

TECHNICAL REPORT #69  
on the

ORGANIZATIONAL STRUCTURE FOR  
CIVIL REGISTRATION AND VITAL STATISTICS  
SYSTEMS

by  
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# 69

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## **FOREWORD**

As countries throughout the world work to develop and/or improve their civil registration and vital statistics systems it is important that persons responsible for such programs consider the different organizational structures that have been used to achieve the goals desired. The author points out the many forms that the organizational structure has taken in different countries and the necessary inter-agency relationships that different structures require. A key distinction in this report is made between the centralized and decentralized systems. What this difference in structure means for the operations of the civil registration and vital statistics systems is carefully described.

The views expressed in this report are those of the author and do not necessarily reflect those of IIVRS.

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## PREFACE

The organization of civil registration and vital statistics systems in various countries differ according to the existing legal and administrative structures in place in the country. The establishment of a centralized or decentralized civil registration program is based on the existing infrastructure of the government agencies. The different modes of operation that exist require specific organizational structures. The civil registration and vital statistics systems developed in the different countries relate to these functions and activities.

This report has been prepared to provide general guidelines and descriptions of the organizational components of civil registration and vital statistics systems under different administrative structures. Specific attention is given to organizational structures and units that are required to implement these systems. Situations in which single or multiple agencies have responsibility for civil registration and vital statistics systems are also addressed.

Consideration is given to the organizational components and their different structures based on the direction taken in establishing and operating civil registration and vital statistics systems. The different aspects described in this report relate to **centralized** and **decentralized** government administrative systems. A centralized system is where the responsibility of the civil registration system is at the national government; the decentralized system is where responsibility for the civil registration system is at the state or provincial level. Within each of these organizational structures, single or multiple agency responsibilities for registration and vital statistics may be designated in order to have an effective system.

A number of different organizational structures are presented in this report in an attempt to cover the most common aspects of the various administrative settings, with single or multiple agency responsibilities for registration and vital statistics activities.

Relationships with other agencies and programs which utilize the registration data are included as part of the organizational arrangement for each system. These include 1) reporting sources for the data, 2) government programs in the areas of health and social services, 3) voluntary programs which address health and legal issues, 4) health research and epidemiologic investigations and, 5) vital and health statistics information. How these agencies and programs are involved depends on the organizational structure of the systems. Organizational structures are presented which may be implemented to meet these needs.

Sources of information directed at these topics and issues include the publications listed in the REFERENCE section of the report.

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# ORGANIZATIONAL STRUCTURE FOR CIVIL REGISTRATION AND VITAL STATISTICS SYSTEMS

## SECTION 1: INTRODUCTION

### I. GENERAL PRINCIPLES

A civil registration system represents the identification, collection and recording of selected vital events including live births, deaths, fetal deaths, marriages and dissolutions of marriage (divorce). The results of the system based on the information obtained from the individual reporting form of each event are then used to support a variety of functions and activities. The extent and type of utilization of the information may differ among countries with registration systems as a result of their organizational structure and operational characteristics.

Depending on the functional status of a country's system, registration data and information may be used for multiple purposes. These may include personal needs; social, health, and administrative services; policy development, planning, and evaluation; and, statistical and research applications. Countries where registration systems have not been established, the development and implementation of a system should consider these components as part of the planning process for incorporation into the system. For existing systems, changes should be considered for meeting the broad concepts that civil registration activities can provide if currently not in the system.

The utility of the civil registration system from the personal viewpoint covers a broad area. This includes personal identification, citizenship, marital status, family structure, inheritance and other related civil rights. The recorded vital event in the civil registration system provides a secure source for accessing registration information which may be required for legal, social, economic or other personal requirements. Documentation for the various vital events related to an individual or family represents a positive incentive for a population to register these events. It is essential that the population is informed and aware of the personal benefits of the registration system to obtain complete and accurate reporting.

The social benefits associated with the registration system relate both to the individual and to the population as a whole. Age of a child for school entrance is established by providing a copy of the birth record. Government support programs to individuals and families such as pension benefits, insurance coverage, inheritance, and employment generally require documentation before the services or benefits can be obtained. Civil registration records cover the essential legal information to justify and receive such services. For the population as a whole, civil registration records can be used by government and private and voluntary agencies to establish programs, pro-

vide services or support facilities to meet legal, social and health needs. These activities and programs may be directed at regional or national issues identified from the various reporting data sources.

Information from the birth records can be used to address maternal and child health issues. Death records, from which information based on causes of death, selected demographics, or geographic areas showing high mortality rates, can be used to direct appropriate resources to the population or areas affected. Marriage information can be used to assess future fertility patterns, family planning needs and related newborn and adolescent services. Data regarding dissolutions of marriage can provide information related to family and child services and economic support as a result of reduced income and other factors affecting family needs.

To address social issues for the individual and for the total population, relevant information can be derived from the civil registration system's recorded vital events. To accomplish these objectives, organization of the civil registration system and the vital statistics system derived from the registration records must be clearly established within the existing governmental administrative structures. This is essential for addressing population, social, economic and statistical issues. A program consistent with the existing organizational framework of the national government is an effective approach to accomplish the stated goals of the registration and vital statistics systems.

In principle, the primary goal of the civil registration system is to have complete, consistent and timely reporting and recording of each vital event that occurs in order to provide information to the individual and to the administrative and program needs of the governmental agencies involved in the process. For the vital statistics system, the goal is to have available complete, accurate, and reliable data. These data can then be used for purposes of 1) demographic, statistical and health research; 2) planning, development and evaluation of medical and health programs; and, 3) for preparing and dissemination of timely reports based on the detailed data collected from the recorded vital events.

A necessary component to effectively meet these goals is the organizational structure of the system. From the organizational perspective, a centralized organizational structure offers the most direct approach to meet the specified goals of each system. A single national agency with responsibility for the civil registration and vital statistics systems within a centralized system can prove very effective in meeting the stated goals, and most efficient in the management and operation of the systems. The completeness, timeliness and reliability of the reported vital events are secure when combined with a nation-

wide network of local and regional government registration offices reporting within a centralized system.

Consistent with this type of organizational arrangement is the capability to establish and maintain standards for reporting, data collection, and processing of information. Modifications and amendments to the various components of the system, whether they relate to vital records or to vital statistics, can be accommodated more effectively when the responsible programs are located in a single agency. Item definitions, record reformat, code structures for demographic and health variables, and processing techniques, are more easily developed and implemented when these system components are under a single authority.

Within a centralized structure, it is necessary to maintain close working relationships with other agencies and programs which utilize the data and information derived from the registration and vital statistics systems. Inter-agency coordination, and the possible integration of vital statistics data with other data systems including administrative record systems, specialized registers and indexes, census files, and research databases are important elements that must be considered. These elements serve to optimize both the civil registration and vital statistics processes. Completeness of reporting and data accuracy in the civil registration system can be monitored using other data and information sources. This approach serves to improve the various systems involved in the process.

Other elements such as legal requirements of the registration system, privacy and confidentiality of the individual's records, and record maintenance, storage and retrieval can best be coordinated within a single responsible agency. The complications associated with having to deal with other independent agencies to address various registration and statistical issues, system modifications, legal changes, and processing methodologies related to registration and vital statistics when the systems' components are distributed among several agencies can be very time-consuming, difficult and often times nonproductive.

The general organizational infrastructure of government administrative and program functions differ widely among countries throughout the world. For this reason it is necessary to define various organizational structures for civil registration and vital statistics. An appropriate system can be implemented where there is consistency with the organizational and administrative infrastructure of the country. The general principles for selected registration and vital statistics functions often can be incorporated into the system of most countries since they represent the fundamental aspects of the program for any organizational environment.

## II. ORGANIZATIONAL STRUCTURES

The existing administrative and legal infrastructure in different countries — centralized or decentralized systems — represent the primary orientation of registration systems that are developed. The major factors to be considered in these instances are

to identify the key elements and relationships that need to be in place to have an effective registration system. These in turn must be related to the legal infrastructure of the country. Given a specific administrative structure, the direction and orientation of the registration system should be developed consistent with that structure. In this way, the registration program can be developed without major administrative or legal changes. Making such changes can often cause significant delays and difficulties in the implementation phase.

### A. National Centralized System

In a centralized system, there are two options which may relate to the administration of a civil registration program and vital statistics system. One is where the responsibilities for both activities rests within a single organization such as the National Statistics Office, or in the Ministry of Health, Interior, or Home Affairs. The other is where the two functions are separate, with civil registration under the responsibility of one agency and the vital statistics system under another agency. Given these different administrative structures, the registration system will have varying responsibilities and functions.

#### 1. Single Agency for Civil Registration and Vital Statistics

### CENTRALIZED CIVIL REGISTRATION AND VITAL STATISTICS SYSTEMS -- NATIONAL LEVEL SINGLE AGENCY SYSTEMS

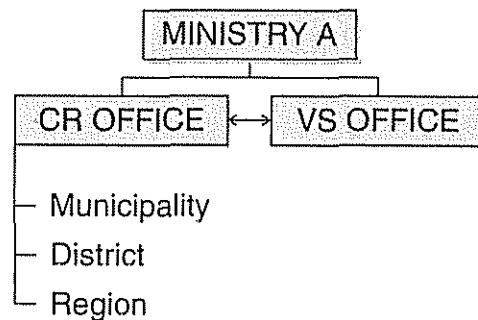


Figure 1

Figure 1 represents a civil registration system where the registration and vital statistics responsibilities are placed in a single administrative organization. This system integrates the two functions, CR and VS, which are closely linked together since vital statistics are developed from the item content of the civil registration forms - birth, death, fetal death and, where applicable, marriage and divorce events. Data collection and processing mechanisms performed for registration activities and subsequently for the preparation of vital statistics can be effectively maintained within a single organization.

The capability here is that required modifications throughout the registration system which can affect vital statistics can be conducted within the organizational unit. This eliminates the need to resolve potential inter-agency differences regarding

the program, and allows close intra-agency collaboration with appropriate registration unit activities. This can also improve timing for incorporating effective changes in both systems, and effectively maintains an interactive role for both aspects of the systems.

An intra-agency committee including the registration and vital statistics units, as well as representatives from other programs which use registration and vital statistics, can be effective in monitoring and operating each functional area. Where a single agency is responsible, registration and vital statistics activities are integrated such that daily operations are undertaken with a complete understanding as to the orientation and direction of the two systems. Activities for attaining specific goals and objectives are unified. Given a centralized system at the national level, each functional and operational requirement can be initiated, developed and implemented in a structured fashion. Single administrative control allows for the appropriate distribution of staff, the allocation and distribution of resources, and for the identification and assignment of geographic sites and designated officials to carry out the specified requirements for conducting registration activities.

The capability and capacity for operating the system in an efficient and cost-effective manner requires direct control over each component of the system. A single agency with oversight on both registration and vital statistics provides an effective organizational structure to accomplish these objectives. Forms design, item content, coding structures, processing mechanisms, legal issues, statistical measures and indicators, and related services to the public and research community are accomplished in a more timely and consistent manner under single agency authority. Other government programs with direct and indirect relationships to the input and outcomes of the civil registration and vital statistics activities are most effectively accomplished within a centralized, single administrative agency responsible for these functions.

The primary resources for operating and maintaining the system rest at the national level within this type of organizational framework. It is important to note that the agency is responsible for the operational activities conducted at the national, regional and local levels. This tends to minimize differences in registration activities since local biases cannot impact the operational aspects of a centralized national structure.

A centralized system in effect presents a systematic structure, top down, with all aspects of the program within a single organizational unit. This establishes a unified program, with all functioning units interrelating under one mode of operation to provide the necessary registration services and produce the vital statistics for national, regional, and local uses. In conjunction with this authority, the responsible agency prepares related official vital statistics information derived from the vital event records - birth, death, fetal death, marriage and dissolution of marriage. The data derived from these records are reviewed and validated, coded, and processed at the central office. This allows for standards and criteria to be imple-

mented and monitored for both registration and vital statistics needs.

Record flow from the local registration offices may be directed through district and regional sites prior to receipt at the national office. Copies of the documents completed for each vital event for legal registration purposes may be retained at each level in order to provide appropriate services to the population. The vital statistics derived from these forms are prepared at the national office and generally distributed to the various levels of government and other sources. As district and regional offices develop capacity to prepare vital statistics data locally, these units can then abstract data from the registration forms as the forms pass through their offices on to the national office. The transmission of the registration forms through the local units allows them to access the data for local use.

In the centralized system all administrative and technical direction comes from the central office. It is essential that strong lines of communication are in place in both directions - to and from the central office and local units. This assures that knowledge from both sources are utilized in effectively managing and operating the system. Committees may be established with representation from both local and national programs and organizations. These may include maternal and child health programs, family planning, and social services. In this way, the various needs and issues in these areas can be considered as part of the administration and operation of the registration program. Although a centralized system has many merits, one demerit of centralization is the inherent delays in field operations as authorization is awaited from the head office. Such delays may not only result in delayed action, but occasionally may mean no action at all with various negatively impacting consequences.

#### CENTRALIZED CIVIL REGISTRATION AND VITAL STATISTICS SYSTEMS -- NATIONAL LEVEL, MULTIPLE AGENCY SYSTEMS

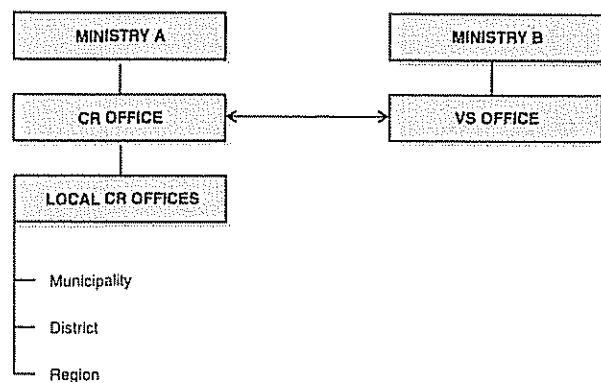


Figure 2

#### Separate Agencies for Civil Registration and Vital Statistics

Where the registration and vital statistics functions are located in separate administrative agencies, interaction and cooperation between these agencies is necessary to have effective

registration and vital statistics programs. Agencies such as the Ministry of Interior, Home Affairs or Health often have responsibility for the civil registration program. The National Statistics Office, the Ministry for Planning, or the Ministry of Finance may have responsibility for the vital statistics system. Under this situation, a somewhat different organizational and operational arrangement may be required than that for the single agency responsible for both functions.

The first issue is to create an interactive and collaborative relationship between the two agencies. Since the vital statistics function derives its data from the registration system's records, the statistical agency should establish a working relationship with the registration program. One option would be to prepare a Memorandum of Agreement (MOA) in which a committee is designated with representatives from each agency, and the relevant factors affecting registration and vital statistics are identified. These factors would include item content, the forms for legal registration, rules and regulations to be followed to provide complete and accurate data for both programs and, processing methods to assure effective registration and statistical services.

Due to the fact that the transfer of records is consistent within a single administrative agency structure, interaction with the local offices should be coordinated through the designated committee, and not conducted independently by the separate agencies. This is not an issue for the single agency model where control over both functions is integrated in the single agency. Since the data used for the preparation of vital statistics is derived from registration forms, there is need for direct contact and interaction with the local units and should originate from the registration office. This should be done following consultation with the committee, but initiated through the registration program unit responsible for field activities. The organizational arrangement for this particular activity is described in the next section as part of the registration functions.

In most instances, the vital statistics functions including data processing, preparation of tables and charts, statistical and trend analyses, reports and related research programs are conducted at the national level and the information distributed to local government units. Where feasible, vital statistics for local areas are prepared at the central office as well, and provided to local agencies for local health programs, planning and population-related activities. Here, direct contact and communication is conducted through the vital statistics agency separate from the registration function.

One advantage of separate agency responsibilities for registration and vital statistics functions is the fact that the problems identified in each component are in effect reduced by fifty percent. Registration problems are the concern of the responsible registration agency, and vital statistics problems are the concern of the statistical agency. Additionally, an interactive role between the two agencies related to their respective programs can result in managing each system in an effective and efficient manner.

Potential problems associated with separate agency structures include reaching agreement on specific issues. These may relate to differences in the data collection process, forms design and item content. In addition, definitions and procedures for assessing completeness, validity and accuracy of the information may have different priorities. In this context, the major distinction within a centralized system between a single administrative agency and a multiple agency structure with related responsibilities, is the need for some type of formal agreement. This is needed to define responsibilities and to interrelate, interact and integrate the related registration and statistical components. The infrastructure to obtain each unit's required information through the reported events reflects on this organizational arrangement.

### Decentralized System

Several organizational options exist for civil registration and vital statistics programs within a decentralized administrative structure. This may include a structure where the national government has oversight as to the legal requirements for registration activities and for the preparation and distribution of national vital statistics information. Sub-national administrative units such as State or Provincial governments have the primary responsibilities for data collection, operation and maintenance of the systems. Another configuration is where the state or provincial government has total responsibility for civil registration and vital statistics, independent of the national government. In this type of organizational structure, arrangements are made by the individual states or provinces with the national government to provide appropriate data and information.

### DECENTRALIZED CIVIL REGISTRATION AND VITAL STATISTICS SYSTEMS -- SINGLE AGENCY AT THE STATE OR PROVINCE LEVEL

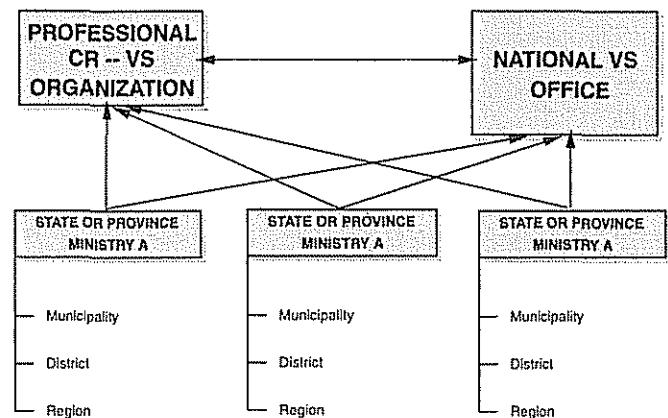


Figure 3

In either case, it is essential that there be relationships established both with the national government organization and among the various states or provinces. The need at the state or

provincial level for consistency, particularly in the legal aspects of civil registration with national programs, is an essential area to be addressed at the local levels. Areas such as immigration and naturalization, passport requirements, and health and social benefits that may be provided by the national government may have specifications with which civil registration programs must be consistent.

### *1. Sub-national Single-Level Administration*

In the decentralized structure where the national government has general oversight and specified legal requirements, and the conduct of operations and maintenance activities for civil registration and vital statistics rests with the state or provincial government, the registration of vital events is directed and administered by the state/province office. Subsidiary units are established at various locations and within various agencies across the geographic area of the state/province. Generally, however, all of the legal registration functions and record processing activities are conducted at the state/province level. A head civil registration office within each directs and administers the system.

When the data from each state in the country are aggregated, the results represent national information for both vital statistics and civil registration purposes. The major difference is that the registration and vital statistics functions are the responsibility of the state/province, with some requirements to be met in a legal sense for the national program. This latter issue reflects on the operational and maintenance activities conducted by the other states or provinces that exist in the country within this type of structure. Each represents a single, sub-national administrative program for registration and vital statistics, linked with the national program as outlined above.

Within this type of decentralized structure, the national office should initiate a program such as a national/state committee or, affiliation with a national professional association related to registration and vital statistics activities to coordinate the various state or province government programs. This would serve to assure standards are met and consistency in data and information designed for national vital statistics and civil registration use is maintained. The committee should meet periodically, perhaps annually, to address any issues which arise at the local levels, to obtain updated information as to changes or developments at the national level, and to maintain an interactive relationship with the other state/province programs.

A decentralized program within a country has certain advantages and disadvantages as was noted under the centralized systems described above. From an individual state or province perspective, one advantage is that decentralization 1) permits the inclusion of data into their registration data collection system that is relevant to their area; 2) addresses legal issues which may be unique to their particular population; and, 3) allows management and operational control appropriate to their own governmental structure. The legal aspects of the

system, if consistent with national requirements, may provide certain benefits in meeting national government needs. Such support can serve both the local and national programs, while the local government still maintains the system necessary to meet their own needs.

There can be disadvantages to this structure as well. As noted above, the lack of coordination and cooperation of the various decentralized single sub national programs within a country can lead to inconsistent patterns of 1) data collection, 2) registration processes including recording of nonresident events and, 3) the distribution of such records to other states' programs. The inclusion of events in the national vital statistics program also requires that each state/province must maintain acceptable levels of completeness, accuracy and reliability of their data, implying that some degree of standards must be implemented. This may be difficult to assess given a large number of independent programs within a decentralized system.

Another consideration under this type of infrastructure within a country is the accessibility and sharing of data and information among the various state/province systems. Though some type of overall national legal requirements may be in place, operational methods to collect and process the information may not be appropriate. The fact that each state/province is in charge of the registration and vital statistics components makes it essential that there be some monitoring and evaluation process in place by the national program office to assure that quality and completeness are attained.

The focus of the program in a state/province may be on specific conditions of local interest. This, in turn, can result in incompatible registration and vital statistics activities which can affect the national system. Different record items, coding procedures, and processing methods can have an impact on consistency and quality of the data produced. Decentralized programs, without a system of coordination and interactive communication among the various states/provinces and the national program, can result in independent activities which are not useful in meeting the general needs of government programs. This can only be resolved through an organizational structure that places specific requirements within the registration program.

Management of the system must address issues related to meeting national requirements, be interactive with other state/province programs in terms of meeting the legal aspects of registration, and have a focus on the standards for data collection, coding and processing. These elements assure cross-utilization and integrity of states' programs among the civil registration and vital statistics organizations and between each program and the national program. A decentralized environment within the context of a country's infrastructure which allows independent governmental units to administer these programs must endorse and retain these essential elements - cooperation, coordination, communication and interaction - to assure a successful program.

## 2. Sub-national Multiple Level Administration

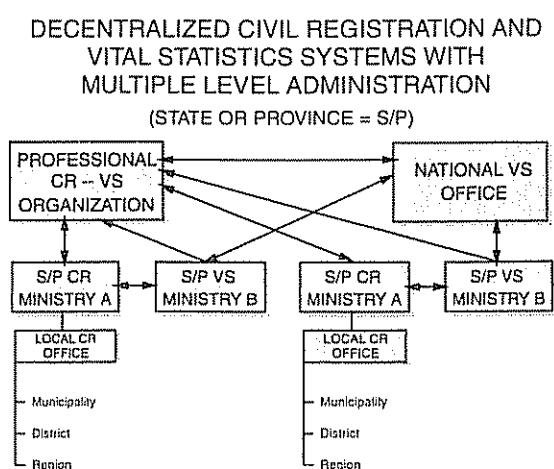


Figure 4

In contrast to the single administrative structure, some countries employ the use of existing local (village, district, region) government units to operate the civil registration program. In this structure, the state/province may establish rules, regulations and statutes to require specific activities to be conducted for purposes of registration. Under this structure, local government bodies may register and record events, issue copies to the population and to some degree make changes and corrections to the records maintained at the local level.

In this context, as noted in Figure 4 above, it would be useful for the state/province government to establish a working relationship with the local government offices either through committees to address specific registration issues, or by holding periodic meetings. In this way information, technology, standards and legal changes or requirements are presented, and problems and issues of concern at the local levels can be addressed. The needs of this type of structure differ significantly from those outlined above in that the government units responsible for registration are not under the direct control of the state/province registration office. Because of this, the interaction and communication requirements with local units must be implemented. The basic difference between the single administrative program and the multiple-agency program is that the former implements all of the components for conducting registration activities and providing services, whereas the latter may require an interactive operational relationship to established operational and administrative functions with other agencies.

### C. Local (Decentralized) System

Another decentralized structure incorporates local units (villages, districts) to conduct the registration process, with reporting of events to the district, state/province, or national level through various reporting mechanisms. This approach is

employed in rural areas where official government offices or other agencies may not be established for the registration system. Each local unit is focused on recording vital events, and in some instances maintaining simple counts of reported events representing basic vital statistics. This system may include independent single recording units, or multiple local site locations to perform this task.

#### 1. Single Site or Source

In order to operate a system in this fashion, the designation of an individual or some type of service unit for registration and data collection purposes is required. Families may be required to report events to a local official (village headman, scribe, police official) or to a local service unit such as a clinic. The official in either situation must maintain a register of the events and at some designated time transmit the information to an official local registration office. Related to this process is the official designation of subregistrars, that is individuals who are involved in vital events such as a midwife, funeral/crematory operator, or clinical site manager. In each case, their responsibility is to record and transfer registration information to the designated local registration official.

In more developed areas, a local office may be designated as a registration center, though other activities may be conducted by the office as well. This would require designated individuals or other officials to travel to a specified central office for the reporting of events. This office, with responsibilities for registration services, would carry out a limited range of activities - recording events, and transmitting information to a higher authority such as a district or regional office at which time vital statistics may be generated. The data would relate to the district or region, and eventually combined at the state or national level for specific geographic area coverage.

#### 2. Multiple Local Sites

In contrast to the single site structure, multiple sites can be designated to conduct registration activities as part of a local program. These would be limited primarily to the recording and transfer of events. Each village may have certain persons assigned to cover specific household groups or sub-village areas to record events. These could include the village leader, midwife, teacher or other individual. The person would at some point be required to transmit the information to an official government unit. The transfer of records and data from local sub-sites, through a number of different local site locations to a government office responsible for registration activities has not proved an effective process for registration. However, this has been a necessary approach in some countries where rural villages are not readily accessible, and established government offices for registering vital events do not exist.

In this latter situation, the use of mobile registration units have been adopted in some areas. In this method, registration staff from a local organizational unit travel to various rural sites at selected time periods and register events which occurred dur-

ing the interval since the previous site visit. Information may be reported by the village scribe, individual families or obtained from clinic records, and is recorded by the staff and eventually entered into the registration system responsible for that location. However, the completeness, quality and reliability of the information derived under these conditions are not considered adequate. This may be due to the lack of formal recording of events at the time of occurrence, lack of knowledge as to the utility of the information required, or no official management. Without the capacity to maintain permanent units to conduct these activities, the mobile unit approach can give some insight as to the vital events of the population in these remote local areas.

### *3. Transition to Centralized or Decentralized System*

The degree to which these areas can be developed into a more structured program, either centralized or decentralized as outlined in the above sections, will reflect the level to which such programs can be improved. The transition phase must incorporate the essential elements of the system as previously described. In the initial steps, the designation of a local registration official, directly responsible for reporting to an existing official registration office, should be made. In addition subregistrars can be authorized, particularly those individuals dealing with vital events such as midwives, funeral/crematory operators, health clinic directors and other related health service providers, with responsibilities to record events and report to the designated registrar.

Once this process has been implemented, the administrative structure that is implemented must be consistent with the governmental organizational structure in place at the specific area or location. That structure, centralized or decentralized, can provide significant improvements to the system.

## **D. Organizational Infrastructure and Related Legal Status**

Within the context of establishing the legal basis for a civil registration and vital statistics system, definitions of each element and component as described in the Legal Requirements section (III), must be defined and incorporated into the statutes, rules and regulations of the country. These may be included in sections of the law relating to the specific ministry or department such as Interior, Home Affairs, or Health, which in many countries are the primary agencies for registration responsibilities. Where other agencies are involved, each should have specific registration functions defined within the specific laws relating to their agency.

### **1. Data Items and Definitions**

The specific definitions for each event — birth, death, fetal death, and marriage and divorce (where applicable) — and the respective reporting time periods to the appropriate registration office are essential for an effective program. The definitions should be consistent with international standards as

specified by the United Nations. The time period requirements for the registering of events must be such that the information is complete, accurate and consistent with other related functions of the system. Examples are given in the next chapter, along with advantages and disadvantages associated with varying time lags. The law should also specify some type of punitive action should the responsible reporting sources and registration units be found not to be in compliance with these requirements.

In the centralized structure, if the civil registration system is administered by a designated national civil registration office, then the legal requirements can be directly related to all registration activities. If, however, the registration system is under the auspices of another agency such as Health, Interior or Home Affairs, then any legal issues related to civil registration are included in the appropriate sections of the national laws for that agency. Some differences in meeting registration needs can result from this diversity of administration and are described in the following sections.

For the decentralized structure, the legal requirements relate to the laws of the state or province. In cases where the national government has established some specific requirements relating to registration, then the state or province must incorporate these into their laws as well. Where the national government has no relation to the registration programs, then complete legal control and the laws stating specifications for the program can directly be structured to meet the specific requirements of the state or province. In most instances where local programs exist that is, where city or regional offices control the registration process, the state or province may establish specific requirements relating to the local program.

In these instances, rules and regulations are often used to address specific issues which may be identified during the operation of the registration program. These are generally developed by the various registration units and address legal issues which may relate to areas such as delayed registration, adoption, paternity or other record changes which occur following the original recording of the event. This approach allows for the establishment of legally mandated functions on a timely basis, since to amend or add new laws can take considerable time. At some later point, the rule or regulation set at the state/province level may be incorporated into the laws relating to registration.

### **2. Purpose, Function and Utility**

The inclusion of the various components of a civil registration system in the laws of the country or a particular state or province, depending on the organizational structure in place, serves a very important purpose. It makes registration activities the legal responsibility of specific agencies and programs including mandatory reporting, maintaining standards, and supporting data quality for subsequent use of the records and information collected through the system. It also offers a consistent and structured basis for performing all of the tasks

associated with the legal aspects of the defined events. This eliminates the potential for ad hoc changes to occur which may negatively affect the system. The legal base gives the registration system a stabilized approach to operate successfully throughout the country.

Another important purpose is that the registration system can provide high quality data collection for the development of vital statistics. The system also can maintain a continuous source of information to serve a broad range of activities and programs requiring this type of data. Without a well defined legal basis for the system, the continuity, quality and consistency of reporting of vital events, and for the related data items could change over time and negatively impact the system. The fact the law defines specific registration requirements helps to sustain the quality and completeness of the related functions and operations.

### **III. LEGAL REQUIREMENTS**

A national civil registration system requires a series of statutory and regulatory items that establish various mandates for the reporting, filing, processing, confidentiality, and release of the registration and vital statistics information. Regardless of the organizational infrastructure of the particular country, these legal mandates are required in order to implement an effective and useful system. Such mandates should be part of the country's national legal system and define the responsibilities of the agency or agencies involved in the registration system, the registration requirements of the population and the legal, functional, and operational characteristics of the system. Additional rules and regulations, which may be authorized by national legislation, allow the responsible agencies to add or modify operations and functions to meet the mandated requirements of the system.

These latter legal requirements serve to maintain and improve the system as technical, administrative and operational changes occur over time. This authorization is essential to the responsible registration agency for the management and operation of an effective, timely and efficient system. The basic requirements of the civil registration system are set in the legal structure at the national level and would require formal submissions to the national legislative body to make any modifications. Conversely, for meeting the daily operational and management needs of the system, rules and regulations can be issued by the responsible agency. Rules and regulations in this context would generally relate to activities within the system requiring adjustments, additions or modifications to continue to meet the goals and objectives of the program.

In most instances, legislation at the national level relates to the various legal components of the registration process. Rules and regulations developed by the central agency relate primarily to operational activities including both legal registration and vital statistics issues. For example, in the latter case, items contained in the reporting forms may be defined for vital statistics purposes. Items may be incorporated into the forms for

utilization in the preparation of demographic characteristics, vital and health statistics, monitoring and surveillance of health indicators, and health research. As population dynamics change, or selected medical and health events occur for which new information is required, the agency can make adjustments through the implementation of appropriate rules and regulations for obtaining the necessary data through the registration system. If the agency was required to go through the national legislative body to make such changes, the delays and lag time involved could be significant and have a negative impact on the immediate conditions. That is a primary reason to have authorization to prepare rules and regulations for selected changes relating to operational needs of the system available to the registration agency.

The national statutes must address the fundamental components - functions, powers and duties -related to the needs of the public, the authority of the responsible agency, and the responsibilities of the registration officials required in the operation of the system. The basic elements of each of these components are essential in any organizational structure and include:

#### **A. Identification and definitions of the vital events to be registered**

The broadest categories of vital events represent live births, deaths, spontaneous fetal deaths, induced abortions, marriages and dissolutions of marriage (divorces). In countries where available resources limit registration activities, the events most frequently covered are live births, deaths, and marriages. These events provide the most significant legal, health and administrative information available from the registration process for both government and personal use. As the system progresses, the remaining vital events can be incorporated into the registration process.

Once the events to be registered are identified, the next step is to define the characteristics of each event so that reporting is consistent and specific to the registration system. Definitions for each type of event are provided by the United Nations. In addition, access to and release of the information and the preparation of copies of the original records must be specified by law. Since various uses are made of the records, specific terms for the type of copy of the event required should be defined by statute.

Terms such as "certified copy", "verified transcript", "certificate of registration", and "certification of (birth", or death", or marriage", etc ) represent the different contents of the document to be issued for a particular purpose. Generally, the term "certified copy" means the exact duplication of the original certificate of the event produced either by photocopy or microfilm equipment. Each of the other terms can be used to define specific contents and uses of selected information from the original record

## **B. Items of information to be included in the reporting documents to meet specific legal and vital statistics purposes**

The items for the legal use of the vital record depends on the specific type of event. For births, the name of the child, the parents' names, the date and place of birth, the residence of the parents, name of the medical attendant, place where the event is registered and signature of the local registration official represent essential legal information. For spontaneous fetal deaths and abortions, similar items are appropriate. In addition for fetal deaths, the cause of death and certifying medical attendant; for abortions, the type of procedure used.

Death record items include the name, age, sex of the decedent, marital status, residence, the date and place of death, cause of death and certifying attendant, parents' names, signature of the funeral director and place of burial, place where event is registered and signature of the local registration official.

Marriage items include the names and ages of bride and groom, parents' names for each, date and place of marriage, residence of married couple, signature of official performing the ceremony, and the place and signature of the local registration official.

Dissolution of marriage (divorce) items include the names of the husband and wife, residence, family size, name of the court, date and place where dissolution is granted, date and place of marriage, and signature of certifying official.

In addition to these legal items, data for demographic use, research, vital and health statistics, planning and evaluation, and health status indicators for monitoring the population can be added to the reporting system. The data elements incorporated on the report forms should represent information for specific purposes. These additional elements may add to the workload in the system but can produce unique and valuable information.

## **C. Reporting sources and time periods for each event to be registered**

The reporting sources for each event may vary depending on the type of event, place of occurrence, and factors related to the event. For births, either parent may provide the basic demographic and residence data, and the facility such as the hospital, clinic or the personal health care provider adds the relevant medical and health related data. When completed, the record is brought to the local registration office where the event is registered and the certificate signed by the registrar. Responsibility for reporting the birth event rests primarily with the parents when the event occurs at home, or with the facility or care provider at the delivery site. Depending on the circumstances involved, the demographic data may be provided by a family member or relative.

For the reporting of death or fetal death information, similar sources may have the designated responsibility for the demographic and medical information. In addition, the funeral director, funeral establishment or crematorium must complete the type of disposition (burial, cremation), and location of the decedent.

Marriage information noted above is generally recorded by the official conducting the marriage ceremony, and the dissolution of marriage information by the judicial system for the legal changes required.

The time period for the reporting and subsequent registration of each type of event varies among countries, but should be specifically defined by national legislation. Without mandated time periods for the registering of vital events, significant lag times and delays will occur and completeness of reporting seriously affected. Time intervals can reflect the stated needs of 1) the population for access to the legal aspects of the vital event; 2) the administrative needs of the registration program in carrying out daily processing activities; 3) the local, regional or national government for relevant vital and health statistics data; 4) for research, evaluation and planning functions; and, 5) for health and social services conducted by various organizations.

The sooner the event is reported and registered the more likely that there will be complete, accurate and timely information available. Long delays in the reporting process can affect each of these elements, which in turn reduces the utility of the records for the legal and personal needs of the public, and for the preparation of vital and health statistics. For these reasons, mandatory reporting time periods are essential for an effective registration system.

In establishing these reporting periods, the capability and capacity of the national office in a centralized system or the individual states in decentralized systems, must consider reasonable intervals for the reporting of vital events. Where communications, transportation facilities, population literacy, seasonal variations, and availability of general knowledge regarding registration requirements by the population are limited, consideration must be given to accommodate the reporting process. Flexibility in reporting given in appropriate areas can still produce relevant and useful information. Severe penalties in such situations can have negative results in the system and produce a lack of compliance or interest in the registration of vital events. The legal statutes must address these issues in establishing specific reporting time periods.

## **D. Responsibilities and duties of registration officials**

Specifications as to the required functions and activities of registration officials at the local, regional or national level are essential for administrative, management and operational compliance with the civil registration system. Legislation covering the civil registration system should clearly specify the

required functions and activities of registration officials at the local, regional, and national levels

Specific duties, though not appropriate to be incorporated into statutes, should require the local registrar to comply with written instructions in manuals developed by the national or state central registration office. In this way, a legal basis is set under which the local registrar has clearly defined duties and responsibilities, and provides the administrative agency with authority to assure compliance is achieved. If performance is not satisfactory, specific activities contained in the manual which were not performed can then be identified. If any penalties were to be assessed against the local official, such action would be initiated at the national level in a centralized system, or at the state level in a decentralized system.

Other requirements which may be cited in statute as part of the legal requirements of the local registrar could address field activities, record maintenance, confidentiality, record transmittal requirements to the central registration agency, and the issuance of copies of records and related costs. The details of each of these events would normally be defined in rules and regulations established by the national or state registration office, with the national statutes providing the legal authority to do so. Due to the need for flexibility and modifications on a relatively frequent basis to meet current needs, specific registration processes cannot be cited in strict legal detail. The system must allow for changes through the regulatory process authorized at the state level in decentralized system, or through the central registration agency at the national level.

Legal statutes should allow for the national agency in the centralized system, or the state or province in a decentralized system to develop necessary rules and regulations. These rules and regulations may include the conduct of specific training programs, establishing periodic meetings or conferences to improve and upgrade the civil registration system, or for the allocation of resources and funds. There can be requirements for interagency committees and participation of professional groups in various aspects of the registration process. These activities help to insure ongoing commitments by participants at all levels of the registration system.

#### **E. Legal evidence represented by registered vital event records**

The general statutes relating to vital records should indicate the legal validity of the copies of the vital events and their use by the population, and for administrative, judicial and government purposes. Each type of record copy, either a complete reproduction of the original certificate, or other certification statements or abstracts must represent a true copy of the information as given on the original certificate and authorized legal copies as certified by the appropriate registration official.

The properly certified record copy should be specified for use in any court or other places requiring documentation, and for any actions, proceedings or applications for services, benefits

or for personal facts and identification. These uses may reflect administrative, judicial or other government requirements. Each type of record copy must have the same level of acceptance and effect as the original certificate as provided by law.

#### **F. Enforcement responsibilities for the provisions of each component of the registration system**

The legal requirements related to the enforcement of the provisions of the statutes for the execution of the civil registration system differ at each level of the system. At the national or state level, the central registration agency is designated as responsible for implementing and administering the entire system. To meet this responsibility, supervisory authority over registrars, deputy registrars and subregistrars, must be allocated to the central agency to assure uniform compliance and operation of the system. The central agency should have legal authority to investigate any violations or discrepancies in the conduct of the registration activities and to utilize the local officials as necessary to assist in such investigations.

The local registration official is charged with the enforcement of all aspects of the laws, rules and regulations of the registration system at the local level. Any violations identified at the local level should be reported to the next higher administrative level. In this way, the problems being experienced in one area can be shared with other areas to avoid similar occurrences and to provide potential solutions. Where the problem is with the local official in not performing duties in proper fashion, the central agency should be authorized to replace the registrar through established procedures designated by law.

#### **G. Violations associated with the various applications and uses of the vital records and related documentation**

Legislation relating to illegal activities that may occur in the system should be identified. Specific areas of concern, as well as authorization for the central agency to define activities as these become known, can prove to be an effective strategy to limit and reduce such events. Several general areas that should be addressed relate to the reporting of information. Such activities which may result in violation of the registration system include:

- a) refusal or failure of the required reporting source (individual, facility, official) to provide complete and accurate information;*
- b) willful alteration or change of any item reported on the official record of the vital event; or, furnishing false information on any certificate or documentation related to the vital event;*
- c) failure of those responsible to record and/or file a registration record or provide appropriate documentation associated with the occurrence of a particular vital event;*

- d) disposal (burial, cremation, transport) of a deceased individual prior to the registration or issuance of an authorized permit as mandated by law;
- e) neglect by the registrar, deputy registrar, subregistrar or other authorized individuals to perform registration functions related to the reporting, recording and filing of a vital event
- f) violation of late registration rules;
- g) double registration of same event

There are numerous other activities that can be identified which represent violations in the registration system. These should be incorporated in the national registration laws or the rules and regulations of the responsible agency as options for countries based on their particular legal infrastructure. In addition, the various conditions that exist in a country which may affect the registration system should be considered when defining violations and the resulting penalties to be imposed. The preferable approach is to minimize the potential for having violations through intensive training, information dissemination, conferences and active participation among all who are involved in the registration process.

#### **H. Penalties related to violations within the system**

The degree of severity implied by the violations noted in Item G is what should determine the type of penalty specified by statute. This can include a range of fines, various periods of confinement and, in the case of officials, loss of employment or reduction in status and income. Penalties should be limited specifically to misuse, abuse or misrepresentation of the legal aspects of the registration process. Where information, training or more interactive involvement of participants in the registration process can have an impact in addressing the above issues, these should be implemented in preference to imposing severe penalties. A positive reaction to the solution of problems is the best option for a successful program.

The law should, however, state the specific fines to be imposed, and the time periods for any confinements resulting from the violations described. The replacement of a local registrar or the reduction of salary level are significant penalties and should be specified according to the type of violation. Where violations are unintentional or not wilful, the penalty imposed may not be punitive, but in monitoring and enhancing education and training of the individual.

## **SECTION 2: STRUCTURE OF ORGANIZATIONAL UNITS**

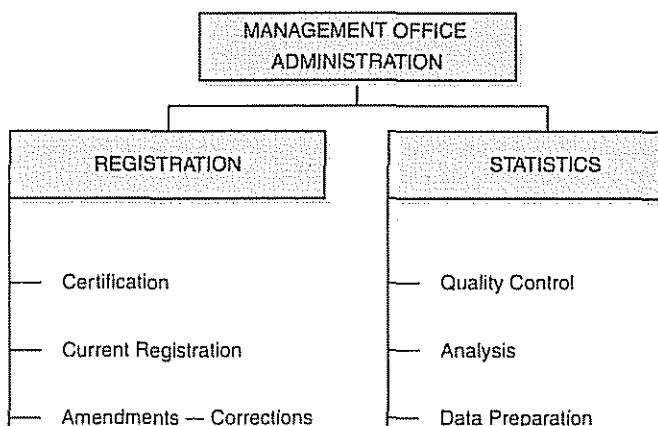
### **I. CENTRALIZED SYSTEM STRUCTURE**

#### **A. Management Office**

The management office is that portion of the organization that provides general administration and technical guidance for the various functional units and local registration network. Al-

though the size of the management office may be small, its function is essential to having an effective and efficient system. The responsibility of the management office will vary according to the organizational arrangement of the registration and vital statistics systems. Where the registration and the vital statistics functions are in the same national agency, the office must be qualified for management operations relating to both statistics and registration. Management experience in the areas of biostatistics, demography, research and analysis, and data base management are essential to manage a joint program.

## **CENTRALIZED SYSTEM STRUCTURE**



**Figure 5**

Other staffing functions necessary include fiscal management capabilities, clerical support services for correspondence, filing and related tasks, and inter-agency collaboration on the registration and statistics components as identified. Management must be directed at the legal and statistical activities that define the system, and those who produce the information for registration needs and those who access the data in the systems for analytical and quantitative use.

In the case where registration and vital statistics are in separate agencies, each of the management offices would need to meet the registration and statistical requirements as described, respectively.

The functional requirements for each office is, however, reduced since the primary responsibilities relate to only one system. In the situation where the two systems are separate, but in the same agency, it would be possible for both fiscal and clerical duties to be handled by a single staff unit, with the responsible management functions conducted separately by each office.

#### **B. Current Registration Unit**

This unit is responsible for processing records concerning recent vital events. It is responsible for receiving the records from the field, and must record, verify, edit, index and file the

## STATISTICS SECTION

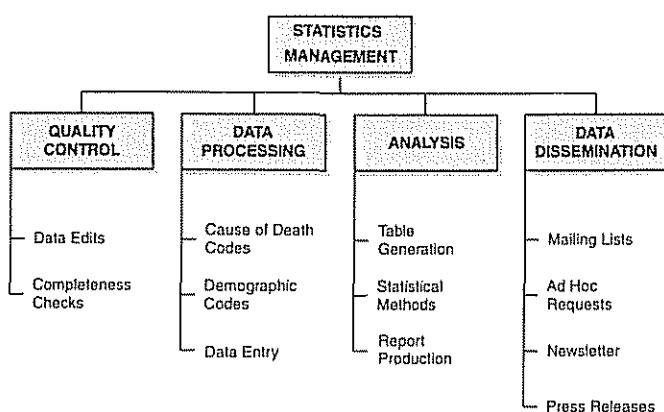


Figure 6

records. The very nature of these functions indicates that the current registration unit be a part of the registration section.

The unit needs a field team to interact directly with the field registration offices. The field unit has responsibility for establishing methods of record transmission such as: Who is responsible for reporting each type of vital event?, where is the event to be reported? how soon should one report the event? On what form should the event be reported? These are all questions the field team should answer based on the legal registration requirements and differences noted in the field monitoring activity. Teaching and training experience are also valuable qualities for the field team staff.

The processing of the new records arriving at the central office is also the responsibility of the current registration unit. Receipt of the records will include a check for completeness and accuracy. New records must be assigned a number for purposes of indexing. It must also question local registrars about missing or inaccurate data. Finally, the unit should design and maintain a filing system to allow easy retrieval of the newly filed records.

To accomplish these tasks the current registration unit will need staff with superior clerical and filing ability. The number of staff members needed will depend on the total number of new records filed.

### C. New Certificates Unit

A unit needs to be established in the registration section to handle the creation of new certificates to replace certificates already placed on file. This need arises for adoptions, paternity establishments, and certain court ordered actions. The new certificate unit also places on file delayed reports of events.

## REGISTRATION SECTION

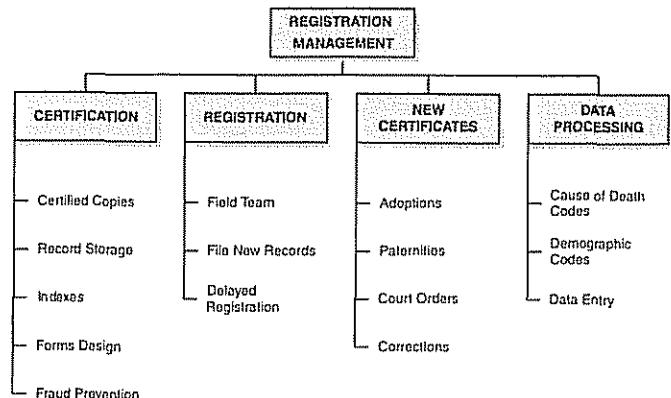


Figure 7

The work in this unit requires a good knowledge of how the files are organized. This is to allow easy location and replacement of a record currently on file. In addition the staff for this unit must have a good knowledge of the laws and regulations governing when one should and may replace a certificate. Questions such as: What documents must be received to certify that an adoption has taken place? What should happen to the original document? Does the original document need to be placed in a sealed file for future administrative or legal use? requires experienced and well trained staff.

This unit also does the correction and amendment work. The correction and amendment process is an easier task in that it is not necessary to prepare a new certificate. One does a legal name change, or the correction of an error on the original document by lining out the original information and inserting the new information.

### D. Data Processing Unit

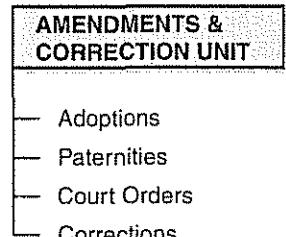
## REGISTRATION SECTION



Figure 8

Another unit one needs in the system is one to handle coding and data entry functions. If the vital statistics section and the registration section are located in separate agencies, there will be a choice as to the location of these two functions. If possible, it is more efficient to locate both in the same agency. That is, one may decide to locate the data entry function in the registration unit to quickly produce indexes for use in locating records. The indexes can also be used to identify unlawful double registration cases. If this decision is taken, then one should similarly locate the coding to allow the coder to do it before data entry. The chart here shows the organization when the decision is to place data processing in the registration section.

#### REGISTRATION SECTION



**Figure 9**

If both the vital statistics and the registration sections are located in the same agency no decision is necessary. The joint location will also make the process easier since one would assign the certificate number within the same agency that contains the data entry function.

Staffing for the data entry function will depend on volume and the type system used. In a classic data entry system entry will be made directly from the information on the original document at the central office.

Another option is to have the entry done at the point where the original document is prepared. This is generally a personal computer based system. The personal computer will be loaded with a software that prompts the operator for necessary information. The responses made are subjected to immediate edits by the software. This has the advantage of challenging entries that appear incorrect at the earliest stage. When the document has been entered and subjected to these up front edits, it can be printed. The software also retains an electronic version of the data that can be transferred to the central office by modem or on a diskette.

The intricacy of the coding system selected, and whether one uses manual or automated systems will affect processing. Coding staff assigns numerical codes to the paper documents. Data entry then picks up the code for entry to the master file.

#### REGISTRATION SECTION

##### DATA PROCESSING

- Cause of Death Codes
- Demographic Codes
- Data Entry

**Figure 10**

Coding staff might also include a trained nosologist who might enter a code on the document or might directly enter the codes into the master file. Or, the coding staff might contain mostly programmers who maintain automated systems of coding. Larger systems will move toward the latter option, but the whole continuum still presents itself for choice.

#### E. Certification Unit

The certification unit responds to requests for copies of vital records for legal and judicial purposes. It is the responsibility of this unit to be able to locate a specific vital record from the many contained in its files upon request of an authorized individual or agency.

One needs to locate the registration section in a place easily accessible to its customers. It usually needs special security provisions to protect the original records it stores from theft and from damage or loss to fire and floods.

##### *1. Issuance of certified copies of vital records*

A major function of the certification unit is the issuance of certified copies of vital records. A certified copy will contain a statement from the custodian of the record certifying that it is an authentic copy of the facts on file in the custodian's files. Usually an official seal of the custodian's office is affixed to the certified copy. The care and detail followed in the issuance of certified copies is due to the legal purposes for which the public uses the copies. People use certified copies of death certificates to settle matters concerning the estate of the deceased. One uses birth certificate copies to establish in law the birth facts of an individual. Indeed the birth certificate has taken on the status of an identity document. It does not conform to the requirements one would normally specify for an identity document. However, taken with the laws and regulations that have generally controlled its issuance, it has become generally accepted as an initial proof of identity. Possession of the birth certificate is the first step in establishing an entire series of documents that form an individual's legal status. Further consideration of this will be given below under a discussion of the confidentiality and fraud prevention duties of the certification unit.

## REGISTRATION SECTION

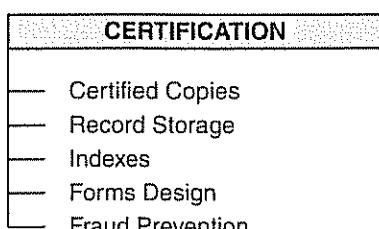


Figure 11

### 2. Storage, index and retrieval of vital records

With the issuance of certified copies of vital one must next look at the storage system for the original documents. The storage system for vital records progressed from written ledger entries for each event to separate written documents that recorded more data elements about each event. By the middle of this century, placing multiple documents into a binding folder to protect the longevity of the individual paper documents became a standard storage method. Within the third quarter of the century in the most advanced civil registration systems, the long term storage system of choice became microfilm. The final quarter of the century has seen a progress toward storage on automated file media. This rapid progression of storage media during the century has also resulted in another common phenomenon. Most vital records systems contain several storage methods. Sometimes this multiple storage option has been one of choice where one medium serves as a back up to another. In other cases the multiplicity of storage methods has been a result of the changes in methods available. Many modern systems thus contain an amalgamation of several methods. These systems display a high degree of inefficiency when one moves to the next important step in the issuance of certified copies. That next step is the indexing and retrieval of the documents from the storage system.

Early indexes were prepared in typewritten lists. Today whenever possible, one maintains the index on a computer or on microfiche. The index is generally organized alphabetically by the last name of the registrant for the event, wherever last names are in practice. In countries where last names are not in use, the index may be prepared in alphabetical order of the first name of the registrant, plus the first names of his/her mother or father. The index information will contain enough other facts to distinguish what would otherwise be similar looking events from each other. Also, the index will contain the certificate number assigned to the particular record. Using the index it becomes an easy matter to begin with the date of the event and name of the registrant, find the index entry and consequently the certificate number. The number is then used to locate the document in the record file.

One can computerize the searching function to find the name and the certificate number. Then the computer can refer to a

computerized index and go directly to the correct record in the computerized files of records. The entire process can be accomplished in a matter of seconds in a computerized system.

It is also often the case that one uses two systems because one system is the back up for the other. In particular where the computerized system is the system that issues copies the question arises "What does one do when the computer is down?" In addition there is a need for a back up to the computer record in the event that it is somehow lost or destroyed. Back up for the computerized system includes magnetic tapes, diskettes and, in addition, a microfilm system. In the latter case, there is for each computer record a microfilm copy of the original document. This, in effect, maintains all of the information on the original certificate. There is also a back up index on microfiche or on a personal computer. In case of a "crash" of the computer system, one can still serve the customer by using the back up system. Archival microfilm copies can also be stored off site as a guard against some disastrous loss of other record copies.

Index printouts for each local registration office should be prepared at the National Registration Office (or State/Province office as the case may be) as they may not as they may not have necessary computer or microfilming facilities to prepare them. The indexes should be updated on a periodic basis.

### Preparation of forms for legal and statistical use

The certification unit also has the responsibility for the preparation of forms for legal use. This can begin with the original registration record for a birth, death, marriage, divorce and whatever vital events of which it is the responsibility of the unit to file records. Since these registration records will also contain information important to the registration unit and the vital statistics section the design of these collection items needs to be a joint operation. Experts in the fields that these collection efforts will affect should be consulted on how to collect the data and what questions to ask. For example, coroners, physicians and funeral directors should participate in the development of the death registration form. Medical personnel at the hospitals, midwives, obstetricians, and pediatricians will add to the design of the birth registration form.

Any number of changes to registration records require the certification unit to design forms to appropriately accomplish those changes. Court ordered changes such as legal change of name, and adoptions call for a change to the birth record. The unit should design the form so that it contains the necessary information to locate the original record in unit files and also the required new information.

### 4. Staffing

It is obvious from the above discussion that the responsibilities of the certification unit are many and varied. So, too, will be the staffing for the unit. The supervisor of the unit will need the ability to interpret the statutes and regulations governing

the issuance of certificates to individuals and to agencies. If electronic issuance is offered by the unit, then the searchers will need to be familiar with the use of computer equipment. The searchers will need to understand the file and index structure to successfully locate requested records.

Staffing and structure for statistics and its interaction with civil registration is described in following sections of the report.

## II. DECENTRALIZED SYSTEM STRUCTURE

What happens to staffing and structure when the system is a decentralized system? That is, when the registration is independently done by sub national units such as states, provinces, departments, or other designated agencies.

In considering this, there are two possibilities at the sub national level. First, the sub national unit might also compile statistics for its jurisdiction besides supplying data to the national organization. Thus, the sub national unit would have both a statistical function and a registration function. The second case, of course, is where the sub national unit registers the vital events but does no statistical work with the sub national data other than to forward it to the national organization.

### A. CASE 1: Sub national unit with both statistical and registration functions

Consider the first case where the sub national unit has both a civil registration and a statistical function. The structure and staffing of the management office will remain very much as described in part a) under the Centralized System discussed above. The smaller size of the operation will probably lessen the stringency of the staffing demands, but the major requirements outlined above will remain.

Similarly there will be no substantial change to the structure and staffing requirements for the current registration unit, the new certificate unit or the correction and amendment unit. There is one change that one might envision. The structure of these operations would most likely have to conform to some set of standards agreed upon between the national organization and the several subnational units contributing data to the national level.

The agreements would attempt to guarantee uniformity in the data collection and reporting processes used by the several sub national groups. Under the decentralized system where a statistical function is also present in the sub national group, cooperation can yield efficiency in the area of coding and data entry. To produce statistical data at its own level the sub national unit will need to have a coding and data entry function similar to that described for the centralized system. Since such coding and data entry are done at the sub national level it becomes efficient for the national organization to obtain the data in already machine readable form. To do so from several different sub national groups it becomes necessary that the parties reach cooperative agreements. Common coding proce-

dures must be selected and common data entry formats need to be developed. The accomplishment of these cooperative arrangements will have its affect on the structure of the coding and data entry function at the sub national level, and will lessen the duplication of effort for the total system.

In the decentralized/statistical type sub national group the certification unit will change little from that described in part E) above. There may be some guidelines developed by the national organization concerning detection of fraud to avoid false data from entering the system. However the certification unit should be practically the same as the staffing and structure described for the centralized system.

### B. CASE 2: Sub national unit with registration functions only

The second consideration under the decentralized model has to do with those situations where the sub national group gives data to the national organization but does not itself do any statistical function. In such a case the management office would be modeled after the staffing and structure pattern in the centralized system where the civil registration function was in a separate agency from the vital statistics function. The management office in the sub national non statistical decentralized model would follow the structure and staffing outlined for the registration section in the split centralized system.

#### DECENTRALIZED SYSTEM

- STATISTICS NATIONALLY
  - REGISTRATION & STATISTICS
- 
- AT LOCAL LEVEL

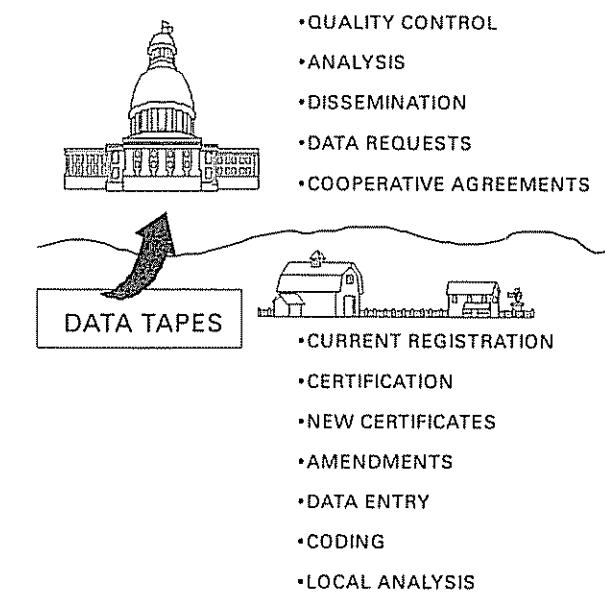


Figure 12

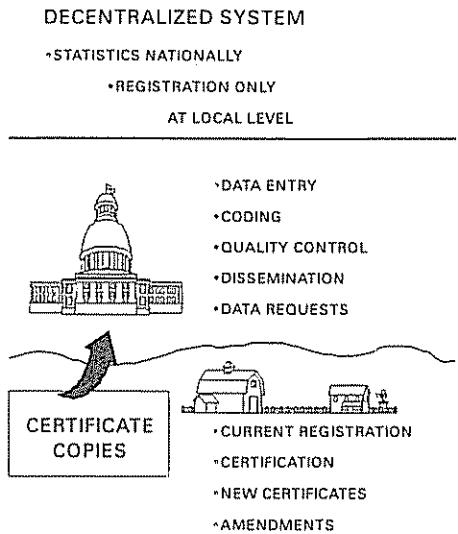


Figure 13

The coding function would probably not exist at the sub national level for this model. Coding would be accomplished by the national organization after it received the raw data. It is possible that some data entry might be done at the sub national level. Data entry, however, would be concerned with the production of Figure 13 indexes to locate records. It would not be concerned with data entry to produce statistical output. One would accomplish this at the national level after receipt of copies of the raw data collection forms.

The remaining units (current registration, new certificate production, correction and amendment, certification) will function as described under the discussion of the centralized system.

### III. LOCAL SYSTEMS

The final organizational arrangement to be considered is that where registration is taking place at the local level in municipalities, parishes, counties, or districts. There may or may not be reporting to a next level jurisdiction for registration purposes but for statistical purposes only. The structure and staffing for these units would follow the model outlined for the decentralized systems applying principles at sub levels defined by the size of the operation. Probably there would be no statistical function in such units. Coding would thus not be a consideration. In small municipalities even the data entry function may be unnecessary. Similarly many functions described above may become part of a few job descriptions in a down sized office. However, the basic principles underlying the functions would remain intact. For example, certified copies of records would be issued, and corrections and amendments could be made. In countries where the local registration offices are under the jurisdiction of a different ministry, effective technical supervision over the local registrars may be a problem. A resolution of this situation, as described earlier in the report, is the interactive participation with the primary agency for the national registration system.

## SECTION 3: ORGANIZATIONAL REQUIREMENTS FOR OPERATIONS

### I. INTERNAL ROLES

#### A. A description of the problem

The multi-unit nature of the structure of the civil registration organization argues immediately and forcefully for internal interrelationships. These relationships should be founded on communication, standardized rules and procedures, and clearly defined monitoring functions.

As outlined in Section 2, the infrastructure of the civil registration organization is composed of five basic and essential units. The units are current registration, new certificate preparation, correction and amendment, coding/data entry, and certification. Although these individual units respond to specific functions in the registration process, they are not to be considered mutually exclusive. There exists a network of dependencies which weaves the units together into an almost symbiotic relationship.

The certification unit is wholly dependent on the current registration unit to organize a data base composed of the necessary information about recent vital events. Certification needs this data base to be able to certify about these occurrences to the individual public requester. Communication between the two units about appropriate methods to make the individual records retrievable is essential. Whether one stores the records electronically or for hand retrieval, agreement between the two units on a set of rules and procedures is simply wise records management. The procedures should maximize the efficiency of transfer between the two units and the ease of retrieval in final long term storage.

#### INTERRELATIONSHIP AMONG UNITS

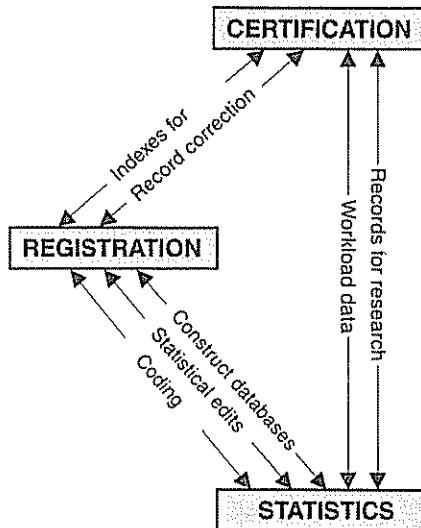


Figure 14

For example, there is bound to be a period after initial registration of the records when both units will need ready access to the new records. A procedure to place the records in a temporary storage bin sorted alphabetically by name of the registrant within each of some jurisdictional breakdown (e.g., county, province, etc.) can make the records easily available to both users. This example leads to the next issue that must be considered in the established interrelationships between units. Access to the common storage bin for the records requires agreement on some method of monitoring where a record removed from the bin is at any given time. The registration unit may need the record to make some completeness or accuracy checks and remove it from the bin. Simultaneously the registrant may request a copy of the record. There needs to be a monitoring system in place to allow easy location of the record. In this example it may be as simple as a card with the user's name or initials placed in the bin for the missing record. The point of the example is that inter-unit communication, procedures, and monitoring methods need to be in place at points of common contact such as that used in this illustration.

Another example would be the dependency of the current registration unit on the correction and amendment unit and also the new certificate unit. Remember that a prime function of the registration unit is the preparation of a data base containing all the necessary information about the recent vital events. Remember also that a basic principle of civil registration is that each vital event is represented in the data base by one and only one record. Communication between the corrections unit and registration is necessary during that period when the record is still under the control of the current registration unit but needs to be updated by the corrections unit. Similarly, while the record is still being processed by the current registration unit an adoption or paternity may be recorded by the new certificate unit. Communication of these facts must take place between the units. Lack of such communication can result in the first instance in inaccurate or incomplete records. In the second instance more than one record may be placed on file for the same event.

The interrelationship between the coding and data entry unit and the current registration unit is a two-way street. The coding and data entry unit is dependent on the current registration unit for complete and accurate records. In turn, the current registration unit is dependent on the coding and data entry unit for accurate and complete entry of the record data into the data base. The interdependence here is so great that sometimes the two units function almost as one. Where possible, the units are best integrated; if not, there must be clearly defined sets of procedures and monitoring methods for management.

One can easily see from the above example that the certification unit is dependent on both the coding and data entry unit for accuracy of entries. A misspelled name will make it very difficult to locate a particular record, as will also a document registered with an incorrect number. Certification is also de-

pendent on the current registration unit for monitoring that all events are recorded.

In summary there are many interrelationships among the five basic units of the civil registration organization. These interactive roles must be identified and proper channels of communications established. There are two key items concerning these interactive roles. These include (1) specific rules and methods of procedure, and (2) well designed monitoring systems which together will check that the principles of accuracy, completeness and uniqueness are followed.

## B. Communication methods among units

To develop appropriate rules, procedures and monitoring methods it is first necessary to assure that good communication exists among the units of the organization. What are some methods that can give this assurance?

# COMMUNICATION

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- Formal unit chief meetings
- Clearly established lines of communication
- Tracking mechanisms
- Organized methods of interaction

Figure 15

### *1. Hold weekly/biweekly meetings*

A formal weekly or biweekly meeting of the managers of the five units should take place. The meeting should be under chairmanship of the manager who has general responsibility for the five units. The prime purpose of this meeting is to report on any activities or changes taking place in the various units that might in any way affect operations of any of the remaining units. Often this meeting will uncover potential that had been unanticipated by the unit initiating the change. The meeting has a secondary value. It keeps each unit manager aware of the workings, goals, objectives, and problems of other organization units.

### *2. Establish staff communication lines*

Staff communication lines should be clearly established so a staff member in one unit who needs to express some information to a staff member in another unit knows exactly the path for the communication to follow. If the staff member is not

clear who in the other unit should receive the communication, then the communication may fail to take place. If the staff member in one unit tells the information to the incorrect person in the other unit, then one may miss taking an appropriate action or one may short circuit a monitoring system. Set up the communication lines with alternate recipients of the communication in case the primary recipient is absent. This will avoid delay in the communication taking place when one employee is ill or on vacation.

### *3. Implement procedure for transmitting and tracking information*

Established methods and appropriate tracking mechanisms should be in place for communications among units. Post-it notes and haphazard slips of paper are too easily lost or misplaced. They are not effective for communication of information that can affect the functioning of a unit. Electronic mail messages or written memos accompanied by the necessary records are more appropriate. For routine communications the development of specific forms containing the needed data may work well. However the communication is made, a tracking system can identify the expected outcome and reveal any communication failure.

## **II. RULES, PROCEDURES AND STANDARDS IN A CENTRALIZED SYSTEM**

It is the purpose of this section to look at some specific rules, procedures, and standards for conducting the specific activities identified in parts A. through E. in Section 2's discussion of the structure of a centralized system. That is, this section will offer specific rules, procedures, and standards for the management office, the current registration unit, the new certificate/correction and amendment unit, the coding and data entry unit, and finally the certification unit. The discussion will use the same lettering of A. through E. as in the discussion of the structure and staffing of these units in Section 2 of this paper.

### **A. Management office**

The discussion of the management office under structure and staffing described it as "that portion of the infrastructure that will supply general administration to the various units." The implied coordination function of the management office includes several important areas. Coordination of the development of the form and content of the basic vital record reporting is a key function. The coordination of this task will include not only the several sections of the registration and statistics office, but also all the external customers (physicians, coroners, hospital personnel, etc.) who deal with the documents. It is necessary that the management office establish a regular procedure and a regular interval for review and update of the reporting instruments.

The statutes and regulations under which the registration and vital statistics system operates are also a major concern to the

management office. The statutes and regulations must be monitored in two major ways.

First, the management office must monitor any legislation changes under consideration by the law making body that might affect the registration and statistics system. Changes to social services legislation or to legislation covering the responsibilities of medical personnel or medical institutions may often have an effect on registration and statistics. The management office must monitor such legislation and offer ideas during each legislative session.

Second, monitor the basic set of statutes and regulations for the registration system to decide if social changes require a statute or regulation modification. For example the arrival of sex change therapy and operation had implications on vital records statutes. It is the responsibility of the management office to conduct a periodic review and update of the total statute. The periodicity of the change need not be frequent. Ten to fifteen years between major updates to the statutes is not unusual. It can be unwise to frequently propose changes. Opening the statutes to legislative consideration can result in sometimes undesired change. Frequency should therefore be tied to major societal changes rather than housekeeping type adjustments.

The management office also should address proper funding, budgeting and accounting functions. As indicated in the staffing and structure discussion it is important that the management office be appropriately staffed to handle these responsibilities.

The encouragement of innovation in the way the registration and vital statistics office does business is also the responsibility of management. There are many examples of the types of innovation that management must continually encourage and support. The development of electronic based solutions to problems, the use of up to date management practices, and encouragement of customer oriented responses by staff are some of these. As the discussion of monitoring and evaluation

## **MANAGEMENT DOES**

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- ▶ Coordination of forms development
- ▶ Development and tracking of legislation
- ▶ Funding and budgeting
- ▶ Fostering of new methods and use of new technology

Figure 16

mechanisms showed, the size of the management office may be small, but its functions are crucial.

## B. Current registration unit

The current registration unit "must record, index, edit, verify and file the records." This is what was said about the current registration unit under the structure discussion. What are some details of those functional responsibilities?

There are two major factors that will cause a variation in how one transmits the record of a vital event to the certification unit. One is the type of vital event involved. Whether the event is a birth or a death will make a difference in the transmission process. Second, the type of structure of the system will play a key role in the transmittal process. That is, whether the system is centralized, decentralized or a local program.

### 1. Registering births

First, consider a birth event. Here, the location of the event will determine the reporting method. Did the birth occur in a hospital or at home?

*Hospital birth under a centralized system.* In this situation it is best to use the medical record function of the hospital to do the reporting of the event. The completed document should be transmitted to the local civil registration office for review and registration.

*Home birth under a centralized system.* Here, whoever is attending the birth will complete the official reporting document. The usual order of preference is to have the document completed by a midwife if one is present at the delivery; by the father if he is present at the delivery; by another person present at the delivery; or by the mother. The reporting document completed by the person selected from the above list should be transmitted to the local registration official who completes the birth record. Then he forwards the original record to the Central Office and retains a copy.

*Hospital birth under a decentralized system.* Here the major difference is that the hospital reports the birth to the local registration office. The local registrar reviews the certificate for accuracy and completeness. The local office retains and files a copy of the certificate so that the local office can issue copies of it. Then forward the original certificate to the national level if certificate copies are also to be available at the national level. If the national level operates a statistical system only, then forward the original to the national level for computerization. Alternatively, one can computerize the data at the local level and forward it to the national office electronically.

*Home birth under a decentralized system.* Again the difference here is that the informant files the birth record with the local registrar. Since a local registration area may be small, often the local registrar helps the parent or person filing the information concerning the home birth. The information is then forwarded

to the state level for civil registration and vital statistics purposes. From there the data are transmitted to the National Vital Statistics Office. Although in situations mentioned above, the official registry documents are prepared by hospitals and midwives, such completion is based on the information being correct by direct personal questioning of the mother. Proper questioning is vital to accuracy and should wherever possible be done by a trained interviewer.

### 2. Registering deaths

Look now at how information concerning deaths is to enter the system. An initial consideration for deaths is to examine how one handles a death in the jurisdiction in question. Is it typical to have a professional mortician or funeral director? Is there a medical examiner or coroner system throughout the country? That is, is every unattended or sudden death examined by a coroner or a medical examiner. Is it the family who is respon-

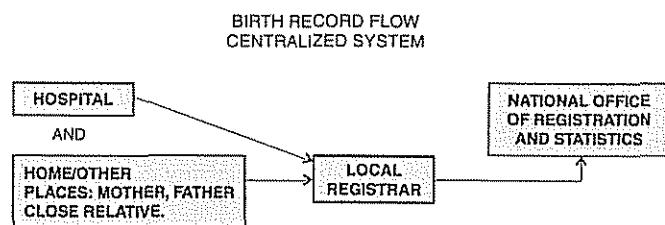


Figure 17

sible for notifying authorities about the death? Depending upon how these questions are answered the method of registering deaths will vary. *If a funeral director or professional mortician handles most dispositions* then it is typical to place the responsibility for filing the death certificate on the funeral director. If it is not usual *for a funeral director or professional mortician to handle final disposition*, then several other methods of obtaining the necessary death information are used. The physician attending the decedent for the illness that led to death completes the medical certification of the cause of death. If the death occurred in a hospital, the physician attending at

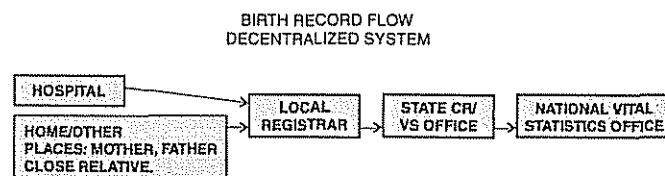


Figure 18

the institution will normally supply the death certification. For traumatic deaths (suicide, homicide, accident) the cause of death certification is generally supplied by the coroner or medical examiner after completion of an examination of the facts surrounding the death.

A member of the family or someone close to the deceased individual will need to supply the personal facts about the decedent. These facts are generally filed separately from the certification information completed by the physician or coroner. Coordinating the timely filing and eventual matching of these sets of information is not an easy task! Many factors will enter the choice of system one uses to do this. For example, how is the hospital system organized? Is it a central hospital in a large city to which many are brought for care from rural areas? This could lead to personal data filing with a local registrar geographically remote from the point where the death certification information is to be completed. Common information about the decedent's residence location on *both* the death certification and the personal fact document will become all important in this situation.

### C. New Certificates Unit

It was pointed out that the new certificate unit of the registration section has the function of replacing certificates already on file with new certificates under certain conditions. The need arises for adoptions, paternity establishments, and certain court ordered actions.

Adoptions form a major class of record changes requiring the preparation of a new certificate. Jurisdictions will vary con-

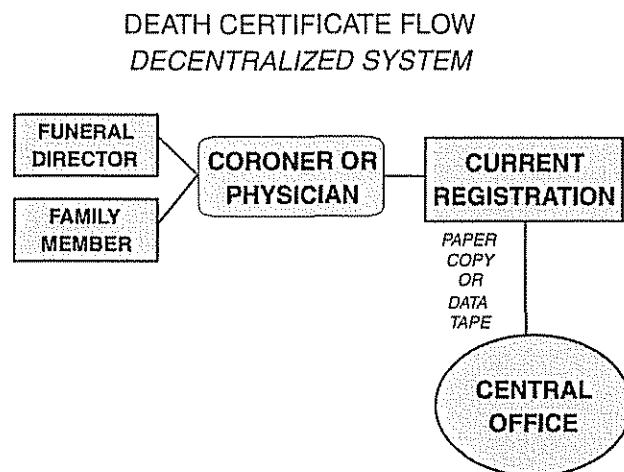


Figure 19

cerning legal restrictions concerning adoption. Most jurisdictions will have provision for having the facts of birth before the adoption record is sealed from view.

Another major group with which the new certificate unit must be concerned is paternity establishment. How one establishes these paternities will be decided by the particular laws. Some

### PREPARATION OF NEW CERTIFICATE

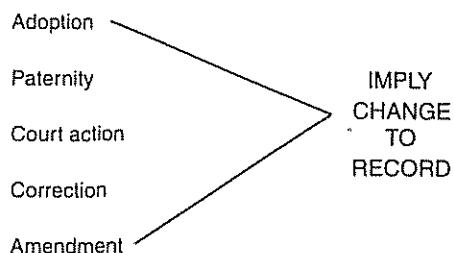


Figure 20

jurisdictions will allow the addition of a father's name to a record given an affidavit by the unwed parents. Other jurisdictions may require some sort of court or legal action to establish paternity. In any event, it is necessary to develop a method to add the father's information to the certificate.

### D. Data Processing Unit

Under the structure previously described, this unit must address the standards, rules and procedures to be considered for the needs of registration and statistics functions.

One major area to be considered is cause of death coding. Cause of death coding should conform to the coding system convened by the World Health Organization. The use of the International Classification of Diseases (ICD) for cause of death code assignment allows comparison of death statistics between different countries, states, counties, provinces, etc. Using the ICD to assign cause of death codes will not guarantee comparability of data. In addition it is necessary to use the coding rules for assigning underlying cause of death. To do so requires a nosologist trained in the use of the coding techniques.

New automated technology has been developed which can be used for coding activities. Computer software programs have been developed that can automatically code about 85% of reported causes of death on the death record. This software applies the W.H.O. rules to code the underlying cause of death. The software also keeps track of the other causes entered so that multiple causes of death categories can be processed as well. A trained nosologist would need to code the reported causes of death that cannot be processed by the software.

### E. Certification Unit

One designs the rules and procedures of the certification unit to serve the public in several ways. First consider the production of certified copies. This is a major program for the certification unit. This service can vary from hand copied abstracts made from a paper copy to computer issuance in a choice of formats. The volume of the jurisdiction's files and the level of requests made by the public will motivate the procedures to be used in this area.

Preparation of legal forms for use in the system was mentioned in the section on structure as an important function of the certification unit. The function is not independent of the other units in the registration and vital statistics office. Certification will take the lead but all three units will be involved. Unless all three units have collaborated on the design of the form this functional coordination will be difficult to accomplish.

#### F. Internal Review Mechanisms

Besides the interactive roles described in the three sections above, there is also a need for interaction in a fourth area. This section will examine internal review mechanisms at both the management level and at the staff level. The units must cooperatively develop methods to monitor for completeness, accuracy and proper record processing. Presumed here is a single agency model where the civil registration and the vital statistics functions are in the same agency. Some of these *methods* may be unnecessary in the other models described. Internal review mechanisms are applied in order to monitor the functions of the daily system operations, and to detect any aberrations as quickly as possible. Adaptation of selected methods for use in the other models may be done on an individualized basis.

Registration staff has a most important internal review mechanism, the tracking of the newly registered certificates. When the certificate is going through the initial processing by the registration staff to get its information quickly and accurately transferred to the master file, it must be handled at many different points in the process. It is important, therefore, that there is an internal system to track where any given certificate is at any given time.

Certification management has a responsibility to respond well to the public in the area of customer service. To do so requires having in place internal system review mechanisms that will yield both work flow data and revenue data. This type of information is necessary for management decisions concerning where to best use the work force of the section.

Certification staff also has areas where internal review is important. It has been mentioned earlier that the increased use of fraud and counterfeit resistant paper for the issuance of certified copies of vital records has also increased the need to protect the blank certified copy forms from theft. Certification staff must develop internal systems to account for the use of the paper.

Statistics management will have as its main concern in the area of internal review mechanisms the effective use of the employees under its control. The best use of the statisticians, researchers, and publication specialists employed in the statistics unit needs to be a prime concern of the statistic management.

Statistics staff should exercise internal review in several areas. Although the registration section has undoubtedly run many edits on the data before submitting it to the master file, this

does not guarantee that when programs are run against the master file that all results will be consistent. Errors in the program may assign variables to incorrect categories. Then, one table of data will give results inconsistent with that of another. Statistics staff should be alert for tables that could possibly generate such a result and include in its internal surveillance system a comparison of these tables when they are compiled. Also, train statistics staff to supply users not only with data but also with an explanation that makes clear to the user what the data represents and what are the limitations if any.

### III. External Roles with Related Agencies

This section will examine the interaction between the civil registration system and other agencies within government. The social services agency will have several areas in which it interacts with the registration system.

Establishment of paternity for a child is a function that uses many of the resources of social service agencies. The registration system can be a useful source for providing required documentation in this area.

Necessary interventions by social service agencies to protect children from neglect and abuse often lead to placements for adoption. It is important for the two agencies to develop a process whereby necessary information is accurate and readily available for timely responses in these situations.

There are other interactions with other agencies that the registration system will have. One example is cooperation by the chief registration official with law enforcement officials or officials of the judicial system who can show a need for vital record information in the prosecution of their lawful duties.

One normally provides information about the deaths occurring in a voter registration area to allow purging of the voter registration roles. This serves not only as an efficiency measure, but also as a deterrent to voter fraud.

Similarly the registration office has close ties with the passport agency and the immigration authorities in verifying the authenticity of documentation that may come under suspicion by those agencies.

How does the exchange of information between civil registration and the other agencies take place? The immediate answer is that the method will vary by type of information needed and by the form in which the data is currently kept.

\* In many of the illustrations dealing with social services interchanges, legal actions were involved. In such cases official copies of the information are generally the exchange medium.

\* For purging files such as in the voter registration example, a computer listing on tape or in paper printout is usually sufficient.

## CIVIL REGISTRATION SERVES OTHER AGENCIES

- ▶ Immigration
- ▶ Passport
- ▶ Fraud control
- ▶ Social services
- ▶ Law enforcement
- ▶ Voter registration
- ▶ Population estimation
- ▶ Health Services
- ▶ Population Registers

Figure 21

\* A verification of the records on file is generally the method for interaction with passport and immigration requests. Should the inquiry lead to criminal prosecution, then official documentation becomes necessary.

Besides the internal monitoring and review mechanisms that are required to maintain the civil registration system, it is also crucial to maintain communications among the various field operations in the system. There are many components to be considered, such as handbooks, training, guidelines, seminars, and newsletters.

## SECTION 4: ORGANIZATIONAL INTEGRATION OF CIVIL REGISTRATION AND VITAL STATISTICS

The processing functions carried out by the registration and statistical units to meet their respective program needs depend on the organizational structure of the system. The systems previously described — centralized or decentralized systems where each may have administrative structures with operational responsibilities allocated to single or multiple agencies — are the most commonly used based on the country's existing administrative and legal infrastructure. These types of systems serve to define the organizational structure most relevant for an effective and productive system.

### I. COMBINED CIVIL REGISTRATION/VITAL STATISTICS SYSTEMS

Where civil registration and vital statistics functions are conducted in a single agency either at the national or state level, the organizational arrangements are optimal. Here, the organization is represented by a single program director for both registration and vital statistics. Deputy directors, assigned to manage each program area, have responsibilities for daily operations of their respective programs and for reporting to the director. This allows for relevant policy, decision-making and planning related to the various functions of either program to be performed in an integrated and coordinated manner.

Within this framework, the issues, needs and problems relating to specific operational activities in the registration program can be addressed so that any possible impact on vital statistics

functions are resolved prior to implementation. This is not an immediately available option in organizational structures involving multiple agencies. The single agency structure also allows for the integration of related activities into a common operational unit. For example, the coding and data entry of registration and vital statistics data are activities which are closely related and best performed under one responsible unit. In this way, the resources and time frames to complete these functions are managed and controlled internally, eliminating the need for external communications which would be required in other organizational structures.

Another benefit of the combined program in a single agency structure is the common physical location. This allows for close working relations and interactivity in conducting the various functions and activities of the registration unit and the vital statistics units. Many of the registration functions interrelate directly with vital statistics functions. For example, changes and corrections made for registration purposes on specific items that originally had been reported inaccurately could impact the vital statistics data. The subsequent addition of information which had not been reported on the initial registration certificate is a common occurrence and could also affect subsequent vital statistics computations.

Common items most frequently affected in these instances include gender, date of birth or death, cause of death, and place of residence. These are often modified following the initial reporting of the vital event and could result in changes in reports and tabulations prepared for demographic, geographic and medical use based on the vital statistics data. Where large volumes of such changes occur on registered vital events, the capability to incorporate them into the vital statistics data base is more effective in the single agency structure.

### COMBINED CR/VS ORGANIZATIONAL STRUCTURE NATIONAL OR STATE LEVEL

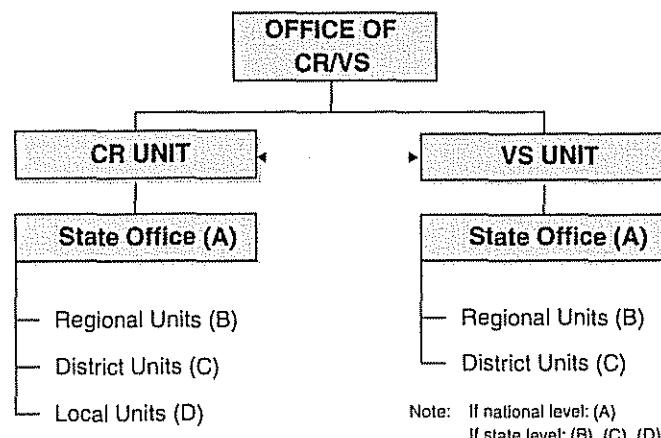


Figure 22

In countries where the vital events are processed in a single, centralized structure either at the national or state level, all aspects of the system can be integrated. Processing for each type of vital event becomes a routine operation for meeting each program's requirements in this structure.

In countries such as Canada, India and the United States, the individual states have total responsibility for the registration of each of the vital events. In a number of other countries the collection of each of the vital events are incorporated into a national population register which consolidates and integrates them into a single data network. Denmark and Japan, for example, include each of these types of vital events in their national population registers. As a result of the comprehensive nature of the data contained in these registers, these countries are in a position to effectively coordinate and manage all of the vital records data components for civil registration and vital statistics, as well as the broader aspects related to population dynamics.

These types of organizational structures provide for control over each type of vital event, and for access to the vital records for incorporating subsequent changes and additions in a timely fashion. Record linkages with various data files in this type of record system allow for the assessment of completeness, accuracy and reliability of the reported vital events data. Independent comparisons of individual events with other records contained in the system are available for this purpose. Processing and the preparation of data files for different statistical, planning and health program applications are also better arranged and coordinated in this combined system of record management and operation.

Within the single agency structure, management and operational functions are more effectively administered since all components are under the control and responsibility of a single program director. Policy and decision-making strategies to accomplish the objectives of the registration and statistical functions of the system can be defined and discussed by relevant unit staff, and a final plan or decision immediately initiated. The organizational alignment in this structure would include the system director, deputy directors (one responsible for the registration program and one for vital statistics), with each deputy reporting directly to the director. Administrative support staff, and appropriate units or sections responsible for specific functions and operations of each program are described below in terms of these internal organizational infrastructures.

Working committees within the system would generally be established in order to keep the respective programs updated as to new developments, required changes, and problems associated with routine operations. At the executive level (director/deputy directors), external committees would be established involving service providers, public and private agencies, health programs, and producers and users of the information from the vital events. At the national or state level in a centralized system, appropriate representation would

come from direct participants in the system. This is possible since the single agency structure is organized such that all aspects of the system are designated by a single central authority. This limits the external impact of other agencies in operating the system.

## **II. SEPARATE CIVIL REGISTRATION/VITAL STATISTICS SYSTEMS**

There may be significant differences in many aspects of the registration process from both the legal and statistical perspective when responsibilities for each of the systems are assigned to different agencies. This involves a broader and more general group of registration participants in the operational aspects of each program since the functions affecting the overall system are independently administered. This can impact the system at either the national or state level. This would involve multiple state or provincial government agencies in the registration process at the national level and, various local districts, municipalities or regional offices at the state level. In these structures the coordination and integration of the definitions of the vital events, the legal and statistical processing standards, reporting forms, and time periods for receipt of the data items become critical factors. This is due to the unique needs and independence that a decentralized, multiple agency administrative structure represents.

### **A. A national committee can help integrate inter-agency activities**

When registration of selected vital events are distributed among different agencies, it is more difficult to have an integrated system. For example, if the registration of births, deaths and fetal deaths are in one agency such as the Ministry of Health or Interior; marriages and divorces in the Ministry of Justice; and, vital statistics in a third agency such as the National Statistical Office, the administrative components for planning, policy development, coordination and program integration become highly diversified.

The priorities of each of these agencies for registration-related activities, given the range of their other program responsibilities, can result in reporting delays, lag periods for the sharing of data and information, incomplete adjustments for corrected or modified data, and limited record linkage and processing for registration and vital statistics purposes. This type of diverse administrative structure at the national level may require a committee to be established which would be responsible for the appropriate integration of inter-program activities.

The need for developing vital statistics at the national level which cover all aspects of vital events requires consistent data collection methods; standardized definitions, coding and processing; and, reliable reporting time periods. A national coordinating committee should involve representatives from 1) each of the agencies responsible for registration components, 2) the reporting sources of registration data through the primary health care facilities and providers and, 3) users of the data and

information for registration, legal and statistical purposes. An example of this type of committee is the National Committee in Chile. This group has incorporated all of the appropriate representatives as noted above, and has had a successful interactive relationship in conducting their registration and vital statistics system.

#### B. A coordinating body is needed for systems decentralized to the local level

A similar organizational infrastructure would be needed to meet registration and statistical needs in countries where the system is decentralized to the local level. Independent registration activities may occur at the regional, district, municipal or village level within a specific geographic area. The number of local offices involved when expanded on a nationwide level then becomes very large, and interactive participation of these groups more difficult to arrange. In this situation, a coordinating body through an organization of local registration officials similar to that described above would represent a centralized resource through which issues and problems could be addressed.

The various levels of the registration process in this type of system would then have an integrated structure for coordinating the system. It would minimize the amount of communication and interactive participation needed by all of the local responsible registration agencies involved, given appropriate representation is assigned to the professional association. Though the local independent framework for registration activities would remain in place, the utility of such an organization would help to maintain a uniform registration process. This, in turn, supports the needs of state and national programs for legal documentation of vital events and for the preparation of consistent and reliable vital statistics.

### III. RELATED LEGAL RESPONSIBILITIES

The legal infrastructure at the national or state level, regardless of the organizational structure of the two systems, must address the issues of access, use and dissemination of the registration information for vital statistics purposes. Authorization is required in order to be able to utilize the data for record matching in the development of health indicators, the preparation of demographic estimates and projections and, in conducting research, evaluation and epidemiologic studies. In these areas, the need to use identifying information to link records must be available to the vital statistics system. Legal restrictions on the access of personal identifiers in the registration system for statistical purposes could seriously affect many administrative, research, and statistical programs.

This aspect of the system must be incorporated into the statutes, rules and regulations established at the various levels of government for the registration and vital statistics programs. Within a national structure, the mandate is set to cover registration and statistical components nationwide, with appropri-

ate rules and regulations set up by the responsible agency or agencies for the programs. In the decentralized structure, the state laws must address this issue, and be implemented statewide to assure the data elements are available and can be accessed for statistical purposes. Locally, the responsible administrative unit must incorporate these features into the existing legal structure of the municipality, district or region.

### SECTION 5: REFERENCES

#### REFERENCES

##### United Nations Publications:

\* Principles and Recommendations for a Vital Statistics System, Series M, No. 19, Rev. 1, United Nations, New York 1973.

\* Handbook of Vital Statistics Systems and Methods, Series F, No. 35, Volume 1 *Legal, Organizational and Technical Aspects*, United Nations, New York 1991.

\* Handbook of Vital Statistics Systems and Methods, Series F, No. 35, Volume II: *Review of National Practices*, United Nations, New York 1985.

\* Handbook of Statistical Organization.

\* Handbook of Household Surveys.

\* Principles and Recommendations for Population and Housing Census.

##### Other Publications:

\* Organizational Arrangements for a Vital Registration System, Working Papers, No. 1, International Institute for Vital Registration and Statistics (IIVRS), April 1977.

\* Standard Industrial Classification Manual, U.S. Department of Commerce, Office of Federal Statistical Policy and Standards, Washington, D.C., 1987.

\* Standard Occupational Classification Manual, U.S. Department of Commerce, Office of Federal Statistical Policy and Standards, Washington, D.C., 1980.

\* International Classification of Diseases, 9th Revision, World Health Organization, Geneva.

\* Organization and Status of Civil Registration and Vital Statistics in Various Countries of the World, IIVRS, Technical Report series, No. 29, December 1986