STATISTICAL NEWS

PA Department of Health ◆ Bureau of Health Statistics and Research ◆ Vol. 30 No. 6 ◆ Nov/Dec 2007

Smoking Among High School Students Declines

Peer Pressure and Living with Smokers Affect Decision to Smoke

Cigarette smoking among high school students in Pennsylvania has declined about 24 percent between school years 2002/03 and 2006/07. During the 2002/03 school year, 23 percent (±2%) of high school students reported smoking cigarettes, compared to 18 percent (±3%) in the 2006/07 school year. The PA Youth Tobacco Survey (PA YTS), conducted during the fall and winter of 2006/07, also found that over half of the students who smoked wanted to quit. Three fourths of smokers believed they could quit if they wanted to, but the number of students who have successfully stopped smoking indicates that quitting is a larger challenge than many students may anticipate.

The PA Youth Tobacco Survey (PA YTS)... also found that over half of the students who smoked wanted to quit.

How much do high school students smoke?

Of the students who had smoked in the past 30 days, most of them (62 percent [±11%]) smoked menthol cigarettes. About 60 percent (±6%) of the current smokers had smoked 100 or more cigarettes during their lives, and a similar figure, 57 percent (±6%), had smoked on 10 or more of the past 30 days (see Chart 1 on page 3). On the days that the students smoked, 41 percent (±6%) smoked between two and five cigarettes and another 25 percent (±5%) smoked six or more cigarettes (see Chart 2 on page 3).

Many of these students appear to be addicted to nicotine. When they were asked how long they could go without smoking before they feel like they need a cigarette, about four out of ten students who smoked thought that they could go less than a full day before they needed to smoke.

Why do high school students smoke?

Every parent knows that peers play a large role in explaining their teenagers' behaviors. So it is probably no surprise to find that well over twice as many high school smokers, as compared to non-smokers, think that people who smoke have more friends. Among smokers, boys are more

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2005 C-Section Delivery Rate Highest Recorded

Dramatic Increases Observed Even Among Low-Risk Mothers

A review of recent birth statistics shows that cesarean section delivery rates are still on the rise, even among low-risk mothers giving birth for the first time. Between 1990 and 1997, the proportion of cesarean sections decreased steadily, reaching a low of 19.3 percent in 1997. The percentage began to rise in 1998 with 19.6 percent and continued to rise, to 28.8 percent in 2005, the highest rate ever recorded in Pennsylvania.

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The proportion of cesarean sections for low-risk first-time mothers is following the same pattern – increasing steadily in recent years, from 16.8 percent in 1997 to 27.1 percent in 2005 among residents. The national Healthy People 2010 (HP2010) Objective #16-09a is to decrease the percent of low-risk first-time mothers giving birth by cesarean section to 15 percent. A further review of Pennsylvania's cesarean section rates (i.e. rates per 100 or percentages) for low-risk first-time mothers between 2001 and 2005 by race, ethnicity, educational status, and age also shows rather consistent increases among most of these demographic groupings.

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DEPARTMENT OF HEALTH

Edward G. Rendell, Governor

Website Updates:

Health Status Indicators Reports and Cancer Facts & Figures Released

County & Health District Health Status Indicators, 2007/08 Report:

This annual report contains health status indicators for the United States, Pennsylvania, and Pennsylvania counties and health districts. It includes 95% confidence intervals and results of significance testing, 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.

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.

Data highlights for the 2007/08 report show that the percentages of low birth weight babies and births to mothers having no prenatal care in the first trimester both increased between 2004 and 2005 for Pennsylvania, while the percentage of births to mothers less than 18 years of age decreased. Age-adjusted death rates for cardiovascular disease, heart disease, lung cancer, female breast cancer, and stroke all declined between the three-year periods of 2002-2004 and 2003-2005. The rate for motor vehicle accidents saw no change during the same time period, while the rates for homicide and suicide increased. The infant death rate for Pennsylvania decreased between 2002-2004 and 2003-2005, as did the incidence rate for measles. The incidence rate for tuberculosis stayed the same during these years while the rate for syphilis increased.

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

Within the Technical Notes 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. Also, the appendix in this report lists additional statistics available that can be used to compute local health status indicators. Most of these data can be obtained from the Health Statistics web pages at ***www.health.state.pa.us/stats***.

Maternal and Child Health Status Indicators for PA 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.

This year the report includes data on births to mothers who smoked during the first trimester of pregnancy. For Pennsylvania, during the three year period of 2003-2005, 17.1 percent of births were to mothers who smoked in the first trimester. Reviewing this statistic by race shows that babies born to White mothers had the highest percentage at 18.5 and Asian/Pacific Islanders had the lowest percentage at 2.1. Of the 22 municipalities listed in the report, the one with the highest percentage of births to mothers who smoked in the first trimester was Johnstown City (38.6%) and the municipality with the lowest percentage was Bethlehem City (13.7%).

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

Both Health Status Indicator reports 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 you wish to view.

Cancer Facts and Figures Pennsylvania 2007:

Efforts in the update of this year's report focused on improving the charts for sections including trends, staging, and expected changes. The report contains projected cancer cases and cancer deaths for Pennsylvania residents by county and projected cancer cases and cancer deaths by primary site and sex for the entire state.

Annual age-adjusted cancer rates were used to examine trends for all cancers by sex and by race and for the top four cancers. In addition, age-adjusted cancer incidence and mortality rates were compared to national rates for all cancers and for lung/bronchus, colon/rectum, urinary bladder, prostate and female breast cancers. Staging data are presented for 1994 and 2004 and compares males to females and Whites to Blacks. Data on behavioral risks among adults, such as the percent of smokers, are also included in this report. The American Cancer Society guidelines for early detection for major cancer sites are shown, followed by information on the Department's Cancer Prevention and Control Section Initiatives.

According to the report, the overall number of invasive cancer cases among Pennsylvania residents is projected to increase slightly by 0.5 percent between 2004 and 2007 (70,837 to 71,190). The number of cancer deaths among residents for 2007 (29,000) is projected to be slightly lower than the 2005 number of deaths (29,355).

To access the *Cancer Facts and Figures Pennsylvania 2007* report online go the Health Statistics web pages at ***www.health.state.pa.us/stats*** and select the blue box labeled "Cancer Incidence and Mortality".

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Smoking Among High School Students Declines

likely (42 percent [±8%]) than girls (25 percent [±8]) to think people who smoke have more friends. Even among non-smokers, 17 percent (±3%) of boys, and 12 percent (±4%) of girls thought that smokers have more friends.

The estimates suggest that peers influence the decision to smoke. As shown on Chart 3, about ninety percent of smokers compared with one third of non-smokers have at least one best friend who smokes. Of course, living with other smokers also plays a big role. Compared to non-smoking students, twice as many students who smoke live with another smoker.

These students know the dangers of smoking cigarettes. Nearly ninety percent of both smoking and non-smoking students thought that young people risked harming themselves by smoking 1 to 5 cigarettes per day.

Nearly 90% of both smoking and non-smoking students thought that young people risked harming themselves by smoking 1 to 5 cigarettes per day.

Female smokers were as likely to think this amount of smoking could cause harm (93 percent, ±5%). Boys who smoked cigarettes were somewhat less likely (84 percent, ±6%) to see this as being dangerous.

Even though they realize the risks, smokers were over three times more likely (27 percent, ±7%) than non-smokers (8 percent, ±2%) to think it would be safe to smoke for a year or two if they then quit. Many of these smokers probably do plan to quit soon, since only about half of them said that they expected to be smoking in five years.

Chart 1
Number of Days High School Students Smoked Cigarettes in the Past 30 days
PA Youth Tobacco Survey, 2006/07

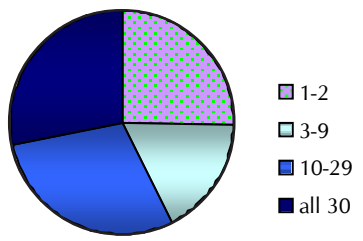


Chart 2
Number of Cigarettes Smoked on Days High School Students Smoked
PA Youth Tobacco Survey, 2006/07

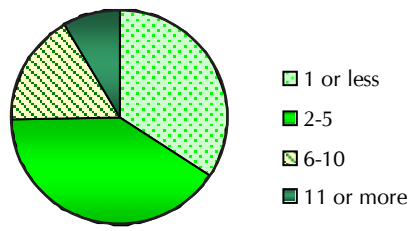
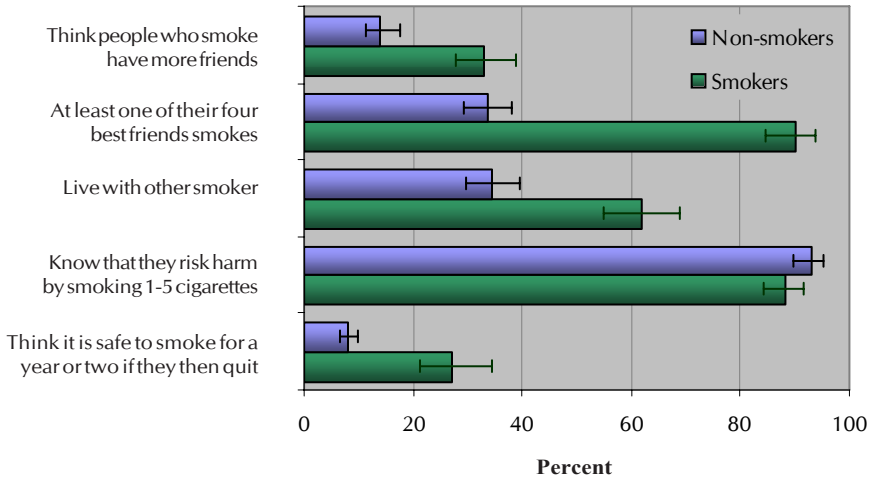


Chart 3
Possible Factors or Attitudes Influencing Decision to Smoke Among High School Students by Smoking Status
PA Youth Tobacco Survey, 2006/07



Are high school students trying to quit smoking?

About half of the students who smoked cigarettes in the past month said that they wanted to quit, as shown in Chart 4 on page 6. In addition, students were very confident of their ability to quit. Three fourths of the students who smoked believed that they could quit if they wanted to.

A different story emerged when the number of quit attempts was compared with the students who are currently smoking. Of the students who had tried to stop smoking during the past year, a little over one quarter of them had quit. So while three fourths of students believed they could quit if they so chose, just over one fourth of them who did try to quit actually stopped smoking.

The Youth Tobacco Survey is a tool developed by the Centers for Disease Control and Prevention/Office on Smoking and Health (CDC/OSH). The survey is used to measure students'

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2005 C-Section Delivery Rate Highest Recorded

PA and U.S. Comparisons:
The latest available United States cesarean section rate for low-risk first-time mothers (25.0 per 100) is for 2004. Comparing these cesarean section rates by the mother's race for Pennsylvania (2005) and the U.S. (2004) show that the state rate for Whites (27.4) and Asian/Pacific Islanders (27.6) are higher than the U.S. rates (24 and 26, respectively). The rate for Hispanics was the same for Pennsylvania and the U.S. (24.1 and 24, respectively), while the state rate for Blacks was lower that the U.S. rate (26.8 vs. 28). Pennsylvania rates by age group are slightly higher than the U.S. rates for all age groups except births to mothers under 15 years of age (16.1 vs. 17).

Pennsylvania (cesarean section) rates by age group are slightly higher than the U.S. rates for all age groups except births to mothers under 15...

Race/Ethnicity of Mother:
Between 2001 and 2005, the cesarean section rates for low-risk first-time mothers for all four race/ethnicity groups have generally increased. In 2005, Asian/Pacific Islander and White mothers had the highest rates, 27.6 and 27.4, respectively, followed closely by Black mothers (26.8). Hispanic mothers had the lowest rate (24.1) in 2005. (Please note that Hispanics can be of any race.) Among the four race/ethnic groups, none of the cesarean section rates in 2005 are close to the HP2010 goal of 15 percent.

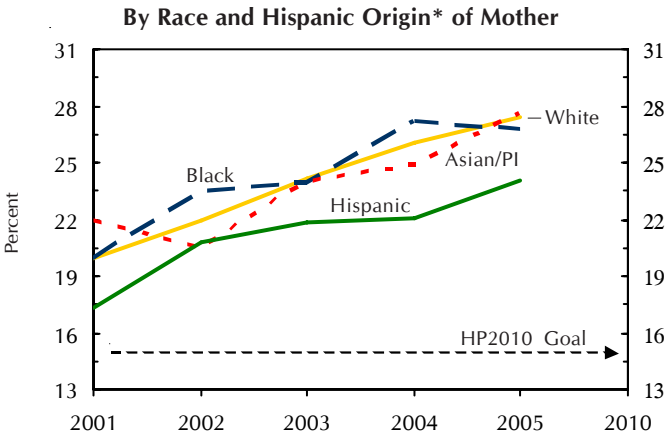
Education of Mother:
The percentage of low-risk first-time cesarean sections by education of the mother shows that mothers with at least some college (aged 20+) had the highest rate for 2005. The percentage for births to mothers with less than a high school education (aged 20+) was the closest to the HP2010 goal in 2001 (16.9) but has significantly increased since then to 23.3 in 2005. The cesarean section rates have been on the increase since 2001 for all three educational groups, with the sharpest increase seen among the best educated mothers.

Age of Mother:
In 2005, among low-risk first-time mothers, the oldest mothers (ages 35+) had the highest percentage (43.0) of cesarean section deliveries – over two and a half times higher than the lowest rate (16.1 for mothers under age 15). Mothers ages 20-24 had a 23.3 cesarean section rate in 2005, compared to 27.5 percent for mothers ages 25-29 and 34.0 percent for mothers ages 30-34. The cesarean section delivery rates for all age groups increased between 2001 and 2005.

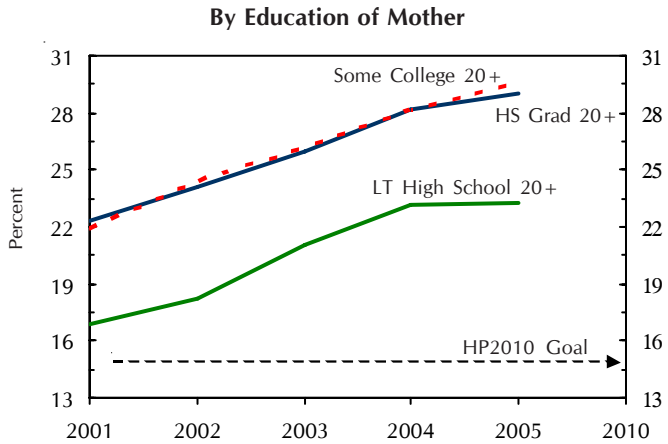
Low-risk first-time mothers aged 30-34 had the largest increase between 2001 and 2005, from 24.7 in 2001 to 34.0 percent in 2005. The 2005 cesarean section rates for the under 15 and 15-19 age groups (16.1 and 18.9, respectively) are the closest to the HP2010 goal of 15 percent.

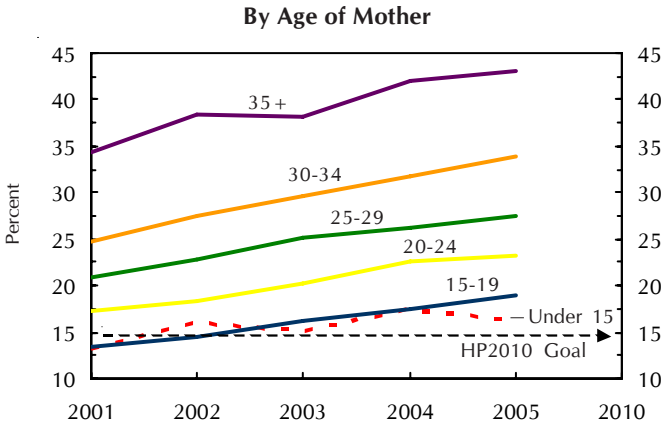
The charts on this page present visual displays of the cesarean section delivery trends in Pennsylvania. Additional statistics can be produced with our interactive web tool, EpiQMS, at ***www.health.state.pa.us/stats***.

Cesarean Section Delivery Rates per 100 (Percent)
Pennsylvania Resident Live Births to
Low-Risk First-Time Mothers, 2001-2005



* Hispanics can be of any race





Update: Healthy People 2010 Objectives

Focus Area 26: Substance Abuse

26-02 - Reduce cirrhosis deaths.....HP2010 Target: 3.0
26-03 - Reduce drug-induced deaths.....HP2010 Target: 1.0

Cirrhosis Deaths:
Between 2001 and 2005, the annual age-adjusted death rate for cirrhosis deaths among all Pennsylvania residents was highest in 2003 and then declined in 2004 and 2005. A similar pattern was observed among males, Whites, and Hispanics. The rates for Hispanics have fluctuated during this period but that is probably due to the smaller annual numbers of events for this group.

The U.S. Healthy People website shows a higher 2004 (most current) age-adjusted rate for cirrhosis deaths for U.S. (9.0), compared to Pennsylvania (7.3 per 100,000 in 2005).

The 2005 age-adjusted death rates for cirrhosis are higher among Hispanic and male residents compared to Whites, Blacks and, especially, females. The 2004 rate for females is the lowest among the five sex/race/ethnic groups shown here but even that rate (4.6) is still over 53 percent higher than the HP2010 national goal of 3.0.

Drug-Induced Deaths:
The annual age-adjusted death rates for drug-induced deaths among all residents have been increasing during the 2001 through 2005 time period. The same can be said for males, females, Whites, and Blacks. The annual age-adjusted death rates for Hispanic residents showed no trend during this five-year time period. The rates for these five sex/race/ethnic groups were highest among males and Blacks.

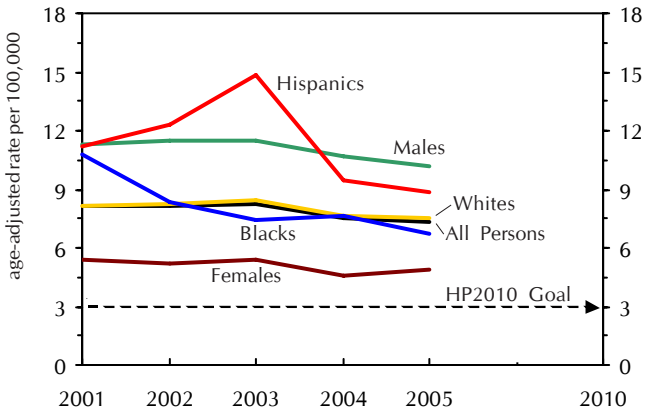
The Healthy People 2010 goal is for an age-adjusted death rate of 1.0 per 100,000 for drug-induced deaths. The 2005 drug-induced death rate for Pennsylvania (13.5) is higher than the most current available U.S. rate (10.4 in 2004). No age-adjusted death rate for any of the five sex/race/ethnic groups in Pennsylvania (as shown here) is close to meeting this goal. The lowest rate among the five sex/race/ethnic groups was observed for females (4.4) in 2001, over four times higher than the HP2010 goal.

Cirrhosis & Drug-Induced Deaths, Age-Adjusted Rate*
By Sex & Race/Ethnicity, Pennsylvania Residents 2001-05

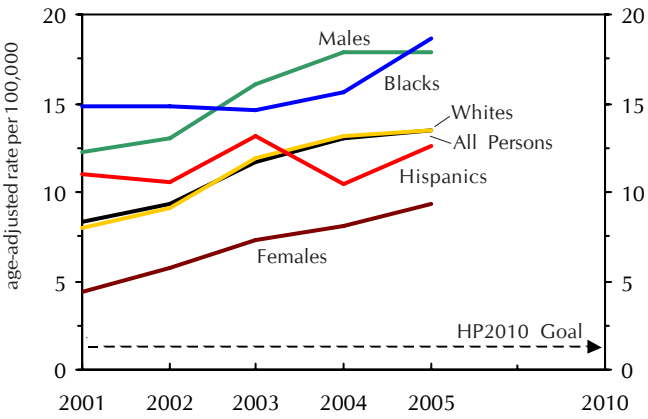
Cirrhosis	2001	2002	2003	2004	2005
All Persons	8.1	8.1	8.2	7.5	7.3
Males	11.3	11.5	11.5	10.7	10.2
Females	5.4	5.2	5.4	4.6	4.9
Whites	8.1	8.2	8.4	7.6	7.5
Blacks	10.8	8.3	7.4	7.6	6.7
Hispanics**	11.2	12.3	14.8	9.5	8.8
Drug-Induced					
All Persons	8.3	9.3	11.7	13.0	13.5
Males	12.3	13.0	16.1	17.9	17.9
Females	4.4	5.7	7.3	8.1	9.3
Whites	8.0	9.1	11.9	13.2	13.5
Blacks	14.8	14.8	14.6	15.6	18.6
Hispanics**	11.0	10.6	13.1	10.4	12.6

*age-adjusted to 2000 standard million U.S. population (per 100,000)
**Hispanics can be of any race.

Age-Adjusted Death Rates* for Cirrhosis Deaths
Pennsylvania Residents, 2001-2005



Age-Adjusted Death Rates* for Drug-Induced Deaths
Pennsylvania Residents, 2001-2005



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

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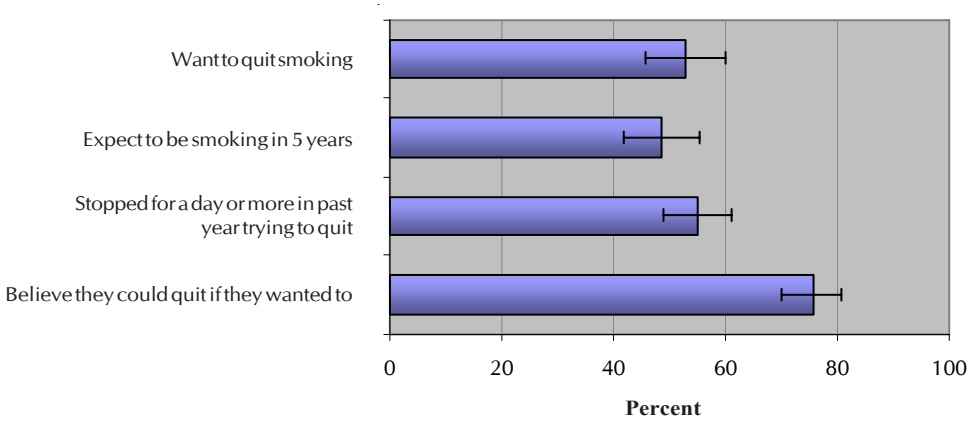
Smoking Among High School Students...

tobacco-related knowledge, behaviors and attitudes at the national and state levels for states participating in the survey.

The 2006/07 Pennsylvania Youth Tobacco Survey report will be available soon. You will be able to access it on the Department's Tobacco Prevention and Control Program web pages at ***www.health.state.pa.us/tobacco***. For questions regarding this article, please contact the Bureau of Health Statistics and Research at 717-783-2548 or via an email link from the Health Statistics web pages at ***www.health.state.pa.us/stats***.

Chart 4
High School Student's Responses to Questions about Quitting Smoking Among Students Who Smoked at Least One Cigarette During the Past 30 Days PA Youth Tobacco Survey, 2006/07



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