

## 1951 Conference

*A lesson in how to overcome legitimate concerns, defeat arguments and defend the indefensible. A propagandist's guide to forcing your views upon others.*

**FOURTH ANNUAL CONFERENCE OF STATE DENTAL DIRECTORS WITH THE PUBLIC HEALTH SERVICE AND THE CHILDRENS BUREAU JUNE 6-8, 1951 FEDERAL SECURITY BUILDING WASHINGTON, D.C.**

**DR. KNUTSON (Assistant Surgeon General & Chief, Division of Dental Public Health): ...**

Now we come to what might be called the piece de resistance on the program. I say that because not so long ago I was scheduled to present the piece de resistance on a program in Wisconsin. They invited me out there to tell about recent advances in the prevention of dental caries. Now, out in Wisconsin they started promoting water fluoridation in 1945. Yet they asked me from the Public Health Service to come out there and tell them of recent advances in the prevention of dental caries. As you all know, the Public Health Service didn't get around to approving water fluoridation until five years later, in 1950.

You all know Dr. Frank Bull has appeared before us, this group, and also many dental groups during the past five years, asking the simple questions: What are we waiting for? Why don't we go ahead and fluoridate drinking water supplies? He is not going to do that today, not going to try to sell you on water fluoridation. We have all, a bit late perhaps, come to the conclusion that he was right in 1945. Now what we want is some guidance and help in doing the job, in bringing about water fluoridation. It is going to be a big job, perhaps a bigger job than most of us realize. There are 16,000 community water supplies in this country that we would all like to see fluoridated this year. Most of those water supplies - in fact, over 10,000 - supply people in communities from 500 to 5,000 population. So to give us some guidance, and tell us some of his experiences in actually promoting water fluoridation in communities, we have asked Dr. Frank Bull to come before us again. With that, Frank, will you come forward and proceed.

(Applause)

**DR. BULL:** Dr Knutson, Dr. Fulton, fellow public health workers, after hearing that introduction I am kind of anxious to hear myself talk.

A lot has happened since the meeting a year ago. Since the State and Territorial dental directors came out with a resolution endorsing fluoridation a year ago, practically all the top level groups have come out with similar recommendations. Of course we in Wisconsin have believed for a long time that this is one of the great all-time public health programs. I hope we are right. I feel sure we are.

But now that all of these recommendations have been made, where does that leave us? Well, it leaves us just about where we started. No recommendation or policy ever helped the public. It is only when a policy or recommendation affects the attitude of the public that we are going to be able to bring about any improvement. I think we should give a little thought to that.

We thought we in Wisconsin had a pretty tough job in promoting fluoridation, but I think you in the other states are going to have just about as tough a job. I think our experiences are going to be repeated all over again, and I think there will be quite a challenge to your promotion of fluoridation. And how you handle this challenge will decide what kind of results you get in your communities.

I think the fact that we are new in public health - it has only been in recent years that we have really had some honest to goodness public health programs - has some bearing on the matter. We haven't had a background of experience in promoting public health programs, and I think that a little review would be in order.

Of we study the history of all public health programs we find certain similarities. One is that they all started at the local level. Public health programs don't start at the national level. They all start at the local level. That is where they should start. John talks about the Public Health Service's being five years late. Well, most public health programs never had national level approval for 15 or 20, or even 30 years. So I don't think we have anything to apologize for on that, John. We needed that waiting period. We have had it, and it hasn't been too long.

If you study these public health programs you will come to another conclusion, and this is this: We have more data based on human experience with our fluoridation program than was ever collected on any public health program in the past. That is a think we should stress, because when people start raising objections to fluoridation, if we cannot handle them with all the data we have on humans, not on guinea pigs, how would we have ever handled any of these programs in the past where you had practically no human experience?

I think there is another thing that comes in, and that is this: All of our past public health programs have been a matter of weighing the good that is in them against the bad. Now, every one that I know of had some bad, and quite a bit of it. Some of our oldest programs, like our immunization programs, are examples of this. Two years ago we really had a mess in Wisconsin with immunization. We had two county nurses that nearly went crazy, because they had so many sick children from an immunization program.

Now, we have never had any public health programs in the past that didn't involve some bad, and it was a matter of weighing it and deciding that there was also much good connected with it. This was the case with penicillin. We still know the trouble we have with penicillin, but the good is great the bad is comparatively little, so the program is promoted.

Well, we are into a program, fluoridating the water, which has absolutely no bad connected with it. If you can't sell that, then you are certainly going to wonder how these other programs were sold in the past.

I think there is another historical factor that is well to remember, and that is that none of these public health programs ever had a hundred percent approval when they were started. None of them even after 30 or 40 years of experience has received 100 percent approval. We still have people in high positions in health work who are against some public health programs, absolutely against them, but does that stop the program? If you let that sort of thing stop your program then you would be acting according to the approval of one-quarter of one percent of the people, and after all, that isn't democracy in action. But those things are from history. If we are going to be able to go out and sell fluoridation, we have got to know what is considered evidence, something like court work. After all, courts take into consideration past decisions when they are making a present-day decision. Well, we have to do that in public health. We dare not let these people write a whole new standard for us when we introduce our dental program. We must not let them say that it has got to have 100 percent approval, or advance as a valid objection the fact that it may possibly have some bad to it.

Well, perhaps that will give us a little more confidence in our approach to the program. I often wonder how these engineers - and it was the engineers, by and large, that sold chlorination of water supplies - did it. If we had one-half as much opposition to the fluoridation program as they had to the chlorination program we wouldn't have a fluoridation program today at all. They did a bang-up job. Here they were selling something that made the water stink, in most cases tasted bad, and had other offensive characteristics. They put it over, and they did one of the greatest pieces of public health work that has ever been done.

Surely in this modern age we should be able to do something with our fluoridation program. But one thing is going to happen to you, just as it happened to us in Wisconsin and is still happening to us. You must be able to answer all of the objections that are brought up to fluoridation. Maybe in your state those objections haven't been brought up as yet, but they are going to be brought up. They will be brought up to test you out.

It is like a ball player who starts getting good and moves up in the leagues a little bit. The higher he gets the more they test him to discover a weak, vulnerable spot. If they find his weakness, that is what they pitch to. And that is exactly what will happen on this fluoridation program. If there is a spot you start to stutter on, that is the spot they are going to work on.

Now, this isn't something new. It has been true of every public health program that has ever been put into use. I can tell you that the state health officer we had for 45 years told me that the toughest program he ever ran into in public health was to discontinue the public drinking cup. You see, each of the programs has gone through pretty much the same thing, and we might just as well know it, because we are going to get it whether we want it or not. What are some of the objections that are brought up on this fluoridation program?

I think the first one that is brought up is: "Isn't fluoride the thing that causes mottled enamel or fluorosis? Are you trying to sell us on the idea of putting that sort of thing in the water?"

What is your answer? You have got to have an answer, and it had better be good. You know, in all public health work it seems to be quite easy to take the negative. They have you the defensive all the time, and you have to be ready with answers.

Now, we tell them this, that at one part per million dental fluorosis brings about the most beautiful looking teeth that anyone ever had. And we show them some pictures of such teeth. We don't try to say that there is no such thing as fluorosis, even at 1.2 parts per million, which we are recommending. But you have got to have an answer. Maybe you have a better one.

They are going to bring up the question of whether fluoride added to the water supply is the same as the natural fluoride. And, incidentally, we never use the term "artificial fluoridation." There is something about that term that means a phony. The public associates artificial pearls or artificial this or artificial that with things that are not real or genuine. We call it "controlled fluoridation." In natural fluoridation you take whatever amount of fluoride happens to be in the water on a particular day coming from the ground. In some areas that will vary a great deal from week to week or season to season, but with controlled fluoridation you get just the exact amount you want.

Well, we now have enough evidence from cities that had demonstrations to show that controlled fluoridation has the same effect as natural fluoridation. Incidentally, we never had any “experiments” in Wisconsin. To take a city of 100,000 and say, “We are going to experiment on you, and if you survive we will learn something” - that is kind of rough treatment on the public. In Wisconsin, we set up demonstrations. They weren't experiments. Anyway, there has been enough experience now to show that it doesn't make any difference whether nature puts the fluoride in the water or we do.

Now, in regard to toxicity, I noticed that Dr. Bain used the term “adding sodium fluoride.” We never do that. That is rat poison. You add fluorides. Never mind that sodium fluoride business, because in most instances we are not adding sodium fluoride anyhow. All of those things give the opposition something to pick at, and they have got enough to pick at without our giving them any more. But this toxicity question is a difficult one. I can't give you the answer on it. After all, you know fluoridated water isn't toxic, but when the other fellows says it is, it is difficult to answer him. I can prove to you that we don't know the answer to that one, because we had a city of 18,000 people which was fluoridating its water for six or eight months. Then a campaign was started by organized opposition on the grounds of toxicity. It ended up in a referendum and they threw out fluoridation. So I would hate to give you advice on that deal. (Laughter) It's tough.

I don't believe you can win approval of any public health program where there is organized opposition, I mean clever, well thought up opposition. I think it is possible to beat almost anything, and I know that is what has happened to us. So when you get the answer on the question of toxicity, please write me at once, because I would like to know. We have answers, but apparently in some places they don't work.

But in that there is a lesson, and it is this: If we had let such things interfere in the promotion of our fluoridation program, we wouldn't be the kind of people that those men who went before us and promoted more difficult public health programs were. We still have good sized communities that will not chlorinate water. They just won't do it. By and large we are getting our water chlorinated, but you will hit spots where even after 30 years you still cannot do anything along certain lines. So we can expect that same kind of problem in fluoridation.

I am sure we have a few communities in Wisconsin that will be the last ones in the United States to fluoridate their public water supplies. Whenever you get a community that talks about the wonderful water it has, look out. (Laughter) You are getting into trouble. You go that community, and you'd swear the only thing the water was any good for was to run under a bridge, but to the people who live there it is wonderful water, and if anyone attempts to add anything to that water - and I am talking about chlorination as well as fluoridation now - you are up against something.

Now, while some of these objections to fluoridation are made by sincere people who want information, there are a lot of people who just throw them out as stumbling blocks to fluoridation.

Another question - the difficulty in maintaining the correct amount of fluorides in your water - is generally a sincere question. People may hesitate just on that thing. They are concerned. Well, you have to reassure those people. The fact that in our small communities that are fluoridating. I am talking about communities of 500 people - they are able to maintain to within one-tenth of one part per million the correct amount of fluorides in the water is a powerful argument. It is an argument not only on that question, but on the belief that you need chemists, and I suppose biochemists and astrologers (Laughter), in order to carry out this program successfully.

Of course we are not trying to belittle the chemist's or the engineer's part in this picture. We want adequate controls, and we have them. We make sure of this by checking them at a higher level, where better and more exact tests can be run. But our experience has been this, that if a community is large enough to have a public water supply, that supply should be fluoridated and can be fluoridated efficiently and economically.

Another charge sometimes made is that you are handling something that is bad, dangerous, and that the workers have to take all kinds of precautions. That isn't so. Of course, we don't want these fellows inhaling the dust, whether it is sodium fluoride dust or whatever it is. We don't want them inhaling the dust 24 hours a day or even for shorter periods. But with ordinary, just ordinary, precautions there is no danger involved in handling fluorides.

Now, the cost is going to be a factor where you go. And on this cost item you have got to know a little bit more than just the cost of fluoridation. You have got to know some other costs, because people are going to talk as if the only thing that costs anything in this community is fluoridation, and its estimated cost sounds like a lot of money to them. That is a stumbling block, you see.

We tell them this: There is only one thing wrong with fluoridation. It is too cheap. And I believe that, I honestly believe that. It has been a drawback to fluoridation. People just can't conceive that for so little money such a great amount of good work can come.

Now, every once in a while, the engineers, and the waterworks men particularly, are really going to give you the business. They will say, "Well, if we can get this reservoir in over here and a new 10-inch line from Padukahville in, and one thing and another, then we will go along with fluoridation." They have many reasons for stalling, and they are all good. But don't pay a bit of attention to a single one of them. Because if you do the waterworks people will stall you from here to doomsday, and don't think we haven't had that experience and in the form of a postgraduate course. They have got more ways of keeping fluorides out of the water than you will ever imagine, but we simply say this: If your water is good enough for people to drink today, then you should have fluorides in it today.

They are always going to drill another well or change this or that, and then they'd be very happy to consider fluoridation. Well, don't hold still for that. Or they need more installations in their community, which may be a fact. But you see, the fact that a good size community needs several installations shouldn't hold anybody up. The per capita cost, even where several installations are needed, would probably be only 30 cents per capita. We think nothing of going to a community of 400 people and saying, "You should fluoridate your water," when we know it is going to cost them \$50 per capita to get their equipment. So why should we let these big communities stall us?

You know, some of the big cities spend money on things without even thinking about it. There is more money that just trickles through their fingers than the whole fluoridation program costs. For example, Milwaukee usually buys 10,000 tons of salt and sand a year to spread on the icy streets during the winter. That costs money. Well, this year they used 50,000 tons, five times as much as usual, and that means five times the amount of help spreading it on the street, and about 10 times the amount of help to go around and shovel it up afterwards when spring finally came. It cost hundreds of thousands of dollars. Well, they dug up the money for that stuff. Another eight inches of snow costs the town \$200,000 or \$300,000, or even \$400,000. Don't let them try to fool you into thinking they can't afford the money when it comes to health. (Laughter)

One question that a community should ask is the effect of fluoridation on the industrial uses of water. Right here I have got to say something. We might as well face it - we are going to have to live down for quite a while some of the things we have been saying the last three or four years in regard to fluoridation. You heard Dr. Scheele say something about the fact that the Public Health Service's attitude had changed. Well, you know a lot of letters have been going back and forth, and a lot of this stuff is in print, and people are going to show it to you, telling you where this fellow is against fluoridation; it is experimental; it is this, that, or the other thing; or someone has come out with statements that are hard to live down.

I suppose we have all made statements that we'd like to live down, especially that "I do" we all went through. (Laughter) But when you get a state coming out with an official policy that reads something like this, I won't read the first part of it; it is standard - "Since there is some indication, although not of a specific nature at the present time, that some interference may be encountered with industrial processes where fluoride treatment is applied, it is recommended strongly that communities considering the adoption of the practice investigate locally to determine whether or not interference with industrial processes will result because of fluoride treatment."

I can kill fluoridation with that. Either we know about these things or we don't. Now, naturally we don't know anything about what fluorides are going to do to some industrial processes that are developed 50 years from now. We don't need to know that. We do know that there is no known industrial process - unless you are an antique collector and pick up one of these old ice making machines they use down in Charlotte, North Carolina (Laughter) - there is just no known industrial process that fluoridation has any effect on.

Why not say that to the people? Why, we have had deans of dental schools coming out with the statement, particularly in reference to sodium fluoride, that high pressure boilers would blow up. Some day you have got to live some of those things down.

The question of taste and odor being added to the water is an important thing a community wants to know about, and you have got to assure and reassure the people. We simply tell them that you can't taste 100 parts per million in the water, let alone one. You can rig up a test or demonstration for that quite simply.

You also hear of fluoridation's being wasteful. Some of the engineers will advance that argument. They generally do it in a weak sort of way. If you grab hold of it and squelch them they will forget it. If you don't know quite how to handle it they will pursue that line of argument a little further. Sure, fluoridation is wasteful, just as a lot of things we do are wasteful, but unfortunately we don't know any other way of doing them. We chlorinate all the water in a community - maybe 175 gallons a day per capita - and the individual drinks a quart. You have chlorinated all that other water for no reason. You are going to do the same thing with fluoridation. You are going to fluoridate 175 gallons per capital daily and drink a quart or a quart and a half. If there were any great expense involved, you would be up against a valid argument, but the fact remains that to do all that, to do it the wasteful way as they might call it, will in most communities cost only 10 cents per capita annually.

One thing that is a little hard to handle is the charge that fluoridation [is] not needed. They talk of other methods, and when they get through adding up all the percentages of decay that we can reduce by such methods, we end up in a minus. When they take us at our own word they make awful liars out of us. And that will be brought up. Cut out sugar and do this and that. We simply tell them this: With all that we think we know about the prevention of dental caries, we are having more of it today than we have ever had in the history of mankind. Instead of being on the decrease it is on the increase. And if they want to do something on a mass basis they must go into their urban areas and start fluoridating the water.

Another thing that will be brought up is that all of the dentists, all of the physicians, all of the public health people, and especially research workers, are not for fluoridation. Well, that is correct to say. But you have got to have the answer for it. All of our physicians aren't for immunization, either. And all of our physicians are not for the use of iodine in goiter prevention. We don't have all our physicians in back of any of our public health programs, and we are never going to have all of our dentists for them either. But the great majority of them are for them, and we adopt our policies accordingly.

As far as research workers are concerned, I suppose fluoridation will always be an experiment, at least during our lifetimes. Maybe that is just as well. But there has to be a time, you know, when the research fits into common sense.

If you have any experience with people who are interested in inventions you know they never get them perfected. There is always another thing to be done, and on and on. We would never make any progress if we held still for that. The unfortunate thing is that some of the research workers are going around the country telling the public they cannot recommend fluoridation. That is going to happen in your community. It is happening all over the United States, so you are going to have to combat it. We tell them this, that if the evidence we have on fluoridation isn't sufficient for its general use by the public, then we shouldn't have any public health program. We shouldn't have one, because we have so much more data on fluoridation than on any of the others. Just think of penicillin. How old is penicillin, seven or eight years? Well, we knew a lot about fluoridation seven or eight years ago, too. But they practically brought penicillin up to its peak in seven or eight years.

Medical men are a little more used to public health programs than we are and not quite as afraid of them. People are going to say to you, "Isn't it a fact that you don't know all about fluoridation? Do you know how this thing works?" We say we don't know all about it. But still you want us to try it, they say. That's right. We don't know all about anything. Why, even one of our oldest public health programs, the chlorination of public water supplies, has been undergoing changes. I think in the last couple of years, the engineers have re-evaluated their chlorination techniques and are doing things differently. We aren't to the perfection stage on anything. If you let the people know that, then they will back up, but if they think they have made a point you can't answer, then you are a little bit behind the eight-ball.

Another tough question is that of the liability of the water department. We never had that one until pretty recently, when someone thought it up. Maybe it is an honest thing, too. I wouldn't know. But you are going to have to answer it. The water department will say, "What is our liability in fluoridation?" Well, we say "You are going to look bad if they start suing you because you are not doing it." (Laughter) You pretty nearly have to turn the thing around. If they get you answering questions for them, then they have you on the defensive, and you are like any salesman, you are sort of up against it.

I think several state attorney generals have ruled that there can be no liability in connection with a thing like fluoridation as long as what the water department is doing is an accepted procedure and it is doing it within accepted standards.

Well, we could go along with this for some time, but I am sure you will have some questions that will be more pertinent than these things I am bringing up.

So you have got along to the stage where you have sold yourself, and after all, if you haven't, then don't start in on this deal. If you are not convinced, if you are not ready to go out and do battle on this thing and maybe be called a few names along the route, you'd better not get in it. But now you have got to the stage where it is the thing to do. The question you will ask is: How am I going to do it?

Of course it would be sort of presumptuous on my part to be telling you how, but I can give you a few of our experiences, and you can take them for what they are worth.

First you need a positive policy by your state dental society and your state board of health. Now, I mean a really positive policy. Don't put any ifs, ands, buts, or maybes in the thing because the minute you do you kill it. You simply give ammunition to the fellow who is against it. Say you recommend fluoridation within limits where there are proper controls that's definite to the public. I could read you some policies that could furnish plenty of ammunition to the opponents of fluoridation. Let's not do that. You have got to get a policy that says "Do it." That is what the public wants, you know. What kind of public health program is it if you say to the community "If you want to do it." You have got to go to the public and say "Do something or don't do something," and make it emphatic. Otherwise they wouldn't need the public health people. What are we here for?

You need a state fluoride committee. In Wisconsin that has been, I believe, the most important thing in our set-up. We have a state committee on fluoridation established by the state dental society. And we have got, outside of myself, I think the best dentists in the state on the committee. Now, that committee is not just a list of names; those fellows really have a job to do.

You need teamwork in your state department of health. You are not going to get any place if your state health director, or your dental director, or the engineers are against it. Between these two groups, your state board of health, with the dental department taking the lead, and the committee of your state dental society, there are a lot of things to do. One is the collection of all the data on fluoridation. Those data should be made available to the component or local dental societies, lay groups, and so forth.

There is a lot of publicity that the local fellows can't handle that must be gotten from the state level. They don't know how to do it, or they are afraid to do it or something. Those are things that can come from the state board of health or the fluoridation committee of the state dental society. And that committee can assist in the pre-fluoridation surveys to be made in a community.

Now, why should we do a pre-fluoridation survey? Is it to find out if fluoridation works? No. We have told the public it works, so we can't go back on that. Then why do we want a pre-fluoridation survey?

Well, gentlemen, what is going to happen five, six, or seven years from now, when we may have a little recession? I mean a lot of people without much cash in their pockets, will be looking around for some way to cut down expenses. The alderman is going to sit on the council and say, "You know my dentist just sent me a bill for 68 bucks for my kids. We have been fluoridating our water, and I don't see that we have done a bit of good. I am still getting these bills. Let's throw fluoridation out."

How can you counteract this? You want your pre-fluoridation data so three, five, or any year from now you can go back into those same areas and do the same type of survey and show the people what they have got for their money. And we owe it to the public to do that. We have no right to be spending public money unless we can show them that what we have done has done them some good.

Have you had any programs on fluoridation at your state meetings? I don't mean programs on fluoridation - at every annual meeting we have had, and we are going to have it, on our 1952 meeting. You just don't go out and tell dentists, any more than you can go out and tell people, that this is the thing to do and they automatically go ahead and do it. You have got to keep this thing before them, and you have got to make it look important enough so you have it on the state meeting level. And when you have it on that level, don't get somebody on the program who ends up with, "But I don't think you should do it." (Laughter)

You are laughing now, but in your state someone may come in and say just that. I am talking about June of 1951. I am not talking about 1945. I just came back from a meeting in Seattle, Washington, and a fellow said, when he got through his presentation, "But I couldn't recommend that anybody do this."

Now, what are we trying to do? Are we trying to promote this thing, or do we want to argue about it? If we want to argue about it, let's get up a debate before our dental organizations and talk the thing out. But when we are inviting the public in and the press in, don't have anybody on the program who is going to go ahead and oppose us because he wants to study it some more. Unfortunately, that is happening right along.

Your local component dental societies also have got to have programs on fluoridation. Who can supply them? The committee from the state society and your state board of health can. When they have the first meeting at the local level, that is the time to get the press in, and as a rule we don't even wait for that. If we are going to present something this evening in a certain community, we get over to the newspaper office this afternoon. They like that. You invite them personally to this meeting. They will want to write about fluoridation. Have a little material. You know that series of articles that was gotten out by the Cleveland Press on fluoridation? That was a terrific piece of publicity. Show the newspaper people some of those things. They get warmed up. They are pleased that you came in. You remind them how the press has been one of the greatest factors in the promotion of public health. You tell them how fluoridation helps the poor devil who can't afford proper dental care, and all that. You will have a pretty sympathetic press. Have them at the first meeting.

And at that meeting you have to have a definite program. There are certain things you have to put over at the local level. I think some of the things you should include are a discussion of the public health aspects of fluoridation, noting that we haven't got enough dentists to take care of the present dental caries, how much dental caries fluoridation prevents, and its economic aspects. That is something they all understand, and is a strong point to make before the lay groups. You can tell the people that after this thing gets going it is probably going to cost \$7.00 to fluoridate the water for an individual throughout his entire lifetime. Now, that fellow sitting at the meeting has paid some dental bills. He knows how little he gets for seven bucks, and he can understand that language.

There again is a place to promote or emphasize community responsibility. You have got a program which is ideal. The people can afford it, but nobody can put it in effect but the community. Now, do they want to do something? After all, it is the finest kind of public health education when you get down to where the local fellow can do something for himself, and in most cases they are apt to do it.

You have got to come out of that local meeting with a resolution from your local dental society on fluoridation. You have got one from the state. You have got one from the state board of health, and you have got one nationally, but that doesn't mean much at the local level. The dental authorities in a community are the local dentists. They are the ones who treat the dental ills of the community, and they are the ones that the people have a right to look up to.

Another thing you have got to come out with at the local level is a committee to follow up the fluoridation program. They passed a resolution on it, but again that is just a resolution. It won't help anybody till you get it working. How are you going to get it working? If you don't have a definite group to follow this thing up, then you might just as well have never started, because somewhere along the line it will just die out. So the local committee is a must.

In addition, the state committee and the state director can do a lot before the medical groups. I suppose we have appeared before every medical society in the State of Wisconsin. Now, the local man generally isn't in a position to do that. He is afraid that when he gets before the medical fellows, they will have a lot more knowledge about things than he has. Well, from your state level you can have a man come in who knows how to present fluoridation, and let me tell you this: The medical audience is the easiest audience in the world to present this thing to. They are used to carrying on, public health activities. This worry about toxicity. Toxicity doesn't mean much to them because of all the human experience we have had.

So you come out with a resolution from your county or local medical organization. You do the same thing with your local board of health. In many places the next thing to do is go before the lay groups, service clubs, PTA's, and always invite the public officials, water men, aldermen, mayors, anybody you can get. Have them at as many of those meetings as you have meetings.

Now, this is before any proposal is made to the council to adopt fluoridation. In other words, it is a sort of lobbying procedure you are carrying on, just as if you are going to present a bill before your state legislature. You know there is a special way of doing that if you expect to get it done. You can't walk up to a legislator and say "Here is a bill." It gets no place. The same way with fluoridation. Have the press at every one of those meetings. Then we have a sample ordinance drawn up, because you can have six months delay just on that. Have one all drawn up, so that all they have got to do is either strike something out, or add what they want, put in the name of the town at the top, and it is an ordinance on fluoridation. Otherwise that thing is going to get lost in the shuffle.

Now you are at the stage to present the ordinance to your city council or your community council. The officials have had an opportunity to listen to this proposal on the way up. They have had an opportunity to hear questions asked about it. They have heard the answers to those questions. They have seen the reaction of the PTA groups, of the service groups, union groups. It doesn't make any difference what groups; public health is everybody's business. It isn't just the physicians, the dentists, and nurses business. It is everybody's business, so talk to anybody that is interested.

Then our technique has been to ask the council for a meeting, and have either a local dentist or a representative from the state health department or the state dental society present. You have one meeting of the community council as a question and answer, explanation session, before they have to vote on the question. They resent being handed a resolution and being asked "How many yes and no." They don't want that. They want a little time to think this over. They have that meeting. It is explained to them. At the next meeting it is voted on.

We have the representatives from all the groups that we can get to attend the meeting where there is the question and answer period. Why? Because it shows interest. And the local officials are pretty apt to go along if the people show enough interest.

Now, what about the small community where you have one dentist or two dentists or no dentists? After all, because there isn't a dentist in a community, that is no reason you can't fluoridate the water, as long as there is a public water supply. Maybe you will promote a physician if there is one there, or maybe you will just pick out an influential citizen and work through him. Have a meeting at which you explain the program and talk it over.

Now let's get into a couple of don'ts. We have had a little experience on some things to avoid. Don't use the word "artificial," and don't use sodium fluoride. You don't know what a community is going to end up using as its fluoridating agent. But don't let them raise the question of rat poison if you can help it. And certainly don't use the word "experimental."

Don't try to promote fluoridation from the state level in the local community. Communities resent that. We made just that error in one of our earlier experiences. We learned a lesson from that. You build a fire under some body at the local. Now, where dentists don't seem to be interested, don't let that stymie you. After all, this is a public health program, and just because some dentist isn't interested, that is no reason why the public should be denied this benefit: What we do in a case like that is to arrange to have the PTA or some group ask for some of us to come in and talk about fluoridation. In this way you get in without forcing yourself, and you can build a fire under the dentist. That is promotional work. It is being done in all kinds of programs. It isn't something we just thought up.

Frequently, after an inquiry from a physician, you can get back to the community and say to the dentist, "Isn't it going to look bad if the physician promotes this program?" You say, "I got a letter from him, He wants me to come in and see him about fluoridation. I don't like to do that. This is a dental matter and should be kept that way. Well, maybe he will move. If he doesn't, go to the physician. Go to anybody.

If you can guard against the negative approach, you will save yourself some trouble. By that I mean you have got to be positive. If there is anything in your mind that you can't hit directly, then don't say it, because that is not the way to talk to the public on a public health program. If we were to tell the people that maybe they should immunize or if the physicians of the community are in accord they should immunize, what kind of foolishness would that be? It is either a public health program or it isn't.

If it is a fact that some individuals are against fluoridation, you have just got to knock their objections down. The question of toxicity is on the same order. Lay off it altogether. Just pass it over, "We know there is absolutely no effect other than reducing tooth decay," you say, and go on. If it becomes an issue, then you will have to take it over, but don't bring it up yourself.

Now, there are times when you get the wrong people promoting a program, and that is bad. I know we have had that experience and that we don't know just how to handle it, but we do try to avoid it. You know, sometimes a dentist in a community, no matter how enthusiastic he is about fluoridation, is just the wrong fellow to promote it. Or some civic group or some public-minded citizen may be the wrong one. So you have to get in there and kind of feel your way around, so that you do not create any more obstacles than you are going to have anyway.

And certainly don't stress the cost: It is just too cheap. Even when you are talking to these people, they are going to pay \$1.00 or \$1.50 per capita to install the equipment. After all, this is health, and let's not minimize the importance of it.

Now, when you go into a local community on any of this promotional work, have a pretty good idea of what the waterworks set-up is there. In other words, if it is in a community that is going to need six or eight installations you should know that before you go in, and you should have a pretty good idea of what these installations are and what they cost and what they look like. Don't think because you have read a couple of articles that you are going to be able to know all the answers, because you aren't. You have got to know what these things look like and what they cost, how complicated they are, and similar details. If you don't have any other place to find out, come on up to Wisconsin and we will show you.

We recently had people from seven states come to Wisconsin to look over some of our outfits. I don't think there was one state out of the seven where the engineer really believed us. So we just took them to several little installations where the village barber is the waterworks man or the hardware man is the waterworks man and turned them over to him, and let the engineers question him, find out what he is doing and how he is doing it. Until they saw that, I don't think they believed us. I don't think some of you are any different from them. It is one of those things you have to see, and I think we should make an effort to see it.

In our large communities we have engineers and chemists, so there are fewer problems. But you have got to sell yourself on the idea that fluoridation can be done and done properly in a small community. Unless you are sold you are going to have a hard time selling anyone else. Now, be sure you get your public officials in on your first meeting. Say it is a local dental society meeting. Invite your alderman and your mayor. Let them hear this thing discussed - not the second and third time it is discussed in a community but the first time. Have your water man there. And don't believe all the water man tells you. They are not going to believe all you say, so why should you be so prejudiced? Those fellows will frequently confuse the issue. For instance, it is not unusual to have one of them get up and say, "We estimate that fluoridation will cost up at \$30,000 the first year." What are you going to say? You are not supposed to know anything about the water department or anything else. The thing to do, if you know what you are talking about, is to say, "Listen, let's leave those jokes to the radio comedians. Let's get down to some common sense. Here is a community 20 miles from you. You need one more installation than they need, and theirs cost them \$2,000 or \$3,000."

Well, then the waterworks man says, "We thought we'd have to enlarge the building." If you are going to invest in big trucks and probably subsidize the railroad for a boxcar in order to bring the stuff up, you can get into some pretty good expense account. But don't let them give you that kind of argument.

How can you stop such talk? By having at least some idea about the expense. You don't have to be a dentist to know that a fellow can get an upper demure for somewhere under \$200. Now, when you say you can't get one for less than \$2,500, even the man in the street knows you are lying. Some individual may charge that much, but he is the exception. And by and large we can do the same thing about engineering.

Whether a thing is going to cost \$500 or \$700 isn't a thing for us to be quibbling about, or whether it is going to cost \$4,000 or \$5,000. But we should have some idea of what the cost will be. And certainly don't fail to push community responsibility. They will let you do this whole business, and you will end up a flop just like we did where we tried to do it ourselves. You have got to get that impressed on them. Your local dental society, the PTA, any of them - this is their baby. If they want to do something for their children, they have to take action. How? They have got to get an ordinance passed.

Let me tell you the PTA is a honey when it comes to fluoridation. Give them all you've got. They will pay you back. We had one community where for a year and a half the council had let this thing be tabled. Then the PTA got together and said, "I wonder what we can do about it." The local dentist called me up and asked when I was coming through. He said he would get some of the PTA people together.

They said, "What can we do?" We said, "How many of these PTA people can you get down to your council meeting on Monday night?" They didn't think they'd have any trouble getting a couple of hundred. "Well," I said to this dentist, "How much does that room hold?"

He said, "Fifty."

I said, "That will be good. Get them down." They were down. The council pulled it out from underneath the table, put it aboveboard, voted, and they got fluoridation.

Now, Milwaukee has given us the run-around for so long I don't know whether we will ever get fluoridation there. One year they leave the whole business out of the budget. Nobody knows it. The whole budget goes through, and a couple of months later we find we are stuck a year. Nobody was following that thing closely enough.

Then they let the bids. It takes them three months to let the bids. It takes three months to decide who was the lowest bidder. A month later they decide the bids weren't right. They say they just want bids on equipment this time, not the installation. They can install it themselves. This is the kind of thing that happens. You might as well be prepared for it. You may not have it, but we certainly have.

I think one mistake that is made at the local level is in some individual dentist's trying to carry the program alone. That makes the other dentists resent it. It makes the lay groups resent it. So make it a community thing as much as you can. And be sure not to present the ordinance to the city council before you have had an opportunity to really sell them. They will resent it if you do.

If you can - I say if you can, because five times we have not been able to do it - keep fluoridation from going to a referendum. After you have just a little experience you will find you can walk into a mayor's office, and after three sentences you know whether he is for fluoridation or against it. He is never going to say he is for or against it, but you can detect that. It is the same way with the waterworks men. They will say, "Well, if the people want to do it, let them vote for it." If we get public health by referendum God help us, because I think that on most of these programs you can beat anything that requires money. When a mayor brought that up to me, I said, "How would it be if we submitted a referendum at the same time the question whether your salary should \$7,000 a year or \$3,000." I said, "How do you think that referendum would come out!"

He said, "Probably come out \$3,000."

I said, "Sure."

After all, this isn't a thing you going to try to sell to every individual member of the community. The community elects people or appoints people to carry out certain duties, and they expect them to perform those duties just like with the health set-up in the community. If your health officer is sold on fluoridation, your dentists are sold on it, your medics are sold, you should present it to the council. It is their duty and obligation to either adopt or reject it instead of passing everything to a referendum. If you going to have government by referendum, what do you have the city council for?

Then there is this matter of not trying to make fluoridation your whole dental problem. I think you will find fluoridation much like the topical applications in that it is a good entering wedge for a dental health program. At the same time don't tell the people that you are just starting on the fluoridation program in order to promote something else, because you are never going to promote anything that comes up to fluoridation in an urban community.

I think maybe one of the things about fluoridation is that it's been too big for the whole profession. I don't think the profession yet grasps the significance of fluoridation. When you stop to think that suddenly something has come in the picture that has the possibility of knocking out two-thirds of the dental decay of the urban population, you are talking about the prevention of more decay, gentlemen, than the entire dental profession has been able to repair. This thing is tremendous. Let's not underestimate it. But by the same token, let's not overestimate it. It doesn't do the whole job.

In our small communities, frequently we use this technique when we are trying to get them to fluoridate. We say, "Of course it really isn't necessary for you to fluoridate, because you are only 12 or 15 miles from Padukahville, and they are fluoridating. After all, your people have got to go somewhere and shop, and they can go over t Padukahville and do their shopping and pick up a couple of gallons of water and use it for their children. You mention about their going shopping in another little town 10 miles away, and they hit the ceiling. But you are giving them an alternative, and frequently that is the most effective approach.

We have frequently said this before a city council, if they didn't seem to be very impressed with what was going on: We have got the data here. Of course if you don't care to fluoridate your water, then we had better begin thinking about a program of care, and we have got the thing pretty well figured out. It will cost us about \$68,000 a year." You get into the big brackets, and then they begin to pay attention. If they don't want to do the one you tell them, they are certainly interested in the other. They are not going to say they don't care about dental health. None of them will say that. If you will give them an alternative, sometimes that is a factor in helping things along.

I think I have exhausted what little I know. If you have any questions, maybe we could get more out of them than we could out of further talk.

(Applause)

**DR. KNUTSON:** Thank you very much. Again you have done a masterful job. As Dr. Bull has indicated, he is willing to answer questions, but before the questions start, let's give Frank a chance to get a drink of water. Let's take five minutes' recess.