

***Effectiveness of Population-Based Interventions
to Promote Oral Health***

**Citizen Dialogues on Community Water
Fluoridation**



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Effectiveness of Population-Based Interventions to Promote Oral Health

- Three year research project
- Conducted by
 - Dental Health Foundation
 - Viewpoint Learning
- Sponsored by
 - Centers for Disease Control and Prevention

Dental Health Foundation (DHF)

- Founded in 1985 to promote the fluoridation of California's water supply
- DHF works through community partnerships to promote “oral health for all” by
 - Providing leadership in advocacy, education and public policy development
 - Promoting community-based prevention strategies
 - Encouraging the integration of oral health and total health
 - Improving access to and the quality of oral health services

Viewpoint Learning

- Viewpoint Learning is a San Diego-based company whose mission is to give people the tools they need to implement a new style of dialogue- and learning-based leadership.
- The Viewpoint-Learning™ model grows out of the empirical research and practice of two principals.
 - Dan Yankelovich has conducted a half-century of research on how public attitudes and social trends evolve.
 - Steve Rosell has worked with hundreds of executives in the public and private sectors developing the learning-based approaches to leadership and governance needed to deal with new social, economic and political realities.

Community Water Fluoridation (CWF): A science-intensive public issue

- How people make up their minds about science-intensive issues is poorly understood
- Community Water Fluoridation is a case in point:
 - Polls show people support water fluoridation
 - Yet fluoridation proposals often fail at the ballot box

Project goals

1. To determine:
 - Which considerations are most important in forming and changing San Diegan's views on fluoridation
 - How citizens' interactions with each other shape their decision on the issue
 - How average citizens receive information, process it, form their attitudes on fluoridation and decide how they intend to vote
2. To lay the groundwork for future efforts to engage the broader community and educate the public
3. To develop insight into how the public reaches judgment on policy issues with a strong scientific component

Polls have proven strengths

- **ACCURATE:** a snapshot of what the public says and feels at a moment in time
- **RELIABLE:** people rarely lie in polls
- **OBJECTIVE:** avoid special interest bias
- **PREDICTIVE:** *but **ONLY** when the public's views are firm*

But polls also have limitations

- When public's views are unresolved, polls are not predictive
- Public's views are unresolved on more than 90% of California's policy issues
- Poll findings do not reveal volatility of views
- Answers to single questions often distort meaning
- Polls do not permit the public to work through painful tradeoffs
- Polls have huge potential to mislead policy makers:
e.g. Clinton's health care plan

ChoiceDialogue:

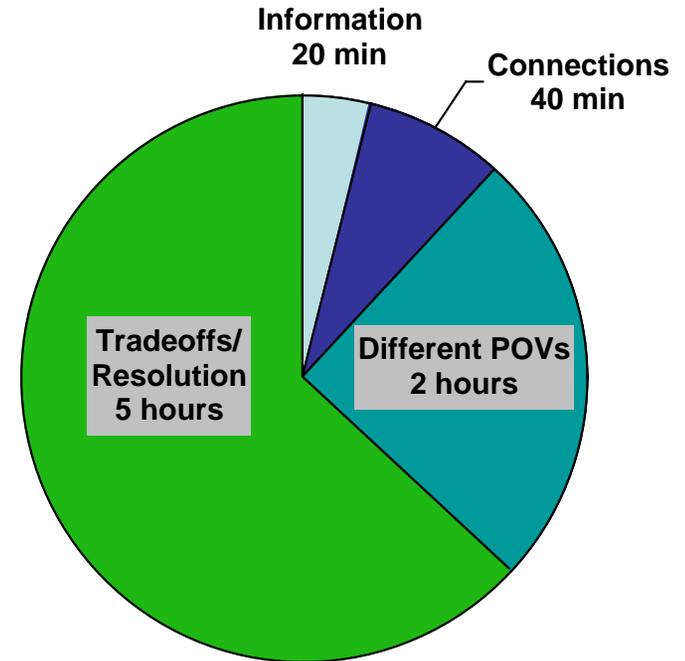
A new research tool

- **A series of dialogues** with representative cross-sections of the public (30-40 participants in each session)
- **Eight-hour sessions** allow intense social learning
- **Dialogue organized** around alternative scenarios developed in advance
- **Special workbook** sets agenda, gives background on issues, lays out pros and cons grounded in research
- **Facilitation** keeps people on track and in dialogue mode
- **Before and after measures** quantify shifts in preferences, coupled with qualitative analysis
- **Replicates how people reach judgment in the real world** - by talking with their peers.

Four learning steps in eight hours

For people to break through gridlock and come to sound judgment, they need to:

1. Be briefed
2. Make connections
3. Hear other points of view
4. Wrestle with tradeoffs, overcome “cognitive dissonance” and achieve resolution



ChoiceDialogues compress a process that would otherwise take weeks, months, decades -- or never happen at all

ChoiceDialogues on Water Fluoridation in San Diego

- June 2005: Three Dialogues
 - Total of 123 participants
- Morning
 - Crafting a vision of oral health in San Diego
 - Determining trade-offs
- Afternoon
 - Testing vision by examining pro and con fluoridation materials (the type that would be used in a campaign)

The Scenarios

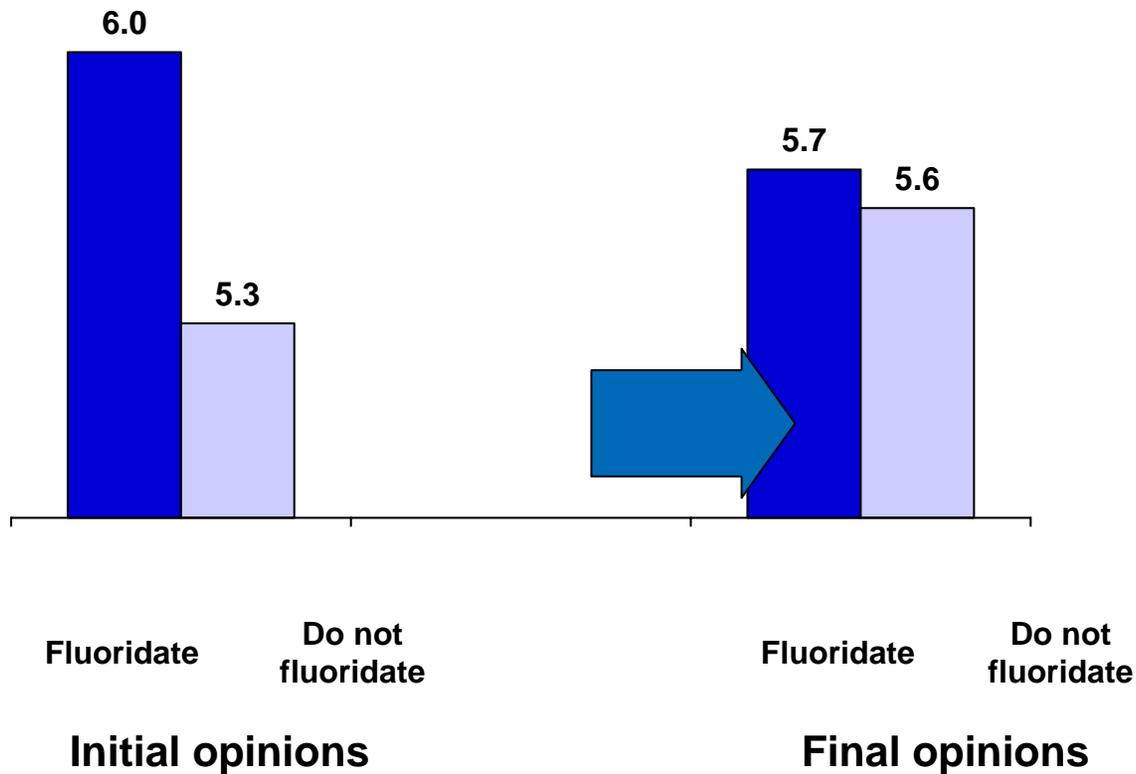
I. Leave the water unchanged

II. Fluoridate the water

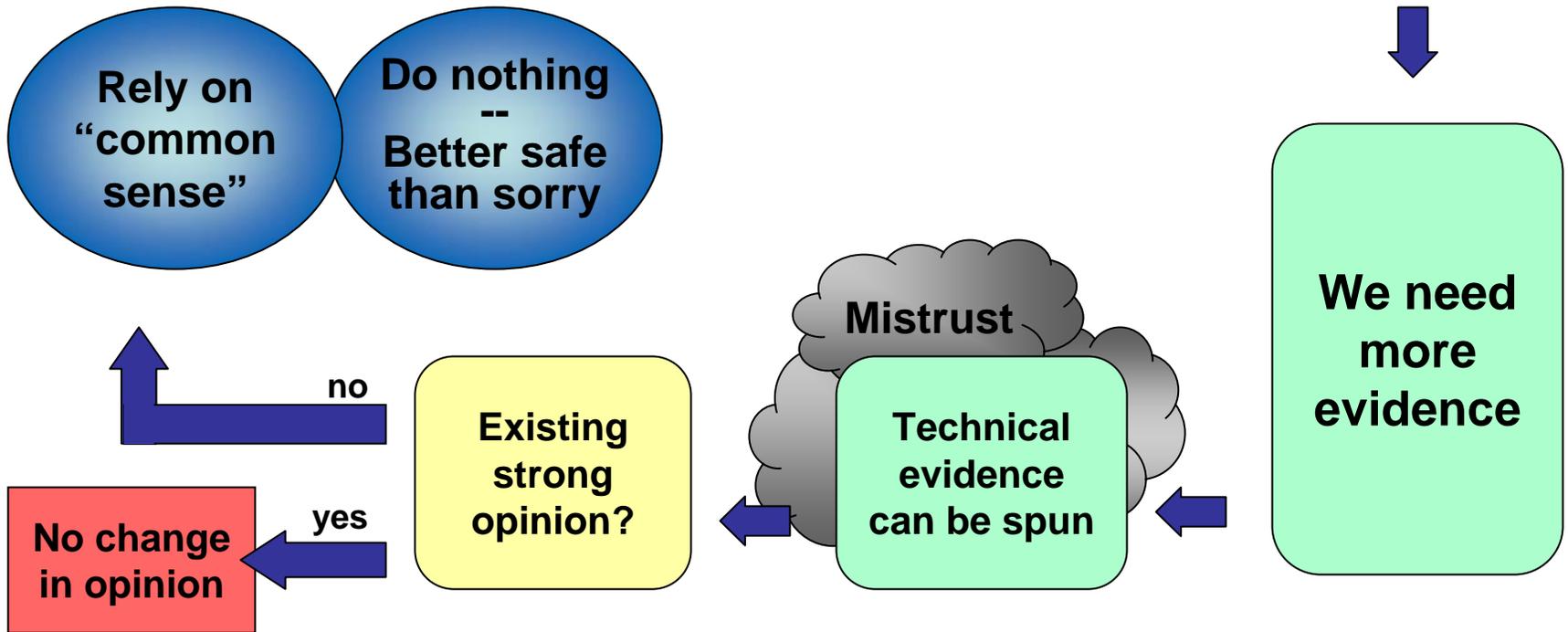
Participants were asked to consider three aspects of the issue, in particular:

1. Personal choice vs. community responsibility
2. Science and the environment
3. Cost vs. benefit

General outcomes: Initial/Final opinions



Thinking it through



Participants found some arguments especially compelling

Supporting water fluoridation

- Fluoridated water prevents tooth decay
- Water fluoridation helps the young, the old, and the medically underserved
- Water fluoridation is cost effective

Opposing water fluoridation

- People get enough fluoride from other sources
- We should not add chemicals to the water unless they are absolutely necessary
- Water fluoridation violates people's right to choose what sort of treatments they want

But these arguments did not change many minds

Participants believed they were being spun by advocates on both sides, and this increased mistrust and resistance to change. In these circumstances:

- Those with strong opinions dug in:
 - Listened only to arguments that reinforced their position
 - Denied or discounted all other arguments
- Those who were undecided became frustrated and either:
 - Looked for “common sense” evidence to resolve the question, or
 - Withdrew and opted for least-change approaches.

“Spin vs. spin” is inadequate and counterproductive. A different approach is needed.

Conclusions and recommendations

- 1. Facts alone will not change minds.** The traditional information-driven campaign is insufficient. Information is easy to ignore, deny, or discount.
 - To be heard, the first step is to build trust —
 - Showing you understand people's concerns and values
 - Emphasizing values and concerns you share.

Conclusions and Recommendations

2. Spin intensifies mistrust. People are quick to suspect they are being spun or manipulated.

- Avoid one-sided arguments and demonstrate openness to other points of view
 - Extreme arguments tend to backfire

3. Transparency about interests is essential. People want to know who benefits and why.

- Dentists supporting fluoridation are especially credible because they may suffer financial losses if fewer people suffer decay

Conclusions and Recommendations

4. “Common sense” resonates in a climate of mistrust.

- Use arguments that mesh with citizens’ intuitive sense of how the world works.
 - E.g. CWF has been in use for 60 years, by millions of people; if there were a problem, we’d know

5. Responsiveness is essential to build trust.

- Acknowledge that public concerns exist, are important, and respond to them seriously. Simply correcting a misunderstanding with data without addressing the underlying concern increases mistrust.
 - E.g. How to reply to the statement: “Scientists haven’t found bad effects because they haven’t looked for them.”

Without trust, even the best arguments go unheard.

Bayesian Analysis

- Conducted by Bill Rudman, University of Mississippi
- Bayesian analysis is used to assess both statistically significant relationships and to simultaneously assess how patterns in the data vary

Those who initially had a negative view of water fluoridation,

- Believed:
 - That putting fluoride in the water violates their fundamental right of choice and should be voluntary (35%)
 - There are long term negative health effects of fluoride (28%),
 - The additional cost of water fluoridation is too much(11%).
- Surprisingly, only (6%) felt more research is necessary. These findings seem to support the importance of emotional issues surrounding general water fluoridation.

Those who initially had a positive attitude about fluoridation

- Believed in:
 - the dental health benefits for children (27%),
 - positive long term dental health benefits (24%),
 - low cost of water fluoridation and prevention of tooth decay (13%)
- Again, the emotional issues were more important than data or facts.

Those who were initially neutral concerning water fluoridation

- Strongly expressed a belief
 - that more research on fluoride needs to be done (34%)
 - that the research on fluoride was confusing (20%).
- This was the only group, as might be expected, that focused more on the research than emotional issues surrounding fluoride use.
- Also, those who were **neutral in the beginning were over 3 times more likely to move toward being negative** than positive in their desire to have water fluoridation.
 - This might suggest, that using research it is easier to cast doubt and to change an opinion from positive to negative than negative to positive when it comes to health and personal choice.

Next Steps

- Review conclusions
- Revise pro fluoridation arguments and materials based on conclusions from the first set of dialogues
 - Develop materials aimed at inoculation from anti-fluoridation arguments
- Repeat dialogues