

**Health Status Indicators  
for Pennsylvania Counties  
and Health Districts  
2006 Report**

Bureau of Health Statistics and Research  
Pennsylvania Department of Health  
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## **Preface**

This publication of health status indicators for Pennsylvania counties and Department of Health Districts was prepared by the Bureau of Health Statistics and Research of the Pennsylvania Department of Health. The indicators were developed by the Centers for Disease Control and Prevention in response to Objective 22.1 of *Healthy People 2000* and are again cited in Objective 23-2 of *Healthy People 2010*. They are to be used for assessing and comparing the health status of state and local areas.

We encourage the use of the statistics in these reports to assess, compare, and track local health status. Additional statistics (see Appendix) that can be used to calculate the indicators at the minor civil division level are also available from the Bureau upon request.

The format of the report includes presentation of available county and health district data of the latest multiple or single-year period available for each indicator. In addition, county outline state maps with the results of significance testing for most of the indicators are also presented. The testing found which county and health district indicators were significantly higher or lower than the state figures and which state indicators were significantly higher or lower than the United States figures. The formulas used in the significance testing appear in the Technical Notes section in the back of this report. This analysis should provide an additional perspective for users of the indicators. All of the data shown in this report are available in either Microsoft Excel or PDF format. Please note that the data presented in this report may not match county data previously released for the indicators due to differences in the definitions for some of the indicators or updates of selected files.

If any of the data provided in this report or upon special request are used in any publication or release, please include the following statement:

These data were supplied by the Bureau of Health Statistics and Research, Pennsylvania Department of Health. The Department specifically disclaims responsibility for any analyses, interpretation or conclusions.

The Bureau of Health Statistics and Research welcomes comments and suggestions on the content and format of this report. Staff is available to answer any questions regarding this report. Please address all comments, questions, requests for data, etc. to:

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This report and many other health statistics are on the Health Statistics pages of the Department's website at

***[www.health.state.pa.us/stats/](http://www.health.state.pa.us/stats/)***

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## **INTRODUCTION**

In July 1991, the Centers for Disease Control and Prevention (CDC) in collaboration with the National Center for Health Statistics (NCHS) released a set of Health Status Indicators to serve as baseline measurements of health status outcome and/or factors that put individuals at increased risk of disease or premature death. These indicators were developed by a CDC Health Status Indicators Consensus Work Group in response to Objective 22.1 as contained in *Healthy People 2000: National Health Promotion and Disease Prevention Objectives for the Nation* which established multiple goals and objectives for improving the health of Americans by the end of the decade. Specifically, Objective 22.1 is to “develop a set of health status indicators appropriate for Federal, State, and local health agencies and establish use of the set in at least 40 states.” Healthy People 2010 continued support for these indicators in Objective 23-2, “Increase access to information on health indicators based on Healthy People 2010 objectives.”

The Consensus Work Group identified 18 health status indicators that were adopted by NCHS and CDC. The 18 indicators are divided into two types – health status or risk indicators. The 13 indicators of health status include eight indicators of total and cause-specific mortality rates (age-adjusted and crude), an infant mortality rate, and four indicators of selected morbidity rates (AIDS, measles, tuberculosis, and syphilis). The five indicators of risk include three involving natality statistics (prevalence of low birth weight, adolescent mothers, and no prenatal care in first trimester of pregnancy); one indicator of childhood poverty; and, one on air quality. As previously stated, the 18 indicators were created to represent a general overview of a community's health, and the data needed to monitor them should be readily available at major geographic levels. CDC and NCHS are encouraging all States and local agencies to use these indicators to assess community health and track their progress.

## **CONTENT of the REPORT**

Average annual (three-year summary) rates and annual rates/percentages for 17 of the 18 health status indicators are presented for the United States, Pennsylvania, each of the 67 counties in the state, and then for the six Department of Health Districts (except for the poverty indicators). Data for the indicator on air quality are not included since there is no data source with complete data by county.

County outline state maps also appear with the county tables depicting the results of significance testing for many of the indicators. The most recent Pennsylvania data used in this report are for 2004. Indicators updated with 2005 data will appear in the 2007 edition of this report. The United States data shown in this report may not be as recent as state or local level data.

In the Spring, 1992 edition of *Healthy People 2000 Statistical Notes* published by the National Center for Health Statistics (NCHS), national data for the indicators as well as for some subcomponents of the indicators were first released. Age-adjusted mortality rates for heart disease and stroke were listed as major subcomponents of the indicator for cardiovascular disease. They also appear in this report. Racial and Hispanic data for the natality and infant death indicators were also listed in the NCHS report as major subcomponents because of the considerable statistical variation among these groups. Blacks and Hispanics tend to have much higher percentages of low birth weight, teen mothers, and no prenatal care in the first trimester, as well as higher infant death rates. Black data for the infant death and birth indicators are therefore also shown in this report for Pennsylvania, Philadelphia City/County, and seven other counties – Allegheny, Bucks, Chester, Dauphin, Delaware, Erie, and Montgomery. A large majority of the state's black residents live in these eight counties. Data on Hispanic origin have only been collected on birth and death certificates in Pennsylvania since 1989 and are included for the state and seven counties (Berks, Chester, Lancaster, Lehigh, Montgomery, Northampton, and Philadelphia) where a large segment of the Hispanic population in the state reside. Starting with the 2002 report, data for Asian/Pacific Islander are shown for birth and three-year infant death statistics. Data for Asians are shown for Pennsylvania and four counties: Allegheny, Delaware, Montgomery, and Philadelphia. The criteria for choosing which counties had racial or Hispanic data was a 2000 U.S. Census population of 15,000 or more blacks, Hispanics, or Asians as well as at least 200 births to black, Hispanic, or Asian/Pacific Islander mothers. Data on whites appear for the state and the twelve counties that also have black, Asian/Pacific Islander and/or Hispanic data shown in this

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report. Racial (except for Asian/Pacific Islander) and Hispanic data appear for all six Department of Health Districts.

Three-year summary or average annual age-adjusted death rates (using the 2000 U.S. standard million population) are presented in this report due to the unreliability of rates based on small numbers of annual events. Pennsylvania has many rural counties with small populations and very few or no deaths per year for some of the causes that appear in this report. Annual numbers of live births by county are much higher than the annual numbers of deaths; therefore, the percentages based on one year of live births can be presented with more confidence in their reliability.

## ***USE of the REPORT***

It should be noted that the health status indicators were not intended to correspond to the Healthy People 2010 objectives. They are meant to be a separate set of health data items for assessing and comparing health status, as opposed to tracking progress in achieving objectives. Some of the indicators do appear as a unit of measurement for a 2010 objective; some indicators are similar to but are not exactly the same measurement used in a 2010 objective; and, some indicators do not appear in any 2010 objective.

Through the release of this report, the Bureau of Health Statistics and Research hopes to encourage the use of these indicators for assessing, comparing, and tracking local health status. All of the data shown in this report are available in Microsoft Excel or PDF format.

## ***ADDITIONAL STATISTICS (for Cities, Boroughs and Townships)***

Additional birth and death data at the minor civil division level (city, borough, and township) are available upon request from the Bureau of Health Statistics and Research. Most of the figures are five-year summary data that can be used to calculate the indicators at these local levels. Five-year summary figures are used due to very small annual numbers of events for many minor civil divisions in the state. A complete list of the additional statistics available is included in the Appendix at the back of this report. Five-year summary data have been updated annually starting with the period 1986-1990 so that running averages can be calculated and used for trend analysis.

Additional three-year summary natality data by race (white and black) for selected cities and boroughs in the state are also available upon request, as well as three-year summary Hispanic birth data for selected cities and boroughs. The cities and boroughs with black or Hispanic data are those that had a 2000 U.S. Census population of 20,000 or more and had at least 100 Hispanic or black annual births among residents.

## **County and Health District Data:**

### **Data Tables, Significance Testing or Comparison Results, and County Outline Maps by Health Status Indicators**

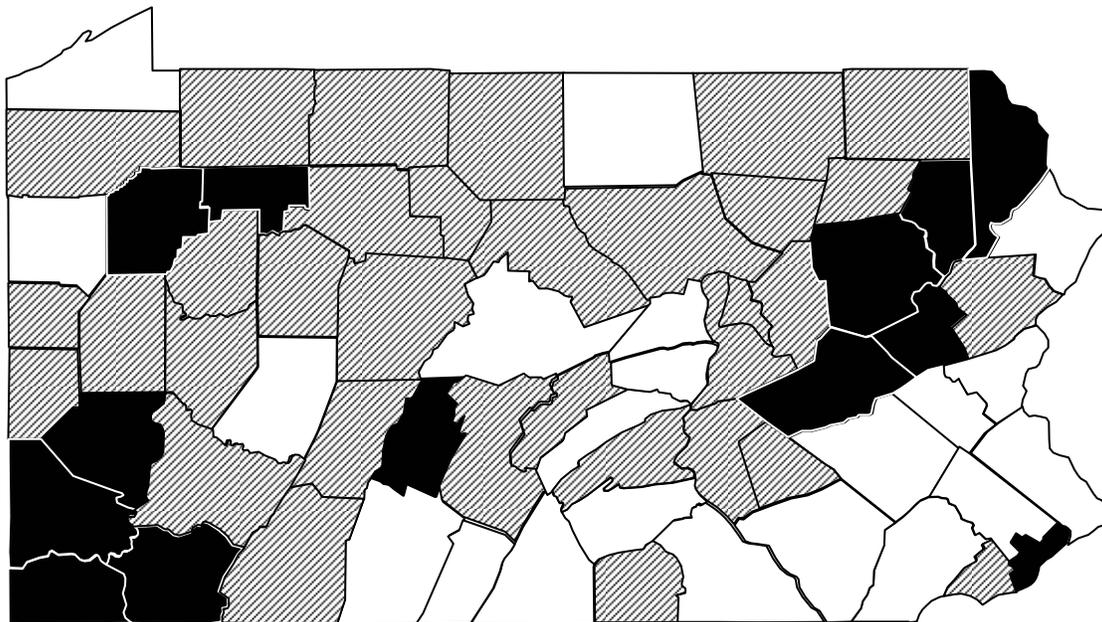
The latest multiple or single-year numbers and rates or ratios for health status indicators by county and by Pennsylvania Department of Health District are presented in summary data table format.

For many of the summary data tables, we have also included 95% confidence bounds and the results of comparison or significance testing of the rates or ratios for each county, health district and the state. We compared each county or health district rate or ratio to the state and also compared the state rate or ratio to the United States figure to determine if age-adjusted death rates could be considered substantially different or other rates/percentages significantly higher or lower. County outline maps are also shown along with the county data tables to geographically display the results of the comparisons.

In order to understand the qualifications of the data presented and how the analyses were conducted, it is important to refer to the footnotes as they appear on each page. Also, review the Technical Notes section (pages 30-33) for a complete discussion of data sources, definitions of terms, age-adjusted rates, the reliability of rates, and the formulas used in the comparative analyses.

## Average Annual Age-Adjusted Death Rates for All Causes, 2002-2004

All Causes	No.	Rate	CI (95%)	All Causes	No.	Rate	CI (95%)
Adams	2,678	847.3	815.21-879.39	Lancaster	13,048	815.8	801.80-829.80 -
Allegheny	44,711	876.1	867.98-884.22 +	Lawrence	3,568	884.5	855.48-913.52
Armstrong	2,589	896.0	861.49-930.51	Lebanon	3,906	839.1	812.78-865.42
Beaver	6,389	871.6	850.23-892.97	Lehigh	9,362	800.8	784.58-817.02 -
Bedford	1,447	791.8	751.00-832.60 -	Luzerne	13,037	940.2	924.06-956.34 +
Berks	10,639	809.4	794.02-824.78 -	Lycoming	3,701	840.5	813.42-867.58
Blair	4,802	961.3	934.11-988.49 +	McKean	1,553	905.0	859.99-950.01
Bradford	2,031	897.4	858.37-936.43	Mercer	4,060	831.8	806.21-857.39 -
Bucks	15,077	847.3	833.78-860.82 -	Mifflin	1,567	872.7	829.49-915.91
Butler	5,440	861.1	838.22-883.98	Monroe	3,529	860.0	831.63-888.37
Cambria	5,654	860.1	837.68-882.52	Montgomery	21,146	787.1	776.49-797.71 -
Cameron	230	865.6	753.73-977.47	Montour	649	899.7	830.48-968.92
Carbon	2,223	924.1	885.68-962.52 +	Northampton	7,815	778.4	761.14-795.66 -
Centre	2,616	774.6	744.92-804.28 -	Northumberland	3,547	886.6	857.42-915.78
Chester	9,849	784.0	768.52-799.48 -	Perry	1,182	890.6	839.83-941.37
Clarion	1,313	885.9	837.98-933.82	Philadelphia	48,894	1,021.1	1,012.05-1,030.15 +
Clearfield	2,753	853.0	821.14-884.86	Pike	1,032	656.0	615.98-696.02 -
Clinton	1,223	885.2	835.59-934.81	Potter	662	934.9	863.68-1,006.12
Columbia	2,063	868.3	830.83-905.77	Schuylkill	6,258	970.4	946.36-994.44 +
Crawford	2,802	861.1	829.22-892.98	Snyder	974	781.7	732.61-830.79 -
Cumberland	6,117	809.1	788.82-829.38 -	Somerset	2,810	863.5	831.57-895.43
Dauphin	7,316	862.0	842.25-881.75	Sullivan	305	952.1	845.25-1,058.95
Delaware	16,875	857.2	844.27-870.13	Susquehanna	1,371	880.9	834.27-927.53
Elk	1,130	834.9	786.22-883.58	Tioga	1,209	759.3	716.50-802.10 -
Erie	8,055	841.7	823.32-860.08 -	Union	1,073	772.5	726.28-818.72 -
Fayette	5,368	898.9	874.85-922.95 +	Venango	2,005	943.3	902.01-984.59 +
Forest	233	1,048.9	914.22-1,183.58 +	Warren	1,430	864.9	820.07-909.73
Franklin	3,866	790.0	765.10-814.90 -	Washington	7,286	888.7	868.29-909.11 +
Fulton	382	785.0	706.28-863.72 -	Wayne	1,863	977.9	933.49-1,022.31 +
Greene	1,379	966.2	915.20-1,017.20 +	Westmoreland	13,281	874.1	859.23-888.97
Huntingdon	1,290	838.6	792.84-884.36	Wyoming	772	860.4	799.71-921.09
Indiana	2,658	829.8	798.25-861.35 -	York	10,047	802.4	786.71-818.09 -
Jefferson	1,662	887.9	845.21-930.59				
Juniata	617	763.9	703.62-824.18 -	Pennsylvania	384,888	865.4	862.67-868.13 +
Lackawanna	8,469	923.4	903.73-943.07 +	United States (2004)	2,398,365	801.1	800.09-802.11



**RATE**  Significantly lower than the state      Not significantly higher or lower than the state  
 Significantly higher than the state

NOTE: A+ or - after the confidence interval (CI) denotes if the county rate was significantly higher or lower than the state rate. No + or - after a CI denotes no significant difference. Pennsylvania data were compared to U.S. data. CIs and comparison results were not calculated and shown for rates based on less than 20 events. See Technical Notes.

## Average Annual Age-Adjusted Death Rates for Selected Causes, 2002-2004

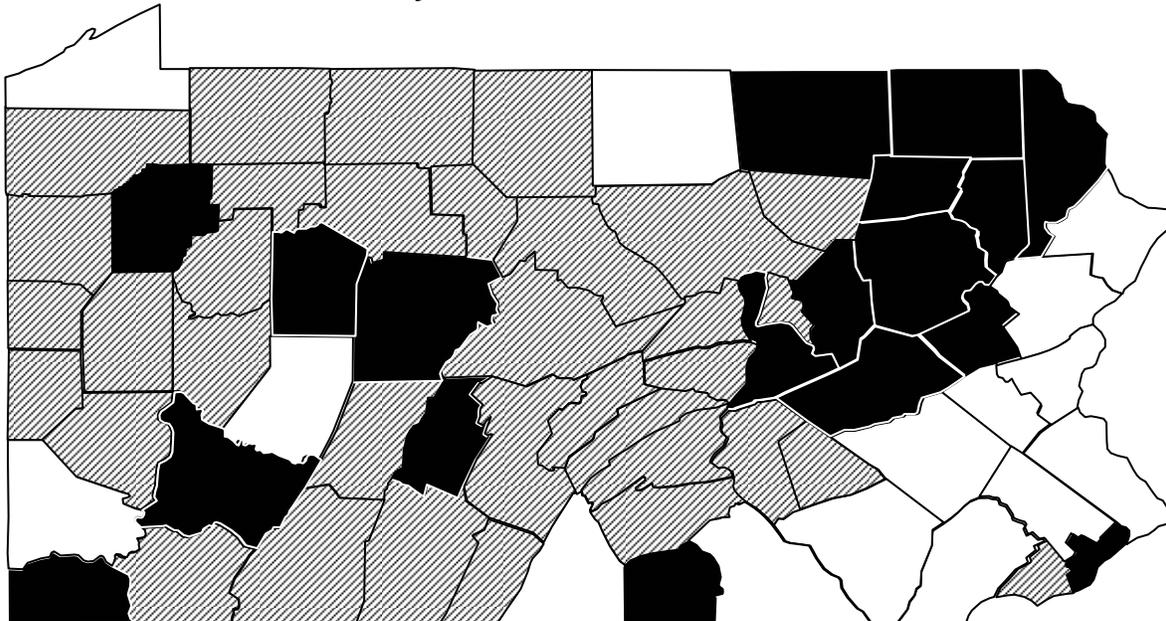
### Cardiovascular

Disease	No.	Rate	CI (95%)
Adams	1,151	360.2	339.39-381.01 +
Allegheny	17,166	324.1	319.25-328.95
Armstrong	980	329.6	308.96-350.24
Beaver	2,408	320.1	307.31-332.89
Bedford	571	306.9	281.73-332.07
Berks	3,985	298.4	289.14-307.66 -
Blair	1,951	381.8	364.86-398.74 +
Bradford	788	344.0	319.98-368.02 +
Bucks	5,117	295.4	287.31-303.49 -
Butler	2,131	328.8	314.84-342.76
Cambria	2,260	329.2	315.63-342.77
Cameron	89	331.7	262.79-400.61
Carbon	863	351.0	327.58-374.42 +
Centre	1,034	311.3	292.33-330.27
Chester	3,513	288.5	278.96-298.04 -
Clarion	508	333.4	304.41-362.39
Clearfield	1,152	348.3	328.19-368.41 +
Clinton	487	349.7	318.64-380.76
Columbia	906	372.5	348.24-396.76 +
Crawford	1,027	310.1	291.13-329.07
Cumberland	2,354	309.7	297.19-322.21
Dauphin	2,776	324.5	312.43-336.57
Delaware	6,387	316.2	308.45-323.95
Elk	433	311.0	281.71-340.29
Erie	2,965	304.4	293.44-315.36 -
Fayette	2,063	332.8	318.44-347.16
Forest	90	377.2	299.27-455.13
Franklin	1,388	279.3	264.61-293.99 -
Fulton	130	272.9	225.99-319.81
Greene	529	363.9	332.89-394.91 +
Huntingdon	486	314.8	286.81-342.79
Indiana	935	284.0	265.80-302.20 -
Jefferson	738	383.3	355.65-410.95 +
Juniata	238	290.3	253.42-327.18
Lackawanna	3,591	372.0	359.83-384.17 +
Lancaster	4,851	300.5	292.04-308.96 -
Lawrence	1,411	333.5	316.10-350.90
Lebanon	1,543	324.9	308.69-341.11
Lehigh	3,332	278.1	268.66-287.54 -
Luzerne	5,643	381.2	371.25-391.15 +
Lycoming	1,448	321.6	305.04-338.88
McKean	613	345.8	318.43-373.17
Mercer	1,571	310.3	294.96-325.64
Mifflin	620	333.7	307.43-359.97
Monroe	1,170	296.8	279.79-313.81 -
Montgomery	7,481	275.1	268.87-281.33 -
Montour	256	344.0	301.86-386.14
Northampton	2,977	290.2	279.78-300.62 -
Northumberland	1,461	355.9	337.65-374.15 +
Perry	438	333.8	302.54-365.06
Philadelphia	17,235	350.6	345.37-355.83 +
Pike	331	221.0	197.19-244.81 -
Potter	229	312.2	271.76-352.64
Schuylkill	2,589	384.1	369.30-398.90 +
Snyder	391	312.4	281.43-343.37
Somerset	1,130	338.1	318.39-357.81
Sullivan	116	343.7	281.15-406.25
Susquehanna	565	353.0	323.89-382.11 +
Tioga	455	275.7	250.37-301.03 -
Union	413	293.1	264.83-321.37
Venango	768	357.6	332.31-382.89 +
Warren	552	329.6	302.10-357.10
Washington	2,585	306.8	294.97-318.63 -
Wayne	718	370.0	342.94-397.06 +
Westmoreland	5,161	331.2	322.16-340.24 +
Wyoming	331	371.2	331.21-411.19 +
York	3,613	288.9	279.48-298.32 -
Pennsylvania	145,187	319.5	317.86-321.14 +
United States (2004)	862,800	287.0	286.39-287.61

Diseases of Heart	No.	Rate	CI (95%)
Adams	956	298.8	279.86-317.74 +
Allegheny	13,404	253.9	249.60-258.20 +
Armstrong	784	264.1	245.61-282.59
Beaver	1,922	256.1	244.65-267.55
Bedford	410	219.3	198.07-240.53 -
Berks	2,968	222.5	214.50-230.50 -
Blair	1,541	302.4	287.30-317.50 +
Bradford	628	274.1	252.66-295.54 +
Bucks	3,742	215.8	208.89-222.71 -
Butler	1,691	261.5	249.04-273.96 +
Cambria	1,766	258.8	246.73-270.87
Cameron	77	287.1	222.97-351.23
Carbon	675	274.8	254.07-295.53 +
Centre	809	242.7	225.98-259.42
Chester	2,706	222.2	213.83-230.57 -
Clarion	402	264.4	238.55-290.25
Clearfield	904	273.8	255.95-291.65 +
Clinton	368	262.4	235.59-289.21
Columbia	707	291.4	269.92-312.88 +
Crawford	774	234.4	217.89-250.91
Cumberland	1,778	233.9	223.03-244.77 -
Dauphin	2,179	254.6	243.91-265.29
Delaware	4,803	238.2	231.46-244.94 -
Elk	316	226.7	201.70-251.70
Erie	2,281	234.7	225.07-244.33 -
Fayette	1,605	259.7	246.99-272.41
Forest	68	285.9	217.95-353.85
Franklin	1,031	207.2	194.55-219.85 -
Fulton	106	222.2	179.90-264.50
Greene	422	290.3	262.60-318.00 +
Huntingdon	383	247.8	222.98-272.62
Indiana	737	224.7	208.48-240.92 -
Jefferson	563	294.1	269.81-318.39 +
Juniata	178	217.2	185.29-249.11
Lackawanna	2,920	303.5	292.49-314.51 +
Lancaster	3,652	226.5	219.15-233.85 -
Lawrence	1,123	267.5	251.85-283.15 +
Lebanon	1,203	253.9	239.55-268.25
Lehigh	2,588	216.2	207.87-224.53 -
Luzerne	4,419	298.9	290.09-307.71 +
Lycoming	1,073	238.7	224.42-252.98
McKean	409	232.6	210.06-255.14
Mercer	1,225	242.8	229.20-256.40
Mifflin	481	259.1	235.94-282.26
Monroe	927	234.3	219.22-249.38
Montgomery	5,390	198.4	193.10-203.70 -
Montour	192	258.4	221.85-294.95
Northampton	2,349	229.2	219.93-238.47 -
Northumberland	1,187	290.5	273.97-307.03 +
Perry	351	266.9	238.98-294.82
Philadelphia	13,360	272.3	267.68-276.92 +
Pike	254	170.7	149.71-191.69 -
Potter	176	240.5	204.97-276.03
Schuylkill	2,072	308.0	294.74-321.26 +
Snyder	301	240.3	213.15-267.45
Somerset	917	275.6	257.76-293.44 +
Sullivan	84	254.0	199.68-308.32
Susquehanna	463	289.8	263.40-316.20 +
Tioga	355	215.3	192.90-237.70 -
Union	316	224.5	199.75-249.25
Venango	598	278.2	255.90-300.50 +
Warren	418	249.6	225.67-273.53
Washington	1,996	237.4	226.99-247.81
Wayne	546	281.5	257.89-305.11 +
Westmoreland	4,050	260.6	252.57-268.63 +
Wyoming	260	291.1	255.72-326.48 +
York	2,820	225.1	216.79-233.41 -
Pennsylvania	112,159	247.1	245.65-248.55 +
United States (2004)	654,092	217.5	216.97-218.03

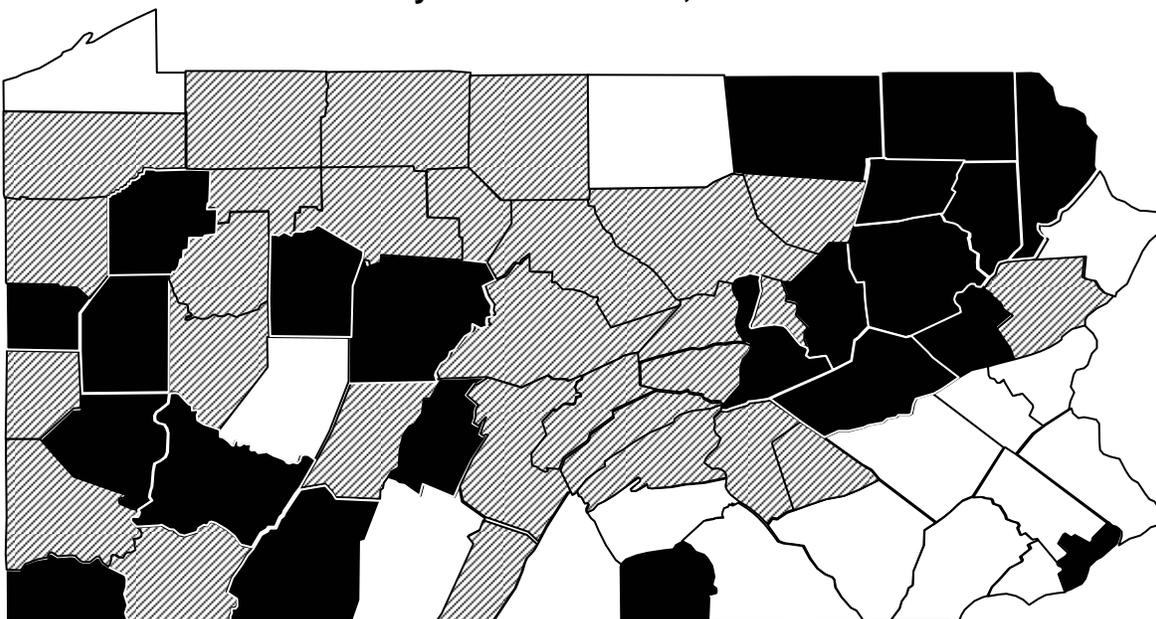
NOTE: A+ or - after the confidence interval (CI) denotes if the county rate was significantly higher or lower than the state rate. No + or - after a CI denotes no significant difference. State data were compared to U.S. data. CIs were not calculated for rates based on less than 20 events. See Technical Notes.

## Average Annual Age-Adjusted Death Rates - Cardiovascular Disease Pennsylvania Residents, 2002-2004



**RATE**     Significantly lower than the state     Not significantly higher or lower than the state  
 Significantly higher than the state

## Average Annual Age-Adjusted Death Rates - Diseases of Heart Pennsylvania Residents, 2002-2004



**RATE**     Significantly lower than the state     Not significantly higher or lower than the state  
 Significantly higher than the state

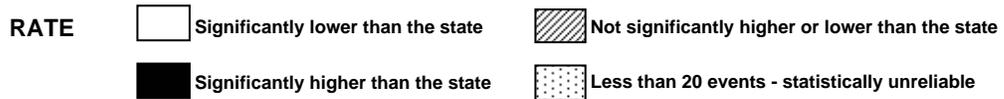
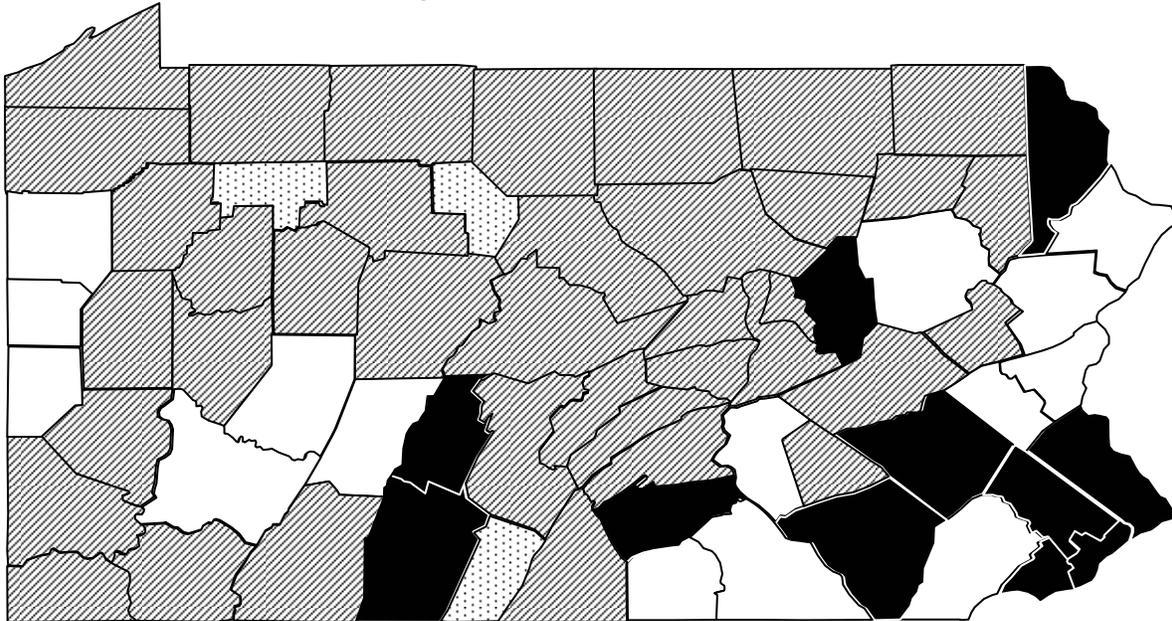
Note: Significance was determined by calculating and comparing county confidence intervals to the state rate. The calculations were not performed for counties that had less than 20 events. Rates for counties with less than 20 events are considered unreliable. See Technical Notes.

## Average Annual Age-Adjusted Death Rates for Selected Causes, 2002-2004

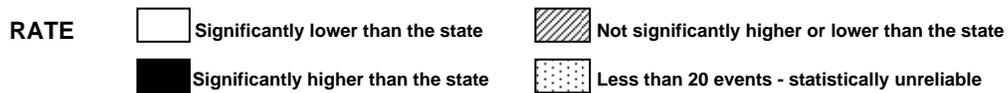
Stroke				Motor Vehicle Accidents			
	No.	Rate	CI (95%)		No.	Rate	CI (95%)
Adams	145	45.7	38.26-53.14 -	Adams	57	19.2	14.22-24.18 +
Allegheny	2,862	53.3	51.35-55.25	Allegheny	310	7.8	6.93-8.67 -
Armstrong	162	53.6	45.35-61.85	Armstrong	42	19.7	13.74-25.66 +
Beaver	342	44.9	40.14-49.66 -	Beaver	50	8.2	5.93-10.47 -
Bedford	132	72.1	59.80-84.40 +	Bedford	49	34.0	24.48-43.52 +
Berks	816	60.9	56.72-65.08 +	Berks	166	14.0	11.87-16.13
Blair	329	63.6	56.73-70.47 +	Blair	66	17.0	12.90-21.10 +
Bradford	118	51.5	42.21-60.79	Bradford	44	23.5	16.56-30.44 +
Bucks	1,013	59.3	55.65-62.95 +	Bucks	205	11.5	9.93-13.07
Butler	344	52.3	46.77-57.83	Butler	90	16.7	13.25-20.15 +
Cambria	305	43.4	38.53-48.27 -	Cambria	64	13.6	10.27-16.93
Cameron	8	30.7		Cameron	4	14.4	
Carbon	121	48.6	39.94-57.26	Carbon	34	18.4	12.22-24.58
Centre	167	50.9	43.18-58.62	Centre	46	11.6	8.25-14.95
Chester	589	48.6	44.68-52.52 -	Chester	128	9.5	7.85-11.15 -
Clarion	71	46.2	35.45-56.95	Clarion	24	19.6	11.76-27.44
Clearfield	181	54.4	46.47-62.33	Clearfield	51	20.2	14.66-25.74 +
Clinton	89	64.6	51.18-78.02	Clinton	25	20.1	12.22-27.98
Columbia	166	67.4	57.15-77.65 +	Columbia	45	22.6	16.00-29.20 +
Crawford	199	59.5	51.23-67.77	Crawford	55	19.9	14.64-25.16 +
Cumberland	453	59.7	54.20-65.20 +	Cumberland	86	12.6	9.94-15.26
Dauphin	375	43.9	39.46-48.34 -	Dauphin	96	12.6	10.08-15.12
Delaware	1,223	60.1	56.73-63.47 +	Delaware	125	7.2	5.94-8.46 -
Elk	89	63.7	50.47-76.93	Elk	30	30.3	19.46-41.14 +
Erie	505	51.6	47.10-56.10	Erie	112	12.6	10.27-14.93
Fayette	326	52.1	46.44-57.76	Fayette	80	18.8	14.68-22.92 +
Forest	15	61.7		Forest	6	48.0	
Franklin	266	53.7	47.25-60.15	Franklin	79	19.0	14.81-23.19 +
Fulton	12	26.9		Fulton	13	29.7	
Greene	80	54.9	42.87-66.93	Greene	36	29.1	19.59-38.61 +
Huntingdon	78	50.7	39.45-61.95	Huntingdon	27	19.6	12.21-26.99
Indiana	147	43.7	36.64-50.76 -	Indiana	59	22.3	16.61-27.99 +
Jefferson	110	56.1	45.62-66.58	Jefferson	30	21.2	13.61-28.79 +
Juniata	36	43.9	29.56-58.24	Juniata	17	26.0	
Lackawanna	491	50.2	45.76-54.64	Lackawanna	83	12.9	10.12-15.68
Lancaster	941	58.1	54.39-61.81 +	Lancaster	176	12.0	10.23-13.77
Lawrence	200	45.7	39.37-52.03 -	Lawrence	43	14.8	10.38-19.22
Lebanon	253	52.8	46.29-59.31	Lebanon	53	13.8	10.08-17.52
Lehigh	538	44.6	40.83-48.37 -	Lehigh	104	10.5	8.48-12.52 -
Luzerne	713	48.1	44.57-51.63 -	Luzerne	140	14.3	11.93-16.67
Lycoming	270	59.6	52.49-66.71	Lycoming	67	18.3	13.92-22.68 +
McKean	83	46.5	36.50-56.50	McKean	23	17.0	10.05-23.95
Mercer	241	47.2	41.24-53.16 -	Mercer	49	13.3	9.58-17.02
Mifflin	104	56.1	45.32-66.88	Mifflin	21	16.3	9.33-23.27
Monroe	170	43.5	36.96-50.04 -	Monroe	93	20.4	16.25-24.55 +
Montgomery	1,618	59.3	56.41-62.19 +	Montgomery	204	9.0	7.76-10.24 -
Montour	49	65.1	46.87-83.33	Montour	11	20.1	
Northampton	436	42.3	38.33-46.27 -	Northampton	84	9.4	7.39-11.41 -
Northumberland	215	51.5	44.62-58.38	Northumberland	43	15.0	10.52-19.48
Perry	70	53.8	41.20-66.40	Perry	32	23.9	15.62-32.18 +
Philadelphia	2,916	58.7	56.57-60.83 +	Philadelphia	392	8.6	7.75-9.45 -
Pike	61	40.0	29.96-50.04 -	Pike	27	17.5	10.90-24.10
Potter	34	46.5	30.87-62.13	Potter	7	13.4	
Schuylkill	374	55.0	49.43-60.57	Schuylkill	103	23.0	18.56-27.44 +
Snyder	67	54.0	41.07-66.93	Snyder	21	18.1	10.36-25.84
Somerset	161	47.0	39.74-54.26	Somerset	39	16.1	11.05-21.15
Sullivan	25	70.2	42.68-97.72	Sullivan	5	31.9	
Susquehanna	78	48.1	37.43-58.77	Susquehanna	33	28.2	18.58-37.82 +
Tioga	85	51.6	40.63-62.57	Tioga	28	21.0	13.22-28.78 +
Union	64	45.6	34.43-56.77	Union	23	17.0	10.05-23.95
Venango	127	58.9	48.66-69.14	Venango	41	23.7	16.45-30.95 +
Warren	99	59.3	47.62-70.98	Warren	26	21.4	13.17-29.63 +
Washington	428	50.2	45.44-54.96	Washington	76	12.0	9.30-14.70
Wayne	136	70.2	58.40-82.00 +	Wayne	41	27.1	18.80-35.40 +
Westmoreland	782	49.7	46.22-53.18 -	Westmoreland	155	13.7	11.54-15.86
Wyoming	54	61.3	44.95-77.65	Wyoming	19	22.0	
York	596	48.0	44.15-51.85 -	York	175	15.2	12.95-17.45 +
Pennsylvania	24,353	53.3	52.63-53.97 +	Pennsylvania	4,788	12.6	12.24-12.96 -
United States (2004)	150,147	50.0	49.75-50.25	United States (2004)	43,947	14.8	14.66-14.94

NOTE: A+ or - after the confidence interval (CI) denotes if the county rate was significantly higher or lower than the state rate. No + or - after a CI denotes no significant difference. State data were compared to U.S. data. CIs were not calculated for rates based on less than 20 events. See Technical Notes.

## Average Annual Age-Adjusted Death Rates - Stroke Pennsylvania Residents, 2002-2004



## Average Annual Age-Adjusted Death Rates - Motor Vehicle Accidents Pennsylvania Residents, 2002-2004



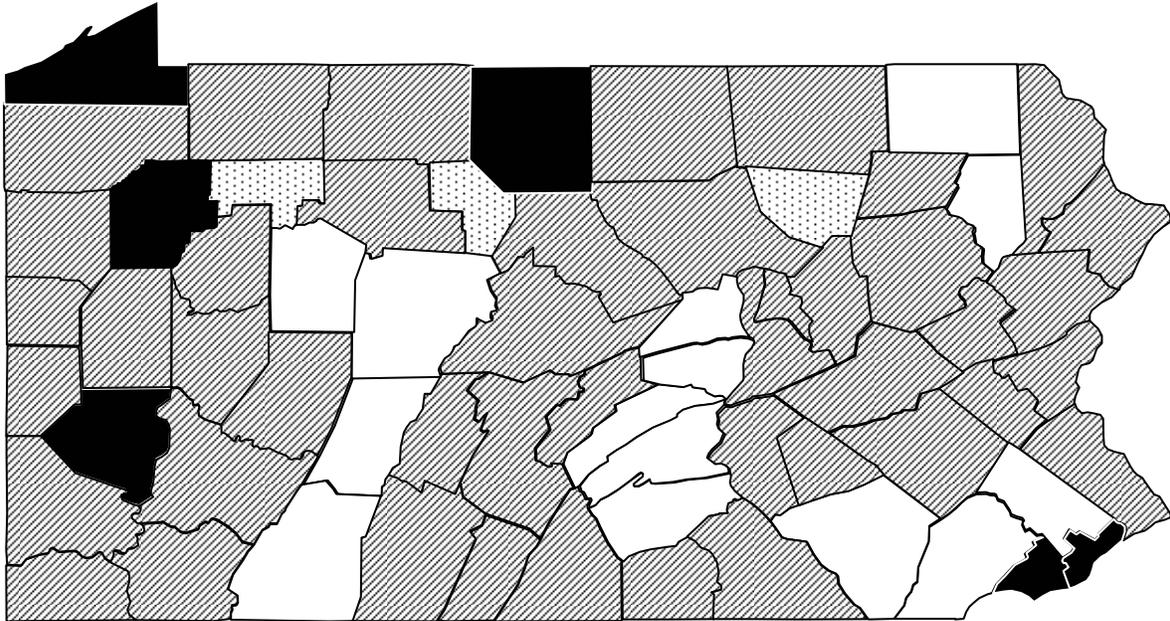
Note: Significance was determined by calculating and comparing county confidence intervals to the state rate. The calculations were not performed for counties that had less than 20 events. Rates for counties with less than 20 events are considered unreliable. See Technical Notes.

## Average Annual Age-Adjusted Death Rates for Selected Causes, 2002-2004

Lung Cancer				Female Breast Cancer			
	No.	Rate	CI (95%)		No.	Rate	CI (95%)
Adams	164	51.5	43.62-59.38	Adams	47	25.6	18.28-32.92
Allegheny	3,005	59.4	57.28-61.52 +	Allegheny	823	28.9	26.93-30.87
Armstrong	157	54.3	45.81-62.79	Armstrong	48	31.7	22.73-40.67
Beaver	417	55.7	50.35-61.05	Beaver	107	26.9	21.80-32.00
Bedford	95	48.6	38.83-58.37	Bedford	26	25.1	15.45-34.75
Berks	671	50.9	47.05-54.75	Berks	195	26.6	22.87-30.33
Blair	281	55.5	49.01-61.99	Blair	75	25.8	19.96-31.64
Bradford	124	52.9	43.59-62.21	Bradford	35	27.0	18.05-35.95
Bucks	970	50.6	47.42-53.78	Bucks	318	29.3	26.08-32.52
Butler	309	50.9	45.22-56.58	Butler	99	28.2	22.64-33.76
Cambria	307	47.1	41.83-52.37 -	Cambria	91	24.8	19.70-29.90
Cameron	17	65.1		Cameron	6	39.6	
Carbon	114	47.1	38.45-55.75	Carbon	39	27.3	18.73-35.87
Centre	165	46.9	39.74-54.06	Centre	30	16.1	10.34-21.86 -
Chester	635	47.6	43.90-51.30 -	Chester	223	29.3	25.45-33.15
Clarion	84	56.2	44.18-68.22	Clarion	20	25.2	14.16-36.24
Clearfield	128	38.7	32.00-45.40 -	Clearfield	37	19.0	12.88-25.12 -
Clinton	75	52.8	40.85-64.75	Clinton	29	35.1	22.32-47.88
Columbia	116	47.9	39.18-56.62	Columbia	37	26.5	17.96-35.04
Crawford	196	59.6	51.26-67.94	Crawford	46	24.8	17.63-31.97
Cumberland	334	42.9	38.30-47.50 -	Cumberland	88	20.1	15.90-24.30 -
Dauphin	422	49.1	44.42-53.78	Dauphin	146	29.8	24.97-34.63
Delaware	1,108	57.2	53.83-60.57 +	Delaware	320	28.9	25.73-32.07
Elk	65	47.2	35.73-58.67	Elk	22	29.0	16.88-41.12
Erie	561	59.5	54.58-64.42 +	Erie	158	29.4	24.82-33.98
Fayette	347	57.4	51.36-63.44	Fayette	81	24.8	19.40-30.20
Forest	11	42.6		Forest	2	26.9	
Franklin	265	52.8	46.44-59.16	Franklin	66	24.8	18.82-30.78
Fulton	22	40.5	23.58-57.42	Fulton	9	31.6	
Greene	81	56.4	44.12-68.68	Greene	22	27.2	15.83-38.57
Huntingdon	78	49.0	38.13-59.87	Huntingdon	15	16.3	
Indiana	153	49.5	41.66-57.34	Indiana	41	24.6	17.07-32.13
Jefferson	78	42.0	32.68-51.32 -	Jefferson	14	13.3	
Juniata	31	35.6	23.07-48.13 -	Juniata	14	26.4	
Lackawanna	419	47.7	43.13-52.27 -	Lackawanna	142	27.7	23.14-32.26
Lancaster	752	46.8	43.46-50.14 -	Lancaster	238	26.6	23.22-29.98
Lawrence	202	50.5	43.54-57.46	Lawrence	53	25.8	18.85-32.75
Lebanon	233	50.0	43.58-56.42	Lebanon	65	25.2	19.07-31.33
Lehigh	597	51.4	47.28-55.52	Lehigh	158	24.3	20.51-28.09
Luzerne	679	50.5	46.70-54.30	Luzerne	221	29.2	25.35-33.05
Lycoming	229	52.0	45.26-58.74	Lycoming	60	25.1	18.75-31.45
McKean	90	52.8	41.89-63.71	McKean	22	25.1	14.61-35.59
Mercer	248	52.3	45.79-58.81	Mercer	65	25.1	19.00-31.20
Mifflin	82	44.3	34.71-53.89	Mifflin	29	27.1	17.24-36.96
Monroe	265	59.2	52.07-66.33	Monroe	74	30.5	23.55-37.45
Montgomery	1,272	47.0	44.42-49.58 -	Montgomery	396	26.1	23.53-28.67
Montour	33	44.9	29.58-60.22	Montour	14	30.0	
Northampton	517	52.2	47.70-56.70	Northampton	129	23.0	19.03-26.97 -
Northumberland	199	50.3	43.31-57.29	Northumberland	62	25.9	19.45-32.35
Perry	60	42.3	31.60-53.00 -	Perry	24	31.1	18.66-43.54
Philadelphia	3,142	67.5	65.14-69.86 +	Philadelphia	894	32.7	30.56-34.84 +
Pike	83	46.7	36.65-56.75	Pike	18	20.4	
Potter	55	79.5	58.49-100.51 +	Potter	16	43.3	
Schuylkill	366	58.2	52.24-64.16	Schuylkill	91	25.8	20.50-31.10
Snyder	53	40.9	29.89-51.91 -	Snyder	15	21.4	
Somerset	144	44.3	37.06-51.54 -	Somerset	47	26.0	18.57-33.43
Sullivan	11	34.1		Sullivan	2	10.0	
Susquehanna	58	37.1	27.55-46.65 -	Susquehanna	11	12.5	
Tioga	70	44.3	33.92-54.68	Tioga	23	28.3	16.73-39.87
Union	39	28.6	19.62-37.58 -	Union	21	30.1	17.23-42.97
Venango	156	70.2	59.18-81.22 +	Venango	36	30.3	20.40-40.20
Warren	93	54.0	43.02-64.98	Warren	22	23.2	13.51-32.89
Washington	476	57.7	52.52-62.88	Washington	112	23.6	19.23-27.97
Wayne	105	51.8	41.89-61.71	Wayne	32	28.9	18.89-38.91
Westmoreland	797	51.5	47.92-55.08	Westmoreland	228	26.6	23.15-30.05
Wyoming	47	49.5	35.35-63.65	Wyoming	13	24.4	
York	658	50.3	46.46-54.14	York	187	26.3	22.53-30.07
Pennsylvania	23,816	53.5	52.82-54.18	Pennsylvania	6,849	27.4	26.75-28.05 +
United States (2004)	157,218	52.9	52.64-53.16	United States (2003)	41,620	25.3	25.06-25.54

NOTE: A+ or - after the confidence interval (CI) denotes if the county rate was significantly higher or lower than the state rate. No + or - after a CI denotes no significant difference. State data were compared to U.S. data. CIs were not calculated for rates based on less than 20 events. See Technical Notes.

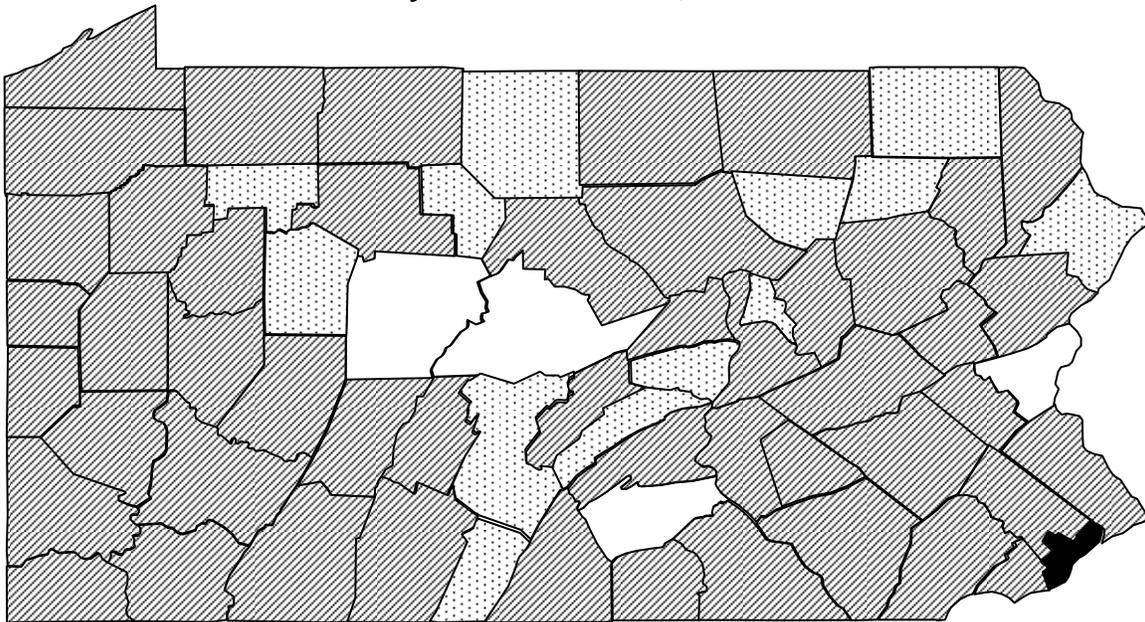
**Average Annual Age-Adjusted Death Rates - Lung Cancer  
Pennsylvania Residents, 2002-2004**



**RATE**

	Significantly lower than the state		Not significantly higher or lower than the state
	Significantly higher than the state		Less than 20 events - statistically unreliable

**Average Annual Age-Adjusted Death Rates - Female Breast Cancer  
Pennsylvania Residents, 2002-2004**



**RATE**

	Significantly lower than the state		Not significantly higher or lower than the state
	Significantly higher than the state		Less than 20 events - statistically unreliable

Note: Significance was determined by calculating and comparing county confidence intervals to the state rate. The calculations were not performed for counties that had less than 20 events. Rates for counties with less than 20 events are considered unreliable. See Technical Notes.

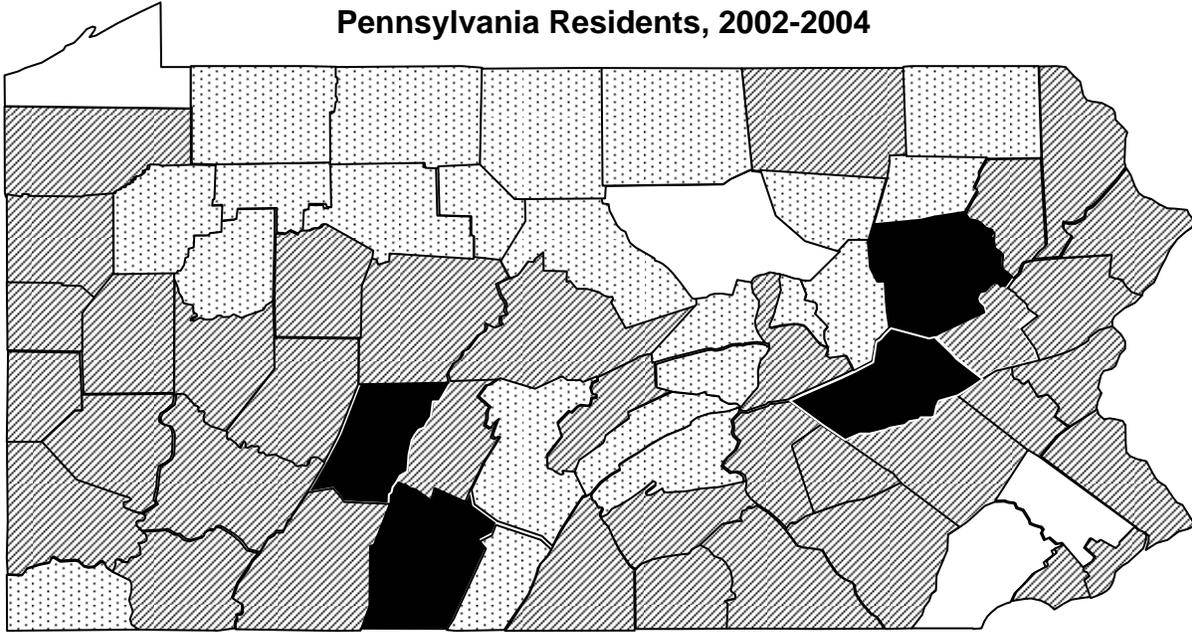
## Average Annual Age-Adjusted Death Rates for Selected Causes, 2002-2004

### Intentional Self-harm

<b>(Suicide)</b>	<b>No.</b>	<b>Rate</b>	<b>CI (95%)</b>	<b>Assault (Homicide)</b>	<b>No.</b>	<b>Rate</b>	<b>CI (95%)</b>
Adams	25	8.5	5.17-11.83	Adams	6	2.2	
Allegheny	457	11.7	10.63-12.77	Allegheny	273	7.6	6.70-8.50 +
Armstrong	21	9.5	5.44-13.56	Armstrong	7	3.8	
Beaver	57	10.1	7.48-12.72	Beaver	12	2.3	
Bedford	28	20.1	12.65-27.55 +	Bedford	3	2.2	
Berks	139	11.7	9.75-13.65	Berks	57	5.1	3.78-6.42
Blair	51	12.6	9.14-16.06	Blair	9	2.3	
Bradford	21	10.6	6.07-15.13	Bradford	7	4.0	
Bucks	186	10.1	8.65-11.55	Bucks	19	1.0	
Butler	56	10.5	7.75-13.25	Butler	2	0.4	
Cambria	69	15.2	11.61-18.79 +	Cambria	13	3.4	
Cameron	1	5.3		Cameron	0	-	
Carbon	31	15.8	10.24-21.36	Carbon	7	3.5	
Centre	37	9.9	6.71-13.09	Centre	6	1.8	
Chester	111	7.9	6.43-9.37 -	Chester	15	1.2	
Clarion	11	9.1		Clarion	3	3.0	
Clearfield	40	14.7	10.14-19.26	Clearfield	1	0.4	
Clinton	9	7.5		Clinton	5	3.2	
Columbia	18	8.3		Columbia	2	1.0	
Crawford	25	8.9	5.41-12.39	Crawford	6	2.1	
Cumberland	65	9.3	7.04-11.56	Cumberland	7	1.2	
Dauphin	71	9.3	7.14-11.46	Dauphin	40	5.7	3.93-7.47
Delaware	157	9.3	7.85-10.75	Delaware	94	5.8	4.63-6.97
Elk	7	7.7		Elk	0	-	
Erie	73	8.6	6.63-10.57 -	Erie	13	1.6	
Fayette	58	13.2	9.80-16.60	Fayette	18	4.6	
Forest	3	19.9		Forest	0	-	
Franklin	38	9.4	6.41-12.39	Franklin	3	0.8	
Fulton	7	16.9		Fulton	0	-	
Greene	16	12.2		Greene	5	4.2	
Huntingdon	15	10.3		Huntingdon	6	4.8	
Indiana	22	8.7	5.06-12.34	Indiana	1	0.4	
Jefferson	24	17.1	10.26-23.94	Jefferson	1	0.9	
Juniata	5	7.4		Juniata	3	4.8	
Lackawanna	84	13.2	10.38-16.02	Lackawanna	12	2.1	
Lancaster	136	9.4	7.82-10.98	Lancaster	37	2.6	1.76-3.44 -
Lawrence	26	8.6	5.29-11.91	Lawrence	5	2.0	
Lebanon	37	9.7	6.57-12.83	Lebanon	9	2.4	
Lehigh	117	12.0	9.83-14.17	Lehigh	27	2.9	1.81-3.99 -
Luzerne	126	13.3	10.98-15.62 +	Luzerne	34	3.8	2.52-5.08 -
Lycoming	29	7.8	4.96-10.64 -	Lycoming	8	2.4	
McKean	18	12.8		McKean	0	-	
Mercer	29	7.9	5.02-10.78	Mercer	6	2.0	
Mifflin	25	17.4	10.58-24.22	Mifflin	2	1.6	
Monroe	50	10.6	7.66-13.54	Monroe	17	3.8	
Montgomery	213	9.0	7.79-10.21 -	Montgomery	58	2.5	1.86-3.14 -
Montour	4	6.1		Montour	0	-	
Northampton	85	9.8	7.72-11.88	Northampton	18	2.2	
Northumberland	21	7.6	4.35-10.85	Northumberland	4	1.5	
Perry	15	10.8		Perry	2	1.7	
Philadelphia	475	10.8	9.83-11.77	Philadelphia	957	20.9	19.58-22.22 +
Pike	23	15.0	8.87-21.13	Pike	5	4.1	
Potter	9	16.2		Potter	1	2.1	
Schuylkill	82	18.1	14.18-22.02 +	Schuylkill	19	4.6	
Snyder	10	8.9		Snyder	1	0.7	
Somerset	27	11.1	6.91-15.29	Somerset	9	3.9	
Sullivan	4	20.9		Sullivan	1	3.0	
Susquehanna	15	11.3		Susquehanna	4	3.5	
Tioga	14	11.9		Tioga	0	-	
Union	15	11.1		Union	1	0.8	
Venango	18	10.4		Venango	4	2.7	
Warren	11	8.3		Warren	3	2.7	
Washington	64	9.5	7.17-11.83	Washington	11	1.9	
Wayne	26	16.8	10.34-23.26	Wayne	3	1.8	
Westmoreland	132	11.6	9.62-13.58	Westmoreland	28	2.9	1.83-3.97 -
Wyoming	14	17.0		Wyoming	4	5.0	
York	145	11.9	9.96-13.84	York	40	3.4	2.35-4.45 -
Pennsylvania	4,053	10.7	10.37-11.03	Pennsylvania	1,974	5.5	5.26-5.74
United States (2004)	31,647	10.7	10.58-10.82	United States (2004)	16,611	5.6	5.51-5.69

NOTE: A+ or - after the confidence interval (CI) denotes if the county rate was significantly higher or lower than the state rate. No + or - after a CI denotes no significant difference. State data were compared to U.S. data. CIs were not calculated for rates based on less than 20 events. See Technical Notes.

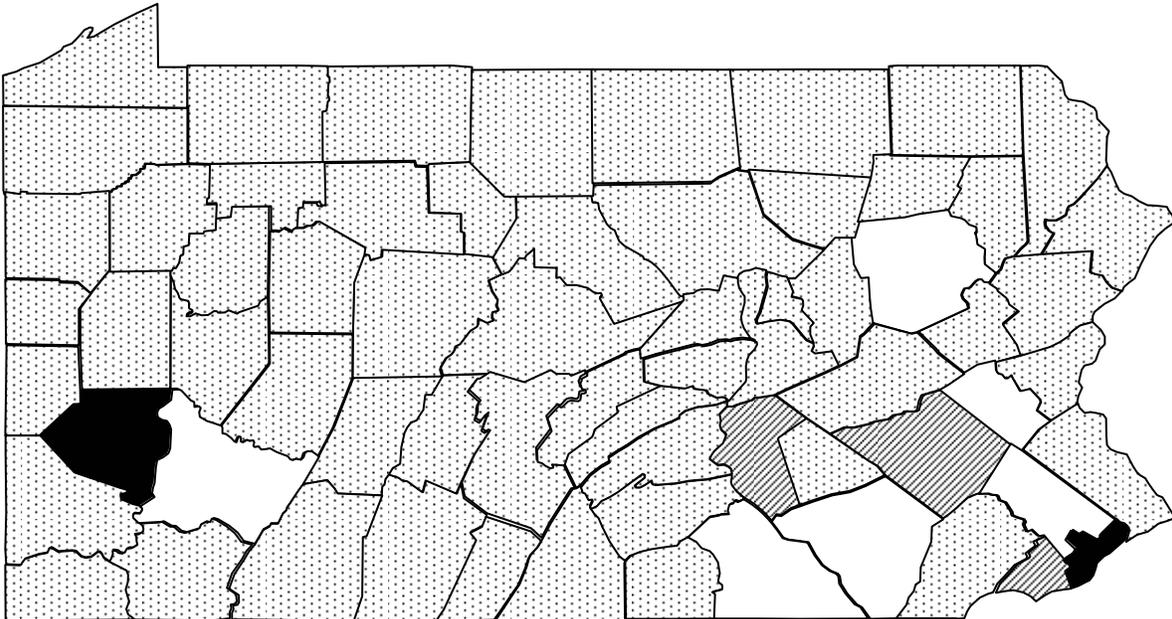
**Average Annual Age-Adjusted Death Rates  
Intentional Self-harm (Suicide)  
Pennsylvania Residents, 2002-2004**



**RATE**

 Significantly lower than the state	 Not significantly higher or lower than the state
 Significantly higher than the state	 Less than 20 events - statistically unreliable

**Average Annual Age-Adjusted Death Rates - Assault (Homicide)  
Pennsylvania Residents, 2002-2004**



**RATE**

 Significantly lower than the state	 Not significantly higher or lower than the state
 Significantly higher than the state	 Less than 20 events - statistically unreliable

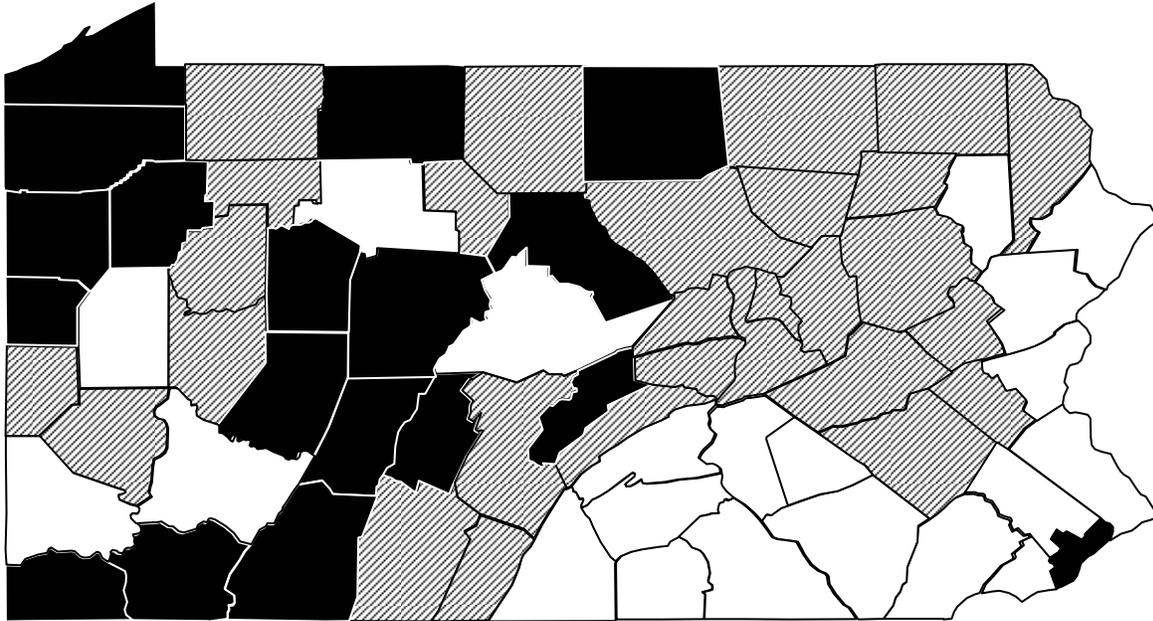
Note: Significance was determined by calculating and comparing county confidence intervals to the state rate. The calculations were not performed for counties that had less than 20 events. Rates for counties with less than 20 events are considered unreliable. See Technical Notes.

## Percent of Children by Age Below Poverty Level, 2003

Related Children				All Children <18			
Ages 5-17 Below Poverty	No.	Pct.	$\mu$ (95%)	Below Poverty	No.	Pct.	$\mu$ (95%)
Adams	1,558	9.3	-4.42 -	Adams	2,288	10.2	-5.81 -
Allegheny	25,920	13.2	0.00	Allegheny	40,626	15.2	1.28
Armstrong	1,657	14.6	1.31	Armstrong	2,489	16.6	1.72
Beaver	3,884	13.5	0.45	Beaver	5,925	15.5	0.97
Bedford	1,223	14.8	1.27	Bedford	1,831	16.4	1.31
Berks	8,567	12.7	-1.14	Berks	13,411	14.5	-1.00
Blair	3,207	16.0	3.47 +	Blair	4,950	18.0	4.24 +
Bradford	1,597	14.5	1.20	Bradford	2,419	16.4	1.50
Bucks	6,302	5.7	-21.85 -	Bucks	9,828	6.6	-26.44 -
Butler	2,418	7.8	-8.33 -	Butler	4,246	10.2	-7.92 -
Cambria	3,270	15.0	2.33 +	Cambria	4,991	16.9	2.84 +
Cameron	134	14.0	0.22	Cameron	190	15.3	0.12
Carbon	1,133	12.1	-0.93	Carbon	1,742	13.9	-0.92
Centre	1,752	10.4	-3.18 -	Centre	2,685	11.6	-4.14 -
Chester	4,796	5.7	-19.06 -	Chester	7,439	6.4	-23.92 -
Clarion	923	15.1	1.30	Clarion	1,374	16.9	1.49
Clearfield	2,196	16.8	3.61 +	Clearfield	3,301	19.2	4.65 +
Clinton	934	16.9	2.41 +	Clinton	1,386	18.1	2.31 +
Columbia	1,185	12.9	-0.25	Columbia	1,827	14.8	-0.09
Crawford	2,504	16.7	3.76 +	Crawford	3,875	18.9	4.73 +
Cumberland	2,197	6.4	-11.04 -	Cumberland	3,436	7.5	-13.07 -
Dauphin	4,440	10.2	-5.48 -	Dauphin	7,303	12.2	-5.45 -
Delaware	10,327	10.5	-7.42 -	Delaware	15,828	11.9	-9.03 -
Elk	576	10.2	-1.98 -	Elk	874	11.7	-2.28 -
Erie	8,144	16.7	6.77 +	Erie	12,632	19.0	8.73 +
Fayette	5,277	22.7	12.69 +	Fayette	7,840	25.2	15.00 +
Forest	142	21.7	1.91	Forest	226	22.5	1.99 +
Franklin	2,433	10.9	-3.01 -	Franklin	3,695	12.0	-4.20 -
Fulton	340	13.6	0.18	Fulton	492	14.7	-0.10
Greene	1,198	19.4	4.27 +	Greene	1,776	21.8	5.14 +
Huntingdon	1,056	15.6	1.73	Huntingdon	1,573	16.9	1.59
Indiana	2,185	17.4	4.12 +	Indiana	3,335	19.8	5.25 +
Jefferson	1,212	16.4	2.41 +	Jefferson	1,808	18.1	2.64 +
Juniata	449	11.2	-1.11	Juniata	667	11.9	-1.85
Lackawanna	3,819	11.8	-2.21 -	Lackawanna	6,404	14.7	-0.34
Lancaster	9,915	10.9	-6.08 -	Lancaster	15,741	12.5	-7.03 -
Lawrence	2,525	16.6	3.67 +	Lawrence	3,807	18.6	4.37 +
Lebanon	2,345	11.5	-2.13 -	Lebanon	3,632	12.9	-2.77 -
Lehigh	6,978	12.6	-1.24	Lehigh	10,878	14.3	-1.37
Luzerne	5,959	12.8	-0.76	Luzerne	9,548	15.3	0.82
Lycoming	2,690	14.3	1.32	Lycoming	4,129	16.2	1.71
McKean	1,190	16.3	2.32 +	McKean	1,769	18.1	2.61 +
Mercer	3,255	16.8	4.39 +	Mercer	4,939	19.0	5.46 +
Mifflin	1,359	17.1	3.05 +	Mifflin	2,055	18.8	3.37 +
Monroe	3,027	10.0	-4.88 -	Monroe	4,567	11.6	-5.40 -
Montgomery	7,429	5.6	-24.25 -	Montgomery	11,470	6.3	-30.29 -
Montour	355	11.8	-0.67	Montour	531	12.9	-1.06
Northampton	4,071	8.7	-8.53 -	Northampton	6,260	10.1	-9.86 -
Northumberland	1,852	13.5	0.31	Northumberland	2,692	14.4	-0.56
Perry	822	10.6	-2.01 -	Perry	1,227	11.8	-2.61 -
Philadelphia	70,886	27.1	62.29 +	Philadelphia	105,457	28.5	68.28 +
Pike	903	8.6	-4.13 -	Pike	1,314	10.1	-4.52 -
Potter	522	16.1	1.45	Potter	766	17.6	1.47
Schuylkill	2,673	12.5	-0.90	Schuylkill	4,114	14.2	-0.98
Snyder	779	12.3	-0.63	Snyder	1,060	12.4	-1.91
Somerset	1,992	16.3	3.00 +	Somerset	2,971	18.3	3.58 +
Sullivan	127	14.6	0.36	Sullivan	191	14.9	0.00
Susquehanna	1,130	15.3	1.58	Susquehanna	1,664	17.1	1.79
Tioga	1,066	16.1	2.07 +	Tioga	1,565	17.5	2.03 +
Union	617	10.5	-1.81	Union	912	11.5	-2.50 -
Venango	1,628	17.5	3.63 +	Venango	2,451	19.9	4.58 +
Warren	1,045	14.7	1.11	Warren	1,542	16.3	1.12
Washington	3,830	11.8	-2.21 -	Washington	5,720	13.2	-2.92 -
Wayne	1,185	14.3	0.88	Wayne	1,750	16.1	1.03
Westmoreland	6,407	11.1	-4.42 -	Westmoreland	10,043	13.2	-3.87 -
Wyoming	616	12.9	-0.18	Wyoming	907	14.2	-0.46
York	6,368	9.2	-9.22 -	York	9,701	10.4	-11.34 -
Pennsylvania	274,501	13.2	-33.18 -	Pennsylvania	420,086	14.9	-34.50 -
United States (2003)	8,399,573	16.1		United States (2003)	12,865,806	17.6	

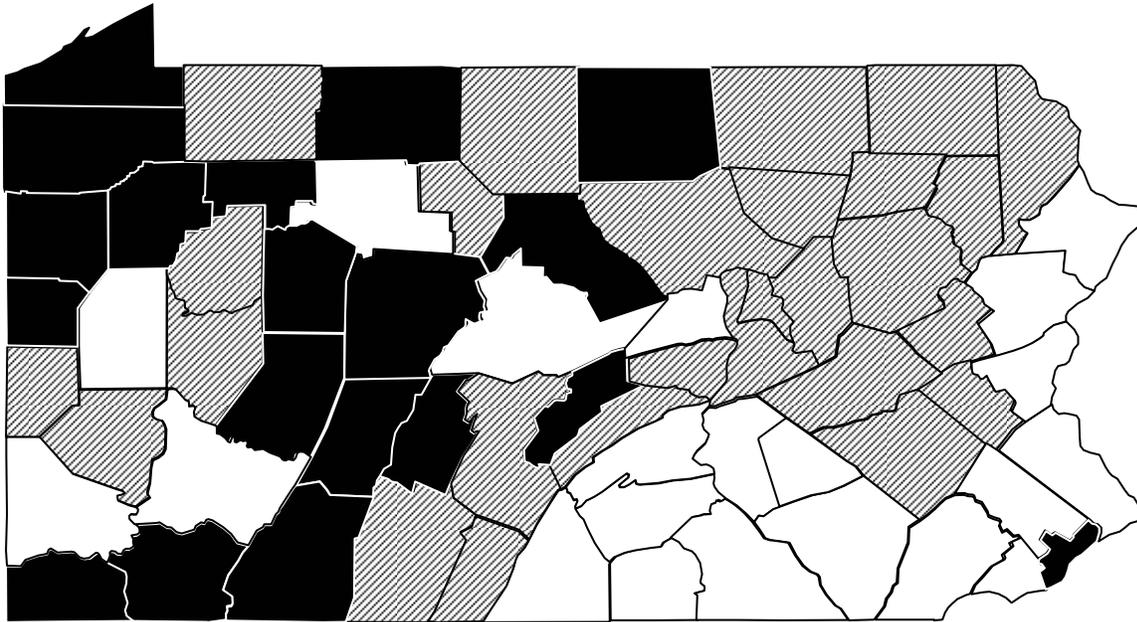
NOTE: A+ or - after the value of  $\mu$  denotes if the county rate was significantly higher or lower than the state rate. No + or - after the  $\mu$  value denotes no significant difference. State data were compared to U.S. data. Two separate formulas computed the  $\mu$  values, depending on the number of events. See Technical Notes.

**Percent of Children 5-17 Related to Persons with Income Below Poverty Level  
Pennsylvania Residents, 2003**



PERCENT  Significantly lower than the state  Not significantly higher or lower than the state  Significantly higher than the state

**Percent of Children Under 18 Living Below Poverty Level  
Pennsylvania Residents, 2003**



PERCENT  Significantly lower than the state  Not significantly higher or lower than the state  Significantly higher than the state

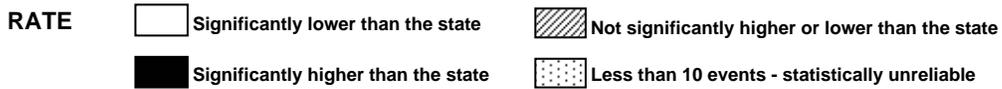
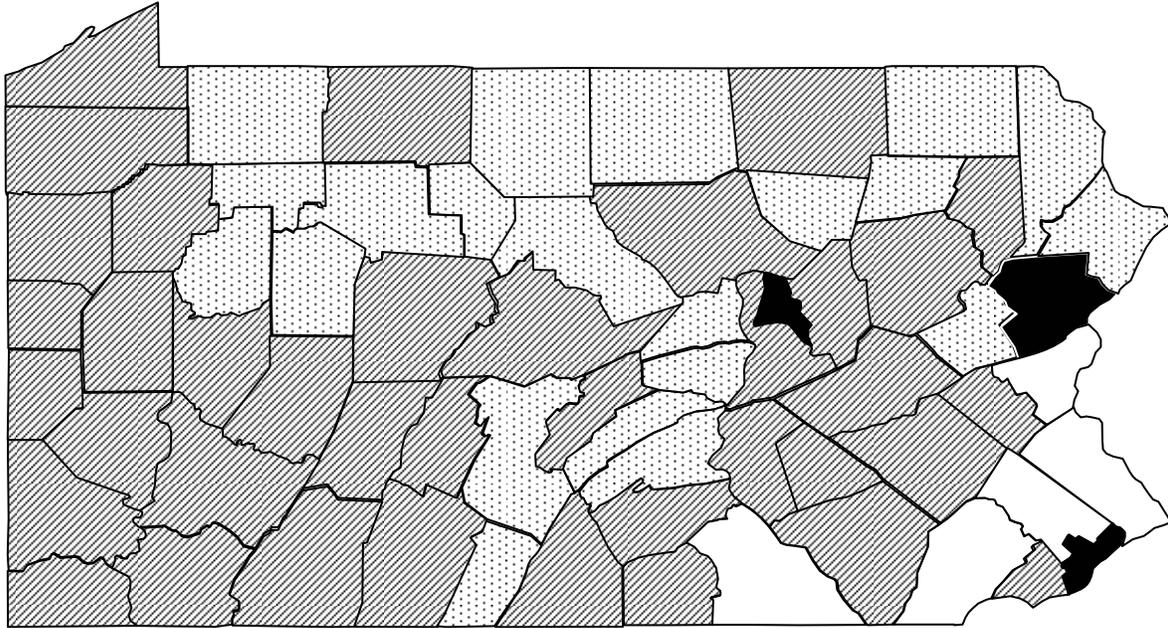
Note: Significance is determined by calculating county  $\mu$  values. The calculations were not performed for counties that had less than 10 events. Rates for counties with less than 10 events are considered unreliable. See Technical Notes

## Infant Death Rates, 2002-04, and Percent Low Birth Weight, 2004

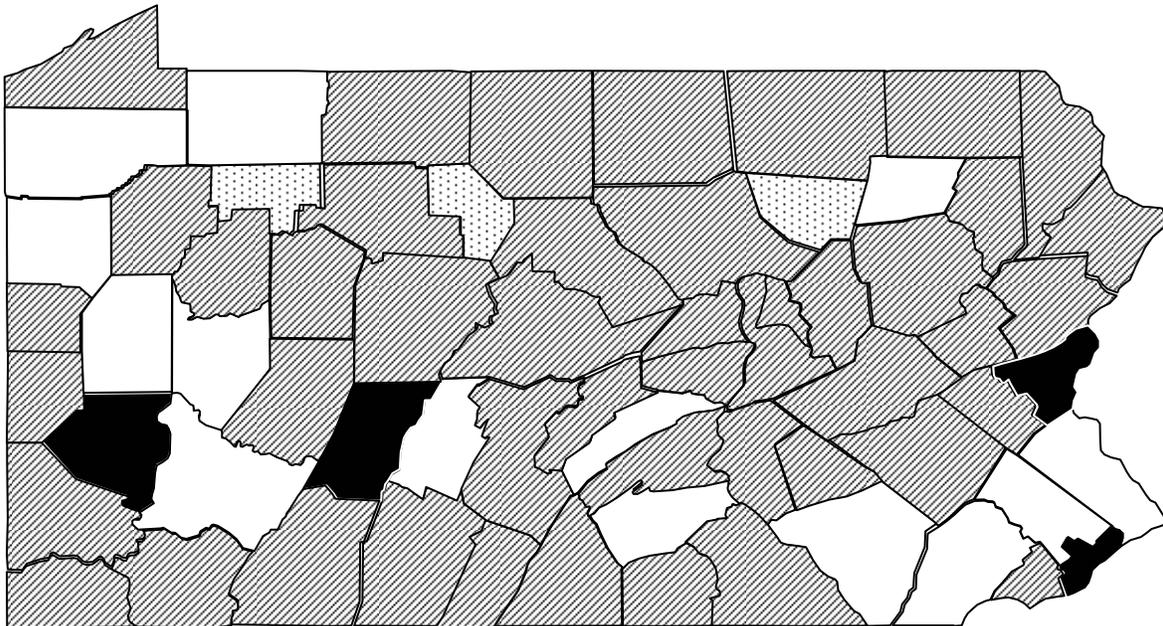
2002-2004 Infant Death Rates				Percent Low Birth Weight			
	No.	Rate	$\mu$ (95%)		No.	Pct.	$\mu$ (95%)
Adams	24	7.6	0.20	Adams	91	8.3	0.12
Allegheny	325	8.1	1.89	Allegheny	1,167	8.9	2.92 +
Armstrong	13	6.1	-0.64	Armstrong	41	5.7	-2.34 -
Beaver	34	6.3	-0.88	Beaver	141	8.0	-0.31
Bedford	14	8.9	0.73	Bedford	41	8.5	0.23
Berks	106	7.3	0.00	Berks	395	8.0	-0.51
Blair	26	5.9	-1.05	Blair	93	6.3	-2.55 -
Bradford	16	7.3	-0.01	Bradford	64	8.3	0.10
Bucks	127	6.1	-2.03 -	Bucks	452	6.6	-4.83 -
Butler	36	5.9	-1.33	Butler	126	6.2	-3.29 -
Cambria	26	5.8	-1.18	Cambria	154	10.2	2.83 +
Cameron	0	-		Cameron	0	-	
Carbon	9	4.8		Carbon	43	7.0	-1.04
Centre	26	6.7	-0.41	Centre	90	7.2	-1.23
Chester	105	5.8	-2.36 -	Chester	420	7.0	-3.39 -
Clarion	3	2.6		Clarion	39	9.8	1.11
Clearfield	20	8.2	0.54	Clearfield	56	6.8	-1.40
Clinton	7	5.6		Clinton	26	6.1	-1.51
Columbia	17	9.0	0.85	Columbia	47	7.8	-0.34
Crawford	22	7.1	-0.10	Crawford	59	5.7	-2.81 -
Cumberland	43	6.3	-0.93	Cumberland	143	6.3	-3.30 -
Dauphin	73	7.6	0.39	Dauphin	263	8.2	0.00
Delaware	160	7.9	1.00	Delaware	530	7.9	-0.90
Elk	6	6.3		Elk	27	8.7	0.31
Erie	75	7.5	0.28	Erie	273	8.3	0.21
Fayette	27	6.1	-0.91	Fayette	123	8.7	0.69
Forest	3	30.6		Forest	5	13.5	
Franklin	29	5.9	-1.13	Franklin	121	7.2	-1.49
Fulton	1	2.1		Fulton	15	9.3	0.49
Greene	11	9.1	0.72	Greene	30	6.8	-1.03
Huntingdon	8	6.1		Huntingdon	26	6.3	-1.35
Indiana	15	5.8	-0.92	Indiana	72	8.4	0.20
Jefferson	8	5.3		Jefferson	32	6.7	-1.14
Juniata	8	8.7		Juniata	15	4.9	-2.02 -
Lackawanna	41	6.4	-0.88	Lackawanna	174	7.7	-0.87
Lancaster	160	7.9	1.00	Lancaster	424	6.2	-6.03 -
Lawrence	28	9.6	1.45	Lawrence	93	10.0	1.92
Lebanon	23	5.1	-1.69	Lebanon	120	7.8	-0.57
Lehigh	70	5.8	-1.88	Lehigh	310	7.5	-1.64
Luzerne	66	7.2	-0.12	Luzerne	246	7.9	-0.61
Lycoming	24	6.1	-0.92	Lycoming	100	7.5	-0.93
McKean	16	11.3	1.78	McKean	33	7.6	-0.44
Mercer	32	8.6	0.94	Mercer	77	6.3	-2.32 -
Mifflin	18	10.3	1.45	Mifflin	34	6.1	-1.73
Monroe	50	10.8	2.80 +	Monroe	136	9.1	1.27
Montgomery	160	5.6	-3.39 -	Montgomery	683	7.2	-3.55 -
Montour	10	15.8	2.50 +	Montour	11	5.3	-1.46
Northampton	44	4.9	-2.71 -	Northampton	281	9.2	2.01 +
Northumberland	21	7.4	0.06	Northumberland	92	10.0	1.91
Perry	9	5.7		Perry	38	6.9	-1.07
Philadelphia	689	10.6	9.89 +	Philadelphia	2,442	11.4	17.07 +
Pike	5	4.3		Pike	24	6.5	-1.14
Potter	6	9.7		Potter	10	5.2	-1.45
Schuylkill	20	4.8	-1.90	Schuylkill	90	6.7	-1.92
Snyder	7	5.1		Snyder	30	6.6	-1.19
Somerset	12	5.3	-1.09	Somerset	54	7.5	-0.66
Sullivan	1	6.8		Sullivan	3	5.8	
Susquehanna	5	3.9		Susquehanna	27	6.7	-1.05
Tioga	9	7.0		Tioga	23	5.9	-1.59
Union	7	5.6		Union	33	7.9	-0.21
Venango	12	6.9	-0.17	Venango	38	6.4	-1.53
Warren	8	6.4		Warren	22	5.4	-1.97 -
Washington	34	5.4	-1.72	Washington	150	7.4	-1.31
Wayne	3	2.1		Wayne	30	6.6	-1.19
Westmoreland	70	6.8	-0.61	Westmoreland	238	7.1	-2.32 -
Wyoming	2	2.2		Wyoming	16	5.0	-2.00 -
York	82	5.7	-2.19 -	York	404	8.2	0.00
Pennsylvania	3,167	7.3	4.00 +	Pennsylvania	11,706	8.2	1.38
United States (2004)	27,838	6.8		United States (2004)	331,772	8.1	

NOTE: A+ or - after the value of  $\mu$  denotes if the county rate was significantly higher or lower than the state rate. No + or - after the  $\mu$  value denotes no significant difference. State data were compared to U.S. data. Two separate formulas computed the  $\mu$  values, depending on the number of events. See Technical Notes.

## Infant Death Rates Pennsylvania Residents, 2002-2004



## Percent Low Birth Weight Pennsylvania Resident Live Births, 2004



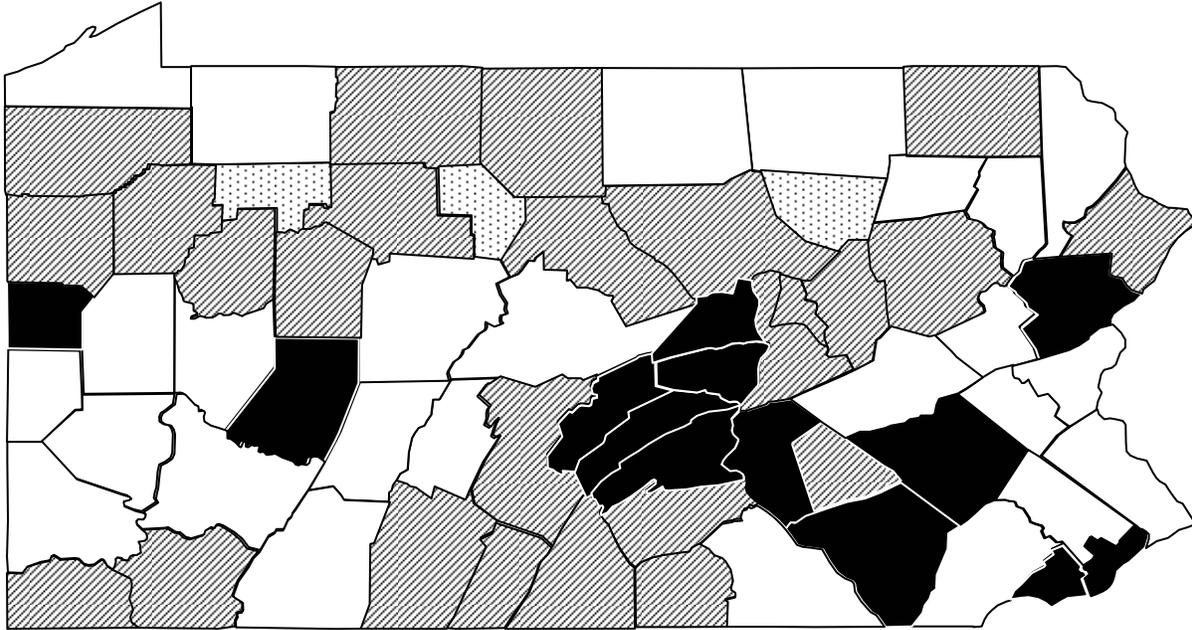
Note: Significance is determined by calculating county  $\mu$  values. The calculations were not performed for counties that had less than 10 events. Rates for counties with less than 10 events are considered unreliable. See Technical Notes

## Percent No Prenatal Care in First Trimester and Teen Births, 2004

No Prenatal Care				Births to			
First Trimester	No.	Pct.	$\mu$ (95%)	Mothers <18	No.	Pct.	$\mu$ (95%)
Adams	151	16.9	-1.38	Adams	33	3.0	-0.19
Allegheny	1,284	11.0	-21.34 -	Allegheny	359	2.7	-2.66 -
Armstrong	92	13.7	-3.00 -	Armstrong	20	2.8	-0.46
Beaver	239	15.8	-2.89 -	Beaver	50	2.8	-0.72
Bedford	64	15.2	-1.66	Bedford	4	0.8	
Berks	959	21.8	5.27 +	Berks	209	4.2	4.48 +
Blair	171	12.5	-5.88 -	Blair	53	3.6	1.09
Bradford	99	15.3	-2.00 -	Bradford	20	2.6	-0.79
Bucks	732	15.1	-6.43 -	Bucks	76	1.1	-9.44 -
Butler	215	11.4	-8.13 -	Butler	28	1.4	-4.32 -
Cambria	204	14.4	-4.15 -	Cambria	58	3.8	1.55
Cameron	7	14.6		Cameron	2	3.8	
Carbon	67	13.1	-2.93 -	Carbon	17	2.8	-0.42
Centre	156	13.7	-4.33 -	Centre	8	0.6	
Chester	828	16.7	-3.61 -	Chester	77	1.3	-7.87 -
Clarion	56	15.0	-1.65	Clarion	10	2.5	-0.68
Clearfield	116	14.9	-2.72 -	Clearfield	16	1.9	-1.98 -
Clinton	72	19.4	0.31	Clinton	12	2.8	-0.35
Columbia	102	18.3	-0.24	Columbia	13	2.2	-1.24
Crawford	189	21.2	1.91	Crawford	28	2.7	-0.73
Cumberland	378	19.2	0.57	Cumberland	35	1.5	-4.39 -
Dauphin	519	20.6	2.45 +	Dauphin	130	4.0	2.96 +
Delaware	1,161	19.8	2.16 +	Delaware	172	2.5	-2.87 -
Elk	45	16.0	-1.05	Elk	5	1.6	
Erie	429	14.9	-5.23 -	Erie	111	3.4	0.99
Fayette	253	20.8	1.88	Fayette	53	3.8	1.48
Forest	6	18.2		Forest	0	-	
Franklin	253	18.6	-0.09	Franklin	47	2.8	-0.70
Fulton	24	19.2	0.13	Fulton	3	1.9	
Greene	46	16.8	-0.73	Greene	12	2.7	-0.48
Huntingdon	57	14.9	-1.72	Huntingdon	14	3.4	0.35
Indiana	185	23.0	3.13 +	Indiana	16	1.9	-1.98 -
Jefferson	99	22.1	1.66	Jefferson	10	2.1	-1.24
Juniata	81	28.6	3.85 +	Juniata	8	2.6	
Lackawanna	321	15.8	-3.35 -	Lackawanna	53	2.4	-1.87
Lancaster	1,327	21.7	6.02 +	Lancaster	166	2.4	-3.36 -
Lawrence	194	22.5	2.86 +	Lawrence	20	2.1	-1.75
Lebanon	250	19.9	1.09	Lebanon	40	2.6	-1.11
Lehigh	569	16.7	-2.99 -	Lehigh	176	4.2	4.11 +
Luzerne	468	17.6	-1.45	Luzerne	82	2.6	-1.59
Lycoming	240	19.1	0.36	Lycoming	54	4.0	1.88
McKean	52	14.6	-1.79	McKean	16	3.7	0.71
Mercer	219	18.8	0.09	Mercer	33	2.7	-0.79
Mifflin	147	28.7	5.80 +	Mifflin	17	3.1	0.00
Monroe	248	21.1	2.11 +	Monroe	30	1.9	-2.71 -
Montgomery	1,205	14.9	-8.76 -	Montgomery	136	1.4	-9.67 -
Montour	33	17.5	-0.38	Montour	2	1.0	
Northampton	379	15.0	-4.77 -	Northampton	71	2.3	-2.52 -
Northumberland	144	16.6	-1.59	Northumberland	24	2.6	-0.86
Perry	109	23.6	2.70 +	Perry	10	1.8	-1.74
Philadelphia	5,076	34.4	48.91 +	Philadelphia	1,393	6.5	28.72 +
Pike	29	20.4	0.47	Pike	2	0.5	
Potter	31	22.0	0.91	Potter	7	3.6	
Schuylkill	126	10.5	-7.29 -	Schuylkill	38	2.8	-0.63
Snyder	109	25.6	3.65 +	Snyder	8	1.8	
Somerset	78	12.4	-3.65 -	Somerset	7	1.0	
Sullivan	8	16.7		Sullivan	3	5.8	
Susquehanna	38	17.6	-0.37	Susquehanna	11	2.7	-0.46
Tioga	31	10.0	-3.54 -	Tioga	9	2.3	
Union	90	23.2	2.05 +	Union	11	2.6	-0.58
Venango	113	20.2	0.91	Venango	13	2.2	-1.24
Warren	44	13.2	-2.32 -	Warren	10	2.5	-0.68
Washington	204	11.1	-8.36 -	Washington	56	2.8	-0.76
Wayne	48	12.5	-2.81 -	Wayne	2	0.4	
Westmoreland	390	12.5	-8.88 -	Westmoreland	51	1.5	-5.30 -
Wyoming	39	13.5	-2.04 -	Wyoming	5	1.6	
York	654	16.0	-4.43 -	York	130	2.6	-2.04 -
Pennsylvania	22,352	18.7	-65.34 -	Pennsylvania	4,395	3.1	-6.23 -
United States (2004)	139,115	27.1		United States (2004)	140,761	3.4	

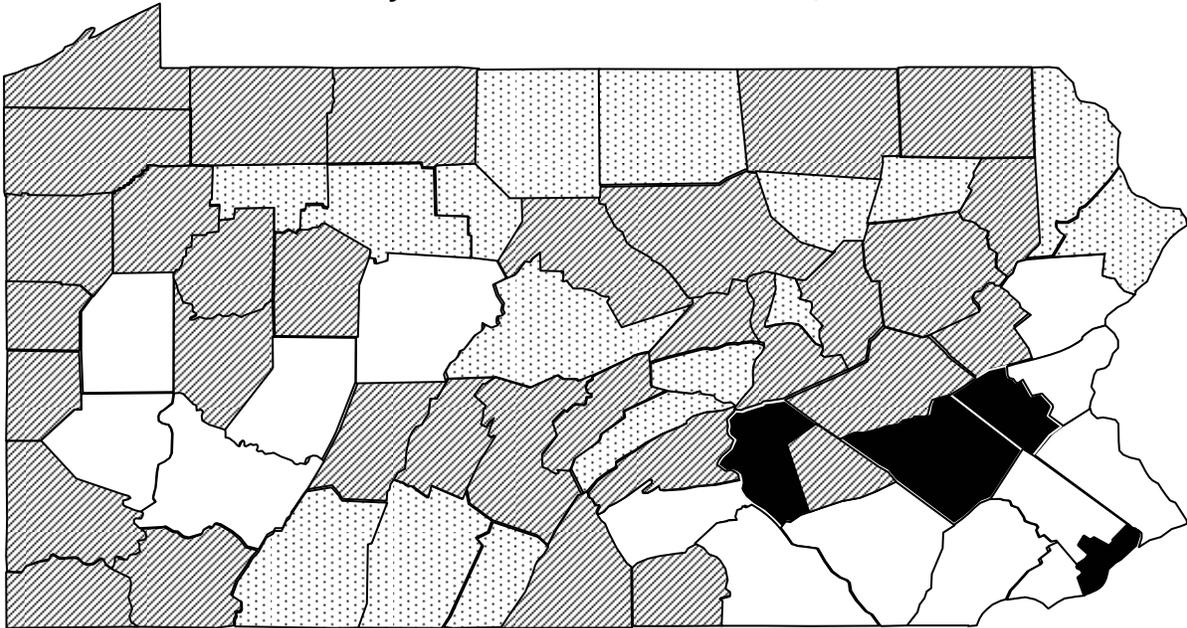
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**Percent with No Prenatal Care in First Trimester  
Pennsylvania Resident Live Births, 2004**



**PERCENT**    Significantly lower than the state    Not significantly higher or lower than the state  
                    Significantly higher than the state    Less than 10 events - statistically unreliable

**Percent of Births to Mothers Under 18  
Pennsylvania Resident Live Births, 2004**



**PERCENT**    Significantly lower than the state    Not significantly higher or lower than the state  
                    Significantly higher than the state    Less than 10 events - statistically unreliable

Note: Significance is determined by calculating county  $\mu$  values. The calculations were not performed for counties that had less than 10 events. Rates for counties with less than 10 events are considered unreliable. See Technical Notes

## Infant Death Rates, Total and By Race/Ethnicity

2004

<b>Infant Deaths</b>	<b>No.</b>	<b>Rate</b>
Adams	8	7.3
Allegheny	97	7.3
Armstrong	1	1.4
Beaver	12	6.8
Bedford	2	4.2
Berks	33	6.7
Blair	7	4.8
Bradford	8	10.3
Bucks	47	6.9
Butler	15	7.3
Cambria	6	4.0
Cameron	0	-
Carbon	3	4.9
Centre	8	6.4
Chester	42	7.0
Clarion	0	-
Clearfield	7	8.5
Clinton	4	9.4
Columbia	3	5.0
Crawford	6	5.8
Cumberland	13	5.7
Dauphin	24	7.4
Delaware	56	8.3
Elk	0	-
Erie	19	5.8
Fayette	11	7.8
Forest	1	27.0
Franklin	13	7.7
Fulton	1	6.2
Greene	4	9.1
Huntingdon	1	2.4
Indiana	3	3.5
Jefferson	2	4.2
Juniata	5	16.3
Lackawanna	13	5.8
Lancaster	56	8.2
Lawrence	12	12.8
Lebanon	7	4.6
Lehigh	15	3.6
Luzerne	14	4.5
Lycoming	3	2.2
McKean	6	13.8
Mercer	10	8.2
Mifflin	3	5.4
Monroe	17	11.0
Montgomery	55	5.7
Montour	1	4.8
Northampton	16	5.2
Northumberland	8	8.6
Perry	5	9.1
Philadelphia	231	10.7
Pike	2	5.2
Potter	2	10.4
Schuylkill	4	3.0
Snyder	0	-
Somerset	2	2.8
Sullivan	0	-
Susquehanna	2	4.9
Tioga	3	7.7
Union	4	9.5
Venango	3	5.0
Warren	4	9.9
Washington	11	5.4
Wayne	2	4.4
Westmoreland	22	6.5
Wyoming	0	-
York	31	6.3
Pennsylvania	1,026	7.1
United States (2004)	27,838	6.8

**2004 Infant Deaths:**

<b>White</b>	<b>No.</b>	<b>Rate</b>
Allegheny	50	5.1
Berks	30	7.9
Bucks	41	7.0
Chester	30	6.0
Dauphin	15	7.3
Delaware	33	7.4
Erie	14	5.1
Lancaster	52	9.0
Lehigh	13	4.8
Montgomery	41	5.4
Northampton	12	4.9
Philadelphia	52	8.6
Pennsylvania	682	6.3
U.S. (2004)	18,240	5.7

<b>Black</b>	<b>No.</b>	<b>Rate</b>
Allegheny	43	16.3
Bucks	2	7.8
Chester	9	27.7
Dauphin	9	12.8
Delaware	20	12.4
Erie	4	11.5
Montgomery	8	10.0
Philadelphia	169	15.8
Pennsylvania	299	15.0
U.S. (2004)	8,359	13.7

<b>Hispanic</b>	<b>No.</b>	<b>Rate</b>
Berks	17	13.3
Chester	7	10.6
Lancaster	6	8.3
Lehigh	5	4.3
Montgomery	6	10.4
Northampton	5	11.1
Philadelphia	26	7.7
Pennsylvania	93	8.1
U.S. (2004)	5,262	5.6

**2002-04 Infant Deaths:**

<b>White</b>	<b>No.</b>	<b>Rate</b>
Allegheny	164	5.4
Berks	95	7.7
Bucks	109	6.0
Chester	83	5.4
Dauphin	41	6.4
Delaware	83	6.0
Erie	47	5.6
Lancaster	150	8.4
Lehigh	56	6.3
Montgomery	123	5.3
Northampton	37	4.8
Philadelphia	174	8.4
Pennsylvania	2,128	6.3

<b>Black</b>	<b>No.</b>	<b>Rate</b>
Allegheny	153	19.8
Bucks	11	13.1
Chester	16	15.5
Dauphin	30	15.0
Delaware	69	14.9
Erie	25	24.0
Montgomery	29	12.5
Philadelphia	470	14.4
Pennsylvania	918	15.4

<b>Hispanic</b>	<b>No.</b>	<b>Rate</b>
Berks	39	11.3
Chester	16	9.7
Lancaster	19	9.2
Lehigh	21	7.1
Montgomery	10	6.6
Northampton	10	8.1
Philadelphia	71	7.5
Pennsylvania	254	8.2

<b>Asian and Pacific Islander</b>	<b>No.</b>	<b>Rate</b>
Allegheny	4	2.7
Delaware	6	5.4
Montgomery	5	2.4
Philadelphia	13	3.4
Pennsylvania	52	3.8

NOTES: Rates based on small numbers can be unreliable. See Technical Notes. Hispanics can be of any race.

## Average Annual Incidence Rates for Selected Diseases, 2002-2004

<b>Syphilis</b>	<b>No.</b>	<b>Rate</b>	<b>AIDS</b>	<b>No.</b>	<b>Rate</b>	<b>Tuberculosis</b>	<b>No.</b>	<b>Rate</b>
Adams	0	-	Adams	7	2.4	Adams	9	3.1
Allegheny	45	1.2	Allegheny	313	8.3	Allegheny	76	2.0
Armstrong	6	2.8	Armstrong	5	2.3	Armstrong	0	-
Beaver	1	0.2	Beaver	17	3.2	Beaver	5	0.9
Bedford	0	-	Bedford	1	0.7	Bedford	1	0.7
Berks	0	-	Berks	97	8.4	Berks	30	2.6
Blair	0	-	Blair	14	3.7	Blair	2	0.5
Bradford	0	-	Bradford	0	-	Bradford	3	1.6
Bucks	13	0.7	Bucks	41	2.2	Bucks	41	2.2
Butler	2	0.4	Butler	5	0.9	Butler	6	1.1
Cambria	0	-	Cambria	16	3.6	Cambria	6	1.3
Cameron	0	-	Cameron	0	-	Cameron	1	5.8
Carbon	0	-	Carbon	3	1.7	Carbon	3	1.7
Centre	1	0.2	Centre	5	1.2	Centre	11	2.6
Chester	0	-	Chester	63	4.6	Chester	18	1.3
Clarion	1	0.8	Clarion	1	0.8	Clarion	2	1.6
Clearfield	0	-	Clearfield	9	3.6	Clearfield	1	0.4
Clinton	0	-	Clinton	1	0.9	Clinton	0	-
Columbia	1	0.5	Columbia	3	1.5	Columbia	2	1.0
Crawford	1	0.4	Crawford	7	2.6	Crawford	3	1.1
Cumberland	0	-	Cumberland	41	6.2	Cumberland	19	2.9
Dauphin	4	0.5	Dauphin	74	9.7	Dauphin	26	3.4
Delaware	2	0.1	Delaware	146	8.8	Delaware	52	3.1
Elk	0	-	Elk	1	1.0	Elk	0	-
Erie	2	0.2	Erie	33	3.9	Erie	30	3.6
Fayette	0	-	Fayette	5	1.1	Fayette	6	1.4
Forest	0	-	Forest	0	-	Forest	0	-
Franklin	0	-	Franklin	11	2.8	Franklin	8	2.0
Fulton	0	-	Fulton	0	-	Fulton	1	2.3
Greene	0	-	Greene	1	0.8	Greene	0	-
Huntingdon	0	-	Huntingdon	5	3.6	Huntingdon	4	2.9
Indiana	0	-	Indiana	6	2.2	Indiana	0	-
Jefferson	0	-	Jefferson	0	-	Jefferson	0	-
Juniata	0	-	Juniata	2	2.9	Juniata	2	2.9
Lackawanna	0	-	Lackawanna	19	3.0	Lackawanna	17	2.7
Lancaster	6	0.4	Lancaster	81	5.6	Lancaster	24	1.7
Lawrence	0	-	Lawrence	6	2.1	Lawrence	2	0.7
Lebanon	0	-	Lebanon	10	2.7	Lebanon	5	1.4
Lehigh	4	0.4	Lehigh	101	10.5	Lehigh	21	2.2
Luzerne	1	0.1	Luzerne	35	3.7	Luzerne	16	1.7
Lycoming	0	-	Lycoming	24	6.7	Lycoming	1	0.3
McKean	0	-	McKean	6	4.5	McKean	2	1.5
Mercer	0	-	Mercer	11	3.1	Mercer	4	1.1
Mifflin	0	-	Mifflin	0	-	Mifflin	5	3.6
Monroe	0	-	Monroe	45	9.7	Monroe	5	1.1
Montgomery	20	0.9	Montgomery	99	4.3	Montgomery	74	3.2
Montour	0	-	Montour	2	3.7	Montour	0	-
Northampton	1	0.1	Northampton	51	6.1	Northampton	18	2.2
Northumberland	1	0.4	Northumberland	8	2.9	Northumberland	2	0.7
Perry	0	-	Perry	3	2.3	Perry	1	0.8
Philadelphia	240	5.4	Philadelphia	2,531	57.0	Philadelphia	396	8.9
Pike	0	-	Pike	11	7.0	Pike	1	0.6
Potter	0	-	Potter	0	-	Potter	0	-
Schuylkill	0	-	Schuylkill	14	3.2	Schuylkill	6	1.4
Snyder	0	-	Snyder	1	0.9	Snyder	0	-
Somerset	1	0.4	Somerset	7	2.9	Somerset	4	1.7
Sullivan	0	-	Sullivan	1	5.2	Sullivan	0	-
Susquehanna	1	0.8	Susquehanna	4	3.2	Susquehanna	1	0.8
Tioga	0	-	Tioga	2	1.6	Tioga	2	1.6
Union	0	-	Union	21	16.5	Union	1	0.8
Venango	0	-	Venango	1	0.6	Venango	0	-
Warren	0	-	Warren	7	5.4	Warren	0	-
Washington	0	-	Washington	12	2.0	Washington	10	1.6
Wayne	0	-	Wayne	5	3.4	Wayne	2	1.4
Westmoreland	30	2.7	Westmoreland	20	1.8	Westmoreland	9	0.8
Wyoming	0	-	Wyoming	0	-	Wyoming	1	1.2
York	1	0.1	York	91	7.7	York	18	1.5
Pennsylvania	385	1.0	Pennsylvania	4,162	11.2	Pennsylvania	1,016	2.7
U.S. (2004)	7,980	2.7	U.S. (2004)	44,108	15.2	U.S. (2004)	14,517	5.0

NOTES: Rates based on small numbers can be unreliable. See the Technical Notes section.

## Average Annual Incidence Rate for Measles, 2002-2004

<u>Measles</u>	<u>No.</u>	<u>Rate</u>	<u>Measles</u>	<u>No.</u>	<u>Rate</u>	<u>Measles</u>	<u>No.</u>	<u>Rate</u>
Adams	0	-	Elk	0	-	Montour	0	-
Allegheny	0	-	Erie	0	-	Northampton	0	-
Armstrong	0	-	Fayette	0	-	Northumberland	0	-
Beaver	0	-	Forest	0	-	Perry	0	-
Bedford	0	-	Franklin	0	-	Philadelphia	0	-
Berks	0	-	Fulton	0	-	Pike	0	-
Blair	0	-	Greene	0	-	Potter	0	-
Bradford	0	-	Huntingdon	0	-	Schuylkill	0	-
Bucks	0	-	Indiana	0	-	Snyder	0	-
Butler	0	-	Jefferson	0	-	Somerset	0	-
Cambria	0	-	Juniata	0	-	Sullivan	0	-
Cameron	0	-	Lackawanna	0	-	Susquehanna	0	-
Carbon	0	-	Lancaster	0	-	Tioga	0	-
Centre	0	-	Lawrence	0	-	Union	0	-
Chester	0	-	Lebanon	0	-	Venango	0	-
Clarion	0	-	Lehigh	0	-	Warren	0	-
Clearfield	0	-	Luzerne	0	-	Washington	0	-
Clinton	0	-	Lycoming	0	-	Wayne	0	-
Columbia	0	-	McKean	0	-	Westmoreland	0	-
Crawford	0	-	Mercer	0	-	Wyoming	0	-
Cumberland	0	-	Mifflin	0	-	York	1	0.08
Dauphin	0	-	Monroe	0	-			
Delaware	9	0.54	Montgomery	0	-	Pennsylvania	10	0.03
						U.S. (2004)	37	0.01

## Average Annual Work-Related Injury Death Rate, 2002-2004

<u>Work-Related</u>	<u>No.</u>	<u>Rate</u>	<u>Work-Related</u>	<u>No.</u>	<u>Rate</u>	<u>Work-Related</u>	<u>No.</u>	<u>Rate</u>
<u>Injury Deaths</u>			<u>Injury Deaths</u>			<u>Injury Deaths</u>		
Adams	4	1.4	Elk	2	1.9	Montour	2	3.7
Allegheny	45	1.2	Erie	14	1.7	Northampton	17	2.0
Armstrong	4	1.9	Fayette	5	1.1	Northumberland	4	1.4
Beaver	15	2.8	Forest	0	-	Perry	8	6.0
Bedford	4	2.7	Franklin	13	3.3	Philadelphia	68	1.5
Berks	25	2.2	Fulton	2	4.6	Pike	5	3.2
Blair	9	2.4	Greene	2	1.7	Potter	0	-
Bradford	7	3.7	Huntingdon	2	1.5	Schuylkill	8	1.8
Bucks	21	1.1	Indiana	3	1.1	Snyder	1	0.9
Butler	10	1.9	Jefferson	5	3.6	Somerset	6	2.5
Cambria	10	2.2	Juniata	4	5.8	Sullivan	0	-
Cameron	0	-	Lackawanna	9	1.4	Susquehanna	2	1.6
Carbon	4	2.2	Lancaster	22	1.5	Tioga	1	0.8
Centre	10	2.4	Lawrence	6	2.1	Union	1	0.8
Chester	20	1.5	Lebanon	12	3.3	Venango	6	3.5
Clarion	3	2.4	Lehigh	13	1.3	Warren	4	3.1
Clearfield	6	2.4	Luzerne	12	1.3	Washington	13	2.1
Clinton	3	2.7	Lycoming	5	1.4	Wayne	5	3.4
Columbia	3	1.5	McKean	3	2.2	Westmoreland	14	1.3
Crawford	2	0.7	Mercer	11	3.1	Wyoming	0	-
Cumberland	9	1.4	Mifflin	2	1.4	York	20	1.7
Dauphin	15	2.0	Monroe	8	1.7			
Delaware	31	1.9	Montgomery	26	1.1	Pennsylvania	626	1.7
						U.S. (2004)	5,764	2.0

NOTES: Rates based on small numbers can be unreliable. See the Technical Notes.

## Selected Birth Statistics by Race and Hispanic Origin of Mother, 2004

<b>Low Birth Weight</b>			<b>No Prenatal Care First Trimester</b>			<b>Births to Mother &lt;18</b>		
	<b>No.</b>	<b>Pct.</b>		<b>No.</b>	<b>Pct.</b>		<b>No.</b>	<b>Pct.</b>
<b>White:</b>			<b>White:</b>			<b>White:</b>		
Allegheny	745	7.6	Allegheny	795	8.9	Allegheny	125	1.3
Berks	307	8.1	Berks	583	16.9	Berks	102	2.7
Bucks	379	6.5	Bucks	544	13.0	Bucks	59	1.0
Chester	314	6.3	Chester	583	14.3	Chester	42	0.8
Dauphin	138	6.8	Dauphin	286	17.0	Dauphin	37	1.8
Delaware	284	6.3	Delaware	509	13.0	Delaware	47	1.0
Erie	213	7.8	Erie	287	12.0	Erie	69	2.5
Lancaster	332	5.7	Lancaster	1,157	21.9	Lancaster	81	1.4
Lehigh	170	6.3	Lehigh	275	12.1	Lehigh	62	2.3
Montgomery	480	6.3	Montgomery	727	11.2	Montgomery	75	1.0
Northampton	213	8.7	Northampton	256	12.6	Northampton	37	1.5
Philadelphia	458	7.6	Philadelphia	890	21.3	Philadelphia	144	2.4
Pennsylvania	7,665	7.1	Pennsylvania	13,779	14.8	Pennsylvania	1,995	1.8
U.S. (2004)	227,732	7.1	U.S. (2004)	100,950	24.1	U.S. (2004)	95,856	3.0
<b>Black:</b>			<b>Black:</b>			<b>Black:</b>		
Allegheny	373	14.2	Allegheny	408	19.0	Allegheny	223	8.4
Bucks	23	8.9	Bucks	63	35.6	Bucks	10	3.9
Chester	41	12.7	Chester	84	30.0	Chester	21	6.5
Dauphin	87	12.5	Dauphin	142	28.8	Dauphin	62	8.9
Delaware	189	11.8	Delaware	473	34.9	Delaware	111	6.9
Erie	41	11.7	Erie	95	30.5	Erie	30	8.6
Montgomery	91	11.4	Montgomery	234	36.0	Montgomery	41	5.2
Philadelphia	1,488	14.1	Philadelphia	2,850	40.0	Philadelphia	932	8.7
Pennsylvania	2,673	13.6	Pennsylvania	5,000	34.2	Pennsylvania	1,643	8.3
U.S. (2004)	82,699	13.4	U.S. (2004)	30,909	42.2	U.S. (2004)	39,682	6.4
<b>Hispanic:</b>			<b>Hispanic:</b>			<b>Hispanic:</b>		
Berks	121	9.5	Berks	441	40.7	Berks	136	10.6
Chester	52	7.8	Chester	234	40.2	Chester	26	3.9
Lancaster	56	7.7	Lancaster	99	18.8	Lancaster	66	9.1
Lehigh	109	9.3	Lehigh	228	25.1	Lehigh	107	9.2
Montgomery	48	8.3	Montgomery	178	37.5	Montgomery	22	3.8
Northampton	44	9.8	Northampton	87	24.6	Northampton	23	5.1
Philadelphia	355	10.6	Philadelphia	889	35.6	Philadelphia	302	8.9
Pennsylvania	1,059	9.2	Pennsylvania	2,969	32.7	Pennsylvania	844	7.3
U.S. (2004)	64,183	6.8	U.S. (2004)	23,055	43.5	U.S. (2004)	51,045	5.4
<b>Asian and Pacific Islander:</b>			<b>Asian and Pacific Islander:</b>			<b>Asian and Pacific Islander:</b>		
Allegheny	29	5.6	Allegheny	45	9.5	Allegheny	0	-
Delaware	31	7.8	Delaware	84	24.5	Delaware	2	0.5
Montgomery	59	8.3	Montgomery	108	17.7	Montgomery	6	0.8
Philadelphia	106	8.7	Philadelphia	353	42.3	Philadelphia	23	1.8
Pennsylvania	372	7.7	Pennsylvania	904	23.2	Pennsylvania	40	0.8
U.S. (2004)	18,072	7.9	U.S. (2004)	5,851	30.9	U.S. (2004)	2,418	1.1

NOTES: Percents based on small numbers can be unreliable. See the Technical Notes section. Hispanics can be of any race.

# Health Status Indicators by Department of Health District

## Total Number of Deaths and Average Annual Age-Adjusted Death Rates All Causes and Selected Causes, 2002-2004

All Causes	No.	Rate	CI (95%)	
North Central	20,053	838.9	827.29-850.51	-
Northeastern	49,473	862.1	854.50-869.70	
Northwestern	30,794	862.8	853.16-872.44	
South Central	45,217	835.9	828.20-843.60	-
Southeastern	141,786	874.1	869.55-878.65	+
Southwestern	97,565	874.9	869.41-880.39	+
Pennsylvania	384,888	865.4	862.67-868.13	+
U.S. (2004)	2,398,365	801.1	800.09-802.11	

### Cardiovascular Disease

	No.	Rate	CI (95%)	
North Central	7,984	329.1	321.88-336.32	+
Northeastern	19,521	330.2	325.57-334.83	+
Northwestern	11,917	325.6	319.75-331.45	+
South Central	17,259	316.2	311.48-320.92	
Southeastern	51,158	311.0	308.30-313.70	-
Southwestern	37,348	324.1	320.81-327.39	+
Pennsylvania	145,187	319.5	317.86-321.14	+
U.S. (2004)	862,800	287.0	286.39-287.61	

Lung Cancer	No.	Rate	CI (95%)	
North Central	1,169	48.5	45.72-51.28	-
Northeastern	2,884	50.4	48.56-52.24	-
Northwestern	1,929	54.1	51.69-56.51	
South Central	2,725	49.0	47.16-50.84	-
Southeastern	8,916	55.0	53.86-56.14	+
Southwestern	6,193	55.7	54.31-57.09	+
Pennsylvania	23,816	53.5	52.82-54.18	
U.S. (2004)	157,218	52.9	52.64-53.16	

### Diseases of Heart

	No.	Rate	CI (95%)	
North Central	6,196	255.7	249.33-262.07	+
Northeastern	15,401	260.7	256.58-264.82	+
Northwestern	9,158	250.9	245.76-256.04	
South Central	13,417	245.6	241.44-249.76	
Southeastern	38,693	235.4	233.05-237.75	-
Southwestern	29,294	255.0	252.08-257.92	+
Pennsylvania	112,159	247.1	245.65-248.55	+
U.S. (2004)	654,092	217.5	216.97-218.03	

### Female

Breast Cancer	No.	Rate	CI (95%)	
North Central	344	25.7	22.98-28.42	
Northeastern	837	26.0	24.24-27.76	
Northwestern	503	25.5	23.27-27.73	
South Central	791	25.7	23.91-27.49	
Southeastern	2,675	29.1	28.00-30.20	+
Southwestern	1,699	27.4	26.10-28.70	
Pennsylvania	6,849	27.4	26.75-28.05	+
U.S. (2003)	41,620	25.3	25.06-25.54	

### Stroke

	No.	Rate	CI (95%)	
North Central	1,349	55.4	52.44-58.36	
Northeastern	2,798	47.1	45.35-48.85	-
Northwestern	1,928	52.2	49.87-54.53	
South Central	2,849	52.3	50.38-54.22	
Southeastern	9,490	57.5	56.34-58.66	+
Southwestern	5,939	50.8	49.51-52.09	-
Pennsylvania	24,353	53.3	52.63-53.97	+
U.S. (2004)	150,147	50.0	49.75-50.25	

### Intentional Self-harm

(Suicide)	No.	Rate	CI (95%)	
North Central	191	9.1	7.81-10.39	-
Northeastern	571	12.3	11.29-13.31	+
Northwestern	286	9.8	8.66-10.94	
South Central	527	10.9	9.97-11.83	
Southeastern	1,499	10.1	9.59-10.61	-
Southwestern	979	11.5	10.78-12.22	+
Pennsylvania	4,053	10.7	10.37-11.03	
U.S. (2004)	31,647	10.7	10.58-10.82	

### Motor Vehicle

Accidents	No.	Rate	CI (95%)	
North Central	365	16.7	14.99-18.41	+
Northeastern	658	14.1	13.02-15.18	+
Northwestern	494	16.9	15.41-18.39	+
South Central	771	16.2	15.06-17.34	+
Southeastern	1,499	10.0	9.49-10.51	-
Southwestern	1,001	11.7	10.98-12.42	-
Pennsylvania	4,788	12.6	12.24-12.96	-
U.S. (2004)	43,947	14.8	14.66-14.94	

Assault (Homicide)	No.	Rate	CI (95%)	
North Central	36	1.8	1.21-2.39	-
Northeastern	131	3.0	2.49-3.51	-
Northwestern	42	1.6	1.12-2.08	-
South Central	130	2.9	2.40-3.40	-
Southeastern	1,256	8.7	8.22-9.18	+
Southwestern	379	4.9	4.41-5.39	-
Pennsylvania	1,974	5.5	5.26-5.74	
U.S. (2004)	16,611	5.6	5.51-5.69	

NOTES: A + or - after the confidence interval (CI) denotes if the district age-adjusted death rate was significantly higher or lower than the state rate. No + or - after a CI denotes no significant difference. State data were compared to U.S. data. Rates based on small numbers can be unreliable. See Technical Notes section.

# Health Status Indicators by Department of Health District

## Infant Deaths, Number and Average Annual Rate By Race and Hispanic Origin, 2002-2004

All Infant Deaths	No.	Rate	$\mu$ (95%)
North Central	151	7.1	-0.34
Northeastern	295	6.2	-2.83 -
Northwestern	233	7.7	0.82
South Central	358	6.5	-2.21 -
Southeastern	1,527	8.0	3.60 +
Southwestern	603	7.1	-0.69
Pennsylvania	3,167	7.3	4.00 +
U.S. (2004)	27,838	6.8	

White	No.	Rate	Black	No.	Rate	Hispanic	No.	Rate
North Central	142	7.0	North Central	4	10.6	North Central	2	6.7
Northeastern	244	6.0	Northeastern	39	19.5	Northeastern	47	8.0
Northwestern	191	6.8	Northwestern	37	23.7	Northwestern	5	8.9
South Central	294	6.1	South Central	58	17.2	South Central	22	6.6
Southeastern	836	6.6	Southeastern	612	14.2	Southeastern	173	8.7
Southwestern	421	5.7	Southwestern	168	18.2	Southwestern	5	5.1
Pennsylvania	2,128	6.3	Pennsylvania	918	15.4	Pennsylvania	254	8.2
U.S. (2004)	18,240	5.7	U.S. (2004)	8,359	13.7	U.S. (2004)	5,262	5.6

## Infant Deaths, Number and Rate By Race and Hispanic Origin, 2004

All Infant Deaths	No.	Rate	$\mu$ (95%)
North Central	44	6.2	-0.85
Northeastern	84	5.1	-2.97 -
Northwestern	70	7.0	-0.14
South Central	120	6.4	-1.14
Southeastern	524	8.2	3.31 +
Southwestern	184	6.5	-1.20
Pennsylvania	1,026	7.1	1.39
U.S. (2004)	27,838	6.8	

White	No.	Rate	Black	No.	Rate	Hispanic	No.	Rate
North Central	41	6.2	North Central	0	-	North Central	0	-
Northeastern	70	5.3	Northeastern	10	13.9	Northeastern	12	5.1
Northwestern	59	6.4	Northwestern	8	14.8	Northwestern	1	4.5
South Central	98	6.1	South Central	21	17.3	South Central	9	7.1
Southeastern	283	7.1	Southeastern	213	15.0	Southeastern	70	9.7
Southwestern	131	5.5	Southwestern	47	14.9	Southwestern	1	2.9
Pennsylvania	682	6.3	Pennsylvania	299	15.0	Pennsylvania	93	8.1
U.S. (2004)	18,240	5.7	U.S. (2004)	8,359	13.7	U.S. (2004)	5,262	5.6

Note: A + or - after the value of  $\mu$  denotes if the district rate was significantly higher or lower than the state rate. No + or - after the  $\mu$  value denotes no significant difference. State data were compared to U.S. data. Two separate formulas computed the  $\mu$  values, depending on the number of events. The value of  $\mu$  was not calculated for rates/percents based on less than 10 events or for rates by race and Hispanic origin. Rates based on small numbers can be unreliable. See Technical Notes.

# Health Status Indicators by Department of Health District

## Selected Diseases

### Total Number and Average Annual Rate, 2002-2004

<b>Syphilis</b>	<b>No.</b>	<b>Rate</b>	<b>Tuberculosis</b>	<b>No.</b>	<b>Rate</b>
North Central	3	0.15	North Central	22	1.1
Northeastern	7	0.15	Northeastern	85	1.9
Northwestern	4	0.14	Northwestern	45	1.6
South Central	5	0.11	South Central	101	2.1
Southeastern	281	1.91	Southeastern	641	4.4
Southwestern	85	1.02	Southwestern	122	1.5
Pennsylvania	385	1.04	Pennsylvania	1,016	2.7
U.S. (2004)	7,980	2.70	U.S. (2004)	14,517	5.0
<b>AIDS</b>	<b>No.</b>	<b>Rate</b>	<b>Measles</b>	<b>No.</b>	<b>Rate</b>
North Central	68	3.3	North Central	0	-
Northeastern	274	6.1	Northeastern	0	-
Northwestern	82	2.9	Northwestern	0	-
South Central	259	5.5	South Central	1	0.02
Southeastern	3,072	20.9	Southeastern	9	0.06
Southwestern	407	4.9	Southwestern	0	-
Pennsylvania	4,162	11.2	Pennsylvania	10	0.03
U.S. (2004)	44,108	15.2	U.S. (2004)	37	0.01

### Low Birth Weight, Number and Percent, By Race and Hispanic Origin, 2004

<b>All Births</b>	<b>No.</b>	<b>Pct.</b>	<b><math>\mu</math> (95%)</b>
North Central	529	7.5	-2.14 -
Northeastern	1,287	7.9	-1.40
Northwestern	754	7.5	-2.56 -
South Central	1,404	7.5	-3.49 -
Southeastern	5,436	8.6	3.67 +
Southwestern	2,296	8.2	0.00
Pennsylvania	11,706	8.2	1.38
U.S. (2004)	331,772	8.1	

<b>White</b>	<b>No.</b>	<b>Pct.</b>	<b>Black</b>	<b>No.</b>	<b>Pct.</b>	<b>Hispanic</b>	<b>No.</b>	<b>Pct.</b>
North Central	491	7.4	North Central	18	13.4	North Central	10	8.7
Northeastern	981	7.4	Northeastern	88	12.2	Northeastern	217	9.3
Northwestern	649	7.1	Northwestern	79	14.6	Northwestern	23	10.3
South Central	1,119	7.0	South Central	167	13.9	South Central	119	9.5
Southeastern	2,641	6.6	Southeastern	1,879	13.4	Southeastern	672	9.3
Southwestern	1,784	7.5	Southwestern	442	14.1	Southwestern	18	5.2
Pennsylvania	7,665	7.1	Pennsylvania	2,673	13.6	Pennsylvania	1,059	9.2
U.S. (2004)	227,732	7.1	U.S. (2004)	82,699	13.4	U.S. (2004)	64,183	6.8

Note: A + or - after the value of  $\mu$  denotes if the district rate was significantly higher or lower than the state rate. No + or - after the  $\mu$  value denotes no significant difference. State data were compared to U.S. data. Two separate formulas computed the  $\mu$  values, depending on the number of events. The value of  $\mu$  was not calculated for rates/percents based on less than 10 events or for rates/percents by race and Hispanic origin. Rates/percents based on small numbers can be unreliable. See Technical Notes.

# Health Status Indicators by Department of Health District

## No Prenatal Care in First Trimester, Number and Percent of Live Births, By Race and Hispanic Origin, 2004

All Births	No.	Pct.	$\mu$ (95%)
North Central	1,115	17.6	-2.25 -
Northeastern	2,206	16.5	-6.52 -
Northwestern	1,569	17.4	-3.17 -
South Central	2,858	18.3	-1.28
Southeastern	11,414	22.7	23.00 +
Southwestern	3,190	12.7	-24.39 -
Pennsylvania	22,352	18.7	-65.34 -
U.S. (2004)	139,115	27.1	

White	No.	Pct.	Black	No.	Pct.	Hispanic	No.	Pct.
North Central	1,014	17.0	North Central	44	37.9	North Central	31	30.4
Northeastern	1,516	13.9	Northeastern	177	32.4	Northeastern	505	27.3
Northwestern	1,340	16.2	Northwestern	154	31.6	Northwestern	52	27.4
South Central	2,278	16.8	South Central	263	28.9	South Central	301	29.8
Southeastern	5,105	15.6	Southeastern	3,835	38.4	Southeastern	2,015	35.7
Southwestern	2,526	11.7	Southwestern	527	20.3	Southwestern	65	21.7
Pennsylvania	13,779	14.8	Pennsylvania	5,000	34.2	Pennsylvania	2,969	32.7
U.S. (2004)	100,950	24.1	U.S. (2004)	30,909	42.2	U.S. (2004)	23,055	43.5

## Live Births to Mothers Under Age 18, Number and Percent, By Race and Hispanic Origin, 2004

All Births	No.	Pct.	$\mu$ (95%)
North Central	171	2.4	-3.41 -
Northeastern	449	2.8	-2.19 -
Northwestern	274	2.7	-2.32 -
South Central	524	2.8	-2.37 -
Southeastern	2,267	3.6	7.24 +
Southwestern	710	2.5	-5.83 -
Pennsylvania	4,395	3.1	-6.23 -
U.S. (2004)	140,761	3.4	

White	No.	Pct.	Black	No.	Pct.	Hispanic	No.	Pct.
North Central	151	2.3	North Central	15	11.2	North Central	7	6.1
Northeastern	271	2.1	Northeastern	41	5.7	Northeastern	159	6.8
Northwestern	213	2.3	Northwestern	48	8.9	Northwestern	16	7.2
South Central	347	2.2	South Central	106	8.8	South Central	80	6.3
Southeastern	586	1.5	Southeastern	1,163	8.2	Southeastern	572	7.9
Southwestern	427	1.8	Southwestern	270	8.6	Southwestern	10	2.9
Pennsylvania	1,995	1.8	Pennsylvania	1,643	8.3	Pennsylvania	844	7.3
U.S. (2004)	95,856	3.0	U.S. (2004)	39,682	6.4	U.S. (2004)	51,045	5.4

Note: A + or - after the value of  $\mu$  denotes if the district rate was significantly higher or lower than the state rate. No + or - after the  $\mu$  value denotes no significant difference. State data were compared to U.S. data. Two separate formulas were used to compute the  $\mu$  values, depending on the number of events. The value of  $\mu$  was not calculated for percents based on less than 10 events or for percents by race and Hispanic Origin. Percents based on small numbers can be unreliable. See Technical Notes.

# Technical Notes

## Data Sources

The Pennsylvania Department of Health's vital statistics registration system was the source for the birth and death statistics that appear in this report except for work-related injury deaths which were from the Census of Fatal Occupational Injuries as conducted by the U.S.

Department of Labor. The National Center for Health Statistics was the source for the U.S. birth and death statistics that appear in this report. The latest available U.S. birth statistics are final 2004 data. **Please note that the 2004 U.S. prenatal care data that appear in this report are based on only the seven states [Idaho, Kentucky, New York (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington] that have implemented the 2003 Revision of the U.S. Certificate of Live Birth. These data are not comparable to those states that have not implemented the 2003 Revision.** The latest available U.S. death statistics are preliminary 2004 data (female breast cancer are final 2003 data).

The Department's Communicable Disease Surveillance, Sexually Transmitted Disease, and Tuberculosis Control Programs were the sources for the number of measles, syphilis, and tuberculosis cases reported. For the number of AIDS cases reported, data from the Department's AIDS Reporting System were used.

The U.S. Census Bureau 2003 income data were used for the estimated number and percentage of related children ages 5-17 and all children under age 18 living below the poverty level by county. Access their website at [www.census.gov](http://www.census.gov) to review complete data tables, including confidence intervals and data limitations.

Population estimates, for the years 2002 through 2004, used to compute rates were produced jointly by the U.S. Census Bureau and the State Data Center of the Pennsylvania State University at Harrisburg under the Federal-State Cooperative Program for Local Population Estimates. The estimated county population figures used to compute the rates that appear in this report are available from the Bureau of Health Statistics and Research upon request. The 2000 United States standard million population used in calculating age-adjusted death rates follows:

<u>Age</u>	<u>Population</u>
All Ages .....	1,000,000
Under 1 .....	13,818
1-4 .....	55,317
5-14 .....	145,565
15-24 .....	138,646
25-34 .....	135,573
35-44 .....	162,613
45-54 .....	134,834
55-64 .....	87,247
65-74 .....	66,037
75-84 .....	44,842
85+ .....	15,508

## DEFINITIONS of TERMS

**Death rates** by cause (and for all causes) are per 100,000 population (except the rate for female breast cancer which is per 100,000 females) and are age-adjusted to the 2000 standard million U.S. population except the rate for work related injury, which is a crude rate per 100,000 population.

**Infant death rates** are per 1,000 live births for the specified years.

**Incidence rates** are per 100,000 population for the specified years.

The **International Classification of Diseases (ICD-10) codes** for the selected causes of death shown in this report are as follows:

	<u>ICD-10</u>
Motor Vehicle Accidents	V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2
Intentional Self-harm (Suicide)	U03, X60-X84, Y87.0
Lung Cancer	C33-C34
Female Breast Cancer	C50 (sex = female)
Cardiovascular Disease	I00-I78
Diseases of Heart	I00-I09, I11, I13, I20-I51
Stroke	I60-I69
Assault (Homicide)	U01-U02, X85-Y09, Y87.1

**Low Birth Weight** is less than 2,500 grams or 5 pounds and 9 ounces.

**Hispanics** can be of any race.

**All calculations** exclude any unknowns.

## Age-Adjusted Rates

There are many characteristics of a population that can render a crude rate of little use, especially when comparing different populations. (A crude rate is usually defined as: total number of events divided by total population at risk, then, multiplied by 1,000 or 100,000.) Any unique demographic factors such as those related to age, sex or race are used or compared. The median age of Pennsylvania's population has been for many years one of the highest among all the states. Therefore, age-adjusted rates offer a more refined measurement to compare experiences over geographic areas or periods of time. However, there are limitations to their use and one should be familiar with these types of rates when using them.

The age-adjusted death rates that appear in this report were calculated using the direct method and the 2000 United States standard million population distribution (shown in the column on the left). It is important to use the same standard population in the computation of each

age-adjusted rate to allow comparability. **Please note that reports for Health Status Indicators prior to the 2001 issue used the 1940 U.S. standard million population to calculate age-adjusted rates. Therefore, the age-adjusted rates that appear in this report should not be compared to the age-adjusted rates that appeared in reports prior to the 2001 issue.** This change in the use of a standard population is in response to national/federal guidelines. Also, note that age-adjusted rates are artificial measurements and should never be compared with any other type of rate or be used to calculate the actual number of events.

To calculate an age-adjusted rate using the direct method, the age-specific rates must first be calculated for each of the age groups (as shown in the 2000 standard population distribution on the previous page) using the enumerated or estimated population figures for the time period and population under study. Each age-specific rate is then multiplied by the population figure of the corresponding age group in the standard population breakdown. The resultant figures are the number of deaths to be expected if the population under study had the same age distribution as the standard population. The total of these expected events is then divided by the total of the standard population (in the report 1,000,000). This dividend is then multiplied by 100,000 to yield the age-adjusted rate per 100,000 population.

## Reliability of Rates

All rates are subject to variation. This variation is directly related to the number of events used to calculate the rate. The smaller the number of events used in the calculation of a rate, the higher will be the variability of the rate. Rates (or percentages) based on unusually small numbers of events over a specified period of time or for a sparsely populated geographic area should be of particular concern and used cautiously. When few events or small populations are evident in calculating/studying rates, multiple-year summary rates usually referred to as average annual rates, will sometimes provide a much better perspective or measurement of an outcome. Expanding the period of time studied enlarges the absolute numbers and adds more credence to a statement regarding a rate. Another approach is to expand the geographical area of study, thereby, enlarging the number of events. Adjoining counties can be grouped into regions according to any demographic features they may share, i.e., rural counties with mostly white, older populations.

It is also common practice among data users familiar with health statistics to calculate what is called a standard error (SE) of a rate when comparing rates. This statistic defines a rate's variability and can be used to calculate a confidence interval (CI) to determine the range of possible values for the true rate. If a set standard, goal or target value is included in a rate's confidence interval, there is no significant difference between the two. However, there are various statistical formulas for comparing rates depending on the types of rates or populations being studied and the number of events involved. The following section discusses various

statistical formulas that were used to compare the rates that appear in this report.

**NOTE:** Before we proceed with presenting formulas for comparing rates and ratios/percentages, the user should understand that these statistical tools for analyzing/comparing rates are crude and rather conservative approaches, especially the formulas presented for comparing age-adjusted rates. A user may wish to utilize more precise and sophisticated calculations performed by computer software such as SPSS or SAS. Consultation with a statistician or other professional familiar with analyzing health statistics may also be a consideration before pursuing any further study.

## Comparison of Age-Adjusted Rates

As mentioned above, a first step in comparing rates is the computation of a standard error (SE), defining the rate's variability. The usual formula given for computing the standard error of an age-adjusted rate (Chiang, 1961) is very complex and not often understood or used by the average health data user. However, the average user can approximate the standard error of an age-adjusted rate with the following less complex formula (Keyfitz, 1966):

$$SE = (R / \sqrt{N})$$

where:

R = (age-adjusted) rate

N = number of events (deaths)

This estimate assumes the rate to be a binomial proportion. As an example, let's use the state's average annual (2002-2004) age-adjusted death rate for suicide of 10.7 to calculate an estimated SE. The rate was based on 4,053 suicides. The square root of 4,053 is 63.66. By dividing the rate of 10.7 by 63.66, one obtains the estimated SE of 0.1681. The estimated SE can then be used to compute a 95% confidence interval (CI) for the rate. The standard formula for determining the 95% CI of a rate is:

$$R \pm (1.96 \times SE)$$

Following this formula, for the rate we are using, produces an equation of  $10.7 \pm (1.96 \times 0.1681)$  and the result is  $10.7 \pm 0.33$ . Then, by subtracting and adding 0.33 against the original rate of 10.7, a range can be calculated and considered the estimated 95% confidence interval for the state, i.e., 10.37 - 11.03. One could then state, with 95% certainty that the actual age-adjusted suicide rate for the state during 2002-2004 was between 10.37 and 11.03.

To compare a particular county's age-adjusted suicide rate for 2002-2004 with the state's corresponding rate, one must go through the same steps shown directly above to obtain the 95% CI for that county's rate. If the rate for the state is not included in the CI, then the county rate is considered to be significantly different, at the 95% confidence level. For example, at first glance, Clearfield County's age-adjusted suicide rate for 2002-2004 of 14.7

(based on 40 deaths) seems much higher than the corresponding state rate of 10.7. However, calculation of a 95% CI for Clearfield County's rate would produce a rather wide range of 10.14-19.26. Since this range for Clearfield County also includes 10.7 or the state rate, we can say that the county rate is not significantly different than the state rate, at the 95% confidence level. If we were comparing two counties, any significant difference would be determined by whether their confidence intervals overlapped or not. However, please note that the formula for computation of the SE that we are using is not as precise as others and the application of a more precise methodology may produce somewhat different results. Another important result the user of this formula should note is that, the smaller the number of events, upon which the rate is based, the larger the SE and CI will be. This clearly demonstrates the wider variability (and less reliability) of rates based on smaller numbers. As a general rule, age-adjusted rates based on less than twenty events should be considered unstable and are not recommended for comparative use or in determining significance. For this reason, the CIs were not computed, compared and shown for any age-adjusted mortality rate in this report based on less than twenty events.

## Comparison of Crude Rates/Ratios

A crude rate is easily computed and usually based on the number of vital events and the total population for a specific area or group, i.e., number of births or deaths among a specific population per 1,000 (or 100,000) of that specific population. A ratio is simply a proportion or percentage, usually a rate per 100. Any of the indicators that are not presented in this report as age-adjusted rates can be considered crude rates or ratios. Before comparison of these figures can be done, they should first be identified as dependent or independent and then defined as being based on a small or large number of events.

### DEPENDENT vs. INDEPENDENT CRUDE RATES:

Two crude rates or ratios are considered dependent when the same events are included in their numerators. Examples of this include a state rate and a county or city rate or rates that share or overlap the same time periods, i.e., two multiple-year summary rates for the state – one for 1990-1995, the other for 1990-1999. Two rates are considered to be independent when they do not include any of the same data or events in their numerator, such as rates for two different counties.

**NUMBER of EVENTS:** When comparing two dependent or independent rates, determining whether a significant difference exists between the two rates or whether the difference is caused solely by chance requires a rather complex statistical computation. The number of events upon which the two observed rates are based is of primary importance. The statistical formula for determining significance is different for a rate based on a small number of events as compared to the formula for a rate based on a large number of events. Exactly what is considered a small number of events is arbitrary but, as a general rule, one can define "small number" as less than 100 events. Crude rates or ratios based on less than ten

events should be considered unstable and are not recommended for comparative use or in determining significance. The formulas are also different depending on whether the rates being compared are dependent or independent.

Four formulas for comparing crude rates and ratios are presented next: one recommended for use in comparing dependent rates based on a small number of events; another, for comparing dependent rates based on a large number of events; a third, for independent rates based on less than 100 events; and, a fourth, for comparing independent rates based on 100 or more events. A sample step-by-step calculation is shown for the first formula to demonstrate its use.

### COMPARISON of DEPENDENT CRUDE RATES

**BASED on SMALL NUMBER OF EVENTS:** When the (county or local) crude rate or ratio to be compared to a standard (state or national) rate or ratio is based on 10-99 events, actual and estimated numbers of events are used to determine statistical significance. The formula for this situation is shown below:

$$\mu = [(o-e) / \sqrt{e}]$$

where:

- o = the number of events for the county or local area to be compared
- e = the expected number of events for the county or local area (based on the state or national crude rate)

If  $\mu$  has a value greater than + 1.96, the county rate is considered to differ significantly at a 95% confidence level from the state rate to which it is being compared. The value for o is a readily available figure; however, e must be specially computed. To compute the expected number of events for the county based on a state or national crude rate, first change the state rate to a percentage or rate per person. For example, if the state rate was 14.5 per 1,000 population, simply divide 14.5 by 1,000; the result is .0145. (Note: If comparing percentages, divide by 100.) Then, multiply the value of the denominator in the county rate (the population used to compute the rate) by this figure to obtain the value for e or the expected number of events for the county.

As an example for computation of this formula, use a county infant death rate of 13.8 per 1,000 resident live births. This rate was based on 58 resident infant deaths occurring among 4,205 resident live births for the county. The comparable state rate that year was 9.5. Step-by-step computation would yield the following results:

$$\begin{aligned} o &= 58 \\ e &= (9.5/1,000) 4,205 = 39.9 \end{aligned}$$

1.  $\sqrt{e} = \sqrt{39.9} = 6.3$
2.  $(o - e) = 58 - 39.9 = 18.1$
3.  $(o - e) / \sqrt{e} = 18.1 / 6.3 = 2.9$  or  $\mu$

Since the value of  $\mu$  in the previous computation exceeds the value of 1.96, it can be stated that the difference between the county's infant death rate and the state's rate that year was significant at the 95% confidence level. In other words, the user can be up to 95% confident that the county's true infant death rate that year was significantly higher than the infant death rate for the state. A negative value of more than -1.96 would mean a significantly lower rate.

**COMPARISON of DEPENDENT CRUDE RATES BASED on LARGE NUMBER OF EVENTS:** The following formula for determining the significance between two observed, dependent crude rates with 100 or more events in the numerator of the county or local rate is more complex than the previous formula for dependent rates.

$$\mu = [(r - s) \sqrt{(n / (s - s^2))}]$$

where:

- r = the county or local rate to be compared, expressed as a rate per person
- s = the state (or national, regional, etc.) rate expressed as a rate per person
- n = the population figure used for computing the county or local rate

To compute a rate per person, divide the rate by the population number used to express the rate. For example, the rate per person for a death rate of 23.5 per 100,000 would be calculated by dividing 23.5 by 100,000. The result is 0.000235.

Determining significance according to the  $\mu$  value follows the same rules as listed in the previous section for comparing dependent rates based on a small number of events.

**COMPARISON of INDEPENDENT CRUDE RATES BASED on SMALL NUMBER OF EVENTS:** The following formulas can be used to compute a 95% confidence interval to determine the statistical significance of the difference between two independent crude rates when both rates are based on 10-99 events. The first step is to calculate the difference (D) between the two rates with the following formula:

$$D = (r_1 - r_2)$$

where:

- r<sub>1</sub> = rate for County 1
- r<sub>2</sub> = rate for County 2

The 95% confidence interval (CI) is then computed using the following formula:

$$CI = D \pm \sqrt{(CL_1^2 + CL_2^2)}$$

where:

- CL<sub>1</sub> = confidence limit for County 1 rate
- CL<sub>2</sub> = confidence limit for County 2 rate

This computation becomes a three-step process due to the need to construct a confidence limit or CL (the numerical value that determines the range of the confidence interval) for each rate before the above formula can be calculated for CI. The formula for 95% confidence is as follows:

$$CL = [1.96 (r / \sqrt{d})]$$

where: d = number of events

At the end of this three-step process, if the confidence interval or the range of the numbers calculated for the difference between the two rates includes the value of 0, then it can be stated that the two rates are not significantly different, with 95% confidence. Of course, if the range of numbers does not contain 0, then the difference between the rates is considered significant, with 95% confidence. For example, a computed confidence interval (CI) of 4.38 for a rate difference (D) of 6.8 would result in a range of 2.42 to 11.18. Since that range does not include the value of 0, the difference between the two rates being compared can be considered significant, with 95% confidence.

**COMPARISON of INDEPENDENT CRUDE RATES BASED on LARGE NUMBER OF EVENTS:** If two independent crude rates or ratios are being compared and both or one of the figures is based on 100 or more events, a two-step calculation is performed to construct a 95% confidence interval for the ratio between the two rates. Please note, however, that whenever only one of the two rates is based on 100 or more events, then that rate must be used as r<sub>2</sub> in the following formula.

The formula for calculating the ratio (R) between the two rates is:

$$R = (r_1 / r_2)$$

where:

- r<sub>1</sub> = rate for County 1
- r<sub>2</sub> = rate for County 2

The formula for the 95% confidence interval (CI) for the ratio between the two independent rates is:

$$CI = R \pm [1.96 (R) \sqrt{((1 / d_1) + (1 / d_2))}]$$

where:

- d<sub>1</sub> = number of events for County 1
- d<sub>2</sub> = number of events for County 2

If the range of numbers derived from the confidence interval (CI) for the ratio contains the value of 1, then a significant difference does not exist, at 95% confidence. If the range of numbers does not contain the value of 1, then it can be stated that the ratio between the two county rates is significantly different, with 95% confidence.

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## References

1. **Centers for Disease Control and Prevention**, *Summary of Notifiable Diseases, United States 2004*. Morbidity and Mortality Weekly Report: Vol. 53 No. 53. Atlanta, Georgia: June 16, 2006.
2. **Chaing CL**. *Standard Error of the Age-Adjusted Rate*. Vital Statistics Special Reports 1961;47(9).
3. **Curtin LP** and **Klein RJ**. *Direct Standardization (Age-Adjusted Death Rates)*. Statistical Notes; Number 6. Hyattsville, Maryland: National Center for Health Statistics. March 1995.
4. **Dever, Alan GE**. *Epidemiology in Health Services Management*. Rockville, Maryland: Aspen Systems Corporation. 1984.
5. **Freedman MA**. *Health Status Indicators for the Year 2000*. Statistical Notes; Vol. 1 No. 1. Hyattsville, Maryland: National Center for Health Statistics. 1991.
6. **Keyfitz N**. *Sampling Variance of Standardized Mortality Rates*. Human Biology, 38:309-317, 1966.
7. **Klein RJ** and **Hawk SA**. *Health Status Indicators: Definitions and National Data*. Statistical Notes; Vol. 1 No. 3. Hyattsville, Maryland: National Center for Health Statistics. 1992.
8. **National Center for Health Statistics**, *Births: Final Data for 2004*, National Vital Statistics Report Vol. 55 No. 1; Hyattsville, Maryland. DHHS Publication No. (PHS) 2006-1120 06-0148 (9/2006).
9. **National Center for Health Statistics**, *Deaths: Preliminary Data for 2004*, National Vital Statistics Report Vol. 54 No. 19; Hyattsville, Maryland. DHHS Publication No. (PHS) 2006-1120 06-0130 (6/2006).
10. **National Center for Health Statistics**, *Deaths: Final Data for 2003*, National Vital Statistics Report Vol. 54 No. 13; Hyattsville, Maryland. DHHS Publication No. (PHS) 2006-1120 06-0093 (4/2006).
11. **Pennsylvania Department of Health**. *Comparing Rates – Part 1: Dependant Rates*. Statistical News from the State Health Data Center; Vol. 12 No. 3, pp. 4-5. Harrisburg, Pennsylvania: State Health Data Center. 1989.
12. **Pennsylvania Department of Health**. *Comparing Rates – Part 2: Independent Rates*. Statistical News from the State Health Data Center; Vol. 12 No. 4, pp. 4-5, 8. Harrisburg, Pennsylvania: State Health Data Center. 1989.
13. **U.S. Department of Health and Human Services**. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives for the Nation*. Washington DC: Public Health Service. 1991.
14. **U.S. Department of Health and Human Services**. *Healthy People 2010*. 2<sup>nd</sup> ed. 2 vols. Washington DC; US Government Printing Office, November 2000.
15. **Centers for Disease Control and Prevention**. *Healthy People 2010 Database – Updated September 2006*. <<http://wonder.cdc.gov/data2010/>>.
16. **U.S. Department of Health and Human Services**. *International Statistical Classification of Diseases and Related Health Problems*. Tenth Revision. Prepared by the World Health Organization, Geneva 1992.

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## **Appendix**

### **Additional Statistics Available**

The Bureau of Health Statistics and Research has created special five-year summary tabulations of birth and death data at the minor civil division level (city, borough or township) that can be used to calculate the health status indicators relating to births and deaths as shown in this report. Five-year summary data have been produced because of the very small annual numbers of births and deaths in most of the minor civil divisions in the state.

Birth multiple-year data that can be used to compute indicators by race and Hispanic Origin are available for selected municipalities. These municipalities were selected according to the following criteria – a city or borough with 2000 enumerated population of 20,000 or more and having at least 100 annual resident live births to black mothers or mothers of Hispanic origin are included in these tabulations. (Please also refer to another one of our publications, *Maternal and Child Health Status Indicators for Pennsylvania and Major Municipalities*, to easily obtain various health statistics at the municipality level.)

All additional data available, except minor civil division population and poverty status figures, will be updated every year, i.e., when 2005 data are available, 2001-2005 summary data will be created. As updates are made, historical multiple-year data will continue to be available, allowing for computing and comparing of trend data. A complete list of the additional statistics available for use in computing and comparing indicators appears below. Copies of these tabulations can be obtained by contacting the Bureau in writing, by telephone (717-783-2548) or FAX (717-772-3258). More recent tabulations are available in Portable Document Format (PDF) files and by visiting the Health Statistics pages of the Department's website at [www.health.state.pa.us/stats](http://www.health.state.pa.us/stats).

#### **Births:**

Resident Live Births by Birth Weight for State, Counties and Minor Civil Divisions, Five-Year Summary and by Race (White and Black) and Hispanic Origin for Selected Municipalities, Three-Year Summary

Resident Live Births by Trimester of Mother's Entry in Prenatal Care for State, Counties and Minor Civil Divisions, Five-Year Summary and by Race (White and Black) and Hispanic Origin for Selected Municipalities, Three-Year Summary

Resident Live Births by Age Group of Mother for State, Counties and Minor Civil Divisions, Five-Year Summary and by Race (White and Black) and Hispanic Origin for Selected Municipalities, Three-Year Summary

#### **Deaths:**

Resident Deaths by Selected Causes by Age Group for State, Counties and Minor Civil Divisions, Five-Year Summary

Resident Infant Deaths for State, Counties and Minor Civil Divisions, Five-Year Summary

#### **Population/Poverty:**

Population for State and Counties by Age Group

Population for Minor Civil Division by Age Group, 2000 Enumerated Only\*

Related Children under 18 Years of Age Living with Person/s with Income in 2003 below Poverty Level for State and Counties – Selected Minor Civil Divisions, Number and Percent, 1999

\*2000 enumerated population data can be accessed via the U.S. Census Bureau web site at [www.census.gov](http://www.census.gov).

# Pennsylvania Health Districts and Counties

