## SAFEGUARDS FOR VITAL STATISTICS

## WALTER H. SCHULER

VITAL RECORDS are an important national resource. Their data provide society and the individual with a basis upon which to determine many rights, duties, privileges, and responsibilities. A fundamental right like citizenship may be established by the place of birth. Social security, veterans, or pension benefits may be affected by date of birth. The settlement of insurance claims may hinge upon establishing the recorded fact, manner, and cause of death.

Because such personal and monetary stakes can hinge upon these records, certain people have attempted without scruple to perpetrate fraudulent registrations. Even ordinarily honest persons have, at times, tried to bend the truth.

To illustrate this situation, a few selected cases are set forth below. These are among the few in which the defrauders were apprehended. It is difficult to estimate how many such frauds are undetected.

About 8 years ago, a man living in a north-eastern State, discovering that it was possible to make a better income "dead" than alive, arranged to file a death certificate for himself. The fraud was not discovered until he and his family had collected more than \$40,000 in welfare and veterans benefits. Because he had legally changed his name prior to filing the death certificate, he was even able to continue at his usual residence and work while his family cashed in on his "death."

A few years ago, a far western city jailed a man who had in his possession three passports and seven birth certificates, all bearing different names. In addition, he had a list of birth facts

Mr. Schuler is acting chief of the Registration Methods Branch, National Vital Statistics Division, Public Health Service. for more than 20 other persons. Inquiries to appropriate vital records offices established that, with the exception of one birth fact on one record, the listing was complete and accurate. Interrogation of the suspect soon revealed the purpose of the listing. He had applied to various local registration offices for fictitious records. When they could not be located, he simply asked to look at the index personally on the pretext that names had been misspelled. It was no feat then for him to memorize birth facts of valid records, so that he could apply for copies as though they were his own. A galling aspect of this case was that offices from which he had fraudulently obtained copies of records either did not require or did not keep applica-tions for records. He could not be prosecuted for impersonation, but, following questioning, which divulged his objectives, he committed suicide in jail.

Birth records are a valuable aid to espionage agents. In August 1952 a woman agent was taken into custody trying to enter the United States from Canada. She was attempting to masquerade as an American citizen, using an authentic copy of a birth certificate previously issued to an American citizen. Less than a year later, another agent responsible for the theft of important military information was arrested in New York City posing as an American photographer under the name of Emil R. Goldfus.

In 1952 a Federal agent was assigned to investigate a delayed birth registration filed for a notorious hoodlum in a middle Atlantic State. His search of building permits turned up the fact that the house where the hoodlum was allegedly born was not built until 4 years after the professed birth date. Another 4 years of investigation was needed, however, to get sufficient evidence to rebut the delayed birth

certificate, establish that the hoodlum was born abroad, and deport him.

In June 1960, a southern vital records office was apprised of a case in which a man found a way to discard a wife without divorce. He obtained a valid photostatic copy of a death certificate, altered it unlawfully, and rephotostated it. He submitted the altered record as proof that his first wife had died. He then obtained a marriage license and remarried.

In April 1962, a leading newsmagazine published an article on capers of collegians in Florida during spring recess. The article noted that many had difficulty buying liquor because they were underage. But one girl among them had no such trouble: she had been given a false birth certificate for a Christmas present.

In a southwestern State in August 1961, a 50-year-old woman whose husband was deceased attempted to file a birth certificate for her daughter, then 1½ years old. The local registrar reported the application to the State registrar for investigation, which disclosed that the child was born abroad and had been smuggled across the border.

A particularly brazen impostor once brought suit to obtain a passport on the ground that the State Department had refused to accept an altered certificate as proof of his alleged birth in the United States. To his chagrin, the U.S. Government attorney was able to bring two facts to the attention of the court. The birth certificate was valid. On the basis of an alleged baptismal record (from what proved to be a nonexistent church), the plaintiff had changed the registration from female to male, with an appropriate name change. But the child for whom the certificate was issued had died 3 months later.

In a midwestern city, a number of suspect birth certificates were submitted to obtain passports. During an investigation, it was learned that the local registration office always started birth entries for a new month at the top of a new ledger page. This left unfilled blanks on the preceding page. Some enterprising man, discovering this fact earlier, had managed to fill in some of these blanks.

A counterfeit ring was uncovered by the printers' union label. The ring's reproductions were perfect copies of current birth certificate

forms. Unfortunately, the certificates the counterfeiters were copying, including the printers' union labels, were for events occurring in the late 1890's, whereas the printers' union label did not appear until 1910.

Such examples of flagrant and grave abuse of our vital records system could be continued indefinitely. But these few may be sufficient to demonstrate the threat. To tighten the system, the National Vital Statistics Division of the Public Health Service in 1961 established an Ad Hoc Committee on Fraud Associated With Vital Records.

Federal and State representatives appointed to the committee were: W. D. Carroll, State registrar of vital statistics, Texas; Edwin Coile, Intelligence Branch, Immigration and Naturalization Service; Jacob Deutch, Claims Policy Division, Social Security Administration; Carl Erhardt, director, Bureau of Records and Statistics, New York City; Walter H. Schuler, National Vital Statistics Division, Public Health Service; Carrol Seeley, Legal Division, Passport Office; Everett H. Williams, Jr., director, Bureau of Vital Statistics, Florida; Melvin R. Wise, director, Bureau of Vital Statistics, Arizona.

The committee was charged with determining the extent to which fraud threatens our national vital statistics system, to examine fraud techniques and patterns, and to recommend steps for reducing and containing such threat.

On May 29, 1962, the following findings and recommendations were offered:

- 1. Fraud associated with vital records is a matter of serious import. It involves not only the creation of fraudulent records but also the use of valid records by persons to whom they do not relate.
- 2. A broader awareness of the many ramifications of the problem is needed. To this end a statement of "Minimum Safeguards Recommended for Vital Records" was drafted.
- 3. States need to tighten up procedures in both State and local offices to reduce opportunities for fraud and misuse of records.
- 4. A mutual exchange of information on fraudulent use of records between vital records offices and Federal agencies is not only feasible but will also serve to strengthen both the vital records system and national security.

5. This type of liaison between security agencies and vital records offices should be initiated by joint meetings of small groups of registration offices and Federal agencies until cooperative exchange processes are formally established.

The National Vital Statistics Division is cooperating with State vital records offices and Federal agencies in the development and establishment of minimum safeguards. While no one is naive enough to believe that fraud can be eliminated from our national vital records system, it is clear that a general strengthening of standards and practices is needed. Whatever standards and practices are developed, success or failure will depend in turn upon the thousands of dedicated and trained vital records custodians throughout the country.

## Science Advances

Among more than 1,800 papers presented last December at the 129th meeting of the American Association for the Advancement of Science, few created more of a stir than a statistical analysis of scientific literature by Derek J. de Solla Price, Avalon professor of the history of science at Yale.

In contrast to the conventional view that scientists and their publications are increasing at a rate which threatens to submerge the continents, Price projected a distribution of scientific processes which is consistent with other social and biological phenomena, such as the distribution of income (Pareto's law) and distribution in rank and size of cities (Zipf's law).

Although the recent burgeoning of science is such that 90 percent of the scientists in recorded history are still alive, Price's data offered assurances that the total number of scientists would not become a disproportionate number in the population. Their numbers, as with other biological populations, are likely to be self-limiting.

Although it is predicted that in the next 10 years as many scientific papers will be published as have been published to this time, it does not follow that the important or significant papers thereby will be lost in the crowd. To the contrary, modern communications have improved so that, within the select community, word of an important report or study is usually well circulated before publication. Moreover, the number of journals and papers tends vastly to exceed the number of important papers or journals. About 10 percent of the journals ac-

count for the majority of references, and about half the papers are written by about 10 percent of the authors.

Price derives such propositions as:

- The number of scientists increases as the square of the number of good scientists.
- The dollar investment in research increases as the square of the number of scientists employed.
- The more scientifically mature a nation becomes, the less will be its share of the world total of scientific work.

Price indicated that present demands for scientific manpower and difficulties in communications are an apparent rather than genuine obstacle to scientific work, that they actually reflect the recent disproportion between the rate of population growth and the rate of increase of scientists and publications. (For 300 years, scientific manpower and literature have increased by a factor of 10 with every doubling of the population.) The true measure of a country's scientific progress, he suggests, is but the logarithm of the scientific head count.

It is his expectation that conventional journal publication will in large part be supplanted by person-to-person exchange, by electronic storage and retrieval of data, and possibly a daily science newspaper.

His comments were selected from the Pegram lectures which he presented at Brookhaven last June. The data and interpretations have been published by Columbia University Press with the title, "Big Science, Little Science."