STATISTICAL NEWS

PA Department of Health ◆ Bureau of Health Statistics and Research ◆ Vol. 28 No. 5 ◆ September 2005

Births to Smoking Mothers Reviewed

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

Women who smoked during pregnancy were more likely to be younger and have low birth weight babies than women who did not smoke during their pregnancy, according to data collected by the Department of Health on certificates of live birth. In addition, white mothers were more likely to have smoked during pregnancy than black mothers and Hispanic mothers while Asian/Pacific Islander mothers were less likely to smoke 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 interventions to reduce smoking by pregnant women. The accuracy of the data on whether cigarettes were used during pregnancy has not been rigorously examined; however, when compared to data collected on the Behavioral Risk Factor Surveillance System (BRFSS), smoking during pregnancy appeared to be accurately reported on the birth certificate.

...white mothers were more likely to have smoked during pregnancy than black mothers and Hispanic mothers...

Prior to 2003, the data collected on the birth certificate consisted of average number of cigarettes smoked per day. Beginning with the reporting of 2003 live births, the latest revision of the birth certificate was implemented in Pennsylvania. Revisions to the birth certificate were made to help improve the quality of the data. One such revision was to data collected on tobacco use. The data now collected on tobacco use consists of average number of cigarettes smoked per day broken down into four categories; three months prior to pregnancy, first three months of pregnancy, second three months of pregnancy and last three months of pregnancy. This data is helpful in identifying smokers prior to pregnancy compared to smokers during all three trimesters of pregnancy.

Go to Page 4 or click here...

Health e-stats Will Keep Data Users Up-To-Date

E-mail System Notifies Data Users About Web Site Updates

Starting in October, the Bureau of Health Statistics and Research will be utilizing a new e-mail system in order to keep our customers informed about updates to our web pages. A short e-mail, entitled *Health e-stats*, will be sent to our customers whenever we make updates or enhancements to the Health Statistics web pages at ***www.health.state.pa.us/stats***.

The Bureau will utilize a new software/web-based product in order to better manage our e-mails and e-mail lists. It will function very similar to a listserve and our customers can easily unsubscribe if they no longer wish to receive *Health e-stats*.

To join (or subscribe to) *Health e-stats* and receive e-mails informing you about the latest available Health Statistics reports, data, and web site enhancements, go to ***www.health.state.pa.us/stats*** (or any Department of Health web page) and click on the *Subscribe* link in the upper right corner and complete the profile for *Health e-stats*. Your e-mail address is the only data item you are required to provide when joining our e-mail list.

To join *Health e-stats*... go to *www.health.state.pa.us/stats* and click on the *Subscribe* link in the upper right corner...

INSIDE THIS ISSUE

Survey of Direct Patient Care Physicians 2

Web Site Updates 3

Home Health Agencies Provide Services 5

New Birth Certificate Data to be Highlighted 6

HP2010 Objectives: Female Breast and Cervical Cancer Deaths 7

DEPARTMENT OF HEALTH

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

Access to "Survey of Direct Patient Care Physicians Reviewed" is currently not available. Please try again at a later date.

Web Site Updates

HP2010 Statistics, Cancer in PA Counties, Cancer Facts and Figures, Family Health Statistics, Health Profiles 2005, Municipality Health Status Indicators

***HP 2010 Statistics*:**
In January 2002, the Bureau of Health Statistics and Research added a new web page that allowed users to access current and historical state and county level data for the Healthy People 2010 (HP2010) national objectives. Staff have recently updated the numerous types of health statistics that can be found on this web page (go to ***www.health.state.pa.us/stats*** and select "Healthy People 2010 Statistics"). For most objectives, 2003 or 2004 data have been added to the historical series.

On this web page, there are several different drop-down menus you can easily use to view and download data. You can view and download all available Healthy People 2010 data for a specific county or all available state data for a specific demographic (gender, race, Hispanic Origin, age, education, and urban vs. rural). There are also links to complete sets of all state and county data, as well as to data sources by Focus Area.

All files are first accessed in PDF format (requires the free software Adobe Acrobat Reader) but also contain links to a Microsoft Excel file if you prefer to download the data in spreadsheet format.

Please note that only objectives with available state and county data are shown. There is a link to the national HP2010 data site where you can view all the objectives, along with national data.

For questions regarding the HP2010 web page, please contact the Bureau at 717-783-2548.

***Analysis of Cancer Incidence in PA Counties*:**
This is the thirteenth edition of *An Analysis of Cancer Incidence in Pennsylvania Counties*. The report provides an analytical approach to analyzing cancer incidence data at the county level.

The report shows the number of observed and expected cancer cases and standardized incidence ratios (SIRs) for 23 primary cancer sites and all cancer sites combined, by county and by sex. The expected cases represent the total number of primary, malignant tumors that would have been diagnosed if Pennsylvania's (or a specific county's) male and female population had experienced the same age-specific rates of cancer incidence as those reported by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) program during the five-year period of 1998-2002.

The report shows the number of observed and expected cancer cases and standardized incidence ratios (SIRs)... by county and by sex.

Five-year summary data for 1998-2002 were used to provide larger numbers for more reliable analysis and to correspond with the most current data available from the SEER program. SIRs were not calculated for any primary sites with less than 10 observed cases throughout the years of 1998 to 2002.

County-outline maps that graphically depict the results of the analysis by sex are also presented. Along with all primary sites combined, maps were created for the five leading primary sites for males and the five leading primary sites for females. At the bottom of each county outline map is a rate depicting the completeness of case ascertainment for Pennsylvania.

Cancer data users can access this report from the Health Statistics web pages at ***www.health.state.pa.us/stats*** (select "Cancer Incidence & Mortality").

***Cancer Facts and Figures*:**
This brochure is now available on the Department's web site at ***www.health.state.pa.us/stats*** (select "Cancer Incidence and Mortality"). This is the seventh annual publication to present projected cancer incidence and mortality statistics.

This report contains 2005 projected cancer cases and cancer deaths by primary site and sex and 2005 projected cancer cases and cancer deaths by county of residence. Trends on age-adjusted incidence and mortality rates dating back to 1992 are discussed and are graphed for all cancers and the top four cancer sites (breast, lung, prostate, and colon/rectum). The percent of cancer cases by stage of disease at diagnosis for 1992 and 2002 are compared for all cancers by sex and race. Cancer related behavioral risk factors for adults by race is graphically presented and is based on the Pennsylvania BRFSS sample survey conducted in 2004. Another section compares Pennsylvania's age-adjusted incidence and mortality rate trends to the United States. Also included are the American Cancer Society guidelines for early detection of cancer in asymptomatic people and information on the Department's Cancer Control Program initiatives.

This report (*Cancer Facts and Figures*) contains 2005 projected cancer cases and cancer deaths by primary site and sex...

***Family Health Statistics*:**
A statistical report useful for tracking Healthy People 2010 objectives related to maternal, infant and child health has recently been updated. The *Family Health Statistics for Pennsylvania and Counties 2005 Report* can now be accessed at ***www.health.state.pa.us/stats*** (select "Vital Statistics").

Statistics are provided for eight of the 28 Focus Areas in Healthy People 2010.

This report shows state trend data and county-level statistics (when available) for many of the family health-related national HP 2010 objectives. The latest comparable United States data are also included when available.

Go to Page 6 or click here...

Continued from Page 1...

Births to Smoking Mothers Reviewed

Chart 1 shows that the percent of mothers who did not smoke during pregnancy has increased between 1995 and 2002, from 81.3 percent to 84.2. In 2003, when the latest revision to the birth certificate was implemented, mothers who smoked during pregnancy decreased to 82.3 percent. Among black mothers, 83.2 percent of the births in 2003 involved mothers who did not smoke; the percent was lower among whites at 81.1. Asian/Pacific Islander mothers had the highest percent of non-smoking mothers (98.0) and 87.7 percent of the births in 2003 to Hispanics were to mothers who did not smoke. (Please note that Hispanics can be of any race.)

Chart 2 shows that the percent of live births to mothers who smoked was highest among mothers 15-24 years of age, especially for white mothers. Among all births, 29.2 percent of the births to females aged 15-19 involved a mother who had smoked and, among those aged 20-24, the percent was 28.9. The percentage of births to smoking mothers was lower among the older age groups (25 and older), compared to the 17.7 recorded for all births. The youngest age group (under 15) also had a low percentage of births to mothers who smoked during pregnancy (10.4).

...the percent of live births to mothers who smoked was highest among mothers 15-24 years of age... the percentage of births to smoking mothers was lower among the older age groups...

When looking at the percent of live births to mothers who smoked by age and race, it becomes evident that differences between the races by age exist. Among whites, Asian/Pacific Islanders and Hispanics, the percent of smoking mothers was much higher for the younger age groups while, among blacks, the percent was higher for the older mothers. For example, 40.6 percent of live births to whites aged 15-19 who smoked during pregnancy, compared to 12.0 percent for black teenage mothers. Among Asian/Pacific Islanders, 14.3 percent of live births to teens 15-19 were to mothers who smoked. Among Hispanic births to mothers aged 20-24, 15.7 percent were to mothers who smoked. However, among the mothers aged 40 and over, only 10.5 percent of the white births were to mothers who smoked; 0.8 percent, to Asian/Pacific Islander mothers who smoked; and, 12.1 percent, to Hispanic mothers who smoked. However, 20.9 percent of births to blacks aged 40+ involved mothers who smoked.

Birth weight is a prime indicator of infant health. Low birth weight (under 5 pounds and 9 ounces) is considered a major contributor to higher infant mortality. Several major health studies have implicated smoking by the mother during pregnancy as having a major impact on the infant's birth weight. Chart 3 shows that in 2003, the percent of low birth weight infants among

Go to Page 5 or click here...

Chart 1
Percent of Live Births to Mothers Who Did Not Smoke During Pregnancy, Pennsylvania Residents, 1995-2003

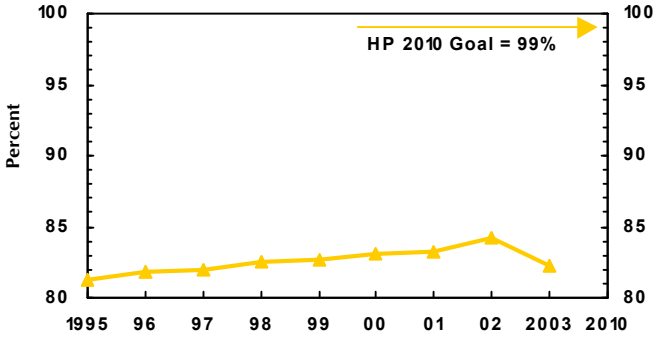


Chart 2
Percent of Live Births to Mothers Who Smoked by Age and Race of Mother, Pennsylvania Residents, 2003

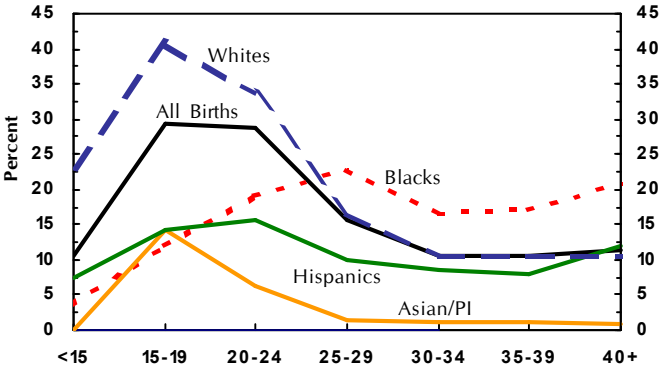
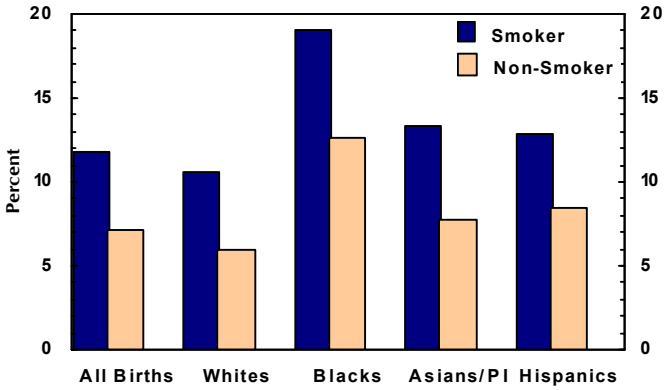


Chart 3
Percent of Low Birth Weight Live Births by Smoking Status and Race of Mother, Pennsylvania Residents, 2003



Home Health Agencies Provide Services to Thousands

Skilled Nursing Was the Most Frequent Type of Service Utilized in 2003

Roughly a quarter of Pennsylvania's residents aged 85 and over used home health services in 2003. Pennsylvania's home health agencies provided over 350,000 residents in 2003 with more than 6.7 million skilled nursing and/or various therapeutic services at their place of residence, as ordered by a physician (see Tables 1 and 2).

Skilled nursing visits were the most frequent type of service provided, accounting for 51 percent of the total home health visits reported for the year 2003. 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 delivered, each accounting for about 1 percent of total visits.

Pennsylvania's home health agencies complete an annual data collection survey as part of their annual license renewal application. The information presented in this article is taken from the survey for 2003, based on the 350 applications received in 2004.

Home health services are available in every county of the state. Costs for home health services vary greatly. The most expensive visits were medical social services, with a median fee of $157 in 2003. The least expensive service was the home health aide visit, with a median fee of $65. Medicare was the principal source of payment for all home health services.

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

Table 1
Number and Percent of Home Health Agency Visits By Type of Service, Pennsylvania 2003

Type of Service	Patient Visits	Percent
Skilled Nursing	3,440,667	51%
Home Health Aide	1,678,290	25%
Physical Therapy	1,240,050	18%
Occupational Therapy	297,737	4%
Speech Therapy	57,669	1%
Medical Social Services	48,780	1%
Total	**6,763,193**	100%

Table 2
Unduplicated Number, Percent and Rate* of Home Health Agency Patients by Age, Pennsylvania 2003

Age	Patients	Percent	Rate*
Under 18	23,744	7%	8.1
18-44	44,654	13%	9.7
45-64	63,346	18%	22.3
65-74	62,578	18%	64.6
75-84	102,342	29%	143.7
85 +	58,227	16%	245.1
Total	**354,891**	100%	

*age-specific rate per 1,000 2000 population

Continued from previous page...

Births to Smoking Mothers...

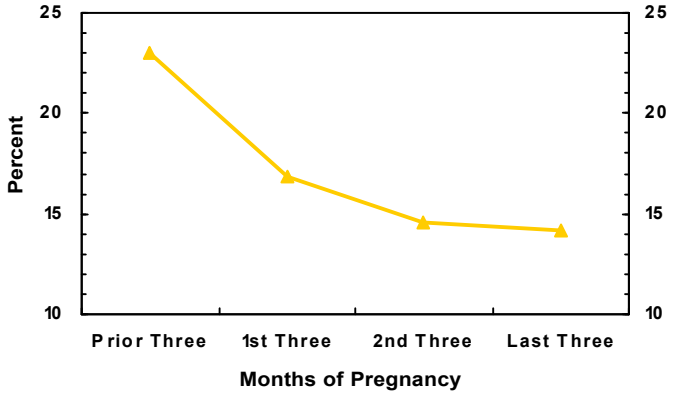
Pennsylvania residents was considerably higher among smoking mothers (11.8 percent) than non-smoking mothers (7.1).

The percent of low birth weight infants for all four race/ethnic groups was again considerably higher among smokers. Among whites, 6.0 percent of live births to non-smoking mothers were low birth weight, compared to 10.6 percent for mothers who smoked during pregnancy. The same pattern was seen among Asian/Pacific Islander mothers and Hispanic mothers, 7.7 and 8.4 percent of live births to non-smoking mothers were low birth weight, compared to 13.3 and 12.8 percent for mothers who smoked during pregnancy, respectively. The percentage differences for black mothers were even more evident. Nineteen percent of live births to smoking black mothers were low birth weight while only 12.6 percent of births among non-smoking black mothers were reported as such.

Chart 4 shows that in 2003 there was a decrease in the percent of women who smoked during the three months prior to pregnancy (8.4 percent), compared to the first three months of pregnancy (6.1). 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 82.3 percent in 2003 to 99 percent by the year 2010. This percent was steadily increasing from 1995 to 2002, then decreased in 2003 when more detailed data on tobacco use was collected. It is very unlikely that the state will reach the national year 2010 goal of 99 percent.

If you have any questions about this article, please contact the Bureau of Health Statistics and Research at 717-783-2548.

Chart 4
Percent of Live Births to Mothers Who Smoked Before and During Pregnancy, Pennsylvania Resident Occurrences, 2003



New Birth Certificate Data to be Highlighted

New Series of Articles Will Focus on New Data Items

A new series of articles appearing in *Statistical News* will focus on the new data items collected via the 2003 revisions to the certificate of live birth. The articles will allow for a forum to present the new data and discuss its usefulness and limitations.

Beginning with the reporting of 2003 live births, the Commonwealth of Pennsylvania implemented the latest revision of the U.S. Standard Certificate of Live Birth. The Standard Certificate of Live Birth has been the principal means for collecting uniform birth information across the United States since 1900. To ensure that the standard certificates and reports meet current data needs, it is essential that they be reviewed and revised periodically. Prior to 2003, the most recent revision in effect was put into practice in 1989.

While most data items on the certificate are comparable to past years, certain items have been changed or removed, which may cause discontinuity in some birth trend data. Many of the changes were made to the medical portion of the document. Specifically, revisions were made to the Medical Risk Factors, Obstetric Procedures, Complications of Labor and/or Delivery, Method of Delivery, Abnormal Conditions of the Newborn, and Congenital Anomalies sections.

The articles will allow for a forum to present the new data and discuss its usefulness and limitations.

In addition, items were added to the certificate to address data collection needs. Additions to the 2003 certificate included the following:

- **Maternal Morbidity**
Information is collected on complications associated with labor and delivery. Includes complications such as maternal transfusion, ruptured uterus, unplanned hysterectomy, and other complications.
- **Mother's Height & Weight**
The revised birth certificate collects data on the mother's height for the first time. The mother's pre-pregnancy weight and weight at delivery are also collected on the certificate.
- **WIC Participation**
Data collected on whether the mother received WIC food for herself during this pregnancy.
- **Principal Source of Payment**
Checkboxes for principal source of payment for this delivery include private insurance, medicaid, self-pay, and other.
- **Infections Present**
Information on infections present and/or treated during this pregnancy includes checkboxes for gonorrhea, syphilis, herpes simplex virus, chlamydia, and hepatitis B and C.
- **Breast Feeding**
The revised birth certificate contains the question, "Is infant being breastfed?".
- **Race of Mother**
This is not a new data item, however, it was revised from an open-ended question to a checkbox format which allows multiple races to be reported. The birth certificate used by Pennsylvania was also revised to collect self-designated single race data. The Bureau utilizes the self-designated single race data within all statistical reports.

Look for these series of articles in future issues of *Statistical News*. After more review and evaluation, the new data items will eventually be incorporated into our regular reports.

Continued from Page 3...

Web Site Updates

Statistics are provided for eight of the 28 Focus Areas in Healthy People 2010. These areas include:

- Access to Quality Health Services
- Family Planning
- HIV
- Immunization and Infectious Diseases
- Injury and Violence Prevention
- Maternal, Infant and Child Health
- Respiratory Diseases
- Vision and Hearing

Hard copies of this report are also available upon request.

Health Profiles 2005:

The 2005 edition of *Health Profiles Pennsylvania Counties* has been added to the Health Statistics web site. To access these updated county reports, go to ***www.health.state.pa.us/stats*** and select "Vital Statistics".

The 2005 *County Health Profiles* are a set of 68 individual two-page pamphlets – one for each of the state's 67 counties and one for Pennsylvania. Each two-page pamphlet is updated annually and provides numerous health-related statistics (demographics including population by age and sex, natality and reported pregnancies, mortality, morbidity including reportable diseases and cancer incidence, drug and alcohol abuse treatment, hospitals, and nursing homes).

Maternal and Child Health Status Indicators for PA and Major Municipalities:

This annual series of reports shows birth, death, infant death, and childhood poverty statistics for 22 selected municipalities as well as for Pennsylvania. Please note that the selected municipalities may vary from year to year.

These reports provide those concerned about maternal and child health with a statistical perspective on the types of urban health problems facing Pennsylvania's major cities. Much of the data are shown by race and Hispanic origin.

These reports are on the Health Statistics web pages at ***www.health.state.pa.us/stats*** (select "Vital Statistics").

Update: Healthy People 2010 Objectives

Focus Area 3: Cancer

3-03 - Reduce the breast cancer death rate.....HP2010 Target: 22.3

3-04 - Reduce the cervical cancer death rate.....HP2010 Target: 2.0

Female Breast Cancer Deaths: Age-adjusted death rates for deaths due to female breast cancer are higher among black residents compared to whites and, especially, to Hispanics.

Between 1999 and 2003, the annual age-adjusted breast cancer death rate among all Pennsylvania female residents has declined from 29.3 (per 100,000 U.S. standard million 2000 population) to 27.1. A decline in the death rate was also seen for white females. Among black females, the breast cancer death rates displayed no discernible trend. The death rates for Hispanic residents are difficult to interpret due to the small numbers of annual events recorded for this group. No rate was calculated among Hispanic residents in the year 2000 since less than 20 deaths occurred.

Pennsylvania's rate will have to drop by 17.7 percent between 2003 and 2010 to meet the national objective of 22.3.

Cervical Cancer Deaths: Pennsylvania's age-adjusted rate for cervical cancer deaths has declined from 3.0 per 100,000 in 1999 to 2.1 in 2003. A decline in the death rates was also seen for both white and black residents during this five-year period of 1999-2003. The age-adjusted death rates were consistently higher among black residents, compared to whites. Cervical cancer death rates were not calculated for Hispanic residents due to the small numbers of annual events.

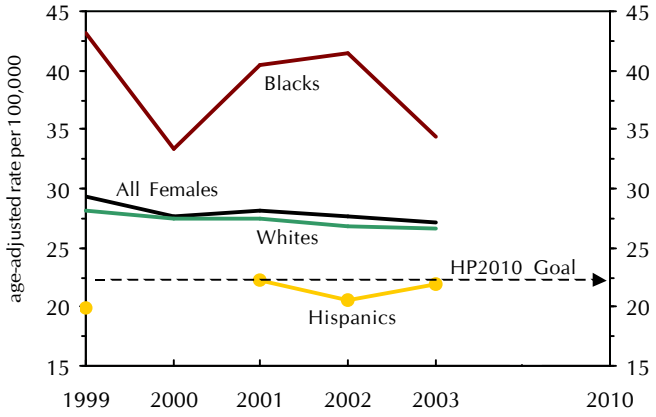
The national Healthy People 2010 objective for an age-adjusted death rate for cervical cancer is set at 2.0. Among white residents, this national goal was achieved in 2003 and it seems very likely that this goal will be met for all female residents combined. However, to meet this national goal, the age-adjusted death rate among black residents will have to decline by 44.4 percent between 2003 and 2010.

Female Breast & Cervical Cancer Deaths
Age-Adjusted Rate* by Race/Ethnicity
Pennsylvania Residents 1999-03

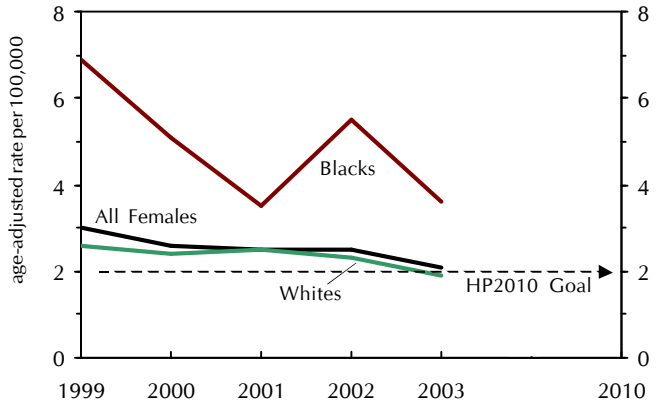
Female Breast	2003	2002	2001	2000	1999
All Females	27.1	27.7	28.1	27.6	29.3
Whites	26.7	26.8	27.4	27.5	28.1
Blacks	34.3	41.4	40.5	33.4	43.2
Hispanics**	21.9	20.6	22.3	DSU	19.9
Uterine Cervix					
All Females	2.1	2.5	2.5	2.6	3.0
Whites	1.9	2.3	2.5	2.4	2.6
Blacks	3.6	5.5	3.5	5.1	6.9
Hispanics**	DSU	DSU	DSU	DSU	DSU

*age-adjusted to 2000 standard million U.S. population (per 100,000)
**Hispanics can be of any race.
NOTE: DSU = data statistically unreliable (small numbers).

Age-Adjusted Death Rates* for Female Breast Cancer
Pennsylvania Residents, 1999-2003



Age-Adjusted Death Rates* for Cervical Cancer
Pennsylvania Residents, 1999-2003



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

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.

Statistical News *is published bimonthly by the Bureau of Health Statistics and Research, Pennsylvania Department of Health, 555 Walnut St., 6th Floor, Harrisburg, PA, 17101. Please write, telephone (717-783-2548) or FAX (717-772-3258) us if you have any questions regarding the contents of this newsletter. Visit the Health Statistics section of the Department's web site at* ***www.health.state.pa.us/stats*** *to access additional health statistics and reports.*

The Department of Health is an equal opportunity provider of grants, contracts, services and employment.

Click on the EpiQMS logo above to access our interactive health statistics web site.

H106.830P