

STATISTICAL NEWS

PA Department of Health ♦ Bureau of Health Statistics and Research ♦ Vol. 26 No. 2 ♦ March 2003

Breast Cancer Staging Statistics Reviewed

Figures By County and Race for Later Stages Highlight Differences

Thirty-four of the sixty-seven counties (just over half) in Pennsylvania reported a higher percentage of later (regional and distant) stage diagnoses of female breast cancer than the state during the five-year period of 1996-2000. A county outline map appears on page 6 depicting these results. In addition, a higher percentage of black women were diagnosed at the later stages of breast cancer compared to white women during that period.

The stage of female breast cancer at the time of diagnosis is one of the most important factors in selecting treatment options and in predicting survival. Earlier cancer diagnoses result in a better chance for successful treatment.

Stage of disease refers to the classification system used to group cancer cases into broad categories according to the extent of the disease at the time of diagnosis. The four basic categories used for staging female breast cancer are in situ, local, regional and distant. The national five-year relative survival rate for localized breast cancer is 96 percent. However, it decreases to

The stage of female breast cancer at the time of diagnosis is one of the most important factors in selecting treatment options and in predicting survival.

78 percent for regional stages of the disease and to 21 percent for distant metastases.

Breast cancer is the most common cancer diagnosed among women, excluding non-melanoma skin cancers. In 2000, there were 9,791 cases of invasive breast cancer reported among female residents in Pennsylvania. This figure accounted for nearly a third of all female cancers reported that year. The Bureau of Health Statistics and Research estimated that 10,930 invasive cases were diagnosed in 2002 and 2,135 deaths resulted from breast cancer that year.

During the five-year period of 1996-2000, regional and distant stage diagnoses of

Continued on Page 6...

Oral Health Needs of PA School Children Surveyed

Phila, Pgh, and Northern Rural PA Identified As Neediest Areas

School children in Philadelphia, Pittsburgh, and northern rural areas of Pennsylvania tend to have more dental care needs, according to a recent survey conducted for the Department of Health as part of a "Pennsylvania Oral Health Needs Assessment."

Dr. Robert J. Weyant and his associates at the University of Pittsburgh surveyed a scientific sample of Pennsylvania public school students in first, third, ninth, and eleventh grades. Clinical oral screening was conducted for this sample from September 1, 1998 through May 30, 2000. They also asked about the dental health behaviors of the school students and telephoned a sub-sample of parents regarding dental health behaviors. These efforts resulted in the assemblage of a large probabilistic sample reflecting the dental health status of Pennsylvania public school students. The researchers examined a variety of oral health measures in order to conduct the "Pennsylvania Oral Health Needs Assessment" using these sample data. These data were provided to the Pennsylvania Department of Health.

...grade school students are generally more likely than high school students to be in need of immediate dental care.

The Bureau of Health Statistics and Research has carried out some general analyses of the data in order to present to

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DEPARTMENT OF HEALTH
... in pursuit of good health

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PA's Hispanic & Asian Populations Grow Fast

Most List Puerto Rico, India and China As Country of Origin

Pennsylvania's Hispanic and Asian populations grew by 70 and 62 percent, respectively, between the census years of 1990 and 2000. In comparison, the black population grew by only 12.4 percent while the number of white residents declined slightly (0.3 percent). Please note that Hispanics are considered an ethnicity and can be of any race (white, black, Asian, American Indian, etc.).

The tables on the right show the 2000 population statistics for these two groups broken down by place of origin.

Of the almost 400,000 Hispanics in the state in 2000, 58 percent listed Puerto Rico as their country of origin and another 14 percent identified Mexico as their place of origin.

Pennsylvania's Hispanic and Asian populations grew by 70 and 62 percent, respectively, between the census years of 1990 and 2000.

Among the 219,813 residents who selected Asian alone (multiple race selection was an option in the 2000 census), 26 percent listed India as their country of origin and 23 percent listed China. Other major countries of origin for Pennsylvania Asians included Korea and Vietnam (14 percent each). The Phillipines and Japan accounted for 7 and 3 percent, respectively.

Number and Percent of Hispanics and Asians By Country of Origin, Pennsylvania, 2000

	Number	Percent
Hispanic	394,088	100%
Puerto Rican	228,557	58%
Mexican	55,178	14%
Cuban	10,363	3%
Other Hispanic	99,990	25%

	Number	Percent
Asian Alone	219,813	100%
Asian Indian	57,241	26%
Chinese	50,650	23%
Korean	31,612	14%
Vietnamese	30,037	14%
Filipino	14,506	7%
Japanese	6,984	3%
Other Asian	28,783	13%

Interactive Health Statistics Web Site Planned

PA's EpiQMS System Will Output Numbers, Rates, Graphs, and Maps

The Bureau of Health Statistics and Research has begun creation of a new interactive health statistics web site that will provide death, birth, cancer incidence, and population statistics including rates, graphs, and mapping capabilities. Users will be able to select the dataset and variables to be included in the output. We are hoping to make up to ten years of data available for each dataset to enable trend analysis at the state, county and possibly municipality level.

EpiQMS or Epidemiologic Query and Mapping Sys-

tem was created by staff at the Washington State Department of Health and currently provides access to their death and population datasets. A recent study of state interactive health statistics web sites done for the Bureau rated EpiQMS as the most compatible with Pennsylvania's strict IT standards and the most beneficial for our data users' needs. EpiQMS is a multidimensional system that outputs not only numbers, rates, graphs and maps but can combine different generated output into a complete profile for a specific

area. PA EpiQMS will provide the public health community with a valuable tool for evaluating health status and conducting needs assessment.

With Washington State's assistance and cooperation, we are adapting the EpiQMS system to incorporate additional datasets (births and cancer incidence) and enhance some of its capabilities. We plan to continue to work together with Washington State Department of Health to improve the system. EpiQMS also includes an interactive survey that allows users to make their comments

PA EpiQMS will provide the public health community with a valuable tool for evaluating health status and conducting needs assessment.

and recommendations for improvements to the system.

We will keep you updated on progress in creating PA EpiQMS. If you have any questions about this project, please contact us at 717-783-2548.

New Report and Data Added to Web Site:

Large Volume of 2000 Cancer Incidence Statistics Now Online

A large volume and variety of data tables with cancer incidence and mortality figures, including statistics for all counties and municipalities in Pennsylvania, have been updated with 2000 data on the Health Statistics web pages at www.health.state.pa.us/stats/. To access the data online, click on **Cancer Incidence and Mortality** and then select **Cancer Incidence and Mortality Statistics 1990-2000**.

You can now easily access the latest available single-year (2000) and five-year (1996-2000) data on cancer incidence and mortality.

Each year when a new cancer incidence annual data file is finalized and released, staff in the Bureau of Health Statistics and Research create and update tens of thousands of pages of numerous crosstabulations that are used to respond to the hundreds of data requests we receive every year.

The 2000 PDF files have recently been added to the Health Statistics web pages and provide all data users with an abundant variety of health statistics. You can now easily access the latest available single-year (2000) and five-year (1996-2000) data on cancer incidence and mortality.

Available incidence data include the following:

1990-2000 Annual Statistics

- Cancer Cases by County by Age, Sex and Race by Primary Site
- Cancer Cases by Age, Sex and Race for 23 Primary Sites by County
- Cancer Cases by Municipality for 23 Primary Sites
- Cancer Cases by Stage and Age by County for 23 Primary Sites
- Cancer Cases by Stage, Sex and Race by County for 23 Primary Sites
- Cancer Cases by Age, Sex and Race for 75 Sites
- Cancer Cases by Age, Sex and Race by County for 75 Sites

1996-2000 Summary Statistics

- Cancer Cases by Sex, Year and County for 23 Primary Sites
- Cancer Cases by Age, Sex and Race for 75 Sites

Available mortality data include the following:

1990-2000 Annual Statistics

- Cancer Deaths by Age, Sex and Race for 23 Primary Sites by County
- Cancer Deaths by Age, Sex and Race by Site and County
- Cancer Deaths by Municipality for 23 Primary Sites

1996-2000 Summary Statistics

- Cancer Deaths by Site, Sex, County and Year

"Injury Deaths in Pennsylvania 1996-2000" Added To Web Site

The report *Injury Deaths in Pennsylvania, 1996-2000* has recently been added to the Health Statistics web pages of the Department of Health's web site at www.health.state.pa.us/stats. Click on **Vital Statistics** and then select the title for this report from the list that appears.

The *Injury Deaths in Pennsylvania 1996-2000* report combines five years of mortality data and presents statistics on nine major types of injuries for the state and counties. The nine areas are:

- Unintentional Injuries
- Motor Vehicle Crashes
- Drug Poisoning
- Falls/Fall-Related Injuries
- Fire and Flames
- Drowning/Submersion
- Suicide
- Homicide
- Firearm-Related Injuries

The following statistics are shown for each area:

STATE DATA

- Numbers of deaths and age-adjusted death rates by year (1996-2000) for the state
- Numbers of deaths and age-adjusted death rates by sex and race by year for the state
- Numbers of deaths and average annual (1996-2000) age-specific death rates by sex and race for the state

COUNTY DATA

- Numbers of deaths, average annual age-adjusted death rates (including 95% confidence intervals) and significance test results
- Numbers of deaths for selected age groups (<20, 20-64 and 65+)

Annual age-adjusted death rates during the five-year period of 1996-2000 show increases for drug poisoning deaths and declines for motor vehicle accidents, falls/fall-related injuries, suicides and homicides.

Annual age-adjusted death rates during the five-year period of 1996-2000 for the state show increases for drug poisoning deaths and declines for motor vehicle accidents, falls/fall-related injuries, suicide and homicide.

We plan on adding graphics, including a state map of counties that displays the results of the significance testing, by the end of February. A narrative section of data highlights will also be added soon for each of the nine areas. This reports updates a previous report for the years 1985-1995.

Please contact the Bureau at 717-783-2548 if you have any questions about this new report.

Oral Health Needs of PA School Children...

the public some baseline statistics.

One of the prime reasons for conducting this sample study was to determine if there were important geographic differences in the oral health status of Pennsylvania children. The sample was designed so that reliable estimates for public school children¹ could be obtained for the six Pennsylvania health districts (see map below) and the state's two largest cities – Philadelphia and Pittsburgh.

The estimates from "Table 1 - Children Needing Immediate Dental Care (significant pain or acute infection)" as shown on the opposite page indicate that grade school students are generally more likely than high school students to be in need of immediate dental care. These estimates also suggest that children in the northern, mostly rural, areas of the state and the

Philadelphia's prevalence of children in immediate need of dental care was statistically elevated for both the grade school students and the high school students.

cities of Philadelphia and Pittsburgh are more likely to be in immediate need of dental care than the southern, mostly suburban, counties. However, a definitive assessment using just these prevalence estimates is obscured by the substantial sample error. When these differences are examined comparing the specific geography to the remainder of the state using a chi-square test, some of these areas stand out as statistically significant. The Northwest Health District ex-

hibits a statistically elevated prevalence of grade school children needing immediate dental care ($p < .01$) but the prevalence for high school students seems to be in line with what was reported elsewhere in the state. Philadelphia's prevalence of children in immediate need of dental care was statistically elevated for both the grade school students ($p = .025$) and high school students ($p < .01$).

"Table 2 - Children with Unfilled Cavities (primary or permanent teeth)" on the opposite page indicates that grade school students are more likely than high school students to need such dental care. As occurred with the data on students in need of immediate care, the estimates in the table suggest that children in the northern half of the state and in the cities of Philadelphia and Pittsburgh are somewhat more likely to have unfilled

cavities than those in the southern counties. When the prevalence estimates for the specific geography are compared to the remainder of the state, some areas stand out as statistically significant. The Northwest Health District exhibits a statistically elevated prevalence of grade school children with unfilled cavities ($p < .01$) but none of the other geography has a statistically significant elevated prevalence of untreated cavities for grade school children when compared to the remainder of the state. Among high school students, both Philadelphia ($p < .01$) and Pittsburgh ($p = .021$) demonstrated significantly elevated prevalences of untreated cavities.

There may be sizeable variation in the oral health care needs of Pennsylvania public school students within the rather large geographic areas examined in this study. Nonetheless, the insights this important information provides are essential in developing effective public dental health policies for the Commonwealth.

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

¹ First, third, ninth, and eleventh grades were selected as representing important stages of dental development for grade school and high school students within a probability proportionate to size selection of school districts in a stratified clustered sample of Pennsylvania public school students.

Pennsylvania Health Districts and Counties

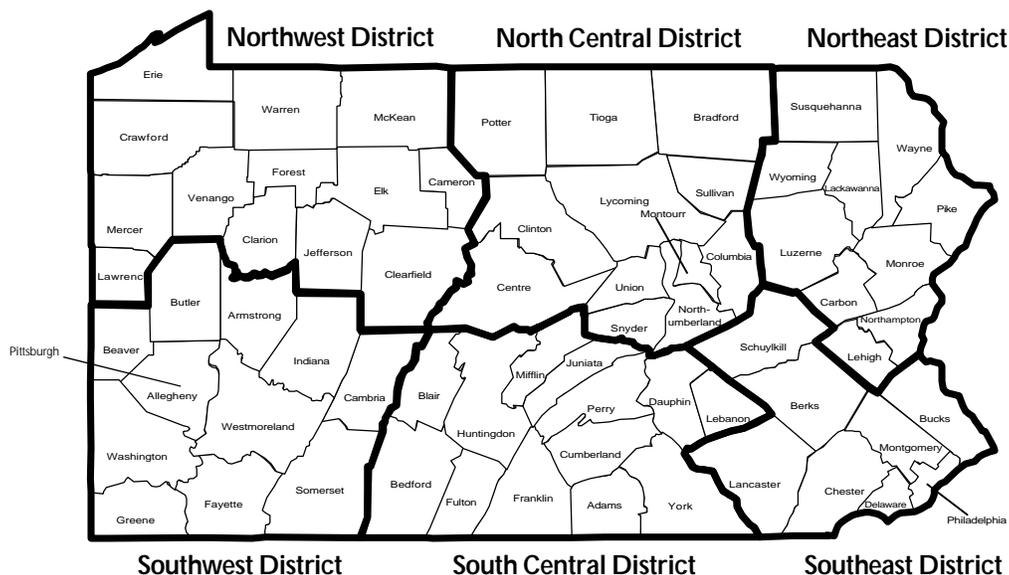


TABLE 1
Children Needing Immediate Dental Care (significant pain or acute infection)
Selected Public School Grades, Pennsylvania, 9/1/98-5/30/00

	First and Third Grades (ages 6, 7, 8 & 9)			Ninth and Eleventh Grades (ages 14, 15, 16 & 17)		
	Lower 95% Confidence Bound	Percent Prevalence	Upper 95% Confidence Bound	Lower 95% Confidence Bound	Percent Prevalence	Upper 95% Confidence Bound
Pennsylvania	4.5	5.6	6.9	2.3	3.1	4.3
NW Health District	7.6	11.5	15.4	0.5	2.1	7.5
NC Health District	2.5	5.7	12.3	3.3	4.0	4.8
NE Health District	3.5	7.3	14.9	0.8	2.5	7.3
SE Health District (Ex. Phila.)	1.6	2.7	4.6	1.0	2.8	7.9
SC Health District	2.6	3.7	5.3	0.3	1.0	3.3
SW Health District (Ex. Pitt.)	1.7	4.0	9.0	0.2	0.6	2.4
Philadelphia	6.8	9.5	13.1	7.5	9.9	13.0
Pittsburgh	0.7	3.9	18.8	1.3	3.8	10.6

TABLE 2
Children with Unfilled Cavities (primary or permanent teeth)
Selected Public School Grades, Pennsylvania, 9/1/98-5/30/00

	First and Third Grades (ages 6, 7, 8 & 9)			Ninth and Eleventh Grades (ages 14, 15, 16 & 17)		
	Lower 95% Confidence Bound	Percent Prevalence	Upper 95% Confidence Bound	Lower 95% Confidence Bound	Percent Prevalence	Upper 95% Confidence Bound
Pennsylvania	24.5	27.2	29.9	11.5	13.8	16.2
NW Health District	33.5	43.6	53.7	11.0	17.3	23.7
NC Health District	26.0	34.7	43.3	6.8	11.5	16.3
NE Health District	17.9	27.7	37.4	7.7	11.1	14.4
SE Health District (Ex. Phila.)	20.0	25.3	30.5	6.7	10.5	14.2
SC Health District	17.5	22.2	27.0	7.4	10.0	13.3
SW Health District (Ex. Pitt.)	14.6	22.0	29.5	5.0	13.8	22.7
Philadelphia	21.9	28.0	34.0	15.7	23.3	31.0
Pittsburgh	19.4	27.0	34.6	16.8	27.4	38.0

Breast Cancer Staging Statistics Reviewed...

breast cancer accounted for 28.4 percent of all staged diagnoses among Pennsylvania residents (23.7 percent regional and 4.7 percent distant). Counties with higher percentages of later stage diagnoses than the state are highlighted in the map below.

Fulton County, followed by Cameron County, was ranked the highest for percentage of regional and distant stages. However, each of these two counties, along with Forest and Sullivan, had less than 50 total breast cancer cases reported during the five-year period of 1996-2000. The smaller the number of events used in the calculation of a rate or ratio, the less reliable is the resultant statistic. Lower numbers also tend to have more fluctuation on a periodic basis.

Clarion, Elk, Jefferson, Potter, Susquehanna and Wayne Counties had greater than 35 percent of breast cancers diagnosed at the later stages during 1996-2000. Montour County had the lowest percentage of regional and distant staged diagnoses during 1996-2000, followed by Huntingdon, Mifflin, and Lycoming Counties (each with less than 23 percent).

Among white residents, the percentage of regional and distant stage breast cancers were generally lower than among black residents. During the five-year period 1996-2000, 27.9 percent of breast cancers among white residents were diagnosed at later stages while 33.4 percent of such cases were diagnosed among

The HealthyWoman Project of the Pennsylvania Department of Health offers free or discounted breast cancer screening for Pennsylvania residents meeting certain eligibility requirements.

black residents. A breakdown of the percentages for later stages showed that whites also had somewhat lower figures in both categories (23.3 vs. 27.8 for regional stage and 4.6 vs. 5.6 for distant stage).

At the county level, six counties were reviewed (Al-

legheny, Chester, Dauphin, Delaware, Montgomery and Philadelphia) for differences in breast cancer staging by race. The largest differences in the percentage of regional and distant staging by race during 1996-2000 were seen in Chester (25.9 for whites and 40.2 for blacks) and Delaware (26.8 for whites and 36.3 for blacks) Counties. Of these six counties, only Dauphin County had a lower percentage of regional and distant stage breast cancers among blacks compared to whites.

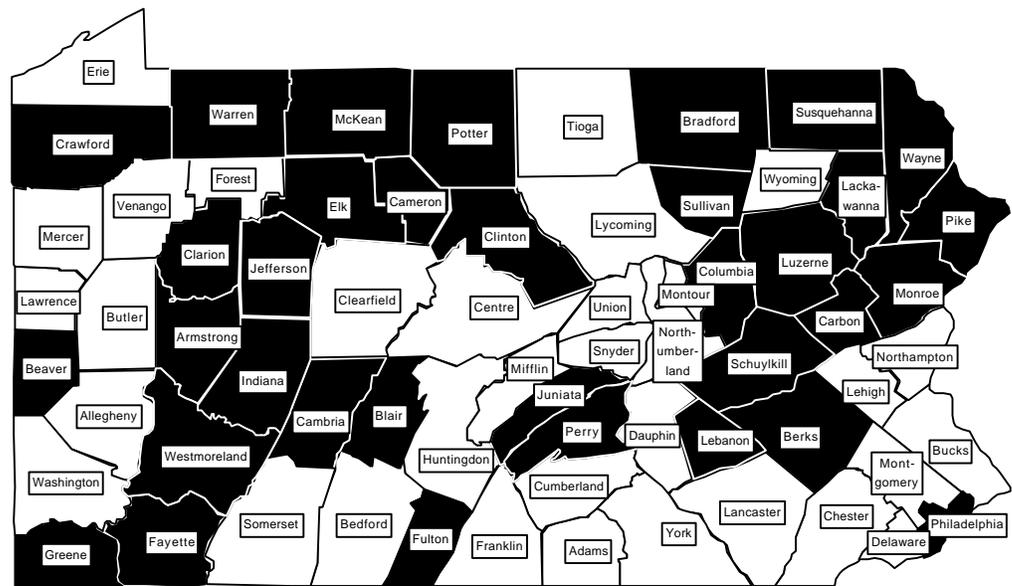
Free/Discounted Breast Cancer Screening:

The HealthyWoman Project of the Pennsylvania Department of Health offers free or dis-

counted breast cancer screening for Pennsylvania residents meeting certain eligibility standards. The program began cancer screening efforts in late 1994. For information, including sites in Pennsylvania offering free or discounted screenings, please contact Cancer Information Services at 1-800-4-CANCER.

If you have any questions about the statistics presented in this article, please contact the Bureau of Health Statistics and Research at 717-783-2548. Visit the Health Statistics web site at <http://www.health.state.pa.us/stats/> for a large amount of additional cancer incidence and mortality statistics for the years 1990 through 2000 (see page 3 for more details).

Percent of Regional and Distant Stage Diagnoses by County Lower/Higher Than State Female Breast Cancer Cases, Pennsylvania Residents, 1996-2000



Pennsylvania Regional and Distant Stage Diagnoses = 28.4%

□ ≤ 28.4% ■ > 28.4%

NOTE: Cameron, Forest, Fulton and Sullivan Counties reported less than 50 total breast cancer cases during 1996-2000.

Update: Healthy People 2010 Objectives

Focus Area 27: Tobacco Use

27-01a - Reduce tobacco use by adults.

2010 Target: 12%

All Adults and By Race:

According to results from the 2001 Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS) sample survey, 25 percent of adults were regular cigarette smokers. The percentage of non-Hispanic white smokers in 2001 was similar at 24 percent. However, among non-Hispanic black adults, 35 percent indicated that they were cigarette smokers. These three figures have not changed much since 1997. With the national 2010 goal set for 12 percent, it seems unlikely that Pennsylvania will meet this important public health goal.

By Age Group:

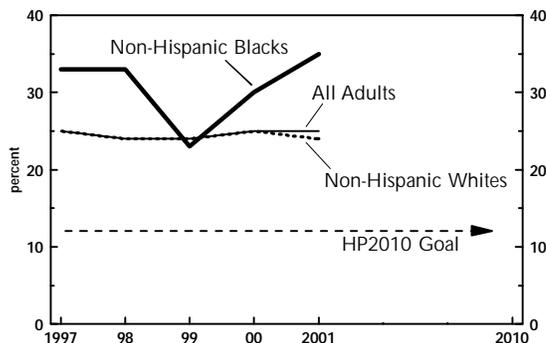
Percentages of adult cigarette smokers by age show higher figures among the younger age groups. For example, 35 percent of adults aged 18-34 smoked in 2001, compared to 25 percent of those aged 45-64 and only 9 percent of adults

aged 65+. In addition, the annual percentages during 1997-2001 for those aged 18-24 and 45-64 have been on the increase recently and figures for the other two age groups have not changed much since 1997. (Please note that the national 2010 goal is based on an age-adjusted figure and the percentages by age are not adjusted.)

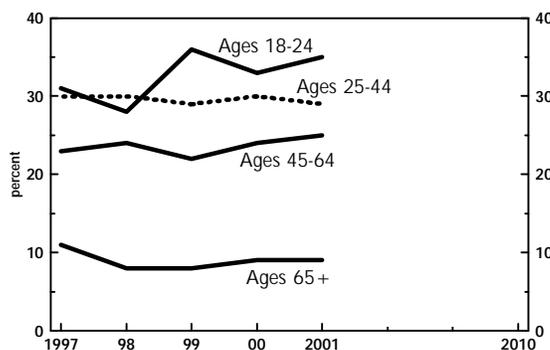
By Education:

Adults aged 25+ without a high school education were much more likely to be cigarette smokers (42 percent) than high school (30 percent) and college (12 percent) graduates of those ages in 2001. This has been true since 1997 and five years of data for the three educational groups show no apparent trends. The current figures for college graduates meet the national goal of 12 percent but the figures for the other two groups are still much higher.

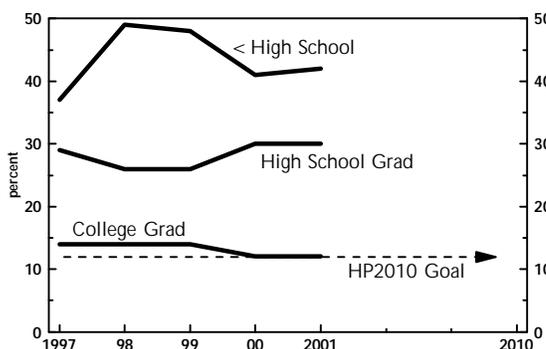
Percent Adults Who Smoke Cigarettes
All Adults* and by Race*, Pennsylvania, 1997-2001



By Age Group, Pennsylvania, 1997-2001



Adults Age 25+ By Education*, Pennsylvania, 1997-2001



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

Percent Adults Who Smoke Cigarettes
Total & Selected Demographics, Pennsylvania, 1997-2001

	2001	2000	1999	1998	1997
All Adults*	25%	25%	24%	24%	25%
Non-Hispanic Whites*	24%	25%	24%	24%	25%
Non-Hispanic Blacks*	35%	30%	23%	33%	33%
Adults 18-24	35%	33%	36%	28%	31%
Adults 25-44	29%	30%	29%	30%	30%
Adults 45-64	25%	24%	22%	24%	23%
Adults 65+	9%	9%	8%	8%	11%
< High School 25+*	42%	41%	48%	49%	37%
High School Grad 25+*	30%	30%	26%	26%	29%
16+ Years Educ. 25+*	12%	12%	14%	14%	14%

*age-adjusted to 2000 std 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.

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