

The Public Votes On Fluoridation

Factors Linked
to the Outcome
of Fluoridation
Campaigns



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The summary report was written by Sarah Furnes, RN.

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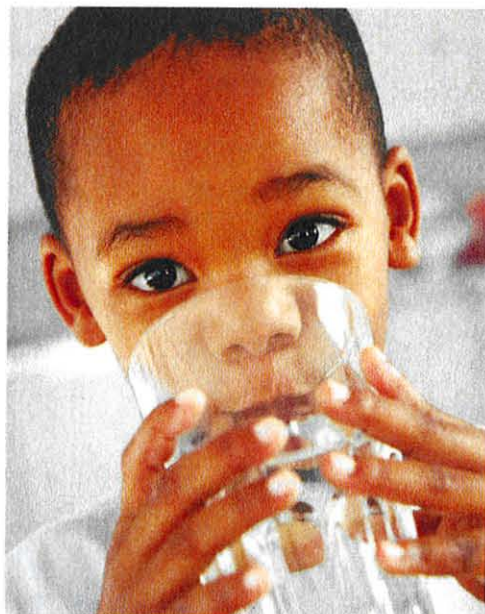
I. INTRODUCTION

Background

The first community to adjust the fluoride in its water to a level optimal for oral health was Grand Rapids, Michigan, in 1945. Since that time, fluoridation of community water supplies has greatly reduced tooth decay in the United States. Not only are there fewer decayed teeth, but the level of decay is less serious. Research conducted over nearly six decades shows that community water fluoridation is safe and cost-effective. It also is an equitable public health measure since it benefits all income groups in a community. In fact, the tremendous impact of fluoridation led the Centers for Disease Control and Prevention (CDC) to designate it one of 10 great public health achievements of the 20th century.¹

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Despite this success, the percentage of U.S. residents with access to fluoridated community water falls short of the 75 percent of the population target set in both the *Healthy People 2000* and *2010* objectives, the public health goals set for the nation and published by the U.S. Department of Health and Human Services.² Since nearly all major metropolitan areas are already fluoridated, to reach the *Healthy People 2010* goal of 75 percent, fluoridation expansion will need to take place in nonfluoridated communities having from 50,000 to 330,000 people.



Introducing water fluoridation to a community can happen in three ways. These are 1) through administrative actions taken by decision-making bodies such as city councils, health boards, or water districts, 2) by a public vote, often called a referendum, or 3) by passing state legislation mandating water fluoridation for specific types of communities. However, state-level legislation was beyond the scope of this study.

As a public health measure, community water fluoridation has faced challenges from its start. Strong scientific evidence shows that fluoridation has greatly improved the nation's dental health, and the overwhelming majority of public health agencies, health professionals, scientists, and health organizations agree that the benefits of fluoridation vastly outweigh any potential risks. Nevertheless, the public debate over this issue often has been heated, particularly when the measure is put to a public vote.

Although major factors at work in fluoridation campaigns have been identified, little is known about why some fluoridation campaigns are successful while others are not. The reasons that voters say yes or no to fluoridation vary by location and depend upon community and political concerns. Given the often intense public debate, how should public health officials proceed? Is there a clear strategy for promoting fluoridation efforts in communities and cities? Is there any way to predict whether the people in a given area will vote for or against fluoridation?

II. A STUDY OF FLUORIDATION CAMPAIGNS

A First Step

In 2002, the CDC launched a three-year study of fluoridation campaigns, hoping to find some common elements that would influence a community to vote either for or against fluoridation. This study only looked at those communities where fluoridation was voted on by the public. Because of limitations in the research methods, the findings from this study cannot be generalized to all communities. Instead, they should be viewed as a guide for further action and study. Because this was a small study involving only eight sites, the results could simply reflect chance alone—or they may be highly predictive. Therefore, this study should be viewed as a first step toward developing an understanding of the dynamics of a public vote on fluoridation.

Eight Towns and Communities

Eight communities were selected for the study. In four towns, the majority of voters voted against fluoridation of the community water supply, and in four towns the majority of voters were in favor of fluoridation. The population of each community selected was between 50,000 and 330,000. All of these communities had public votes that occurred during the year 2000 or later.

A Study in Three Phases

The study was carried out in three phases and was guided by an expert panel. At each stage, the research team looked for factors that may have influenced a vote for or against fluoridation [see Box A below].

- In the first phase, professional journal articles on fluoridation campaigns were reviewed to develop a literature review.³
- In the second phase, local newspaper coverage of the fluoridation campaign at each of the eight sites was analyzed. The research team reviewed articles, editorials, op-ed (opinion) pieces, and letters to the editor.
- The third phase consisted of interviews with key people who both supported and opposed community water fluoridation at the time of the vote. These interviews were held in-person at each of the eight sites [see Box A].

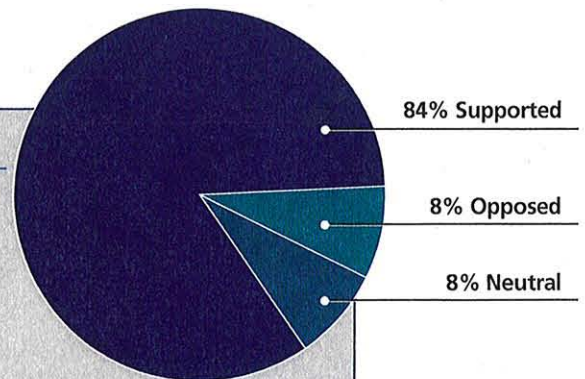
The research team gathered information on voter data including voter turnout, campaign finance disclosure information, any consultants who were hired for the campaign, and how much money was spent on advertising [see Box B on page 3]. Demographic data on community populations, including levels of education and income, also were collected.

A. Who Was Interviewed:

Fifty-three (53) out of 81 people contacted agreed to be interviewed. Of the 53, 45 (84%) were in support of fluoridation, 4 (8%) were opposed to fluoridation, and 4 (8%) were neutral.

People interviewed for the study included:

- Campaign spokespeople • Grassroots leaders
- Community residents • Media representatives • Political consultants
- Health care providers • Local elected officials • State/local health department staff • Public water officials



B. The Research Questions:

1. What were the key campaign factors that may have influenced the result of the public vote on fluoridation?

- Who may have had a major role in the outcome of the campaign?
- How did the campaigns try to build support with key people, organizations, and the voters?
- What resources did the campaigns use?
- What were thought to be the strengths or weaknesses of the campaign?

2. What were the key events that may have influenced the result of the public vote on fluoridation?

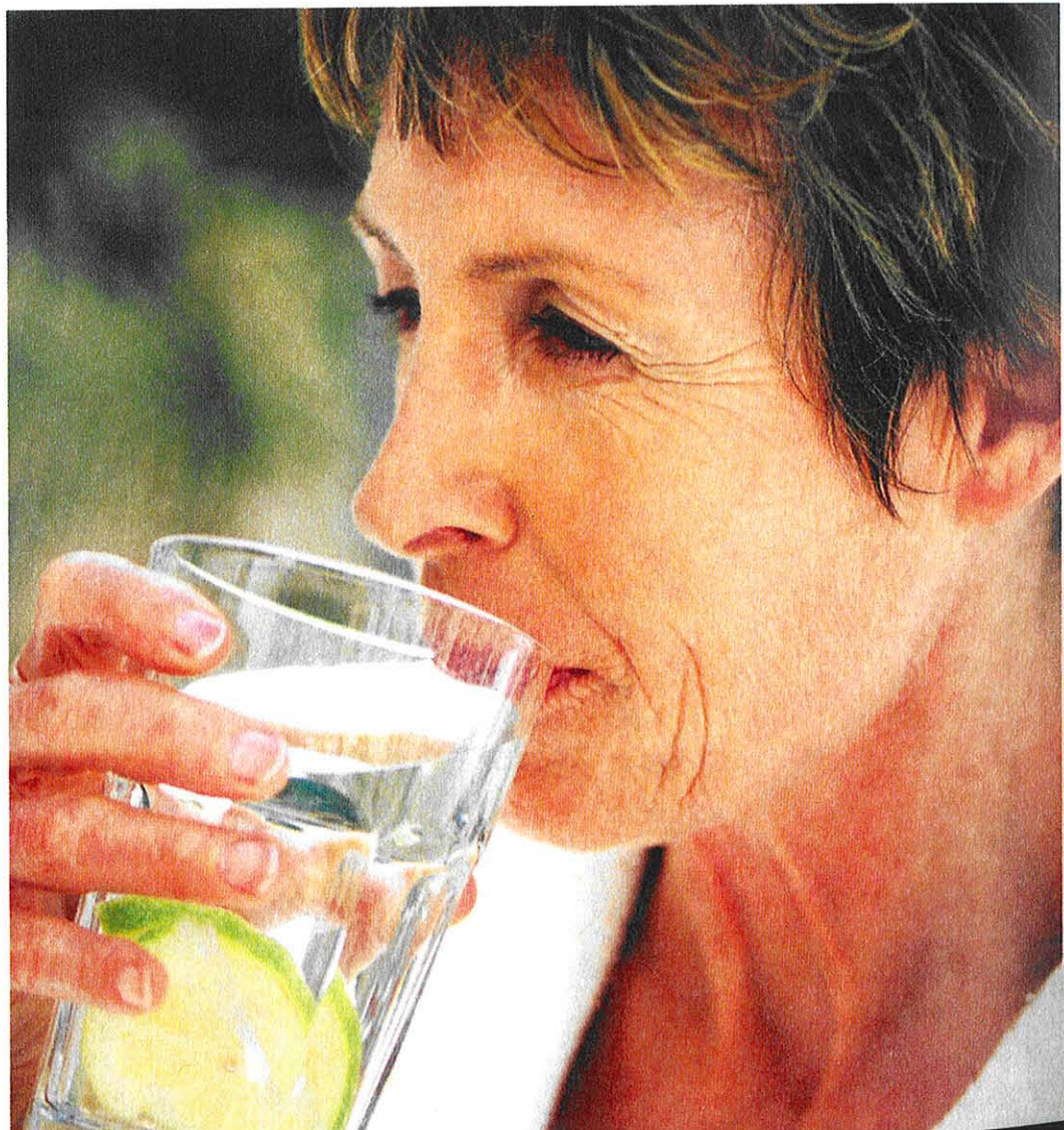
- How did the events and activities of the campaign fit together?

3. What were the main approaches to fluoridation that were used in the campaigns?

- What messages were used in the campaigns?
- How were those messages publicized?
- How did the campaigns work with the media?

4. Did the opposing sides interact and how?

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III. FACTORS INFLUENCING CAMPAIGN OUTCOMES

A summary of the factors that may have influenced fluoridation decisions in the eight communities studied is shown below [Table 1]. This is followed by a more complete description of these factors.

Table 1. Factors Influencing Campaign Outcomes

	Factors that may be linked with campaigns approving fluoridation	Factors that may be linked with campaigns withholding fluoridation
GENERAL CHARACTERISTICS		
Duration	Short time (< 9 mos.)	Long time (> 9 mos.)
Visibility	Low	High
Timing	During election with high voter turnout (e.g., presidential election)	During election with low voter turnout
CONTEXT		
Geographic location	Near metropolitan area	Rural
Socioeconomic status	Higher than average	"Middle class" status
Previous fluoridation votes	No previous referenda held fluoridation	Yes, or sometimes approved administratively followed by public vote
LEADERSHIP AND SUPPORTERS		
Coalition	Championed by trusted community members and/or locally elected officials – included health professionals	Championed by health professionals or public health officials; trusted community leaders maintained a low profile
Endorsements	Sought from health professionals, public health officials, and local newspapers	Sought from herbal and nutrition stores, local environmental groups
Level of political sensitivity and savvy	Higher on the part of the proponents	Higher on the part of the opponents
MESSAGES		
	Focus on three or four main messages involving: <ul style="list-style-type: none"> • prevents tooth decay • benefits everyone • no harmful side effects • natural substance • cost effective • dental care in "crisis" • supported by trustworthy scientific groups 	Numerous issues were introduced that focused on: <ul style="list-style-type: none"> • harmful health effects • costs too much • dental health alternatives • distrust of government • distrust of science • FDA should approve • mass medication • overexposure to fluoride • poison/toxic waste/ ecological threat • water issue

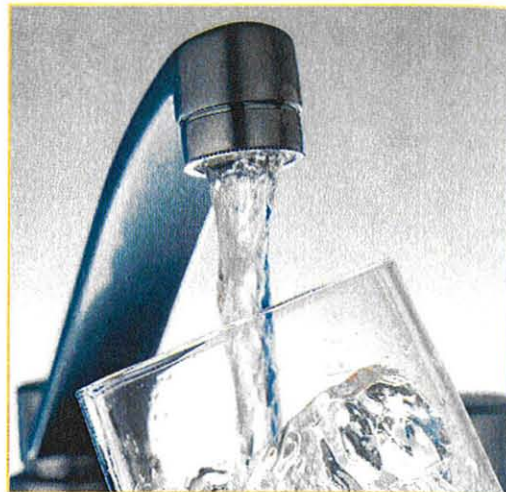
General Characteristics

When put to a public vote, in general, fluoridation campaigns tended to be successful if the campaign was short, had low visibility, and was conducted at a time of an expected large voter turnout. Campaign visibility was measured by the level of intensity of public concern as well as the extent of the news coverage. Shorter campaigns that were held at a time of expected high voter turnout—such as a presidential election—generally favored passing fluoridation. For the most part, the less visible the campaign, the more likely that fluoridation was approved by the voters.

Unsuccessful fluoridation campaigns tended to be longer, highly visible, and conducted at a time of expected low voter turnout. Trusted community leaders maintained a low profile or were active in the opposition. All four sites that rejected fluoridation had active campaigns of more than nine months. The campaigns were highly visible with high levels of intense public concern and widespread news coverage. Most held their vote during low turnout or local-only elections, where those who do vote generally are less likely to vote for fluoridation. Groups supporting fluoridation based many of their campaign messages on the scientific evidence supporting fluoridation and on logic, while nearly all groups opposed to fluoridation focused on the emotional aspects using a “shotgun” approach of messaging to instill some fear and doubt in voters.

Context

Those communities voting to approve fluoridation tended to be located close to a metropolitan area. Because most large metropolitan areas in the United States currently are fluoridating, voters in sites that adopted fluoridation may have been more aware of nearby towns and cities with fluoridated water. Communities supporting fluoridation had higher than average socioeconomic status and little or no history of previously having voted on this issue.



Fluoridation tended to be rejected when administrative actions to approve fluoridation were taken first and then a measure on whether or not to adopt fluoridation was put on the ballot by a group opposing fluoridation. It also was rejected in those communities where fluoridation had previously been rejected several times.

Participants from some communities where campaigns were unsuccessful were particularly concerned about the environment and environmental issues. One community was described as having “*a vocal environmental activist community*” and that no other issues “*seem to be as politically charged as environmental issues.*” Respondents from this site emphasized that people often moved to the community for its environment, including the perceived water quality, making passing a measure to put anything in the water more difficult. These communities were characterized by having a historic distrust of government, a high value on “clean” water, and a high value on alternative (non-Western) medicine.

One respondent described his community as follows, “There is a faction that is very opposed to the government imposing things upon them. To them, fluoridation was just another thing that the government wanted to do, and they didn’t want the government involved and messing with our water. Anytime they perceive that the government is coming in and telling them to do something, they vote ‘No.’”

Leadership and Supporters

A critical feature of any campaign was its coalition—the group that organized and conducted the campaign. In general, coalitions were small—between 6 and 15 people—with the bulk of the work being done by two or three people. Although all proponent coalitions included dental health professionals (e.g., dentists, dental hygienists, oral surgeons) and state and county public health professionals, only the campaigns that were championed

by community members and/or locally elected officials were successful in approving fluoridation. Where the issue of fluoridation was seen to be raised and championed primarily by members of the public health or dental health sectors, fluoridation was rejected. Coalitions of those who opposed fluoridation were led and supported for the most part by community residents not associated with health care. Public health professionals or local elected officials were not generally active in these coalitions, however individual local dentists and doctors were welcomed.

The leadership of all the successful campaigns was reported to have had high levels of political sensitivity and savvy. Leadership by trusted and politically savvy community representatives favored success. Where this was not evident, campaigns tended to fail.

Endorsements for pro-fluoridation efforts were sought from health professionals, public health officials, and local newspapers. It appears, however, that endorsements were not an effective substitute for having trusted community leaders taking an active role in the campaigns. Anti-fluoridation campaigns placed much less emphasis on public endorsements. Most were endorsed by herbal and nutrition stores and community organizations.

With all these campaigns for and against fluoridation, leadership from outsiders was not welcome. Most campaign participants strongly felt that support on either side needed to come from respected, established members of their communities, although spokespeople from national fluoridation opposition groups assisted campaigns at half the sites. One participant stated, *“At the community forum, 18 of the 19 folks who testified or submitted material against*

fluoridation lived outside the city.”

“Leadership by trusted and politically savvy community representatives favored success. Where this was not evident, campaigns tended to fail.”

Conducting debates played a major role in coalitions opposing fluoridation. It was a successful strategy because they were able to use national spokespeople from groups opposed to fluoridation; fluoridation supporters in these communities chose not to attend the debate.

Campaign Resources

Most campaigns promoting fluoridation, successful or not, were fairly well funded and used technical assistance from state organizations in their campaigns. Taken alone, however, access to these resources was not sufficient to ensure the outcome of the vote. None of the coalitions opposing fluoridation were well funded. Many received materials from state and national organizations that oppose fluoridation and these Web sites often were cited as sources of information.

Ballot Language

The way the ballot question on fluoridation was worded was important to the outcome of these campaigns. In all four sites where fluoridation was approved, fluoridation advocates were able to write or influence the wording of the ballot. Ballot wording becomes an important piece of voter education; the way a ballot measure is phrased can influence how voters interpret and cast their votes. Table 2 below identifies who wrote the ballot measure and whether the wording was written so that a “yes” vote was a vote in favor of fluoridation.

Campaign Messages

Traditionally, all pro-fluoridation campaign messages are framed by a simple and scientific concept, such as: It has been shown time and time again that optimally fluoridated water prevents dental decay and has no harmful side effects. Major campaign messages used by supporters included:

- Fluoridation is safe.
- Fluoridation is cost effective.
- Fluoridation is beneficial to children and all other community residents.
- Fluoridation is natural since fluoride occurs naturally at some level in most drinking water.
- Many people have pain and suffering because dental care is not affordable. As a result, dental care is in a “crisis” and fluoridation is essential.

- Fluoridation is supported by trustworthy scientific groups and voters should trust federal and local governments to make the right decision. People should not trust “junk science.”

Fluoridation opponents often used arguments that appealed to emotion and fear and developed messages that were framed to include prevalent community concerns. The major messages were:

- Putting fluoride in the community water supply is an infringement of free choice and a form of mass medication imposed by government.
- Science can't be trusted.
- Fluoride is bad for health—it's a dangerous substance that has negative side effects. People will become overexposed to fluoride because they are ingesting large amounts in food and drink.
- It is not even approved by the Food and Drug Administration.
- There are other fluoride alternatives that people can use that don't require ingestion, such as toothpaste and mouth rinses.
- Fluoride is bad for the environment. It is a poison, a toxic waste. There have already been problems with water shortages/water contamination.
- Fluoridation costs too much.

Table 2. Ballot Wording Authorship and Phrasing

Site	Written or Primarily Influenced by Proponents	Written or Primarily Influenced by Opponents	“Yes” Vote for Fluoridation
A	X		X
B	X		X
C	X		X
D	X		X
E		X	X
F	Not available	Not available	X
G		X	
H	X		X

* Note: Sites A-D passed fluoridation, and sites E-H did not pass fluoridation.

IV. CAMPAIGN STRATEGIES

Political Strategies Used at All Eight Sites

Each fluoridation campaign used a number of similar political strategies and tactics—appeals to the community, threats and diversions, and controlling the flow of information. All of these were used in one or more campaigns and had some effect on the course of the campaigns.

Appeals to the community

- Drawing upon community values or concerns when naming the coalition. For example, many coalitions opposing fluoridation used the name “Citizens for Safe Drinking Water.” Fluoridation advocates did not use names that resonated with community values, e.g., “Citizens for Fluoride” and “Healthy Smiles.”
- Taking the issue straight to the voters.
- Initiating community education about fluoridation before the issue became politicized.
- Being the first to raise the issue of fluoridation. This strategy was used most often by fluoridation advocates.

Threats and diversions

- Diverting the energy of the other side in some way, e.g., creating “red tape” by reporting flaws in the opposition’s legal paperwork or making outlandish claims. “The opposition kept throwing the kitchen sink at the issue... They threw arguments at us from all over the map, so we spent a lot of energy during the campaign refuting bizarre stretches of the truth.”

- Opponents of fluoridation attempted to neutralize politicians by threatening to vote them out of office if they came down on the “wrong” side of fluoridation or threatening to or actually filing a lawsuit against the city for not allowing public comment on items brought up before city council. This occurred at one site.

Controlling the flow of information

- Managing the flow of communication in a campaign by naming spokespeople. This tactic was said to help avoid a “common problem” of having “fringe extremists” make the rest of the opposition look bad.

Four Key Strategies Not Used in All Locations

The following four strategies and tactics, frequently used by only one side of the campaign, appeared to be closely related to the outcome of the vote. They may warrant a closer look for use in future campaigns.

Political insight and judgment

- The presence or absence of political savvy of those involved in fluoridation campaigns appears to be strongly related to referendum outcomes. Political sensitivity and sophistication were found to be characteristic of many spokespeople and overall political strategies in successful campaigns. In all four sites where fluoridation was approved, coalition leaders were reported to have been politically astute [see Table 3 below].

Table 3. Leaders and Advisors Were Politically Perceptive

Site	Proponents	Opponents
A	X	
B	X	
C	X	X
D	X	X
E		X
F		
G		X
H		

* Note: Sites A-D passed fluoridation, and sites E-H did not pass fluoridation.

Administrative action prior to a public vote

- When administrative actions approving fluoridation were taken first and then the issue was put on the ballot by a group opposing fluoridation, fluoridation tended to be rejected. This happened at three of the study sites. In contrast, voters approved fluoridation in three other communities where the issue was taken straight to the voters. It appears that when an administrative action is taken to approve fluoridation, the public might feel that fluoridation is being imposed by the government. These findings seem to suggest that the public may respond more positively when fluoridation advocates endorse a public vote on the issue rather than supporting a direct administrative action to fluoridate.

“... fluoridation advocates reported they underestimated their opponents' resources, appeal, and political savvy.”

as a failing of their campaigns. Some proponents interviewed highlighted this factor as a possible reason why their campaigns were not successful in persuading voters to fluoridate.

Taking part in public debates

- The existence and nature of public debates about fluoridation appeared to be an important factor in the outcomes. At many sites, fluoridation advocates made a decision not to participate in public debates. They felt it gave the impression that both sides have equal legitimacy [see Table 4 below].

Fluoridation opponents were said to have made a “big deal” out of the fact that fluoridation advocates did not attend the debate. Advocates reported that they did not feel prepared to be in a debate against a national fluoridation opponent and wished they had stronger debating skills. In retrospect, several fluoridation supporters said they should have debated, “I think it behooves us to be there to set the record straight.”

Underestimating the opposition

- In three of the sites that rejected fluoridation, fluoridation advocates reported that they underestimated their opponents' resources, appeal, and political savvy. Many of those interviewed noted this

Table 4. Debates

Site	National Proponents Involved	National Opponents Involved	Held by Opponents, Proponents Did Not Attend	Held by Neutral Party, Both Attended	No Debates
A				X	
B					X
C	X	X		X	
D					X
E		X	X		
F		X	X		
G		X	X		
H		X	X		

* Note: Sites A-D passed fluoridation, and sites E-H did not pass fluoridation.

V. DISCUSSION

Distrust of the Government and the Role of Public Health

Distrust of public health

Distrust of government is as American as apple pie. It varies only in the particular issue being targeted and its intensity. It is not surprising, therefore, that some amount of distrust of government was found at all study sites. It also is not surprising that those groups opposing fluoridation were against any government (administrative) action that would allow fluoridation to be approved without a public vote on the issue.

What was unexpected was the possibility that public health officials at all levels were subject to being viewed as an arm of the government and therefore were not viewed as being particularly trustworthy. Their "science" could be viewed with skepticism and their pronouncements seen as the government imposing its will on the public. When public health professionals raised the issue of fluoridation, were seen as the leaders of fluoridation campaigns, and acted as spokespeople, fluoridation measures more often were turned down than accepted. The opposite was true when members of the community and local elected officials were identified with campaigns promoting fluoridation.

Interviews with individuals showed there was even a mixed impression of the value of having public health professionals supporting fluoridation campaigns. Some believed that including health professionals from state and local governments in the effort made a good impression, while others argued that this kind of support did not really make much of a difference to the voters.

Public funds and technical assistance

State and local public health groups offered funds and technical assistance to fluoridation

campaigns in six out of the eight sites, but this appeared to have little effect on the outcomes of these fluoridation campaigns. In fact, four of these six sites rejected fluoridation.

Resources are no doubt helpful; however, these may play a more helpful role when combined with other important factors, such as having the right people in the coalition and being able to find resources, including technical assistance or guidance, sources of information, campaign personnel, campaign research, and financial contributions to the campaigns.

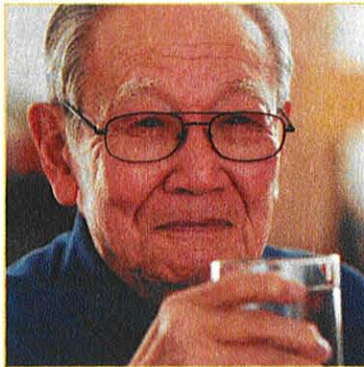
Whose Science?

Widespread access to information

The public has increasing and widespread access to all kinds of information from numerous sources, not just the "official scientific sources." In four sites that rejected fluoridation and one site that approved it, fluoridation opponents received materials from state or national organizations that oppose fluoridation. Web sites sponsored by national groups opposing fluoride often were cited as sources of information and campaign strategies. It also was noted that spokespeople from national groups opposed to fluoridation assisted campaigns at half of the study sites.

Environmental concerns about fluoridation

Many of the messages used in the campaigns that rejected fluoridation were framed by people concerned about the environment. Because fluoridation supporters were reluctant to engage in public debate with opposition groups, environmental concerns about fluoridation were not sufficiently addressed. Nor is it clear whether the fluoridation supporters had adequate knowledge and understanding of the environmentalists' concerns.



Whose science can be trusted?

Trust in the source of scientific information is critical. Large amounts of contradictory information can create suspicion and skepticism. In general, study findings suggest that the level of trust placed in opinion leaders on either side of the controversy may be influenced by the amount of contradictory information distributed by both sides of the issue and how believable it is.

"Political sensitivity was very helpful in navigating the volatile political conditions that surround this issue when fluoridation is put to a public vote."

The take-away message is that it cannot be assumed that people will trust only official and/or governmental sources of health and scientific information. The American public is becoming increasingly confident about making their judgments about what is good science. The term "junk science" may no longer be an effective communication strategy.

Science by itself is not enough

Emotions are stronger than logic and often will prevail over any scientific arguments. Public concern appeared to be heightened where approval of fluoridation was seen as being risky. Research shows that warning messages are more easily believed than reassuring messages. The public sees a situation as being risky if they don't trust the reliability of the science-based messages or if they believe that information is being withheld.⁴

Helpful Strategies

Political sensitivity drives the issue

Political sensitivity was very helpful in navigating the volatile political conditions that surround this issue when fluoridation is put to a public vote. Coalition leaders and spokespeople should be politically astute and trusted community leaders. They will have the best sense about how fluoridation issues will be received by the community and, in fact, will be likely to promote fluoridation only if they perceive that the public is supportive and that opposition is limited. They also will

be best suited to help the campaign craft its messages to fit with community concerns and bring the most successful opinion leaders to the table. Conversely, fluoridation efforts that are not actively championed by trusted elected officials and community leaders are unlikely to generate a majority of public votes on this issue. This is particularly true in an election where the turnout is expected to be low.

Local dental groups, health care, and public health organizations lend credence to a fluoridation campaign and are important to include in a coalition. However, they should not be perceived as the primary movers and shakers of a fluoridation campaign.

Never underestimate the opposition

Fluoridation supporters should be knowledgeable about the arguments presented by the opposition and give them respectful attention. Taking part in public debates is one important strategy to be considered. If a neutral party organizes a debate that is attended by people both for and against fluoridation, or if no debates are held, fluoridation may be adopted. Fluoridation supporters should think about taking part in controlled debates as a way of managing public perception of risk.

Ballot wording

The wording of the ballot question is the last—and sometimes the only piece—of information about fluoridation that voters see before making their decision. Thus, the ballot itself gives a campaign one last chance to attempt to influence voter decisions. Ballot wording reflects how the issue was raised in the community, the resources of the campaign, and the political skills of those running the campaigns. The results of this study suggest that campaigns should pay close attention to ballot wording when there is to be a vote on fluoridation.

VI. NEXT STEPS – RESEARCH AND ACTION

This study provides some information useful to people preparing to conduct community fluoridation campaigns. The results suggest the need for additional research. Some potential research topics are provided below.

Conduct more research on fluoridation campaigns.

It would be helpful to see if the factors thought to influence fluoridation campaigns in this study are found in other campaigns. Future studies should look for these and other factors that may be relevant and explore the relationships among them.

Develop new supplemental resources for fluoridation campaigns, such as a series of case reports.

For community leaders interested in fluoridation, understanding the complete story of a community's efforts in mounting a campaign would be especially useful, even more so if the story can be shaped by the research questions outlined in this study [see Box B on page 4]. One community's efforts can be shaped by another's experience. A series of case reports then could be developed and distributed to interested communities and coalitions.

Analyze the wording of ballots used in fluoridation votes that have resulted in approval or rejection.

The wording of fluoridation ballot measures may play an important role in voters' final decisions at the polls. Looking at fluoridation ballot questions through the lens of the campaign messages discussed in this study could help to clarify the role that ballot wording plays in influencing voter decisions. It could offer guidance for future campaigns.

Conduct social marketing research with voters in communities with populations of 50,000 to 350,000.

This could be valuable in developing the most effective campaign messages and finding the best ways of promoting these messages to the public.

Assess a community's readiness for fluoridation before developing campaign strategies.

Before starting a fluoridation campaign, it would be helpful for leaders to be able to accurately assess the status of their community with regard to the factors that are likely to have an impact on the campaign. The most important factors—such as the level of environmental concern and enthusiasm of community leaders—can serve as a guide both to assess a community's readiness to consider adopting fluoridation and to develop an effective campaign strategy.

Understand the perspectives of environmental groups on the issue of fluoridation.

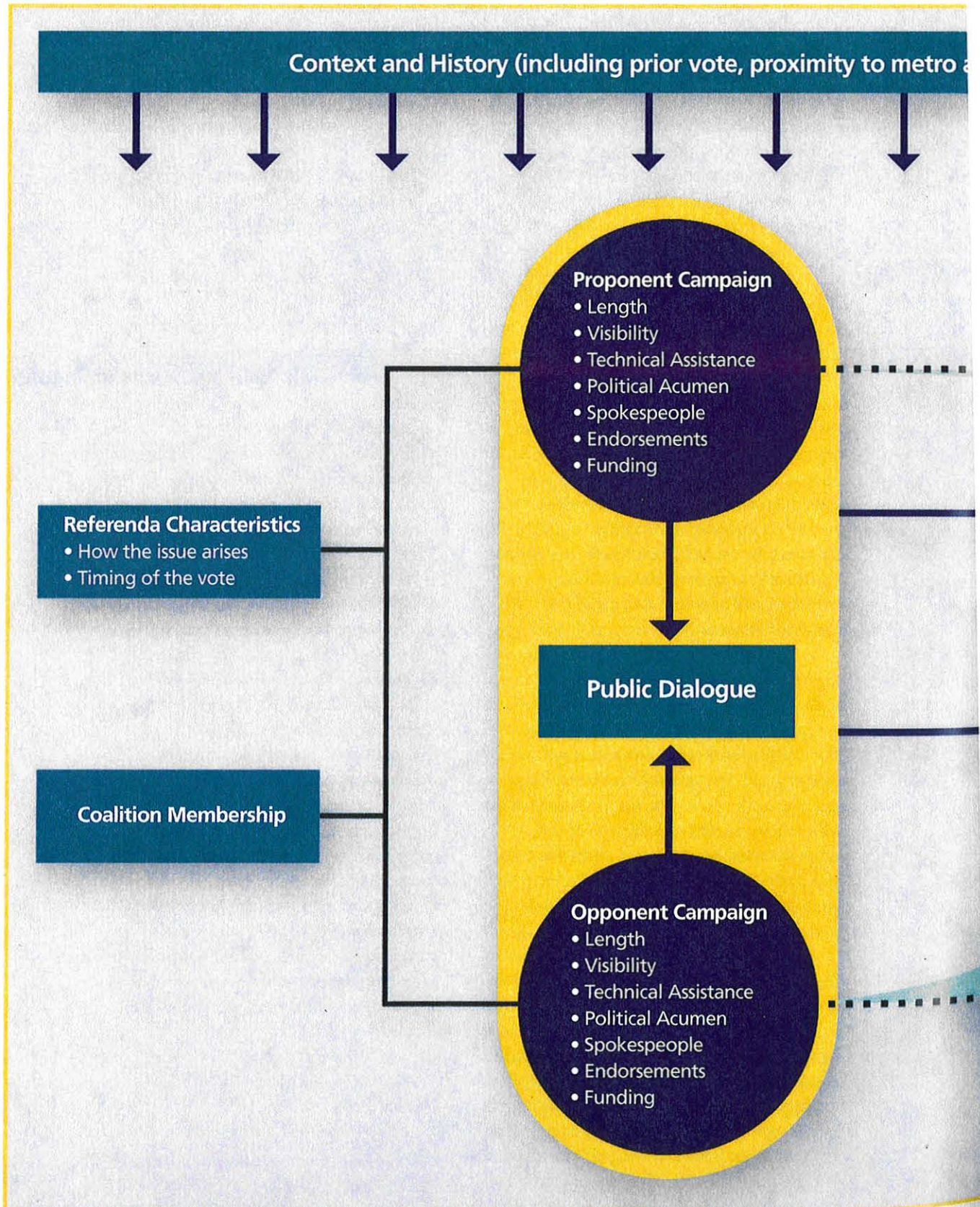
A study should be launched to explore and further understand environmental groups' perspectives and attitudes toward fluoridation. It is clear that it would be helpful to reduce the degree of conflict between public health leaders and environmental groups. This might help both groups to find new ways to communicate and to identify shared public health and environmental preservation goals.

Use these research findings to address other public health concerns.

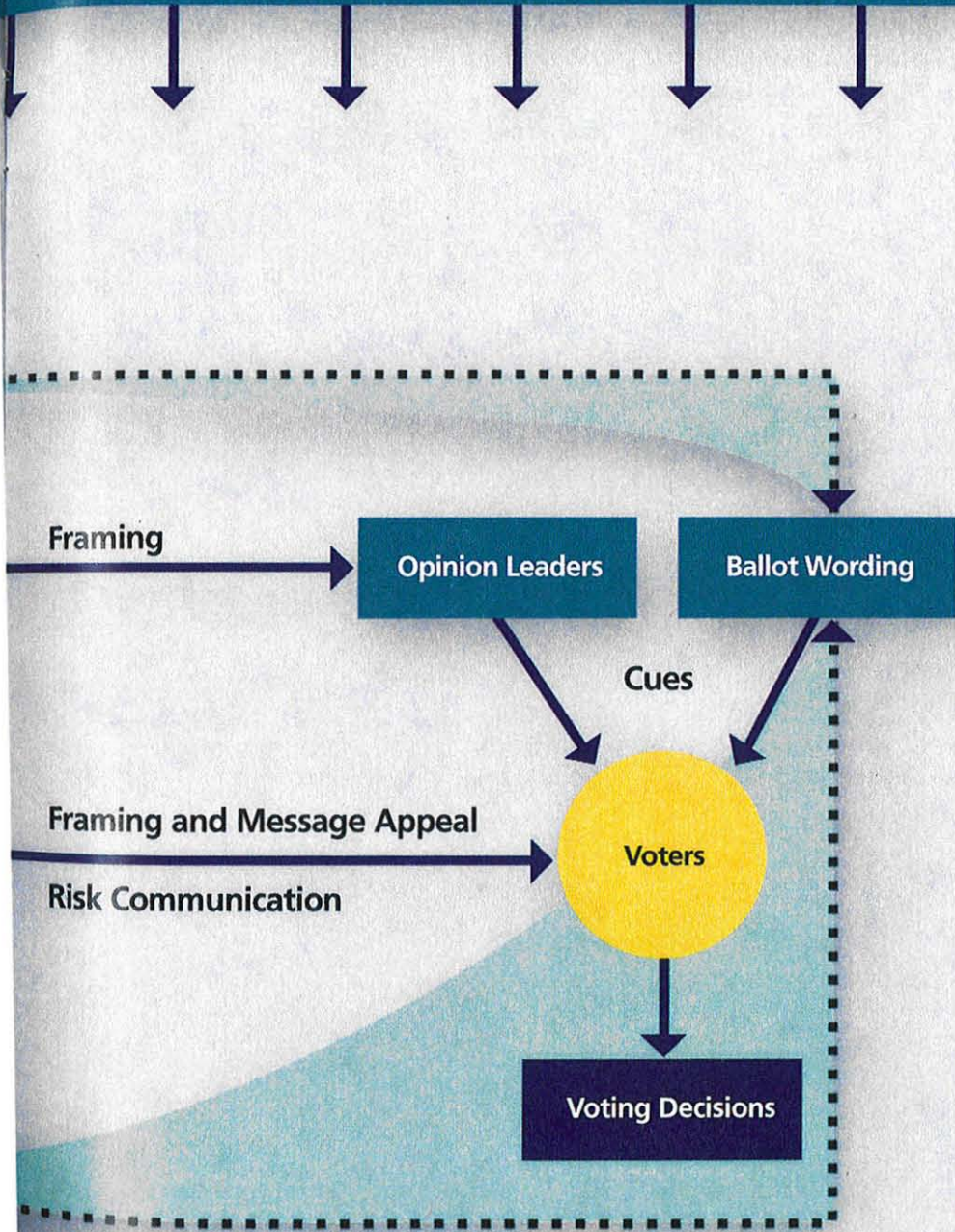
Key barriers to fluoridation efforts, such as distrust of government and its scientific pronouncements, are common to other public health efforts. These often can be seen in campaigns that hope to use some kind of governmental action as a way of implementing public health programs. Recent examples of these kinds of campaigns include imposing smoking restrictions in public places, restricting trans fat in restaurant foods, fining drivers not using seat belts, and enforcing the use of helmets for motorcyclists. Thus, the findings of this study contribute to a body of knowledge about public health campaigns, which, when adapted and translated, could help to improve health outcomes.

VII. FLUORIDATION REFERENDUM CAMPAIGN MODEL

This report describes an in-depth look into factors linked with the results of public votes on fluoridation. Its focus was on fluoridation campaigns held in eight communities from 2000 to 2003. These factors have been placed in a diagram to help show their relationship to one another and how they may interact and influence a public vote on fluoridation.

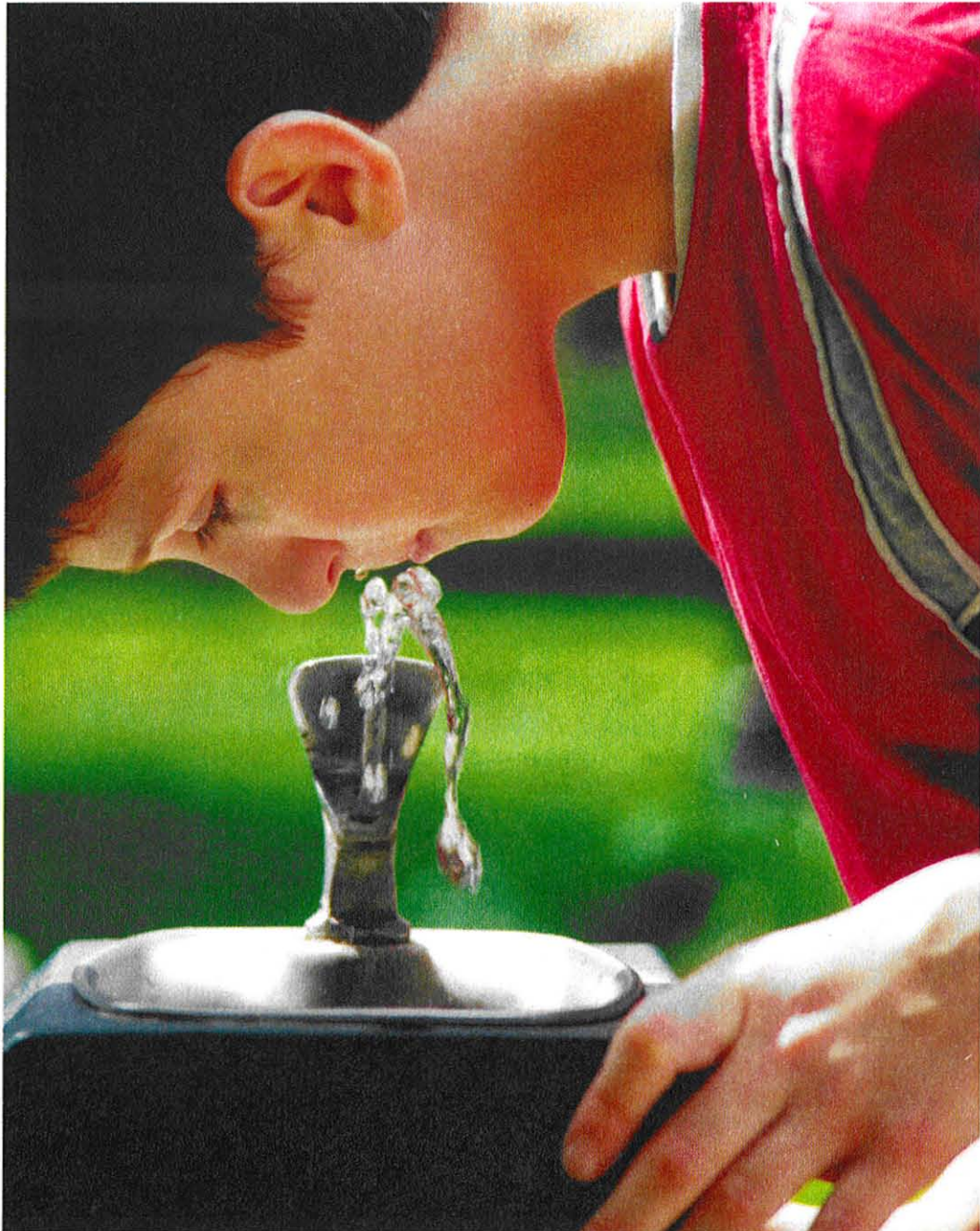


socioeconomic status, and community values)

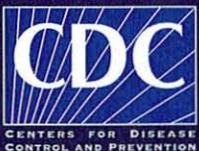


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A more detailed description of this study, "Exploring Factors Associated with Fluoridation Referenda Outcomes, Final Report" (September 2005), and its findings are available from the CDC Division of Oral Health.



CDC
NCCDPHP
Division of Oral Health
4770 Buford Highway
MS F-10
Atlanta, GA 30341
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