

STATISTICAL NEWS

PA Department of Health ♦ Bureau of Health Statistics and Research ♦ Vol. 25 No. 4 ♦ July 2002

Suicides Increase in 2000; But No Trends Seen

Males, Especially Middle-Aged Whites, Have Highest Rates

The number of deaths due to suicide and the age-adjusted death rate for suicides among Pennsylvania residents increased in 2000. However, there were no discernible trends among these numbers and rates during the five-year period of 1996-2000. Also, suicide rates among males continued to remain approximately five times higher than the rates for female residents.

In 2000, there were 1,348 suicides among residents of Pennsylvania – 6.0 percent higher than the 1,272 reported for 1999. The 2000 suicide rate of 10.7 per 100,000 (age-adjusted to the 2000 U.S. standard million population) was also slightly higher than the 1999 rate of 10.4.

The following reviews statistics on suicides in Pennsylvania compared to the United States and for the state by age, sex, race, and county.

Pennsylvania and United States Comparisons:

The latest available United States age-adjusted suicide rate is for 1999 and it was 10.7, the same rate as occurred for Pennsylvania in 2000.

Age-adjusted suicide

...suicide rates among males continued to remain approximately five times higher than the rates for females.

rates by race and sex for Pennsylvania (2000) and the United States (1999) were also similar but had some slight differences. The rates for whites were nearly identical (11.4 for the state and 11.5 for the United States). However, the state rate for blacks was somewhat higher than the United States rate (7.1 vs. 5.7). The state rate for males was slightly higher (18.6 vs. 18.2) while the state rate for females was slightly lower (3.8 vs. 4.1).

Race and Sex:

The age-adjusted death rate for suicide among white residents (11.4) during 2000 was almost 61 percent higher than the rate for blacks (7.1). There were 1,249 resident suicides for whites, compared to 84 among black residents.

Continued on Page 6...

C-Section Deliveries On the Rise Again

After Decline, Figures Rising Even Among Low-Risk First-Time Mothers

A review of recent birth statistics shows that cesarean section delivery rates are on the rise again, even among low-risk mothers giving birth for the first time. In the past, the proportion of cesarean sections had been increasing steadily, reaching a high of 23.3 percent in 1987 — a rise of almost 50 percent compared to the 1980 figure of 15.6 percent. Then, between 1988 and 1997, there was a general decline in the annual percentage of cesarean sections, to a low of 19.0 in 1997. However, the percentage has begun to rise again since 1998, to 21.2 percent in 2000.

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 19.0 percent in 2000 among Pennsylvania 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 for low-risk first-time mothers between

...between 1988 and 1997, there was a general decline...

However, the percentage has begun to rise again since 1998...

1996 and 2000 by race, ethnicity, educational status, and age also shows rather con-

Continued on Page 4...

INSIDE THIS ISSUE

Colon/Rectum Cancer Statistics, PA and US .. 2

1990-2000 Birth, Death, Cancer Data Now on Web Site 5

HP2010 Objectives: Unintentional Injury ... 7

Colon/Rectum Cancer Statistics for PA and U.S.

PA Incidence/Mortality Rates Higher Than U.S. But Mortality Declining

Pennsylvania's age-adjusted incidence and mortality rates for colon and rectum cancer are higher than comparable rates for the United States and black residents have higher rates than whites in Pennsylvania. In addition, there has not been much change between 1989 and 1999 in the age-adjusted incidence rates and the percentage distribution of stage at time of diagnosis for these cancers among state residents. However, the age-adjusted mortality rates in Pennsylvania have been on the decline between 1990 and 2000.

There were 8,918 cases of invasive colon and rectum cancers diagnosed among residents in 1999, the third highest annual number for the ten-year period of 1990-99. It was also the third most common cancer site among males and the second most common among females, accounting for almost 13 percent of all of the new invasive cancer cases recorded for 1999.

Total Incidence Rates:

The 1999 (latest year of cancer incidence data available) age-adjusted incidence rate for colon and rectum cancer among Pennsylvania residents was 61.9 per 100,000 2000 United States standard million population. (Please note that starting with the reporting of 1999 events, the 2000 standard million population is being used instead of the 1970 standard to calculate all age-adjusted rates shown here and in all reports released by the Bureau. Therefore, these rates

(Colon and rectum cancer)...was the third most common cancer site among males and the second most common among females... (in 1999).

will not be comparable to age-adjusted rates previously calculated or released using the 1970 standard population.) In 1989, the age-adjusted incidence rate was 64.2 and has fluctuated between 64.4 and 59.8 throughout the eleven-year period of 1989-1999. However, no trend seems to be evident for these rates.

The SEER (Surveillance, Epidemiology, End Results) program of the National Cancer Institute annually reports age-adjusted cancer incidence rates for areas which are selected to be representative of the United States total population. Pennsylvania's age-adjusted incidence rates have been consistently higher than the SEER rates since 1989. The 1999 Pennsylvania age-adjusted rate of 61.9 was 14.0 percent higher than the 1999 SEER rate of 54.3.

Incidence Rates by Race:

Pennsylvania's age-adjusted incidence rates by race showed that the rates for blacks were usually somewhat higher than for whites. The SEER age-adjusted incidence rates by race were also higher for blacks compared to whites. However, Pennsylvania's rates for blacks

were higher than corresponding SEER rates for blacks. This was also true of Pennsylvania's rates for white residents. The state's average annual age-adjusted incidence rate among black residents for 1995-99 was 64.1 – 4.7 percent higher than the rate of 61.2 for white residents.

Total Mortality Rates:

SEER also reports total United States cancer mortality rates based on death certificate data. The Pennsylvania age-adjusted annual mortality rates and the United States annual mortality rates for colon and rectum cancer have both shown declines between 1990 and 1999 or 2000. However, Pennsylvania's rates have remained higher than United States rates throughout the period. At this time, 1999 is the most current year available for United States mortality rates from the National Cancer Institute.

In 1999, Pennsylvania's age-adjusted mortality rate was 23.5, compared to 21.1 for the United States. The rate for Pennsylvania residents has declined from 28.0 in 1990 to 23.0 in 2000.

Mortality Rates by Race:

As occurred with the incidence rates, blacks had higher age-adjusted mortality rates than whites among both the Pennsylvania and United States rates. In addition, Pennsylvania's mortality rates for both blacks and whites were consistently higher than corresponding United States rates between 1990 and 1999.

Stage of Disease:

A review of the differences in the percentage distribution of stage of the disease at time of diagnosis between 1989 and 1999 for colon and rectum cancers among residents showed a slight increase for in situ diagnoses, little change for regional and unknown stages, and slight decreases for local and distant stage diagnoses.

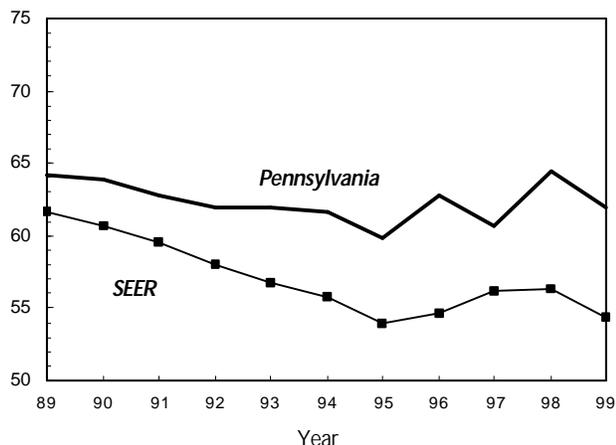
Staging distribution statistics by race in 1999 showed higher percentages of in situ and distant stage diagnoses among black residents, compared to whites. White residents had higher percentages of local and regional stage diagnoses.

Please contact the Bureau of Health Statistics and Research at 717-783-2548 if you have any questions regarding the colon and rectum cancer statistics presented in this article.

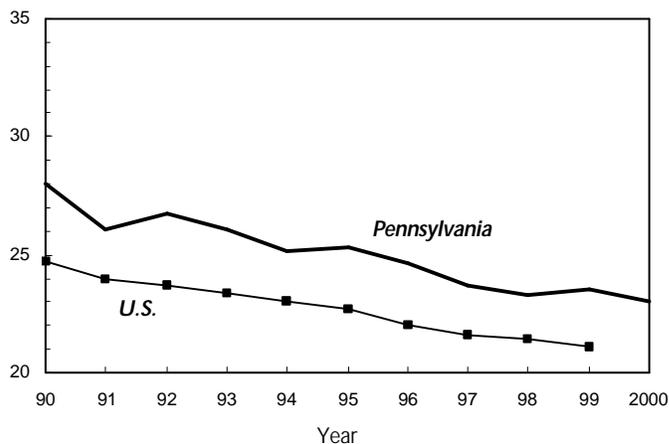
For additional cancer incidence and mortality statistics, please go to the Health Statistics web page on the Department's web site at www.health.state.pa.us/stats.

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**Age-Adjusted Invasive Colon/Rectum Cancer Incidence Rates
Pennsylvania Residents and SEER Data, 1989-1999**



**Age-Adjusted Colon/Rectum Cancer Mortality Rates
Pennsylvania Residents and United States, 1990-2000**



Age-Adjusted Invasive Incidence Rates by Race

Year	All Cases		Whites		Blacks	
	PA	SEER	PA	SEER	PA	SEER
1989	64.2	61.7	64.5	61.9	54.9	64.2
1990	63.9	60.7	63.9	60.8	65.5	66.5
1991	62.8	59.5	62.6	59.4	63.6	65.5
1992	62.0	58.0	62.3	58.0	55.2	65.2
1993	61.9	56.8	61.7	56.4	63.2	64.3
1994	61.6	55.7	61.3	55.5	63.3	63.9
1995	59.8	54.0	59.2	53.6	62.7	61.9
1996	62.8	54.6	62.3	54.4	61.5	57.8
1997	60.7	56.2	60.0	56.0	62.9	63.9
1998	64.4	56.3	63.6	56.1	67.8	61.6
1999	61.9	54.3	60.9	53.8	66.2	61.7
1995-99	61.9	55.1	61.2	54.8	64.1	61.4

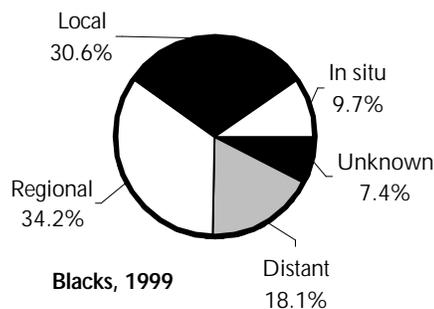
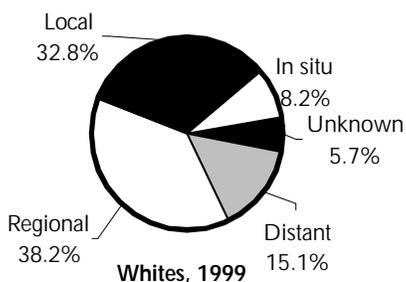
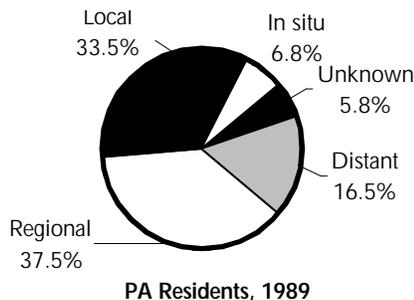
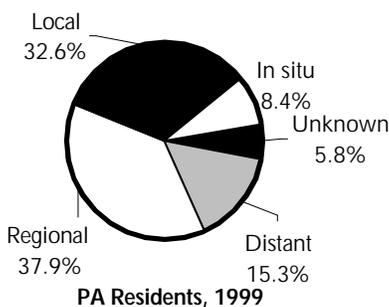
Age-Adjusted Mortality Rates by Sex

Year	All Deaths		Whites		Blacks	
	PA	US	PA	US	PA	US
1990	28.0	24.7	27.8	24.3	32.6	30.7
1991	26.1	24.0	25.7	23.7	33.0	30.0
1992	26.7	23.7	26.4	23.3	32.6	29.5
1993	26.1	23.4	25.6	23.0	33.5	29.8
1994	25.1	23.0	24.9	22.6	28.5	29.1
1995	25.3	22.7	24.8	22.2	32.8	29.7
1996	24.6	22.0	24.2	21.5	31.0	28.8
1997	23.7	21.6	23.0	21.1	32.9	29.1
1998	23.3	21.4	23.0	20.9	29.1	28.6
1999	23.5	21.1	23.0	20.6	30.9	28.8
2000	23.0	NA	22.9	NA	28.1	NA
1995-99	24.0	21.7	23.6	21.3	31.3	29.0

NOTE: All rates are per 100,000 and age-adjusted to 2000 U.S. standard million

NA = not available

Colon/Rectum Cancer, Percent Distribution of Stage at Diagnosis, PA Residents, All Cases (1989 and 1999) and By Race (1999)



Cesarean Deliveries Rising

sistent increases among most of these demographic groupings. A discussion of these findings follows.

Race/Ethnicity of Mother:

The cesarean section rates for whites and blacks between 1996 and 2000 have generally increased while the rates for Asians/Pacific Islanders and Hispanics have shown no obvious trends (see top line graph on right). (Please note that Hispanics can be of any race.) All four race/ethnic groups had a slight increase in percentages from 1997 to 1998. However, there was a slight decrease for blacks, Asians/Pacific Islanders, and Hispanics between 1998 and 1999.

The rates for whites have almost consistently increased, from 16.9 in 1996 to 19.2 in 2000. Among black mothers, there has been a slight increase from 18.5 in 1996 to 19.0 in 2000. The cesarean section rates among Asians and Pacific Islanders has fluctuated between 15.4 (1997) and 17.0 (1998) since 1996. The recent annual rates for Hispanics have also fluctuated; however, the 2000 rate of 17.5 was a rather sharp increase from the 15.1 recorded in 1999.

In 2000, among the four race/ethnic groups, only the cesarean section rate (16.0) for Asians and Pacific Islanders was somewhat close to the national HP2010 goal of 15.

Education of Mother:

A review of the percentages of cesarean sections to low-risk first-time mothers by their educational status shows that c-sections rates increase with higher educational status (see

The cesarean section delivery rate rises consistently with increasing maternal age.

middle line graph on right). The 2000 percentage for births to mothers with less than a high school education (12.7) was already below the HP2010 goal, compared to the percentage for high school graduates (19.7), and mothers with at least some college education (20.5). However, the cesarean section rates have been on the increase since 1998 for all three educational groups, with the sharpest increase seen among the best educated mothers (at least some college).

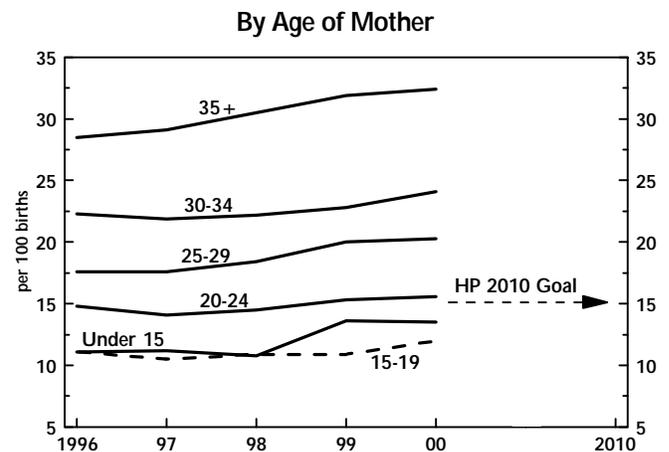
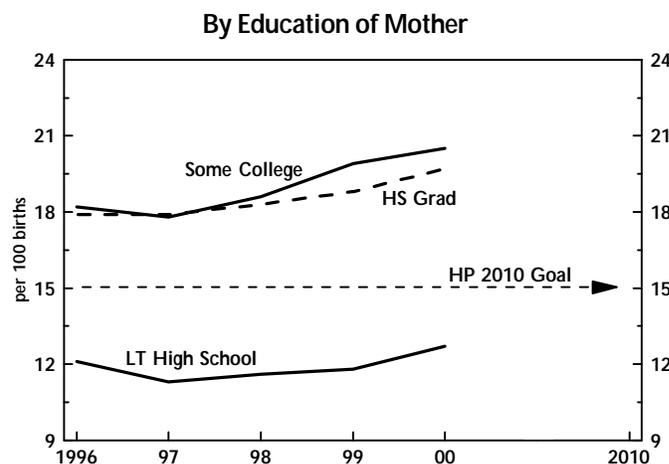
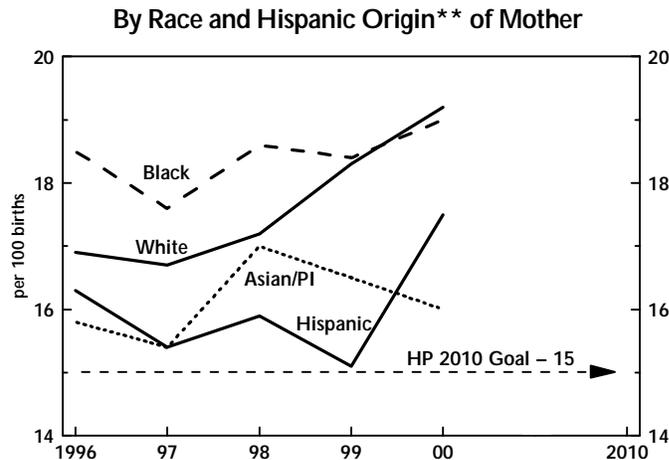
If these increases continue, it is possible that even the currently low rate for mothers with less than a high school education may rise above the national HP2010 goal of 15 percent.

Age of Mother:

The cesarean section delivery rate rises consistently with increasing maternal age (see bottom line graph on right). In 2000, among low-risk first-time mothers, the oldest mothers (ages 35+) had the highest percentage (32.4) — over two and a half times higher than the lowest rate of 12.0 for mothers ages 15-19. Mothers aged 20-24 had a 15.6 cesarean section rate in 2000, compared to 24.1 percent for mothers ages 30-34.

The cesarean section delivery rates for all age groups increased between 1996 and

Cesarean Section Delivery Rates*
Resident Live Births, Pennsylvania, 1996-2000



*per 100 resident live births **Hispanics can be of any race

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1990-2000 Birth, Death, and Cancer Statistics Now Available on Health Statistics Web Pages

Annual Report, "Pennsylvania Vital Statistics 2000", Also Added

In the March issue of *Statistical News*, we mentioned the addition to the Health Statistics web pages of a large volume and variety of data tables with birth, death, and cancer incidence/mortality figures, including statistics for all counties and municipalities in Pennsylvania. We have now greatly expanded these data tables on-line to include birth and death statistics from 1990 through 2000 and cancer incidence and mortality data for 1990 through 1999 (latest year available).

In addition to this expansion, the latest annual report of births, deaths, fetal deaths, induced abortions, and reported pregnancies – *Pennsylvania Vital Statistics 2000* – was added to our web pages in early June. Hard copies of this report will not be printed and distributed until sometime in July.

To access these data and/or the new vital statistics annual report, please go to the

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Health Statistics home page at www.health.state.pa.us/stats. Then, to get to *Pennsylvania Vital Statistics 2000* or the 1990-2000 birth and death data tables, click on **Vital Statistics** and then either select *Pennsylvania Vital Statistics 2000* or **1990-2000 Birth and Death Statistics**. To access 1990-1999 cancer incidence/mortality data, click on **Cancer Incidence and Mortality** at the Health Statistics home page (www.health.state.pa.us/stats) and then select **1990-1999 Cancer Incidence and Mortality Statistics**.

Each year when a new final birth, death or cancer incidence annual data file is finalized and released, staff in the Bureau of Health Statistics and Research created and updated tens of thousands of pages of numerous crosstabulations that are used to respond to the thousands of data requests we receive every year. In recent years, we have been creating electronic file versions of these tabulations in PDF format (requires the free software Adobe Acrobat Reader) and sending them to requestors via e-mail.

These PDF files for the years 1990-2000 have now been added to the Health Statistics web pages and provide all data users with an abundant variety of current and historical health statistics. You can easily access the latest available single-year (2000 for births and deaths and 1999 for cancer incidence) of statistics as well as nine to ten previous

years of the same data. We have also included five-year data tables (1996-00 for births and deaths and 1995-99 for cancer incidence) that list five-year summary data as well as annual figures for five years in one convenient data table.

We highly recommend that our regular and new data users check out this newly expanded site. In most cases, you will find exactly what you are looking for since these data tables have helped us answer at least 90-95 percent of all our requests for birth, death and cancer statistics in the past.

We highly recommend that our regular and new data users check out this newly expanded site. In most cases, you will find exactly what you are looking for...

Available natality data include births by age and race/ethnicity of mother, trimester of entry into prenatal care, marital status, birth weight, and method of delivery, with many of these statistics available at the county and municipality level.

Available cancer incidence/mortality data include cases and deaths by primary site, age, sex, race, and stage of disease, again with most data available for all counties and municipalities.

Examples of mortality data include deaths by age, sex, race, and cause for all counties and municipalities.

Continued from previous page...

Cesarean Deliveries Rising...

2000. The oldest (age 35+) low-risk first-time mothers had the largest increase between 1996 and 2000, from 28.5 in 1996 to 32.4 percent in 2000. The youngest of these mothers (under age 15) and those aged 25-29 had the next largest increases.

The 2000 cesarean section rates for the under 15, 15-19, and 20-24 age groups were all below or near the HP2010 goal of 15 percent. However, if recent increases continue, these groups will probably not meet that national objective.

If you have any questions regarding the statistics presented here on c-sections, please contact the Bureau of Health Statistics and Research at 717-783-2548. Additional natality statistics can also be found on our web site at www.health.state.pa.us/stats.

Suicides Increase in 2000...

The vast majority of suicides for Pennsylvania residents occurred among males. In 2000, the age-adjusted suicide rate among males was almost five times higher than the rate for females – 18.6 compared to only 3.8 among females. Of the 1,348 resident suicides recorded that year, 1,105 occurred among males. Thus, males accounted for 82.0 percent of the suicides among Pennsylvania residents in 2000. Of those male suicides, 1,023 or 92.6 percent were among whites (age-adjusted rate of 19.6) while 70 were among blacks (rate of 12.6).

Method of suicide differed somewhat between males and females. For males, firearm-related suicide was the leading method, followed by suffocation and, then, poisoning. For females, poisoning ranked first, followed by firearm-related and, then, suffocation.

Age:

In reviewing the numbers of suicides by age group for the five-year period of 1996-2000 (see bar graph on the right), middle-aged adults had the highest figures. The age group 35-39 had the highest number, accounting for 11.9 percent of all suicides. The second highest number occurred among those aged 40-44, followed by the age groups 45-49 and 30-34. Over 71 percent of all suicides in Pennsylvania during 2000 occurred among residents between the ages of 20 and 59. These patterns were similar for whites but slightly different for blacks. Blacks had the highest number of suicides among the age groups 25-29 and 30-34.

Over 71 percent of all suicides in Pennsylvania during 2000 occurred among residents between the ages of 20 and 59.

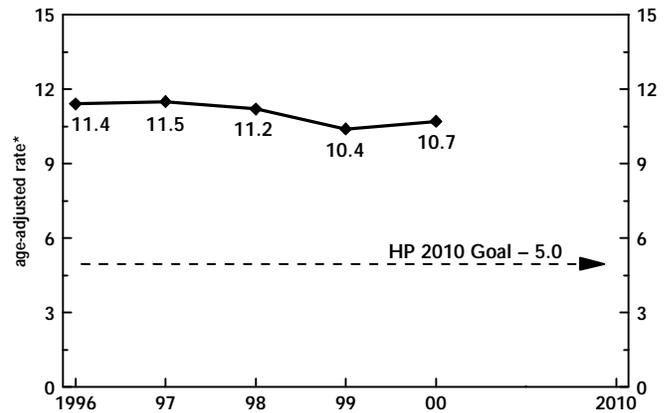
Method of Suicide:

Three types of suicide were most prevalent in the year 2000. Suicide by use of firearms (750 suicides) made up 55.6 percent of all suicides for Pennsylvania residents. Suffocation (273) was second at 20.3 percent; and, poisoning (227) accounted for 16.8 percent.

County Suicide Rates:

For the three-year period of 1998-2000, both Bedford County (age-adjusted rate of 19.7 based on 30 suicides) and Indiana County (rate of 16.4 based on 44 suicides) had a significantly higher age-adjusted suicide rate than the state.

Age-Adjusted Suicide Rate*
Pennsylvania Residents, 1996-2000



*per 100,000 2000 U.S. standard million population

Four counties – Bucks (with a rate of 8.2 based on 147 suicides), Centre (rate of 6.7 based on 23 suicides), Chester (8.2 rate based on 105 suicides), and Montgomery (9.5 rate based on 211 suicides) – had a significantly lower rate than the state during 1998-2000.

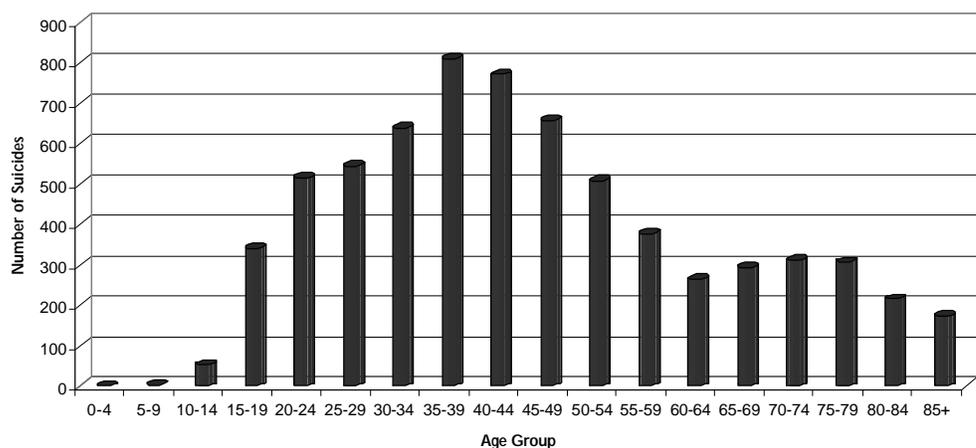
Trends:

There has been no evident trend in the age-adjusted rate for suicides in Pennsylvania between 1996 and 2000 (see line graph above). The national

year 2010 objective is an age-adjusted rate of 5.0. Pennsylvania is still a long way from reaching the goal, as is the United States. There also has been no obvious trends among the rates for whites, blacks, males or females; but, one interesting note is that the 2000 age-adjusted suicide rate for blacks is at its lowest point during the five-year period of 1996-2000.

If you have any questions regarding the statistics presented here on suicides, please contact us at 717-783-2548.

Numbers of Suicides by Age Group
Pennsylvania Residents, 1996-2000



Update: Healthy People 2010 Objectives

Focus Area 15 - Injury and Violence Prevention

15-13 - Reduce unintentional injury deaths.

All Deaths and by Sex and Race/Hispanic Origin:

The age-adjusted death rate for unintentional injuries among all Pennsylvania residents has increased slightly between 1996 and 2000, from 31.7 to 34.6. Rates for males are more than twice those for females (e.g., 49.6 vs. 21.2 in 2000). However, while male rates have shown no trend between 1996 and 2000, the rates for females have been on the increase, from 18.8 to 21.2.

The 2000 age-adjusted death rates for whites (34.7) and Hispanics (36.5) are similar while the 2000 rate for blacks is somewhat higher (43.2). However, while the rates between 1996 and 2000 have been declining for Hispanics, the rates for whites have been on the increase. The 1996-2000 annual rates for blacks show no discernible trend.

The rates for all deaths, males, whites, blacks, and Hispanics are well above the na-

tional HP2010 objective of 17.5 and the rates for all deaths and whites seem to be on the increase. The 2000 rate for females (21.2) is somewhat close to the HP2010 goal of 17.7; however, these rates are also on the increase.

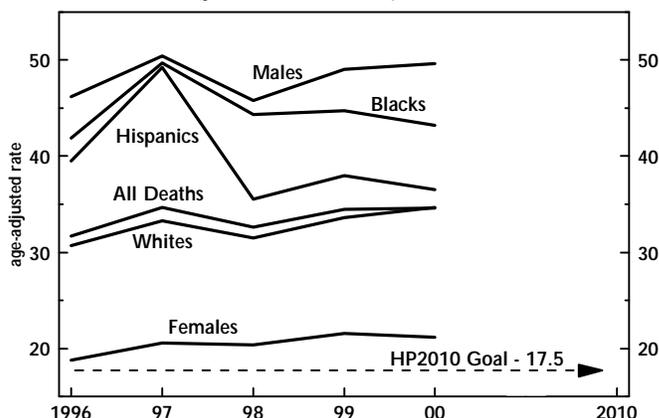
Males By Race and Hispanic Origin:

The bottom graph on the right depicts age-adjusted unintentional injury death rates for black, white, and Hispanic males. The rate for black males was the highest – 69.6 in 2000, compared to 52.0 for Hispanic males and 49.4 for white males. The rates for Hispanic males have been on the decline and are now close to the rate for white males. The rates for black and white males between 1996 and 2000 show no evident trends.

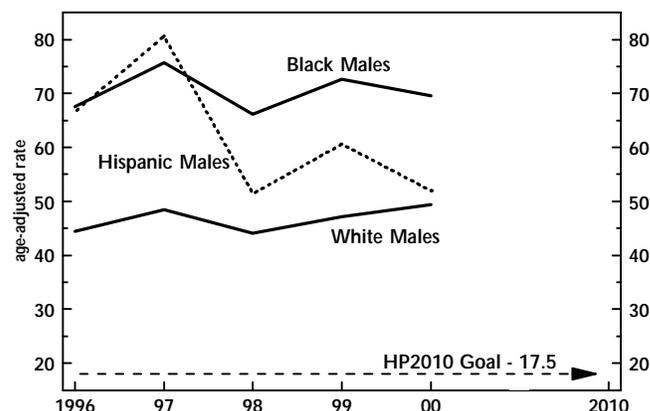
All of these rates for males are far above the HP2010 goal of 17.5 and only the rate for Hispanics shows any recent decline.

2010 Target: 17.5 deaths per 100,000

Unintentional Injury Age-Adjusted Death Rates*
All Deaths and by Sex, Race, and Hispanic Origin**
Pennsylvania Residents, 1996-2000



Males by Race & Hispanic Origin**, Pennsylvania, 1996-2000



Unintentional Injury Age-Adjusted Death Rates*
By Sex, Race, and Hispanic Origin
Pennsylvania Residents, 1996-2000

	2000	1999	1998	1997	1996
All Deaths	34.6	34.5	32.6	34.7	31.7
Males	49.6	49.0	45.8	50.4	46.2
Females	21.2	21.6	20.4	20.6	18.8
Whites	34.7	33.6	31.5	33.3	30.7
Blacks	43.2	44.7	44.3	49.7	41.9
Hispanics**	36.5	38.0	35.5	49.2	39.5
Black Males	69.6	72.6	66.2	75.7	67.6
Hispanic** Males	52.0	60.6	51.4	80.6	66.6
White Males	49.4	47.1	44.1	48.5	44.4

*per 100,000 2000 U.S. standard million population

**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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*Robert S. Zimmerman, Jr., M.P.H.
Secretary of Health*

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