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South Dakota Pregnancy Risk Assessment Monitoring System (PRAMS)

The Pregnancy Risk Assessment Monitoring System (PRAMS) was developed by the Centers for Disease Control and Prevention (CDC) in 1987 and is done in collaboration with various state health departments. PRAMS is a statewide survey that collects valuable information from new mothers on behaviors and attitudes before, during and after pregnancy to find out why some babies are born healthy and others are not. Currently, 47 states, New York City, Puerto Rico, the District of Columbia and the Great Plains Tribal Chairmen’s Health Board (GPTCHB) participate in the PRAMS survey, representing approximately 83% of all U.S. live births. The Ethel Austin Martin Program at South Dakota State University, in partnership with the South Dakota Department of Health, conducted South Dakota PRAMS-like surveys in 2014 and 2016, and is currently conducting the CDC-sponsored PRAMS with the Department of Health, which began in 2017.

The PRAMS survey results provide state agencies and the CDC with data, so they can monitor changes in maternal and child health indicators such as the prevalence of unintended pregnancy, prenatal care, breastfeeding, and smoking and drinking behaviors. PRAMS data can be used to identify groups of women and children who are at high risk for health problems and to measure the progress of goals that are developed to improve the health of women and children. PRAMS data also can be used by researchers to investigate emerging issues of maternal and child health and by state and local governments to design, review or help plan maternal and child health programs and policies.

In 2007, a South Dakota Tribal PRAMS (SDT PRAMS) was conducted by the Great Plains Tribal Chairmen’s Health Board and the Northern Plains Tribal Epidemiology Center. It was the first PRAMS run by a tribe and focused on maternal and health data for the American Indian population. In 2017, CDC funded a South Dakota Tribal PRAMS that is collecting data from American Indian mothers from four South Dakota tribes (Crow Creek Sioux Tribe, Flandreau Sioux Tribe, Sisseton Wahpeton Oyate and Standing Rock Sioux Tribe) who gave birth in 2017. In comparison, the SD PRAMS is collecting data statewide on all races for at least the next three years. The ultimate goal of both surveys is to improve the health of future mothers and children.

How is a PRAMS conducted?

The PRAMS survey is organized as a questionnaire in a booklet format. The questionnaire itself has gone through many modifications since its original development by the CDC in 1987. It is composed of two parts, the CDC’s core questions and pre-tested standard questions. The core portion is required from all states and contains questions about a mother’s attitudes and feelings during her most recent pregnancy, the content of her prenatal care, maternal alcohol and tobacco consumption, physical abuse before and during pregnancy, contraceptive use and knowledge of pregnancy-related health issues. In addition to the core questions, states can also choose from a standard list of 185 pre-tested questions or develop their own state-specific questions.

The standard questions either provide additional information on core topics or address other topics such as social support, mental health and injury prevention. South Dakota PRAMS selected 83 standard and core questions and added 10 adverse childhood experience questions to better understand how a mother’s childhood experiences may affect pregnancy or birth outcomes. The entire survey takes about 25 minutes to complete.

Each month a random sample of mothers who delivered a baby who would be about two months of age at the time of sampling is obtained, and the mothers are asked to complete the survey. The sample is pulled from South Dakota’s birth certificate file, and the total annual sample size will include about 1,800 women. For confidentiality purposes, at no time is a name associated with the individual survey results. The South Dakota 2017 PRAMS was completed in June of 2018, and the South Dakota 2018 PRAMS sampling began in March of 2019.
In order to obtain sufficient numbers within different race categories, American Indian mothers and mothers of other races are oversampled. For example, we will be sampling about 600 births in each of the three race categories (White, American Indian, other races) each year, which will require about 8% of White mothers, 35% of American Indian mothers, and 40% of mothers of other races being sampled. The random sample should be representative of South Dakota births, but some exclusions are applied. Births that occur to South Dakota residents out-of-state and those that occur in-state to non-residents are excluded. Also excluded are adopted and surrogate births and births for which the birth certificate is processed more than six months after birth. For multiple births, only one sibling is randomly chosen.

As with all surveys, it is important to have a high response rate. A high response rate ensures that the data reflect South Dakota mothers and to get the best overall picture of maternal and child health in the state. Per CDC protocol, the randomly selected women are first contacted by mail with a letter that introduces the PRAMS survey and notes that a questionnaire will follow in the near future. Three to seven days later, a questionnaire packet is mailed. It contains a cover letter that describes the PRAMS study, encourages participation and explains how to fill out and return the survey. The packet also includes the PRAMS questionnaire booklet, a self-addressed pre-paid return envelope, a brochure that provides additional information about the PRAMS survey, and a cash incentive as a thank you for participation. If the mother does not respond, two more packets will be sent before the mothers are followed up with telephone calls. Attempts to contact the mother will last about five weeks and calls are made at various times of the day and on different days of the week. Mothers are provided with a reward upon completion of the survey.

South Dakota is also using other resources to promote participation in the PRAMS survey. Efforts include reaching out to the mother’s local Women’s, Infants and Children Program (WIC) office as well as many community hospitals, clinics, medical associations, newspapers and radio stations throughout the state.

The Goal of South Dakota PRAMS

The South Dakota PRAMS has several goals:

1. Supplement existing birth certificate information
2. Increase awareness of the disparities that exist in the state, determine why they exist, and what can be done to eliminate them; and
3. Provide accurate estimates on what is occurring in the state in terms of maternal and child health.

Specifically, the South Dakota PRAMS hopes to learn about unintended pregnancies, barriers to accessing prenatal care and trends in mother’s behaviors and attitudes.

Other states have used PRAMS results to:

- understand how maternal behaviors and experiences correlate with infant health at birth
- develop new maternal and child health programs and modify existing programs
- influence public health policy
- help health professionals incorporate the latest research into current standards of practice
- monitor the progress of local, state and national health objectives

Results of the South Dakota 2014 and 2016 PRAMS-like survey, along with executive summaries, are currently available on the South Dakota Department of Health website:

doh.sd.gov/statistics/prams.aspx

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