



Copies of any bulletin may be ordered by calling the Section of Epidemiology at (907) 269-8000  
or by writing to us at PO Box 240249, Anchorage, Alaska 99524-0249

**Bulletin Number 7**  
**March 30, 1984**

## **INFANT MORTALITY IN ALASKA, 1970-1980**

During the summer of 1983, Melissa M. Adams, R.N., MPH, Birth Defects Branch, Chronic Diseases Division, Center for Environmental Health, Centers for Disease Control, Atlanta, Georgia, at the request of the Epidemiology Office, conducted a study of infant mortality in Alaska, 1970-1980, based on an analysis of linked birth and death data. We present here, a summary of her important findings.

Alaska's crude infant mortality rates during the 1970s were comparable with rates for the United States. The crude rates concealed important differences between whites and natives. During the 1970s, infant mortality rates for natives were more than double the rates for whites. By 1979-1980, infant mortality for natives was 2.5 times greater than for whites (22.3 versus 8.5 per 1,000 live births).

Among both whites and natives, infants born to urban residents had better survival than infants born to rural residents. The urban-rural difference in mortality rates was most prominent for natives.

During the 1970s, there were small decreases in the percentages of infants with low birth weights for both whites and natives. In the late 1970s, less than 5% of white newborns and less than 7% of native newborns weighed <2500 grams. These percentages were comparable to those observed for white newborns in Georgia in 1980. For whites during the 1970s, the mortality rate decreased for the 3 birth weight groups of <1500 grams, 1500-2499 grams, and 2500-5500 grams. For natives during the 1970s, only the birth weight group of 1500-2499 grams sustained a decrease in the mortality rate. The difference in the birth weight-specific mortality trends between whites and natives increased the gap in mortality rates between the 2 groups. In 1971, the crude infant mortality rate for natives was 93% higher than the rate for whites; by 1979, the rate for natives was 153% higher than for whites.

During 1979-1980, 41% of white infant deaths and 54% of native infant deaths occurred after the first month of life. The excess percentage among natives reflected a post-neonatal mortality rate that was 3.5 times higher than the rate for whites.

As a result of the findings from this study, the following steps were recommended:

- 1) As a high priority, efforts should be directed to reduce post-neonatal mortality, particularly among natives.
- 2) An interdisciplinary committee should be established to be responsible for reducing fetal and infant mortality and improving infant health. Initial activities should include:

- a. conduct an infant mortality audit,
  - b. develop profiles of infants with a high risk of mortality,
  - c. evaluate regionalized care,
  - d. sponsor, conduct, and oversee specific etiologic studies.
- 3) Increased efforts should be directed to continue development and analysis of a fetal and infant data base:
- a. include more information in the vital records data base
  - b. audit for completeness of ascertainment of vital events
  - c. audit the accuracy of vital records information
  - d. modify computer tapes to assume consistency of codes from year-to-year.

(We would like to acknowledge the cooperation and support of Perry Shipman, Research Analyst; Joan Brooks, State Registrar; Joan Pelto, Nutritionist; and the staffs of the Division of Public Health and Bureau of Vital Records. We also wish to thank Melissa Adams for this important contribution to the people of Alaska.)