

Social Dimensions of Private Well Testing: Why Don't People Test their Water?

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Study Purpose and Introduction

Introduction

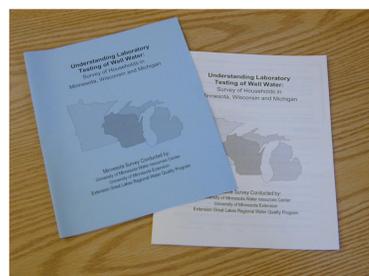
Across the Upper Midwest there is a history of private well testing programs, organized by Extension, local government units, or other organizations. However, many private well owners or renters choose not to participate in these programs. Some of their reasons for not participating have been identified, but many barriers remain unidentified. Natural resources and public health professionals may find it difficult to understand why private well owners choose not to get their water tested, and this can affect the way testing clinics are implemented and promoted. That lack of understanding may also affect their attitudes toward well owners, particularly rural audiences or those living below the poverty level.

In Minnesota, 70% of residents get their drinking water from ground water; Ten-15% of private wells exceed the 10 mg/L standard for nitrate and many areas of the state have naturally-occurring arsenic at unsafe levels. When counties offer private well testing clinics, participation rates are often less than 1% of the well owners .



Project Goals included:

- characterizing the factors that influence private well testing;
- identifying barriers or challenges that prevent or discourage well owners from getting a water test;
- developing recommendations to increase private well testing to protect public health.



Survey Process

- Private well owners in targeted counties in MN, WI, and MI, we surveyed using the Dillman (1978) method.
- 2690 surveys mailed February 2007
 - Preceded by an introductory letter (1 week ahead)
 - Included in survey mailing – another cover letter, hand-signed; a SASE; a \$2 bill incentive
 - Reminder postcards sent at 7 days and 10 days
 - Responses began to arrive 2 working days after mailing

Survey Returns

	WI \$2 + free test	MN \$2 Bill	MI Coupon for free test	Totals
Surveys mailed	1459	596	635	2690
Surveys completed	1057	386	290	1733
Return Rate	72%	65%	48%	64%

Demographics of survey respondents

	MN	WI	MI
Male	63%	56%	52%
Female	37%	44%	47%
Mean age (3=40-49; 4=50-59)	3.95	3.81	3.98
Mean Years in Home	19.9	17.9	18.6
Child in home	36%	39%	39%
Education 3=some tech/college 4= tech school 5=college	3.53	3.57	3.73



MN counties surveyed:
Otter Tail (arsenic concern);
McLeod (arsenic concern);
Dakota (nitrate concern)

Survey Results

Surveys included 43 questions that asked about water use, attitudes & beliefs, water testing behaviors, source of information, demographics. Surveys were the same for all three states, and were coded to identify county

- ❖ When asked, **“Do you believe your untreated well water is safe to drink?”** respondents reported they believe it is ...

Very unsafe	Unsafe	Somewhat Unsafe	Somewhat Safe	Safe	Very Safe
4%	5%	11%	13%	47%	20%

67% believe their untreated well water is Safe or Very Safe

- ❖ When asked, **“How worried are you about possible health risks from untreated well water?”** respondents said they are ...

Very Worried	Worried	Slightly Worried	Not Worried
3%	10%	35%	52%

- ❖ When people who hadn't tested their water were asked, **“Why haven't you tested water from your well?”** the top ten reasons they gave were ...

1. We've been drinking it for years – **53%**
2. Didn't know what to test for – **41%**
3. Don't know how to test – **35%**
4. It's probably fine – **25%**
5. Didn't know I should test it – **17%**
6. Testing costs too much – **17%**
7. I'll Wait for others to find problems – **12%**
8. Dealing with problem would be too costly - **12%**
9. Missed the testing program – **8%**
10. I don't want to know – **8%**

- ❖ When asked, **“Where do you turn to get information about water testing and water safety?”** respondents said from ...

	MN	WI	MI
Local Health Dept	23%	Online	Local Health Dept
State Health Dept	20%	Local Health Dept	Online
Online Sources	17%	Water test lab 16%	DEQ
Extension	16%	State Health Dept	State Health Dept

Only in MN

Conclusions and Impacts

Conclusions from study

- ✓ People believe their water is safe; Sometimes without validating information
- ✓ Barriers to testing include that they don't know they **should** test, **how** or **what** to test for
- ✓ Local arsenic risk prompts testing (not nitrate)
- ✓ People want information from local sources & online

Implications for increasing well testing

- ❖ When asked, **“Have you thought about testing your water?”** those who hadn't tested responded ...

- 41%** - Never thought about it
- 12%** - Thought, but not going to test
- 6%** - Plan to test in next year
- 41%** - Plan to test sometime

That means we can:

- **Raise Awareness of the need to test, and**
- **Provide prompts/reminders to test: 41% are ready to test if we make it easy**

Further implications:

- ✓ Regular programs can increase testing rates
- ✓ Provide clear outreach materials
- ✓ Provide information online and easily accessible
- ✓ Partner with local Public Health Departments & private labs



Impacts from Study

Based on our work ...

- WI received grant to develop online materials
- WI revised forms that accompany water tests
- Extension Educator in Hawaii got funds to conduct a survey using our tool
- Dakota County, MN, implemented changes in how they encourage private well testing and conduct testing clinics
- MI implemented changes in water testing clinics