

STATISTICAL NEWS

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Motor Vehicle Accident Deaths Decline for the Third Straight Year

PA Rates Lower Than U.S. Rates; Highest Rates for Young White Males

The number of deaths and the age-adjusted death rate for motor vehicle accidents among Pennsylvania residents decreased in 2000 – the third straight year that this number and the age-adjusted death rate declined from a previous year. In addition, Pennsylvania's rates are much lower than the United States rates. And, a review of these deaths by age, sex and race showed that young white males tended to have the highest rates for this cause of death.

In 2000, there were 1,473 deaths due to motor vehicle accident among Pennsylvania residents – 3.2 percent lower than the 1,521 reported for 1999 and 9.7 percent lower than the 1,631 for 1998. The 2000 death rate for motor vehicle accidents of 11.8 per 100,000 (age-adjusted to the 2000 U.S. standard million population) was also lower than the 1999 rate of 12.4. In 1998, the age-adjusted death rate was 12.8 (see Chart 1 on page 4).

One of the more common types of death by motor vehicle accident in 2000 for Penn-

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sylvanians residents occurred when occupants of a motor vehicle (car, truck or van) died in a collision with another motor vehicle (214 deaths or 14.5 percent). Another common type of motor vehicle accident death involved motorcyclists (132 deaths or 9.0 percent). In 2000, there were 80 pedestrian deaths involving a collision with a motor vehicle and 41 deaths where an occupant of a motor vehicle was involved in a non-collision accident.

The rest of this article reviews statistics on motor vehicle accident deaths in Pennsylvania, compared to the United States, and will further discuss statistics for Pennsylvania by age, sex, race, and county.

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Half of Pennsylvanians Aged 45+ Have Arthritis

Sufferers Tend to Be Overweight, Less Active, and In Poor Health

In 2001, 36 percent (95% CI=34-38%) of all adult Pennsylvanians reported that they suffer from arthritis. Among residents aged 45 and older, the prevalence of arthritis is approximately one out of every two Pennsylvanians.

These figures were obtained from the state's annual sample survey of adults, the Behavioral Risk Factor Surveillance System (BRFSS). The 2001 national percentage for the prevalence of arthritis among adults was 33.1 percent (95% CI=32.8-33.5). Higher figures for Pennsylvania can directly be attributed to the fact that the state's population is, on the average, older than elsewhere in the country. As such, chronic conditions like arthritis are more prevalent. The Centers for Disease Control and Prevention (CDC) has designated arthritis as the leading cause of disability for the nation.

Although arthritis is not generally life threatening, the pain and limitations it imposes affects the quality of life for millions of Pennsylvanians. Approximately one million Pennsylvanians, or 31% (95% CI=28-34%) of adults with

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arthritis, reported in the 2001 BRFSS survey that their arthritis was severe enough to limit some of their activities (see data table on page 6). After adjusting the survey results

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Fair or Poor Health Status Is Higher Among Adults with Specific Behavioral or Health Risks

2001 Data Show Significant Differences By Age, Education, Income, Race

Fourteen percent of Pennsylvania adults indicated that their general health was fair or poor, according to data recently released from Pennsylvania's 2001 sample survey of adults, the Behavioral Risk Factor Surveillance System (BRFSS). However, the percentage of Pennsylvania adults who report their general health status as fair or poor significantly increases for those with certain health or behavioral risks, such as diabetes, obesity, cardiovascular disease, high blood pressure, and physical disabilities (see bar chart below). These differences can often be attributed to specific age, education, income or race characteristics. The following highlights these differences by specific health or behavioral risk factor.

Diabetic Adults:

Adults who were told that they have diabetes (excluding gestational diabetes) reported a significantly higher percentage of fair or poor health (47 percent), compared to the general adult population (14 percent). Among diabetic adults, household income seemed to be directly related to general health status. Those with incomes under \$15,000 had a 70 percent prevalence of fair or poor health, significantly higher than the 39 percent for diabetic adults with household incomes of \$15,000+.

Obese Adults:

The Body Mass Index (BMI), which is a measure of body fat

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based on height and weight, is used to determine normal weight in adults. Adults with a BMI of 30 or greater are considered to be obese by the standards set by the National Institutes of Health. Twenty-four percent of Pennsylvania adults who are considered obese reported fair or poor health on the 2001 BRFSS survey. This percentage was significantly higher, compared to the percentage for the general population. Age, education, and income are associated with increased percentages of obese adults in fair or poor health.

Obese Pennsylvanians aged 45+ had a significantly higher percentage (29), compared to those under age 45 (16 percent). Adults considered to be obese who had less than a high school education had a significantly higher percentage of fair or poor health (46) than obese adults with a high school education or higher (20 percent). Income seemed to become a factor when adult household income was less than \$25,000 a year. These obese adults had a percentage of 40 for fair or poor health, significantly higher than the 15 percent for adults with a household income of \$25,000+.

Adults Who Had Heart Attack/Disease or Stroke:

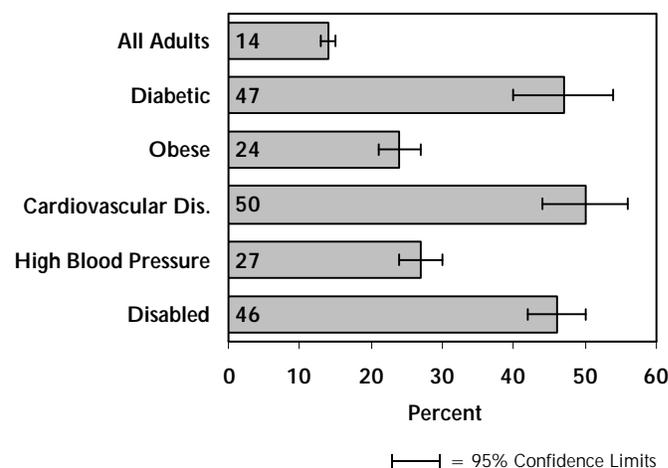
The group of Pennsylvania adults who had either a heart attack or heart disease or a stroke or any combination of these conditions had a significantly higher percentage of fair or poor health (50 percent), compared to the general population. Both education and income were associated with higher percentages. A significantly higher percentage of adults with less than a high school education had fair or poor health (64 percent), compared to adults with a high school education or higher with these conditions (46 percent). Also, these adults with household incomes below \$25,000 had a percentage (58) of fair or poor health that was significantly higher than like adults with household incomes of \$25,000+ (39 percent).

Adults with High Blood Pressure:

Pennsylvania adults with high blood pressure also reported a significantly higher percentage of fair or poor health (27 percent), compared to the general population. These adults with a high school education or less had a significantly higher percentage (33), compared to those with more than a high school education (18 percent). Similarly, adults with high blood pressure and incomes below \$50,000 had a significantly higher percentage (33) than like adults with incomes of \$50,000+. In addition, non-Hispanic black adults with high blood pressure had a significantly higher percentage of fair or poor health (41 percent), compared to non-Hispanic whites (25 percent).

Continued on next page...

Percent of Adults with Selected Health/Behavioral Risks Reporting Fair or Poor General Health Status
Pennsylvania BRFSS, 2001



7.3 Million Home Health Services Provided In 2000

Skilled and/or Therapeutic Services Available In Every County

Almost a quarter of Pennsylvania's residents aged 85 and over used home health services in 2000. Pennsylvania's home health agencies provided over 350,000 residents in 2000 with 7.3 million skilled nursing and/or various therapeutic services at their place of residence, as ordered by a physician (see Tables 1 and 2 below).

Skilled nursing visits were the most frequent type of service provided, accounting for 56 percent of the total home health visits reported for the year 2000. Home health aide services accounted for another 25 percent of the home health visits. Speech therapy and medical social work were the services least frequently de-

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livered, each accounting for less than 1 percent of total visits (see Table 1 below).

Pennsylvania's home health agencies complete an annual data collection report as part of their annual license renewal application. The information presented here is drawn from the report for the year 2000, based on the 322 applications received in 2001. Home health services are available in every county of the state.

Costs for these services vary. The most expensive visits are medical social services, with a median fee of \$150.00 in 2000. The least expensive service is the home health aide visit, with a median fee of \$64.50. Medicare is the predominant source of payment for all home health services.

Skilled nursing is a high intensity, comprehensive, planned service, performed by a licensed registered nurse or by a licensed practical nurse under the supervision of a registered nurse. Therapeutic services include those performed by a physical therapist, or an occupational therapist, both licensed by the Commonwealth. Other therapeutic services are provided by speech patholo-

gist/audiologists, who are licensed by the Commonwealth and certified by the American Speech and Hearing Association, and by social workers with special training and experience, who participate in carrying out a plan of care.

Home health aides extend a plan of care by performing simple procedures of personal care, exercise and household services essential to the plan. They are trained in methods of assisting patients to achieve maximum self-reliance, nutrition and meal preparation, the aging process and emotional problems of illness.

The full report is available from the Department's Division of Home Health at 717-783-1379.

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Poor Health Status...

Disabled Adults:

Disabled Pennsylvania adults (reporting that they were prevented in some way from participating in some activities by physical, mental, or emotional problems) showed a significantly higher percentage of fair or poor health (46 percent), compared to the general adult population. Age, education, and income seemed to be key factors in the increased percentages of fair or poor health for disabled adults in Pennsylvania. Disabled adults aged 45 and older had a significantly higher percentage (52), compared to disabled adults under age 45 (33 percent). Disabled Pennsylvania adults with less than a high

school education had a significantly higher percentage of fair or poor health (65 percent), compared to disabled adults with a high school education or higher (42 percent). Also, adults with a disability who had a household income of less than \$25,000 had a significantly higher percentage (58) than those disabled adults with household incomes of \$25,000+ (30 percent).

Please contact the Bureau of Health Statistics and Research at 717-783-2548 if you have any questions about the 2001 BRFSS data presented here.

TABLE 1
Number and Percent of Home Health Agency Visits
By Type of Service, Pennsylvania 2000

TYPE OF SERVICE	PATIENT VISITS	PERCENT
Skilled Nursing	4,115,739	56%
Home Health Aide	1,832,533	25%
Physical Therapy	1,050,046	14%
Occupational Therapy	218,458	3%
Speech Therapy	58,990	1%
Medical Social Services	47,676	1%
TOTAL	7,323,442	100%

TABLE 2
Unduplicated Number, Percent and Rate* of
Home Health Agency Patients By Age, Pennsylvania 2000

AGE	PATIENTS	PERCENT	RATE*
Under 18	28,064	8%	0.96
18-44	46,967	13%	1.02
45-64	52,952	15%	1.87
65-74	68,063	19%	7.02
75-84	99,895	28%	14.02
85+	57,676	16%	24.28
TOTAL	353,617	100%	

*per 100 2000 population

Motor Vehicle Accident Deaths...

Pennsylvania and United States:

United States age-adjusted death rates for motor vehicle accidents have consistently been much higher than Pennsylvania rates over the years. The 2000 age-adjusted death rate for the United States has just been released and the rate that year was 15.7 which is 33 percent higher than the 2000 rate of 11.8 for Pennsylvania.

A comparison of Pennsylvania and United States 2000 age-adjusted death rates for motor vehicle accidents by race and sex also shows much higher rates for the United States. The United States rate for whites was 15.9, compared to 12.4 for Pennsylvania whites. Among blacks, Pennsylvania's rate of 10.2 was over 36 percent lower than the United States rate of 16.0, and, for males, the Pennsylvania rate of 17.6 was almost 21 percent lower than the United States rate of 22.2. The United States rate for females was 9.7, compared to 6.6 for Pennsylvania.

Race and Sex:

Pennsylvania's age-adjusted death rate for motor vehicle accidents among white residents during 2000 was more than 21 percent higher than the rate for blacks (12.4 vs. 10.2). There were 1,329 resident motor vehicle accident deaths for whites, compared to 122 among black residents.

A large portion of deaths due to motor vehicle accidents for Pennsylvania residents occurred among males. In 2000, the age-adjusted death rate for

Chart 1
Age-Adjusted Death Rate* for Motor Vehicle Accidents
Pennsylvania Residents, 1996-2000

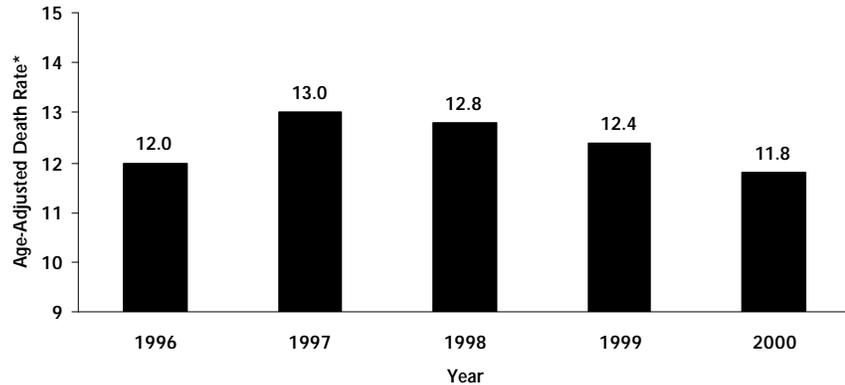
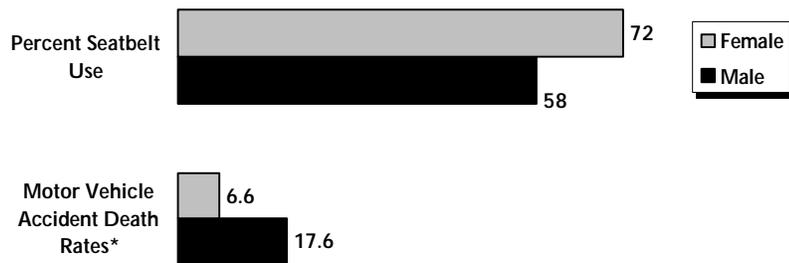
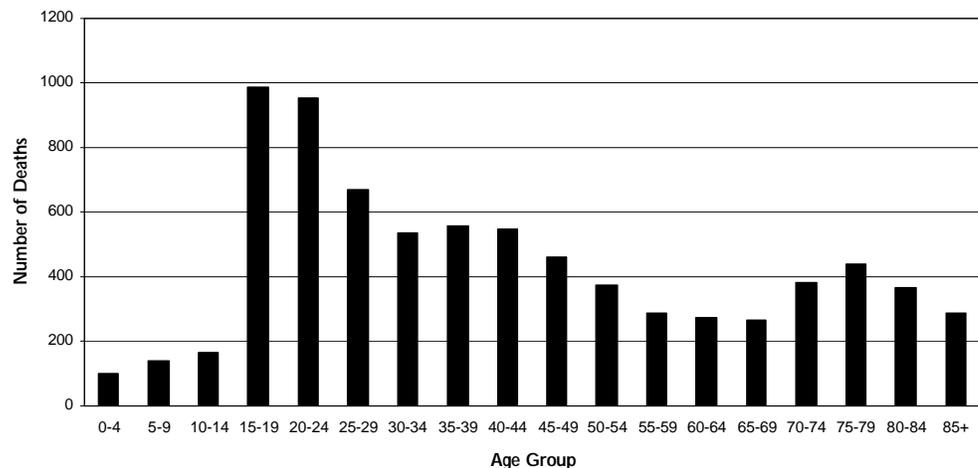


Chart 2
Age-Adjusted Death Rate* for Motor Vehicle Accidents and % Seatbelt Use by Adults
Pennsylvania Residents by Sex, 1998 (Seatbelt Use) and 2000 (Deaths)



*per 100,000 and age-adjusted to 2000 U.S. standard million population

Chart 3
Number of Deaths Due to Motor Vehicle Accidents by Age Group
Pennsylvania Residents, 1996-2000



Pocket Guide & Family Health Statistics Released

"Family Health Statistics for PA and Counties" Tracks HP2010 Objectives

A new report, *Family Health Statistics for Pennsylvania and Counties*, is now available in hard copy, upon request, and on the Department's Health Statistics web pages at www.health.state.pa.us/stats.

This report shows state trends and county-level statistics (when available) for track-

ing progress in meeting many of the Healthy People 2010 national objectives related to family health. The latest comparable United States data are also included when available.

The 2002 Edition of our annual brochure *Pocket Guide of Pennsylvania and County Health Statistics* is also now available. This is the third year

the brochure has been published. This small brochure contains over 5,000 numbers and rates, including various demographic data and statistics on births, deaths, disease incidence, cancer, hospitals, nursing homes, drug and alcohol treatment facilities, behavioral health risk factors, HMO enrollment, and personal care

homes for Pennsylvania and all 67 counties. There are also comparative figures for Pennsylvania and the United States.

To receive a copy of either report, please contact the Bureau at 717-783-2548 or visit the Health Statistics web pages at www.health.state.pa.us/stats/ to view the family health statistics report.

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Motor Vehicle Accident Deaths...

males was more than two and a half times as great as the rate for females – 17.6 compared to 6.6. Of the 1,473 motor vehicle accident deaths for the year 2000, 1,030 occurred among males and only 443 among females. Therefore, males accounted for nearly 70 percent of the motor vehicle deaths among Pennsylvania residents in the year 2000.

A closer look at male deaths due to motor vehicle accidents shows that 921 or 89.4 percent were among whites (for an age-adjusted rate of 18.3) while 94 were among blacks (for rate of 16.9).

Seatbelt use/non-use could be a factor in the discrepancy by sex. According to the *1998 Behavioral Health Risks of Pennsylvania Adults*,

(According to 1998 statistics)...58 percent of male adults... always wore seatbelts... compared to 72 percent of female adults.

Of the 1,473 motor vehicle accident deaths for the year 2000, 1,030 occurred among males and only 443 among females.

58 percent of male adults in the state always wore seatbelts when riding in a car, compared to 72 percent of female adults (see Chart 2 on page 4).

Age:

Reviewing the number of motor vehicle accident deaths by age group for the five-year period of 1996-2000 (see Chart 3 on page 4) showed that late teens and young adults had the highest figures. The age groups 15-19 and 20-24 had by far the highest numbers, accounting for 12.7 percent and 12.2 percent of all such deaths, respectively. Starting at about age 25, the number of deaths due to motor vehicle accidents began decreasing for the older age groups up until age 70 when the figures started to increase again.

A look at seatbelt use among the different age groups showed that it increased with age. In 1998, 60 percent of Pennsylvania adults aged 18-29 always wore seatbelts when riding in a car, compared to 65 percent of those aged 30-44, 66 percent of those aged 45-64, and 73 percent of those 65 years of age and older.

County:

For the three-year period of 1998-2000, the county with the highest age-adjusted death rate for motor vehicle accidents was Elk County with a rate of 33.8 (based on 34 deaths). The second highest rate occurred for Susquehanna County (rate of 30.2, based on 37 deaths). Third was Wayne County, followed by Somerset and Clarion Counties. (Counties with less than 20 deaths due to motor vehicle accidents were excluded since age-adjusted rates based on less than 20 events are considered statistically unreliable.)

The county with the lowest 1998-2000 age-adjusted death rate for motor vehicle

accidents was Allegheny County with a rate of 6.6, (based on 267 deaths). The second lowest rate was for residents of Delaware County (8.4, based on 144 deaths). The third lowest rate was Philadelphia County followed by Montgomery County.

Rural counties tended to have higher age-adjusted death rates for motor vehicle accidents while urban counties tended to have the lower rates.

Healthy People 2010 Goal:

The Healthy People 2010 national goal for deaths due to motor vehicle accidents is an age-adjusted rate of 9.2. Pennsylvania's 2000 rate of 11.8 is not that far from such a goal and, if declines continue for this rate throughout the coming decade, the state has a good chance of meeting the national objective.

If you have any questions regarding the statistics presented here, please contact the Bureau of Health Statistics and Research at 717-783-2548. Additional statistics on motor vehicle accident deaths can be accessed on the Department's Health Statistics web pages at www.health.state.pa.us/stats.

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Arthritis...

for age, it was determined that persons with arthritis reported they were unable to do their usual activities nearly six days out of 30, compared to only two days a month for adults without arthritis. Also, persons with arthritis reported more days with poor physical and mental health than those with no arthritis, even after adjusting for age (see graph on right).

...persons with arthritis reported they were unable to do their usual activities nearly six days out of 30, compared to only two days for persons without arthritis.

Like the rest of us, most arthritis sufferers benefit from exercise and avoiding excess weight. Excess weight aggravates arthritis by increasing the stress on joints and muscles. Persons who are overweight or obese are more likely to suffer from arthritis. This may be due to the increased stress that the extra weight causes or the avoidance of physical activity due to arthritis pain. Approximately 9 out of 10 overweight persons reported they were trying to lose or maintain their current

weight regardless of whether or not they have arthritis. Although overweight persons (Body Mass Index of 25 or more) with arthritis (28% ±3%) were more likely than those not suffering (22% ±2%) from arthritis to have been told by a health professional to lose weight, they were less likely to exercise to lose weight (58% ±3%, compared to 53% ±2%). About three out of every four overweight persons said they were eating fewer calories and/or less fat regardless of having arthritis or not.

The pain associated with arthritis often deters people from exercise. However, not using joints and muscles accelerates their degeneration. Persons with arthritis should discuss with their doctor the types and extent of exercise appropriate for them. However, nearly every arthritis sufferer can benefit from some form of exercise. A suggested Internet link is the University of Washington's *UW Physicians* online – [Exercise and Arthritis: Introduction at http://www.orthop.washington.edu/arthritis/living/exercise/01](http://www.orthop.washington.edu/arthritis/living/exercise/01).

Adults with arthritis were less likely than those not suffering from arthritis to engage in some form of leisure time physical activity. No doubt some of this difference in physical activity is due to persons with arthritis tending to be older than persons without arthritis. Nonetheless, when

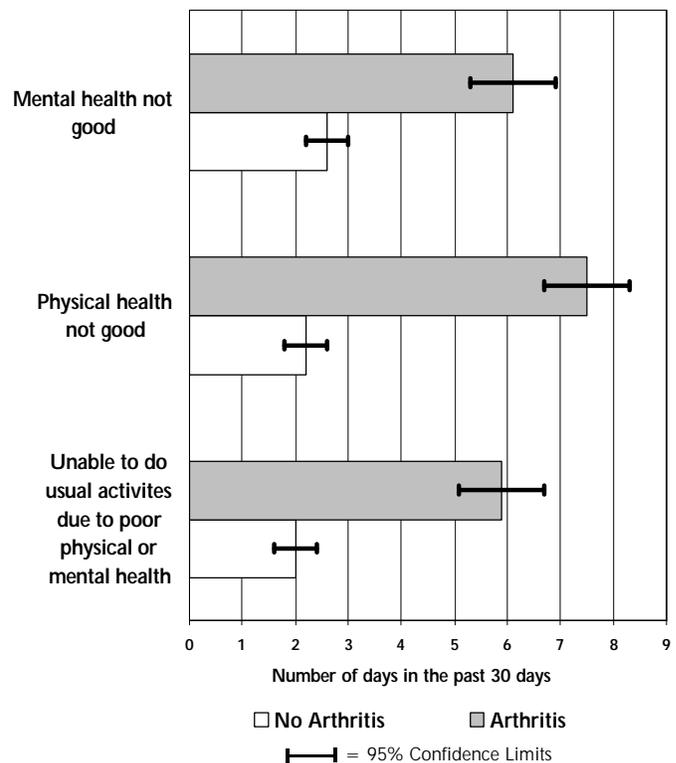
age is controlled, the difference remained statistically significant (p<.01).

Much of the pain and disability associated with arthritis can be reduced with early identification and management such as weight control and exercise. Doctors may also prescribe a number of new pharmaceuticals designed to deal with the pain that accompanies arthritis or rheumatism. Since many Pennsylvanians who reach age forty-five or

older will suffer some arthritis symptoms, they should be aware of arthritis management and treatment and be sure to tell their doctor about any reoccurring joint or muscle pains.

If you have any questions about the statistics presented in this article, please contact the Bureau at 717-783-2548. Various reports of BRFSS data can be accessed at the Department's Health Statistics web pages at www.health.state.pa.us/stats.

**Physical/Mental Health Status and Activity Limitations
Pennsylvania Adults With/Without Arthritis, 2001 BRFSS**



NOTE: Percentages are age-adjusted.

Selected Levels of Physical Activity for Pennsylvania Adults With/Without Arthritis, 2001 BRFSS

	Lower 95% Confidence Limits	PERCENT PREVALENCE ESTIMATE	Upper 95% Confidence Limits
Engaged in no leisure time physical activity			
Persons with Arthritis	33.1	30.4	27.6
Persons without Arthritis	23.3	21.4	19.4
Engaged in some leisure time physical activity			
Persons with Arthritis	66.9	69.6	72.4
Persons without Arthritis	76.7	78.6	80.6

Update: Healthy People 2010 Objectives

Focus Area 01 - Access to Quality Health Services

01-09a - Reduce the hospitalization rate for pediatric asthma (persons under 18).

2010 Target: 17.3 discharges per 10,000

All Persons Under 18 and By Sex:

The hospitalization rate for pediatric asthma among Pennsylvania residents was 24.7 per 10,000 population under 18 in 2000. There were 7,229 discharges with a primary diagnosis of asthma to residents under 18 that year from Pennsylvania hospitals.

The pediatric asthma hospitalization rate in 2000 was over 50 percent higher among males under 18 (29.8), compared to females under 18 (19.4). This difference in the rates by sex was consistent between 1996 and 2000.

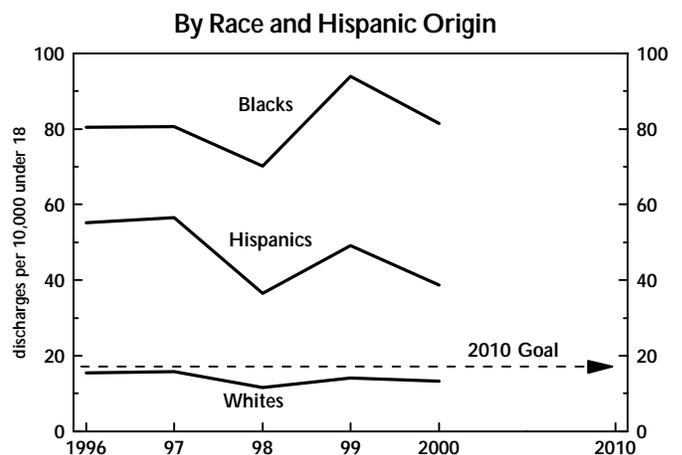
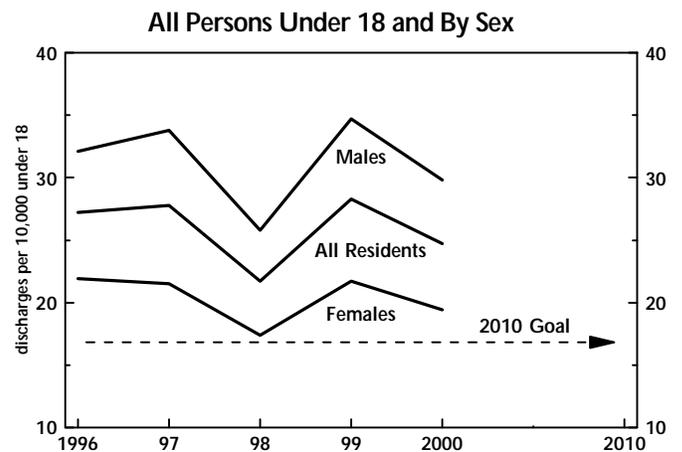
The Healthy People 2010 objective is a rate of 17.3. The rates for all persons under 18 and for males under 18 have been much higher than the 2010 goal and historical data show no trends. The rates for females under 18 are closer to the 2010 goal but, again, no trends are evident.

Race and Hispanic Origin:

The 2000 pediatric asthma hospitalization rates by race and Hispanic Origin show that the rate for blacks (81.4 per 10,000) was over six times higher than the rate for whites (13.3) and the Hispanic rate (38.7) was almost three times higher than the white rate. In addition, the rates for blacks between 1996 and 2000 have remained high while the rates for Hispanics have shown some decline. The rates for whites have not changed much between 1996 and 2000.

The rates for whites have been below the Healthy People objective of 17.3 throughout the five-year period of 1996-2000. If the rates for Hispanics continue to decline substantially, there is a chance for meeting the 2010 goal. However, the rates for blacks show no trend and are so high now that it seems improbable that they will meet the goal.

Hospitalization Rates For Pediatric Asthma
Pennsylvania Residents Under Age 18, 1996-2000



Hospitalization Rate* for Pediatric Asthma
By Sex and Race, Pennsylvania Residents, 1996-2000

	2000	1999	1998	1997	1996
All Persons Under 18	24.7	28.3	21.7	27.8	27.2
Males Under 18	29.8	34.7	25.8	33.8	32.1
Females Under 18	19.4	21.7	17.4	21.5	21.9
Whites Under 18	13.3	14.1	11.5	15.7	15.4
Blacks Under 18	81.4	94.0	70.2	80.6	80.5
Hispanics** Under 18	38.7	49.2	36.5	56.5	55.2

*discharges per 10,000 under 18 **Hispanics can be of any race

HP2010 State and County Data on the Web

To access the Department of Health's web page of Healthy People 2010 statistics for the state and counties, go to www.health.state.pa.us/stats. The latest available statistics as well as trend data are shown. You can view data for the state, all counties, a specific demographic element (age, sex, race, etc.) or just for a specific county. Complete data sets for the state and counties can be downloaded. There is also a link to the national HP2010 web site.

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