# 2012 Indiana County Age-Adjusted Emergency Department and Hospitalization Rates

### **Overview**

### Why age-adjusted rates?

Age-adjusted rates enable comparisons between groups with different age distributions. Rates were calculated using the U.S. 2000 standard population to remove the impact of different age distributions between populations.

#### Where does the data come from?

Data on asthma hospital discharges and emergency department (ED) visits were obtained from Indiana's Hospital Discharge Data source, which includes over 95% of Indiana hospitals. These data contain de-identified health record details on patient demographics, charges, diagnoses, procedures and residence by zip code.

#### Who was included in the rate?

Asthma hospitalizations and ED visits were defined as a primary diagnosis asthma encounter using ICD-9-CM diagnosis code 493 (inclusive) for an Indiana resident (all ages) discharged from an Indiana hospital/emergency department during the 2012 calendar year (January 1, 2012 to December 31, 2012). ED rates also include patients discharged from the ED and admitted into the hospital.

### Why are some rates missing?

Age-adjusted rates and counts were suppressed if the number of hospitalizations or ED visits for a particular county is less than 5. Rates were considered unstable if less than 20 hospitalizations or ED visits occurred in the county.

### Indiana rates for all ages, 2012

Rate Name	Description	Year	Count	Age-adjusted Rates
Asthma ED Visits	Rate of asthma emergency department visits per 10,000 Indiana residents	2012	30,570	48.8
Asthma Hospitalization	Rate of asthma hospital admissions per 10,000 Indiana residents	2012	7,707	11.6

#### For more information on asthma in Indiana

Visit the Indiana State Department of Health's Asthma <u>Data and Reports</u> website at <u>http://www.in.gov/isdh/17279.htm</u>. For more health-related data, visit <u>Indiana INdicators</u> at <u>http://indianaindicators.org/</u>.







# Asthma Emergency Department Visits by County, Indiana, 2012

County	Count	Age-adjusted Rate**
ADAMS	94	29.2
ALLEN	1,936	55.0
BARTHOLOMEW	205	27.1
BENTON	27	34.0
BLACKFORD	77	69.1
BOONE	144	25.9
BROWN	14	*
CARROLL	53	30.4
CASS	143	39.8
CLARK	455	43.1
CLAY	129	54.7
CLINTON	146	45.9
CRAWFORD	26	25.2
DAVIESS	82	26.3
DEARBORN	81	18.1
DECATUR	109	44.8
DEKALB	124	32.1
DELAWARE	507	48.3
DUBOIS	29	7.1
ELKHART	754	38.8
FAYETTE	79	35.5
FLOYD	254	36.6
FOUNTAIN	135	87.3
FRANKLIN	17	*
FULTON	57	29.0
GIBSON	130	43.0
GRANT	632	97.6
GREENE	110	36.0
HAMILTON	640	22.2
HANCOCK	147	22.1
HARRISON	108	29.5
HENDRICKS	276	18.7
HENRY	261	59.2
HOWARD	448	59.2
HUNTINGTON	170	50.1
JACKSON	222	53.9
JASPER	102	31.2
JAY	135	66.1
JEFFERSON	62	20.9
JENNINGS	109	40.8
JOHNSON	461	33.1
KNOX	166	47.4
KOSCIUSKO		34.4
LAGRANGE	252 84	21.9
LAKE		66.6
LAKE	3,125	
	553	54.7
LAWRENCE	254	60.2
MADISON	984	81.6
MARION	7,121	77.5
MARSHALL	141	32.5





### Asthma Emergency Department Visits by County, Indiana, 2012 (cont.)

County	Count	Age-adjusted Rate**
MARTIN	18	*
MIAMI	205	59.3
MONROE	326	26.2
MONTGOMERY	171	49.1
MORGAN	357	56.1
NEWTON	25	19.8
NOBLE	188	40.7
OHIO	19	*
ORANGE	63	34.9
OWEN	66	33.8
PARKE	67	41.8
PERRY	217	123.2
PIKE	19	*
PORTER	647	41.1
POSEY	46	20.8
PULASKI	42	33.9
PUTNAM	127	37.6
RANDOLPH	105	45.6
RIPLEY	69	26.2
RUSH	101	65.5
ST. JOSEPH	1,182	46.6
SCOTT	96	43.6
SHELBY	213	51.7
SPENCER	62	33.5
STARKE	121	55.3
STEUBEN	162	48.9
SULLIVAN	78	39.2
SWITZERLAND	7	*
TIPPECANOE	634	38.1
TIPTON	80	58.4
UNION	9	*
VANDERBURGH	1,046	61.6
VERMILLION	78	53.7
VIGO	525	50.9
WABASH	108	36.8
WARREN	60	79.6
WARRICK	195	35.9
WASHINGTON	91	34.8
WAYNE	279	45.5
WELLS	88	32.8
WHITE	90	42.7
WHITLEY	117	36.9

<sup>\*</sup>Counts are suppressed if they are less than or equal 5.

<sup>\*</sup>Rates are considered unstable, and thus not reported, if counts are less than or equal to 20.

<sup>\*\*</sup>Age-adjusted rates are per 10,000 Indiana residents.





# Asthma Hospitalizations by County, Indiana, 2012

County	Count	Age-adjusted Rate**
ADAMS	40	9.8
ALLEN	439	12.0
BARTHOLOMEW	50	6.2
BENTON	8	*
BLACKFORD	15	*
BOONE	37	6.4
BROWN	¥	*
CARROLL	9	*
CASS	26	6.3
CLARK	148	12.1
CLAY	30	10.5
CLINTON	29	9.1
CRAWFORD	¥	*
DAVIESS	21	6.3
DEARBORN	28	5.2
DECATUR	20	7.0
DEKALB	34	7.9
DELAWARE	183	16.3
DUBOIS	26	5.5
ELKHART	178	8.7
FAYETTE	6	*
FLOYD	100	13.2
FOUNTAIN	20	11.4
FRANKLIN	6	*
FULTON	11	*
GIBSON	15	*
GRANT	144	19.6
GREENE	25	7.3
HAMILTON	127	4.5
HANCOCK	25	3.4
HARRISON	24	5.9
HENDRICKS	81	5.6
HENRY	63	12.3
HOWARD	109	12.3
HUNTINGTON	66	17.5
	26	5.5
JACKSON JASPER	29	8.3
JASPER	36	14.8
	33	9.2
JEFFERSON		
JENNINGS	21	7.6
JOHNSON	114	7.7
KNOX	23	6.1
KOSCIUSKO	66	8.0 *
LAGRANGE	14	
LAKE	1,114	21.3
LAPORTE	98	8.9
LAWRENCE	25	4.9
MADISON	218	15.6
MARION	1,886	20.6
MARSHALL	18	*





# Asthma Hospitalizations by County, Indiana, 2012 (cont.)

County	Count	Age-adjusted Rate**
MARTIN	8	*
MIAMI	38	10.5
MONROE	40	3.6
MONTGOMERY	34	8.3
MORGAN	86	12.9
NEWTON	¥	*
NOBLE	53	11.1
OHIO	6	*
ORANGE	8	*
OWEN	13	*
PARKE	18	*
PERRY	8	*
PIKE	8	*
PORTER	223	12.7
POSEY	33	11.5
PULASKI	5	*
PUTNAM	31	9.7
RANDOLPH	19	*
RIPLEY	18	*
RUSH	16	*
ST. JOSEPH	304	11.2
SCOTT	24	9.6
SHELBY	60	13.7
SPENCER	10	*
STARKE	23	9.2
STEUBEN	22	6.2
SULLIVAN	27	11.7
SWITZERLAND	¥	*
TIPPECANOE	119	7.5
TIPTON	11	*
UNION	¥	*
VANDERBURGH	151	8.4
VERMILLION	17	*
VIGO	120	11.3
WABASH	25	6.6
WARREN	¥	*
WARRICK	38	6.4
WASHINGTON	31	10.0
WAYNE	79	11.6
WELLS	60	18.4
WHITE	16	*
WHITLEY	27	7.8

<sup>\*</sup>Counts are suppressed if they are less than 5.

<sup>\*</sup>Rates are considered unstable, and thus not reported, if counts are less than 20.

<sup>\*\*</sup>Age-adjusted rates are per 10,000 Indiana residents.





# Asthma Emergency Department Visits by Rate, Indiana, 2012

County	Count	Age-adjusted Rate**
PERRY	217	123.2
GRANT	632	97.6
FOUNTAIN	135	87.3
MADISON	984	81.6
WARREN	60	79.6
MARION	7,121	77.5
BLACKFORD	77	69.1
LAKE	3,125	66.6
JAY	135	66.1
RUSH	101	65.5
VANDERBURGH	1,046	61.6
LAWRENCE	254	60.2
MIAMI	205	59.3
HOWARD	448	59.2
HENRY	261	59.2
TIPTON	80	58.4
MORGAN	357	56.1
STARKE	121	55.3
ALLEN	1,936	55.0
LAPORTE	553	54.7
CLAY	129	54.7
JACKSON	222	53.9
VERMILLION	78	53.7
SHELBY	213	51.7
VIGO	525	50.9
HUNTINGTON	170	50.1
MONTGOMERY	171	49.1
STEUBEN	162	48.9
DELAWARE	507	48.3
KNOX	166	47.4
ST. JOSEPH	1,182	46.6
CLINTON	146	45.9
RANDOLPH	105	45.6
WAYNE	279	45.5
DECATUR	109	44.8
SCOTT	96	43.6
CLARK	455	43.1
GIBSON	130	43.0
WHITE	90	42.7
PARKE	67	41.8
PORTER	647	41.1
JENNINGS	109	40.8
NOBLE	188	40.7
CASS	143	39.8
SULLIVAN	78	39.2
ELKHART	754	38.8
TIPPECANOE	634	38.1
PUTNAM	127	37.6
WHITLEY	117	36.9
WABASH	108	36.8





### Asthma Emergency Department Visits by Rate, Indiana, 2012 (cont.)

County	Count	Age-adjusted Rate**
FLOYD	254	36.6
GREENE	110	36.0
WARRICK	195	35.9
FAYETTE	79	35.5
ORANGE	63	34.9
WASHINGTON	91	34.8
KOSCIUSKO	252	34.4
BENTON	27	34.0
PULASKI	42	33.9
OWEN	66	33.8
SPENCER	62	33.5
JOHNSON	461	33.1
WELLS	88	32.8
MARSHALL	141	32.5
DEKALB	124	32.1
JASPER	102	31.2
CARROLL	53	30.4
HARRISON	108	29.5
ADAMS	94	29.2
FULTON	57	29.0
BARTHOLOMEW	205	27.1
DAVIESS	82	26.3
RIPLEY	69	26.2
MONROE	326	26.2
BOONE	144	25.9
CRAWFORD	26	25.2
HAMILTON	640	22.2
HANCOCK	147	22.1
LAGRANGE	84	21.9
JEFFERSON	62	20.9
POSEY	46	20.8
NEWTON	25	19.8
HENDRICKS	276	18.7
DEARBORN	81	18.1
DUBOIS	29	7.1
BROWN	14	*
FRANKLIN	17	*
MARTIN	18	*
OHIO	19	*
PIKE	19	*
SWITZERLAND	7	*
UNION	9	*

<sup>\*</sup>Counts are suppressed if they are less than or equal 5.

<sup>\*</sup>Rates are considered unstable, and thus not reported, if counts are less than or equal to 20.

<sup>\*\*</sup>Age-adjusted rates are per 10,000 Indiana residents.





# Asthma Hospitalizations by Rate, Indiana, 2012

County	Count	Age-adjusted Rate**
LAKE	1,114	21.3
MARION	1,886	20.6
GRANT	144	19.6
WELLS	60	18.4
HUNTINGTON	66	17.5
DELAWARE	183	16.3
MADISON	218	15.6
JAY	36	14.8
SHELBY	60	13.7
FLOYD	100	13.2
MORGAN	86	12.9
PORTER	223	12.7
HENRY	63	12.3
CLARK	148	12.1
ALLEN	439	12.0
HOWARD	109	11.8
SULLIVAN	27	11.7
WAYNE	<b>7</b> 9	11.6
POSEY	33	11.5
FOUNTAIN	20	11.4
VIGO	120	11.3
ST. JOSEPH	304	11.2
NOBLE	53	11.1
MIAMI	38	10.5
CLAY	30	10.5
WASHINGTON	31	10.0
ADAMS	40	9.8
PUTNAM	31	9.7
SCOTT	24	9.6
STARKE	23	9.2
JEFFERSON	33	9.2
CLINTON	29	9.1
LAPORTE	98	8.9
ELKHART	178	8.7
VANDERBURGH	151	8.4
MONTGOMERY	34	8.3
JASPER	29	8.3
KOSCIUSKO	66	8.0
DEKALB	34	7.9
WHITLEY	27	7.8
		7.8
JOHNSON JENNINGS	114	
	21	7.6 7.5
TIPPECANOE	119	
GREENE	25	7.3
DECATUR	20	7.0
WABASH	25	6.6
BOONE	37	6.4
WARRICK	38	6.4
CASS	26	6.3
DAVIESS	21	6.3





### Asthma Hospitalizations by Rate, Indiana, 2012 (cont.)

County	Count	Age-adjusted Rate**
BARTHOLOMEW	50	6.2
STEUBEN	22	6.2
KNOX	23	6.1
HARRISON	24	5.9
HENDRICKS	81	5.6
JACKSON	26	5.5
DUBOIS	26	5.5
DEARBORN	28	5.2
LAWRENCE	25	4.9
HAMILTON	127	4.5
MONROE	40	3.6
HANCOCK	25	3.4
RANDOLPH	19	*
MARSHALL	18	*
PARKE	18	*
RIPLEY	18	*
VERMILLION	17	*
RUSH	16	*
WHITE	16	*
BLACKFORD	15	*
GIBSON	15	*
LAGRANGE	14	*
OWEN	13	*
FULTON	11	*
TIPTON	11	*
SPENCER	10	*
CARROLL	9	*
BENTON	8	*
MARTIN	8	*
ORANGE	8	*
PERRY	8	*
PIKE	8	*
FAYETTE	6	*
FRANKLIN	6	*
OHIO	6	*
PULASKI	5	*
BROWN	¥	*
CRAWFORD	¥	*
NEWTON	¥	*
SWITZERLAND	¥	*
UNION	¥	*
WARREN	¥	*
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<sup>\*</sup>Counts are suppressed if they are less than or equal 5.

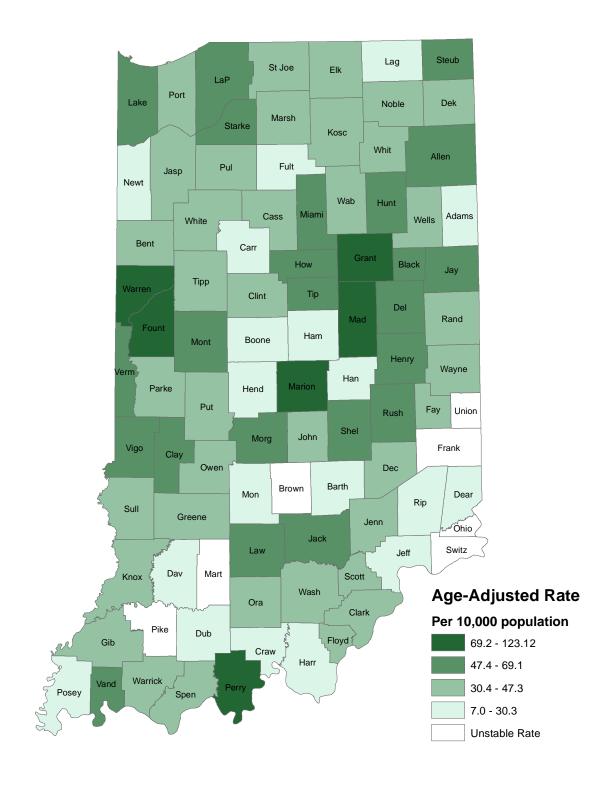
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# Asthma Emergency Department Visits, Indiana, 2012







# Asthma Hospitalizations, Indiana, 2012

