Q: What is the BRFSS?
The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys established by the Centers for Disease Control and Prevention (CDC) in 1984. The BRFSS survey consists of telephone interviews using randomly generated telephone numbers to determine the households contacted. The survey contains a core set of questions provided by CDC to gather comprehensive, standard information nationwide and states are permitted to include pre-tested state-added questions or optional modules released by the CDC.

The BRFSS is an important public health tool for measuring adult health by directly contacting Pennsylvanians to collect information on chronic disease prevalence, risk behaviors, demographics, health care access, and preventive behaviors. Public and private health programs at the federal, state, and local levels rely on BRFSS to identify public health issues and use BRFSS estimates to formulate preventative action plans and to measure progress towards those prevention efforts.

Currently, all states collect BRFSS data to help them establish and track state and local health objectives, plan health programs, implement disease prevention and health promotion activities, and monitor trends. Nearly two thirds of states use BRFSS data to support health-related legislative efforts.
With technical and methodological assistance from CDC, state health departments use in-house interviewers or contract with telephone call centers or universities to administer the BRFSS surveys continuously through the year.

**Q: Who is contacted to participate in the survey**
The BRFSS only collects information from Pennsylvania adults ages 18 and over and from only one adult per household. Those who live in an institution, such as a nursing home, group home, or prison are not eligible. Phone numbers are randomly selected from all working phone numbers, both listed and unlisted. Random sampling is a method of selecting individuals from a population so that Pennsylvania residents in the group have the same chance of being selected.

Anyone with at least one residential telephone number (unlisted as well as listed) in the state could potentially be called. Calls are made days, evenings and weekends to assure all adults have an equal chance to be selected. Survey work sponsored by the government is exempted from do-not-call lists so you may be contacted.

If a Pennsylvania cell phone number is called and the respondent is deemed to be out-of-state then only core questions will be asked. Any optional modules and state-added questions will not be asked if the respondent is out-of-state.

The BRFSS survey is conducted for research and does not fall under current federal do-not-call list regulations. Nothing is being offered for sale and participation is optional, but your answers will help health officials evaluate and guide important public health policy and programs.

**Q: How do I know that the phone call is legitimate?**
The Pennsylvania Department of Health has been administering the BRFSS since 1989. An agreement with the University of Pittsburgh School of Public Health has been made to conduct and complete the calls for Pennsylvania.

Their interviewers will state that they are calling on behalf of the Department of Health and all interviewers are trained on CDC protocols. The interviewer will state the purpose of the call and ask permission to perform the interview.

“University of Pittsburgh” will display if the respondent’s telephone has caller ID capability. Otherwise, the call will originate from 412-624-4444.

Potential participants who are hesitant or have questions about the legitimacy of the survey can contact the Pennsylvania BRFSS Coordinator, Adam Johnson, by phone (717-782-2448) or by email (adamjohns@pa.gov). The CDC BRFSS web page gives more detail at the national level.
Q: Do I have to participate in the survey?
Participation by those randomly selected is voluntary but is also encouraged and is very important to accurately represent all adults in Pennsylvania, regardless of health status. Participating will assure that adults like you are represented in statewide estimates.

Q: Why do you keep calling me after I told you I don't want to participate?
Initial refusals are called again to verify that respondent does not want to participate in the survey. It is important to the survey to verify that the randomly selected respondent does not want to participate.

If respondents say that, “This is not a good time for me,” they will be contacted again in hopes that it will be a more convenient time. If you are called on your cell-phone then you will be asked “Is this a safe time to talk with you?” If the answer is “no” then you will be called back at a more convenient time. A predetermined call back time can be agreed upon.

The DOH strongly encourages all Pennsylvania residents, if contacted, to participate in this national effort to collect the vital health information necessary to implement effective programmatic planning and evaluation strategies to assist Pennsylvanians.

Q: How long does the survey take?
The survey takes approximately 20 minutes to complete and can run shorter or longer depending on the number of questions asked and how long it takes to answer each question. If the survey length becomes an issue during the interview, then a second call can be scheduled at a more convenient time to ask the remaining questions.

Q: Why do you need to know the number of adults in the household?
For this survey, households are first randomly selected in the state, and then one adult is randomly selected in each household to be interviewed. It is important to the accuracy of the survey that those selected for the survey participate because this is what ensures that the results will represent the entire state.
Q: Will you be collecting any personal information?
Identifiable personal information is not collected. Phone numbers are not included in public datasets. Questions on county of residence and zip code are included in the survey but respondents can refuse to answer any questions that they think may be too personal.

Q: Is my information kept confidential?
Yes. Pennsylvania safely collects and securely stores data while observing federal and state confidentiality guidelines. Except for the phone number, personal identifying information is not collected. Researchers are permitted to request survey data after a completed application indicating confidentiality practices is submitted and reviewed. The phone number is discarded once the respondent completes the survey and is not included in any datasets.

Pennsylvania aggregates individual responses for statistical reporting purposes. If researchers request record-level data with geographic identifiers (residence county/zip code) for analysis purposes then they are required to complete an Application for Access to Protected BRFSS Data for review to assure confidentiality practices will be followed.

Q: How do I request record-level BRFSS data sets?
The CDC provides datasets for download at their Survey Data & Documentation web page. Datasets offered by the CDC do not include geographic identifiers. Pennsylvania does provide datasets with geographic identifiers. To obtain these from Pennsylvania, please contact Adam Johnson (adamjohns@pa.gov), Pennsylvania BRFSS Coordinator, and request and complete the Application for Access to Protected BRFSS Data. Datasets may be provided once confidentiality procedures have been identified and the application has been reviewed for completeness.

Pennsylvania does not recommend producing estimates at the county level unless an appropriate weighting approach is applied. Estimates produced by statistical models should not be used to replace prevalence estimates released by Pennsylvania or the CDC.

Q: Who can I contact for more information?
For more information, you may contact the Pennsylvania BRFSS Coordinator, Adam Johnson, by phone (717-782-2448) or by email (adamjohns@pa.gov).

Q: What are the components of the BRFSS questionnaire?
The survey is comprised of standardized core questionnaire where some questions are asked as part of a fixed core (asked every year) or as part of a rotating core (asked every other odd or even year). Optional modules and state-added questions are also selected each year. Each
year a committee of BRFSS statisticians collects question submissions from Pennsylvania health programs and prioritizes them based off Departmental need. This is necessary since the space for adding optional modules and state-added questions is usually limited to approximately 30 questions each year.

Core questions included in the survey undergo technical review, cognitive testing, and field testing before being placed on the questionnaire. States are encouraged to only accept questions that have been properly tested and are suitable for a telephone survey.

Q: What state-added questions were asked in past BRFSS surveys?
Please reference the CDC state-added question database for questions selected by individual states to include in past surveys.

Q: What is the process Pennsylvania undergoes to select questions for the survey?
Each summer, BRFSS managers contact Department of Health (DOH) program managers to invite them to request questions that benefit program efforts to be included in the survey for the following year. Requested questions can include optional CDC modules or state-added questions which are developed by programs to address data needs that may not be addressed through CDC core questions or optional modules.

Once requests for all state-added questions/modules for an upcoming survey year are collected, a small committee, which includes representation from the Executive Office, reviews the requests and selects questions determined by DOH priorities. The committee considers factors such as how well the questions will work in a telephone survey, how recently the questions have been asked in past surveys, how the program plans to use the collected data, and how the questions align with the Department’s strategic plan and the Secretary’s priorities. The committee’s recommendations are ultimately approved by the Secretary of Health.

It is recommended to partner with appropriate DOH programs to request questions if outside agencies or stakeholders would like to request questions be included in future surveys.

Q: Are the data weighted?
Before 2011, post-stratification offered a means of providing the best possible prevalence estimates. However, societal changes often necessitate changes in survey methodology. Advancements in technology have had both positive and negative effects on the ability of telephone surveys, such as the BRFSS, to provide valid and representative data. The advent of extremely fast microprocessors for desktop computers and local area networks has enabled the routine use of more complex statistical weighting procedures to account for differences
between survey respondents and the target population. The continuing trend towards the replacement of household landline telephones with personal cell phones in the United States has made it necessary to introduce new weighting measures.

Beginning in 2011, the CDC implemented a new weighting methodology known as iterative proportional fitting or raking. Raking is accomplished by adjusting for one demographic variable (or margin) at a time. For example, when weighting by age and gender, weights would first be adjusted for gender groups, then those estimates would be adjusted by age groups. This iterative process would continue until all group proportions in the sample approach those of the population, or up to 75 iterations. Raking allows for the incorporation of cell phone survey data, permits the introduction of additional demographic characteristics and more accurately matches sample distributions to known demographic characteristics of populations.

Q: What software is utilized to produce BRFSS estimates?
SAS statistical software is used along with SUDAAN, a software package developed by the Research Triangle Institute that properly estimates sample variances for complex sample designs, to calculate point estimates and confidence intervals.

All BRFSS data should be analyzed using complex sampling procedures. SAS and SUDAAN include statements for stratification, clustering, and sample weight to account for complex sampling design of survey data.

Q: When are BRFSS estimates made available?
BRFSS estimates are typically made available during the summer of the following year in which the survey was completed. Pennsylvania publishes estimates through various reporting means. Two main methods of publishing estimates are through the Enterprise Data Dissemination Informatics Exchange (EDDIE) data query tool or through the interactive report located on the BRFSS webpage.

Q: Can BRFSS estimates be compared to produce trend analysis?
As a result of the changes made in 2011, it is recommended to use 2011 as a baseline to compare to future years. Estimates produced prior to 2011 should not be compared to estimates produced in 2011 or later years.

Q: What is the smallest geographic area that BRFSS estimates support?
Each year, Pennsylvania submits a sample design to the CDC that identifies the geographic strata identified so that raking can be applied to each geography. The CDC weights
Pennsylvania by eight different health districts, which includes Allegheny and Philadelphia Counties as separate districts. Pennsylvania also produces regional-level estimates by combining three consecutive years of collected data from contiguous counties to produce sample sizes necessary to produce reliable estimates. Pennsylvania does not produce county, zip code, or political-subdivision level estimates. However, some counties are large enough to produce three-year regional estimates.

Estimates produced from fewer than 50 un-weighted records are not considered by the CDC to meet standards of statistical reliability. There is also a possibility of the identification of individual respondents if the sample size is very small.

Q: Are there limitations to the data?
Non-coverage bias exists since some households may not have a landline or cell phone. Households without a telephone tend to have lower household incomes and may socio-economic differences from the survey population which would make adults in this group underrepresented in final estimates.

The BRFSS relies on self-reporting and prevalence estimates a solely based on how respondents answer the questions. Some may report they have a healthier lifestyle than they actually have and some may not be truthful when questions on risky behaviors are asked.