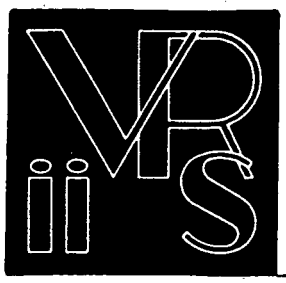

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The Organization of the Civil Registration System of the United States

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CONTENTS

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FOREWORD

The national registration system of the United States is of relatively recent origin. It had a modest beginning in 1900 when the death registration system was started with 10 States and the District of Columbia. The birth registration system began in 1915. As the States were qualified, they were added to the registration areas. In 1933, all the States were included in the birth and death registration areas. This historical development should be of interest to the developing countries concerned with gradually increasing the population coverage of their civil registration system.

As in a number of other countries with a federal political system, civil registration is the responsibility of the individual States. The absence of a central authority for civil registration gives rise to problems of maintaining uniformity of national vital statistics. The coordination of the civil registration and vital statistics systems in the United States is achieved by the National Center for Health Statistics working through an association of State registration executives. The establishment and use of a coordinating mechanism such as this is one approach to this very difficult problem.

The Organization of the Civil Registration System of the United States

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INTRODUCTION: HISTORICAL DEVELOPMENT

The vital registration and statistics system of the United States is a federated system, as opposed to a centralized system, and is composed of many subnational and independent systems; 50 State systems, including one contributing city system, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. It has had a long and irregular period of development and began, not as a rudimentary national system, but as a local system responding to local needs even before it developed the State functions. The national system was not completely operational until a few decades ago; in some ways it is not a complete system today. This unusual background makes the system unique and helps to explain its strength and weakness. The strength comes from the fact that the strong independent subsystems provide an effective internal structure which gives considerable support to the national superstructure. The weakness comes from the condition that local and State interests may override national interests, to the detriment of national statistics, as in the case of the refusal to adopt standards, to take steps necessary for admission into registration areas, and to omit items which are recommended on the U.S. Standard Certificates. Nevertheless, the national vital statistics system functions effectively because the relations between the local, State and national vital statistics offices are traditionally close and cooperative; they have matured together.

1632 to 1850

The roots of the present system reflect the colonial heritage. The first use of records followed the 17th Century English pattern of the clerical registration of christenings, marriages, and burials. In 1632, the Grand Assembly of Virginia required parish ministers or wardens to appear annually at court to give an account of these vital events, but it was not until 1639 that responsibility for registration was placed on civil officials. In that year, the General Court of Massachusetts Bay Colony ordered that all vital events be recorded by the Government to protect the rights of individuals and safeguard the community. While such records were maintained in some local areas, registration laws were not strictly enforced, and little, if any, statistical use was made of the records. As the colonies became States, their separate representative government structures went with them, and the Government of the United States, in 1789, became a federated rather than a central government. This is indicated in the laws of the land which reserved the right of the States to be self-governing in all matters not expressly conferred on the national government by the Constitution. Civil registration therefore became one of the functions left to the States.

The 18th and particularly the 19th Centuries saw the development of mortality statistics and the growth of the public health movement in response to concern with the control of disease and epidemics. By 1833, however, in only 5 cities in the U.S. were deaths and births routinely registered: Boston, New York, Philadelphia, Baltimore, and New Orleans. Under the leadership of Edwin Chadwick (1800-1890), England, in 1836, enacted a registration law creating a central register office responsible for the records and statistics of births, marriages and deaths, by cause, for England and Wales. This became a turning point for registration in Europe and America. In the United States, Lemuel Shattuck (1793-1859) was influential in having Massachusetts pass the first State registration law in 1842, which was subsequently strengthened in 1844. The American Statistical Association, in which Shattuck was prominent, sponsored the legislation. A number of cities and a few States passed similar legislation and began the collection of vital statistics. The American Medical Association in 1846-47 pressed for the improvement of vital event registration.

1850 to 1900

A start toward the collection of vital statistics on a national level began with the Census of 1850 when the practice of using census enumeration to determine births, marriages and deaths was introduced. Although the practice was continued

through the Census of 1900, the data obtained were unsatisfactory, and it was recognized that a system of continuous registration was necessary.

Another step forward was inspired by the American Public Health Association which was founded in 1872 and which, throughout its history, has supported every effort to improve vital and health statistics. As the result of its recommendations, a National Board of Health was created by Congress in 1879. The Board emphasized the need for complete and uniform vital registration. It appointed a Committee on Vital Statistics under John Shaw Billings (1838-1913) which worked toward this end and published a weekly *Bulletin* containing mortality summaries from cities with registration systems. When the Board began its work it received reports from 24 cities; 14 separate forms were used of which no two were alike. All differed in nomenclature, classification, and arrangement. Through its efforts, immediate improvements were made so that by the following year the Board received weekly mortality reports from 90 cities with better quality in reporting. In 1880, the Board took a significant step; it called a national meeting of State and local registrars to consider all problems related to registration—laws, standard forms and procedures, vital registration improvement, etc.—and to lay plans for the development of a uniform system. In connection with the 1880 Census, Billings suggested the creation of a "registration area" composed of cities and States where vital registration systems existed and where registration was more or less complete, and from which the Census could obtain death records for statistical purposes. He also provided physicians with books of standard blank certificates to be collected by Census takers. Although there were many gaps in the operation, Billings was able to produce accurate life tables for 2 States and 12 cities. For the Census of 1890, realizing that the many varieties of registration methods, laws, and procedures made for difficulty in data processing, the Census Office prepared an index of probable registration completeness from a study of States and cities. To obtain more uniform data, the Census used a death certificate form. Billings extended his analysis by developing mortality statistics by geographic area. For the first time, the Census Office used the Hollerith mechanical tabulator, making possible the rapid handling of mass data. Interest in vital statistics at the time was increased in the great discoveries in the etiology of disease and in immunology, through the findings of Robert Koch (1843-1910), Louis Pasteur (1822-95) and others, and with the public health movement moving into the area of disease control.

1900 to 1933

It was in preparation for the Census of 1900 that the impetus was given to the establishment of a truly national registration system. Intensive correspondence on the subject was conducted with all the States and cities of 5,000 or more population. The Census Office asked for, received, and correlated data, materials on laws, procedures, estimation methods, underregistration, and related subjects, and made a study of them. It recommended a standard death certificate for adoption by the registration areas by January 1, 1900. As a result, 12 States adopted the certificate in full, 6 States and the District of Columbia adopted the certificate in part, and 71 cities in other States adopted it in full or revised it. Also, the Census of 1900 included data from the registration areas which had adopted model laws and had attained 90 percent completion of registration. In 1902, the permanent, full-time Bureau of the Census was established with the authority to collect information on births as well as deaths. Marriage and divorce statistics had been gathered by special surveys for 1867 to 1886. In 1907, the Census Bureau was ordered to tabulate these data for 1886 to 1907, and subsequently was to produce statistics on marriage and divorce on an intermittent basis to 1940.

The development of an annual system of collection of area data, capable of producing national vital statistics was, after its establishment, pushed by the Census Bureau. Recognizing that an entire structuring of such a system was necessary, the Bureau sought to create a uniform system of registration, with model laws and regulations, standard forms and procedures, and common statistical methodology. Instructions for local registrars, physicians, and others were prepared; and a system of mortality classification for statistical purposes was developed. Congress, in a resolution in 1903, requested the States to cooperate with the Census Bureau in achieving a uniform national system. To help promote its plans, the Bureau obtained the aid of the American Bar Association, the American Statistical Association, the American Public Health Association, the American Medical Association, and many others. One of the first actions to be completed was the formulation of a model law. In 1900, the American Public Health Association had developed principles of a model law, and in 1907, the Bureau of the Census submitted a model bill

to the States with the recommendation that a similar bill be introduced into the State legislatures. Another action, with implications for improving communication between the States and the Federal government, was introduced in 1913; Federal mailing privileges were made available to Health Departments for the mailing of reports or certificates of vital statistics to the Bureau of the Census.

In 1915, the Birth Registration Area (BRA), modeled after the Death Registration Area (DRA), was established. The slow growth of the registration areas prompted the Census Bureau in 1924 to establish a committee to work to complete the areas by 1930. Both areas were complete by 1933.

The struggle to develop a national reporting system is well summarized in a 1938 report of the National Resources Committee:

> "The long, hard, often discouraging campaign which was fought to bring States, one by one, into the fold constitutes one of the proudest chapters in the history of the Bureau of the Census. . . . In some States, the boards of health had to be educated to the need, before the citizens of that State could approach the legislature. In others, the legislatures were apathetic, in spite of strong pressures. After the required legislation was passed, there remained the problem of bringing a State up to the minimum quota. Each State had to educate its physicians and undertakers as to their duties, as well as an army of local registrars. The Bureau aided the State registrars in preparing promotional publicity and facilitated the exchange of ideas as to the most effective ways of presenting public health data to the general public."[1]

1933 to 1946

Four events had a stimulating and sometimes drastic effect upon vital statistics in the 1930's and 1940's. The appointment of a Presidential Research Committee on Social Trends in the U.S. in 1929; the establishment in 1933 of a joint Committee on Government Statistics and Information Services (COGSIS); the enactment of social legislation by the New Deal after 1935; and the entry of the U.S. into the World War II. The first stressed the need for social statistics and improvement in vital statistics. The second, established by the Social Science Research Council and the American Statistical Association, made a number of important recommendations concerning strengthening the Division of Vital Statistics in the Census Bureau. These recommendations were put into effect and in 1935 the Division, under the new leadership of Halbert L. Dunn, was completely reorganized with an augmented staff. As the birth and death registration areas were now complete, the focus could be shifted to other activities involved with the improvement of data, the analysis of data, research, and development of a highly professionalized staff.

The records themselves became unusually important after 1935, when social welfare legislation made proof of age important to older persons and to those on social security programs. The development of industrial pension plans in the private sector also relied on the use of the birth certificate. For many citizens, birth certificates were nonexistent. Millions (an estimated 50 million in 1940) born in this country had never been registered; the records of others were irretrievably lost through local disasters or bad management. There was pressure on State and local registrars to establish a proof of age through the filing of delayed birth certificates. Unfortunately, in many states, there was no mechanism for establishing the fact of birth for older persons.

Even greater pressure was exerted on State registration offices prior to and during World War II (1941-45) because of conditions related to the registration of aliens, admission to employment in defense industries, and military requirements. Federal agencies, in dealing with the situation, found a bewildering lack of uniformity with respect to records and the administration of State and local records. The American Association of Registration Executives (AARE, founded in 1933) recommended that an emergency council of state and federal officials be established to work out wartime problems; this was accomplished in 1944. By the time the war came to an end, it was obvious that a more strenuous effort, and a systematic one, should be made to calibrate all elements into a unified whole. In a 1943 report, the Association of State and Territorial Health Officers had recommended that a cooperative vital records system of State and local registration officials on one hand, and a national office on the other, be created, to work together entirely in the area of vital registration and statistics. The objectives of the office would be to correct the

[1]National Resources Planning Board. 1938. *Research: A National Resource.* Part I, p. 210. Washington, D.C.

existing deficiencies and to work toward improving, developing, and integrating the various units of the system. Subsequently, the Bureau of the Budget recommended that such an office be established and that it be moved from the Bureau of the Census to the U.S. Public Health Service as, over the years, the responsibility for vital records had been moved from civil administrative offices to State and local Health departments. The Bureau of the Budget recommendations were adopted in 1946 and the National Office of Vital Statistics (NOVS) was established, in the Public Health Service, Federal Security Agency.

As a result of the creation of the U.S. Department of Health, Education, and Welfare, the operations came under this new agency in 1953. In 1958, the work of the National Office of Vital Statistics was strengthened through its incorporation into the newly formed National Center for Health Statistics (NCHS) under Forrest E. Linder. The new Division of Vital Statistics became one of the major components of NCHS. Under Linder's view that the NCHS is a scientific organization, there was a stress on statistical quality, an expansion of professionalism, and an increase in analytical publications in vital and health statistics. As never before, NCHS entered the field of international statistics, and developed a program for training registrars and health officials from other countries in techniques used in the United States. The role of the Public Health Conference on Records and Statistics was extended, and the Applied Statistics Training Institute was established. Under Dorothy P. Rice, the NCHS Director since 1976, the vital statistics program has taken a new turn. The Vital Statistics Improvement Project (VISTIM), a joint effort of the NCHS and the Agency for International Development, U.S. Department of State, seeks to bring the experience and expertise in vital statistics to other countries who request it. Expert consultation to the project is provided by the successor to AARE, the American Association for Vital Records and Public Health Statistics (AAVRPHS), the organization of State registration and health statistics officials.

Summary

The development of the vital registration and statistics system of the United States took over three centuries, if one looks at the early beginnings of local registration in 1639, or over one century, if one considers the first attempts to integrate registration data into a national whole. It was not until well into the 20th Century that circumstances made possible the production of birth and death statistics with all the States included. Even today, marriage and divorce statistics are incomplete, despite persistent efforts to promote standardization, reporting, and central filing.

The operation of the Federal system requires daily nurturing, the constant cooperation of hundreds of individuals all over the country, and the interchange and communication provided by committees, workshops and national conferences. The system is maintained by the close working relationship of Federal and State governments.

DISTRIBUTION OF FEDERAL-STATE RESPONSIBILITIES

Unlike the situation in many countries, where responsibility for the entire operation of a national system of civil registration and statistics rests upon a central authority, in the United States a Federated system applies in which responsibility is shared by Federal and State governments. Each has a role to play, and this role is reinforced in both Federal and State laws. As has been indicated, these roles were not fixed in the beginning; they had their roots in tradition in the older States, and their present form is the result of a continuing evolutionary process. The roles may be considered as emerging roles which change according to the needs and demands of new developments in vital and health statistics. They are also symbiotic in the sense that two dissimilar systems exist together in a mutually beneficial relationship. The national system, under U.S. Law, cannot exist without the independent State registration systems. The States benefit, although less directly, through the participation in the national system, the development of standards by the national office, the services provided by the NCHS, and so on. Also the national office provides data the subsystems by themselves cannot produce.

Activities of the States

The States' duties with respect to vital statistics are generally as follows:

1. To maintain a State vital statistics and registration system, including the organization and administration of a system of registration within the State.

2. To develop record forms necessary for the reporting of vital events, to administer their distribution and collection.

3. To collect information on births, deaths, fetal deaths, marriages, and divorces, as they occur within the State. To exchange, with other States, nonresident records and data.

4. To register vital events and maintain a permanent, central file of vital records, with an appropriate index of these files.

5. To issue certified copies of transcripts to qualified persons.

6. To process data, prepare tabulations, and publish periodic reports (weekly, monthly, annually) of vital statistics.

7. To maintain the vital statistics system in a state of efficiency, to maintain statistical standards, and to organize the training of staff.

8. To provide instruction manuals for registration officials, physicians, hospitals, and related personnel.

9. To forward to the Federal government copies of all vital statistics records as obtained by the State, on a procedural basis, or to provide the Federal government with data tapes related to vital statistics.

10. To provide representation at national conferences on vital statistics, to present the views of the State, and to participate in the formulation of national standards, such as the standard certificates and the Model Law.

The Role of the Federal Government

The Federal activity is related to working with the States to develop and maintain a national vital statistics system.

1. To maintain a national vital statistics system for the United States through cooperation and coordination with State vital statistics offices.

2. To receive copies of records of vital statistics from the States, and direct the flow of these documents.

3. To process data, prepare tabulations, and publish periodic reports on national vital statistics.

4. To maintain close communication with State offices, and to gather State officials together in a biennial conference for the discussion of problems of mutual interest, with the end of improving both State and national vital statistics systems.

5. To assist States in recruitment and training of personnel.

6. To develop standards for the effective collection and processing of data for a national system, such as the development of the Model Law, standard certificates, and manuals and guidelines.

7. To support State vital registration activities through provision of special services and technical assistance.

8. To supply other Federal agencies with data required for their administration and planning.

9. To provide national vital statistics to international organizations, and to represent the United States in international programs related to vital statistics.

THE SYSTEM IN THE LAW

The collection of information on vital events is a power delegated to the individual States. The Constitution of the United States of America provides that powers not specifically delegated to the Federal government nor denied to the States, are reserved to the States (Article X, Amendments). Under this authority the police powers of the several States exist, and these include licensing, registration, and similar powers. The States, therefore, are the basis of civil registration, which accounts for the fact that there are 50 separate State registration systems in operation in the country (and independent systems in New York City, Puerto Rico, the U.S. Virgin Islands, and Guam), each with its central office usually located in the capitol, with its own State Registrar or Director of Vital Statistics, with differently designed certificates of vital events, its own publication program, and so forth. The chain which binds each State and the Federal government together with respect to the registration system is the standard legal guide for the formulation of State vital statistics laws, the model vital statistics law, which is recommended by the Federal government and without which the system could not operate efficiently or effectively.

The Legal process in the State

Each State has its own vital statistics laws, which reflect the principles if not the exact wording of the model act. The legal process in the passage of vital statistics legislation is somewhat the same in each State. The State Registrar has the responsibility of developing the written law. In the case where changes must be made to adopt revisions of the Model State Vital Statistics Act—1977 Revision, for example, the State Registrar will make comparisons between the State Vital Statistics statutes currently in force and the new model law. He will prepare amendments to bring the State Law into conformity with the Model Law. In North Carolina, the State Health Agency, or Vital Statistics Division, has a legislative liaison person who provides

assistance and guidance in preparing the bill and steering it through the necessary stages to presentation before the legislature. Legal assistance in actually framing the law and expressing it in proper language is provided by the Attorney General of the State. The final draft of the bill is approved by the Director of the Agency, and an appropriate legislator is selected to introduce the bill. The matter is discussed in a legislative committee, with the Registrar present to explain the bill or answer questions. The bill then moves from the Committee to the floor of the House or Senate with recommendations.

As a further example, in Colorado the process of introducing legislation and its enactment varies but usually the State Registrar drafts a bill with the assistance of the Attorney General's staff. He obtains comments from interested individuals and groups, and requests one or more legislators to sponsor the bill in the Colorado General Assembly. The sponsor refers the proposed bill to the legislative drafting office where it will be reviewed (primarily for language and format rather than content). The legislator and his staff may rewrite the bill. It goes through the legislative process of committee hearings. Upon approval in one House of the General Assembly, it is referred to the other House, where it goes through the same process. It can fail at any step in this process. If not enacted in one session it may be reintroduced during a later session. It is not unusual to take several sessions before a bill is enacted, unless it has a high priority or public appeal.

In many States new legislation can be introduced only every two years, and alterations in the vital statistics laws may take a minimum of 2 to 4 years if nothing controversial is involved.

The Federal Laws

The Federal government enacts legislation to authorize specific Federal agencies to make arrangements for obtaining and utilizing State certificates of vital events for the purpose of publishing national vital statistics. It is restricted to this activity because, as previously indicated, the powers of registration are reserved to the States. The U.S. Congress has directly acted only occasionally to establish and describe the national vital registration and vital statistics system. An act of Congress established the Bureau of the Census in 1902 and provided for obtaining birth and death records on a routine basis from the States. The most explicit directives for the operation of the national system are contained in the legislation passed by Congress in 1974. The "Health Services Research, Health Statistics, and Medical Libraries Act" (Public Law 93-353), an amendment of the Public Health Services Act, provides that the National Center for Health Statistics will carry on a broad program in vital and health statistics. It specifies that there will be an annual collection of births, deaths, marriages, and divorces in the registration areas, and that each State or area shall be paid the Federal share of its cost. Special studies are called for in the area of life expectancy, infant and maternal mortality, and general mortality, as well as family formation, growth, and dissolution. The U.S. National Committee on Vital and Health Statistics is recognized and strengthened, and international interchange is authorized. Under this law, it has been possible to provide more technical assistance to the States, and to assist them in providing vital statistics computer tapes directly into the national system. The Center also has been able to develop a staff for the purpose of vital and health statistics analysis.

Coordination of legal responsibilities

In the matter of civil registration, the Federal government must defer to the States. The Federal government's principal activity has been to relate positively to this right of the States, and to work toward obtaining the cooperation of the States in the production of national statistics. Federal law takes this into account and is limited to indicating the area of Federal responsibility, designating the agency which has the authority to deal with the States, and specifying the kind of data to be obtained from the States.

In the area of law, States generally operate in the same way. Their vital statistics laws delineate the details of State registration operations and other matters of particular interest to each State. With respect to the forms and contents of vital records, so important for uniform national reporting, these usually adhere to Federal standards. Changes in State vital statistics laws are usually made in connection with a national drive, Federally sponsored, for compliance to changes in the Standard Certificates, and for adoption of a new Model Law and Model Regulations. In the former case, this may be every 5 or 10 years; in the latter, every 20 or so years.

Thus, throughout this century, the relationship between the States and the Federal government as regards vital registration and statistics has

been one of continuing and growing cooperation. Federal legislation regarding national statistics takes into account State functions and State legislation is tailored to the extent that national statistics may be produced from the product of the States.

DEVELOPMENT OF A NATIONAL SYSTEM

When the Civil War in the United States ended in 1865, there was a resurgence of interest in civil registration, particularly regarding deaths, combined with the growth of the public health movement. Health legislation was adopted in a number of States; this included registration and vital statistics as a regular function of the health department. There were 2 principal obstacles to the development of a national mortality reporting system: the report forms in format and content were so diverse as to be practically useless for comparison, and there was no universal mechanism for combining records from local registration offices which produced complete and accurate records.

The basis for a truly national reporting system was laid down in the schemes developed for the Census of 1880, which promoted the concept of the registration area and of uniformity in the reporting of events. In time, these concepts lead to the development of processes and procedures which are now routine and strengthen the ties between State systems and the national system.

The Registration area concept

A practical solution to the problem of developing national data from unorganized and scattered collection points presents itself in the registration area concept, first proposed by Billings in 1880. The basic concept of the registration area is that separate subnational areas, in which civil registration is complete, can be joined to create a total area for more comprehensive statistics for national purposes. The objectives are to coordinate information from many reporting systems and to work to develop and improve other subsystems until they can enter the system. Eventually, all subsystems will be incorporated. In the beginning, a registration area will contain a small proportion of the population but as the area expands the proportion will increase until the entire population is included. The area will produce reliable and accurate data for the population it represents and at the same time be a sound statistical base for other national estimates.

In the United States it took some 53 years to develop the Death Registration Area (DRA) to the point where it included all the then-existing 48 States. On the basis of the experience with the system, it took only 18 years to complete the Birth Registration Area (BRA). Certain minimum requirements were developed for admittance to the area. These included: use of a uniform or standard record form; a developed routine of reporting to a central office; maintenance of a central file of records; and passing of a test of completeness of registration (usually 90 percent), of recording of items and accuracy of information. Adjustments to the minimum conditions were made in individual cases, and certain major population areas such as cities in nonregistration area States were also admitted.

The first registration area, the DRA, was formed in 1880 of 2 States, the District of Columbia, and several large cities. By 1900, when the annual collection of mortality statistics was begun by the Census Office, 8 States had been added and 26 percent of the total population of the United States was included in the area. In 1920, the DRA consisted of 25 States and covered 81 percent of the population. It was not until 1933, that all of the States were included. Alaska and Hawaii became States in 1959. Alaska had entered the DRA in 1950 and Hawaii in 1917; however, prior to Statehood, their data had been tabulated separately. The second area, the BRA, was established in 1915 of 10 States and the District of Columbia; it also was complete in 1933. Today the birth registration system covers the 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam, each of which have independent registration systems.

The Marriage Registration Area (MRA) and the Divorce Registration Area (DIVRA) were established in 1957 and 1958, respectively. These areas are not yet complete. In 1978, the MRA consisted of 41 States plus the District of Columbia, Puerto Rico, and the Virgin Islands; and the DIVRA of 28 States and the Virgin Islands. There are many problems connected with completing these areas. Some States do not maintain central files of marriage records; others do not report on all the items of the standard certificates; and some counties do not release any information whatever. While many of the problems are similar to those experienced in the development of the birth and death registration areas, those most difficult are peculiar to the legal systems and special circumstances in each State.

Divorce records fall under the jurisdiction of local and State courts, and the judicial systems, as regards administration, are more complex than are departments of health. There are also judicial deci-

sions against the release of personal information; and there are restrictions in the laws of several States which impede the flow of records. In addition, there is difficulty in obtaining personal particulars; the parties involved are not necessarily present at the time of divorce, and are not available to provide the information. Despite these many problems, the NCHS has continued efforts to increase participation of local jurisdictions and States in the MRA and DIVRA areas. Unfortunately, a registration area, once established, is not necessarily permanent as to its components. A State may be removed from a registration area when modification of the state vital statistics laws makes it impossible for that State to comply with the basic criteria for admittance. Although this has not happened frequently, the possibility of this occurrence poses a constant threat to the system.

Standardization

One of the most serious problems in statistical systems is the lack of standards on all levels of operation. Unless record forms, for example, are uniform in content, the items they contain cannot be combined to produce data for the total population, or cross tabulations for analysis. Furthermore, considering modern electronic and machine processing of data, unless they are uniform in format, they cannot be handled efficiently or economically. In the Federated system, to achieve the necessary uniformity, a national standard certificate form for each vital event has been developed for adoption by the States. This has eliminated the confusion which characterized the early days of registration when every locality produced its own, and different, form. The same holds true with respect to laws and regulations, statistical methodology, administration of records, analysis, and publication. To promote standards in all necessary areas, an entire series of mechanisms has been developed. Through conferences, committees, training programs, consultation and technical assistance, the Federal government works with the State governments to effect the standardization so necessary to a national vital statistics system.

The Model Law

1. Background. As indicated previously, colonies had enacted legislation related to the recording of vital events early in the 17th Century (Virginia in 1632 and Massachusetts in 1639) which continued in effect after they became States. The first State Registration Law which provided for regular and routine registration was adopted by Massachusetts in 1842-44. This called for standard forms, fees, penalties, and delegated responsibility to designated officials. Six additional States adopted similar laws by 1851, and others followed. Registration laws were not strictly enforced, however, and the systems were operational only in a few localities.

There continued to be confusion as to the responsibility of various State agencies, and considerable dissimilarity in practices, reporting, and administration. The National Board of Health (1879-1883) collected and published information on State and local laws and recommended the formulation of a model law which would provide the appropriate legislative authority, and specify State organization and function, for the development of an efficient registration system. By the end of the century, it was realized by all concerned that vital statistics laws must be made uniform. The American Public Health Association, in its meeting in 1900, adopted principles of a model law for the registration of births and deaths. The new Bureau of the Census in 1902 began to formulate a model and in 1903 Congress adopted a joint resolution requesting the States to cooperate with the Census in this activity. Pennsylvania in 1905 adopted a draft of the Census model, and in 1907 a model law was sent to the States with the endorsement of a number of organizations. The principles of this and subsequent model laws have been adopted in every State.

2. The 1977 Revision. The Model State Vital Statistics Act, 1977 Revision, which replaces the 1959 version, was many years in the making, and was originally formulated by a Technical Consultant Panel of the Public Health Conference on Records and Statistics. It was then sent to all State Registrars for review, was discussed at conferences, and other meetings. When all the details had been debated, a consensus was reached on all major points of disagreement. The 1977 Revision differs from previous models in one important conceptual area: It places emphasis on a strong State centralized vital statistics system as opposed to a locally-oriented system. It places control for the entire system in the State Registrar in the State Office of Vital Statistics. This will reduce duplication of effort and make Federal-State operations more effective.

As for content, the model act begins with a list of definitions which describes items related to vital statistics as used in the act. It states that, "the office of vital statistics shall operate the only system of vital statistics through this State" (Sec. 2). It

specifies the duties of the State Registrar, and the responsibilities of all others who have an involvement with the system, such as those who furnish information or sign certificates. It provides legal sanction for the certificates of birth, death, marriage and divorce, and provides penalties for those who give false information, falsify records, or violate their confidentiality. The integrity of vital records is protected. The administration of records is included as well as the certain aspects of record flow and processing. Of primary importance for the development of the national system, aside from the implications of the model itself, is the emphasis given to the adoption of the U.S. standard certificates "in order to promote and maintain nationwide uniformity in the system of vital statistics" (Sec. 6), and the arrangement to furnish State vital records to the national office: "the Federal agency responsible for national vital statistics may be furnished such copies from the system of vital statistics as it may require for national statistics . . ." (Sec. 24(c)).

Published along with the Model Law is the Model State Vital Statistics Regulations, 1977 Revision, which provide provisions for carrying out the act.

The Standard Certificate. The problem of statistical standards was recognized in the 19th Century and efforts were made to develop standard disease and cause-of-death nomenclature, standard definitions of vital events, standard classification systems, and standard reporting forms. It was not until the last decade of that century that the Bureau of the Census prepared a standard death certificate which it requested States to adopt on January 1, 1900. Standard birth certificate forms were developed in the U.S. in 1909, Standard Record of Divorce and Annulment was created in 1954, and the U.S. Standard Record of Marriage in 1956. Revisions of the standard certificates are made periodically; the standard certificates of birth and death have been revised 9 times, fetal deaths 5 times, and marriage and divorce twice. The standard certificates now in use are the 1978 Revisions.

The production of standard certificates are the result of team work on the part of many Federal and State officials and other interested persons. Technical Consultant Panels of experts from all over the country study structure, format and content of certificates. Detailed reports are prepared for the biennial meetings of the Public Health Conference on Records and Statistics. Questionnaires, particularly regarding changes, are sent to Federal and State offices, to demographers and other social scientists, to universities, medical schools and associations, and hundreds of other consumers. When the final standard forms are sent to the States for adoption, State registrars are already aware of the contents as they have participated in the discussions leading up to their formulation. This program of study committees was followed in preparing both the 1968 and 1978 Revisions of the Standard Certificates. The titles of the 1978 Revision are as follows:

- U.S. Standard Certificate of Live Birth
- U.S. Standard Certificate of Death (Physician, Medical Examiner or Coroner)
- U.S. Standard Certificate of Death (Physician)
- U.S. Standard Certificate of Death (Medical Examiner or Coroner)
- U.S. Standard Report of Fetal Death
- U.S. Standard License and Certificate of Marriage
- U.S. Standard Certificate of Marriage, Dissolution of Marriage or Annulment
- U.S. Standard Report of Induced Termination of Pregnancy.

The standardization of State forms, and the support and direction provided in the Model Law and Regulations, are a necessary factor in the efficient operation of a Federal vital statistics system.

SUMMARY

The United States, in developing a federated rather than a centralized vital statistics system, was from the beginning faced with problems of nonconformity in all systematic elements. These problems were overcome through a process of creative and constructive growth which changed a highly diversified activity into a unified, universal system. This process included the following major factors:

—the development of standards at all stages of administration, reporting, processing, and statistical manipulation and presentation: the model law, standard certificates, statistical standards

—the implementation of the registration area concept, which made possible statistical reporting from those localities and States which produced data of high quality

—strong leadership in the States, the centralization of control in the State offices

of vital statistics, with authority for vital statistics vested in the State Registrar

—creative leadership in the Federal government which directed the progressive development of national vital statistics

—support by national organizations, which has included the American Association for Vital Records and Public Health Statistics, the American Bar Association, the American Hospital Association, the American Medical Association, the American Public Health Association, the American Statistical Association, the Association of State and Territorial Health Officers, and the Population Association of America, among others.

The national system is entirely dependent upon the vital statistics registration system of each State. In the law of the land, only the States may actually collect information on vital events and maintain civil registers of the population. The Federal authority is limited to obtaining permission from the States to use vital data for the purpose of producing national vital statistics. The continued existence of the system, and its efficiency, will require the continual cooperation of Federal and State officials.

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