## Health

## **Respiratory Diseases**

Table H1: Percentage of children ages 0 to 17 years with asthma, 1997-2015

1997-2003							
	1997	1998	1999	2000	2001	2002	2003
Asthma attack prevalence	5.5	5.3	5.3	5.5	5.7	5.8	5.5
Current asthma prevalence‡					8.7	8.3	8.5
2004-2010							
	2004	2005	2006	2007	2008	2009	2010
Asthma attack prevalence	5.5	5.2	5.6	5.2	5.6	5.5	5.7
Current asthma prevalence‡	8.5	8.9	9.3	9.1	9.4	9.6	9.4
2010-2015							
	2011	2012	2013	2014	2015		
Asthma attack prevalence	5.5	5.4	4.9	4.3	4.2		
Current asthma prevalence‡	9.5	9.3	8.3	8.6	8.4		

DATA: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey

NOTE: Data represent responses to the following survey questions: "Has a doctor or other health professional ever told you that <child's name> had asthma?" and if yes, "During the past 12 months, has <child's name> had an episode of asthma or an asthma attack?" For 2001-2015 the survey included the question: "Does <child's name> still have asthma?" Responses are provided by a parent or other knowledgeable household adult.

Table H1a: Percentage of children ages 0 to 17 years with current asthma, 2001-2015, by sex

	2001	2002	2003	2004	2005
All children	8.7	8.3	8.5	8.5	8.9
Boys	9.9	9.5	9.5	10.2	10.0
Girls	7.5	7.2	7.5	6.7	7.8
	2006	2007	2008	2009	2010
All children	9.3	9.1	9.4	9.6	9.4
Boys	11.0	9.7	11.4	11.3	10.5
Girls	7.5	8.5	7.4	7.9	8.2
	2011	2012	2013	2014	2015
All children	9.5	9.3	8.3	8.6	8.4
Boys	10.2	10.0	9.3	10.1	9.9
Girls	8.8	8.6	7.3	7.0	6.9

DATA: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey

NOTE: Data represent responses to the following survey questions: "Has a doctor or other health professional ever told you that <child's name> had asthma?" and if yes, "During the past 12 months, has <child's name> had an episode of asthma or an asthma attack?" For 2001-2015 the survey included the question: "Does <child's name> still have asthma?" Responses are provided by a parent or other knowledgeable household adult.

<sup>‡</sup> This survey question was first asked in 2001.

Table H1b: Percentage of children ages 0 to 17 years with asthma, 1980-1996†

1980-1987									
	1980	1981	1982	198	33 1	984	1985	1986	1987
Asthma in the past 12 months	3.6	3.7	4.1	4.5	5 4	4.3	4.8	5.1	5.3
1988-1996									
	1988	1989	1990	1991	1992	1993	1994	1995	1996
Asthma in the past 12 months	5.0	6.1	5.8	6.4	6.3	7.2	6.9	7.5	6.2

DATA: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey

Table H1c: Percentage of children ages 0 to 17 years with current asthma who reported an asthma attack in the past 12 months, 2001-2015

2001-2008								
	2001	2002	2003	2004	2005	2006	2007	2008
Asthma attack prevalence among those with current asthma	61.7	64.9	62.7	61.2	56.7	56.1	54.8	57.2
2009-2015								
	2009	2010	2011	2012	2013	2014	2015	
Asthma attack prevalence among those with current asthma	53.9	58.3	55.5	55.2	57.9	48.0	47.5	

DATA: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey

NOTE: Data represent responses to the following survey questions: "Has a doctor or other health professional ever told you that <child's name> had asthma?" and if yes, "During the past 12 months, has <child's name> had an episode of asthma or an asthma attack?" For 2001-2015 the survey included the question: "Does <child's name> still have asthma?" Responses are provided by a parent or other knowledgeable household adult.

<sup>†</sup> The survey questions for asthma changed in 1997; data before 1997 cannot be directly compared to data in 1997 and later, and are thus shown in this separate table. For 1980 to 1996, the asthma survey question was "Did <child's name> have asthma in the past 12 months?"

Table H2: Percentage of children ages 0 to 17 years reported to have current asthma by race/ethnicity and family income, 2012-2015

				≥ Poverty L	evel (Detail)
Race / Ethnicity	<b>All</b> (n = 51,720)	< Poverty Level (n = 11,272)	≥Poverty Level (n = 40,448)	100-200% of Poverty Level (n = 12,457)	<pre>&gt; 200% of Poverty Level (n = 27,991)</pre>
<b>All</b> (n = 51,720)	8.7	11.5	7.9	8.7	7.5
White non-Hispanic (n = 23,560)	7.6	11.3	7.1	8.1	6.8
Black or African-American non- Hispanic (n = 7,351)	14.1	15.2	13.4	13.6	13.1
Asian non-Hispanic (n = 3,010)	5.1	5.3*	5.1	3.4	5.6
Hispanic (n = 14,939)	8.1	9.2	7.6	7.2	7.9
<b>Mexican</b> (n = 9,947)	6.9	7.6	6.5	6.3	6.7
Puerto Rican (n = 1,171)	18.5	22.4	16.3	19.1	14.5
All Other Races† (n = 2,860)	11.1	15.2	9.7	11.4	9.0
American Indian or Alaska Native non-Hispanic (n = 411)	12.3	14.1*	11.0	12.5*	9.6*

DATA: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey

Table H2a: Percentage of children ages 0 to 17 years reported to have current asthma by age and sex, 2012-2015

	Ages 0 to 17 years	Ages 0 to 5 years	Ages 6 to 10 years	Ages 11 to 17 years
All children	8.7	5.3	10.3	10.3
Boys	9.8	6.4	11.8	11.2
Girls	7.5	4.1	8.9	9.3

DATA: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey

<sup>†</sup> The "All Other Races" category includes all other races not specified, together with those individuals who report more than one race.

<sup>\*</sup> The estimate should be interpreted with caution because the standard error of the estimate is relatively large: the relative standard error, RSE, is at least 30% but is less than 40% (RSE = standard error divided by the estimate).

Table H3: Children's emergency room visits and hospitalizations for asthma and other respiratory causes, ages 0 to 17 years, 1996-2014

	Rate per 10,000 children					
1996-1999	1996	1997	1998	1999		
<b>Emergency Room Visits</b>						
Asthma and all other respiratory causes	636.4	631.5	654.7	619.9		
All respiratory causes other than asthma	521.9	519.4	530.3	515.4		
Upper respiratory	408.4	409.3	426.0	403.0		
Pneumonia or influenza	56.3	52.0	58.0	58.8		
Other lower respiratory	57.2	58.0	46.3	53.6		
Asthma	114.4	112.1	124.4	104.5		
Hospitalizations						
Asthma and all other respiratory causes	90.3	102.2	86.3	101.4		
All respiratory causes other than asthma	59.9	69.1	61.4	72.5		
Upper respiratory	28.9	37.2	27.6	39.5		
Pneumonia or influenza	29.6	30.6	33.1	32.0		
Other lower respiratory	1.4	1.3	0.7	1.0		
Asthma	30.4	33.1	25.0	28.9		

	Rate per 10,000 children					
2000-2003	2000	2001	2002	2003		
<b>Emergency Room Visits</b>						
Asthma and all other respiratory causes	622.7	624.0	721.1	740.2		
All respiratory causes other than asthma	521.8	532.3	621.3	644.8		
Upper respiratory	428.1	426.8	494.4	499.1		
Pneumonia or influenza	54.1	63.3	79.8	94.3		
Other lower respiratory	39.7	42.2	47.1	51.5		
Asthma	100.9	91.7	99.9	95.4		
Hospitalizations						
Asthma and all other respiratory causes	92.0	92.7	94.8	98.2		
All respiratory causes other than asthma	62.4	66.5	67.9	67.0		
Upper respiratory	35.4	36.7	36.7	32.7		
Pneumonia or influenza	26.0	29.0	30.4	33.1		
Other lower respiratory	1.0	NA**	0.7	1.3		
Asthma	29.6	26.2	26.9	31.2		

## Appendices | Appendix A: Data Tables

	Rate per 10,000 children					
2004-2007	2004	2005	2006	2007		
<b>Emergency Room Visits</b>						
Asthma and all other respiratory causes	528.8	639.8	584.3	625.1		
All respiratory causes other than asthma	426.0	537.8	504.1	538.5		
Upper respiratory	331.6	441.3	396.9	416.2		
Pneumonia or influenza	56.9	62.6	61.1	87.6		
Other lower respiratory	37.4	33.9	46.1	34.6		
Asthma	102.8	102.1	80.2	86.6		
Hospitalizations						
Asthma and all other respiratory causes	88.4	80.3	73.2	68.1		
All respiratory causes other than asthma	61.4	57.9	52.3	46.9		
Upper respiratory	33.5	28.4	25.9	25.6		
Pneumonia or influenza	26.6	29.1	25.4	21.0		
Other lower respiratory	1.2	0.4*	1.0	NA**		
Asthma	27.0	22.4	20.9	21.2		

	Rate per 10,000 children					
2008-2010	2008	2009	2010	2011		
<b>Emergency Room Visits</b>						
Asthma and all other respiratory causes	619.1	839.0	631.1	619.3		
All respiratory causes other than asthma	516.6	728.2	532.5	525.7		
Upper respiratory	388.2	547.2	429.6	419.1		
Pneumonia or influenza	91.3	138.2	67.2	66.8		
Other lower respiratory	37.1	42.8	35.7	39.8		
Asthma	102.6	110.9	98.7	93.6		
Hospitalizations						
Asthma and all other respiratory causes	62.3	66.5	64.4	-		
All respiratory causes other than asthma	44.3	47.4	45.9	-		
Upper respiratory	21.2	20.8	23.0	-		
Pneumonia or influenza	22.6	26.3	22.5	-		
Other lower respiratory	NA**	NA**	NA**	-		
Asthma	18.0	19.2	18.5	-		

	Rate per 10,000 children					
2011-2014	2012	2013	2014			
<b>Emergency Room Visits</b>						
Asthma and all other respiratory causes	571.4	699.1	741.4			
All respiratory causes other than asthma	459.3	613.2	613.9			
Upper respiratory	373.3	474.6	500.1			
Pneumonia or influenza	56.7	110.8	88.9			
Other lower respiratory	29.2	27.8	24.9			
Asthma	112.2	85.9	127.5			

DATA: Centers for Disease Control and Prevention, National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey and National Hospital Discharge Survey

<sup>\*</sup> The estimate should be interpreted with caution because the standard error of the estimate is relatively large: the relative standard error, RSE, is at least 30% but is less than 40% (RSE = standard error divided by the estimate).

<sup>\*\*</sup> Not available. The estimate is not reported because it has large uncertainty: the relative standard error, RSE, exceeds 40% (RSE = standard error divided by the estimate) or there are fewer than 30 sampled hospitalizations.

Table H3a: Children's emergency room visits for asthma and other respiratory causes, by race/ethnicity, ages 0 to 17 years, 2011-2014

	Rate per 10,000 children						
	2011	2012	2013	2014	2011-2014		
<b>All</b> (n=23,786)	619.3	571.4	699.1	741.4	657.7		
White non-Hispanic (n=11,108)	509.5	397.4	598.7	566.8	517.7		
Black non-Hispanic (n=5,810)	1,239.3	1,082.6	1,167.6	1,729.6	1,304.1		
American Indian/Alaska Native non-Hispanic (n=136)	NA**	NA**	NA**	NA**	NA**		
Asian and Pacific Islander non- Hispanic (n=664)	398.8*	NA**	NA**	NA**	327.6		
Hispanic (n=5,867)	618.8	837.0	821.7	733.0	753.0		

DATA: Centers for Disease Control and Prevention, National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey

Table H3b: Children's emergency room visits for asthma and other respiratory causes, by age, 2011-2014

	Rate per 10,000 children						
	2011	2012	2013	2014	2011-2014		
Ages 0 to 17 years	619.3	571.4	699.1	741.4	657.7		
Ages 0 to 1 year	1,823.0	2,068.2	2,626.7	2,348.0	2,215.9		
Age 1 year	1,638.8	1,509.0	1,959.6	1,952.9	1,764.4		
Age 2 years	1,252.8	799.9	1,027.2	1,366.0	1,111.0		
Ages 3 to 5 years	877.6	739.1	1,066.5	980.0	915.1		
Ages 6 to 10 years	435.6	387.1	392.5	563.5	444.9		
Ages 11 to 15 years	247.3	298.5	294.1	271.4	277.8		
Ages 16 to 17 years	258.5	194.5	259.4	367.4	269.7		

DATA: Centers for Disease Control and Prevention, National Center for Health Statistics, National Hospital Ambulatory Medical Care Survey

<sup>\*</sup> The estimate should be interpreted with caution because the standard error of the estimate is relatively large: the relative standard error, RSE, is at least 30% but is less than 40% (RSE = standard error divided by the estimate).

<sup>\*\*</sup> Not available. The estimate is not reported because it has large uncertainty: the relative standard error, RSE, exceeds 40% (RSE = standard error divided by the estimate) or there are fewer than 30 sampled emergency room visits.

Table H3c: Children's hospitalizations for asthma and other respiratory causes, by race,† ages 0 to 17 years, 2007-2010

	Rate per 10,000 children					
	2007	2008	2009	2010	2007-2010	
All (n=10,435)	68.1	62.3	66.5	64.4	65.3	
White (n=5,025)	47.7	42.7	39.8	40.7	42.7	
Black (n=2,253)	78.0	72.3	86.9	73.3	77.6	
American Indian/Alaska Native (n=42)	NA**	NA**	NA**	NA**	28.4	
Asian and Pacific Islander (n=141)	24.2	NA**	36.4*	51.2*	36.0	

DATA: Centers for Disease Control and Prevention, National Center for Health Statistics, National Hospital Discharge Survey

Table H3d: Children's hospitalizations for asthma and other respiratory causes, by age, 2007-2010

	Rate per 10,000 children					
	2007	2008	2009	2010	2007-2010	
Ages 0 to 17 years	68.1	62.3	66.5	64.4	65.3	
Ages 0 to 1 year	412.8	390.1	391.3	392.9	396.9	
Age 1 year	196.0	172.3	204.9	176.5	187.6	
Age 2 years	132.9	101.4	91.4	112.1	109.2	
Ages 3 to 5 years	60.4	59.9	75.1	81.0	69.1	
Ages 6 to 10 years	32.1	30.7	28.4	32.1	30.8	
Ages 11 to 15 years	18.8	14.4	15.7	13.5	15.6	
Ages 16 to 17 years	15.1	15.4	19.8*	14.4*	16.2	

DATA: Centers for Disease Control and Prevention, National Center for Health Statistics, National Hospital Discharge Survey

<sup>†</sup> Estimates for ethnicity not available. Race categories include children of Hispanic ethnicity.

<sup>\*</sup> The estimate should be interpreted with caution because the standard error of the estimate is relatively large: the relative standard error, RSE, is at least 30% but is less than 40% (RSE = standard error divided by the estimate).

<sup>\*\*</sup> Not available. The estimate is not reported because it has large uncertainty: the relative standard error, RSE, exceeds 40% (RSE = standard error divided by the estimate) or there are fewer than 30 sampled emergency room visits.

<sup>\*</sup> The estimate should be interpreted with caution because the standard error of the estimate is relatively large: the relative standard error, RSE, is at least 30% but is less than 40% (RSE = standard error divided by the estimate).