

**YOUR COUNTY County Health Department
YOUR COUNTY HEALTH DEPARTMENT'S ADDRESS
YOUR COUNTY HEALTH DEPARTMENT'S PHONE NUMBER**

M E M O R A N D U M

To: Infant Mortality Task Force
From: Dr. Shea McCormick, Director
Date: **PLACE APPROPRIATE DATE HERE**
Re: First Steps

Enclosed you will find excerpts from the publication, North Carolina Leading Causes of Death, Expanded Edition Including 1979-1998 Mortality Trends, Vital Statistics Volume 2, 1998. This booklet is published annually by the North Carolina State Center for Health Statistics. As you can see, from the enclosed data, North Carolina's statistics on infant mortality are above the national rate. Of greatest concern, however, are the increasing rates of infant mortality among minority populations. The Governor has asked that all 100 county health departments in North Carolina band together in an Infant Mortality Task Force to investigate the association between race and infant mortality. As member of this county's Task Force, your duties will entail:

- 1) Investigating how the following risk factors contribute to infant mortality:
 - a) socioeconomic indicators (poverty, low education, young maternal age, unintended pregnancy),
 - b) maternal medical conditions (infection, hypertension, diabetes),
 - c) obstretical complications (vaginal bleeding, poor weight gain, multiple gestation),
 - d) previous pregnancy history (prior fetal or infant death)
- 2) Exploring the use of folic acid prophylaxis before pregnancy and in early pregnancy for minority women (a treatment which has been recommended by some medical experts and which may reduce the infant mortality rate)

Please be prepared to make an oral report to the Board of Directors of the Health Department on **PLACE APPROPRIATE DATE HERE**, APPROXIMATELY 2-3 CLASS PERIODS LATER.

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Excerpts from North Carolina Leading Causes of Death, Expanded Edition Including 1979-1998 Mortality Trends, Vital Statistics Volume 2, 1998, pages 141-143.

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Infant Mortality

Introduction

Unlike other causes of death listed in this report, infant mortality (defined as death within the first year of life) includes deaths from all causes. Birth defects and complications related to preterm birth/low birth weight account for the vast majority of infant deaths in North Carolina. Although the infant mortality rate is not age-adjusted, it is often partitioned into two components: 1) neonatal mortality, which includes deaths under 28 days of age; and 2) postneonatal mortality, which includes deaths from 28 to 365 days of age.

In 1998, there were 1,037 infant deaths to North Carolina residents, accounting for 1.5 % of all resident deaths in the state. Approximately 70% (n=723) of the infant deaths were among neonates, with the remaining 30% occurring during the postneonatal period. The overall infant mortality rate in 1998 was 9.3 deaths per 1,000 live births. The provisional 1998 United States rate was 7.0.

Risk Factors

A more perplexing issue is the association between race and infant mortality. Minority populations, and African Americans in particular, often experience infant mortality rates that are more than twice that of whites. Over the past twenty years the black-white disparity in infant mortality has continued to increase and has grown to a 2.5-fold difference in 1998 (See Table One). While poverty and other socioeconomic factors clearly play an important role in the high minority infant mortality rate, the fact that the racial disparity persists even after controlling for these factors suggests that the

problem is considerably more complex than can be explained by poverty along.

Geographic Patterns

County infant mortality rates tend to be highest in the northeastern coastal plain. This pattern is due largely to the higher proportion of births to minorities in these counties, combined with the high rate of infant death among these groups as discussed above. Other issues such as limited access to prenatal care and other preventive health services may play a role in the high infant mortality rates in this predominantly rural region of the state.

Table One: Infant Mortality Rates by Race
1988-1998

Year	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
White	9.6	8.7	8.2	8.0	7.2	7.9	7.5	6.8	7.1	6.9	6.4
Minority	18.7	17.0	15.9	16.9	15.7	16.4	15.6	15.0	14.3	14.8	16.3

Curriculum Alignment: Infant Mortality Problem

Unit N: Nutrition

- MD 14.01 Analyze the function of nutrients
 - a. Analyze nutrients
 - 6. Vitamins
- MD 14.02 Analyze dietary guidelines
 - a. Recommended daily dietary allowances
 - b. Food Guide Pyramid
 - c. Nutrition labeling

Unit I Lymphatic System & Immunity

- MD 09.02 Analyze the function of the lymphatic system
 - d. Immunity (Infection of mother)

Unit G Hematology

- MD 07.02 Analyze the function of the blood
 - b. Leukocytes
 - 2. Synthesis of antibody molecules
 - 3. Inflammation process

Unit P Endocrine System

- MD 16.03 Evaluate characteristics and treatment of common endocrine disorders
 - e. Pancreatic disorders (diabetes of mother)

Unit H Circulatory System

- MD 08.04 Evaluate characteristics and treatment of common cardiac and circulatory disorders
 - b. Vascular diseases (hypertension of mother)

