

# STATISTICAL NEWS

PA Department of Health ♦ Bureau of Health Statistics and Research ♦ Vol. 30 No. 2 ♦ March 2007

## Overview of PA BRFSS Local Sampling Program

*Since 2002, 34 Counties Surveyed Through Local Sampling Program*

A significantly higher percent (29) of adults in Mifflin and Juniata counties were considered to be obese compared to Pennsylvania adults (24%) in 2004. Only 33 percent of Armstrong County adults age 50+ had a sigmoidoscopy or colonoscopy – significantly lower than for all Pennsylvania adults age 50+ (48%) in 2002. Elk County adults had a significantly higher percent (24%) compared to all Pennsylvania adults (18%) for binge drinking in 2003. These are a sampling of the statistics and comparisons currently available through the Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS) Local Sampling Program (see Figure 1 on page 4).

### Program Overview

Nearly half of all deaths occurring annually in the U.S. are the result of modifiable behavioral risk factors. In an effort to provide local BRFSS data addressing many of these risk factors, the Pennsylvania Department of Health instituted the Pennsylvania BRFSS Local Sampling Program in 2002. Participation in the program is open to Pennsylvania's State Health Improvement Plan (SHIP) affili-

**Nearly half of all deaths occurring annually in the United States are the result of modifiable behavioral risk factors.**

ated partnerships located statewide. Participants are able to select a Pennsylvania county or group of counties to sample survey during their participation year. Since 2002, 34 counties have been surveyed at the request of SHIP-affiliated partnerships.

In addition to the survey questions asked by everyone using the PA BRFSS survey (i.e. the core survey questions), local sampling program participants can ask an additional 45 to 50 questions depending on the survey space availability in their particular participation year. The Department of Health covers approximately two-thirds of the survey costs in addition to providing standard statistical reports of the data results, additional data output upon request,

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## Unintentional Fall Deaths and Hospital Discharges

*Increases Observed in Fall Deaths & Hospital Discharges Due to Falls*

In recent years, unintentional fall deaths have increased not only in Pennsylvania, but in the United States as well. In Pennsylvania, age-adjusted mortality rates for unintentional falls were higher for male residents than for female residents. Residents age 65 and older accounted for about 80 percent of all unintentional fall deaths and over 70 percent of all hospital discharges due to unintentional falls. When examining data by sex, older female residents (65 and older) had higher percentages than older males for both deaths and hospitalizations due to unintentional falls.

### Background

Unintentional fall deaths include codes W00-W19 as defined by the International Classification of Diseases, Tenth Revision (ICD-10). There are two important criteria for injury deaths that help determine the ICD-10 code: the mechanism of the injury and the manner or intent of the injury. The mechanism involves the circumstances of the injury (e.g. fall, motor vehicle accident, poisoning). The manner or intent of the injury involves whether

**Residents age 65 and older accounted for about 80% of all unintentional fall deaths and over 70% of all hospital discharges due to unintentional falls.**

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**DEPARTMENT OF HEALTH**

*Edward G. Rendell, Governor*

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# Health of PA Veterans of the Armed Forces

*About 29 Percent of Pennsylvania Adult Male Residents Are Veterans*

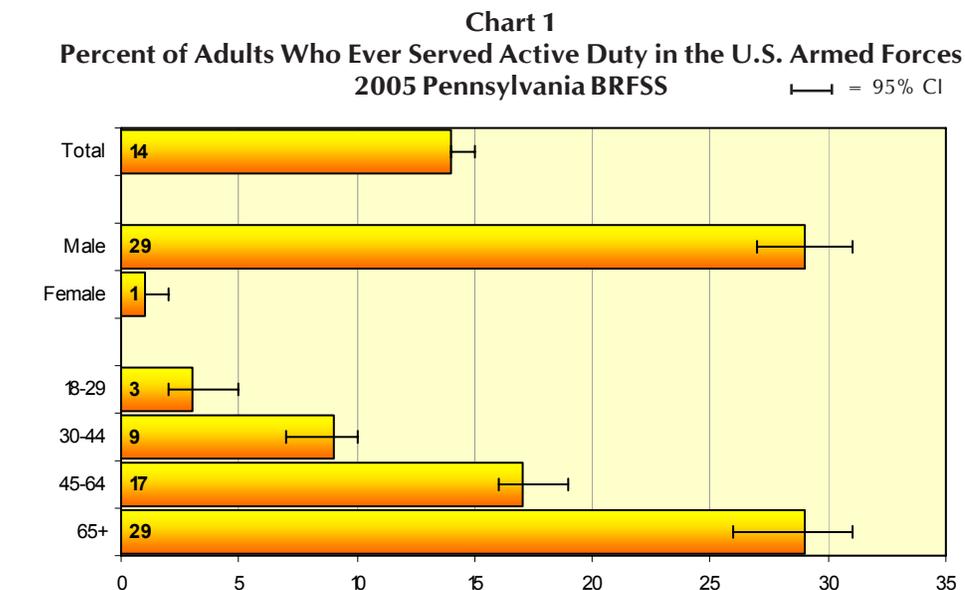
In 2005, approximately 14 percent of Pennsylvania adults reported ever serving on active duty in the United States Armed Forces, either in the regular military or in a National Guard or military reserve unit. An analysis of the data, which came from the 2005 Behavioral Risk Factor Surveillance System (BRFSS), showed that men had a much higher prevalence (29 percent) compared to the one percent of women who ever served on active duty. As age increased, the percentage of adults ever serving also increased; 29 percent of adults age 65 and older, 17 percent of adults ages 45-64, nine percent of adults ages 30-44, and three percent of adults ages 18-29 ever served on active duty in the United States Armed Forces (see Chart 1).

Currently, the vast majority of adult Pennsylvanians who ever served active duty in the U.S. Armed Forces are men (more than 90% of all Pennsylvanians who ever served). With this in mind, the remainder of this article will focus on the health of Pennsylvania's male veterans.

## General Health

According to the results of the 2005 Pennsylvania BRFSS, it appears that serving in the United States Armed Forces has a negative affect on the general health of Pennsylvania men. Eighteen percent of male veterans reported that their general health was either fair or poor. This is significantly higher than the 11 percent of non-veteran men who reported their general health as fair or poor.

Although being an armed forces veteran seems to have a negative affect on general health,



the affect on mental health was opposite and the results showed no significant difference in the physical health of Pennsylvania veterans compared to non-veterans. A significantly lower percentage of male veterans (23 percent) reported their mental health as being not good one or more days in the past month compared to 31 percent of non-veterans.

## Health Limitations

Veteran men had a significantly higher percentage for being limited in any way because of physi-

**...veteran men had a significantly higher percentage for visiting a doctor for a routine checkup in the past two years compared to non-veteran men in Pennsylvania.**

cal, mental or emotional problems (26 percent), almost twice as high as non-veteran men (14 percent). In addition, ten percent of veteran men reported having a health problem that requires the use of special equipment. This is significantly higher compared to the four percent of non-veterans in Pennsylvania requiring special equipment due to health problems.

## Health Care Access

United States Armed Forces veterans in Pennsylvania may experience higher prevalence for some health limitations, but they appear to have better access to health care. Veteran men have a significantly lower percentage (10 percent) of not having a person they think of as their personal health care provider compared to non-veteran men (17 percent). Veteran men were also less likely to be unable to see a doctor because of medical cost in the past year. Only five percent of male veterans in Pennsylvania re-

ported needing to see a doctor in the past year but were unable to because of cost, significantly lower than the nine percent of non-veteran men.

Having improved access to health care, veteran men had a significantly higher percentage for visiting a doctor for a routine checkup in the past two years (87 percent) compared to 76 percent of non-veteran men in Pennsylvania.

## Cardiovascular Health

Veteran men showed much higher percentages for having cardiovascular health issues. This may be due to their increased health care access, allowing for an increased chance for having their heart disease detected. Thirty-nine (39) percent of male veterans in Pennsylvania reported ever being told they have high blood pressure, significantly higher than the 22 percent of non-veteran men. Of those men ever told

*Continued on Page 3*

# Health of PA Veterans...

they have high blood pressure, veterans had a significantly higher prevalence for taking blood pressure medication (83 percent) compared to non-veterans (65 percent).

Having a much higher prevalence of high blood pressure may have long-term affects on Pennsylvania male veterans. Twice as many veteran men age 35 and older (22 percent) were ever told they have heart disease, had a heart attack or had a stroke, compared to nine percent of non-veteran men age 35 and older. Again, this may be due to their higher percentage of health care access, which may be contributing to a higher rate of diagnosis.

### Behavioral Risk Factors

Although the 2005 Pennsylvania BRFSS showed no significant differences in tobacco- or

alcohol-related risk factors for veteran men compared to non-veteran men, they may suggest that veterans tend to make healthier choices when it comes to their use of alcohol and tobacco. Twenty-one (21) percent of veteran men reported currently smoking some days or every day while 27 percent of non-veteran men reported the same. Twenty (20) percent of male veterans and 25 percent of male non-veterans reportedly binge drank on one or more occasions in the month prior to completing the survey.

### Life Satisfaction

There were no significant differences between veteran and non-veteran men when looking at their satisfaction with life. Ninety-five (95) percent of men (veteran and non-veteran) reported being satisfied or very satisfied with

**Twice as many veteran men age 35+ were ever told they have heart disease, had a heart attack, or had a stroke, compared to non-veteran men age 35 and older.**

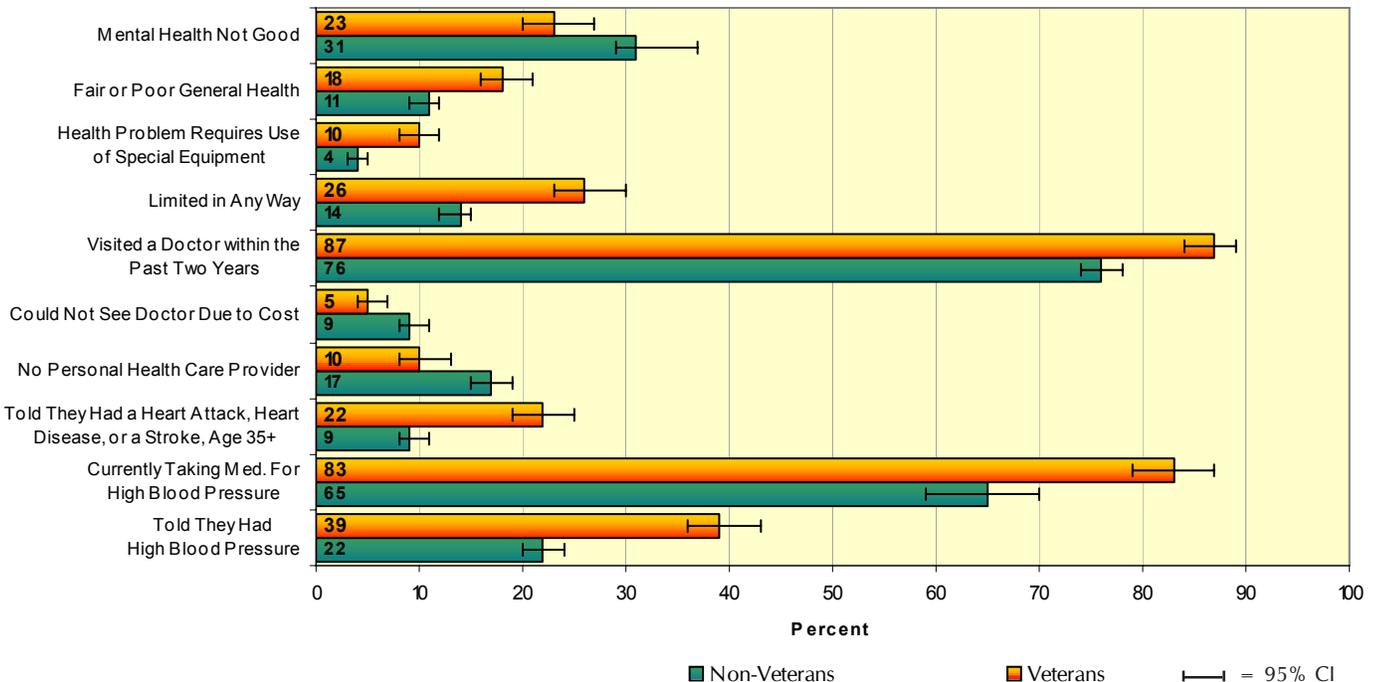
veteran men, some issues must be considered when trying to determine the true cause of the differences. Veterans have better access to health care and they are, therefore, more likely to be diagnosed with health problems than non-veteran adults. And perhaps some of the differences (since the results are self-reported) are due to the fact that veterans have a different perspective on their health issues than non-veterans.

Please contact the Bureau at 717-783-2548 if you have any questions about the BRFSS data presented in this article. You can find more BRFSS data, including charts, graphs, and regional assessments by using our interactive web tool called EpiQMS. Access EpiQMS on the Health Statistics web pages at [www.health.state.pa.us/stats/](http://www.health.state.pa.us/stats/)

their lives. Although not significantly different, the results suggest that veteran men are more likely to feel that they rarely or never get the social and emotional support they need compared to non-veteran men [11 percent of veteran men and eight percent of non-veteran men].

Although it appears there are some differences between the health of veteran and non-

**Chart 2  
Veteran Health Versus Non-Veteran Health for Males  
2005 Pennsylvania BRFSS**



# Overview of PA BRFSS Local Sampling Program

and technical support with data interpretation. The standard statistical reports consist of a series of three reports – a summary report, a detailed core survey questions report, and a detailed locally-added survey questions report.

The summary report includes a brief review of local statistical results from core questions measured to be statistically different from Pennsylvania estimates. The Healthy People 2010 goals are addressed for the specific objectives covered by the data collected from the local BRFSS survey.

The detailed core question tables report provides a section detailing statistical differences between local and corresponding Pennsylvania demographic groups. A demographic differences section compares statistics within demographic groups surveyed in the local area.

The detailed local question tables report consists of similar information as the detailed core question tables report but includes statistics on the locally-added question. The data reports developed for the participating partnerships are available on the Department’s Health Statistics web pages at [www.health.state.pa.us/stats/](http://www.health.state.pa.us/stats/).

**Local Area Comparisons to PA**  
Participation in the Pennsylvania BRFSS Local Sampling Program can allow the local sample area to be compared to Pennsylvania. For example, based on the 2005 BRFSS a significantly lower percent (29) of Westmoreland County adults, ages 18-64, who had an HIV test had their most recent HIV test at a private doctor or HMO, com-

**Participation in the program is open to Pennsylvania's State Health Improvement Plan (SHIP) affiliated partnerships located statewide.**

pared to 42 percent of Pennsylvania adults (ages 18-64). This indicates a tendency by Westmoreland County adults to seek this service from other venues (see Figure 2 on page 5).

**Demographic Comparisons**  
Comparisons performed within the local areas between various demographic categories are also possible utilizing data collected from the Pennsylvania BRFSS Local Sampling Program. In Allegheny County, the percentage of adults who visited a dentist within the past year displayed many significant differences within various demographic groups according to the 2005 BRFSS (see Figure 3 on page 5).

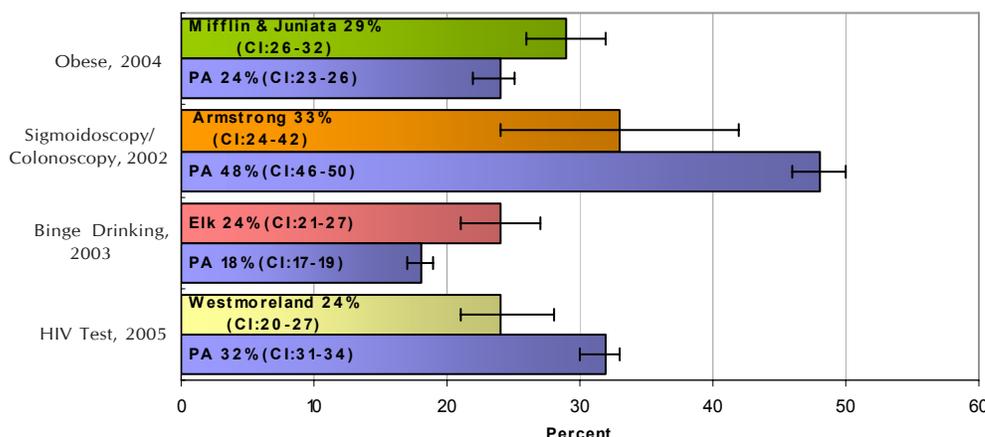
For example, men in Allegheny County had a significantly lower percentage for visiting a dentist within the past year (63%, CI: 56-68), compared to Allegheny County women (74%, CI: 70-77). In addition, the percentage for adults ages 30-44 was significantly higher (80%, CI: 74-85) than adults ages 18-29 (57%, CI 45-68) or age 45+ (ages 45-64, 67%, CI: 62-72 and age 65+, 65%, CI: 59-70).

**Comparisons Over Time**  
Chester County has participated in the BRFSS Local Sampling Program for five years and this provides an opportunity to track health status over time. Chester County adult estimates suggest an increasing percentage of adults unable to get medical care due to cost. This is based on statistics calculated from their original baseline estimate developed in 2002 (2%, CI: 1-4). When compared to subsequent data collected in 2004 (6%, CI: 5-8) and 2005 (7%, CI: 5-9), it appears that this may be the beginning of an increasing trend in the Chester County adult popula-

tion. Chester County will have data available from their program participation in 2006 and 2007. These results will be used to confirm this potential increase and may serve to establish the need for a specific health program or for further investigation.

**Multi-Year Aggregate Data**  
Combining the Chester County Local BRFSS data for 2002, 2004, and 2005 makes it possible to perform analyses of the data on demographic groups that one year of data would not support. With the three years of data, it became apparent that the percentage for being obese for Chester County non-Hispanic Black adults was significantly higher (26%, CI: 18-35), compared to non-Hispanic White adults (16%, CI: 15-18). When breaking this down into finer detail, it became further apparent that non-Hispanic Black women had a notable influence on the overall total obesity percentage of non-Hispanic Black adults. Twenty-eight percent (CI: 18-40) of non-Hispanic Black women were determined

**Figure 1**  
Select Pennsylvania BRFSS Local Sampling Program Statistics for Various Years With 95% CI Bars, Local Areas Compared to Pennsylvania



# Overview of PA BRFSS Local Sampling Program

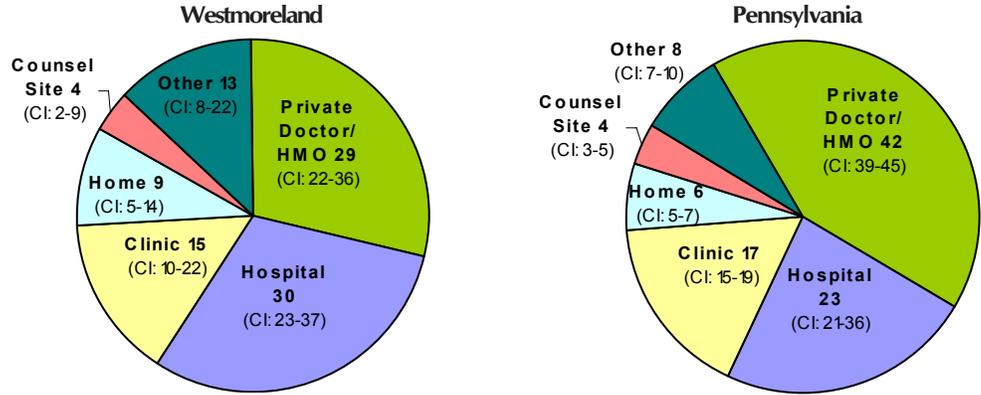
to be obese. This is significantly higher than non-Hispanic White women (14%, CI: 13-16) in Chester County (see Figure 4).

One contributing factor among non-Hispanic Black adults, especially non-Hispanic Black women, could be a lack of leisure time physical activity. Non-Hispanic Black adults had a significantly higher percentage for not participating in minimal levels of leisure time physical activity (27%, CI: 19-36) compared to non-Hispanic White adults (15%, CI: 14-16). As in the obesity percentages, non-Hispanic Black women appear to be driving up the percentage for lack of leisure time activity among all non-Hispanics Blacks. The percentage for non-Hispanic Black women (30% CI: 20-42) for lack of leisure time activity was significantly higher than non-Hispanic White women (16%, CI: 14-18) and non-Hispanic White men (14%, CI: 12-16).

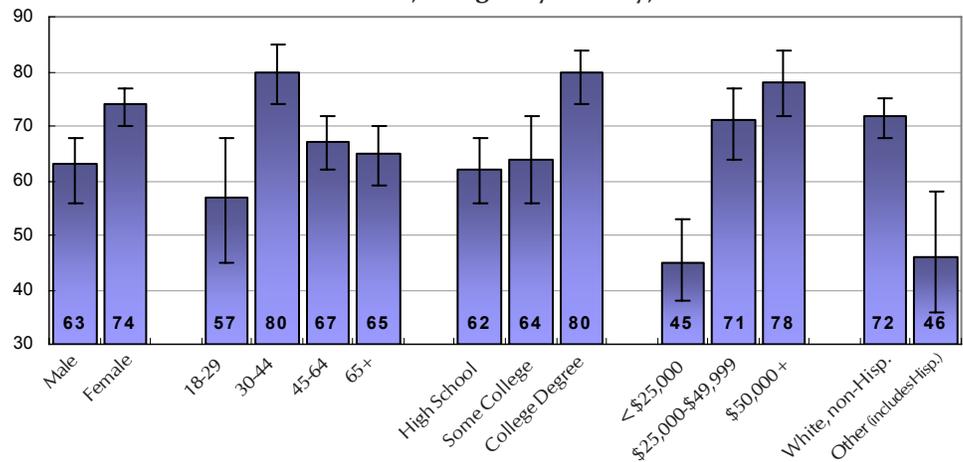
The statistics previously presented in this article represent only a small fraction of the possibilities for analyses available using the data collected by the Pennsylvania BRFSS Local Sampling Program. The consistency of the core questions which allows for comparability across geographies and the flexibility of the locally-added questions provide an opportunity to address issues not approachable with previously existing data sources. This provides participants and their collaborators the opportunity to conduct community assessments not achievable in the past.

For questions about this article, please contact the Bureau at 717-783-2548.

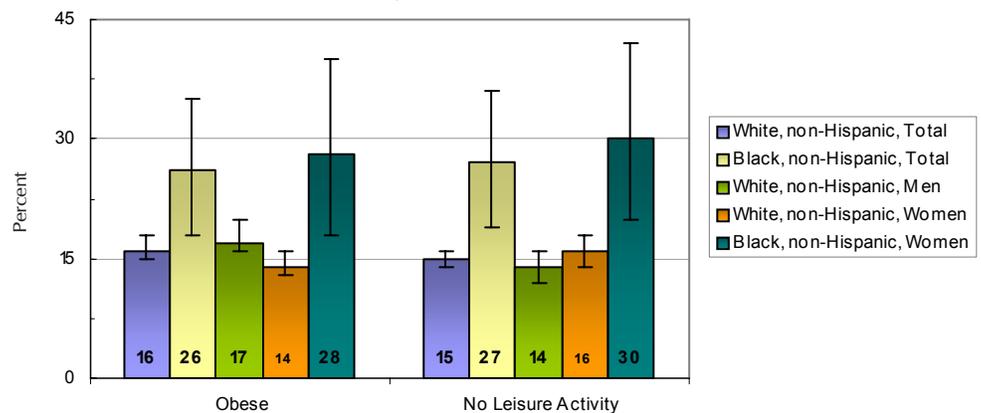
**Figure 2**  
Venues Where Adults (Ages 18-64) Who Had HIV Test, Last Had the Test Westmoreland County and Pennsylvania, 2005 BRFSS



**Figure 3**  
Percent of Adults (Ages 18-64) Who Visited a Dentist Within the Past Year With 95% CI Bars, Allegheny County, 2005 BRFSS



**Figure 4**  
Obesity and Lack of Leisure Activity by Gender and Race with 95% CI Bars Chester County, 2002, 2004, and 2005 BRFSS



# Unintentional Fall Deaths and Hospital Discharges

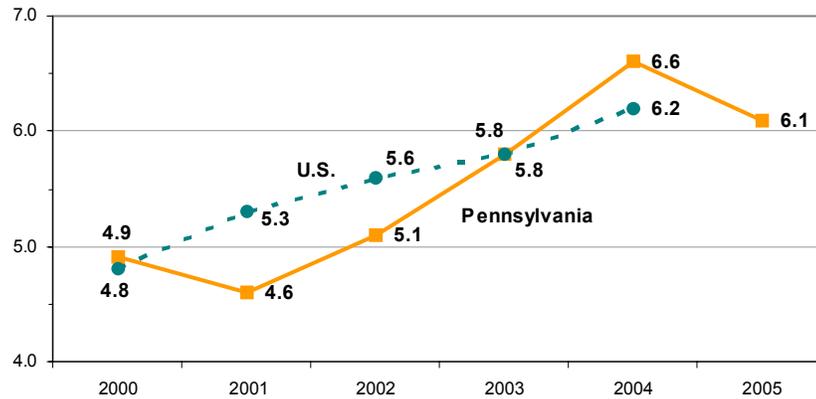
the injury was inflicted purposefully or not (intentional or unintentional). Throughout more recent years, the overwhelming majority (approximately 95 percent) of all fall-related deaths in the United States were classified as unintentional.

## PA Compared to U.S.

The age-adjusted rate for unintentional fall deaths in the United States has grown 29.2 percent between 2000 and 2004. The rates increased from 4.8 to 6.2 deaths per 100,000 respectively (age-adjusted to the 2000 U.S. standard million population; based upon preliminary 2004 U.S. death data). A similar increase also occurred among Pennsylvania residents. In 2000, the Pennsylvania age-adjusted rate for unintentional fall deaths was 4.9 deaths per 100,000. In 2004, the Pennsylvania age-adjusted rate rose to 6.6 deaths per 100,000 (an increase of 34.7 percent, compared to 2000) as it surpassed the preliminary 2004 U.S. rate. The Pennsylvania rate then dropped slightly to 6.1 in 2005, 24.5 percent higher than in 2000. Chart 1 exemplifies this point. Due to the unavailability of 2005 U.S. data, it can not yet be determined if Pennsylvania's rate will remain above the U.S.

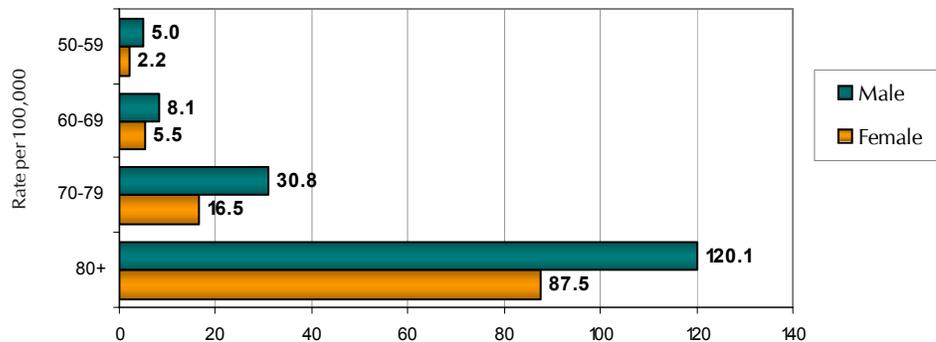
**In 2004, the (PA) age-adjusted rate rose to 6.6 deaths per 100,000 (an increase of 34.7%, compared to 2000) as it surpassed the preliminary 2004 U.S. rate.**

**Chart 1**  
Age-Adjusted Death Rates\*, Unintentional Fall Deaths  
Pennsylvania Residents and United States, 2000-2005



\* per 100,000 - adjusted to the 2000 U.S. standard million population  
Note: Preliminary 2004 U.S. data

**Chart 2**  
Age-Specific Death Rates, Unintentional Fall Deaths  
by Sex and Selected Age Groups, Pennsylvania Residents, 2005



## Age, Sex and Race

Studying the differences among age groups in Pennsylvania reveals that most unintentional fall deaths occurred to residents who were age 65 and older. Roughly 80 percent of all unintentional fall deaths occurred to residents 65 years of age and older during the 2000 through 2005 period. While the total number of unintentional fall deaths was almost evenly split between males and females during 2000 through

2005, the percentage breakouts for each sex for those age 65 and older were different. For males, generally 70 percent of unintentional fall deaths were to residents age 65 and older between 2000 and 2005. For females during the same six year period, about 90 percent of the deaths were to residents age 65 and older. Both male and female percentages for the 65 and older category can be found in Table 1 on page 8.

The differences between males and females as age increases is further illustrated through the age-specific rates displayed in Chart 2. During 2005, the unintentional fall age-specific death rate for males was nearly double the female rate for the age group 70-79. Even in the last years of life (age 80+), males continued to have a higher age-specific death rate than females.

*Continued on Page 8*

# Update: Healthy People 2010 Objectives

## Focus Area 16: Maternal, Infant, and Child Health

### 16-17c - Increase abstinence from cigarettes among pregnant women.

**2010 Target: 99%**

#### All Births and

#### Race/Ethnicity of Mother:

The percentage of live births to Pennsylvania mothers who did not smoke during pregnancy was 82.1 in 2004, somewhat lower than the 83.1 percent recorded in 2000.

Starting in 2003, the percentages have decreased for all births and among White, Black and Hispanic mothers. This coincides with the 2003 revisions to the certificate of live birth. The tobacco use questions were modified to improve the quality of birth data. Among Asian/Pacific Islander mothers, the percentages have been stable throughout the 2000-2004 period and were consistently the highest for the race/ethnic groups.

Only the percentage for births to Asian/Pacific Islander mothers is near the national Healthy People 2010 goal of 99 percent. The other three groups have much farther to go by 2010.

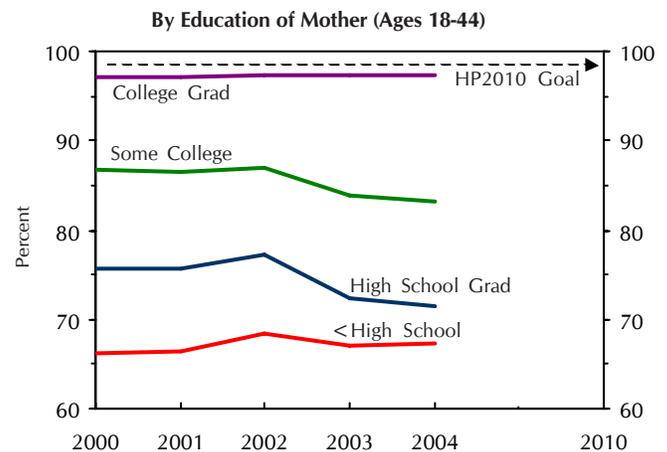
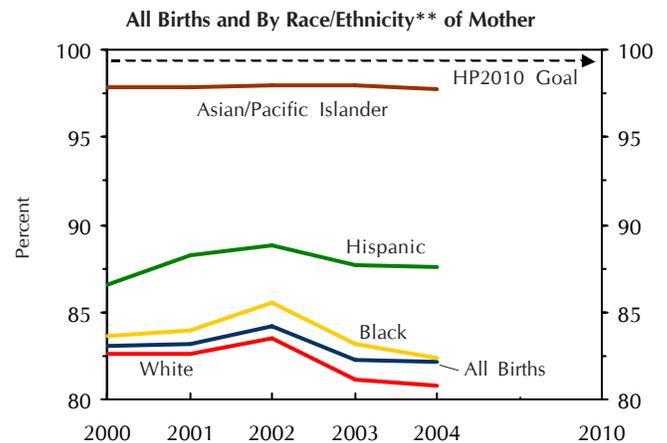
#### Education of Mother:

The percentages based on the education of the mother (ages 18-44) showed that the higher the educational status, the less likely is the mother to have smoked during her pregnancy.

For births in 2004 to mothers with less than a high school education, only 67.4 percent of the mothers had not smoked – compared to 71.6 percent for high school graduates, 83.3 percent for those with some college, and 97.3 percent for college graduates. Percentages have decreased starting in 2003 among mothers who were high school graduates and mothers with some college education.

Percentages among mothers with less than a high school education has been higher in recent years. Among college graduates, the percentages have remained stable throughout 2000-2004 and were close to the national Healthy People 2010 goal.

**Percent of Live Births to Mothers Who Did Not Smoke During Pregnancy, Pennsylvania Residents, 2000-2004**



\*\*Hispanics can be of any race

**Percent of Live Births to Mothers Who Did Not Smoke During Pregnancy by Race/Ethnicity and Education, Pennsylvania Residents, 2000-2004**

	2000	2001	2002	2003	2004
All Births .....	83.1	83.2	84.2	82.3	82.1
White Mother .....	82.6	82.6	83.5	81.1	80.8
Black Mother .....	83.6	83.9	85.5	83.2	82.4
Asian/Pacific Islander Mother ....	97.8	97.9	98.0	98.0	97.7
Hispanic* Mother .....	86.6	88.3	88.8	87.7	87.6
Less Than High School (18-44) ..	66.1	66.4	68.3	67.0	67.4
High School Grad (18-44) .....	75.6	75.6	77.2	72.3	71.6
At least some college (18-44) .....	86.8	86.5	86.9	83.8	83.3
College Grad (18-44) .....	97.1	97.1	97.3	97.4	97.3

\*Hispanics can be of any race NOTE: Unknowns excluded in calculations.

#### 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](http://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.

# Unintentional Fall Deaths and Hospital Discharges

When comparing age-adjusted rates for fall deaths among White and Black residents, Whites increased 28.6 percent between 2000 and 2005 (4.9 to 6.3, respectively) while Black residents had a much smaller increase of 2.3 percent (4.4 to 4.5).

## Hospital Discharges

In addition to unintentional fall deaths, Table 1 presents Pennsylvania hospital discharge data due

to falls between 2000 and 2004. Unlike the split observed in the total number of unintentional fall deaths between males and females, hospital discharge data was more one-sided. In 2000, approximately 35 percent (or 18,463) of hospital discharges due to falls occurred to males, while almost 65 percent (or 33,757) occurred to females. A similar split between male and female hospital discharges can

be found throughout the years of 2001-2004. Parallel to deaths, hospital discharges for females were primarily residents age 65 and older (over 80 percent) during the years of 2000 through 2004. Males age 65 and older accounted for over half (approximately 55 percent) of all male hospital discharges due to falls during the same time frame.

For more information concerning unintentional fall deaths

among PA residents, please visit the Department's Health Statistics web pages at [www.health.state.pa.us/stats/](http://www.health.state.pa.us/stats/). For more information on hospital discharge data, visit the Pennsylvania Health Care Cost Containment Counsel at [www.phc4.org](http://www.phc4.org). Information on unintentional fall deaths for the U.S. can be found at the Centers for Disease Control and Prevention website ([www.cdc.gov/ncipc/wisqars/](http://www.cdc.gov/ncipc/wisqars/)).

**Table 1**  
**Unintentional Fall Deaths and Hospital Discharges Due to Falls, by Sex and Year**  
**Number and Percent for Age 65 +, Pennsylvania Residents, 2000-2005**

	Deaths						Discharges					
	Both Sexes		Male		Female		Both Sexes		Male		Female	
	Total	% 65+	Total	% 65+	Total	% 65+	Total	% 65+	Total	% 65+	Total	% 65+
2005	943	82.8	466	75.5	477	89.9	*	*	*	*	*	*
2004	998	79.7	521	72.2	477	87.8	62,175	72.3	22,315	58.5	39,856	80.1
2003	858	78.9	442	68.8	416	89.7	61,777	72.2	22,125	57.3	39,650	80.5
2002	750	81.1	377	73.5	373	88.7	58,367	73.3	20,592	57.8	37,772	81.8
2001	695	79.1	364	67.6	331	91.8	50,066	71.6	17,860	55.7	32,206	80.4
2000	714	79.8	337	68.5	377	89.9	52,221	72.6	18,463	56.4	33,757	81.5

\* Data not available

Source: Pennsylvania Certificates of Death and Pennsylvania Health Care Cost Containment Council

Note: Unknowns excluded from calculations. Total discharges include unknown sex.

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