logic tests, and aids in the control of the quality of certain foods which may serve as means of transmission of disease.

Future of public health.—For the future improvement in public health we may have the assistance of an improvement in the economic situation. Honduras is always ready to cooperate with the Pan American Sanitary Bureau in the solution of the public health problems of the Continent.

# SOME IMPORTANT DATA ON PUBLIC HEALTH IN MEXICO

## By Drs. VÍCTOR FERNÁNDEZ MANERO and ALBERTO P. LEÓN

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Most notable developments.-The first Public Health Council of Mexico was created in 1841, and was purely advisory in nature. On July 14, 1891, the first Sanitary Code was promulgated, granting executive authority to the Superior Council of Health. An amended Code was issued September 10, 1894, defining the jurisdictions of Federal and Local public health authority, and placing the former in the hands of the Superior Council of Health. When the new Constitution was adopted in 1917, the Department of Public Health was created on February 5, as an autonomous body, directly under the President of the Republic. The general Regulations for the Department were issued December 19, 1924, appearing in the Diario Oficial for January 21, 1925. Amendments to the Sanitary Code, March 6, 1926, increased the powers of the Department in public health matters; the new Code was published in the Diario Oficial of July 8 and 9 of that year. In 1926, the Regulations for the Council of Public Health were also adopted. January, 1927, saw the creation of the first (32) Federal Health Delegations in the States. In January, 1929, the Office of Rural Hygiene and Sanitary Services of the Interior was established, and also the Service of Visiting Sanitary (or Public Health) Nurses. In 1931, the first Coordination of Federal and Local Sanitary Services was organized to strengthen public health activity by the cooperation of Federal and Local governments, particularly the services in rural zones. In 1935, the Ejidal Public Health Services (Services in the Ejidos, or communal villages patterned after the old Indian system), and the Coordinated Services were expanded to include 22 States. The Cooperative Office of Health Services in the Federal District was created the same year, in order to separate the local practical work from the administrative services for the Republic as a whole. A National Housing Commission was appointed in 1938. In 1934, there were 182 Health Offices in the States, and these had been increased by 1940 to 698, of which 108 were social medicine and rural hygiene units. The number of public health nurses employed in these Health Offices rose from 383 in 1934 to 1,390 in 1940.

Health education.—When the National School of Medicine was organized in 1833, a course in hygiene was included with that of physiology, the first time in which hygiene was taught in Mexico. In 1867 a separate chair of hygiene was created and made compulsory for medical students; the first instructor was Dr. Ladislao de la Pascua. In 1922 the School of Public Health was founded, but its educational activities began in May, 1925. In this year, the Office of Propaganda and Health Education was created.

Communicable Diseases.—In 1902 a Commission on Epidemiology was added to the Superior Council of Health, and its duty was the prevention of communicable disease. In that same year Dr. Eduardo Licéaga, first President of the

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Council, proposed an energetic campaign against the Aedes aegupti mosquito. The project, Regulations, and plans were approved in 1903, and the work was begun in September in the Port of Veracruz, being extended to other ports and cities a few months later. By December 1904, three months had passed since a case of yellow fever had been reported in Veracruz, and on October 25, 1906, the Superior Council of Health reported that not a single case had appeared in the whole country. Also in 1902, at the suggestion of the Superior Council of Health, the President of the Republic asked the States to make smallpox vaccination compulsory. On March 27, 1925, the Regulations on Vaccination and Re-vaccination were issued, making vaccination compulsory for all inhabitants of the country. On October 20, 1902, an epidemic of bubonic plague appeared for the first time in Mexico (port of Mazatlán). Its control is one of the most interesting and eloquent examples of victory over this disease. By March 15, 1903, the epidemic had been completely controlled; there were no more cases. In April, 1911, two years after Nicolle had demonstrated the role of Pediculus vestimenti as a vector of exanthematic typhus, a de-lousing campaign was begun in Mexico. In 1920 an epidemic outbreak of bubonic plague occurred in the port of Veracruz; it was brought under control by the middle of the same year. In April, 1924, a campaign against hookworm was undertaken in collaboration with the Rockefeller Foundation. A Commission for the study of *pinto* was appointed in 1929, as was another for the study and control of *onchocerciasis*. In 1938 a beginning was made in the combating of measles through the use of convalescent serum or by the attenuation or modification of the virus by placental extract; active immunization against diphtheria with alum-precipitated toxoid was initiated, and the epidemiological investigation of brucellosis was begun. In 1940 a hospital was completed in Huixtla, Chiapas, for onchocerciasis patients in the endemic area; and another was opened in Arcelia. Guerrero, for *pinto* cases, this likewise being in the endemic zone. In the same year a Medical-Public Health Service for the prevention of trachoma was created in Nacimiento, Muzquiz (Coahuila), and the study of the prevalence in Mexico City of the different types of pneumococci was undertaken.

Tuberculosis.—In 1900 Dr. Licéaga founded the first National Tuberculosis Association. In 1918 the first tuberculosis dispensary was opened in Mexico City, and in 1929 the construction of the Huipulco Tuberculosis Sanatorium and five dispensaries in Mexico City was begun. Dispensaries were also opened in the States of Tamaulipas, Veracruz, Guanajuato, Sinaloa, and Coahuila. The National Tuberculosis Control Committee, created by Presidential decree November 10, 1939, began its work in January 1940. The first preventorium was founded that same year in Mexico City. The National Committee instituted a financial campaign in 1941, collecting 4,000,000 pesos through public cooperation, and beginning the construction of three hospitals with a total capacity of 1,100 beds, a preventorium in Mexico City for 300 children, and a 300-bed children's tuberculosis hospital. The First Regional Conference on Tuberculosis was celebrated the same year in Guanajuato.

Venereal Disease.—The first Regulation on Prostitution and the Registration and Health Inspection of prostitutes was promulgated in 1918, and the first dispensary was opened. The first 12 venereal disease dispensaries in the States were founded in 1924, and a consultative service for venereal disease cases was created in each health unit. In 1933 the Venereal Disease Control Campaign Service was established in the Department of Public Health, combining under one administration the various institutions in this field. Legal prostitution was abolished in 1940, and the operation of houses of prostitution and the transmission of venereal disease were included as crimes under the Penal Code. A Service of Social Workers was created in that year to assist in the campaign. Malaria.—Permanent malaria control engineering projects were begun in 1934. In 1935 a Presidential decree declared the malaria control campaign to be of public utility, and the importation of quinine and its derivatives was made duty-free. Studies for the cultivation of cinchona were begun. In 1940, 761,935 pesos had been spent for malaria control.

Leprosy.—The Leprosy Prevention Service was created in 1929, and the National Leprosy Prevention Regulations were issued. The first leprosy census was made the same year. In 1939 the first Leprosarium, "Dr. Pedro López," in Zoquiapán, D. F., was opened. The Sarabia (Guanajuato) Leprosarium was built in 1940. In 1941 the First Regional Leprosy Conference was held in that State.

Maritime sanitation.—On December 16, 1905, the resolutions of the II Pan American Sanitary Convention regarding maritime and international sanitation were approved, and they were later ratified by the Senate. The first Maritime Sanitation quarantine station was opened February 11, 1906, in the Port of Veracruz. In 1938 construction was begun on the Manzanillo quarantine station, and it was inaugurated in 1940.

Sanitation.—Mexico City's first modern drainage system was begun in 1901 at the initiative of the Superior Council of Health. The first Regulations on Sanitary Engineering were issued January 1, 1904. In 1939 the National Drinking Water Division was created in the Department of Public Health. From 1934 to 1940, drinking water services were installed in 337 small towns, at a cost of 5,500,000 pesos, and benefiting 415,000 persons.

<sup>'</sup>Food Hygiene.—When the Superior Council of Health was created in 1891, a Commission of Food and Beverage Hygiene was included in its organization. In 1902 the first provisions on milk and bread hygiene were adopted, and 1918 saw the promulgation of the first Regulation on the Production, Sale, and Distribution of Milk, the Regulation on Production and Sale of Foods and Beverages, and the Market Regulation.

Child welfare.—The first child welfare center was founded January 1, 1925, and named in honor of Dr. Eduardo Licéaga. In May, 1929 the Child Hygiene Service was founded, and various child welfare centers were opened in Mexico City and in some of the States. In that same year the National Child Protection Society, not an official organization, was created. Under its auspices the Maternity Home, six home-schools, and seven child centers were established. The Department of Social Assistance for Children was created June 30, 1937, and placed in charge of child welfare work in the Republic. On December 30, 1939, the Secretariat of Public Assistance came into being, and among its functions are assistance to mothers and children, and child hygiene.

Industrial hygiene.—When the Superior Health Council was created in 1891, it included a Commission on Factory and Industrial Hygiene. In 1929 the Industrial Hygiene and Social Prevision Service was established, and placed in charge of Federal action in this field.

Institute of Hygiene.—The Institute of Hygiene, which manufactures the biologic products used in the prophylaxis of communicable disease, was founded May 1, 1895, as the National Bacteriological Institute, a dependency of the Bacteriology Section of the Anatomy-Pathology Museum. In 1921 it was reorganized and enlarged under its present name, being a part of the Department of Public Health.

Institute of Public Health and Tropical Disease.—The construction of this Institute was begun in 1935, and it was inaugurated in 1939.

Important Activities.—Among other important activities of recent years have been: the discovery of the causative agent of mal del pinto; adoption of simultanee

ous active and passive immunization against diphtheria; preparation of typhus vaccine in adequate quantities and at low cost; and the preparation of an alumprecipitated typhoid-paratyphoid vaccine (T.A.B.), to be administered in a single dose.

Most important needs.—To judge by the mortality statistics, Mexico's most important health problems at present are the prevention of water-borne diseases, pneumonia, malaria, and tuberculosis.

Future program.—The program for the future must, of necessity, be based on these four problems, thus including: (1) increased efforts to prevent the transmission of water-borne diseases; (2) prevention of pneumonia; (3) intensified construction of malaria control projects; and (4) a more effective campaign against tuberculosis.

**Funds.**—The Federal appropriations for the Department of Public Health have increased from 165,586 *pesos* in 1900, to 562,900 in 1910, 2,116,981 in 1920, 8,882,576.25 in 1930, 10.480.000 in 1935, 16.500.000 in 1940, and 20.233.403.18 in 1941.

General death rate.-1900, 33.6; 1939, 22.4; 1900-1904, 32.9; 1935-1939, 22.7.

Infant death rate.—1900, 286.8; 1939, 132; 1900–1904, 292.4; 1935–1939, 131. Causes of death.—Smallpox: 1900, 203.1; 1939, 11.5; 1900–1904, 158.3; 1935–1939.

19.8. Typhus: 1900, 33.8; 1939, 5.3; 1900–1904, 31.1; 1935–1939, 5.8. Malaria: 1922, 173.3; 1939, 130.3; 1922–1926, 32.8; 1935–1939, 27.5. Tuberculosis: 1922, 78.8; 1939, 55.6; 1922–1926, 73.2; 1935–1939, 54.4.

### PAN AMERICAN HEALTH DAY

### By Dr. LUIS MANUEL DEBAYLE

#### Director General of Health of Nicaragua

The institution of Pan American Health Day has been a most excellent action, and the selection of December 2, anniversary of the opening, in 1902, of the First Pan American Sanitary Congress, is full of symbolism.

The ideal of cooperation and mutual service which the American Continent has set up as the invariable standard for the relations among its various national components, has found its most complete realization in the field of public health. The differences which may arise in other matters as the result of special national conditions or variations in cultures, have no place in sanitation, which partakes of the universality of Science. We all seek a single, noble end: the health of American humanity, through the health of each inhabitant of our respective countries. We meet, we enter into consultation, we each place at the disposition of all the fruits of our experience, so that the measures which we take to achieve our goal may always be the most effective, the ones most certain of success; so that some day it may be said that, having the same goal, we work toward it with the same methods. We will then have indeed achieved the standardization of public health services on the American continent.

On Pan American Health Day we recall with gratitude and appreciation the pioneers of continental public health: Finlay, Gorgas, Chagas, Morquio, Liceaga, Unanue, and Wyman; and let us place beside these illustrious names that of Dr. Hugh S. Cumming, who for several decades has placed his scientific knowledge and his experience at the service of Pan American health.

How eloquent and how consoling is the fact that while in other parts of the earth death is placing its fateful seal on men and things, here in America we may join in a hymn to Health, that magic ingredient which fills hearts with the joy of living.