacceptable choice, in my opinion, to put fluoride back into our drinking water, those of us that have already been committed to Brevard will feel duped and disrespected for a potential profit making venture that would gain the Water Department some subsidies..perhaps to our demise. For those that are considering coming to Brevard for home or business, I say that this will now give them one more reason to look elsewhere. So on a positive note, I want to say how about some out of the box thinking about this? And I'm one that believes by being a citizen of the United States that I actually get a choice about my health care. And automatic fluoridation of water in our municipal supply ...it takes away my choice. And instead of this, I propose that we gather the great minds of Brevard together and look instead at broad reaching action...like this... in the water...but we focus on focused solutions. Perhaps we could see grants for it or contribute to a fund that would allow the City to buy fluoride toothpaste to pay for the topical fluoride treatments that are needed and would provide funding needed to cooperate with local dentists for providing a fluoride treatment service to those who chose it. Thank you.

19:29

Mark Creasman: Thank you. Next is Mary Douglas Kimble...Franklin Street.

Mary Douglas Kimble: I'm going to approach it from a different point of view. I think we all do have choices, but the choices that you are making for children who are underprivileged and often don't have resources to pay for this is something that we really have to consider. You know places like the brewing company she was talking about...filters can be put on their water if that's a problem. I bought my property here in Transylvania County before you took the fluoridation out of the water. It was here when I purchased my property so I certainly would not be opposed to it going back in, but the real consideration is the very people who can not afford to have the fluoridation treatments or to afford the high priced toothpaste or don't brush their children's teeth at all.....are the very children that we need to address. I'm a social worker...a hospice social worker, but I was in a home recently that the child had totally black teeth and every tooth that wasn't black was covered in silver. She was 4 years old. You know I have grandchildren. I am concerned about the children of people who do not have the resources to provide.....and I think

this is a very simple way....anybody can put a filter on their water supply if they don't want it, but you can't go into every one of these homes and take care of their teeth. Thank you.

21:20

Mark Creasman: Thank you. Next is Joe Cowart from Lambs Creek Road.

Joe Cowart: Thank you. I'm Joe Cowart..I'm a local dentist and I've been here for 32 going on 33 years. When I first came here I saw a lot of dental decay. As a matter of fact, Dr. Folger and I used to team up on these little kids that had gross decay and he'd put them to sleep and I'd take all of their teeth out. You'd see multiple abscesses which was a serious issue. And you know as far as inside the city of Brevard...the water was fluoridated, I didn't see as much of that...I don't see as much of that now either although it seems to be coming back. Bridgett Masters is our hygienist, our public health hygienist and one of the more interesting things that you can research in Raleigh is that when we took fluoride out of the water, Henderson County put it in and if you look at the numbers they have collected what you see of course is the decay rate in Transylvania County is going up, decay rate in Henderson County is going down. Fluoride is a very abundant element...it's the (13th?) most abundant element around so everybody gets fluoride. It's in everything that we eat and everything that we drink. Just amounts of it...vary from food to food. The biggest problems that you see with foods is like apple juice from Washington state which is loaded with fluoride. Chewing tobacco is loaded with fluoride. Tea is loaded with fluoride. So it's not a matter of how much you're going to get, you're going to get some. The idea is to get the optimal amount. Too much fluoride is bad. There are some studies to indicate that not enough fluoride can be bad too because it inhibits bone development. So that also is a problem. From my standpoint, I think since fluoride is everywhere, it's practically in everything ...the idea would be to make sure the children have the right amount of fluoride so they don't have problems with decay. Thank you.

23:43

Mark Creasman: The next speaker is Stewart Trimble...Morningside Drive.

Stewart Trimble: Hey. Thanks for allowing (?). I've been here in Brevard since 2006 ...and for several working years prior to that (?). I am a physician, but I'm speaking more just from the perspective of a citizen. I think fluoride...if its doing good for kids, then we ought to focus more perhaps on their diet and getting junk food out of schools and out of reach at home. That would benefit more than their teeth. And as far as fluoride in the water...I consider that involuntary medication from my point of view. It would probably do good to put Prozac and aspirin and Lipitor in the water supply too and I'm sure it would do a lot of folks a lot of good and we'd see some health bills go down, but I don't think anyone would agree to do that. I do admire and respect the perspective the dentists bring forth ...that they have seen the incidence of dental caries rise and fall inversely with the amount of fluoride that's been in the water, but I think there's a healthier approach to address their concerns, especially in children. Thank you.

25:01

Mark Creasman: OK, our last speaker is Martha Ingram, Ecusta View Drive.

Martha Ingram: Well as you guys can see...a very controversial issue here and research is divided on this. There is definitely research for and against. As I remember my college statistics class, you can massage the data to get whatever statistics you want...so that's neither here nor there. I'd just like to talk kind of from my own personal experience as a doctor of natural health. When you take something in systemically as in fluoride ingested through the water supply ...you can not assume logically that it's only going to affect the enamel producing cells of the teeth. That is going to have a systemic effect on the organism just as chemotherapy does ...its meant to attack fast growing cancer cells, but it also attacks all the fast growing cells of the body ...the (?), the hair follicles, That's the side effects. So anything you take systemically has systemic effects. There are no long term studies because fluoride is a chemical that accumulates in your body and we can have a short term savings and say...oh there were no health effects, but since it is something that does accumulate we really don't exactly know. The studies are clear that too much fluoride increases the risk of dental fluorosis. And I'm concerned about the infants...the American Dental Association's position is that infants under 6 months should be exclusively breastfed and should continue to be breastfed until 12 months because there is very little fluoride in mother's milk. However, especially low income moms who are receiving government assistance through WIC...they are provided free of charge with a powdered formula. They are not provided any bottled water or any of the ready to feed formula with low fluoride. So therefore, these infants are receiving a far greater dose than would be healthy for them. And the theory that it needs to be ingested...is now, since 1999 has shown that the topical use is really where it is at after the teeth have erupted vs. giving this high dose and they're more likely to get the dental fluorosis when they're getting it at such a young age and a high dose for their body weight. And I'd like to address as far as the low income population...that is a big concern, they have very limited access to dental care and there's a lot of dental decay in these children in the low income bracket. However, there is little evidence to suggest that fluoridation has really helped this group because dental decay is at epidemic levels in the low income groups in communities that had fluoridated water for over 50 years. So something else is at play here because in addition to poor dental access they also do not have access to healthy food. We all know that oral health reflects your general health. And those with poor nutrition are more likely to have dental decay as well as fluorosis. They just don't have the vitamins and minerals the body needs to provide healthy bone structure...healthy teeth structure. There is a (Tufts?) study from 2005 showing that soft drinks and fruit flavored drinks have replaced white bread as the number one calorie source in America. Now, none of these things are good for our nutrition...they all are very processed foods and are poor in nutrients. So we see that our (kids?) are malnourished, particularly in this low income bracket. The studies of Weston Price, a dentist who traveled around the world...he noticed that cultures that were eating the traditional diet of whole food ..in game and fish and vegetables and fruits they gathered had very excellent bone structure, facial structure, teeth structure. And when they were introduced to white flour, white sugar, vegetable oils...the tooth decay was the first outward sign that we saw that their health was declining. This had effects that first manifested in the mouth and then became apparent with their overall general health. So in my opinion we really need to focus on improving the health of the children in Transylvania County which will provide much stronger teeth that are resistant to decay. And in my opinion the addition of fluoride to our water besides the fact that its not been shown to provide the benefit of topical toothpaste fluoridated provides.....its also unethical to

medicate an entire population on something (?)...this benefit ratio is still questionable. And by the way water filters do not remove fluoride unless it is an expensive reverse osmosis filter which most households do not have or can not afford. So thank you very much.

30:03

Mark Creasman: Mr. Null do you want to speak?

Jim Null: Pass.

Mark Creasman: OK. Thank you. That concludes our speakers. You are all welcome to stay and watch the rest of our presentation and our board meeting. Appreciate your input and we'll have to digest this at a future time. What we wanted to do tonight was to bring in the information so we could have that discussion. I do appreciate all of the input that we've gotten tonight.

(This represents the close of the public hearing portion of the agenda.)

30:47

Audience member (sounds like Stewart Trimble): Hey Mark. What's the easiest way for us to track this conversation?

Mark Creasman: What's the next step Steve?

Steve Smith: We'll post minutes from this meeting on the Health Department website and then you'll also see future agendas.