Prevalence of Adult Tobacco Use

In 2011, an estimated 22 percent of Pennsylvania residents, aged 18 and over reported smoking cigarettes. Every day smokers were 17 percent and some days smokers were 5 percent of the total adult population.

Smoking rates from 2011 are not comparable with previous years due to changes in BRFSS sampling and analysis methodology. See Appendix: Adult Tobacco Use.

Figure 2-1. Percentage of Adults Who Smoke Cigarettes, by Year, Pennsylvania and United States, BRFSS 1995-2011

Sources:
Figure 2-2. Current Adult Cigarette Smoking Prevalence in Pennsylvania by Health District
BRFSS 2009-2011

The lower and upper numbers are the range of the 95% confidence interval, and the middle number is the estimated value of the prevalence of smoking in that district.


*Southeast Health District excludes Philadelphia; Southwest Health District excludes Allegheny County

Note: See Appendix: Adult Tobacco Use

The Southeast Health District with Philadelphia excluded has a significantly lower smoking rate than the statewide estimate. The Northwest Health District has a significantly higher smoking rate than the statewide estimate. All other health regions are not significantly different, compared to the state.
Figure 2-3. Percent of Adult Cigarette Smokers with One or More Attempts to Quit in the Past Year
Pennsylvania by Health District, BRFSS 2009-2011

The lower and upper numbers are the range of the 95% confidence interval, and the middle number is the estimated value of the percentage of smokers with one or more attempts to quit.


*Southeast Health District excludes Philadelphia; Southwest Health District excludes Allegheny County
Note: See Appendix: Adult Tobacco Use

More than half of the Pennsylvania adult smokers have made one or more quit attempts in the past year [Figure 2-3.] Percentages of smokers attempting to quit are not significantly different across all eight Health Districts.
Table 2-1. Selected Quitting Characteristics of Pennsylvania Adult Cigarette Smokers

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>95% Confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of current smokers who want to quit for good</td>
<td>67%</td>
</tr>
<tr>
<td>Percent of those who want to quit for good who plan to quit in the next 30 days</td>
<td>27%</td>
</tr>
<tr>
<td>Percent of those who want to quit and have a time frame in mind who plan to use a quitline, a class or program or counseling to quit</td>
<td>20%</td>
</tr>
<tr>
<td>Percent of those who want to quit and have a time frame in mind who plan to use medication such as pills or nicotine patch, gum, lozenge, nasal spray or inhaler</td>
<td>41%</td>
</tr>
</tbody>
</table>


Results from the Adult Tobacco Survey, administered in 2010, show that approximately 67 percent of the current smokers want to quit for good and 27 percent of them plan to quit in the next 30 days. Smokers who plan to quit and have a timeframe in mind are more predisposed to use medication than counseling.
Figure 2-4. Prevalence of Current Adult Use of Smokeless Tobacco in Pennsylvania by Health District, BRFSS 2009-2011

The lower and upper numbers are the range of the 95% confidence interval, and the middle number is the estimated value of the prevalence of current adult use of smokeless tobacco.


*Southeast Health District excludes Philadelphia; Southwest Health District excludes Allegheny County

Note: See Appendix: Adult Tobacco Use

The prevalence of smokeless tobacco users in the Southwest Health District (excluding Allegheny County) is significantly higher than the estimate for the state as a whole.
Appendix: Adult Tobacco Use

These estimates of adult cigarette smoking are based on the Pennsylvania Behavioral Risk Factors Surveillance Survey (BRFSS). Prior to 2011, BRFSS collected data by surveying households through their landline telephones. Over the past decade use of cell phones in Pennsylvania and the United States has increased. To maintain the representativeness of the sample, in 2011 BRFSS expanded the traditional landline-based random digit dialing survey to a dual-frame survey of households using landline telephones and households using only cell phones.

An analysis of the 2011 results revealed that Pennsylvania residents from cell-phone-only households were more at risk for cigarette smoking than the population of users of landline telephones, even after demographic differences were taken into account. In retrospect it seems likely that some of the apparent decline in the estimates of the prevalence of cigarette smoking after 2003, shown in Figure 2.1, was due to the increasing failure of the landline sample to cover the entire population, as cell phone usage increased.

Because bias due to faulty coverage is a product of the level of noncoverage and the degree to which respondents and nonrespondents differ, the approach of using a cell phone survey appears to have reduced the potential for bias in 2011 by addressing both issues—reducing the level of noncoverage and improving participation among respondents with characteristics different from those of the original pool of respondents.

Only landline sample data from 2011 was combined with similar data from 2009 and 2010 to build the three-year data files needed for the regional estimates presented in this chapter.
The situation is more complex than first appears. A major change in the way the survey is weighted, which also affects estimates, was introduced in 2011. In 2012, the cell phone sample was expanded to include households with a landline telephone, but which use the cell phone 90 percent of the time or more (“cell-mostly”). More instability may be possible as the survey is adjusted to take into account further changes in communications technology.

The BRFSS 2011 data should be considered a baseline year for data analysis, and not directly comparable to previous years of BRFSS data because of the changes in weighting methodology and the addition of the cell phone sampling frame. More information about the changes to the 2011 BRFSS is available here: [http://www.cdc.gov/surveillancepractice/reports/brfss/brfss.html](http://www.cdc.gov/surveillancepractice/reports/brfss/brfss.html)

**Pennsylvania Health Districts**

- Northwestern Health District includes Warren, Clearfield, Lawrence, Mercer, Venango, Forest, McKean, Elk, Erie, Cameron, Clarion, Jefferson and Crawford counties.
- Southwestern Health District includes Washington, Westmoreland, Cambria, Indiana, Armstrong, Butler, Fayette, Green, Beaver and Somerset counties. For the above illustration, Allegheny County was analyzed separately.
- South Central Health District includes York, Franklin, Fulton, Bedford, Adams, Perry, Lebanon, Huntington, Juniata, Cumberland, Dauphin, Blair and Mifflin counties.
- Southeastern Health District includes Berks, Bucks, Chester, Delaware, Lancaster, Montgomery and Schuylkill counties. For the above illustration, Philadelphia County was analyzed separately.
- North Central Health District includes Snyder, Northumberland, Union, Columbia, Montour, Sullivan, Bradford, Tioga, Lycoming, Centre, Clinton and Potter counties.