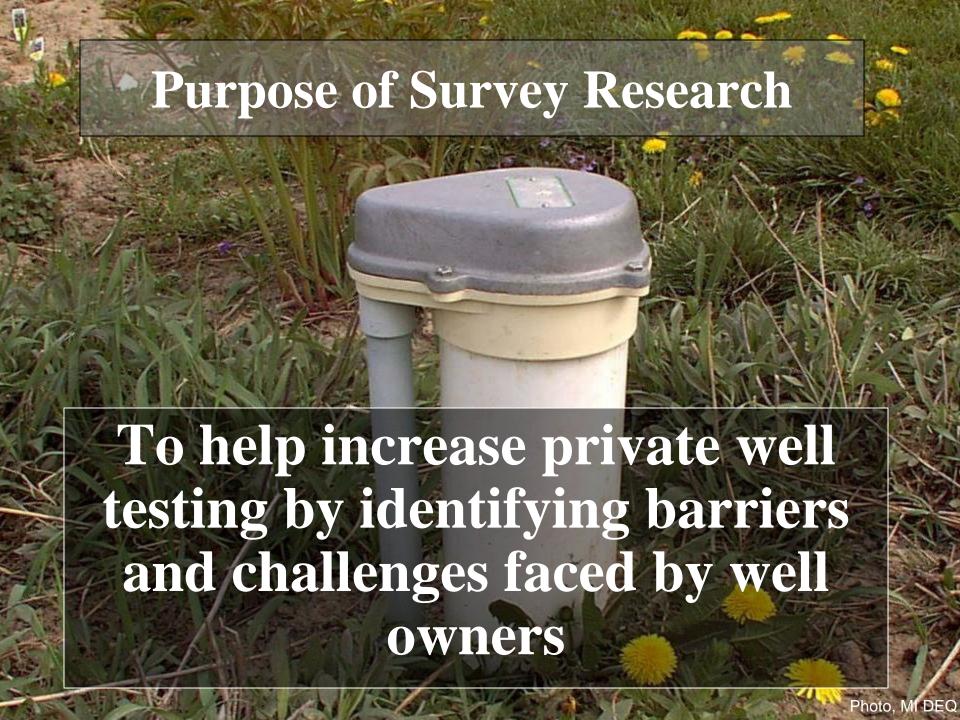
Social dimensions of private well testing: Why don't people test their well water?

Dolores Severtson, University of WI Barbara Liukkonen, University of MN Ruth Kline-Robach, MI State University

> CSREES WQ Conference Sparks, NV - February 4, 2008





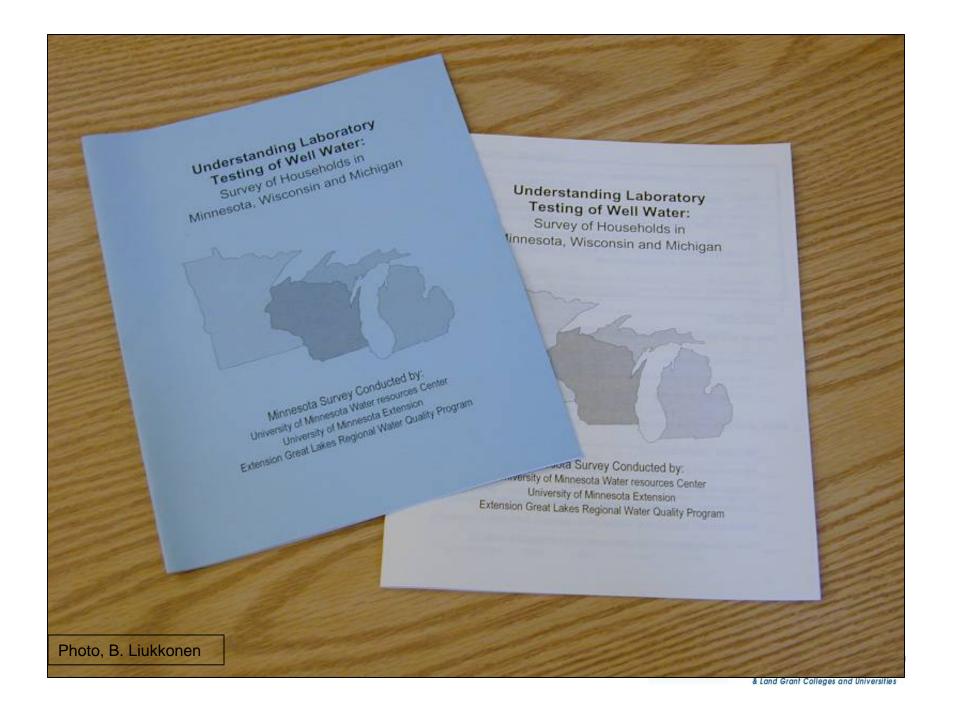


- Survey design & implementation
- Results
 - All populations
 - Comparisons between states
- Conclusions & Implications

Survey Research

- 3-state project, funded by Extension Great Lakes Water Program
- 600 surveys in MN and MI; 1400 in WI
- Survey design fall 2006, mailed March 2007
- Results returned March-May, 2007





Targeted Survey Recipients

- Arsenic or Nitrate risk levels
- Test program participants
- Ex-urban and rural

 Addresses randomly selected within target populations



Challenges

- Developing questions
 - To give useful information
 - Understandable answerable
- Dealing with addresses, tax files
- Signing & mailing
- Incentives









Survey Returns: March - May

	WI \$2+Coupon	MN \$2 Bill	MI Coupon
Surveys mailed	1459	596	635
Surveys completed	1057	386	290
Return Rate	72%	65%	48%

Demographics - Gender & Age

	MN	WI	MI
Male	63%	56%	52%
Female	37%	44%	47%
Mean age	3.95	3.81	3.98
3 = 40-49			
4 = 50-59			



More demographics

	MN	WI	MI
Mean Years	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



Were survey respondents representative?

- Education slightly higher in most counties
- Income levels higher in many counties



Internet at Home?

	MN	WI	MI
Internet at Home	72%	75%	73%





- 33% mostly to always (M-A) drink untreated well water
- 53% seldom to never (S-N) drink untreated well water
- 14% M-A drink purchased bottled water



- What types do they use?
- How often do they maintain them?
- Who is the primary decision-maker?

32% said they maintain system less often than recommended

Opinion of well water safety ...

• Before any treatment? (all states combined)

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



Opinion of well water safety ...

• Before any treatment - by state

	MN	WI	MI
Mean –	4.66	4.57	4.35
Higher =			
more safe			



How worried about health risks?

• From untreated well water?

No	Very	Worried	Slightly	Not
response	Worried		Worried	Worried
1%	2%	9%	33%	55%

MN Data



How worried about health risks?

• Before any treatment - by state

	MN	WI	MI
Mean	3.44	3.36	3.24
Higher = less worried			



What would prompt a water test?

- Neighbor's well contaminated 86%
- Change in taste, odor, looks 86%
- Well testing program available 66%
- Unexplained health problems 63%

What would prompt a water test? (Continued)

- Contamination in the area 61%
- State or local requirement 59%
- Getting a reminder or discount 33%
- New baby living or visiting 28%

Why did you test?

- To know if my water is safe 40%
- Testing program offered 29%
- New well 16%
- Real estate transaction 14%
- Infants or pregnant woman in home -12%
- Test regularly 8%



Questions about water testing

- How would you prefer to get the kit?
- Where would you want to test?
- How would you prefer to get test results?



Main reasons for not testing? (people who haven't tested)

- We've been drinking for years 53%
- Didn't know what to test for -41%
- Don't know how -35%
- It's probably fine 25%
- Didn't know I should 17%



Main reasons for not testing?

(continued)

- It costs too much -17%
- Wait for others -12%
- Dealing with problem would be \$ 12%
- Missed the testing program 8%
- I don't want to know -8%
- We don't drink it -7%



Thoughts about water testing

among those who hadn't tested

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



Where would you look for info?

	MN	WI	MI
Most common response	Local health (23%)	Online (23%)	Local health (36%)
2 nd	State health (20%)	Local health (22%)	Online (25%)
3 rd	Online (17%)	Water test lab (16%)	DEQ (13%)
4 th	Extension (16%)	State Health (15%)	State Health (12%)

Further analysis

- Crosstab analysis with demographics (e.g., age, gender, children, income, education)
- Crosstabs between certain responses
- Analysis of comments



Conclusions

- People believe their water is safe
- 20% didn't know they should test
- 40% don't know what to test for
- People want info from local sources & online
- Program testers were older and longerterm residents

Implications

- Regular programs can prompt testing
 - as can news about contamination
- Cost may be seen as a barrier
 - have to help people see value
- Provide clear outreach materials
 - why, how & what to test for



To increase private well testing

- Be clear about need
- Provide info online and easily accessible
- Make it easy local programs
- Partner with local Public Health
 Departments & private labs



Acknowledgments

- Funding from Extension Great Lakes Regional Water Program, 2006-2008
- Blue Cross Blue Shield of Wisconsin



