Perceptions of drinking water management and safety: A public survey of U.S. residents

Supplementary Materials

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Table S1: Survey questions.

Questions	Response Options
What is the source of your household tap water?	☐ Public supply - municipal
	☐ Public supply - rural water district
	☐ Private supply - private well, river, pond, lake
	☐ Private supply - rainwater harvest system
	☐ I don't know
	☐ Other
What is your main source of drinking water?	☐ Unfiltered tap water
	☐ Filtered tap water
	□ Bottled or prepackaged water
	□ Other

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Table S1: Survey questions. (Continued)

	,
Has your primary source of drinking water ever been impacted by any of the following issues? (select all that apply)	 □ Odd smell □ Discolored water □ Cloudy water □ Staining of clothes, teeth, or skin □ Saltiness (high salt content) □ Hardness or scale buildup (high mineral content)
	□ Corrosion of pipes or water fixtures□ Boil water notice
	☐ Water shortage
	☐ None of the above
To your knowledge, has your primary source of drinking water been impacted by any of the following contaminants? (select all that apply)	
On a scale from 0 to 10, how safe do you believe your drinking water is for consumption?	Scale, 0-10
 ¹What is your level of trust in the following entities for making sure drinking water is safe for consumption: • Federal government • State government • Local government • Water utility • Landlords, property manager • Household residents 	

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Table S1: Survey questions. (Continued)

¹ How often do you use the following sources to	□ Never
get information about drinking water quality?	□ Occasionally
 Local news agency 	☐ Sometimes
 National news agency 	☐ Often
 Local newspaper 	☐ Always
 National newspaper 	
Social media	
 Radio or podcast 	
 Word of mouth 	
• Email	
 Government agencies 	
My water provider	
• Other	

Table S2: Unweighted and weighted survey demographics.

Value	Unweighted (n)	Unweighted (%)	Target (%)	Weighted (n)	Weighted (%)
Age	(11)	(70)	(70)	(11)	(10)
18:24	125	11.4	11.9	130.6	11.9
25:34	192	17.5	17.7	195.1	17.7
35:44	204	18.5	16.6	183.1	16.6
45:54	198	18.0	16.3	179.2	16.3
55:64	171	15.5	16.8	184.4	16.8
65+	208	18.9	20.7	227.6	20.7
No answer	2	0.2	NA	NA	NA
Education					
Some high school	47	4.3	7.8	85.8	7.8
High school graduate or GED	418	38.0	49.4	543.7	49.4
Associate degree	178	16.2	8.3	91.3	8.3
Bachelor's degree	246	22.4	19.4	213.7	19.4
Master's degree	132	12.0	8.3	91.3	8.3
Doctorate or terminal degree	28	2.5	1.3	14.7	1.3
Other	40	3.6	5.4	59.5	5.4
No answer	11	1.0	NA	NA	NA
Race/Ethnicity					
White	723	65.7	62.4	686.3	62.4
Non-white	373	33.9	37.6	413.7	37.6
No answer	4	0.4	NA	NA	NA
Sex/Gender					

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¹ Matrix style question.

Table S2: Unweighted and weighted survey demographics. (Continued)

Male	529	48.1	49.0	539.1	49.0
Not Male	569	51.7	51.0	560.9	51.0
No answer	2	0.2	NA	NA	NA

Table S3: Results of multinomial logistic regression model for primary source of drinking water. Odds-ratios are relative to unfiltered tap water.

	Filtered tap water			Bottled		
Variable	Odds-Ratio, [95% CI]	t-statistic	p-value	Odds-Ratio, [95% CI]	t-statistic	p-value
(Intercept)	0.7, [0.21, 2.31]	-0.59	0.558	0.5, [0.16, 1.58]	-1.18	0.240
Sex/Gender						
Female	1.06, [0.73, 1.54]	0.32	0.752	1.49, [1.02, 2.17]	2.08	0.038
Other	0.22, [0.01, 4.17]	-1.01	0.311	0.51, [0.04, 6.17]	-0.53	0.595
Age						
25:34	0.95, [0.42, 2.13]	-0.13	0.897	1.22, [0.53, 2.81]	0.47	0.641
35:44	0.52, [0.24, 1.14]	-1.64	0.100	0.96, [0.43, 2.13]	-0.11	0.911
45:54	0.29, [0.13, 0.64]	-3.09	0.002	0.69, [0.32, 1.5]	-0.94	0.348
55:64	0.29, [0.13, 0.65]	-3.02	0.002	0.58, [0.25, 1.33]	-1.28	0.201
65+	0.28, [0.13, 0.62]	-3.15	0.002	0.74, [0.33, 1.69]	-0.71	0.480
Race/Ethnicity						
Non-white	1.17, [0.74, 1.85]	0.68	0.496	1.59, [1.01, 2.52]	1.99	0.046
Education						
High school graduate or GED	2.37, [0.93, 6.03]	1.82	0.069	1.08, [0.5, 2.37]	0.20	0.840
Associate degree	1.46, [0.54, 3.94]	0.75	0.451	0.7, [0.3, 1.64]	-0.82	0.410
Bachelor's degree	4.31, [1.59, 11.66]	2.88	0.004	1.24, [0.51, 3.01]	0.47	0.642
Master's degree	3.06, [1.09, 8.59]	2.12	0.034	1.07, [0.41, 2.76]	0.13	0.894
Doctorate or terminal degree	2.81, [0.72, 11]	1.48	0.138	0.63, [0.16, 2.5]	-0.66	0.509
Other	1.23, [0.33, 4.56]	0.32	0.752	1.57, [0.53, 4.67]	0.81	0.417
Home Ownership						
Rent	1.28, [0.86, 1.91]	1.21	0.226	1.64, [1.07, 2.5]	2.29	0.022
Income						
\$25,000 - \$49,999	1.35, [0.79, 2.3]	1.10	0.271	1.22, [0.72, 2.07]	0.75	0.455
\$50,000 - \$74,999	2.2, [1.23, 3.93]	2.66	0.008	1.56, [0.86, 2.83]	1.46	0.145
\$75,000 - \$99,999	1.83, [0.96, 3.5]	1.82	0.068	1.66, [0.84, 3.27]	1.46	0.145
\$100,000 - \$200,000	1.52, [0.77, 3]	1.20	0.230	0.93, [0.45, 1.9]	-0.20	0.838
> \$200,000	2.73, [0.94, 7.97]	1.84	0.066	2.51, [0.78, 8.08]	1.54	0.123
Primary tap water supply						
Public supply - rural water district	1.37, [0.82, 2.28]	1.21	0.227	1.25, [0.74, 2.11]	0.82	0.413
Private supply - well, river, pond, rainwater	0.83, [0.5, 1.39]	-0.70	0.486	0.8, [0.47, 1.38]	-0.79	0.427
I don't know	1.16, [0.6, 2.26]	0.44	0.663	1.6, [0.85, 3]	1.45	0.147
Taste, odor, color issues						
Yes	1.07, [0.75, 1.52]	0.35	0.723	1.4, [0.96, 2.04]	1.75	0.081

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Table S4: Results of proportional odds-models on (1) water safety rating and (2) trust in water utilities. Model coefficients are displayed as odds-ratios relative to the reference level for each variable.

	Water safet	y rating		Trust in water utility			
	Odds-Ratio, [95% CI]	t-stat	p-value	Odds-Ratio, [95% CI]	t-stat	p-value	
Sex/Gender							
Male	-			-			
Female	0.883 [0.683, 1.141]	-0.954	0.340	0.760 [0.593, 0.974]	-2.169	0.030	
Other	0.190 [0.014, 2.563]	-1.253	0.210	0.127 [0.051, 0.311]	-4.505	<0.001	
Age							
18:24	=			=			
25:34	0.906 [0.550, 1.491]	-0.390	0.697	0.935 [0.586, 1.493]	-0.280	0.779	
35:44	0.730 [0.439, 1.215]	-1.213	0.226	0.793 [0.484, 1.300]	-0.920	0.358	
45:54	0.528 [0.301, 0.928]	-2.221	0.027	0.457 [0.276, 0.759]	-3.029	0.003	
55:64	0.849 [0.485, 1.486]	-0.574	0.566	0.720 [0.429, 1.211]	-1.239	0.216	
65+	0.708 [0.416, 1.205]	-1.273	0.203	1.142 [0.675, 1.933]	0.497	0.620	
Race/Ethnicity							
White	-			-			
Non-white	0.859 [0.642, 1.148]	-1.029	0.304	0.783 [0.575, 1.067]	-1.550	0.122	
Education	- , -						
Some high school	-			=			
High school graduate or GED	1.920 [0.926, 3.980]	1.756	0.079	1.243 [0.580, 2.664]	0.560	0.576	
Associate degree	1.715 [0.794, 3.702]	1.376	0.169	1.025 [0.461, 2.282]	0.061	0.951	
Bachelor's degree	2.185 [1.019, 4.684]	2.012	0.045	1.514 [0.681, 3.363]	1.019	0.308	
Master's degree	3.339 [1.487, 7.494]	2.926	0.004	2.001 [0.881, 4.545]	1.660	0.097	
Doctorate or terminal degree	2.274 [0.757, 6.829]	1.466	0.143	1.684 [0.685, 4.141]	1.138	0.256	
Other	1.814 [0.694, 4.738]	1.217	0.224	0.951 [0.366, 2.472]	-0.103	0.918	
Homeownership	, , , , , , , , , , , , , , , , , , , ,						
Own	-			=			
Rent	0.689 [0.527, 0.901]	-2.721	0.007	0.676 [0.513, 0.889]	-2.799	0.005	
Income				[,]			
< \$25,000	-			_			
\$25,000 - \$49,999	0.790 [0.547, 1.141]	-1.259	0.209	1.187 [0.815, 1.728]	0.895	0.371	
\$50,000 - \$74,999	0.864 [0.577, 1.294]	-0.710	0.478	1.075 [0.720, 1.605]	0.354	0.723	
\$75,000 - \$99,999	0.701 [0.444, 1.107]	-1.526	0.127	0.901 [0.574, 1.416]	-0.451	0.652	
\$100,000 - \$200,000	1.529 [0.976, 2.396]	1.855	0.064	1.502 [0.962, 2.344]	1.793	0.073	
> \$200,000	0.872 [0.400, 1.898]	-0.346	0.729	1.823 [0.895, 3.710]	1.657	0.098	
Primary tap water supply	0.072 [0.100, 1.070]	0.0.0	0.723		1.007	0.070	
Public supply - municipal	-			_			
Public supply - rural water district	1.070 [0.768, 1.490]	0.400	0.689	0.808 [0.582, 1.124]	-1.268	0.205	
Private supply - well, river, pond, rainwater	0.763 [0.547, 1.064]	-1.597	0.111	1.544 [1.098, 2.173]	2.498	0.013	
I don't know	0.882 [0.568, 1.368]	-0.563	0.574	0.992 [0.617, 1.594]	-0.034	0.973	
Taste, odor, color issues	3.332 [0.333, 1.330]	0.000	0.07 T	0.552 [0.017, 1.054]	0.004	0.770	
No	<u>-</u>			-			
Yes	0.728 [0.568, 0.932]	-2.516	0.012	0.321 [0.248, 0.415]	-8.695	<0.001	