

WWAMI RURAL HEALTH RESEARCH CENTER

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Project Summary June 1999

Perinatal and Infant Health Among Rural and Urban American Indians/Alaska Natives

Background: A complete national picture of rural and urban American Indian/Alaska Native (AI/AN) maternal and infant health is unavailable, since the Indian Health Service tracks health indicators only in those geographic areas where it has service obligations. The purpose of this study was to examine and compare maternal risk factors, prenatal care use, and birth outcomes of rural and urban AI/AN populations using a national linked birth-death database.

Methods: We examined all singleton AI/AN births between January 1, 1989, through December 31, 1991, to women residents of the U.S. Comparisons were made to the 1990 singleton white, African-American, and overall non-AI/AN populations. We looked at the percentage of women who received an inadequate pattern of prenatal care; the percentage of low-birthweight births (< 2500 grams); neonatal, postneonatal, and overall infant mortality rates; and cause of death.

Results: Rural mothers of AI/AN infants were significantly more likely to have received an inadequate pattern of prenatal care than urban mothers of AI/AN infants (18.1% versus 14.4%). Both groups had over twice the rate of receipt of an inadequate pattern of prenatal care compared to whites (6.8%). The low-birthweight and neonatal death rates were significantly higher for urban compared to rural AI/AN births. AI/AN postneonatal death rates (rural 6.7/1000, urban 5.4/1000) were over twice that of whites (2.6/1000). Deaths from SIDS, infectious diseases, and unintentional injuries were most consistently higher in AI/ANs compared to the rest of the U.S. population. There was a great deal of variation in all outcome measures between the Indian Health Service's administrative Areas.

Conclusions: There are high rates of receipt of an inadequate pattern of prenatal care and infant death, especially postneonatal death, among American Indians/Alaska Natives nationally. Many of these postneonatal deaths are from preventable causes, suggesting that there are untapped opportunities for improvement through better access to health services and health education and prevention programs.

Products: Findings from this study are described in WWAMI RHRC Working Paper #54: Baldwin L-M, Grossman DC, Casey S, Hollow W, Sugarman JR, Freeman WL, Hart LG, June 1999.

	AMERICAN INDIANS/ALASKA NATIVES		WHITES	AFRICAN AMERICANS
	RURAL	URBAN		
Prenatal care use:				
% who received an inadequate pattern of prenatal care	18.1	14.4	6.8	16.4
Low birthweight:				
% low birthweight (< 2,500 grams)	5.2	5.7	4.7	12.0
Mortality (rate/1,000):				
Neonatal (0-28 days)	5.0	5.5	4.0	9.8
Postneonatal (29 days-1 year)	6.7	5.4	2.6	5.8
Infant death (first year total)	11.7	11.0	6.7	15.6
Number of births	75,752	72,730	9,469,966	1,983,611

