

Pregnancy Risk Assessment Monitoring System (PRAMS)

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National Web Site:

<http://www.cdc.gov/PRAMS>

Sources of Information for the Database

PRAMS, the Pregnancy Risk Assessment Monitoring System, is a surveillance project of the Centers for Disease Control and Prevention (CDC) and state health departments. Developed in 1987, PRAMS collects state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy. PRAMS surveillance currently covers about 83% of all U.S. births. PRAMS provides data not available from other sources. These data can be used to identify groups of women and infants at high risk for health problems, to monitor changes in health status, and to measure progress towards goals in improving the health of mothers and infants. PRAMS data are used by researchers to investigate emerging issues in the field of reproductive health and by state and local governments to plan and review programs and policies aimed at reducing health problems among mothers and babies.

Kentucky was recently awarded a cooperative agreement through a competitive grant application process by the CDC to conduct PRAMS surveillance. This is a five year cooperative agreement that began on May 1, 2016 and will continue through April 30, 2021. At the end of the five year funding cycle, states will again apply through a competitive grant application process for another five years of funding. The Kentucky PRAMS program is organizationally located in the Cabinet for Health and Family Services, Department for Public Health, Division of Maternal and Child Health.

Description of the Data Collected

PRAMS utilizes a mixed mode system consisting of mail and telephone surveys to collect data. The survey distribution cycle is conducted over a period of 3 to 6 months with participant samples drawn each month. The samples are derived from the live birth certificate files and are randomly generated to include women who gave birth 3 to 6 months prior to sample selection. Fetal deaths, stillbirths, abortions, out-of-state births, and birth certificates with missing identification (i.e. mother's last name or mailing address) are excluded from the sample. Mothers are included regardless of age.

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Participation in the survey is completely voluntary, and data are de-identified prior to analysis. Incentives and rewards are utilized to increase response rates.

PRAMS collects data on perinatal maternal behavior and experiences that may be associated with adverse birth outcomes. Data are collected on a variety of topics including: access to prenatal care, insurance status, quality of prenatal care, infant sleeping position, medical problems during pregnancy, delivery of the infant, mother's employment status, government assistance, pregnancy intent, contraceptive use, substance use, breastfeeding, smoking, and oral health. Demographic data are collected both from the PRAMS survey and from the birth certificate, and include race, age, education level, income, marital status, and insurance status.

All CDC funded PRAMS states collect data in the same manner following the guidelines of the PRAMS model surveillance protocol. There are three types of questions available for use by all PRAMS states and those include core questions, standardized questions, and state-added questions. Core questions are asked by all states, standardized questions are questions on particular topics developed by the CDC that the states may choose to use, and state-added questions are questions that the state develops that relate to health needs of the particular state. Data collection is on-going and conducted on a calendar year basis with the first sample batch of each new year being drawn in April. This is to comply with the sampling protocol requirement that eligible births must be between three and six months of age in order to be included on the sampling frame. Births that occur in January of a calendar year do not meet this requirement until April; therefore, sampling for a new year always begins in April.

Kentucky met all state requirements in the first year of the grant and was approved by CDC to begin data collection in April 2017 and is currently collecting its first year of PRAMS data.

Strengths of the Data

PRAMS was designed to supplement vital records data by providing state-specific data on maternal behaviors and experiences to be used for planning and assessing perinatal health programs. In addition, because PRAMS uses standardized data collection methods, it allows data to be compared among states.

PRAMS provides data on health indicators, such as prematurity, low birth weight, infant mortality, breastfeeding, and pregnancy intent that are not collected by other surveillance systems. In addition, the data are timely and typically available the year following collection. Data are weighted so results can be generalized to Kentucky's entire population of pregnant women.

Data Limitations

There are some limitations in the PRAMS data: recall bias, non-response bias, and small sample size. These limitations should not hinder the use of PRAMS data, but should be considered.

- **Recall Bias:** PRAMS respondents are contacted within 3-6 months after giving birth and questions are asked regarding behaviors throughout the perinatal period, which includes, at minimum, a 12 month span of time. Due to this long time frame it is possible that the accuracy of the data may be impacted by the mother's ability to recall all of the past events. To alleviate this bias, calendars are included with survey mailings to help the mother develop a timeline of events during her pregnancy.
- **Non-Response Bias:** PRAMS surveys are mailed based on address information collected from the birth certificate files. Transient populations and non-English speaking populations are more difficult to reach. It is possible that the results in the non-response population could differ from those of the respondents.
- **Small Sample Size:** The PRAMS projects are point in time surveillance systems and only sample the population for 3-6 months of the year. Approximately 150 women are selected each month to participate in the survey and only 50-60% of participants respond.

Specific Uses of Information

Findings from analyses of PRAMS population-based data can be generalized to an entire state's population of women whose pregnancies resulted in a live birth. Findings from PRAMS data have been used in many important ways:

- To increase understanding of maternal behaviors and experiences and their relationship to adverse pregnancy outcomes.
- To develop new maternal and child health programs and to modify existing programs.
- To influence public health policy.
- To help health professionals incorporate the latest research findings into their standards of practice.
- To monitor progress toward local, state, and national health objectives and goals.
- To provide data not available from other sources about pregnancy and the first few months after birth.
- To investigate emerging maternal and child health issues.
- To evaluate health disparities.

System Evaluation

The data collection for the Kentucky PRAMS program follows the CDC model surveillance protocol to ensure consistent and valid sampling techniques and survey monitoring.

Data Set Availability

Kentucky PRAMS data will be made available once the program has one full year of calendar data complete and has been weighted. The data will be available in SAS and comma delimited format. A weighting variable will be included in the data sets so that prevalence estimates can be generalized to the statewide population. Requests for Kentucky data may be made to the PRAMS coordinator. National data are available on the CDC PRAMS website.

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- **Average Yearly Sample Size** 1200
- **Data Format** SAS, comma delimited
- **Cost of Data Set** Free

Data Release Policy

Data requests should be addressed to the PRAMS data coordinator. Data release policies will be discussed at that time.

Data Publications

The PRAMS program will produce a statewide summary for each survey year. Once completed and approved, reports will be made available on the website.

Suggested Data Citation

Kentucky Department for Public Health (KDPH). *Pregnancy Risk Assessment Monitoring System Data*. Frankfort, Kentucky: Division of Maternal and Child Health, [**survey year**].

Contribution Author

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