

NATIONAL ASSOCIATION FOR PUBLIC HEALTH STATISTICS AND INFORMATION SYSTEMS

Project Plan for the Analysis of New and Modified Items on the Revised Standard Certificates

Background:

U.S. standard certificates for the collection of vital records information are periodically revised to reflect changing legal requirements and to improve the quality and usefulness of data collected for public health purposes. In January 1998, a panel of expert consultants began reviewing the standard certificates in use since 1989. In addition to making recommendations for revising the standard certificates, the panel recommended the use of standard worksheets and instructions for collecting information. Changes to the standard certificates recommended by the panel were revised by the Department of Health and Human Services (HHS), and the new standard certificates were officially approved by the Secretary of HHS in December 2003.

The 2003 U.S. standard certificate of birth and standard report of fetal death contain major changes in the medical and statistical data sections. Many new data items were added and many other data items were revised substantially. The 2003 standard death certificate contains fewer new items and modifications. However, for all 2003 standard certificates, the collection format has been changed for a number of demographic variables including race and education.

Detailed specifications have also been developed by the National Center for Health Statistics (NCHS) for jurisdictions to follow in the reporting, collecting, coding, and editing of the items on the 2003 standard certificates. Many additional data items have been added to Vital Statistics Cooperative Program (VSCP) data files for births, deaths, and fetal deaths, including items previously dropped from the 1989 data files by NCHS due to lack of funding for the jurisdictions. Major changes have also been made to the NCHS specifications for coding various data items such as race, ethnicity, residence, and place of birth. To implement the required NCHS specifications, jurisdictions must make major changes to internal processes and electronic systems. Major costs will be incurred by jurisdictions to make the changes necessary to implement the 2003 revised standard certificates and to maintain the systems necessary to create the data sets that NCHS is requesting.

Draft copies of the revised standard certificates were presented to NAPHSIS members during the 1999 joint meeting of the National Association for Public Health Statistics and Information Systems (NAPHSIS) and NCHS. At that meeting, NAPHSIS members expressed concern about the major changes in the standards and the cost to implement these changes. In response to these concerns, an additional open session was held during the meeting, at which time the NCHS Division of Vital Statistics Director assured NAPHSIS members that funds would be provided to jurisdictions to assist with

the implementation of the 2003 standard certificates. NAPHSIS members also passed Resolution 1999-2 that endorsed a panel recommendation “that a careful plan for implementation be developed so that states have adequate time and resources to permit orderly transition to the new certificates.”

Since the 1999 meeting, NCHS has not had sufficient funds to fully support the current VSCP program and has made cuts in the amount of data purchased. No funds have been available to jurisdictions to support the implementation of the new standard certificates. A number of jurisdictions have used their own resources to implement the new standard certificates and have begun sending data to NCHS in the new file format. Because of the increase in the size of the data set, particularly for births, and the expanded coding requirements for some items, the ongoing costs to jurisdictions for quality control and software maintenance have increased. To date, jurisdictions that are sending the new standard data files to NCHS have received no additional support from NCHS, and the prospect for receiving any additional funding appears far from certain at this time.

NAPHSIS recognizes the public health importance of the new data items on the 2003 revised standard certificates and the need for standards for the collection and production of vital statistics data, and has recommended that NCHS take steps to obtain adequate funding for implementation of the new standard certificates in all jurisdictions. Funds provided to jurisdictions should include both a one-time payment to help with implementation costs and an annual amount to cover the ongoing costs for the additional and expanded data items and increased quality standards for the NCHS data files created from the 2003 standard certificates. Furthermore, the NAPHSIS membership recommended that, if sufficient funds could not be found in the NCHS budget, NCHS might consider seeking funds to cover the increased costs from other government agencies that are major users of the data. NAPHSIS presented these recommendations to NCHS in the form of a resolution passed at the 2005 annual meeting (Resolution 2005-1).

Resolution 2005-1 also stated that until such a time that NCHS is able to provide the funding needed for implementation of the revised U.S. standard certificates nationwide, those jurisdictions that have already transitioned to the 2003 standard certificates should only voluntarily loan new data items on the electronic files they transmit to NCHS if NCHS agrees to the following conditions:

1. NCHS will only use the new items to assess and evaluate the quality of the data with the jurisdictions submitting the data;
2. NCHS will not release the new item information in a statistical format, on data files or in publications except to communicate back to the jurisdictions or at NAPHSIS meetings;
3. Jurisdictions loaning new item data to NCHS retain ownership of the data; and
4. NCHS will return or purge the new item data upon request of a jurisdiction.

In addition, the NAPHSIS membership passed a motion at the 2005 annual meeting stating that given the public health importance of many of the new items on the revised birth, death and fetal death certificates, NAPHSIS should assume responsibility for compiling, analyzing and disseminating the new data.

In response to passage of the resolution and the motion, the Revised Certificate Data Analysis Committee was formed to begin to compile, analyze and disseminate the new data items. The Committee is currently comprised of representatives of jurisdictions that have implemented the revised birth certificate and members of the NAPHSIS Statistics Committee. The following is the Committee's draft plan for compiling, analyzing and disseminating the new data.

Project Plan:

Phase 1.

Phase 1 of the project will focus on the analysis of data collected from the nine jurisdictions that implemented the revised birth certificate during 2003 or 2004. These jurisdictions include Pennsylvania, Washington, Florida, Idaho, Kentucky, New Hampshire, New York State, South Carolina and Tennessee. These nine jurisdictions are responsible for approximately 795,000 or 19% of births occurring annually in the United States.

In Phase 1 of the project, each jurisdiction will be asked to prepare frequency distributions for selected new and modified data items from the revised birth certificate. These variables include mother's education and race, father's education and race, mother's height, mother's weight at delivery, participation in the WIC program, cigarette smoking before and during pregnancy, principal source of payment for delivery, risk factors in the current pregnancy, infections during pregnancy, obstetric procedures, characteristics of labor and delivery, maternal morbidity, and breastfeeding. In addition, jurisdictions will be asked to provide information on the completeness of data relating to the date of the first prenatal care visit and last prenatal care visit. Tables will be prepared showing frequency distributions of data items by jurisdiction of occurrence.

The purpose of analyzing the 2004 data in this manner is three-fold. First, review of these data will provide a preview of what national data are likely to show. Second, review of these data is likely to identify problems in data completeness and data quality. Finally, review of these data will provide a starting point for a more comprehensive analysis of 2005 data in Phase 2 of this project. The goal is to complete Phase 1 of the project in time to present the findings at the 2006 NAPHSIS Annual Meeting in June.

Phase 2

Five additional jurisdictions (Kansas, Nebraska, Puerto Rico, Texas and Vermont) began to collect revised birth certificate data during 2005. Added to the nine jurisdictions that began to collect revised data in 2003 and 2004, this accounts for a total of

approximately 1.3 million birth records, or about 30% of births that occur annually in the U.S.

The goal for Phase 2 of the project is to prepare data in a format similar to the format used by NCHS to present information on new data items following the implementation of the 1989 revised birth certificate (see National Center for Health Statistics. Advance report of new data from the 1989 birth certificate. Monthly vital statistics report; vol 40 no 12, suppl. Hyattsville, Maryland: Public Health Service. 1992).

Since NAPHSIS does not have the resources to house a database at the central office, the Committee will decide whether to combine aggregate jurisdictional data, or house a database in one of the state vital statistics offices. If the latter approach selected, data sharing and data confidentiality issues must be carefully considered. Refinement of the Phase 2 project plan will begin when Phase 1 is nearing completion and the Committee has preliminary information on the completeness and quality of the new and modified data items.

Phase 3

In Phase 3 of the project, new and revised items on the death and fetal death certificates will be compiled, analyzed and disseminated.