Residential Energy Consumption Surveys

1997 Housing Characteristics Tables

Appliances Tables

(Percent of U.S. Households; 48 pages, 144 kb)

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These data are from the 1997 Residential Energy Consumption Survey (RECS) which provides information on the use of energy in residential housing units in the United States. The RECS is a national statistical survey that collects data for occupied primary housing units. RECS was first conducted in 1978; the sixth and most recent survey was conducted in 1997 RECS. The data were collected from a sample of 5,900 housing units statistically selected to represent the 101.5 million units in the United States. The 1997 data are available for the four Census regions, the nine Census divisions, and for the four most populous States--California, Florida, New York, and Texas.

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Contact: Robert Latta, Survey Manager (rlatta@eia.doe.gov)

World Wide Web: http://www.eia.doe.gov/emeu/consumption

Table HC5-1b. Appliances by Climate Zone, Percent of U.S. Households, 1997

				Climate Zone ¹			
			Fewer than 2,	000 CDD and		2,000 CDD or More	
Appliance Types and Characteristics	Total	More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD	and Fewer than 4,000 HDD	RSE
RSE Column Factor:	0.5	1.4	1.0	1.1	1.3	1.1	Row Factors
Total	100.0	100.0	100.0	100.0	100.0	100.0	0.0
	100.0	100.0	100.0	100.0	100.0	100.0	0.0
Households With Electric Air-Conditioning Equipment Central Equipment Not Used Room Air Conditioners Not Used	72.5 0.3 0.7	56.9 Q Q	66.3 Q 1.3	79.1 Q Q	62.5 Q Q	89.0 Q Q	3.5 40.0 28.1
Households Using Electric Air-Conditioning ²	71.6	56.1	65.0	78.4	61.6	88.2	3.6
Type of Electric Air-Conditioning							
Used Central Air-Conditioning ³	46.8	31.1	37.5	46.0	43.1	69.0	6.0
Without a Heat Pump With a Heat Pump	36.4 10.4	29.6 1.5	35.1 2.5	33.2 12.8	29.5 13.7	50.1 18.9	8.6 17.7
Room Air-Conditioning	24.8	24.9	27.5	32.4	18.5	19.2	7.9
1 Unit	14.7	18.8	17.7	16.3	12.9	9.0	9.2
2 Units 3 or More Units	7.1 3.0	5.4 Q	7.0 2.7	11.2 4.9	4.4 1.3	6.2 3.9	12.8 19.2
Clothes Washer	77.4	85.5	78.3	77.4	72.6	77.0	2.4
Clothes Dryer	71.2	82.6	73.5	70.2	66.1	68.8	2.7
Electric Natural Gas	55.1 15.2	64.2 16.0	51.0 21.6	57.0 12.2	51.2 14.6	58.0 10.3	4.2 11.1
LPG	0.8	2.4	0.9	0.9	Q Q	Q Q	28.8
Dishwasher	50.2	47.4	51.6	50.3	46.6	52.5	4.2
Ceiling Fans	60.1	58.4	56.8	57.9	53.9	72.7	3.5
1	23.3	29.3	27.7	23.9	19.6	17.7	6.1
2	13.8 23.0	14.8 14.3	13.3 15.7	13.9 20.1	12.9 21.3	14.7 40.4	7.8 6.8
Freezer	33.2	49.1	33.5	31.7	28.7	31.4	6.5
12 or more	30.2 2.9	44.2 4.9	30.7 2.9	29.7 2.0	26.6 2.1	27.7 3.7	6.6 16.1
Most-Used Freezer							
Defrost Method Frost-Free	10.5	12.4	10.0	10.4	10.7	10.4	8.5
Manual	22.6	36.7	23.5	21.3	18.0	21.0	8.0
Type of Freezer	16.3	20.4	16.2	16.4	15.0	15 7	6.6
Upright Chest	16.9	28.7	17.3	15.4	13.7	15.7 15.7	10.5
Age of Freezer Less than 2 Years	2.4	4.0	2.7	1.4	1.4	3.1	19.1
2 to 4 Years	4.1	4.5	4.3	3.7	4.7	3.6	17.8
5 to 9 Years	7.4	10.1	6.9	6.8	7.6	7.4	11.5
10 to 19 Years	12.2	17.0	11.6	12.8	10.5	11.6	9.0
20 Years or More	6.6 0.5	13.0	7.4	6.3 0.8	4.2	5.2	13.3 31.0
Don't Know	0.5	Q	Q	0.8	Q	Q	

Table HC5-1b. Appliances by Climate Zone,
Percent of U.S. Households, 1997 (Continued)

				Climate Zone ¹					
			Fewer than 2,000 CDD and						
Appliance Types and Characteristics	Total	More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD	or More and Fewer than 4,000 HDD	RSE		
RSE Column Factor:	0.5	1.4	1.0	1.1	1.3	1.1	Row Factors		
				1	1				
Freezer Size Very Small (Less than 11 cf) Small (11-14 cf) Medium (15-18 cf) Large (19-22 cf) Very Large (23 or More cf)	2.7	4.1	3.2	2.5	1.5	2.6	17.5		
	6.6	11.6	6.5	6.8	5.6	5.4	11.6		
	13.3	19.2	12.0	13.2	11.6	13.9	10.1		
	8.9	11.9	9.6	7.9	8.7	8.0	10.9		
	1.7	2.3	2.2	1.2	1.4	1.6	21.4		
Heaters (other) Hot Tub or Spa Electric Natural Gas LPG/Other	3.9 2.6 1.1 Q	2.7 2.2 Q Q	3.7 2.5 1.0 Q	3.6 3.2 Q	4.2 2.7 1.4 Q	4.8 2.3 Q Q	15.6 18.4 28.6 NF		
Portable Space	13.9	16.6	12.8	16.3	13.5	12.1	7.7		
	12.1	15.3	11.3	13.6	11.1	11.3	8.2		
	2.0	1.7	1.7	3.0	2.7	1.0	20.4		
Swimming Pool Natural Gas Electric/LPG/Other	1.1	Q	1.0	Q	1.1	2.1	35.5		
	0.7	Q	Q	Q	Q	Q	50.3		
	0.4	Q	Q	Q	Q	Q	56.0		
Waterbed Heaters	8.3	11.9	11.6	6.4	4.9	7.5	12.0		
	6.8	10.1	9.8	5.0	4.2	5.8	14.2		
	1.4	1.7	1.7	1.4	Q	1.6	21.4		
Waterbed Heaters Used All Year1	7.3	10.8	10.5	5.3	4.3	6.6	12.4		
	6.4	9.5	9.1	4.5	3.7	5.7	14.6		
2 or More	1.0	Q	1.4	0.8	Q	0.9	22.8		
	98.8	98.9	99.2	98.9	98.2	98.7	NF		
Electric Natural Gas LPG Other	61.4	70.9	56.7	58.7	58.3	68.9	3.6		
	33.3	19.6	39.0	36.5	36.0	26.0	7.4		
	4.1	8.3	3.5	3.7	3.9	3.6	23.2		
	Q	Q	Q	Q	Q	Q	NF		
Self-Cleaning Oven Continuous Manual Start	44.1	49.4	48.9	44.1	38.0	41.0	4.1		
	9.9	8.8	9.2	11.4	9.5	10.2	9.2		
	34.1	40.5	39.7	32.7	28.5	30.9	5.0		
Pumps (Electric) Hot Tub or Spa Swimming Pool Well Water	19.8	27.9	22.5	19.5	14.1	18.6	8.8		
	4.0	2.9	3.7	3.7	4.2	4.8	15.1		
	5.4	2.7	5.1	5.2	3.4	8.8	13.9		
	14.1	25.2	17.1	13.7	8.5	11.1	13.8		
Range Electric Natural Gas LPG Other	99.2	99.6	99.4	99.1	98.9	99.1	NF		
	60.2	70.2	56.0	57.8	56.0	67.4	3.8		
	34.7	20.8	39.8	37.2	38.7	27.8	7.3		
	4.3	8.7	3.6	4.0	4.2	3.8	22.7		
	Q	Q	Q	Q	Q	Q	NF		
Refrigerators 12 or More	99.8	99.7	100.0	99.9	99.7	99.8	NF		
	84.7	82.2	82.4	85.4	86.4	86.5	1.3		
	15.2	17.5	17.6	14.5	13.3	13.3	7.4		

Table HC5-1b. Appliances by Climate Zone,
Percent of U.S. Households, 1997 (Continued)

				Climate Zone ¹			
				2,000 CDD or More			
Appliance Types and Characteristics	Total	More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD	and Fewer than 4,000 HDD	RSE
RSE Column Factor:	0.5	1.4	1.0	1.1	1.3	1.1	Row Factors
Most-Used Refrigerator							
Defrost Method							
Frost-Free	86.8	83.9	85.0	86.8	86.2	90.8	1.2
Manual	13.1	15.8	15.0	13.1	13.6	9.0	8.1
Type of Refrigerator							
2-Doors (top and bottom)	68.0	76.1	71.4	71.7	58.8	64.4	2.5
2-Doors (side-by-side)	20.4	14.1	18.9	16.9	24.4	25.0	7.4
Regular (single door) Half-Size/Other	10.7 0.7	8.4 Q	8.9 0.7	11.0 Q	15.6 0.9	9.2 1.0	12.7 32.0
Age of Refrigerator							
Less than 2 Years	13.2	11.8	13.7	12.4	14.0	13.4	7.3
2 to 4 Years	21.0	16.7	20.2	21.2	22.6	22.4	5.3
5 to 9 Years	29.9	33.4	27.4	31.0	29.8	30.3	4.9
10 to 19 Years	23.8	24.4	24.4	24.3	24.0	22.1	4.6
20 Years or More Don't Know	7.0 5.0	9.6 3.8	7.9	5.9 5.1	7.1 2.1	5.7 5.8	9.3
Don't Know	5.0	3.0	6.5	5.1	2.1	5.6	17.3
Size of Refrigerator Very Small (Less than 11 cf)	0.9	Q	0.9	1.1	1.1	Q	24.3
Small (11-14 cf)	7.6	6.3	6.9	6.0	9.9	8.8	9.4
Medium (15-18 cf)	45.0	48.0	46.2	50.7	40.2	40.7	3.4
Large (19-22 cf)	44.8	42.9	44.4	40.7	47.3	48.1	4.1
Very Large (23 or More cf)	1.5	Q	1.5	1.4	1.3	1.7	19.7
Through-the-Door Ice/Water Service							
Yes	13.0	6.8	11.3	9.8	15.6	18.6	9.7
No	87.0	93.2	88.7	90.2	84.4	81.4	1.3
Color Television Sets	98.7	98.1	99.1	98.9	98.5	98.4	NF
1	31.8	38.9	32.2	29.3	32.0	30.8	5.0
2	37.4	34.6	35.7	37.4	40.7	37.6	3.6
3 4	19.1 7.7	14.2 8.7	21.8 7.2	19.7 8.5	17.8 5.7	18.3 8.6	6.0 11.0
5 or More	2.7	1.8	2.2	4.0	2.2	3.0	18.2
Video Cassetto Boorders							
Video Cassette Recorders (VCR's)	87.6	88.2	88.9	87.7	88.2	84.9	1.3
1	55.5	59.9	56.5	56.0	57.0	50.7	3.0
2	24.9	23.4	24.2	24.6	25.2	26.4	6.4
3 or More	7.2	4.8	8.1	7.2	6.0	7.9	11.0
Water Heaters	100.0	100.0	100.0	100.0	100.0	100.0	NE
Electric	39.1	39.6	27.5	40.1	38.9	52.5	7.0
For One Housing Unit For Two or More Units	37.3 1.8	37.4 2.2	25.7 1.8	38.6 1.5	37.6 1.3	50.1 2.4	7.3 24.0
Natural Gas	51.9	2.2 45.4	63.4	43.5	57.4	43.8	6.1
For One Housing Unit	45.8	39.2	55.4	36.6	50.8	41.4	6.7
For Two or More Units	6.1	6.2	8.0	6.9	6.6	2.3	17.9
Fuel Oil	5.1	8.1	5.7	12.4	Q	Q	19.1
For Two or More Units	3.1	6.0	4.7	5.7 6.7	Q	Q	23.0
For Two or More Units LPG	2.0 3.2	Q 5.5	1.0 3.0	6.7 3.2	Q 3.3	Q 2.3	23.0 22.3
Other	0.7	0.5 Q	3.0 Q	3.2 Q	3.3 Q	1.0	42.0
No Water Heater	0.2	Q	Q	Q	Q	Q	69.9

Table HC5-1b. Appliances by Climate Zone, Percent of U.S. Households, 1997 (Continued)

				Climate Zone ¹			
			2,000 CDD or More				
Appliance Types and Characteristics	Total	More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD	and Fewer than 4,000 HDD	RSE
RSE Column Factor:	0.5	1.4	1.0	1.1	1.3	1.1	Row Factors
					I.		
Water Heater (for one housing							
unit)	89.7	88.6	88.9	84.5	91.8	94.8	1.5
Age							
Less than 2 Years	11.1	10.4	12.1	11.0	10.8	10.3	9.5
2 to 4 Years	16.8	16.1	17.9	13.4	16.7	19.0	6.7
5 to 9 Years	25.0	22.9	23.9	23.5	26.0	27.7	5.3
10 to 19 Years	19.9	23.5	17.5	20.1	20.2	21.2	6.9
20 Years or More	7.0	7.8	6.6	5.0	10.5	6.3	11.7
Don't Know	7.0	3.8	7.6	5.5	6.6	9.6	12.1
No Separate Heater	2.9	4.2	3.3	6.0	1.0	0.6	26.9
No Water Heater	0.2	Q.	Q.S	Q.O	Q	Q.O	69.9
Water Heaters for	0.2	Q	Q	Q	Q	Q	03.3
Two or More Units	10.1	11.4	11.1	15.4	8.0	4.8	14.4
	10.1			10.1	0.0	1.0	'
Size							l
Small	15.3	12.5	12.9	12.9	15.7	21.5	8.8
Medium	46.4	48.3	47.4	40.3	49.2	48.2	4.0
Large	21.3	21.1	20.3	22.1	23.6	20.1	7.6
Don't Know	3.7	2.6	5.0	3.2	2.2	4.4	20.1
No Separate Heater	2.9	4.2	3.3	6.0	1.0	0.6	26.9
No Water Heater	0.2	Q	Q	Q	Q	Q	69.9
Water Heaters for							
Two or More Units	10.1	11.4	11.1	15.4	8.0	4.8	14.4
Other Appliances							
Heated Aquarium	3.8	4.5	4.0	3.7	4.1	3.2	13.9
Microwave Oven	83.0	90.5	83.9	83.6	81.3	79.5	1.6
Outdoor Gas Light ³	0.7	Q	1.1	Q	Q	1.0	33.6
Rechargeable Tools/							
or Appliances	43.7	51.3	45.4	43.7	41.0	41.0	3.4
Stereo Equipment	68.8	67.5	69.3	68.6	69.5	68.4	1.9

¹ One of five climatically distinct areas, determined according to the 30-year average (1961-1990) of the annual heating and cooling degree-days. For this report, the heating or cooling degree-days are a measure of how cold or how hot a location is over a period of one year, relative to a base temperature of 65 degrees Fahrenheit. A household is assigned to a climate some according to the 30-year average annual degree-days for an appropriate nearby weather station.

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

The number of households, where the end use is electric air-conditioning, does not include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

3 Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These are excluded from the count of 25.2 million

households using only room air-conditioners.

cf = Cubic feet.

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.
• Percentages are calculated on unrounded numbers. • 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, B, C of the 1997 Residential Energy Consumption Survey.

Table HC5-2b. Appliances by Year of Construction, Percent of U.S. Households, 1997

				Year of C	onstruction				
Appliance Types and Characteristics	Total	1990 to 1997 ¹	1980 to 1989	1970 to 1979	1960 to 1969	1950 to 1959	1949 or Before		
RSE Column Factor:	0.5	0.5	1.6	1.1	1.0	1.1	1.2	0.9	RSE Row Factors
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	
Households With Electric									
Air-Conditioning Equipment	72.5	85.9	85.5	75.6	70.7	71.2	59.1	2.4	
Central Equipment Not Used	0.3	Q	Q	Q	Q	Q	Q	39.0	
Room Air Conditioners Not Used	0.7	Q	Q	Q	Q	Q	1.2	28.7	
Households Using Electric Air-Conditioning ²	71.6	85.6	84.6	75.1	69.3	70.9	57.6	2.5	
Type of Electric Air-Conditioning									
Used Central Air-Conditioning ³	46.8	77.4	74.4	55.1	45.3	36.7	18.5	4.1	
Without a Heat Pump	36.4	57.3	51.8	41.7	38.4	30.6	17.3	5.9	
With a Heat Pump	10.4	20.1	22.6	13.3	6.9	6.0	1.2	14.5	
Room Air-Conditioning	24.8	8.3	10.2	20.0	24.0	34.3	39.1	7.7	
1 Unit	14.7	6.3	7.9	13.3	14.1	17.9	21.5	10.1	
2 Units	7.1	Q	1.6	4.6	6.5	12.0	12.4	12.6	
3 or More Units	3.0	Q	Q	2.1	3.3	4.4	5.2	18.7	
Clothes Washer	77.4	89.7	83.0	72.7	70.1	81.0	75.1	2.2	
Clothes Dryer	71.2	88.3	80.0	68.8	63.4	71.7	65.1	2.5	
Electric	55.1	71.7	67.0	59.0	49.6	48.8	45.0	3.7	
Natural Gas	15.2	16.0	12.1	9.2	13.2	22.5	18.9	11.3	
LPG	0.8	Q	Q	0.7	Q	Q	1.2	29.0	
Dishwasher	50.2	76.7	71.2	56.6	48.3	37.2	30.3	3.7	
Ceiling Fans	60.1	75.7	64.2	58.5	59.8	57.2	54.7	3.0	
1	23.3	28.7	21.3	24.1	26.0	20.5	21.9	6.8	
2	13.8	16.3	13.3	13.3	12.1	12.7	15.0	8.4	
3 or more	23.0	30.6	29.6	21.1	21.8	24.1	17.8	6.0	
Freezer	33.2	35.5	30.9	30.8	33.1	32.3	35.9	5.0	
1	30.2	33.6	28.8	28.2	28.3	30.0	32.5	5.4	
2 or more Most-Used Freezer	2.9	Q	2.0	2.6	4.8	2.3	3.3	17.8	
Defrost Method	40 =	40.0	44.5	2.2	40.0	40 :			
Frost-Free	10.5	13.9	11.0	9.3	10.8	10.4	9.9	8.9	
Manual	22.6	21.6	19.8	21.6	22.3	22.0	25.9	6.3	
Type of Freezer	40.0	40.0	4	4-0	40-	40-			
Upright Chest	16.3 16.9	16.3 19.2	17.4 13.4	15.8 15.0	16.7 16.4	16.7 15.6	15.6 20.3	7.1 7.6	
Age of Freezer									
Less than 2 Years	2.4	4.7	2.5	1.7	2.3	1.8	2.2	20.8	
2 to 4 Years	4.1	6.9	4.0	3.8	2.9	3.3	4.5	17.3	
5 to 9 Years	7.4	9.4	10.0	7.0	5.7	6.1	6.8	11.8	
10 to 19 Years 20 Years or More	12.2 6.6	10.8 3.2	10.8 3.2	11.2 6.8	13.0 8.3	11.6 8.9	13.9 7.7	9.0 13.1	
Don't Know	0.5	3.2 Q	Q.2	0.8 Q	0.3 Q	0.9 Q	0.7	33.2	

Table HC5-2b. Appliances by Year of Construction, Percent of U.S. Households, 1997 (Continued)

				Year of Co	onstruction			
Appliance Types and Characteristics	Total	1990 to 1997 ¹	1980 to 1989	1970 to 1979	1960 to 1969	1950 to 1959	1949 or Before	
RSE Column Factor:	0.5	1.6	1.1	1.0	1.1	1.2	0.9	RSE Row Factors
Freezer Size								
Very Small (Less than 11 cf)	2.7	3.2	2.3	2.5	2.3	2.3	3.2	19.6
Small (11-14 cf)	6.6	7.9	7.1	6.7	6.2	4.9	6.8	12.2
Medium (15-18 cf)	13.3	14.9	13.0	12.0	13.5	12.6	13.9	9.0
Large (19-22 cf)	8.9	7.3	6.8	8.5	9.1	9.8	10.6	10.9
Very Large (23 or More cf)	1.7	2.1	1.6	1.2	1.9	2.8	1.3	24.0
Heaters (other)								
Hot Tub or Spa	3.9	9.2	5.6	4.7	2.7	2.7	1.7	16.7
Electric	2.6	5.5	2.9	3.5	2.1	2.2	1.4	19.9
Natural Gas	1.1	Q	2.5	1.1	Q	Q	Q	36.0
LPG/Other	Q	Q	Q	Q	Q	Q	Q	NF
Portable Space	13.9	7.2	12.6	10.8	15.4	15.3	17.8	8.5
Electric	12.1	6.2	11.2	9.0	14.1	13.9	15.1	9.3
Kerosene	2.0	Q	1.7	2.0	1.6	1.4	3.2	21.9
Swimming Pool	1.1	Q	Q	1.5	Q	Q	0.9	34.2
Natural Gas	0.7	Q	Q	Q	Q	Q	Q	49.1
Electric/LPG/Other	0.4	Q	Q	Q	Q	Q	Q	54.6
Waterbed Heaters	8.3	8.9	9.1	9.7	7.9	8.1	6.8	11.7
1 2 or More	6.8 1.4	7.9 Q	7.5 1.6	7.5 2.2	6.7 1.2	7.3 Q	5.4 1.4	12.9 24.0
		~				~		
Waterbed Heaters								
Used All Year	7.3	8.3	7.9	8.4	6.8	7.7	6.0	12.5
1	6.4	8.0	7.0	7.2	5.7	7.0	4.8	13.8
2 or More	1.0	Q	Q	1.2	1.2	Q	1.1	25.5
Oven	98.8	98.9	99.2	99.3	98.7	98.8	98.2	NF
Electric	61.4	76.3	76.6	73.3	63.6	53.9	40.7	3.3
Natural Gas	33.3	18.3	18.7	21.6	30.0	43.3	52.8	7.2
Uther	4.1 Q	4.3 Q	3.8 Q	4.3 Q	5.1 Q	1.5 Q	4.7 Q	17.9 NF
Self-Cleaning Oven	44.1	59.6	51.8	48.5	39.1	40.0	35.2	4.2
Continuous Manual Start	9.9 34.1	13.3 46.3	10.2 41.6	10.5 38.0	8.7 30.4	10.5 29.4	8.5 26.7	9.6 5.1
Pumps (Electric)	19.8	26.3	18.9	23.5	18.7	16.3	17.7	7.9
Hot Tub or Spa	4.0	9.5	5.6	4.7	2.7	2.8	1.7	16.6
Swimming Pool Well Water	5.4 14.1	5.1 18.9	6.4 12.1	8.2 16.6	4.5 13.3	5.0 10.6	3.5 14.0	14.0 11.2
Range	99.2	99.4	99.5	99.6	99.3	98.8	98.7	NF
Electric	60.2	72.4	75.3	72.7	62.5	52.2	40.1	3.6
Natural Gas	34.7	22.0	20.1	22.4	31.6	45.0	53.6	7.1
LPG	4.3	5.0	4.1	4.4	5.3	1.5	4.9	17.9
Other	Q.	Q.	Q	Q.	Q.3.3	Q.	Q Q	NF
Refrigerators	99.8	100.0	99.9	99.9	99.7	99.9	99.8	NF
1	84.7	83.1	83.6	87.1	82.0	81.7	87.0	1.4

Table HC5-2b. Appliances by Year of Construction, Percent of U.S. Households, 1997 (Continued)

		Year of Construction								
Appliance Types and Characteristics	Total	1990 to 1997 ¹	1980 to 1989	1970 to 1979	1960 to 1969	1950 to 1959	1949 or Before			
RSE Column Factor:	0.5	1.6	1.1	1.0	1.1	1.2	0.9	RSE Row Factors		
Most-Used Refrigerator										
Defrost Method										
Frost-Free	86.8	95.2	90.4	87.3	83.7	88.1	82.2	1.2		
Manual	13.1	4.8	9.5	12.6	16.0	11.8	17.6	9.5		
Type of Refrigerator										
2-Doors (top and bottom)	68.0	58.8	70.6	68.5	64.0	69.9	70.3	2.4		
2-Doors (side-by-side)	20.4	34.0	20.8	20.8	20.5	19.6	15.5	7.0		
Regular (single door)	10.7	7.1	7.4	10.1	14.5	9.8	12.8	11.8		
Half-Size/Other	0.7	Q	Q	Q	Q	Q	1.1	29.7		
Age of Refrigerator										
Less than 2 Years	13.2	24.7	10.0	14.5	10.2	11.3	12.7	8.1		
2 to 4 Years	21.0	33.7	17.0	20.8	22.4	19.7	19.3	6.0		
5 to 9 Years	29.9	31.1	35.8	27.0	29.1	29.7	28.2	4.8		
10 to 19 Years	23.8	8.7	30.0	22.9	22.7	24.3	26.1	5.9		
20 Years or More	7.0	Q	1.6	9.0	9.6	9.0	8.7	11.7		
Don't Know	5.0	Q	5.5	5.7	5.7	5.9	4.8	16.1		
Size of Refrigerator										
Very Small (Less than 11 cf)	0.9	Q	Q	0.9	1.0	Q	1.4	25.8		
Small (11-14 cf)	7.6	3.4	6.9	7.8	7.8	7.6	9.3	12.1		
Medium (15-18 cf)	45.0	38.3	46.0	45.8	46.0	44.7	45.8	3.8		
Large (19-22 cf)	44.8	56.1	44.9	44.0	43.0	45.7	42.0	4.0		
Very Large (23 or More cf)	1.5	Q	1.4	1.4	1.9	1.4	1.3	24.4		
Through-the-Door Ice/Water Service										
Yes	13.0	28.2	14.5	13.3	11.6	11.4	7.8	9.2		
No	87.0	71.8	85.5	86.7	88.4	88.6	92.2	1.5		
Color Television Sets	98.7	99.3	99.2	98.9	98.9	98.6	98.0	NF		
1	31.8	23.4	26.9	33.1	33.4	30.6	36.7	5.2		
2	37.4	40.6	39.3	38.5	36.5	36.8	35.0	4.1		
3	19.1	21.6	21.0	17.4	20.1	20.9	17.0	6.6		
4	7.7	8.8	8.7	7.8	5.8	8.8	7.0	11.7		
5 or More	2.7	4.8	3.3	2.1	3.2	1.6	2.4	19.3		
Video Cassette Recorders										
(VCR's)	87.6	94.5	91.2	88.6	88.3	84.7	83.1	1.2		
1	55.5	54.6	53.6	55.6	57.8	54.8	56.1	2.9		
2	24.9	30.1	28.5	26.3	24.3	23.4	20.8	6.3		
3 or More	7.2	9.8	9.0	6.8	6.3	6.5	6.1	11.8		
Water Heaters	100.0	100.0	100.0	100.0	100.0	100.0	100.0	NE		
Electric	39.1	48.9	57.5	51.3	33.2	27.8	23.7	5.6		
For One Housing Unit	37.3	47.1	55.2	48.7	31.0	26.6	22.8	5.8		
For Two or More Units	1.8	Q	2.4	2.7	2.1	1.2	0.9	26.2		
Natural Gas	51.9	47.2	36.5	42.1	57.6	61.7	62.5	4.7		
For One Housing Unit For Two or More Units	45.8 6.1	45.7	35.1	34.1	48.7	58.3	53.6	5.3		
Fuel Oil	6.1 5.1	Q Q	1.4 2.2	8.0 2.2	8.9 5.5	3.4 8.0	8.9 8.7	17.0 17.2		
For One Housing Unit	3.1	Q	1.9	1.4	3.6	5.7	4.4	18.7		
For Two or More Units	2.0	Q	Q	Q	1.9	2.3	4.4	26.1		
LPG	3.2	2.5	3.1	2.9	2.7	2.1	4.3	18.1		
Other	0.7	Q	Q	1.3	Q	Q Q	Q Q	37.7 68.2		
No Water Heater	0.2	Q	Q	Q	Q					

Table HC5-2b. Appliances by Year of Construction, Percent of U.S. Households, 1997 (Continued)

		Year of Construction								
Appliance Types and Characteristics	Total	1990 to 1997 ¹	1980 to 1989	1970 to 1979	1960 to 1969	1950 to 1959	1949 or Before			
RSE Column Factor:	0.5	1.6	1.1	1.0	1.1	1.2	0.9	RSE Row Factors		
Water Heater (for one housing	20.7	00.5	05.0	07.0	00.4	00.0	05.0	4.0		
unit)	89.7	96.5	95.8	87.8	86.4	92.9	85.2	1.3		
Age	44.4	05.0	40.0	0.7	40.0	0.0	0.4			
Less than 2 Years	11.1	25.9	10.0	8.7	10.0	9.8	9.4	9.3		
2 to 4 Years	16.8	34.5	11.8	15.4	15.8	15.8	15.5	6.4		
5 to 9 Years	25.0	32.4	35.2	21.7	22.8	22.7	20.5	5.9		
10 to 19 Years	19.9	Q	30.6	20.6	18.1	22.9	19.3	6.4		
20 Years or More	7.0	Q	Q 6.4	9.6	9.9	10.4	8.9	10.4		
Don't Know	7.0	1.9	6.4 1.7	9.2	6.6	7.5	7.7 4.1	12.9		
No Separate Heater No Water Heater	2.9 0.2	Q Q	1.7 Q	2.5	3.3	3.8 Q	4.1 Q	21.2 68.2		
	0.2	Q	Q	Q	Q	Q	Q	00.2		
Water Heaters for Two or More Units	10.1	3.3	4.2	12.1	13.4	7.0	14.5	15.1		
Two or wore ornes	10.1	3.3	4.2	12.1	13.4	7.0	14.5	15.1		
Size										
Small	15.3	9.5	16.1	16.8	17.2	15.8	14.5	8.6		
Medium	46.4	46.8	48.9	42.1	43.8	53.6	45.9	3.9		
Large	21.3	34.8	25.1	22.4	18.6	17.5	16.8	7.4		
Don't Know	3.7	4.3	3.9	4.0	3.6	2.2	3.9	18.6		
No Separate Heater	2.9	Q	1.7	2.5	3.3	3.8	4.1	21.2		
No Water Heater	0.2	Q	Q	Q	Q	Q	Q	68.2		
Water Heaters for										
Two or More Units	10.1	3.3	4.2	12.1	13.4	7.0	14.5	15.1		
Other Appliances										
Heated Aquarium	3.8	4.5	4.7	4.0	2.8	3.8	3.5	15.7		
Microwave Oven	83.0	88.5	87.2	84.1	82.9	82.6	77.9	1.7		
Outdoor Gas Light ³	0.7	Q	Q	Q	Q	Q	0.9	34.3		
Rechargeable Tools/										
or Appliances	43.7	54.1	46.4	44.7	43.2	42.3	38.7	4.0		
Stereo Equipment	68.8	76.6	75.2	70.4	67.9	65.1	63.1	2.1		

¹ New construction for 1997 includes only those housing units built and occupied between January and the April-August period when the household interviews were conducted

conducted.

The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

electricity.

3 Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These are excluded from the count of 25.2 million households using only room air-conditioners.

cf = Cubic feet.

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.

Percentages are calculated on unrounded numbers. • 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, B, C of the 1997 Residential Energy Consumption Survey.

Table HC5-3b. Appliances by Household Income, Percent of U.S. Households, 1997

			1997 House	ehold Income			Eli- gible		
Appliance Types and Characteristics	Total	Less than \$10,000	\$10,000 to \$24,999	\$25,000 to \$49,999	\$50,000 or More	Below Poverty Line	for Fed- eral Assist- ance ¹	DOE	
RSE Column Factor:	0.6	0.6	1.6	1.0	0.9	0.9	1.4	1.0	RSE Row Factors
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	
Households With Electric									
Air-Conditioning Equipment	72.5	61.3	67.2	75.3	80.3	57.6	62.4	2.3	
Central Equipment Not Used	0.3	Q	Q	Q	Q	Q	Q	34.1	
Room Air Conditioners Not Used	0.7	Q	0.8	0.7	0.8	Q	0.9	30.2	
Households Using Electric Air-Conditioning ²	71.6	60.7	66.1	74.2	79.6	56.7	61.2	2.4	
Type of Electric Air-Conditioning Used									
Central Air-Conditioning ³	46.8	27.4	37.3	50.2	62.1	25.0	30.8	4.3	
Without a Heat Pump	36.4	20.8	28.8	40.0	47.6	19.2	23.4	5.9	
With a Heat Pump	10.4	6.6	8.6	10.1	14.5	5.8	7.3	12.1	
Room Air-Conditioning	24.8	33.3	28.8	24.0	17.5	31.7	30.5	5.1	
1 Unit	14.7	24.5	18.7	12.8	7.8	23.0	20.2	6.4	
2 Units 3 or More Units	7.1 3.0	7.6 Q	7.3 2.8	8.5 2.7	5.3 4.4	7.6 1.1	7.9 2.4	10.1 18.8	
Clothes Washer	77.4	52.7	69.0	81.5	93.4	58.0	63.3	2.4	
Clothes Dryer	71.2	36.2	61.0	77.1	91.8	41.5	51.2	2.8	
Electric	55.1	31.0	49.0	59.9	67.6	33.3	40.2	3.5	
Natural Gas	15.2	4.8	11.1	16.3	23.3	8.1	10.4	9.1	
LPG	0.8	Q	0.9	0.9	0.9	Q	0.7	28.6	
Dishwasher	50.2	15.7	35.5	53.6	78.2	17.3	26.7	4.1	
Ceiling Fans	60.1	39.3	55.2	64.4	70.3	40.9	48.3	2.9	
1	23.3	21.0	24.8	25.4	20.4	22.9	23.5	5.4	
2	13.8	7.5	13.0	15.1	16.2	6.6	11.0	7.8	
3 or more	23.0	10.9	17.5	23.9	33.7	11.5	13.8	6.2	
Freezer	33.2	25.6	30.0	35.1	37.9	26.4	27.9	4.4	
1	30.2	23.6	27.5	32.2	34.1	24.3	25.8	4.6 15.9	
2 or more Most-Used Freezer	2.9	2.0	2.5	2.9	3.8	2.1	2.0	15.9	
Defrost Method									
Frost-Free	10.5 22.6	7.3 18.3	8.1 22.0	11.8 23.3	13.2 24.7	7.6 18.8	7.7 20.1	7.7 5.6	
Type of Freezer	16.0	0.4	10.0	16.4	22.0	0.0	44 5	6.7	
Upright Chest	16.3 16.9	9.4 16.2	13.8 16.2	16.4 18.6	22.0 15.9	9.9 16.6	11.5 16.3	6.7 6.4	
Age of Freezer Less than 2 Years	2.4	1.8	2.3	2.3	2.8	1.9	2.4	17.6	
2 to 4 Years	4.1	3.0	3.6	4.0	2.6 5.4	3.5	3.2	13.8	
5 to 9 Years	7.4	7.1	5.8	8.0	8.6	7.2	6.2	10.1	
10 to 19 Years	12.2	9.0	10.3	13.3	14.3	10.1	9.9	7.4	
20 Years or More	6.6	4.3	7.4	6.9	6.3	3.2	5.7	11.3	
Don't Know	0.5	Q	0.6	0.5	Q	Q	0.4	31.4	

Table HC5-3b. Appliances by Household Income, Percent of U.S. Households, 1997 (Continued)

			1997 House	hold Income			Eli- gible							
Appliance Types and Characteristics	Total	Less than \$10,000	\$10,000 to \$24,999	\$25,000 to \$49,999	\$50,000 or More	Below Poverty Line	for Fed- eral Assist- ance ¹	RSE						
RSE Column Factor:		0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.6	1.0	0.9	0.9	1.4	1.0
France Sine														
Freezer Size	2.7	2.1	2.5	2.9	2.9	2.3	1.9	16.0						
Very Small (Less than 11 cf) Small (11-14 cf)	6.6	5.4	6.3	7.0	7.2	2.3 5.7	1.9 5.8	10.5						
Medium (15-18 cf)	13.3	10.9	13.0	13.7	14.1	10.6	11.9	7.4						
Large (19-22 cf)	8.9	6.7	7.4	9.9	10.5	6.9	7.5	9.4						
Very Large (23 or More cf)	1.7	Q	0.8	1.6	3.3	Q	0.8	21.4						
Heaters (other)														
Hot Tub or Spa	3.9	Q	1.1	3.7	8.3	1.9	1.8	20.4						
Electric	2.6	Q	1.1	2.4	5.6	Q	1.2	20.8						
Natural GasLPG/Other	1.1 Q	Q Q	Q Q	1.1 Q	2.4 Q	Q Q	Q Q	32.6 NF						
		_	-											
Portable Space	13.9	11.0	12.6	14.3	16.2	12.9	11.6	7.0						
Electric Kerosene	12.1 2.0	9.8 1.3	10.9 2.0	12.1 2.5	14.5 1.9	11.0 2.1	10.1 1.9	7.4 16.9						
Swimming Pool	1.1	Q	Q	0.9	2.5	Q	Q	32.2						
Natural Gas	0.7	ã	Q	Q	1.7	Q	ã	33.3						
Electric/LPG/Other	0.4	Q	Q	Q	8.0	Q	Q	39.1						
Waterbed Heaters	8.3	2.6	7.1	9.3	11.0	3.8	5.3	12.0						
1	6.8	2.5	6.2	7.4	9.0	3.7	4.6	13.5						
2 or More	1.4	Q	0.9	1.9	2.1	Q	0.6	22.9						
Waterbed Heaters														
Used All Year	7.3	2.1	6.1	8.5	9.9	3.3	4.2	13.2						
1 2 or More	6.4 1.0	2.0 Q	5.5 0.5	7.0 1.5	8.6 1.3	3.2 Q	3.9 Q	14.4 23.5						
Oven	98.8 61.4	96.6 49.1	98.6 58.7	99.4 63.9	99.3 67.4	97.4 47.6	98.0 52.5	NF 3.0						
Natural Gas	33.3	42.2	34.9	31.6	29.2	44.6	40.3	4.7						
LPG	4.1	5.3	5.1	3.9	2.7	5.0	5.1	15.4						
Other	Q	Q	Q	Q	Q	Q	Q	NF						
Self-Cleaning Oven	44.1	18.1	31.1	47.0	66.6	19.4	25.4	4.3						
Continuous	9.9	5.1	8.8	10.7	12.5	5.3	7.0	9.4						
Manual Start	34.1	13.0	22.3	36.3	54.1	14.1	18.4	5.4						
Pumps (Electric)	19.8	9.3	14.6	20.4	29.8	10.9	12.6	8.2						
Hot Tub or Spa	4.0	Q	1.1	3.7	8.5	1.9	1.8	20.3						
Swimming Pool	5.4	Q	2.4	5.1	10.9	2.1	2.2	14.7						
Well Water	14.1	8.5	12.4	14.3	18.5	9.4	10.5	10.6						
Range	99.2	97.0	99.1	99.8	99.6	97.8	98.4	NF						
Electric	60.2	49.1 42.4	58.3	62.8	64.4	47.7	52.3	3.0						
Natural GasLPG	34.7 4.3	42.4 5.4	35.6 5.2	32.9 4.0	31.9 3.3	44.9 5.1	40.9 5.1	4.6 15.1						
Other	4.3 Q	Q Q	Q.2	Q.	3.3 Q	Q Q	Q.	NF						
Refrigerators	99.8	99.3	99.9	99.9	100.0	99.6	99.7	NF						
1	84.7	94.3	90.5	83.4	75.5	92.7	91.4	1.0						
2 or More	15.2	5.0		16.5	24.5	6.8		7.8						

Table HC5-3b. Appliances by Household Income, Percent of U.S. Households, 1997 (Continued)

			<u> </u>	•	,			
			1997 House	ehold Income			Eli- gible	
Appliance Types and Characteristics	Total	Less than \$10,000	\$10,000 to \$24,999	\$25,000 to \$49,999	\$50,000 or More	Below Poverty Line	for Fed- eral Assist- ance ¹	RSE
RSE Column Factor:	0.6	1.6		0.9	0.9	1.4	1.0	Row Factors
Most-Used Refrigerator								
Defrost Method	00.0	72.0	00.4	00.5	05.0	75.6	70.0	1 4 4
Frost-Free	86.8 13.1	73.0 26.2	83.1 16.8	88.5 11.4	95.2 4.8	75.6 24.0	79.2 20.5	1.4 6.9
Manual	13.1	20.2	10.0	11.4	4.0	24.0	20.5	0.9
Type of Refrigerator								
2-Doors (top and bottom)	68.0	70.2	72.2	70.4	59.7	70.2	72.2	1.9
2-Doors (side-by-side)	20.4	8.7	14.2	18.9	34.1	10.7	11.9	7.0
Regular (single door)	10.7	18.6	12.6	9.8	5.8	17.1	14.5	8.4
Half-Size/Other	0.7	1.6	0.8	0.8	Q	1.5	0.9	25.3
Age of Refrigerator								
Less than 2 Years	13.2	12.1	11.7	13.9	14.5	11.9	11.8	7.1
2 to 4 Years	21.0	21.5	18.3	20.5	24.3	25.0	21.1	5.1
5 to 9 Years	29.9	25.6	30.3	29.9	31.4	26.9	28.5	4.2
10 to 19 Years	23.8	21.7	24.4	24.8	23.0	19.4	22.6	4.9
20 Years or More	7.0	9.3	9.0	6.4	4.4	7.5	8.0	9.6
Don't Know	5.0	9.1	6.2	4.4	2.4	8.9	7.7	12.2
Size of Refrigerator								
Very Small (Less than 11 cf)	0.9	3.0	0.8	0.6	Q	2.7	1.5	19.0
Small (11-14 cf)	7.6	15.5	9.4	7.1	2.6	12.8	11.6	9.3
Medium (15-18 cf)	45.0	50.8	52.4	46.0	33.5	53.2	50.5	2.9
Large (19-22 cf)	44.8	29.5	36.6	44.8	60.7	30.4	35.5	3.7
Very Large (23 or More cf)	1.5	Q	0.7	1.4	2.9	Q	0.6	22.4
Through-the-Door Ice/Water Service								
Yes	13.0	4.1	7.6	11.3	24.6	5.6	6.0	10.5
No	87.0	95.9	92.4	88.7	75.4	94.4	94.0	1.1
Colon Tolonicion Coto	00.7	00.4	00.5	00.0	00.0	07.0	07.5	N.E
Color Television Sets	98.7	96.1	98.5	99.2	99.6	97.3	97.5	NF
2	31.8 37.4	55.6 30.9	40.5 37.7	27.3 41.6	16.6 35.4	47.0 34.5	43.3 35.5	3.9 3.5
3	19.1	7.5	15.6	20.4	26.8	11.8	13.8	6.3
4	7.7	1.7	3.6	8.2	14.0	2.9	3.7	11.5
5 or More	2.7	Q	1.1	1.7	6.8	Q	1.3	18.9
Video Cassette Recorders	07.0	00.0	04.0	04.0	00.0	70.0	77.4	4.0
(VCR's)	87.6 55.5	66.8 47.9	84.0 63.3	91.6 59.5	96.6 46.7	73.8 52.6	77.1 55.4	1.6 2.6
2	24.9	17.9	17.8	25.2	35.2	19.4	19.0	5.5
3 or More	7.2	Q	2.9	6.9	14.8	1.8	2.7	12.0
Water Heaters	100.0	100.0	100.0	100.0	100.0	100.0	100.0	NE
Electric	39.1	40.7	43.3	39.9	32.9	38.7	40.4	4.7
For One Housing Unit For Two or More Units	37.3 1.8	37.9 2.8	40.8 2.6	38.4 1.5	32.0 0.9	36.5 2.1	37.5 3.0	4.8
Natural Gas	51.9	46.9	2.6 48.5	51.5	58.2	49.7	49.3	4.0
For One Housing Unit	45.8	35.0	40.8	45.9	56.1	38.2	39.7	4.8
For Two or More Units	6.1	12.0	7.6	5.6	2.1	11.5	9.6	11.4
Fuel Oil	5.1	7.2	4.4	4.8	5.0	6.4	5.8	11.2
For One Housing Unit	3.1	1.5	2.3	3.3	4.5	1.1	2.1	18.0
For Two or More Units	2.0	5.7	2.0	1.6	0.5	5.2	3.7	15.8
LPG	3.2	3.0	3.4	3.3	2.8	3.3	3.3	15.8
Other	0.7	Q	Q	0.4	1.1	1.5	0.8	35.6
No Water Heater	0.2	Q	Q	Q	Q	Q	Q	59.7
_								

Table HC5-3b. Appliances by Household Income,
Percent of U.S. Households, 1997 (Continued)

			1997 House	hold Income	_		Eli- gible	
Appliance Types and Characteristics	Total	Less than \$10,000	\$10,000 to \$24,999	\$25,000 to \$49,999	\$50,000 or More	Below Poverty Line	for Fed- eral Assist- ance ¹	RSE
RSE Column Factor:		1.6	1.0	0.9	0.9	1.4	1.0	Row
Water Heater (for one housing	89.7	77.9	87.5	91.0	96.3	79.9	83.0	1.5
unit) Age	69.7	77.9	67.5	91.0	90.3	79.9	63.0	1.5
Less than 2 Years	11.1	8.4	9.3	12.8	12.3	8.9	9.3	7.6
2 to 4 Years	16.8	15.3	14.8	15.4	21.0	16.1	15.2	5.8
5 to 9 Years	25.0	15.3	22.1	26.8	30.5	16.8	19.5	5.3
10 to 19 Years	19.9	14.4	21.5	20.5	20.4	14.4	17.5	5.8
20 Years or More	7.0	10.0	9.0	5.7	5.0	9.5	9.3	9.5
Don't Know	7.0	10.4	7.9	7.2	4.3	10.6	8.9	9.7
No Separate Heater	2.9	4.1	3.0	2.5	2.8	3.6	3.3	17.5
No Water Heater	0.2	Q	Q.U	Q.3	Q	Q	Q.5	59.7
Water Heaters for	0.2	Q	Q	Q	Q	Q	Q	33.7
Two or More Units	10.1	21.1	12.4	9.0	3.7	19.5	16.6	8.8
Size								
Small	15.3	19.8	20.4	14.9	8.2	17.9	18.1	6.8
Medium	46.4	34.6	45.2	49.1	50.4	37.2	41.0	3.3
Large	21.3	13.7	15.4	21.3	31.3	16.6	15.9	6.7
Don't Know	3.7	5.7	3.5	3.2	3.6	4.7	4.6	15.2
No Separate Heater	2.9	4.1	3.0	2.5	2.8	3.6	3.3	17.5
No Water Heater Water Heaters for	0.2	Q	Q	Q	Q	Q	Q	59.7
Two or More Units	10.1	21.1	12.4	9.0	3.7	19.5	16.6	8.8
Other Appliances								
Heated Aquarium	3.8	3.0	2.7	4.0	5.2	2.9	2.8	14.1
Microwave Oven	83.0	60.3	81.2	86.7	91.5	63.8	72.0	1.7
Outdoor Gas Light ³ Rechargeable Tools/	0.7	Q	Q	0.7	1.2	Q	Q	32.5
or Appliances	43.7	15.1	32.0	48.6	64.1	18.8	25.8	4.0
Stereo Equipment	68.8	45.2	60.1	73.7	83.7	53.0	56.0	2.1

Below 150 percent of poverty line or 60 percent of median State income.

² The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

electricity.

3 Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These are excluded from the count of 25.2 million households using only room air-conditioners.

cf = Cubic feet.

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 RSF 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.

Percentages are calculated on unrounded numbers. • 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, B, C of the 1997 Residential Energy Consumption Survey.

Table HC5-4b. Appliances by Type of Housing Unit, Percent of U.S. Households, 1997

			Type of Ho	ousing Unit		
			Multi	family		
Appliance Types and Characteristics	Total	Single-Family	Two to Four Units	Five or More Units	Mobile Home	RSE
RSE Column Factor:	0.5	0.5	1.9	1.5		Row Factors
Total	100.0	100.0	100.0	100.0	100.0	0.0
Households With Electric Air-Conditioning Equipment	72.5	73.8	62.6	70.4	71.7	3.0
Central Equipment Not Used	0.3	0.3	Q	Q	Q	52.1
Room Air Conditioners Not Used	0.7	0.6	Q	Q	Q	38.9
Households Using Electric Air-Conditioning ¹	71.6	73.0	60.9	68.9	71.1	3.0
_						
Type of Electric Air-Conditioning Used						
Central Air-Conditioning ²	46.8	49.9	28.4	40.9	41.5	5.7
Without a Heat Pump	36.4	38.4	25.0	32.2	32.5	7.6
With a Heat Pump	10.4	11.4	Q	8.7	9.0	16.5
Room Air-Conditioning	24.8	23.1	32.4	28.0	29.6	6.8
1 Unit	14.7	11.8	24.8	21.7	21.0	8.3
2 Units 3 or More Units	7.1 3.0	7.6 3.7	7.2 Q	5.2 Q	6.7 Q	13.1 22.0
Clothes Washer	77.4	92.2	39.7	21.3	78.9	3.8
Clothes Dryer	71.2	85.8	28.5	17.8	71.6	4.6
Electric Natural Gas	55.1 15.2	64.8 19.9	23.0 5.6	16.4 1.3	67.5 4.1	5.5 16.4
LPG	0.8	1.1	Q.0	Q	Q	31.2
Dishwasher	50.2	56.6	18.3	40.1	29.0	5.7
Ceiling Fans	60.1	68.8	31.1	31.1	57.0	3.8
1	23.3	22.4	22.2	23.1	34.9	6.5
2	13.8	16.7	4.0	5.0	10.9	10.3
3 or more	23.0	29.7	5.0	2.9	11.3	10.1
Freezer	33.2	41.6	11.0	3.5	28.3	7.0
1	30.2	37.9	10.8	3.5	25.7	7.4
2 or more	2.9	3.8	Q	Q	Q	15.9
Most-Used Freezer						
Defrost Method Frost-Free	10.5	13.2	Q	1.8	8.7	10.6
Manual	22.6	28.4	8.7	1.7	19.6	8.8
Type of Freezer						
Upright Chest	16.3 16.9	20.9 20.8	4.5 6.5	1.1 2.4	11.5 16.8	10.6 10.8
	10.9	20.0	0.5	Z. 4	10.0	10.8
Age of Freezer	2.4	0.0	0	0	2.5	22.0
Less than 2 Years 2 to 4 Years	2.4 4.1	2.8 4.9	Q Q	Q 1.0	3.5 5.2	23.0 18.5
5 to 9 Years	7.4	9.1	3.7	Q Q	7.8	11.8
10 to 19 Years	12.2	15.8	Q.,	0.9	6.5	12.2
20 Years or More	6.6	8.5	Q	Q	4.8	13.9
Don't Know	0.5	0.5	Q	Q	Q	40.8

Table HC5-4b. Appliances by Type of Housing Unit, Percent of U.S. Households, 1997 (Continued)

Preezer Size				Type of Ho	ousing Unit			
RSE Column Factor: 0.5 0.5 1.9 1.5 1.5 1.5				Multi	family			
Preezer Size		Total	Single-Family	Two to Four Units	Five or More Units	Mobile Home	RSE	
Very Small (Less than 11 of) 2.7 3.0 Q G 5.1 Small (11+1 dc) 6.6 8.0 Q 1.2 7.3 Medium (15-18 cf) 13.3 17.0 4.0 1.1 8.4 Large (19-22 cf) 8.9 11.4 Q Q 6.8 Very Large (23 or More cf) 1.7 2.2 Q Q Q Heaters (other) 8.9 5.3 Q Q Q Q Hot Tub or Spa 3.9 5.3 Q	RSE Column Factor:	0.5	0.5	0.5 0.5 1.9	1.9	1.5	1.5	RSE Row Factors
Very Small (Less than 11 of) 2.7 3.0 Q G 5.1 Small (11+1 dc) 6.6 8.0 Q 1.2 7.3 Medium (15-18 cf) 13.3 17.0 4.0 1.1 8.4 Large (19-22 cf) 8.9 11.4 Q Q 6.8 Very Large (23 or More cf) 1.7 2.2 Q Q Q Heaters (other) 8.9 5.3 Q Q Q Q Hot Tub or Spa 3.9 5.3 Q	Freezer Size							
Small (11-14 c)		2.7	3.0	Q	Q	5.1	18.8	
Large (19-22 cf)		6.6	8.0	Q		7.3	14.3	
Very Large (23 or More cf)	Medium (15-18 cf)	13.3	17.0	4.0	1.1	8.4	13.5	
Heaters (other) Hot Tub or Spa	Large (19-22 cf)	8.9	11.4	Q	Q	6.8	11.5	
Hot Tub or Spa	Very Large (23 or More cf)	1.7	2.2	Q	Q	Q	21.8	
Hot Tub or Spa	Heaters (other)							
Electric		3.9	5.3	0	0	0	18.3	
Natural Gas							19.4	
LPG/Other							50.8	
Electric 12.1 13.2 9.4 6.9 14.8 Kerosene 2.0 2.5 Q Q 2.1 Swimming Pool 1.1 1.5 Q Q Q Natural Gas 0.7 1.0 Q Q Q Electric/LPG/Other 0.4 0.5 Q Q Q Waterbed Heaters 8.3 9.6 5.6 3.8 5.9 1 6.8 7.8 4.8 3.8 5.3 2 or More 1.4 1.9 Q Q Q Waterbed Heaters Used All Year 7.3 8.7 3.3 3.5 4.9 1 6.4 7.4 3.1 3.5 4.9 1 1.0 1.3 Q Q Q Oven 98.8 98.9 98.7 98.4 98.9 Electric 61.4 62.5 50.2 64.7 50.3 Natural Gas 33.3 32	LPG/Other	Q					NF	
Electric 12.1 13.2 9.4 6.9 14.8	D 111 0	40.0	45.5	40.0	7.0	40.4	0.4	
Kerosene 2.0 2.5 Q Q 2.1 Swimming Pool 1.1 1.5 Q Q Q Natural Gas 0.7 1.0 Q Q Q Electric/LPG/Other 0.4 0.5 Q Q Q Waterbed Heaters 8.3 9.6 5.6 3.8 5.9 1 6.8 7.8 4.8 3.8 5.3 2 or More 1.4 1.9 Q Q Q Waterbed Heaters Used All Year 7.3 8.7 3.3 3.5 4.9 1. 6.4 7.4 3.1 3.5 4.9 1. 6.4 7.4 3.1 3.5 4.9 1. 6.4 7.4 3.1 3.5 4.9 1. 6.4 7.4 3.1 3.5 4.9 2 or More 1.0 1.3 Q Q Q Q Selectric 61.4 62.							9.1 9.7	
Swimming Pool							20.7	
Natural Gas 0.7 1.0 Q Q Q Electric/LPG/Other 0.4 0.5 Q Q Q Waterbed Heaters 8.3 9.6 5.6 3.8 5.9 1 6.8 7.8 4.8 3.8 5.3 2 or More 1.4 1.9 Q Q Q Waterbed Heaters Used All Year 7.3 8.7 3.3 3.5 4.9 1 6.4 7.4 3.1 3.5 4.3 2 or More 1.0 1.3 Q Q Q 0ven 98.8 98.9 98.7 98.4 98.9 Electric 61.4 62.5 50.2 64.7 50.3 Natural Gas 33.3 32.5 47.5 33.7 27.8 LPG 4.1 3.8 Q Q Q Q Other Q Q Q Q Q Q Self-Cleaning Oven <td>Reloserie</td> <td>2.0</td> <td>2.5</td> <td>Q</td> <td>· ·</td> <td>2.1</td> <td>20.7</td>	Reloserie	2.0	2.5	Q	· ·	2.1	20.7	
Electric/LPG/Other							47.1	
Waterbed Heaters 8.3 9.6 5.6 3.8 5.9 1 6.8 7.8 4.8 3.8 5.3 2 or More 1.4 1.9 Q Q Q Waterbed Heaters Used All Year 7.3 8.7 3.3 3.5 4.9 1 6.4 7.4 3.1 3.5 4.3 2 or More 1.0 1.3 Q Q Q Oven 98.8 98.9 98.7 98.4 98.9 Electric 61.4 62.5 50.2 64.7 50.3 Natural Gas 33.3 32.5 47.5 33.7 27.8 LPG 4.1 3.8 Q Q Q 20.8 Other Q Q Q Q Q Q 20.8 Other Q Q Q Q Q Q Q Q Q Q Q Q Q							51.1	
1 6.8 7.8 4.8 3.8 5.3 2 or More 1.4 1.9 Q Q Q Waterbed Heaters Used All Year 7.3 8.7 3.3 3.5 4.9 1 6.4 7.4 3.1 3.5 4.3 2 or More 1.0 1.3 Q Q Q Oven 98.8 98.9 98.7 98.4 98.9 Electric 61.4 62.5 50.2 64.7 50.3 Natural Gas 33.3 32.5 47.5 33.7 27.8 LPG 4.1 3.8 Q Q Q 20.8 Other Q Q Q Q Q Q 20.8 Other Q<	Electric/LPG/Other	0.4	0.5	Q	Q	Q	56.6	
1 6.8 7.8 4.8 3.8 5.3 2 or More 1.4 1.9 Q Q Q Waterbed Heaters Used All Year 7.3 8.7 3.3 3.5 4.9 1 6.4 7.4 3.1 3.5 4.3 2 or More 1.0 1.3 Q Q Q Oven 98.8 98.9 98.7 98.4 98.9 Electric 61.4 62.5 50.2 64.7 50.3 Natural Gas 33.3 32.5 47.5 33.7 27.8 LPG 4.1 3.8 Q Q Q 20.8 Other Q Q Q Q Q Q 20.8 Other Q<	Waterbed Heaters	8.3	9.6	5.6	3.8	5.9	14.5	
Waterbed Heaters Used All Year 7.3 8.7 3.3 3.5 4.9 1 6.4 7.4 3.1 3.5 4.3 2 or More 1.0 1.3 Q Q Q Oven 98.8 98.9 98.7 98.4 98.9 Electric 61.4 62.5 50.2 64.7 50.3 Natural Gas 33.3 32.5 47.5 33.7 27.8 LPG 4.1 3.8 Q Q Q 20.8 Other Q Q Q Q Q 20.8 Self-Cleaning Oven 44.1 53.9 15.0 18.9 17.7 Continuous 9.9 11.6 3.0 6.1 6.4 Manual Start 34.1 42.4 12.0 12.7 11.3 Pumps (Electric) 19.8 25.3 2.6 Q Q Q Hot Tub or Spa 4.0 5.3 Q Q <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>15.6</td></t<>							15.6	
Used All Year 7.3 8.7 3.3 3.5 4.9 1 6.4 7.4 3.1 3.5 4.3 2 or More 1.0 1.3 Q Q Q Oven 98.8 98.9 98.7 98.4 98.9 Electric 61.4 62.5 50.2 64.7 50.3 Natural Gas 33.3 32.5 47.5 33.7 27.8 LPG 4.1 3.8 Q Q Q 20.8 Other Q Q Q Q Q Q 20.8 Other Q	2 or More	1.4	1.9	Q	Q	Q	21.3	
Used All Year 7.3 8.7 3.3 3.5 4.9 1 6.4 7.4 3.1 3.5 4.3 2 or More 1.0 1.3 Q Q Q Oven 98.8 98.9 98.7 98.4 98.9 Electric 61.4 62.5 50.2 64.7 50.3 Natural Gas 33.3 32.5 47.5 33.7 27.8 LPG 4.1 3.8 Q Q Q 20.8 Other Q Q Q Q Q Q 20.8 Other Q	Waterhed Heaters							
1 6.4 7.4 3.1 3.5 4.3 2 or More 1.0 1.3 Q Q Q Oven 98.8 98.9 98.7 98.4 98.9 Electric 61.4 62.5 50.2 64.7 50.3 Natural Gas 33.3 32.5 47.5 33.7 27.8 LPG 4.1 3.8 Q Q Q 20.8 Other Q Q Q Q Q Q Q Self-Cleaning Oven 44.1 53.9 15.0 18.9 17.7 C Continuous 9.9 11.6 3.0 6.1 6.4 A Manual Start 34.1 42.4 12.0 12.7 11.3 11.3 11.3 Pumps (Electric) 19.8 25.3 2.6 Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q		7.3	8.7	3.3	3.5	4.9	15.2	
2 or More 1.0 1.3 Q Q Q Oven 98.8 98.9 98.7 98.4 98.9 Electric 61.4 62.5 50.2 64.7 50.3 Natural Gas 33.3 32.5 47.5 33.7 27.8 LPG 4.1 3.8 Q Q Q 20.8 Other Q Q Q Q Q Q 20.8 Other Q							16.2	
Electric 61.4 62.5 50.2 64.7 50.3 Natural Gas 33.3 32.5 47.5 33.7 27.8 LPG 4.1 3.8 Q Q Q 20.8 Other Q Q Q Q Q Q Q Self-Cleaning Oven 44.1 53.9 15.0 18.9 17.7 Continuous 9.9 11.6 3.0 6.1 6.4 A Manual Start 34.1 42.4 12.0 12.7 11.3 11.3 11.3 Pumps (Electric) 19.8 25.3 2.6 Q 20.5 Q		1.0	1.3	Q	Q	Q	22.4	
Electric 61.4 62.5 50.2 64.7 50.3 Natural Gas 33.3 32.5 47.5 33.7 27.8 LPG 4.1 3.8 Q Q Q 20.8 Other Q Q Q Q Q Q Q Self-Cleaning Oven 44.1 53.9 15.0 18.9 17.7 Continuous 9.9 11.6 3.0 6.1 6.4 A Manual Start 34.1 42.4 12.0 12.7 11.3 11.3 11.3 Pumps (Electric) 19.8 25.3 2.6 Q 20.5 Q	•	00.0	00.0	00.7	22.4	00.0		
Natural Gas 33.3 32.5 47.5 33.7 27.8 LPG 4.1 3.8 Q Q Q 20.8 Other Q Q Q Q Q Q Self-Cleaning Oven 44.1 53.9 15.0 18.9 17.7 Continuous 9.9 11.6 3.0 6.1 6.4 Manual Start 34.1 42.4 12.0 12.7 11.3 Pumps (Electric) 19.8 25.3 2.6 Q 20.5 Hot Tub or Spa 4.0 5.3 Q Q Q Swimming Pool 5.4 7.4 Q Q Q Well Water 14.1 17.5 1.8 Q 20.1 Range 99.2 99.3 99.0 98.8 99.4 Electric 60.2 60.8 50.2 64.8 50.4 Natural Gas 34.7 34.4 47.8 34.0 27.9 LPG 4.3 4.1 Q Q Q 21.0							NF	
LPG 4.1 3.8 Q Q 20.8 Other Q Q Q Q Q Self-Cleaning Oven 44.1 53.9 15.0 18.9 17.7 Continuous 9.9 11.6 3.0 6.1 6.4 Manual Start 34.1 42.4 12.0 12.7 11.3 Pumps (Electric) 19.8 25.3 2.6 Q 20.5 Hot Tub or Spa 4.0 5.3 Q Q Q Swimming Pool 5.4 7.4 Q Q Q Well Water 14.1 17.5 1.8 Q 20.1 Range 99.2 99.3 99.0 98.8 99.4 Electric 60.2 60.8 50.2 64.8 50.4 Natural Gas 34.7 34.4 47.8 34.0 27.9 LPG 4.3 4.1 Q Q Q 21.0 Other Q Q Q Q Q Q							3.9	
Other Q D A <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>6.6 18.1</td>							6.6 18.1	
Self-Cleaning Oven 44.1 53.9 15.0 18.9 17.7 Continuous 9.9 11.6 3.0 6.1 6.4 Manual Start 34.1 42.4 12.0 12.7 11.3 Pumps (Electric) 19.8 25.3 2.6 Q 20.5 Hot Tub or Spa 4.0 5.3 Q Q Q Swimming Pool 5.4 7.4 Q Q Q Well Water 14.1 17.5 1.8 Q 20.1 Range 99.2 99.3 99.0 98.8 99.4 Electric 60.2 60.8 50.2 64.8 50.4 Natural Gas 34.7 34.4 47.8 34.0 27.9 LPG 4.3 4.1 Q Q Q 21.0 Other Q Q Q Q Q Q			_				NF	
Continuous 9.9 11.6 3.0 6.1 6.4 Manual Start 34.1 42.4 12.0 12.7 11.3 Pumps (Electric) 19.8 25.3 2.6 Q 20.5 Hot Tub or Spa 4.0 5.3 Q Q Q Swimming Pool 5.4 7.4 Q Q Q Well Water 14.1 17.5 1.8 Q 20.1 Range 99.2 99.3 99.0 98.8 99.4 Electric 60.2 60.8 50.2 64.8 50.4 Natural Gas 34.7 34.4 47.8 34.0 27.9 LPG 4.3 4.1 Q Q Q 21.0 Other Q Q Q Q Q Q					-			
Manual Start 34.1 42.4 12.0 12.7 11.3 Pumps (Electric) 19.8 25.3 2.6 Q 20.5 Hot Tub or Spa 4.0 5.3 Q Q Q Swimming Pool 5.4 7.4 Q Q Q Well Water 14.1 17.5 1.8 Q 20.1 Range 99.2 99.3 99.0 98.8 99.4 Electric 60.2 60.8 50.2 64.8 50.4 Natural Gas 34.7 34.4 47.8 34.0 27.9 LPG 4.3 4.1 Q Q Q 21.0 Other Q Q Q Q Q Q							6.1	
Pumps (Electric) 19.8 25.3 2.6 Q 20.5 Hot Tub or Spa 4.0 5.3 Q Q Q Swimming Pool 5.4 7.4 Q Q Q Well Water 14.1 17.5 1.8 Q 20.1 Range 99.2 99.3 99.0 98.8 99.4 Electric 60.2 60.8 50.2 64.8 50.4 Natural Gas 34.7 34.4 47.8 34.0 27.9 LPG 4.3 4.1 Q Q 21.0 Other Q Q Q Q Q							12.4	
Hot Tub or Spa 4.0 5.3 Q Q Q Swimming Pool 5.4 7.4 Q Q Q Well Water 14.1 17.5 1.8 Q 20.1 Range 99.2 99.3 99.0 98.8 99.4 Electric 60.2 60.8 50.2 64.8 50.4 Natural Gas 34.7 34.4 47.8 34.0 27.9 LPG 4.3 4.1 Q Q 21.0 Other Q Q Q Q Q	Manual Start	34.1	42.4	12.0	12.7	11.3	6.9	
Hot Tub or Spa 4.0 5.3 Q Q Q Swimming Pool 5.4 7.4 Q Q Q Well Water 14.1 17.5 1.8 Q 20.1 Range 99.2 99.3 99.0 98.8 99.4 Electric 60.2 60.8 50.2 64.8 50.4 Natural Gas 34.7 34.4 47.8 34.0 27.9 LPG 4.3 4.1 Q Q 21.0 Other Q Q Q Q Q	Pumps (Electric)	19.8	25.3	2.6	Q	20.5	11.7	
Well Water 14.1 17.5 1.8 Q 20.1 Range 99.2 99.3 99.0 98.8 99.4 Electric 60.2 60.8 50.2 64.8 50.4 Natural Gas 34.7 34.4 47.8 34.0 27.9 LPG 4.3 4.1 Q Q 21.0 Other Q Q Q Q Q	Hot Tub or Spa	4.0	5.3	Q	Q	Q	18.0	
Range 99.2 99.3 99.0 98.8 99.4 Electric 60.2 60.8 50.2 64.8 50.4 Natural Gas 34.7 34.4 47.8 34.0 27.9 LPG 4.3 4.1 Q Q 21.0 Other Q Q Q Q Q	Swimming Pool	5.4	7.4	Q	Q	Q	14.2	
Electric 60.2 60.8 50.2 64.8 50.4 Natural Gas 34.7 34.4 47.8 34.0 27.9 LPG 4.3 4.1 Q Q 21.0 Other Q Q Q Q Q	Well Water	14.1	17.5	1.8	Q	20.1	15.3	
Electric 60.2 60.8 50.2 64.8 50.4 Natural Gas 34.7 34.4 47.8 34.0 27.9 LPG 4.3 4.1 Q Q 21.0 Other Q Q Q Q Q	Range	99.2	99.3	99.0	98.8	99 4	NF	
Natural Gas 34.7 34.4 47.8 34.0 27.9 LPG 4.3 4.1 Q Q 21.0 Other Q Q Q Q Q							3.9	
LPG							6.5	
Other Q Q Q Q Q							17.8	
Refrigerators 99.8 99.9 100.0 90.5 90.9	Other						NF	
RETURNATORS 998 999 1000 UUA 009 I	Defriceretors	00.0	00.0	400.0	00.5	00.0	,	
1	Refrigerators	99.8 84.7	99.9 80.1	100.0 96.7	99.5 97.8	99.8 95.1	NF 0.9	
2 or More							13.4	

Table HC5-4b. Appliances by Type of Housing Unit, Percent of U.S. Households, 1997 (Continued)

			Type of Ho	Type of Housing Unit				
			Multi	family				
Appliance Types and Characteristics	Total	Single-Family	Two to Four Units	Five or More Units	Mobile Home	RSE		
RSE Column Factor:	0.5	0.5	1.9	1.5		Row Factors		
Most-Used Refrigerator								
Defrost Method								
Frost-Free Manual	86.8 13.1	91.4 8.6	69.1 30.9	75.5 24.0	77.3 22.5	2.1 7.8		
Type of Refrigerator								
2-Doors (top and bottom)	68.0	65.1	73.2	77.0	74.4	2.5		
2-Doors (side-by-side)	20.4	25.7	6.6	4.5	10.9	9.8		
Regular (single door)	10.7	8.5	19.0	17.2	12.8	10.9		
Half-Size/Other	0.7	0.6	Q	Q	Q	40.1		
Age of Refrigerator	12.2	12.0	11.0	42.0	45.0	0.4		
Less than 2 Years 2 to 4 Years	13.2 21.0	13.0 21.0	11.6 20.6	13.9 22.1	15.6 19.6	8.1 6.2		
5 to 9 Years	29.9	30.9	28.9	25.6	29.2	5.1		
10 to 19 Years	23.8	25.9	20.0	16.5	21.4	6.0		
20 Years or More	7.0	6.7	6.8	7.2	9.2	11.2		
Don't Know	5.0	2.4	12.0	14.2	4.9	14.6		
Size of Refrigerator								
Very Small (Less than 11 cf)	0.9	0.6	Q	1.9	Q	25.3		
Small (11-14 cf)	7.6	4.9	13.7	16.4	11.4	9.6		
Medium (15-18 cf)	45.0	40.0	55.8	59.2	58.6	3.1		
Large (19-22 cf)	44.8 1.5	52.4 2.0	29.4 Q	21.8 Q	27.7 Q	4.7 21.9		
Very Large (23 or More cf)	1.5	2.0	Q	Q	Q	21.9		
Through-the-Door Ice/Water Service								
Yes	13.0	17.1	Q	Q	5.7	11.6		
No	87.0	82.9	98.1	99.5	94.3	0.9		
Color Television Sets	98.7	99.0	96.7	97.7	99.4	NF		
1	31.8	24.1	48.2	56.1	47.5	4.0		
2	37.4	38.7	30.3	35.1	34.5	4.3		
3 4	19.1 7.7	23.0 9.7	13.2 4.3	5.6 Q	12.7 3.5	7.5 13.5		
5 or More	2.7	3.6	4.3 Q	Q	Q.3	18.8		
Video Cassette Recorders								
(VCR's)	87.6	89.5	78.2	81.2	88.9	1.4		
1	55.5	53.2	55.4	62.5	65.8	3.0		
2	24.9	27.4	20.1	16.7	19.8	6.9		
3 or More	7.2	8.9	2.7	2.1	3.3	15.3		
Water Heaters	100.0	100.0	100.0	100.0	100.0	NE		
Electric	39.1	36.0	32.7	43.8	68.2	5.7		
For One Housing Unit	37.3	35.6	29.0	35.7	68.0	6.1		
For Two or More Units Natural Gas	1.8 51.9	0.4 55.4	3.7 61.3	8.1 43.6	Q 22.8	21.0 5.8		
For One Housing Unit	45.8	53.7	44.4	43.6 18.6	22.6 22.7	7.4		
For Two or More Units	6.1	1.7	16.9	25.1	Q	12.5		
Fuel Oil	5.1	4.3	5.6	10.3	Q	15.7		
For One Housing Unit	3.1	4.0	Q	1.1	Q	21.7		
For Two or More Units	2.0	0.3	5.1	9.3	Q	20.1		
LPG	3.2	3.6	Q	Q	8.3	18.6		
Other	0.7	0.6	Q	1.7	Q	40.4		
No Water Heater	0.2	Q	Q	Q	Q	75.7		

Table HC5-4b. Appliances by Type of Housing Unit, Percent of U.S. Households, 1997 (Continued)

			Type of Ho	ousing Unit		
Appliance Types and Characteristics RSE Column Factor:			Multifamily			
	Total	Single-Family 0.5	Two to Four Units	Five or More Units	Mobile Home	RSE
	0.5		1.9		1.5	Row Factors
Water Heater (for one housing						
unit)	89.7	97.4	74.3	55.6	99.0	3.1
Age	03.7	37.4	74.5	33.0	33.0	3.1
Less than 2 Years	11.1	12.4	6.0	4.7	16.5	10.9
2 to 4 Years	16.8	18.4	15.0	7.9	21.9	7.3
5 to 9 Years	25.0	28.2	19.2	13.0	21.9	7.5
10 to 19 Years	19.9	23.1	9.3	8.7	20.5	8.3
20 Years or More	7.0	7.6	4.4	3.9	10.7	12.6
Don't Know	7.0	5.4	16.7	11.0	7.5	11.7
No Separate Heater	2.9	2.4	3.7	6.4	Q	20.0
No Water Heater	0.2	Q	Q.	Q	ã	75.7
Water Heaters for	V. <u>_</u>	~	~	~	~	
Two or More Units	10.1	2.5	25.7	44.1	Q	10.1
Size						
Small	15.3	13.3	16.7	15.5	36.9	7.8
Medium	46.4	52.9	32.0	21.2	47.1	4.5
Large	21.3	26.0	13.9	6.3	12.0	9.3
Don't Know	3.7	2.9	8.0	6.2	2.9	17.4
No Separate Heater	2.9	2.4	3.7	6.4	Q	20.0
No Water Heater	0.2	Q	Q	Q	Q	75.7
Water Heaters for Two or More Units	10.1	2.5	25.7	44.1	Q	10.1
Other Appliances						
Heated Aquarium	3.8	4.0	4.1	3.0	3.2	15.2
Microwave Oven	83.0	4.0 86.7	67.8	71.6	3.2 81.4	2.0
Outdoor Gas Light ²	0.7	0.9	Q Q	71.6 Q	Q Q	39.9
or Appliances	43.7	51.0	19.9	22.2	33.9	4.5
Stereo Equipment	68.8	70.4	63.0	65.7	62.7	2.3

¹ The number of households where the end use is electric air-conditioning excludes households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those latter households were treated as if the fuel was electricity.

2 Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These are excluded from the count of 25.2 million

households using only room air-conditioners.

cf = Cubic feet.

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. • Percentages are calculated on unrounded numbers. • 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, B, C of the 1997 Residential Energy Consumption Survey.

Table HC5-5b. Appliances by Type of Owner-Occupied Housing Unit, Percent of U.S. Households, 1997

		Touseriolus,				Τ
			Type of Owner-Occ	cupied Housing Unit		
	Total		Multi	family		
Appliance Types and Characteristics	Owner- Occupied Units	Single-Family	Two to Four Units	Five or More Units	Mobile Home	RSE
RSE Column Factor:		0.4	2.3	2.5	1.2	Row Factors
Total	100.0	100.0	100.0	100.0	100.0	0.0
Households With Electric						
Air-Conditioning Equipment	76.7	76.8	83.4	75.7	73.9	3.9
Central Equipment Not Used	0.3	0.3	Q	Q	Q Q	65.3
Room Air Conditioners Not Used	0.7	0.7	Q	Q	Q	57.9
Households Using Electric						
Air-Conditioning ¹	75.7	76.0	79.5	70.2	73.2	4.2
Type of Electric Air-Conditioning Used						
Central Air-Conditioning ²	52.8	54.1	41.1	30.1	44.9	8.0
Without a Heat Pump	41.2	42.0	39.0	23.6	36.1	10.4
With a Heat Pump	11.6	12.0	Q	Q	8.8	23.7
Room Air-Conditioning	22.0	22.0	20.2	40.4	20.2	9.8
1 Unit	23.0 11.4	22.0 10.4	38.3 17.9	40.1 17.5	28.2 19.8	14.4
2 Units	7.6	7.4	Q Q	15.1	6.2	18.3
3 or More Units	4.0	4.1	ã	Q	Q	29.2
Clothes Washer	93.0	95.6	62.5	35.5	81.0	5.7
Clothes Dryer	87.6	90.2	54.0	31.9	75.0	6.4
Electric	66.7	67.5	39.8	27.2	70.6	7.1
Natural Gas	19.7	21.4	Q Q	Q Q	4.4	18.9
LPG	1.1	1.3	Q	Q	Q	42.1
Dishwasher	58.9	61.7	31.9	48.9	33.3	7.0
Ceiling Fans	71.5	72.9	57.5	48.8	63.2	4.1
1	23.5	22.3	32.1	18.5	37.3	9.5
2	17.1 31.0	17.6 33.1	Q Q	20.8 Q	12.3 13.5	12.1 9.0
3 of more	31.0	30.1	Q	Q	13.3	3.0
Freezer	43.6	45.9	Q	Q	30.6	6.2
1	39.4 4.2	41.4 4.4	Q Q	Q Q	27.5 Q	7.1 19.9
Most-Used Freezer			-	-	_	
Defrost Method						
Frost-Free	13.7	14.4	Q	Q	8.9	11.8
Manual	29.9	31.4	Q	Q	21.7	8.3
Type of Freezer Upright	21.9	23.3	0	Q	11 5	9.9
Chest	21.7	23.3 22.6	Q Q	Q	11.5 19.1	9.9
Age of Freezer						
Less than 2 Years	2.9	2.9	Q	Q	Q	27.7
2 to 4 Years	5.3	5.3	Q	Q	5.9	22.1
5 to 9 Years	9.4	9.7	Q	Q	8.5	14.7
10 to 19 Years	16.3	17.5	Q	Q	7.6	13.2
20 Years or More	9.3	9.9	Q	Q	5.3	18.3
Don't Know	0.4	0.5	Q	Q	Q	65.9

Table HC5-5b. Appliances by Type of Owner-Occupied Housing Unit, Percent of U.S. Households, 1997 (Continued)

			Type of Owner-Occ	cupied Housing Unit		
	Total Owner-		Multi	family		
Appliance Types and Characteristics	Occupied Units	Single-Family	Two to Four Units	Five or More Units	Mobile Home	RSE
RSE Column Factor:	0.4	0.4	2.3	2.5	1.2	Row Factors
Freezer Size						
Very Small (Less than 11 cf)	3.1	3.0	Q	Q	5.2	28.2
Small (11-14 cf)	8.3	8.5	Q	Q	8.5	17.7
Medium (15-18 cf)	18.0	19.2	Q	Q	10.0	13.1
Large (19-22 cf)	11.9	12.6	Q	Q	6.3	14.9
Very Large (23 or More cf)	2.3	2.5	Q	Q	Q	29.2
Heaters (other)						
Hot Tub or Spa	5.6	6.1	Q	Q	Q	23.8
Electric	3.7	4.0	Q	Q	Q	24.9
Natural Gas	1.7	1.9	Q	Q	Q	65.7
LPG/Other	Q	Q	Q	Q	Q	NF
Portable Space	15.6	15.8	Q	Q	16.3	12.6
Electric	13.5	13.5	Q	Q	15.4	13.8
Kerosene	2.4	2.5	Q	Q	Q	28.1
Swimming Pool	1.6	1.8	Q	Q	Q	60.8
Natural Gas	1.0	1.1	Q	Q	Q	66.7
Electric/LPG/Other	0.6	0.6	Q	Q	Q	71.6
Waterbed Heaters	9.3	9.9	Q	Q	5.6	19.8
1	7.7	8.1	Q	Q	4.9	22.0
2 or More	1.6	1.8	Q	Q	Q	31.7
Waterbed Heaters						
Used All Year	8.4	9.0	Q	Q	4.6	20.2
1	7.3	7.8	Q	Q	3.8	22.5
2 or More	1.1	1.2	Q	Q	Q	34.4
Oven	99.0	99.1	98.8	96.8	99.1	0.7
Electric	63.3	64.8	42.0	60.8	49.8	6.1
Natural Gas	30.7	30.3	56.8	36.0	29.1	9.6
LPG Other	5.0 Q	3.9 Q	Q Q	Q Q	20.2 Q	23.1 NF
		-		-		
Self-Cleaning Oven	55.8	59.4	40.0	49.7	18.9	6.7
Continuous Manual Start	12.2 43.6	12.8 46.6	Q 36.4	Q 37.6	7.2 11.7	15.6 8.4
Pumps (Electric)	26.7 5.6	28.0 6.2	Q Q	Q Q	19.9 Q	12.5 23.4
Hot Tub or SpaSwimming Pool	7.6	8.6	Q	Q	Q	18.3
Well Water	18.6	19.1	Q	Q	19.3	17.4
Range	99.5	99.5	100.0	100.0	99.5	NF
Electric	61.5	62.8	42.0	62.6	50.0	6.1
Natural Gas	32.6	32.4	58.0	37.4	29.3	9.2
LPG	5.3	4.2	Q Q	Q Q	20.2	22.6
Other	Q	Q	Q	Q	Q	NF
Refrigerators	99.9	99.9	100.0	100.0	99.8	NF
1	79.4	77.7	87.1	96.1	95.0	1.8
2 or More	20.5	22.3	Q	Q	4.8	13.8

Table HC5-5b. Appliances by Type of Owner-Occupied Housing Unit, Percent of U.S. Households, 1997 (Continued)

			Type of Owner-Occ	upied Housing Unit		
	Total		Multin	family		
Appliance Types and Characteristics	eristics	Single-Family	Two to Four Units	Five or More Units	Mobile Home	RSE
RSE Column Factor:		2.3	2.5	1.2	Row Factors	
Most-Used Refrigerator						
Defrost Method						
Frost-FreeManual	92.0 7.9	93.3 6.7	89.3 Q	89.2 Q	78.2 21.6	2.2 16.1
Type of Refrigerator						
2-Doors (top and bottom)	63.8	62.8	60.9	73.0	74.3	3.9
2-Doors (side-by-side)	27.4	29.0	22.2	15.9	12.4	10.9
Regular (single door)	8.0	7.6	Q	Q	11.5	21.2
Half-Size/Other	0.6	0.5	Q	Q	Q	62.6
Age of Refrigerator	40.0	40.5	0	0	40.0	40.0
Less than 2 Years 2 to 4 Years	12.8	12.5 21.1	Q Q	Q 18.4	16.8	12.0 9.4
5 to 9 Years	20.9 31.4	31.4	43.8	33.6	21.1 28.3	7.4
10 to 19 Years	26.0	26.6	20.1	21.3	21.0	9.0
20 Years or More	7.5	7.0	Q	Q	10.6	15.3
Don't Know	1.5	1.3	Q	Q	Q	52.5
Size of Refrigerator						
Very Small (Less than 11 cf)	0.7	0.5	Q	Q	Q	58.9
Small (11-14 cf)	4.7	4.1	Q	11.8	10.4	17.7
Medium (15-18 cf)	38.6	36.8	49.8	40.7	57.0	5.8
Large (19-22 cf)	54.0 2.0	56.4 2.2	46.9 Q	45.0 Q	30.0 Q	6.1 30.5
Very Large (23 or More cf)	2.0	2.2	Q	Q	Q	30.5
Through-the-Door Ice/Water Service						
Yes	18.1	19.5	Q	Q	6.5	14.3
No	81.9	80.5	89.0	97.4	93.5	1.6
Color Television Sets	99.1	99.1	98.7	100.0	99.3	0.6
1	23.6	21.3	24.6	44.9	45.1	8.4
2	39.0	39.3	33.6	43.0	34.9	6.7
3	22.6	23.7	Q	Q	13.8	9.6
4	10.3	10.8	20.2	Q	3.9	17.4
5 or More	3.7	3.9	Q	Q	Q	23.2
Video Cassette Recorders	90.0	00.2	07.0	80.2	00.5	2.4
(VCR's)	89.9 53.5	90.3 52.2	87.8 58.8	60.8	88.5 65.9	4.9
2	27.6	28.7	19.7	14.7	19.1	11.4
3 or More	8.8	9.4	Q	Q	3.4	17.5
Water Heaters	100.0	100.0	100.0	100.0	100.0	NE
Electric	38.5	36.4	Q	44.4	66.3	8.6
For One Housing Unit	38.0	36.0	Q	38.4	66.1	8.9
For Two or More Units	0.5	0.4	Q	Q	Q	74.9
Natural Gas	52.7	54.8	79.7	42.0	25.4	8.2
For One Housing Unit	50.9	53.7	61.8	Q	25.2	8.5
For Two or More Units	1.8	1.0	Q	35.0	Q	28.9
Fuel Oil	4.4	4.6	Q	Q	Q	28.5
For Two or More Units	3.9	4.4	Q	Q	Q	29.9
For Two or More UnitsLPG	0.5 3.8	Q 3.6	Q Q	Q Q	Q 7.5	42.2 25.0
	0.0	5.0	~	∠	1.5	
Other	0.6	0.6	Q	Q	Q	74.2

Table HC5-5b. Appliances by Type of Owner-Occupied Housing Unit, Percent of U.S. Households, 1997 (Continued)

			Type of Owner-Occ	cupied Housing Unit		
Appliance Types and Characteristics RSE Column Factor:	Total Owner- Occupied Units		Multifamily			
		Single-Family	Two to Four Units	Five or More Units	Mobile Home	RSE
			2.3	2.5	1.2	Row Factors
Water Heater (for one housing						
Water Heater (for one housing unit)	97.1	98.3	75.8	46.7	98.8	6.2
Age	37.1	30.3	73.0	40.7	90.0	0.2
Less than 2 Years	12.4	12.4	Q	Q	15.9	14.5
2 to 4 Years	18.7	18.6	Q	Q	23.9	9.0
5 to 9 Years	28.5	29.4	19.0	Q	23.1	10.6
10 to 19 Years	23.6	24.3	Q	Q	20.7	9.5
20 Years or More	7.8	7.5	Q	Q	10.8	16.9
Don't Know	3.7	3.6	Q	Q	4.2	20.9
No Separate Heater	2.5	2.6	Q	Q	Q	35.7
No Water Heater	Q	Q Q	Ö	Q	Q	NF
Water Heaters for	Q	Q	Q	Q	Q	131
Two or More Units	2.8	1.7	24.2	53.3	Q	18.4
Size						
Small	14.2	12.5	Q	Q	34.9	11.4
Medium	51.8	53.2	32.8	Q	47.8	5.7
Large	26.1	27.6	26.0	Q	13.3	11.2
Don't Know	2.5	2.4	Q	Q	Q	42.8
No Separate Heater	2.5	2.6	Q	Q	ã	35.7
No Water Heater	Q	Q	Q	Q	Q	NF
Water Heaters for						
Two or More Units	2.8	1.7	24.2	53.3	Q	18.4
Other Appliances						
Heated Aquarium	4.0	4.0	Q	Q	3.1	24.8
Microwave Oven	87.6	88.4	75.6	75.7	83.1	2.9
Outdoor Gas Light ² Rechargeable Tools/	0.9	1.0	Q	Q	Q	54.3
or Appliances	52.5	54.5	38.3	29.6	36.9	5.9
Stereo Equipment	69.1	70.0	57.2	57.8	62.7	3.9

¹ The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

² Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These are excluded from the count of 25.2 million households using only room air-conditioners.

cf = Cubic feet.

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. • Percentages are calculated on unrounded numbers. • 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, B, C of the 1997 Residential Energy Consumption Survey.

Table HC5-6b. Appliances by Type of Rented Housing Unit, Percent of U.S. Households, 1997

			Type of Rente	d Housing Unit		
				-		
	Total		Multi	family	Mobile Home	
Appliance Types and Characteristics	Rented Units 0.5	Single-Family	Two to Four Units	Five or More Units		RSE
RSE Column Factor:		0.7	1.4	1.0	1.9	Row Factors
Total	100.0	100.0	100.0	100.0	100.0	0.0
Households With Electric						
Air-Conditioning Equipment	63.9	59.1	58.5	69.9	61.1	4.8
Central Equipment Not Used	Q	Q	Q	Q	Q	NF
Room Air Conditioners Not Used	0.6	Q	Q	Q	Q	85.5
Households Using Electric Air-Conditioning ¹	62.9	58.5	57.2	68.8	61.1	4.8
Type of Electric Air-Conditioning Used						
Central Air-Conditioning ²	34.3	29.7	25.9	41.7	24.4	10.3
Without a Heat Pump With a Heat Pump	26.3 8.0	21.2 8.5	22.3 Q	32.9 8.8	14.6 Q	12.8 NF
Room Air-Conditioning	28.6	28.8	31.3	27.0	36.6	8.9
1 Unit	21.5	18.6	26.2	22.0	27.2	11.0
2 Units 3 or More Units	6.1 1.0	8.3 1.9	5.1 Q	4.4 Q	Q Q	20.1 39.1
Clothes Washer	45.0	75.4	35.2	20.2	68.6	6.7
Clothes Dryer	37.2	64.5	23.5	16.7	54.9	8.9
Electric	31.1	51.6	19.6	15.6	52.0	10.2
Natural GasLPG	5.9 Q	12.6 Q	3.9 Q	Q Q	Q Q	21.8 NF
LFG	Q	Q	Q	Q	Q	INF
Dishwasher	32.0	31.5	15.6	39.4	Q	11.0
Ceiling Fans	36.4	48.8	25.9 20.2	29.7	26.8	9.0
2	22.8 7.0	22.9 12.5	3.0	23.5 3.8	23.0 Q	11.2 20.1
3 or more	6.6	13.4	2.7	2.4	Q	22.9
Freezer	11.4	21.1	10.0	3.1	16.9	15.2
1	11.2 Q	20.6 Q	10.0 Q	3.1 Q	16.9 Q	15.3 NF
Most-Used Freezer Defrost Method						
Frost-Free	4.0	7.2	Q	1.7	Q	27.8
Manual	7.5	13.9	8.6	1.4	Q	17.8
Type of Freezer Upright	4.6	9.2	Q	Q	Q	18.8
Chest	6.9	11.9	7.3	2.4	Q	21.1
Age of Freezer						
Less than 2 Years	1.3	2.0	Q	Q	Q	36.6
2 to 4 Years 5 to 9 Years	1.8 3.2	2.6 6.5	Q 3.0	1.1 Q	Q Q	35.0 25.3
10 to 19 Years	3.5	7.4	Q.0	Q	Q	18.3
20 Years or More	0.9	1.8	Q	Q	Q	38.9
Don't Know	0.7	Q	Q	Q	Q	46.3

Table HC5-6b. Appliances by Type of Rented Housing Unit, Percent of U.S. Households, 1997 (Continued)

			Type of Rente	d Housing Unit		
			Multi	family	Mobile Home	
Appliance Types and Characteristics	Total Rented Units	Single-Family	Two to Four Units	Five or More Units		RSE
RSE Column Factor:	0.5	0.7	1.4	1.0	1.9	Row Factors
Freezer Size Very Small (Less than 11 cf) Small (11-14 cf) Medium (15-18 cf) Large (19-22 cf) Very Large (23 or More cf)	1.7 3.0 3.5 2.8 Q	2.6 5.5 6.5 5.7 Q	Q Q 3.6 Q Q	Q 1.0 1.2 Q Q	Q Q Q Q	34.5 25.9 27.7 28.1 NF
Heaters (other) Hot Tub or Spa Electric Natural Gas LPG/Other	0.5 Q Q Q	Q Q Q	Q Q Q	Q Q Q	Q Q Q	78.9 NF NF NF
Portable Space	10.5	14.0	10.0	7.2	17.0	13.9
Electric	9.4	11.9	9.2	7.1	Q	14.6
Kerosene	1.2	2.5	Q	Q	Q	39.0
Swimming Pool	Q	Q	Q	Q	Q	NF
Natural Gas	Q	Q	Q	Q	Q	NF
Electric/LPG/Other	Q	Q	Q	Q	Q	NF
Waterbed Heaters	6.1	8.4	6.2	3.9	Q	20.0
	5.0	6.0	5.3	3.9	Q	22.0
	1.0	2.4	Q	Q	Q	44.4
Waterbed Heaters Used All Year 1	5.1	7.2	3.9	3.6	Q	22.5
	4.3	5.3	3.7	3.6	Q	24.5
	0.8	1.9	Q	Q	Q	47.5
Oven Electric Natural Gas LPG Other	98.3	98.1	98.6	98.5	97.8	0.8
	57.6	51.6	51.8	65.0	52.5	5.8
	38.5	43.2	45.6	33.5	21.3	8.8
	2.2	3.2	Q	Q	24.0	26.7
	Q	Q	Q	Q	Q	NF
Self-Cleaning Oven Continuous Manual Start	19.7	27.7	10.1	16.4	Q	12.3
	5.2	5.7	Q	5.7	Q	22.0
	14.5	22.0	7.2	10.7	Q	13.9
Pumps (Electric) Hot Tub or Spa Swimming Pool Well Water	5.7 0.5 0.7 4.8	12.2 Q 1.9 9.8	Q Q Q Q	a a a	23.6 Q Q 23.6	18.9 78.9 43.1 20.8
Range	98.6	98.4	98.8	98.7	98.9	0.6
	57.4	51.1	51.8	64.9	52.5	5.8
	39.0	44.1	45.8	33.7	21.3	8.8
	2.3	3.2	Q	Q	25.1	26.2
	Q	Q	Q	Q	Q	NF
Refrigerators 12 or More	99.7	99.8	100.0	99.5	100.0	NF
	95.6	91.7	98.6	98.0	95.8	1.8
	4.1	8.0	Q	1.5	Q	22.2

Table HC5-6b. Appliances by Type of Rented Housing Unit, Percent of U.S. Households, 1997 (Continued)

			Type of Rente	d Housing Unit		
			Multit	family		
Appliance Types and Characteristics	pristics	Single-Family	Two to Four Units	Five or More Units	Mobile Home	RSE
RSE Column Factor:		1.4	1.0	1.9	Row Factors	
Most-Used Refrigerator						
Defrost Method						
Frost-Free	76.0	82.1	65.2	74.4	72.7	3.2
Manual	23.7	17.7	34.8	25.1	27.3	9.4
Type of Refrigerator						
2-Doors (top and bottom)	76.5	76.0	75.7	77.3	75.1	3.4
2-Doors (side-by-side)	6.0	9.9	3.5	3.5	Q	18.3
Regular (single door)	16.2	12.8	19.4	17.9	19.1	13.2
Half-Size/Other	1.0	Q	Q	Q	Q	43.6
Age of Refrigerator						
Less than 2 Years	14.2	15.3	12.2	14.3	Q	12.9
2 to 4 Years	21.4	20.5	23.1	22.4	11.8	10.9
5 to 9 Years	26.7	28.5	25.9	24.9	33.3	8.4
10 to 19 Years	19.2	22.1	20.0	16.1	23.1	10.9
20 Years or More	6.0	5.4	6.3	6.6	Q	19.1
Don't Know	12.2	8.0	12.5	15.2	19.8	13.7
Size of Befrigerator						
Size of Refrigerator Very Small (Less than 11 cf)	1.4	1.1	Q	1.8	Q	30.6
Small (11-14 cf)	13.7	9.0	15.7	16.8	16.7	13.5
Medium (15-18 cf)	58.3	55.4	56.9	60.6	66.8	4.0
Large (19-22 cf)	25.8	33.2	25.9	20.0	16.5	9.3
Very Large (23 or More cf)	Q	Q	Q	Q	Q	NF
Through-the-Door Ice/Water Service						
Yes	2.3	5.4	Q	Q	Q	NF
No	97.7	94.6	99.9	99.7	98.0	1.1
Color Television Sets	97.9	98.8	96.3	97.5	100.0	0.8
1	49.0	37.4	52.9	56.9	59.4	5.4
2 3	34.1 11.8	35.5 19.5	29.6 12.5	34.5 5.3	32.3	7.3 13.0
4	2.2	4.5	Q	Q.3	Q Q	28.3
5 or More	0.8	1.8	Q	Q	Q	50.4
Video Cassette Recorders	00.6	05.0	76.0	04.2	00.0	2.1
(VCR's)	82.6 59.8	85.9 58.0	76.3 54.7	81.3 62.6	90.8 65.1	4.4
2	19.2	21.2	20.2	16.8	23.3	10.4
3 or More	3.7	6.7	Q	1.9	Q Q	27.6
Water Heaters	100.0	100.0	100.0	100.0	100.0	NE 71
For One Housing Unit	40.2 35.7	34.5 33.9	36.3 31.9	43.7 35.5	77.5 77.5	7.1 7.6
For Two or More Units	35.7 4.5	33.9 Q	31.9 4.4	35.5 8.2	77.5 Q	19.2
Natural Gas	50.3	58.5	57.6	43.8	Q	6.4
For One Housing Unit	35.3	53.7	40.9	19.5	Q	10.1
For Two or More Units	15.0	4.8	16.7	24.3	Q	16.3
Fuel Oil	6.4	2.9	5.5	10.2	Q	20.4
For One Housing Unit	1.4	2.3	Q	Q	Q	36.2
For Two or More Units	5.0	Q	4.9	9.1	Q	19.3
LPG	1.9	3.6	Q	Q	12.4	27.4
		_				51.7
Other	0.9	Q	Q	1.8	Q	31.7

Table HC5-6b. Appliances by Type of Rented Housing Unit, Percent of U.S. Households, 1997 (Continued)

		<u>, </u>	•	•		
			Type of Rente	d Housing Unit		
			Multi	family		
Appliance Types and Characteristics RSE Column Factor:	Total Rented Units	Single-Family	Two to Four Units	Five or More Units	Mobile Home	RSE
	0.5	0.7	1.4	1.0	1.9	Row Factors
Water Heater (for one housing						
unit)	74.4	93.3	74.0	56.3	100.0	3.7
Age						
Less than 2 Years	8.3	12.4	5.6	4.8	19.1	16.5
2 to 4 Years	12.7	17.0	15.4	8.3	Q	12.2
5 to 9 Years	17.6	22.6	19.2	12.9	15.8	13.8
10 to 19 Years	12.3	17.3	9.2	8.5	19.2	15.3
20 Years or More	5.5	8.2	3.4	3.5	Q	21.8
Don't Know	14.0	14.2	17.9	11.8	23.7	14.5
No Separate Heater	4.0	1.6	3.3	6.5	Q	29.6
No Water Heater	Q	Q	Q	Q	Q	NF
Water Heaters for						
Two or More Units	25.3	6.3	26.0	43.3	Q	13.0
Size						
Small	17.5	17.1	17.8	15.7	46.9	10.9
Medium	35.2	51.4	31.8	21.8	43.5	7.5
Large	11.5	18.1	11.5	6.2	Q	16.7
Don't Know	6.2	5.2	9.6	6.1	Q	20.8
No Separate Heater	4.0	1.6	3.3	6.5	Q	29.6
No Water Heater Water Heaters for	Q	Q	Q	Q	Q	NF
Two or More Units	25.3	6.3	26.0	43.3	Q	13.0
Other Appliances						
Heated Aquarium	3.4	4.0	Q	3.2	Q	24.1
Microwave Oven	73.3	78.4	66.2	71.2	73.0	3.1
Outdoor Gas Light ²	Q	Q	Q	Q	Q	NF
Rechargeable Tools/						
or Appliances	25.5	33.9	16.2	21.7	19.4	9.7
Stereo Equipment	68.2	72.4	64.2	66.3	62.6	3.9

¹ The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

² Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These are excluded from the count of 25.2 million households using only room air-conditioners.

cf = Cubic feet.

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. • Percentages are calculated on unrounded numbers. • 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, B, C of the 1997 Residential Energy Consumption Survey.

Table HC5-7b. Appliances by Four Most Populated States, Percent of U.S. Households, 1997

			Four Most Pop	ulated States		
Appliance Types and Characteristics	Total	New York	California	Texas	Florida	RSE
RSE Column Factor:	0.4	1.3	1.2	1.2	1.4	Row Factors
Total	100.0	100.0	100.0	100.0	100.0	0.0
Households With Electric	70.5	00.0	44.4	04.7	00.0	0.5
Air-Conditioning Equipment	72.5	62.6	41.4	91.7	96.0	3.5
Central Equipment Not Used Room Air Conditioners Not Used	0.3 0.7	Q Q	1.2 Q	0.5 Q	1.1 1.1	29.3 36.9
Room Air Conditioners Not Used	0.7	Q	Q	Q	1.1	36.9
Households Using Electric Air-Conditioning ¹	71.6	62.2	39.9	91.2	94.3	3.3
Type of Electric Air-Conditioning Used						
Central Air-Conditioning Used Central Air-Conditioning ²	46.8	18.5	27.7	68.6	82.1	5.4
Without a Heat Pump	36.4	17.2	24.8	58.8	41.9	10.6
With a Heat Pump	10.4	1.3	2.9	9.8	40.1	21.2
. A. O. 191	04.0	40.0	40.0	00.0	40.0	40.7
Room Air-Conditioning	24.8 14.7	43.8 22.8	12.2 11.1	22.6 9.6	12.3 7.9	10.7 12.5
2 Units	7.1	22.6 14.2	1.0	9.6 7.6	7.9 2.5	17.8
3 or More Units	3.0	6.8	1.0 Q	7.6 5.3	1.9	25.7
Clothes Washer	77.4	66.6	60.7	73.0	81.8	4.3
Clathes Dryer	71.2	E / E	57.1	69.6	73.7	4.1
Electric	55.1	54.5 37.4	30.6	55.3	70.3	6.2
Natural Gas	15.2	16.4	26.2	14.1	2.7	15.4
LPG	0.8	0.6	Q	Q	Q	34.2
Dishwasher	50.2	46.0	47.5	54.7	58.0	6.1
Ceiling Fans	60.1	50.4	41.1	74.6	74.5	3.6
1	23.3	29.4	21.0	14.8	12.2	7.2
2	13.8	8.8	9.7	18.0	14.8	11.4
3 or more	23.0	12.2	10.4	41.8	47.4	8.2
Freezer	33.2	21.2	14.4	30.2	24.8	8.2
1	30.2	18.5	13.6	27.1	23.8	9.0
2 or more	2.9	Q Q	Q Q	3.0	1.0	23.0
Most-Used Freezer						
Defrost Method	10.5	6.6	E 1	0.9	9.4	15.6
Host-Free	22.6	6.6 14.6	5.4 9.0	9.8 20.4	15.4	15.6 7.7
Type of Freezer						
Upright	16.3	13.6	11.8	13.1	17.3	8.1
Chest	16.9	7.6	2.6	17.0	7.5	17.0
Age of Freezer						
Less than 2 Years	2.4	Q	0.6	2.7	Q	26.9
2 to 4 Years	4.1	1.9	1.8	4.3	3.5	28.5
5 to 9 Years	7.4	4.9	4.2	7.4	5.0	13.2
10 to 19 Years 20 Years or More	12.2	7.2	4.9	12.0	9.8	13.5
Don't Know	6.6 0.5	5.2 Q	2.9 Q	3.4 Q	Q Q	24.7 46.6
DOI: 1.1110W	0.0	Q	~	~	Q	1 -0.0

Table HC5-7b. Appliances by Four Most Populated States, Percent of U.S. Households, 1997 (Continued)

			Four Most Pop	oulated States		
Appliance Types and Characteristics	Total	New York	California	Texas	Florida	RSE
RSE Column Factor:	0.4	1.3	1.2	1.2	1.4	Row Factors
Freezer Size						
Very Small (Less than 11 cf)	2.7	1.2	1.0	3.0	1.5	32.0
Small (11-14 cf)	6.6	3.6	2.3	6.3	3.9	22.3
Medium (15-18 cf)	13.3	7.1	6.2	11.7	10.0	12.5
Large (19-22 cf)	8.9	7.7	3.5	7.6	8.4	14.9
Very Large (23 or More cf)	1.7	1.6	1.4	Q	Q	21.4
Heaters (other)						
Hot Tub or Spa	3.9	3.5	6.7	5.4	8.3	23.0
Electric	2.6	3.0	3.8	3.5	3.0	28.3
Natural Gas	1.1	Q	2.6	Q	Q	34.6
LPG/Other	0.1	Q	Q	Q	Q	NF
Portable Space	13.9	11.2	11.2	14.8	9.5	11.2
Electric	12.1	10.5	10.9	14.3	8.4	10.6
Kerosene	2.0	Q	Q	Q	Q	24.5
Swimming Pool	1.1	Q	1.7	1.7	Q	31.8
Natural Gas	0.7	0.7	1.4	1.7	Q	33.1
Electric/LPG/Other	0.4	Q	Q	Q	Q	70.4
Waterbed Heaters	8.3	5.5	3.3	8.5	9.4	17.5
1	6.8	5.2	Q	7.2	7.3	20.4
2 or More	1.4	Q	0.8	1.4	2.0	18.1
Waterbed Heaters						
Used All Year	7.3	5.0	3.3	7.2	9.4	19.8
1	6.4	4.6	Q	6.2	8.4	20.1
2 or More	1.0	Q	0.8	1.0	1.0	23.6
Oven	98.8	99.3	97.5	99.0	98.5	NF
Electric	61.4	35.2	42.5	59.9	89.2	3.9
Natural Gas	33.3	57.2	52.8	35.7	5.6	6.9
LPG	4.1	6.9	2.3	3.4	3.7	23.3
Other	Q	Q	Q	Q	Q	NF
Self-Cleaning Oven	44.1	43.3	36.8	41.3	46.8	6.6
Continuous	9.9	10.9	8.6	11.2	8.0	12.7
Manual Start	34.1	32.4	28.2	30.1	38.8	7.6
Pumps (Electric)	19.8	19.3	11.5	12.3	34.9	10.7
Hot Tub or Spa	4.0	3.7	6.7	5.4	8.3	22.5
Swimming Pool	5.4	8.5	4.1	5.0	15.0	15.6
Well Water	14.1	10.7	3.4	5.1	28.2	22.6
Range	99.2	99.6	98.6	99.0	99.2	NF
Electric	60.2	34.7	39.0	56.4	89.7	4.2
Natural Gas	34.7	58.0	56.8	39.0	5.8	6.8
UPGOther	4.3 Q	6.9 Q	2.8 Q	3.6 Q	3.7 Q	24.6 NF
Refrigerators 1	99.8 84.7	99.8 88.6	99.7 84.2	100.0 85.4	100.0	NF 1.7
	84.7 15.2	88.6	84.2 15.5	85.4 14.6	88.6	1.7
2 or More	15.2	11.1	15.5	14.6	11.4	10.8

Table HC5-7b. Appliances by Four Most Populated States, Percent of U.S. Households, 1997 (Continued)

			Four Most Pop	ulated States		
Appliance Types and Characteristics	Total	New York	California	Texas		RSE
RSE Column Factor:	0.4	1.3	1.2	1.2	1.4	Row Factors
Most-Used Refrigerator						
Defrost Method						
Frost-Free	86.8	83.1	84.0	91.2	93.4	1.3
Manual	13.1	16.7	15.7	8.8	6.6	10.8
Type of Refrigerator						
2-Doors (top and bottom)	68.0	71.9	54.5	63.9	63.7	4.5
2-Doors (side-by-side)	20.4	15.0	29.6	26.3	23.9	11.2
Regular (single door)	10.7	12.4	14.6	8.6	11.3	14.4
Half-Size/Other	0.7	0.4	1.0	Q	Q	34.3
Age of Refrigerator						
Less than 2 Years	13.2	13.0	13.8	14.9	11.4	11.6
2 to 4 Years	21.0	23.0	18.5	24.8	17.1	9.0
5 to 9 Years	29.9	26.1	32.9	30.2	33.5	7.4
10 to 19 Years 20 Years or More	23.8	23.5 7.5	24.3	20.3	25.7	6.2 15.5
Don't Know	7.0 5.0	6.6	6.2 4.0	5.8 4.0	3.9 8.4	18.3
DOIT TRIOW	3.0	0.0	4.0	4.0	0.4	10.5
Size of Refrigerator						
Very Small (Less than 11 cf)	0.9	Q	1.0	Q	Q	34.5
Small (11-14 cf)	7.6	10.3	11.7	6.6	11.5	10.7
Medium (15-18 cf)	45.0 44.8	47.6 40.5	35.3	40.2	37.6 49.9	5.2 5.7
Large (19-22 cf)Very Large (23 or More cf)	1.5	40.5 Q	50.1 1.6	50.1 2.0	49.9 Q	26.1
, g . (,		_				
Through-the-Door Ice/Water						
Service	40.0	0.4	47.5	40.0	40.0	44.7
Yes No	13.0 87.0	8.4 91.6	17.5 82.5	18.0 82.0	18.2 81.8	14.7 2.7
NO	07.0	31.0	02.3	02.0	01.0	2.1
Color Television Sets	98.7	99.6	98.0	97.7	98.1	NF
1	31.8	31.2	34.7	30.2	25.0	7.5
2	37.4	39.3	38.2	37.0	40.7	4.5
3	19.1	19.2	18.2	19.2	18.6	8.4
45 or More	7.7 2.7	7.9 2.1	5.3 1.5	7.8 3.5	11.4 2.4	16.6 24.1
o or word	2.7	2.1	1.0	0.0	2.3	24.1
Video Cassette Recorders (VCR's)	87.6	86.0	89.5	86.5	81.6	1.7
1	55.5	59.5	58.5	50.9	45.4	4.2
2	24.9	19.8	24.5	26.8	27.9	7.9
3 or More	7.2	6.8	6.5	8.8	8.2	15.6
Water Heaters	100.0	100.0	100.0	100.0	100.0	NE
Electric	39.1	14.8	15.7	34.6	78.8	10.8
For One Housing Unit	37.3	13.7	13.9	29.9	77.7	11.3
For Two or More Units	1.8	Q	1.7	4.7	1.1	27.8
Natural Gas	51.9	48.6	80.9	61.5	15.6	8.0
For Two or More Units	45.8 6.1	35.1 13.5	69.0	59.4	13.0 2.6	9.6
For Two or More Units Fuel Oil	6.1 5.1	13.5 32.6	11.9 Q	Q Q	2.6 Q	16.8 15.5
For One Housing Unit	3.1	13.0	Q	Q	Q	23.9
For Two or More Units	2.0	19.7	Q	Q	Q	14.4
LPG	3.2	3.0	2.7	3.6	2.5	24.5
Other	0.7	Q	Q	Q	Q	57.2
No Water Heater	0.2	0.4	0.3	Q	Q	41.2

Table HC5-7b. Appliances by Four Most Populated States, Percent of U.S. Households, 1997 (Continued)

			Four Most Pop	oulated States		
Appliance Types and Characteristics RSE Column Factor:	Total	New York	California	Texas	Florida	RSE
	0.4	1.3	1.2	1.2	1.4	Row Factors
Water Heater (for one housing unit)	89.7	65.0	85.7	93.0	95.3	2.0
Less than 2 Years	11.1	9.0	8.1	10.9	6.8	15.4
2 to 4 Years	16.8	12.9	12.3	26.7	16.1	10.7
5 to 9 Years	25.0	16.6	23.8	27.2	33.9	7.8
10 to 19 Years	19.9	12.4	20.9	15.7	20.7	11.0
20 Years or More	7.0	3.2	11.0	4.1	4.9	17.2
Don't Know	7.0	2.8	7.1	7.5	12.5	13.6
No Separate Heater	2.9	8.1	2.5	Q	Q	24.5
No Water Heater	0.2	0.4	0.3	ã	ã	41.2
Water Heaters for						
Two or More Units	10.1	34.7	14.0	6.8	3.9	15.9
Size						
Small	15.3	8.0	12.8	18.4	25.0	11.3
Medium	46.4	31.2	40.6	51.0	47.0	6.5
Large	21.3	15.3	25.9	20.3	17.7	9.5
Don't Know	3.7	2.3	4.0	2.3	Q	24.8
No Separate Heater	2.9	8.1	2.5	Q	Q	24.5
No Water Heater	0.2	0.4	0.3	Q	Q	41.2
Water Heaters for						
Two or More Units	10.1	34.7	14.0	6.8	3.9	15.9
Other Appliances						
Heated Aquarium	3.8	4.4	4.7	1.8	4.2	17.2
Microwave Oven	83.0	75.9	82.1	79.7	84.0	2.1
Outdoor Gas Light ² Rechargeable Tools/	0.7	Q	Q	1.0	Q	27.9
or Appliances	43.7	38.9	43.7	46.0	42.1	5.1
Stereo Equipment	68.8	68.6	73.1	72.6	73.0	2.0

¹ The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These are excluded from the count of 25.2 million households

using only room air-conditioners.

cf = Cubic feet.

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.

Percentages are calculated on unrounded numbers. • 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, B, C of the 1997 Residential Energy Consumption Survey.

Table HC5-8b. Appliances by Urban/Rural Location, Percent of U.S. Households, 1997

			Urban/Rเ	ıral Location ¹		
Appliance Types and Characteristics	Total	City	Town	Suburbs	Rural	RSE
RSE Column Factor:	0.6	0.9	1.3	1.2	1.2	Row Factors
Total	100.0	100.0	100.0	100.0	100.0	0.0
Households With Electric						
Air-Conditioning Equipment	72.5	69.8	72.8	80.7	70.8	2.3
Central Equipment Not Used	0.3	0.5	Q	Q	Q	27.6
Room Air Conditioners Not Used	0.7	0.7	0.6	Q	Q	28.5
Households Using Electric Air-Conditioning ²	71.6	68.7	72.1	79.9	70.1	2.4
	71.0	00.7	72.1	70.0	70.1	
Type of Electric Air-Conditioning Used Central Air-Conditioning ³	46.8	42.5	42.7	64.3	44.1	3.8
Without a Heat Pump	36.4	34.0	35.5	49.2	29.7	5.3
With a Heat Pump	10.4	8.5	7.2	15.1	14.4	11.3
Willi a Heat Fullip	10.4	0.5	1.2	13.1	14.4	11.3
Room Air-Conditioning	24.8	26.2	29.4	15.7	26.0	6.0
1 Unit	14.7	16.2	16.4	9.2	14.4	8.0
2 Units	7.1	6.9	9.6	4.5	8.2	10.4
3 or More Units	3.0	3.1	3.4	2.0	3.4	16.3
Clothes Washer	77.4	67.5	80.9	88.4	90.1	1.7
Clothes Dryer	71.2	59.8	74.6	85.0	84.9	2.0
Electric	55.1	42.6	61.6	62.5	76.3	2.9
Natural Gas	15.2	17.0	12.5	22.3	5.0	10.1
LPG	0.8	0.2	0.5	Q	3.6	27.7
Dishwasher	50.2	42.2	48.8	71.9	50.6	3.2
Ceiling Fans	60.1	54.5	58.8	67.8	69.2	2.6
1	23.3	21.7	23.5	23.9	26.8	5.4
2	13.8	12.8	14.9	16.1	13.0	6.8
3 or more	23.0	20.0	20.4	27.8	29.4	5.3
Freezer	33.2	24.8	35.2	32.2	56.5	4.3
1	30.2	23.1	32.0	29.9	49.7	4.6
2 or more	2.9	1.7	3.3	2.4	6.8	13.6
Most-Used Freezer						
Defrost Method						
Frost-Free	10.5	8.1	11.0	10.9	16.8	7.0
Manual	22.6	16.7	24.3	21.3	39.7	5.3
Type of Freezer						
Upright	16.3	13.0	15.8	19.9	22.5	5.5
Chest	16.9	11.8	19.5	12.3	34.0	6.4
Age of Freezer						
Less than 2 Years	2.4	1.6	2.5	1.8	5.2	16.6
2 to 4 Years	4.1	3.8	3.8	3.5	6.2	13.8
5 to 9 Years	7.4	5.9	7.8	7.7	11.1	9.7
10 to 19 Years	12.2	9.3	12.2	11.4	21.3	7.1
20 Years or More	6.6	3.9	8.6	7.1	11.5	10.8
Don't Know	0.5	0.3	Q	0.6	1.2	33.5

Table HC5-8b. Appliances by Urban/Rural Location, Percent of U.S. Households, 1997 (Continued)

			Urban/Rui	ral Location ¹		
Appliance Types and Characteristics	Total	City	Town	Suburbs	Rural	RSE
RSE Column Factor:	0.6	0.9	1.3	1.2	1.2	Row Factors
Freezer Size						
Very Small (Less than 11 cf)	2.7	2.4	3.0	2.6	3.2	16.0
Small (11-14 cf)	6.6	4.5	7.9	7.1	10.7	9.8
Medium (15-18 cf)	13.3	10.4	13.8	12.0	22.6	7.7
Large (19-22 cf)	8.9	6.3	8.9	8.7	16.7	8.4
Very Large (23 or More cf)	1.7	1.1	1.7	1.8	3.3	19.7
Heaters (other)						
Hot Tub or Spa	3.9	2.4	3.9	6.7	5.2	15.3
Electric	2.6	1.7	2.7	3.9	3.9	16.2
Natural Gas	1.1	0.7	1.2	2.7	Q	30.5
LPG/Other	0.1	Q	Q	Q	0.5	NF
Portable Space	13.9	11.3	14.8	18.0	16.0	7.2
Electric	12.1	10.1	13.2	15.8	12.8	8.1
Kerosene	2.0	1.4	1.7	2.3	3.8	17.0
Swimming Pool	1.1	0.6	0.7	2.2	1.7	33.9
Natural Gas	0.7	0.3	Q	2.0	Q	41.7
Electric/LPG/Other	0.4	0.3	Q	Q	1.2	41.6
Waterbed Heaters	8.3	6.4	9.8	9.3	10.7	9.9
12 or More	6.8 1.4	5.4 1.0	8.2 1.6	7.2 2.1	9.1 1.7	11.1 19.2
2 01 NOTE	1.4	1.0	1.0	2.1	1.7	19.2
Waterbed Heaters Used All Year	7.3	5.8	8.2	8.5	9.7	10.2
1	6.4	5.1	6.9	7.3	8.4	11.3
2 or More	1.0	0.7	1.3	1.2	1.3	21.0
Oven	98.8	98.5	99.1	99.4	98.7	NF
Electric	61.4	53.9	68.6	65.6	70.6	2.7
Natural Gas	33.3	43.7	26.2	32.4	11.3	6.4
LPG	4.1	0.8	4.3	1.4	16.7	17.6
Other	Q	Q	Q	Q	Q	NF
Self-Cleaning Oven	44.1	37.0	45.9	58.1	47.0	3.4
Continuous	9.9	8.7	9.1	13.0	10.9	8.4
Manual Start	34.1	28.2	36.8	45.1	36.0	4.2
Pumps (Electric)	19.8	7.9	15.8	19.5	59.7	7.1
Hot Tub or Spa	4.0	2.4	4.1	6.7	5.3	15.2
Swimming Pool	5.4	3.4	3.8	9.0	8.9	11.4
Well Water	14.1	3.1	10.5	9.9	55.2	11.6
Range	99.2	99.0	99.0	99.3	99.7	NF
Electric	60.2	53.2	67.3	63.1	69.5	2.8
Natural Gas	34.7	45.0	27.5	34.9	12.1	6.2
LPG	4.3	0.8	4.3	1.4	17.9	17.5
Other	Q	Q	Q	Q	Q	NF
Refrigerators	99.8	99.8	99.8	100.0	99.8	NF
1	84.7	88.1	85.5	78.0	81.3	1.4
2 or More	15.2	11.7	14.3	22.0	18.5	6.3

Table HC5-8b. Appliances by Urban/Rural Location, Percent of U.S. Households, 1997 (Continued)

			Urban/Rui	ral Location ¹		
Appliance Types and Characteristics	Total	City	Town	Suburbs	Rural	RSE
RSE Column Factor:	0.6	0.9	1.3	1.2	1.2	Row Factors
Most-Used Refrigerator						
Defrost Method						
Frost-Free	86.8	84.1	87.1 12.7	92.5	87.9	1.1
Manual	13.1	15.7	12.7	7.5	11.9	8.1
Type of Refrigerator						
2-Doors (top and bottom)	68.0	67.2	72.9	67.2	65.5	2.0
2-Doors (side-by-side)	20.4	18.2	17.4	25.1	24.9	5.8
Regular (single door)	10.7	13.5	8.8	6.9	8.7	10.6
Half-Size/Other	0.7	0.9	0.6	0.6	0.6	29.6
Age of Refrigerator						
Less than 2 Years	13.2	13.4	12.4	13.7	13.1	6.5
2 to 4 Years	21.0	20.8	20.9	21.4	21.7	4.9
5 to 9 Years	29.9	29.5	32.2	29.2	28.9	4.4
10 to 19 Years		22.7	23.0	25.7	25.8	4.5
20 Years or More Don't Know	7.0	7.5	6.3	5.3	8.0	9.1
Don't Know	5.0	6.0	4.9	4.6	2.3	15.8
Size of Refrigerator						
Very Small (Less than 11 cf)	0.9	1.0	0.9	0.6	1.2	25.0
Small (11-14 cf)	7.6	9.2	7.6	5.3	5.7	9.5
Medium (15-18 cf)		45.3	48.1	42.2	44.0	2.9
Large (19-22 cf) Very Large (23 or More cf)	44.8 1.5	43.4 1.1	41.4 1.8	49.3 2.6	47.9 1.2	3.3 19.6
very Large (25 or More or)	1.5	1.1	1.0	2.0	1.2	13.0
Through-the-Door Ice/Water						
Service						
Yes	13.0	10.4	11.8	17.0	17.3	8.2
No	87.0	89.6	88.2	83.0	82.7	1.4
Color Television Sets	98.7	98.3	99.4	99.3	98.4	NF
1	31.8	33.7	35.3	21.8	33.9	4.1
2	37.4	38.6	33.8	38.9	36.0	3.5
3		17.5	18.9	24.1	18.5	5.7
4		6.3	8.6	10.0	7.9	9.9
5 or More	2.7	2.2	2.8	4.6	2.1	15.7
Video Cassette Recorders (VCR's)	87.6	85.6	87.1	91.5	89.5	1.1
1	55.5	54.2	57.7	52.2	60.9	2.6
2	24.9	24.7	22.0	29.5	23.4	5.3
3 or More	7.2	6.7	7.5	9.8	5.2	10.1
Water Heaters	100.0	100.0	100.0	100.0	100.0	NE
Electric	39.1	30.9	41.8	35.6	63.8	4.6
For One Housing Unit	37.3	28.8	40.6	33.6	62.5	4.7
For Two or More Units	1.8	2.1	1.2	2.0	1.3	22.7
Natural Gas		63.2	47.8	58.7	15.5	4.8
For One Housing Unit	45.8	53.7	43.6	55.6	14.2	5.2
For Two or More Units	6.1	9.5	4.3	3.2	1.3	15.5
Fuel Oil	5.1	4.5	6.4	4.7	5.7	13.3
For Two or More Units	3.1 2.0	1.2 3.2	5.2 1.2	4.4 Q	4.8 0.9	17.0 18.5
For Two or More Units LPG	3.2	3.2 0.6	3.5	0.5	13.3	20.3
Other	0.7	0.7	Q.	0.5	1.2	34.7
			-		·	48.3

Table HC5-8b. Appliances by Urban/Rural Location, Percent of U.S. Households, 1997 (Continued)

			Urban/Rur	ral Location ¹		
Appliance Types and Characteristics RSE Column Factor:	Total	City	Town	Suburbs	Rural	RSE
	0.6	0.9	1.3	1.2	1.2	Row Factors
Water Heater (for one housing unit)	89.7	84.5	93.1	94.5	95.9	1.1
Age Less than 2 Years	11.1	10.2	11.6	11.3	13.0	7.7
2 to 4 Years	16.8	15.7	17.4	16.9	19.2	5.6
5 to 9 Years	25.0	22.6	25.6	30.1	25.3	4.7
10 to 19 Years	19.9	18.0	20.8	21.8	22.7	5.7
20 Years or More	7.0	7.1	8.1	4.3	8.5	10.0
Don't Know	7.0	8.5	6.2	6.7	4.2	10.7
No Separate Heater	2.9	2.5	3.4	3.5	3.1	17.3
No Water Heater	0.2	0.1	Q	Q	Q	48.3
Water Heaters for						
Two or More Units	10.1	15.3	6.8	5.5	3.6	12.5
Size						
Small	15.3	16.0	15.2	11.0	18.0	7.3
Medium	46.4	44.5	49.1	50.2	44.8	3.3
Large	21.3	17.0	22.3	26.6	27.0	6.0
Don't Know	3.7	4.4	3.1	3.2	3.0	17.4
No Separate Heater	2.9	2.5	3.4	3.5	3.1	17.3
No Water Heater	0.2	0.1	Q	Q	Q	48.3
Water Heaters for						
Two or More Units	10.1	15.3	6.8	5.5	3.6	12.5
Other Appliances						
Heated Aguarium	3.8	3.2	3.7	4.3	5.2	12.9
Microwave Oven	83.0	78.6	86.5	88.1	85.9	1.5
Outdoor Gas Light ³	0.7	0.7	0.7	0.7	0.6	30.9
Rechargeable Tools/						
or Appliances	43.7	37.0	45.2	54.1	50.3	3.0
Stereo Equipment	68.8	67.3	65.9	79.5	64.3	1.7

¹ Based on the household respondent's description rather than the Federal Government definition.

² The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

was electricity.

³ Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These are excluded from the count of 25.2 million households using only room air-conditioners.

cf = Cubic feet.

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.

[•] Percentages are calculated on unrounded numbers. • 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, B, C of the 1997 Residential Energy Consumption Survey.

Table HC5-9b. Appliances by Northeast Census Region, Percent of U.S. Households, 1997

			Northeast Census Region	n	
			Census	Division	
Appliance Types and Characteristics	Total U.S.	Total	Middle Atlantic	New England	RSE
RSE Column Factor:	0.5	1.0	1.3	1.5	Row Factors
Total	100.0	100.0	100.0	100.0	0.0
Households With Electric					
Air-Conditioning Equipment	72.5	63.3	68.6	48.8	3.8
Central Equipment Not Used	0.3	Q	Q	Q	40.2
Room Air Conditioners Not Used	0.7	1.5	1.4	Q	29.5
Households Using Electric					
Air-Conditioning ¹	71.6	61.7	67.2	46.9	4.2
Type of Electric Air-Conditioning Used	46.0	22.1	27.5	7.7	11.2
Central Air-Conditioning ²	46.8 36.4	22.1 19.7	27.5 24.5	7.7 6.7	13.6
With a Heat Pump	10.4	2.5	3.0	Q.	26.0
, , , , , , , , , , , , , , , , , , ,				-	
Room Air-Conditioning	24.8	39.6	39.7	39.2	7.4
1 Unit	14.7	20.3	19.6	21.9	9.3
2 Units	7.1	13.6	14.3	11.7	10.7
3 or More Units	3.0	5.7	5.8	5.6	19.0
Clothes Washer	77.4	76.0	76.5	74.5	2.2
Olad as Bassa	74.0	20.7	07.0	05.0	
Clothes Dryer	71.2 55.1	66.7 48.3	67.2 46.1	65.2 54.3	2.3 5.0
Natural Gas	15.2	17.7	20.7	9.3	15.2
LPG	0.8	0.7	Q	Q.S	25.9
Dishwasher	50.2	48.5	48.9	47.5	3.9
Ceiling Fans	60.1	51.2	53.4	45.5	2.9
1	23.3	26.0	27.0	23.3	4.4
2	13.8	11.9	12.1	11.2	7.8
3 or more	23.0	13.3	14.2	11.0	8.3
Freezer	33.2	25.7	27.2	21.9	6.4
1	30.2	24.2	25.4	21.0	6.7
2 or more	2.9	1.5	1.7	Q	25.3
Most-Used Freezer					
Defrost Method					
Frost-Free	10.5	7.5	7.6	7.2	6.9
Manual	22.6	18.3	19.6	14.7	7.6
Type of Freezer					
Upright	16.3	13.9	14.6	12.0	5.3
Chest	16.9	11.8	12.5	9.9	11.7
Ago of France					
Age of Freezer Less than 2 Years	2.4	2.2	2.1	2.5	22.5
2 to 4 Years	4.1	2.6	2.6	2.7	16.5
5 to 9 Years	7.4	5.3	5.2	5.5	14.5
10 to 19 Years	12.2	9.8	11.0	6.6	10.2
20 Years or More	6.6	5.4	5.8	4.5	13.6
Don't Know	0.5	Q	Q	Q	37.3

Table HC5-9b. Appliances by Northeast Census Region, Percent of U.S. Households, 1997 (Continued)

			Northeast Census Region		
			Census	Division	
Appliance Types and Characteristics	Total U.S.	Total	Middle Atlantic	New England	RSE
RSE Column Factor:	0.5	1.0	1.3	1.5	Row Factors
Freezer Size					
Very Small (Less than 11 cf)	2.7	3.0	2.3	4.9	21.1
Small (11-14 cf)	6.6	5.4	5.7	4.5	14.0
Medium (15-18 cf)	13.3	9.0	9.8	6.7	7.6
Large (19-22 cf)	8.9	6.8	7.3	5.2	9.9
Very Large (23 or More cf)	1.7	1.7	2.0	Q	19.2
Heaters (other)					
Hot Tub or Spa	3.9	2.8	3.6	Q	18.3
Electric	2.6	2.4	3.2	ã	20.7
Natural Gas	1.1	Q.	Q	Q	50.3
LPG/Other	Q	Q	Q	Q	NF
D	10.0	40.0	40.5	40.4	
Portable Space	13.9	12.6	13.5	10.1	9.3
Electric Kerosene	12.1 2.0	10.8 1.9	11.8 1.8	8.1 2.2	9.7 19.9
Reloselle	2.0	1.9	1.0	2.2	19.9
Swimming Pool	1.1	0.8	Q	Q	36.8
Natural Gas	0.7	Q	Q	Q	50.7
Electric/LPG/Other	0.4	Q	Q	Q	56.3
Waterbed Heaters	8.3	6.1	6.2	6.1	12.5
1	6.8	5.4	5.6	5.0	13.7
2 or More	1.4	Q	Q	Q	20.8
\\/-4					
Waterbed Heaters Used All Year	7.3	5.5	5.7	5.2	14.6
1	6.4	4.8	5.1	4.1	16.6
2 or More	1.0	Q	Q	Q	21.7
Oven	98.8	99.4	99.4	99.5	NF
Electric	61.4	49.3	43.4	65.1	5.5
Natural Gas	33.3	45.0	51.8	26.5	8.6
LPG	4.1	5.1	4.1 Q	7.9 Q	20.6 NF
Other	Q	Q	Q	Q	INF
Self-Cleaning Oven	44.1	48.5	46.9	52.7	4.6
Continuous	9.9	9.6	10.5	7.0	10.4
Manual Start	34.1	38.9	36.4	45.8	5.6
Pumps (Electric)	19.8	26.1	23.5	33.1	9.4
Hot Tub or Spa	4.0	3.0	3.7	Q	17.6
Swimming Pool	5.4	7.6	6.9	9.6	9.3
Well Water	14.1	18.9	16.4	25.6	13.6
Range	99.2	99.7	99.5	100.0	NF
Electric	60.2	48.3	42.4	64.5	5.5
Natural GasLPG	34.7	45.7 5.6	52.5	27.2	8.3
Other	4.3 Q	5.6 Q	4.6 Q	8.4 Q	19.7 NF
	· ·	¥	Q	Q	'*'
Refrigerators	99.8	99.9	99.9	100.0	NF
1	84.7	84.6	84.5	84.8	1.6
2 or More	15.2	15.3	15.4	15.2	8.6

Table HC5-9b. Appliances by Northeast Census Region, Percent of U.S. Households, 1997 (Continued)

			Northeast Census Region		
			Census	Division	
Appliance Types and Characteristics	Total U.S.	Total	Middle Atlantic	New England	RSE
RSE Column Factor:	0.5	1.0	1.3	1.5	Row Factors
Most-Used Refrigerator					
Defrost Method	00.0	05.0	05.7	20.7	1
Frost-Free	86.8 13.1	85.2 14.7	85.7 14.2	83.7 16.3	1.5 6.2
Type of Refrigerator					
2-Doors (top and bottom)	68.0	74.2	73.6	75.8	1.9
2-Doors (side-by-side)	20.4	15.2	15.7	13.9	7.0
Regular (single door)	10.7	9.8	10.0	9.2	10.5
Half-Size/Other	0.7	0.6	Q	Q	33.8
Age of Refrigerator					
Less than 2 Years	13.2	12.4	11.5	14.8	7.2
2 to 4 Years 5 to 9 Years	21.0 29.9	21.1 28.9	21.5 28.7	19.8 29.4	6.2 4.6
10 to 19 Years	23.8	24.1	24.9	21.8	4.6
20 Years or More	7.0	7.8	8.2	6.7	9.9
Don't Know	5.0	5.6	4.9	7.5	16.8
Size of Refrigerator					
Very Small (Less than 11 cf)	0.9	1.4	1.5	Q	22.5
Small (11-14 cf)	7.6	8.4	9.0	7.0	11.1
Medium (15-18 cf)	45.0	48.8	48.6	49.4	2.7
Large (19-22 cf) Very Large (23 or More cf)	44.8 1.5	39.6 1.6	39.2 1.6	40.9 Q	4.3 21.1
Through-the-Door Ice/Water Service					
Yes	13.0	8.4	8.2	8.8	12.4
No	87.0	91.6	91.8	91.2	1.2
Color Television Sets	98.7	98.9	99.2	98.0	NF
1	31.8	31.8	29.7	37.6	4.4
2	37.4	36.1	38.1	30.6	3.7
3	19.1	20.8	21.4	19.4	5.5
45 or More	7.7 2.7	7.5 2.6	7.1 2.9	8.7 Q	9.8 17.6
Video Cassette Recorders (VCR's)	97.6	06.1	96.2	9E 0	1 1 1
1	87.6 55.5	86.1 57.5	86.2 57.9	85.9 56.2	1.1
2	24.9	21.5	21.3	22.1	5.0
3 or More	7.2	7.1	7.0	7.5	10.3
Water Heaters	100.0	100.0	100.0	100.0	NE
Electric	39.1	25.9	23.7	32.0	8.7
For One Housing Unit	37.3	24.3	22.8	28.3	8.9
For Two or More Units Natural Gas	1.8	1.7 46.3	Q 52.2	3.7	21.3 9.2
For One Housing Unit	51.9 45.8	46.3 38.4	52.2 42.8	30.5 26.4	10.6
For Two or More Units	6.1	7.9	9.3	4.1	15.2
Fuel Oil	5.1	24.8	21.4	33.9	9.5
For One Housing Unit	3.1	14.7	10.7	25.6	11.5
For Two or More Units	2.0	10.1	10.7	8.3	14.5
LPG	3.2	2.0	2.0	2.2	23.6
Other	0.7	0.8	Q	Q	44.8

Table HC5-9b. Appliances by Northeast Census Region, Percent of U.S. Households, 1997 (Continued)

			Northeast Census Region			
			Census	Census Division		
Appliance Types and Characteristics	Total U.S.	Total	Middle Atlantic	New England	RSE	
RSE Column Factor:	0.5	1.0	1.3	1.5	Row Factors	
Water Heater (for one housing unit)	89.7	79.7	78.5	83.0	2.2	
Age	44.4	40.0	0.0	40.4		
Less than 2 Years	11.1	10.0	9.9	10.1	9.1	
2 to 4 Years	16.8	15.0	14.7	15.8	6.7	
5 to 9 Years	25.0	20.9	21.3	19.9	5.7	
10 to 19 Years	19.9	14.4	15.9	10.1	7.3	
20 Years or More	7.0	6.2	5.3	8.7	10.5	
Don't Know	7.0	4.3	4.0	5.3	13.2	
No Separate Heater	2.9	9.0	7.5	13.0	14.4	
No Water Heater	0.2	Q	Q	Q	70.4	
Water Heaters for						
Two or More Units	10.1	20.1	21.3	17.0	9.8	
Size						
Small	15.3	11.1	11.2	10.6	7.5	
Medium	46.4	40.3	42.6	34.0	5.8	
Large	21.3	15.6	14.9	17.6	7.8	
Don't Know	3.7	3.8	2.3	7.8	16.7	
No Separate Heater	2.9	9.0	7.5	13.0	14.4	
No Water Heater	0.2	Q	Q	Q	70.4	
Water Heaters for						
Two or More Units	10.1	20.1	21.3	17.0	9.8	
Other Appliances						
Heated Aquarium	3.8	3.3	3.3	3.1	14.4	
Microwave Oven	83.0	78.7	78.1	80.2	1.5	
Outdoor Gas Light ²	0.7	70.7 Q	70.1 Q	Q	38.5	
Rechargeable Tools/	0.7	•	3	•	55.5	
or Appliances	43.7	43.2	43.2	43.1	4.0	
Stereo Equipment	68.8	66.7	66.7	67.0	2.0	

¹ The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

if the fuel was electricity.

Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These are excluded from the count of 25.2 million households using only room air-conditioners.

cf = Cubic feet

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.

[•] Percentages are calculated on unrounded numbers. • 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, B, C of the 1997 Residential Energy Consumption Survey.

Table HC5-10b. Appliances by Midwest Census Region, Percent of U.S. Households, 1997

			Midwest Census Region		
			Census	Division	RSE
Appliance Types and Characteristics	Total U.S.		East North Central	West North Central	
RSE Column Factor:	0.5	1.0	1.2	1.6	Row Factors
Total	100.0	100.0	100.0	100.0	0.0
Households With Electric					
Air-Conditioning Equipment	72.5	78.2	73.8	88.6	2.3
Central Equipment Not Used	0.3	Q	Q	Q Q	37.3
Room Air Conditioners Not Used	0.7	0.9	Q	Q	26.8
Households Using Electric					
Air-Conditioning ¹	71.6	77.3	73.1	87.5	2.2
Type of Electric Air-Conditioning Used					
Central Air-Conditioning Used	46.8	51.3	47.6	60.1	4.2
Without a Heat Pump	36.4	49.5	45.8	58.4	4.8
With a Heat Pump	10.4	1.7	1.8	Q	23.7
Room Air-Conditioning	24.8	26.1	25.5	27.4	8.1
1 Unit	14.7	18.2	17.4	20.0	9.7
2 Units	7.1	6.3	6.1	6.8	13.5
3 or More Units	3.0	1.6	2.0	Q	21.4
Clothes Washer	77.4	78.9	76.1	85.6	2.0
Clothes Dryer	71.2	75.8	73.0	82.3	2.4
Electric	55.1	50.1	45.4	61.2	4.2
Natural Gas	15.2	23.9	26.0	19.0	11.3
LPG	0.8	1.7	1.6	2.1	22.7
Dishwasher	50.2	46.9	45.3	50.7	3.6
Ceiling Fans	60.1	63.6	60.7	70.4	3.6
1	23.3	26.6	26.7	26.2	7.6
2	13.8	15.9	15.1	17.9	5.7
3 or more	23.0	21.1	18.9	26.2	5.5
Freezer	33.2	41.8	36.6	54.1	3.8
1	30.2	38.4	33.4	50.1	4.1
2 or more	2.9	3.4	3.2	3.9	11.8
Most-Used Freezer Defrost Method					
Frost-Free	10.5	11.0	10.4	12.3	7.6
Manual	22.6	30.8	26.2	41.8	5.0
Type of Freezer					
Upright	16.3	17.0	15.5	20.5	6.3
Chest	16.9	24.8	21.1	33.6	4.8
Age of Freezer					
Less than 2 Years	2.4	2.9	2.8	3.2	15.7
2 to 4 Years	4.1	5.3	4.6	6.9	13.3
5 to 9 Years	7.4	8.6	7.5	11.1	10.3
10 to 19 Years	12.2	15.0	14.0	17.4	6.1
20 Years or More	6.6	9.2	7.2	14.0	11.2
Don't Know	0.5	0.9	Q	Q	33.0

Table HC5-10b. Appliances by Midwest Census Region, Percent of U.S. Households, 1997 (Continued)

			Midwest Census Region		
			Census	Division	
Appliance Types and Characteristics	Total U.S.		East North Central	West North Central	RSE
RSE Column Factor:	0.5	1.0	1.2	1.6	Row Factors
Freezer Size					
Very Small (Less than 11 cf)	2.7	3.4	3.2	3.9	20.0
Small (11-14 cf)	6.6	9.8	8.8	12.2	10.2
Medium (15-18 cf)	13.3	16.1	13.2	23.0	7.7
Large (19-22 cf)	8.9	10.6	9.5	13.3	8.5
Very Large (23 or More cf)	1.7	1.9	2.0	Q	22.8
Heaters (other)					
Hot Tub or Spa	3.9	3.1	3.5	Q	14.7
Electric	2.6	2.0	2.2	Q	21.0
Natural Gas	1.1	Q	Q	Q	46.6
LPG/Other	Q	Q	Q	Q	NF
Portable Space	13.9	14.2	13.7	15.4	8.2
Electric	12.1	13.1	12.5	14.5	7.7
Kerosene	2.0	1.4	1.5	Q	22.0
Swimming Pool	1.1	Q	Q	Q	43.3
Natural Gas	0.7	Q	Q	Q	46.9
Electric/LPG/Other	0.4	Q	Q	Q	52.2
Motorbod Hostors	0.0	44.0	11.0	0.7	111
Waterbed Heaters1	8.3 6.8	11.2 9.4	11.9 10.0	9.7 8.1	11.4
2 or More	1.4	1.8	1.9	Q	18.8
Waterbed Heaters	7.0	40.0	44.4	0.0	14.0
Used All Year	7.3	10.2	11.1	8.0	11.9
1 2 or More	6.4 1.0	8.8 1.4	9.7 1.3	6.7 Q	12.8 19.5
2 of wore	1.0	1.4	1.5	Q	13.5
Oven	98.8	99.1	99.5	98.1	NF
Electric	61.4	56.6	53.2	64.5	3.2
Natural Gas	33.3	38.0	43.3	25.5	5.6
LPG	4.1	4.5	3.0	8.2	24.5
Other	Q	Q	Q	Q	NF
Self-Cleaning Oven	44.1	45.1	43.2	49.5	3.7
Continuous	9.9	10.1	8.9	13.1	8.4
Manual Start	34.1	34.9	34.3	36.5	4.8
Pumps (Electric)	19.8	20.6	22.6	15.9	10.3
Hot Tub or Spa	4.0	3.1	3.5	Q	14.4
Swimming Pool Well Water	5.4 14.1	2.9 17.6	3.3 19.6	Q 13.1	15.0 13.6
	17.1	11.0	10.0	10.1	10.0
Range	99.2	99.4	99.4	99.2	NF
Electric	60.2	55.5	52.2	63.3	3.5
Natural Gas	34.7	39.3	44.2	27.7	5.8
LPG	4.3	4.5	3.0	8.2	24.5
Other	Q	Q	Q	Q	NF
Refrigerators	99.8	99.9	99.8	99.9	NF
1	84.7	81.8	82.9	79.2	1.5
2 or More	15.2	18.1	16.9	20.7	6.9

Table HC5-10b. Appliances by Midwest Census Region, Percent of U.S. Households, 1997 (Continued)

			Midwest Census Region		
			Census	Division	
Appliance Types and Characteristics	Total U.S.	Total	East North Central	West North Central	RSE
RSE Column Factor:	0.5	1.0	1.2	1.6	Row Factors
Most-Used Refrigerator					
Defrost Method					
Frost-Free Manual	86.8 13.1	85.1 14.7	83.8 16.1	88.4 11.5	1.9 10.9
	10.1	17.7	10.1	11.0	10.3
Type of Refrigerator	60.0	70.4	70.4	75.0	2.0
2-Doors (top and bottom) 2-Doors (side-by-side)	68.0 20.4	73.1 17.6	72.1 19.0	75.3 14.4	2.0 7.6
Regular (single door)	10.7	8.5	8.0	9.5	11.3
Half-Size/Other	0.7	Q	Q	Q	32.0
Age of Refrigerator					
Less than 2 Years	13.2	13.0	13.7	11.2	6.3
2 to 4 Years	21.0	19.2	18.4	20.9	3.2
5 to 9 Years 10 to 19 Years	29.9 23.8	29.1 24.7	28.8 24.5	30.0 25.3	5.2 4.2
20 Years or More	23.6 7.0	8.0	8.2	7.6	11.1
Don't Know	5.0	5.9	6.3	4.9	19.2
Size of Refrigerator					
Very Small (Less than 11 cf)	0.9	0.9	Q	Q	25.3
Small (11-14 cf)	7.6	6.5	6.6	6.3	9.3
Medium (15-18 cf)	45.0	47.0	46.0	49.2	3.5
Large (19-22 cf) Very Large (23 or More cf)	44.8 1.5	43.8 1.6	45.0 1.3	41.0 2.5	4.6 21.6
, , ,					
Through-the-Door Ice/Water Service					
Yes	13.0	10.4	11.5	7.8	11.3
No	87.0	89.6	88.5	92.2	1.3
Color Television Sets	98.7	99.0	99.2	98.5	NF
1	31.8	32.1	31.3	34.1	5.4
2	37.4	36.2	37.4	33.5	4.3
34	19.1 7.7	20.4 7.8	20.3 7.5	20.6 8.4	7.7 13.3
5 or More	2.7	2.5	2.7	Q. Q	19.0
Video Cassette Recorders (VCR's)	87.6	89.7	89.4	90.5	1.2
1	55.5	56.4	56.0	57.5	3.5
2	24.9	26.0	25.7	26.7	6.9
3 or More	7.2	7.3	7.7	6.2	12.6
Water Heaters	100.0	100.0	100.0	100.0	NE
Electric	39.1	26.5	24.0	32.4	8.1
For One Housing Unit For Two or More Units	37.3 1.8	24.8 1.7	21.7 2.3	32.0 Q	8.4 26.0
Natural Gas	51.9	67.6	71.5	58.4	4.8
For One Housing Unit	45.8	58.4	60.6	53.2	5.6
For Two or More Units	6.1	9.2	10.9	5.2	12.3
Fuel Oil	5.1	Q Q	Q Q	Q	16.4 20.5
For One Housing Unit For Two or More Units	3.1 2.0	Q	Q	Q Q	20.5
LPG	3.2	4.8	3.5	7.9	18.3
Other	0.7	Q	Q	Q	42.4
No Water Heater	0.2	Q	Q	Q	65.2

Table HC5-10b. Appliances by Midwest Census Region,
Percent of U.S. Households, 1997 (Continued)

			Midwest Census Region			
Appliance Types and Characteristics RSE Column Factor:	Total U.S. 0.5		Census	Census Division		
			East North Central	West North Central	RSE	
		1.0	1.2		Row Factors	
Water Heater (for one housing unit)	89.7	88.5	86.3	93.5	1.8	
Age	44.4	44.4	40.0	44.0	0.0	
Less than 2 Years	11.1 16.8	11.1 16.3	10.9 15.3	11.6	9.6 6.4	
2 to 4 Years	25.0	23.3	22.6	18.6 25.2	5.2	
5 to 9 Years 10 to 19 Years	25.0 19.9	23.3 22.5	22.6	25.2 24.8	4.5	
20 Years or More	7.0	6.7	6.3	24.0 7.7	11.0	
Don't Know	7.0 7.0	7.6	8.6	7.7 5.2	13.4	
No Separate Heater	2.9	7.6 Q	Q.0	0.2 Q	23.0	
No Water Heater	0.2	Q	Q	Q	65.2	
Water Heaters for	0.2	Q	Q	Q	03.2	
Two or More Units	10.1	11.5	13.7	6.5	10.6	
				0.0	10.0	
Size						
Small	15.3	14.3	13.8	15.5	7.6	
Medium	46.4	50.6	50.4	51.1	3.4	
Large	21.3	18.8	18.2	20.2	7.6	
Don't Know	3.7	3.8	2.8	6.3	21.2	
No Separate Heater	2.9	Q	Q	Q	23.0	
No Water Heater	0.2	Q	Q	Q	65.2	
Water Heaters for Two or More Units	10.1	11.5	13.7	6.5	10.6	
	10.1	11.0	10.1	0.0	10.0	
Other Appliances					40-	
Heated Aquarium	3.8	4.0	3.6	5.0	18.6	
Microwave Oven	83.0	86.9	85.0	91.4	1.5	
Outdoor Gas Light ²	0.7	1.1	Q	Q	35.4	
Rechargeable Tools/	40.7	40.5	40.0	40.0		
or Appliances	43.7	46.5	46.3	46.9	3.5	
Stereo Equipment	68.8	67.0	66.5	68.0	2.3	

¹ The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

if the fuel was electricity.

Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These are excluded from the count of 25.2 million households using only room air-conditioners.

cf = Cubic feet

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.

[•] Percentages are calculated on unrounded numbers. • 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, B, C of the 1997 Residential Energy Consumption Survey.

Table HC5-11b. Appliances by South Census Region, Percent of U.S. Households, 1997

			Sout	th Census Region		
				Census Division		
Appliance Types and Characteristics	Total U.S.	Total	South Atlantic	East South Central	West South Central	RSE
RSE Column Factor:	0.5	0.8	1.2	1.4	1.4	Row Factors
Total	100.0	100.0	100.0	100.0	100.0	0.0
Households With Electric Air-Conditioning Equipment	72.5	93.0	92.6	94.3	92.8	1.6
Central Equipment Not Used	0.3	93.0 Q	92.6 Q	94.3 Q	92.6 Q	39.2
Room Air Conditioners Not Used	0.3	Q	Q	Q	Q	33.9
	· · ·	~	~	~	~	00.0
Households Using Electric						
Air-Conditioning ¹	71.6	92.5	92.0	94.3	92.5	1.6
Type of Electric Air-Conditioning Used						
Central Air-Conditioning ²	46.8	69.4	71.2	66.3	68.1	3.2
Without a Heat Pump	36.4	45.6	37.8	45.3	59.4	6.4
With a Heat Pump	10.4	23.7	33.4	21.0	8.7	12.1
·						
Room Air-Conditioning	24.8	23.2	20.8	28.1	24.4	6.7
1 Unit	14.7	11.8	12.1	13.7	10.1	8.2
2 Units	7.1 3.0	7.3 4.1	5.8 2.9	9.3 5.0	8.9 5.5	13.2
3 of More Offics	3.0	4.1	2.9	3.0	5.5	20.0
Clothes Washer	77.4	82.0	83.4	86.3	76.9	2.1
Clothes Dryer	71.2	74.2	72.9	81.0	72.5	2.5
Electric	55.1	66.4	67.8	75.6	58.7	3.4
Natural GasLPG	15.2 0.8	7.2 0.5	4.5 Q	Q Q	13.5 Q	12.0 35.3
LFG	0.0	0.5	Q	Q	Q	33.3
Dishwasher	50.2	51.5	53.5	42.3	53.4	4.0
Ceiling Fans	60.1	71.2	67.9	73.3	75.7	2.6
1	23.3	18.9	19.9	22.3	15.0	6.7
3 or more	13.8 23.0	16.0 36.3	15.8 32.1	14.1 36.9	17.4 43.2	7.8 4.2
o or more	20.0	00.0	02.1	30.3	40.∠	7.2
Freezer	33.2	36.9	35.1	41.4	37.2	4.0
1	30.2	33.1	32.3	35.9	32.7	4.7
2 or more	2.9	3.8	2.8	5.4	4.5	12.7
Most-Used Freezer						
Defrost Method	40.5	40.4	40.5	10.0	40.0	
Frost-Free	10.5 22.6	13.1 23.7	13.5 21.6	13.9 27.4	12.0 25.2	6.5 5.6
Manual	22.0	23.1	21.0	27.4	25.2	3.0
Type of Freezer						
Upright	16.3	16.8	17.6	16.4	15.8	6.8
Chest	16.9	20.0	17.6	24.9	21.4	6.9
Ago of Eroozor						
Age of Freezer Less than 2 Years	2.4	2.8	2.7	2.8	3.2	19.2
2 to 4 Years	4.1	2.6 5.1	5.1	6.4	4.2	17.1
5 to 9 Years	7.4	8.5	8.2	8.2	9.2	10.1
10 to 19 Years	12.2	14.0	12.6	16.9	14.6	7.7
20 Years or More	6.6	5.9	5.9	6.7	5.6	13.3
	0.5			Q		33.8

Table HC5-11b. Appliances by South Census Region, Percent of U.S. Households, 1997 (Continued)

			Sou	th Census Region		
				Census Division		
Appliance Types and Characteristics	Total U.S.	Total	South Atlantic	East South Central	West South Central	RSE
RSE Column Factor:	0.5	0.8	1.2	1.4	1.4	Row Factors
Freezer Size						
Very Small (Less than 11 cf)	2.7	2.3	2.3	2.2	2.5	18.3
Small (11-14 cf)	6.6	7.0	7.0	7.4	6.8	12.2
Medium (15-18 cf)	13.3	15.9	14.5	19.1	16.5	7.8
Large (19-22 cf)	8.9	10.2	10.2	11.5	9.3	11.6
Very Large (23 or More cf)	1.7	10.2	1.1	Q Q	9.3 2.1	25.2
vory Large (20 Or More Or)	1.1	1.4	1.1	Q	۷.1	20.2
Heaters (other)						
Hot Tub or Spa	3.9	4.0	4.2	4.0	3.6	21.9
Electric	2.6	2.5	2.4	3.1	2.5	20.9
Natural Gas	1.1	Q	Q	Q	Q	49.0
LPG/Other	Q	Q	Q	ã	Q	NF
Li O/Otiloi	· ·	Q	Q	Q	Q	'"
Portable Space	13.9	16.0	16.2	18.7	14.0	8.6
Electric	12.1	13.0	12.2	14.7	13.6	10.5
Kerosene	2.0	3.4	4.3	5.2	Q	15.2
Reloserie	2.0	3.4	4.5	5.2	Q	10.2
Swimming Pool	1.1	1.4	Q	Q	Q	48.6
Natural Gas	0.7	1.0	Q	Q	Q	49.6
Electric/LPG/Other	0.4	Q Q	Q	Q	Q	54.9
Electric/El G/Otricl	0.4	Q	Q	Q	Q	04.5
Waterbed Heaters	8.3	8.2	7.2	10.7	8.4	11.2
1	6.8	6.7	5.7	9.8	6.5	12.4
2 or More	1.4	1.5	1.5	Q	Q	20.8
Waterbed Heaters						
Used All Year	7.3	6.9	6.2	8.7	7.0	11.9
1	6.4	6.2	5.8	8.1	6.0	13.2
2 or More	1.0	0.7	Q	Q	Q	23.3
Oven	98.8	98.7	98.6	98.5	98.9	NF
Electric	61.4	72.1	78.8	75.0	58.7	3.7
Natural Gas	33.3	22.1	15.7	15.9	36.8	10.7
LPG	4.1	4.4	4.0	7.3	3.5	20.5
Other	Q	Q	Q	Q	Q	NF
Self-Cleaning Oven	44.1	41.8	43.4	41.5	39.1	4.5
Continuous	9.9	11.0	10.0	12.6	11.8	10.6
Manual Start	34.1	30.8	33.5	29.0	27.3	5.9
Pumps (Electric)	19.8	19.3	25.8	16.7	9.7	8.8
Hot Tub or Spa	4.0	4.0	4.2	4.0	3.6	21.8
Swimming Pool	5.4	6.6	8.6	4.7	4.4	13.3
Well Water	14.1	13.7	20.5	10.6	3.7	18.1
Range	99.2	99.1	98.9	99.1	99.3	NF
Electric	60.2	70.9	78.5	75.3	55.4	3.7
Natural Gas	34.7	23.6	16.3	16.3	40.3	10.0
LPG	4.3	4.5	4.1	7.3	3.6	20.4
Other	Q	Q	Q	Q	Q	NF
Refrigerators	99.8	99.9	100.0	99.9	99.9	NF
1	99.6 84.7	86.8	87.5	84.8	86.7	1.2
2 or More	15.2	13.1	12.5	15.1	13.2	7.6
∠ UI IVIUI	13.2	13.1	14.5	10.1	13.2	1 7.0

Table HC5-11b. Appliances by South Census Region, Percent of U.S. Households, 1997 (Continued)

			Sou	th Census Region		
				Census Division		
Appliance Types and Characteristics	Total U.S.	Total	South Atlantic	East South Central West So	West South Central	RSE
RSE Column Factor:	0.5	0.8	0.8 1.2	1.4	1.4	Row Factor
Most-Used Refrigerator						
Defrost Method						
Frost-Free	86.8 13.1	90.0 9.9	89.6 10.3	90.7 9.2	90.3 9.6	1.0 8.0
	-			-		
Type of Refrigerator 2-Doors (top and bottom)	68.0	65.6	64.8	67.4	65.9	3.0
2-Doors (side-by-side)	20.4	22.2	21.0	21.5	24.8	7.6
Regular (single door)	10.7	11.4	13.5	10.5	8.3	13.0
Half-Size/Other	0.7	0.6	Q	Q	Q	36.7
Age of Refrigerator						
Less than 2 Years	13.2	13.3	13.2	11.1	14.7	7.1
2 to 4 Years	21.0	24.0	23.5	24.6	24.7	5.3
5 to 9 Years	29.9 23.8	29.5 22.6	29.2 23.6	31.4 21.6	29.0	4.7 6.2
20 Years or More	23.8 7.0	22.6 6.1	23.6 5.4	7.2	21.5 6.7	7.9
Don't Know	5.0	4.4	5.1	3.9	3.4	16.6
Size of Refrigerator						
Very Small (Less than 11 cf)	0.9	0.6	Q	Q	Q	32.2
Small (11-14 cf)	7.6	7.1	7.7	4.9	7.2	11.7
Medium (15-18 cf)	45.0	45.1	46.9	45.1	42.1	3.2
Large (19-22 cf)	44.8	45.9	44.1	47.4	48.0	3.4
Very Large (23 or More cf)	1.5	1.2	Q	Q	1.9	18.3
Through-the-Door Ice/Water						
Service Yes	13.0	16.3	15.4	15.9	18.3	8.0
No	87.0	83.7	84.6	84.1	81.7	1.5
	07.10	00	00	· · · ·		
Color Television Sets	98.7	98.7	98.8	99.6	98.0	NF_
1	31.8 37.4	29.1	27.8	31.4	30.1	4.5
3	37. 4 19.1	38.9 18.4	38.3 19.6	40.1 16.7	39.4 17.4	3.8 5.8
4	7.7	8.9	9.9	7.7	7.9	10.1
5 or More	2.7	3.4	3.3	3.6	3.2	16.0
/ideo Cassette Recorders (VCR's)	87.6	86.0	85.9	86.0	86.1	1.4
1	55.5	52.8	52.2	55.5	52.2	3.0
2	24.9	25.8	26.5	23.9	25.8	7.0
3 or More	7.2	7.4	7.3	6.6	8.1	12.8
Nater Heaters	100.0	100.0	100.0	100.0	100.0	NE
Electric	39.1	58.3	68.6	65.7	36.4	6.1
For One Housing Unit	37.3	56.5	67.4	64.8	32.9	6.5
For Two or More Units Natural Gas	1.8 51.9	1.8 37.3	1.2 26.5	Q 29.6	3.4 60.5	21.8
For One Housing Unit	45.8	37.3 35.9	25.1	28.2	58.8	8.2
For Two or More Units	6.1	1.5	1.4	Q	Q	25.0
Fuel Oil	5.1	Q	Q	ã	Q	17.2
For One Housing Unit	3.1	Q	Q	Q	Q	21.5
For Two or More Units	2.0	Q	Q	Q	Q	22.4
LPG	3.2 0.7	3.1 Q	2.7 Q	4.7 Q	3.0 Q	19.0
Other						44.6

Table HC5-11b. Appliances by South Census Region, Percent of U.S. Households, 1997 (Continued)

			Sou	th Census Region		
				Census Division		
Appliance Types and Characteristics	Total U.S.	Total	South Atlantic	East South Central	West South Central	RSE
RSE Column Factor:	0.5	0.8	1.2	1.4	1.4	Row Factors
Water Heater (fee and benefit with	00.7	00.5	07.4	07.7	04.0	4.0
Water Heater (for one housing unit)	89.7	96.5	97.1	97.7	94.8	1.0
Less than 2 Years	11.1	11.7	12.0	13.7	9.9	7.8
2 to 4 Years	16.8	19.3	16.8	19.3	23.5	7.5
5 to 9 Years	25.0	28.7	30.7	25.4	27.2	5.5
10 to 19 Years	19.9	20.9	20.5	22.7	20.5	6.0
20 Years or More	7.0	6.6	6.0	9.1	6.0	11.9
Don't Know	7.0	8.3	9.6	6.7	6.9	11.4
No Separate Heater	2.9	1.1	1.4	Q	Q	29.6
No Water Heater	0.2	Q	Q	Q	Q	68.6
Water Heaters for				-		
Two or More Units	10.1	3.3	2.6	Q	5.1	19.8
Size						
Small	15.3	19.7	19.2	19.8	20.3	8.5
Medium	46.4	50.1	49.4	47.7	52.6	3.7
Large	21.3	22.1	22.9	26.7	18.1	9.2
Don't Know	3.7	3.5	4.1	Q	3.0	24.8
No Separate Heater	2.9	1.1	1.4	Q	Q	29.6
No Water Heater	0.2	Q	Q	Q	Q	68.6
Water Heaters for						
Two or More Units	10.1	3.3	2.6	Q	5.1	19.8
Other Appliances						
Heated Aquarium	3.8	3.4	3.8	4.3	2.3	12.3
Microwave Oven	83.0	82.4	83.7	79.3	82.0	2.8
Outdoor Gas Light ²	0.7	0.7	Q	Q	Q	33.9
Rechargeable Tools/	40 =			40.0		
or Appliances	43.7	41.8	41.4	42.9	41.8	3.5
Stereo Equipment	68.8	67.8	69.0	63.9	67.9	1.5

¹ The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel

was electricity.

Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These are excluded from the count of 25.2 million households using only room air-conditioners.

cf = Cubic feet.

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.

Percentages are calculated on unrounded numbers. • 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, B, C of the 1997 Residential Energy Consumption Survey.

Table HC5-12b. Appliances by West Census Region, Percent of U.S. Households, 1997

			West Census Region		
			Censu	Census Division	
Appliance Types and Characteristics	Total U.S.	Total	Mountain	Pacific	RSE
RSE Column Factor:	0.5	1.0	1.6	1.3	Row Factors
Total	100.0	100.0	100.0	100.0	0.0
Households With Electric					
Air-Conditioning Equipment	72.5	40.9	48.7	37.8	6.9
Central Equipment Not Used	0.3	0.7	Q	Q	35.7
Room Air Conditioners Not Used	0.7	Q	Q	Q	35.8
Households Using Electric					
Air-Conditioning ¹	71.6	39.7	47.6	36.5	6.9
Type of Electric Air-Conditioning Used					
Central Air-Conditioning ²	46.8	26.9	34.0	24.1	7.9
Without a Heat Pump	36.4	21.7	26.0	19.9	10.6
With a Heat Pump	10.4	5.3	8.0	4.2	13.1
Room Air-Conditioning	24.8	12.8	13.6	12.4	11.3
1 Unit	14.7	10.5	10.5	10.5	12.7
2 Units	7.1	1.9	2.5	1.6	15.4
3 or More Units	3.0	Q	Q	Q	23.1
Clothes Washer	77.4	69.5	76.5	66.8	3.4
Clothes Dryer	71.2	65.1	70.1	63.2	3.9
Electric	55.1	48.2	61.0	43.1	4.5
Natural Gas	15.2	16.5	8.4	19.7	9.4
LPG	0.8	Q	Q	Q	31.7
Dishwasher	50.2	53.1	57.2	51.5	4.5
Ceiling Fans	60.1	46.0	61.0	40.1	4.0
1	23.3	24.4	31.9	21.4	7.4
2	13.8	9.6	9.9	9.4	8.5
3 or more	23.0	12.0	19.2	9.2	10.1
Freezer	33.2	24.2	33.8	20.5	5.5
1	30.2	22.1	30.1	18.9	5.3
2 or more	2.9	2.2	3.7	1.6	19.1
Most-Used Freezer Defrost Method					
Frost-Free	10.5	8.5	12.4	7.0	10.1
Manual	22.6	15.7	21.4	13.5	6.9
Type of Freezer					
Upright	16.3	16.8	19.3	15.8	6.1
Chest	16.9	7.5	14.5	4.7	10.9
Age of Freezer					
Less than 2 Years	2.4	1.2	2.1	0.8	24.8
2 to 4 Years	4.1	2.7	4.4	1.9	17.2
5 to 9 Years	7.4	6.3	9.1	5.2	11.5
10 to 19 Years	12.2	8.2	10.8	7.1	9.1
20 Years or More	6.6	5.7	6.6	5.3	15.3
Don't Know	0.5	Q	Q	Q	38.4

Table HC5-12b. Appliances by West Census Region, Percent of U.S. Households, 1997 (Continued)

			West Census Region		
			Census	s Division	
Appliance Types and Characteristics	Total U.S.	Total	Mountain	Pacific	RSE
RSE Column Factor:	0.5	1.0	1.6	1.3	Row Factors
Freezer Size					
Very Small (Less than 11 cf)	2.7	2.1	3.2	1.7	17.7
Small (11-14 cf)	6.6	3.6	5.2	3.0	13.0
Medium (15-18 cf)	13.3	9.7	12.9	8.4	9.3
Large (19-22 cf)	8.9	6.9	10.4	5.5	12.8
Very Large (23 or More cf)	1.7	2.0	Q	1.9	15.4
Heaters (ather)					
Heaters (other) Hot Tub or Spa	3.9	5.8	4.6	6.3	11.5
Electric	2.6	3.7	3.5	3.8	12.3
Natural Gas	1.1	1.9	Q.5	2.3	24.3
LPG/Other	Q	Q	Q	Q	NF
	-	_	_		
Portable Space	13.9	11.2	11.7	11.1	9.1
Electric	12.1	10.7	10.7	10.8	9.9
Kerosene	2.0	Q	Q	Q	20.2
Swimming Pool	1.1	1.3	Q	1.6	34.8
Natural Gas	0.7	0.9	Q	1.2	40.2
Electric/LPG/Other	0.4	Q	Q	Q	58.0
March 1111	0.0	7.4	44.0	4.0	40.4
Waterbed Heaters	8.3	7.1	14.0	4.3	16.1
1 2 or More	6.8 1.4	5.5 1.5	11.1 2.9	3.3 1.0	18.9 19.7
Waterbed Heaters Used All Year	7.3	6.5	12.4	4.2	15.9
1	7.3 6.4	5.2	12.4 10.1	3.2	19.4
2 or More	1.0	1.4	2.2	1.0	17.3
2 0					
Oven	98.8	98.1	98.6	98.0	NF
Electric	61.4	60.2	70.2	56.2	3.3
Natural Gas	33.3	35.7	25.4	39.8	6.2
LPG	4.1	2.3	3.0	1.9	20.3
Other	Q	Q	Q	Q	NF
Self-Cleaning Oven	44.1	42.7	47.2	40.9	4.4
Continuous	9.9	8.3	5.8	9.2	11.7
Manual Start	34.1	34.4	41.4	31.7	4.4
Dumma (Flactria)	19.8	14.2	40.4	10.7	11.0
Pumps (Electric) Hot Tub or Spa	4.0	5.8	18.1 4.6	12.7 6.3	11.0 11.4
Swimming Pool	5.4	4.1	5.8	3.4	15.1
Well Water	14.1	6.7	10.2	5.3	18.9
Range	99.2	98.8	98.8	98.8	NF
Electric	60.2	58.4	70.3	53.6	3.4
Natural Gas	34.7 4.3	37.8 2.7	25.2 3.2	42.7	6.2
LPG Other	4.3 Q	2.7 Q	3.2 Q	2.4 Q	22.5 NF
	•	•	•	•	'"
Refrigerators	99.8	99.7	99.7	99.7	NF
1	84.7	84.5	86.3	83.8	1.3
2 or More	15.2	15.1	13.4	15.8	7.4

Table HC5-12b. Appliances by West Census Region,
Percent of U.S. Households, 1997 (Continued)

			West Census Region		
			Census I	Division	
Appliance Types and Characteristics	Total U.S.	Total	Mountain	Pacific	RSE
RSE Column Factor:	0.5	1.0	1.6	1.3	Row Factors
Most-Used Refrigerator					
Defrost Method	00.0	04.7	00.7	00.0	
Frost-Free	86.8 13.1	84.7 15.0	86.7 13.0	83.9 15.8	1.4 8.4
Type of Policiparator					
Type of Refrigerator 2-Doors (top and bottom)	68.0	60.6	66.5	58.2	3.3
2-Doors (side-by-side)	20.4	25.2	21.5	26.7	7.6
Regular (single door)	10.7	12.7	10.5	13.6	12.2
Half-Size/Other	0.7	1.1	Q	1.2	28.6
Age of Refrigerator					
Less than 2 Years	13.2	14.2	14.8	13.9	6.7
2 to 4 Years 5 to 9 Years	21.0 29.9	18.2 32.1	17.5 29.4	18.5 33.1	5.9 5.3
10 to 19 Years	23.8	24.5	25.2	24.2	3.7
20 Years or More	7.0	6.6	7.2	6.3	12.2
Don't Know	5.0	4.2	5.6	3.7	18.2
Size of Refrigerator					
Very Small (Less than 11 cf)	0.9	0.9	Q	1.1	29.1
Small (11-14 cf)	7.6	8.9	6.5	9.9	8.8
Medium (15-18 cf)	45.0	39.2	41.9	38.2	4.3
Large (19-22 cf) Very Large (23 or More cf)	44.8 1.5	48.9 1.7	49.1 Q	48.8 1.7	4.1 21.8
Through-the-Door Ice/Water Service					
Yes	13.0	14.4	11.3	15.7	8.3
No	87.0	85.6	88.7	84.3	1.8
Color Television Sets	98.7	98.2	99.3	97.8	NF
1	31.8	36.0	35.1	36.4	4.4
2	37.4	37.3	37.5	37.2	3.3
3	19.1	17.3	16.4	17.6	5.6
45 or More	7.7 2.7	5.5 2.2	6.8 3.6	5.0 1.6	11.3 17.2
Video Cassette Recorders (VCR's)	97.6	90.0	90.2	90.0	0.0
1	87.6 55.5	89.0 57.3	89.2 55.9	89.0 57.8	0.9 2.9
2	24.9	25.1	24.8	25.2	6.2
3 or More	7.2	6.7	8.5	6.0	10.2
Water Heaters	100.0	100.0	100.0	100.0	NE
Electric	39.1	33.0	34.5	32.5	6.3
For One Housing Unit	37.3	31.2	32.6	30.6	5.9
For Two or More Units	1.8	1.9	Q 64.7	1.9	26.7
Natural Gas For One Housing Unit	51.9 45.8	63.5 55.0	61.7 54.4	64.2 55.2	3.4 4.6
For Two or More Units	6.1	8.5	7.2	9.0	17.6
Fuel Oil	5.1	Q	Q	Q.	18.2
For One Housing Unit	3.1	Q	Q	Q	22.8
For Two or More Units	2.0	Q	Q	Q	23.7
LDC	3.2	2.4	Q	2.3	20.0
Countries Countr	0.7	0.8	Q	Q	38.7

Table HC5-12b. Appliances by West Census Region, Percent of U.S. Households, 1997 (Continued)

Appliance Types and Characteristics RSE Column Factor:	Total U.S. 0.5	West Census Region			
		Total	Census Division		
			Mountain	Pacific	RSE Row Factors
Age					
Less than 2 Years	11.1	11.1	15.8	9.2	11.5
2 to 4 Years	16.8	14.7	17.7	13.5	6.3
5 to 9 Years	25.0	24.2	22.9	24.7	6.4
10 to 19 Years	19.9	20.6	21.2	20.4	8.9
20 Years or More	7.0	8.8	5.6	10.1	11.2
Don't Know	7.0	6.8	6.3	7.0	12.5
No Separate Heater	2.9	2.8	Q	3.6	30.8
No Water Heater	0.2	Q	Q	Q	72.4
Water Heaters for					
Two or More Units	10.1	10.6	9.1	11.2	15.3
Size					
Small	15.3	13.0	16.0	11.8	8.4
Medium	46.4	41.4	43.9	40.3	4.1
Large	21.3	28.1	25.4	29.2	7.1
Don't Know	3.7	3.8	4.2	3.6	18.0
No Separate Heater	2.9	2.8	Q	3.6	30.8
No Water Heater	0.2	Q	Q	Q	72.4
Water Heaters for					
Two or More Units	10.1	10.6	9.1	11.2	15.3
Other Appliances					
Heated Aquarium	3.8	4.7	4.1	5.0	13.5
Microwave Oven	83.0	83.3	84.2	83.0	1.5
Outdoor Gas Light ²	0.7	Q	Q	Q	39.6
Rechargeable Tools/					
or Appliances	43.7	44.4	46.6	43.6	4.2
Stereo Equipment	68.8	74.4	73.7	74.6	1.6

¹ The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (0.9 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

if the fuel was electricity.

Includes 642,000 households using room/wall air-conditioners in addition to central air-conditioning. These are excluded from the count of 25.2 million households using only room air-conditioners.

cf = Cubic feet.

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.

[•] Percentages are calculated on unrounded numbers. • 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, B, C of the 1997 Residential Energy Consumption Survey.