

## CONTENTS

	Page
International Sanitary Convention of Paris of January 17, 1912, revised June 21, 1926 .....	1785
Public health engineering abstracts .....	1854
Deaths during week ended June 30, 1928:	
Death claims reported by insurance companies .....	1857
Deaths in certain large cities of the United States .....	1858
<b>PREVALENCE OF DISEASE</b>	
United States:	
Current weekly State reports—	
Reports for weeks ended July 7, 1928, and July 9, 1927 .....	1860
Summary of monthly reports from States .....	1862
First admissions to institutions for the care of epileptics, January— March, 1928 .....	1863
General current summary and weekly reports from cities .....	1863
City reports for week ended June 23, 1928 .....	1864
Summary of weekly reports from cities, May 20 to June 23, 1928— Rates—Comparison with 1927 .....	1871
Foreign and insular:	
The Far East—Report for the week ended June 16, 1928 .....	1874
Angola—Communicable diseases—March, 1928 .....	1874
Canada—	
Provinces—Communicable diseases—Week ended June 23, 1928 .....	1875
Quebec Province—Communicable diseases—Week ended June 23, 1928 .....	1875
Cuba—Quarantine measures against arrivals from Brazil on account of yellow fever .....	1875
Great Britain—London—Typhus fever—Week ended June 9, 1928 .....	1875
Jamaica—	
Smallpox (alastrim)—April 29—June 2, 1928 .....	1876
Other communicable diseases .....	1876
Latvia—Communicable diseases—April, 1928 .....	1876
Paraguay—Asuncion—Plague—July 7, 1928 .....	1876
Union of Soviet Socialist Republics—Astrakhan Government— Pneumonic plague—June 18, 1928 .....	1876
Virgin Islands—Communicable diseases—May, 1928 .....	1877
Cholera, plague, smallpox, typhus fever, and yellow fever—	
Cholera .....	1878
Plague .....	1880
Plague rats on vessels .....	1884
Smallpox .....	1885
Typhus fever .....	1891
Yellow fever .....	1894

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## INTERNATIONAL SANITARY CONVENTION OF PARIS OF JANUARY 17, 1912, REVISED JUNE 22, 1926<sup>1</sup>

[Ratified by the Senate, March 22, 1928; ratified by the President, April 7, 1928; ratification deposited with the Government of France, May 22, 1928; proclaimed by the President, June 21, 1928]

In executive session this day [March 22, 1928] the Senate, having had under consideration Executive D, Sixty-ninth Congress, second session, an international convention signed at Paris on June 21, 1926, revising the International Sanitary Convention of January 17, 1912, advised and consented to its ratification, subject to the following understandings and conditions:

1. The ratification of this International Sanitary Convention is not to be construed to mean that the United States of America recognizes a régime or entity acting as government of a signatory or adhering power when that régime or entity is not recognized by the United States as the government of that power.

2. The participation of the United States of America in this International Sanitary Convention does not involve any contractual obligation on the part of the United States to a signatory or adhering power represented by a régime or entity which the United States does not recognize as representing the government of that power until it is represented by a government recognized by the United States.

3. The Government of the United States reserves to itself the right to decide whether, from the standpoint of the measures to be applied, a foreign district is to be considered as infected and to decide what measures shall be applied to arrivals in its own ports under special circumstances.

On motion of Mr. Borah, and by unanimous consent, the injunction of secrecy was removed from the convention, which is as follows:

*To the Senate:*

To the end that I may receive the advice and consent of the Senate to ratification, I transmit herewith an international convention signed at Paris on June 21, 1926, revising the International Sanitary Convention of January 17, 1912.

The convention now transmitted was signed by the American plenipotentiaries subject to two declarations recited in the accompanying report of the Acting Secretary of State to me, and I recommend that the advice and consent of the Senate to ratification be given subject to them.

CALVIN COOLIDGE.

THE WHITE HOUSE, *Washington.*

<sup>1</sup> The text of the convention printed here is taken from the Congressional Record for Mar. 22, 1928, and is published as preliminary information for use ad interim pending the issuance of the official translation by the State Department.

**The PRESIDENT:**

The undersigned, Acting Secretary of State, has the honor to lay before the President, with a view to its transmission to the Senate to receive the advice and consent of that body to ratification, an international convention signed at Paris on June 21, 1926, revising the International Sanitary Convention of January 17, 1912.

The plenipotentiaries of the United States signing the convention were Dr. H. S. Cumming, Surgeon General of the United States Public Health Service, and Surg. W. W. King, also of that service, who signed subject to two declarations entered in the protocol of signature, an authenticated copy of which is also furnished for transmission to the Senate. These declarations are as follows:

"The plenipotentiaries of the United States of America formally declare that their signing the International Sanitary Convention of this date is not to be construed to mean that the United States of America recognizes a régime or entity acting as government of a signatory or adhering power when that régime or entity is not recognized by the United States as the government of that power. They further declare that the participation of the United States of America in the International Sanitary Convention of this date does not involve any contractual obligation on the part of the United States to a signatory or adhering power represented by a régime or entity which the United States does not recognize as representing the government of that power until it is represented by a government recognized by the United States.

"The plenipotentiaries of the United States of America declare, furthermore, that their Government reserves to itself the right to decide whether, from the standpoint of the measures to be applied, a foreign district is to be considered as infected and to decide what measures shall be applied to arrivals in its own ports under special circumstances."

It is recommended that the advice and consent of the Senate to ratification be made subject to these two declarations.

Respectfully submitted.

JOSEPH C. GREW,  
*Acting Secretary of State.*

DEPARTMENT OF STATE,  
*Washington, February 23, 1927.*

[Translation]

### INTERNATIONAL SANITARY CONVENTION

His Majesty the King of Afghanistan; the President of the Republic of Albania; the President of the German Empire; the President of the Argentine Nation; the Federal President of the Austrian Republic; His Majesty the King of the Belgians; the President of the Republic of the United States of Brazil; His Majesty the King of the Bulgarians; the President of the Republic of Chile; the President of the Republic of China; the President of the Republic of Colombia; the President of the Republic of Cuba; His Majesty the King of Denmark; the President of the Dominican Republic; His Majesty the King of Egypt; the President of the Republic of Ecuador; His Majesty the King of Spain; the President of the United States of America; Her Majesty the Queen of Ethiopia and His Imperial and

Royal Highness the Prince Hereditary and Regent of the Empire; the President of the Republic of Finland; the President of the Republic of France; His Majesty the King of the United Kingdom of Great Britain and Ireland and of the British Possessions beyond the Seas, Emperor of India; the President of the Republic of Greece; the President of the Republic of Guatemala; the President of the Republic of Haiti; His Majesty the King of the Hedjaz; the President of the Republic of Honduras; His Serene Highness the Regent of the Kingdom of Hungary; His Majesty the King of Italy; His Majesty the Emperor of Japan; the President of the Republic of Liberia; the President of the Republic of Lithuania; Her Royal Highness Madame the Grand Duchess of Luxembourg; His Majesty the Sultan of Morocco; the President of the Republic of Mexico; His Serene Highness the Prince of Monaco; His Majesty the King of Norway; the President of the Republic of Paraguay; Her Majesty the Queen of the Netherlands; the President of the Republic of Peru; His Majesty the Shah of Persia; the President of the Republic of Poland; the President of the Portuguese Republic; His Majesty the King of Rumania; the Captains Regents of San-Marino; His Majesty the King of the Serbs, Croats and Slovenes; the President of the Republic of Salvador; the Governor General Representing the Sovereign Authority of the Soudan; the Swiss Federal Council; the President of the Republic of Czechoslovakia; His Highness the Bey of Tunis; the President of the Turkish Republic; the Central Executive Committee of the Union of the Soviet Socialist Republics; the President of the Republic of Uruguay and the President of the Republic of Venezuela.

Having decided to make in the provisions of the sanitary convention signed at Paris on January 17, 1912, the changes that are called for by the new data of prophylactic science and experience, to set up an international set of regulations relative to exanthematic typhus and smallpox and to broaden, as far as possible, the field of application of the principles which inspired the international health regulations, have decided to conclude a convention to that effect and have appointed as their plenipotentiaries, to wit:

His Majesty the King of Afghanistan:

Mr. Islambek Khoudoiar Khan, Secretary of the Legation of Afghanistan at Paris.

The President of the Republic of Albania:

Doctor Osman, Director of the Tirana Hospital.

The President of the German Republic:

Mr. Franoux, Privy Legation Counselor at the German Embassy at Paris.

Doctor Hamel, Counselor in the Ministry of the Interior of the Republic.

The President of the Argentine Nation:

Mr. Federico Alvarez de Toledo, Minister of Argentina at Paris.

Dr. Abaoz Alfaro, President of the Department of Hygiene.

Mr. Manuel Carbonnel, professor of hygiene on the Faculty of Medicine of Buenos Aires.



- The Federal President of the Republic of Austria:**  
Mr. Alfred Grünberger, Minister of Austria at Paris.
- His Majesty the King of the Belgians:**  
Mr. Veighe, Secretary General of the Ministry of the Interior and of Hygiene.
- The President of the Republic of the United States of Brazil:**  
Dr. Carlos Chagas, Director General of the National Department of Public Health, Director of the Oswald Cruz Institute.  
Dr. Gilberto Maura Costa.
- His Majesty the King of the Bulgarians:**  
Mr. Morfoff, Minister of Bulgaria at Paris.  
Dr. Tochko Petroff, Professor on the Faculty of Medicine of Sofia.
- The President of the Republic of Chile:**  
Mr. Armando Quezada, Minister of Chile at Paris.  
Dr. Emilio Aldunate, Professor on the Faculty of Medicine of Chile.  
Dr. J. Rodriguez Barros, Professor on the Faculty of Medicine of Chile.
- The President of the Republic of China:**  
General Yao Si-Kiou, Military Attaché at Paris.  
Dr. Soie Ton-Fa, special secretary of the Chinese legation at Paris.
- The President of the Republic of Colombia:**  
Dr. Miguel Jiménez Lopez, Professor on the Faculty of Medicine of Bogota, Minister Plenipotentiary of Colombia at Berlin.
- President of the Republic of Cuba:**  
Mr. Ramiro Hernandez Portela, Counselor of the Legation of Cuba at Paris.  
Dr. Mario Lebrede, Director of the "Las Animas" Hospital.
- His Majesty the King of Denmark:**  
Dr. Th. Madsen, Director of the State Serum Institute.  
Mr. I. A. Korbing, Director of the United Society of Shipowners.
- The President of the Republic of Poland, for the Free City of Danzig:**  
Dr. Witold Chodzko, former Minister of Health.  
Dr. Carl Stade, State Counselor of the Senate of the Free City of Danzig.
- The President of the Dominican Republic:**  
Doctor Betances, Professor on the Faculty of Medicine of Santo Domingo.
- His Majesty the King of Egypt:**  
Mr. Fakhry Pacha, Minister of Egypt at Paris.  
Maj. Charles P. Thomson, D. S. O., President of the Sanitary, Maritime and Quarantine Board of Egypt.  
Dr. Mohamed Abd El Salam El Guindy Bey, second secretary of the legation of Egypt at Brussels, Delegate of the Egyptian Government to the Committee of the International Office of Public Hygiene.
- The President of the Republic of Ecuador:**  
Dr. J. Illingourth Ycaza.
- His Majesty the King of Spain:**  
Marquis de Faura, Minister; Counselor of the Embassy of Spain at Paris.  
Dr. Francisco Murillo y Palacios, Director General of Health of Spain.
- The President of the United States of America:**  
Dr. H. S. Cumming, Surgeon General, Public Health Service.  
Dr. Toliaferro Clark, senior surgeon, Public Health Service.  
Dr. W. W. King, surgeon, Public Health Service.
- Her Majesty the Queen of Ethiopia and His Imperial and Royal Highness the Prince Hereditary and Regent of the Empire:**  
Count Lagarde, Duke of Entotto, Minister Plenipotentiary.
- President of the Republic of Finland:**  
Mr. Charles Enckell, Minister of Finland at Paris.  
Dr. Oswald Streng, Professor at the University of Helsingfors.

The President of the French Republic:

His Excellency, Camille Barrère, Ambassador of France.

Mr. Harismendy, Minister Plenipotentiary, Under Director to the Minister of Foreign Affairs.

Mr. de Navilles, Underdirector to the Minister of Foreign Affairs.

Doctor Calmette, Underdirector of the Pasteur Institute.

Dr. Léon Bernard, Professor on the Faculty of Medicine of Paris.

For Algeria:

Dr. Lucien Raynaud, Inspector General of Hygiene Services of Algeria.

For French West Africa:

Dr. Paul Gouzien, Medical Inspector General of Colonial Troops.

For French East Africa:

Doctor Thiroux, Medical Inspector of Colonial Troops.

For French Indo-China:

Doctor L'Herminier, Delegate of Indo-China, financial consultant of the Eastern Bureau of the League of Nations.

Dr. Noël Bernard, Director of Pasteur Institutes of Indo-China.

For the States of Syria, Great Lebanon, Alaouites, and Djebel-Druse:

Mr. Harismendy, Minister Plenipotentiary, Underdirector of the Ministry of Foreign Affairs.

Doctor Delmas.

For all other colonies, protectorates, possessions, and territories under French mandate:

Doctor Audibert, Inspector General of the Health Service of the Colonial Ministry.

His Majesty the King of the United Kingdom of Great Britain and Ireland and the British possessions beyond the Seas, Emperor of India:

Sir George Seaton Buchanan, Kt., C. B., M. D., Chief Medical Officer to the Ministry of Health.

Mr. John Murray, C. M. G., Counselor to the Foreign Office.

For the Dominion of Canada:

Dr. John Andrew Amyot, C. M. G., M. B., Director General of the Ministry of Health of the Dominion of Canada.

For the Commonwealth of Australia:

Dr. William Campbell Sawers, D. S. O., M. B., Physician to the Ministry of Health.

For the Dominion of New Zealand:

Lieut. Col. Sydney Price James, M. D.

For India:

Mr. David Thomas Chadwick, C. S. I., C. I. E., Secretary of the Government of India, to the Ministry of Commerce.

For the Union of South Africa:

Dr. Philip Stock, C. B., C. B. E., Delegate to the Committee of the International Office of Public Hygiene.

The President of the Republic of Greece:

Mr. Al. C. Carapanos, Minister of Greece at Paris.

Dr. Matarangas Gérassimos.

The President of the Republic of Guatemala:

Dr. Francisco A. Figueroa, Chargé d'Affaires at Paris.

The President of the Republic of Haiti:

Dr. Georges Audain.

His Majesty the King of Hedjaz:

Dr. Mahmoud Hamoudé, Director General of Public Health.

The President of the Republic of Honduras:

Dr. Ruben Aúdino-Aguilar, Chargé d'Affaires at Paris.

His Serene Highness the Regent of the Kingdom of Hungary:

Dr. Charles Grosch, Counselor to the Ministry of Social Welfare.

His Majesty the King of Italy:

Dr. Albert Lutrario, Prefect of the first class.

Dr. Giovanni Vittorio Repetti, Physician General of the Royal Italian Marine, Sanitary Director of the General Commissariat of Emigration.

Colonel Odoardo Huetter, Commandant of the Port of Venice.

Mr. Guido Rocco, First Secretary of the Italian Embassy at Paris.

Dr. Cancelliere, Vice-Prefect of the first class.

Dr. Druetti, Foreign Sanitary Delegate.

His Majesty the Emperor of Japan:

Mr. Hajimé Matsushima, Counselor of the Embassy.

Dr. Mitsuzo Tsurumi, Delegate of Japan to the Committee of the International Office of Public Hygiene.

The President of the Republic of Liberia:

Baron R. A. L. Lermann, Minister of Liberia at Paris.

Mr. N. Ooms, First Secretary of the Legation.

The President of the Republic of Lithuania:

Dr. Pranas Viciuska, Lieutenant General of Health (of the Reserve), in charge of course of instruction at the University of Kaunas, Medical Officer of the City of Kaunas.

Her Royal Highness Madame Grand Duchess of Luxembourg:

Doctor Praum, Director of the Bacteriological Laboratory of Luxembourg.

His Majesty the Sultan of Morocco:

Mr. Harismendy, Minister Plenipotentiary, Underdirector of the Ministry of Foreign Affairs.

Dr. Lucien Raynaud, Inspector General of Hygiene Services of Algeria.

The President of the Republic of Mexico:

Doctor Raphaël Cabrera, Minister of Mexico at Brussels.

His Serene Highness the Prince of Monaco:

Mr. Roussel-Despierres, Secretary of State of H. S. H. Prince of Monaco.

Doctor Marsan, Director of Hygiene Service of the Principality.

His Majesty the King of Norway:

Mr. Sigurd Bentzon, Counselor of the Legation of Norway at Paris.

Dr. H. Mathias Gram, Director General of the Sanitary Administration.

The President of the Republic of Paraguay:

Dr. R. V. Caballero, Chargé d'Affaires of Paraguay in France.

Her Majesty the Queen of the Netherlands:

Mr. Doude van Troostwyk, Minister of the Netherlands at Bern.

Dr. N. M. Josephus Jitta, President of the Board of Hygiene.

Dr. de Vogel, former chief inspector of the Sanitary Service of Netherlands Indies.

Mr. van der Plas, Consul of the Netherlands at Djeddah.

The President of the Republic of Peru:

Dr. Pablo S. Mimbela, Minister Plenipotentiary of Peru at Bern.

His Majesty the Shah of Persia:

Dr. Ali-Khan Partow-Aazam, former Undersecretary to the Ministry of Public Instruction, Vice President of the Sanitary Board, and Director of the Imperial Hospital.

Doctor Mansour-Charif, former physician to the Royal Family.

The President of the Republic of Poland:

Dr. Witold Chodzko, former Minister of Health.

Mr. Taylor, Underchief of the Department of Customs.

- The President of the Portuguese Republic:  
Prof. Ricardo Jorge, Director General of Public Health.
- His Majesty the King of Rumania:  
Dr. Jean Cantacuzéne, Professor on the Faculty of Medicine of Bucharest.
- The Captains Regent of San-Marino:  
Doctor Guelpa.
- The President of the Republic of Salvador:  
Professor Lardé-Arthés.
- His Majesty the King of the Serbs, Croats, and Slovenes:  
Mr. Miroslav Spalaikovitch, Minister Plenipotentiary at Paris.
- The Governor General representing the sovereign authority of the Sudan:  
Dr. Oliver Francis Haynes Atkey, M. B., F. R. C. S., Director of the Medical Service of the Sudan.
- The Swiss Federal Council:  
Mr. Alphonse Dunant, Minister of Switzerland at Paris.  
Doctor Carrière, Director of the Federal Public Health Service.
- The President of the Czechoslovak Republic:  
Dr. Ladislav Prochazka, Chief of the Sanitary Services of the City of Prague.
- His Highness the Bey of Tunis:  
Mr. de Navilles, Underdirector of the Ministry of Foreign Affairs.
- The President of the Turkish Republic:  
His Excellency Aly Féthy Bey, Ambassador of Turkey at Paris.
- The Central Executive Committee of the Union of Soviet Socialist Republics:  
Professor Nicolas Semachko, Member of the Central Executive Committee of the U. R. S. S., Peoples' Commissary for Health of the same; also for the R. S. F. S. R.  
Mr. Jacques Davtian, Counselor of the Embassy of the U. R. S. S. at Paris.  
Mr. Vladimir Egoriew, Underdirector of the Peoples' Commissariat for Foreign Affairs.  
Dr. Iliá Mammoulia, Member of the Central Executive Committee of the R. S. S. of Georgia.  
Dr. Léon Bronstein, of the Peoples' Commissariat for Public Health of the R. S. S. of the Ukraine.  
Dr. Oganés Mebourntonoff, Member of the College of the Peoples' Commissariat for Public Health of the R. S. S. of the Uzbekistan.  
Dr. Nicolas Freyberg, Counselor to the Peoples' Commissariat for Public Health of the R. S. F. S. R.  
Dr. Aléxis Syssine, Chief of the Sanitary and Epidemiology Department of the Peoples' Commissariat for Public Health of the R. S. F. S. R., Professor in the University.
- The President of the Republic of Uruguay:  
Mr. A. Herosa, former Chargé d' Affaires of Uruguay at Paris.
- The President of the Republic of Venezuela:  
Mr. José Ignacio Cardenas, Minister of Venezuela at Madrid and The Hague.

Who, after depositing their full powers, found to be in good and due form, have agreed to the following provisions:

#### PRELIMINARY PROVISIONS

For the purposes of this convention the high contracting parties adopt the following definitions:

1. The word *circumscription* designates a fully defined part of territory, for example: A province, a government, a district, a

department, a canton, an island, a commune, a city, a city district, a village, a port, a community, etc., regardless of the area and population of those parts of territory.

2. The word *observation* means isolation of the persons either on board a ship or in a sanitary station before they are given free pratique.

The word *surveillance* means that the persons are not isolated, are immediately given free pratique, but are reported to the health authorities in the several places they are to visit and subjected to a medical examination by which their health condition is ascertained.

3. The word *équipage* includes all persons who are not on board for the mere purpose of being carried from one country to another, but who are employed in any capacity whatsoever in the service of the ship or persons on board or of the cargo.

4. The word *day* means an interval of 24 hours.

#### TITLE I. GENERAL PROVISIONS

##### CHAPTER I. PROVISIONS TO BE OBSERVED BY THE GOVERNMENTS OF THE COUNTRIES PARTICIPATING IN THE PRESENT CONVENTION ON THE APPEARANCE OF PLAGUE, CHOLERA, YELLOW FEVER, OR CERTAIN OTHER INFECTIOUS DISEASES IN THEIR TERRITORY

###### SECTION I. *Notification and subsequent communications to other countries*

###### ARTICLE 1

Each government shall immediately notify the other governments and, at the same time the International Office of Public Hygiene—

- (1) The first authentic case of plague, cholera, or yellow fever discovered in its territory.
- (2) The first authentic case of plague, cholera, or yellow fever which occurs outside the limits of local areas already affected.
- (3) The existence of an epidemic of typhus or of smallpox.

###### ARTICLE 2

Every notification prescribed in article 1 shall be accompanied, or very promptly followed, by detailed information as to—

- (1) Where the disease has appeared.
- (2) The date of its appearance, its source, and its type.
- (3) The number of established cases and the number of deaths.
- (4) The extent of the area or areas affected.
- (5) In the case of plague, the existence of that disease or of an unusual mortality among rats.
- (6) In the case of cholera, the number of germ carriers when these have been discovered.
- (7) In the case of yellow fever, the presence and relative prevalence (index) of *Stegomyia calopus* (*Aedes ægypti*).
- (8) The measures taken.

## ARTICLE 3

The notifications contemplated in articles 1 and 2 are to be addressed to the diplomatic missions or failing them to consular offices in the capital of the infected country and shall be held at the disposition of consular offices established in its territory.

These notifications shall also be addressed to the International Office of Public Hygiene, which shall communicate them immediately to all diplomatic missions or, failing them, to the consulates, in Paris, as well as to the principal public health authorities of the participating countries. Those prescribed under Article I shall be addressed by telegrams.

The telegrams addressed by the International Office of Public Hygiene to the governments of countries participating in the present convention or to the principal public health authorities of these countries, and the telegrams transmitted by these governments and by these authorities under this convention, are treated like State telegrams and enjoy the priority accorded to such telegrams by Article V of the International Telegraphic Convention of July 10-22, 1875.

## ARTICLE 4

The notification and the information contemplated in Articles 1 and 2 shall be followed by subsequent communications sent regularly to the International Office of Public Hygiene so as to keep the governments informed of the progress of the epidemic.

These communications, which shall be as frequent and as complete as possible and shall take place at least once a week with regard to the number of cases and deaths, shall indicate in particular the precautions adopted with a view to preventing the spread of the disease. They shall specify the measures enforced upon the departure of vessels to prevent exportation of the disease, and especially the measures taken with regard to rats or insects.

## ARTICLE 5

The governments undertake to reply to any request for information which is made to them by the International Office of Public Hygiene in regard to epidemic diseases mentioned in the convention, which occur in their territory, and in regard to circumstances likely to affect the transmission of these diseases from one country to another.

## ARTICLE 6

Since rats<sup>1</sup> are the principal agents by which bubonic plague is spread, the governments undertake to make use of all means in their power to diminish this danger and constantly to keep themselves

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<sup>1</sup> The provisions of this convention regarding rats are applicable in the case of other rodents, and in general to other animals known to be the means of spreading plague.

informed of the condition of the rats in their ports as regards plague infection, by frequent and periodical examinations; and in particular to carry out the systematic collection and the bacteriological examination of rats in every plague-infected area during a period of not less than six months from the finding of the last plague-infected rat.

The methods and the results of these examinations shall be communicated in ordinary circumstances at regular intervals, and in the case of plague every month, to the International Office of Public Hygiene in order that governments may be kept uninterruptedly informed by that office of the condition of ports in regard to plague among rats.

On the first discovery of plague among rats on land, in a port free from infection during the previous six months, the communications shall be sent by the most rapid ways.

#### ARTICLE 7

In order to facilitate the fulfillment of duties put upon it by this convention, and having regard to the benefits derived from the information furnished by the epidemiological intelligence service of the League of Nations, including its eastern bureau at Singapore, and of other analogous bureaus, as well as by the Pan-American Sanitary Bureau, the International Office of Public Hygiene is empowered to make the needful arrangements with the health committee of the League of Nations, as well as with the Pan-American Sanitary Bureau and other similar organizations.

It is understood that the relations established under the arrangements above indicated will not involve any derogation from the provisions of the convention of Rome of December 9, 1907, and can not work the effect of substituting any other sanitary body for the International Office of Public Hygiene.

#### ARTICLE 8

As it is of primary importance that the foregoing provisions be promptly and scrupulously complied with, the governments recognize the necessity of giving instructions to the appropriate services in regard to the application of these provisions.

As notification is of no value unless every government be itself informed, in good time, of cases of plague, cholera, yellow fever, typhus, or smallpox, and also of suspected cases of these diseases, which occur in its territory, countries participating in the convention undertake to make it compulsory to declare such cases.

#### ARTICLE 9

It is recommended that neighboring countries should make special arrangements, with the object of organizing direct exchange of information between the head of the department concerned as regards

territories that are contiguous or have close commercial relations. These arrangements shall be communicated to the International Office of Public Hygiene.

SECTION II. *Conditions which warrant considering that the measures prescribed by the convention are or have ceased to be applicable to arrivals from particular areas*

ARTICLE 10

The notification of imported cases of plague, cholera, or yellow fever shall not lead to the adoption of the measures prescribed in the following Chapter II in regard to arrivals from the area in which they occurred.

But the measures may be adopted when a first case of plague or yellow fever has occurred which is recognized as a nonimported case, or when the cases of cholera from a *foyer*,<sup>2</sup> or when exanthematous typhus or smallpox exists in epidemic form.

ARTICLE 11

In order that the measures prescribed in Chapter II may be limited to places which are actually stricken, governments must restrict their application to arrivals from defined local areas in which the diseases coming under the present convention have appeared under the conditions indicated in the second paragraph of article 10.

But this limitation of an infected local area must be accepted only on the express condition that the government of the country in which this area is comprised shall take the measures necessary (1) for checking the spread of the epidemic and (2) for applying the measures prescribed by article 13 below.

ARTICLE 12

The government of a country in which an infected area is situated will inform other governments and the International Office of Public Hygiene in the manner specified in article 3, when the danger of infection from that area has ceased, and when all the preventive measures have been taken. From the time of this information the measures prescribed in Chapter II will no longer be applicable to arrivals from the area in question, except in exceptional circumstances, which must be established.

SECTION III. *Measures at the ports and on the departure of vessels*

ARTICLE 13

The competent authority shall be obliged to take effectual measures—

(1) To prevent the embarkation of persons showing symptoms of plague, cholera, yellow fever, exanthematous typhus, or smallpox,

<sup>2</sup> A "*foyer*" exists when the occurrence of new cases outside the immediate surroundings of the first case proves that the spread of the disease has not been limited to the place where it began.



and of persons in such relations with the sick as to render themselves liable to transmit the infection of these diseases.

(2) In the case of plague, to prevent rats gaining access to ships.

(3) In the case of cholera, to see that the drinking water and foodstuffs taken on board are wholesome, and that water taken in as ballast is disinfected if necessary.

(4) In the case of yellow fever, to prevent mosquitoes from gaining access to ships.

(5) In the case of exanthematous typhus, to secure the delousing of all suspects before their embarkation.

(6) In the case of smallpox, to subject to disinfection worn garments and rags before they are compressed.

#### ARTICLE 14

Governments undertake to maintain in and around their large ports and, as far as possible, in and around their other ports, a sanitary service possessing an organization and equipment capable of carrying out the application of the prophylactic measures in the case of the diseases coming under this convention and especially the measures laid down in articles 6, 8, and 13.

The said governments will supply at least once a year to the International Office of Public Hygiene a statement showing in the case of each of their ports the condition of its sanitary organization commensurate with the provisions of the preceding paragraph. The office will forward such information through the proper channels to the principal health authorities of the participating countries either directly or through some other international sanitary organization in accordance with the arrangements concluded under article 7.

#### CHAPTER II. MEASURES OF DEFENCE AGAINST THE DISEASES MENTIONED IN CHAPTER I

#### ARTICLE 15

Any ship, whatever port it comes from, may be subjected by the sanitary authority to a medical inspection and, if circumstances require it, to a thorough examination.

The sanitary measures and actions to which a ship may be subjected on arrival shall be determined by the actual condition found to exist on board and the sanitary particulars of the voyage.

It rests with each government, taking into account the information furnished under the provisions of Section I, Chapter I, and of article 14 of this convention, as well as the obligations placed upon it by Section II, Chapter I, to determine what procedure is applicable in its own ports to arrivals from any foreign port, and in particular to decide whether, from the point of view of the procedure to be applied, a particular foreign port should be considered as infected.

The measures as provided in this chapter must be regarded as constituting a maximum within the limits of which governments may regulate the procedure to be applied to ships on their arrival.

SECTION I. *Notification of measures prescribed*

ARTICLE 16

Every government is bound to communicate immediately to the diplomatic mission or, failing that, to the consul of the infected country, residing in its capital, as well as to the International Office of Public Hygiene, which shall immediately make them known to the other governments, the measures which it considers necessary to prescribe with regard to arrivals from that country. Such information will in like manner be held at the disposition of other diplomatic or consular representatives established in its territory.

It also is bound to communicate, through the same channels, the withdrawal of these measures or any modifications thereof.

In the absence of a diplomatic mission or a consulate in the capital, the communications shall be made direct to the government of the country concerned.

SECTION II. *Merchandise and baggage—Importation and transit*

ARTICLE 17

Subject to the provisions of the last paragraph of article 50, the entry of merchandise and baggage arriving by land or by sea for import or for transit may not be prohibited nor may merchandise or baggage be detained at land frontiers or in ports. The only measures which may be prescribed with regard to such merchandise and baggage are specified in the following paragraphs:

(a) In the case of plague, body linen, wearing apparel, and bedding which have been in recent use may be subjected to disinsectization, and, if necessary, to disinfection.

Merchandise coming from an infected local area and likely to harbor plague-infected rats may be unloaded only on condition that the precautions necessary to prevent the escape of rats and to ensure their destruction are taken as far as practicable.

(b) In the case of cholera, body linen, wearing apparel, and bedding which have been in recent use may be subjected to disinfection.

In derogation of the provisions of this article, the importation of fresh fish, shellfish, and vegetables may be prohibited unless they have undergone a treatment calculated to destroy cholera vibrios.

(c) In the case of exanthematous typhus, body linen, wearing apparel, and bedding which have been in recent use, as well as rags not carried as merchandise in large quantities, may be subjected to disinsectization.

(d) In the case of smallpox, body linen, wearing apparel, and bedding which have been in recent use, as well as rags not carried as merchandise in large quantities, may be subjected to disinfection.

## ARTICLE 18

It rests with the authority of the country to which the merchandise and things are consigned to decide in what manner and at what place disinfection shall be carried out and what shall be the methods adopted to secure the destruction of rats or insects (fleas, lice, mosquitoes, etc.). These operations must be performed in such a fashion as to injure articles as little as possible. Clothes and other articles of small value, including rags not carried as merchandise in large quantities, may be destroyed by fire.

It rests with each State to settle questions of compensation for damage caused by disinfection, deratisation, or disinsectisation, or by the destruction of the things referred to above.

If, on account of these measures, charges are levied by the sanitary authority, either directly or indirectly, through a company or an individual, the rates of these charges must be in accordance with a tariff made public beforehand and so drawn up that the State and the sanitary authority shall, on the whole, derive no profit from its application.

## ARTICLE 19

Letters and correspondence, printed matter, books, newspapers, business documents, etc., shall not be subject to any sanitary measure. Post parcels shall be subjected to restriction only if their contents include articles on which the measures provided by article 17 of the present convention may be enforced.

## ARTICLE 20

When merchandise or baggage has been subjected to the operations prescribed in article 17, any interested party can require the sanitary authorities to issue a free certificate showing the measures that have been taken.

SECTION III. *Provisions relating to emigrants*

## ARTICLE 21

The sanitary authorities in a country of emigration must subject its emigrants to a medical examination before their departure.

It is recommended that special arrangements be made between the countries of emigration, immigration, and transit, with a view to laying down the conditions under which this examination shall be considered satisfactory by them, so that rejections on medical grounds at the frontier of the countries of transit and destination may be reduced to a minimum.

It is also recommended that these arrangements should determine what preventive measures against infectious diseases shall be applied to emigrants in the country of departure.

## ARTICLE 22

It is recommended that, at the towns or ports of embarkation for emigrants, there should be an adequate health and sanitary administration having especially (1) a service for medical examination and treatment, as well as the necessary medical and prophylactic equipment; (2) an establishment supervised by the State where emigrants may be subjected to the health formalities, temporarily housed, and undergo all necessary medical examination and have their food and drinking supplies examined; (3) premises situated at the port where medical examinations shall be made at the time of the final embarkation.

## ARTICLE 23

It is recommended that emigrant ships be provided with a sufficient quantity of vaccines (antismallpox, anticholera, etc.) in order to permit, if necessary, of vaccinations during the voyage.

SECTION IV. *Measures at ports and marine frontiers*

## A. PLAGUE

## ARTICLE 24

A ship shall be regarded as *infected*—

- (1) If it has a case of human plague on board.
- (2) Or if a case of human plague broke out more than six days after embarkation.
- (3) Or if plague-infected rats are found on board.

A ship shall be regarded as *suspected*—

- (1) If a case of human plague broke out in the first six days after embarkation.
- (2) Or if investigations regarding rats have shown the existence of an unusual mortality without determining the cause thereof.

The ship shall continue to be regarded as suspicious until it has been subjected to the measures prescribed by this convention at a suitably equipped port.

A ship shall be regarded as *uninfected*, notwithstanding its having come from an infected port, if there has been no human or rat plague on board either at the time of departure or during the voyage, or at the time of arrival, and the investigations regarding rats have not shown the existence of an unusual mortality.

## ARTICLE 25

Plague-infected ships shall undergo the following measures:

(1) Medical inspection.

(2) The patients shall immediately be landed and isolated.

(3) All persons who have been in contact with the patients and those whom the health authority of the port has reason to consider suspect shall be disembarked if possible. They may be subjected to observation or surveillance, or to a period of observation followed by surveillance,<sup>3</sup> provided that the total duration of these measures does not exceed six days from the time of arrival of the ship.

It rests with the sanitary authority of the port, after taking into consideration the date of the last case, the condition of the ship, and the local possibilities, to take that one of these measures which seems to it preferable. During the same period the crew may be prevented from going ashore except on duty made known to the sanitary authority.

(4) Bedding which has been used, and such soiled linen, wearing apparel, and other articles as are, in the opinion of the sanitary authority, infected, shall be disinfected and, if there be occasion, disinfected.

(5) The parts of the ship which have been occupied by persons suffering from plague or which, in the opinion of the sanitary authority, are infected, shall be disinfected and, if there be occasion, disinfected.

(6) The sanitary authority may order deratisation before the discharge of cargo, if it is of opinion, having regard to the nature of the cargo, and the way in which it is loaded, that it is possible to effect a total destruction of rats without removing it. In this case, the ship can not be subjected to a new deratisation after discharge. In other cases the complete destruction of rats on board must be effected when the holds are empty. In the cases of ships in ballast, this shall be done as soon as possible before taking cargo.

Destruction of rats shall be carried out so as to avoid, as far as possible, damage to the ship and cargo (if any). The operation must not last longer than 24 hours. All charges made in respect to these operations of deratisation, as also all contingent indemnity claims, shall be settled in accordance with the principles laid down in article 18.

If a ship is only to discharge a part of its cargo, and if the port authorities consider that it is impossible to undertake complete deratisation, the said ship shall be allowed to remain in the port

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<sup>3</sup> In all cases where the present convention refers to "surveillance" the sanitary authority may substitute "observation" as an exceptional measure in the case of persons who do not offer adequate sanitary guarantees.

Persons under observation or surveillance must submit to all clinical or bacteriological investigations which are considered necessary by the sanitary authority.

for the time required to discharge that part of its cargo, provided that all precautions, including isolation, are taken to the satisfaction of the sanitary authority to prevent rats from passing from ship to shore, either with unladen goods or otherwise.

The discharge of cargo shall be carried out under the supervision of the sanitary authority, who shall take all measures necessary to prevent the men employed on this duty from becoming infected. The men shall be subjected to observation or to surveillance for a period not exceeding six days from the time when they have ceased to work at the unloading of the ship.

#### ARTICLE 26

Plague-suspected ships shall undergo the measures indicated in Nos. (1), (4), (5), and (6) of article 25.

In addition, the crew and passengers may be subjected to surveillance which shall not exceed six days, reckoned from the date of the ship's arrival. The crew may be prevented during the same period from going ashore except on duty made known to the sanitary authority.

#### ARTICLE 27

Ships uninfected with plague shall be given free pratique immediately, with the reservation that the sanitary authority of the port of arrival may prescribe the following measures with regard to them:

(1) Medical inspection to determine whether the condition of the ship corresponds to the definition of a healthy ship.

(2) Destruction of rats on board under the conditions specified in (6) of article 25 in exceptional cases and for well-founded reasons which will be communicated in writing to the captain of the ship.

(3) The crew and passengers may be subjected to surveillance during a period which shall not exceed six days reckoned from the date on which the ship left the contaminated port. The crew may be prevented during the same period from going ashore except on duty made known to the sanitary authority.

#### ARTICLE 28

All ships, except those employed in national coastwise service, must be periodically deratised, or be permanently kept in such a condition that rat population is reduced to the minimum. In the first case they receive deratisation certificates, and in the second deratisation exemption certificates.

Governments shall make known through the International Office of Public Hygiene those of their ports possessing the equipment and personnel necessary for the deratisation of ships.

A deratisation certificate or a deratisation exemption certificate shall be issued only by the sanitary authority of the aforesaid ports. The certificate shall be valid for six months. One additional month, however, may be allowed in the case of a ship proceeding to its home port.

If no valid certificate is produced, the sanitary authority at the ports mentioned in the second paragraph of this article may after inquiry and inspection:

(a) Directly perform the deratisation of the vessel, or cause it to be done under its direction and supervision. When completed to its satisfaction it shall issue a dated deratisation certificate. It shall decide in each case what process shall be employed practically to exterminate the rats on board, particulars of the mode of deratising applied and of the number of rats destroyed must be entered on the certificate. Destruction of rats must be accomplished in a manner that will as far as possible save the ship and cargo (if any) from injury. The operation must not last longer than 24 hours. In the case of vessels in ballast, it must be done before loading. All charges on account of these operations of deratisation and all claims, if any, for damages shall be settled according to the terms of article 18.

(b) Issue a deratisation exemption certificate stating the date and grounds if it is satisfied that the ship is maintained in such a condition that the rat population is reduced to a minimum.

The deratisation and deratisation exemption certificates shall be drawn up as far as possible in a uniform manner. Forms of such certificates will be prepared by the International Office of Public Hygiene.

The competent authority of each country undertakes each year to furnish the International Office of Public Hygiene with a statement of the measures taken under this article and the number of ships which have been subjected to deratisation, or which have been granted deratisation exemption certificates, at the ports referred to in the second paragraph of this article.

The International Office of Public Hygiene is requested to take in accordance with article 14 all steps for the interchange of information as to the action taken under this article and the results obtained.

The provisions of this article do not affect the rights accorded to sanitary authorities by articles 24-27 of this convention.

The governments shall see that all requisite and practicable measures are taken by the competent authorities to accomplish the destruction of rats in ports and the dependent and neighboring ports as well as on lighters and coastwise vessels.

## B. CHOLERA

## ARTICLE 29

A ship shall be regarded as *infected* if there is a case of cholera on board, or if there has been a case of cholera during the five days previous to the arrival of the ship in port.

A ship shall be regarded as *suspected* if there has been a case of cholera at the time of departure or during the voyage, but no fresh case in the five days previous to arrival. The ship shall continue to be regarded as suspected until it has been subjected to the measures prescribed by the present convention.

A ship shall be considered *uninfected* notwithstanding that it came from an infected port or that it may have on board persons proceeding from an infected area if there has been no case of cholera at the time of departure, during the voyage, or on arrival.

Cases presenting the clinical symptoms of cholera, in which no cholera vibrios have been found, or in which vibrios not strictly showing the characteristics of cholera vibrio have been found, shall be subject to all measures required in the case of cholera.

Germ carriers discovered on the arrival of the ship shall be submitted after disembarkation to all the obligations which may be imposed on such a case by the laws of the country of arrival on its own nationals.

## ARTICLE 30

Cholera-infected ships shall be subjected to the following measures:

- (1) Medical inspection.
- (2) The patients shall be immediately landed and isolated.
- (3) The crew and passengers may also be landed and either be kept under observation or subjected to surveillance during a period not exceeding five days reckoned from the date of arrival.

However, persons who can show that they have been immunized from cholera by vaccination effected less than six months and more than six days before, may be subjected to surveillance but not to observation.

(4) Bedding which has been used, soiled linen, wearing apparel, and other articles, including foodstuffs, which in the opinion of the sanitary authority of the port have been recently contaminated, shall be disinfected.

(5) The parts of the vessel which have been occupied by cholera patients or which are considered by the health authorities as being contaminated, shall be disinfected.

(6) Unloading shall be carried out under the supervision of the sanitary authority, who will take all measures necessary to prevent the infection of the men engaged in unloading. They shall be subjected to observation or to surveillance which shall not exceed five days from the time when they cease unloading.



(7) When the drinking water stored on board is considered suspicious it shall be turned off after being disinfected and replaced, after disinfection of the tanks, by a supply of water of good quality.

(8) The health authority may prohibit the turning off without previous disinfection of water ballast if it has been taken in at an infected port.

(9) It may be forbidden to let run or throw human dejections or the residuary waters of the vessel into the waters of the port, unless they are first disinfected.

#### ARTICLE 31

Vessels suspected of cholera shall be subjected to the measures prescribed under Nos. (1), (4), (5), (7), (8), and (9) of article 30.

The crew and passengers may be subjected to a surveillance not to exceed five days from the arrival of the vessel. It is recommended that the landing of the crew be prevented during the same period except for purposes connected with the service and made known to the sanitary authority of the port.

#### ARTICLE 32

If the ship has been declared infected or suspected only because of cases on board presenting the clinical features of cholera, and two bacteriological examinations, made with an interval of not less than 24 hours between them, have not revealed the presence of cholera or any other suspicious vibrios, it shall be classed as uninfected.

#### ARTICLE 33

Vessels uninfected with cholera shall be granted pratique immediately.

The health authority of the port of arrival may order in their case the measures provided under Nos. (1), (7), (8), and (9) of article 30.

The crew and the passengers may be subjected to a surveillance not to exceed five days from the date of arrival of the ship. The landing of the crew may be forbidden during the same period, except for purposes connected with the service and made known to the sanitary authority of the port.

#### ARTICLE 34

Since anticholera vaccination is a method of proved efficacy in checking cholera epidemics, and consequently in lessening the likelihood of the spread of the disease, it is recommended that sanitary administrations shall, in the largest measure possible, and as often as practicable, apply specific vaccination in cholera hotbeds and grant certain advantages as regards restrictive measures to persons who agree to be vaccinated.

## C. YELLOW FEVER

## ARTICLE 35

A ship shall be regarded as *infected* if there is a case of yellow fever on board, or if there was one at the time of departure or during the voyage.

A ship shall be regarded as *suspected* if it had no case of yellow fever but arrives after a voyage of less than six days from an infected port or from an uninfected port in close relation with endemic centers of yellow fever, or if when it arrives having been more than six days out, there is reason to believe that it may carry winged *Stegomyia* (*Aedes ægypti*) from the said port.

A ship shall be regarded as *uninfected*, notwithstanding its having come from a yellow fever infected port, if having had no case of yellow fever on board and arrived after more than six days on the way there is no reason to believe that it carries winged *Stegomyia*, or when it proves to the satisfaction of the sanitary authority of the port of arrival:

(a) That during its stay in the port of departure it kept at a distance of more than 200 meters from the inhabited land and at such a distance from the pontoons as to make the access of *Stegomyia* improbable.

(b) Or that at the time of departure it was subjected to effective fumigation in order to destroy mosquitoes.

## ARTICLE 36

Ships infected with yellow fever shall undergo the following measures:

(1) Medical inspection.

(2) The patients shall be landed, and those of them who are in the first five days of the disease shall be isolated so as to prevent contamination by mosquitoes.

(3) The other persons who land shall be subjected to observation or surveillance not exceeding six days reckoned from the time of landing.

(4) The ship will be moored at least 200 meters from the inhabited land and at such a distance from the pontoons as will render the access of *Stegomyia* improbable.

(5) Mosquitoes at all stages of evolution shall be destroyed on board as far as possible before discharge of cargo. If unloading takes place before the destruction of mosquitoes, the personnel in charge of that work will be subjected to observation or to surveillance for not more than six days from the time when they ceased unloading.

## ARTICLE 37

Ships suspected of yellow fever may be subjected to the measures specified in (1), (3), (4), and (5) of article 36.

Nevertheless, if the voyage has lasted less than six days and if the ship meets the conditions specified under letters (a) and (b) in the subsection of article 35 relating to uninfected ships, it shall only be subjected to the measures prescribed by article 36, (1) and (3) and to fumigation.

When 30 days have elapsed after the departure of the ship from the infected port, and no case has occurred during its voyage, the ship may be granted free pratique subject to preliminary fumigation should the sanitary authority deem it necessary.

## ARTICLE 38

Ships uninfected with yellow fever shall be granted free pratique after medical inspection.

## ARTICLE 39

The measures prescribed in articles 36 and 37 concern only those regions in which the *Stegomyia* exists, and they shall be applied with due consideration to the climatic conditions prevailing in the countries concerned and also the stegomyian index.

In other regions they shall be applied to the extent considered necessary by the sanitary authority.

## ARTICLE 40

The masters of ships which have touched at ports infected with yellow fever are specially advised to cause a search to be made for mosquitoes and their larvae during the voyage and to secure their systematic destruction in all accessible parts of the ship, particularly in the storerooms, galleys, boiler rooms, water tanks and other places specially likely to harbor *Stegomyia*.

## D. EXANTHEMATOUS TYPHUS

## ARTICLE 41

Ships which, during the voyage, have had, or at the time of their arrival have, a case of typhus on board, may be subjected to the following measures:

- (1) Medical inspection.
- (2) The patients shall immediately be landed, isolated, and deloused.
- (3) Other persons reasonably suspected to harbor lice, or to have been exposed to infection, shall also be deloused, and may be subjected to surveillance for a time to be specified, but which shall never be more than 12 days, reckoned from the date of delousing.
- (4) Bedding which has been used, and such linen, wearing apparel, and other articles as the sanitary authority of the port considers to be infected, shall be disinfected.
- (5) The parts of the ship which have been occupied by persons ill with typhus, and that the sanitary authority regards as infected, shall be disinfected.

The ship shall immediately be given free pratique.

It rests with each government to take after disembarkation the measures which it considers appropriate to secure the surveillance of persons who arrive on a ship which had no case of exanthematous typhus on board, but who left an area where typhus was epidemic less than 12 days before.

#### E. SMALLPOX

##### ARTICLE 42

Ships which have had a case of smallpox on board either during the voyage or at the time of arrival may be subjected to the following measures:

- (1) Medical inspection.
- (2) The patients shall immediately be landed and isolated.
- (3) Other persons reasonably suspected to have been exposed to infection on board, and who, in the opinion of the sanitary authority, are not sufficiently protected by recent vaccination, or by a previous attack of smallpox, may be subjected to vaccination followed by surveillance, the period of surveillance being specified in each case according to the circumstances, but never to exceed 14 days reckoned from the date of arrival.
- (4) Bedding which has been used, soiled linen, wearing apparel, and other articles which the sanitary authority of the port considers to be infected, shall be disinfected.
- (5) Only those parts of the ship which have been occupied by persons ill with smallpox and which the sanitary authority regards as infected shall be disinfected.

The ship shall immediately be given free pratique.

It rests with each government to take after disembarkation the measures which it considers appropriate to secure the surveillance of persons who are not protected by vaccination, and who arrive on a ship that had no smallpox on board, but left an area where smallpox was epidemic less than 14 days before.

##### ARTICLE 43

It is recommended that ships calling in countries where smallpox is epidemic, shall take all precautions possible to secure the vaccination or revaccination of the crew.

It is also recommended that governments should make vaccination and revaccination as general as possible, especially in ports and border regions.

#### F. COMMON PROVISIONS

##### ARTICLE 44

The captain and the ship's physician must answer all questions that are put to them by the sanitary authority with regard to the health of the ship during the voyage.

When the captain and the physician declare that there has not been any case of plague, cholera, yellow fever, exanthematous typhus, or smallpox, and no unusual mortality among rats on the ship since the time of its departure, the sanitary authority may require them to make a solemn or sworn declaration.

## ARTICLE 45

In applying the measures set forth in the preceding subsections A, B, C, D, and E, the sanitary authority will take into account the presence of a physician on board and the actual preventive measures taken in the course of the voyage, especially for the destruction of rats.

The sanitary authorities of countries that find it convenient to come to an agreement on the matter may exempt from medical inspection and other measures uninfected ships carrying a physician specially commissioned by their country.

## ARTICLE 46

It is recommended that governments take into account, as to the treatment to be applied to arrivals from another country, measures taken in the latter country to combat infectious diseases and to prevent their transmission to other countries.

Ships arriving from ports which fulfill the conditions set out in articles 14 and 51, do not derive from that alone any right to special advantages at the port of arrival, but the governments agree to take into the fullest consideration the measures already taken in those ports, so that all the measures taken at the port of arrival with regard to ships coming from those ports shall be reduced to a minimum. To that end and in order to put shipping, commerce, and traffic to as little inconvenience as possible, it is recommended that special arrangements in accordance with article 57 of this convention be made in all cases where it would seem advantageous to do so.

## ARTICLE 47

Ships arriving from an infected area which have been submitted to sufficient sanitary measures to the satisfaction of the sanitary authority, shall not undergo those measures again on their arrival at another port, whether or not the latter belongs to the same country, provided nothing has happened since which would call for the application of the sanitary measures above referred to and the ships have not called at an infected port, except for coaling.

A ship shall not be considered as having stopped at a port, when without having been in communication with the shore it has landed passengers only and their luggage and the mail, or has taken on board only mails or passengers, with or without their luggage, who

have not communicated with the port or with a contaminated area. In the case of yellow fever the vessel must, in addition, have kept wherever possible not less than 200 meters from inhabited land and at such a distance from the pontoons as to make access of *Stegomyia* improbable.

## ARTICLE 48

The port authority who imposes sanitary measures shall, whenever requested, deliver to the captain, or any other interested person, a certificate specifying the nature of the measures and the methods employed, the parts of the ship treated, and the reasons why the measures have been applied.

It may also in the same way, on demand, issue free of charge to passengers who have arrived by an infected ship a certificate stating the date of their arrival and the measures to which they and their luggage have been subjected.

SECTION V. *General Provisions*

## ARTICLE 49

It is recommended—

- (1) That bills of health be issued free in all ports.
- (2) That fees for consular visas be reduced by way of reciprocity, so as not to represent more than the cost of the service rendered.
- (3) That the bill of health be made out in at least one of the languages known to the maritime world, in addition to that of the country where it is issued.
- (4) That special agreements in the spirit of article 57 of this convention be made with a view to doing away gradually with consular visas and bills of health.

## ARTICLE 50

It is desirable that the number of ports furnished with an organization and equipment sufficient for the reception of a ship, whatever its health conditions may be, should be, in each country, commensurate with the importance of the trade and shipping. However, without prejudice to the right of governments to make agreements for the establishment of common sanitary stations, every country must provide at least one port on each of its seacoasts with the above-mentioned organization and equipment.

Furthermore, it is recommended that all large seaports should be so equipped that uninfected ships at least may undergo, immediately upon their arrival, the prescribed sanitary measures without being sent to another port for this purpose.

Every infected or suspected ship which arrives in a port not equipped for its reception must proceed, at its own risk and peril, to one of the ports opened to ships of the category to which it belongs.

Governments shall make known to the International Office of Public Hygiene what ports are open to arrivals from ports infected with plague, cholera, or yellow fever, and in particular those open to infected or suspected ships.

## ARTICLE 51

It is recommended that there be set up in large seaports—

(a) A regular port medical service and permanent medical surveillance of the health condition of crews and of the inhabitants of the port.

(b) An outfit for the transport of the sick and suitable premises for their isolation, and for keeping suspected persons under observation.

(c) Installations necessary for efficient disinfection and disinsectisation, bacteriological laboratory, and a force prepared to attend to urgent vaccination against smallpox or against other diseases.

(d) A supply of drinking water of quality beyond suspicion for the use of the port, and a system affording all possible security for the removal of waste, filth, and waste water.

(e) A competent and adequate staff and necessary equipment for the deratisation of ships, yards, docks, and warehouses.

(f) A permanent organization for the detection and examination of rats.

It is also recommended that warehouses and docks should as far as possible be rat proof, and that the sewer system of the port be separate from that of the town.

## ARTICLE 52

Governments will refrain from making any sanitary inspection of ships passing through their territorial waters<sup>4</sup> without stopping at the ports or on the coasts of their respective countries.

If the ship, for any reason whatever, should stop at a port or on the coast, it would be subjected to the sanitary laws and regulations of the country to which the port or coast belongs, as far as permitted by international conventions.

## ARTICLE 53

Special measures may be prescribed regarding any ship in an exceptionally bad sanitary condition likely to facilitate the spread of the diseases mentioned in this convention, especially crowded ships.

## ARTICLE 54

Ships unwilling to comply with obligations imposed by the port authority, in virtue of the provisions of this convention, shall be at liberty to put out to sea.

<sup>4</sup> The expression "territorial waters" must be understood in its strictly juridical sense. It does not include Suez, Panama, and Kiel Canals.

Such ships may, however, be permitted to land goods if the ship is isolated and if the goods are subjected to the measures provided by Chapter II, Section II, of this convention.

Such ships may also be authorized to disembark passengers at their request, on the condition that such passengers submit to the measures prescribed by the sanitary authority.

The ship, while kept isolated, may also take on fuel, stores, and water.

ARTICLE 55

Each government undertakes to have a single sanitary tariff only, which shall be published, and the charges therein shall be moderate. This tariff will be applied in ports to all ships, without distinction being made between the national and foreign flags, and to foreigners in the same conditions as to the country's own nationals.

ARTICLE 56

International coasting traffic will come under special regulations, to be agreed upon by the countries concerned. Nevertheless, the provisions of article 28 of the present convention shall be applicable to them in all cases.

ARTICLE 57

The governments, taking into account their peculiar situation, may conclude special agreements amongst themselves in order to make the sanitary measures prescribed by this convention more efficacious and less cumbersome. The text of such agreements shall be communicated to the International Office of Public Hygiene.

SECTION VI. *Measures at land frontiers—Travelers—Railways—Frontier zones—River ways*

ARTICLE 58

Observation shall not be established at land frontiers.

Persons showing symptoms only of the diseases mentioned in this convention may be detained at frontiers.

This principle does not deprive a State of the right to close a portion of its frontiers if need be. The places through which border traffic will exclusively be allowed shall be designated, and in such cases duly equipped sanitary stations shall be set up at the places thus designated. Notice of these measures shall immediately be given to the neighboring country concerned.

Notwithstanding the provisions of the present article, persons having been in contact with a person ill with pulmonary plague may be retained at land frontiers under observation for not more than seven days, reckoned from the time of arrival.

Persons who have been in contact with a person ill with exanthematous typhus may be submitted to delousing.



## ARTICLE 59

In trains coming from infected areas it is important that the railway crew keep watch on the way over the state of health of the travelers.

Medical intervention shall be limited to inspection of travelers and care of the sick and the latter's companions if there be occasion. When this inspection is resorted to, it shall, as far as possible, be combined with the customs examination in order that travelers may suffer as little delay as possible.

## ARTICLE 60

Railway cars running in countries where yellow fever exists must be so arranged as to be as little suited as possible for the transport of *Stegomyia*.

## ARTICLE 61

Travelers coming from an area which lies under the conditions coming under the second paragraph of article 10 of this convention may be subjected, on arrival at their destination, to surveillance for not more than 6 days, reckoned from the date of their arrival, in the case of plague, 5 days in the case of cholera, 6 days in the case of yellow fever, 12 days in the case of exanthematous typhus, or 14 days in the case of smallpox.

## ARTICLE 62

With respect to diseases coming under this convention, governments, notwithstanding the foregoing provisions, reserve the right in exceptional cases to take special measures in regard to certain classes of persons who do not offer satisfactory sanitary guarantees, especially persons traveling or crossing the frontier in bands. The provisions of this paragraph are not applicable to emigrants, save the provisions of article 21.

These measures may include the establishment at frontiers of sanitary stations sufficiently equipped to insure the surveillance and the observation, if necessary, of the persons concerned, as well as for their medical examination, disinfection, disinsectisation, and vaccination.

As far as possible these exceptional measures should be made the subject of special arrangements between adjoining States.

## ARTICLE 63

Railway cars for passengers, mails, or luggage, and freight cars, may not be detained at the frontier.

If, however, one of the carriages is infected or has been occupied by any person suffering from plague, cholera, exanthematous typhus, or smallpox, it shall be detained all the time required to undergo the prophylactic measures indicated for each case.

## ARTICLE 64

The measures concerning the crossing of frontiers by railroad and postal employees are within the province of the administrations concerned. They shall be combined so as not to hinder the service.

## ARTICLE 65

The regulation of frontier traffic and questions pertaining thereto shall be left to special arrangements between the contiguous countries in accordance with the provisions of this convention.

## ARTICLE 66

It shall be the province of the government of the riparian nations to regulate the sanitary régime of lakes and river routes by means of special arrangements.

## TITLE II. SPECIAL PROVISIONS FOR THE SUEZ CANAL AND NEIGHBORING COUNTRIES

SECTION I. *Measures with respect to ordinary vessels hailing from contaminated northern ports and appearing at the entrance of the Suez Canal or in Egyptian ports*

## ARTICLE 67

Ordinary *uninfected* vessels hailing from a plague or cholera infected port of Europe or the basin of the Mediterranean and presenting themselves for passage through the Suez Canal shall be allowed to pass through in quarantine.

## ARTICLE 68

Ordinary *uninfected* vessels wishing to make a landing in Egypt may stop at Alexandria or Port Said.

If the port of departure is contaminated by plague, article 37 will be applicable.

If the port of departure is contaminated by cholera, article 33 will be applicable.

The sanitary authority of the port may substitute for surveillance, observation either on board or in a quarantine station.

## ARTICLE 69

The measures to which *infected* or *suspected* vessels shall be subjected which hail from a plague or cholera infected port of Europe or the shores of the Mediterranean or the Black Sea, and which desire to effect a landing in one of the Egyptian ports or to pass through the Suez Canal, shall be determined by the Sanitary, Maritime, and Quarantine Board of Egypt in conformity with the stipulations of the present convention.

## ARTICLE 70

The regulations of the Sanitary, Maritime, and Quarantine Board of Egypt shall be revised with the least possible delay to conform with the stipulations of this convention. In order to become effective, they must be accepted by the several powers represented on the board. They shall establish the régime to which ships, passengers, and merchandise are to be subjected. They shall decide the minimum number of medical officers to be attached to each station, the method of recruitment, the salaries, and duties of such medical officers and all officials appointed to carry out under the orders of the Sanitary, Maritime, and Quarantine Board of Egypt the supervision and the execution of preventive measures.

The names of the physicians and officials shall be proposed to the Egyptian Government by the Sanitary, Maritime, and Quarantine Board of Egypt, through its president.

SECTION II. *Measures in the Red Sea*

## A. MEASURES WITH RESPECT TO ORDINARY VESSELS HAILING FROM THE SOUTH AND APPEARING IN PORTS OF THE RED SEA OR BOUND TOWARD THE MEDITERRANEAN

## ARTICLE 71

Independently of the general provisions in Title I, concerning the classification of and the régime of infected, suspected, or uninfected vessels, the special provisions contained in the ensuing articles are applicable to ordinary vessels coming from the south and entering the Red Sea.

## ARTICLE 72

*Uninfected ships.*—Uninfected ships may pass through the Suez Canal in quarantine. When the ship is to touch at an Egyptian port—

(a) If the port of departure is infected by plague, the ship must have been six full days on the way else the passengers who land and the crews shall be kept under surveillance until the six days are completed.

Loading and unloading of cargo will be allowed with due observance of the necessary measures to prevent the landing of rats.

(b) If the port of departure is infected by cholera, the ship may receive free pratique, but every passenger or member of the crew who disembarks when five days have not elapsed since the date of departure from the infected port, will be subjected to surveillance until the completion of that time.

The sanitary authority of the port may in all cases where that authority considers it necessary, substitute observation on board or in a quarantine station for surveillance. In all cases the sanitary authority may make the bacteriological examinations which it considers necessary.

## ARTICLE 73

*Suspected ships.*—Suspected ships having a physician on board may, if regarded by the sanitary authority as presenting sufficient guarantees, be allowed to pass through the Suez Canal in quarantine under the regulations provided for in article 70.

When the ship is to stop at an Egyptian port—

(a) In the case of plague, the provisions of article 6 are applicable, but surveillance may be replaced by observation.

(b) In the case of cholera, the provisions of article 31 are applicable with the same reservation as to observation instead of surveillance.

## ARTICLE 74

*Infected ships.*—(a) *Plague.*—The measures laid down in article 25 are applicable. Where danger of infection exists, the ship may be required to moor at Moses Wells or any other place named by the sanitary authority of the port.

Passage in quarantine may be granted before the expiration of the six days required by the regulations, if the sanitary authority of the port considers it possible.

(b) *Cholera.*—The measures laid down in article 30 are applicable. The ship may be required to moor at Moses Wells or any other place, and in case of a serious outbreak on board, may be sent off to Tor so that vaccination and, if occasion demands, the treatment of the patients may take place.

The ship can not be authorized to pass through the Suez Canal until the sanitary authority is satisfied that the ship, passengers, and crew no longer present any danger.

**B. MEASURES WITH RESPECT TO ORDINARY VESSELS HAILING FROM THE INFECTED PORTS OF HEDJAZ DURING THE PILGRIMAGE SEASON**

## ARTICLE 75

If plague or cholera prevails in Hedjaz during the time of the Mecca pilgrimage, vessels coming from Hedjaz or from any other port of the Arabian coast of the Red Sea without having embarked there any pilgrims or similar groups of persons, and which have not had any suspicious occurrence on board during the voyage, shall be placed in the category of ordinary suspected vessels. They shall be subjected to the preventive measures and to the treatment imposed on such vessels.

If they are bound for Egypt they may undergo, in a sanitary establishment designated by the Sanitary, Maritime, and Quarantine Board, an observation of five days for cholera and six days for plague from the date of their embarkation. They shall be subjected, moreover, to all the measures prescribed for suspected vessels (disinfection, etc.), and shall not be granted pratique until they have passed a favorable medical examination.

It shall be understood that if the vessels have had suspicious occurrences during the voyage they shall pass the observation period at Moses Wells, which shall last five days for cholera and six days for plague.

SECTION III. *Organization surveillance*

ARTICLE 76

The medical inspection prescribed by the regulations may take place at night on ships that come up to pass through the canal if lighted by electricity, and whenever the sanitary authority of the port is satisfied that the lighting facilities are adequate.

The supervision and performance of the prophylactic measures applied in the Suez Canal, and at the quarantine establishments, shall be entrusted to a corps of sanitary guards. These guards shall have the status of police officers, with the right to make requisitions in cases where the sanitary regulations are infringed.

SECTION IV. *Passage through the Suez Canal in quarantine*

ARTICLE 77

The health authority of the port of Suez shall grant the passage through in quarantine, and the Sanitary, Maritime, and Quarantine Board shall be immediately informed thereof. Doubtful cases shall be decided by that board.

ARTICLE 78

As soon as the permit provided for in the preceding article is granted, a telegram shall be sent to the authority of the port named by the captain as his next port of call and also to the port of final destination. The despatch of the telegram is at the expense of the vessel.

ARTICLE 79

Each country shall establish penalties against vessels which abandon the route indicated by the captain and unduly approach one of the ports within its territory, cases of *vis major* and enforced sojourn being excepted.

ARTICLE 80

Upon a vessel's being spoken, the captain shall be obliged to declare whether he has on board any gangs of native stokers or of wage-earning employees of any description who are not inscribed on the crew list or the register kept for this purpose.

The following questions in particular shall be asked the captains of all vessels arriving at Suez from the south, and shall be answered under oath or solemn declaration:

"Have you any helpers, stokers, or other workmen not inscribed on your crew list or on the special register? What is their nationality? Where did you embark them?"

The sanitary physicians shall ascertain the presence of these helpers; and if they discover that any of them are missing they should carefully seek the cause of their absence.

## ARTICLE 81

A health officer and at least two guards of the sanitary service shall board the vessel and accompany her to Port Said. Their duty shall be to prevent communications and see to the execution of the prescribed measures during the passage through the canal.

## ARTICLE 82

All embarkations, landings, and transshipments of passengers or cargo are forbidden during the passage through the Suez Canal.

However, passengers may embark at Suez or Port Said in quarantine.

## ARTICLE 83

Vessels passing through in quarantine shall make the trip from Suez to Port Said or *vice versa*, without lying up.

In case of stranding or of being compelled to lie up, the necessary operations shall be performed by the personnel on board, all communications with the employees of the Suez Canal Co. being avoided.

## ARTICLE 84

When troops are conveyed through the canal on suspicious or infected vessels passing through in quarantine, the trip shall be made in the daytime only. If it is necessary to stop at night in the canal, the vessels shall anchor in Lake Timsah or the Great Lake.

## ARTICLE 85

Vessels passing through in quarantine are forbidden to stop in the harbor of Port Said except in the cases contemplated in articles 82 and 86.

The supply and preparation of food on board vessels shall be effected with the means at hand on the vessels.

Stevedores or any other persons who may have gone on board shall be isolated on the quarantine barge. They shall undergo the regulation measures.

## ARTICLE 86

When it is absolutely necessary for vessels passing through in quarantine to take on coal or oil at Suez or Port Said, they shall perform this operation under the necessary guarantee for isolation and sanitary surveillance that may be ordered by the Sanitary, Maritime, and Quarantine Board of Egypt. When it is possible to

maintain a strict supervision of coaling on board the vessel and to prevent all contact with the persons on board, the coaling of the vessel by the workmen of the port may be permitted. At night the place where the coaling is done should be efficiently illuminated by electric lights.

## ARTICLE 87

The pilots, electricians, agents of the company, and sanitary guards must leave the vessel at Port Said outside of the port between the jetties, and thence be conducted directly to the quarantine barge, where they shall undergo the measures that may be deemed necessary.

## ARTICLE 88

The war vessels hereinafter specified shall enjoy the benefits of the following provisions when passing through the Suez Canal:

They shall be recognized by the quarantine authority as uninfected upon the production of a certificate issued by the physicians on board, countersigned by the commanding officer and affirming under oath or solemn declaration—

(a) That there has not been any case of plague or cholera on board either at the time of departure or during the passage;

(b) That a careful examination of all persons on board, without any exception, has been made less than 12 hours before the arrival in the Egyptian port, and that it revealed no case of these diseases.

These vessels shall be exempted from the medical examination and immediately receive pratique.

The quarantine authorities shall nevertheless have a right to cause their agents to perform the medical examination on board war vessels whenever they deem it necessary.

Suspicious or infected war vessels shall be subjected to the regulations in force.

Only fighting units shall be considered as war vessels, transports, and hospital ships falling under the category of ordinary vessels.

## ARTICLE 89

The Sanitary, Maritime, and Quarantine Board of Egypt is authorized to organize through Egyptian territory, by rail, in quarantine trains, the transit of the mails and ordinary passengers coming from infected countries.

SECTION V. *Sanitary measures applicable to the Persian Gulf*

## ARTICLE 90

The sanitary régime established by Title I of the present convention shall be applied, as regards vessels navigating the Persian Gulf, by the health authorities of the ports both of departure and arrival.

## TITLE III. PROVISIONS SPECIALLY APPLICABLE TO PILGRIMAGES

## CHAPTER I. GENERAL PROVISIONS

## ARTICLE 91

The provisions of article 13 are applicable to persons and objects bound for Hedjaz or the Kingdom of Irak and who are to be embarked on a pilgrim ship, even if the port of embarkation is not infected.

## ARTICLE 92

When cases of plague or cholera or other epidemic disease exist in the port, no embarkation shall be made on pilgrim ships until after the persons, assembled in groups, have been subjected to an observation for the purpose of ascertaining that none of them is stricken with those diseases.

It shall be understood that, in executing this measure, each government may take into account the local circumstances and possibilities.

In the case of cholera, the persons agreeing to being vaccinated there and then by the physician of the sanitary authority shall be submitted to the medical inspection only at the time of the vaccination. They shall not be required to submit to the observation provided for in this article.

## ARTICLE 93

Pilgrims must be provided with a round trip ticket or have deposited sufficient money for the return journey, and, if circumstances permit, prove that they command the means necessary for the accomplishment of the pilgrimage.

## ARTICLE 94

Only mechanically propelled ships shall be permitted to carry pilgrims on long voyages.

## ARTICLE 95

Pilgrim ships that are Red Sea coasters intended for short passages known as "coasting voyages" shall be subject to the provisions in the special regulations published by the Sanitary, Maritime, and Quarantine Board of Egypt.

## ARTICLE 96

A ship, which, in addition to ordinary passengers, among whom pilgrims of the upper classes may be included, carries pilgrims in less proportion than 1 pilgrim per 100 tons gross, shall not be considered a pilgrim ship.

This exemption applies only to the ship, and the pilgrims carried therein, irrespective of class, shall remain subject to all measures prescribed for them in this convention.



## ARTICLE 97

The captain or the agent of the shipping company, as the sanitary authority may elect, must pay all sanitary taxes that may be levied on pilgrims. These taxes must be included in the price of the ticket.

## ARTICLE 98

As far as possible, pilgrims who embark or disembark at sanitary stations must have no contact with one another at the landing places.

Pilgrims who are landed must be distributed at the camp in as small groups as possible.

They must be supplied with good drinking water, obtained either from local sources or by distillation.

## ARTICLE 99

Victuals brought by pilgrims shall be destroyed if the sanitary authority considers it necessary.

## CHAPTER II. PILGRIM SHIPS—SANITARY STATIONS

SECTION I. *General conditions applying to ships*

## ARTICLE 100

The ships must be capable of accommodating the pilgrims in the between decks. Outside of the space reserved for the crew, it must provide for each person, irrespective of age, an area of 1.50 square meters, i. e., 16 English square feet, and a height between decks of at least 1.80 meters, i. e., about 6 English feet.

It is forbidden to accommodate pilgrims under the first between decks, that is, below the water line.

Satisfactory ventilation must be ensured and below the upper between deck must be supplemented by mechanical ventilation.

In addition to the space reserved for pilgrims, the ship must provide, on the upper deck, for each person, irrespective of age, a free area of not less than 0.56 square meter, i. e., about 6 English square feet, in addition to the area upon the upper deck reserved for temporary hospital, the crew, shower baths, and latrines, and for the working of the ship.

## ARTICLE 101

On deck places must be set apart, screened from view, of which a sufficient number must be for the exclusive use of women.

These places shall be provided with water pipes under pressure, and provided with taps or douches in such a way as to furnish at all times sea water for the use of the pilgrims even if the ship is lying at anchor.

There shall be one tap or douche for every hundred or fraction of 100 pilgrims.

## ARTICLE 102

The vessel must be provided, in addition to closets for the crew, with latrines, fitted with a flushing apparatus or with a water tap. Some of these latrines shall be reserved exclusively for women.

Latrines must be in the proportion of 2 per 100 pilgrims, or fraction of 100.

There must be no water-closets in the hold.

## ARTICLE 103

The vessel must have two places for cooking set apart for the use of the pilgrims.

## ARTICLE 104

Infirmaries meeting proper conditions of safety and wholesomeness must be reserved for the accommodation of the sick. They must be on the main deck unless in the opinion of the sanitary authority equally healthy accommodations can be provided elsewhere.

They must be constructed so as to allow persons suffering from infectious diseases and persons who have been in contact with them, to be isolated according to the nature of their illness.

The infirmaries, including temporary infirmaries, must be capable of accommodating at the rate of 3 square meters, i. e., about 32 English square feet per patient, not less than 4 per 100 or fraction of 100 of the pilgrims taken on board.

The infirmaries must be provided with special latrines.

## ARTICLE 105

Every vessel shall have on board the medicines, disinfectants, and articles necessary for the care of the sick. The regulations made for this kind of vessels by each government shall determine the nature and quantity of the medicines. Every vessel must also carry the needful immunizing agents, especially cholera and smallpox vaccines. The care and the remedies shall be furnished free of charge to the pilgrims.

## ARTICLE 106

Every vessel embarking pilgrims shall have on board a physician holding a regular diploma who must be acceptable to the government of the country of the first port in which pilgrims embarked on the outward journey. A second physician meeting the same conditions shall be embarked as soon as the number of pilgrims carried by the vessel exceeds 1,000.

## ARTICLE 107

The captain shall be obliged to have handbills posted on board in a position which is conspicuous and accessible to those interested. They shall be in the principal languages of the countries inhabited by the pilgrims embarked, and show—

1. The destination of the vessel.
2. The price of the ticket.

3. The daily ration of water and food allowed to each pilgrim according to the regulations of the country of origin.

4. A price list of victuals not comprised in the daily ration and to be paid for extra.

## ARTICLE 108

The heavy baggage of the pilgrims shall be registered and numbered. The pilgrims will be allowed to keep with them only such articles as are absolutely necessary. The regulations made by each government for its vessels will determine the nature, quantity, and dimensions of the said articles.

## ARTICLE 109

Extracts from the provisions of Chapters I, II (Secs. I, II, and III), and III of the present title shall be posted, in the form of regulations, in the language of the nationality of the vessel as well as in the principal language of the countries inhabited by the pilgrims embarked, in a conspicuous and accessible place on each deck and between decks on every vessel carrying pilgrims.

SECTION II. *Measures to be taken before departure*

## ARTICLE 110

At least three days before departure the captain, or in the absence of the captain the owner or agent, of every pilgrim ship must declare his intention to embark pilgrims to the competent authority of the port of departure. In ports of call the captain, or in the absence of the captain the owner or agent, of every pilgrim ship must make this same declaration 12 hours before the departure of the vessel. This declaration must indicate the intended day of sailing and the destination of the vessel.

## ARTICLE 111

Upon the declaration prescribed by the preceding article being made, the competent authority shall proceed to the inspection and measurement of the vessel at the expense of the captain.

The inspection only shall be made if the captain is already provided with a certificate of measurement issued by the competent authority of his country, unless it is suspected that the document no longer corresponds to the actual state of the vessel.

## ARTICLE 112

The competent authority shall not permit the departure of a pilgrim ship until he has ascertained—

(a) That the vessel has been put in a state of perfect cleanliness and, if necessary, disinfected.

(b) That the vessel is in a condition to undertake the voyage without danger; that she is provided with the necessary plant and

appliances for use in case of shipwreck, accident, or fire, particularly a wireless apparatus for sending and receiving messages that may be operated independently of the main engine room; that she carries a sufficient number of life-saving devices; that she is properly outfitted, appointed, ventilated, and provided with awnings of sufficient thickness and size to shelter the decks, and that there is nothing on board that is or may become injurious to the health or safety of the passengers.

(c) That, in addition to the stores for the vessel and the crew, there are provisions and fuel of good quality on board in places where they can be suitably stored and in sufficient quantity for all the pilgrims and for the entire duration of the voyage.

(d) That the drinking water taken on board is of good quality; that there is a sufficient quantity thereof; that the tanks of drinking water on board are protected against all tainting and closed in such a way that the water can be let out only through the stopcocks or pumps. The devices for letting water out called "suckers" are absolutely forbidden.

(e) That the vessel has a distilling apparatus capable of producing at least 5 liters of water per head each day for every person embarked, including the crew.

(f) That the vessel has a disinfecting chamber whose safety and efficiency have been ascertained by the health authority of the port of embarkation of the pilgrims.

(g) That the crew comprises a physician holding a diploma and as well informed as possible on questions of maritime health and exotic pathology, and who must be acceptable to the government of the first port where pilgrims embarked on the outward journey, and that the vessel has a supply of medicines in accordance with article 105.

(h) That the deck of the vessel is free from all cargo and other incumbrances.

(i) That the arrangements of the vessel are such that the measures prescribed by Section III hereinafter may be executed.

#### ARTICLE 113

The captain shall not sail until he has in his possession—

1. A list visaed by the competent authority and showing the names and sex of the pilgrims who have been taken on board and total number of the pilgrims whom he is authorized to embark.

2. A document stating the name, nationality, and tonnage of the vessel, the name of the captain and of the physician, the exact number of persons embarked (crew, pilgrims, and other passengers), the nature of the cargo, and the port of departure.

The competent authority shall indicate on the bill of health whether the number of pilgrims allowed by the regulations is reached

or not, and, in case it is not reached, the additional number of passengers which the vessel is authorized to embark in subsequent ports of call.

SECTION III.—*Measures to be taken during the passage*

ARTICLE 114

The deck intended for the pilgrims shall remain free from encumbering objects during the voyage and shall be reserved day and night for the persons on board and be placed gratuitously at their service.

ARTICLE 115

Every day the space between decks shall be cleaned carefully and scrubbed with sand while the pilgrims are on deck.

ARTICLE 116

The latrines intended for the passengers as well as those for the crew shall be kept neat and be cleansed and disinfected three times a day, and oftener if needed.

ARTICLE 117

The excretions and dejections of persons showing symptoms of plague or cholera, dysentery, or any other disease preventing their using the infirmary latrines, shall be collected in vessels containing a disinfecting solution. These vessels shall be emptied into the infirmary latrines, which shall be thoroughly disinfected after each projection of matter.

ARTICLE 118

Articles of bedding, carpets, and clothing which have been in contact with the patients mentioned in the preceding article shall be immediately disinfected. The observance of this rule is especially recommended with regard to the clothing of persons who come near to these patients and which may have become soiled.

Such of the articles mentioned above as have no value shall be thrown overboard, if the vessel is neither in a port nor a canal, or else destroyed by fire. The others shall be disinfected as directed by the ship physician.

ARTICLE 119

The quarters occupied by the patients and referred to in article 104 shall be thoroughly and regularly disinfected.

ARTICLE 120

The quantity of drinking water allowed daily to each pilgrim free of charge, whatever be his age, shall be at least 5 liters.

ARTICLE 121

If there is any doubt about the quality of the drinking water or any possibility of its contamination either at the place of its origin or during the course of the voyage, the water shall be boiled or other-

wise sterilized, and the captain shall be obliged to throw it overboard at the first port in which a stop is made and in which he is able to procure a better supply. He may take it on board only after the tanks shall have been disinfected.

## ARTICLE 122

The physician shall examine the pilgrims, attend the patients, and see that the rules of hygiene are observed on board. He shall especially—

1. Satisfy himself that the provisions dealt out to the pilgrims are of good quality, that their quantity is in conformity with the obligations assumed, and that they are suitably prepared.

2. Satisfy himself that the requirements of article 120 relative to the distribution of water are observed.

3. If there is any doubt about the quality of the drinking water, remind the captain in writing of the provisions of article 121.

4. Satisfy himself that the vessel is maintained in a constant state of cleanliness, and especially that the latrines are cleaned in accordance with the provisions of article 116.

5. Satisfy himself that the lodgings of the pilgrims are maintained in a healthful condition, and that, in case of transmissible disease, they are disinfected in conformity with article 119.

6. Keep a diary of all the sanitary incidents occurring during the course of the voyage and present on request this diary to the competent authority of the port of call or arrival.

## ARTICLE 123

The persons intrusted with the care of patients suffering with plague, cholera, or other diseases shall alone have access to them and shall have no contact with the other persons on board.

## ARTICLE 124

In case of a death occurring during the voyage, the captain shall make note of the death opposite the name on the list visaed by the authority of the port of departure, besides entering on his journal the name of the deceased person, his age, where he comes from, the presumable cause of his death according to the physician's certificate, and the date of the death.

In case of death by a transmissible disease, the body shall be wrapped in a shroud saturated with a disinfecting solution and thrown overboard.

## ARTICLE 125

The captain shall see that the prophylactic measures executed during the voyage are recorded in the ship's journal. This journal shall be presented by him to the competent authority of the port of arrival.

In each port of call the captain shall have the list prepared in accordance with article 113 visaed by the competent authority.

In case a pilgrim is landed during the course of the voyage, the captain shall note the fact on the list opposite the name of the pilgrim.

In case of an embarkation, the persons embarked shall be mentioned on this list in conformity with the aforementioned article 113 and before it is visaed again by the competent authority.

#### ARTICLE 126

The bill of health delivered at the port of departure shall not be changed during the course of the voyage. If this requirement is not complied with, the vessel may be treated as an infected vessel.

It shall be visaed by the health authority of each port of call, who shall note thereon—

1. The number of passengers landed or embarked in that port.
2. The incidents occurring at sea and affecting the health or life of the persons on board.
3. The sanitary condition of the port of call.

#### SECTION IV. Measures to be taken on the arrival of pilgrims in the Red Sea

##### A. SANITARY MEASURES APPLICABLE TO PILGRIM SHIPS BOUND FROM THE SOUTH TOWARD HEDJAZ

#### ARTICLE 127

Pilgrim ships hailing from the south and bound for Hedjaz shall first stop at the sanitary station at Camaran, where they shall be subjected to the measures prescribed in the following articles.

#### ARTICLE 128

Vessels recognized as *uninfected* after a medical inspection shall obtain pratique when the following operations are completed:

The pilgrims shall be landed, take a shower or sea bath, and their soiled linen and the part of their wearing apparel and baggage which appears suspicious in the opinion of the health authority shall be disinfected. The duration of these operations, including debarkation and embarkation, shall not exceed 48 hours. Provided the time limit be not exceeded, the sanitary authority may perform such bacteriological examinations as may be deemed necessary.

If no real or suspected case of plague or cholera is discovered during these operations, the pilgrims shall be reembarked immediately and the vessel shall proceed toward Jeddah.

Vessels found, on medical inspection, to be uninfected shall not undergo the measures prescribed hereinabove, if the following conditions are fulfilled:

- (1) All pilgrims on board have been immunized against cholera and smallpox.
- (2) The requirements of this convention have been strictly followed.

(3) There is no reason to doubt the declaration of the captain and doctor of the ship to the effect that no case of plague, cholera, or smallpox has occurred on board, either at the time of departure or during the voyage.

For plague, the provisions of article 27 shall be applied with regard to the rats which may be found on board the vessels.

## ARTICLE 129

*Suspicious* vessels on board of which there were cases of plague in the six days following the embarkation and on board of which an unusual mortality of rats is discovered or cases of cholera at the time of departure, but no new case in the last five days, shall be treated in the following manner:

The pilgrims shall be landed, take a shower or sea bath, and their soiled linen and the part of their wearing apparel and baggage which appears suspicious in the opinion of the health authority shall be disinfected; the parts of the vessel that have been occupied by the patients shall be disinfected. The duration of these operations, including debarkation and embarkation, shall not exceed 48 hours. Provided this period is not exceeded, such bacteriological examination as may be considered necessary by the sanitary authority may be made.

If no real or suspected case of plague or cholera is discovered during these operations, the pilgrims shall be reembarked immediately and the vessel shall proceed to Jeddah.

For plague, the provisions of article 26 shall be applicable with regard to the rats which may be found on board.

## ARTICLE 130

*Infected* vessels, that is, those having cases of plague or cholera on board or having had cases of plague more than six days after embarkation, or cholera on board within five days, or on board of which rats infected by plague have been discovered, shall undergo the following treatment:

The persons stricken with plague or cholera shall be landed and isolated at the hospital. The other passengers shall be landed and isolated in groups comprising as few persons as possible, so that the whole number may not suffer with and for a particular group in which plague or cholera should develop.

The soiled linen, wearing apparel, and clothing of the crew and passengers, as well as the vessel, shall be disinfected.

However, the local health authority may decide that the unloading of the heavy baggage and the cargo is not necessary, and that only a part of the vessel need be disinfected.

The passengers shall remain in the Camaran establishment five or six days according as to whether the case is plague or cholera. If a



new case should occur after disembarkation, the period of observation shall be extended by five days for cholera and six days for plague, to date from the isolation of the last case.

For plague, the measures prescribed by article 25 shall be applied with regard to the rats, which may be found on board the vessels.

When these operations have been completed, the ship, having reembarked its pilgrims, shall be sent to Jeddah.

#### ARTICLE 131

Ships, to which articles 128, 129, and 130 apply, will be subject to medical inspection on board on arrival at Jeddah.

If the result is favorable, the ship shall receive free pratique.

If, on the other hand, well-established cases of plague or cholera have occurred on board during the voyage, or at the time of arrival at Jeddah, the sanitary authority of Hedjaz may take all necessary measures subject to the provisions of article 54.

#### ARTICLE 132

Every sanitary station designed to receive pilgrims should be provided with a trained, experienced, and sufficiently numerous staff, as well as with all the buildings and apparatus necessary to insure the application, in their entirety, of the measures to which said pilgrims are subject.

### B. SANITARY MEASURES APPLICABLE TO PILGRIM SHIPS HAILING FROM NORTH OF PORT SAID AND BOUND TOWARD HEDJAZ

#### ARTICLE 133

If plague or cholera is not found to exist in the port of departure or its neighborhood, and if no case of plague or cholera has occurred during the passage, the vessel shall be immediately granted pratique.

#### ARTICLE 134

If plague or cholera is known to exist in the port of departure or its vicinity, or if a case of plague or cholera has occurred during the voyage, the vessel shall be subjected at Tor to the rules established for vessels coming from the south and stopping at Camaran. The vessels shall thereupon be granted pratique.

### SECTION V. *Measures to be taken upon the return of pilgrims*

#### A. PILGRIM SHIPS RETURNING NORTHWARD

#### ARTICLE 135

Every vessel bound for Suez or for a Mediterranean port, having on board pilgrims or similar masses of persons, and hailing from a port of Hedjaz or from any other port on the Arabian coast of the Red Sea, must repair to Tor in order to undergo there the observation and the sanitary measures indicated in articles 140 to 142.

## ARTICLE 136

Pending the creation at the port of Akaba of a quarantine station meeting the requirements, pilgrims going from Hedjaz to Akaba by sea shall undergo the necessary quarantine measures at Tor before landing at Akaba.

## ARTICLE 137

Vessels bringing pilgrims back toward the Mediterranean shall pass through the canal in quarantine only.

## ARTICLE 138

The agents of navigation companies and captains are warned that, after completing their observation period at the sanitary station of Tor, the Egyptian pilgrims will alone be permitted to leave the vessel permanently in order to return thereupon to their homes.

Only those pilgrims will be recognized as Egyptians or as residents of Egypt who are provided with a certificate of residence issued by an Egyptian authority and conforming to the established model.

Pilgrims other than Egyptians may not be landed in an Egyptian port after leaving Tor, except by special permit under special conditions imposed by the Egyptian health authority, in accord with the Sanitary, Maritime, and Quarantine Board of Egypt. Consequently, navigation agents and captains are warned that the transshipment of pilgrims not residents of Egypt at Tor, Suez, Port Said, or Alexandria is forbidden except under a special permit for each case.

Vessels having pilgrims on board who are not Egyptian nationals shall be subject to the rules applicable to these pilgrims and shall not be received in any Egyptian port of the Mediterranean.

## ARTICLE 139

Egyptian pilgrims shall undergo an observation of three days and a medical examination and, if there be occasion, disinfection and disinsectisation at Tor or any other station designated by the Sanitary, Maritime, and Quarantine Board of Egypt; pilgrims shall not be permitted to enter any Egyptian port in the Mediterranean.

## ARTICLE 140

If plague or cholera is found to exist in Hedjaz or in the port from which the vessel hails, or if it has existed in Hedjaz during the course of the pilgrimage, the vessel shall be subjected at Tor to the rules adopted at Camaran for infected vessels.

The persons stricken with plague or cholera shall be landed and isolated in the hospitals. The other passengers shall be landed and isolated in groups composed of as few persons as possible, so that the whole number may not suffer with any particular group in which the plague or cholera should develop.

The soiled linen, wearing apparel, and clothing of the crew and passengers, as well as the baggage and cargo suspected of contamination, shall be landed and disinfected. Their disinfection, as well as that of the vessel, shall be thorough.

However, the local health authority may decide that the unloading of the heavy baggage and the cargo is not necessary, and that only a part of the vessel need undergo disinfection.

The measures provided in article 25 shall be applied with regard to the rats which may be found on board.

All the pilgrims shall be subjected to an observation of six full days from the day on which the disinfecting operations are completed, in the case of plague, and five days in the case of cholera. If a case of plague or cholera has appeared in one section, the period of six or five days shall not begin for this section until the day on which the last case was discovered.

#### ARTICLE 141

In the case contemplated in the preceding article, the Egyptian pilgrims shall be subjected, besides, to an additional observation of three days.

#### ARTICLE 142

If plague or cholera is not found to exist either in Hedjaz or in the port from which the vessel hails, and has not been known to exist in Hedjaz during the course of the pilgrimage, the vessel shall be subjected at Tor to the rules adopted at Camaran for uninfected vessels.

The pilgrims shall be landed and take a shower or sea bath, and their soiled linen or the part of their wearing apparel and baggage which may appear suspicious, in the opinion of the health authority, shall be disinfected. The duration of these operations shall not exceed 72 hours.

However, a pilgrim ship, if it has had no plague or cholera patients during the course of the voyage from Djeddah to Yambo or Tor, and if the individual medical examination made at Tor after debarkation establishes the fact that it contains no such patients, may be authorized by the Sanitary, Maritime, and Quarantine Board of Egypt to pass through the Suez Canal in quarantine even at night, when the following four conditions are fulfilled:

1. Medical attendance shall be given on board by one or several physicians graduated and duly accepted.
2. The vessel shall be provided with disinfecting chambers in good working order.
3. It shall be shown that the number of pilgrims does not exceed that authorized by the pilgrimage regulations.
4. The captain shall bind himself to repair directly to the port which he names as his next call port.

The sanitary tax to be paid to the quarantine administration shall be the same as the pilgrims would have paid had they remained in quarantine three days.

## ARTICLE 143

A vessel which has had a suspicious case on board during the voyage from Tor to Suez may be sent back to Tor.

## ARTICLE 144

The transshipment of pilgrims is strictly forbidden in Egyptian ports except by special permit and on the conditions laid down by the Egyptian sanitary authority in accord with the Sanitary, Maritime, and Quarantine Board of Egypt.

## ARTICLE 145

Vessels leaving Hedjaz and having on board pilgrims who are bound for a port on the African shore of the Red Sea shall proceed directly to the quarantine station named by the territorial authority to which that port belongs, where they shall submit to the same quarantine procedure as at Tor.

## ARTICLE 146

Vessels sailing from Hedjaz or from a port on the Arabian coast of the Red Sea, in which neither plague nor cholera prevails, which have no pilgrims or similar groups of people on board, and have had no suspicious occurrence during the voyage, shall be granted pratique at Suez after a favorable medical inspection.

## ARTICLE 147

Passengers coming from Hedjaz who have accompanied the pilgrimage shall be subject to the same measures as pilgrims. The appellation of merchant or any other will not exempt them from the measures applicable to the pilgrims.

## B. RETURNING PILGRIMS GOING NORTH BY CARAVAN

## ARTICLE 148

Whatever the sanitary condition in Hedjaz may be, pilgrims traveling by caravan must repair to one of the quarantine stations upon their route, there to undergo according to circumstances the measures prescribed by articles 140 or 142 for pilgrims who have been landed.

## C. PILGRIMS RETURNING SOUTHWARD

## ARTICLE 149

In the event of the pilgrimage being infected, pilgrim ships returning to places south of the Straits of Bab-el-Mandeb may be required,

by direction of the consular authority of the countries to which the pilgrims are going, to stop at Camaran and there undergo medical inspection.

SECTION VI. *Measures applicable to pilgrims traveling by the Hedjaz Railway*

ARTICLE 150

The governments of the countries through which the Hedjaz Railway passes shall make all necessary arrangements to organize the sanitary supervision of pilgrims during their journey to the Holy Places, and the application of prophylactic measures in order to prevent the dissemination of infectious diseases presenting epidemic features, bearing in mind the principles of the present convention.

SECTION IV. *Sanitary information concerning the pilgrimage*

ARTICLE 151

The Sanitary, Maritime, and Quarantine Board of Egypt will transmit periodically and, if occasion arises, by the speediest route, to the sanitary authorities of all the countries interested and, concurrently, to the International Office of Public Hygiene, under the conditions provided by this convention, all sanitary information and reports that may come to its knowledge during the pilgrimage concerning the sanitary condition of Hedjaz and the countries through which the pilgrims pass. It will also prepare an annual report which shall be sent to the said authorities and the International Office of Public Hygiene.

CHAPTER III. SANCTIONS

ARTICLE 152

Every captain convicted of not having conformed, in the distribution of water, provisions, or fuel, to the obligations assumed by or for him, shall be liable to a fine of not more than 50 francs (gold) for every failure. This fine shall be collected for the benefit of the pilgrim who shall have been the victim of the default, and who shall prove that he has vainly demanded the execution of the agreement made.

ARTICLE 153

Every infraction of article 107 shall be punished by a fine of not more than 750 francs (gold).

ARTICLE 154

Every captain who has committed or knowingly permitted any fraud whatever concerning the list of pilgrims or the bill of health provided for in article 113 shall be liable to a fine of not more than 150 francs (gold).

## ARTICLE 155

Every captain of a vessel arriving without a bill of health of the port of departure, or without a visa of the ports of call, or who is not provided with the list required by the regulations and regularly kept in accordance with article 113 and articles 125 and 126, shall be liable in each case to a fine of not more than 300 francs (gold).

## ARTICLE 156

Every captain convicted of having or having had on board more than 100 pilgrims without the presence of a graduate physician according to the provisions of article 106 shall be liable to a fine of not more than 7,500 francs (gold).

## ARTICLE 157

Every captain convicted of having or having had on board a greater number of pilgrims than that which he is authorized to embark according to the provisions of subsection 1 of article 113 shall be liable to a fine of not more than 125 francs (gold) for each pilgrim in excess.

The pilgrims in excess of the regular number shall be landed at the first station at which a competent authority resides, and the captain shall be obliged to furnish the landed pilgrims with the money necessary to pursue their voyage to their destination.

## ARTICLE 158

Every captain convicted of having landed pilgrims at a place other than their destination, except with their consent, or excepting cases of *vis major*, shall be liable to a fine of not more than 500 francs (gold) for each pilgrim wrongfully landed.

## ARTICLE 159

All other infractions of the provisions relative to pilgrim ships are punishable by a fine of not less than 250 nor more than 2,500 francs (gold).

## ARTICLE 160

Every violation proven in the course of a voyage shall be noted on the ship's papers as well as on the list of pilgrims. The competent authority shall draw up a report thereof and deliver it to the proper party.

Contraventions of articles 152 to 159, inclusive, will be certified by the sanitary authority of the port at which the ship has called.

Penalties will be imposed by the competent authority.

## ARTICLE 161

All agents called upon to assist in the execution of the provisions of the present convention with regard to pilgrim ships are liable to punishment in conformity with the laws of their respective countries in case of faults committed by them in the application of the said provisions.

## TITLE IV. SURVEILLANCE AND EXECUTION

## I. SANITARY, MARITIME, AND QUARANTINE BOARD OF EGYPT

## ARTICLE 162

The stipulations of Appendix III of the Sanitary Convention of Venice of January 30, 1892, concerning the composition, powers and duties, and operation of the Sanitary, Maritime, and Quarantine Board of Egypt, are confirmed as they appear in the khedival decrees under date of June 19, 1893, and December 25, 1894, as well as in the ministerial decision of June 19, 1893.

The said decrees and decisions are annexed to the present convention.

## ARTICLE 163

Notwithstanding the provisions of the said decrees and decisions the high contracting parties agree that—

I. The number of Egyptian delegates on the Egyptian Sanitary, Maritime, and Quarantine Board shall be increased to five:

(1) The president of the board, appointed by the Egyptian Government, and who will have only a casting vote.

(2) A European doctor of medicine, inspector general of the sanitary, maritime, and quarantine service.

(3) Three delegates appointed by the Egyptian Government.

II. The veterinary service of the Sanitary, Maritime, and Quarantine Board shall be transferred to the Egyptian Government.

The following conditions shall be observed:

(1) The Egyptian Government will collect sanitary taxes on imported cattle not to exceed those now collected by the Egyptian Sanitary, Maritime, and Quarantine Board.

(2) The Egyptian Government undertakes in consequence to pay annually to the Sanitary, Maritime, and Quarantine Board a sum representing the average of the excess of receipts over the expenditures of the said service during the three budgetary years preceding the date on which the present convention is put into force.

(3) The measures to be taken for the disinfection of cattle ships, and of skins and other animal derivatives, shall be as in the past in charge of the Sanitary, Maritime, and Quarantine Board.

(4) The foreign personnel now in the veterinary service of the Sanitary, Maritime, and Quarantine Board will be granted the

benefit of the salaries appropriated by Law No. 28 of 1923 regarding the conditions of service and the retirement or discharge of officials, employees, or agents of foreign nationality.

Grading of salaries shall be as provided by the above-mentioned law. The other details will be fixed by an agreement between the Egyptian Government and the Sanitary, Maritime, and Quarantine Board.

III. On account of the great distance between the port of Suakim and the headquarters of the Egyptian Sanitary, Maritime, and Quarantine Board at Alexandria, and the fact that the pilgrims and passengers who disembark in this port of Suakim concern, from the sanitary point of view, only the territory of the Sudan, the sanitary administration of this port will be detached from the said board.

#### ARTICLE 164

The ordinary expenses resulting from the provisions of the present convention, especially those relating to the increase of the personnel belonging to the Sanitary, Maritime, and Quarantine Board of Egypt, shall be covered by means of an annual supplementary payment by the Egyptian Government of the sum of 4,000 Egyptian pounds, which may be taken from the surplus revenues from the lighthouse service remaining at the disposal of said Government.

However, the proceeds of a supplementary quarantine tax of 10 tariff dollars per pilgrim to be collected at Tor shall be deducted from this sum.

In case the Egyptian Government shall find difficulty in bearing this share of the expenses, the powers represented in the Sanitary, Maritime, and Quarantine Board shall reach an understanding with that Government in order to insure the participation of the latter in the expenses contemplated.

#### ARTICLE 165

The Sanitary, Maritime, and Quarantine Board of Egypt shall undertake the task of bringing the provisions of the present convention into conformity with the regulations at present enforced by it in regard to plague, cholera, and yellow fever, as well as with the regulations relative to arrivals from the Arabian ports of the Red Sea during the pilgrim season.

To the same end it shall, if occasion arises, revise the general regulations of the sanitary, maritime, and quarantine police at present in force.

These regulations, in order to become effective, must be accepted by the various powers represented on the board.



II. MISCELLANEOUS PROVISIONS

ARTICLE 166

The proceeds from the sanitary taxes and fines collected by the Sanitary, Maritime, and Quarantine Board shall in no case be employed for objects other than those within the province of the said board.

ARTICLE 167

The high contracting parties agree to have a set of instructions prepared by their health departments for the purpose of enabling captains of vessels, especially when there is no physician on board, to enforce the provisions contained in the present convention with regard to plague, cholera, and yellow fever.

TITLE V. FINAL PROVISIONS

ARTICLE 168

The present convention supersedes, as between the high contracting parties, the provisions of the convention signed at Paris on January 17, 1912, and also, the case arising, those of the convention signed at Paris on December 3, 1903. These two last-named conventions will remain in force as between the high contracting parties and any State which is a party thereto and is not a party to the present convention.

ARTICLE 169

The present convention will bear to-day's date and may be signed up to October 1 of the current year.

ARTICLE 170

The present convention shall be ratified and the ratifications shall be deposited at Paris as soon as possible. It shall not come into force until it has been ratified by 10 of the high contracting parties. Thereafter it will take effect as regards each high contracting party from the date of the deposit of its ratification.

ARTICLE 171

The States which have not signed the present convention shall be permitted to adhere thereto upon request. Notice of this adhesion shall be given through diplomatic channels to the Government of the French Republic and by the latter to the other contracting parties.

ARTICLE 172

Any of the high contracting parties may declare, at the moment either of his signature, ratification, or accession, that his acceptance of the present convention does not include either all or any of the protectorates, colonies, possessions, or mandated territories, and may

subsequently accede, in accordance with the preceding article, on behalf of any one of its protectorates, colonies, possessions, or mandated territories excluded by such declaration.

In faith whereof the respective plenipotentiaries have signed the present convention.

Done at Paris the 21st day of June, 1926, in a single copy, which will remain deposited in the archives of the Government of the French Republic; and of which certified copies will be transmitted through the diplomatic channel to the other contracting parties.

- For Afghanistan, Islambek Khoudoiar Khan.
- For Albania, Doctor Osman.
- For Germany, Franoux Hamel.
- For Argentina, F. A. de Toledo.
- For Austria, Dr. Alfred Grünberger.
- For Belgium, Velghe.
- For Brazil, Carlos Chagas, Gilberto Moura Costa.
- For Bulgaria, B. Morfoff, Tochko Petroff.
- For Chile, Armando Quezada.
- For China, S. K. Yao, Soie Ton Fa.
- For Colombia, Miguel Jiménez Lopez.
- For Cuba, R. Hernandez Portela.
- For Denmark, Th. Madsen.
- For Danzig, Chodzko, Stade.
- For the Dominican Republic, Betances.
- For Egypt, Fakhry, Dr. M. El Guindy.
- For Ecuador, J. Illingourth.
- For Spain, Marquis De Faura, Dr. F. Murillo.
- For the United States of America, H. S. Cumming, W. W. King.
- For Ethiopia, Lagarde, Duc D'Entotto.
- For Finland, Enckell.
- For France, Camille Barrère, Harismendy, Navailles, Dr. A. Calmette, Leon Bernard.
- For Algeria, Doctor Raynaud.
- For West Africa, Dr. Paul Gouzien.
- For East Africa, Thiroux.
- For Indo-China, Doctor L'Herminier, Dr. N. Bernard.
- For the States of Syria, the Great Lebanon, Alaouïtes and Djebel-Druse, Harismendy.
- For all other colonies, protectorates, possessions, and territories under French mandate, Audibert.
- For the British Empire, G. S. Buchanan, John Murray.
- For Canada, J. A. Amyot.
- For Australia, W. C. Sawers.
- For New Zealand, Sydney Price James.
- For India, D. T. Chadwick.
- For the Union of South Africa, Philip Stock.
- For Greece, Al. C. Carapanos, D. Matarangas.
- For Guatemala, Francisco A. Figueroa.
- For Haiti, Georges Audain.
- For Hedjaz, Dr. Mahmoud Hamouddé.
- For Honduras, Rúbén Audino Aguilar.
- For Hungary, Dr. Ch. Grosch.

- For Italy, Albert Lutrario, Giovanni Vittorio Repetti, Odoardo Huetter,  
G. Rocco, Giuseppe Druetti.
- For Japan, H. Matsushima, Mitsuzo Tsurumi.
- For Liberia, R. Lehmann, N. Ooms.
- For Lithuania, Dr. Pr. Vaiciuska.
- For Luxembourg, Doctor Praum.
- For Morocco, Harismendy, Doctor Raynaud.
- For Mexico, R. Cabrera.
- For Monaco, F. Roussel, Doctor Marsan.
- For Norway, Sigurd Bentzon.
- For Paraguay, R. V. Caballero.
- For The Netherlands, Doude Van Troostwyk, N. M. Josephus Jitta,  
De Vogel, Van De Plas.
- For Peru, P. Mimbela.
- For Persia, ad referendum, Dr. Ali Khan Partow Aazam, Mansour  
Charif.
- For Poland, Chodzko.
- For Portugal, Ricardo Jorge.
- For Rumania, Dr. J. Cantacuzène.
- For San-Marino, Doctor Guelpa.
- For the Kingdom of the Serbs, Croats and Slovenes, M. Spalaikovitch.
- For Salvador, Carlos R. Lardé-Arthès.
- For the Sudan, Oliver Francis Haynes Atkey.
- For Switzerland, Dunant, Carrière.
- For Czechoslovakia, Dr. Ladislav Prochazka.
- For Tunis, Navailles.
- For Turkey, A. Féthy.
- For the Union of the Soviet Socialist Republics, J. Davtian, J. Mammoulia,  
L. Bronsten, O. Mebournoutoff, N. Freyberg, Al. Syssine, V. Eboriew.
- For Uruguay, A. Herosa.
- For Venezuela, ad referendum, Jose Ig. Cardenas.

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## ANNEXES

*Khedival decree of June 19, 1898*

We, Khedive of Egypt, on the recommendation of our minister of the interior, with the advice and consent of our cabinet, and considering that it is necessary to introduce various amendments in our decree of January 3, 1881 (2 Safer 1298), decree:

ART. 1. The Sanitary, Maritime, and Quarantine Board shall decide on the measures to be taken to prevent the introduction into Egypt, or the transmission to foreign countries, of epidemic diseases and epizootics.

ART. 2. The number of Egyptian delegates shall be reduced to four, as follows:

1. The president of the board, appointed by the Egyptian Government, and to vote only in case of a tie.

2. A European doctor of medicine, inspector general of the sanitary, maritime, and quarantine service.

3. The sanitary inspector of the city of Alexandria, or whoever acts in that capacity.

4. The veterinary inspector of the administration of sanitary services and public hygiene.

All the delegates must be physicians holding a regular diploma, granted either by a European faculty of medicine or by the Government, or be regularly appointed officials in actual service, of the grade of vice consul at least, or of an equivalent grade. This provision is not applicable to the present incumbents.

ART. 3. The Sanitary, Maritime, and Quarantine Board shall exercise permanent supervision over the sanitary condition of Egypt and over arrivals from foreign countries.

ART. 4. As regards Egypt, the Sanitary, Maritime, and Quarantine Board shall receive each week from the board of health and public hygiene, the sanitary bulletins of the cities of Cairo and Alexandria, and each month the sanitary bulletins of the provinces. These bulletins shall be transmitted at shorter intervals when, owing to special circumstances, the Sanitary, Maritime, and Quarantine Board so requests.

On its part, the Sanitary, Maritime, and Quarantine Board shall communicate to the board of health and public hygiene any decisions it may have reached and any information it may have received from abroad.

The governments shall address to the board, if they deem proper, the sanitary bulletin of their countries, and shall notify it of epidemics and epizootics as soon as they appear.

ART. 5. The Sanitary, Maritime, and Quarantine Board shall ascertain the sanitary condition of the country and send inspecting boards wherever it may deem necessary.

The board of health and public hygiene shall be notified of the dispatch of these boards and shall endeavor to facilitate the performance of their mission.

ART. 6. The board shall adopt preventive measures for the purpose of preventing the introduction of epidemics and epizootics into Egypt via the maritime or desert frontiers, and it shall determine the points at which temporary camps and permanent quarantine establishments are to be located.

ART. 7. It shall draft the note to be written on the bill of health issued by the health offices to departing vessels.

ART. 8. In case of the appearance of epidemics or epizootics in Egypt, it shall adopt preventive measures with the object of preventing the transmission of these diseases to foreign countries.

ART. 9. The board shall supervise and control the execution of the quarantine sanitary measures which it has adopted.

It shall draft all regulations relating to the quarantine service and see to their strict enforcement both with regard to protecting the country and to maintaining the guarantees stipulated by international sanitary conventions.

ART. 10. It shall regulate, from a sanitary standpoint, the conditions under which pilgrims going to and returning from Hedjaz are to be transported, and watch over their state of health during pilgrimage.

ART. 11. The decisions reached by the Sanitary, Maritime, and Quarantine Board shall be communicated to the ministry of the interior; they shall also be made known to the ministry of foreign affairs, which shall communicate them, if necessary, to the agencies and consulates general.

However, the president of the board shall be authorized to correspond directly with the consular authorities of maritime cities in current matters connected with the service.

ART. 12. The president, or, in case of his absence or impediment, the inspector general of the sanitary, maritime, and quarantine service, shall see to the enforcement of the decisions of the board.

For this purpose he shall correspond directly with all the agents of the sanitary, maritime, and quarantine service and with the various authorities of the countries. He shall, with the advice of the board, direct the sanitary police of the ports, the maritime quarantine establishments, and the quarantine stations of the desert.

Finally, he shall transact current business.

ART. 13. The sanitary inspector general, the directors of sanitary offices, and the physicians of sanitary stations and quarantine camps must be selected from among physicians regularly diplomaed either by a European faculty of medicine or by the Government.

The delegate of the board of Djeddah may be a diplomaed physician of Cairo.

ART. 14. The board shall designate its candidates through its president to the Minister of the Interior for all offices and positions under the sanitary, maritime, and quarantine service, said minister alone having a right to appoint them.

The same course shall be followed in regard to dismissals, transfers, and promotions.

However, the president shall have the direct appointment of all the subaltern agents, laborers, servants, etc.

The appointment of the sanitary guards shall be reserved to the board.

ART. 15. The number of directors of sanitary offices shall be seven, their residence being at Alexandria, Damietta, Port Said, Suez, Tor, Suakim, and Kosseir.

The sanitary office of Tor may operate only during the continuance of the pilgrimage or in time of epidemic.

ART. 16. The directors of the sanitary offices shall have under their orders all the sanitary employees of their district. They shall be responsible for the proper performance of the service.

ART. 17. The chief of the sanitary agency of El Ariche shall have the same powers and duties as those entrusted to the directors by the foregoing article.

ART. 18. The directors of the sanitary stations and quarantine camps shall have under their orders all the employees of the medical and administrative service of the establishments under their direction.

ART. 19. The sanitary inspector general shall have the supervision over all the services under the Sanitary, Maritime, and Quarantine Board.

ART. 20. It shall be the mission of the delegate of the Sanitary, Maritime, and Quarantine Board at Djeddah to furnish the board with information as to the sanitary condition of Hedjaz, especially in time of pilgrimage.

ART. 21. A disciplinary committee composed of the president, the inspector general of the sanitary, maritime, and quarantine service, and the three delegates elected by the board, shall be intrusted with an examination of the complaints lodged against the agents belonging to the sanitary, maritime, and quarantine service.

It shall draw up a report on each case and submit it to the consideration of the board convened in general assembly. The delegates shall be renewed every year. They shall be reeligible.

The decision of the board shall be submitted by its president to the sanction of the Minister of the Interior.

The disciplinary committee may inflict, without consulting the board: (1) Censure and (2) suspension of pay up to one month.

ART. 22. The disciplinary penalties shall be—

1. Censure.
2. Suspension of pay from eight days to three months.
3. Transfer without indemnity.
4. Dismissal.

All without prejudice to any actions to be brought for common law crimes or offenses.

ART. 23. Sanitary and quarantine dues shall be collected by the agents belonging to the sanitary, maritime, and quarantine service.

The latter shall conform, in regard to accounts and bookkeeping, to the general regulations established by the ministry of finance.

The accounting officers shall address their accounts and the proceeds of their collections to the president of the board.

The accounting officer who is chief of the central bureau of accounts shall approve them over the visa of the president of the board.

ART. 24. The Sanitary, Maritime, and Quarantine Board shall have control over its own finances.

The administration of the receipts and expenses shall be intrusted to a committee composed of the president, the inspector general of the Sanitary, Maritime, and Quarantine Service, and of three delegates of the powers elected by the board. It shall be entitled "Committee on finances." The three delegates of the powers shall be renewed every year. They shall be reeligible.

Subject to ratification by the board, this committee shall fix the salary of the employees of every grade; it shall decide on the permanent and the unforeseen expenses. Every three months, at a special meeting, it shall make a detailed report on its management to the board. Within three months following the expiration of the budgetary year, the board, upon the recommendation of the committee, shall strike a final balance and transmit it through its president to the ministry of the interior.

The board shall prepare the budget of its receipts and that of its expenditures. This budget shall be adopted by the cabinet, at the same time as the general budget of the Government, as an annexed budget. In case the expenditures should exceed the receipts, the deficit shall be covered from the general resources of the nation. However, the board shall without delay examine into the means of balancing the receipts and expenditures. Its recommendations shall be transmitted by the president to the Minister of the Interior. Any surplus that may exist shall accrue to the treasury of the Sanitary, Maritime, and Quarantine Board; it shall, after a decision is reached by the sanitary board and ratified by the cabinet, be devoted exclusively to the creation of a reserve fund for use in emergencies.

ART. 25. The president shall be obliged to order voting done by secret ballot whenever three members of the board so request. Voting by secret ballot shall be compulsory whenever it is a question of the choice of delegates of the powers to form part of the disciplinary committee or of the committee on finances and when it is a question of appointing, dismissing, transferring, or promoting employees.

ART. 26. The governors, prefects of police, and mudirs shall be responsible, as far as concerns them, for the enforcement of the sanitary regulations. They, as well as the civil and military authorities, shall give their assistance, whenever legally called upon by the agents of the sanitary, maritime, and quarantine service, in order to insure the prompt enforcement of the measures taken in the interest of public health.

ART. 27. All previous decrees and regulations are repealed as far as contrary to the foregoing provisions.

ART. 28. Our Minister of the Interior is intrusted with the enforcement of the present decree, which shall not be enforceable until November 1, 1893.

Done in the Palace of Ramleh, June 19, 1893.

By the Khedive:

ABBAS HILMI.

RIAZ,

*Head of the Cabinet, Minister of the Interior.*

*Khedival decree of December 25, 1894*

We, Khedive of Egypt, on the recommendation of our Minister of Finance, with the advice and consent of our cabinet, with the consent of the commissioner directors of the public-debt fund as regards article 7, and with the consent of the powers, decree:

ART. 1. Beginning with the fiscal year 1894, there shall be deducted annually from the present receipts of lighthouse dues the sum of 40,000 pounds Egyptian, which shall be employed as explained in the following articles.

ART. 2. The sum deducted in 1894 shall be used: (1) To cover any deficit during the fiscal year 1894 of the quarantine board, in case it has been impossible entirely to cover such deficit with the resources derived from the reserve fund of said board, as will be stated in the following article; (2) to meet the extraordinary expenses necessitated by the fitting up of the sanitary establishments of Tor, Suez, and Moses Wells.

ART. 3. The present reserve fund of the quarantine board will be used to cover the deficit of the fiscal year 1894, and it shall not be reduced to an amount less than 10,000 pounds Egyptian.

If the deficit should not be fully covered, the remainder shall be met with the resources created in article 1.

ART. 4. From the sum of 80,000 pounds Egyptian derived from the fiscal years 1895 and 1896 there shall be deducted: (1) An amount equal to that which has been paid out in 1894 from the same receipts, to be applied to the deficit of said year 1894, so as to bring up to 40,000 pounds Egyptian the sums allotted to the extraordinary works provided for in article 1 for Tor, Suez, and Moses Wells; (2) the sums necessary in order to cover the deficit of the budget of the quarantine board for the fiscal years 1895 and 1896.

After the aforementioned deduction has been made, the surplus shall be devoted to the construction of new lighthouses in the Red Sea.

ART. 5. Beginning with the fiscal year 1897, this annual sum of 40,000 Egyptian pounds shall be used to cover possible deficits of the quarantine board. The amount necessary for this purpose shall be conclusively determined by taking as a basis the financial results of the fiscal years 1894 and 1895 of the board.



The surplus shall be devoted to a reduction in the lighthouse dues, it being understood that these dues shall be reduced in the same proportion in the Red Sea and the Mediterranean.

ART. 6. In consideration of the aforementioned deductions and allotments the Government shall, beginning with 1894, be relieved of any obligation in regard to the expenses, ordinary or extraordinary, of the quarantine board.

It is understood, however, that the expenses borne hitherto by the Egyptian Government shall continue to be borne by it.

ART. 7. Beginning with the fiscal year 1894, upon the settlement of account of the excesses with the public debt fund, the share of these excesses due the Government shall be increased by an annual sum of 20,000 pounds Egyptian.

ART. 8. It has been agreed between the Egyptian Government and the Governments of Germany, Belgium, Great Britain, and Italy that the sum allotted to a reduction of the lighthouse dues, in accordance with article 5 to the present decree, shall be deducted from the sum of 40,000 pounds Egyptian provided for in the letters annexed to the commercial conventions concluded between Egypt and said Governments.

ART. 9. Our Minister of Finance is charged with the enforcement of the present decree.

Done at the Palace of Koubbeh, December 25, 1894.

ABBAS HÍLMI.

By the Khedive:

N. NUBAR,  
*Head of the Cabinet.*

AHMER MAZLOUM,  
*Minister of Finance.*

BOUTROS GHALI,  
*Minister of Foreign Affairs.*

*Ministerial decision of June 19, 1893, concerning the operation of the sanitary, maritime, and quarantine service*

The Minister of the Interior, in view of the decree of June 19, 1893, decides:

TITLE I.—THE SANITARY, MARITIME, AND QUARANTINE BOARD

ART. 1. The president shall be obliged to convene the Sanitary, Maritime, and Quarantine Board in regular session on the first Tuesday of each month.

He shall likewise be obliged to convene it whenever three members so request.

He shall, finally, convene the board in extra session whenever circumstances demand the immediate adoption of an important measure.

ART. 2. The letter of convocation shall indicate the questions to be considered. Except in cases of urgency, no final decisions shall be made on any but questions mentioned in the letter of convocation.

ART. 3. The secretary of the board shall prepare the minutes of the meetings.

These minutes must be presented for signature to all the members who have attended the meeting.

They shall be copied in full on a register which shall be preserved in the archives concurrently with the original minutes.

A provisional copy of the minutes shall be delivered to any member of the board so requesting.

ART. 4. A permanent board composed of the president, inspector general of the sanitary, maritime, and quarantine service, and two delegates of the powers, elected by the board, shall be charged with making decisions and taking measures in urgent matters.

The delegates of the nation interested shall always be summoned to attend and shall be entitled to vote.

The president shall vote only in case of a tie.

The decisions shall be communicated at once by letter to all the members of the board.

This board shall be renewed every three months.

ART. 5. The president, or, in his absence, the inspector general of the sanitary, maritime, and quarantine service, shall direct the deliberations of the board, but shall vote only in case of a tie.

The president shall have general direction of the service. He shall be charged with causing the enforcement of the decisions of the board.

#### SECRETARIAT

ART. 6. The secretary of the board, chief of the secretariat, shall "centralize" the correspondence with the ministry of the interior and the various agents of the sanitary, maritime, and quarantine service.

It shall be in charge of the statistics and archives. It shall have added to it clerks and interpreters in sufficient number to attend to the discharge of business.

ART. 7. The secretary of the board, chief of the secretariat, shall attend the meetings of the board and prepare the minutes.

He shall have under his orders the employees and servants of the secretariat.

He shall direct and supervise their work, under the authority of the president.

He shall have custody of and be responsible for the archives.

## BUREAU OF ACCOUNTS

ART. 8. The chief of the central bureau of accounts shall be "the accounting officer."

He shall not be permitted to assume office until he has furnished a bond the amount of which shall be fixed by the Sanitary, Maritime, and Quarantine Board.

He shall, under the direction of the committee on finance, supervise the operations of the employees whose duty it is to receive the sanitary and quarantine dues.

He shall draw up the statements and accounts which are to be transmitted to the ministry of the interior after being adopted by the committee on finance and approved by the board.

## THE SANITARY INSPECTOR GENERAL

ART. 9. The sanitary inspector general shall have supervision of all the services under the board. He shall exercise this supervision under the conditions provided in article 19 of the decree dated June 19, 1893.

He shall, at least once a year, inspect each of the sanitary offices, agencies, or posts.

Besides, the president shall, upon the recommendation of the council and according to the needs of the service, determine the inspections which the inspector general shall make.

In case of impediment of the inspector general, the president shall designate, with the consent of the board, the official who is to take his place.

Every time the inspector general has visited an office, agency, sanitary post, sanitary station, or quarantine camp, he shall give an account to the president of the board, in a special report, of the results of his inspection.

During the intervals between his rounds of inspection, the inspector general shall, under the authority of the president, take part in the direction of the general service. He shall take the place of the president in case of absence or impediment.

## TITLE II. SERVICE OF PORTS, QUARANTINE STATIONS, AND SANITARY STATIONS

ART. 10. The sanitary, maritime, and quarantine policing along the Egyptian coast of the Mediterranean and Red Seas, as well as on the land frontiers, in the direction of the desert, shall be intrusted to the directors of the health offices, the directors of sanitary stations or quarantine camps, the chiefs of sanitary agencies or sanitary posts, and the employees under their orders.

ART. 11. The directors of the health offices shall have the direction of and be responsible for the service both of the office at the head of which they are placed and of the sanitary posts thereunder.

They shall see to the strict enforcement of the regulations on sanitary, maritime, and quarantine police. They shall obey the instructions they receive from the president of the board and shall give the necessary orders and instructions to all the employees of their office, as well as to the employees of the sanitary posts attached thereto.

They shall be charged with the examination and speaking of vessels and with the application of the quarantine measures, and, in the cases provided by the regulations, they shall proceed to make medical inspections and inquiries regarding violations of quarantines.

In administrative matters they shall correspond only with the president, to whom they shall transmit all sanitary information which they gather while discharging their duties.

ART. 12. In regard to salary, the directors of the health offices shall be divided into two classes:

The first-class offices, which are four in number, viz: Alexandria, Port Said, Suez Basin and camp at Moses Wells, and Tor.

The second-class offices, three in number, viz: Damietta, Suakim, and Kosseir.

ART. 13. The chiefs of the sanitary agencies shall have the same duties and powers, as regards the agency, as the directors as regards their office.

ART. 14. There shall be a single agency at El Ariche.

ART. 15. The chiefs of the sanitary posts shall have under their orders the employees of the post which they are directing. They shall be under the orders of the director of one of the health offices.

They shall be charged with the duty of carrying out the sanitary quarantine measures called for by the regulations.

They shall not be permitted to issue any bill of health or authorized to visa any bills of health except those of vessels departing with pratique.

They shall compel vessels arriving at their ports with a foul bill of health or under irregular conditions to put into a port where there is a health office.

They can not make sanitary inquests themselves, but they must call upon the director of their office for this purpose.

Outside of cases of absolute urgency, they shall correspond only with this director in all administrative matters. In urgent sanitary and quarantine matters, such as the measures to be taken in regard to an arriving vessel, or the annotation to be made on the bill of health of a departing vessel, they shall correspond directly with the president of the board; but they must communicate this correspondence to their director without delay.

They shall be obliged to give notice, by the quickest route, to the president of the board regarding shipwrecks of which they have knowledge.

ART. 16. The sanitary posts shall be six in number, as follows:

Posts of Port Neuf, Aboukir, Brullos, and Rosetta, under the Alexandria office.

Posts of Kantara and of the inland port of Ismailia, under the Port Said office.

The board may create new sanitary posts, according to the needs of the service and its resources.

ART. 17. The permanent or temporary service of the sanitary stations and quarantine camps shall be intrusted to directors having under their orders sanitary employees, guards, porters, and servants.

ART. 18. It shall be the duty of the directors to compel persons sent to the sanitary station or the camp to submit to quarantine. They shall cooperate with the physicians in isolating the different categories of quarantined persons and in preventing any jeopardization. Upon the expiration of the period fixed, they shall grant or withhold pratique in accordance with the regulations, cause merchandise and wearing apparel to be disinfected, and apply quarantine to the persons employed in this operation.

ART. 19. They shall exercise constant supervision over the execution of the measures prescribed, as well as over the state of health of the quarantined persons and the employees of the establishment.

ART. 20. They shall be responsible for the progress of the service and shall give an account thereof, in a daily report, to the president of the sanitary, maritime, and quarantine board.

ART. 21. The physicians attached to the sanitary stations and quarantine camps shall be under the directors of these establishments. They shall have the druggists and hospital attendants under their orders.

They shall watch over the state of health of the quarantined persons and of the employees, and shall direct the infirmary of the sanitary station or of the camp.

Pratique shall not be granted to persons in quarantine until an inspection and favorable report have been made by the physician.

ART. 22. In each sanitary office, sanitary station, or quarantine camp, the director shall also be "accounting officer."

He shall, under his own actual personal responsibility, designate the employee to be in charge of the receipt of the sanitary and quarantine dues.

The chiefs of sanitary agencies or posts shall also be accounting officers, and shall be personally charged with collecting the dues.

The agents charged with the collection of the dues must conform, as regards the guarantees to be given, the keeping of the documents, the time of payments, and in general everything relating to the financial part of their service, to the regulations issued by the ministry of finance.

**ART. 23.** The expenses of the sanitary, maritime, and quarantine service shall be defrayed with the means at the disposal of the board itself, or, with the consent of the ministry of finance, from such fund as the latter may designate.

Cairo, June 19, 1893.

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RIAZ.

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[Translation]

PROTOCOL OF SIGNATURE

The undersigned plenipotentiaries met on the date of this day for the purpose of signing the International Sanitary Convention.

The plenipotentiaries of the German Empire, referring to article 25, make express reservations as to the power granted by the convention to several governments to enforce the observation in case of bubonic plague.

The plenipotentiaries of Brazil declare they are empowered to sign the convention ad referendum under the reservations entered in the minutes of the last plenary session.

The plenipotentiaries of Chile declare that they join in the reservations made by the plenipotentiaries of Brazil and Portugal.

The plenipotentiaries of China express reservations in the name of their Government concerning the engagement appearing in article 8, second section, that it would be compulsory to declare the diseases coming under the convention.

In the name of their Government the plenipotentiaries of Egypt renew the express reservations made by them concerning the presence at the convention of a delegate representing the Sudan. They furthermore declare that the said presence could not in any way affect the rights of sovereignty of Egypt.

The plenipotentiaries of Spain declare they make in the name of their Government a reservation identical with that of the plenipotentiaries of the United States of America concerning article 12.

The plenipotentiaries of the United States of America formally declare that their signing the International Sanitary Convention of this date is not to be construed to mean that the United States of America recognizes a régime or entity acting as government of a signatory or adhering power when that régime or entity is not recognized by the United States as the government of that power. They further declare that the participation of the United States of America in the International Sanitary Convention of this date does not involve any contractual obligation on the part of the United States to a signatory or adhering power represented by a régime or entity which the United

States does not recognize as representing the government of that power, until it is represented by a government recognized by the United States.

The plenipotentiaries of the United States of America declared, furthermore, that their Government reserves to itself the right to decide whether from the standpoint of the measures to be applied a foreign district is to be considered as infected and to decide what measure shall be applied to arrivals in its own ports under special circumstances.

The great work accomplished by the International Sanitary Convention and the many new provisions carried could not be referred by telegraph to Her Majesty the Queen of the Kings and to His Imperial and Royal Highness Prince Tafari Makonnen, Heir to and Regent of the Empire, and the delegate of the Ethiopian Empire declares that he must refrain from signing the convention before he receives the necessary instructions.

The British plenipotentiaries declare that their signing does not bind any part of the British Empire that is a distinct member of the League of Nations and would not sign separately or adhere to the convention.

They further declared that they reserve the right not to apply the provisions of the second subsection of article 8 to all the protectorates, colonies, possessions, or countries under the British mandate which might be parties to the convention and which on practical grounds might be unable to give full effect to those provisions relative to the compulsory declaration of the diseases referred to in the said article.

The delegate of Canada reserves for his Government the right to decide whether from the viewpoint of the measures to be applied a foreign district is to be considered as infected and to decide what measures shall be applied to arrivals in Canadian ports under special circumstances. Subject to that reservation the delegate from Canada declares that his Government is ready to take into consideration the obligations of article 12 of the convention and the official information it may receive concerning the existence of the diseases in foreign countries.

The delegate of India declares that he is authorized to sign the International Sanitary Convention under the reservation that on grounds of a practical nature India is not in a position to assume the obligations resulting from article 8 in so far as it has to do with the obligatory declaration of the diseases named in said article, except in large cities or in cases of epidemic.

The British plenipotentiaries declare and wish to have it made a record that the reservation of the plenipotentiaries of Persia about article 90 can not in any way modify the present status quo pending an agreement to be arrived at between the Persian and British Governments.

The plenipotentiaries of the Finnish Republic declare that immunization from cholera does not constitute a sufficient guarantee and that their Government reserves to itself, notwithstanding the provisions of article 30, the right to make, if the occasion arises, immune persons undergo observation.

On the other hand, considering that the traffic of the Finnish border could go over only two railways in the east very close to each other and a single railway in the west which does not make it permissible to contemplate a partial closing of the frontier, Finland, in order to avoid the complete closing in case of epidemic, reserves to itself the right to set up observation if occasion arises notwithstanding the provisions in article 58.

The plenipotentiaries of Japan declare that their Government reserves to itself the right: (1) To forward through the eastern bureau of Singapore the notices and information, the mailing of which to the International Office of Public Hygiene is required by the convention; (2) to take such measures as the sanitary authorities may deem necessary with regard to carriers of cholera vibrios.

The plenipotentiaries of Lithuania declare that, though adhering to the convention, they make special reservations as to its being put into practice between Lithuania and Poland as long as normal relations between the two countries shall not have been restored.

These reservations are of particular importance with respect to the provisions in articles 9, 196, 57, and 66.

The plenipotentiaries of The Netherlands declare in the name of their Government that it reserves to itself with regard to the Dutch East Indies to enforce the measures provided in article 10, subsection 2 in the same degree to arrivals from districts afflicted with *murine plague*.

They further declare that their Government reserves to itself with respect to the Dutch East Indies the right to put on article 27(2) a construction to the effect that the destruction of rats referred to in that article may be applied to vessels taking cargo from a district afflicted with murine plague when the sanitary authority believes that the cargo is likely to carry rats and is stowed in such a way as to make it impossible to effect the search provided in the last subsection of article 24.

The plenipotentiaries of Persia declare that there is nothing warranting any special provision concerning the Persian Gulf being retained in the convention. The fact that there is in the convention article 90 constituting Section V of Title II, prevents their signing without making the most express reservations. The plenipotentiaries of Persia further declare that the status quo could not in any way bind their Government. Again, they reserve for their Government the right not to apply the provisions of article 8 relative to the obligatory declaration of the diseases coming under the said article.



The plenipotentiary of Portugal declares that he is authorized by his Government to sign the convention *ad referendum* with the reservations entered in the minutes of the last plenary session.

The plenipotentiary of Turkey declares that Turkey would not relinquish by any treaty the right of being represented in the Sanitary, Maritime, and Quarantine Board of Egypt. On the other hand, taking into consideration the stipulations in the convention of the Straits signed at Lausanne and the special conditions of the Straits of Bosphorus and Dardanelles, he reserves the right for the sanitary administration of Turkey to put a sanitary guard on board any merchant vessel going through the Straits without a physician and coming from an infected port so as to prevent that vessel from calling at any Turkish port. It is understood, however, that the delay and expenses that such a guard may entail will be very slight.

The plenipotentiaries of the Union of Soviet Socialist Republics, calling to mind the declarations made by them on May 26, at the session of the first commission concerning article 7 of the draft of the convention, declare they have no objection to offer to the provisions relative to the right of the International Office of Public Hygiene to make arrangements with other sanitary agencies; but they are of the opinion that that right flows from the arrangement of Rome of 1907 which defines the functions of the office. They therefore believe that the provision hereinabove referred to is but a confirmation of that right and should appear only in the minutes and not be made an article of the convention itself.

The plenipotentiaries of the Union of Soviet Socialist Republics call to mind that at the time article 12 of the convention was under consideration they cast their votes against the provision granting the governments the right to prolong in exceptional cases the application of sanitary measures notwithstanding the declaration of the State concerned that there is no longer any danger of the disease.

They hold that that provision may infringe upon one of the fundamental principles of the previous conventions and become a cause of misunderstanding that could arise from its application.

They therefore declare that in the spirit of the convention that provision can be considered only in exceptional cases when the government to which the afflicted district belongs does not meet the obligations laid down by the convention in that respect.

The plenipotentiaries of the Union of Soviet Socialist Republics call to mind that the reservations already made by them in second commission concerning the functions, duties, and powers of the Sanitary, Maritime, and Quarantine Board of Egypt. They particularly wish to emphasize the fact that articles 70 and 164 in particular confer upon that board the right to set up different sanitary, maritime, and quarantine police regulations on condition that those regulations in

order to be capable of execution must be accepted by the different powers represented in the council. Inasmuch as the Union of Soviet Socialist Republics is not yet represented in the Sanitary, Maritime, and Quarantine Board of Egypt, the delegation of the Union wishes to reserve the rights of its Government to accept or not to accept the measures worked out by that board.

The undersigned make a formal acknowledgment of the reservations hereinabove set forth and declare that their own countries reserve to themselves the right to invoke the benefit thereof as against the countries in whose name they were made.

In witness whereof, the plenipotentiaries have signed this protocol.  
Done in Paris, June 21, 1926.

For Afghanistan, Islambek Khoudoiar Khan.

For Albania, Doctor Osman.

For the German Empire, Branoux Hamel.

For the Argentine Republic, F. A. de Toledo.

For Austria, Dr. Alfred Grünberger.

For Belgium, Velche.

For Brazil, Carlos Chagas, Gilberto Moura Costa.

For Bulgaria, B. Morfoff, Tochko Petroff.

For Chile, Armando Quezada.

For China, S. K. Yao, Soie Ton Fa.

For Colombia, Miguel Jiménez Lopez.

For Cuba, R. Hernandez Portela.

For Denmark, Th. Madsen.

For Danzig, Chodzko, Stade.

For the Dominican Republic, Betances.

For Egypt, Fakhry, Dr. M. El Guindy.

For Ecuador, J. Illingourth.

For Spain, Marquis de Faura, Dr. F. Murillo.

For the United States of America, H. S. Cumming, W. W. King.

For Ethiopia, Lagarde duc D'Entotto.

For Finland, Enckell.

For France, Camille Barrère, Harismendy, Navailles, Dr. A. Calmette,  
Leon Bernard,

For Algeria, Doctor Raynaud.

For West Africa, Dr. Paul Gouzien.

For East Africa, Thiroux.

For Indo-China, Doctor L'Herminier, Doctor N. Bernard.

For the States of Syria, the Great Lebanon, Alaouïtes, and Djebel-  
Druse, Harismendy.

For all of the other Colonies, Protectorates, Possessions, and Territories  
under French mandate, Audibert.

For the British Empire, G. S. Buchanan, John Murray.

For Canada, J. A. Amyot.

For Australia, W. C. Sawers.

For New Zealand, Sydney Price James.

For India, D. T. Chadwick.

For the Union of South Africa, Philip Stock.

For Greece, Al. C. Carpanos, D. Mataramgas.

For Guatemala Francisco A. Figueora.

- For Haiti, Georges Audain.  
 For Hedjaz, Dr. Mahmoud Hamoudé.  
 For Honduras, Rubén Audino Aguilar.  
 For Hungary, Dr. Ch. Grosch.  
 For Italy, Albert Lutrario, Giovanni Vittorio Repetti, Odoardo Huetter,  
 G. Rocco, Guiseppe Druetti.  
 For Japan, H. Matsushima, Mitsuzo Tsurumi.  
 For the Republic of Liberia, R. Lehmann, N. Ooms.  
 For Lithuania, Dr. Pr. Vaiciuska.  
 For Luxemburg, Doctor Praum.  
 For Morocco, Harismendy, Doctor Raynaud.  
 For Mexico, R. Cabrera.  
 For Monaco, F. Roussel, Doctor Marsan.  
 For Norway, Sigurd Bentzon.  
 For Paraguay, R. V. Caballero.  
 For the Netherlands, Doude Van Troostwyk, N. M. Josephus Jitta,  
 De Vogel, Van Der Plas.  
 For Peru, P. Mimbela.  
 For Persia, ad referendum, Dr. Ali Khan Partow Aazam, Mansour  
 Charif.  
 For Poland, Chodzko.  
 For Portugal, Ricardo Jorge.  
 For Rumania, Dr. J. Cantacuzéne.  
 For San Marino, Doctor Guelpa.  
 For the Kingdom of the Serbs, Croats and Slovenes, M. Spalaikovitch.  
 For Salvador, Carlos R. Lardé-Arthès.  
 For the Sudan, Oliver Francis Haynes Atkey.  
 For Switzerland, Dunant Carrière.  
 For Czechoslovakia, Dr. Ladislav Prochazka.  
 For Tunis, Navailles.  
 For Turkey, A. Féthy.  
 For the Union of the Soviet Socialist Republics, J. Davtian, J. Mam-  
 moulia, L. Bronstein, O. Mebournoutoff, N. Freyberg, Al. Syssine,  
 V. Egoriew.  
 For Uruguay, A. Herosa.  
 For Venezuela, ad referendum, José Ig. Cardenas.

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## PUBLIC HEALTH ENGINEERING ABSTRACTS

**Tunnel Atmosphere Tests on Chesapeake & Ohio.** (A Summary of the U. S. Bureau of Mines Reports of Investigations, Serial No. 2858.) *Railway Age*, vol. 84, No. 16, April 21, 1928, pp. 923-924. (Abstract by Leonard Greenburg.)

These studies were conducted for the purpose of determining the temperature, humidity, and composition of the atmosphere in certain tunnels of the Chesapeake & Ohio Railroad.

The tunnels vary in length from 668 feet to 6,501 feet, and have either one or two tracks. They are 16 feet to 22 feet in height from rail to crown, from 14 to 27 feet in width, and have varying grades of from 4 to 60 feet per mile.

The load pulled in all tests was at least the average tonnage for the locomotive used, the locomotives being of the H-6 and H-7 types. Temperature measurements and gas samples were taken in the engine cab near the engineman or fireman. Several quantitative tests for hydrogen sulphide were made, but all were found to be negative, as were tests for CO of blood samples taken from one

of the members of the test crew as rapidly as possible after emerging from the tunnel. Of all the tests, but two showed any appreciable amount of carbon monoxide; and in these cases, in order to be dangerous, exposure would be required for 45 minutes or longer. No health hazard was found to exist from sulphur dioxide, carbon dioxide, or the depletion of oxygen. There might be danger in these cases only if the train were stopped in the tunnel for longer periods of time.

The chief cause of discomfort was the high humidity and temperature. In one test, for example, the temperature was high enough to cause a surface burn. The effective temperatures vary with the type of engine, tunnel, and the direction of travel. They appeared to lie between 85° and 123°. While these temperatures are exceedingly high, yet it must be noted that the men are exposed for but short periods of time (10 to 15 minutes). It is to be noted, the authors point out, that because of clothing the body is not actually exposed to the temperatures observed.

**The Gas Industry's Contribution to Smoke Abatement.** F. W. Goodenough. *The Surveyor*, vol. 72, No. 1869, November 18, 1927, pp. 489-490. (Abstract by C. K. Calvert.)

Economy of operation prevents the elimination of all smoke in industrial plants, but such plants are responsible for less of the nuisance than private houses. Some manufacturing operations are carried on better and more economically with gas than with coal, on account of easier temperature control and the elimination of dirt, resulting in a better product at less cost. The article is in line with some articles published in this country which show a greater over-all economy in the production and use of gas and coke than in the use of coal directly. Coke and gas are recommended for domestic use in cases where, by the use of good equipment and temperature control, the cost of heating can be brought to near that of coal.

**The Effect of Sea Water on the Development of Hookworm Ova and Larvæ (*Necator Americanus*).** F. C. Caldwell and E. L. Caldwell. *Journal of Parasitology*, vol. 13, June, 1927, pp. 270-282. (Abstract by N. R. Stoll.)

The San Blas Indians of Panama—men, women, and children—have "the time-honored and inviolate custom of defecating directly into the sea." Examinations showed only 4.7 per cent hookworm incidence among them (Willis method), while non-Indians without the custom in the same region show 65.8 per cent incidence (Willis method), and Indians living in the interior of Panama 82.3 per cent (smear). The San Blas Indians "for the most part live on an archipelago of coral islands along the Atlantic coast of Panama, where conditions of soil, climate, rainfall, and shade are most favorable for the development of hookworm larvæ to the infective stage. Except for the disposal of all wastes into the sea, the living conditions of these Indians differ in no material way from those of the Panamians on the mainland, where infestation with hookworm is heavy." This situation caused an inquiry into the effect of sea water upon hookworm (*Necator americanus*) development in cultures, with the following results: (a) Under conditions of saturation, sea water has a marked lethal effect on the development of hookworm ova to the infective larval stage, 600 times that of fresh water under like conditions; (b) under optimum cultural conditions, the lethal action of sea water was demonstrated by an average larval yield of 0.1 per cent, in contrast with 67.6 per cent from cultures moistened with tap water; (c) from feces containing viable hookworm ova submerged under sea water for more than one day and transferred to favorable conditions of temperature, soil, and moisture, the larval yield was consistently low, averaging 0.75 per cent from all cultures; (d) study of the process in detail showed that sea water does not to any extent prevent the development of hookworm ova to the embryo stage, but does retard the hatching of the embryos, and kills the newly hatched larvæ.

**Treatment of Filtered Water with Lime at Harrisburg, Pa.** Richard H. Gould. *Journal American Water Works Association*, vol. 19, No. 4, April, 1928, pp. 358-373. (Abstract by W. M. Olson.)

Raw water from the Susquehanna River varies widely in chemical and physical properties, because of the coal mine and limestone drainage. Complaints of "red water" and the short life of house plumbing led to the treatment of corrosive water.

The filter plant comprises settling basins, coagulating basins, rapid sand filters with perforated pipe underdrains, and clear well; capacity 20 m. g. d.; draft 12 m. g. d.; double coagulation with alum.

"The use of sodium silicate and sodium carbonate was considered, but the treatment of the filtered water with lime was selected as being most practicable." Lime was added to remove all free CO<sub>2</sub> (averaging 5 p. p. m.) and to produce a trace of normal carbonates, but no caustic alkalinity. The lime dosage is controlled by the amount of free CO<sub>2</sub> in the filtered water. The values of pH were recorded, but not used, in control. The corrosion was measured by the decrease in dissolved oxygen in water passing through the distribution system. Before treatment, decrease in dissolved oxygen (showing amount of corrosive action which took place in pipes) was 4.45 p. p. m. After a year of treatment the decrease was 0.2 p. p. m. This reduction in corrosion when converted into terms of iron pipe saved from rust amounts to \$100 per day. (Allowing ordinary values for mains in place.) The extra lime cost \$3 per day.

Analytical data indicate results not fully explained by current theories of corrosion. Unexpected fluctuations in hardness were most puzzling.

Data for loss of dissolved oxygen, hardness, alkalinity, pH, free CO<sub>2</sub>, lime added, and carbonates are plotted for a period of 17 months. "It seems to have been easier to produce the results desired than to develop information as to exactly what is taking place \* \* \*."

**Discussion—Carl A. Hechmer.**—At the Washington Suburban Sanitary District plant, Maryland, the use of liquid sodium aluminate has reduced the alum and lime required, has eliminated the use of soda ash, and has made possible the use of pH control of the lime dosage.

**John R. Baylis.**—"The loss of dissolved oxygen in the water of a closed system, such as the distribution system of a water works, is a fairly good measure of the amount of corrosion taking place." Water just saturated with calcium carbonate possesses the ideal chemical balance. Saturation equilibrium table for calcium carbonate:

Alkalinity	pH	Alkalinity	pH	Alkalinity	pH
15.....	8.3	40.....	8.1+	120.....	7.5
20.....	8.9	50.....	8.0+	140.....	7.4
25.....	8.7	70.....	7.8	190.....	7.2
30.....	8.5	100.....	7.6		

Determination of equilibrium is explained and invites attention to the economy of treating corrosive waters.

**Robert Spurr Weston.**—Recommends a reduction of the lime dosage, after the protective coating has been formed, until 0.5 p. p. m. of CO<sub>2</sub> remains in tap water and suggests the occasional use of sodium silicate.

**The Quantitative Estimation of Plankton.**—Wilfred F. Langelier. *Journal American Water Works Association*, vol. 19, No. 4, April, 1928, pp. 408-415. (Abstract by W. M. Olson.)

The writer recommends the Sedgwick-Rafter method as a standard laboratory method. He prefers plankton net for routine examination of reservoirs and

describes the 12-inch diameter and 4-inch diameter nets used by his laboratory. The smaller net is well suited to routine reservoir control work.

He has also used transparency tests to set time for copper sulphate treatment. A white iron plate 8 inches in diameter is attached to a graduated cord. The depth at which it disappears from view is recorded. It may be visible up to 40 feet. When it disappears at three feet the reservoir is dosed heavily. This device is crude but effective in dealing with organisms smaller than "net plankton."

**Sewerage and Sewage Disposal in the Urban District of Sedgley, Staffs.** A. E. Dicks, *The Surveyor*, vol. 73, No. 1892, April 27, 1928, pp. 463-464. (Abstract by F. J. Lavery.)

The urban district of Sedgley has an area of some 3,854 acres and an estimated total population of 20,000. The works dealt with in this paper are three, namely: (a) Beacon Hill, (b) Upper Gormal, and (c) Lower Gormal. The actual present and future population to be treated at these three works is 20,000. A fourth plant to deal with the remainder of the area will be constructed at Gospel End.

In these plants provisions are made to treat three times the dry weather flow, which is received in two detritus tanks and thence flows to three sedimentation tanks. After sedimentation, the flow passes to two dosing tanks for discharge on bacterial filter beds, whence the filtrate reaches humus tanks for ultimate discharge. Six times the dry weather flow can be handled in two storm-water tanks.

The following tabulations supply engineering detail:

*Particulars of works*

	Beacon Hill	Upper Gormal	Lower Gormal
Area of site.....acres.....	6½	5½	7
Population.....	6,000	3,000	11,000
Dry weather flow.....	120,000	60,000	220,000
Capacity of sedimentation tanks.....cubic yards.....	100,700	42,000	165,000
Capacity of filters.....do.....	2,400	1,226	4,888
Capacity of humus tanks.....do.....	20,400	8,400	40,000
Capacity of storm water tanks.....do.....	30,700	13,000	55,000
Area of sludge beds.....square yards.....	600	250	920
Cost.....	£10,000	£5,450	£25,500

In the Lower Gormal district some 12 miles of sewers were constructed at a cost of £43,700, not including land and easements. In the Upper Gormal, 2¼ miles of sewers, 6 to 9 inches in diameter, were built at an engineering cost of £7,250. In Sedgley, 5 miles of 6 to 15 inch sewers were constructed at a cost of £12,300.

## DEATHS DURING WEEK ENDED JUNE 30, 1928

*Summary of information received by telegraph from industrial insurance companies for the week ended June 30, 1928, and corresponding week of 1927. (From the Weekly Health Index, July 5, 1928, issued by the Bureau of the Census, Department of Commerce)*

	Week ended June 30, 1928	Corresponding week, 1927
Policies in force.....	71,497,850	68,033,479
Number of death claims.....	13,084	11,306
Death claims per 1,000 policies in force, annual rate.....	9.6	8.7

*Deaths from all causes in certain large cities of the United States during the week ended June 30, 1928, infant mortality, annual death rate, and comparison with corresponding week of 1927. (From the Weekly Health Index, July 5, 1928, issued by the Bureau of the Census, Department of Commerce)*

City	Week ended June 30, 1928		Annual death rate per 1,000 corresponding week, 1927	Deaths under 1 year		Infant mortality rate week ended June 30, 1928 <sup>1</sup>
	Total deaths	Death rate <sup>1</sup>		Week ended June 30, 1928	Corresponding week, 1927	
Total (68 cities).....	6,606	11.4	11.7	711	670	58
Akron.....	34			7	4	76
Albany <sup>2</sup> .....	29	12.6	14.0	0	1	0
Atlanta.....	79	16.2	13.8	13	8	
White.....	40		8.9	6	2	
Colored.....	39	( <sup>3</sup> )	25.4	7	6	
Baltimore <sup>3</sup> .....	179	11.3	12.9	18	18	57
White.....	121		10.5	10	13	40
Colored.....	58	( <sup>3</sup> )	26.8	8	5	125
Birmingham.....	70	16.5	13.2	10	8	86
White.....	26		9.8	3	3	41
Colored.....	44	( <sup>3</sup> )	18.5	7	5	158
Boston.....	208	13.6	11.7	31	23	86
Bridgeport.....	22			6	1	110
Buffalo.....	101	9.5	11.2	16	15	69
Cambridge.....	22	9.1	8.0	3	2	53
Camden.....	43	16.6	11.0	4	2	64
Canton.....	19	8.5	8.3	6	3	143
Chicago <sup>4</sup> .....	604	10.0	11.0	42	66	36
Cincinnati.....	128	16.2	18.0	12	13	73
Cleveland.....	182	9.4	9.1	23	14	62
Columbus.....	85	14.9	15.4	5	5	47
Dallas.....	48	11.5	12.8	11	7	
White.....	15		9.6	7	5	
Colored.....	33	( <sup>3</sup> )	34.3	4	2	
Dayton.....	32	9.1	11.3	1	2	17
Denver.....	73	13.0	12.6	7	3	
Des Moines.....	29	10.0	10.2	5	2	83
Detroit.....	235	8.9	11.9	30	43	46
Duluth.....	21	9.4	10.0	1	1	23
El Paso.....	29	12.9	15.2	9	8	
Erie.....	26			5	1	103
Fall River <sup>3</sup> .....	26	10.1	8.3	4	2	69
Flint.....	16	5.6	7.7	4	4	51
Fort Worth.....	34	10.6	14.0	2	4	
White.....	27		12.7	1	3	
Colored.....	7	( <sup>3</sup> )	23.9	1	1	
Grand Rapids.....	27	8.6	10.3	6	4	90
Houston.....	78			11	7	
White.....	55			10	6	
Colored.....	23	( <sup>3</sup> )		1	1	
Indianapolis.....	78	10.7	15.3	6	4	46
White.....	70		14.4	5	3	44
Colored.....	8	( <sup>3</sup> )	22.1	1	1	61
Jersey City.....	81	13.0	8.3	11	7	82
Kansas City, Kans.....	23	10.2	12.4	2	4	42
White.....	16		11.9	1	4	25
Colored.....	7	( <sup>3</sup> )	14.8	1	0	145
Kansas City, Mo.....	92	12.3	11.7	8	7	57
Knoxville.....	15	7.4	18.4	4	6	87
White.....	11		18.0	2	5	48
Colored.....	4	( <sup>3</sup> )	21.4	2	1	427
Los Angeles.....	230			22	34	63
Louisville.....	80	12.7	13.2	5	0	42
Lowell.....	21	10.0	8.5	4	4	84
Lynn.....	18	8.9	9.5	0	1	0
Memphis.....	70	19.2	18.4	8	5	94
White.....	32		11.3	4	8	75
Colored.....	38	( <sup>3</sup> )	31.3	4	3	125
Milwaukee.....	97	9.3	12.1	12	20	54
Minneapolis.....	72	8.3	11.3	4	4	24
Nashville.....	46	17.4	21.6	5	3	79
White.....	26		22.1	3	3	64
Colored.....	20	( <sup>3</sup> )	20.1	2	0	120

<sup>1</sup> Annual rate per 1,000 population.

<sup>2</sup> Deaths under 1 year per 1,000 births. Cities left blank are not in the registration area for births.

<sup>3</sup> Deaths for week ended Friday, June 29, 1928.

<sup>4</sup> In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Memphis, 38; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 25.

Deaths from all causes in certain large cities of the United States during the week ended June 30, 1923, infant mortality, annual death rate, and comparison with corresponding week of 1927—Continued

City	Week ended June 30, 1923		Annual death rate per 1,000 corresponding week, 1927	Deaths under 1 year		Infant mortality rate week ended June 30, 1923
	Total deaths	Death rate		Week ended June 30, 1923	Corresponding week, 1927	
New Bedford.....	26	11.4	11.3	2	1	43
New Haven.....	34	9.4	10.4	3	1	42
New Orleans.....	138	16.8	18.9	11	15	53
White.....	78		14.8	1	8	7
Colored.....	60	( <sup>4</sup> )	30.7	10	7	145
New York.....	1,370	11.9	10.2	162	118	65
Bronx Borough.....	161	8.8	8.2	7	15	21
Brooklyn Borough.....	479	10.8	9.1	65	41	65
Manhattan Borough.....	562	16.8	13.3	67	48	79
Queens Borough.....	122	7.5	8.0	19	11	76
Richmond Borough.....	46	16.0	16.4	4	3	72
Newark, N. J.....	104	11.5	8.3	8	6	41
Oakland.....	54	10.3	11.3	1	5	11
Oklahoma City.....	26			3	4	---
Omaha.....	41	9.6	11.4	3	7	35
Paterson.....	25	9.0	10.9	0	2	0
Philadelphia.....	454	11.5	10.9	53	32	71
Pittsburgh.....	136	10.6	12.3	16	23	52
Portland, Oreg.....	67			2	5	21
Providence.....	66	12.1	8.9	14	5	122
Richmond.....	39	10.5	14.4	6	4	78
White.....	19		10.3	3	2	61
Colored.....	20	( <sup>4</sup> )	24.4	3	2	110
Rochester.....	61	9.7	12.7	1	7	8
St. Louis.....	207	12.8	14.8	21	20	70
St. Paul.....	45	9.3	12.7	5	7	48
Salt Lake City <sup>1</sup> .....	34	12.9	16.1	2	7	33
San Antonio.....	55	13.2	15.0	15	13	---
San Diego.....	33	14.4	18.1	1	5	19
San Francisco.....	121	10.8	14.6	10	12	63
Schenectady.....	20	11.2	21.3	6	5	188
Somerville.....	17	8.7	10.3	0	2	0
Spokane.....	33	15.8	6.7	0	2	0
Springfield, Mass.....	26	9.1	9.6	2	1	32
Syracuse.....	47	12.3	10.6	1	6	12
Toledo.....	71	11.9	14.7	7	8	67
Trenton.....	40	15.0	8.4	6	3	102
Utica.....	34	17.1	12.6	3	2	68
Washington, D. C.....	131	12.4	9.7	10	11	57
White.....	85		6.7	4	5	33
Colored.....	46	( <sup>4</sup> )	18.4	6	6	111
Waterbury.....	19			3	5	17
Wilmington, Del.....	29	11.8	13.6	3	3	79
Worcester.....	41	10.8	10.9	5	3	61
Yonkers.....	29	12.5	5.7	1	3	23
Youngstown.....	33	9.9	10.2	1	4	13

<sup>1</sup> Deaths for week ended Friday, June 29, 1923.

<sup>4</sup> In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Memphis, 38; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 25.



# PREVALENCE OF DISEASE

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring*

## UNITED STATES

### CURRENT WEEKLY STATE REPORTS

These reports are preliminary and the figures are subject to change when later returns are received by the State health officers

Reports for Weeks Ended July 7, 1928, and July 9, 1927

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended July 7, 1928, and July 9, 1927

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended July 7, 1928	Week ended July 9, 1927	Week ended July 7, 1928	Week ended July 9, 1927	Week ended July 7, 1928	Week ended July 9, 1927	Week ended July 7, 1928	Week ended July 9, 1927
<b>New England States:</b>								
Maine.....	1	3	3		45	13	0	0
New Hampshire.....								
Vermont.....		4			16	41	0	0
Massachusetts.....	63	58	3	2	429	235	2	0
Rhode Island.....	2	10			165	2	1	0
Connecticut.....	9	13	1	2	294	30	1	1
<b>Middle Atlantic States:</b>								
New York.....	259	359	140	111	1,407	537	11	5
New Jersey.....	115	64	1	1	515	27	2	3
Pennsylvania.....	101	162			1,079	418	4	2
<b>East North Central States:</b>								
Ohio.....	33		24		477		4	
Indiana.....	20	26	14		116	50	0	0
Illinois.....	77	99	57	3	123	177	6	5
Michigan.....	60	66	5	2	427	129	5	1
Wisconsin.....	11	21	47	14	32	446	3	7
<b>West North Central States:</b>								
Minnesota.....	21	14	3	1	27	18	5	2
Iowa.....	5				6		0	
Missouri.....	416	16	44		472	36	4	0
North Dakota.....	2	4	4		8	6	0	0
South Dakota.....				2	72	26	0	0
Nebraska.....		4			3	14	0	0
Kansas.....	3	12			33	89	1	1
<b>South Atlantic States:</b>								
Delaware.....		1			6	4	0	0
Maryland <sup>1</sup> .....	9	44	5	2	81	14	0	0
District of Columbia.....	20	5			83	7	0	0
Virginia.....								
West Virginia.....	5	12	32	2	23	68	1	2
North Carolina.....	9	11	0		106	397	1	0
South Carolina.....	14	9	257	138	54	144	0	0
Georgia.....	1	3	20	20	47	32	0	0
Florida.....	5	5	41	1	47	19	1	0
<b>East South Central States:</b>								
Kentucky.....	1				38		1	
Tennessee.....	3	8	10	20	31	5	1	0
Alabama.....	10	12	31	4	45	60	1	0
Mississippi.....	7	4					0	0
<b>West South Central States:</b>								
Arkansas.....			10	4	17	42	0	0
Louisiana.....	1	5	32		83	43	1	0
Oklahoma <sup>1</sup> .....	5	8	14	7	30	77	1	0
Texas.....	16	14	27	21	45	34	0	0
<b>Mountain States:</b>								
Montana.....	2	1			15	7	3	0
Idaho.....	1				2	5	0	0
Wyoming.....	1				1	18	0	0
Colorado.....	20	26			47	52	2	0
New Mexico.....	2	2			4	17	0	0
Arizona.....	2		2		1	6	1	0
Utah <sup>1</sup> .....		6	3	3	3	63	2	1

<sup>1</sup> New York City only.    <sup>2</sup> Week ended Friday.    <sup>3</sup> Exclusive of Tulsa.    <sup>4</sup> Exclusive of Kansas.

## Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended July 7, 1928, and July 9, 1927—Continued

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended July 7, 1928	Week ended July 9, 1927	Week ended July 7, 1928	Week ended July 9, 1927	Week ended July 7, 1928	Week ended July 9, 1927	Week ended July 7, 1928	Week ended July 9, 1927
Pacific States:								
Washington.....	11	10			24	233	2	1
Oregon.....	5	9	4	15	23	59	0	0
California.....	52	64	19	9	23	198	1	8
Division and State	Polioomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended July 7, 1928	Week ended July 9, 1927	Week ended July 7, 1928	Week ended July 9, 1927	Week ended July 7, 1928	Week ended July 9, 1927	Week ended July 7, 1928	Week ended July 9, 1927
New England States:								
Maine.....	0	0	5	10	0	0	6	2
New Hampshire.....								
Vermont.....	1	0	4	1	0	0	0	0
Massachusetts.....	3	4	96	190	0	0	5	4
Rhode Island.....	0	0	12	25	0	0	0	3
Connecticut.....	1	0	18	40	0	0	0	1
Middle Atlantic States:								
New York.....	3	4	164	250	0	3	17	30
New Jersey.....	2	2	45	104	1	0	6	6
Pennsylvania.....	0	1	135	226	0	0	20	18
East North Central States:								
Ohio.....	1		85		12		13	
Indiana.....	0	1	45	33	26	91	2	12
Illinois.....	0	4	106	97	16	26	13	22
Michigan.....	0	0	114	133	14	22	7	9
Wisconsin.....	1	0	78	69	19	1	2	2
West North Central States:								
Minnesota.....	1	0	43	68	4	1	0	5
Iowa.....	1		22		9			
Missouri.....	0	0	29	27	4	19	6	8
North Dakota.....	0	0	24	16	1	0	1	0
South Dakota.....	0	0	17	24	5	6	0	2
Nebraska.....	0	0	16	19	25	13	0	2
Kansas.....	0	4	35	26	63	21	3	8
South Atlantic States:								
Delaware.....	0	0		2	0	0	1	0
Maryland.....	2	0	11	26	0	0	11	4
District of Columbia.....	0	0	20	11	0	9	0	1
Virginia.....						6		
West Virginia.....	4	0	4	26	22	59	3	18
North Carolina.....	3	0	13	14	13	15	35	70
South Carolina.....	1	2	7	5	19	19	118	127
Georgia.....	0	2	4	7	0	7	8	89
Florida.....	2	1	2	5	0	14	8	12
East South Central States:								
Kentucky.....	0		14		16		3	
Tennessee.....	0	3	14	9	15	5	28	165
Alabama.....	2	0	5	8	4	24	45	84
Mississippi.....	1	1	3	4	0	6	31	33
West South Central States:								
Arkansas.....	1	0	2	0	4	0	20	18
Louisiana.....	0	6		2	4	2	32	33
Oklahoma.....	0	1	13	12	35	35	26	72
Texas.....	0	3	8	4	59	8	5	15
Mountain States:								
Montana.....	0	0	1	20	12	9	5	0
Idaho.....	0	0	4	2	5	6	0	0
Wyoming.....	0	0	10	11	0	10	2	0
Colorado.....	0	0	38	71	2	15	8	4
New Mexico.....	1	10	2	11	1	0		3
Arizona.....	0	5	1	1	4	0		2
Utah.....	0	1	4	11	4	6	0	2
Pacific States:								
Washington.....	0	0	11	21	16	43	7	1
Oregon.....	2	0	9	3	33	15	5	9
California.....	6	27	60	53	20	9	17	12

1 Week ended Friday.

2 Exclusive of Tulsa.

3 Exclusive of Kansas City.

**SUMMARY OF MONTHLY REPORTS FROM STATES**

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State	Menin- gococ- menin- gitis	Diph- theria	Influ- enza	Malaria	Measles	Pel- lagra	Polio- myelitis	Scarlet fever	Small- pox	Ty- phoid fever
<i>March, 1928</i>										
Colorado.....	62	84	87	-----	341	-----	1	519	89	7
<i>May, 1928</i>										
Indiana.....	2	65	317	-----	2,200	-----	0	337	454	11
Kansas.....	16	37	20	-----	853	-----	1	472	320	16
Massachusetts.....	9	315	304	-----	4,252	1	7	1,049	5	14
Montana.....	9	11	11	-----	91	-----	0	62	74	18
Oklahoma <sup>1</sup> .....	5	44	822	161	1,113	61	1	139	338	15
Pennsylvania.....	49	683	-----	-----	12,754	-----	5	1,788	16	69
South Dakota.....	3	8	14	-----	289	-----	1	118	29	-----
Virginia.....	4	40	2,784	96	3,069	62	5	116	23	25
Washington.....	14	61	25	-----	438	-----	7	151	150	20
<i>June, 1928</i>										
North Dakota.....	0	7	75	-----	43	-----	1	74	3	2

<sup>1</sup> Exclusive of Oklahoma City and Tulsa.

<i>March, 1928</i>		Cases	<i>May, 1928—Continued</i>		Cases
<b>Colorado:</b>					
Chicken pox.....		404	Mumps:		
Mumps.....		585	Indiana.....		267
Septic sore throat.....		8	Kansas.....		487
Whooping cough.....		148	Massachusetts.....		678
<i>May, 1928</i>					
<b>Anthrax:</b>					
Massachusetts.....		1	Montana.....		6
Pennsylvania.....		2	Oklahoma.....		1,111
<b>Chicken pox:</b>					
Indiana.....		227	Pennsylvania.....		2,603
Kansas.....		277	South Dakota.....		13
Massachusetts.....		553	Washington.....		364
Montana.....		63	<b>Ophthalmia neonatorum:</b>		
Oklahoma.....		168	Massachusetts.....		114
Pennsylvania.....		1,434	Oklahoma.....		12
South Dakota.....		45	Pennsylvania.....		14
Virginia.....		466	Washington.....		3
Washington.....		565	<b>Puerperal septicemia:</b>		
<b>Dysentery:</b>					
Kansas.....		1	Pennsylvania.....		18
Massachusetts.....		1	<b>Rabies in animals:</b>		
Oklahoma.....		16	Washington.....		3
Pennsylvania.....		1	<b>Rocky Mountain spotted or tick fever:</b>		
Virginia.....		125	Montana.....		9
<b>German measles:</b>					
Kansas.....		94	<b>Scabies:</b>		
Massachusetts.....		81	Washington.....		2
Pennsylvania.....		912	<b>Septic sore throat:</b>		
Washington.....		18	Massachusetts.....		14
<b>Hookworm disease:</b>					
Virginia.....		2	Montana.....		3
<b>Impetigo contagiosa:</b>					
Washington.....		2	Oklahoma.....		119
<b>Lead poisoning:</b>					
Massachusetts.....		6	<b>Tetanus:</b>		
<b>Lethargic encephalitis:</b>					
Kansas.....		1	Kansas.....		1
Massachusetts.....		7	Massachusetts.....		2
Montana.....		1	Oklahoma.....		11
Washington.....		1	Pennsylvania.....		9
<b>Trachoma:</b>					
Kansas.....		1	Kansas.....		3
Massachusetts.....		3	Massachusetts.....		140
Montana.....		1	Montana.....		12
Oklahoma.....		1	Oklahoma.....		3
Pennsylvania.....		3	Pennsylvania.....		3
South Dakota.....		3	South Dakota.....		3
Washington.....		2	Washington.....		2

<sup>1</sup> Exclusive of Oklahoma City and Tulsa.

<i>May, 1928—Continued</i>		<i>May, 1928—Continued</i>	
Trichinosis:	Cases	Whooping cough—Continued.	Cases
Massachusetts.....	1	Oklahoma.....	1 100
Pennsylvania.....	1	Pennsylvania.....	1,233
Tularaemia:		South Dakota.....	19
Oklahoma.....	1 1	Virginia.....	518
Virginia.....	1	Washington.....	87
Undulant (Malta) fever:			
Pennsylvania.....	2	<i>June, 1928</i>	
Whooping cough:		North Dakota:	
Indiana.....	88	Chicken pox.....	15
Kansas.....	363	Mumps.....	4
Massachusetts.....	726	Trachoma.....	2
Montana.....	14	Vincent's angina.....	9
		Whooping cough.....	59

1 Exclusive of Oklahoma City and Tulsa.

### FIRST ADMISSIONS TO INSTITUTIONS FOR THE CARE OF EPILEPTICS JANUARY-MARCH, 1928

Reports for the first quarter of the year 1928 have been received by the Public Health Service from 11 institutions for the care of epileptics, located in 11 States. The total number of patients in these institutions on March 31, 1928, including those on parole or otherwise absent but still on the books, was 7,436.

The first admissions were as follows:

	Male	Female	Total
January.....	53	27	80
February.....	32	31	63
March.....	54	44	98
Total.....	159	102	261

Of the new admissions during the three months, 60.9 per cent were males and 39.1 per cent females, giving a ratio of 156 males per 100 females.

On March 31, 1928, there were 3,936 male patients in the 11 institutions and 3,500 female patients, giving a ratio of 112 males per 100 females.

During the three months 99 patients were discharged—60 males and 39 females. Seventy-two male patients and 50 female patients died. The annual death rates, based on the estimated population of the institutions the middle of February were: Males, 74.1 per 1,000; females, 58.0 per 1,000; persons 66.5 per 1,000.

### GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

The 99 cities reporting cases used in the following table are situated in all parts of the country and have an estimated aggregate population of more than 31,600,000. The estimated population of the 93 cities reporting deaths is more than 30,900,000. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Weeks ended June 23, 1928, and June 25, 1927

	1928	1927	Estimated expectancy
<i>Cases reported</i>			
<b>Diphtheria:</b>			
42 States.....	1,206	1,487	
99 cities.....	709	960	718
<b>Measles:</b>			
40 States.....	9,938	6,517	
99 cities.....	3,944	1,790	
<b>Poliomyelitis:</b>			
42 States.....	30	70	
<b>Scarlet fever:</b>			
42 States.....	1,973	2,552	
99 cities.....	868	1,126	582
<b>Smallpox:</b>			
42 States.....	459	487	
99 cities.....	44	92	72
<b>Typhoid fever:</b>			
42 States.....	383	677	
99 cities.....	40	65	88
<i>Deaths reported</i>			
<b>Influenza and pneumonia:</b>			
93 cities.....	537	471	
<b>Smallpox:</b>			
93 cities.....	0	0	

City reports for week ended June 23, 1928

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence the number of cases of the disease under consideration that may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding weeks of the preceding years. When the reports include several epidemics or when for other reasons the median is unsatisfactory, the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during non-epidemic years.

If the reports have not been received for the full nine years, data are used for as many years as possible but no year earlier than 1919 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviations from the usual trend. For some of the disease given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Population, July 1, 1926, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
<b>NEW ENGLAND</b>									
<b>Maine:</b>									
Portland.....	76,400	3	0	0	0	0	8	1	0
<b>New Hampshire:</b>									
Concord.....	122,546	0	0	0	0	0	11	0	1
Manchester.....	84,000	0	1	0	0	0	6	0	4
<b>Vermont:</b>									
Barre.....	110,008	0	0	0	0	0	1	0	0
Burlington.....	124,089	1	0	0	0	0	4	0	0
<b>Massachusetts:</b>									
Boston.....	787,000	29	43	11	1	0	39	3	12
Fall River.....	131,000	2	3	1	0	0	34	0	3
Springfield.....	145,000	11	2	5	0	0	12	6	1
Worcester.....	193,000	6	3	3	0	0	61	18	2
<b>Rhode Island:</b>									
Pawtucket.....	71,000	0	0	0	0	0	0	1	1
Providence.....	275,000	0	5	6	0	0	148	1	5
<b>Connecticut:</b>									
Bridgeport.....	(?)	2	4	5	0	1	15	0	3
Hartford.....	164,000	2	4	3	0	1	58	9	7
New Haven.....	182,000	10	1	0	1	0	19	26	4

<sup>1</sup> Estimated, July 1, 1925.

<sup>2</sup> No estimate made.

## City reports for week ended June 23, 1923—Continued

Division, State, and city	Population, July 1, 1920, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
<b>MIDDLE ATLANTIC</b>									
New York:									
Buffalo.....	544,000	16	8	12	0	32	28	14	
New York.....	5,924,000	120	215	245	18	1,313	23	127	
Rochester.....	321,000	4	9	13	1	120	22	6	
Syracuse.....	185,000	23	4	1	0	78	13	4	
New Jersey:									
Camden.....	131,000	0	5	6	0	33	3	5	
Newark.....	459,000	21	9	41	2	65	4	6	
Trenton.....	134,000	3	2	4	0	9	0	4	
Pennsylvania:									
Philadelphia.....	2,008,000	42	58	37	0	549	30	38	
Pittsburgh.....	637,000	20	14	12	0	45	39	18	
Reading.....	114,000	6	2	5	0	19	0	3	
<b>EAST NORTH CENTRAL</b>									
Ohio:									
Cincinnati.....	411,000	8	6	1	0	6	1	5	
Cleveland.....	960,000	48	23	19	2	131	23	12	
Columbus.....	285,000	1	2	2	1	56	1	0	
Toledo.....	295,000	13	5	1	2	53	2	6	
Indiana:									
Fort Wayne.....	99,900	4	2	4	0	2	0	2	
Indianapolis.....	367,000	29	3	3	0	100	12	9	
South Bend.....	81,700	0	0	1	0	1	0	0	
Terre Haute.....	71,900	2	0	0	0	5	0	1	
Illinois:									
Chicago.....	3,048,000	91	62	102	8	56	30	47	
Springfield.....	64,700	4	0	0	0	0	0	0	
Michigan:									
Detroit.....	<sup>1</sup> 2,242,044	0	39	41	0	188	0	0	
Flint.....	136,000	1	2	1	0	71	1	4	
Grand Rapids.....	156,000	1	2	1	0	25	5	1	
Wisconsin:									
Kenosha.....	52,700	18	0	0	0	1	0	1	
Milwaukee.....	517,000	92	12	5	1	4	7	7	
Racine.....	69,400	1	1	1	0	1	1	1	
Superior.....	<sup>1</sup> 39,671	0	1	0	0	1	0	1	
<b>WEST NORTH CENTRAL</b>									
Minnesota:									
Duluth.....	113,000	2	1	0	0	0	0	3	
Minneapolis.....	434,000	55	12	5	0	22	5	3	
St. Paul.....	248,000	5	8	0	0	4	5	6	
Iowa:									
Davenport.....	<sup>1</sup> 52,469	2	0	0	0	0	0	0	
Des Moines.....	146,000	0	1	1	0	0	0	0	
Sioux City.....	78,000	9	1	1	0	1	7	0	
Waterloo.....	36,900	5	0	0	0	0	7	0	
Missouri:									
Kansas City.....	375,000	5	4	1	0	30	14	5	
St. Joseph.....	78,400	0	1	0	0	1	2	3	
St. Louis.....	830,000	6	26	23	0	112	5	0	
North Dakota:									
Fargo.....	<sup>1</sup> 26,403	1	1	0	0	0	0	1	
Grand Forks.....	<sup>1</sup> 14,811	0	0	0	0	0	0	0	
South Dakota:									
Aberdeen.....	<sup>1</sup> 15,036	0	0	1	0	0	1	0	
Sioux Falls.....	<sup>1</sup> 30,127	0	1	0	0	0	0	0	
Nebraska:									
Lincoln.....	62,000	2	1	0	0	0	3	0	
Omaha.....	216,000	2	1	2	0	0	0	0	
Kansas:									
Topeka.....	56,500	12	1	0	1	5	3	0	
Wichita.....	92,500	3	0	0	0	0	1	0	

<sup>1</sup> Estimated, July 1, 1925.<sup>1</sup> Special census.

## City reports for week ended June 23, 1928—Continued

Division, State, and city	Population, July 1, 1926, estimated	Chick- en pox, cases re- ported	Diphtheria		Influenza		Meas- les, cases re- ported	Mumps, cases re- ported	Pneu- monia, deaths re- ported
			Cases, esti- mated expect- ancy	Cases re- ported	Cases re- ported	Deaths re- ported			
<b>SOUTH ATLANTIC</b>									
Delaware:									
Wilmington.....	124, 000	1	1	1	0	0	14	1	2
Maryland:									
Baltimore.....	808, 000	27	15	19	2	1	53	17	12
Cumberland.....	<sup>1</sup> 33, 741	2	0	0	0	0	0	0	0
Frederick.....	<sup>1</sup> 12, 035	0	0	0	0	0	3	0	0
District of Columbia:									
Washington.....	528, 000	7	7	7	1	1	130	0	6
Virginia:									
Lynchburg.....	<sup>2</sup> 38, 493	1	0	2	0	0	16	2	2
Norfolk.....	174, 000	0	0	1	0	0	0	0	4
Richmond.....	189, 000	1	1	0	0	0	29	3	3
Roanoke.....	61, 900	8	0	0	0	0	2	0	1
West Virginia:									
Charleston.....	50, 700	0	1	1	0	0	0	0	1
Wheeling.....	<sup>1</sup> 56, 208	5	1	0	0	0	5	0	1
North Carolina:									
Raleigh.....	<sup>1</sup> 30, 371	0	0	1	0	0	9	0	0
Wilmington.....	37, 700	1	0	0	0	0	0	0	3
Winston-Salem.....	71, 800	1	0	0	0	0	0	0	3
South Carolina:									
Charleston.....	74, 100	0	0	0	7	0	0	0	2
Columbia.....	41, 800	3	0	0	0	0	1	3	1
Greenville.....	<sup>1</sup> 27, 311	2	0	0	0	0	0	0	0
Georgia:									
Atlanta.....	( <sup>2</sup> )	1	1	0	6	1	6	2	11
Brunswick.....	<sup>1</sup> 16, 809	0	0	0	0	0	0	6	1
Savannah.....	94, 900	0	0	1	2	0	0	0	0
Florida:									
Miami.....	<sup>2</sup> 131, 286	3	1	1	0	0	0	0	2
St. Petersburg.....	<sup>1</sup> 42, 629	0	0	0	0	0	0	0	0
Tampa.....	102, 000	1	1	0	0	1	0	0	0
<b>EAST SOUTH CENTRAL</b>									
Kentucky:									
Covington.....	58, 500	0	1	0	0	0	1	0	0
Louisville.....	311, 000	7	1	3	2	1	17	0	9
Tennessee:									
Memphis.....	177, 000	2	0	0	0	0	2	7	3
Nashville.....	137, 000	2	0	1	0	0	22	2	1
Alabama:									
Birmingham.....	211, 000	0	1	1	5	0	48	6	2
Mobile.....	66, 800	0	0	0	2	0	0	0	0
Montgomery.....	47, 000	8	0	0	0	0	0	0	0
<b>WEST SOUTH CENTRAL</b>									
Arkansas:									
Fort Smith.....	<sup>1</sup> 31, 643	0	0	0	0	0	1	0	0
Little Rock.....	75, 900	0	0	0	0	0	1	0	0
Louisiana:									
New Orleans.....	419, 000	1	4	6	0	0	1	0	7
Shreveport.....	59, 500	1	0	0	0	1	2	0	1
Oklahoma:									
Tulsa.....	133, 000	0	0	0	0	0	2	2	0
Texas:									
Dallas.....	203, 000	1	3	1	0	0	5	0	0
Fort Worth.....	159, 000	2	1	2	0	1	0	0	2
Galveston.....	49, 100	0	0	0	0	0	1	0	1
Houston.....	<sup>1</sup> 164, 954	0	2	6	0	0	0	0	4
San Antonio.....	205, 000	0	2	0	0	0	0	1	8
<b>MOUNTAIN</b>									
Montana:									
Billings.....	<sup>1</sup> 17, 971	0	0	0	0	0	0	0	0
Great Falls.....	<sup>1</sup> 29, 833	0	0	0	0	0	0	0	0
Helena.....	<sup>1</sup> 12, 037	0	0	0	0	0	0	0	0
Missoula.....	<sup>1</sup> 12, 668	2	0	0	0	0	0	0	0
Idaho:									
Boise.....	<sup>1</sup> 23, 042	2	0	0	0	0	0	0	0

<sup>1</sup> Estimated, July 1, 1925.<sup>2</sup> No estimate made.

Special census.

## City reports for week ended June 23, 1928—Continued

Division, State, and city	Population, July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported		
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported					
<b>MOUNTAIN—continued</b>											
Colorado:											
Denver.....	285,000	26	9	2	0	0	25	31	6		
Pueblo.....	43,900	10	1	0	0	0	2	0	2		
New Mexico:											
Albuquerque.....	121,000	0	0	0	0	0	1	0	1		
Utah:											
Salt Lake City.....	133,000	21	3	2	0	0	0	4	1		
Nevada:											
Reno.....	112,665	0	0	0	0	0	0	0	1		
<b>PACIFIC</b>											
Washington:											
Seattle.....	(?)	27	4	3	0	0	21	4	-----		
Spokane.....	109,000	17	2	0	0	0	0	0	-----		
Tacoma.....	106,000	2	2	1	0	0	20	25	2		
Oregon:											
Portland.....	1282,383	13	5	7	0	0	7	1	7		
California:											
Los Angeles.....	(?)	38	37	12	18	0	7	41	18		
Sacramento.....	73,400	2	2	1	0	0	2	1	1		
San Francisco.....	567,000	14	13	11	1	1	6	10	4		
Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
<b>NEW ENGLAND</b>											
Maine:											
Portland.....	1	3	0	0	0	0	0	0	0	0	23
New Hampshire:											
Concord.....	0	0	0	0	0	1	0	0	0	0	9
Manchester.....	1	3	0	0	0	0	0	0	0	0	21
Vermont:											
Barre.....	0	0	0	0	0	0	0	0	0	0	2
Burlington.....	0	0	0	0	0	1	0	0	0	0	5
Massachusetts:											
Boston.....	38	45	0	0	0	11	2	2	0	15	202
Fall River.....	2	3	0	0	0	2	1	0	0	5	27
Springfield.....	3	8	0	0	0	2	0	0	0	4	26
Worcester.....	6	2	0	0	0	5	0	0	0	14	47
Rhode Island:											
Pawtucket.....	1	1	0	0	0	1	0	0	0	1	16
Providence.....	5	8	0	0	0	3	0	2	0	1	62
Connecticut:											
Bridgeport.....	5	0	0	0	0	3	0	0	0	3	33
Hartford.....	2	4	0	0	0	2	1	0	0	4	-----
New Haven.....	3	0	0	0	0	2	1	0	0	12	46
<b>MIDDLE ATLANTIC</b>											
New York:											
Buffalo.....	14	25	0	0	0	11	1	0	0	26	131
New York.....	127	178	0	0	0	108	13	3	0	130	1,342
Rochester.....	8	5	0	0	0	3	1	0	0	3	81
Syracuse.....	4	2	0	0	0	0	0	0	0	13	55
New Jersey:											
Camden.....	4	0	0	0	0	2	0	0	0	4	37
Newark.....	15	26	0	0	0	12	0	0	0	37	109
Trenton.....	2	0	1	0	0	5	1	0	0	2	36
Pennsylvania:											
Philadelphia.....	53	43	0	0	0	24	4	0	0	68	451
Pittsburgh.....	21	18	0	0	0	7	0	0	0	24	159
Reading.....	1	2	0	0	0	0	0	0	0	3	26

1 Estimated, July 1, 1925.

2 No estimate made.



City reports for week ended June 23, 1928—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported mamm	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
<b>EAST NORTH CENTRAL</b>											
<b>Ohio:</b>											
Cincinnati.....	7	25	1	3	0	8	0	0	0	2	133
Cleveland.....	21	14	1	0	0	13	2	0	0	33	186
Columbus.....	4	2	1	0	0	6	0	0	0	6	79
Toledo.....	9	7	1	0	0	3	0	0	0	9	75
<b>Indiana:</b>											
Fort Wayne.....	1	0	1	0	0	1	0	1	0	1	25
Indianapolis.....	5	14	6	1	0	9	0	0	0	9	98
South Bend.....	1	0	1	0	0	1	0	0	0	2	11
Terre Haute.....	1	1	0	2	0	0	0	0	0	1	8
<b>Illinois:</b>											
Chicago.....	73	79	1	2	0	45	3	2	2	66	632
Springfield.....	1	4	0	1	0	1	0	0	2	5	16
<b>Michigan:</b>											
Detroit.....	48	74	3	0	0	0	2	0	0	101	-----
Flint.....	4	10	1	4	0	0	0	0	0	3	31
Grand Rapids.....	4	3	1	0	0	1	0	0	0	2	19
<b>Wisconsin:</b>											
Kenosha.....	1	0	0	0	0	0	0	0	0	18	2
Milwaukee.....	15	48	1	0	0	6	1	0	0	17	111
Racine.....	3	0	0	0	0	2	0	0	0	2	13
Superior.....	2	3	2	0	0	1	0	0	0	0	12
<b>WEST NORTH CENTRAL</b>											
<b>Minnesota:</b>											
Duluth.....	5	4	2	0	0	1	0	0	0	1	20
Minneapolis.....	20	14	5	2	0	3	1	0	0	4	81
St. Paul.....	12	12	2	0	0	4	1	0	0	13	51
<b>Iowa:</b>											
Davenport.....	0	0	1	1	-----	-----	0	0	-----	1	-----
Des Moines.....	3	3	2	11	-----	-----	0	0	-----	0	27
Sioux City.....	1	0	2	0	-----	-----	0	0	-----	2	-----
Waterloo.....	0	3	0	1	-----	-----	0	0	-----	1	-----
<b>Missouri:</b>											
Kansas City.....	3	19	1	0	0	9	1	1	0	8	83
St. Joseph.....	0	0	0	2	0	0	0	0	0	5	21
St. Louis.....	14	12	2	1	0	6	2	1	0	23	195
<b>North Dakota:</b>											
Fargo.....	1	1	0	0	0	0	0	0	0	8	8
Grand Forks.....	0	0	0	0	-----	-----	0	0	-----	0	-----
<b>South Dakota:</b>											
Aberdeen.....	1	0	0	0	-----	-----	0	0	-----	0	-----
Sioux Falls.....	0	2	0	0	-----	-----	0	0	-----	0	6
<b>Nebraska:</b>											
Lincoln.....	1	4	0	4	0	0	0	0	0	4	18
Omaha.....	3	1	3	0	0	2	1	0	0	0	46
<b>Kansas:</b>											
Topeka.....	1	1	1	0	0	2	1	0	0	1	7
Wichita.....	1	4	0	6	0	1	0	0	0	16	28
<b>SOUTH ATLANTIC</b>											
<b>Delaware:</b>											
Wilmington.....	2	2	0	0	0	0	1	0	0	0	33
<b>Maryland:</b>											
Baltimore.....	17	13	0	0	0	12	3	2	0	72	180
Cumberland.....	0	0	0	0	0	0	0	0	0	0	4
Frederick.....	0	0	0	0	0	0	0	0	0	0	2
<b>District of Col.:</b>											
Washington.....	11	22	0	0	0	9	2	0	0	10	138
<b>Virginia:</b>											
Lynchburg.....	1	0	0	0	0	2	1	0	0	13	11
Norfolk.....	1	1	0	0	0	1	1	0	1	2	-----
Richmond.....	1	1	1	0	0	3	1	0	0	1	54
Roanoke.....	0	0	0	0	0	0	0	0	0	0	15
<b>West Virginia:</b>											
Charleston.....	0	3	1	0	0	0	1	0	1	0	14
Wheeling.....	1	2	0	0	0	2	1	0	0	0	18

## City reports for week ended June 23, 1928—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
SOUTH ATLANTIC— continued											
North Carolina:											
Raleigh.....	0	0	0	1	0	2	0	0	0	4	16
Wilmington.....	0	0	0	0	0	0	0	0	0	0	13
Winston-Salem.....	0	2	1	0	0	0	1	0	0	0	19
South Carolina:											
Charleston.....	0	1	1	0	0	1	1	1	0	3	19
Columbia.....	0	1	0	0	0	2	1	0	0	5	21
Greenville.....	0	1	0	0	0	0	1	0	0	2	12
Georgia:											
Atlanta.....	2	2	3	1	0	6	3	3	0	4	73
Brunswick.....	0	0	0	0	0	0	0	0	0	0	4
Savannah.....	0	2	0	0	0	2	1	0	0	0	36
Florida:											
Miami.....	0	0	0	0	0	1	1	0	0	2	20
St. Petersburg.....	0	0	0	0	0	0	0	0	0	0	6
Tampa.....	0	0	0	0	0	1	1	1	0	0	15
EAST SOUTH CEN- TRAL											
Kentucky:											
Covington.....	0	3	0	0	0	3	0	0	0	0	33
Louisville.....	4	10	0	0	0	11	2	1	1	6	93
Tennessee:											
Memphis.....	2	2	1	0	0	6	3	3	0	6	62
Nashville.....	1	0	1	3	0	5	2	1	0	2	43
Alabama:											
Birmingham.....	2	2	3	1	0	9	3	1	1	8	85
Mobile.....	0	0	0	0	0	0	1	2	0	0	25
Montgomery.....	1	0	0	0	0	0	0	0	0	0	0
WEST SOUTH CEN- TRAL											
Arkansas:											
Fort Smith.....	0	1	0	0	0	0	1	1	0	1	0
Little Rock.....	0	1	0	0	0	0	2	0	0	0	0
Louisiana:											
New Orleans.....	2	3	0	0	0	19	3	4	0	9	179
Shreveport.....	0	1	1	2	0	2	1	0	0	5	28
Oklahoma:											
Tulsa.....	0	4	1	0	0	0	2	0	0	2	0
Texas:											
Dallas.....	2	3	1	2	0	2	2	0	0	28	41
Fort Worth.....	1	0	1	3	0	0	1	0	0	0	28
Galveston.....	0	0	0	0	0	2	0	0	0	0	15
Houston.....	1	1	0	2	0	5	1	2	1	0	69
San Antonio.....	0	1	0	0	0	7	1	0	0	0	0
MOUNTAIN											
Montana:											
Billings.....	0	0	0	0	0	0	0	0	0	0	0
Great Falls.....	3	0	1	0	0	0	0	0	0	0	5
Helena.....	0	0	1	0	0	0	0	0	0	0	0
Missoula.....	0	0	0	0	0	0	0	0	0	0	3
Idaho:											
Boise.....	0	0	1	0	0	0	0	0	0	0	9
Colorado:											
Denver.....	7	3	1	0	0	10	0	0	0	14	70
Pueblo.....	0	0	0	0	0	3	1	0	0	1	8
New Mexico:											
Albuquerque.....	1	0	0	0	0	1	0	0	0	0	7
Utah:											
Salt Lake City.....	2	0	1	1	0	1	0	0	0	8	36
Nevada:											
Reno.....	0	0	0	0	0	0	0	0	0	0	4
PACIFIC											
Washington:											
Seattle.....	8	5	2	1	0	0	0	0	0	4	0
Spokane.....	4	5	3	4	0	0	2	0	0	0	0
Tacoma.....	2	2	3	0	0	2	1	0	0	0	30
Oregon:											
Portland.....	4	7	7	16	0	3	0	0	0	0	57
California:											
Los Angeles.....	19	17	5	0	0	23	3	2	0	62	244
Sacramento.....	1	13	1	1	0	3	1	0	0	0	21
San Francisco.....	9	21	1	0	0	12	0	2	0	4	154

City reports for week ended June 23, 1928—Continued

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
<b>NEW ENGLAND<sup>1</sup></b>									
Massachusetts:									
Boston.....	0	0	2	1	0	0	1	1	0
<b>MIDDLE ATLANTIC</b>									
New York:									
New York.....	14	9	5	3	0	0	2	0	1
Pennsylvania:									
Philadelphia.....	1	0	0	0	0	0	0	0	0
Pittsburgh.....	4	2	0	0	0	0	0	0	0
<b>EAST NORTH CENTRAL</b>									
Ohio:									
Cincinnati.....	1	0	0	0	0	0	0	0	0
Cleveland.....	2	0	0	1	0	0	0	2	2
Toledo.....	1	1	0	0	0	0	0	0	0
Indiana:									
Indianapolis.....	0	2	0	0	0	0	0	0	0
South Bend.....	1	0	0	0	0	0	0	0	0
Terre Haute.....	0	0	0	0	0	0	0	1	0
Illinois:									
Chicago.....	1	3	3	2	0	0	0	0	0
Michigan:									
Grand Rapids.....	0	1	0	0	0	0	0	0	0
Wisconsin:									
Milwaukee.....	1	1	1	1	0	0	0	0	0
Racine.....	2	0	0	0	0	0	0	0	0
<b>WEST NORTH CENTRAL</b>									
Iowa:									
Des Moines.....	1	0	0	0	0	0	0	0	0
Missouri:									
Kansas City.....	3	2	0	0	0	0	0	0	0
St. Louis.....	3	1	0	0	0	0	1	0	0
<b>SOUTH ATLANTIC</b>									
Maryland:									
Baltimore.....	0	0	0	1	0	0	0	2	1
Virginia:									
Norfolk.....	2	0	0	0	0	0	0	0	0
Richmond.....	0	0	0	0	0	1	0	0	0
North Carolina:									
Raleigh.....	0	0	0	0	0	2	0	0	0
South Carolina:									
Charleston.....	0	0	0	1	1	0	0	1	0
Columbia.....	0	0	0	0	0	1	0	0	0
Georgia:									
Atlanta.....	0	0	0	0	0	1	0	0	0
Brunswick.....	0	0	0	0	0	1	0	0	0
Savannah <sup>1</sup> .....	0	0	0	0	1	1	0	0	0
Florida:									
Tampa <sup>1</sup> .....	0	0	0	0	1	1	0	0	0
<b>EAST SOUTH CENTRAL</b>									
Tennessee:									
Nashville.....	0	1	0	0	0	0	0	0	0
<b>WEST SOUTH CENTRAL</b>									
Arkansas:									
Little Rock.....	0	0	0	0	1	3	0	0	0
Louisiana:									
New Orleans.....	0	0	0	0	10	2	0	0	0
Texas: <sup>2</sup>									
Dallas.....	0	0	0	0	1	1	0	0	0
Fort Worth.....	0	0	0	0	0	1	0	1	1
San Antonio.....	0	0	0	0	0	1	0	0	0

<sup>1</sup> Typhus fever, 4 cases; 1 at New Haven, Conn., 2 at Savannah, Ga., and 1 at Tampa, Fla.

<sup>2</sup> Dengue, 3 cases, at Galveston, Tex.

## City reports for week ended June 23, 1928—Continued

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
<b>MOUNTAIN</b>									
Montana:									
Missoula.....	1	0	0	0	0	0	0	0	0
Colorado:									
Denver.....	1	0	0	0	0	0	0	1	1
Pueblo.....	1	0	0	0	0	0	0	0	0
<b>PACIFIC</b>									
California:									
Los Angeles.....	0	1	0	0	0	0	0	0	0

The following table gives the rates per 100,000 population for 101 cities for the five-week period ended June 23, 1928, compared with those for a like period ended June 25, 1927. The population figures used in computing the rates are approximate estimates as of July 1, 1928 and 1927, respectively, authoritative figures for many of the cities not being available. The 101 cities reporting cases had estimated aggregate populations of approximately 31,657,000 in 1928 and 31,050,000 in 1927. The 95 cities reporting deaths had nearly 30,961,000 estimated population in 1928 and nearly 30,370,000 in 1927. The number of cities included in each group and the estimated aggregate populations are shown in a separate table below.

Summary of weekly reports from cities, May 20 to June 23, 1928—Annual rates per 100,000 population compared with rates for the corresponding period of 1927<sup>1</sup>

## DIPHTHERIA CASE RATES

	Week ended—									
	May 26, 1928	May 28, 1927	June 2, 1928	June 4, 1927	June 9, 1928	June 11, 1927	June 16, 1928	June 18, 1927	June 23, 1928	June 25, 1927
101 cities.....	128	171	122	158	134	161	146	150	117	161
New England.....	64	160	99	160	97	133	115	119	78	116
Middle Atlantic.....	213	233	178	234	220	247	242	216	185	269
East North Central.....	102	145	105	123	108	125	123	141	118	132
West North Central.....	72	91	84	81	50	81	69	79	62	46
South Atlantic.....	109	144	93	126	98	124	66	117	58	106
East South Central.....	35	96	45	61	20	20	29	41	25	35
West South Central.....	28	83	56	66	60	45	52	54	52	66
Mountain.....	71	143	71	179	35	368	44	206	39	152
Pacific.....	92	196	107	128	115	125	110	115	72	112

<sup>1</sup> The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1928 and 1927, respectively.

<sup>2</sup> Waterloo, Iowa, and Fargo, N. Dak., not included.

<sup>3</sup> Greenville, S. C., not included.

<sup>4</sup> Waterloo, Iowa, Norfolk, Va., Greenville, S. C., and Louisville, Ky., not included.

<sup>5</sup> Billings and Great Falls, Mont., not included.

<sup>6</sup> Waterloo, Iowa, not included.

<sup>7</sup> Norfolk, Va., and Greenville, S. C., not included.

<sup>8</sup> Louisville, Ky., not included.

Summary of weekly reports from cities, May 30 to June 23, 1928—Annual rates per 100,000 population compared with rates for the corresponding period of 1927—Continued

MEASLES CASE RATES

	Week ended—									
	May 26, 1928	May 28, 1927	June 2, 1928	June 4, 1927	June 9, 1928	June 11, 1927	June 16, 1928	June 18, 1927	June 23, 1928	June 25, 1927
101 cities.....	1,305	548	1,215	447	1,025	425	865	360	652	301
New England.....	1,290	435	1,129	314	952	458	996	407	933	328
Middle Atlantic.....	2,185	365	2,104	282	1,707	298	1,399	281	1,102	247
East North Central.....	773	372	661	324	688	295	678	261	424	213
West North Central.....	939	653	752	450	809	372	839	247	341	216
South Atlantic.....	1,219	1,358	1,021	1,001	833	847	599	691	470	529
East South Central.....	1,077	319	1,037	380	763	157	458	132	449	132
West South Central.....	260	459	176	496	60	418	112	265	44	128
Mountain.....	831	1,049	991	619	734	565	631	341	262	448
Pacific.....	304	1,060	217	1,094	174	1,136	110	969	143	841

SCARLET FEVER CASE RATES

101 cities.....	234	294	206	219	197	240	166	198	144	189
New England.....	306	365	248	288	290	323	223	265	170	237
Middle Atlantic.....	267	363	200	255	190	266	162	223	146	222
East North Central.....	254	301	228	212	237	247	220	215	181	209
West North Central.....	207	245	232	236	162	194	150	162	138	158
South Atlantic.....	163	121	184	78	149	109	108	81	93	96
East South Central.....	219	137	284	101	259	66	80	71	85	81
West South Central.....	204	25	144	21	92	33	44	8	44	37
Mountain.....	18	897	77	780	106	717	71	663	29	439
Pacific.....	130	209	148	185	156	204	156	180	161	138

SMALLPOX CASE RATES

101 cities.....	17	29	13	21	11	20	10	19	7	16
New England.....	9	0	0	0	0	0	0	0	0	0
Middle Atlantic.....	0	0	0	0	0	0	0	0	0	0
East North Central.....	16	49	10	33	9	21	11	21	9	12
West North Central.....	27	42	29	24	22	32	24	30	23	57
South Atlantic.....	26	40	12	32	30	20	13	36	4	29
East South Central.....	60	61	45	91	25	106	53	56	20	56
West South Central.....	24	29	24	17	24	8	20	12	24	12
Mountain.....	133	27	53	36	71	27	44	54	10	90
Pacific.....	38	84	49	60	13	91	18	65	15	21

TYPHOID FEVER CASE RATES

101 cities.....	8	9	12	13	9	11	7	13	7	11
New England.....	11	9	57	9	2	5	2	12	9	2
Middle Atlantic.....	6	6	1	5	10	6	2	6	1	4
East North Central.....	5	7	3	7	7	6	3	8	2	6
West North Central.....	4	4	4	12	4	14	4	6	4	6
South Atlantic.....	7	18	16	29	11	18	17	27	12	40
East South Central.....	10	30	65	61	10	41	44	81	40	61
West South Central.....	12	25	32	37	32	33	36	37	28	21
Mountain.....	0	18	0	9	9	0	9	18	0	18
Pacific.....	36	8	18	26	10	21	20	8	15	8

<sup>2</sup> Waterloo, Iowa, and Fargo, N. Dak., not included.

<sup>3</sup> Greenville, S. C., not included.

<sup>4</sup> Waterloo, Iowa, Norfolk, Va., Greenville, S. C., and Louisville, Ky., not included.

<sup>5</sup> Billings and Great Falls, Mont., not included.

<sup>6</sup> Waterloo, Iowa, not included.

<sup>7</sup> Norfolk, Va., and Greenville, S. C., not included.

<sup>8</sup> Louisville, Ky., not included.

Summary of weekly reports from cities, May 20 to June 23, 1928—Annual rates per 100,000 population compared with rates for the corresponding period of 1927—Continued

## INFLUENZA DEATH RATES

	Week ended—									
	May 26, 1928	May 28, 1927	June 2, 1928	June 4, 1927	June 9, 1928	June 11, 1927	June 16, 1928	June 18, 1927	June 23, 1928	June 25, 1927
95 cities.....	25	9	20	7	17	6*	11	5	6	7
New England.....	18	9	16	2	14	0	14	2	5	5
Middle Atlantic.....	21	8	24	9	19	5	11	5	9	6
East North Central.....	33	4	21	4	17	4	14	5	6	5
West North Central.....	12	12	14	6	14	4	4	2	0	10
South Atlantic.....	11	13	9	16	9	9	7	9	7	2
East South Central.....	89	27	26	5	52	11	31	5	5	27
West South Central.....	33	25	25	17	33	25	16	17	4	4
Mountain.....	53	9	44	0	0	9	9	9	0	27
Pacific.....	7	3	7	3	7	7	7	0	3	10

## PNEUMONIA DEATH RATES

95 cities.....	176	100	145	93	126	93	111	87	85	74
New England.....	253	144	172	116	168	88	136	107	90	86
Middle Atlantic.....	211	116	182	107	147	112	132	95	110	85
East North Central.....	175	85	130	79	115	93	111	86	60	71
West North Central.....	84	87	59	58	64	50	86	48	43	52
South Atlantic.....	119	85	137	112	130	64	79	60	93	45
East South Central.....	230	64	204	53	157	117	117	74	78	58
West South Central.....	144	89	127	81	107	102	74	93	86	42
Mountain.....	124	36	106	72	88	90	53	152	97	54
Pacific.....	91	100	71	97	81	83	88	100	84	131

\* Greenville, S. C., not included.

† Billings and Great Falls, Mont., not included.

‡ Norfolk, Va., and Greenville, S. C., not included.

§ Louisville, Ky., not included.

¶ Fargo, N. Dak., not included.

|| Norfolk, Va., Greenville, S. C., and Louisville, Ky., not included.

Number of cities included in summary of weekly reports, and aggregate population of cities in each group, approximated as of July 1, 1928 and 1927, respectively

Group of cities	Number of cities reporting cases	Number of cities reporting deaths	Aggregate population of cities reporting cases		Aggregate population of cities reporting deaths	
			1928	1927	1928	1927
Total.....	101	95	31,657,000	31,050,300	30,960,700	30,369,500
New England.....	12	12	2,274,400	2,242,700	2,274,400	2,242,700
Middle Atlantic.....	10	10	10,732,400	10,594,700	10,732,400	10,594,700
East North Central.....	16	16	7,991,400	7,820,700	7,991,400	7,820,700
West North Central.....	12	10	2,683,500	2,634,500	2,566,400	2,518,500
South Atlantic.....	21	21	2,981,900	2,890,700	2,981,900	2,890,700
East South Central.....	7	6	1,048,300	1,028,300	1,000,100	980,700
West South Central.....	8	7	1,307,600	1,260,700	1,274,100	1,227,800
Mountain.....	9	9	591,100	581,600	591,100	581,600
Pacific.....	6	4	2,046,400	1,996,400	1,548,900	1,512,100

# FOREIGN AND INSULAR

## THE FAR EAST

*Report for the week ended June 16, 1928.*—The following report for the week ended June 16, 1928, was transmitted by the Eastern Bureau of the Health Section of the Secretariat of the League of Nations, located at Singapore, to the headquarters at Geneva:

Plague, cholera, or smallpox was reported present in the following ports:

PLAGUE	SMALLPOX
<i>India.</i> —Bassein, Bombay, Rangoon.	<i>India.</i> —Bombay, Calcutta, Moulmein, Madras, Rangoon, Negapatam, Vizagapatam.
<i>Madagascar.</i> —Tamatave.	<i>French India.</i> —Pondicherry.
<i>French Indo-China.</i> —Saigon.	<i>Siam.</i> —Bangkok.
CHOLERA	<i>Straits Settlements.</i> —Singapore.
<i>India.</i> —Bassein, Calcutta, Madras, Rangoon.	<i>Dutch East Indies.</i> —Belawan-Deil.
<i>Siam.</i> —Bangkok.	<i>China.</i> —Shanghai, Hong Kong.
<i>French Indo-China.</i> —Saigon, Tourane.	<i>Japan.</i> —Osaka.
	<i>Kwantung.</i> —Dairen, Chinchou.
	<i>Manchuria.</i> —Mukden, Fushun, Teshihchiao, Supinghai.

## ANGOLA

*Communicable diseases—March, 1928.*—During the month of March, 1928, communicable diseases were reported in Angola as follows:

Disease	Coast district	Land frontier	Interior	Total
Ancylostomiasis.....	8	17	4	29
Beriberi.....	1	-----	1	2
Bilharzia.....	17	2	18	37
Chicken pox.....	7	16	-----	23
Diphtheria.....	-----	2	-----	2
Dysentery.....	46	4	4	54
Hemoglobin fever.....	17	-----	4	21
Influenza.....	150	253	20	423
Leprosy.....	7	-----	-----	7
Malaria.....	499	221	132	852
Measles.....	19	14	-----	33
Meningitis.....	-----	-----	1	1
Mumps.....	5	3	2	10
Pneumonia.....	18	15	11	44
Relapsing fever.....	-----	-----	12	12
Scabies.....	41	76	-----	117
Smallpox.....	-----	-----	1	1
Tetanus.....	1	-----	-----	1
Trypanosomiasis.....	128	69	13	210
Tuberculosis.....	28	4	2	34
Typhoid and paratyphoid.....	-----	-----	1	1
Veneral disease.....	153	76	28	257
Whooping cough.....	17	-----	6	23
Yaws.....	192	31	30	253

Population: 4,119,000.

## CANADA

*Provinces—Communicable diseases—Week ended June 23, 1928.*—The Canadian Ministry of Health reports cases of certain communicable diseases from six Provinces of Canada for the week ended June 23, 1928, as follows:

Disease	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Total
Influenza.....				14			14
Lethargic encephalitis.....				1			1
Smallpox.....		7	14	14		3	38
Typhoid fever.....		1	10	4			15

*Quebec Province—Communicable diseases—Week ended June 23, 1928.*—The Bureau of Health of the Province of Quebec reports cases of certain communicable diseases for the week ended June 23, 1928, as follows:

Disease	Cases	Disease	Cases
Chicken pox.....	11	Scarlet fever.....	52
Diphtheria.....	30	Smallpox.....	14
German measles.....	2	Tuberculosis.....	49
Measles.....	108	Typhoid fever.....	10
Mumps.....	15	Whooping cough.....	9

## CUBA

*Quarantine measures against arrivals from Brazil on account of yellow fever.*—Information received under date of June 22, 1928, shows that arrivals from ports in Brazil will be treated at ports in Cuba as follows:

(a) Vessels which in ports of Brazil have remained in open bay, more than 200 meters from the shore or wharf, will be admitted, as far as concerns yellow fever, if they have taken six days or more in the trip, provided that they have had no sickness on board.

(b) Vessels which in ports of Brazil remain less than 200 meters from the shore or wharf will be fumigated throughout on arrival at a Cuban port and passengers and crew of said vessels will remain subject to observation for six days, dating from the fumigation or from their departure from the vessel.

## GREAT BRITAIN

*London—Typhus fever—Week ended June 9, 1928.*—A case of typhus fever was reported in Stepney, County of London, England, during the week ended June 9, 1928.



**JAMAICA**

*Smallpox (alastrim)*—April 29–June 2, 1928.—During the five weeks ended June 2, 1928, three cases of smallpox (alastrim) were reported in the Island of Jamaica, exclusive of Kingston city and parish.

*Other communicable diseases.*—During the period under report other communicable diseases were reported in the island as follows:

Disease	Cases		Disease	Cases	
	Kingston	Other localities		Kingston	Other localities
Chicken pox.....	1	32	Puerperal fever.....		2
Dysentery.....	8	33	Tuberculosis.....	17	91
Leprosy.....		2	Typhoid fever.....	24	151
Poliomyelitis.....		1			

Population: Kingston, 62,707; Island 926,000.

**LATVIA**

*Communicable diseases*—April, 1928.—During the month of April, 1928, communicable diseases were reported in the Republic of Latvia, as follows:

Disease	Cases	Disease	Cases
Cerebrospinal meningitis.....	9	Puerperal fever.....	5
Diphtheria.....	43	Scarlet fever.....	174
Erysipelas.....	20	Scurvy.....	1
Influenza.....	25	Trachoma.....	21
Malaria.....	1	Typhoid fever.....	80
Measles.....	1,010	Typhus fever.....	4
Mumps.....	18	Whooping cough.....	57

**PARAGUAY**

*Asuncion—Plague*—July 7, 1928.—Two deaths from plague were reported at Asuncion, Paraguay, July 7, 1928. The disease was said to have been imported.

**UNION OF SOVIET SOCIALIST REPUBLICS**

*Astrakhan Government—Pneumonic plague*—June 18, 1928.—Under date of June 18, 1928, three cases of pneumonic plague with two deaths were reported in the Astrakhan Government, occurring in Axary district, a locality situated on the left bank of the Volga River. It was stated that measures of control, including deratization, were being carried out.

## VIRGIN ISLANDS

*Communicable diseases—May, 1928.*—During the month of May, 1928, communicable diseases were reported in the Virgin Islands of the United States as follows:

Island and disease	Cases	Remarks
St. Thomas and St. John:		
Chaneroid .....	1	
Gonorrhoea .....	3	
Syphilis .....	4	Secondary, 3.
Whooping cough .....	10	



Indo-China (see also table below):	3	4	16	96	50	28	23	15	10	4	1	5	1
Saigon.....	1	1	8	59	37	17	12	10	7	2	1	1	1
Toursane.....													
Iraq <sup>1</sup> .....													
Kwangchow-Wan (see table below).													
Siam.....	110	200	295	291	120	85	88	58	46	25			
	76	139	214	216	84	61	63	26	29	18			
Ayudhaya.....													
Bangkok.....	2	101	60	60	30	30	24	20	17	14	11	8	3
Prad.....	2	11	66	30	13	13	14	8	6	9	7	4	2
Straits Settlements: Singapore.....	7	5		2			1						1
On vessel:													
S. S. Hawaii Maru at Singapore from Saigon, French Indo-China.....	4	1		2			1						
				11									

Place	January, 1928		February, 1928			March, 1928			April, 1928			May, 1928		
	1-10	11-20	1-10	11-20	21-31	1-10	11-20	21-30	1-10	11-20	21-31	1-10	11-20	21-31
Indo-China (French) (see also table above):														
Annam.....	370	207	23	36	14	18	18	23	17	11	18	4	26	13
Cambodia.....	251	54	38	22	51	33	22	92	43	102	51	34	47	20
Cochin-China.....	469	295	178	113	153	206	217	245	277	316	240	140	139	125
Laos.....	248	77												
Tonkin.....	1,297	3	1						1	4	1	9	1	16
Kwangchow-Wan.....	16													

<sup>1</sup> From July 19 to Dec. 26, 1927, 1,479 cases of cholera were reported in Iraq, with 1,063 deaths.











**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

**PLAGUE—Continued**

[C indicates cases; D, deaths; F, present]

Place	Octo-ber-December, 1927	Janu-ary, 1928	Feb-ruary, 1928	March, 1928	April, 1928	May, 1928	June, 1928	Octo-ber-December, 1927	Janu-ary, 1928	Feb-ruary, 1928	March, 1928	April, 1928	May, 1928	June, 1928
Algeria (see also table above):														
Algers.....	2					1								
Angola.....	3													
British East Africa (see also table above):														
Kenya.....	62	26	24	19	17									
Ecuador: Guayaquil.....	18	4	6	10										
Plague-infected rats.	5	4	3	1										
Indo-China (see also table above):	31	25	31	21										
Kwangchow-Wan.....	10	7		5		9								
Madagascar.....	692	427	542	171		16								
Ambostris Province.....	605	388	517	169		17								
Antsirabe Province.....	25	108	67	80										
Itasy Province.....	109	117	108	56										
	108	117	108	54										
	104	83	19	3										
	94	29	17	8										
Madagascar—Continued.														
Moramanga Province.....														
Tananarive Province.....														
Nigeria (see also table above):														
Peru.....	81	16												
Callao.....	34													
Lima.....	11													
Senegal (see also table above):														
Rufisque.....	2													
Thies.....	3													
Tiassouane.....														
Syria: Beirut.....														

**PLAGUE RATS ON VESSELS**

S. S. *Medani* at Göteborg, Sweden, from Bahia and Buenos Aires via Cape Verde Islands, December 22, 1927.  
 S. S. *Gydenore* at Landskrona, Sweden, from Rosario via Canary Islands, January 22, 1928.  
 S. S. *Dryden* at Liverpool from La Plata River ports, January 20, 1928.  
 S. S. *Sicity* at Liverpool from Buenos Aires and Rosario, June 6, 1928, 7 plague-infected rats.











**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**  
**SMALLPOX—Continued**

[C indicates cases; D, deaths; P, present]

Place	October-December, 1927		January, 1928		March, 1928		April, 1928		May, 1928		June 1-10, 1928				
	July-September, 1927	October-December, 1927	January, 1928	February, 1928	1-10	11-20 21-31	1-10	11-20 21-30	1-10	11-20 21-31	1-10, 1928				
Algeria (see also table above)															
Oran	1, 217	682													
Indo-China (French) (see also table above)	51	11													
Ivory Coast	68	97		58	171	71	69		35	6	37				
Senegal (see also table above)															
Dakar															
Sudan (French)															
Syria:															
Aleppo		1		1											
Beirut		2		15	37	12	4	3	5	1	2				
Damascus		47		13		1	2	1							
Place	July-September, 1927	October, 1927	January, 1928	February, 1928	March, 1928	April, 1928	May, 1928	Place	July-September, 1927	October, 1927	January, 1928	February, 1928	March, 1928	April, 1928	May, 1928
Angola	51	151	10	36	1			Gold Coast	7	4	6	1	3	1	22
Congo	5	2						Greece	10	9	6	11	19	1	22
Cuansa-Norie	1	77		36	1			Latvia	2	2	256	2	2	1	1
Cuansa-Sul	1	9	10					Mexico (see also table above)	221	346	256	47	30	19	26
Loanda	3	5						Morocco	180	622	55	217			
Zaire	1	5						Nigeria (see also table above)	820	316	275	39	45		
Brazil (see also table above):								Persia	173	2	7	143	115		
Porto Alegre	11	5		1				Portugal (see also table above)	2	2	22	8	8		
British East Africa (see also table above):								Spain (see also table above):			1				
Zanzibar		2						Madrid							
Chosen	21	1	4					U. S. S. R.:							
Seoul	6	1	2	8	6	23		Railways, etc.	26	33	15	20			
Ecuador: Guayaquil	4	6	2	9	1	31		Other territories in Europe	366	1,266		968			
Central Asia								Transcaucasus, Siberia, and							
Ukraine								Central Asia	80	81	6	11			
France	37	25	11	10	13	6	15		27	48					









