

## Health Disparities & Prenatal Care

### Introduction

*This Facts on KIDS will look at health disparities and prenatal care. Health disparities is a growing concern for the United States as the population grows more diverse. Understanding what health disparities are, why they exist, and what can be done to close the variances in health between population groups will offer a chance at improving the health of the entire nation. The determinants of health interact throughout a person's life to influence disease prevalence, morbidity, and mortality. Prenatal care is a widely used preventive health care service that may lead to better birth outcomes and provide babies a healthy start to life.*

*In order to eliminate health disparities, this monograph will discuss why differences in health exist between population groups, health disparities in South Dakota, and how an effective intervention like prenatal care can provide babies a healthy start to life.*

### What is health disparity?

According to the Centers for Disease Control (CDC), "health disparities are preventable differences in the burden of disease,



injury and violence, or opportunities to achieve optimal health experienced by socially disadvantaged racial, ethnic, and other populations groups and communities; these disparities are unjust, unfair and directly related to the historical and current unequal distribution of social, political, economic, and environmental factors" (2010). Health disparities have risen to the top of many health agencies' agenda in the last couple of decades. Numerous new health organizations have been created to combat the effects

of health disparities. Disparities in health vary widely between various population groups due to a multitude of reasons that many researchers are just starting to fully understand today. Health is determined by the context of a person's life and not all the determinants of health can be altered.

In an article by Carter-Pokras and Baquet (2002), determinants of health alone could be:

#### 1. Income and social status

*A large gap in income and social status between population groups is linked to larger variation in health. Income is an important health determinant because it can influence other factors such as social class, socioeconomic status, education, and ability to purchase health insurance.*

#### 2. Social support networks

*The underlying premise of social support networks is in "helping people solve problems and deal with adversity, as well as in maintaining a sense of mastery and control over life circumstances" ("Public health agency", 2003).*

#### 3. Education

*The level of educational attainment may contribute to health by providing the knowledge and skills to access health information and alter health behavior accordingly.*

#### 4. Employment and working conditions

*Healthy workplaces as well as safe houses, communities, and roads all contribute to good health ("Health impact assessment, 2011).*

#### 5. Social environments

*The relationship between people and their social environment is "reflected in the institutions, organizations and informal giving practices that people create to share resources and build attachments with others" ("Public health agency", 2003).*

#### 6. Physical environments

*A physical environment can be damaging to population health by having a high level of contaminants in the air, water, food, and soil.*

#### 7. Personal health practices and coping skills

*Personal health practices and coping skills "refer to those actions by which individuals can prevent diseases and promote self-care, cope with challenges, and develop self-reliance, solve problems and make choices that enhance health" and those practices "are greatly influenced by the socioeconomic environments in which people live, learn, work and play" ("Public health agency", 2003).*

#### 8. Healthy child development

*Healthy child development starts from conception and continues to the first few years of a person's life and these early experiences can affect the health to adulthood.*

#### 9. Biology and genetic endowment

*Biology and genetic endowment may influence the predisposition for a person to have certain health risks and diseases.*

#### 10. Health services

*Health services encompass the access and utilization of services to prevent and treat disease.*

#### 11. Gender

*Gender "refers to the array of society-determined roles, personality traits, attitudes, behaviors, values, relative power and influence that society ascribes to the two sexes on a differential basis" ("Public health agency", 2003).*

**12. Culture**

*Culture includes the customs, traditions, and beliefs of a population group.*

These twelve health determinants interact to influence disease incidence, morbidity, and mortality.

**Data for South Dakota**

Minority racial and ethnic populations consistently have lower measures of health in various areas. The following South Dakota data helps to depict the prevalence of health disparities regarding births and prenatal care.

Many health agencies agree a healthy childhood can limit the disparities between populations as a child grows into

adulthood. To take this concept one step further, a healthy life begins even before a baby is born and depends on the care during the nine months of pregnancy. Prenatal care is the care received throughout pregnancy and is used to promote the health of both the mother and fetus. According to the National Women’s Health Information Center, “babies of mothers who do



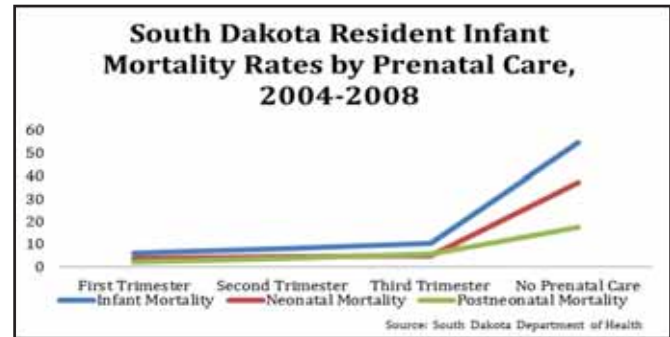
not get prenatal care are three times more likely to have low birth weight and five times more likely to die than those born to mothers who do get care” (“Prenatal care”, 2009).

South Dakota’s Department of Health has set many health objectives to meet by 2020. One of their goals is to increase the proportion of women who receive prenatal care in the first trimester from 68.9% in 2008 to 75% by 2020 (SDDOH). Similarly, Healthy People 2020 has also set a national target of improvement from 70.8% in 2007 to 77.9% in 2020.

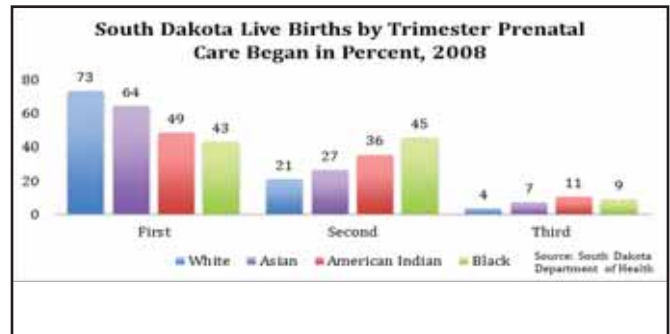
The main importance of first trimester prenatal care lies in the support given by the physician and the screenings performed. The Mayo Clinic suggested a first trimester visit will include a discussion on medical history, due date and lifestyle issues, a physical exam, lab tests, and screening tests for fetal abnormalities (2010). A complete medical history will provide the physician insights into any allergies, history of genetic diseases, or complications from past pregnancies. This discussion will be crucial if the mother have experienced miscarriages or stillbirth previously because extra precaution is warranted in those situations.

Late or no prenatal care is associated with a higher rate of infant mortality. According to the aggregate birth data from 2004 to 2008, South Dakota mothers who had no prenatal care had the highest rate of infant mortality (54.5 per 1,000 live births), neonatal mortality (37 per 1,000 live births), and postneonatal mortality (17.4 per 1,000 live births) (“2008 vital statistics”, 2010). The rate decreased significantly when compared to mothers who initiated care in the first trimester. South Dakota mothers who initiated care in the

first trimester had an infant mortality rate of 6.1 per 1,000 live births, neonatal mortality rate of 3.8 per 1,000 live births, and postneonatal mortality rate of 2.3 per 1,000 live births.

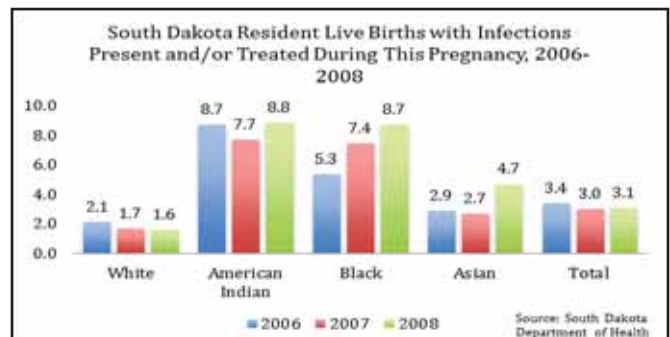


A look at South Dakota’s first trimester prenatal care shows the disparate utilization rates for race. The percentage of South Dakota women receiving prenatal care in the first trimester was the highest for Whites in 2008 at 73% and lowest for Blacks at 43%. Blacks had the



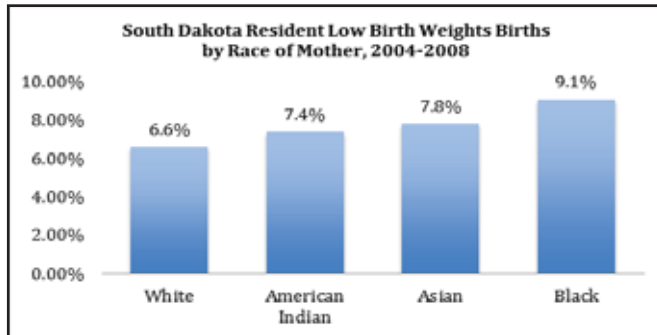
highest percentage of prenatal care initiation in the second trimester at 45% compared to 21% for Whites.

Adequate and effective prenatal care can provide a host of benefits for the mother and baby. An important benefit of prenatal care is the detection and treatment of health problems such as infections. The following chart displays the percentage of live births with infections present and/or treated during the pregnancy. Of the births born to American Indian mothers in 2008, 8.8 percent had an infection present compared to only 1.6 percent for White mothers. An infection may include but is not limited to chlamydia, genital herpes, hepatitis C and B, and syphilis. Adequate prenatal care presents an opportunity for mothers to discover and treat these infections before they have an opportunity to cause problems for the fetus/baby.



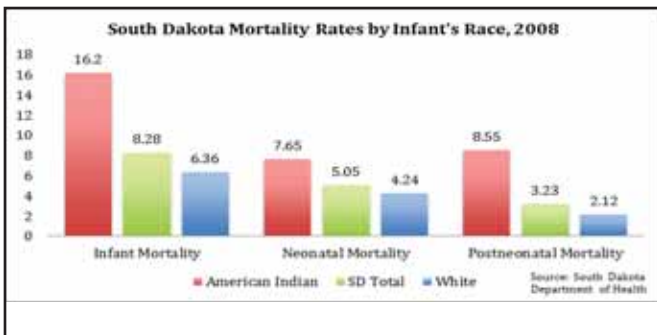
## Facts on Kids in South Dakota

Low birth weight (LBW) is primarily caused by premature births. Low birth weight in the following table is identified as babies born weighing less than 2,500 grams. Of the total births from 2004 to 2008, Blacks had the highest percentage of LBW births at 9.1% compared to Whites at 6.6%.



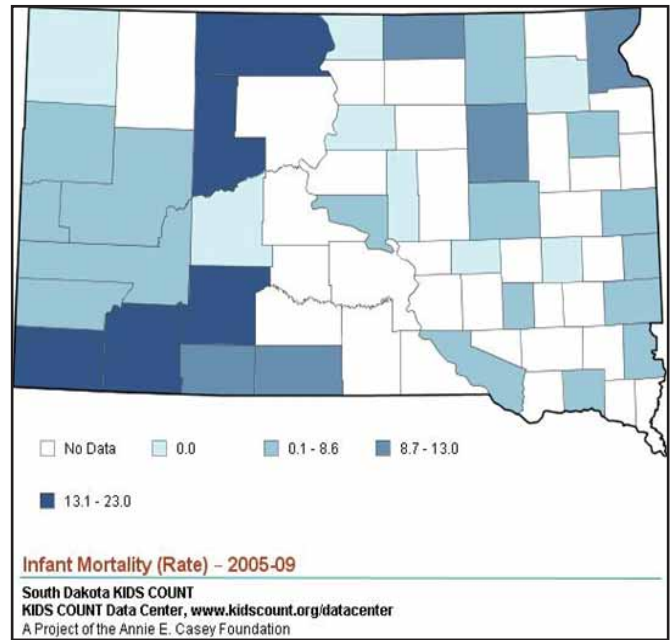
Babies born with low birth weight, especially those who weigh less than 1,000 grams, have a higher risk for infant death.

South Dakota's infant mortality as a whole fluctuates only slightly around the nation's rate from 1989 to 2008. Whites, for the majority of the years, have a lower infant mortality rate than the nation while American Indians have a much higher rate than the nation every year. In 2008, American Indians had a significantly higher infant mortality rate than Whites at 16.2 compared to 6.3 per 1,000 live births. The rates for neonatal mortality and postneonatal mortality for American Indians are also higher than Whites. Infant deaths occur before the age of one, neonatal deaths occur within the first month of life, postneonatal deaths occur after the first month of life but before



the age of one. Because the number of births of American Indians babies in South Dakota is considerably smaller than Whites, the mortality rates could change significantly with a small change in the number of deaths. For this reason, it is recommend mortality rates should be analyzed over a period of time.

The map shows South Dakota's infant mortality rate by county. Counties with the highest rate of infant mortality for 2005-2009 were Ziebach, Shannon, Corson, Fall River, and Jackson ("South Dakota Kids Count", 2011). Four of these counties are located on federally recognized Indian reservations in South Dakota.



### Conclusion

Prenatal care can be beneficial for any mother regardless of age or pregnancy history but is even more crucial for first time mothers or those with a history of pregnancy complications. Finding and connecting links between the twelve determinants of health and birth outcomes can help answer the question of how prenatal care can be tailored to optimize outcomes based on the needs of the target population.

As the population of racial and ethnic minorities continues to climb, efforts must be directed at closing the gap in health and health care. Early and adequate prenatal care is a relatively simple and cost-effective measure that allows the physician to monitor the growing fetus, provide support and advice on issues such as smoking cessation or proper nutrition to the mother, and educate the mother what she should expect.

*This Facts on KIDS is an excerpt from a paper written by Phuong Anh T. Nguyen, a MBA student with a concentration in Health Services Administration and a South Dakota Leadership Education Excellence in Caring for Children with Neurodevelopmental and Related Disorders (LEND) Program trainee.*

*LEND is a one year specialized training which focuses on the interdisciplinary training of professionals for leadership roles in the provision of health and related services to infants, children and adolescents with neurodevelopmental and related disabilities and their families. The South Dakota LEND Program is supported by a grant from the Maternal and Child Health Bureau (MCHB), Health Resources and Services Administration (HRSA), of the United States Department of Health and Human Services - grant number T73MC00037-13-04.*



SD KIDS COUNT Project  
Beacom School of Business  
The University of South Dakota  
414 East Clark Street  
Vermillion, SD 57069

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U.S. POSTAGE PAID  
VERMILLION, SD  
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Facts on KIDS in South Dakota is published by South Dakota KIDS COUNT, Beacom School of Business, The University of South Dakota.

The South Dakota KIDS COUNT Project ([www.sdkidscount.org](http://www.sdkidscount.org)) is a national and state-by-state effort, sponsored by the Annie E. Casey Foundation, to track the status of children in the United States. By providing policymakers and citizens with benchmarks of child well-being, KIDS COUNT seeks to enrich local, state, and national discussions concerning ways to secure better futures for children and families. Additional funding for the state project comes from the South Dakota Departments of: Education & Human Services.

Thank you to:

- *Phuong Anh T. Nguyen* for her work on this monograph. She will be receiving her Masters of Business Administration (MBA) degree from the Beacom School of Business, The University of South Dakota in August 2011.