

STATISTICAL NEWS

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Heart Disease Deaths Continue to Decline

Highest Death Rates Observed for Elderly Black Males

The age-adjusted death rate for heart disease among Pennsylvania residents decreased in 2004. This marked the second consecutive year in which the rate decreased. The age-adjusted death rate among males was 51.9 percent higher than the rate for female residents. A further review of these death rates by age, sex and race showed that elderly black males tended to have the highest rates for this cause of death.

In 2004, there were 36,063 deaths due to heart disease among Pennsylvania residents—4.6 percent lower than the 37,805 reported for 2003. The 2004 death rate for heart disease of 234.1 per 100,000 (age-adjusted to the 2000 U.S. standard million population) was 6.4 percent lower than the 2003 rate of 250.1.

One of the more common types of heart disease is coronary heart disease. There were 25,237 Pennsylvania resident deaths for this cause in 2004. Acute myocardial infarction (heart attack), which is a subset of coronary heart disease, accounted for 8,720 resident deaths. Congestive heart failure was the cause for 3,217 deaths. There were 1,216 deaths due to cardiac arrest in 2004.

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PA and U.S. Comparisons:

The age-adjusted death rate for heart disease for the United States in 2003 (latest available year) was 232.3. This is slightly less than the latest rate (234.1 in 2004) for Pennsylvania. In 2003, Pennsylvania had the 18th highest age-adjusted heart disease death rate among all of the states.

A look at age-adjusted rates for heart disease deaths by race and sex also shows slightly higher rates for PA (2004) as compared to the U.S. (2003), except for blacks. The rates for males were 286.6 for the United States and 292.1 for Pennsylvania. For females, the rates were 190.3 (U.S.) and 192.3 (PA). The United States rate for whites was 228.2 compared to 232.1 for Pennsylvania. The rates among blacks were 300.2 (U.S.) compared to 274.4 for Pennsylvania.

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New Birth Data on Smoking Reviewed

Revised Certificate Asks About Smoking Before/During Pregnancy

This is the fourth and final of a series of articles that focuses on the new data items collected via the 2003 revisions to the certificate of live birth. The certificate now asks if the mother smoked three months before pregnancy and during the first, second or last trimester of pregnancy. It also asks the average number of cigarettes smoked during each of those time periods. Prior to 2003, the certificate asked only if tobacco was used during pregnancy and the average number of cigarettes smoked per day.

Chart 1 (page 5) shows that in 2004, 23.4 percent (32,398) of births were to mothers who smoked during the three months prior to pregnancy. That percentage dropped sharply to 17.2 percent (23,777) during the first three months of pregnancy. During the second trimester of pregnancy, the percentage dropped again to 14.6 (20,123). During the last trimester of pregnancy, the percent of births to mothers who smoked dropped slightly to 14.1 (19,423). Births to mothers 20-24 years of age had the highest number and percentage of smokers over all four of the three-

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Births to mothers 20-24 years of age had the highest number and percentage of smokers (before and throughout the pregnancy)...

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DEPARTMENT OF HEALTH

*Edward G. Rendell, Governor
Calvin B. Johnson, M.D., M.P.H.
Secretary of Health*

Secondhand Smoke – Attitudes and Beliefs

2005 Sample Survey Data Reviewed

Pennsylvania adults generally agree that secondhand smoke, also known as Environmental Tobacco Smoke (ETS), is harmful to one's health. According to a Pennsylvania Adult Tobacco Survey, smokers and non-smokers alike in Pennsylvania believe that ETS causes lung cancer and heart disease in adults and respiratory problems in children. The surveyed adults were much less likely to agree on whether smoking should be banned indoors across the state.

According to the Center for Disease Control and Prevention's report, *Exposure to Environmental Tobacco Smoke and Cotinine Levels*, Environmental Tobacco Smoke (ETS) is responsible for many adult deaths due to lung cancer among nonsmokers and is associated with an increased risk

for heart disease in adults. ETS, according to the report, causes serious respiratory problems in children, and increases the risk for Sudden Infant Death Syndrome (SIDS).

Pennsylvania adults seem to have heard this message. When asked about smoke from other people's cigarettes, approximately 8 out of 10 current smokers, and over 95 percent of those who never smoked, agreed that breathing secondhand smoke is either very or somewhat harmful to one's health. Chart 1 shows the continuum of beliefs about the health effects of secondhand smoke from the current smoker (who is least likely to believe ETS negatively impacts one's health), the current smoker who plans to quit in the next 30 days, the former smoker, and lastly the

...8 out of 10 current smokers... agreed that breathing secondhand smoke is either very or somewhat harmful to one's health.

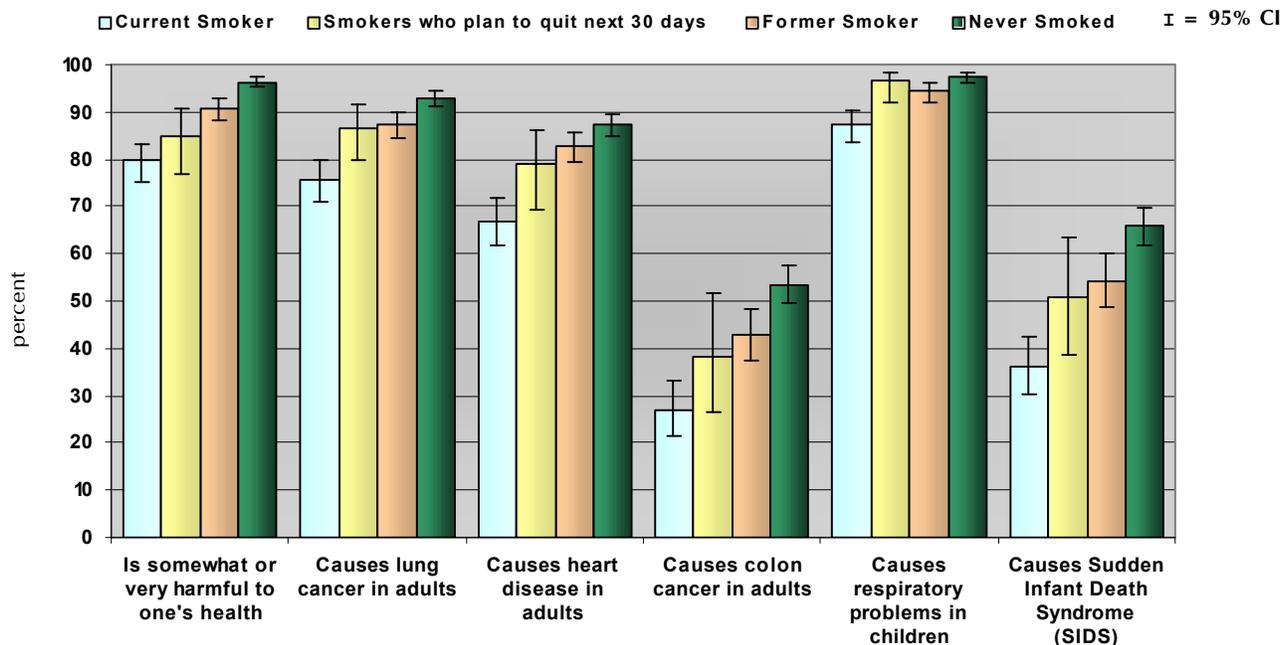
Pennsylvania adult who never smoked (who is most likely to believe the risks).

A current smoker is defined as someone who has smoked at least one cigarette in the past 30 days and has smoked at least 100 cigarettes in their lifetime. Someone who never smoked is defined as a person who has not smoked 100 cigarettes in their lifetime.

Despite the relative consensus about the effects of breathing ETS, banning smoking in public places has not achieved a similar level of agreement. When asked about smoking in restaurants, over three times as many adults who never smoked, and over twice as many former smokers than current smokers, thought smoking should not be permitted in restaurants. Chart 2, on the next page, depicts the preferences of Pennsylvania adults for banning smoking in restaurants, shopping malls, and indoor work areas. It breaks out the responses by the same categories as above—current smokers, current smokers planning to quit in the next 30 days, former smokers, and those who never smoked.

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Chart 1
Beliefs about Effects of Secondhand Smoke
Pennsylvania Adults



SOURCE: Pennsylvania Adult Tobacco Survey, Spring 2005.

EpiQMS and Website Updates

Infant Deaths & Other Additions to EpiQMS; Website Updated with Vital Statistics Pamphlet and Birth (2004) and Preliminary Death (2005) Reports

EpiQMS:

EpiQMS, the Bureau of Health Statistics and Research's interactive health statistics web tool, has recently been updated with 2004 birth data. These data are available at the state, county, and municipal levels. Health data users can access a wide variety of current birth statistics.

As part of our current EpiQMS enhancement project, a new dataset has recently been added. Health data users can now access resident infant death data at the state and county levels. Single year and three-year summary data are available for 1999 through 2004. At the state level, data users can choose between producing a data table or a chart for eight major causes of infant deaths or total deaths. Modules

available at the County level include Tables, Charts, Maps and County Assessments.

Staff are currently working to expand EpiQMS to include reported teen pregnancy data at the state and county levels. Additional enhancements are also being planned, so be sure to periodically check EpiQMS to begin using the enhancements as soon as they become available. To access EpiQMS, go to www.health.state.pa.us/stats and click on the EpiQMS logo.

Vital Statistics Pamphlet:

The *Vital Statistics for Pennsylvania 1906-2004* pamphlet is now available on the Health Statistics web pages and can be accessed at www.health.state.pa.us/stats (select **Vital Statistics**). This

pamphlet shows basic vital statistics (population, birth, induced abortion, and death data) for the state as far back as possible. Printed copies of this pamphlet will be available in early June.

2004 Birth Data:

A large volume and variety of data tables with 2004 birth statistics, including information for all counties and municipalities in Pennsylvania, have been added to the Bureau of Health Statistics and Research web pages.

To access the 2004 data, go to www.health.state.pa.us/stats and click on **Vital Statistics** and then select **Birth and Death Statistics 1990-2004**.

Examples of birth data available at this web page include births by age and race of mother,

by sex of infant, birth weight, medical conditions, previous live births, previous pregnancies, and trimester of entry into prenatal care for the state and all counties. Birth data tables are also available for all minor civil divisions (i.e. municipalities).

Preliminary Death Data:

Preliminary 2005 death data by month and county and by municipality are now available on the Health Statistics web pages. The preliminary data is subject to change.

To access the preliminary 2005 death data, go to www.health.state.pa.us/stats and click on **Vital Statistics** and then select **Preliminary 2005 Deaths by County and Municipality**.

Continued from Page 2...

Secondhand Smoke...

It also shows the percentages for those who prohibit smoking in their homes. As would be expected, over twice as many of those who do not currently smoke, compared to current smokers, ban smoking in their homes.

The Pennsylvania Adult Tobacco Survey, conducted in the Spring of 2005 for the Department's Division of Tobacco Control and Prevention, is a telephone survey that provides a probability sample of Pennsylvania adults. For questions concerning this article or for more information on this survey, contact the Bureau at 717-783-2548.

Chart 2
Areas Where Smoking Should be Banned
Pennsylvania Adults

± = 95% CI



SOURCE: Pennsylvania Adult Tobacco Survey, Spring 2005.

Heart Disease Deaths Continue to Decline

Race:

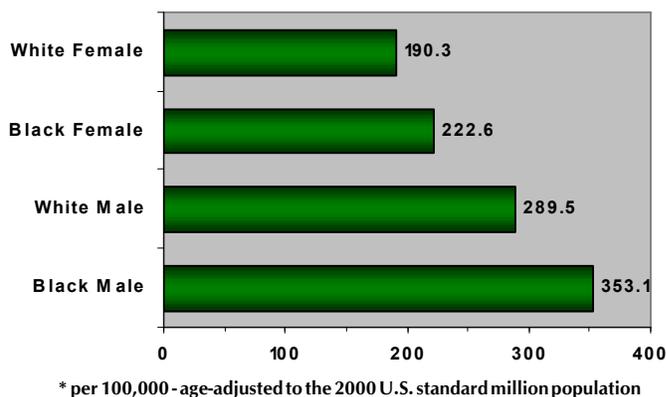
Pennsylvania's age-adjusted death rate for heart disease among black residents during 2004 was more than 18 percent higher than the rate for whites (274.4 versus 232.1). One of the possible reasons for the disparity by race could be weight. According to the 2004 *Behavioral Health Risks of Pennsylvania Adults*, 72 percent of non-Hispanic black adults (age 18+) were overweight; which was significantly higher (at the 95% confidence level) than the 60 percent for non-Hispanic white adults. Another possible reason for the difference could be blood pressure. The percent of non-Hispanic white residents of Pennsylvania (age 20+) who were ever told they had high blood pressure was 24 percent in 2003. The percentage for high blood pressure was significantly higher among non-Hispanic black residents of Pennsylvania at 36 percent.

Behavioral Health Risks of Pennsylvania Adults, 69 percent of male adults (ages 18+) were overweight. The percent of overweight female adult residents was significantly lower at 53 percent. Among Pennsylvania male residents, 28 percent (ages 20+) were ever told they had high blood pressure in 2003. The corresponding percent for females was significantly lower at 22 percent.

Age:

Reviewing the number of heart disease deaths by age group for 2004 shows that, as expected, elderly persons had by far the highest figures. Over 71 percent of Pennsylvania resident deaths due to heart disease occurred among residents aged 75 and older. Chart 2 shows that the 2004 age specific death rate for heart disease was 3.7 per 100,000 among the youngest population (age group 0-4) and then the rates increased steadily with age,

Chart 1
Heart Disease Death Rates* by Race/Sex
Pennsylvania Residents, 2004



reaching a high of 5,651.4 per 100,000 recorded for persons age 85 and older.

County:

Susquehanna County had the highest age-adjusted rate for heart disease deaths in 2004 (rate of 327.8 based on 178 deaths). The second highest rate

occurred for Schuylkill County (rate of 306.1 based on 683 deaths). Luzerne County had the third highest death rate, followed by Lackawanna. The age-adjusted death rates for these counties were all significantly higher than the state rate.

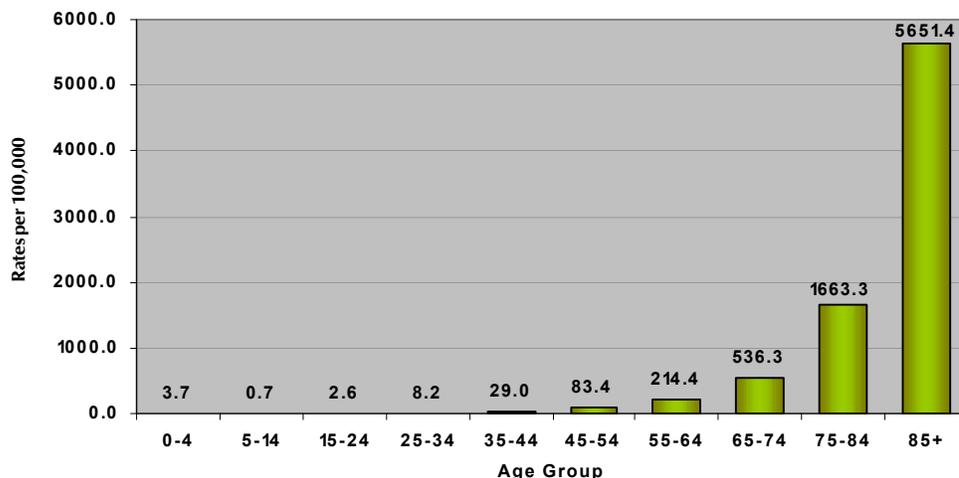
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...(the) death rate for heart disease among black residents during 2004 was more than 18 percent higher than the rate for whites...

Sex:

In 2004, the age-adjusted heart disease death rate for male residents of Pennsylvania was over 51 percent higher than the rate for females—292.1 compared to 192.3. Chart 1 shows that white males in Pennsylvania had an age-adjusted heart disease death rate of 289.5 per 100,000 while black males had a rate of 353.1. According to the 2004 *Behav-*

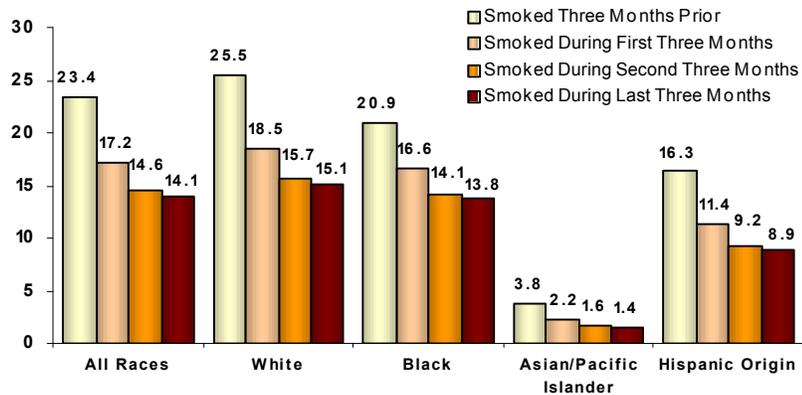
Chart 2
Age-Specific Death Rates for Heart Disease
Pennsylvania Residents, 2004



Birth Data Highlighted...

month time periods, compared to the other age categories. Their highest percentage occurred during the three months prior to pregnancy when 37.3 percent (11,411) had smoked. Their lowest percentage occurred during the last three months of pregnancy when 22.7 percent (6,946) had smoked. When comparing percentages, the 20-24 year old mothers had a slightly higher percent than the 15-19 year-old mothers. These two age groups

Chart 1
Live Births by Race/Ethnicity of Mother and Smoking Status
Pennsylvania Residents, 2004



Notes: Unknowns excluded in calculations. Hispanic can be of any race.

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Heart Disease Deaths...

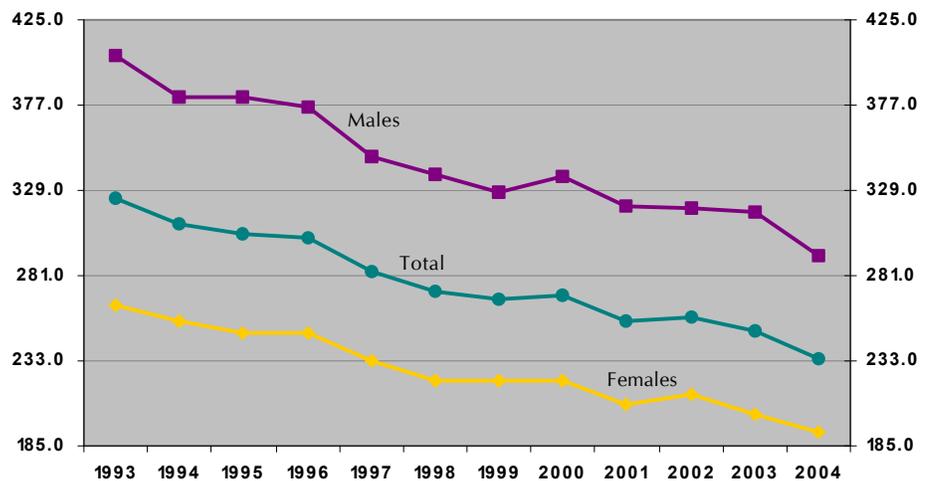
With a rate of 141.6 (based on 73 deaths), Pike County had the lowest age-adjusted death rate for heart disease. The next lowest rate was for residents of Juniata County (158.9 based on 45 deaths), followed by Tioga and then Franklin. These four counties all had significantly lower age-adjusted heart disease death rates compared to the state.

Trends:

Chart 3 shows that the age-adjusted rates for heart disease deaths among all persons have declined dramatically during the period of 1993-2004. Similar declines were observed for both male and female residents.

The Pennsylvania 2004 age-adjusted heart disease death rate marked the ninth time in eleven years that the rate decreased when compared to the previous year. The rate has dropped 27.7 percent since 1993 (234.1 in 2004 vs. 324.0 in 1993).

Chart 3
Age-Adjusted Death Rates* for Heart Disease by Sex
Pennsylvania Residents, 1993-2004



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

For questions regarding this article, please contact the Bureau of Health Statistics and Research

at 717-783-2548. Additional statistics on heart disease deaths and deaths due to other causes

can be accessed on the Health Statistics web pages at www.health.state.pa.us/stats.

Birth Data Highlighted...

accounted for approximately 50 percent of all births to mothers who smoked during each of the four three-month periods.

Chart 1 (page 5) also shows that among the four race/ethnic groups reviewed, births to white mothers had higher percentages of smokers for all four three-month time periods. Black mothers had the next highest percentage for all four time periods, followed by mothers of Hispanic origin. Asian/Pacific Islander mothers were, by far, the least likely to smoke either before or during pregnancy, compared to the other race/ethnic groups. Consistent percentage declines were observed over time periods for all races and Hispanics.

...births to white mothers had higher percentages of smokers for all four... time periods.

In 2004, 17.9 percent (24,760) of resident live births were to mothers who smoked at some point during pregnancy. For births to mothers who smoked during pregnancy, 12.7 percent (3,139) resulted in low birth weight babies (weighing less than 2500 grams), compared to 7.8 percent (8,803) of births to mothers who did not smoke at any time during pregnancy. Chart 2 shows the percent of low birth weight babies and the mother's smoking status before and during pregnancy broken out into the four three-month periods (three months prior to pregnancy, first trimester, second trimester, and

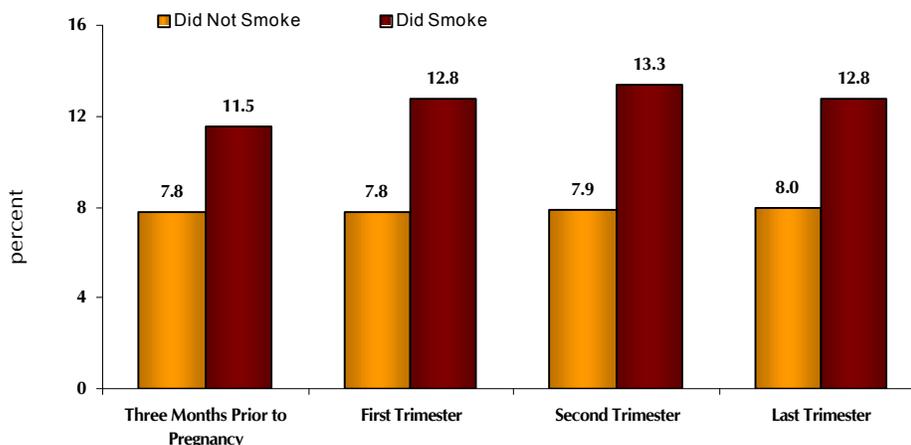
third trimester of pregnancy). For each of the four periods, approximately eight percent of the births to mothers who did not smoke were low birth weight. In comparison, the percentages for mothers who did smoke ranged from 11.5 during the three months prior to pregnancy to 13.3 during the second trimester of pregnancy. The greatest percent difference between smoking and nonsmoking mothers occurred during the second trimester of pregnancy, 13.3 percent compared to 7.9, respectively.

In 2004, nearly 75 percent (15,353) of births were to mothers who had smoked during pregnancy and had obtained prenatal care during the first trimester, compared to 83.0 percent (80,583) for nonsmoking mothers. Of the births to mothers who smoked during pregnancy, 2.4 percent (497) were to mothers who did not receive any prenatal

care during pregnancy, compared to 0.9 percent (832) for births to mothers who did not smoke. Also, in 2004 over 61 percent (14,958) of the births were to mothers who smoked during pregnancy and received WIC food while only 31.2 percent (34,789) of births were to nonsmoking mothers who received WIC food.

For births to mothers who smoked during pregnancy, 12.7 percent resulted in low birth weight babies...compared to 7.8 percent of births to mothers who did not smoke...

Chart 2
Low Birth Weight Resident Live Births by Smoking Status Prior and During Pregnancy, Pennsylvania, 2004



Notes: Unknowns excluded in calculations. Low birth weight defined as less than 2,500 grams.

Principal source of payment for the delivery is now collected on the certificate of live birth as a result of the 2003 revisions. Among the births paid for by Medicaid and smoking status was known, 36.3 percent (10,981) were to mothers who smoked, compared to only 11.3 percent (9,148) for births paid under private insurance.

If you have any questions concerning this article or the 2003 revisions to the certificate of live birth, contact the Bureau of Health Statistics and Research at 717-783-2548. The new data items described in this article, as well as the other articles in this series, will be incorporated into the *Pennsylvania Vital Statistics 2004* report. Access to additional Pennsylvania birth statistics can be obtained from the Health Statistics web pages at www.health.state.pa.us/stats.

Update: Healthy People 2010 Objectives

Focus Area 5: Diabetes

5-05 - Reduce diabetes deaths..... 2010 Target: 45 deaths per 100,000

All Deaths and by Sex:

The age-adjusted death rate for diabetes (as an underlying or contributing cause) among all residents between 2000 and 2004 has been lower in recent years. The highest figure was recorded in 2000 (86.3 per 100,000) and the lowest figure in 2004 (80.7) during that five-year period.

There were 12,236 resident deaths in 2004 either due directly to diabetes or with diabetes mentioned as a contributing cause, resulting in an age-adjusted rate of 80.7 per 100,000 2000 U.S. standard million population. In 2000, there were 12,827 such deaths for a rate of 86.3.

The age-adjusted death rate among female residents has been on the decline between 2000 and 2004—from 76.7 per 100,000 in 2000 to 68.5 in 2004. The rate among male residents has not changed much.

Pennsylvania's age-adjusted death rates for diabetes for all residents and by sex are much higher than the Healthy People 2010 objective of 45 per 100,000.

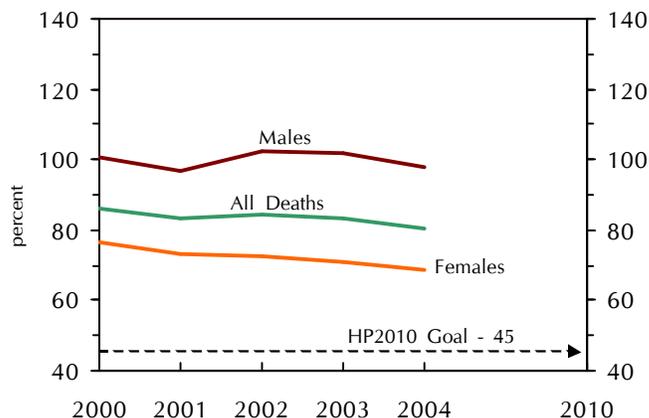
By Race and Hispanic Origin:

Black residents have much higher age-adjusted death rates for diabetes (as an underlying or contributing cause), compared to white and Hispanic residents. The 2004 rate for blacks was 108.2 per 100,000 2000 U.S. standard million population, compared to 79.1 for whites and 60.0 for Hispanics.

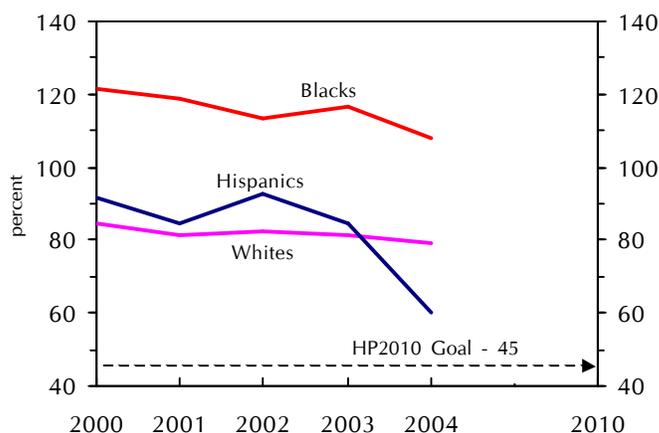
During the five-year period of 2000-2004, the age-adjusted diabetes death rates for white, black and Hispanic residents have been lower in recent years. Among white and black residents, the highest annual rate for this period occurred in 2000. Among Hispanics, the highest death rate occurred in 2002. The lowest rates among all three race/ethnic groups occurred in 2004.

The Healthy People 2010 national objective is for an age-adjusted death rate of 45 per 100,000. The rates for Pennsylvania's whites, Hispanics and, especially, blacks are much higher than the 2010 goal.

**Diabetes Age-Adjusted Death Rates*
All Deaths and by Sex
Pennsylvania Residents, 2000-2004**



By Race & Hispanic Origin
Pennsylvania Residents, 2000-2004**



**Diabetes Age-Adjusted Death Rates*
By Sex, Race, and Hispanic Origin
Pennsylvania Residents, 2000-2004**

	2000	2001	2002	2003	2004
All Deaths	86.3	83.0	84.5	83.5	80.7
Males	100.4	96.8	102.5	101.9	98.1
Females	76.7	73.3	72.4	70.8	68.5
Whites	84.6	81.1	82.6	81.4	79.1
Blacks	121.5	119.0	113.6	116.5	108.2
Hispanics**	91.6	84.5	92.7	84.7	60.0

*per 100,000 2000 U.S. standard million population

**Hispanic can be of any race

NOTE: Data are for deaths listing diabetes as an underlying or contributing cause

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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