

**Table 1.1.1. Untreated dental caries prevalence among children (aged 2-4 and 6-8 years), adolescents (aged 12-15 years), and adults (aged 35-44 years) by selected demographic characteristics**

	Percentage of Untreated Decay (dt/DT) (95% CI)			
	Age 2-4 Years	Age 6-8 Years	Age 12-15 Years	Age 35-44 Years
<b>Total</b>	16.25 (14.20, 18.31)	28.45 (24.99, 31.91)	17.87 (14.93, 20.81)	26.12 (23.60, 28.65)
<b>Race/ethnicity</b>				
Non-Hispanic white	11.15 (8.74, 13.55)	22.37 (17.97, 26.76)	14.64 (11.03, 18.26)	21.90 (18.87, 24.93)
Non-Hispanic black	22.25 (18.13, 26.37)	35.12 (31.93, 38.31)	28.35 (23.38, 33.31)	45.92 (41.60, 50.25)
Mexican American	30.22 (27.61, 32.83)	47.16 (40.89, 53.43)	29.77 (25.59, 33.95)	33.49 (29.91, 37.08)
American Indian/ Alaska Native*	68 (NA)	72 (NA)	69 (NA)	68 (NA)
<b>Gender</b>				
Male	16.77 (14.08, 19.27)	25.37 (21.04, 29.69)	17.13 (13.92, 20.35)	28.55 (25.05, 32.04)
Female	15.71 (12.87, 18.54)	32.02 (27.07, 36.98)	18.64 (14.03, 23.25)	23.96 (20.29, 27.62)
<b>Federal poverty level (FPL)</b>				
Below FPL	25.90 (21.27, 30.53)	47.32 (40.93, 53.70)	30.18 (22.02, 38.35)	50.74 (45.71, 55.76)
At or above FPL	11.86 (10.08, 13.63)	21.63 (17.74, 25.52)	14.57 (11.43, 17.71)	23.07 (20.36, 25.78)
<b>Education**</b>				
Less than 12th grade	25.73 (20.77, 30.70)	44.33 (37.43, 51.23)	29.83 (24.81, 34.85)	47.57 (41.12, 54.01)
12th grade	16.56 (14.00, 19.12)	30.06 (24.03, 36.10)	20.58 (15.34, 25.81)	33.14 (28.81, 37.48)
Greater than 12th grade	9.90 (7.56, 12.25)	17.71 (12.73, 22.69)	8.58 (5.48, 11.67)	15.50 (13.00, 18.00)
<b>Below FPL</b>				
Non-Hispanic white	23.29 (14.17, 32.41)	43.95 (32.02, 55.89)	26.35 (11.74, 40.97)	48.60 (38.10, 59.10)
Non-Hispanic black	23.69 (19.21, 28.16)	39.98 (32.97, 46.99)	31.35 (24.23, 38.46)	57.36 (49.55, 65.18)
Mexican American	33.07 (28.21, 37.94)	56.02 (48.23, 63.80)	40.50 (31.98, 49.03)	54.02 (45.27, 62.77)
<b>At or Above FPL</b>				
Non-Hispanic white	8.82 (6.78, 10.86)	18.04 (13.12, 22.96)	12.79 (9.29, 16.31)	20.31 (17.14, 23.47)
Non-Hispanic black	20.63 (15.00, 26.26)	31.63 (25.34, 37.92)	28.19 (21.69, 34.68)	42.39 (36.87, 47.91)
Mexican American	26.50 (19.65, 33.36)	38.88 (27.74, 50.02)	19.47 (13.07, 25.88)	22.16 (18.27, 26.05)

\* Data are for the Indian Health Service areas for 1999. NA, Not available.

\*\* For children and adolescents this variable represents the education of the head of household; for persons aged 35 to 44 this variable represents the sample person's education.

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 1.2.1. Decayed, missing, and filled surfaces among children (aged 6-8 years), adolescents (aged 12-15 years), and adults (aged 35-44 years) by selected demographic characteristics**

NHANES III	Mean DMFS (95% CI)		
	6-8 Years	12-15 Years	35-44 Years
<b>Total</b>	0.33 (0.26, 0.41)	4.47 (3.96, 4.99)	42.51 (40.74, 44.28)
<b>Race/ethnicity</b>			
Non-Hispanic white	0.29 (0.18, 0.40)	4.46 (3.68, 5.23)	43.60 (41.48, 45.72)
Non-Hispanic black	0.30 (0.21, 0.39)	3.64 (3.12, 4.16)	44.48 (42.02, 46.94)
Mexican American	0.42 (0.27, 0.58)	4.25 (3.60, 4.90)	27.29 (25.81, 28.77)
<b>Gender</b>			
Male	0.33 (0.23, 0.43)	4.20 (3.59, 4.80)	41.03 (38.95, 43.11)
Female	0.33 (0.22, 0.44)	4.76 (4.01, 5.52)	43.83 (41.47, 46.20)
<b>Federal poverty level (FPL)</b>			
Below FPL	0.32 (0.22, 0.43)	5.32 (4.14, 6.50)	43.98 (39.73, 48.22)
At or above FPL	0.33 (0.23, 0.42)	4.18 (3.53, 4.83)	42.29 (40.34, 44.24)
<b>Sealants</b>			
Yes	0.54 (0.30, 0.78)	4.27 (2.80, 5.75)	—
No	0.31 (0.23, 0.39)	4.53 (4.02, 5.05)	—

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 1.2.2. Decayed and filled surfaces among children (aged 2-4 and 6-8 years)**

NHANES III	Mean dfs (95% CI)	
	2-4 Years	6-8 Years
<b>Total</b>	1.41 (1.13, 1.69)	3.96 (3.49, 4.43)
<b>Race/ethnicity</b>		
Non-Hispanic white	0.91 (0.62, 1.21)	3.15 (2.59, 3.71)
Non-Hispanic black	1.66 (1.19, 2.12)	4.15 (3.36, 4.94)
Mexican American	2.75 (2.38, 3.12)	5.70 (4.63, 6.78)
<b>Gender</b>		
Male	1.30 (0.95, 1.66)	4.06 (3.31, 4.80)
Female	1.52 (1.20, 1.83)	3.85 (3.24, 4.46)
<b>Federal poverty level (FPL)</b>		
Below FPL	2.33 (1.70, 2.97)	5.79 (4.94, 6.64)
At or above FPL	1.00 (0.75, 1.24)	3.34 (2.74, 3.95)
<b>Sealants</b>		
Yes	NA	4.65 (3.21, 6.10)
No	NA	3.98 (3.43, 4.52)

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 1.3.1. Trends in primary dentition untreated dental caries prevalence among children (aged 2-4 and 6-8 years) and trends in permanent dentition untreated dental caries among children (aged 6-8 years), adolescents (aged 12-15 years), and adults (aged 35-44 years) by selected demographic characteristics**

	Prevalence (95% CI)					
	2-4 Years - Primary (ds)		6-8 Years - Primary (ds)		6-8 Years - Permanent (DS)	
	NHANES I	NHANES III	NHANES I	NHANES III	NHANES I	NHANES III
<b>Total</b>	16.68 (14.30, 19.06)	15.90 (13.83, 17.98)	48.65 (44.36, 52.93)	26.52 (23.29, 29.76)	20.98 (16.81, 25.15)	6.34 (4.55, 8.14)
<b>Race/ethnicity</b>						
Non-Hispanic white	15.02 (12.77, 17.27)	10.79 (8.36, 13.23)	44.87 (40.09, 49.64)	20.69 (16.65, 24.72)	19.08 (13.79, 24.38)	4.47 (2.22, 6.72)
Non-Hispanic black	18.95 (13.24, 24.66)	22.00 (18.12, 25.87)	50.87 (43.72, 58.02)	33.48 (30.26, 36.67)	23.70 (17.40, 30.00)	7.28 (4.69, 9.87)
Mexican American	31.53 (16.43, 46.62)	30.11 (27.36, 32.86)	78.61 (64.48, 92.74)	44.75 (38.27, 51.24)	35.95 (18.67, 53.24)	10.49 (7.40, 13.58)
<b>Gender</b>						
Male	17.74 (14.18, 21.30)	16.25 (13.61, 18.90)	49.79 (44.45, 55.13)	24.18 (20.26, 28.11)	21.98 (17.54, 26.43)	4.32 (2.29, 6.36)
Female	15.54 (12.31, 18.77)	15.53 (12.71, 18.36)	47.46 (42.06, 52.87)	29.23 (24.54, 33.93)	19.97 (14.42, 25.53)	8.60 (5.20, 12.01)
<b>Federal poverty level (FPL)</b>						
Below FPL	20.58 (15.19, 25.96)	25.79 (21.20, 30.39)	65.79 (58.42, 73.16)	45.24 (39.13, 51.35)	28.09 (19.84, 36.33)	9.95 (5.53, 14.36)
At or above FPL	15.77 (13.44, 18.10)	11.40 (9.65, 13.15)	43.99 (39.39, 48.59)	19.74 (16.16, 23.33)	19.02 (14.51, 23.52)	4.99 (3.04, 6.93)
<b>Education (head of household)</b>						
Less than 12th grade	23.78 (17.36, 30.21)	25.69 (20.72, 30.66)	63.31 (56.64, 69.97)	41.56 (35.00, 48.13)	27.42 (21.52, 33.31)	9.36 (6.23, 12.50)
12th grade	17.84 (13.97, 21.72)	16.26 (13.63, 18.88)	46.77 (40.37, 53.17)	28.12 (22.63, 33.61)	20.15 (11.45, 28.85)	6.38 (2.97, 9.80)
More than 12th grade	7.57 (4.95, 10.18)	9.36 (6.97, 11.75)	31.28 (22.93, 39.62)	16.27 (11.39, 21.16)	11.72 (7.15, 16.28)	4.65 (1.88, 7.43)
	Prevalence (95% CI)					
	12-15 Years - Permanent (DS)		35-44 Years - Permanent (DS)			
	NHANES I	NHANES III	NHANES I	NHANES III		
<b>Total</b>	53.19 (48.95, 57.44)	16.91 (13.86, 19.96)	40.30 (37.22, 43.37)	26.12 (23.60, 28.65)		
<b>Race/ethnicity</b>						
Non-Hispanic white	48.70 (43.81, 53.59)	13.64 (9.78, 17.49)	37.72 (34.11, 41.34)	21.90 (18.87, 24.93)		
Non-Hispanic black	65.15 (58.91, 71.39)	27.35 (22.59, 32.12)	43.39 (38.83, 47.96)	45.92 (41.60, 50.25)		
Mexican American	51.06 (40.80, 61.32)	28.34 (24.42, 32.25)	46.81 (22.93, 70.69)	33.49 (29.91, 37.08)		
<b>Gender</b>						
Male	51.03 (46.52, 55.54)	15.97 (12.53, 19.41)	43.99 (39.33, 48.66)	28.55 (25.05, 32.04)		
Female	55.42 (49.93, 60.90)	17.89 (13.38, 22.40)	36.89 (33.91, 39.86)	23.96 (20.29, 27.62)		
<b>Federal poverty level (FPL)</b>						
Below FPL	69.26 (64.17, 74.36)	29.42 (21.26, 37.59)	60.87 (53.36, 68.38)	50.74 (45.71, 55.76)		
At or above FPL	50.17 (45.59, 54.75)	13.54 (10.23, 16.84)	38.20 (35.27, 41.13)	23.07 (20.36, 25.78)		
<b>Education (head of household)*</b>						
Less than 12th grade	67.15 (62.29, 72.00)	28.71 (23.73, 33.68)	48.81 (45.13, 52.50)	47.57 (41.12, 54.01)		
12th grade	49.23 (43.21, 55.26)	20.09 (14.79, 25.39)	39.78 (35.07, 44.48)	33.14 (28.81, 37.48)		
More than 12th grade	35.68 (29.14, 42.21)	7.29 (4.22, 10.37)	32.16 (28.10, 36.22)	15.50 (13.00, 18.00)		

\* The sample person's education level is used in the 35-44 years age group.  
 Data source: The First National Health and Nutrition Examination Survey (NHANES I) 1971-1975, and the Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 2.1.1. Children and adolescents with dental sealants by age group and selected demographic characteristics**

Characteristics	Percentage of Children with Dental Sealants on 1st or 2nd Molars (95% CI)	
	Age 8-10 (N=1,611)	Age 14-16 (N=1,194)
<b>Total</b>	26.09 (20.02, 32.15)	22.18 (17.18, 27.18)
<b>Race/ethnicity</b>		
Non-Hispanic white	30.58 (22.87, 38.30)	29.06 (22.50, 35.62)
Non-Hispanic black	12.59 (9.84, 15.33)	8.13 (4.46, 11.80)
Mexican American	16.67 (11.48, 21.86)	9.35 (5.41, 13.30)
<b>Gender</b>		
Male	25.65 (17.55, 33.75)	18.63 (12.23, 25.02)
Female	26.55 (20.55, 32.54)	25.72 (19.94, 31.50)
<b>Federal poverty level (FPL)</b>		
Below FPL	14.62 (6.05, 23.20)	14.89 (5.63, 24.15)
At or above FPL	30.11 (23.79, 36.44)	24.96 (19.03, 30.89)
<b>Below FPL</b>		
Non-Hispanic white	16.48 (4.44, 28.53)	28.63 (9.33, 47.93)
Non-Hispanic black	12.38 (6.70, 18.07)	7.11 (3.64, 10.58)
Mexican American	10.71 (3.41, 18.01)	3.37 (0.81, 5.94)
<b>At or Above FPL</b>		
Non-Hispanic white	33.15 (25.46, 40.83)	29.56 (22.32, 36.80)
Non-Hispanic black	14.02 (10.39, 17.66)	9.45 (4.28, 14.62)
Mexican American	22.56 (12.94, 32.17)	13.82 (6.80, 20.85)

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 2.2.1. Percentage of U.S. population receiving fluoridated water through public water systems by state - United States, 2000**

<b>United States</b>	<b>65.8</b>	Missouri	80.5
Alabama	89.2	Montana	22.2
Alaska	55.2	Nebraska	77.7
Arizona	55.5	Nevada	65.9
Arkansas	59.9	New Hampshire	43.0
California	28.7	New Jersey	15.5
Colorado	76.9	New Mexico	76.7
Connecticut	88.8	New York	67.8
Delaware	80.9	North Carolina	83.3
District of Columbia	100.0	North Dakota	95.4
Florida	62.6	Ohio	87.6
Georgia	92.9	Oklahoma	74.6
Hawaii	9.0	Oregon	22.7
Idaho	45.4	Pennsylvania	54.2
Illinois	93.4	Rhode Island	85.1
Indian	95.3	South Carolina	91.2
Iowa	91.3	South Dakota	88.4
Kansas	62.5	Tennessee	94.5
Kentucky	96.1	Texas	65.7
Louisiana	53.2	Utah	2.0
Maine	75.4	Vermont	54.2
Maryland	90.7	Virginia	93.3
Massachusetts	55.8	Washington	57.8
Michigan	90.7	West Virginia	87.0
Minnesota	98.2	Wisconsin	89.3
Mississippi	46.0	Wyoming	30.3

Source: 2000 Water Fluoridation Reporting System, Centers for Disease Control and Prevention (<http://www2.cdc.gov/nohss/FluoridationV.asp>).

**Table 3.1.1. Prevalence of gingivitis among adults aged 20 and older by selected demographic characteristics**

Characteristics	Gingivitis
	N=13,003
	Percent (95% CI)
<b>Total</b>	52.90 (48.70, 57.10)
<b>Age</b>	
20-29	58.12 (52.97, 63.27)
30-39	49.08 (43.75, 54.42)
40-49	49.76 (45.33, 54.18)
50-59	54.06 (49.14, 58.98)
60-69	52.68 (46.64, 58.72)
70-79	55.03 (49.78, 60.27)
80-90	56.20 (50.29, 62.12)
<b>Race/ethnicity</b>	
Non-Hispanic white	50.14 (45.39, 54.89)
Non-Hispanic black	58.19 (54.08, 62.30)
Mexican American	66.47 (62.30, 70.65)
<b>Gender</b>	
Male	56.85 (52.55, 61.15)
Female	49.14 (44.66, 53.61)
<b>Federal poverty level (FPL)</b>	
Below FPL	64.63 (60.07, 69.20)
At/above FPL	51.24 (46.78, 55.70)
<b>Education</b>	
Less than 12th grade	60.93 (56.96, 64.89)
12th grade	53.82 (48.66, 58.98)
More than 12th grade	48.30 (43.51, 53.10)
<b>Ever smoked at least 100 cigarettes</b>	
Yes	50.73 (46.42, 55.04)
No	55.26 (50.50, 60.02)

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 3.2.1. Destructive periodontal disease<sup>1</sup> among adults aged 20 and older by selected demographic characteristics**

Characteristics	Destructive periodontal disease
	N=12,976
	Percent (95% CI)
<b>Total</b>	26.14 (24.41, 27.88)
<b>Age</b>	
20-29	6.08 (4.58, 7.58)
30-39	18.19 (15.34, 21.04)
40-49	28.13 (25.42, 30.83)
50-59	46.21 (42.67, 49.74)
60-69	52.55 (46.86, 58.24)
70-79	55.72 (50.91, 60.53)
80-90	67.51(61.31, 73.71)
<b>Race/ethnicity*</b>	
Non-Hispanic white	27.04 (25.18, 28.91)
Non-Hispanic black	38.63 (36.48, 40.78)
Mexican American	33.52 (31.89, 35.15)
<b>Gender*</b>	
Male	34.00 (32.09, 35.90)
Female	24.46 (22.49, 26.44)
<b>Federal poverty level (FPL)*</b>	
Below FPL	42.22 (39.20, 45.24)
At/above FPL	27.39 (25.68, 29.10)
<b>Education*</b>	
Less than 12th grade	38.96 (36.72, 41.21)
12th grade	30.80 (28.22, 33.37)
More than 12th grade	23.03 (20.70, 25.36)
<b>Ever smoked at least 100 cigarettes*</b>	
Yes	35.09 (32.87, 37.32)
No	21.81 (20.17, 23.45)

<sup>1</sup> Destructive periodontal disease is defined as having a loss of attachment of at least 4 mm at one or more sites.

\*Age standardized to the year 2000 U.S. population.

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 4.1.1. Adults aged 18 and older with full dentition by selected demographic characteristics**

Characteristics	NHANES III	BRFSS
	N=16,818	N=19,243
Percent (95% CI)		
<b>Total</b>	30.20 (28.74, 31.66)	50.10 (49.72, 50.48)
<b>Age</b>		
18-24	65.19 (62.32, 68.06)	83.02 (81.99, 84.06)
25-34	45.29 (42.08, 48.51)	69.27 (68.36, 70.17)
35-44	30.11 (26.95, 33.27)	54.22 (53.35, 55.09)
45-54	16.82 (14.31, 19.33)	39.37 (38.41, 40.34)
55-64	9.70 (7.55, 11.85)	25.41 (24.35, 26.47)
65-74	5.85 (4.23, 7.47)	17.96 (16.96, 18.95)
75-84	2.23 (1.64, 2.82)	15.41 (14.24, 16.58)
85 and older	0.26 (0, 0.78)	14.44 (11.81, 17.07)
<b>Race/ethnicity*</b>		
Non-Hispanic white	32.66 (30.79, 34.52)	53.17 (52.76, 53.59)
Non-Hispanic black	19.17 (17.42, 20.92)	34.71 (33.60, 35.83)
Mexican American/Hispanic**	30.69 (29.67, 31.70)	47.17 (45.68, 48.66)
<b>Gender*</b>		
Male	30.72 (28.92, 32.53)	50.35 (49.77, 50.94)
Female	29.54 (27.97, 31.12)	49.81 (49.31, 50.30)
<b>Education*</b>		
Less than 12th grade	20.33 (18.41, 22.25)	35.71 (34.47, 36.96)
12th grade	26.80 (24.76, 28.85)	42.81 (42.14, 43.48)
More than 12th grade	37.65 (36.05, 39.26)	57.39 (56.89, 57.88)
<b>Federal poverty level (FPL)*</b>		
Below FPL	20.22 (18.24, 22.20)	NA
At/above FPL	31.84 (30.29, 33.40)	NA
<b>Income*</b>		
Less than \$15,000	NA	36.96 (35.67, 38.26)
\$15,000-\$24,999	NA	39.48 (38.52, 40.44)
\$25,000-\$34,999	NA	46.08 (45.11, 47.05)
\$35,000-\$49,999	NA	51.24 (50.32, 52.15)
More than \$50,000	NA	60.32 (59.50, 61.15)
<b>Below FPL*</b>		
Non-Hispanic white	22.09 (18.13, 26.06)	NA
Non-Hispanic black	15.07 (13.05, 17.08)	
Mexican American	27.73 (25.75, 27.68)	
<b>At/above FPL*</b>		
Non-Hispanic white	33.63 (31.63, 35.62)	NA
Non-Hispanic black	21.03 (19.03, 23.03)	
Mexican American	32.64 (31.52, 33.77)	

\* Age standardized to the year 2000 U.S. population.

\*\*Mexican American group refers to NHANES III and Hispanic to BRFSS.

Data sources: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention, and the 1999 Behavioral Risk Factor Surveillance System (BRFSS), Centers for Disease Control and Prevention.

**Table 4.2.1. Adults aged 20 and older with 21 or more teeth  
by selected demographic characteristics**

Characteristics		N=16,115		
		Percent (95% CI)		
<b>Total</b>		71.73 (69.88, 73.59)		
<b>Age</b>				
20-29		97.18 (96.15, 98.21)		
30-39		90.78 (88.65, 92.91)		
40-49		75.28 (71.60, 78.96)		
50-59		52.01 (48.87, 55.16)		
60-69		41.23 (38.15, 44.32)		
70-79		29.87 (26.27, 33.47)		
80 and older		28.21 (19.87, 36.55)		
<b>Race/ethnicity*</b>				
Non-Hispanic white		73.11 (71.35, 74.87)		
Non-Hispanic black		61.21 (59.53, 62.90)		
Mexican American		77.79 (76.69, 78.82)		
<b>Gender*</b>				
Male		72.15 (70.69, 73.62)		
Female		71.68 (69.80, 73.57)		
<b>Federal poverty level (FPL)*</b>				
Below FPL		61.29 (58.45, 64.12)		
At/above FPL		73.54 (72.05, 75.03)		
<b>Education*</b>				
Less than 12th grade		59.02 (56.68, 61.36)		
12th grade		69.93 (68.11, 71.74)		
More than 12th grade		82.15 (80.92, 83.37)		
Age group by race/ethnicity	Non-Hispanic white	Non-Hispanic black	Mexican American	
	Percent (95% CI)			
20-29	96.77 (95.35, 98.18)	97.96 (97.21, 98.71)	99.24 (98.81, 99.67)	
30-39	92.01 (89.23, 94.78)	82.55 (80.14, 84.96)	95.94 (94.82, 97.05)	
40-49	76.95 (72.44, 81.46)	58.60 (54.37, 62.82)	85.87 (83.17, 88.57)	
50-59	53.76 (49.91, 57.61)	33.42 (27.83, 39.01)	67.46 (62.07, 72.85)	
60-69	43.83 (40.35, 47.32)	23.26 (18.68, 27.84)	46.19 (40.76, 51.61)	
70-79	31.52 (27.63, 35.41)	18.10 (13.59, 22.61)	31.96 (24.15, 39.76)	
80 and older	32.23 (22.93, 41.52)	2.13 (0, 6.15) (n=26)	11.34 (0, 28.73) (=18)	

\* Age standardized to the year 2000 U.S. population.

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 4.2.2. Adults aged 50 and older with 21 or more teeth  
by selected demographic characteristics**

Characteristics	N=5,903
	Percent (95% CI)
<b>Total</b>	42.41 (40.03, 44.78)
<b>Age</b>	
50-59	52.01 (48.87, 55.16)
60-69	41.23 (38.15, 44.32)
70-79	29.87 (26.27, 33.47)
80 and older	28.21 (19.87, 36.55)
<b>Race/ethnicity*</b>	
Non-Hispanic white	45.39 (42.58, 48.21)
Non-Hispanic black	27.58 (23.62, 31.54)
Mexican American	52.48 (49.04, 55.92)
<b>Gender*</b>	
Male	43.65 (40.22, 47.08)
Female	43.92 (40.97, 46.87)
<b>Federal poverty level (FPL)*</b>	
Below FPL	24.20 (18.87, 29.54)
At/above FPL	47.01 (44.42, 49.61)
<b>Education*</b>	
Less than 12th grade	25.31 (21.93, 28.69)
12th grade	41.76 (38.63, 44.90)
More than 12th grade	62.81 (59.91, 65.71)
<b>Below FPL*</b>	
Non-Hispanic white	24.14 (16.68, 31.60)
Non-Hispanic black	23.36 (15.95, 30.78)
Mexican American	47.48 (39.62, 55.34)
<b>At/above FPL*</b>	
Non-Hispanic white	47.85 (45.07, 50.63)
Non-Hispanic black	29.88 (25.75, 34.01)
Mexican American	57.10 (51.12, 63.07)

\* Age standardized to the year 2000 U.S. population.

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 4.3.1. Edentulous adults 65 to 74 years old by selected demographic characteristics**

Characteristics	NHIS 1998	BRFSS 1999
	N=854	N=4,338
	Percent (95% CI)	
<b>Total</b>	24.72 (23.03, 26.42)	21.79 (20.82, 22.76)
<b>Race/ethnicity</b>		
Non-Hispanic white	24.86 (22.93, 26.79)	21.97 (20.91, 23.02)
Non-Hispanic black	27.66 (22.18, 33.14)	27.49 (23.68, 31.30)
Hispanic	20.75 (15.67, 25.82)	17.23 (13.50, 20.96)
<b>Gender</b>		
Male	24.46 (21.70, 27.22)	19.91 (18.40, 21.43)
Female	22.93 (22.72, 27.15)	23.22 (21.96, 24.49)
<b>Education</b>		
Less than years	39.07 (35.71, 42.43)	38.83 (36.20, 41.46)
12 years	25.04 (22.21, 27.86)	22.79 (21.17, 24.42)
Greater than 12 years	12.77 (10.56, 14.98)	12.09 (10.89, 13.29)
<b>Federal poverty level (FPL)</b>		
Below FPL	37.28 (31.52, 43.04)	NA
At/above FPL	25.13 (22.89, 27.37)	NA
<b>Income</b>		
Less than \$15,000	NA	37.14 (34.34, 39.94)
\$15,000-\$24,999	NA	26.94 (24.71, 29.17)
\$25,000-\$34,999	NA	19.06 (16.40, 21.73)
\$35,000-\$49,999	NA	12.95 (10.29, 15.62)
More than \$50,000	NA	7.72 (5.94, 9.51)
<b>Below FPL</b>		
Non-Hispanic white	35.83 (22.53, 49.14)	NA
Non-Hispanic black	38.39 (30.39, 46.39)	
Hispanic	33.40 (21.12, 45.69)	
<b>At/above FPL</b>		
Non-Hispanic white	18.50 (12.48, 24.51)	NA
Non-Hispanic black	25.78 (23.27, 28.30)	
Hispanic	25.87 (19.13, 32.60)	

Data sources: 1998 National Health Interview Survey, National Center for Health Statistics, Centers for Disease Control and Prevention and 1999 Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention.

Table 4.3.2. Edentulous adults 45 to 64 years old by selected demographic characteristics

Characteristics	NHIS 1998	BRFSS 1999
	N=916	N=4,996
Percent (95% CI)		
<b>Total</b>	9.65 (8.90, 10.39)	9.10 (8.68, 9.53)
<b>Race/ethnicity</b>		
Non-Hispanic white	10.34 (9.46, 11.23)	10.38 (8.85, 11.92)
Non-Hispanic black	8.05 (6.37, 9.73)	6.07 (4.67, 7.47)
Hispanic	6.23 (4.70, 7.76)	9.40 (8.94, 9.87)
<b>Gender</b>		
Male	9.56 (8.55, 10.58)	8.52 (7.89, 9.15)
Female	9.72 (8.78, 10.67)	9.66 (9.09, 10.22)
<b>Education</b>		
Less than 12 years	23.19 (20.77, 25.61)	23.04 (21.17, 24.92)
12 years	11.42 (10.00, 12.84)	12.44 (11.58, 13.30)
Greater than 12 years	4.76 (4.11, 5.41)	4.06 (3.70, 4.42)
<b>Federal poverty level (FPL)</b>		
Below FPL	18.67 (15.81, 21.54)	NA
At/above FPL	8.75 (7.91, 9.58)	NA
<b>Income</b>		
<\$15,000	NA	19.35 (17.46, 21.24)
\$15,000-\$24,999	NA	16.17 (14.65, 17.69)
\$25,000-\$34,999	NA	11.08 (9.78, 12.39)
\$35,000-\$49,999	NA	7.60 (6.65, 8.54)
≥\$50,000	NA	3.61 (3.09, 4.13)
<b>Below FPL</b>		
Non-Hispanic white	11.14 (5.40, 16.87)	NA
Non-Hispanic black	24.52 (19.99, 29.05)	
Hispanic	11.11 (7.18, 15.04)	
<b>At/above FPL</b>		
Non-Hispanic white	5.12 (3.39, 6.86)	NA
Non-Hispanic black	9.33 (8.34, 10.32)	
Hispanic	7.34 (5.25, 9.42)	

Data sources: 1998 National Health Interview Survey, National Center for Health Statistics, Centers for Disease Control and Prevention and 1999 Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention.

**Table 4.3.3. Edentulous adults 25 to 44 years old by selected demographic characteristics**

Characteristics	NHIS 1998	BRFSS 1999
	N=271	N=793
	Percent (95% CI)	
<b>Total</b>	2.18 (1.84, 2.52)	1.24 (1.08, 1.40)
<b>Race/ethnicity</b>		
Non-Hispanic white	2.31 (1.88, 2.75)	1.63 (1.11, 2.15)
Non-Hispanic black	1.95 (1.19, 2.72)	0.69 (0.22, 1.17)
Hispanic	1.36 (0.87, 1.85)	1.30 (1.13, 1.46)
<b>Gender</b>		
Male	2.05 (1.59, 2.52)	1.09 (0.87, 1.31)
Female	2.31 (1.80, 2.81)	1.39 (1.15, 1.63)
<b>Education</b>		
Less than 12 years	4.09 (3.10, 5.08)	3.04 (2.22, 3.86)
12 years	2.56 (1.91, 3.21)	1.93 (1.55, 2.32)
Greater than 12 years	1.55 (1.16, 1.95)	0.55 (0.43, 0.68)
<b>Federal poverty level (FPL)</b>		
Below FPL	3.42 (2.27, 4.57)	NA
At/above FPL	1.95 (1.60, 2.30)	NA
<b>Income</b>		
<\$15,000	NA	2.61 (1.86, 3.36)
\$15,000-\$24,999	NA	2.18 (1.58, 2.79)
\$25,000-\$34,999	NA	1.38 (0.99, 1.76)
\$35,000-\$49,999	NA	0.82 (0.58, 1.06)
≥\$50,000	NA	0.56 (0.38, 0.75)
<b>Below FPL</b>		
Non-Hispanic white	1.35 (0.45, 2.24)	NA
Non-Hispanic black	5.44 (3.0, 7.88)	
Hispanic	2.34 (0.67, 4.01)	
<b>At/above FPL</b>		
Non-Hispanic white	1.12 (0.57, 1.68)	NA
Non-Hispanic black	2.04 (1.60, 2.47)	
Hispanic	1.93 (0.90, 2.97)	

Data sources: 1998 National Health Interview Survey, National Center for Health Statistics, Centers for Disease Control and Prevention and 1999 Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention.

Table 4.4.1. Edentulous adults who had and used their dentures

Characteristics	Overall	65-74 Years Old	75 Years and Older
	N=1,549	N=535	N=798
	Percent (95% CI)		
<b>Total</b>	83.32 (80.52,86.13)	89.08 (86.03, 92.13)	77.73 (72.51, 82.95)
<b>Age</b>			
18-24	—	NA	NA
25-34	93.08 (82.12, 104.04)	NA	NA
35-44	79.60 (66.60, 92.59)	NA	NA
45-54	83.35 (74.97, 91.72)	NA	NA
55-64	82.67 (78.35, 87.0)	NA	NA
65-74	89.08 (86.03, 92.13)	NA	NA
75+	77.73 (72.51, 82.95)	NA	NA
<b>Race/ethnicity</b>			
Non-Hispanic white	84.49 (81.45, 87.54)	90.00 (86.98, 93.03)	79.78 (74.00, 85.57)
Non-Hispanic black	74.30 (69.26, 79.35)	84.13 (77.27, 91.00)	64.71 (54.78, 74.63)
Mexican American	75.24 (67.82, 82.66)	82.98 (71.40, 94.57)	59.37 (50.63, 68.11)
<b>Gender</b>			
Male	79.87 (75.84, 83.89)	85.60 (80.50, 90.70)	75.26 (68.75, 81.77)
Female	86.07 (83.11, 89.04)	91.89 (87.94, 95.85)	79.33 (73.81, 84.86)
<b>Federal poverty level (FPL)</b>			
Below FPL	71.22 (65.82, 76.62)	73.08 (61.76, 84.41)	67.76 (61.19, 74.33)
At/above FPL	85.79 (82.74, 88.85)	90.90 (87.03, 94.78)	79.84 (73.79, 85.89)
<b>Education</b>			
Less than 12th grade	77.36 (73.60, 81.12)	83.61 (79.21, 88.02)	75.35 (69.73, 80.97)
12th grade	88.94 (85.84, 92.04)	93.90 (89.96, 97.84)	78.42 (67.63, 89.22)
More than 12th grade	94.70 (91.31, 98.08)	98.70 (96.68, 100.71)	88.48 (78.82, 98.14)

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 5.1.1. Adults aged 18 and older with a self-assessed oral health status of good or better**

Characteristic	Percent (95% CI)*
<b>Total</b>	65.06 (63.15, 66.97)
<b>Age</b>	
18-24	70.99 (67.85, 74.13)
25-34	68.46 (65.58, 71.35)
35-44	66.74 (63.40, 70.07)
45-54	66.61 (62.57, 70.66)
55-64	58.65 (55.15, 62.15)
65-74	56.68 (53.85, 59.52)
75 and older	53.32 (48.71, 57.92)
<b>Race/ethnicity</b>	
Non-Hispanic white	69.22 (66.97, 71.48)
Non-Hispanic black	50.99 (49.22, 52.76)
Mexican American	43.37 (41.30, 45.43)
<b>Gender</b>	
Male	64.38 (62.30, 66.46)
Female	65.55 (63.22, 67.88)
<b>Federal poverty level (FPL)</b>	
Below FPL	44.25 (40.68, 47.82)
At/above FPL	68.01 (66.20, 69.83)
<b>Education</b>	
Less than 12th grade	45.80 (43.66, 47.94)
12th grade	62.84 (59.97, 65.71)
More than 12th grade	76.28 (74.52, 78.03)
<b>Smoking status</b>	
Never	70.63 (68.72, 72.53)
Former	69.20 (66.46, 71.94)
Current	52.19 (48.07, 56.32)
<b>Dental visit within past year</b>	
Yes	71.24 (69.16, 73.33)
No	50.60 (48.17, 53.03)
<b>Below FPL</b>	
Non-Hispanic white	50.42 (43.67, 57.16)
Non-Hispanic black	41.30 (38.01, 44.59)
Mexican American	34.28 (31.85, 36.72)
<b>At or above FPL</b>	
Non-Hispanic white	70.76 (68.60, 72.92)
Non-Hispanic black	54.30 (51.77, 56.83)
Mexican American	49.93 (47.20, 52.65)

\* All variables are age-adjusted to the year 2000 U.S. standard population, except those for age subgroups.

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

Table 6.1.1. Adults aged 18 and older with oral infections and benign lesions

Characteristics	Angular Cheilitis (N=128)	Herpes Labialis (N=232)	Papillomas/ Warts (N=111)	Recurrent Aphthous Ulcerations (N=134)
	Percent (95% CI)			
<b>Total</b>	2.46 (1.64, 3.29)	5.66 (4.69, 6.63)	1.94 (1.33, 2.56)	2.97 (2.31, 3.64)
<b>Age</b>				
18-24	0.69 (0, 1.91)	9.21 (4.22, 14.20)	1.22 (0, 3.03)	8.77 (5.03, 12.50)
25-34	2.41 (0.69, 4.13)	7.49 (3.95, 11.03)	0.41 (0, 1.05)	5.04 (2.52, 7.55)
35-44	1.81 (0.34, 3.29)	4.06 (1.49, 6.62)	1.75 (0.46, 3.05)	2.83 (1.32, 4.35)
45-54	0.91 (0.12, 1.71)	7.60 (4.80, 10.39)	2.75 (0.93, 4.57)	1.09 (0.27, 1.91)
55-64	3.10 (1.81, 4.38)	3.91 (1.94, 5.88)	1.86 (0.84, 2.89)	1.49 (0.28, 2.70)
65-74	3.53 (1.85, 5.22)	4.94 (2.61, 7.27)	3.37 (1.51, 5.23)	1.75 (0.67, 2.83)
75 and older	5.51 (3.06, 7.96)	3.05 (1.38, 4.72)	2.20 (0.92, 3.49)	1.40 (0.40, 2.39)
<b>Race/ethnicity</b>				
Non-Hispanic white	2.80 (1.80, 3.81)	6.19 (5.03, 7.35)	1.86 (1.17, 2.54)	2.83 (2.11, 3.54)
Non-Hispanic black	0.49 (0.07, 0.92)	2.01 (1.17, 2.85)	2.17 (1.17, 3.18)	1.56 (0.60, 2.52)
Mexican American	1.81 (1.00, 2.61)	9.48 (6.02, 12.94)	2.23 (1.07, 3.38)	5.07 (3.53, 6.62)
<b>Gender</b>				
Male	2.22 (1.33, 3.12)	6.22 (4.78, 7.66)	2.35 (1.53, 3.17)	3.36 (2.16, 4.56)
Female	2.72 (1.78, 3.65)	5.07 (3.79, 6.35)	1.50 (0.77, 2.24)	2.56 (1.75, 3.37)
<b>Federal poverty level (FPL)</b>				
Below FPL	3.20 (1.44, 4.95)	5.16 (3.16, 7.15)	2.35 (0.72, 3.99)	2.68 (1.01, 4.34)
At/above FPL	2.44 (1.55, 3.34)	5.75 (4.62, 6.88)	1.73 (1.14, 2.32)	2.88 (2.04, 3.72)
<b>Education</b>				
Less than 12th grade	3.43 (2.34, 4.52)	5.54 (3.58, 7.50)	2.43 (1.28, 3.59)	1.89 (0.94, 2.84)
12th grade	2.63 (1.39, 3.88)	6.37 (4.85, 7.90)	1.94 (0.89, 2.99)	3.22 (2.30, 4.14)
Greater than 12th grade	1.45 (0.60, 2.30)	5.05 (3.11, 6.99)	1.53 (0.70, 2.36)	3.73 (1.99, 5.46)
<b>Dental visits</b>				
Within the past year	1.74 (0.84, 2.64)	5.86 (4.46, 7.25)	1.92 (1.12, 2.73)	3.26 (2.26, 4.26)
More than one year ago	3.37 (2.22, 4.53)	5.37 (3.57, 7.17)	1.95 (1.16, 2.74)	2.64 (1.53, 3.75)

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 7.1.1. Visits to a dentist during the past year among those aged 2 years and older**

Characteristics	N=26,619
	Percent (95% CI)
<b>Total</b>	67.24 (65.65, 68.84)
<b>Age</b>	
2-4	36.45 (33.77, 39.13)
5-14	77.56 (74.97, 80.14)
15-24	68.26 (65.62, 70.90)
25-34	67.97 (64.99, 70.95)
35-44	72.53 (69.61, 75.44)
45-54	70.05 (66.80, 73.30)
55-64	64.67 (61.23, 68.11)
65-74	59.21 (55.00, 63.42)
75-84	51.53 (46.14, 56.93)
85 and older	48.78 (42.87, 54.70)
<b>Race/ethnicity</b>	
Non-Hispanic white	70.31 (68.43, 72.19)
Non-Hispanic black	58.16 (55.87, 60.45)
Mexican American	51.88 (49.56, 54.21)
<b>Gender</b>	
Male	64.10 (62.27, 65.93)
Female	70.19 (68.37, 72.00)
<b>Federal poverty level (FPL)</b>	
Below FPL	50.56 (47.78, 53.34)
At or above FPL	70.99 (69.41, 72.58)
<b>Education<sup>1</sup></b>	
Less than 12th grade	49.79 (47.52, 52.05)
12th grade	65.83 (63.82, 67.83)
More than 12th grade	79.24 (77.56, 80.92)
<b>Below FPL</b>	
Non-Hispanic white	52.15 (47.12, 57.19)
Non-Hispanic black	50.68 (48.06, 53.30)
Mexican American	40.92 (38.73, 43.10)
<b>At or above FPL</b>	
Non-Hispanic white	72.57 (70.77, 74.38)
Non-Hispanic black	62.68 (59.96, 65.41)
Mexican American	61.03 (57.95, 64.11)

<sup>1</sup>Education represents the education of the head of the household for persons under 18; otherwise, it represents the education of the individual person.

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 7.3.1. Percentage of children aged 18 years and younger who received preventive dental services during 1997 by type of service**

Characteristics	General exam or consultation	Cleaning, prophylaxis, or polishing	X-rays, radiographs, or bitewings	Fluoride treatment	Fillings	Orthodontia, braces, or retainers
	Percent receiving services					
<b>Total percent</b>	35.3 (33.5, 37.1)	30.9 (29.1, 32.7)	17.5 (16.2, 18.8)	12.4 (11.1, 13.7)	7.7 (7.0, 8.5)	7.0 (6.2, 7.8)
<b>Age</b>						
Under 6	17.4 (15.6, 19.2)	13.2 (11.7, 14.8)	6.0 (4.9, 7.2)	6.2 (5.0, 7.3)	3.1 (2.4, 3.9)	—
6-8	44.0 (40.5, 47.6)	39.6 (36.1, 43.1)	23.0 (20.0, 26.0)	19.7 (16.6, 22.7)	11.7 (9.6, 13.8)	—
9-11	50.3 (46.6, 53.9)	45.0 (41.5, 48.6)	27.6 (24.5, 30.6)	20.0 (17.2, 22.8)	10.5 (8.5, 12.4)	9.2 (7.3, 11.2)
12-15	42.4 (39.0, 45.7)	38.2 (34.9, 41.4)	20.7 (18.2, 23.3)	13.1 (10.7, 15.5)	8.2 (6.8, 9.6)	17.8 (15.4, 20.1)
16-18	37.6 (34.4, 40.8)	33.5 (30.3, 36.8)	20.4 (17.7, 23.0)	9.0 (7.0, 10.9)	9.5 (7.6, 11.3)	10.1 (8.0, 12.3)
<b>Race/ethnicity</b>						
Non-Hispanic white and other	40.8 (38.6, 43.1)	36.5 (34.2, 38.8)	20.4 (18.6, 22.1)	15.3 (13.6, 17.0)	8.6 (7.6, 9.5)	8.9 (7.9, 10.0)
Non-Hispanic black	23.0 (20.1, 25.8)	19.3 (16.5, 22.0)	10.6 (8.7, 12.5)	6.3 (4.8, 7.9)	—	—
Hispanic	22.9 (20.4, 25.3)	17.7 (15.4, 19.9)	11.8 (9.9, 13.8)	5.6 (4.1, 7.2)	7.2 (5.8, 8.5)	2.9 (2.0, 3.7)
<b>Gender</b>						
Male	33.9 (31.8, 36.0)	29.9 (27.8, 32.0)	17.2 (15.5, 18.9)	11.9 (10.3, 13.5)	7.3 (6.3, 8.3)	5.4 (4.6, 6.3)
Female	36.7 (34.6, 38.8)	32.0 (29.8, 34.1)	17.8 (16.2, 19.4)	13.0 (11.4, 14.5)	8.2 (7.1, 9.3)	8.6 (7.5, 9.7)
<b>Federal poverty level (FPL)</b>						
Below FPL	22.6 (20.0, 25.2)	17.3 (14.9, 19.7)	11.2 (9.2, 13.1)	4.7 (3.3, 6.1)	7.8 (6.3, 9.3)	—
At/above FPL	38.4 (36.4, 40.4)	34.3 (32.3, 36.2)	19.1 (17.6, 20.6)	14.4 (12.9, 15.9)	7.7 (6.9, 8.6)	8.2 (7.2, 9.1)
<b>Insurance status</b>						
Any private <sup>a</sup>	41.4 (39.3, 43.6)	37.3 (35.2, 39.5)	20.3 (18.6, 22.0)	15.6 (13.8, 17.3)	7.8 (6.9, 8.8)	9.2 (8.2, 10.3)
Any public	24.2 (21.7, 26.6)	18.4 (16.2, 20.6)	12.4 (10.3, 14.5)	5.9 (4.6, 7.3)	9.0 (7.4, 10.6)	—
Uninsured	17.0 (14.0, 20.0)	13.6 (10.9, 16.2)	9.4 (7.0, 11.7)	—	—	—

— Sample size insufficient to produce reliable national estimates.

<sup>a</sup> Includes CHAMPUS and CHAMPVA, which cover military dependents and veterans respectively.

Source: 1997 Medical Expenditure Panel Survey Household Component, Agency for Healthcare Research and Quality.

**Table 7.3.2A. Percentage of children aged 18 years and younger living below the federal poverty level during 1997 by extent of dental services received**

Characteristics	No preventive dental services	Basic preventive dental services <sup>a</sup>	Any preventive dental services <sup>b</sup>
	Percent receiving services		
<b>Total percent</b>	74.8 (72.1, 77.4)	24.5 (21.9, 27.2)	25.2 (22.6, 27.9)
<b>Age</b>			
Under 6	85.8 (83.2, 88.5)	14.1 (11.5, 16.7)	14.2 (11.5, 16.8)
6-8	69.1 (62.9, 75.4)	30.3 (24.1, 36.4)	30.9 (24.6, 37.1)
9-11	65.8 (59.2, 72.3)	33.0 (26.4, 39.6)	34.2 (27.7, 40.8)
12-15	67.8 (61.9, 73.7)	31.7 (25.7, 37.7)	32.2 (26.3, 38.1)
16-18	71.6 (65.1, 78.1)	—	28.4 (21.9, 34.9)
<b>Race/ethnicity</b>			
Non-Hispanic white and other	70.0 (65.1, 74.9)	29.5 (24.6, 34.4)	30.0 (25.1, 34.9)
Non-Hispanic black	78.0 (73.3, 82.7)	21.4 (16.8, 26.0)	22.0 (17.3, 26.7)
Hispanic	78.4 (75.2, 81.7)	20.4 (17.4, 23.6)	21.6 (18.3, 24.8)
<b>Gender</b>			
Male	76.5 (73.2, 79.7)	23.0 (19.7, 26.2)	23.5 (20.3, 26.8)
Female	73.0 (69.7, 76.3)	26.1 (22.8, 29.5)	27.0 (23.7, 30.3)
<b>Insurance status</b>			
Any private <sup>c</sup>	71.9 (65.3, 78.6)	27.7 (21.1, 34.3)	28.1 (21.4, 34.7)
Any public	73.9 (70.8, 77.0)	25.3 (22.2, 28.4)	26.1 (23.0, 29.2)
Uninsured	86.0 (80.8, 91.1)	—	—

— Sample size insufficient to produce reliable national estimate.

<sup>a</sup> Includes general exam or consultation; cleaning, prophylaxis, or polishing; x-rays, radiographs, or bitewings; or fluoride treatment.

<sup>b</sup> Includes general exam or consultation; cleaning, prophylaxis, or polishing; x-rays, radiographs, or bitewings; fluoride treatment; fillings; or orthodontia.

<sup>c</sup> Includes CHAMPUS and CHAMPVA, which cover military dependents and veterans, respectively.

Data source: 1997 Medical Expenditure Panel Survey Household Component, Agency for Healthcare Research and Quality.

**Table 7.3.2B. Percentage of children aged 18 years and younger living at or above the federal poverty level during 1997 by extent of dental services received**

Characteristics	No preventive dental services	Basic preventive dental services <sup>a</sup>	Any preventive dental services <sup>b</sup>
	Percent receiving services		
<b>Total percent</b>	56.2 (54.3, 58.2)	40.9 (38.9, 42.8)	43.8 (41.8, 45.7)
<b>Age</b>			
Under 6	80.7 (78.6, 82.9)	19.1 (17.0, 21.3)	19.3 (17.1, 21.4)
6-8	46.4 (42.5, 50.3)	52.2 (48.3, 56.2)	53.6 (49.7, 57.5)
9-11	40.1 (36.4, 43.8)	57.3 (53.5, 61.1)	59.9 (56.2, 63.6)
12-15	44.6 (41.3, 48.0)	48.3 (44.8, 51.8)	55.4 (52.0, 58.7)
16-18	51.4 (47.9, 54.9)	44.3 (40.7, 47.8)	48.6 (45.1, 52.1)
<b>Race/ethnicity</b>			
Non-Hispanic white and other	51.7 (49.4, 53.9)	45.1 (42.8, 47.4)	48.3 (46.1, 50.6)
Non-Hispanic black	70.2 (66.0, 74.5)	28.1 (24.0, 32.2)	29.8 (25.5, 34.0)
Hispanic	70.7 (67.4, 74.0)	27.6 (24.4, 30.9)	29.3 (26.0, 32.6)
<b>Gender</b>			
Male	58.1 (55.7, 60.6)	39.4 (37.0, 41.7)	41.9 (39.4, 44.3)
Female	54.2 (51.8, 56.6)	42.5 (40.1, 44.9)	45.8 (43.4, 48.2)
<b>Insurance status</b>			
Any private <sup>c</sup>	51.6 (49.5, 53.7)	45.1 (42.9, 47.2)	48.4 (46.3, 50.5)
Any public	70.8 (66.2, 75.4)	28.1 (23.5, 32.6)	29.2 (24.6, 33.8)
Uninsured	78.2 (74.2, 82.1)	20.9 (17.0, 24.8)	21.8 (17.9, 25.8)

<sup>a</sup> Includes general exam or consultation; cleaning, prophylaxis, or polishing; x-rays, radiographs, or bitewings; or fluoride treatment.

<sup>b</sup> Includes general exam or consultation; cleaning, prophylaxis, or polishing; x-rays, radiographs, or bitewings; fluoride treatment; fillings; or orthodontia.

<sup>c</sup> Includes CHAMPUS and CHAMPVA, which cover military dependents and veterans, respectively.

Data source: 1997 Medical Expenditure Panel Survey Household Component, Agency for Healthcare Research and Quality.

**Table 7.4.1. States, districts, and schools with oral health-related services and policies at school-based health centers, 2000**

Level	State	District	School
Requirements	Percent	Percent (95% CI)	Percent (95% CI)
Oral health screening	17.6	31.1 (27.04, 35.00)	NA
Parental notification	87.5	98.3 (96.05, 100.23)	98.0 (96.11, 99.55)
Teacher notification	0	68.1 (61.14, 75.51)	57.3 (51.41, 63.08)
Identify/refer dental problems	28.0	43.7 (39.47, 48.01)	54.5 (51.29, 57.66)

NA: Not available.

Source: School of Health Policies and Programs Study 2000 via Brener ND, Burstein GR, DuShaw ML, Vernon ME, Wheeler L, Robinson J. Health services: results from the School of Health Policies and Programs Study 2000. J School Health 2001;71(7):294-304. Materials used with the permission of the American School Health Association.

**Table 7.6.1. Full-time equivalent dental care employees and dental directors by state, 2000**

<b>States</b>	<b>Full-time equivalents employed in state dental health programs (including state dental director)</b>	<b>Full-time dental director</b>
Alabama	2	Yes
Alaska	2.5	No
Arizona	11	Yes
Arkansas	2	Yes
California	4.5	No
Colorado	3.2	Yes
Connecticut	2	No
District of Columbia	No data available	No data available
Delaware	19	Yes
Florida	4.5	Yes
Georgia	3	Yes
Hawaii	25.6	Yes
Idaho	1.5	Yes
Illinois	6	Yes
Indiana	10	Yes
Iowa	4	Yes
Kansas	0	No
Kentucky	2.75	No
Louisiana	2.2	Yes
Maine	4	Yes
Maryland	2	Yes
Massachusetts	3	No
Michigan	1	Yes
Minnesota	1	Yes
Mississippi	2	No
Missouri	7	Yes
Montana	1	Yes
Nebraska	3	Yes
Nevada	1.7	No
New Hampshire	1	Yes
New Jersey	3	No
New Mexico	16	Yes
New York	12	Yes
North Carolina	80	Yes
North Dakota	3.6	Yes
Ohio	19	Yes
Oklahoma	14	Yes
Oregon	0.5	No
Pennsylvania	No data available	No data available
Rhode Island	No data available	No data available
South Carolina	0	No
South Dakota	No data available	No data available
Tennessee	No data available	No data available
Texas	73	Yes
Utah	3	No
Vermont	7	Yes
Virginia	0	No
Washington	2	No
West Virginia	1.5	No
Wisconsin	1	Yes
Wyoming	2.5	No

Data source: Oral Health Resources 2000, National Center for Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. <<http://www2.cdc.gov/nccdphp/doh/synopses/index.asp>>

**Table 7.7.1. Adults with a usual source of dental care, 1971-1975**

Characteristics	Percent (95% CI)
	N=6,805
<b>Total</b>	68.43 (66.52, 70.33)
<b>Age</b>	
25-34	69.98 (66.77, 73.19)
35-44	76.29 (72.85, 79.73)
45-54	72.75 (70.18, 75.32)
55-64	61.49 (57.89, 65.09)
65-74	53.82 (50.31, 57.34)
<b>Race</b>	
White	70.87 (68.85, 72.88)
Black	47.72 (42.81, 52.64)
Other	56.12 (41.31, 70.93)
<b>Gender</b>	
Male	63.96 (61.45, 66.46)
Female	72.46 (70.27, 74.64)
<b>Education</b>	
Less than high school	52.22 (48.78, 55.66)
High school graduate	73.74 (71.38, 76.11)
More than high school	82.62 (80.20, 85.04)
<b>Federal poverty level (FPL)</b>	
Below FPL	40.63 (33.23, 48.03)
At/above FPL	71.12 (68.42, 73.82)
<b>Dental visit</b>	
Less than a year ago	93.63 (92.53, 94.73)
A year ago or more	51.02 (48.12, 53.91)

Data source: The First National Health and Nutrition Examination Survey (NHANES I) 1971-1975, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 7.8.1 Percent of population who received preventive dental services during 1997 by type of service**

Characteristics	General dentist, dental hygienist, or dental technician seen	General exam or consultation	Cleaning, prophylaxis, or polishing	X-rays, radiographs, or bitewings	Fluoride treatment	Fillings	Sealants
	Percent Receiving Services						
<b>Total percent</b>	39.6 (38.4, 40.7)	33.3 (32.1, 34.4)	30.7 (29.5, 31.9)	19.3 (18.5, 20.2)	5.4 (4.9, 6.0)	9.6 (9.1, 10.1)	1.3 (1.1, 1.5)
<b>Age</b>							
Under 6	17.9 (16.1, 19.7)	17.4 (15.6, 19.2)	13.2 (11.7, 14.8)	6.0 (4.9, 7.2)	6.2 (5.0, 7.3)	3.1 (2.4, 3.9)	—
6-18	46.9 (44.9, 49.0)	43.5 (41.2, 45.7)	39.0 (36.7, 41.3)	22.8 (21.0, 24.6)	15.3 (13.5, 17.1)	9.8 (8.9, 10.8)	4.8 (4.0, 5.6)
19-34	34.1 (32.3, 35.8)	27.8 (26.1, 29.5)	26.3 (24.5, 28.0)	17.5 (16.2, 18.9)	3.6 (2.8, 4.3)	8.6 (7.7, 9.4)	—
35-49	44.8 (43.1, 46.6)	36.6 (34.8, 38.4)	34.3 (32.5, 36.0)	22.9 (21.3, 24.5)	3.1 (2.5, 3.7)	10.7 (9.7, 11.6)	—
50-64	44.9 (42.9, 47.0)	35.9 (33.9, 37.9)	34.2 (32.3, 36.2)	22.5 (20.7, 24.2)	2.2 (1.6, 2.8)	10.5 (9.4, 11.7)	—
65 and over	37.5 (35.1, 39.9)	29.3 (27.1, 31.6)	27.8 (25.7, 30.0)	16.5 (14.6, 18.4)	—	12.6 (11.1, 14.1)	—
<b>Race/ethnicity<sup>a</sup></b>							
Non-Hispanic white and other	44.2 (42.9, 45.6)	37.6 (36.2, 38.9)	35.3 (33.9, 36.7)	21.9 (20.9, 23.0)	6.1 (5.4, 6.7)	10.9 (10.3, 11.5)	1.5 (1.2, 1.7)
Non-Hispanic black	24.4 (22.5, 26.3)	18.8 (17.0, 20.6)	15.9 (14.2, 17.6)	9.9 (8.6, 11.1)	3.4 (2.6, 4.3)	4.7 (3.9, 5.5)	—
Hispanic	25.1 (23.3, 26.9)	20.5 (18.8, 22.3)	16.6 (15.0, 18.1)	12.6 (11.2, 14.0)	3.4 (2.7, 4.1)	6.3 (5.5, 7.2)	—
<b>Gender</b>							
Male	36.4 (35.1, 37.7)	30.5 (29.2, 31.8)	28.0 (26.7, 29.3)	17.4 (16.4, 18.4)	5.1 (4.5, 5.8)	9.0 (8.4, 9.5)	1.1 (0.9, 1.3)
Female	42.6 (41.2, 43.9)	35.9 (34.6, 37.2)	33.3 (31.9, 34.7)	21.2 (20.2, 22.2)	5.7 (5.1, 6.3)	10.2 (9.5, 10.9)	1.5 (1.2, 1.7)
<b>Federal poverty level (FPL)</b>							
Below FPL	22.7 (21.3, 24.2)	17.7 (16.2, 19.3)	14.0 (12.5, 15.5)	9.8 (8.7, 11.0)	2.8 (2.1, 3.5)	6.6 (5.7, 7.5)	—
At/above FPL	42.2 (41.0, 43.4)	35.7 (34.4, 36.9)	33.3 (32.1, 34.6)	20.8 (19.9, 21.7)	5.8 (5.3, 6.4)	10.1 (9.5, 10.6)	1.3 (1.1, 1.5)
<b>Insurance status</b>							
Any private <sup>b</sup>	45.7 (44.4, 47.0)	39.0 (37.7, 40.4)	37.0 (35.6, 38.3)	22.7 (21.6, 23.7)	6.5 (5.9, 7.2)	10.8 (10.2, 11.4)	1.5 (1.2, 1.7)
Any public	26.3 (24.6, 27.9)	20.8 (19.2, 22.3)	16.2 (14.8, 17.7)	11.9 (10.5, 13.2)	3.1 (2.3, 3.8)	8.0 (7.0, 9.0)	—
Uninsured	19.1 (17.4, 20.8)	13.9 (12.4, 15.5)	10.9 (9.6, 12.2)	8.3 (7.0, 9.6)	—	4.4 (3.7, 5.2)	—

— Sample size insufficient to produce reliable national estimates.

<sup>a</sup> MEPS reports race/ethnicity as Hispanic, black-not Hispanic, and other (including whites).

<sup>b</sup> Includes CHAMPUS and CHAMPVA, which cover military dependents and veterans, respectively.

Data source: 1997 Medical Expenditure Panel Survey Household Component, Agency for Healthcare Research and Quality.

**Table 7.9.1. Adults who did not visit a dentist during the past 12 months due to cost by selected demographic characteristics**

Characteristics	NHANES I (1971-1975)*	BRFSS (1997)*
	N=1,463	N=17,425
	Percent (95% CI)	
<b>Total</b>	34.08 (30.50, 37.66)	24.31 (23.29, 25.33)
<b>Age</b>		
18-24	—	31.10 (27.64, 34.55)
25-34	37.11 (31.73, 42.49)	31.96 (29.62, 34.31)
35-44	27.55 (21.36, 33.75)	31.11 (28.69, 33.53)
45-54	33.37 (27.12, 39.61)	25.98 (23.15, 28.80)
55-64	38.14 (30.89, 45.40)	16.46 (13.92, 19.0)
65-99	—	7.55 (6.25, 8.84)
65-74	34.18 (25.78, 42.57)	—
<b>Race/ethnicity</b>		
Non-Hispanic white	—	21.98 (20.90, 23.07)
Non-Hispanic black	—	20.68 (17.99, 23.37)
Hispanic	—	35.20 (32.07, 38.33)
White	32.83 (28.95, 36.72)	—
Black	41.35 (34.83, 47.87)	—
<b>Gender</b>		
Male	28.88 (23.93, 33.82)	21.36 (19.88, 22.83)
Female	38.59 (34.22, 42.97)	27.47 (26.08, 28.86)
<b>Education</b>		
Less than high school	38.95 (34.34, 43.56)	26.37 (24.09, 28.65)
High school graduate	32.52 (27.11, 37.93)	22.87 (21.22, 24.52)
More than high school	27.76 (20.59, 34.94)	24.29 (22.75, 25.83)
<b>Household income</b>		
Less than \$7,000	44.86 (39.46, 50.26)	—
\$7,000-\$19,999	30.34 (25.63, 35.05)	—
\$20,000 and over	19.06 (11.31, 26.81) (n=26)	—
Less than \$15,000	—	33.73 (31.07, 36.40)
\$15,000-\$24,999	—	29.82 (27.63, 32.01)
\$25,000-\$34,999	—	23.32 (20.70, 25.94)
\$35,000-\$49,999	—	19.77 (17.34, 22.21)
\$50,000 or more	—	14.10 (11.86, 16.35)

\*NHANES I: During the past 12 months have you had a dental problem which you would have liked to see a dentist but didn't see the dentist? Why didn't you see him...would cost too much?

BRFSS: What is the main reason you have not visited the dentist in the last year...cost?

Data sources: The First National Health and Nutrition Examination Survey (NHANES I) 1971-1975, National Center for Health Statistics, Centers for Disease Control and Prevention; and 1997 Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention.

**Table 9.1.1. Prevalence of cleft lip and/or palate and other congenital malformations per 100,000 live births**

Characteristics	Cleft Lip and/or Palate	Hydrocephalus	Microcephalus	Down's Syndrome
<b>Total</b>	81.24	24.54	6.23	43.67
<b>Age of mother</b>				
Less than 20	88.83	30.09	8.09	25.11
20-24	84.73	27.39	6.26	24.95
25-29	76.74	20.30	5.57	25.39
30-34	78.13	23.09	6.09	40.79
35-39	80.68	25.05	5.30 (n=22)	104.77
40-54	90.53	26.56 (n=22)	9.66 (n=8)	322.29
<b>Race/ethnicity of mother</b>				
Non-Hispanic white	96.09	24.88	59.27	53.09
Non-Hispanic black	45.96	25.80	6.84	21.19
Hispanic	58.96	22.46	6.06	35.17
<b>Education of mother</b>				
Less than 12th grade	86.11	30.31	7.70	35.24
12th grade	87.13	25.86	7.03	40.17
More than 12th grade	74.77	20.26	4.75	49.83
<b>Gender of infant</b>				
Male	91.17	25.79	4.87	42.79
Female	70.85	23.23	7.65	44.59

Data source: 1998 Natality Data Set, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 10.1.1. Adults experiencing chronic orofacial pain more than once during the past 6 months**

Characteristics	Jaw Joint Pain N=2,103	Burning Mouth N=299	Dull Facial Pain N=606
	Percent (95% CI)		
<b>Overall</b>	5.33 (5.06, 5.60)	0.74 (0.64, 0.83)	1.49 (1.35, 1.64)
<b>Age</b>			
20-24	6.70 (5.84, 7.56)	0.63 (0.32, 0.94)	1.66 (1.16, 2.16)
25-34	6.64 (6.09, 7.20)	0.69 (0.49, 0.89)	1.73 (1.45, 2.01)
35-44	5.53 (4.94, 6.12)	0.73 (0.52, 0.94)	1.62 (1.33, 1.92)
45-54	4.51 (3.86, 5.15)	0.67 (0.41, 0.94)	1.43 (1.08, 1.78)
55-64	3.86 (3.20, 4.51)	0.74 (0.52, 0.95)	1.15 (0.77, 1.52)
65 and older	4.10 (3.58, 4.62)	0.94 (0.72, 1.17)	1.18 (0.90, 1.47)
<b>Race/ethnicity</b>			
Non-Hispanic white	5.56 (5.25, 5.88)	0.71 (0.61, 0.81)	1.56 (1.40, 1.73)
Non-Hispanic black	3.99 (3.37, 4.61)	0.52 (0.28, 0.75)	1.44 (1.07, 1.80)
Hispanic	5.28 (4.24, 6.32)	0.93 (0.49, 1.34)	1.07 (0.66, 1.48)
<b>Gender</b>			
Male	3.56 (3.22, 3.90)	0.64 (0.50, 0.78)	1.00 (0.81, 1.18)
Female	6.93 (6.53, 7.32)	0.83 (0.69, 0.96)	1.94 (1.74, 2.14)
<b>Federal poverty level (FPL)</b>			
Below FPL	7.84 (6.83, 8.85)	1.15 (0.74, 1.57)	2.56 (2.00, 3.11)
At/above FPL	5.17 (4.88, 5.45)	0.69 (0.59, 0.79)	1.36 (1.22, 1.50)
<b>Education</b>			
Less than 12 years	5.44 (4.87, 6.01)	1.08 (0.84, 1.33)	1.65 (1.31, 1.98)
12 years	5.12 (4.67, 5.57)	0.68 (0.53, 0.82)	1.48 (1.24, 1.71)
Greater than 12 years	5.47 (5.08, 5.87)	0.61 (0.48, 0.74)	1.43 (1.22, 1.63)

Data source: 1989 National Health Interview Survey Orofacial Pain Supplement, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 10.2.1. Adults experiencing acute orofacial pain during the past 6 months**

Characteristics	Tooth Pain* N=4,591	Mouth Sores N=3,193
	Percent (95% CI)	
<b>Overall</b>	13.57 (13.12, 14.01)	8.43 (8.06, 8.81)
<b>Age</b>		
20-24	20.10 (18.48, 21.73)	10.65 (9.30, 12.00)
25-34	15.68 (14.79, 16.58)	9.99 (9.18, 10.81)
35-44	13.43 (12.61, 14.26)	8.50 (7.78, 9.22)
45-54	12.45 (11.32, 13.59)	7.60 (6.83, 8.37)
55-64	10.26 (8.92, 11.59)	7.20 (6.41, 7.98)
65 and older	7.10 (6.32, 7.88)	6.28 (5.68, 6.88)
<b>Race/ethnicity</b>		
Non-Hispanic white	13.07 (12.55, 13.59)	9.01 (8.57, 9.44)
Non-Hispanic black	15.65 (14.36, 16.94)	4.40 (3.75, 5.06)
Hispanic	15.59 (13.81, 17.37)	7.67 (6.35, 9.00)
<b>Gender</b>		
Male	13.21 (12.54, 13.88)	7.91 (7.34, 8.47)
Female	13.89 (13.32, 14.46)	8.90 (8.44, 9.37)
<b>Federal poverty level (FPL)</b>		
Below FPL	21.11 (19.46, 22.76)	9.38 (8.26, 10.49)
At/above FPL	13.01 (12.53, 13.49)	8.66 (8.26, 9.06)
<b>Education</b>		
Less than 12 years	16.15 (15.04, 17.26)	7.51 (6.83, 8.19)
12 years	13.90 (13.20, 14.60)	8.18 (7.66, 8.70)
Greater than 12 years	12.25 (11.65, 12.86)	9.16 (8.53, 9.78)

\* Edentulous people were deleted.

Data source: 1989 National Health Interview Survey Orofacial Pain Supplement, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 11.1.1. Incidence of craniofacial injuries among emergency room visits by selected demographic characteristics**

Characteristics	Percent (95% CI)
	N=7,626
<b>Total</b>	11.28 (10.57, 11.99)
<b>Age</b>	
Less than 15	21.50 (20.58, 22.43)
15-24	11.77 (11.05, 12.50)
25-44	7.43 (6.84, 8.02)
45-64	7.13 (6.59, 7.75)
65-74	7.83 (7.23, 8.43)
75 and older	9.87 (9.20, 10.54)
<b>Race</b>	
White	11.39 (10.68, 12.11)
Black	10.35 (9.66, 11.03)
Other	13.90 (13.12, 14.68)
<b>Gender</b>	
Male	10.09 (9.41, 10.76)
Female	12.24 (11.50, 12.97)

Data source: 1999 National Hospital Ambulatory Medical Care Survey, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 12.1.1. School children aged 12-17 years with smokeless tobacco lesions by selected demographic characteristics**

Characteristics	Percent (95% CI)
	N=17,027
<b>Total</b>	1.5 (0.9, 2.7)
<b>Age in years</b>	
12-13	0.4 (0.20, 1.00)
14-15	1.4 (0.80, 2.40)
16-17	2.6 (1.40, 4.80)
<b>Race/ethnicity</b>	
White	2.0 (1.2, 3.6)
Black	0.2 (0.0, 0.7)
Hispanic	0.8 (0.4, 1.8)
<b>Gender</b>	
Male	2.9 (1.6, 5.2)
Female	0.1 (0.0, 0.2)

Source: The 1986-1987 National Survey of Oral Health in U.S. School Children, National Institute of Dental and Craniofacial Research, National Institutes of Health via Tomar SL, Winn DM, Swango PA, Giovino GA, Kleinman DV. Oral mucosal smokeless tobacco lesions among adolescents in the United States. *J Dent Res* 1997;76:1277-86, reprinted with permission from the *Journal of Dental Research*.

**Table 12.1.2. Smokeless tobacco lesions among adults aged 18 and older by selected demographic characteristics**

Characteristics	Percent (95% CI)
	N=4,726
<b>Total</b>	5.31 (3.83, 6.79)
<b>Age in years</b>	
18-24	11.63 (5.04, 18.23)
25-34	11.83 (5.95, 17.71)
35-44	3.81 (2.29, 5.34)
45-54	3.77 (1.79, 5.75)
55-64	2.79 (1.04, 4.53)
65-74	2.85 (1.31, 4.39)
75 and older	1.68 (0.45, 2.91)
<b>Race/ethnicity*</b>	
Non-Hispanic white	6.97 (4.62, 9.31)
Non-Hispanic black	4.40 (2.38, 6.42)
Mexican American	1.16 (0.32, 2.00)
<b>Gender*</b>	
Male	10.60 (7.61, 13.59)
Female	0.65 (0.33, 0.98)
<b>Education*</b>	
Less than 12th grade	8.08 (4.83, 11.34)
12th grade	7.12 (4.66, 9.58)
More than 12th grade	3.32 (1.52, 5.13)
<b>Federal poverty level (FPL)*</b>	
Below FPL	6.06 (3.72, 8.40)
At/above FPL	6.14 (4.07, 8.22)

\*Age standardized to the year 2000 U.S. population except for age subgroups.

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 12.2.1. High school students who used tobacco by selected demographic characteristics**

Category	Percent (95% CI)								
	Current Cigarette Use*				Smokeless Tobacco Use**				Current Cigar Use***
	1993	1995	1997	1999	1993	1995	1997	1999	1999
<b>Total</b>	30.5 (28.6, 32.4)	34.8 (32.6, 37.0)	36.4 (34.1, 38.7)	34.8 (32.3, 37.3)	11.5 (9.9, 13.1)	11.4 (9.7, 13.1)	9.3 (7.1, 11.5)	7.8 (5.6, 10.0)	17.7 (16.0, 19.4)
<b>Race/ethnicity</b>									
Non-Hispanic white	33.7 (31.5, 35.9)	38.3 (35.7, 40.9)	39.7 (37.3, 42.1)	38.6 (35.4, 41.8)	14.6 (12.8, 16.4)	14.5 (12.8, 16.2)	12.2 (9.7, 14.7)	10.4 (7.0, 13.8)	18.8 (16.4, 21.2)
Non-Hispanic black	15.4 (12.9, 17.9)	19.2 (16.2, 22.2)	22.7 (18.9, 26.5)	19.7 (15.6, 23.8)	2.6 (1.4, 3.8)	2.2 (1.2, 3.2)	2.2 (1.1, 3.3)	1.3 (0.2, 2.4)	13.7 (11.3, 16.1)
Hispanic	28.7 (25.5, 31.9)	34.0 (28.8, 39.2)	34.0 (31.3, 36.7)	32.7 (28.9, 36.5)	4.9 (3.6, 6.2)	4.4 (2.6, 6.2)	5.1 (2.8, 7.4)	3.9 (2.3, 5.5)	16.7 (14.2, 19.2)
<b>Grade</b>									
9th	27.8 (25.5, 30.1)	31.2 (29.5, 32.9)	33.4 (28.3, 38.5)	27.6 (23.6, 31.6)	10.5 (8.4, 12.6)	11.2 (9.5, 12.9)	9.7 (7.0, 12.4)	6.8 (3.6, 10.0)	13.7 (10.4, 17.0)
10th	28.0 (24.7, 31.3)	33.1 (29.3, 36.9)	35.3 (31.2, 39.4)	34.7 (32.2, 37.2)	11.2 (9.0, 13.4)	9.6 (7.4, 11.8)	6.8 (5.1, 8.5)	7.1 (4.6, 9.6)	17.8 (15.2, 20.4)
11th	31.1 (27.9, 34.3)	35.8 (32.2, 39.4)	36.6 (33.0, 40.2)	36.0 (33.0, 39.0)	11.8 (9.6, 14.0)	13.0 (10.3, 15.7)	10.0 (7.5, 12.5)	8.4 (6.0, 10.8)	18.2 (16.6, 19.8)
12th	34.5 (30.7, 38.3)	38.2 (34.7, 41.7)	39.6 (34.7, 44.5)	42.8 (37.3, 48.3)	12.1 (10.4, 13.8)	11.2 (8.4, 14.0)	10.5 (6.9, 14.1)	8.9 (5.4, 12.4)	22.0 (18.4, 25.6)
<b>Sex</b>									
Male	29.8 (27.5, 32.1)	35.4 (33.0, 37.8)	37.7 (35.0, 40.4)	34.7 (31.7, 37.7)	20.4 (17.4, 23.1)	19.7 (17.2, 22.2)	15.8 (12.1, 19.5)	14.2 (10.4, 18.0)	25.4 (23.1, 27.7)
Female	31.2 (29.1, 33.3)	34.3 (31.2, 37.4)	34.7 (31.9, 37.5)	34.9 (32.3, 37.5)	2.0 (1.4, 2.6)	2.4 (1.1, 3.7)	1.5 (0.8, 2.2)	1.3 (0.8, 1.8)	9.9 (7.7, 12.1)

\*Smoked cigarettes on ≥1 of the 30 days preceding the survey.

\*\*Used chewing tobacco or snuff during the 30 days preceding the survey.

\*\*\*Smoked cigars on ≥1 of the 30 days preceding the survey.

Source: MMWR Surveillance Summaries for the 1993, 1995, 1997, and 1999 Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention.

**Table 12.2.2. Trends in percentage of adults who are current cigarette smokers\***

Characteristics	Percentage of Current Adult Smokers			
	1993	1995	1997	1999
	Percentage (95% CI)			
<b>Total</b>	24.98 (24.22, 25.74)	24.71 (23.93, 25.49)	24.74 (24.17, 25.31)	23.49 (22.87, 24.11)
<b>Age</b>				
18-24	25.80 (23.68, 27.93)	24.79 (22.42, 27.17)	28.73 (26.81, 30.65)	27.92 (25.89, 29.96)
25-34	28.73 (27.21, 30.26)	27.94 (26.30, 29.59)	27.48 (26.27, 28.70)	26.21 (24.90, 27.52)
35-44	29.64 (28.08, 31.20)	29.28 (27.56, 31.01)	29.63 (28.44, 30.81)	28.18 (26.83, 29.53)
45-54	28.46 (26.58, 30.35)	25.72 (23.79, 27.65)	26.38 (25.09, 27.68)	25.52 (24.23, 26.81)
55-64	22.55 (20.76, 24.33)	25.23 (23.05, 27.41)	21.43 (19.93, 22.93)	19.93 (18.44, 21.41)
65-99	11.76 (10.55, 12.96)	12.96 (11.73, 14.19)	12.04 (11.26, 12.82)	10.61 (9.76, 11.46)
<b>Race/ethnicity</b>				
Non-Hispanic white	25.40 (24.54, 26.26)	25.54 (24.61, 26.47)	25.28 (24.56, 26.00)	24.28 (23.54, 25.02)
Non-Hispanic black	26.09 (24.14, 28.04)	25.88 (23.63, 28.14)	26.77 (25.27, 28.28)	24.26 (22.17, 26.35)
Hispanic	20.39 (17.81, 22.97)	18.32 (16.63, 20.02)	20.37 (19.13, 21.60)	18.10 (16.76, 19.43)
<b>Gender</b>				
Male	27.70 (26.58, 28.83)	26.99 (25.80, 28.19)	27.62 (26.75, 28.50)	25.70 (24.74, 26.67)
Female	22.49 (21.62, 23.37)	22.62 (21.60, 23.64)	22.08 (21.38, 22.79)	21.46 (20.72, 22.21)
<b>Education</b>				
Less than high school	30.70 (28.74, 32.67)	30.91 (29.13, 32.68)	30.86 (29.57, 32.16)	29.55 (27.93, 31.17)
High school graduate	29.16 (28.00, 30.31)	28.82 (27.47, 30.18)	28.50 (25.23, 31.77)	24.90 (21.42, 28.38)
More than high school	18.79 (17.79, 19.79)	18.76 (17.71, 19.81)	23.33 (22.72, 23.94)	22.34 (21.66, 23.02)

\*Smoked  $\geq 100$  cigarettes during their lifetime and reported at the time of interview smoking every day or some days.

Data source: 1993, 1995, 1997, and 1999 National Health Interview Surveys, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 13.1.1. Incidence rates for oral and pharyngeal cancers by stage and selected demographic characteristics**

SEER Historic Stage	Race		
	White	Black	All Races
	Rate per 100,000* (95% CI)		
In Situ	0.36 (0.33, 0.39)	0.23 (0.17, 0.31)	0.34 (0.31, 0.36)
Localized	3.78 (3.69, 3.87)	2.56 (2.33, 2.80)	3.56 (3.48, 3.64)
Regional	4.26 (4.16, 4.35)	6.72 (6.34, 7.10)	4.50 (4.41, 4.59)
Distant	0.70 (0.66, 0.74)	1.51 (1.34, 1.70)	0.77 (0.73, 0.81)
Unstaged	1.04 (1.00, 1.09)	1.45 (1.29, 1.63)	1.11 (1.07, 1.16)
All Stages	10.13 (9.99, 10.28)	12.47 (11.96, 12.99)	10.28 (10.14, 10.41)
SEER Historic Stage	Gender		
	Male	Female	
	Rate per 100,000* (95% CI)		
In Situ	0.47 (0.43, 0.52)	0.22 (0.20, 0.25)	
Localized	5.11 (4.97, 5.25)	2.31 (2.23, 2.40)	
Regional	6.82 (6.66, 6.99)	2.51 (2.42, 2.60)	
Distant	1.19 (1.12, 1.26)	0.41 (0.37, 0.45)	
Unstaged	1.74 (1.66, 1.82)	0.57 (0.53, 0.61)	
All Stages	15.34 (15.09, 15.58)	6.02 (5.88, 6.17)	

\* The rates are age-adjusted to the 1970 U.S. standard population.

Data source: Surveillance, Epidemiology, and End Results (SEER) 11 Registries Public-Use, August 1999 Submission (1992-1997).

**Table 13.1.2. Incidence rates for oral and pharyngeal cancers for all stages by race**

Year	White	Black	All Races
	Rate per 100,000* (95% CI)		
1973	11.32 (10.77, 11.88)	11.19 (9.27, 13.47)	11.43 (10.92, 11.97)
1974	11.46 (10.95, 11.99)	11.04 (9.21, 13.20)	11.41 (10.93, 11.90)
1975	11.77 (11.27, 12.29)	11.91 (10.18, 13.91)	11.73 (11.26, 12.22)
1976	11.76 (11.26, 12.27)	13.31 (11.50, 15.36)	11.81 (11.34, 12.29)
1977	11.21 (10.73, 11.71)	13.42 (11.62, 15.45)	11.39 (10.94, 11.86)
1978	11.86 (11.36, 12.37)	13.73 (11.93, 15.75)	11.97 (11.50, 12.44)
1979	12.13 (11.63, 12.64)	17.10 (15.13, 19.29)	12.48 (12.01, 12.96)
1980	11.51 (11.03, 12.01)	15.32 (13.48, 17.36)	11.86 (11.40, 12.33)
1981	11.98 (11.50, 12.49)	15.50 (13.66, 17.54)	12.21 (11.75, 12.69)
1982	11.61 (11.13, 12.11)	15.56 (13.74, 17.59)	11.86 (11.41, 12.32)
1983	11.82 (11.33, 12.31)	14.37 (12.62, 16.32)	11.87 (11.43, 12.34)
1984	11.72 (11.24, 12.21)	17.43 (15.52, 19.51)	12.17 (11.72, 12.64)
1985	11.82 (11.34, 12.32)	14.58 (12.86, 16.49)	11.90 (11.45, 12.36)
1986	11.20 (10.73, 11.68)	14.51 (12.81, 16.39)	11.32 (10.89, 11.76)
1987	11.76 (11.29, 12.25)	15.20 (13.46, 17.11)	11.87 (11.44, 12.33)
1988	10.76 (10.31, 11.23)	15.13 (13.41, 17.01)	11.08 (10.65, 11.51)
1989	10.77 (10.32, 11.23)	14.59 (12.92, 16.42)	11.03 (10.61, 11.46)
1990	11.26 (10.80, 11.74)	14.78 (13.11, 16.61)	11.52 (11.10, 11.96)
1991	11.11 (10.66, 11.58)	13.29 (11.72, 15.02)	11.20 (10.78, 11.63)
1992	10.71 (10.27, 11.17)	13.57 (12.00, 15.29)	10.87 (10.46, 11.28)
1993	10.98 (10.54, 11.44)	14.78 (13.17, 16.56)	11.24 (10.83, 11.66)
1994	10.28 (9.86, 10.73)	15.00 (13.38, 16.77)	10.68 (10.28, 11.09)
1995	10.40 (9.97, 10.84)	12.25 (10.81, 13.83)	10.44 (10.05, 10.84)
1996	10.17 (9.75, 10.60)	14.32 (12.77, 16.01)	10.57 (10.18, 10.97)
1997	9.89 (9.48, 10.32)	10.52 (9.23, 11.95)	10.04 (9.67, 10.43)

\* The rates are age-adjusted to the 1970 U.S. standard population.

Data source: Surveillance, Epidemiology, and End Results (SEER) 9 Registries Public-Use, August 1999 Submission (1992-1997).

**Table 13.1.3. Incidence rates for oral and pharyngeal cancers by stage at diagnosis**

Year	In Situ	Localized	Regional	Distant	All Stages*
	Rate per 100,000** (95% CI)				
1973	0.16 (0.11, 0.24)	4.11 (3.81, 4.44)	3.53 (3.25, 3.83)	1.35 (1.18, 1.54)	11.43 (10.92, 11.97)
1974	0.27 (0.20, 0.36)	4.85 (4.53, 5.17)	3.70 (3.43, 3.98)	1.37 (1.21, 1.55)	11.41 (10.93, 11.90)
1975	0.32 (0.25, 0.41)	4.54 (4.25, 4.85)	4.11 (3.83, 4.40)	1.47 (1.31, 1.65)	11.73 (11.26, 12.22)
1976	0.32 (0.25, 0.41)	4.61 (4.32, 4.92)	4.17 (3.89, 4.46)	1.51 (1.34, 1.69)	11.81 (11.34, 12.29)
1977	0.28 (0.21, 0.36)	4.32 (4.04, 4.62)	4.43 (4.15, 4.73)	1.18 (1.03, 1.33)	11.39 (10.94, 11.86)
1978	0.37 (0.30, 0.47)	4.62 (4.34, 4.92)	4.51 (4.23, 4.81)	1.34 (1.18, 1.50)	11.97 (11.50, 12.44)
1979	0.35 (0.27, 0.44)	4.85 (4.56, 5.15)	4.71 (4.42, 5.01)	1.43 (1.28, 1.61)	12.48 (12.01, 12.96)
1980	0.28 (0.21, 0.36)	4.68 (4.40, 4.98)	4.58 (4.30, 4.88)	1.29 (1.15, 1.46)	11.86 (11.40, 12.33)
1981	0.38 (0.30, 0.48)	4.54 (4.27, 4.84)	4.68 (4.39, 4.98)	1.52 (1.36, 1.70)	12.21 (11.75, 12.69)
1982	0.33 (0.26, 0.41)	4.43 (4.15, 4.72)	4.40 (4.13, 4.69)	1.47 (1.31, 1.64)	11.86 (11.41, 12.32)
1983	0.32 (0.25, 0.40)	4.47 (4.20, 4.76)	4.77 (4.48, 5.06)	1.11 (0.98, 1.26)	11.87 (11.43, 12.34)
1984	0.38 (0.31, 0.48)	4.29 (4.03, 4.57)	5.13 (4.84, 5.44)	1.15 (1.01, 1.30)	12.17 (11.72, 12.64)
1985	0.36 (0.28, 0.45)	4.39 (4.12, 4.67)	4.76 (4.48, 5.06)	1.24 (1.10, 1.40)	11.90 (11.45, 12.36)
1986	0.33 (0.26, 0.42)	4.25 (3.99, 4.53)	4.57 (4.29, 4.85)	1.01 (0.89, 1.15)	11.32 (10.89, 11.76)
1987	0.30 (0.23, 0.38)	4.39 (4.13, 4.67)	4.79 (4.51, 5.08)	1.18 (1.04, 1.33)	11.87 (11.44, 12.33)
1988	0.33 (0.26, 0.41)	3.93 (3.69, 4.20)	4.73 (4.46, 5.03)	0.89 (0.77, 1.02)	11.08 (10.65, 11.51)
1989	0.30 (0.23, 0.38)	3.83 (3.59, 4.09)	4.63 (4.36, 4.92)	0.99 (0.86, 1.12)	11.03 (10.61, 11.46)
1990	0.35 (0.28, 0.44)	3.97 (3.72, 4.23)	4.78 (4.51, 5.07)	0.98 (0.85, 1.11)	11.52 (11.10, 11.96)
1991	0.38 (0.30, 0.46)	3.75 (3.51, 4.00)	4.46 (4.20, 4.74)	0.92 (0.80, 1.05)	11.20 (10.78, 11.63)
1992	0.34 (0.27, 0.43)	3.99 (3.74, 4.24)	4.35 (4.10, 4.63)	0.78 (0.68, 0.90)	10.87 (10.46, 11.28)
1993	0.38 (0.30, 0.46)	3.80 (3.57, 4.05)	4.76 (4.50, 5.05)	0.96 (0.84, 1.10)	11.24 (10.83, 11.66)
1994	0.36 (0.29, 0.44)	3.71 (3.48, 3.95)	4.53 (4.27, 4.81)	0.86 (0.75, 0.99)	10.68 (10.28, 11.09)
1995	0.44 (0.36, 0.53)	3.92 (3.68, 4.16)	4.13 (3.88, 4.39)	0.86 (0.75, 0.99)	10.44 (10.05, 10.84)
1996	0.40 (0.32, 0.49)	3.75 (3.52, 4.00)	4.65 (4.39, 4.92)	0.71 (0.61, 0.82)	10.57 (10.18, 10.97)
1997	0.38 (0.30, 0.46)	3.45 (3.23, 3.68)	4.57 (4.32, 4.84)	0.76 (0.65, 0.87)	10.04 (9.67, 10.43)

\* The totals in this figure include also the unstaged cancers.

\*\* The rates are age-adjusted to the 1970 U.S. standard population.

Data source: Surveillance, Epidemiology, and End Results (SEER) 9 Registries Public-Use, August 1999 Submission (1992-1997).

**Table 13.2.1. Adults aged 40 years and older reporting having had an oral and pharyngeal cancer examination**

Characteristics	Oral/Pharyngeal Cancer Examination in Past 12 Months	
	Percent (95% CI)	
	1992	1998
<b>Total</b>	7.6 (6.8, 8.5)	14.7 (14.0, 15.4)
<b>Race/ethnicity</b>		
Non-Hispanic white	8.4 (7.5, 9.3)	16.6 (15.8, 17.4)
Non-Hispanic black	3.3 (1.7, 4.9)	7.2 (5.8, 8.6)
Hispanic	3.9 (2.1, 5.8)	6.6 (5.2, 7.9)
<b>Gender</b>		
Male	8.7 (7.4, 10.1)	13.9 (13.0, 14.9)
Female	6.7 (5.8, 7.7)	15.4 (14.6, 16.3)
<b>Federal poverty level (FPL)</b>		
Below FPL	3.3 (1.6, 4.9)	5.7 (4.4, 7.0)
At or above FPL	8.5 (7.6, 9.4)	16.9 (16.0, 17.8)
<b>Education</b>		
Less than 12 years	3.6 (2.5, 4.7)	5.7 (4.8, 6.6)
12 years	6.2 (5.0, 7.3)	7.5 (3.9, 11.1)
More than 12 years	11.9 (10.2, 13.5)	17.1 (16.3, 17.9)

Data source: 1992 and 1998 National Health Interview Surveys, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 13.3.1. Oral and pharyngeal cancer deaths (per 100,000)**

Total Population, 1998	Percent (95% CI)
<b>Total</b>	2.99 (2.92, 3.05)
<b>Race and ethnicity*</b>	
American Indian or Alaska Native	2.09 (1.33, 2.86)
Asian or Pacific Islander	2.19 (1.84, 2.55)
Black or African American	4.54 (4.27, 4.81)
White	2.82 (2.76, 2.89)
Hispanic or Latino	1.79 (1.58, 2.00)
Not Hispanic or Latino	3.07 (3.00, 3.14)
Black or African American	4.69 (4.42, 4.97)
White	2.88 (2.81, 2.95)
<b>Gender*</b>	
Female	1.74 (1.67, 1.81)
Male	4.54 (4.42, 4.66)
<b>Education*</b>	
Less than 12th grade	5.62 (5.37, 5.86)
12th grade	5.50 (5.31, 5.69)
More than 12th grade	3.17 (3.03, 3.32)

\*Data are age adjusted to the year 2000 U.S. standard population.

Data source: 1998 National Vital Statistics System, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 13.4.1. Incidence rates for oral and pharyngeal cancers by site**

Site	Age-Adjusted Rates for Oral and Pharyngeal Cancers
	Rate per 100,000* (95% CI)
Lip	1.00 (0.96, 1.04)
Tongue	2.29 (2.23, 2.36)
Salivary gland	0.99 (0.95, 1.03)
Floor of mouth	0.97 (0.93, 1.01)
Gum and other mouth	1.74 (1.69, 1.80)
Nasopharynx	0.68 (0.65, 0.72)
Tonsil	1.11 (1.06, 1.15)
Oropharynx	0.30 (0.27, 0.32)
Hypopharynx	0.88 (0.84, 0.92)
Other oral cavity and pharynx	0.32 (0.30, 0.35)

\* The rates are age-adjusted to the 1970 U.S. standard population.

Data source: Surveillance, Epidemiology, and End Results (SEER) 11 Registries Public-Use, August 1999 Submission (1992-1997).

**Table 13.4.2. Incidence rates for oral and pharyngeal cancers by site and race**

Site	Race		
	White	Black	All Races
	Rate per 100,000* (95% CI)		
Lip	1.15 (1.10, 1.20)	0.14 (0.09, 0.21)	1.00 (0.96, 1.04)
Tongue	2.33 (2.26, 2.41)	2.60 (2.37, 2.84)	2.29 (2.23, 2.36)
Salivary gland	1.02 (0.97, 1.07)	0.85 (0.72, 0.99)	0.99 (0.95, 1.03)
Floor of mouth	0.99 (0.94, 1.03)	1.36 (1.19, 1.54)	0.97 (0.93, 1.01)
Gum and other mouth	1.74 (1.68, 1.80)	2.25 (2.04, 2.47)	1.74 (1.69, 1.80)
Nasopharynx	0.38 (0.35, 0.41)	0.65 (0.55, 0.78)	0.68 (0.65, 0.72)
Tonsil	1.10 (1.05, 1.15)	1.73 (1.55, 1.94)	1.11 (1.06, 1.15)
Oropharynx	0.28 (0.26, 0.31)	0.60 (0.50, 0.73)	0.30 (0.27, 0.32)
Hypopharynx	0.82 (0.78, 0.87)	1.69 (1.51, 1.89)	0.88 (0.84, 0.92)
Other oral cavity and pharynx	0.32 (0.29, 0.35)	0.59 (0.49, 0.72)	0.32 (0.30, 0.35)

\* The rates are age-adjusted to the 1970 U.S. standard population.

Data source: Surveillance, Epidemiology, and End Results (SEER) 11 Registries Public-Use, August 1999 Submission (1992-1997).

**Table 13.4.3 Incidence rates for oral and pharyngeal cancers by site and stage at diagnosis**

Site	In Situ	Localized	Regional	Distant	Unstaged
	Rate per 100,000* (95% CI)				
Lip	0.05 (0.04, 0.06)	0.84 (0.81, 0.88)	0.02 (0.02, 0.03)	0.01 (0.00, 0.01)	0.07 (0.06, 0.08)
Tongue	0.08 (0.07, 0.10)	0.87 (0.84, 0.91)	0.93 (0.89, 0.98)	0.19 (0.18, 0.21)	0.20 (0.19, 0.22)
Salivary gland	0.00 (0.00, 0.01)	0.45 (0.43, 0.48)	0.40 (0.37, 0.42)	0.05 (0.05, 0.07)	0.08 (0.07, 0.10)
Floor of mouth	0.08 (0.07, 0.10)	0.37 (0.34, 0.39)	0.42 (0.39, 0.44)	0.03 (0.03, 0.04)	0.07 (0.06, 0.08)
Gum and other mouth	0.07 (0.06, 0.08)	0.59 (0.56, 0.62)	0.68 (0.65, 0.71)	0.10 (0.09, 0.11)	0.31 (0.29, 0.33)
Nasopharynx	0.00 (0.00, 0.00)	0.06 (0.05, 0.08)	0.42 (0.39, 0.45)	0.09 (0.08, 0.10)	0.11 (0.10, 0.13)
Tonsil	0.02 (0.02, 0.03)	0.16 (0.14, 0.18)	0.71 (0.68, 0.75)	0.11 (0.10, 0.13)	0.10 (0.08, 0.11)
Oropharynx	0.01 (0.00, 0.01)	0.04 (0.04, 0.05)	0.18 (0.16, 0.19)	0.03 (0.02, 0.04)	0.04 (0.03, 0.05)
Hypopharynx	0.01 (0.00, 0.01)	0.12 (0.10, 0.13)	0.58 (0.55, 0.62)	0.11 (0.10, 0.13)	0.06 (0.05, 0.07)
Other oral cavity and pharynx	0.00 (0.00, 0.01)	0.05 (0.04, 0.06)	0.16 (0.14, 0.17)	0.03 (0.03, 0.04)	0.08 (0.07, 0.09)

\* The rates are age-adjusted to the 1970 U.S. standard population.

Data source: Surveillance, Epidemiology, and End Results (SEER) 11 Registries Public-Use, August 1999 Submission (1992-1997).

**Table 13.4.4 Incidence rates for oral and pharyngeal cancers by site and gender**

Site	Gender		
	Male	Female	Male and Female
	Rate per 100,000* (95% CI)		
Lip	1.85 (1.77, 1.94)	0.34 (0.31, 0.37)	1.00 (0.96, 1.04)
Tongue	3.33 (3.22, 3.45)	1.40 (1.33, 1.47)	2.29 (2.23, 2.36)
Salivary gland	1.27 (1.20, 1.34)	0.80 (0.75, 0.85)	0.99 (0.95, 1.03)
Floor of mouth	1.42 (1.35, 1.50)	0.57 (0.52, 0.61)	0.97 (0.93, 1.01)
Gum and other mouth	2.23 (2.14, 2.32)	1.31 (1.25, 1.38)	1.74 (1.69, 1.80)
Nasopharynx	1.00 (0.94, 1.06)	0.40 (0.36, 0.44)	0.68 (0.65, 0.72)
Tonsil	1.74 (1.65, 1.82)	0.55 (0.51, 0.60)	1.11 (1.06, 1.15)
Oropharynx	0.48 (0.44, 0.53)	0.14 (0.11, 0.16)	0.30 (0.27, 0.32)
Hypopharynx	1.51 (1.43, 1.59)	0.36 (0.32, 0.40)	0.88 (0.84, 0.92)
Other oral cavity and pharynx	0.51 (0.47, 0.56)	0.17 (0.14, 0.19)	0.32 (0.30, 0.35)

\* The rates are age-adjusted to the 1970 U.S. standard population.

Data source: Surveillance, Epidemiology, and End Results (SEER) 11 Registries Public-Use, August 1999 Submission (1992-1997).

**Table 15.1.1. Percentage of adults aged 30 and older with diabetes by selected demographic characteristics**

Characteristics	Adults with Diabetes
	Percentage (95% CI)
<b>Total</b>	6.39 (5.82, 6.96)
<b>Age</b>	
30-39	1.75 (0.90, 2.60)
40-49	3.91 (2.81, 5.01)
50-59	8.07 (6.42, 9.71)
60-69	12.25 (10.26, 14.24)
70-79	13.18 (11.25, 15.12)
80-89	11.81 (9.95, 13.67)
90 and older	6.70 (1.37, 12.03)
<b>Race/ethnicity</b>	
Non-Hispanic white	6.05 (5.28, 6.81)
Non-Hispanic black	8.98 (7.82, 10.13)
Mexican American	8.47 (7.48, 9.45)
<b>Gender</b>	
Male	6.04 (5.42, 6.67)
Female	6.70 (5.74, 7.67)
<b>Federal poverty level (FPL)</b>	
Below FPL	9.72 (7.73, 11.72)
At or above FPL	5.87 (5.20, 6.54)
<b>Education</b>	
Less than 12th grade	10.80 (9.76, 11.84)
12th grade	6.20 (5.01, 7.38)
More than 12th grade	3.79 (2.93, 4.66)

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 15.2.1. Percentage of dentate adults aged 50 and older reporting a dental visit in the last year by diabetic status**

Characteristics	Diabetics N=1,025	Non-diabetics N=8,703
	Percent (95% CI)	
<b>Total</b>	63.24 (59.94, 66.53)	72.33 (71.30, 73.36)
<b>Age</b>		
50-64	64.22 (59.67, 68.76)	72.57 (71.30, 73.84)
65+	62.37 (57.73, 67.01)	72.02 (70.40, 73.65)
<b>Race/ethnicity</b>		
Non-Hispanic white	66.16 (62.13, 70.19)	75.21 (74.05, 76.37)
Non-Hispanic black	50.23 (43.24, 57.21)	53.40 (50.31, 56.48)
Hispanic	57.68 (49.90, 65.46)	58.24 (54.42, 62.05)
<b>Gender</b>		
Male	66.54 (61.55, 71.52)	70.44 (68.83, 72.04)
Female	60.73 (56.47, 64.99)	73.68 (72.48, 74.89)
<b>Federal poverty level (FPL)</b>		
Below FPL	42.44 (34.00, 50.88)	45.05 (40.87, 49.22)
At or above FPL	68.26 (64.33, 72.19)	74.61 (73.48, 75.74)
<b>Education</b>		
Less than 12 years	47.35 (41.60, 53.10)	51.30 (48.66, 53.94)
12 Years	70.14 (48.49, 91.80)	62.59 (54.43, 70.75)
More than 12 years	70.38 (66.57, 74.20)	77.19 (76.13, 78.26)

Data source: 1998 National Health Interview Survey, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 15.2.2. Percentage of edentulous adults aged 50 and older reporting a dental visit in the last year by diabetes status**

Characteristics	Diabetics N=432	Non-diabetics N=2,145
	Percent (95% CI)	
<b>Total</b>	16.24 (12.55, 19.92)	18.43 (16.69, 20.17)
<b>Age</b>		
50-64	10.54 (4.08, 17.00)	19.58 (16.52, 22.64)
65+	18.37 (14.13, 22.63)	17.94 (15.86, 20.12)
<b>Race/ethnicity</b>		
Non-Hispanic white	15.05 (10.43, 19.68)	17.87 (15.95, 19.79)
Non-Hispanic black	15.81 (7.42, 24.19)	19.49 (14.26, 24.72)
Hispanic	19.31 (9.32, 29.29)	23.58 (16.61, 30.55)
<b>Gender</b>		
Male	17.20 (11.39, 23.02)	18.33 (15.56, 21.09)
Female	15.70 (11.04, 20.36)	18.50 (16.21, 20.79)
<b>Federal poverty level (FPL)</b>		
Below FPL	17.26 (8.59, 25.94)	13.33 (9.49, 17.17)
At or above FPL	12.91 (8.64, 17.19)	20.19 (17.88, 22.51)
<b>Education</b>		
Less than 12 years	16.47 (11.14, 21.80)	13.88 (11.59, 16.16)
12 Years	38.97 (8.22, 69.72)	6.34 (0.29, 12.39)
More than 12 years	14.66 (9.47, 19.85)	22.60 (20.00, 25.21)

Data source: 1998 National Health Interview Survey, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 15.4.1. Prevalence of osteoporosis among adults aged 45 and older**

Characteristics	Prevalence per 100 Persons 45 and Older (95% CI)
	(N=9,737)
<b>Total</b>	4.16 (3.60, 4.75)
<b>Age</b>	
45-54	1.70 (0.85, 2.56)
55-64	3.73 (2.84, 4.62)
65-74	6.54 (5.10, 8.01)
75-84	7.86 (6.62, 9.10)
85 and older	7.10 (4.71, 9.50)
<b>Race/ethnicity*</b>	
Non-Hispanic white	4.61 (3.90, 5.34)
Non-Hispanic black	1.76 (1.14, 2.40)
Mexican American	2.17 (1.51, 2.83)
<b>Gender*</b>	
Male	0.64 (0.42, 0.87)
Female	6.96 (5.97, 7.96)
<b>Education</b>	
Less than 12th grade	3.44 (2.43, 4.45)
12th grade	5.64 (4.58, 6.70)
More than 12th grade	3.71 (2.91, 4.51)
<b>Federal poverty level (FPL)*</b>	
Below FPL	3.49 (2.10, 4.90)
At or above FPL	4.24 (3.60, 4.90)
<b>Below FPL*</b>	
Non-Hispanic white	4.54 (2.20, 6.90)
Non-Hispanic black	2.04 (0.53, 3.55)
Mexican American	2.26 (0.90, 2.70)
<b>At or Above FPL*</b>	
Non-Hispanic white	4.59 (3.84, 5.34)
Non-Hispanic black	1.73 (1.01, 2.46)
Mexican American	2.17 (1.15, 3.18)

\* Age standardized to the year 2000 U.S. population.

Data source: The Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994, National Center for Health Statistics, Centers for Disease Control and Prevention.

**Table 16.1.1. Distribution of U.S. adult population with dental and/or medical insurance by selected demographic characteristics, 1997**

Characteristic	With Dental Insurance	With Medical Insurance
	N=28,504	N=118,650
	Percent (95% CI)	
<b>Total</b>	55.70 (55.06, 56.35)	85.88 (85.56, 86.20)
<b>Age</b>		
18-34	58.09 (56.88, 59.31)	72.63 (71.32, 73.95)
35-54	64.03 (63.04, 65.02)	80.12 (79.28, 80.96)
55+	41.67 (40.53, 42.82)	98.43 (98.21, 98.65)
<b>Race/ethnicity</b>		
Non-Hispanic white	56.39 (55.69, 57.09)	89.07 (88.77, 89.37)
Non-Hispanic black	60.83 (58.86, 62.81)	81.77 (80.70, 82.83)
Hispanic	46.20 (44.10, 48.30)	69.25 (67.66, 70.84)
<b>Gender</b>		
Male	56.67 (55.67, 57.66)	84.71 (84.19, 85.23)
Female	54.81 (53.98, 55.63)	86.96 (86.57, 87.35)
<b>Education</b>		
Less than 12th grade	32.85 (31.11, 34.58)	73.60 (72.39, 74.80)
12th grade	53.51 (52.38, 54.64)	83.90 (83.32, 84.47)
More than 12th grade	63.15 (62.32, 63.98)	90.22 (89.86, 90.58)
<b>Family annual income</b>		
Less than \$15,000	31.52 (29.66, 33.38)	69.57 (68.23, 70.91)
\$15,000-\$24,999	40.60 (39.09, 42.12)	76.47 (75.58, 77.36)
\$25,000-\$34,999	54.07 (52.40, 55.75)	85.62 (84.80, 86.44)
\$35,000-\$49,999	67.78 (66.35, 69.22)	92.30 (91.71, 92.88)
More than \$50,000	74.90 (73.81, 76.00)	96.10 (95.74, 96.46)

Note: The health insurance data shown were obtained in the core survey and thus come from all states. The dental insurance data come from the following 20 self-selected states and are thus not nationally representative: Alabama, California, Colorado, Florida, Idaho, Indiana, Maryland, Mississippi, Missouri, Montana, Nevada, New Jersey, New Mexico, New York, Ohio, Tennessee, Texas, Utah, Virginia, and West Virginia.

Data source: 1997 Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention.

**Table 16.2.1. Annual per capita costs for dental services by year and source of payment, 1960-1999**

	1960	1970	1980	1990	1999
U.S. population (in millions) <sup>a</sup>	186.2	210.2	230.4	254.2	277.8
Total dental expenses (\$ millions)	\$ 1,963.20	\$ 4,669.00	\$ 13,322.50	\$ 31,502.00	\$ 56,050.00
Annual per capita dental costs (\$)	\$ 10.5	\$ 22.2	\$ 57.8	\$ 123.9	\$ 201.8
<b>Source of payment</b>					
Out-of-pocket	10.2	20.2	38.3	60.4	92.3
Private health insurance <sup>b</sup>	0.2	1.0	16.7	59.9	100.2
Total public funds	0.1	1.0	2.8	3.5	9.3
Medicaid <sup>c</sup>	0.0	0.8	2.2	3.0	8.3
Medicare	0.0	0.0	0.0	0.0	0.4
Other public <sup>d</sup>	0.0	0.2	0.6	0.6	0.6

Note: Dental services include services provided in establishments operated by a doctor of dental medicine (D.M.D.) or doctor of dental surgery (D.D.S.) or doctor of dental science (D.D.Sc.). These establishments are classified as NAICS 6213 Offices of Dentists or SIC 802-Offices and clinics of dentists.

<sup>a</sup> July 1 census resident-based population estimates for each year.

<sup>b</sup> Includes other private revenues including philanthropy.

<sup>c</sup> Medicaid State Children's Health Insurance Program (SCHIP) expansion and SCHIP are included in figures for 1999.

<sup>d</sup> Other public includes Department of Defense Maternal/Child Health, Veterans Affairs, Indian Health Service, and General Assistance funds.

Source: Centers for Medicare and Medicaid Services, Office of the Actuary; National Health Statistics Group and U.S. Census Bureau, National Health Accounts.

**Table 16.2.2. Mean annual dental expense among persons with dental expenses by source of payment and population characteristics, 1977**

Population Characteristic	Mean Annual Dental Expense per Person with Dental Expense (\$) (95% CI)	Source of Payment			
		Out of Pocket	Private Insurance	Medicaid	Other <sup>a</sup>
		Mean Annual Dental Expense (\$)			
<b>Total population<sup>b</sup></b>	\$ 137 (133, 141)	\$99	\$25	\$3	\$10
<b>Age</b>					
Under 6	55 (51, 59)	33	10	6	6
6-18	142 (136, 148)	106	22	5	9
19-44	126 (122, 130)	84	28	3	11
45-64	159 (151, 167)	114	31	2	12
65 and over	136 (128, 144)	120	5	3	8
<b>Race/ethnicity<sup>c</sup></b>					
Non-Hispanic white and other	138 (134, 142)	101	24	2	10
Non-Hispanic black	114 (107, 121)	61	33	11	9
Hispanic	146 (132, 160)	93	24	17	13
<b>Gender</b>					
Male	133 (129, 137)	93	24	3	13
Female	139 (135, 143)	102	25	4	8
<b>Federal poverty level<sup>d</sup></b>					
Poor	139 (125, 153)	85	18	20	17
Near poor	137 (124, 150)	92	18	15	12
Low income	127 (119, 135)	92	15	5	15
Middle income	125 (120, 130)	88	25	2	11
High income	151 (146, 156)	114	30	0	7

Notes: (1) Mean annual dental expense by source of payment was derived from data in the original publication. (2) Confidence intervals are provided in parentheses next to numbers for which standard errors were reported in the original publication. (3) Mean annual dental expense was calculated only among those with dental expenses.

<sup>a</sup> Includes Medicare, CHAMPUS, CHAMPVA, the Indian Health Service, the Department of Veterans Affairs, the military, other federal, state, city, or county payers, philanthropic institutions, and unknown sources of payment.

<sup>b</sup> Includes people in families with negative income.

<sup>c</sup> NMCES reported race/ethnicity as white (including all other race/ethnicity groups not shown separately), black, and Hispanic.

<sup>d</sup> Poor: incomes below the federal poverty line; near poor: between the federal poverty line and 125% of the federal poverty line; low income: over 125% to 200% of the federal poverty line; middle income: over 200% to 400% of the federal poverty line; and high income: over 400% of the federal poverty line.

Source: Moeller J, Levy H. Dental services: a comparison of use, expenditures, and sources of payment, 1977 and 1987. Rockville, MD: Agency for Healthcare Research and Quality, 1996; AHCPH Pub. No. 96-0005. National Medical Expenditure Survey Research Findings 26.

Table 16.2.3. Mean annual dental expense by source of payment, 1987

Population Characteristic	Total Annual Dental Expense (\$ millions)	Mean Annual Dental Expense per Person with Dental Expense (\$) (95% CI)	Source of Payment <sup>a</sup>		
			Out of Pocket	Private Insurance	Medicaid <sup>b</sup>
			Mean Annual Dental Expense (\$) (95% CI)		
<b>Total<sup>c</sup></b>	\$29,996	\$295.3 (289.7, 300.9)	\$164.3 (160.1, 168.5)	\$101.4 (98.4, 104.4)	\$5.9
<b>Age</b>					
Under 6	338	78.1 (73.5, 82.7)	30.6 (27.9, 33.3)	28.6 (25.7, 31.5)	8.7
6-18	8,391	365.7 (349.7, 381.7)	195.6 (184.7, 206.5)	133.5 (125.2, 141.8)	11.7
19-44	11,138	255.0 (247.7, 262.3)	125.7 (121.1, 130.3)	102.7 (98.0, 107.4)	3.3
45-64	6,903	340.8 (325.2, 356.4)	199.4 (189.0, 209.8)	113.6 (106.2, 121.0)	4.1
65 and over	3,227	311.4 (292.3, 330.5)	245.4 (229.0, 261.8)	32.3 (27.7, 36.9)	5.3
<b>Race/ethnicity<sup>d</sup></b>					
Non-Hispanic white and other	27,026	302.8 (296.8, 308.8)	171.2 (166.6, 175.8)	104.5 (101.2, 107.8)	3.6
Non-Hispanic black	1,573	216.4 (203.8, 229.0)	99.7 (94.0, 105.4)	72.7 (65.0, 80.4)	17.3
Hispanic	1,396	276.9 (254.7, 299.1)	135.9 (123.9, 147.9)	88.7 (78.5, 98.9)	24.7
<b>Gender</b>					
Male	12,974	282.0 (274.6, 289.4)	158.6 (152.9, 164.3)	96.9 (93.1, 100.7)	3.7
Female	17,022	306.3 (298.7, 313.9)	169.1 (164.2, 174.4)	105.2 (100.8, 109.6)	7.3
<b>Federal poverty level<sup>e</sup></b>					
Poor	1,523	205.9 (184.4, 227.4)	113.4 (98.3, 128.5)	33.7 (24.6, 42.8)	32.1
Near poor	735	240.8 (196.3, 285.3)	118.4 (110.0, 126.8)	51.9 (22.9, 80.9)	31.3
Low income	2,294	230.3 (216.6, 244.0)	136.6 (127.4, 145.8)	51.5 (45.5, 57.5)	13.1
Middle income	10,574	293.7 (283.9, 303.5)	164.4 (157.8, 171.0)	105.7 (100.4, 111.0)	2.1
High income	14,830	331.0 (321.4, 340.6)	182.6 (176.2, 189.0)	124.4 (119.5, 129.3)	1.3

Notes: Confidence intervals are provided in parentheses next to numbers for which standard errors were reported in the original publication. Mean annual dental expense was calculated only among those with dental expenses.

<sup>a</sup> Does not include Medicaid, other public programs, workers' compensation, private charity, and other similar sources.

<sup>b</sup> Medicaid figures were derived from data reported in Moeller et al., 1996.

<sup>c</sup> Includes people in families with negative income.

<sup>d</sup> NMES reported race/ethnicity as white (including all other race/ethnicity groups not shown separately), black, and Hispanic.

<sup>e</sup> Poor: incomes below the federal poverty line; near poor: between the federal poverty line and 125% of the federal poverty line; low income: over 125% to 200% of the federal poverty line; middle income: over 200% to 400% of the federal poverty line; and high income: over 400% of the federal poverty line.

Sources: Manski RJ, Moeller JF, Maas WR. Dental services: use, expenditures and sources of payment, 1987. J Am Dent Assoc 1999; 130(4):500-8. Copyright ©1999 American Dental Association. Adapted 2002 with permission of ADA Publishing, a Division of ADA Business Enterprises, Inc.; and Moeller J, Levy H. Dental services: a comparison of use, expenditures, and sources of payment, 1977 and 1987. Rockville, MD: Agency for Healthcare Research and Quality, 1996; AHCPR Pub. No. 96-0005. National Medical Expenditure Survey Research Findings 26.

**Table 16.2.4. Mean annual dental expense by source of payment, 1996**

Population Characteristic	Total Annual Dental Expense (\$ millions)	Mean Annual Dental Expense per Person with Dental Expense (\$) (95% CI)	Source of Payment					
			Out of Pocket	Private Insurance	Medicare	Medicaid	Other Public	Other
			Mean Annual Dental Expense (\$) (95% CI)					
Total	\$43,147	\$384 (374, 393)	\$198 (191, 204)	\$163 (158, 168)	\$1 (0, 1)	\$11 (10, 12)	\$2 (1, 3)	\$9 (7, 10)
<b>Age</b>								
Under 6	624	127 (118, 135)	44 (39, 50)	61 (55, 67)	0 (0, 0)	18 (15, 21)	1 (0, 1)	2 (1, 3)
6-17	10,642	437 (407, 467)	207 (189, 225)	197 (180, 215)	0 (0, 0)	19 (17, 22)	2 (1, 2)	11 (7, 16)
18-44	14,625	333 (321, 346)	152 (144, 161)	163 (156, 169)	0 (0, 0)	10 (8, 12)	1 (1, 2)	7 (5, 9)
45-64	11,251	434 (417, 450)	222 (210, 234)	192 (183, 201)	0 (0, 0)	7 (5, 9)	2 (1, 2)	11 (8, 14)
65 and over	6,005	452 (423, 480)	339 (317, 361)	83 (74, 92)	7 (2, 11)	3 (2, 5)	10 (3, 17)	9 (7, 12)
<b>Race/ethnicity<sup>a</sup></b>								
Non-Hispanic white and other	37,808	395 (384, 406)	206 (199, 214)	169 (163, 175)	0 (0, 1)	8 (7, 10)	3 (2, 4)	8 (7, 10)
Non-Hispanic black	2,628	311 (278, 343)	145 (121, 168)	124 (111, 137)	7 (0, 13)	24 (19, 29)	2 (1, 2)	9 (5, 13)
Hispanic	2,710	329 (304, 353)	150 (134, 165)	133 (120, 145)	1 (0, 1)	28 (7, 10)	1 (0, 1)	17 (9, 25)
<b>Gender</b>								
Male	18,878	372 (356, 387)	188 (179, 197)	160 (151, 168)	0 (0, 0)	10 (9, 12)	4 (2, 6)	9 (7, 11)
Female	24,269	394 (381, 407)	205 (196, 214)	166 (160, 172)	1 (0, 2)	11 (10, 13)	1 (1, 1)	9 (7, 11)
<b>Federal poverty level<sup>b</sup></b>								
Poor	2,691	277 (254, 299)	126 (107, 144)	45 (36, 54)	0 (0, 0)	89 (78, 101)	4 (2, 7)	12 (8, 16)
Near poor	936	304 (267, 341)	173 (144, 202)	72 (57, 86)	1 (0, 1)	43 (29, 58)	9 (3, 15)	7 (4, 9)
Low income	3,418	294 (276, 311)	171 (156, 186)	109 (100, 118)	1 (1, 2)	7 (5, 9)	1 (0, 1)	4 (3, 6)
Middle income	15,226	392 (375, 410)	199 (188, 210)	176 (167, 186)	2 (0, 3)	3 (2, 4)	4 (2, 7)	8 (6, 10)
High income	20,876	424 (408, 441)	218 (207, 229)	194 (186, 203)	0 (0, 0)	1 (0, 1)	1 (0, 1)	10 (7, 13)

Notes: Includes costs of services provided by general dentists, dental hygienists, dental technicians, dental surgeons, orthodontists, endodontists, and periodontists.

<sup>a</sup> MEPS reports race/ethnicity as Hispanic, black-not Hispanic, and other (including non-Hispanic whites).

<sup>b</sup> Poor: incomes below the federal poverty line; near-poor: between the federal poverty line and 124% of the federal poverty line; low income: 125% to 199% of the federal poverty line; middle income: 200% to 399% of the federal poverty line; and high income: 400% of the federal poverty line and above.

Data source: Medical Expenditure Panel Survey-Household Component, 1996. Agency for Healthcare Research and Quality.

**Table 16.3.1. Trends in the percent of total annual dental expense by source of payment, 1960-1999**

	Year				
	1960	1970	1980	1990	1999
<b>Total Dental Expense (in \$ millions)</b>	\$1,963.2	\$ 4,669.0	\$ 13,322.5	\$ 31,502.0	\$ 56,050.0
<b>Percent Distribution</b>					
<b>Source of payment</b>					
Out of pocket	97.2	90.9	66.3	48.8	45.8
Private insurance <sup>a</sup>	1.9	4.5	28.8	48.4	49.6
Total public funds	0.9	4.6	4.9	2.9	4.6
Medicare	0.0	0.0	0.0	0.0	0.2
Medicaid <sup>b</sup>	0.0	3.5	3.8	2.4	4.1
Other public funds <sup>c</sup>	0.9	1.1	1.1	0.5	0.3

Note: Dental services include services provided in establishments operated by a doctor of dental medicine (D.M.D.) or doctor of dental surgery (D.D.S.) or doctor of dental science (D.D.Sc.). These establishments are classified as NAICS 6213 Offices of Dentists or SIC 802-Offices and clinics of dentists.

<sup>a</sup> Includes other private revenues including philanthropy.

<sup>b</sup> Includes Medicaid State Children's Insurance Program (SCHIP) expansion and SCHIP funds in 1999.

<sup>c</sup> Other public includes Non-XIX, Department of Defense, Maternal/Child Health, Veterans Affairs, General Hospital/Medical, Indian Health Service, and General Assistance funds.

Source: Centers for Medicare and Medicaid Services, Office of the Actuary: National Health Statistics Group, 2001, National Health Accounts.

Table 16.3.2. Percent of total annual dental expense by source of payment, 1977

Population Characteristic	Source of Payment			
	Out of Pocket	Private Insurance	Medicaid	Other <sup>a</sup>
<b>Total population with dental expense<sup>b</sup></b>	72.0	18.1	2.5	7.4
<b>Age</b>				
Under 6	60.2	17.9	10.2	11.6
6-18	74.5	15.7	3.5	6.2
19-44	67.0	22.2	2.2	8.5
45-64	71.6	19.5	1.4	7.6
65 and over	88.2	3.9	2.1	5.8
<b>Race/ethnicity<sup>c</sup></b>				
Non-Hispanic white and other	73.2	17.7	1.8	7.3
Non-Hispanic black	53.4	29.2	9.9	7.5
Hispanic	63.8	16.1	11.4	*8.7
<b>Gender</b>				
Male	70.3	18.4	1.9	9.4
Female	73.3	17.9	3.0	5.8
<b>Federal poverty level<sup>d</sup></b>				
Poor	61.1	13.0	14.1	11.9
Near poor	67.1	*13.0	11.3	8.6
Low income	72.6	11.5	4.2	11.7
Middle income	70.6	19.7	1.2	8.5
High income	75.3	20.1	*0.1	4.5

Note: No standard error or confidence intervals were reported for these data in the original publication.

\* Relative standard error is equal to or greater than 30%.

<sup>a</sup> Includes Medicare, CHAMPUS, CHAMPVA, the Indian Health Service, the Department of Veterans Affairs, the military, other federal, state, city, or county payers, philanthropic institutions, and unknown sources of payment.

<sup>b</sup> Includes persons in families with negative income.

<sup>c</sup> NMCES reported race/ethnicity as whites (including all other race/ethnicity groups not shown separately), black, and Hispanic.

<sup>d</sup> Poor refers to incomes below the federal poverty line; near poor, between the federal poverty line and 125% of the federal poverty line; low income, over 125% to 200% of the federal poverty line; middle income, over 200% to 400% of the federal poverty line; and high income, over 400% of the federal poverty line.

Source: Moeller J, Levy H. Dental services: A comparison of use, expenditures, and sources of payment, 1977 and 1987. Rockville, MD: Agency for Healthcare Research and Quality, 1996; AHCPH Pub. No. 96-0005. National Medical Expenditure Survey Research Findings 26.

**Table 16.3.3. Percent of total annual dental expense by source of payment, 1987**

Population Characteristic	Total Annual Dental Expense (\$ millions)	Source of Payment			
		Out of Pocket	Private Insurance	Medicaid	Other <sup>a</sup>
		Percent Distribution (95% CI)			
<b>Total population with Dental expense<sup>b</sup></b>	29,996	55.6 (54.8, 56.4)	34.4 (33.6, 35.2)	2.0	8.1
<b>Age</b>					
Under 6	338	39.1 (36.2, 42.0)	35.9 (32.8, 39.0)	11.2	13.7
6-18	8,391	53.5 (51.9, 55.1)	36.5 (34.9, 38.1)	3.2	6.9
19-44	11,138	49.3 (48.0, 50.6)	40.3 (38.8, 41.8)	1.3	9.1
45-64	6,903	58.5 (57.0, 60.0)	33.3 (31.9, 34.7)	1.2	7.0
65 and over	3,227	78.8 (77.4, 80.2)	10.4 (9.1, 11.7)	*1.7	9.1
<b>Race/ethnicity<sup>c</sup></b>					
Non-Hispanic white and other	27,026	56.5 (55.6, 57.4)	34.5 (33.6, 35.4)	1.2	7.7
Non-Hispanic black	1,573	46.1 (44.2, 48.0)	33.6 (31.5, 35.7)	8.0	12.3
Hispanic	1,396	49.1 (46.2, 52.0)	32.0 (29.6, 34.4)	*8.9	10.0
<b>Gender</b>					
Male	12,974	56.2 (55.1, 57.3)	34.3 (33.3, 35.3)	1.3	8.1
Female	17,022	55.2 (54.1, 56.3)	34.3 (33.2, 35.4)	2.4	8.0
<b>Federal poverty level<sup>d</sup></b>					
Poor	1,523	55.1 (51.2, 59.0)	16.4 (12.7, 20.1)	15.6	12.9
Near poor	735	49.2 (43.2, 55.2)	*21.6 (12.9, 30.3)	13.0	*16.3
Low income	2,294	59.3 (57.3, 61.3)	22.4 (20.3, 24.5)	5.7	12.7
Middle income	10,574	56.0 (54.9, 57.1)	36.0 (34.7, 37.3)	0.7	7.4
High income	14,830	55.2 (54.1, 56.3)	37.6 (36.6, 38.6)	*0.4	6.9

Notes: Confidence intervals are provided in parentheses next to numbers for which standard errors are reported in the original publication.

\* Relative standard error is equal to or greater than 30%.

<sup>a</sup> Includes Medicare, CHAMPUS, CHAMPVA, the Indian Health Service, the Department of Veterans Affairs, the military, other federal, state, city, or county payers, philanthropic institutions, and unknown sources of payment.

<sup>b</sup> Includes people in families with negative income.

<sup>c</sup> NMES reported race/ethnicity as whites (including all other race/ethnicity groups not shown separately), black, and Hispanic.

<sup>d</sup> Poor refers to incomes below the federal poverty line; near poor, between the federal poverty line and 125% of the federal poverty line; low income, over 125% to 200% of the federal poverty line; middle income, over 200% to 400% of the federal poverty line; and high income, over 400% of the federal poverty line.

Sources: Manski RJ, Moeller JF, Maas WR. Dental services: use, expenditures and sources of payment, 1987. J Am Dent Assoc 1999;130(4):500-8. Copyright ©1999 American Dental Association. Adapted 2002 with permission of ADA Publishing, a Division of ADA Business Enterprises, Inc.; Agency for Health Care Policy and Research, 1987 National Medical Expenditure Survey-Household Survey; and Moeller J, Levy H. Dental services: A comparison of use, expenditures, and sources of payment, 1977 and 1987. Rockville, MD: Agency for Healthcare Research and Quality, 1996; AHCPH Pub. No. 96-0005. National Medical Expenditure Survey Research Findings 26.

Table 16.3.4. Percent of total annual dental expense by source of payment, 1996

Population Characteristic	Total Annual Dental Expense (\$ millions)	Source of Payment					
		Out of Pocket	Private <sup>a</sup>	Medicare	Medicaid	Other Public <sup>b</sup>	Other <sup>c</sup>
<b>Total</b>	\$43,147	51.5 (50.6, 52.4)	42.5 (41.6, 43.4)	0.2 (0.1, 0.3)	2.8 (2.4, 3.2)	0.6 (0.4, 0.8)	2.3 (1.9, 2.7)
<b>Age</b>							
Under 6	624	35.1 (31.7, 38.5)	48.0 (44.5, 51.5)	0.0 (0.0, 0.0)	14.2 (11.6, 16.8)	0.7 (0.3, 1.1)	1.9 (1.1, 2.7)
6-17	10,642	47.4 (45.2, 49.6)	45.2 (43.1, 47.3)	0.0 (0.0, 0.0)	4.4 (3.7, 5.1)	0.4 (0.2, 0.6)	2.6 (1.5, 3.7)
18-44	14,625	45.7 (44.3, 47.1)	48.8 (47.5, 50.1)	0.0 (0.0, 0.0)	3.0 (2.4, 3.6)	0.3 (0.2, 0.4)	2.1 (1.6, 2.6)
45-64	11,251	51.1 (49.6, 52.6)	44.3 (42.8, 45.8)	0.0 (0.0, 0.0)	1.6 (1.1, 2.1)	0.4 (0.2, 0.6)	2.5 (1.8, 3.2)
65 and over	6,005	75.1 (73.0, 77.2)	18.4 (16.7, 20.1)	1.4 (0.5, 2.3)	0.8 (0.6, 1.0)	2.3 (0.8, 3.8)	2.0 (1.4, 2.6)
<b>Gender</b>							
Male	18,878	50.6 (49.3, 51.9)	42.9 (41.5, 44.3)	0.1 (0.1, 0.1)	2.8 (2.3, 3.3)	1.1 (0.6, 1.6)	2.5 (2.0, 3.0)
Female	24,269	52.1 (50.9, 53.3)	42.2 (41.1, 43.3)	0.4 (0.2, 0.6)	2.9 (2.5, 3.3)	0.3 (0.2, 0.4)	2.2 (1.7, 2.7)
<b>Race/ethnicity<sup>d</sup></b>							
White and other	37,808	52.2 (51.2, 53.2)	42.8 (41.8, 43.8)	0.1 (0.1, 0.1)	2.1 (1.7, 2.5)	0.7 (0.4, 1.0)	2.1 (1.7, 2.5)
Black	2,628	46.6 (43.0, 50.2)	40.0 (37.1, 42.9)	2.2 (0.2, 4.2)	7.7 (5.8, 9.6)	0.5 (0.2, 0.8)	3.0 (1.7, 4.3)
Hispanic	2,711	45.5 (42.7, 48.3)	40.3 (37.6, 43.0)	0.2 (0.1, 0.3)	8.5 (7.0, 10.0)	0.3 (0.2, 0.4)	5.2 (2.9, 7.5)
<b>Federal poverty level<sup>e</sup></b>							
Poor	2,691	45.4 (41.1, 49.7)	16.3 (13.3, 19.3)	0.1 (0.1, 0.1)	32.3 (28.0, 36.6)	1.6 (0.7, 2.5)	4.4 (2.9, 5.9)
Near poor	936	56.8 (51.2, 62.4)	23.5 (19.8, 27.2)	0.2 (0.1, 0.3)	14.2 (9.6, 18.8)	3.1 (1.0, 5.2)	2.1 (1.2, 3.0)
Low income	3,418	58.2 (55.4, 61.0)	37.2 (34.5, 39.9)	0.5 (0.3, 0.7)	2.4 (1.6, 3.2)	0.2 (0.1, 0.3)	1.5 (1.1, 1.9)
Middle income	15,226	50.8 (49.3, 52.3)	44.9 (43.3, 46.5)	0.4 (0.0, 0.8)	0.7 (0.4, 1.0)	1.1 (0.5, 1.7)	2.1 (1.6, 2.6)
High income	20,876	51.4 (50.1, 52.7)	45.8 (44.5, 47.1)	0.1 (0.1, 0.1)	0.1 (0.0, 0.2)	0.2 (0.1, 0.3)	2.4 (1.7, 3.1)

Note: Expenses from any type of dental care provider are included.

<sup>a</sup> Private includes CHAMPUS and CHAMPVA (Armed Forces related coverage).

<sup>b</sup> Other public includes Department of Veterans Affairs (except CHAMPVA); other federal sources (Indian Health Service, military treatment facilities, and other care provided by the federal government); other state and local sources (community and neighborhood clinics, state and local health departments, and state programs other than Medicaid); and other public (Medicaid payments reported for persons who were not enrolled in the Medicaid program at any time during the year).

<sup>c</sup> Other included worker's compensation; other unclassified sources (e.g., automobile, homeowner's, liability, and other miscellaneous or unknown sources); and other private insurance (any type of private insurance payments reported for persons without private health insurance coverage during the year, as defined in MEPS).

<sup>d</sup> MEPS reported race/ethnicity as Hispanic, black-not Hispanic, and other (including non-Hispanic whites).

<sup>e</sup> Poor refers to incomes at or below the federal poverty line; near-poor, over the federal poverty line through 125% of the federal poverty line; low income, over 125% through 200% of the federal poverty line; middle income, over 200% to 400% of the federal poverty line; and high income, over 400% of the federal poverty line.

Source: Cohen JW, Machlin SR, Zuvekas SH, et al. Health care expenses in the United States, 1996. Rockville, MD: Agency for Healthcare Research and Quality; 2000. MEPS Research Findings 12. AHRQ Pub. No. 01-0009.

**Table 16.4.1. Percentage of the population underserved by a dental professional by state, September 2001**

Regions	States	Estimated Percent of Population Underserved*
<b>Overall</b>	--	69
<b>Region I</b>	<b>Total</b>	<b>64</b>
	Connecticut	61
	Maine	73
	Massachusetts	54
	New Hampshire	75
	Rhode Island	69
	Vermont	61
<b>Region II</b>	<b>Total</b>	<b>60</b>
	New Jersey	59
	New York	59
	Puerto Rico	62
	Virgin Islands	43
<b>Region III</b>	<b>Total</b>	<b>68</b>
	Delaware	54
	District of Columbia	33
	Maryland	68
	Pennsylvania	79
	Virginia	59
	West Virginia	45
<b>Region IV</b>	<b>Total</b>	<b>73</b>
	Alabama	87
	Florida	74
	Georgia	65
	Kentucky	54
	Mississippi	53
	North Carolina	77
	South Carolina	73
	Tennessee	76
<b>Region V</b>	<b>Total</b>	<b>82</b>
	Illinois	80
	Indiana	88
	Michigan	89
	Minnesota	63
	Ohio	79
	Wisconsin	84
<b>Region VI</b>	<b>Total</b>	<b>59</b>
	Arkansas	59
	Louisiana	57
	New Mexico	61
	Oklahoma	49
	Texas	60

**Table 16.4.1. Percentage of the population underserved by a dental professional by state, September 2001 (continued)**

Regions	States	Estimated Percent of Population Underserved*
<b>Region VII</b>	<b>Total</b>	<b>83</b>
	Iowa	87
	Kansas	70
	Missouri	86
	Nebraska	59
<b>Region VIII</b>	<b>Total</b>	<b>67</b>
	Colorado	67
	Montana	62
	North Dakota	65
	South Dakota	80
	Utah	67
	Wyoming	100
<b>Region IX</b>	<b>Total</b>	<b>58</b>
	American Samoa	61
	Arizona	59
	California	47
	Federated States of Micronesia	100
	Guam	39
	Hawaii	58
	Marshall Islands	0
	Nevada	84
	Northern Mariana Islands	59
	Republic of Palau	58
	U.S. Minor Islands	0
<b>Region X</b>	<b>Total</b>	<b>65</b>
	Alaska	85
	Idaho	62
	Oregon	67
	Washington	61

\* The estimated underserved population was computed by multiplying the number of practitioners in the area by the target population-to-practitioner ratio (3000:1) and subtracting this figure from the area population. The percentage was calculated by dividing the estimated underserved population by the total population. Territories are not included in the first two bullets since additional issues including population levels are involved.

Data source: Health Resources and Services Administration. Selected statistics on health professional shortage areas. Rockville, MD: Bureau of Primary Health Care, 2001.

**Table 17.1.1. Hours missed annually from work for personal dental visits and problems among the employed population**

	Number of Hours Lost (thousands)	Hours Missed per 100 Employed Persons (mean)	Hours Missed by Those with Missed Hours (mean)
<b>Total</b>	164,179.7	148 (124.87, 171.13)	4.4 (3.85, 4.95)
<b>Age</b>			
18-24	32,376.7	193 (99.51, 286.49)	8.2 (4.79, 11.61)
25-44	93,328.2	152 (125.15, 178.85)	4.1 (3.61, 4.59)
45-64	97,793.0	128 (88.02, 167.98)	3.7 (2.66, 4.74)
65+	681.8	19 (0.77, 37.23)	2.6 (1.62, 3.58)
<b>Race</b>			
White	140,868.7	147 (122.70, 171.30)	4.1 (3.61, 4.59)
Black	20,530.7	178 (72.75, 283.25)	8.9 (3.98, 13.82)
<b>Ethnicity</b>			
Non-Hispanic	151,332.6	147 (122.70, 171.30)	4.3 (3.73, 4.87)
Hispanic	12,847.1	154 (93.63, 214.37)	5.0 (3.65, 6.35)
<b>Gender</b>			
Male	76,107.6	124 (97.74, 150.26)	3.7 (3.11, 4.29)
Female	88,072.9	177 (137.02, 216.98)	5.2 (4.14, 6.26)
<b>Education</b>			
≤12	82,690.7	138 (107.82, 168.18)	5.3 (4.42, 6.18)
>12	81,488.9	150 (114.72, 185.28)	3.8 (3.09, 4.51)
<b>Family income</b>			
<\$10,000	30,050.1	140 (80.42, 199.58)	5.9 (3.65, 8.15)
\$10,000-\$19,999	19,288.1	125 (75.02, 174.98)	5.9 (4.35, 7.45)
\$20,000-\$34,999	54,348.2	192 (130.85, 253.15)	5.7 (4.17, 7.23)
≥\$35,000	60,493.2	132 (108.09, 155.91)	3.1 (2.73, 3.47)
<b>Dental insurance</b>			
Yes	98,650.8	162 (134.17, 189.83)	3.9 (3.37, 4.43)
No	65,528.8	131 (93.17, 168.83)	5.4 (4.05, 6.75)

Source: Gift HC, Reisine ST, Larach DC. The social impact of dental problems and visits. Am J Public Health 1992;82(12):1663-8. Copyright ©1992, by the American Public Health Association.

**Table 17.1.2. Time missed from work among those with time missed by selected occupations**

Occupation	Hours Missed by Those with Missed Hours (mean)
Executive	2.8
Professional	4.8
Sales	4.3
Administrative support	4.3
Craft, precision	4.4
Technical	3.7
Service	10
Machine operators	6

Source: Gift HC, Reisine ST, Larach DC. The social impact of dental problems and visits. Am J Public Health 1992;82(12):1663-8. Copyright ©1992, by the American Public Health Association.

**Table 17.1.3. Hours missed annually from school for personal dental visits and problems among the U.S. population 5-17 years old**

	Number of Hours Lost (thousands)	Hours Missed per 100 School-Aged Children (mean)	Hours Missed by Those with Missed Hours (mean per 100)
<b>Total</b>	51,679.1	117 (91.91, 142.09)	330 (281, 379)
<b>Age</b>			
5-7	7,261.9	68 (37.42, 98.58)	350 (234, 466)
8-12	19,095.4	112 (78.29, 145.71)	310 (255, 365)
13-17	25,321.7	156 (109.35, 202.65)	350 (266, 434)
<b>Race</b>			
White	44,464.6	125 (96.38, 153.62)	320 (267, 373)
Black	4,076.3	59 (31.36, 86.64)	310 (228, 392)
<b>Ethnicity</b>			
Non-Hispanic	46,131.7	120 (92.76, 147.24)	320 (267, 373)
Hispanic	5,547.3	100 (51.78, 148.22)	430 (330, 530)
<b>Gender</b>			
Male	18,331.3	82 (63.38, 100.62)	280 (234, 323)
Female	33,347.8	155 (109.72, 200.28)	370 (288, 452)
<b>Education</b>			
≤12	19,367.6	86 (45.23, 126.77)	380 (264, 496)
>12	32,311.5	150 (111.98, 188.02)	310 (261, 359)
<b>Family income</b>			
<\$10,000	8,947.0	86 (45.23, 126.77)	390 (284, 496)
\$10,000-\$19,999	9716.0	135 (70.71, 199.29)	480 (306, 654)
\$20,000-\$34,999	12,239.9	113 (55.57, 170.43)	380 (209, 551)
≥\$35,000	20,776.0	132 (102.60, 161.40)	260 (223, 297)
<b>Dental insurance</b>			
Yes	27,582.0	124 (87.15, 160.85)	290 (227, 353)
No	24,097.1	110 (80.80, 139.20)	410 (334, 486)

Source: Gift HC, Reisine ST, Larach DC. The social impact of dental problems and visits. Am J Public Health 1992;82(12):1663-8. Copyright ©1992, by the American Public Health Association.