

STATISTICAL NEWS

PA Department of Health ♦ Bureau of Health Statistics and Research ♦ Vol. 29 No. 6 ♦ November 2006

Youth Beliefs & Attitudes About Smoking Cigarettes

About 23 Percent of Students in Grades 10 and 12 Smoke Cigarettes

According to a recent survey, approximately two out of every three students in 10th or 12th grade considered it wrong or very wrong to smoke when asked "How wrong is it for someone your age to smoke cigarettes?". Again, about two thirds thought their adult neighbors would disapprove of kids their age who smoke. The students' answers were more striking when asked what their parents would think of their smoking. In this case, nearly 85 percent of students believed their parents would not approve of them smoking cigarettes (see Charts 1A, 1B, and 1C on page 4).

These results are based on the 2005 Pennsylvania Youth Survey (PAYS). PAYS is conducted every two years by the Pennsylvania Commission on Crime and Delinquency and is a probability sample survey of public school students in 6th, 8th, 10th, and 12th grade.

It is important to know what youth beliefs and attitudes are associated with smoking and with not smoking in order to develop and deliver effective tobacco prevention and cessation programs. In this survey, students were asked to provide

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anonymous information about their use of drugs, tobacco and alcohol. They were also questioned about their schools, families, neighbors, and friends to determine what factors might play a role in their decisions about whether or not to use a controlled substance. This article is focused on the smoking-related survey results for students in 10th and 12th grade.

Social factors can have a large influence on teenagers' behavior. A question was posed about whether the students had brothers or sisters who ever smoked. Chart 2A on page 4 shows that while approximately seven percent of the respondents did not have brothers or sisters, about 41 percent answered that they had at least one sibling who had ever smoked. The students were also asked about their four best friends,

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2005 American Community Survey Data Released

The ACS Eliminates the Need for a 2010 Census Long Form

On August 15, 2006, the U.S. Census Bureau released the 2005 American Community Survey (ACS) data on social and demographic characteristics for the nation, all 50 states and the District of Columbia, every congressional district, and all counties and places with populations of 65,000 or more. The August 15 release date was the first of four scheduled releases of data from the 2005 ACS and marked the first year of full implementation of the ACS. Subsequent releases of 2005 ACS data in 2006 will include economic data, housing characteristics, and selected population profiles with data by race, Hispanic origin, and ancestry.

The ACS is part of the U.S. Census Bureau's effort to streamline and improve the census by providing communities with a vibrant, moving picture every year instead of once every 10 years. This survey is a new approach to producing critical information about various characteristics of local communities and it will eliminate the need for a long form in the 2010 Census.

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The 2005 (ACS) includes data on 38 PA counties, 7 PA cities, and other PA geographical entities with populations of 65,000 or more.

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DEPARTMENT OF HEALTH

Edward G. Rendell, Governor

Basic Facts on Female Breast Cancer in PA

Breast Cancer Represents the Leading Cancer Site Among Females

Every October, the National Breast Cancer Awareness Month (NBCAM) program is dedicated to increasing awareness of the importance of early detection of breast cancer. In recognition of this program, *Statistical News* highlights some basic facts on female breast cancer in Pennsylvania. Below are com-

mon questions and answers specific to female breast cancer as reported among Pennsylvania residents. Cancer abstracts collected by the Pennsylvania Cancer Registry are the source for cancer incidence data shown here and Pennsylvania's Certificate of Death is the source document for cancer mortality data.

For additional data, visit the Health Statistics web pages at www.health.state.pa.us/stats (select "Cancer Incidence and Mortality"). The American Cancer Society is also a useful source for information on breast cancer. The report, *Breast Cancer Facts & Figures 2005-2006*, provides estimates of new breast cancer cases

and deaths for 2005, as well as information on factors that influence survival, known risk factors, prevention details, early detection and treatment methods, and research currently being conducted. To view this report go to www.cancer.org and click on "Statistics" under the heading "Find It Fast".

How Many Women Are Diagnosed With Breast Cancer?

In 2003, breast cancer was the most common cancer diagnosed among Pennsylvania women – accounting for 27 percent of all cancer types diagnosed among women. Specifically, there were 9,399 invasive cases of female breast cancer for an age-adjusted rate of 121.7 per 100,000.

Has the Incidence of Breast Cancer Changed Over Time?

During the period 1990-2003, the number of breast cancer cases among Pennsylvania women have fluctuated, from a low of 8,924 cases in 1992 to a high of 10,158 cases in 1999 – a difference of nearly 14 percent. Likewise, age-adjusted rates reached a high of 136.6 in 1999 with a low of 121.7 per 100,000 in 2003. The annual age-adjusted rates for breast cancer increased in Pennsylvania from 1994 through 1999. In recent years, the rates have been lower.

Can Breast Cancer Be Diagnosed at an Early Stage?

Clinical examination and mammographic screening effectively reduce cancer mortality in woman ages 50-69. In 2003, over 68 percent of breast cancer cases were diagnosed at an early stage when survival rates are high. However, over 28 percent of cases were diagnosed at late (regional and distant) stages. During the period 1990-2003, the number of in situ diagnoses among resident women with breast cancer has more than doubled, from 935 cases to 2,186 cases. Percentages for the other stages (local, regional, distant, unknown) have not changed much during the same period.

How Does Pennsylvania Compare to the United States?

Compared to the United States, Pennsylvania's age-adjusted incidence rates for invasive female breast cancer were consistently lower during the period 1990-2003. In 2003, Pennsylvania females had an incidence rate of 121.7 compared to 124.7 for the United States. However, age-adjusted mortality rates for female breast cancer have been higher among Pennsylvania females compared to the United States throughout the period 1990-2003. In 2003, Pennsylvania females had a mortality rate of 27.0 compared to 25.2 for the United States.

How Many Women Die of Breast Cancer?

In 2004, there were 2,294 deaths due to breast cancer among female residents in Pennsylvania for an age-adjusted rate of 27.4 per 100,000. Breast cancer was the second most frequent cause of cancer mortality among females – only surpassed by lung/bronchus cancer (3,486 resident deaths in 2004). Breast cancer accounted for nearly 16 percent of all resident cancer deaths among women in 2004.

Have Breast Cancer Deaths Changed Over Time?

During the period 1990-2004, the annual number of breast cancer deaths among female residents have generally declined from 2,690 in 1990 to 2,294 in 2004. However, the numbers have not changed much since 2000. The age-adjusted death rates have also shown an overall decline since 1990 (36.6 per 100,000 in 1990 to 27.4 in 2004).

Is Breast Cancer Associated with Age?

In Pennsylvania, nearly 81 percent of invasive breast cancer cases were diagnosed among female residents aged 50 years and older during the five year period 1999-2003. Age-specific incidence rates for female breast cancer dramatically increased at about age 35 and continued to climb until about age 80.

Is Breast Cancer Associated with Race?

In Pennsylvania, age-adjusted incidence rates for invasive female breast cancer have been consistently higher among whites compared to blacks during the 1990-2003 period. White women had a rate of 122.1 compared to 118.1 for blacks in 2003. However, blacks had a larger percentage of cancers diagnosed at the late stage compared to whites (34.9 versus 27.8 for 2003). Additionally, age-adjusted mortality rates for female breast cancer have been consistently higher among black women compared to white women throughout the period of 1990-2004. In 2004, the mortality rate for female breast cancer among whites was 27.1 compared to 31.7 among black residents.

Two Health Status Indicators Reports Updated

These Two Reports Can Be Used for Assessing and Comparing the Health Status of the State and Local Areas

County & Health District Health Status Indicators, 2006 Report:

Specific health status indicators were developed by the Centers for Disease Control and Prevention in response to Objective 22-1 of *Healthy People 2000* and are cited again in Objective 23-2 of *Healthy People 2010*. They are to be used for assessing and comparing the health status of state and local areas.

This report includes 95% results of significance testing for these indicators, which are graphically depicted by county outline maps. Thus, the report provides descriptive and analytical statistics at the county and health district level in one convenient publication for health data users.

The latest birth data in the 2006 report are for 2004. The most recent death and disease incidence rates are average annual rates covering the three-year period of 2002-2004. Three-year average annual rates were used primarily because of the small annual numbers for selected diseases and for specific causes of deaths in many counties of the state.

Data highlights for the 2006 report show that the percentages of low birth weight babies and mothers having no prenatal care in the first trimester both increased from 2003 to 2004 for Pennsylvania, while the percentage of births to mothers less than 18 years of age decreased from 2003 to 2004. Age-adjusted death rates for cardiovascular disease, heart disease, lung cancer, female breast cancer, and stroke all de-

Age-adjusted death rates for cardiovascular disease, heart disease, lung cancer, female breast cancer, and stroke all declined... while the rate for suicide increased.

clined from the three-year period of 2001-2003 to the three-year period of 2002-2004. The rates for homicide and motor vehicle accidents saw no change during the same time period, while the rate for suicide increased. The infant death rate for Pennsylvania decreased from 2001-2003 to 2002-2004, as did the incidence rates for measles, AIDS, and tuberculosis. The incidence rate for syphilis stayed the same during these years.

This report shows differences in the birth and infant death statistics among Whites, Blacks, Hispanics and Asians. Black and Hispanic residents have much higher percentages of teenage births and no prenatal care in the first trimester compared to Whites and Asians. Black residents also have higher percentages of low birth weight babies and much higher infant death rates than Whites, Asians, and Hispanics.

Significance or comparison testing was performed on most objectives to determine which county or Health District indicator was significantly higher or lower than the state figure and

which state indicator was significantly higher or lower than the United States figure. Confidence intervals were not calculated and testing was not conducted for disease incidence rates, work-related injury death rates, and any rates dealing with race/ethnicity mainly because of the small numbers associated with these rates.

Another special feature of the county and health district report is the Technical Notes. In this section of the report, the user can find various statistical formulas used to compute the confidence intervals and standard errors that were used for significance or comparison testing. This section also contains a discussion about the reliability of the data as well as definitions of terms used throughout the report. The appendix in the report lists additional statistics available at the city, borough or township level that can be used to compute local health status indicators.

This Health Status Indicators report can be accessed online at www.health.state.pa.us/stats (select "Vital Statistics" and then select the report title).

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

This annual report shows birth, death, infant death and childhood poverty statistics for 22 municipalities as well as for Pennsylvania. These one page profiles provide those concerned with maternal and child health a statistical perspective on the

types of urban health problems facing Pennsylvania's major cities. All of the data are shown by race (White, Black and Asian/Pacific Islander) and for those of Hispanic origin.

The report includes leading causes of death among residents ages 1 to 17, infant death rates, percentages of low birth weight babies, mothers with no prenatal care in the first trimester, teen births, and children living below the poverty level.

The twenty cities and two boroughs included in the report are Allentown, Altoona, Bethlehem, Chester, Easton, Erie, Harrisburg, Hazleton, Johnstown, Lancaster, Lebanon, McKeesport, New Castle, Norristown, Philadelphia, Pittsburgh, Reading, Scranton, West Mifflin, Wilkes-Barre, Williamsport and York.

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

This Health Status Indicators report can be accessed from the Health Statistics web pages at www.health.state.pa.us/stats (select the blue box labeled "Vital Statistics" and then select the report title). For questions about these reports, please contact the Bureau of Health Statistics and Research at 717-783-2548.

Youth Beliefs & Attitudes About Smoking Cigarettes

and how many of those four friends had smoked over the past year (see Chart 2B). About 41 percent of the students responded that none of their four best friends had smoked during the past year. Approximately 31 percent of the students had one or two best friends who had smoked and another 28 percent

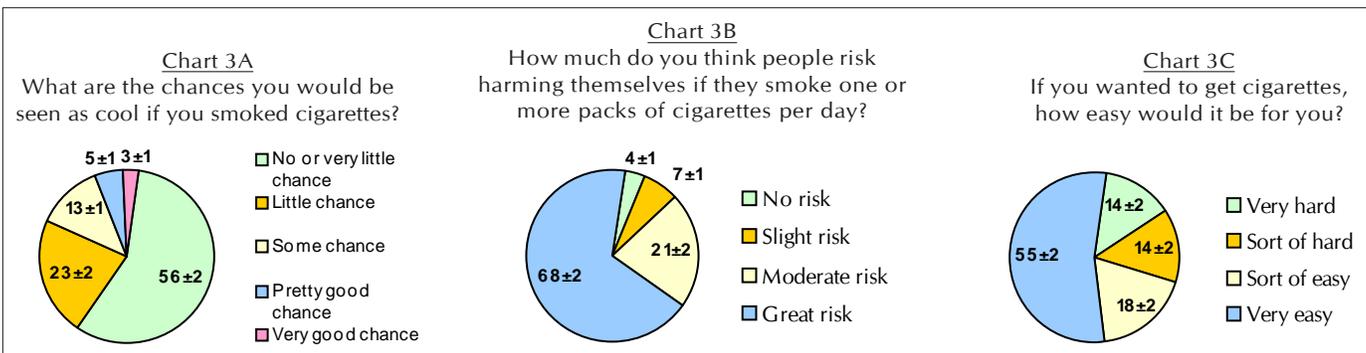
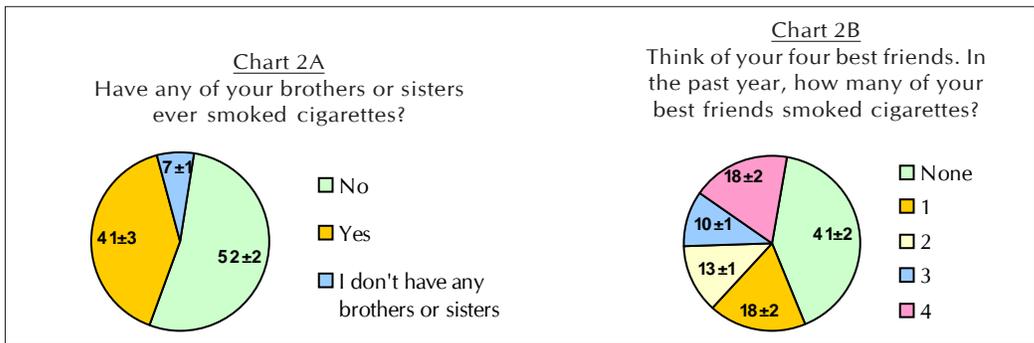
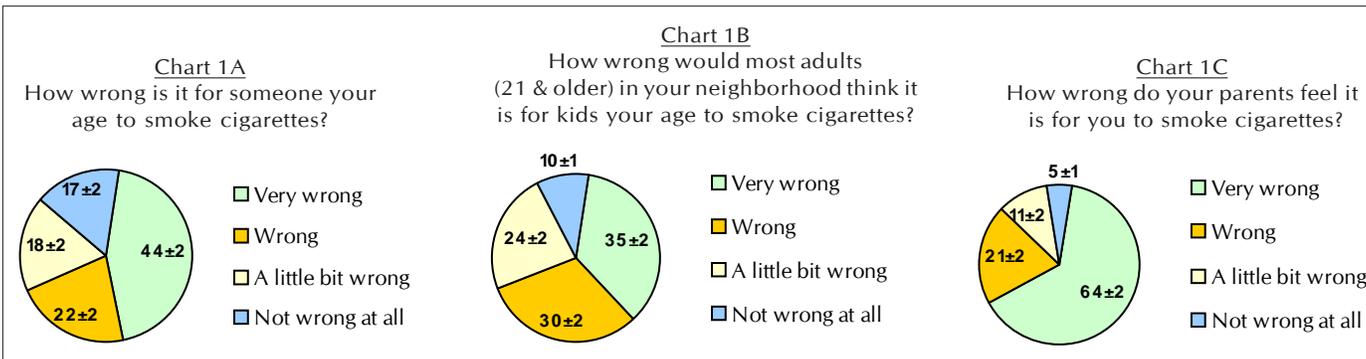
...about 41 percent answered that they had at least one sibling who had ever smoked.

had three or four best friends who smoked during the past year.

Students did not generally think they would be considered cool if they smoked. Chart 3A shows that less than ten percent of youth believed that there was a good chance of being seen as cool if they smoked cigarettes. Two other factors that can influence the decision to smoke are how harmful cigarettes may be

and how difficult they are to obtain (see Chart 3B and 3C). The students overwhelmingly agreed (nearly 90 percent) that smoking one or more packs of cigarettes per day presented a moderate or great risk of harm. Regarding how hard or easy it would be to obtain cigarettes, approximately 73 percent of

Charts 1A-3C
Percent of Student Responses for Selected Smoking Attitudes and Social Factors (Grades 10 & 12 only)
Pennsylvania Youth Survey (PAYS), School Year 2005-06



Note: The ± figures appearing in the pie charts represent the 95% confidence interval.

the students thought that cigarettes would be sort of or very easy to obtain.

Based on results from PAYS, the overall prevalence of smoking in grades 10 and 12 was 23 (±4) percent. The survey showed that there were large differences in the attitudes between students who smoked and those who did not. The differences for all of the attitudes or social factors regarding smoking that were examined here were statistically significant, at the 95% confidence level, when comparing smokers to non-smokers (see Chart 4). About 79 percent of

non-smokers thought it was wrong to smoke compared to only about 20 percent of smokers. Over 38 percent of smokers and 16 percent of non-smokers thought there was some or a good chance of seeming cool if they smoked. Smokers were also much more likely to have best friends who smoked cigarettes. Nearly 90 percent of smokers had at least two best friends who smoked, while only about one quarter of non-smokers did.

When the students were asked about health risks associated with smoking, both smokers and non-smokers believed

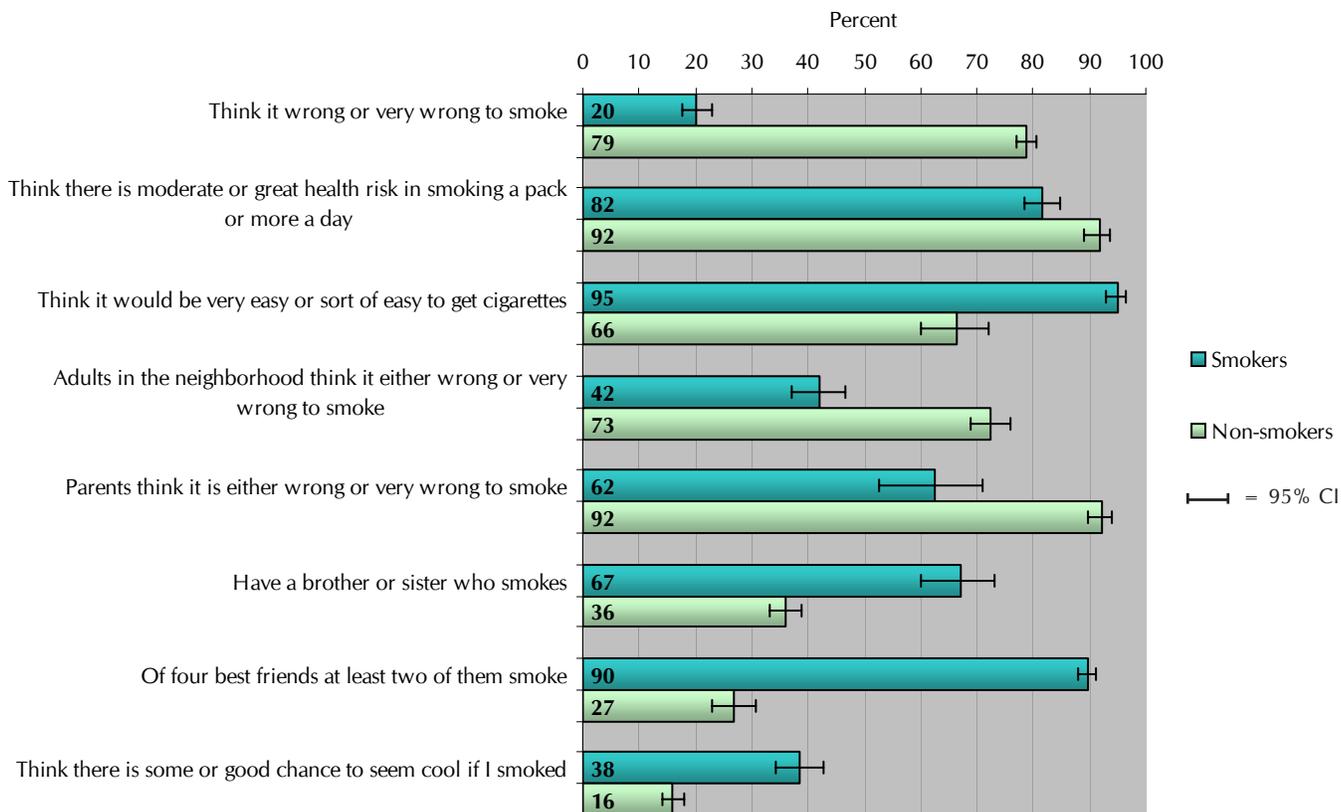
About 79 percent of non-smokers thought it was wrong to smoke compared to only about 20 percent of smokers.

that there was a risk associated with smoking a pack or more of cigarettes daily. About 92 percent of the non-smoking students thought there was a moderate or great risk in smoking a pack of cigarettes each day, compared to approximately 82 percent of the students who smoked.

If you have any questions about this article, please contact the Bureau of Health Statistics and Research at 717-783-2548 or via an e-mail from a link on our website at www.health.state.pa.us/stats.

The information from the PAYS allows community leaders to direct prevention resources to areas where they are likely to have the greatest impact. For more information about the Pennsylvania Commission on Crime and Delinquency's Pennsylvania Youth Survey, go to www.pccd.state.pa.us/pccd and select "research".

Chart 4
Percent of Student Responses for Smoking Attitudes and Social Factors and 95% Confidence Interval Bars by Smoking Status (Grades 10 and 12 Only) Pennsylvania Youth Survey (PAYS), School Year 2005-06



2005 American Community Survey Data Released

Responding to the ACS is mandated by law. The 2005 survey includes data on 38 Pennsylvania counties, 7 Pennsylvania cities (Allentown, Bethlehem, Erie, Philadelphia, Pittsburgh, Reading, and Scranton), and various other Pennsylvania geographical entities with populations of 65,000 or more. Caution should be used by those that use both 2000 U.S. Census data and 2005 ACS data, as there are some rather significant differences between the two and how the data are collected.

Table 1 below provides some important issues to be aware of when comparing the

2000 Census and the 2005 ACS data. One primary difference is that most 2000 Census data includes the population living in both housing units and group quarters, while the 2005 ACS data are limited to only those living in housing units. Another significant difference between the 2000 Census and the 2005 ACS is place of residence. In the 2000 Census, residence is where an individual resides most of the year; therefore, a college student would be counted at their college residence. In the 2005 ACS, an individual is counted at their current address if they have lived there “most of the time in

**For more
information on...
the ACS... go to
www.census.gov/acs.**

the last two months.” For example, a college student living back at home during the summer might be counted at their parent’s residence. Therefore, areas that are heavily populated by college students may see some decrease in their 2005 ACS population estimate.

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

Research at 717-783-2548. For more information on the type of data produced from the ACS, including measures of quality that are critical for users to understand, go to www.census.gov/acs. The guide entitled “Using Data from the 2005 American Community Survey”, explains which geographic areas will receive data products, details on each of the specific 2005 ACS data products, and tips on how to access and use these products. A timetable for the 2005 ACS data releases is also included along with references and contacts for users needing additional help.

**Table 1
Overview of Data Comparability Issues
Between the 2000 Census and 2005 American Community Survey**

Issue	Census 2000	ACS 2005
Universe	<ul style="list-style-type: none"> Most tables include ALL residents (there may be age, race, etc. restrictions). Some tables are limited to the household population. 	<ul style="list-style-type: none"> Tables are limited to the HOUSEHOLD POPULATION ONLY (there may be additional restrictions such as age or race). GROUP QUARTERS POPULATION NOT INCLUDED IN 2005 ACS.
Residence Rules	<ul style="list-style-type: none"> Usual place of residence – Self identification of where you live most of the year. College students are supposed to be counted at their college address. Does not capture seasonality or second home location. 	<ul style="list-style-type: none"> Current Residence – Counted at the sampled address if lived there most of the time in the last TWO MONTHS. (College students might be counted at parent’s residence during the later summer months.)
Collection Procedures Non-Response Follow-up	<ul style="list-style-type: none"> Primarily personal visit by short-term, moderately trained employees, being paid a relatively low wage for the area. Emphasis on counting number of people at address. 	<ul style="list-style-type: none"> Conducted by long-term, highly-trained employees, being paid reasonably well for the area. Telephone follow-up in second month if possible. Personal visit in third month usually to 1/3 of addresses not responding. Emphasis is on collecting characteristics of individuals in the household.
Proxy Respondents	<ul style="list-style-type: none"> Allowed - People living outside the address (landlords, neighbors, etc.) are allowed to provide information. 	<ul style="list-style-type: none"> NOT Allowed - ONLY people living at the address can answer the questions.
Reliability	<ul style="list-style-type: none"> Statistical reliability is generally not reported, but can be calculated. Generally, fairly small compared to the Margin of Error reported on the ACS. 	<ul style="list-style-type: none"> Reported as Margin of Error (MOE) and must be calculated for user derived data The MOE can be VERY large compared to the Census results. The MOE MUST be used for comparing areas or change over time.

Update: Healthy People 2010 Objectives

Focus Area 16: Maternal, Infant, and Child Health

16-01c - Reduce infant deaths.

All Infant Deaths and by Sex:

Infant death rates for all Pennsylvania residents as displayed in the first graph on the right show that the figure had been on the increase between 2000 and 2002 but declined in 2003 and 2004. There were 1,026 infant deaths among residents in 2004 for a rate of 7.1 per 1,000 live births, compared to 1,081 and 7.6 in 2002. Since 1989, annual increases in the Pennsylvania infant death rate only occurred in 2001 and 2002.

The 2004 infant death rates by sex showed a decrease for males and females. The 2004 rate for males was about 30 percent higher than the rate for females (7.9 versus 6.1, respectively).

To reach the national 2010 goal of 4.5, Pennsylvania's infant death rate will have to decline by 37 percent. For male residents to reach this national goal, the rate will need to decline by 43 percent; and for females, by 26 percent.

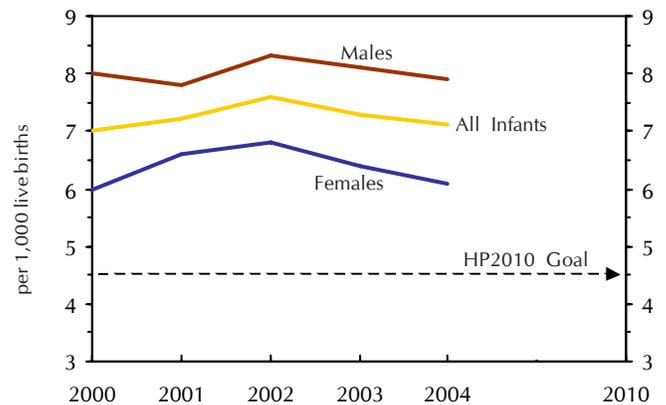
By Race and Hispanic Origin:

The second graph on the right depicts infant death rates by race and Hispanic Origin for 2000-2004 and large differences can easily be seen. The rates for Black residents are two to five times higher than the rates for Whites and Asians/Pacific Islanders. The rates for Hispanics, while lower than the rates for Blacks, are still somewhat higher than the rates for Whites and Asians/Pacific Islanders. However, the infant death rate for Blacks declined in 2004, while the rate for Whites, Hispanics, and especially Asian/Pacific Islanders increased.

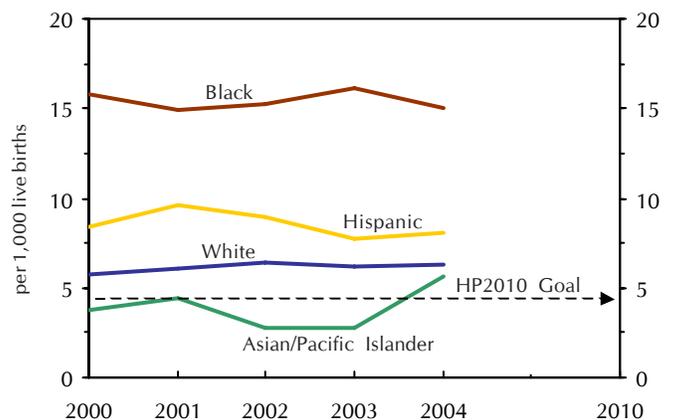
With the exception of 2004, the infant death rates for Asians/Pacific Islanders has been lower than the 2010 goal of 4.5. Although the rates for Whites are also low, they have been on the increase and should be of concern. The rates for Hispanics and especially for Blacks need to decrease significantly in order to reach the HP2010 goal.

2010 Target: 4.5 infant deaths per 1,000 live births

Infant Death Rates
Total and By Sex, Pennsylvania Residents, 2000-2004



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



Infant Death Rates*
By Sex, Race, and Hispanic Origin
Pennsylvania Residents, 2000-2004

	2004	2003	2002	2001	2000
All Infant Deaths	7.1	7.3	7.6	7.2	7.0
Males	7.9	8.1	8.3	7.8	8.0
Females	6.1	6.4	6.8	6.6	6.0
White	6.3	6.2	6.4	6.1	5.7
Black	15.0	16.1	15.2	14.9	15.8
Asian/Pacific Islander	5.6	2.8	2.8	4.4	3.8
Hispanic**	8.1	7.7	9.0	9.6	8.4

*per 1,000 live births

**Hispanic can be of any race

HP2010 State and County Data on the Web

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

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