

STATISTICAL NEWS

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Obesity Higher in Some Groups & Their Health Risks Are Also Higher

Less Educated, Older Adults, and Blacks Identified as Risk Groups

Recent statistics confirm that obesity is higher among Pennsylvanians aged 30 and older, black Pennsylvanians, and residents with a high school education or less. These statistics also show that many health risks (such as diabetes, asthma, and arthritis) are significantly more prevalent among obese adults.

"Individuals who are obese (Body Mass Index or BMI > 30) have a 50 to 100 percent increased risk of premature death from all causes compared to individuals with a BMI in the range of 20 to 25. An estimated 300,000 deaths a year may be attributable to obesity." This was an acknowledgment of obesity as a pressing health issue that is quoted from the 2001 report *The Surgeon General's Call To Action To Prevent and Decrease Overweight and Obesity 2001* published by the Office of the Surgeon General in the Department of Health and Human Services. Since the publication of that report, obesity has continued to increase in prevalence, often being classified as a national health epi-

"...obese (individuals)... have a 50 to 100 percent increased risk of premature death from all causes..."

demic. The progress of this increase has been measured through the use of the Body Mass Index (BMI), which is a measure of body fat based on the factors of height and weight. According to standards set by the National Institutes of Health, adults with a BMI of 18.5 to 24.9 are considered to be of normal weight. Adults with a BMI of 25.0 to 29.9 are considered overweight and with a BMI of 30 or greater are considered to be obese.

Higher Prevalence Among Certain Demographic Groups:

Higher prevalences of obesity have been seen in Pennsylvania among different demographic groups. Adults who are 30 years of age or older (25

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Birth Data Show Decline for Mothers Who Smoke

Differences Seen By Race/Ethnicity & Age; Birth Weight Also Affected

Mothers who smoked during pregnancy were more likely to be younger and have low birth weight babies than mothers who did not smoke during their pregnancy, according to statistics derived from data collected by the Department of Health on certificates of live birth. In addition, white mothers were slightly more likely to have smoked during pregnancy than black mothers while Asian/Pacific Islander mothers were the least likely of the three racial groups (white, black, Asian/Pacific Islander) to have smoked during pregnancy.

It has been long recognized that smoking while pregnant can adversely affect the fetus. Data collection via the birth certificate provides information useful in understanding the problem and targeting which groups are at risk, leading to the development of public health interventions to reduce smoking by pregnant women. The accuracy of the birth certificate data on smoking during pregnancy has not been rigorously examined; however, when compared to statewide sample data collected by the Pennsylvania

Although this decrease was consistent over the years, it is not a very substantial decline.

Behavioral Risk Factor Surveillance System (BRFSS), smoking statistics based on the birth certificates were very similar to BRFSS figures.

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2001 Birth Statistics & BRFSS Report Released

Data/Report Available On Web Site; 2001 Births Lowest Ever Recorded

The Bureau of Health Statistics and Research has recently released final 2001 birth statistics and a 2001 BRFSS annual report. Both the birth statistics and the new BRFSS report can be easily accessed on the Health Statistics web pages of the Department's web site. Go to www.health.state.pa.us/stats and select either Vital Statistics (for 2001 birth data) or Behavioral Risk Data (for the BRFSS report).

2001 Live Births:

The number of resident live births for Pennsylvania in 2001 (143,404) was a decline of 2,470 or 1.7 percent from the 145,874 reported for 2000. The 2001 figure is the lowest ever recorded for the state since 1915 when statewide figures were first collected and reported. The second lowest annual figure occurred in 1997 when there were 143,967 resident live births reported. The annual numbers of births for Pennsylvania have been on the decline since the babyboom era ended back in the early 1960s.

Percentages of low birth weight and births to unmarried mothers increased and the percentage of births to mothers obtaining care in the first trimester declined.

A review of other birth statistics showed a slight increase in the percentage of low birth weight, from 7.7 in 2000 to 7.9 in 2001. The percent of births to mothers who received prenatal care in the first trimester declined slightly from 81.6 to 80.9. Also, the percentage of births to unmarried mothers increased from 32.6 to 33.8. Cesarean deliveries increased from 21.2 to 22.4 percent, continuing the rise in this figure that started back in 1997.

Numerous cross-tabulations of 2001 births by age and race of mother, birth weight, start of prenatal care, and many other variables for the state, counties and all municipalities can now be accessed as

PDF files (requires the free software Adobe Acrobat Reader) at www.health.state.pa.us/stats (select "Vital Statistics" and then click on "1990-2001 Birth and Death Statistics").

2001 Behavioral Health Risks of Pennsylvania

Adults:

This updated report continues the series based on sample data obtained via telephone surveys of Pennsylvania adults, as part of the Behavioral Risk Factor Surveillance System or BRFSS. Seventeen topics are covered and include the following:

- Health Status
- Health Care Access
- Asthma
- Diabetes
- Tobacco Use
- Pap Tests
- HIV/AIDS
- Prostate Cancer Screening
- Breast Cancer Screening
- Alcohol Consumption
- Overweight and Obese
- Colorectal Cancer Screening
- Immunization

- Hypertension Awareness
- Cholesterol Awareness
- Oral Health
- Osteoporosis
- Cardiovascular Disease
- Weight Control
- Vitamin & Folic Acid Use
- Arthritis
- Exercise
- Disability
- Organ Donor

There is also a new page that conveniently shows all available 2001 Pennsylvania BRFSS data for Healthy People 2010 national objectives. Another section provides some statistical assistance with "Synthetic Estimation Process for Local Data".

To view the report online or download it from the web, go to www.health.state.pa.us/stats and select "Behavioral Risk Data (BRFSS)" and then click on the title of this report.

If you have any questions about the availability of 2001 birth statistics or would like a hard copy of the 2001 BRFSS annual report, please contact the Bureau at 717-783-2548.

E-Guide to Health Statistics & Injury Death Report Coming Soon to Health Statistics Web Pages

Two new web pages will soon be added to the Health Statistics web site.

The *E-Guide to Health Statistics for Pennsylvania, Counties and Communities* will provide an alphabetical index of over 300 health sta-

tistical topic areas with hyperlinks to web pages that will provide information on data sources, geographic detail available, titles and contents of data reports, and instructions (with embedded hyperlinks) to related web pages.

We also will be updating an old report, *Injury Deaths in Pennsylvania*, with 1996-2000 injury statistics by type of injury with trend data and county level statistics.

We hope to have both of these new web pages up and

available to our customers by the end of January. So you may want to take a look at our web pages now at www.health.state.pa.us/stats to see if they are there yet. We will update you on their availability in the March newsletter.

Obesity Higher in Some Groups; Health Risks Higher

percent, 95% CI = 23 to 27) had a significantly higher percentage of obesity compared to adults aged 18-29 (13 percent, 95% CI = 10 to 16). The percentage of black adults (35 percent, 95% CI = 28 to 42) compared to white adults (21 percent, 95% CI = 19 to 23) was also significantly higher. In addition, educational status seemed to be a factor in the obesity prevalence of Pennsylvania adults. Adults with a high school education or less had a significantly higher percentage of obesity (23 percent, 95% CI = 22 to 24) compared to adults with some college education or a college degree (17 percent, 95% CI = 16 to 18). See the data table below.

When further refining our review of the prevalence of obesity in Pennsylvania, it became apparent that black females were major contribu-

...black females were major contributors to the elevated (obesity) figure among black adults...(and) white females with a high school education or less had a significantly higher percentage of obesity...

tors to the elevated obesity figure among black adults. Black females had a significantly higher percentage (43 percent, 95% CI = 34 to 52) compared to white males (22 percent, 95% CI = 20 to 24), white females (20 percent, 95% CI = 18 to 22) or black males (24 percent, 95% CI = 15 to 33). Another interesting comparison showed that white females with a high school education or less had a significantly

higher percentage of obesity (24 percent, 95% CI = 21 to 27) compared to white females with some college education or a college degree (17 percent, 95% CI = 14 to 20). This education difference was not seen for white males or black adults.

Since there are limits on the resources needed to obtain a larger and more reliable annual sample of specific sub-populations in Pennsylvania, we chose in this case to combine data from several survey years. This allowed us to have a sufficient sample size to assess the validity of the sample estimates. For this review, the obesity differences were determined using survey data from 1997 through 2001 which was gathered by the annual sample telephone surveys of Pennsylvania adults, conducted by Pennsylvania's Behavioral Risk Factor Surveillance System (BRFSS) program. New sample weights were calculated using the 2000 Pennsylvania census population to post-stratify on the race, sex and age characteristics of Pennsylvanians. Please note that the race strata used to

group race was black and all other races.

It is important to note that this approach does have limitations. The number of years that a particular question is asked and each year's comparability become important when combining survey sample years. Also, how many years one is willing to use to calculate estimates becomes an issue due to fluctuations in the annual prevalences. Long-term trends in these data would have a tendency to diminish the impact of the five-year estimates. If a particular prevalence is rising or falling, the five-year prevalence estimate will be somewhat lower or higher since it is an average of the five years of data. Regardless, for many of the behavioral risk factors that we examine in the BRFSS, a multi-year sample can allow us to confirm relationships that are sometimes suggested but not able to be validated due to the sample size restrictions of an annual BRFSS sample.

Specific Health Risks Higher Among Obese Adults:

According to Pennsylvania's 2001 BRFSS, 22 percent of all Pennsylvania adults were found to be obese. For the adults found to be obese in 2001, significant increases were apparent for certain health or behavioral risks.

Obese adults reported a significantly higher percentage of being told that they have diabetes (13 percent, 95% CI

Obese adults reported a significantly higher percentage of... diabetes, asthma, heart disease, stroke, high blood pressure, high cholesterol, fair or poor general health, arthritis, physical disability...

**Percent of Obese Adults by Demographic Group
Pennsylvania BRFSS, 1997-2001**

Demographics	Percent Obese	Confidence Interval (95%)
All Adults	22	20-24
Age:		
18-29	13	10-16
30+	25	23-27
Race:		
White	21	19-23
Black	35	28-42
Education:		
High School or Less	23	22-24
Some College or College Degree	17	16-18

Continued on Page 6...

Mothers Who Smoke...

The percent of mothers who smoked during pregnancy declined between 1995 and 2001, from 18.8 percent to 16.8 (see Chart 1 on the right). Although this decrease was consistent over the years, it is not a very substantial decline. The annual figures by race of mother show some slight declines among whites and Asian/Pacific Islanders and a somewhat higher decline among blacks.

Among resident births to black mothers, 15.7 percent in 2001 involved mothers who smoked. However, among whites, the percent was slightly higher at 16.9. Births to Asian/Pacific Islander mothers had the lowest percent of mothers who smoked (2.1). Among births to Hispanic mothers, 11.5 percent in 2001 involved mothers who smoked. (Please note that Hispanics can be of any race.)

The percent of live births to mothers who smoked was highest among mothers 15-24 years of age. For example, in 25.5 percent of the births to females aged 15-19, the mother had smoked; and, among those aged 20-24, the percent was 25.4. The percentage of smoking mothers decreased among the older age groups (25+), all having percentages much lower than the 16.8 recorded for births to mothers of all ages. The youngest age group (under 15) also had a rather low percentage of births to mothers who smoked during pregnancy (9.6).

When looking at the percent of live births to mothers who smoked by age and race (see Chart 2 on the right), it becomes evident that differ-

Among whites, Asian/Pacific Islanders, and Hispanics, the percentages of smoking mothers were much higher for younger age groups while, among blacks, the percentages were higher among older mothers.

ences between the races by age exist. Among whites, Asian/Pacific Islanders and Hispanics, the percentages of smoking mothers were much higher for the younger age groups while, among blacks, the percentages were higher among older mothers. For example, 32.2 percent of live births to white teens (ages 15-19) involved mothers who smoked during pregnancy, compared to 11.0 percent of births to black teenage mothers of those ages.

Among the births to mothers aged 40 and over, only 10.6 percent were to white mothers who smoked, 1.1 percent to Asian/Pacific Islander mothers who smoked, and 9.2 percent to Hispanic mothers who smoked – compared to 20.7 percent of births to black mothers aged 40+ who smoked. These figures were also similar for births to mothers aged 35-39.

Birth weight is a prime indicator of infant health. Low birth weight infants (under 5 pounds and 9 ounces) are considered a major contributor to higher infant mortality rates.

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Chart 1
Percent of Live Births to Mothers Who Did Not Smoke During Pregnancy, Pennsylvania Residents, 1995-2001

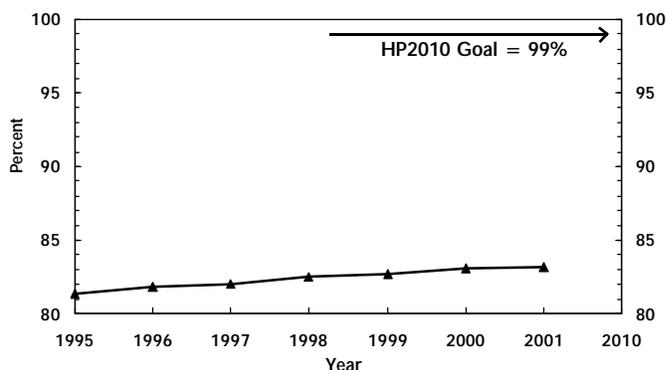


Chart 2
Percent of Live Births to Mothers Who Smoked By Age and Race of Mother, Pennsylvania Residents, 2001

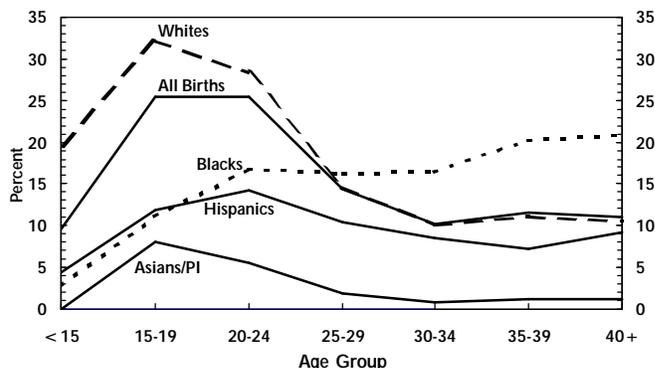
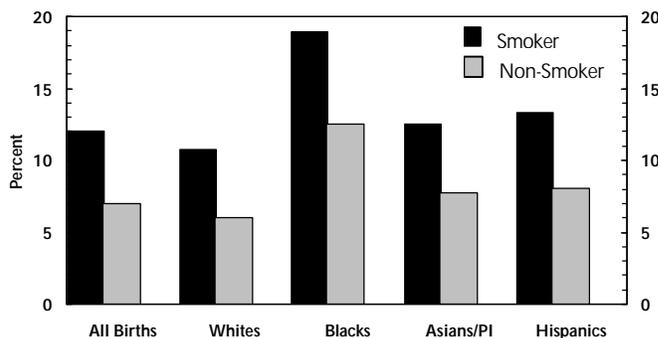


Chart 3
Percent of Low Birth Weight Live Births by Smoking Status and Race of Mother, Pennsylvania Residents, 2001



Top Ten Baby Names for 2001 Released

Abigail and Emma New to Top Ten; Emily and Michael Still #1's

The most popular first name given to female babies born in Pennsylvania in 2001 was Emily, for the eighth year in a row. Emily has been listed in the top ten since 1991. Madison remained in second place. Sarah and Hannah traded places as Sarah moved into third while Hannah dropped to fourth. The newcomer Abigail moved from fourteenth place in 2000 to fifth, replacing Alexis (which dropped to ninth). Olivia moved up from ninth place in 2000 to sixth. Samantha slid from sixth to seventh place, replacing Taylor (down to thirteenth). Elizabeth came back into the top ten in eighth place, bumping out Lauren (down to fourteenth). Finishing in tenth place was the newcomer Emma, bumping out Alyssa (down to twelfth).

There were 12,438 different first names given to baby girls in 2001. The following

**Complete lists
(in order by frequency)
by sex can be accessed
on the Health Statistics
web pages. Go to
[www.health.state.pa.us/
stats...](http://www.health.state.pa.us/stats...)**

were a few of the more unique ones – Freedom, Goddess, Galaxy, Beautiful, Avon, Hawaii, Italy, Russia, Do, Eunique, River, Season, Secret, Sun, Royal, and Timber.

For the twenty-fifth year in a row, Michael was the most popular first name given to baby boys in 2001. Jacob, Matthew and Nicholas remained in second, third and fourth place, respectively. Tyler moved up from sixth to fifth, bumping Ryan down to seventh place. Joshua moved up from seventh place in 2000 to sixth in 2001. Joseph, John

Top Ten Most Popular Baby Names By Sex Pennsylvania Live Births, 2001

<u>Males</u>	<u>Females</u>
Michael	Emily
Jacob	Madison
Matthew	Sarah
Nicholas	Hannah
Tyler	Abigail
Joshua	Olivia
Ryan	Samantha
Joseph	Elizabeth
John	Alexis
Zachary	Emma

and Zachary remained in eighth, ninth and tenth place, respectively. For the fourth year in a row, there were no new male names in the top ten list.

A total of 8,300 different first names were given to baby boys in 2001. The following were some of the more unusual ones – Victory, Army, Artic, Boston, Edge, English, Fate, Ireland, Taiwan, Tim-

berland, Triumph, Egypt, Kentucky, Scotland, Three, Yonder, and Wish.

The top ten baby names for 2001 by sex appear above. Complete lists (in order by frequency) by sex can be accessed as PDF files (requires the free software Acrobat Reader) on the Health Statistics web page. Go to www.health.state.pa.us/stats and select Vital Statistics.

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Mothers Who Smoke...

Several major health studies have implicated smoking by the mother during pregnancy as having a major impact on the infant's birth weight. In 2001, the percent of low birth weight infants among Pennsylvania residents was considerably higher among smoking mothers (12.0 percent) than non-smoking mothers (7.0 percent).

The percent of low birth weight infants among all four race/ethnic groups was consistently much higher among

smokers (see Chart 3 on page 4). For whites, 6.0 percent of live births to non-smoking mothers were low birth weight, compared to 10.8 percent for mothers who smoked during pregnancy. The same pattern was seen among births to Asian/Pacific Islander mothers and Hispanic mothers, 7.8 and 8.1 percent of live births to non-smoking mothers were low birth weight respectively, compared to 12.5 and 13.3 percent for mothers who

smoked during pregnancy, respectively. The percentages for births to black mothers were even higher – 18.9 percent of live births to smoking mothers were low birth weight while only 12.5 percent of births among non-smoking black mothers were reported as such.

The Healthy People 2010 national objective calls for an increase in the abstinence from tobacco use by pregnant women to 99 percent. Attainment of this goal in Pennsylvania would require the percent of live births to mothers who did not smoke during pregnancy to increase from

83.2 percent in 2001 to 99 percent by the year 2010. This percent has been increasing in recent years in Pennsylvania. However, without vigorous and more successful public health intervention programs, it seems unlikely that the state will reach the 2010 goal.

In addition to the statistics presented in this article, four new tables related to resident live births by tobacco use during pregnancy will be added to the *Pennsylvania Vital Statistics 2001* annual report. Please contact the Bureau at 717-783-2548 if you have any questions regarding this article.

Obesity Higher in Some Groups; Health Risks Higher

= 10-16; excluding gestational diabetes) compared to non-obese adults (5 percent, 95% CI = 4-6). The percentages of asthma (15 percent, 95% CI = 12-18); heart attack, heart disease, or stroke (12 percent, 95% CI = 9-15); high blood pressure (41 percent, 95% CI = 37-45); high cholesterol (40 percent, 95% CI = 36-44); fair or poor general health (24 percent, 95% CI = 21-27); arthritis (37 percent, 95% CI = 33-41); lack of physical activity (31 percent, 95% CI = 27-35); and physical disability (25 percent, 95% CI = 22-28) were also significantly higher com-

pared to the non-obese adult percentages (see the bar chart below).

The risk to obese adults of diabetes, heart disease, high blood pressure, and arthritis-related disability have been indicated by the Centers for Disease Control and Prevention report *The Burden of Chronic Disease and Their Risk Factors: National and State Perspectives 2002* released in February 2002. In the National Institute of Health's *Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults* (released

in 1998), high blood cholesterol, congestive heart failure, and stroke are also stated as risks for obese adults. In addition, the U.S. Surgeon General's report, as previously mentioned, asserted the risks to obese adults of asthma and diminished activity.

In review of the obesity percentages for the Pennsylvania BRFSS during 1997 through 2001 and the health risk disparities of obese adults ascertained from the BRFSS data for 2001, it may be suggested that adults 30 years of age or older, black adults (specifically black females), and

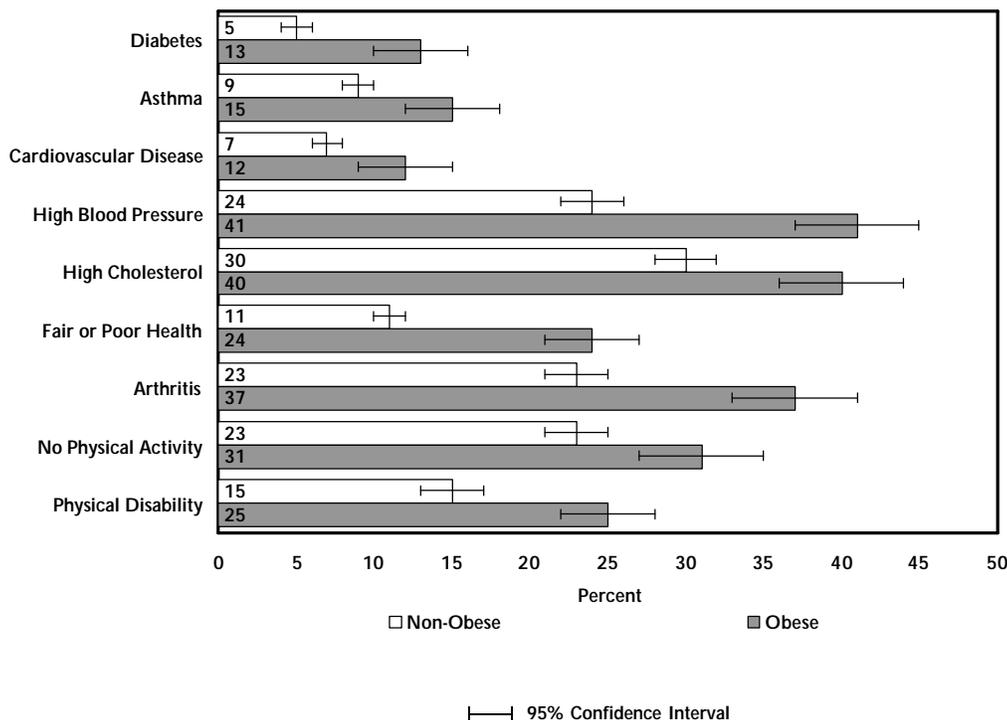
...obesity percentages for Pennsylvania... suggested that adults 30+, black adults, and adults with a high school education or less could be at an increased health risk.

adults with a high school education or less (specifically white females) could be at an increased health risk. The health conditions found to be of significantly higher percentages for obese adults in the 2001 BRFSS survey are suggestive of health risk for individuals afflicted with the condition of obesity. It could be inferred that the subpopulations determined to have significantly higher obesity percentages from the analysis of the 1997 through 2001 data could be prone to the same health risk percentage increase seen for obese adults in 2001.

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

Please also note that the 2001 BRFSS annual report, *2001 Behavioral Health Risks for Pennsylvania Adults*, is now available and can be viewed on the Health Statistics web pages at www.health.state.pa.us/stats (select "Behavioral Risk Data - BRFSS" and then the title of this report).

Percent of Obese and Non-Obese Adults with Selected Health/Behavioral Risks Pennsylvania BRFSS, 2001



Update: Healthy People 2010 Objectives

Focus Area 3 - Cancer

3-11b - Increase the proportion of women aged 18+ who received a Pap test within past three years. 2010 Target: 90%

All Females and Non-Hispanic White Females:

The percentages of all females and non-Hispanic white females aged 18 and older who had had a Pap test in the previous three years were very similar during the five-year period of 1997-2001. These percentages have increased slightly but rather consistently during that time period, from 81 percent in 1997 to 84-85 percent in 2001 (see data table below).

Non-Hispanic Blacks:

The 1997-2001 annual percentages of non-Hispanic black females aged 18 and older who had had a Pap test in the previous three years have been slightly higher than the figures for non-Hispanic whites during that five-year period. In fact, the 2001 percentage of 91 percent for non-Hispanic black females is just above the national goal of 90 percent.

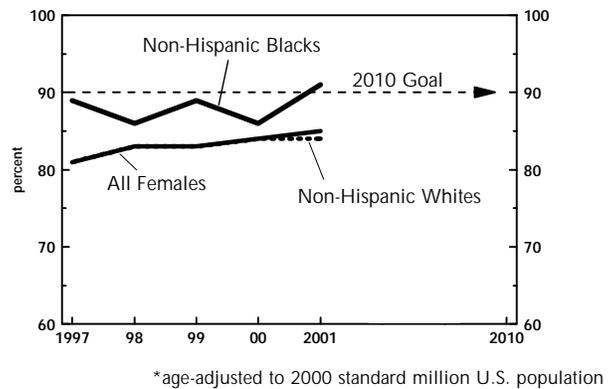
Rural vs. Urban:

The percentages of females aged 18 and older living in urban areas who had had a Pap test in the previous three years showed some increases between 1997 and 2001. However, the annual percentages for those in rural areas have been somewhat lower than for those in urban areas (82 percent vs. 86 percent in 2001) and have not changed much.

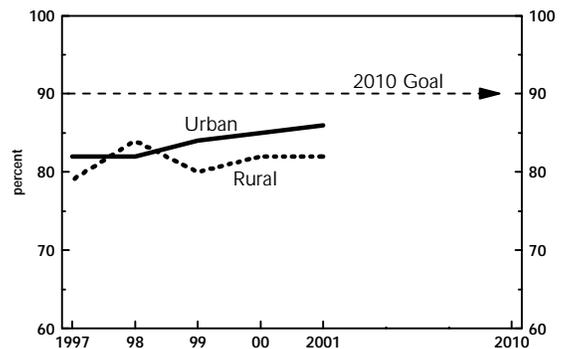
Education:

The percentages for females aged 25 and older at all three educational levels have shown some slight increases. However, higher percentages occurred for each higher educational level, with the 2001 percentage for females in the highest educational level (at least some college) reaching the 2010 goal. The percentages for females with less than a high school education were much lower than the other two groups.

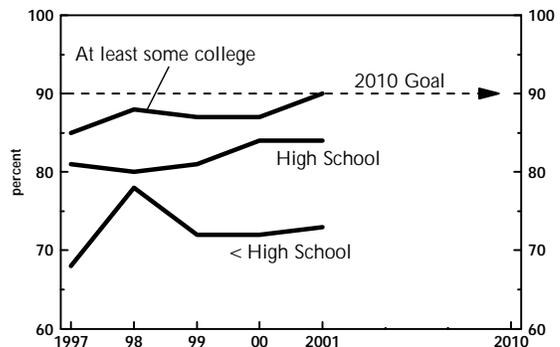
Percent* Women 18+ With Pap Test in Past 3 Years Total and by Race, Pennsylvania, 1997-2001



By Rural and Urban, Pennsylvania, 1997-2001



By Education Aged 25+, Pennsylvania, 1997-2001



Percent* Women 18+ With Pap Test in Past 3 Years Total & Selected Demographics, Pennsylvania, 1997-2001

	2001	2000	1999	1998	1997
All Females 18+	85%	84%	83%	83%	81%
Whites** 18+	84%	84%	83%	83%	81%
Blacks* 18+	91%	86%	89%	86%	89%
Urban 18+	86%	85%	84%	82%	82%
Rural 18+	82%	82%	80%	84%	79%
< High School 25+	73%	72%	72%	78%	68%
High School 25+	84%	84%	81%	80%	81%
At least some college 25+	90%	87%	87%	88%	85%

*age-adjusted to 2000 standard million U.S. population

**non-Hispanic

NOTE: Data for Hispanics are not reported due to unreliability (small numbers).

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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Secretary of Health*

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