

# 2. Maternal & Child Health

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Maternal and child health indicators describe the health and well-being of mothers, infants, children, and families. We focus attention on this specific group because their health and well-being affects not only the present generation, but also the health and well-being of future generations. A mother's health and well-being before, during, and after pregnancy has direct and sometimes lifelong effects on the health of her child. Promoting healthy practices before, during, and after pregnancy is critical to ensuring that children will have the chance to begin life with good health.

The U.S. has shown improvement on several maternal and child health indicators over the last 20 years. However, we continue to see disparities by race and ethnicity, with some of the greatest burden in American Indian and Alaska Native populations. It is a nation-wide priority to eradicate these disparities and improve the health and well-being of AI/AN women, children, and communities.

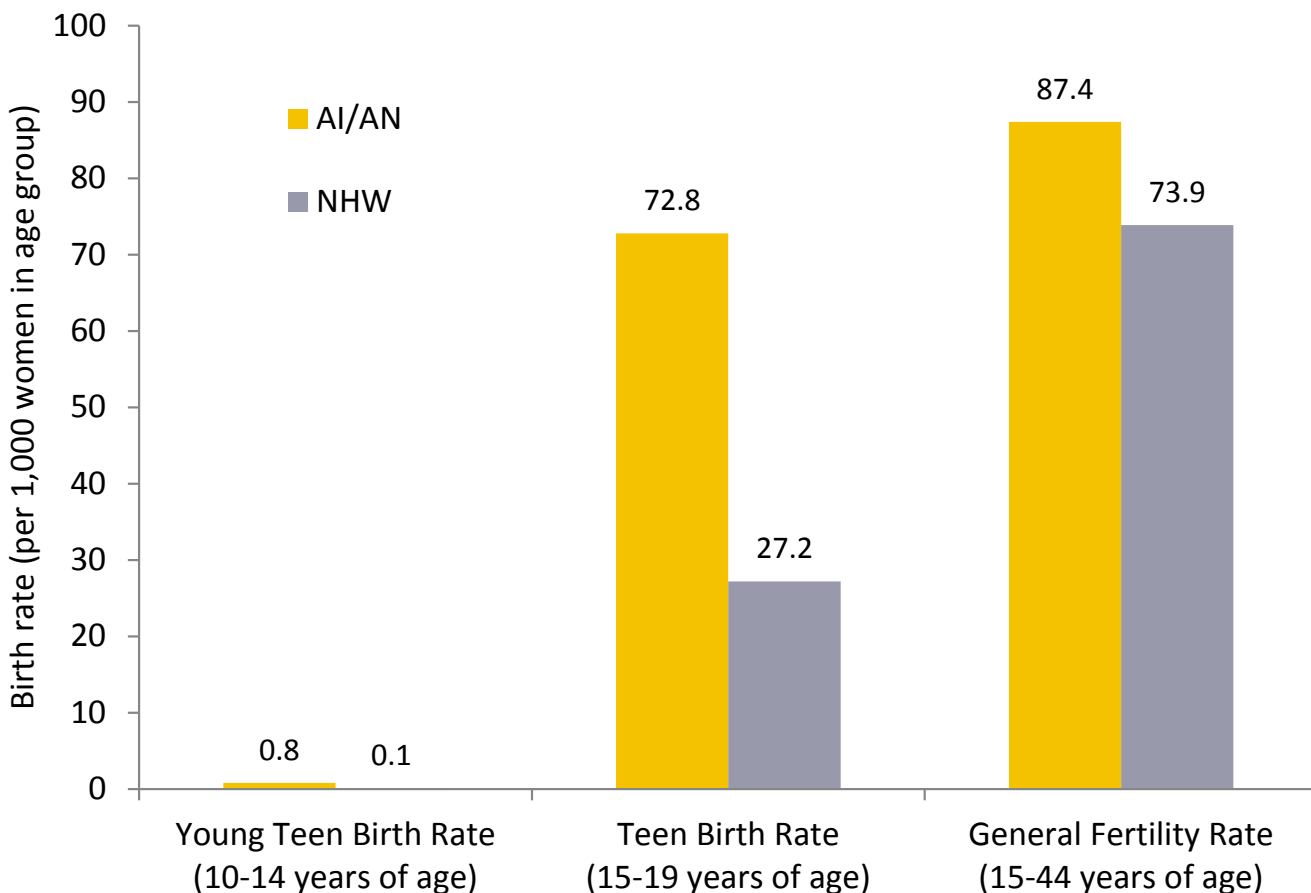
For AI/AN in Idaho, birth rates were higher than for the general population. AI/AN teen birth rates were over two and a half times higher than NHW teen birth rates. AI/AN mothers experienced risk factors that could lead to poor outcomes for their babies - one in five smoked during pregnancy, one third were obese pre-pregnancy, and one quarter received inadequate prenatal care. In spite of these risk factors, birth outcomes were generally good. Less than 10% of AI/AN babies were born premature, and 84% were born at a healthy birth weight.

# Birth Rates

Figure 2.1 shows birth rates per 1,000 population for Idaho AI/AN and NHW. Young Teen Birth Rate is defined as the number of births to females ages 10-14 per 1,000 females ages 10-14 per year, Teen Birth Rate as the number of births to females ages 15-19 per 1,000 females ages 15-19 per year, and General Fertility Rate as the number of live births to females 15-44 per 1,000 females ages 15-44 per year.

From 2006-2012, AI/AN women in Idaho had a higher General Fertility Rate than NHW (87.4 versus 73.9 per 1,000), as well as a significantly higher Teen Birth Rate than NHW in Idaho (72.8 versus 27.2 births per 1,000).

**Figure 2.1: Birth rates by age group and race, Idaho, 2006-2012.**



# Maternal Risk Factors

Table 2.1 shows selected maternal risk factors during pregnancy for AI/AN and NHW mothers in Idaho. AI/AN women have higher risks for some factors, which could affect their babies' health and the outcomes of their pregnancies. These factors include the following:

- About 1 in 5 AI/AN women reported smoking during their pregnancy. This was 55% higher than the smoking rate among NHW pregnant women.
- Over 30% of AI/AN mothers were obese pre-pregnancy, compared to 20% of NHW women.
- Complications during pregnancy were more common among AI/AN women than NHW women: 5% developed gestational diabetes and 8% developed hypertension during pregnancy.
- One in four (25%) AI/AN women received inadequate prenatal care, compared to only 12% of NHW women.

*Data Source: Data from the birth certificates in the Idaho birth registry from 2006-2012 were used to provide the following statistics. Race was corrected for misclassification through linkage with the Northwest Tribal Registry.*

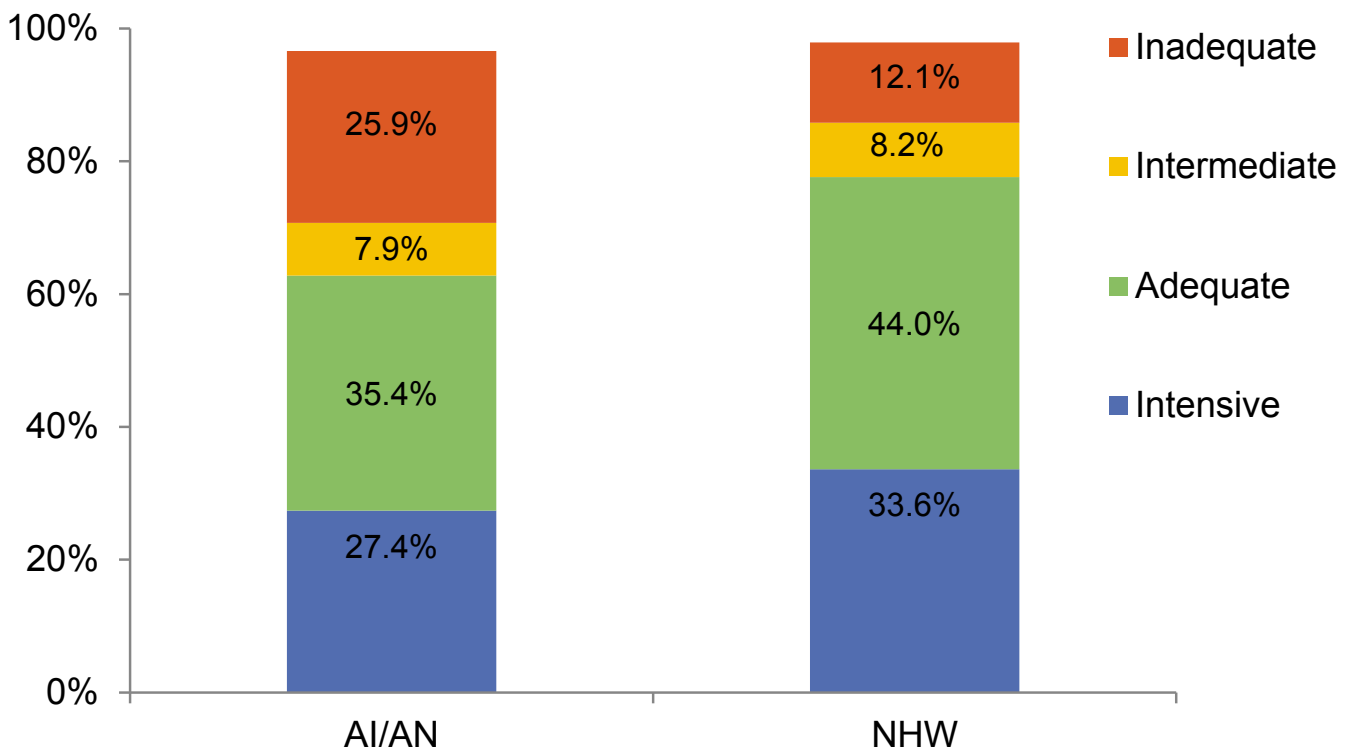
**Table 2.1: Maternal risk factors by race, Idaho, 2006-2012.**

	AI/AN (%)	NHW (%)
<b>Smoked during pregnancy</b>	19.4%	12.5%
<b>Pre-pregnancy BMI</b>		
Underweight (<18.5)	3.2%	3.9%
Normal (18.5-24.9)	36.1%	52.3%
Overweight (25.0-29.9)	27.7%	23.4%
Obese (30.0 and above)	32.4%	19.7%
<b>Diabetes</b>		
Pre-pregnancy	1.3%	0.6%
Gestational	5.0%	3.6%
<b>Hypertension</b>		
Pre-pregnancy	1.0%	1.0%
Gestational	7.6%	6.7%
<b>Adequacy of Prenatal Care</b>		
Inadequate	25.9%	12.1%
Intermediate	7.9%	8.2%
Adequate	35.4%	44.0%
Intensive	27.4%	33.6%

# Prenatal Care Initiation

Prenatal care is care women receive during pregnancy and can help health care providers detect health issues early on for mother and/or baby. Inadequate prenatal care means a woman received 50% or fewer of the expected prenatal care visits for her type of pregnancy. One in four (25%) AI/AN women had inadequate prenatal care during pregnancy, compared to 12% of NHW women.

**Figure 2.2: Adequacy of prenatal care by race, Idaho, 2010-2012.**



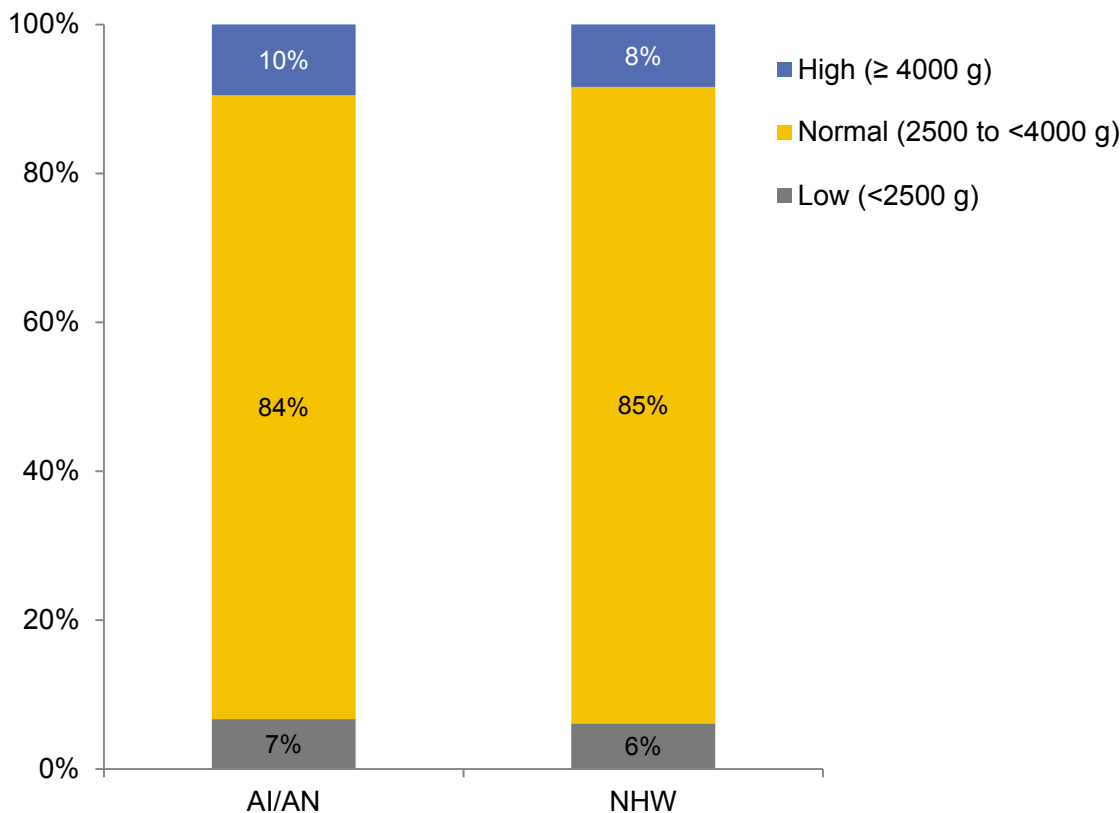
# Birth Weight and Prematurity

Babies who have very low or very high weight at birth can be at higher risk of death and other complications as they grow up<sup>1</sup>. Low birth weight is also often indicative of broader public health concerns among the mothers, including poor nutrition, substance abuse, and inadequate access to health care.

Figure 2.3 shows that the majority of AI/AN babies born in Idaho are in a healthy birth weight range. Only seven percent were born with low birth weight, and only ten percent with higher than normal birth weight. This is very similar to the distribution seen among NHW babies in the state.

1. Maureen Hack, Nancy K. Klein, and H. Gerry Taylor, "Long-Term Developmental Outcomes of Low Birth Weight Infants," *The Future of Children* 5, no. 1 (1995), 176–96.

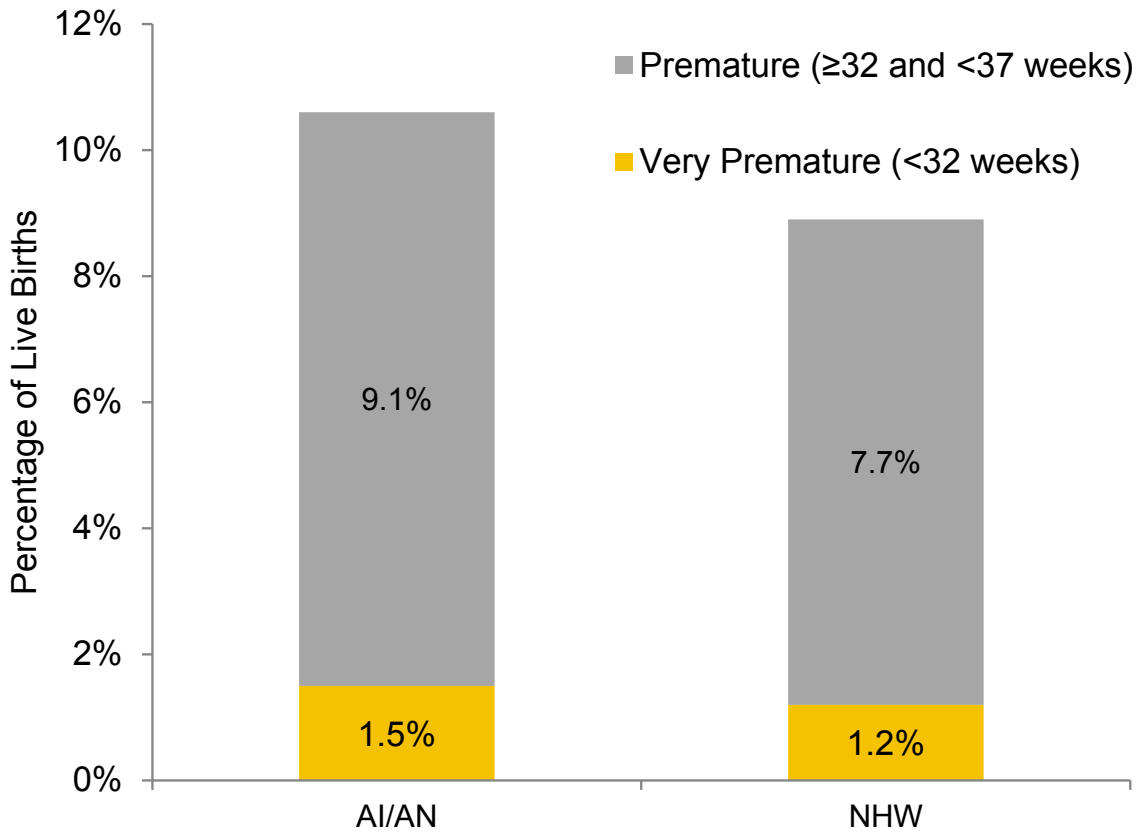
**Figure 2.3: Birth weight by race, Idaho, 2006-2012**





From 2006-2012, 8.9% of AI/AN babies were born premature (before 37 weeks gestation) (Figure 2.4). Most of these premature births were moderately premature (from 32 to less than 37 weeks), while 1.2% were very premature (less than 32 weeks). For NHW, 9.1% of babies were moderately premature and 1.5% were very premature.

**Figure 2.4: Premature births by race, Idaho, 2006-2012.**





## Program Spotlight: Native CARS

NPAIHB's Native CARS (Native Children Always Ride Safe) is working with tribal communities to design, implement and test the effectiveness of tribal interventions to improve the use of child safety seats among AI/AN children.

Working in partnership with the six Northwest tribes, Native CARS sought to identify the barriers to and facilitators of proper and consistent use of child restraints. The study partnership used this information to design and implement

community-level interventions. The interventions resulted in significant reductions in the percentage of children riding completely unrestrained in motor vehicles from 29% in 2009 to 14% in 2013 and increased proper restraint from 49% in 2009 to 60% in 2013. NATIVE CARS is currently working to disseminate its evidence-based protocols and intervention materials through the **Native CARS Atlas**, which can be used by other tribes in the Northwest and nationwide.

For more information, please contact:

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## Program Spotlight: Northwest Tribal Fetal Alcohol Spectrum Disorder (FASD) Project

The consumption of alcohol during pregnancy is one of the leading preventable causes of birth defects and childhood disabilities in the United States. The Northwest Tribal FASD Project seeks to reduce the incidence of FASD and to assist tribal communities to improve the quality of life of those living with FASD. by providing prevention education about the effects of fetal exposure to alcohol. The project also provides training for community members in diagnosing FASD, and works with communities to

develop services that support and protect community members already affected by FASD. The Northwest FASD Project has worked with Northwest Tribes to develop tribal coalitions to address FASD within their communities. These coalitions have identified long-term goals and strategies, and receive trainings on counseling for expecting mothers, educational strategies for children, and chemical dependency for adolescents and adults who may have had fetal alcohol exposure. For more information, please contact:



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[http://www.npaihb.org/programs/the\\_northwest\\_tribal\\_fetal\\_alcohol\\_spectrum\\_disorders\\_project](http://www.npaihb.org/programs/the_northwest_tribal_fetal_alcohol_spectrum_disorders_project)