

**Table CE4-10e. Water-Heating Energy Expenditures 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	1.0	1.3	1.4	
RSE Column Factor:					
<b>Million Households</b>					
<b>Total U.S. Households</b> .....	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 <sup>1</sup> .....	0.2	Q	Q	Q	73.1
Using a Major Fuel <sup>1</sup> .....	106.7	24.5	17.1	7.4	NE
For Main Water Heating .....	106.5	24.5	17.1	7.4	NE
<b>Number of Households with Water Heating, Major Fuels Used:</b>					
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	19.6
LPG .....	3.0	1.3	0.5	0.7	23.0
<b>Billion Dollars<sup>a</sup></b>					
<b>Water-Heating Expenditures, Major Fuels Used:</b>					
Electricity .....	8.47	1.24	0.77	0.47	7.7
Natural Gas .....	11.31	2.98	2.14	0.84	5.2
Fuel Oil .....	1.14	Q	Q	Q	22.2
LPG .....	0.69	0.27	0.11	0.16	24.8
Total <sup>2</sup> .....	21.61	4.50	3.02	1.47	2.5
<b>Dollars per Household<sup>4,a</sup></b>					
<b>Average Water-Heating Expenditures per Household</b>					
Using a Major Fuel <sup>1</sup> .....	203	184	177	199	2.5
For Main Water Heating .....	203	184	177	199	2.5
<b>Million Households</b>					
<b>Number of Households, Where the Main Water-Heating Fuel Is:</b>					
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	20.4
LPG .....	2.9	1.3	0.5	0.7	23.0
Does Not Heat Water .....	Q	Q	Q	Q	NF
<b>Dollars per Household<sup>4,a</sup></b>					
<b>Water-Heating Expenditures per Household,<sup>3</sup> Where the Main Water-Heating Fuel Is:</b>					
Electricity .....	208	196	186	214	3.8
Natural Gas .....	194	175	171	188	3.4
Fuel Oil .....	243	Q	Q	Q	7.7
LPG .....	233	218	213	222	5.6

See footnotes at end of table.

**Table CE4-10e. Water-Heating Energy Expenditures 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	1.0	1.3	1.4	
<b>Number of Household Members (NHM) per Household<sup>4</sup></b>					
<b>Number of Household Members per Household, Where the Main Water-Heating Fuel Is:</b>					
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
<b>Water-Heating Intensity<sup>4,a</sup> (Dollars÷NHM)</b>					
<b>Water-Heating Intensity, Where the Main Water-Heating Fuel Is:</b>					
Electricity .....	85	83	82	85	3.7
Natural Gas .....	73	68	65	77	3.6
Fuel Oil .....	101	Q	Q	Q	9.5
LPG .....	91	85	79	89	5.8

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

<sup>2</sup> Includes a small amount of kerosene use for water heating.

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

<sup>4</sup> Averages are for those households using each of the main water-heating fuels.

<sup>a</sup> 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.