# Communication and Public Outreach About Emerging Contaminants in Public Water Supplies in Minnesota

Amanda Strommer

# Background

- Groundwater and surface water provide drinking water supplies around Minnesota
- Contamination can impact the availability of these drinking water supplies
- Contaminants of Emerging Concern (CECs) have been found in groundwater and surface water in Minnesota
- Examples include pharmaceuticals, endocrine disruptors, or perfluorochemicals (PFCs)
- Project coordinated with Minnesota Department of Health Contaminants of Emerging Concern Program

# Unregulated Contaminants Monitoring

- US EPA program to test for water contaminants that do not have health based standards
- Started in late 1980's
- Tests for contaminants that are not usually looked for in drinking water
- Starting in 2013 will be testing for many contaminants of emerging concern

#### In Minnesota

- 7100 Public Water Suppliers (PWS)
- Over 700 Municipal Suppliers
- Regulated according to the Federal Safe Drinking Water Act
- Water suppliers required to communicate through an annual water quality report or consumer confidence report
- I 10 suppliers participating in the Unregulated Contaminants Monitoring Regulation program, of which 104 are municipal suppliers

#### Purpose and Research Question

- Evaluate how public water suppliers currently communicate about drinking water safety and emerging contaminants and how to address communication challenges
- Better understand how communication should occur around emerging contaminants given the uncertainty about health impacts
- Develop recommendations to the Minnesota Department of Health in regards to communication about emerging contaminants and specifically how that relates to public water suppliers

#### Methods

- Sample allowed a 2x2 comparison of smaller vs. larger and surface water vs. groundwater sources
- Data collection was done through the use of surveys of PWS operators in Minnesota

7 Groundwater	<b>13 Groundwater</b>
Smaller Cities	Larger Cities
3 Surface Water	7 Surface Water Larger
Smaller Cities	Cities

. . . . . . . . . . **. f** : . **f** . . . .



Establishes baseline of information for what the public water supply thinks is important to communicate about.

- Water supply websites easily accessed from search engines
- 83% had Consumer Confidence Report (CCR) available online
- 56% of the information about water was related to quality and safety vs. quantity, conservation, or billing
- 30% had contaminants of emerging concern information

97% say citizens go to the PWS for information about their drinking water

#### **Information Requested By Citizens**



Percent

#### **Communication Tools Used**



Percent

- 30% of surface water suppliers use 3 or more communication tools vs. 45% of groundwater suppliers
- PWS react to questions and concerns they get from public
- Low interest can lead to lower communication which leads to lower awareness of drinking water quality
- All PWS use at least one method to communicate about drinking water

- Greatest challenges include:
  - Citizen awareness of issues (50%)
  - Communication (23%)
  - Other Media, language, staff resources (20%)
  - Citizen technical understanding (10%)

#### **Consumer Confidence Report Distribution Methods**



Percent

- All PWS use Consumer Confidence Reports to communicate about drinking water
- Effectiveness of CCR to communicate what is in the public water supply
  - On a scale of I (very low) to IO (very high)
  - Average response of 6

#### Results – PWS Interviews - Quotes

- "I look at my consumer confidence report and I think it's a real fine document. We spend a lot of time to do a real nice job on it. There's a lot of good information in it. But, honestly, I'll bet half the people just throw it in the trash. I think it would generate more calls than it does."
- "It's pretty hard to make something interesting to people when there's no problem with it. Everybody goes to their tap, turns it, great water comes out; it's hard to get interested about anything about that."

- What can state do to help PWS better communicate with citizens about drinking water?
  - Nothing (63%)
  - Provide template language (17%)
  - Send out information to citizens (10%)
  - Other (20%)
    - Use media, radio, tv, psa, social media
    - Make data available more frequently
    - More attention grabbing fact sheets

- 33% of PWS contacted by citizens about CECs
  - 50% of surface water suppliers
  - 25% of groundwater suppliers
- I7% (5) PWS currently communicate about CECs

How urgent is the need for testing for CECs? Scale I (very low) to IO (very high)

- Average of 6.1
  - No significant difference between groundwater and surface water

How urgent is the need for communication to the public about CECs?

Scale I (very low) to IO (very high)

- Average of 4.7 Groundwater (5.6) and Surface water (3.2)
  - Significant difference (P value=0.015)

#### **Resources Needed for CEC Communication**



Percent

# PWS express a need for tools and resources about CECs

"You know our job really is to guarantee that the drinking water is safe and communicate that to the public. I really don't want to see us get into the area of concerning the public over things that we ourselves are not completely sure of yet ... We need to keep our people in the industry well informed and well trained." (Operator)

## MDH Citizen Focus Groups

- General opinions and perceptions of water quality
- Perceptions about contaminants
- Sources of information

#### MDH Citizen Focus Groups - Findings

- General interest in drinking water quality with an underlying concern for safety, but lacked an overwhelming concern regarding this issue.
- Low interest level and reported not worrying about contaminants.
- Assume drinking water quality is good.

### MDH Citizen Focus Groups - Findings

- Low interest and awareness of specific contaminants.
- Most had never looked up information on drinking water.
- Knowledge they have comes from media or local contacts.
- Internet was most frequently mentioned source.
- Water quality reports seen as data rather than information.

#### Recommendations

- Recommendation I: MDH should provide education and information about emerging contaminants to public water suppliers and use public water suppliers to distribute information about emerging contaminants to the general public.
- Recommendation 2: MDH should promote consumer confidence report as tool for the public to access for important drinking water quality information.

#### Recommendations

- Recommendation 3: MDH and PWS should strategically use the media and social media in order to provide communication to the public about drinking water quality and contaminants of emerging concern.
- Recommendation 4: MDH should continue to use formal collaborations, partnerships, and networks to address emerging drinking water contamination issues.

# Conclusion

- Proactive strategic and coordinated communication regarding emerging contaminants in drinking water will be a key aspect if monitoring finds CECs in drinking water.
- Benefits to communication include increased public knowledge and increased ability of the government agencies to respond to potential issues that may arise.
- Strive for strategic messaging, proactive training, and tool development.

# Questions?

Contact Information: Amanda Strommer Washington County Public Health & Environment amanda.strommer@co.washington.mn.us 651-430-6744