

**Table A-2a. Age-adjusted percentages (with standard errors) of selected respiratory diseases among adults aged 18 and over, by selected characteristics: United States, 2016**

Selected characteristic	Emphysema <sup>1</sup>	Ever had asthma <sup>1</sup>	Still has asthma <sup>1</sup>	Hay fever <sup>1</sup>	Sinusitis <sup>1</sup>	Chronic bronchitis <sup>1</sup>
Total	1.3 (0.07)	14.0 (0.29)	8.3 (0.21)	6.2 (0.19)	10.6 (0.24)	3.4 (0.13)
Sex						
Male	1.5 (0.11)	12.4 (0.39)	6.1 (0.27)	5.4 (0.24)	7.7 (0.30)	2.5 (0.17)
Female	1.1 (0.08)	15.6 (0.39)	10.3 (0.31)	7.1 (0.26)	13.2 (0.34)	4.3 (0.19)
Age (years)						
18–44	0.2 (0.03)	15.3 (0.47)	8.1 (0.34)	4.4 (0.23)	7.7 (0.32)	2.0 (0.15)
45–64	1.8 (0.15)	13.7 (0.44)	9.2 (0.35)	8.9 (0.36)	14.0 (0.42)	5.0 (0.28)
65–74	3.6 (0.34)	12.0 (0.62)	8.3 (0.51)	8.6 (0.52)	14.6 (0.66)	5.3 (0.37)
75 and over	4.0 (0.41)	9.3 (0.59)	6.0 (0.47)	6.0 (0.51)	12.3 (0.68)	4.9 (0.44)
Race						
One race <sup>2</sup>	1.3 (0.07)	13.9 (0.29)	8.2 (0.22)	6.2 (0.19)	10.5 (0.24)	3.4 (0.13)
White	1.4 (0.08)	13.9 (0.32)	8.1 (0.24)	6.4 (0.21)	11.0 (0.27)	3.5 (0.15)
Black or African American	0.9 (0.16)	15.6 (0.82)	10.0 (0.64)	5.0 (0.45)	10.5 (0.61)	3.8 (0.38)
American Indian or Alaska Native	0.6 (0.36)	15.8 (2.51)	9.0 (1.92)	6.9 (1.59)	12.3 (2.27)	2.9 (0.90)
Asian	0.4 (0.14)	9.9 (1.10)	5.7 (0.77)	5.9 (0.75)	4.6 (0.78)	1.2 (0.29)
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*
Two or more races <sup>3</sup>	2.6 (1.02)	20.3 (2.24)	12.5 (1.93)	9.9 (1.76)	12.8 (1.71)	5.5 (1.13)
Black or African American, white	-	16.8 (4.49)	*	*	*	*
American Indian or Alaska Native, white	*	20.4 (3.60)	14.6 (3.36)	14.2 (2.91)	16.7 (2.74)	8.1 (2.00)
Hispanic or Latino origin <sup>4</sup> and race						
Hispanic or Latino	0.9 (0.22)	11.0 (0.66)	6.3 (0.50)	4.7 (0.43)	7.3 (0.51)	2.5 (0.31)
Mexican or Mexican American	0.9 (0.28)	9.4 (0.77)	4.9 (0.60)	4.9 (0.55)	6.9 (0.59)	2.4 (0.42)
Not Hispanic or Latino	1.3 (0.07)	14.6 (0.32)	8.6 (0.24)	6.5 (0.21)	11.1 (0.27)	3.6 (0.14)
White, single race	1.5 (0.08)	14.7 (0.35)	8.5 (0.27)	6.7 (0.23)	11.8 (0.32)	3.7 (0.17)
Black or African American, single race	0.8 (0.14)	15.7 (0.86)	10.0 (0.66)	5.1 (0.47)	10.5 (0.62)	3.9 (0.40)
Education <sup>5</sup>						
Less than a high school diploma	2.9 (0.27)	11.5 (0.76)	8.1 (0.62)	5.1 (0.53)	10.0 (0.69)	5.5 (0.44)
High school diploma or GED <sup>6</sup>	2.0 (0.18)	12.8 (0.57)	8.4 (0.48)	5.2 (0.34)	9.9 (0.48)	4.0 (0.29)
Some college	1.4 (0.15)	14.7 (0.53)	8.9 (0.42)	6.9 (0.35)	13.2 (0.46)	4.4 (0.27)
Bachelor's degree or higher	0.5 (0.07)	13.0 (0.47)	7.1 (0.34)	8.1 (0.34)	11.0 (0.42)	2.1 (0.18)
Current employment status <sup>7</sup>						
Employed	0.5 (0.08)	12.8 (0.36)	7.0 (0.26)	6.1 (0.26)	9.9 (0.37)	2.5 (0.17)
Full-time	0.4 (0.07)	11.6 (0.35)	6.3 (0.27)	5.6 (0.29)	9.3 (0.40)	2.3 (0.18)
Part-time	0.9 (0.20)	15.3 (0.92)	9.0 (0.69)	7.3 (0.62)	10.4 (0.68)	2.9 (0.33)
Not employed but has worked previously	2.2 (0.15)	16.9 (0.64)	10.9 (0.52)	6.4 (0.35)	12.4 (0.53)	5.3 (0.31)
Not employed and has never worked	1.1 (0.30)	13.1 (1.22)	8.7 (0.98)	6.7 (0.85)	9.3 (0.96)	4.0 (0.63)

**Table A-2a. Age-adjusted percentages (with standard errors) of selected respiratory diseases among adults aged 18 and over, by selected characteristics: United States, 2016**

Selected characteristic	Emphysema <sup>1</sup>	Ever had asthma <sup>1</sup>	Still has asthma <sup>1</sup>	Hay fever <sup>1</sup>	Sinusitis <sup>1</sup>	Chronic bronchitis <sup>1</sup>
<b>Family income<sup>8</sup></b>						
Less than \$35,000	2.6 (0.18)	16.2 (0.51)	11.0 (0.41)	5.9 (0.32)	11.2 (0.40)	5.5 (0.27)
\$35,000 or more	0.9 (0.08)	13.6 (0.36)	7.4 (0.26)	6.5 (0.23)	10.4 (0.29)	2.8 (0.15)
\$35,000–\$49,999	1.5 (0.23)	13.8 (0.89)	8.4 (0.61)	5.1 (0.44)	11.0 (0.69)	3.8 (0.42)
\$50,000–\$74,999	1.1 (0.20)	13.4 (0.68)	7.5 (0.54)	6.4 (0.42)	9.8 (0.50)	3.2 (0.37)
\$75,000–\$99,999	0.7 (0.17)	12.4 (0.75)	6.5 (0.53)	5.9 (0.49)	10.5 (0.65)	2.8 (0.32)
\$100,000 or more	0.4 (0.09)	13.9 (0.64)	7.0 (0.43)	7.4 (0.42)	10.5 (0.53)	2.1 (0.24)
<b>Poverty status<sup>9</sup></b>						
Poor	3.3 (0.32)	18.0 (0.74)	13.0 (0.63)	6.2 (0.48)	11.8 (0.59)	6.5 (0.45)
Near poor	2.3 (0.22)	14.7 (0.67)	9.3 (0.52)	5.3 (0.39)	10.3 (0.55)	4.8 (0.37)
Not poor	0.8 (0.07)	13.4 (0.37)	7.3 (0.26)	6.6 (0.24)	10.6 (0.29)	2.7 (0.14)
<b>Health insurance coverage<sup>10</sup></b>						
<b>Under 65:</b>						
Private	0.4 (0.05)	14.1 (0.39)	7.7 (0.30)	6.3 (0.25)	10.2 (0.33)	2.3 (0.15)
Medicaid	2.6 (0.34)	19.8 (0.99)	13.8 (0.77)	5.8 (0.51)	10.6 (0.63)	5.9 (0.47)
Other coverage	2.0 (0.35)	16.9 (1.81)	11.4 (1.61)	8.2 (1.13)	13.2 (1.47)	5.0 (0.68)
Uninsured	0.6 (0.15)	11.0 (0.81)	5.7 (0.51)	4.2 (0.47)	7.1 (0.61)	3.6 (0.43)
<b>65 and over:</b>						
Private	3.5 (0.39)	10.7 (0.66)	6.8 (0.52)	7.5 (0.54)	13.9 (0.77)	5.1 (0.41)
Medicare and Medicaid	6.8 (1.24)	15.4 (1.64)	12.0 (1.53)	9.2 (1.42)	17.6 (1.80)	7.4 (1.16)
Medicare Advantage	3.3 (0.48)	9.8 (0.77)	6.7 (0.65)	7.3 (0.71)	12.5 (0.93)	4.7 (0.57)
Medicare only	3.3 (0.54)	11.0 (0.96)	7.2 (0.80)	7.2 (0.85)	13.4 (1.06)	5.1 (0.83)
Other coverage	5.9 (1.12)	9.8 (1.38)	6.7 (1.17)	6.3 (1.15)	12.2 (1.63)	5.2 (0.93)
Uninsured	*	*	*	*	*	*
<b>Marital status</b>						
Married	1.0 (0.08)	12.3 (0.40)	7.1 (0.31)	6.6 (0.27)	10.4 (0.33)	2.7 (0.15)
Widowed	2.0 (0.34)	22.2 (4.89)	13.4 (3.39)	6.2 (1.55)	14.5 (2.65)	6.6 (1.98)
Divorced or separated	2.0 (0.20)	16.0 (0.87)	10.0 (0.74)	7.0 (0.51)	12.9 (0.69)	4.5 (0.36)
Never married	1.4 (0.23)	15.3 (0.65)	9.3 (0.55)	5.6 (0.39)	10.6 (0.57)	3.6 (0.33)
Living with a partner	2.0 (0.47)	15.5 (1.07)	9.1 (0.89)	4.7 (0.60)	9.7 (0.85)	5.0 (0.72)
<b>Place of residence<sup>11</sup></b>						
Large MSA	0.9 (0.08)	13.9 (0.41)	7.9 (0.29)	6.3 (0.28)	9.3 (0.31)	2.9 (0.17)
Small MSA	1.5 (0.13)	14.2 (0.46)	8.7 (0.39)	6.3 (0.31)	11.5 (0.43)	3.9 (0.23)
Not in MSA	2.0 (0.21)	14.3 (0.76)	8.9 (0.59)	6.1 (0.47)	13.4 (0.81)	4.5 (0.39)
<b>Region</b>						
Northeast	1.2 (0.14)	15.0 (0.84)	9.4 (0.59)	5.4 (0.48)	8.7 (0.51)	3.1 (0.26)
Midwest	1.5 (0.17)	14.2 (0.56)	9.0 (0.47)	5.3 (0.32)	10.9 (0.54)	3.7 (0.32)
South	1.4 (0.11)	12.6 (0.43)	7.3 (0.33)	5.7 (0.29)	12.7 (0.44)	4.0 (0.21)
West	0.9 (0.11)	15.2 (0.60)	8.3 (0.42)	8.6 (0.47)	8.4 (0.42)	2.6 (0.23)

**Table A-2a. Age-adjusted percentages (with standard errors) of selected respiratory diseases among adults aged 18 and over, by selected characteristics: United States, 2016**

Selected characteristic	Emphysema <sup>1</sup>	Ever had asthma <sup>1</sup>	Still has asthma <sup>1</sup>	Hay fever <sup>1</sup>	Sinusitis <sup>1</sup>	Chronic bronchitis <sup>1</sup>
Hispanic or Latino origin <sup>4</sup> , race, and sex						
Hispanic or Latino, male	1.2 (0.39)	8.3 (0.80)	3.6 (0.53)	3.5 (0.59)	4.4 (0.58)	1.6 (0.34)
Hispanic or Latina, female	0.7 (0.27)	13.7 (1.04)	8.9 (0.82)	5.9 (0.63)	10.1 (0.79)	3.3 (0.52)
Not Hispanic or Latino:						
White, single race, male	1.7 (0.14)	12.9 (0.48)	6.3 (0.34)	6.0 (0.30)	9.1 (0.42)	2.7 (0.22)
White, single race, female	1.3 (0.11)	16.3 (0.50)	10.7 (0.42)	7.5 (0.32)	14.5 (0.45)	4.7 (0.24)
Black or African American, single race, male	0.7 (0.22)	14.8 (1.36)	8.1 (1.00)	3.8 (0.62)	6.8 (0.77)	3.2 (0.54)
Black or African American, single race, female	0.8 (0.18)	16.4 (1.06)	11.7 (0.81)	6.2 (0.66)	13.5 (0.91)	4.6 (0.56)

\* Estimate is considered unreliable, as specified in National Center for Health Statistics Data Presentation Standards for Proportions (available from: [https://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_175.pdf](https://www.cdc.gov/nchs/data/series/sr_02/sr02_175.pdf)), and is not shown.

\*\* Complement of the estimate is considered unreliable, as specified in National Center for Health Statistics Data Presentation Standards for Proportions (available from: [https://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_175.pdf](https://www.cdc.gov/nchs/data/series/sr_02/sr02_175.pdf)).

- Quantity zero.

<sup>1</sup> Respondents were asked in two separate questions if they had ever been told by a doctor or other health professional that they had emphysema or asthma. Respondents who had been told they had asthma were asked if they still had asthma. Respondents were asked in three separate questions if they had been told by a doctor or other health professional in the past 12 months that they had hay fever, sinusitis, or chronic bronchitis. A person may be represented in more than one column.

<sup>2</sup> Refers to persons who indicated only a single race group, including those of Hispanic or Latino origin.

<sup>3</sup> Refers to persons who indicated more than one race group, including those of Hispanic or Latino origin. Only two combinations of multiple race groups are shown due to small sample sizes for other combinations.

<sup>4</sup> Refers to persons who are of Hispanic or Latino origin and may be of any race or combination of races. "Not Hispanic or Latino" refers to persons who are not of Hispanic or Latino origin, regardless of race.

<sup>5</sup> Shown only for adults aged 25 and over. Estimates are age adjusted to the projected 2000 U.S. population as the standard population using four age groups: 25-44, 45-64, 65-74, and 75 and over.

<sup>6</sup> GED is General Educational Development high school equivalency diploma.

<sup>7</sup> "Full-time" employment is 35 or more hours per week. "Part-time" employment is 34 or fewer hours per week.

<sup>8</sup> Includes persons who reported a dollar amount or who would not provide a dollar amount but provided an income interval.

<sup>9</sup> "Poor" persons are defined as having income below the poverty threshold. "Near poor" persons have incomes of 100% to less than 200% of the poverty threshold. "Not poor" persons have incomes that are 200% of the poverty threshold or greater.

<sup>10</sup> Based on a hierarchy of mutually exclusive categories. Adults with more than one type of health insurance were assigned to the first appropriate category in the hierarchy. "Uninsured" includes adults who had no coverage as well as those who had only Indian Health Service coverage or had only a private plan that paid for one type of service such as accidents or dental care.

<sup>11</sup> MSA is metropolitan statistical area. Large MSAs have a population size of 1 million or more; small MSAs have a population size of less than 1 million. "Not in MSA" consists of persons not living in a metropolitan statistical area.

NOTES: Estimates are based on household interviews of a sample of the civilian noninstitutionalized population. This table is based on data from the Sample Adult file and was weighted using the Sample Adult weight. Unknowns for the columns were not included in the denominators when calculating percentages. Percentages may not add to totals due to rounding. "Total" includes other races not shown separately and persons with unknown education, family income, poverty status, and health insurance characteristics. Unless otherwise specified, estimates are age-adjusted using the projected 2000 U.S. population as the standard population and using four age groups: 18-44, 45-64, 65-74, and 75 and over. Estimates for age groups are not age-adjusted. For more information on the data source, methods, and definitions used for this table, refer to Technical Notes for Summary Health Statistics Tables: National Health Interview Survey (available from <http://www.cdc.gov/nchs/nhis/SHS/tables.htm>). Suggested citation: Blackwell DL, Villarreal MA. Tables of Summary Health Statistics for U.S. Adults: 2016 National Health Interview Survey. National Center for Health Statistics. 2018. Available from: <http://www.cdc.gov/nchs/nhis/SHS/tables.htm>.

SOURCE: NCHS, National Health Interview Survey, 2016.

**Table A-2b. Frequencies (in thousands) of selected respiratory diseases among adults aged 18 and over, by selected characteristics: United States, 2016**

Selected characteristic	All adults aged 18 and over	Emphysema <sup>1</sup>	Ever had asthma <sup>1</sup>	Still has asthma <sup>1</sup>	Hay fever <sup>1</sup>	Sinusitis <sup>1</sup>	Chronic bronchitis <sup>1</sup>
Total	245,142	3,524	33,992	20,383	16,042	26,945	8,940
Sex							
Male	118,223	1,871	14,385	7,268	6,601	9,430	3,038
Female	126,920	1,653	19,607	13,116	9,441	17,516	5,903
Age (years)							
18–44	113,401	179	17,309	9,204	5,003	8,684	2,264
45–64	83,703	1,527	11,440	7,650	7,412	11,706	4,203
65–74	28,532	1,038	3,431	2,364	2,451	4,153	1,512
75 and over	19,507	780	1,812	1,165	1,177	2,403	961
Race							
One race <sup>2</sup>	240,410	3,449	33,013	19,786	15,600	26,373	8,738
White	192,455	3,112	26,271	15,609	13,017	22,181	7,322
Black or African American	30,105	261	4,757	3,057	1,532	3,215	1,162
American Indian or Alaska Native	2,460	15	415	233	167	284	79
Asian	14,853	57	1,491	861	874	671	171
Native Hawaiian or Other Pacific Islander	538	4	*	*	*	*	4
Two or more races <sup>3</sup>	4,732	75	979	597	442	573	203
Black or African American, white	816	-	186	*	*	*	*
American Indian or Alaska Native, white	1,763	*	362	252	248	299	146
Hispanic or Latino origin <sup>4</sup> and race							
Hispanic or Latino	38,782	250	4,444	2,501	1,764	2,755	897
Mexican or Mexican American	23,240	130	2,325	1,223	1,049	1,491	491
Not Hispanic or Latino	206,360	3,274	29,548	17,882	14,278	24,190	8,043
White, single race	157,505	2,911	22,371	13,420	11,387	19,741	6,444
Black or African American, single race	28,757	213	4,569	2,919	1,497	3,075	1,156
Education <sup>5</sup>							
Less than a high school diploma	26,459	957	3,085	2,185	1,448	2,922	1,582
High school diploma or GED <sup>6</sup>	51,932	1,270	6,500	4,413	2,928	5,626	2,285
Some college	61,937	912	9,138	5,546	4,462	8,429	2,874
Bachelor's degree or higher	74,100	349	9,678	5,342	6,174	8,306	1,621
Current employment status <sup>7</sup>							
Employed	150,236	707	19,882	10,988	9,281	14,527	3,662
Full-time	120,071	449	15,198	8,272	7,153	11,548	2,847
Part-time	27,966	250	4,370	2,544	2,013	2,763	752
Not employed but has worked previously	81,641	2,705	12,395	8,321	5,947	11,278	4,811
Not employed and has never worked	13,099	111	1,690	1,073	814	1,139	447

**Table A-2b. Frequencies (in thousands) of selected respiratory diseases among adults aged 18 and over, by selected characteristics: United States, 2016**

Selected characteristic	All adults aged 18 and over	Emphysema <sup>1</sup>	Ever had asthma <sup>1</sup>	Still has asthma <sup>1</sup>	Hay fever <sup>1</sup>	Sinusitis <sup>1</sup>	Chronic bronchitis <sup>1</sup>
Family income <sup>8</sup>							
Less than \$35,000	66,236	1,899	10,518	7,145	3,944	7,650	3,716
\$35,000 or more	153,049	1,345	20,616	11,354	10,427	16,481	4,450
\$35,000–\$49,999	24,929	424	3,402	2,100	1,355	2,806	1,007
\$50,000–\$74,999	38,167	450	5,062	2,844	2,549	3,834	1,282
\$75,000–\$99,999	27,484	215	3,441	1,803	1,698	2,970	795
\$100,000 or more	62,469	256	8,710	4,607	4,825	6,870	1,366
Poverty status <sup>9</sup>							
Poor	28,852	795	5,163	3,655	1,704	3,127	1,724
Near poor	40,911	1,031	5,919	3,737	2,141	4,257	1,976
Not poor	162,870	1,554	21,450	12,041	11,511	18,169	4,852
Health insurance coverage <sup>10</sup>							
Under 65:							
Private	136,020	574	18,844	10,549	9,001	14,474	3,417
Medicaid	28,037	737	5,541	3,832	1,610	2,978	1,658
Other coverage	8,873	265	1,587	1,092	868	1,376	604
Uninsured	22,734	124	2,512	1,282	917	1,530	785
65 and over:							
Private	20,020	673	2,155	1,386	1,541	2,812	1,019
Medicare and Medicaid	3,360	227	521	405	312	596	249
Medicare Advantage	12,135	393	1,207	818	888	1,534	567
Medicare only	8,167	265	915	603	611	1,111	423
Other coverage	3,891	230	392	281	250	458	202
Uninsured	336	*	*	*	*	*	*
Marital status							
Married	130,447	1,564	15,865	9,476	9,465	14,448	4,078
Widowed	14,066	565	1,857	1,304	1,024	2,325	941
Divorced or separated	27,343	810	4,316	2,869	2,228	3,991	1,601
Never married	54,432	321	8,855	4,942	2,503	4,539	1,482
Living with a partner	18,527	256	3,053	1,759	800	1,605	835
Place of residence <sup>11</sup>							
Large MSA	137,266	1,344	18,920	10,959	8,955	13,098	4,221
Small MSA	73,222	1,315	10,330	6,427	4,850	8,894	3,063
Not in MSA	34,654	865	4,741	2,997	2,237	4,954	1,656
Region							
Northeast	44,851	604	6,561	4,191	2,609	4,134	1,492
Midwest	54,359	932	7,607	4,881	3,019	6,134	2,169
South	87,402	1,412	11,013	6,490	5,252	11,651	3,731
West	58,531	576	8,811	4,821	5,162	5,026	1,548

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Selected characteristic	All adults aged 18 and over	Emphysema <sup>1</sup>	Ever had asthma <sup>1</sup>	Still has asthma <sup>1</sup>	Hay fever <sup>1</sup>	Sinusitis <sup>1</sup>	Chronic bronchitis <sup>1</sup>
Hispanic or Latino origin <sup>4</sup> , race, and sex							
Hispanic or Latino, male	19,292	139	1,717	737	634	839	274
Hispanic or Latina, female	19,489	112	2,727	1,764	1,130	1,916	623
Not Hispanic or Latino:							
White, single race, male	76,525	1,548	9,471	4,837	4,898	7,289	2,226
White, single race, female	80,980	1,363	12,900	8,583	6,489	12,452	4,218
Black or African American, single race, male	12,928	85	1,932	1,045	495	874	407
Black or African American, single race, female	15,829	128	2,637	1,874	1,002	2,201	749

\* Corresponding crude percentage for the frequency is considered unreliable, as specified in National Center for Health Statistics Data Presentation Standards for Proportions (available from: [https://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_175.pdf](https://www.cdc.gov/nchs/data/series/sr_02/sr02_175.pdf)), so the frequency is not shown.

\*\* Complement of the corresponding crude percentage for the frequency is considered unreliable, as specified in National Center for Health Statistics Data Presentation Standards for Proportions (available from: [https://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_175.pdf](https://www.cdc.gov/nchs/data/series/sr_02/sr02_175.pdf)).

- Quantity zero.

<sup>1</sup> Respondents were asked in two separate questions if they had ever been told by a doctor or other health professional that they had emphysema or asthma. Respondents who had been told they had asthma were asked if they still had asthma. Respondents were asked in three separate questions if they had been told by a doctor or other health professional in the past 12 months that they had hay fever, sinusitis, or chronic bronchitis. A person may be represented in more than one column.

<sup>2</sup> Refers to persons who indicated only a single race group, including those of Hispanic or Latino origin.

<sup>3</sup> Refers to persons who indicated more than one race group, including those of Hispanic or Latino origin. Only two combinations of multiple race groups are shown due to small sample sizes for other combinations.

<sup>4</sup> Refers to persons who are of Hispanic or Latino origin and may be of any race or combination of races. "Not Hispanic or Latino" refers to persons who are not of Hispanic or Latino origin, regardless of race.

<sup>5</sup> Shown only for adults aged 25 and over.

<sup>6</sup> GED is General Educational Development high school equivalency diploma.

<sup>7</sup> "Full-time" employment is 35 or more hours per week. "Part-time" employment is 34 or fewer hours per week.

<sup>8</sup> Includes persons in families that reported either a dollar amount or would not provide a dollar amount but provided an income interval.

<sup>9</sup> "Poor" persons live in families defined as below the poverty threshold. "Near poor" persons live in families with incomes of 100% to less than 200% of the poverty threshold. "Not poor" persons live in families with incomes that are 200% of the poverty threshold or greater.

<sup>10</sup> Based on a hierarchy of mutually exclusive categories. Adults with more than one type of health insurance were assigned to the first appropriate category in the hierarchy. "Uninsured" includes adults who had no coverage as well as those who had only Indian Health Service coverage or had only a private plan that paid for one type of service such as accidents or dental care.

<sup>11</sup> MSA is metropolitan statistical area. Large MSAs have a population size of 1 million or more; small MSAs have a population size of less than 1 million. "Not in MSA" consists of persons not living in a metropolitan statistical area.

NOTES: Estimates are based on household interviews of a sample of the civilian noninstitutionalized population. This table is based on data from the Sample Adult file and was weighted using the Sample Adult weight. Unknowns for the columns were not included in the frequencies, but they are included in the "All adults aged 18 and over" column. "Total" includes other races not shown separately and persons with unknown education, family income, poverty status, and health insurance characteristics. For more information on the data source, methods, and definitions used for this table, refer to Technical Notes for Summary Health Statistics Tables: National Health Interview Survey (available from <http://www.cdc.gov/nchs/nhis/SHS/tables.htm>). Suggested citation: Blackwell DL, Villarreal MA. Tables of Summary Health Statistics for U.S. Adults: 2016 National Health Interview Survey. National Center for Health Statistics. 2018. Available from: <http://www.cdc.gov/nchs/nhis/SHS/tables.htm>.

SOURCE: NCHS, National Health Interview Survey, 2016.

**Table A-2c. Crude percentages (with standard errors) of selected respiratory diseases among adults aged 18 and over, by selected characteristics: United States, 2016**

Selected characteristic	Emphysema <sup>1</sup>	Ever had asthma <sup>1</sup>	Still has asthma <sup>1</sup>	Hay fever <sup>1</sup>	Sinusitis <sup>1</sup>	Chronic bronchitis <sup>1</sup>
Total	1.4 (0.08)	13.9 (0.27)	8.3 (0.21)	6.5 (0.19)	11.0 (0.24)	3.7 (0.13)
Sex						
Male	1.6 (0.12)	12.2 (0.38)	6.2 (0.26)	5.6 (0.25)	8.0 (0.30)	2.6 (0.17)
Female	1.3 (0.10)	15.5 (0.37)	10.4 (0.30)	7.4 (0.27)	13.8 (0.35)	4.7 (0.20)
Age (years)						
18–44	0.2 (0.03)	15.3 (0.47)	8.1 (0.34)	4.4 (0.23)	7.7 (0.32)	2.0 (0.15)
45–64	1.8 (0.15)	13.7 (0.44)	9.2 (0.35)	8.9 (0.36)	14.0 (0.42)	5.0 (0.28)
65–74	3.6 (0.34)	12.0 (0.62)	8.3 (0.51)	8.6 (0.52)	14.6 (0.66)	5.3 (0.37)
75 and over	4.0 (0.41)	9.3 (0.59)	6.0 (0.47)	6.0 (0.51)	12.3 (0.68)	4.9 (0.44)
Race						
One race <sup>2</sup>	1.4 (0.08)	13.7 (0.27)	8.2 (0.21)	6.5 (0.20)	11.0 (0.25)	3.6 (0.13)
White	1.6 (0.09)	13.7 (0.29)	8.1 (0.23)	6.8 (0.21)	11.5 (0.28)	3.8 (0.15)
Black or African American	0.9 (0.17)	15.8 (0.83)	10.2 (0.65)	5.1 (0.46)	10.7 (0.65)	3.9 (0.39)
American Indian or Alaska Native	0.6 (0.39)	16.9 (2.71)	9.5 (2.05)	6.8 (1.50)	11.6 (2.24)	3.2 (1.00)
Asian	0.4 (0.13)	10.0 (1.12)	5.8 (0.79)	5.9 (0.75)	4.5 (0.77)	1.2 (0.28)
Native Hawaiian or Other Pacific Islander	0.7 (0.73)	*	*	*	*	0.8 (0.54)
Two or more races <sup>3</sup>	1.6 (0.66)	20.7 (2.44)	12.6 (2.13)	9.3 (1.82)	12.1 (1.69)	4.3 (0.95)
Black or African American, white	-	22.8 (6.10)	*	*	*	*
American Indian or Alaska Native, white	*	20.6 (3.49)	14.4 (3.26)	14.1 (2.87)	16.9 (2.74)	8.3 (2.10)
Hispanic or Latino origin <sup>4</sup> and race						
Hispanic or Latino	0.6 (0.16)	11.5 (0.71)	6.5 (0.52)	4.6 (0.41)	7.1 (0.50)	2.3 (0.30)
Mexican or Mexican American	0.6 (0.19)	10.0 (0.86)	5.3 (0.66)	4.5 (0.50)	6.4 (0.57)	2.1 (0.39)
Not Hispanic or Latino	1.6 (0.08)	14.3 (0.29)	8.7 (0.22)	6.9 (0.21)	11.7 (0.27)	3.9 (0.15)
White, single race	1.9 (0.10)	14.2 (0.32)	8.5 (0.25)	7.2 (0.23)	12.5 (0.31)	4.1 (0.18)
Black or African American, single race	0.7 (0.13)	15.9 (0.86)	10.2 (0.66)	5.2 (0.48)	10.7 (0.66)	4.0 (0.40)
Education <sup>5</sup>						
Less than a high school diploma	3.6 (0.33)	11.7 (0.70)	8.3 (0.56)	5.5 (0.51)	11.1 (0.68)	6.0 (0.46)
High school diploma or GED <sup>6</sup>	2.4 (0.22)	12.5 (0.52)	8.5 (0.45)	5.6 (0.35)	10.8 (0.50)	4.4 (0.30)
Some college	1.5 (0.16)	14.8 (0.52)	9.0 (0.41)	7.2 (0.36)	13.6 (0.47)	4.6 (0.29)
Bachelor's degree or higher	0.5 (0.07)	13.1 (0.47)	7.2 (0.34)	8.3 (0.35)	11.2 (0.42)	2.2 (0.18)
Current employment status <sup>7</sup>						
Employed	0.5 (0.06)	13.2 (0.36)	7.3 (0.26)	6.2 (0.24)	9.7 (0.31)	2.4 (0.15)
Full-time	0.4 (0.05)	12.7 (0.38)	6.9 (0.29)	6.0 (0.25)	9.6 (0.33)	2.4 (0.17)
Part-time	0.9 (0.20)	15.7 (0.97)	9.2 (0.72)	7.2 (0.62)	9.9 (0.64)	2.7 (0.31)
Not employed but has worked previously	3.3 (0.19)	15.2 (0.44)	10.2 (0.36)	7.3 (0.31)	13.8 (0.43)	5.9 (0.28)
Not employed and has never worked	0.8 (0.23)	12.9 (1.23)	8.2 (0.92)	6.2 (0.82)	8.7 (0.92)	3.4 (0.51)

**Table A-2c. Crude percentages (with standard errors) of selected respiratory diseases among adults aged 18 and over, by selected characteristics: United States, 2016**

Selected characteristic	Emphysema <sup>1</sup>	Ever had asthma <sup>1</sup>	Still has asthma <sup>1</sup>	Hay fever <sup>1</sup>	Sinusitis <sup>1</sup>	Chronic bronchitis <sup>1</sup>
Family income <sup>8</sup>						
Less than \$35,000	2.9 (0.19)	15.9 (0.48)	10.8 (0.39)	6.0 (0.31)	11.6 (0.41)	5.6 (0.27)
\$35,000 or more	0.9 (0.08)	13.5 (0.35)	7.4 (0.25)	6.8 (0.24)	10.8 (0.29)	2.9 (0.16)
\$35,000–\$49,999	1.7 (0.26)	13.6 (0.86)	8.5 (0.60)	5.4 (0.46)	11.3 (0.69)	4.0 (0.43)
\$50,000–\$74,999	1.2 (0.21)	13.3 (0.66)	7.5 (0.52)	6.7 (0.43)	10.1 (0.51)	3.4 (0.37)
\$75,000–\$99,999	0.8 (0.19)	12.5 (0.74)	6.6 (0.51)	6.2 (0.50)	10.8 (0.65)	2.9 (0.33)
\$100,000 or more	0.4 (0.08)	13.9 (0.60)	7.4 (0.43)	7.7 (0.41)	11.0 (0.51)	2.2 (0.23)
Poverty status <sup>9</sup>						
Poor	2.8 (0.28)	17.9 (0.76)	12.7 (0.64)	5.9 (0.46)	10.8 (0.58)	6.0 (0.43)
Near poor	2.5 (0.24)	14.5 (0.65)	9.2 (0.50)	5.2 (0.38)	10.4 (0.54)	4.8 (0.37)
Not poor	1.0 (0.08)	13.2 (0.34)	7.4 (0.25)	7.1 (0.24)	11.2 (0.29)	3.0 (0.15)
Health insurance coverage <sup>10</sup>						
Under 65:						
Private	0.4 (0.06)	13.9 (0.37)	7.8 (0.29)	6.6 (0.26)	10.7 (0.33)	2.5 (0.16)
Medicaid	2.6 (0.35)	19.8 (1.00)	13.8 (0.77)	5.8 (0.51)	10.6 (0.63)	5.9 (0.48)
Other coverage	3.0 (0.47)	17.9 (1.42)	12.3 (1.24)	9.8 (1.06)	15.5 (1.32)	6.8 (0.82)
Uninsured	0.5 (0.13)	11.1 (0.82)	5.7 (0.51)	4.0 (0.46)	6.7 (0.58)	3.5 (0.42)
65 and over:						
Private	3.4 (0.38)	10.8 (0.67)	6.9 (0.52)	7.7 (0.54)	14.1 (0.78)	5.1 (0.40)
Medicare and Medicaid	6.8 (1.25)	15.5 (1.66)	12.1 (1.56)	9.3 (1.43)	17.7 (1.84)	7.4 (1.17)
Medicare Advantage	3.2 (0.48)	10.0 (0.79)	6.8 (0.67)	7.3 (0.72)	12.7 (0.95)	4.7 (0.56)
Medicare only	3.3 (0.53)	11.2 (0.98)	7.4 (0.82)	7.5 (0.90)	13.7 (1.09)	5.2 (0.84)
Other coverage	5.9 (1.09)	10.1 (1.47)	7.2 (1.34)	6.4 (1.20)	11.8 (1.60)	5.2 (0.92)
Uninsured	*	*	*	*	*	*
Marital status						
Married	1.2 (0.10)	12.2 (0.36)	7.3 (0.28)	7.3 (0.28)	11.1 (0.33)	3.1 (0.18)
Widowed	4.0 (0.39)	13.2 (0.79)	9.3 (0.65)	7.3 (0.60)	16.6 (0.87)	6.7 (0.54)
Divorced or separated	3.0 (0.27)	15.8 (0.69)	10.5 (0.56)	8.2 (0.48)	14.6 (0.61)	5.9 (0.40)
Never married	0.6 (0.10)	16.3 (0.67)	9.1 (0.50)	4.6 (0.33)	8.3 (0.49)	2.7 (0.25)
Living with a partner	1.4 (0.35)	16.5 (1.07)	9.5 (0.88)	4.3 (0.58)	8.7 (0.72)	4.5 (0.60)
Place of residence <sup>11</sup>						
Large MSA	1.0 (0.09)	13.8 (0.39)	8.0 (0.29)	6.5 (0.29)	9.6 (0.31)	3.1 (0.17)
Small MSA	1.8 (0.15)	14.1 (0.44)	8.8 (0.37)	6.6 (0.32)	12.2 (0.44)	4.2 (0.24)
Not in MSA	2.5 (0.25)	13.7 (0.65)	8.7 (0.50)	6.5 (0.46)	14.3 (0.81)	4.8 (0.38)
Region						
Northeast	1.3 (0.17)	14.6 (0.75)	9.4 (0.55)	5.8 (0.48)	9.2 (0.51)	3.3 (0.28)
Midwest	1.7 (0.20)	14.0 (0.54)	9.0 (0.45)	5.6 (0.33)	11.3 (0.55)	4.0 (0.34)
South	1.6 (0.13)	12.6 (0.42)	7.4 (0.32)	6.0 (0.30)	13.3 (0.45)	4.3 (0.21)
West	1.0 (0.11)	15.1 (0.58)	8.3 (0.41)	8.8 (0.48)	8.6 (0.43)	2.6 (0.23)



**Table A-2c. Crude percentages (with standard errors) of selected respiratory diseases among adults aged 18 and over, by selected characteristics: United States, 2016**

Selected characteristic	Emphysema <sup>1</sup>	Ever had asthma <sup>1</sup>	Still has asthma <sup>1</sup>	Hay fever <sup>1</sup>	Sinusitis <sup>1</sup>	Chronic bronchitis <sup>1</sup>
Hispanic or Latino origin <sup>4</sup> , race, and sex						
Hispanic or Latino, male	0.7 (0.23)	8.9 (0.88)	3.8 (0.58)	3.3 (0.56)	4.4 (0.59)	1.4 (0.31)
Hispanic or Latina, female	0.6 (0.24)	14.0 (1.09)	9.1 (0.85)	5.8 (0.62)	9.8 (0.79)	3.2 (0.52)
Not Hispanic or Latino:						
White, single race, male	2.0 (0.16)	12.4 (0.44)	6.3 (0.32)	6.4 (0.30)	9.5 (0.41)	2.9 (0.22)
White, single race, female	1.7 (0.13)	15.9 (0.45)	10.6 (0.38)	8.0 (0.32)	15.4 (0.44)	5.2 (0.26)
Black or African American, single race, male	0.7 (0.19)	14.9 (1.37)	8.1 (1.00)	3.8 (0.64)	6.8 (0.77)	3.1 (0.53)
Black or African American, single race, female	0.8 (0.18)	16.7 (1.07)	11.8 (0.83)	6.3 (0.68)	13.9 (0.96)	4.7 (0.57)

\* Estimate is considered unreliable, as specified in National Center for Health Statistics Data Presentation Standards for Proportions (available from: [https://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_175.pdf](https://www.cdc.gov/nchs/data/series/sr_02/sr02_175.pdf)), and is not shown.

\*\* Complement of the estimate is considered unreliable, as specified in National Center for Health Statistics Data Presentation Standards for Proportions (available from: [https://www.cdc.gov/nchs/data/series/sr\\_02/sr02\\_175.pdf](https://www.cdc.gov/nchs/data/series/sr_02/sr02_175.pdf)).

- Quantity zero.

<sup>1</sup> Respondents were asked in two separate questions if they had ever been told by a doctor or other health professional that they had emphysema or asthma. Respondents who had been told they had asthma were asked if they still had asthma. Respondents were asked in three separate questions if they had been told by a doctor or other health professional in the past 12 months that they had hay fever, sinusitis, or chronic bronchitis. A person may be represented in more than one column.

<sup>2</sup> Refers to persons who indicated only a single race group, including those of Hispanic or Latino origin.

<sup>3</sup> Refers to persons who indicated more than one race group, including those of Hispanic or Latino origin. Only two combinations of multiple race groups are shown due to small sample sizes for other combinations.

<sup>4</sup> Refers to persons who are of Hispanic or Latino origin and may be of any race or combination of races. "Not Hispanic or Latino" refers to persons who are not of Hispanic or Latino origin, regardless of race.

<sup>5</sup> Shown only for adults aged 25 and over.

<sup>6</sup> GED is General Educational Development high school equivalency diploma.

<sup>7</sup> "Full-time" employment is 35 or more hours per week. "Part-time" employment is 34 or fewer hours per week.

<sup>8</sup> Includes persons in families that reported either a dollar amount or would not provide a dollar amount but provided an income interval.

<sup>9</sup> "Poor" persons live in families defined as below the poverty threshold. "Near poor" persons live in families with incomes of 100% to less than 200% of the poverty threshold. "Not poor" persons live in families with incomes that are 200% of the poverty threshold or greater.

<sup>10</sup> Based on a hierarchy of mutually exclusive categories. Adults with more than one type of health insurance were assigned to the first appropriate category in the hierarchy. "Uninsured" includes adults who had no coverage as well as those who had only Indian Health Service coverage or had only a private plan that paid for one type of service such as accidents or dental care.

<sup>11</sup> MSA is metropolitan statistical area. Large MSAs have a population size of 1 million or more; small MSAs have a population size of less than 1 million. "Not in MSA" consists of persons not living in a metropolitan statistical area.

NOTES: Estimates are based on household interviews of a sample of the civilian noninstitutionalized population. This table is based on data from the Sample Adult file and was weighted using the Sample Adult weight. Unknowns for the columns were not included in the denominators when calculating percentages. Percentages may not add to totals due to rounding.

"Total" includes other races not shown separately and persons with unknown education, family income, poverty status, and health insurance characteristics. For more information on the data source, methods, and definitions used for this table, refer to Technical Notes for Summary Health Statistics Tables: National Health Interview Survey (available from <http://www.cdc.gov/nchs/nhis/SHS/tables.htm>). Suggested citation: Blackwell DL, Villarreal MA. Tables of Summary Health Statistics for U.S. Adults: 2016 National Health Interview Survey. National Center for Health Statistics. 2018. Available from: <http://www.cdc.gov/nchs/nhis/SHS/tables.htm>.

SOURCE: NCHS, National Health Interview Survey, 2016.