

**Table CE4-10c. Water-Heating Energy Consumption in U.S. Households
by Midwest Census Region, 2001**

	Midwest Census Region				RSE Row Factors
	Total U.S.	Total	Census Division		
			East North Central	West North Central	
	0.6	0.9	1.3	1.5	
Million Households					
Total U.S. Households	107.0	24.5	17.1	7.4	NE
No Water Heating	Q	Q	Q	Q	NF
Water Heating	106.9	24.5	17.1	7.4	NE
Not Using a Major Fuel ¹	0.2	Q	Q	Q	72.5
Using a Major Fuel ¹	106.7	24.5	17.1	7.4	NE
For Main Water Heating	106.5	24.5	17.1	7.4	NE
Number of Households with Water Heating, Major Fuels Used:					
Electricity	41.6	6.4	4.2	2.2	6.8
Natural Gas	58.2	17.0	12.5	4.5	4.0
Fuel Oil	4.7	Q	Q	Q	19.4
LPG	3.0	1.3	0.5	0.7	23.0
Quadrillion Btu^a					
Water-Heating Btu Consumption, Major Fuels Used:					
Electricity	0.36	0.05	0.03	0.02	7.6
Natural Gas	1.15	0.35	0.26	0.09	4.8
Fuel Oil	0.13	Q	Q	Q	21.9
LPG	0.05	0.02	0.01	0.01	24.7
Total ²	1.68	0.43	0.30	0.12	2.6
Physical Units^a					
Physical Units of Water-Heating Consumption, Major Fuels Used:					
Electricity (billion kWh)	104	16	10	6	7.6
Natural Gas (billion cf)	1,115	341	253	88	4.8
Fuel Oil (million gallons)	950	Q	Q	Q	21.9
LPG (million gallons)	515	232	93	139	24.7
Million Btu per Household^{3,a}					
Average Water-Heating Btu Consumption per Household					
Using a Major Fuel ¹	15.8	17.4	17.7	16.8	2.6
For Main Water Heating	15.8	17.4	17.7	16.8	2.6
Million Households					
Number of Households, Where the Main Water-Heating Fuel Is:					
Electricity	40.8	6.3	4.2	2.2	6.8
Natural Gas	58.0	16.9	12.4	4.5	3.9
Fuel Oil	4.6	Q	Q	Q	20.2
LPG	2.9	1.3	0.5	0.7	23.0
No Water Heating	Q	Q	Q	Q	NF

See footnotes at end of table.

Table CE4-10c. Water-Heating Energy Consumption in U.S. Households by Midwest Census Region, 2001 (Continued)

	Midwest Census Region				RSE Row Factors
	Total U.S.	Total	Census Division		
			East North Central	West North Central	
RSE Column Factor:	0.6	0.9	1.3	1.5	
Million Btu per Household^{3,a}					
Water-Heating Btu Consumption per Household,³ Where the Main Water-Heating Fuel Is:					
Electricity	8.7	8.6	8.0	9.7	3.0
Natural Gas	19.7	20.6	20.8	20.1	2.7
Fuel Oil	28.1	Q	Q	Q	6.8
LPG	15.9	16.9	16.0	17.5	6.4
Physical Units (PU) per Household^{3,a}					
Physical Units of Water-Heating Consumption per Household,³ Where the Main Water-Heating Fuel Is:					
Electricity (kWh)	2,552	2,515	2,337	2,854	3.0
Natural Gas (thousand cf)	19	20	20	20	2.7
Fuel Oil (gallons)	203	Q	Q	Q	6.8
LPG (gallons)	174	185	175	192	6.4
Number of Household Members (NHM) per Household³					
Number of Household Members per Household, Where the Main Water-Heating Fuel Is:					
Electricity	2.4	2.4	2.3	2.5	3.3
Natural Gas	2.7	2.6	2.6	2.4	3.3
Fuel Oil	2.4	Q	Q	Q	6.8
LPG	2.6	2.6	2.7	2.5	5.9
Water-Heating Intensity^{3,a} (PU÷NHM)					
Water-Heating Intensity, Where the Main Water-Heating Fuel Is:					
Electricity	1,048	1,069	1,034	1,126	3.9
Natural Gas	7.2	7.8	7.7	8.0	2.1
Fuel Oil	84	Q	Q	Q	9.1
LPG	68	72	65	77	5.6

¹ The major fuels are electricity, natural gas, fuel oil, kerosene, and liquefied petroleum gas (LPG).

² Includes a small amount of kerosene use for water heating.

³ Includes only the water-heating consumption of the water-heating fuel. Not included are: 1) the consumption of the main water-heating fuel for uses other than water heating; 2) the consumption of the main water-heating fuel where it is the secondary, and not the main, water-heating fuel, and; 3) the consumption of other fuels that are used as secondary water-heating fuels.

³ Averages are for those households using each of the main water-heating fuels.

^a The row factor in this section is underestimated because it contains no error for estimating the end-use.

NE = RSE row factor not estimated because RSE's for all statistics in this row are between 0.0 and 1.0 percent.

NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

• See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 2001 Residential Energy Consumption Survey.