Foreword

A. The State Infant Mortality Collaborative

From 2004-2006, the Centers for Disease Control and Prevention (CDC), the Association of Maternal & Child Health Programs (AMCHP), and the National March of Dimes partnered on a multiyear project that supported five multidisciplinary state teams interested and able to address their high rates of infant mortality. The State Infant Mortality Collaborative (SIMC) was established in response to the 2002 increase in the U.S. infant mortality rate as well as persistent racial and ethnic disparities in infant mortality rates. The five state teams that participated in the SIMC – Delaware, Hawaii, Louisiana, Missouri and North Carolina – were selected based on their increasing, stagnant or high infant mortality rates. The membership of each team was comprised of key stakeholders and included the Title V maternal and child health (MCH) director or designee, scientists and MCH epidemiologists or other scientific representative, policy/program decision makers, and community partners. The project focused on the practical application of MCH epidemiology to discern the underlying factors responsible for high rates of infant death and to identify opportunities for intervention.

The goal of the SIMC was to assist state public health agencies in investigating their increasing, persistent or high infant mortality rates. With many states experiencing increases for several years, this collaborative also brought national experts together to work with the teams. For two years, state teams explored possible explanations for current infant mortality trends. Additionally, state participants and national experts worked together to develop a State Infant Mortality (SIM) Toolkit to assist states in these investigations.

B. The Purpose and Objectives of the SIM Toolkit

This toolkit is the product of the lessons learned from the SIMC and the experiences and guidance of the five teams that provided the framework for the material contained within this document. The overall purpose of this toolkit is to assist with the analysis and interpretation of available perinatal-related data. It is envisioned that a standardized approach to the infant mortality assessment process presented here will help those concerned with infant mortality programs and data in their states, counties, urban areas, tribal regions, or other population-based areas to identify needs and tailor programs aimed at improving maternal, child, and infant health.

The SIM toolkit has several objectives:

- Emphasize the importance of infant mortality as a key indicator of population health
- Provide a framework to assist states, counties, tribes and/or urban areas in selecting appropriate indicators of infant mortality with corresponding data sources
- Use case examples to illustrate methodological and statistical approaches to analyzing the data and interpreting findings
- Offer a foundation to translate findings into programs and policies that can reduce infant mortality

This toolkit was developed for use by a team of staff comprising, at a minimum, an MCH or perinatal epidemiologist, an MCH program director or other MCH program staff, and an MCH policymaker or MCH staff person who understands policy developed for MCH populations. Therefore, specific sections of the toolkit are targeted for these different audiences. No one staff person should be expected to read the toolkit from cover to cover. For example, the resources section of helpful formulas may be of interest only to the epidemiologist, while the case studies may be of more interest to the program and policy staff. As such, this toolkit is meant to be a reference tool used as needed by MCH programs.

There are many instances necessitating an infant mortality assessment, including persistently high, fluctuating or increasing rates of infant death within a state, county, urban center, or among subpopulations. Assessment may even be necessary when there is a lack of change (or even improvement) for an identified population. The SIM toolkit may be more appropriate for use by states, counties, urban centers, and tribes that are focused on understanding, assessing, or exploring their infant mortality issue, rather than for agencies with thoroughly developed programs aimed at reducing infant mortality. This toolkit offers a specific strategy to better understand infant mortality and contributing factors to infant mortality rates in a step-by-step manner; so that all staff on the team may participate in the analytical process and contribute to the development of programs and policies based on the evidence generated from data findings. This toolkit is not a comprehensive description of all analytic strategies for examining infant mortality – the underlying contributors to infant mortality are as unique as the populations served by public health. The toolkit is a structured and systematic way to investigate infant mortality, based on state experiences and successes examining infant mortality trends, birth weight-specific mortality, and contributors to infant mortality. We hope this toolkit provides readers the technical information needed to help them complete a thorough, accurate, and informative infant mortality assessment.