

Porto Rico Health Review

Official Bulletin of the Department of Health

Published monthly by the Department of Health of Porto Rico.

VOL. I

MARCH, 1926

No. 9

VITAL STATISTICS IN PORTO RICO

By MANUEL A. PÉREZ, Chief, Bureau of Vital Statistics

The importance of vital statistics in the administration of public health is recognized to-day all over the world. Countries of the highest standards of civilization can at present boast of having in operation the most perfect and accurate systems of vital statistics on which to base their respective health activities.

The prevention of disease, its control or its eradication can be successfully attained only when the time, the place, and the circumstances under which they occur, are known. The knowledge of how the population is composed, of how it grows and diminishes, and of its morbid affections can be obtained if the data concerning births, marriages, and deaths are appropriately collected, tabulated, analyzed, and kept on record. Wilbur has called vital statistics "the corner stone of health administration".

Many changes have taken place in the organization of the Department of Health of Porto Rico since the approval of the Organic Act in 1917, by which Act the Department was created as an independent branch of the Government, solely dedicated to deal with the problems affecting the health of the people, and with an ample scope of action. But it was not until 1923 that a complete reorganization began to be effected by adding many other services—most of them dealing primarily with the prevention of disease—to those already established, in order to bring the Department up to a standard institution.

As a result of the reorganization, the Division of Vital Statistics which had been functioning for a long time as a branch of the Bureau of Transmissible Diseases was abolished, and the Bureau of Vital Statistics created.

With the creation of the Bureau, however, the problem was not completely solved. It does not matter how well the central office may be functioning, if the material available from which conclusions are to be drawn is not absolutely dependable.

In order to make the discussion of this matter clearer, we deem

it proper to summarize briefly the development of vital statistics in Porto Rico: Early in the history of the country, the Spanish clergy instituted the custom of registering baptisms (births), marriages, and deaths, in special books which were known as "Parish Records", and in 1513 the parish registers were definitely established by order of Alonso Manso the first Catholic Bishop of the Island. However, the registration of these vital facts was not made compulsory until 1563 by virtue of agreement of the Ecumenical Council of Trent (1545-1563).

When the Dutch attacked San Juan, the capital of the Island, in 1625, one of their deeds of war was to set the public archives on fire, completely destroying them. Nevertheless, after that deplorable interruption the registration was continued. The parish records in use since then, and up to the nineteenth century, were divided into two sections, one for the white people, another for the colored people, either free or slaves. By the middle of the nineteenth century this division was suppressed and all registrations were entered in the books intended for the white people, though it was stated to which race the registration corresponded; but even this procedure was afterwards discarded.

By decree of the King of Spain issued on January 8, 1884, the Spanish Civil Registry Law was made extensive to Cuba and Porto Rico, the same being definitely put in operation in this Island in 1885. It was still in force when the American occupation took place.

During all this time, as no independent health organization was established, the data gathered were not used except by the casual interested investigator.

This state of affairs continued uninterrupted until 1911, in which year an act "to establish a law of Civil Register" was passed by the Legislature. This law provides that "acts concerning the civil status of persons shall be recorded in the register kept for such purpose, which shall be known as the "Civil Register"; that such registers are to be in charge of the municipal secretaries (county clerks), under the immediate inspection of the mayors; shall include records of births, marriages, emancipations, deaths, etc., occurring in each municipality, and shall be divided into three sections to be known as the "Register of Births", the "Register of Marriages" and the "Register of Deaths", each section to be kept in different books.

In the chapter dealing with the registration of deaths this law states that no corpse shall be buried unless a record of death be previously made in the civil register and the corresponding burial permit be issued, and unless twenty-four hours have elapsed from

the time that death has occurred according to the physician's certificate. In cases of death from contagious disease the burial shall take place within the time fixed by the health regulations. The person in charge of a cemetery in which a corpse has been buried without a burial permit, and those who have ordered or authorized such burial shall be liable to a fine of from ten to one hundred dollars.

No death shall be recorded until a certificate of the physician who attended the deceased during his last illness is presented, which certificate shall specify the cause of death. The law provides, however, that when there is no physician to issue the certificate the same may be substituted by an examination of the deceased by the person who reported the death, in the presence of two witnesses.

The law also states that every person, individual, public officer, minister of the Gospel, priest, physician or midwife violating the provisions of this law or failing to fulfill any of the obligations imposed by the same, is guilty of a misdemeanor and subject to a fine not exceeding two hundred dollars.

The most striking feature of this legislation is that while it places the immediate inspection of each local registry in charge of the mayor of each municipality and it empowers the Attorney General to inspect said registers and to adopt the necessary regulations in order that the registration may be uniform, it makes but a vague reference as to the authority of the Department of Health. In this respect a final section was inserted providing that *daily statistics shall be kept in all the registers* which must contain such information as may be determined by the Director of Health. This law has been subsequently amended, but remains fundamentally unchanged to-day.

As a matter of fact, both the municipal and Insular authorities seldom, if ever, inspect the civil registers. But assuming that they do, how can they be aware or even interested in the accuracy of the data registered, outside of the legal aspect of the registration itself? What does it matter to them that the record of age, color, occupation, and cause of death is properly taken? These simple but most important details are indispensable to the building up of an accurate system of vital statistics which is ultimately intended to be a guide in the struggle for the betterment of public health.

On March 4, 1912, a law to reorganize the Sanitation Service was approved, by which the Director of Sanitation was directed to maintain a Bureau of Vital Statistics and authorized "for this and other purposes . . . to require such reports as may be necessary

for the discharge of his duties. . . ." The Bureau was created, but shortly after, it was consolidated with the Bureau of Transmissible Diseases to be finally re-established, independently, on July 1st 1923.

In this short period of time—1923–1925, but especially during the last fiscal year (1924–1925)—a step forward was taken to conform the statistical work with the rules generally accepted throughout the civilized world, the aim being to facilitate the comparison of our statistics with those of other countries.

The International List of Causes of Death has been in use in Porto Rico almost since its approval. The books and demographic cards contain space for most of the data required to carry out the statistical work in a proper way according to up-to-date methods. The statistics, however, were made, until recently, for the Island as a whole, with no separate information as to the health conditions of the different municipalities.

At the end of the year, the total of births, stillbirths, marriages, and deaths was given together with the general rates; but concealed in these figures remained facts which if properly displayed would have proved advantageous in the improvement of the health conditions in the Island. In fact, the statistics as they were presented were of very limited use for an efficient public-health administration.

At present we are carrying on the work separately for each municipality as well as for the whole Island. Births, still-births, marriages and deaths are classified by age, color, sex, occupation, domicile, etc., and the rates of each classification are presented for each municipality. Particular study is also made of the most prevalent diseases.

Nevertheless, when on preparing the last annual report an attempt was made to give specific rates for the various classifications, we found ourselves, in many instances, unable to do so because of the evidently wrong classifications made by most of the local registrars.

Practically all deaths are recorded and classified by us strictly in accordance with the International List of Causes of Death. But on account of the undesirable and in some instances absurd terms often used by physicians, the column of "Ill-defined Diseases" sometimes rises to unusual figures. On the other hand, an overwhelming majority of deaths, especially those occurring in the rural zones, are certified without the doctor having actually seen the deceased, due to the fact that the population though dense in sections is widely separated, and the medical service is insufficient. In some sections there is only one doctor for a group of twelve to fifteen thousand

people. Hence, the cause of death in many cases has to be guessed instead of scientifically determined. The compilation of accurate mortality statistics under such conditions is next to impossible. Therefore, when we say that thirty thousand deaths occurred in Porto Rico during a certain year, we are perfectly correct. But, is our statement correct when we say that tuberculosis in all its forms was responsible for three thousand deaths, uncinariasis for five hundred, and malaria for fifteen hundred?

Morbidity statistics, I regret to state, are also very incomplete. The number of cases reported is so low that the result derived from the statistics is misleading. The Porto Rico physicians have not as yet developed the habit of systematically reporting their cases of communicable diseases. Frankly speaking, most of them have always been negligent in this respect. For one reason or another a great number of cases of transmissible diseases are not reported; and unless the medical profession is willing to cooperate with the Department of Health by reporting every case or suspected case of transmissible disease, the formation of veritable and complete morbidity statistics will be impossible.

The following table shows the number of cases of communicable diseases reported and the number of deaths which occurred from the same causes during the last fiscal year, 1924-1925:

Disease	Cases reported	Deaths occurred
Influenza	424	441
Typhoid fever	837	224
Tetanus	16	153
Chickenpox	45	1
Scarlet fever	2	2
Diphtheria	370	101
Dengue	1	.....
Epidemic cerebro-spinal meningitis	2	.....
Whooping cough	358	131
Mumps	3	.....
Filariasis	6	.....
Tetanus (neonatorum)	59	491
Malaria	1215	1474
Tuberculosis (all forms)	1929	3085
Leprosy	10	2
Ankylostomiasis	731	775
Pneumonia	10	.....
Measles	1224	620
Syphilis .....	.....	135
Ophthalmia neonatorum	14	.....
Trachoma	23	.....
Puerperal fever	6	.....
Erysipelas .....	.....	13
Anthrax	4	4

I think it is absolutely necessary and advisable to make a reform in our legislation and in our procedures with regard to vital statistics. The Civil Register Law, with some amendments, could be maintained but its enforcement should be placed under the control of the Department of Health. This is the only means by which all the deficiencies set forth in this article can be corrected.

