

2006

## Prenatal Care and Infant Mortality in Nevada

Cynthia C. Huth

Phil Nowak

Chuck Duarte

Follow this and additional works at: [https://digitalscholarship.unlv.edu/social\\_health\\_nevada\\_reports](https://digitalscholarship.unlv.edu/social_health_nevada_reports)



Part of the [Community-Based Research Commons](#), and the [Medicine and Health Commons](#)

---

### Repository Citation

Huth, C. C., Nowak, P., Duarte, C. (2006). Prenatal Care and Infant Mortality in Nevada. In Dmitri N. Shalin, *The Social Health of Nevada: Leading Indicators and Quality of Life in the Silver State* 1-23.

Available at: [https://digitalscholarship.unlv.edu/social\\_health\\_nevada\\_reports/12](https://digitalscholarship.unlv.edu/social_health_nevada_reports/12)

This Report is protected by copyright and/or related rights. It has been brought to you by Digital Scholarship@UNLV with permission from the rights-holder(s). You are free to use this Report in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself.

This Report has been accepted for inclusion in Reports by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact [digitalscholarship@unlv.edu](mailto:digitalscholarship@unlv.edu).

# Prenatal Care and Infant Mortality in Nevada\*

## Introduction

Prenatal care, also known as antepartum care, refers to the health services that a pregnant woman receives before a baby's birth. Health care providers know from numerous studies that prenatal care is important because potential problems that may endanger the mother or her baby may be discovered and treated prior to birth. In many cases, potential problems can be prevented altogether. Because of this, it is important that the pregnant woman not only begins prenatal care early, but also receives continuous care throughout her pregnancy. The preconception (before pregnancy) care is also an important factor affecting the future mother's and baby's health. The **United States (U.S.) Department of Health and Human Services, Maternal and Child Health Bureau**, in their report, *A Healthy Start, Begin Before Baby's Born*, at <http://www.mchb.hrsa.gov/programs/womeninfants/prenatal.htm>, states that

- Babies born to mothers who received no prenatal care are 3 times more likely to be born at low birth weight and 5 times more likely to die than those whose mothers received prenatal care.

Potential problems may be identified and corrected before conception. An example of this benefit is iron-deficiency anemia. If a woman is anemic due to iron deficiency and becomes pregnant, the red blood cells that carry oxygen to the fetus may be impaired. This would prevent the ideal oxygenation of the baby. Identifying the anemia before pregnancy and prescribing iron tablets to the woman in order to boost her iron blood level would prevent problems early in the pregnancy. However, preconception and prenatal care not only encompasses physical health care, but education and counseling. A woman and her family can talk to a health care provider about her special needs, and may be referred to a variety of sources to help her have a healthy pregnancy,

including nutritional and mental health counseling, social services, and physical activity education.

The term “infant mortality” refers to a baby’s death that occurs before the infant is one year old. It is a vital public health indicator that reflects the aggregate impact of social and political conditions, health care delivery, and medical outcomes. The **Infant Mortality Rate** (IMR), which is the number of deaths per 1,000 live births, may be further classified into (a) neonatal, which extends from 0 to 27 days, and (b) post-neonatal, ranging from 28 to 365 days.

Differences in the infant mortality rates among industrialized nations reflect disparities in the health status of women before and during pregnancy, as well as the quality and accessibility of primary care for pregnant women and their infants. Although in the last century the infant mortality rate has declined worldwide, in less developed countries, the chances of dying are greatest at infancy and remain high during the first few years of childhood. A newborn child is fragile and has not developed immunities to common ailments. When a country has a high rate of infant death, it usually signals high mortality risk from infectious, parasitic, communicable, and other diseases associated with poor sanitary conditions and malnourishment. Most of the advances made in the U.S. infant mortality rate can be attributed to overall better health care than a hundred years ago, including immunizations, better sanitary conditions, easier access to health care, antibiotics and improved nutrition. Although the rate has declined dramatically, the U.S. still has a higher infant mortality rate than many other nations. The U.S. infant mortality problem arises primarily because of its birthweight distribution; relatively more infants are born at low birthweight in the United States than in most other industrialized countries. Unfortunately, little progress has been made in reducing U.S. low birthweight rates, which would further improve infant mortality rates.

Graph 1, taken from Child Health USA, [http://www.mchb.hrsa.gov/mchirc/chusa\\_04/pages/0405iimr.htm](http://www.mchb.hrsa.gov/mchirc/chusa_04/pages/0405iimr.htm), compares international infant mortality rates, including countries, territories, cities, or geographic areas with a population of

at least 1 million that have complete counts of live births and infant deaths. In 2000, four of these jurisdictions had infant mortality rates less than half that of the U.S.

The national prevention initiative, known as "Healthy People," identifies opportunities to improve the health of all Americans. The United States Department of Health and Human Services (DHHS) has used health promotion and disease prevention objectives to identify priority areas targeted for improvement and provide direction for health promotion policies. **The Centers for Disease Control and Prevention**

**(CDC)**, <http://www.cdc.gov/omh/AMH/factsheets/infant.htm>, has noted that the leading causes of infant death include congenital abnormalities, pre-term/low birth weight, Sudden Infant Death Syndrome (SIDS), problems related to complications of pregnancy, and respiratory distress syndrome. Of these, the most likely to be preventable are those related to preterm birth and low birth weight. **The Healthy People**

**2010**, <http://www.healthypeople.gov/>, general category of low birth weight infants includes both those born too early (preterm infants) and those who are born at full term but who are too small, a condition known as intrauterine growth retardation (IUGR). Maternal characteristics that are risk factors associated with IUGR include maternal low birth weight, prior low birth weight birth history, low prepregnancy weight, cigarette smoking, multiple births, and low pregnancy weight gain. The use of alcohol, tobacco and illegal substances during pregnancy is a major risk factor for low birth weight and other poor infant outcomes. There are also racial disparities that place some infants at a higher risk for low birth weight and infant mortality.

The health of mothers, infants, and children is of critical importance, both as a reflection of the current health status of a large segment of the United States population and as a predictor of the health of the next generation.

## **Historical Overview**

Prenatal care has existed in one form or another since the beginning of man. Midwives have attended women in labor during most of

history, and continue to do so up to the present day. There is biblical reference to midwives assisting in the delivery of an infant in Exodus 1:15-22, which is set in Egypt during Pharaoh's time. Although physicians did not normally attend to a pregnant woman until the 1700's, they did attend to women who were dying during childbirth, in an attempt to save the child. They cut the woman's abdomen open to retrieve the child. Roman law under Caesar decreed that all women dying during childbirth must be cut open. This is one explanation of where the term "cesarean" came from, although there is still controversy over this.

In the early 1600's, according to the **National Library of Medicine** archival texts, the Chamberlen family in England developed and used obstetrical forceps to assist in extracting newborns from the birth canal that otherwise might have died. Men's claims to authority over such instruments assisted them in establishing professional control over childbirth. Over the next three centuries or more, the male-midwife and obstetrician gradually wrested that control from the female midwife, thus diminishing her role. Regardless of who attended the pregnant woman, both the maternal and infant mortality rates were extremely high, even into the 20th century. This was true for the United States, and continues to be true for less industrialized countries.

In Washington, D.C., the Children's Bureau was established in 1912. It was the first organization to investigate and report on matters surrounding the welfare of children and child life throughout America, and published its first report with appalling statistics:

- In 1912, 124 American babies per 1,000 were dying, and the maternal mortality rates were equally as devastating.

The Bureau recognized the importance of prenatal care, and developed a plan to have public health nurses provide that care to pregnant women. In addition, advances were being made in obstetrics, hygiene, and medicine in general. All of these factors led to a decline in the maternal and infant mortality rates in the United States.

- During the 20th century, the United States infant mortality rates declined by 90%.
- However, despite these advances, the United States still lags behind 27 other nations in maternal mortality, and ranks 27th in the world in infant mortality.

The **World Health Organization, Department of Reproductive Health and Research**, reports the following mortality figures for the year 2000, the most recent figures available:

- The United States reported maternal mortality ratio was 11 deaths for every 100,000 live births.
- The United States lagged behind the United Kingdom, Switzerland, Spain, Slovakia, Qatar, Portugal, Poland, New Zealand and 19 other countries in the reported maternal mortality ratio.

In 1991, the **Nevada State Health Division**, <http://health2k.state.nv.us/>, partnered with other public and private organizations to tackle the infant mortality rate and poor entry into prenatal care. The “Baby Your Baby” campaign was introduced as a public outreach to encourage women to obtain early and continuous prenatal care. Many hospitals, doctors, and laboratories provided discounts to pregnant women and families with children under five so that everyone had the opportunity to obtain medical care. This campaign evolved over time into the Maternal & Child Health campaign. It is a safety net for women who do not have health insurance and do not qualify for financial assistance from other programs. As a result of these and other efforts, Nevada’s infant mortality rate has been significantly reduced over the most recent decade.

- In 1990, infant mortality rate in Nevada was 8.3 deaths per 1,000 live births; by 1991 the number had climbed to 9 per 1,000 births; it is now below the overall United States rate, although it still lags behind the Healthy People 2010 goal.

## **Prenatal Care Guidelines**

In the United States, there are a variety of sources that suggest a standard of practice for prenatal care delivery. **The American College of Obstetricians and Gynecologists** (ACOG), <http://www.acog.org/>, publishes practice guidelines for obstetrical care, which are accepted as the standard of practice for physicians. **The American College of Nurse-Midwives**, <http://www.acnm.org/about.cfm>, also published position statements regarding obstetrical care. Most of these guidelines, or protocols, are similar, and are geared toward their respective peers.

Regardless of the health care providers status, all have the same goal in delivering prenatal care. To ensure the best possible outcome for both the mother and babies. In the **National Collaborating Centre for Women's and Children's Health** publication, *Antenatal care: routine care for the healthy pregnant woman*, recommendations include:

- Pregnant women should be offered opportunities to attend antepartum classes and have written information about their care.
- At the first contact, pregnant women should be offered information about the pregnancy-care services and options available, lifestyle considerations, including dietary information; and screening tests.
- Pregnant women should be informed about the purpose of any screening test before it is performed. The right of a woman to accept or decline a test should be made clear.
- Pregnant women should be offered evidence-based information and support to enable them to make informed decisions regarding their care. Information should include details of where they will be seen and who will undertake their care. Addressing women's choices should be recognized as being integral to the decision-making process.
- At each prenatal appointment, midwives and doctors should offer consistent information and clear explanations and should provide pregnant women with an opportunity to discuss issues and ask questions.
- A system of clear referral paths should be established so that pregnant women who require additional care are managed and

treated by the appropriate specialist teams when problems are identified.

- Antenatal care should be provided by a small group of carers with whom the woman feels comfortable. There should be continuity of care throughout the antenatal period.

As stated above, it is ideal to have a woman begin prenatal care in her first trimester, and continue her prenatal visits on a regular basis until delivery. A typical schedule for prenatal visits to a health care provider include visits: (1) about once each month during the first six months of pregnancy, then (2) every two weeks during the next two months, and then, (3) weekly until the delivery date.

If a woman is over 35 or the pregnancy is high risk because of certain health problems (like diabetes or high blood pressure), the health care provider will probably schedule more frequent visits.

The **U.S. Department of Health and Human Services, Office on Women's**

**Health** website, <http://www.womenshealth.gov/faq/prenatal.htm>, discusses many questions that women often want to know about their pregnancy and the timing of their prenatal care.

The goal of prenatal care is not only to provide the best care for the pregnant woman and the unborn child, but also to prepare the mother-to-be for the delivery of a healthy baby. During prenatal visits, tests are performed on both the mother and the baby to assess any potential risks, to treat any maternal or fetal complications, and to monitor the growth and development of the fetus. In addition, counseling and guidance are provided regarding various aspects of pregnancy, including weight gain, exercise, nutrition, and overall health. A typical prenatal visit may include any/all of the following:

- Weight measurement
- Blood pressure measurement
- Measurement of the uterus to check for proper growth of the fetus
- Physical examination of the mother to identify problems or discomforts (i.e., swelling of the hands and feet)



- Urine test to measure sugar and protein levels, which can indicate diabetes or preeclampsia (a condition characterized by pregnancy-induced high blood pressure, protein in the urine, and swelling due to fluid retention)
- Fetal heart rate measurement
- Prenatal screening tests (i.e., blood tests to check for anemia)

In addition to these tests at each prenatal visit, additional screening tests are performed at various times during the pregnancy to rule out a variety of possible problems.

### **Adequacy of Prenatal Care**

In the United States, there are two different criteria used nationally to define whether or not prenatal care was adequate, one is known as **Kessner Index** (see Appendix A) and another as **Kotelchuck Index** (see Appendix B). The Kessner Index identifies the criteria for adequacy of prenatal care based on the gestational age of the fetus and the number of prenatal visits made by the mother. The Kotelchuck Index, which is also known as the Adequacy of Prenatal Care Utilization (APNCU) Index, uses two elements obtained from birth certificate data – the initiation of prenatal care and the number of prenatal visits from when prenatal care began until delivery.

- In Nevada, 70.1 % of live births were to women receiving adequate/adequate plus prenatal care, 12.3% were to women receiving intermediate care, and 17.6% were to women receiving inadequate care (see Figure 1).

### **Public Health Issues**

Public health surveillance – identifying and reviewing pregnancy-related deaths, including both maternal and infant deaths, analyzing the findings, and taking action – should decrease the risk of morbidity and mortality due to pregnancy. Numerous studies indicate that early and continuous prenatal care reduces the risk of problems to both the mother and infant.

As a result of this information, outreach activities and advertising by various health care organizations, agencies, foundations, and

clinicians encourage women to obtain adequate prenatal care. Although the majority of women in Nevada obtain adequate care, not all women who are pregnant receive adequate or, in many cases, any prenatal care. The reasons vary from a conscious decision not to obtain the prenatal care to difficulty in accessing the care.

Low healthcare utilization may also reflect lack of health insurance. Nevada ranks high among states in the percentage of the population lacking health insurance. There is the compounding difficulty in the Silver State posed by rapid population growth relative to the number of medical providers. There is also considerable racial/ethnic disparity, age, and geographic distinction, with Clark County showing lower scores on early and adequate care than the Nevada statewide average.

## **Prenatal Care in Nevada**

Nevada ranks below the national average in the percentage of pregnant women who receive adequate prenatal care (state health rankings may be found

at: <http://www.unitedhealthfoundation.org/shr2004/components/prenatalcare.html>).

- In 2002, the latest year for which comparable data from all states is available, 70.1% of women in Nevada received adequate prenatal care, which ranks the Silver State 41st among 50 states. The national average is 76.2%.
- Access to adequate prenatal care ranged from 85% or more of pregnant women in [New Hampshire](#), [Rhode Island](#), [Vermont](#), and [Massachusetts](#), to less than 60% in [New Mexico](#).
- The most recent figures from the **Nevada State Health Division, Bureau of Health Planning and Statistics**, <http://health2k.state.nv.us/>, show that in 2004, the percentage of infants born to pregnant women receiving prenatal care beginning in the first trimester was 74.4%.

## **Race-Ethnicity**

There are pronounced disparities between races in infant death rates. The **Infant Mortality Statistics from the 2002 Period Linked Birth/Infant Death Data Set** provides the following data for the United States:

- In the year 2002, the overall infant mortality rate for all races in the U.S. was 7.0 deaths per 1,000 live births.
- African Americans had an infant mortality rate of 13.8.
- The American Indian infant mortality rate was 8.6.
- Non-Hispanic Whites had an infant mortality rate of 5.8.
- Hispanics (all origins) had an infant mortality rate of 5.6.
- The Asian/Pacific Islander infant mortality rate was 4.7.

Although there has been a narrowing of racial disparities in early and adequate prenatal care in the United States over the past thirteen years, they still exist. However, a research article published in the *American Journal of Public Health*, titled "Racial differences in prenatal care use in the United States: are disparities decreasing?" indicates the reduction in the disparities is thought to be due to a national policy emphasis on and commitment to the reduction of racial disparities in health outcomes and efforts to promote more culturally competent care.

Women give a variety of reasons for not accessing early prenatal care. Many simply feel that obtaining early care is not necessary, others cite financial concerns. Geographic, language and transportation barriers are also cited as reasons for not obtaining early care. In Nevada, as in the United States, although there has been improvement, the 2003 data reveals continued disparities in ethnicity and race in accessing early prenatal care.

- 64.7% of Hispanic women received early prenatal care in Nevada, compared to 71.1% of Black women and 89.2% of White, non-Hispanic women (see Figure 2).

These figures are particularly noteworthy since Hispanics represent over one-third of total live births in Nevada.

## **Birth Outcomes**

A successful birth outcome is defined as the birth of a healthy baby to a healthy mother. Numerous factors have been found to influence birth outcomes, including the mother's health at the beginning of the pregnancy and throughout, genetics, drug, alcohol and tobacco intake, nutrition, the quality and quantity of prenatal care, social, economic and financial status, and family support. Women and their families may be overwhelmed by the stresses of poverty. It is suspected that stress may also cause poor birth outcomes, especially in high-risk women. For those at-risk women who do seek care, the health and human service system may be inadequate to meet her or her children's needs. In some communities, health care providers are few, nonexistent, or they are not fully accessible to Medicaid patients. Certain types of care, such as substance abuse treatment and mental health programs, may not be readily available.

Studies and prevention programs have focused much of their efforts on low birthweight, since it is one of the leading causes of infant mortality. Low birthweight is largely preventable. However, given the complicated health and social problems often associated with women who deliver low birthweight infants, there remain no easy solutions. Effective preventive programs blend health care, health education, environmental modification and public policy in an effort to create a culture supporting a prudent lifestyle. More information on low birth weight and racial disparities may be found at: <http://www.healthystartassoc.org/hswpp5.html>.

## **Infant Mortality**

The **National Center for Health**

**Statistics**, <http://www.cdc.gov/nchs/births.htm>, describes the following patterns of infant mortality rates in the U.S population:

- Infant mortality rates were higher for infants whose mothers had no prenatal care, were teenagers, had less education, were unmarried, or smoked during pregnancy.
- Infant mortality rates are higher for infants of women who were born in the United States, compared with women born outside the United States.

- Infant mortality rates are higher for male infants, multiple births, and infants born preterm or at low birthweight.
- Infant mortality rates also varied greatly by State. Rates are generally higher for states in the south and lowest for states in the west and northeast. Infant mortality rates among states ranged from 10.4 for Mississippi to 4.9 for Massachusetts.

Given the state's rapid population growth, dearth of healthcare providers, and low levels of care delivery, Nevada's infant mortality rate (IMR) is quite low. Moreover, this indicator shows a trend toward improvement.

- In 2004, Nevada ranked 17th lowest among the states, with 6.1 deaths per 1,000 live births. The overall IMR for the United States in 2004 was 7.0 per 1,000 live births.
- With respect to the timing of infant deaths, 52.8% of Nevada's infant deaths occurred in the neonatal period and 47.2% occurred in the post-neonatal period.

Although the overall infant mortality rate has declined in Nevada, and is lower than most other states, we continue to see disparities between African Americans and other races regarding infant mortality and low birthweight, which is one of the leading causes of infant mortality (see Figure 3 and Table 2).

### **How to Improve the Quality of Prenatal Care**

- The Healthy People 2010 goals for both entry into prenatal care in the first trimester and early and continuous prenatal care are 90%.
- The infant mortality rate goal is 4.5 per 1,000 live births.

There are many reasons why Nevada has not been able to attain the Healthy People 2010 goals. Some were discussed earlier, including geography, transportation, and language barriers. Other barriers to early and continuous prenatal care include lack of education about the importance of care, the lack of obstetrical providers and health insurance. Recent studies also attribute social and domestic issues to reasons for poor prenatal care and infant outcomes. Some of these issues include cultural differences, perinatal depression,

domestic violence, lack of breastfeeding, poor nutrition and lack of family support.

There are several things that health providers and state governments can do to lower these barriers.

- Public Education programs delivered through various mass media outlets can help women and families to understand the benefits of early and continuous prenatal care.
- Prenatal care providers need to improve their cultural competency.
- Increasing the number of bilingual health care providers will help improve the quality of prenatal care.
- A more positive litigation and practice insurance environment must be created to reassure health care providers.
- Expanded Medicaid coverage will improve the quality of care among at-risk groups.
- Positive outcomes will also increase with screening for a variety of social and mental health needs, including perinatal depression, domestic violence, transportation needs, drug/alcohol/tobacco use, and family support.
- All providers, including hospital staff, should emphasize the importance of breastfeeding for positive prenatal care outcomes.
- Nutritional counseling is one more step known to improve the quality of prenatal care.

### **Prospects for the Future and Policy Considerations**

Although there have been positive changes in birth outcomes over the past decade or so, a lot of work lies ahead. Nevada must continue its efforts to meet the Healthy People 2010 goals. The future is promising as collaboration between agencies increases, and the public becomes more educated about the benefits of early and continuous prenatal care.

We need to expand the continuum of maternal and child health services from preconception through the postpartum period. As Nevada continues to grow more ethnically and racially diverse, it is essential that health care providers receive training in, and increase

their sensitivity to, cultural differences affecting health care delivery. In addition, collaboration with managed care organizations to improve care coordination will help women and infants from getting “lost” in systems of care.

State, county, and local governments must address mental health and social services needs of women and children. Although the needs are complex and diversified, long term effective interventions must be identified and instituted to create a successful environment where women are empowered to seek and obtain necessary interventions that make their lives and those of their children better.

## **Conclusion**

To measure the health of a nation, it is vital to evaluate maternal and child health. Multiple studies have shown that early and continuous prenatal care will improve the mother and infant’s health. The United State has improved the infant mortality rate over the last century, and over 75% of women enter prenatal care in their first trimester. Nevada reflects these statistics, but we need to continue to strive to reduce the disparities that exist between races and ethnicities. To do this, we must all work together to establish a seamless system of care, including mental health and social services and increase the number of pregnant women covered financially.

## **Data Sources and Suggested Reading**

U.S. Department of Health and Human Services, Maternal and Child Health Bureau, *A Healthy Start, Begin Before Baby’s Born* website, <http://www.mchb.hrsa.gov/programs/womeninfants/prenatal.htm>.

Centers for Disease Control and Prevention, *Eliminating Disparities in Infant Mortality* fact sheet, (2005), <http://www.cdc.gov/omh/AMH/factsheets/infant.htm>.

*Healthy People 2010*, Maternal, Infant, and Child Health, Centers for Disease Control and Prevention.

T.J. Mathews, M.S.; Fay Menacker, Dr. P. H.; and Marian F. MacDorman, Ph.D., (2004). Infant Mortality Statistics from the 2002 Period Linked Birth/Infant Death Data Set, Centers for Disease Control and Prevention, Division of Vital Statistics, *National Vital Statistics Report*, Volume 53, Number 10.

United States Library of Medicine, (April, 1998) *Cesarean Section – A Brief History*, [http://www.nlm.nih.gov/exhibition/cesarean/cesarean\\_1.html](http://www.nlm.nih.gov/exhibition/cesarean/cesarean_1.html).

World Health Organization, Department of Reproductive Health and Research, (2004) *Maternal Mortality in 2000*.

National Collaborating Centre for Women's and Children's Health. (Oct. 2003), *Antenatal care: routine care for the healthy pregnant woman*.

South Carolina Department of Health and Environmental Control, SCAN Birth Certificate Data, <http://scangis.dhec.sc.gov/scan/defn/birthdefn.htm>.

United Health Foundation, *America's Health: State Health Rankings – 2004 Edition*. <http://www.unitedhealthfoundation.org/shr2004/component/s/prenatalcare.html>.

Nevada State Health Division, Bureau of Health Planning and Statistics, 2005.

U.S. Department of Health and Human Services, Office on Women's Health, *Frequently Asked Questions about Prenatal Care* fact sheet: <http://www.womenshealth.gov/faq/prenatal.htm>.

Alexander G.R., Kogan M.D. and Nabukera S., (2002), *Racial differences in prenatal care use in the United States: are disparities decreasing?* American Journal of Public Health, 92(12):1970-1975.



Allegheny County Health Department, Pittsburgh, PA.  
(2000), *Pittsburgh, Allegheny County, Pennsylvania* <http://www.healthystartassoc.org/hswpp5.html>.

National Center for Health Statistics, (2003), *Infant Mortality Statistics from the 2001 Period Linked Birth/Infant Death Data Set*. NVSR Volume 52, Number 2. 27 pp. (PHS) 2003-1120, <http://www.healthystartassoc.org/hswpp5.html>.

Bureau of Health Planning and Statistics, (March 2005), Nevada Vital Statistics 2001 – 2003.

National Institutes of Health, National Institute of Child Health and Development, (2005), *Care Before and During Pregnancy – Prenatal Care*.

Berg, C., Danel, I., Atrash, H., Zane, S., and Bartlett, L., (2001) *Strategies to reduce pregnancy-related deaths: from identification and review to action*, Centers for Disease Control and Prevention.

Association of Maternal & Child Health Programs, (January 2005), *Building State Partnerships to Improve Birth Outcomes*.

## **Community Resources**

The following list of resources includes clinics where women can receive pregnancy testing and prenatal care. Please note that the list is not exhaustive.

### **Pregnancy Testing Centers**

**Clark County Health District** provides a variety of public health clinics throughout Clark County. Their main offices are located at 625 Shadow Lane, Las Vegas, NV. Tel. 702-759-0708. Website: <http://www.cchd.org>.

**Women's Resource Center** provides education and counseling to pregnant women. 2915 W. Charleston Blvd., Las Vegas, NV, 89102. Tel. 702-366-1247. Website: [www.lvwomensctr.org](http://www.lvwomensctr.org).

**Huntridge Teen Clinic** provides family planning services. 2100 S. Maryland Pkwy #5, Las Vegas, NV. Tel. 702-732-8776.

**North Las Vegas Family Health Center** provides Family Medicine, Women's Health, Pediatrics, D.O.T. Physicals, Occupational Health, STD/HIV Education, Family Planning, Periodic Screenings for Kids & Adults, Well-Child Care and Immunizations, Prenatal and Newborn Care, Chronic Illness Management, Health Education. 2031 McDaniel, Suite 210 , NLV, NV 89030. Tel. 702-214-5948. Website: <http://www.nvrhc.org/northlv.htm>.

**Martin L. King Family Health Center** provides Family Medicine, Women's Health, Pediatrics, D.O.T. Physicals, Occupational Health, STD/HIV Education & Screening, Family Planning, Periodic Screenings for Kids & Adults, Well-Child Care and Immunizations, Prenatal and Newborn Care, Chronic Illness Management, Health Education. 1700 Wheeler Peak, Las Vegas, NV, 89106. Tel. 702-383-1961. Website: <http://www.nvrhc.org/lasvegas.htm>.

**Cambridge Family Health Center** provides Family Medicine, Women's Health, Pediatrics, D.O.T. Physicals, Occupational Health, STD/HIV Education & Screening, Family Planning, Periodic Screenings for Kids & Adults, Well-Child Care and Immunizations, Prenatal and Newborn Care, Chronic Illness Management, Health Education. 3900 Cambridge Ave. #102, Las Vegas, NV 89109. Tel. 702-307-5415. Website: <http://www.nvrhc.org/cambridge.htm>.

### **Prenatal Health Services**

**Baby Steps ( University Medical Center )** is a comprehensive program that provides health care for moms and their babies. Obstetricians, pediatricians, family practice doctors and certified nurse midwives are available to work with clients so both mother and baby get the care needed. 1120 Shadow Lane, Las Vegas, NV. Tel. 702-383-2229. Website: [http://www.umc-cares.org/med\\_serv/familyresource/babysteps.asp](http://www.umc-cares.org/med_serv/familyresource/babysteps.asp).

**North Vista Hospital Pregnancy Center** provides full obstetrical and infant care. 1409 E. Lake Mead Blvd, NLV, NV. Tel. 702-657-5510. Website: [www.northvistahospital.com](http://www.northvistahospital.com).

**Sunrise Pregnancy Center** provides referrals to physicians and full obstetrical and infant care. 3101 S. Maryland Pkwy #315, Las Vegas, NV. Tel. 702-735-2229. Website: [www.sunrisehospital.com](http://www.sunrisehospital.com).

**Saint Rose Dominican Hospital** provides referrals to physicians and full obstetrical and infant care. 102 E. Lake Mead Dr., Henderson, NV. Tel. 702-616-4508. Website: [www.strosehospitals.org](http://www.strosehospitals.org).

**Babies are Beautiful** is a program providing help to pregnant women who do not have health care coverage. Prenatal care, childbirth classes, referrals to community agencies and other services are provided. 700 Shadow Lane #455A, Las Vegas, NV. Tel. 702-671-8501. Website: <http://www.valleyhospital.net/p711.html>.

**University Women's Center** provides prenatal care services. 2231 W. Charleston Blvd., Las Vegas, NV. Tel. 702-383-2403.

**Washoe Pregnancy Center** provides obstetrical care to low-income pregnant women. 975 Ryland, Suite 105, Reno, NV. Tel. 775-982-5640.

**Saint Mary's Nell J. Redfield Center** provides obstetrical care to low-income pregnant women. 3915 Neil Road, Reno. Tel. 775-623-5222.

**HumboldtGeneralHospital**, provides discounted services to low-income women. 118 E. Haskell St., Winnemucca, NV. Tel. 775-623-5222. Website: <http://www.hghospital.ws>.

***This report has been written by Cynthia C. Huth, with contributions from Phil Nowak and Charles Duarte. Cynthia Huth is the Women's and Perinatal Nurse Consultant, Nevada State Health Division, Bureau of Family Health Services, 3427 Goni Road, Suite 108, Carson City, NV 89706, Tel. 775-684-4250, Email: [chuth@nvhd.state.nv.us](mailto:chuth@nvhd.state.nv.us). Phil Nowak is Chief of Business Lines, Division of Health Care Financing and Policy. Tel. 775-684-3691, Email: [pnowak@dhcfc.state.nv.us](mailto:pnowak@dhcfc.state.nv.us); and Charles Duarte, Chief, Health Care Financing and Policy,***

***Nevada Department of Health and Human Services, 1100 East William Street, Suite 10, Carson City, NV 89701. Tel. 775-684-3676, Email:[cduarte@nvhd.state.nv.us](mailto:cduarte@nvhd.state.nv.us).***

## **Supplementary Materials**

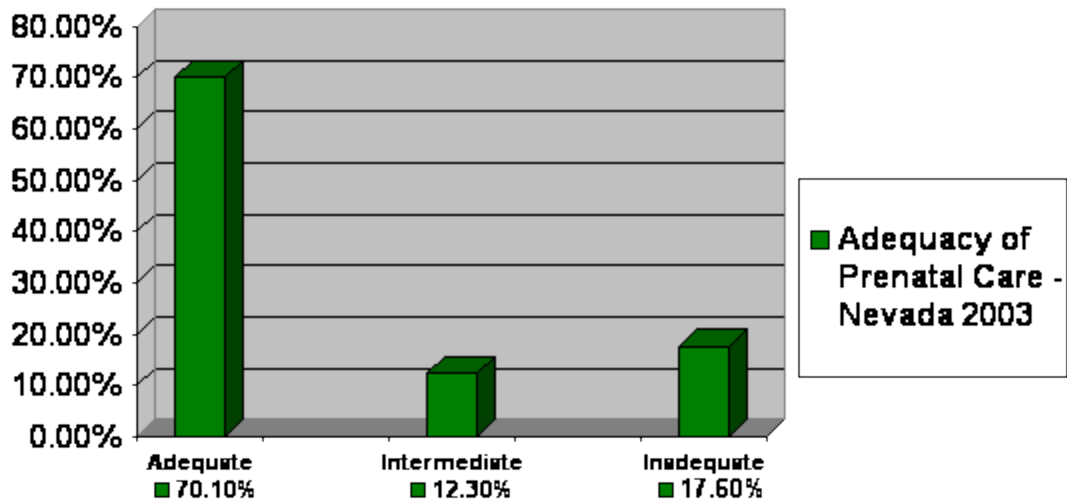
**Table 1**

<b>Recommended Frequency of Prenatal Care Visits (Modified Kessner Criteria)*</b>	
<b>Cumulative Gestation (Weeks)</b>	<b>Total Number of Visits</b>
<b>17</b>	<b>2</b>
<b>18-21</b>	<b>3</b>
<b>22-25</b>	<b>4</b>
<b>26-29</b>	<b>5</b>
<b>30-31</b>	<b>6</b>
<b>32-33</b>	<b>7</b>
<b>34-35</b>	<b>8</b>
<b>36 or more</b>	<b>9</b>

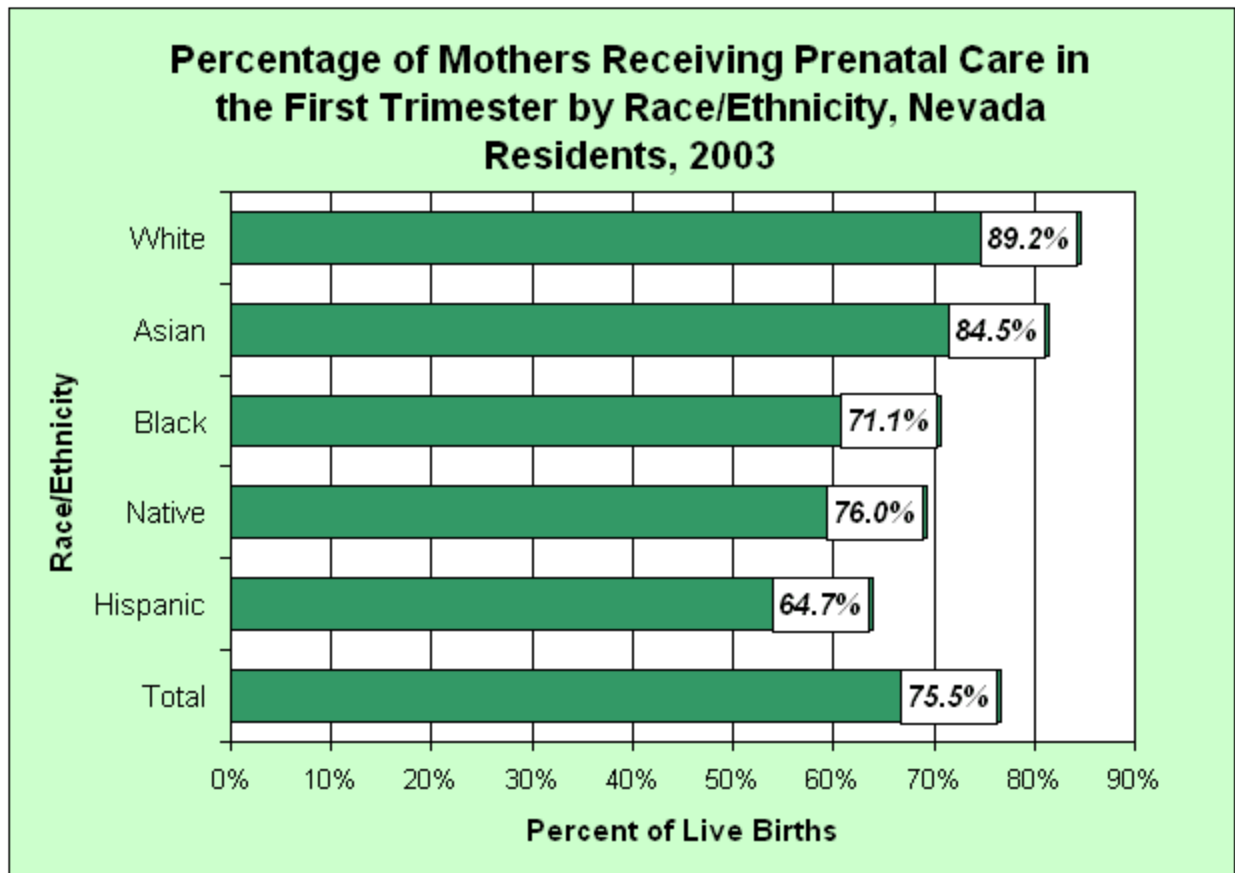
\*Adequacy of prenatal care is not adjusted for age or race.

## **Figure 1**

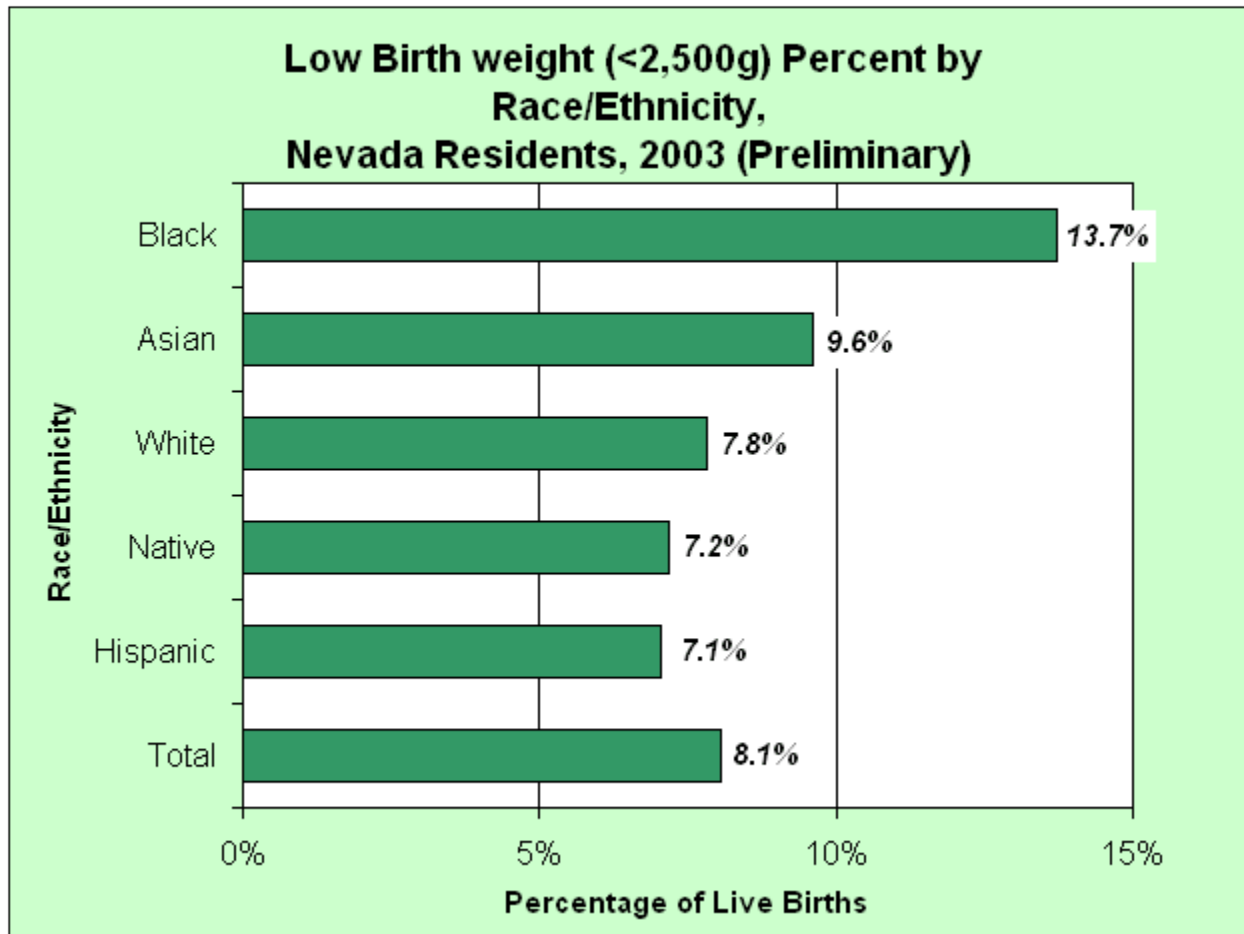
### **Adequacy of Prenatal Care – Nevada 2003**



**Figure 2**



**Figure 3**



**Table 2**

**Infant Mortality by Race/Ethnicity, Nevada Residents, 2003**

	White	Black	Native	Asian	Hispanic	Other/ Unkown	Total
<b>Neonatal Rate (1/1,000)</b>	3.69	6.88	*	2.08	2.52	-	3.42
<b>Post- Neonatal Rate (1/1,000)</b>	2.16	5.07	*	*	1.87	-	2.20

<b>Infant Rate (1/1,000)</b>	<b>5.86</b>	<b>11.95</b>	<b>*</b>	<b>3.32</b>	<b>4.38</b>	<b>-</b>	<b>5.62</b>
--------------------------------------	-------------	--------------	----------	-------------	-------------	----------	-------------

Rate not calculated for race/ethnicities with fewer than 5 infant deaths.

**Table 3**

**2005 Projected Infant Mortality Rate** Source: U.S. Census Bureau, International - <http://www.census.gov/ipc/www/idbprint.html>

<b>Country</b>	<b>Rate</b>	<b>Country</b>	<b>Rate</b>
Afghanistan	163.07	Hungary	8.57
Albania	21.52	India	56.29
Algeria	31.00	Indonesia	35.60
American Samoa	9.27	Ireland	5.39
Andorra	4.05	Israel	7.03
Angola	187.49	Italy	5.94
Argentina	15.18	Japan	3.26
Australia	4.69	Kenya	61.47
Austria	4.66	Madagascar	76.83
Bangladesh	62.60	Malawi	96.14
Belgium	4.68	Mexico	20.91
Belize	25.40	Mozambique	130.79
Benin	81.29	Namibia	48.98
Bolivia	53.11	Netherlands	5.04
Botswana	54.58	New Zealand	5.85
Brazil	29.61	Niger	119.69
Cambodia	70.89	Nigeria	98.80
Canada	4.75	Norway	3.70
Chad	93.13	Pakistan	72.44
Chile	8.80	Portugal	5.05
China	24.18	Russia	15.39
Colombia	20.97	Rwanda	91.23
Costa Rica	9.95	Singapore	2.29
Cuba	6.33	Somalia	116.70
Denmark	4.56	South Africa	61.81
Ecuador	23.66	Spain	4.42
Egypt	32.59	Sweden	2.77
El Salvador	25.10	Turkey	41.04
Ethiopia	95.32	Uganda	67.83
Finland	3.57	United Kingdom	5.16
France	4.26	United States	6.50
Germany	4.16	Venezuela	22.20
Guatemala	32.00	Zambia	88.29

---

\*This report stems from the Justice & Democracy forum on the Leading Social Indicators in Nevada that took place on November 5, 2004, at the William S. Boyd School of Law. The report, the first of its kind for the Silver State, has been a collaborative effort of the University of Nevada faculty, Clark County professionals, and state of Nevada officials. The Social Health of Nevada report was made possible in part by a Planning Initiative Award that the Center for Democratic Culture received from the UNLV President's office for its project "Civic Culture Initiative for the City of Las Vegas." Individual chapters are brought on line as they become available. For further inquiries, please contact authors responsible for individual reports or email CDC Director, Dr. Dmitri Shalin [shalin@unlv.nevada.edu](mailto:shalin@unlv.nevada.edu).