

Civil Registration and Vital Statistics in the United States of America¹

The United States of America has a decentralized system, with responsibility for the registration of vital events vested in the 50 states, and seven separate systems in New York City, the federal District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, Northern Mariana Islands, and American Samoa.

Each jurisdiction is in charge of the operation of its own registration system, for most of the financing required, and for the system's legal framework. Information from registrations is forwarded - generally by computer data tapes - to the central government for the preparation of national vital statistics.

A description of how data sources are coordinated and reported can be seen at Notzon, NCHS, 1993. Since the 1950's, responsibility for coordinating the practices of vital records offices at the state level was vested in the National Center for Health Statistics (NCHS).

The NCHS integrates vital event data from 55 of the 57 separate registration systems to produce statistics, and compensates financially the state and other registration jurisdictions for this data. (Data are not received from the registration systems of Northern Mariana Islands and American Samoa) It also works to promote uniformity in data collection and maintain appropriate statistical standards.

Federal support for the state systems, through the NCHS, includes technical assistance, training and the preparation of manuals and guidelines. It has a training program for employees of state registration systems, holds national conferences biennially and has established study committees. The regular annual program of training courses for personnel of state vital statistics offices is supplemented by the provision of other training materials to be used at the state and local level and by other groups such as physicians.

The NCHS combines the vital event computer files of event registration of data sent in by the 55 state and other offices. Information on the resident population is provided by the Census Bureau from decennial census and from mid-year population estimates. In return, the NCHS provides the Census Bureau with detailed data on vital statistics for use in its population projections and estimates, and quality control and studies. Using the population data the NCHS calculates vital event rates for the states and the U.S.

¹ Francis Notzon (National Center for Health Statistics, NCHS) in: *Coordinating Data Sources: The United States of America*. Paper prepared for the East and South Asian Workshop on Strategies For Accelerating the Improvement of Civil Registration and Vital Statistics Systems; Beijing, China 1993 (Update Version 1997).

A great deal of work is done by the State Registrars and others, working with the NCHS, to revise standardized registration forms every ten years. These recommended standard certificates serve as models for state registration offices. Use of standardized registration forms has led to the production of reliable national vital statistics. Model forms are reviewed and endorsed by the National Association for Public Health Statistics and Information Systems (NAPHSIS), the national association of state vital registration, statistics and information systems executives. A model vital event registration act and regulations have also been prepared jointly by the State Registrars and the NCHS to serve as a model for state jurisdictions.

When registration forms are changed, the NCHS assists the states by preparing a variety of instructional material including handbooks, which are distributed to all of the states for their use and guidance. Videotapes have been produced on how to complete forms - one for birth registrations and three for death registrations - for physicians, medical examiners and for funeral directors. An audiocassette on the proper completion of the medical certificates of cause of death was prepared for physicians, who can listen to it while driving or on breaks in their medical routines.

The NCHS, in the late 1960's and early 70's, in order to meet expanding needs for greater use of medical information from death registration records, developed an automated computer system to produce mortality statistics. These statistics are based on the statistical classification structure of the International Classification of Diseases (ICD), of The World Health Organization (WHO).

The automated system for coding mortality data had two major objectives:

1. To introduce consistent and rapid assignment in their medical routines.
2. To allow better utilization of medical information on death records.

The ACME (Automated Classification of Medical Entities) system meets both of these objectives; NCHS produces all of its underlying cause of death statistics for the United States based on this system. To further automate the process, NCHS has produced two additional software systems. MICAR (Mortality Medical Indexing, Classification, and Retrieval Systems) produces the appropriate ICD code from standardized nomenclature provided by the coder for each cause of death. SUPERMICAR is a further enhancement of the system, producing ICD codes from verbatim cause of death information entered by the coder. Use of these software systems improves data consistency and quality, and greatly reduces formal and on-the-job training required for nosologists.