PUBLIC HEALTH REPORTS

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THE PAN AMERICAN SANITARY CODE

INTERNATIONAL SANITARY CONVENTION SIGNED AT HABANA, CUBA, NOVEMBER 14, 1924

In executive session on February 23, 1925, the Senate of the United States ratified the international sanitary convention of the American Republics, which adopted the sanitary code printed below:

To the Senate:

With a view to receiving the advice and consent of the Senate to ratification, I transmit herewith an international sanitary convention signed on November 14, 1924, by the delegates of the United States and Latin-American Republics represented at the Seventh Pan American Sanitary Conference at Habana.

The attention of the Senate is invited to the accompanying report of the Secretary of State, and memorandum concerning the convention prepared by Surgeon General Cumming of the Public Health Service.

CALVIN COOLIDGE.

THE WHITE HOUSE,
Washington, February 7, 1925.

The PRESIDENT:

The undersigned, the 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, if his judgment approve thereof, a copy duly authenticated by the Secretary of State of Cuba, of an international sanitary convention, signed in one original at Habana on November 14, 1924, by the delegates of the United States, the Argentine Republic, Brazil, Chile, Colombia, Costa Rica, Cuba, Salvador, Guatemala, Haiti, Honduras, Mexico, Panama, Paraguay, Peru, the Dominican Republic, Uruguay, and Venezuela, to the Seventh Pan American Sanitary Conference.

The convention was submitted to the Secretary of the Treasury, who has stated to me in writing his approval of it, and has furnished a memorandum concerning it prepared by Surgeon General Cumming of the Public Health Service, who was one of the delegates of the United States to the Habana conference, and a signer of the con-

vention. A copy of this memorandum is submitted for the information of the Senate.

Respectfully submitted.

CHARLES E. HUGHES.

DEPARTMENT OF STATE,
Washington, February 6, 1925.

THE PAN AMERICAN SANITARY CODE

The Presidents of Argentine, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Guatemala, Haiti, Honduras, Mexico, Salvador, Panama, Paraguay, Peru, United States of America, Uruguay, and Venezuela, being desirous of entering into a sanitary convention for the purpose of better promoting and protecting the public health of their respective nations, and particularly to the end that effective cooperative international measures may be applied for the prevention of the international spread of the communicable infections of human beings and to facilitate international commerce and communication, have appointed as their plenipotentiaries, to wit:

The Republic of Argentine:
Dr. Gregorio Araoz Alfaro.
Dr. Joaquin Llambias.
The United States of Brazil:
Dr. Nascimento Gurgel.
Dr. Raúl Almeida Magalhaes.
The Republic of Chile:
Dr. Carlos Graf.
The Republic of Colombia:
Dr. R. Gutiérrez Lee.
The Republic of Costa Rica:
Dr. José Barela Zequeira.
The Republic of Cuba.
Dr. Mario G. Lebredo.
Dr. José A. López del Valle.
Dr. Hugo Roberts.
Dr. Diego Tamayo.
Dr. Francisco M. Fernández
Dr. Domingo F. Ramos.
The Republic of El Salvador:
Dr. Leopoldo Paz.
The United States of America:
Dr. Hugh S. Cumming.
Dr. Richard Creel.
Mr. P. D. Cronin.
Dr. Francis D. Patterson.

The Republic of Guatemala:
Dr. José de Cubas y Serrate.
The Republic of Haiti:
Dr. Charles Mathon.
The Republic of Honduras:
Dr. Arístides Agramonte.
The Republic of Mexico:
Dr. Alfonso Pruneda.
The Republic of Panama:
Dr. Jaime de la Guardia.
The Republic of Paraguay:
Dr. Andrés Gubetich.
The Republic of Peru:
Dr. Carlos E. Paz Soldán.
The Dominican Republic:
Dr. R. Pérez Cabral.
The Republic of Uruguay:
Dr. Justo F. González.
The United States of Venezuela:
Dr. Enrique Tejera.
Dr. Antonio Smith.

Who, having exchanged their full powers, found in good and due form, have agreed to adopt, ad referendum, the following

Pan American Sanitary Code

Chapter I. *Objects of the Code and Definitions of Terms used Therein*

Article 1. The objects of this code are:

(*a*) The prevention of the international spread of communicable infections of human beings.

(*b*) The promotion of cooperative measures for the prevention of the introduction and spread of disease into and from the territories of the signatory Governments.

(*c*) The standardization of the collection of morbidity and mortality statistics by the signatory Governments.

(*d*) The stimulation of the mutual interchange of information which may be of value in improving the public health and combating the diseases of man.

(*e*) The standardization of the measures employed at places of entry for the prevention of the introduction and spread of the communicable diseases of man, so that greater protection against them shall be achieved and unnecessary hindrance to international commerce and communication eliminated.

Art. 2. Definitions: As herein used, the following words and phrases shall be taken in the sense hereinbelow indicated, except as a

different meaning for the word or phrase in question may be given in a particular article, or is plainly to be collected from the context or connection where the term is used.

Aircraft: Any vehicle which is capable of transporting persons or things through the air, including aeroplanes, seaplanes, gliders, helicopters, airships, balloons, and captive balloons.

Area: A well-determined portion of territory.

Disinfection: The act of rendering free from the causal agencies of disease.

Fumigation: A standard process by which the organisms of disease or their potential carriers are exposed to a gas in lethal concentrations.

Index, *Aëdes aegypti:* The percentage ratio determined after examination between the number of houses in a given area and the number in which larvæ or mosquitoes of the Aëdes aegypti are found in a fixed period of time.

Inspection: The act of examining persons, buildings, areas, or things which may become capable of harboring, transmitting, or transporting the infectious agents of disease, or of propagating or favoring the propagation of such agents. Also the act of studying and observing measures put in force for the suppression or prevention of disease.

Incubation, period of: For plague, cholera, and yellow fever, each 6 days; for smallpox, 14 days; and for typhus fever, 12 days.

Isolation: The separation of human beings or animals from other human beings or animals in such manner as to prevent the interchange of disease.

Plague: Bubonic, septicemic, pneumonic, or rodent plague.

Port: Any place or area where a vessel or aircraft may seek harbor, discharge or receive passengers, crew, cargo, or supplies.

Rodents: Rats, domestic and wild, and other rodents.

Chapter II

Section 1. Notification and subsequent communications to other countries

Art. 3. Each of the signatory Governments agrees to transmit to each of the other signatory Governments and to the Pan American Sanitary Bureau, at intervals of not more than two weeks, a statement containing information as to the state of its public health, particularly that of its ports.

The following diseases are obligatorily reportable:

Plague, cholera, yellow fever, smallpox, typhus, epidemic cerebrospinal meningitis, acute epidemic poliomyelitis, epidemic lethargic encephalitis, influenza or epidemic la grippe, typhoid and paratyphoid fevers, and such other diseases as the Pan American Sanitary Bureau may by resolution add to the above list.

ART. 4. Each signatory Government agrees to notify adjacent countries and the Pan American Sanitary Bureau immediately by the most rapid available means of communication, of the appearance in its territory of an authentic or officially suspected case or cases of plague, cholera, yellow fever, smallpox, typhus, or any other dangerous contagion liable to be spread through the intermediary agency of international commerce.

ART. 5. This notification is to be accompanied or very promptly followed by the following additional information:

1. The area where the disease has appeared.
2. The date of its appearance, its origin, and its form.
3. The probable source or country from which introduced and manner of introduction.
4. The number of confirmed cases and number of deaths.
5. The number of suspected cases and deaths.
6. In addition, for plague, the existence among rodents of plague or of an unusual mortality among rodents; for yellow fever, the Aëdes aegypti index of the locality.
7. The measures which have been applied for the prevention of the spread of the disease and its eradication.

ART. 6. The notification and information prescribed in articles 4 and 5 are to be addressed to diplomatic or consular representatives in the capital of the infected country, and to the Pan American Sanitary Bureau at Washington, which shall immediately transmit the information to all countries concerned.

ART. 7. The notification and the information prescribed in articles 3, 4, 5, and 6 are to be followed by further communications in order to keep other Governments informed as to the progress of the disease or diseases. These communications will be made at least once weekly and will be as complete as possible, indicating in detail the measures employed to prevent the extension of the disease. The telegraph, the cable, and the radio will be employed for this purpose, except in those instances in which the data may be transmitted rapidly by mail. Reports by telegraph, cable, or radio will be confirmed by letter. Neighboring countries will endeavor to make special arrangements for the solution of local problems that do not involve widespread international interest.

ART. 8. The signatory Governments agree that in the event of the appearance of any of the following diseases, namely, cholera, yellow fever, plague, typhus fever, or other pestilential diseases in severe epidemic form in their territory they will immediately put in force appropriate sanitary measures for the prevention of the international carriage of any of the said diseases therefrom by passengers, crew, cargo, and vessels, and mosquitoes, rats, and vermin that may be carried thereon, and will promptly notify each of the other signatory

Governments and the Pan American Sanitary Bureau as to the nature and extent of the sanitary measures which they have applied for the accomplishment of the requirements of this article.

SECTION 2. PUBLICATION OF PRESCRIBED MEASURES

ART. 9. Information of the first nonimported case of plague, cholera, or yellow fever justifies the application of sanitary measures against an area where said disease may have appeared.

ART. 10. The Government of each country obligates itself to publish immediately the preventive measures which will be considered necessary to be taken by vessels or other means of transport, passengers, and crew at any port of departure or place located in the infected area. The said publication is to be communicated at once to the accredited diplomatic or consular representatives of the infected country and to the Pan American Sanitary Bureau. The signatory Governments also obligate themselves to make known in the same manner the revocation of these measures or of modifications thereof that may be made.

ART. 11. In order that an area may be considered to be no longer infected, it must be officially established:

1. That there has neither been a death nor a new case as regards plague or cholera for 10 days and as regards yellow fever for 20 days, either since the isolation or since the death or recovery of the last patient.

2. That all means for the eradication of the disease have been applied and, in the case of plague, that effective measures against rats have been continuously carried out and that the disease has not been discovered among them within six months; in the case of yellow fever, that Aëdes aegypti index of the infected area has been maintained at an average of not more than 2 per cent for the 30-day period immediately preceding, and that no portion of the infected area has had an index in excess of 5 per cent for the same period of time.

SECTION 3. MORBIDITY AND MORTALITY STATISTICS

ART. 12. The International Classification of the Causes of Death is adopted as the Pan American Classification of the Causes of Death, and shall be used by the signatory nations in the interchange of mortality and morbidity reports.

ART. 13. The Pan American Sanitary Bureau is hereby authorized and directed to republish from time to time the Pan American Classification of the causes of Death.

ART. 14. Each of the signatory Governments agrees to put in operation at the earliest practicable date a system for the collection and tabulation of vital statistics which shall include:

1. A central statistical office presided over by a competent official.
2. The establishment of regional statistical offices.
3. The enactment of laws, decrees, or regulations requiring the prompt reporting of births, deaths, and communicable diseases by health officers, physicians, midwives, and hospitals, and providing penalties for failure to make such reports.

ART. 15. The Pan American Sanitary Bureau shall prepare and publish standard forms for the reporting of deaths and cases of communicable disease and all other vital statistics.

CHAPTER III. *Sanitary Documents*

SECTION 1. BILLS OF HEALTH

ART. 16. The master of any vessel or aircraft which proceeds to a port of any of the signatory Governments is required to obtain at the port of departure and ports of call a bill of health, in duplicate, issued in accordance with the information set forth in the appendix and adopted as the standard bill of health.

ART. 17. The bill of health will be accompanied by a list of the passengers, and stowaways if any, which shall indicate the port where they embarked and the port to which they are destined, and a list of the crew.

ART. 18. Consuls and other officials signing or countersigning bills of health should keep themselves accurately informed with respect to the sanitary conditions of their ports and the manner in which this code is obeyed by vessels and their passengers and crews while therein. They should have accurate knowledge of local mortality and morbidity and of sanitary conditions which may affect vessels in port. To this end, they shall be furnished with information they request pertaining to sanitary records, harbors, and vessels.

ART. 19. The signatory Governments may assign medical or sanitary officers as public health attachés to embassies or legations and as representatives to international conferences.

ART. 20. If at the port of departure there be no consul or consular agent of the country of destination, the bill of health may be issued by the consul or consular agent of a friendly Government authorized to issue such bill of health.

ART. 21. The bill of health should be issued not to exceed 48 hours before the departure of the ship to which it is issued. The sanitary visa should not be given more than 24 hours before departure.

ART. 22. Any erasure or alteration of a bill of health shall invalidate the document, unless such alteration or erasure shall be made by competent authority and notation thereof appropriately made.

ART. 23. A clean bill of health is one which shows the complete absence in the port of departure of cholera, yellow fever, plague, typhus fever, or of other pestilential disease in severe epidemic form liable to be transported by international commerce. Provided, that the presence only of bona fide imported cases of such disease, when properly isolated, shall not compel the issuance of a foul bill of health, but notation of the presence of such cases will be made under the heading of "Remarks" on the bill of health.

ART. 24. A foul bill of health is one which shows the presence of nonimported cases of any of the diseases referred to in article 23.

ART. 25. Specific bills of health are not required of vessels which, by reason of accident, storm, or other emergency condition, including wireless change of itinerary, are obliged to put into ports other than their original destinations, but such vessels shall be required to exhibit such bills of health as they possess.

ART. 26. It shall be the duty of the Pan American Sanitary Bureau to publish appropriate information which may be distributed by port health officers for the purpose of instructing owners, agents, and masters of vessels as to the methods which should be put in force by them for the prevention of the international spread of disease.

SECTION 2. OTHER SANITARY DOCUMENTS

ART. 27. Every vessel carrying a medical officer will maintain a sanitary log which will be kept by him, and he will record therein daily: The sanitary condition of the vessel and its passengers and crew; a record showing the names of passengers and crew which have been vaccinated by him; name, age, nationality, home address, occupation, and nature of illness or injury of all passengers and crew treated during the voyage; the source and sanitary quality of the drinking water of the vessel, the place where taken on board, and the method in use on board for its purification; sanitary conditions observed in ports visited during the voyage; the measures taken to prevent the ingress and egress of rodents to and from the vessel; the measures which have been taken to protect the passengers and crew against mosquitoes, other insects, and vermin. The sanitary log will be signed by the master and medical officer of the vessel, and will be exhibited upon the request of any sanitary or consular officer. In the absence of a medical officer, the master shall record the above information in the log of the vessel, in so far as possible.

ART. 28. Equal or similar forms for quarantine declarations, certificate of fumigation, and certificate of vaccination set forth in the appendix are hereby adopted as standard forms.

CHAPTER IV. *Classification of Ports*

ART. 29. An infected port is one in which any of the following diseases exist, namely: Plague, cholera, yellow fever, or other pestilential disease in severe epidemic form.

ART. 30. A suspected port is a port in which or in the areas contiguous thereto a nonimported case or cases of any of the diseases referred to in article 23 have occurred within 60 days or which has not taken adequate measures to protect itself against such diseases, but which is not known to be an infected port.

ART. 31. A clean port, Class A, is one in which the following conditions are fulfilled:

1. The absence of nonimported cases of any of the diseases referred to in article 23 in the port itself and in the areas contiguous thereto.

2. (*a*) The presence of a qualified and adequate health staff.

(*b*) Adequate means of fumigation.

(*c*) Adequate personnel and material for the capture or destruction of rodents.

(*d*) An adequate bacteriological and pathological laboratory.

(*e*) A safe water supply.

(*f*) Adequate means for the collection of mortality and morbidity data.

(*g*) Adequate facilities for the isolation of suspects and the treatment of infectious diseases.

(*h*) Signatory Governments shall register in the Pan American Sanitary Bureau those places that comply with these conditions.

ART. 32. A clean port, Class B, is one in which the conditions described in article 31, 1 and 2 (*a*), above, are fulfilled, but in which one or more of the other requirements of article 31, 2, are not fulfilled.

ART. 33. An unclassified port is one with regard to which the information concerning the existence or nonexistence of any of the diseases referred to in article 23 and the measures which are being applied for the control of such diseases is not sufficient to classify such port.

An unclassified port shall be provisionally considered as a suspected or infected port, as the information available in each case may determine, until definitely classified.

ART. 34. The Pan American Sanitary Bureau shall prepare and publish at intervals a tabulation of the most commonly used ports of the Western Hemisphere, giving information as to sanitary conditions.

CHAPTER V. *Classification of Vessels*

ART. 35. A clean vessel is one coming from a clean port, Class A or B, which has had no case of plague, cholera, yellow fever, small-

pox, or typhus aboard during the voyage, and which has complied with the requirements of this code.

ART 36. An infected or suspected vessel is:

1. One which has had on board during the voyage a case or cases of any of the diseases mentioned in article 35.
2. One which is from an infected or suspected port.
3. One which is from a port where plague or yellow fever exists.
4. Any vessel on which there has been mortality among rats.
5. A vessel which has violated any of the provisions of this code.

Provided that the sanitary authorities should give due consideration in applying sanitary measures to a vessel that has not docked.

ART. 37. Any master or owner of any vessel, or any person violating any provisions of this code or violating any rule or regulation made in accordance with this code relating to the inspection of vessels, the entry or departure from any quarantine station, grounds, or anchorages, or trespass thereon, or to the prevention of the introduction of contagious or infectious disease into any of the signatory countries, or any master, owner or agent of a vessel making a false statement relative to the sanitary condition of a vessel, or its contents, or as to the health of any passenger or person thereon, or who interferes with a quarantine or health officer in the proper discharge of his duty or fails or refuses to present bills of health, or other sanitary document or pertinent information to a quarantine or health officer, shall be punished in accordance with the provisions of such laws, rules, or regulations as may be or may have been enacted or promulgated in accordance with the provisions of this code, by the Government of the country within whose jurisdiction the offense is committed.

CHAPTER VI. *The Treatment of Vessels*

ART. 38. Clean vessels will be granted pratique by the port health authority upon acceptable evidence that they properly fulfill the requirements of Article 35.

ART. 39. Suspected vessels will be subjected to necessary sanitary measures to determine their actual condition.

ART. 40. Vessels infected with any of the diseases referred to in article 23 shall be subjected to such sanitary measures as will prevent the continuance thereon and the spread therefrom of any of said diseases to other vessels or ports. The disinfection of cargo, stores, and personal effects shall be limited to the destruction of the vectors of disease which may be contained therein, provided that things which have been freshly soiled with human excretions capable of transmitting disease shall always be disinfected. Vessels on which there is undue prevalence of rats, mosquitoes, lice, or any other potential vector of communicable disease may be disinfected irrespective of the classification of the vessel.

ART. 41. Vessels infected with plague shall be subjected to the following treatment:

1. The vessel shall be held for observation and necessary treatment.

2. The sick, if any, shall be removed and placed under appropriate treatment in isolation.

3. The vessel shall be simultaneously fumigated throughout for the destruction of rats. In order to render fumigation more effective, cargo may be wholly or partially discharged prior to such fumigation, but care will be taken to discharge no cargo which might harbor rats,[1] except for fumigation.

4. All rats recovered after fumigation should be examined bacteriologically.

5. Healthy contacts, except those actually exposed to cases of pneumonic plague, will not be detained in quarantine.

6. The vessel will not be granted pratique until it is reasonably certain that it is free from rats and vermin.

ART. 42. Vessels infected with cholera shall be subjected to the following treatment:

1. The vessels shall be held for observation and necessary treatment.

2. The sick, if any, shall be removed and placed under appropriate treatment in isolation.

3. All persons on board shall be subjected to bacteriological examination and shall not be admitted to entry until demonstrated free from cholera vibrios.

4. Appropriate disinfection shall be performed.

ART. 43. Vessels infected with yellow fever shall be subjected to the following treatment:

1. The vessel shall be held for observation and necessary treatment.

2. The sick, if any, shall be removed and placed under appropriate treatment in isolation from Aëdes aegypti mosquitoes.

3. All persons on board nonimmune to yellow fever shall be placed under observation to complete six days from the last possible exposure to Aëdes aegypti mosquitoes.

4. The vessel shall be freed from Aëdes aegypti mosquitoes.

ART. 44. Vessels infected with smallpox shall be subjected to the following treatment:

1. The vessels shall be held for observation and necessary treatment.

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[1] Explanatory footnote.—The nature of the goods or merchandise likely to harbor rats (plague suspicious cargo), shall, for purpose of this section, be deemed to be the following, namely: Rice or other grain (exclusive of flour); oilcake in sacks; beans in mats or sacks; goods packed in crates with straw or similar packing material; matting in bundles; dried vegetables in baskets or cases; dried and salted fish; peanuts in sacks; dry ginger; curios, etc., in fragile cases; copra; loose hemp in bundles; coiled rope in sacking kapok; maize in bags; sea grass in bales; tiles, large pipes, and similar articles; and bamboo poles in bundles.

2. The sick, if any, shall be removed and placed under appropriate treatment in isolation.

3. All persons on board shall be vaccinated. As an option the passengers may elect to undergo isolation to complete 14 days from the last possible exposure to the disease.

4. All living quarters of the vessels shall be rendered mechanically clean and used clothing and bedding of the patient disinfected.

ART. 45. Vessels infected with typhus shall be subjected to the following treatment:

1. The vessel shall be held for observation and necessary treatment.

2. The sick, if any, shall be removed and placed under appropriate treatment in isolation from lice.

3. All persons on board and their personal effects shall be deloused.

4. All persons on board who have been exposed to the infection shall be placed under observation to complete 12 days from the last possible exposure to the infection.

5. The vessel shall be deloused.

ART. 46. The time of detention of vessels for inspection or treatment shall be the least consistent with public safety and scientific knowledge. It is the duty of port health officers to facilitate the speedy movement of vessels to the utmost compatible with the foregoing.

ART. 47. The power and authority of quarantine will not be utilized for financial gain, and no charges for quarantine services will exceed actual cost plus a reasonable surcharge for administrative expenses and fluctuations in the market prices of materials used.

CHAPTER VII. *Fumigation Standards*

ART. 48. Sulphur dioxide, hydrocyanic acid, and cyanogen chloride gas mixture shall be considered as standard fumigants when used in accordance with the table set forth in the appendix as regards hours of exposure and of quantities of fumigants per 1,000 cubic feet.

ART. 49. Fumigation of ships to be most effective should be performed periodically and preferably at six months' intervals, and should include the entire vessel and its lifeboats. The vessel should be free of cargo.

ART. 50. Before the liberation of hydrogen cyanide or cyanogen chloride, all personnel of the vessel will be removed, and care will be observed that all compartments are rendered as nearly gas tight as possible.

CHAPTER VIII. *Medical Officers of Vessels*

ART. 51. In order to better protect the health of travelers by sea, to aid in the prevention of the international spread of disease, and to facilitate the movement of international commerce and communication, the signatory Governments are authorized in their discretion to license physicians employed on vessels.

ART. 52. It is recommended that license not issue unless the applicant therefor is a graduate in medicine from a duly chartered and recognized school of medicine, is the holder of an unrepealed license to practice medicine, and has successfully passed an examination as to his moral and mental fitness to be the surgeon or medical officer of a vessel. Said examination shall be set by the directing head of the national health service and shall require of the applicant a competent knowledge of medicine and surgery. Said directing head of the national health service may issue a license to an applicant who successfully passes the examination, and may revoke said license upon conviction of malpractice, unprofessional conduct, offenses involving moral turpitude, or infraction of any of the sanitary laws or regulations of any of the signatory Governments based upon the provisions of this code.

ART. 53. When duly licensed as aforesaid, said surgeons or medical officers of vessels may be utilized in aid of inspection as defined in this code.

CHAPTER IX. *The Pan American Sanitary Bureau*

FUNCTIONS AND DUTIES

ART. 54. The organization, functions, and duties of the Pan American Sanitary Bureau shall include those heretofore determined for the International Sanitary Bureau by the various international sanitary and other conferences of American Republics, and such additional administrative functions and duties as may be hereafter determined by Pan American sanitary conferences.

ART. 55. The Pan American Sanitary Bureau shall be the central coordinating sanitary agency of the various member Republics of the Pan American Union and the general collection and distribution center of sanitary information to and from said Republics. For this purpose it shall, from time to time, designate representatives to visit and confer with the sanitary authorities of the various signatory Governments on public health matters, and such representatives shall be given all available sanitary information in the countries visited by them in the course of their official visits and conferences.

ART. 56. In addition, the Pan American Sanitary Bureau shall perform the following specific functions:

To supply to the sanitary authorities of the signatory Governments through its publications, or in other appropriate manner, all available information relative to the actual status of the communicable diseases of man, new invasions of such diseases, the sanitary measures undertaken, and the progress effected in the control or eradication of such diseases; new methods for combating disease; morbidity and mortality statistics; public health organization and administration; progress in any of the branches of preventive medicine; and other pertinent information relative to sanitation and public health in any of its phases, including a bibliography of books and periodicals on public hygiene.

In order to more efficiently discharge its functions, it may undertake cooperative epidemiological and other studies; may employ at headquarters and elsewhere experts for this purpose; may stimulate and facilitate scientific researches and the practical application of the results therefrom; and may accept gifts, benefactions, and bequests, which shall be accounted for in the manner now provided for the maintenance funds of the Bureau.

ART. 57. The Pan American Sanitary Bureau shall advise and consult with the sanitary authorities of the various signatory Governments relative to public health problems and the manner of interpreting and applying the provisions of this code.

ART. 58. Officials of the National Health Services may be designated as representatives, ex-officio, of the Pan American Sanitary Bureau, in addition to their regular duties, and when so designated they may be empowered to act as sanitary representatives of one or more of the signatory Governments when properly designated and accredited to so serve.

ART. 59. Upon request of the sanitary authorities of any of the signatory Governments, the Pan American Sanitary Bureau is authorized to take the necessary preparatory steps to bring about an exchange of professors, medical and health officers, experts or advisers in public health of any of the sanitary sciences, for the purpose of mutual aid and advancement in the protection of the public health of the signatory Governments.

ART. 60. For the purpose of discharging the functions and duties imposed upon the Pan American Sanitary Bureau, a fund of not less than $50,000 shall be collected by the Pan American Union, apportioned among the signatory Governments on the same basis as are the expenses of the Pan American Union.

CHAPTER X. *Aircraft*

ART. 61. The provisions of this convention shall apply to aircraft, and the signatory Governments agree to designate landing places for aircraft which shall have the same status as quarantine anchorages.

CHAPTER XI. *Sanitary Convention of Washington*

ART. 62. The provisions of articles 5, 6, 13, 14, 15, 16, 17, 18, 25, 30, 32, 33, 34, 37, 38, 39, 40, 41, 42, 43, 44, 45, 49, and 50 of the Pan American Sanitary Convention concluded in Washington on October 14, 1905, are hereby continued in full force and effect, except in so far as they may be in conflict with the provisions of this convention.

CHAPTER XII

Be it understood that this code does not in any way abrogate or impair the validity or force of any existing treaty, convention, or agreement between any of the signatory Governments and any other Government.

CHAPTER XIII. *Transitory Disposition*

ART. 63. The Governments which may not have signed the present convention are to be admitted to adherence thereto upon demand, notice of this adherence to be given through diplomatic channels to the Government of the Republic of Cuba.

Made and signed in the city of Habana, on the 14th day of the month of November, 1924, in two copies, in English and Spanish, respectively, which shall be deposited with the Department of Foreign Relations of the Republic of Cuba, in order that certified copies thereof, in both English and Spanish, may be made for transmission through diplomatic channels to each of the signatory Governments.

By the Republic of Argentine:

GREGORIO ARAOZ ALFARO.
JOAQUIN LLAMBIAS.

By the United States of Brazil:

NASCIMENTO GURGEL.
RAUL ALMEIDA MAGALHAES.

By the Republic of Chile:

CARLOS GRAF.

By the Republic of Colombia:

R. GUTIERREZ LEE.

By the Republic of Costa Rica:

JOSE VARELA ZEQUEIRA.

By the Republic of Cuba:

MARIO G. LEBREDO.
JOSE A. LOPEZ DEL VALLE.
HUGO ROBERTS.
DIEGO TAMAYO.
FRANCISCO M. FERNANDEZ.
DOMINGO F. RAMOS.

By the Republic of El Salvador:

LEOPOLDO PAZ.

By the United States of America:

HUGH S. CUMMING.
RICHARD CREEL.
P. D. CRONIN.

By the Republic of Guatemala:

JOSE DE CUBAS Y SERRATE

By the Republic of Haiti:

CHARLES MATHON.

By the Republic of Honduras:

ARISTIDES AGRAMONTE.

By the Republic of Mexico:

ALFONSO PRUNEDA.

By the Republic of Panama:

JAIME DE LA GUARDIA.

By the Republic of Paraguay:

ANDRES GUBETICH.

By the Republic of Peru:

CARLOS E. PAZ SOLDAN.

By the Dominican Republic:

R. PEREZ CABRAL.

By the Republic of Uraguay:

JUSTO F. GONZALEZ.

By the United States of Venezuela:

ENRIQUE TEJERA.
ANTONIO SMITH.

APPENDIX

TABLE I.—*Quantities per 1,000 cubic feet*

Chemicals	Sulphur dioxide				Hydrocyanic acid				Cyanogen chloride mixture			
	Mosquitoes	Rats	Lice	Bedbugs	Mosquitoes	Rats	Lice	Bedbugs	Mosquitoes	Rats	Lice	Bedbugs
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Oz.*	*Oz.*	*Oz.*	*Oz.*	*Oz.*	*Oz.*	*Oz.*	*Oz.*
Sulphur	2	3	4	3								
Sodium cyanide					½	5	10	5	½	4	8	4
Sulphuric acid					½	5	10	5				
Sodium chlorate									¼	2	4	2
Hydrochloric acid									2⅛	17	34	17
Water					1¼	12½	25	12½	2⅛	17	34	17

TABLE II.—*Hours of exposure*

	Hours
Sulphur dioxide:	
Mosquitoes	1
Rats	6
Lice	6
Bedbugs	6
Hydrocyanic acid:	
Mosquitoes	½
Rats	2
Lice	2
Bedbugs	2
Cyanogen chloride mixture:	
Mosquitoes	½
Rats	1½
Lice	1½
Bedbugs	1½

Serial No.

---Health Service.

---Quarantine Station---

CERTIFICATE OF VACCINATION AGAINST SMALLPOX

Name--- Sex---

Age---Date of Vaccination---

Height---Date of Reaction---

Result:

Immune Reaction.

Vaccinoid.

Successful Vaccination.

--- *Signed*---

(Signature) *Medical officer in Charge.*

---Health Service.

CERTIFICATE OF DISCHARGE FROM NATIONAL QUARANTINE

---Quarantine Station,

Port of---

---, 192

I certify that the---of---, from---bound for---, has in all respects complied with the quarantine regulations prescribed under the authority of the laws of---, and the Pan American Sanitary Code, and that the (Country)

vessel, cargo, crew, and passengers are, to the best of my knowledge and belief, free from quarantinable diseases or danger of conveying the same. Said vessel is this day granted {free / provisional} pratique.

1. Rat guards of an accepted design to be placed on all lines leading from the vessels.
2. Gangways to be raised at night, or lighted and watched.
3. Vessels to be fumigated after discharge of cargo.

Quarantine Officer.

---Health Service

32340°—25†——2

CERTIFICATE OF FUMIGATION

(Not to be taken up by port authorities)

Port of _____

_____, 192

This is to certify that the _____ from _____ has been fumigated at this station for the destruction of _____ as follows:

	Cubic capacity	Kilos or pounds sulphur	Grams or ounces cyanide	Grams or ounces cyanide and sodium chlorate	
Holds 1					Date_____
2					Duration of exposure_____
3					_____
4					Evidence of rats before fumigation_____
5					_____
Engine-room and shaft alley					Rats after fumination: living, _____, dead_____
Bunkers					_____
Forepeak					_____
Forecastle					Inspection made by_____
Steerage					_____
Dining saloon (first cabin)					Opened by_____
Pantry (first cabin)					Dunnage or other protection to rats; how treated prior to fumigation_____
Galley					_____
Second cabin					_____
Second cabin pantry					_____
Provision storeroom					_____
Living quarters					_____
Staterooms					_____
Smoking room					_____
Total					

_____

Quarantine Officer.

On the reverse side make a report of all compartments which were not fuminated, why they were not, and give treatment. Also report any other pertinent information.

QUARANTINE DECLARATION

_____ Quarantine Station

_____, 192

Name of vessel_____; destination_____; nationality_____; rig_____; tonnage_____; date of arrival_____; port of departure _____; intermediate ports_____; days from port of departure _____; days from last port_____; previous ports of departure and call_____; officers and crew_____; cabin passengers_____; steerage passengers_____; total number of persons on board_____; cargo_____; ballast (tons)_____; character of_____; source_____ If water ballast, were tanks filled at the port of departure or at sea?_____

In ports of departure and call, did vessel lie at wharf or at moorings in harbor or roadstead?_____

If vessel lay at moorings, how far from shore?_____

Was there communication with the shore?_____ What changes in the personnel of the crew, if any?_____

_____

Sickness, cases of, in port of departure. No._____; result_____

in intermediate ports. No._____; result_____

at sea. No._____; result_____

Were the sick sent to hospital or allowed to remain on board?_____

Was the bedding and clothing of those sick at sea frequently aired and washed?_____

Do you know of any circumstances affecting the health of the crew, or which render the ship dangerous to the health of any port of_____ If so, state them_____

(Country)

I certify that the foregoing statements, and the answers to the questions, are true to the best of my knowledge and belief.

Master_____

Ship's Surgeon_____

Vessel_____

Treatment of vessel.....;
(Inspected and passed or detained)
disinfection of hold.....; cabin and forecastle.....; bedding, clothing,
(Method) (Method)
etc.....
(Method)
Detained.....days; sickness in quarantine.....;
(Number of cases and nature)
discharge in free pratique.....; port named in certificate of discharge.....
.....
.....
Quarantine Officer.

INTERNATIONAL STANDARD FORM BILL OF HEALTH

INFORMATION CONCERNING THE VESSEL

I ..... (official title) ..... (the person authorized to issue the bill, at the port of .....) do hereby state that the vessel hereinafter named clears (or leaves) from the port of ..... under the following circumstances: Name of vessel.....; nationality .....; master .....; tonnage, gross.....; net .....; name of medical officer .....; number of officers .....; of crew, including petty officers .....; officers' families .....; passengers destined for .....
(Country of destination)
embarking at this port .....; first cabin .....; second cabin .....; steerage .....; total number of passengers on board .....
Ports visited within preceding four months .....
Location of vessel while in port—wharf .....; open bay .....; distance from shore .....;
If any passengers or members of crew disembarked on account of sickness, state disease .....;
Time vessel was in port (date and hour of arrival) .....; (date and hour of departure) .....;
Character of communication with shore .....
Sanitary condition of vessel.....
Sanitary measures, if any, adopted while in port .....
Date of last fumigation for the destruction of rodents.....
Number of rodents obtained .....
Port where fumigated ..... and officials supervising the fumigation .....
.....
Method of fumigation used (for rodents) .....;
(for mosquitoes).....

INFORMATION CONCERNING THE PORT

Sanitary conditions of port and vicinity.....
Prevailing diseases at port and vicinity.....

Number of cases and deaths from the following-named diseases during the two weeks ending.....

Diseases	Number of cases [1]	Number of deaths [1]	Remarks (any conditions affecting the public health existing in the port or vicinity to be here stated)
Yellow fever			
Asiatic cholera			
Cholera nostras or cholerine			
Smallpox			
Typhus fever			
Plague			
Leprosy			

[1] When there are no cases or deaths, entry to that effect must be made.

Health Office of the port of..... (when practicable this certificate should be signed by the health officer of the port).
Date of last case of:
Cholera.....
Yellow fever.....
Human plague.....
Typhus.....
Rodent plague.....
Measures, if any, imposed by the municipality against rats during the last six months.....
.....
Signature of Port Health Officer.

I certify that the vessel has complied with the rules and regulations made under the terms of the Pan American Sanitary Code, and with the laws and regulations of the country of destination. The vessel leaves this port bound for_____, via_____.

Given under my hand and seal this_____day of_____, 192____.

(Signature of consular officer)_____

_____

[SEAL.]

Countersigned by

_____

Medical Officer.

DRAINAGE DITCHES COVERED ECONOMICALLY

Concrete Pipe Manufactured and Laid Cheaply in Emporia, Va.

By GEORGE S. BOTE, Scientific Assistant, United States Public Health Service

In 1916 the town of Emporia, Va., with a population of only 2,018 people, carried out an extensive drainage project, digging about 6½ miles of new ditches and widening and deepening a number of the old ones. This work was brought about by the presence of annoying mosquitoes and the prevalence of malaria in the town, and by a determination of the citizens and the town and county officials to rid the community of these pests and this disabling malady. It was the first project of this kind undertaken by a small municipality in Virginia.

In all, approximately 9 miles of ditches were completed and placed under mosquito control. They have been cleaned several times each year, and a regular weekly oiling schedule has been maintained throughout the mosquito season. The reduction in mosquitoes and malaria has been quite pronounced in the years that have followed, and the people have enjoyed greater comfort and better health.

The ditches were located on property lines wherever practicable. When first completed, eight years ago, they had gradually sloping sides with narrow bottoms, this form being considered the best type of drainage ditches for mosquito control. They receive all street drainage and all waste water, other than sewage, from the town of Emporia.

In this section of Virginia the top soil is loam, the subsoil is sand for several feet, and the next lower stratum is gravel or blue clay. Gradually the banks of the ditches have caved in and the bottoms have widened. Many of them are now twice their original size, and, as they pass through both the business and residential sections, they mar the landscape and depreciate, to some extent, the value of the property; but their net advantage from the standpoint of mosquito control and health is fully recognized. Then, too, the maintenance cost on these ditches has progressively increased, owing to caving and consequent obstructions. In some places fences on property lines have fallen in. When, during the cleaning process, the oil-

soaked mud was thrown out on the banks near the sidewalks which cross these ditches, some of the citizens became alarmed and censured the health officials for permitting such practice. Of course the mud was harmless, but because of its unsightliness considerable unfavorable comment was heard each time the ditches were cleaned. The sanitary officer received the brunt of the complaints.

Greensville County and the town of Emporia have been cooperating with the State board of health and the United States Public Health Service in providing funds for the employment of a full-time sanitary officer, who has conducted a campaign for better health in the town and county during the past five years and who is still so occupied. This plan of work was inaugurated in July, 1919. Visits are made at intervals by a representative of the State board of health and the Public Health Service to consult with the local authorities and the sanitary officer pertaining to this health program. For several years these agencies have been seeking an inexpensive method to pipe or cover over these ditches, but not until early in 1924 was a practicable economic plan evolved.

Terra cotta pipe, to be purchased by carload lots, was first considered. It was found that 30-inch pipe was required for the ditches selected to be covered first. In order to secure some definite figures, a hundred foot section of this ditch was arbitrarily designated and prices on the pipe were obtained. The cost of 30-inch tile delivered in Emporia was found to be about $10.50 per joint, 2½ feet long or $4.21 per foot. This section of the ditch was 100 feet long, making the cost of the tile $421. The cost of hauling and laying this pipe and building a manhole was estimated to be $35.60, making the total $456.60, or $4.57 per foot. This was out of the question with the funds on hand in the town treasury. Contract figures submitted were slightly more than those given above.

The next plan considered was that of making wooden forms and concreting the sides and bottom. The cost in this case, while estimated at slightly less than that of terra cotta pipe, was also considered prohibitive.

Other methods considered were the walling of the sides with brick and the laying of a concrete bottom, and the use of corrugated metal culvert pipe. Both of these methods were also regarded as too expensive, and the corrugated metal pipe was not considered advisable in a sandy country where the ditches could be given but little grade.

The plan finally adopted by the Emporia Town Council, upon the recommendation of the writer, was the purchase of metal molds for making the concrete pipe locally. It was decided that 24-inch and 30-inch pipe would be the sizes required for the ditches selected to be covered. Accordingly, the town council authorized the purchase of two molds, one for 30-inch pipe, and one for 24-inch pipe,

both 2½ feet in length. The socket, or "slip joint," type of pipe was selected.

COST OF METAL MOLDS

Each mold consists of one inside casing, one outside casing, one cone centering plate, one top socket ring, and one bottom socket ring. Experience has shown it to be advisable to purchase an extra bottom socket ring for each mold. The cost was as follows:

30-inch mold

One 30-inch mold with centering plate (inside casing and outside casing)	$40. 25	
1 bottom socket ring	5. 00	
1 top socket ring	5. 75	
1 extra bottom socket ring	5. 00	
		$56. 00

24-inch mold

One 24-inch mold with centering plate (inside casing and outside casing)	30. 80	
1 bottom socket ring	3. 55	
1 top socket ring	4. 30	
1 extra bottom socket ring	3. 55	
		42. 20
Total		98. 20

METHOD OF MANUFACTURE

A small concrete platform about 6 feet square and 4 inches thick was poured and leveled. On this platform the metal molds were set. It is important to have the molds set level in order to get smooth and even ends so that the joints will fit together properly. With the platform the above size, and by having the extra bottom socket ring, the two molds can be filled with concrete one day and at one mixing, and on the following day, at least during warm weather, the metal molds can be removed, cleaned, greased, set up, and refilled with concrete without moving or handling the pipe poured the first day. On the third day the pipe poured the first day can be moved to the storage yard with but little danger of breakage, the bottom socket ring taken out, and the molds reset and filled again.

The concrete is mixed by hand, and sufficient material is mixed at one time to pour one 30-inch and one 24-inch pipe. The thickness of the wall of the 24-inch pipe is 2 inches; that of the 30-inch pipe, 2½ inches. Approximately 2.9 cubic feet of concrete is required to make the 24-inch pipe, and 4.5 cubic feet to make the 30-inch pipe.

In making the above amount of concrete, 8 cubic feet of sand and gravel and 3 bags of cement are used. Allowing for a small amount of wastage, 8 cubic feet of concrete is a safe amount to mix up for the

two pipes. The aggregate is not screened, but is used just as it comes from one of the local gravel pits. This has no large pebbles in it, but has a good quantity of fine gravel.

The best mixture is 1 part Portland cement, 1½ parts sand, and 2½ parts gravel or crushed stone. Gravel should not exceed one-half inch in size. We have used a mix of 1 part Portland cement, 1¾ parts sand, and 2¾ parts of gravel with apparently good results. It would, perhaps, be advisable to screen the gravel.

Each concrete pipe is reinforced with six rings of No. 9 wire. The rings are placed as the molds are filled with concrete, and are spaced as evenly as possible.

There has been very little breakage in handling and in laying the pipe.

The detail cost of material used for making one 24-inch pipe and one 30-inch pipe both 2½ feet long, a total of 5 feet, is as follows:

3 bags cement at 80¢ per bag	$2.40	
8 cubic feet sand and gravel at $1.50 per yard or 5½ cents per cubic foot	.44	
12 rings No. 9 wire for reinforcing	.15	
Material cost		$2.99
The cost of labor, removing, cleaning, greasing, resetting molds, and mixing concretes is as follows:		
1 man, 2 hours at 20¢	.40	
1 man, 2 hours at 25¢	.50	
Labor cost		.90
Total		3.89

There are approximately 8 cubic feet of concrete in the two joints of pipe, and the cost of this for material and labor is $3.89.

Estimating the labor and material cost of the 30-inch pipe at nine-sixteenths of the total ($3.89), the 2½-foot section of 30-inch pipe costs approximately $2.19, or 87½ cents per foot; and putting the labor and material cost of the 24-inch pipe at seven-sixteenths of the total, the 2½-foot section of 24-inch pipe costs approximately $1.70, or 68 cents per foot.

There must be added to the above cost the amount of depreciation on the molds based on the total number of times each mold can be used before it becomes unserviceable. This is arbitrarily estimated at 4 cents per foot for the 24-inch pipe and 5 cents per foot for the 30-inch pipe; it may be less. There is nothing to base such an estimate on except that the first molds purchased have been used 160 times at this writing and show but slight deterioration, and have required no repairing.

At first only two molds were purchased in order to try out this method of pipe making with as small an outlay of money as possible. The pipe is made by the regularly employed street force of the town, who do this work under the supervision of either the superintendent of streets or the county sanitary officer. Neither of the latter spends much time supervising the manufacture, merely going by to see that the proper mix is made up, then again after molds are filled to see that the top socket rings are properly placed. Sometimes the concrete settles away from the ring a little, but this is remedied by a few minutes' work. This is one matter, however, to be carefully watched.

The concrete platform, the mixing board, the molds, and the sand and gravel were placed near the tool house, at which the street force reports daily. The cement, reinforcing material, and tools are stored inside the tool house, and the water is obtained from a city water tap located just inside the tool house.

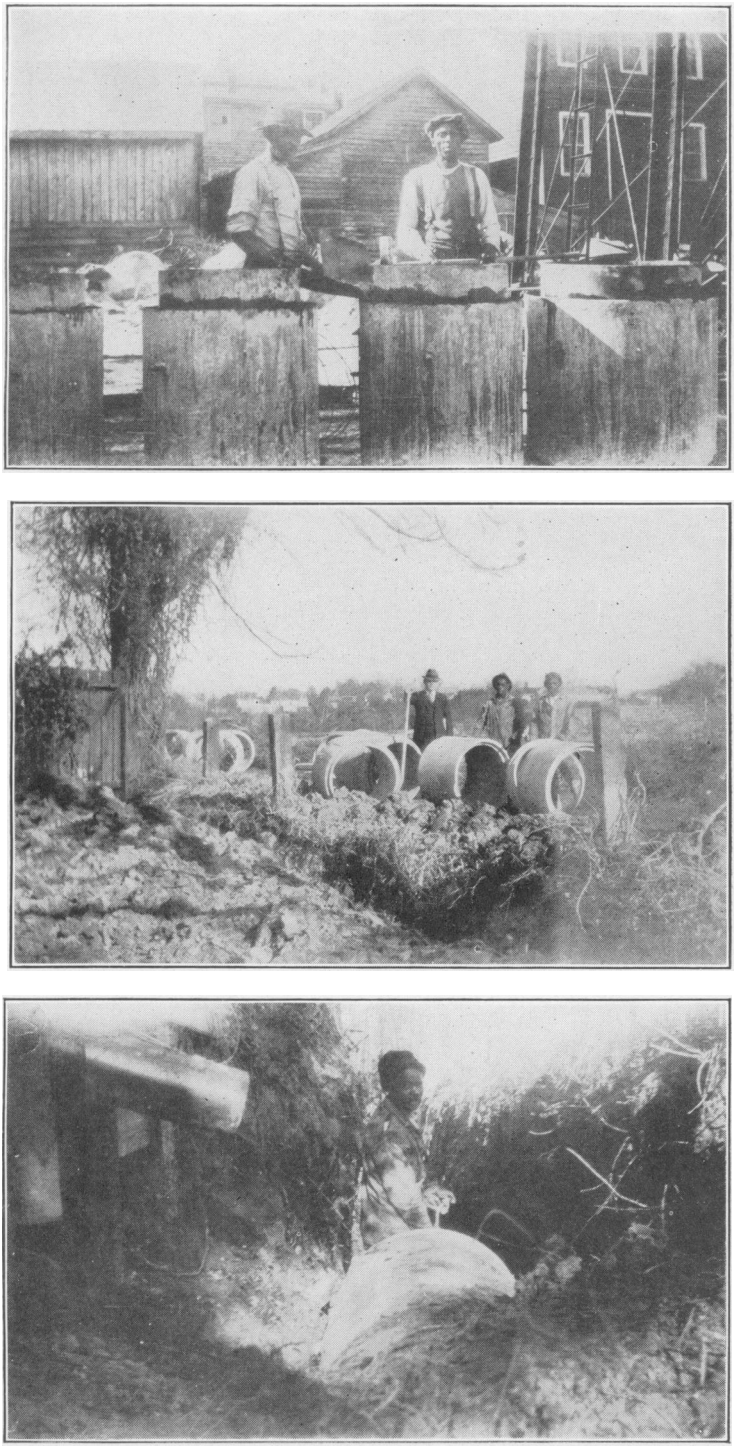
Thus, it is seen, the materials are convenient and all unnecessary work and waste motion have been eliminated. This has contributed greatly to the low cost of manufacture. Furthermore, after several joints of pipe had been made and the men had become acquainted with the procedure, it was determined that two hours for two men were ample for taking down, cleaning off, greasing, setting up the molds, and mixing the concrete. This has been systematized to such an extent that two men are allowed two hours pay for completion of the task, and they usually finish a few minutes short of the time allowed. The chief advantage, however, is that it reduces supervision to a minimum.

After the pipe has set for two days, it is rolled to the storage yard near the tool house and allowed to cure three weeks before being handled. Storage space is rather limited; and as soon as there is enough pipe on hand to provide one day's work for the street force, it is placed in the ditches. This also eliminates danger of breakage in the storage yard, puts the pipe in service quickly, and the return on the investment is not delayed.

LAYING PIPE

A start was made by laying 90 feet of 30-inch pipe in one of the large ditches. Some additional cost was due to the grubbing out of two large stumps in order to straighten this ditch. Manholes are provided at intervals of 100 feet or less for cleaning and flushing out the pipe line in case clogging should occur. These add to the cost considerably but were deemed advisable.

The itemized cost for this work is as follows:



Top: Filling molds. Center: Pipe ready to be laid. Bottom: Pipe in ditch

Hauling pipe from yard to ditch

1 team and driver (1 day)	$5. 50	
1 helper (1 day)	2. 00	
		$7. 50

Labor for laying and covering pipe

4 men at $2 per day	8. 00	
1 man at $2.50 per day	2. 50	
		10. 50
1 cast iron manhole and cover	9. 50	
2 bags cement for cementing pipe joints and building manhole	1. 60	
Old paving stones for manhole	1. 50	
		12. 60
Labor building manhole and to complete covering pipe		6. 00
		36. 60
90 feet 30-inch pipe at 92½¢ (87½¢ plus 5¢ per ft. depreciation on mold)		83. 25
Total, exclusive of supervision		119. 85

Therefore, for making, laying, and covering 90 feet of 30-inch homemade concrete pipe, including one manhole installed, the cost was $1.33 per foot.

The cost of 90 feet of 30-inch terra cotta pipe at $4.21 per foot would be $378.90; allowing the same amount as above for manhole, laying and covering—$36.60—would make the total cost $415.50. Comparing the cost of the home manufactured concrete pipe ($119.85) with the cost of terra cotta pipe for this job we find the saving to be $295.65, or about $3.28 per foot.

The second job of 30-inch concrete pipe placed and covered was 45 joints, or 112½ feet. The cost for this job, including two manholes installed, was as follows:

Hauling

1 team and driver, 8 hours at 60¢	$4. 80	
1 helper, 8 hours at 20¢	1. 60	
		$6. 40

Two manholes

2 manholes and covers at $9	18. 00	
2 bags cement, building manhole, and cementing pipe joints	1. 60	
Old paving stones for manholes	3. 00	
		22. 60
Labor laying and covering pipe and installing two manholes, 107 hours at 20¢		21. 40
		50. 40
112½ ft. 30 inch pipe at 92½¢ (87½¢ plus 5¢ per foot depreciation on mold)		104. 06
Total, exclusive of supervision		154. 46

Allowing the same charge for installation for terra cotta pipe (it may be less) we find the 112½ feet of pipe at $4.21 would have cost $473.62 plus installation, $50.40, or a total of $524.02 as against $154.46 for the home manufactured concrete pipe, showing a saving of $369.56.

The above results demonstrated to the satisfaction of the town council that this plan of making pipe is practicable and economical, and they authorized the purchase of an additional 24-inch mold and another 30-inch mold. This has increased the output of concrete pipe to 5 feet of each sized pipe per day. It has also lessened the cost of manufacture considerably, as two men can usually remove the molds, clean, and grease them, set them up, and fill the four molds with concrete in three hours, whereas before it required two hours to fill the two molds. The amount of sand and gravel has been decreased slightly as it has been found that the wastage is no more in using the four molds than previously with two molds. The number of bags of cement has also been reduced in the larger batch, making the mix approximately 1 : 1¾ : 2¾. More reinforcing wire and a richer mixture may be advisable, but the pipe made to date has withstood handling and seems strong and durable.

List of materials used for 5 feet of 24-inch concrete pipe and 5 feet of 30-inch concrete pipe and the labor in making this amount of pipe are approximately as follows:

Material	
5 bags cement at 80¢	$4.00
Wire for reinforcing	.30
Labor	
1 man, 3 hours at 25¢	.75
1 man, 3 hours at 20¢	.60
15 cubic feet sand and gravel at 5½¢ per cubic foot	.83
Total, exclusive of supervision	6.48

Estimating the cost of 30-inch concrete pipe at nine-sixteenths of the total ($6.48) we find the 5 feet to cost about $3.64, or 73 cents per foot. Putting the cost of the 24-inch pipe at seven-sixteenths of the total ($6.48), 5 feet of the pipe costs approximately $2.83, or 56½ cents per foot. Adding 4 cents per foot for depreciation on molds for the 24-inch pipe, it now costs 60½ cents per foot, and adding 5 cents per foot on the 30-inch pipe, it now costs 78 cents per foot. Therefore, by using four molds instead of two we reduced the cost of the 30-inch pipe approximately 14½ cents per foot and of the 24-inch pipe 11½ cents per foot.

This method has worked exceedingly well and the work has been done at odd times by the street force under the supervision of the

sanitary officer and the superintendent of streets. The advantages as they appear to the writer are as follows:

(1) Small outlay for equipment.

(2) Pipe can be made at odd times, as much or as little as funds will permit.

(3) Practically no overhead when molds are not in use.

(4) Low cost of manufacture, with resulting greater accomplishment in proportion to expenditure.

(5) Equipment always on hand to manufacture pipe when needed.

No mention has been made of the use of the 24-inch pipe manufactured. This has not been laid in any of the ditches as yet, but will be ready to be put in when a sufficient amount of the larger pipe has been laid to permit the use of the 24-inch. The lowest price quoted on 24-inch terra cotta pipe was $2.03 per foot in carload lots. It has been manufactured for 68 cents per foot when two forms were used, and for 60½ cents per foot when four forms were used. Taking the higher figure for comparison, 68 cents per foot against $2.03 per foot for terra cotta, we find the saving to be $1.35 per foot.

Practically any sized pipe required can be made under this plan. One important point to bear in mind is that the molds must be thoroughly cleaned and then greased after each cast. This is an important factor in making the molds easy to remove; and it also aids in preserving the molds and in getting smooth pipe.

As far as is known, Emporia is the first municipality which has used the above method of manufacturing concrete pipe and covering the drainage ditches. It shows a considerable saving on the work completed. What Emporia has done, other towns with a wide-awake sanitary officer or superintendent can do; and this article is written with the hope that it will help other communities in solving their drainage problem in a satisfactory and economical way.

DEATHS DURING WEEK ENDED FEBRUARY 28, 1925

Summary of information received by telegraph from industrial insurance companies for week ended February 28, 1925, and corresponding week of 1924. (From the Weekly Health Index, March 3, 1925, issued by the Bureau of the Census, Department of Commerce)

	Week ended Feb. 28, 1925	Corresponding week, 1924
Policies in force	58, 814, 219	55, 145, 701
Number of death claims	11, 954	12, 454
Death claims per 1,000 policies in force, annual rate	10. 6	11. 8

Deaths from all causes in certain large cities of the United States during the week ended February 28, 1925, infant mortality, annual death rate, and comparison with corresponding week of 1924. (From the Weekly Health Index, March 3, 1925, issued by the Bureau of the Census, Department of Commerce)

City	Week ended Feb. 28, 1925		Annual death rate per 1,000 corresponding week, 1924	Deaths under 1 year		Infant mortality rate, week ended Feb. 28, 1925 [2]
	Total deaths	Death rate [1]		Week ended Feb. 28, 1925	Corresponding week, 1924	
Total (64 cities)	7,315	13.9	[3] 14.5	908	[3] 946	
Akron	37			7	3	77
Albany [4]	35	15.2	20.7	3	4	67
Atlanta	87	19.5	22.0	8	14	
Baltimore [4]	246	16.1	18.5	37	34	108
Birmingham	88	22.3	19.0	9	16	
Boston	288	19.2	14.6	50	32	132
Bridgeport	37			8	8	127
Buffalo	194	18.3	13.3	35	28	142
Cambridge	26	12.1	13.5	3	5	52
Camden	48	19.5	14.9	5	9	82
Chicago [4]	703	12.2	12.6	95	96	84
Cincinnati	111	14.1	16.4	10	12	59
Cleveland	198	11.0	12.1	32	37	79
Columbus	80	15.2	11.3	12	5	113
Dallas	49	13.2	21.6	5	11	
Dayton	45	13.6	14.5	6	3	96
Denver	85			8	8	
Des Moines	30	10.5	10.1	7	3	120
Detroit	289			54	46	91
Duluth	19	9.0	9.6	1	1	21
Erie	30			6	10	117
Fall River [4]	40	17.2	15.9	10	8	144
Flint	27			5	2	82
Fort Worth	28	9.6	14.1	2	5	
Grand Rapids	34	11.8	10.2	4	2	62
Indianapolis	103	15.0	13.5	11	10	76
Jacksonville, Fla	22	10.9	18.3	3	6	67
Jersey City	62	10.3	14.9	4	11	28
Kansas City, Kans	25	10.5	15.0	2	3	42
Kansas City, Mo	131	18.6	14.9	20	19	
Los Angeles	265			22	14	61
Louisville	98	19.7	16.7	11	8	98
Lowell	31	13.9	10.8	4	6	70
Lynn	32	15.9	16.1	6	3	159
Memphis	68	20.3	24.8	12	9	
Milwaukee	102	10.6	9.3	13	13	59
Minneapolis	104	12.7	11.5	15	9	80
Nashville [4]	44	18.5	22.0	8	6	
New Bedford	35	13.5	12.6	8	7	133
New Haven	54	15.7	13.6	7	6	91
New Orleans	176	22.1	20.9	14	15	
New York	1,473	12.6	13.7	187	218	75
Bronx Borough	164	9.5	11.0	15	16	52
Brooklyn Borough	489	11.4	13.4	58	75	61
Manhattan Borough	651	15.0	16.2	96	114	96
Queens Borough	125	11.4	8.4	15	9	74
Richmond Borough	44	17.1	17.2	3	4	54
Newark, N. J	107	12.3	12.8	12	14	55
Norfolk	27	8.3	14.3	6	7	107
Oakland	69	14.2	18.2	3	9	35
Oklahoma City	21	10.2	14.5	4	4	
Omaha	60	14.8	14.5	2	5	19
Paterson	33	12.1	14.8	3	6	50
Philadelphia	532	14.0	15.6	63	62	79
Pittsburgh	174	14.4	16.3	14	30	49
Portland, Oreg	69	12.7	9.8	5	2	52
Providence	72	15.3	20.1	14	12	112
Richmond	59	16.5	18.7	3	10	36
Rochester	68	10.7		5		40
St. Louis	232	14.7	15.3	12	20	
St. Paul	56	11.9	12.6	5	5	43
Salt Lake City [4]	33	13.1	15.4	1	4	16

[1] Annual rate per 1,000 population.
[2] Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1924. Cities left blank are not in the registration area for births.
[3] Data for 63 cities.
[4] Deaths for week ended Friday, February 27, 1925.

Deaths from all causes in certain large cities of the United States during the week ended February 28, 1925, infant mortality, annual death rate, and comparison with corresponding week of 1924—Continued

City	Week ended Feb. 28, 1925		Annual death rate per 1,000 corresponding week, 1924	Deaths under 1 year		Infant mortality rate, week ended Feb. 28, 1925
	Total deaths	Death rate		Week ended Feb. 28, 1925	Corresponding week, 1924	
San Antonio	60	15.8	21.2	7	7	----
San Francisco	130	12.2	15.7	10	10	58
Schenectady	30	15.3	8.3	4	1	113
Seattle	55	----	----	3	4	31
Somerville	23	11.7	11.9	4	4	107
Spokane	23	----	----	1	5	22
Springfield, Mass	36	12.3	11.9	6	7	89
Syracuse	51	13.9	11.1	6	5	75
Tacoma	27	13.5	10.6	3	0	71
Toledo	87	15.8	13.8	7	8	63
Trenton	37	14.6	20.1	6	8	97
Washington, D. C	157	16.4	16.7	20	13	112
Waterbury	27	----	----	4	2	88
Wilmington, Del	36	15.4	13.9	5	2	114
Worcester	42	11.0	13.9	7	8	81
Yonkers	33	15.4	7.6	4	3	88
Youngstown	45	14.7	16.1	8	6	101

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 Week Ended March 7, 1925

ALABAMA

	Cases
Cerebrospinal meningitis	1
Chicken pox	29
Diphtheria	11
Dysentery	2
Influenza	897
Malaria	15
Measles	52
Mumps	48
Ophthalmia neonatorum	1
Pellagra	9
Pneumonia	191
Poliomyelitis	1
Scarlet fever	19
Smallpox	183
Trachoma	1
Tuberculosis	36
Typhoid fever	12
Whooping cough	6

ARIZONA

Chicken pox	6
Diphtheria	1
Measles	180
Mumps	2
Pneumonia	2
Scarlet fever	10
Trachoma	9
Tuberculosis	2
Whooping cough	1

ARKANSAS

Chicken pox	20
Diphtheria	1
Influenza	399
Malaria	41
Measles	32
Mumps	39
Pellagra	4
Scarlet fever	9
Smallpox	7
Tuberculosis	4
Typhoid fever	9
Whooping cough	19

CALIFORNIA

Cerebrospinal meningitis:	
Merced County	1
Siskiyou County	1
Diphtheria	120
Influenza	120
Lethargic encepalitis:	
Los Angeles	2
San Diego	1
Measles	72
Poliomyelitis:	
Berkeley	2
Los Angeles	1
Los Angeles County	1
Scarlet fever	169
Smallpox:	
Los Angeles	37
Los Angeles County	17
Oakland	8
San Diego	15
San Francisco	9
Scattering	55
Typhoid fever	14

COLORADO

(Exclusive of Denver)

Chicken pox	59
Diphtheria	15
Influenza	14
Measles	1
Mumps	16
Pneumonia	19
Scarlet fever	33
Tuberculosis	66
Typhoid fever	5
Whooping cough	3

CONNECTICUT

	Cases
Chicken pox	44
Conjunctivitis (infectious)	1
Diphtheria	60
German measles	44
Influenza	5
Measles	99
Mumps	85
Paratyphoid fever	1
Pneumonia (all forms)	92
Scarlet fever	153
Septic sore throat	4
Trachoma	1
Tuberculosis (all forms)	31
Typhoid fever	5
Whooping cough	68

DELAWARE

Diphtheria	4
Mumps	1
Pneumonia	1
Scarlet fever	8
Tuberculosis	7
Whooping cough	3

DISTRICT OF COLUMBIA

Chicken pox	30
Diphtheria	15
Influenza	1
Measles	13
Pneumonia	38
Scarlet fever	29
Smallpox	1
Tuberculosis	26
Typhoid fever	1
Whooping cough	2

FLORIDA

Diphtheria	5
Influenza	23
Malaria	7
Pneumonia	1
Scarlet fever	2
Smallpox	1
Typhoid fever	12

GEORGIA

Chicken pox	53
Conjunctivitis (infectious)	1
Dengue	1
Diphtheria	19
Dysentery (bacillary)	1
Hookworm disease	4
Influenza	961
Lethargic encephalitis	1
Malaria	15
Measles	16
Mumps	119
Pellagra	4
Pneumonia	162
Rabies	2
Scarlet fever	12
Septic sore throat	9
Small pox	3
Tuberculosis	24
Typhoid fever	8
Whooping cough	44

ILLINOIS

	Cases
Cerebrospinal meningitis—Menard County	1
Diphtheria:	
Cook County	65
Scattering	38
Influenza	57
Lethargic encephalitis:	
Cook County	1
Knox County	1
Measles	948
Pneumonia	428
Poliomyelitis—Williamson County	1
Scarlet fever:	
Cook County	346
Kane County	9
Kankakee County	10
Knox County	10
La Salle County	9
St. Clair County	11
Will County	9
Scattering	130
Smallpox:	
Madison County	10
St. Clair County	11
Scattering	18
Tuberculosis	177
Typhoid fever	13
Whooping cough	252

INDIANA

Chicken pox	69
Diphtheria	36
Influenza	270
Measles	179
Mumps	12
Pneumonia	35
Poliomyelitis	1
Scarlet fever	243
Smallpox	122
Tuberculosis	45
Typhoid fever	8
Whooping cough	27

IOWA

Diphtheria	15
Scarlet fever	41
Smallpox	12
Typhoid fever	1

KANSAS

Cerebrospinal meningitis	2
Chicken pox	105
Diphtheria	30
German measles	3
Influenza	41
Measles	12
Mumps	512
Pneumonia	105
Scarlet fever	136
Smallpox	3
Tuberculosis	33
Typhoid fever	4
Whooping cough	61

LOUISIANA

Cerebrospinal meningitis	1
Diphtheria	15
Influenza	213

LOUISIANA—continued

	Cases
Malaria	8
Pneumonia	36
Scarlet fever	31
Smallpox	26
Tuberculosis	35
Typhoid fever	9

MAINE

	Cases
Chicken pox	23
Conjunctivitis	1
Diphtheria	4
Influenza	13
Lethargic encephalitis	1
Measles	13
Mumps	227
Pneumonia	10
Scarlet fever	19
Tuberculosis	4
Typhoid fever	2
Vincent's angina	1
Whooping cough	13

MARYLAND [1]

	Cases
Cerebrospinal meningitis	1
Chicken pox	73
Diphtheria	24
German measles	4
Influenza	68
Measles	52
Mumps	89
Pneumonia (all forms)	146
Scarlet fever	71
Septic sore throat	1
Tuberculosis	49
Typhoid fever	2
Whooping cough	89

MASSACHUSETTS

	Cases
Cerebrospinal meningitis	2
Chicken pox	238
Conjunctivitis (suppurative)	26
Diphtheria	120
German measles	228
Hookworm disease	1
Influenza	65
Lethargic encephalitis	4
Measles	599
Mumps	90
Ophthalmia neonatorum	32
Pneumonia (lobar)	215
Poliomyelitis	2
Scarlet fever	319
Septic sore throat	4
Trachoma	2
Tuberculosis (all forms)	142
Typhoid fever	5
Whooping cough	198

MICHIGAN

	Cases
Diphtheria	85
Measles	142
Pneumonia	273
Scarlet fever	418
Smallpox	10
Tuberculosis	50
Typhoid fever	10
Whooping cough	81

MINNESOTA

	Cases
Cerebrospinal meningitis	1
Chicken pox	139
Diphtheria	68
Measles	44
Pneumonia	3
Scarlet fever	247
Smallpox	26
Tuberculosis	67
Typhoid fever	6
Whooping cough	9

MISSISSIPPI

	Cases
Diphtheria	9
Influenza	525
Scarlet fever	2
Smallpox	22
Typhoid fever	4

MISSOURI

	Cases
Anthrax	1
Cerebrospinal meningitis	3
Chicken pox	87
Diphtheria	87
Influenza	75
Measles	9
Mumps	107
Pneumonia	76
Poliomyelitis	1
Rabies	2
Scarlet fever	434
Smallpox	13
Tetanus	1
Tuberculosis	79
Typhoid fever	3
Whooping cough	17

MONTANA [2]

	Cases
Chicken pox	38
Diphtheria	14
German measles	117
Measles	36
Mumps	22
Pneumonia	1
Scarlet fever	56
Smallpox	18
Tuberculosis	12
Typhoid fever	6
Whooping cough	23

NEBRASKA

	Cases
Chicken pox	28
Diphtheria	7
Mumps	7
Pneumonia	3
Scarlet fever	9
Smallpox	38
Typhoid fever	1
Whooping cough	10

NEW JERSEY

	Cases
Anthrax	1
Cerebrospinal meningitis	1
Chicken pox	156
Diphtheria	85
Influenza	42
Measles	223
Paratyphoid fever	2

[1] Week ended Friday.

[2] Reports for two weeks ended March 7, 1925.

NEW JERSEY—continued

	Cases
Pneumonia	144
Scarlet fever	320
Smallpox	5
Trachoma	4
Trichinosis	4
Typhoid fever	9
Whooping cough	231

NEW MEXICO

Chicken pox	28
Conjunctivitis	2
Diphtheria	4
Influenza	76
Measles	34
Mumps	30
Pellagra	1
Pneumonia	15
Scarlet fever	5
Tuberculosis	37
Whooping cough	4

NEW YORK

(Exclusive of New York City)

Cerebrospinal meningitis	2
Diphtheria	88
Influenza	132
Lethargic encephalitis	6
Measles	554
Pneumonia	412
Poliomyelitis	1
Scarlet fever	344
Smallpox	14
Typhoid fever	19
Whooping cough	228

NORTH CAROLINA

Chicken pox	114
Diphtheria	34
German measles	1
Measles	117
Scarlet fever	23
Small pox	43
Typhoid fever	2
Whooping cough	117

OKLAHOMA

(Exclusive of Oklahoma City and Tulsa)

Chicken pox	32
Diphtheria	16
Influenza	489
Measles	8
Mumps	54
Pneumonia	169
Poliomyelitis-Washita County	1
Scarlet fever:	
Washington County	8
Woods County	9
Scattering	19
Smallpox:	
Custer County	8
Scattering	7
Typhoid fever	9
Whooping cough	30

OREGON

	Cases
Cerebrospinal meningitis	[1] 1
Chicken pox	24
Diphtheria	24
Influenza	4
Lethargic encephalitis	2
Measles	2
Mumps	32
Pneumonia	[1] 5
Scarlet fever	26
Smallpox	10
Tuberculosis	9
Typhoid fever	[1] 1
Whooping cough	8

SOUTH DAKOTA

Chicken pox	5
Diphtheria	8
Measles	1
Mumps	5
Pneumonia	5
Poliomyelitis	1
Scarlet fever	43
Smallpox	17
Tuberculosis	2
Typhoid fever	2
Whooping cough	7

TEXAS

Cerebrospinal meningitis	1
Chicken pox	100
Dengue	10
Diphtheria	42
Dysentery (epidemic)	4
Influenza	1,862
Measles	91
Mumps	122
Pellagra	8
Pneumonia	192
Scarlet fever	29
Smallpox	67
Tetanus	1
Trachoma	5
Tuberculosis	41
Typhoid fever	3
Whooping cough	59

VERMONT

Chicken pox	64
Diphtheria	3
Measles	4
Mumps	63
Pneumonia	2
Scarlet fever	24
Whooping cough	2

WASHINGTON

Chicken pox	156
Diphtheria	60
German measles	88
Lethargic encephalitis	1
Measles	8
Mumps	215
Pneumonia	1
Scarlet fever	63
Smallpox	93
Tuberculosis	26
Typhoid fever	4
Whooping cough	47

[1] Deaths.

WEST VIRGINIA

	Cases
Diphtheria	7
Scarlet fever	3
Smallpox	6
Typhoid fever	3

WISCONSIN

	Cases
Milwaukee:	
Chicken pox	47
Diphtheria	15
German measles	583
Measles	487
Mumps	65
Pneumonia	7
Scarlet fever	11
Smallpox	12
Tuberculosis	12
Whooping cough	41
Scattering:	
Chicken pox	129
Diphtheria	18
German measles	86
Influenza	79
Measles	171
Mumps	364
Pneumonia	20
Poliomyelitis	2
Scarlet fever	129
Smallpox	41
Tuberculosis	15
Whooping cough	49

WYOMING

	Cases
Chicken pox	23
Diphtheria	4
Measles	2
Mumps	7
Pneumonia	2
Scarlet fever	7
Trachoma	2
Typhoid fever	11

Reports for Week Ended February 28, 1925

DISTRICT OF COLUMBIA

	Cases
Chicken pox	48
Diphtheria	15
Influenza	1
Measles	11
Pneumonia	43
Scarlet fever	38
Smallpox	1
Tuberculosis	31
Whooping cough	20

NORTH DAKOTA

	Cases
Chicken pox	40
Diphtheria	9
German measles	2
Measles	3
Mumps	25
Pneumonia	23
Scarlet fever	99
Smallpox	2
Tuberculosis	3
Typhoid fever	6
Whooping cough	24

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	Cerebrospinal meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
November, 1924										
Colorado	3	116	1	----	13	----	2	164	11	11
December, 1924										
Colorado	1	105	4	----	8	----	1	186	1	5
January, 1925										
Arkansas	3	29	865	88	175	19	0	51	48	37
Colorado	1	99	11	----	31	----	----	205	3	12
Delaware	----	24	7	----	7	----	----	18	----	----
North Dakota	1	24	5	----	28	----	2	346	50	3
February, 1925										
Vermont	----	17	----	----	29	----	1	75	----	3

Number of Cases of Certain Communicable Diseases Reported for the Month of December, 1924, by State Health Officers

State	Chicken pox	Diphtheria	Measles	Mumps	Scarlet fever	Smallpox	Tuberculosis	Typhoid fever	Whooping cough
Alabama	182	131	141	121	86	352	144	75	105
Arizona	19	20	179	84	55	25	202	7	28
Arkansas	128	35	25	18	67	42	[1] 39	90	84
California [5]									
Colorado [5]									
Connecticut	308	293	71	84	824		117	33	222
Delaware	5	13	2	8	6		7	1	8
District of Columbia	156	62	16		173		92	35	54
Florida [5]									
Georgia	78	120	96	8	28	17	81	16	15
Idaho	20				22			3	
Illinois	2,037	664	815	823	1,516	166	925	231	950
Indiana		237			462			50	
Iowa	108	77	46	36	215	219		[2]	40
Kansas	691	186	19	761	393	17	192	9	87
Kentucky [3]									
Louisiana	35	101	11	1	60	53	[1] 107	157	8
Maine	257	43	14	255	149		34	20	31
Maryland	400	218	86	80	378		203	63	278
Massachusetts	1,242	677	674	392	1,411		475	73	367
Michigan [5]									
Minnesota	797	402	65		986	554	267	17	111
Mississippi	829	141	114	1,397	61	102	267	141	374
Missouri	234	331	22	45	937	43	116	24	27
Montana	78	92	29	3	59	65	44	9	65
Nebraska	50				69			2	
New Hampshire [4]									
New Jersey	957	519	336		811	11	379	122	1,026
New Mexico [5]									
New York	2,633	1,520	925	833	2,263	51	1,555	784	1,440
North Carolina	634	314	82		215	152		27	454
North Dakota	162	29	64	14	167	69	5		6
Ohio	2,430	687	257	605	1,722	358	536	107	598
Oklahoma	81		9		174	27	62	217	138
Oregon	137	168	17	21	182	70	61	11	16
Pennsylvania	3,580	1,192	1,917	1,918	2,633	6	475	164	1,120
Rhode Island		95			103			15	
South Carolina	46	217		39	8	98	[1] 7	16	8
South Dakota	105	34	7	8	203	88	4	8	20
Tennessee [3]	329	94	154		186	161	146	94	196
Texas [3]									
Utah	793	42	187	16	75	5	[1] 19	7	62
Vermont	298	25	44	135	93		[1] 10	5	104
Virginia	799	344	290		279	2	[1] 147	48	590
Washington	561	167	45	217	176	103	133	41	33
West Virginia	312	120	79		213	47	27	39	155
Wisconsin	1,516	265	760	682	643	146	132	20	441
Wyoming	63	1	2	4	16	10			

[1] Pulmonary.
[2] Reports not required by law.
[3] Reports received weekly.
[4] Reports received annually.
[5] Not received.

Case Rates per 1,000 Population (Annual Basis) for the Month of December, 1924

State	Chicken pox	Diphtheria	Measles	Mumps	Scarlet fever	Smallpox	Tuberculosis	Typhoid fever	Whooping cough
Alabama	0.88	0.63	0.08	0.58	0.42	1.70	0.70	0.36	0.51
Arizona	.57	.60	5.36	2.52	1.65	.75	6.05	.21	.84
Arkansas	.82	.23	.16	.12	.43	.27	[1] 1.25	.58	.54
California [5]									
Colorado [5]									
Connecticut	2.42	2.30	.56	.66	6.47		.92	.26	1.74
Delaware	.25	.66	.10	.41	.30		.36	.05	.41
District of Columbia	4.21	1.67	.43		4.67		2.48	.94	1.46
Florida [5]									
Georgia	.30	.47	.37	.03	.11	.07	.32	.06	.06
Idaho	.49				.54			.07	
Illinois	3.50	1.14	1.40	1.41	2.60	.28	1.59	.40	1.63
Indiana		.92			1.80			.19	
Iowa	.51	.37	.22	.17	1.02	1.04		(2)	.19
Kansas	4.52	1.22	.12	4.98	2.57	.11	1.26	.06	.57
Kentucky [3]									
Louisiana	.22	.64	.07	.01	.38	.34	[1] .68	.99	.05
Maine	3.89	.65	.21	3.86	2.26		.51	.30	.47
Maryland	3.10	1.69	.67	.62	2.93		1.58	.49	2.16
Massachusetts	3.60	1.96	1.95	1.13	4.09		1.38	.21	1.06
Michigan [5]									
Minnesota	3.72	1.87	.30		4.60	2.58	1.25	.08	.52
Mississippi	5.47	.93	.75	9.21	.40	.67	1.76	.93	2.47
Missouri	.80	1.13	.08	.15	3.20	.15	.40	.08	.09
Montana	1.46	1.73	.54	.06	1.11	1.22	.83	.17	1.22
Nebraska	.44				.61			.02	
New Hampshire [4]									
New Jersey	3.28	1.78	1.15		2.78	.04	1.30	.42	3.52
New Mexico [5]									
New York	2.83	1.64	1.00	.90	2.43	.05	1.67	.84	1.55
North Carolina	2.75	1.36	.36		.93	.66		.12	1.97
North Dakota	2.82	.50	1.11	.24	2.90	1.20	.09		.10
Ohio	4.61	1.30	.49	1.15	3.27	.68	1.02	.20	1.14
Oklahoma	.43		.05		.93	.14	.33	1.16	.74
Oregon	1.94	2.38	.24	.30	2.57	.99	.86	.16	.23
Pennsylvania	4.59	1.53	2.46	2.46	3.38	.01	.61	.21	1.44
Rhode Island		1.77			1.92			.28	
South Carolina	.31	1.45		.26	.05	.66	[1] .05	.11	.05
South Dakota	1.88	.61	.13	.14	3.63	1.57	.07	.14	.36
Tennessee [5]	1.61	.46	.75		.91	.79	.72	.46	.96
Texas [3]									
Utah	19.32	1.02	4.56	.39	1.83	.12	[1] .46	.17	1.51
Vermont	9.98	.84	1.47	4.52	3.12		[1] .34	.17	3.48
Virginia	3.89	1.68	1.41		1.36	.01	[1] .72	.23	2.87
Washington	4.55	1.35	.36	1.76	1.43	.84	1.08	.33	.27
West Virginia	2.34	.90	.59		1.60	.35	.20	.29	1.16
Wisconsin	6.46	1.13	3.24	2.91	2.74	.62	.56	.09	1.88
Wyoming	3.43	.05	.11	.22	.87	.54			

[1] Pulmonary.
[2] Reports not required by law.
[3] Reports received weekly
[4] Reports received annually.
[5] Not received.

PLAGUE-ERADICATIVE MEASURES IN THE UNITED STATES

The following items were taken from the reports of plague-eradicative measures from the cities named for the week ended February 21, 1925:

Los Angeles, Calif.

Week ended Feb. 21, 1925:

Number of rats examined	3,446
Number of rats found to be plague infected	14
Number of squirrels examined	446
Number of squirrels found to be plague infected	2

Totals to Feb. 21, 1925:

Number of rats examined	53,023
Number of rats found to be plague infected	97
Number of squirrels examined	2,304
Number of squirrels found to be plague infected	2

Oakland, Calif.

Week ended Feb. 21, 1925:	
Number of rats examined	3,196
Number of rats found to be plague infected	1
Totals to Feb. 21, 1925:	
Number of rats examined	12,324
Number of rats found to be plague infected	19

New Orleans, La.

Week ended Feb. 21, 1925:	
Number of vessels inspected	342
Number of inspections made	1,078
Number of vessels fumigated with cyanide gas	44
Number of rodents examined for plague	5,133
Number of rodents found to be plague infected	0
Totals to Feb. 21, 1925:	
Number of rodents examined	42,491
Number of rodents found to be plague infected	12

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

Diphtheria.—For the week ended February 21, 1925, 34 States reported 1,573 cases of diphtheria. For the week ended February 23, 1924, the same States reported 1,691 cases of this disease. One hundred and four cities, situated in all parts of the country and having an aggregate population of more than 28,800,000, reported 827 cases for the week ended February 21, 1925. Last year for the corresponding week they reported 1,076 cases. The estimated expectancy for these cities was 1,086 cases of diphtheria. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Measles.—Thirty States reported 3,494 cases of measles for the week ended February 21, 1925, and 16,389 cases of this disease for the week ended February 23, 1924. One hundred and four cities reported 2,120 cases of measles for the week this year, and 5,991 cases last year.

Scarlet fever.—Scarlet fever was reported for the week as follows: Thirty-four States—this year, 4,259 cases; last year, 3,812 cases; 104 cities—this year, 2,161; last year, 1,679; estimated expectancy, 1,059 cases.

Smallpox.—For the week ended February 21, 1925, 34 States reported 1,207 cases of smallpox. Last year for the corresponding week they reported 1,305 cases. One hundred and four cities reported smallpox for the week as follows: 1925, 366 cases; 1924, 485 cases; estimated expectancy, 105 cases. These cities reported 12 deaths from smallpox for the week this year, of which 4 occurred at Minneapolis.

Typhoid fever.—Two hundred and seventy-five cases of typhoid fever were reported for the week ended February 21, 1925, by 33

States. For the corresponding week of 1924 the same States reported 221 cases. One hundred and four cities reported 60 cases of typhoid fever for the week this year, and 52 cases for the week last year. The estimated expectancy for these cities was 49 cases.

Influenza and pneumonia.—Deaths from influenza and pneumonia (combined) were reported for the week by 104 cities as follows: 1925, 1,322 deaths; 1924, 1,283 deaths.

City reports for week ended February 21, 1925

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence how many cases of the disease under consideration 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 week 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 nonepidemic years.

If reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1915 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 diseases 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, 1923, 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			
NEW ENGLAND									
Maine:									
Portland	73,129	8	2	2	4	0	0	23	3
New Hampshire:									
Concord	22,408	0	0	0	0	0	0	0	0
Vermont:									
Barre	[1] 10,008	0	0	0	1	0	0	10	2
Burlington	23,613	2	1	0	0	0	0	8	0
Massachusetts:									
Boston	770,400	32	66	56	24	4	199	4	49
Fall River	120,912	3	6	1	1	1	0	0	6
Springfield	144,227	6	4	1	1	1	66	4	3
Worcester	191,927	34	4	7	0	0	2	5	3
Rhode Island:									
Pawtucket	68,799	1	1	2	0	0	0	0	1
Providence	242,378	0	13	10	0	0	7	0	12
Connecticut:									
Bridgeport	[1] 143,555	1	9	5	1	1	2	0	2
Hartford	[1] 138,036	2	9	12	2	0	2	4	9
New Haven	172,967	42	3	1	4	0	12	1	7
MIDDLE ATLANTIC									
New York:									
Buffalo	536,718	17	23	6	2	0	110	9	16
New York	5,927,625	206	223	188	125	28	61	35	227
Rochester	317,867	8	9	0	0	0	20	36	5
Syracuse	184,511	18	7	4	0	0	3	44	7
New Jersey:									
Camden	124,157	7	4	7	0	0	6	0	8
Newark	438,699	35	21	9	18	0	60	9	16
Trenton	127,390	0	7	3	3	0	16	0	4
Pennsylvania:									
Philadelphia	1,922,788	79	76	84	----	9	220	30	93
Pittsburgh	613,442	49	24	19	----	4	228	39	50
Reading	110,917	7	3	2	0	0	12	3	0
Scranton	140,636	5	4	3	0	0	1	0	5

[1] Population Jan. 1, 1920.

City reports for week ended February 21, 1925—Continued

Division, State, and city	Population July 1, 1923, 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			
EAST NORTH CENTRAL									
Ohio:									
Cincinnati	406,312	22	10	3	4	2	0	8	10
Cleveland	888,519	84	33	35	13	4	6	12	35
Columbus	261,082	21	4	4	-------	2	2	2	8
Toledo	268,338	27	7	8	1	1	28	1	4
Indiana:									
Fort Wayne	93,573	17	3	2	0	0	4	0	3
Indianapolis	342,718	39	11	5	-------	1	3	5	30
South Bend	76,709	8	1	2	0	0	7	0	3
Terre Haute	68,939	2	1	2	0	0	1	0	9
Illinois:									
Chicago	2,886,121	110	119	64	25	7	414	25	97
Cicero	55,968	0	1	0	0	0	14	1	0
Springfield	61,833	5	2	6	4	0	4	50	1
Michigan:									
Detroit	995,668	67	62	22	3	4	12	8	43
Flint	117,968	6	7	3	0	0	1	0	1
Grand Rapids	145,947	7	3	2	2	1	10	0	4
Wisconsin:									
Madison	42,519	8	0	0	0	-------	2	240	-------
Milwaukee	484,595	50	17	15	3	3	426	106	0
Racine	64,393	28	2	1	0	0	22	6	1
Superior	[1] 39,671	15	1	0	0	0	0	0	3
WEST NORTH CENTRAL									
Minnesota:									
Duluth	106,289	10	2	0	0	0	0	0	1
Minneapolis	409,125	72	16	30	0	0	0	5	9
St. Paul	241,891	18	13	17	0	1	4	44	6
Iowa:									
Davenport	61,262	1	1	2	0	-------	0	0	-------
Des Moines	140,923	1	4	3	0	-------	0	0	-------
Sioux City	79,662	0	2	1	0	-------	0	0	-------
Waterloo	39,667	2	0	0	0	-------	0	2	-------
Missouri:									
Kansas City	351,819	5	9	5	11	9	2	20	20
St. Joseph	78,232	11	2	2	0	0	0	2	6
St. Louis	803,853	27	48	29	1	0	7	13	-------
North Dakota:									
Fargo	24,841	23	1	0	0	0	0	15	0
Grand Forks	14,547	1	0	0	0	-------	0	0	-------
South Dakota:									
Aberdeen	15,829	5	-------	0	0	-------	0	0	-------
Sioux Falls	29,206	2	1	0	0	-------	0	0	-------
Nebraska:									
Lincoln	58,761	11	1	1	0	1	0	1	2
Omaha	204,382	13	5	10	0	0	0	0	10
Kansas:									
Topeka	52,555	10	2	2	0	0	0	163	2
Wichita	79,261	28	1	5	0	0	0	3	6
SOUTH ATLANTIC									
Delaware:									
Wilmington	117,728	3	2	6	0	0	0	0	0
Maryland:									
Baltimore	773,580	50	27	29	30	7	10	14	51
Cumberland	32,361	-------	1	3	1	-------	0	-------	-------
Frederick	11,301	-------	1	1	1	0	1	-------	1
District of Columbia:									
Washington	[1] 437,571	17	13	15	-------	4	12	-------	16
Virginia:									
Lynchburg	30,277	0	1	2	0	0	1	34	0
Norfolk	159,089	29	2	2	0	0	1	94	3
Richmond	181,044	4	3	6	-------	3	4	3	5
Roanoke	55,502	8	1	2	0	0	1	0	0
West Virginia:									
Charleston	45,597	3	1	3	5	0	17	2	1
Huntington	57,918	0	1	1	0	-------	0	0	-------
Wheeling	[1] 56,208	3	1	0	0	0	2	0	0
North Carolina:									
Raleigh	29,171	1	0	1	-------	1	2	0	3
Wilmington	35,719	3	0	0	0	0	0	6	3
Winston-Salem	56,230	5	1	2	0	0	1	1	2

[1] Population Jan. 1, 1920.

City reports for week ended February 21, 1925—Continued

Division, State, and city	Population July 1, 1923, 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			
SOUTH ATLANTIC—CON.									
South Carolina:									
Charleston	71,245	0	1	0	0	0	0	1	2
Columbia	39,688	1	1	1	0	0	2	4	2
Greenville	25,789	1	0	0	----	2	0	0	0
Georgia:									
Atlanta	222,963	7	2	3	32	9	0	2	24
Brunswick	15,937	----	1	0	16	0	0	----	1
Savannah	89,448	----	1	----	----	----	----	----	----
Florida:									
St. Petersburg	24,403	0	0	0	0	0	0	0	3
Tampa	56,050	0	2	0	9	0	0	3	3
EAST SOUTH CENTRAL									
Kentucky:									
Covington	57,877	0	2	1	0	0	0	0	5
Louisville	257,671	4	5	3	1	0	0	0	12
Tennessee:									
Memphis	170,067	17	4	4	----	1	2	4	19
Nashville	121,128	1	1	1	----	4	6	1	5
Alabama:									
Birmingham	195,901	8	2	4	13	6	1	9	13
Mobile	63,858	0	1	0	41	2	0	2	2
Montgomery	45,383	0	1	1	11	0	0	5	0
WEST SOUTH CENTRAL									
Arkansas:									
Fort Smith	30,635	11	0	2	0	----	0	6	----
Little Rock	70,916	0	1	0	10	3	2	1	2
Louisiana:									
New Orleans	404,575	5	13	12	35	20	0	0	25
Shreveport	54,590	1	----	0	0	1	0	0	8
Oklahoma:									
Oklahoma	101,150	5	1	2	7	1	0	2	2
Tulsa	102,618	11	1	1	0	----	1	----	----
Texas:									
Dallas	177,274	----	5	6	163	2	0	----	18
Galveston	46,877	0	1	1	0	0	0	2	5
Houston	154,970	10	2	3	----	1	1	1	13
San Antonio	184,727	1	2	3	2	3	0	0	9
MOUNTAIN									
Montana:									
Billings	16,927	2	1	0	0	0	0	12	3
Great Falls	27,787	5	1	3	----	1	48	2	0
Helena	[1] 12,037	----	0	0	0	0	0	----	0
Missoula	[1] 12,668	0	6	2	0	0	15	0	1
Idaho:									
Boise	22,806	10	0	0	0	0	1	0	0
Colorado:									
Denver	272,031	26	10	10	----	4	0	102	9
Pueblo	43,519	16	3	2	----	1	0	10	1
New Mexico:									
Albuquerque	16,648	5	1	0	0	0	0	1	2
Utah:									
Salt Lake City	126,241	42	2	0	0	0	1	31	8
Nevada:									
Reno	12,429	0	0	0	0	0	0	0	0
PACIFIC									
Washington:									
Seattle	[1] 315,685	68	6	7	0	----	3	80	----
Spokane	104,573	11	4	22	0	----	0	0	----
Tacoma	101,731	1	2	0	0	0	0	1	4
Oregon:									
Portland	273,621	7	7	12	1	0	1	3	9
California:									
Los Angeles	666,853	67	36	10	43	1	17	24	31
Sacramento	69,950	0	1	2	0	0	0	0	4
San Francisco	539,038	41	25	16	3	2	2	64	13

[1] Population Jan. 1, 1920.

City reports for week ended February 21, 1925—Continued

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		
NEW ENGLAND											
Maine:											
Portland	2	0	0	0	0	1	1	0	0	2	17
New Hampshire:											
Concord	0	5	0	0	0	0	0	0	0	0	5
Vermont:											
Barre	1	4	0	0	0	0	0	0	0	0	7
Burlington	1	0	0	0	0	0	0	0	0	1	4
Massachusetts:											
Boston	55	115	0	0	0	14	2	0	0	61	265
Fall River	4	2	0	0	0	5	1	0	0	7	45
Springfield	7	29	0	0	0	1	0	0	0	13	32
Worcester	9	13	0	0	0	0	0	0	0	11	48
Rhode Island:											
Pawtucket	2	2	0	0	0	1	0	0	0	0	15
Providence	9	16	0	0	0	5	0	0	0	0	70
Connecticut:											
Bridgeport	6	22	0	0	0	2	0	0	0	2	27
Hartford	5	10	0	0	0	3	1	0	0	0	47
New Haven	6	26	0	0	0	3	0	0	0	6	57
MIDDLE ATLANTIC											
New York:											
Buffalo	21	19	1	0	0	5	1	0	1	30	116
New York	178	340	0	0	0	[1] 117	8	11	0	105	1,533
Rochester	11	69	0	0	0	3	0	0	0	9	63
Syracuse	18	4	0	0	0	2	0	0	0	5	51
New Jersey:											
Camden		21	0	1	1	2	0	2	0	3	28
Newark	23	40	0	0	0	7	0	0	0	50	115
Trenton	3	3	0	0	0	4	0	0	0	6	44
Pennsylvania:											
Philadelphia	62	178	0	2	0	50	3	2	0	69	641
Pittsburgh	21	57	1	0	0	11	1	0	0	5	215
Reading	2	11	0	0	0	2	0	4	0	9	41
Scranton	4	1	0	0	0	0	0	0	0	4	-------
EAST NORTH CENTRAL											
Ohio:											
Cincinnati	10	19	1	5	0	8	0	1	1	3	131
Cleveland	32	37	1	2	0	19	1	1	0	9	215
Columbus	8	8	1	14	0	2	0	0	0	9	69
Toledo	18	18	4	0	0	4	0	1	0	24	72
Indiana:											
Fort Wayne	3	7	0	0	0	1	0	0	0	1	16
Indianapolis	10	8	4	25	0	7	0	0	0	9	128
South Bend	2	15	0	1	0	3	0	0	0	2	16
Terre Haute	2	8	8	9	0	0	0	0	0	0	22
Illinois:											
Chicago	95	287	3	3	0	53	3	3	1	147	754
Cicero	1	4	0	0	0	0	0	0	0	4	3
Springfield	1	9	0	0	0	1	0	2	0	3	25
Michigan:											
Detroit	82	100	4	4	0	36	2	1	0	44	289
Flint	8	5	1	0	0	1	1	0	0	2	23
Grand Rapids	8	43	1	1	0	0	0	0	0	1	32
Wisconsin:											
Madison	3	6	1	0	-------	-------	0	0	-------	12	-------
Milwaukee	37	22	1	3	2	6	6	0	0	32	115
Racine	5	0	0	8	0	1	1	0	0	0	10
Superior	2	4	3	0	0	0	0	0	0	0	9
WEST NORTH CENTRAL											
Minnesota:											
Duluth	4	14	1	0	0	1	0	1	0	3	25
Minneapolis	35	82	7	23	4	5	0	0	0	2	109
St. Paul	27	23	8	0	0	2	1	1	0	15	58

[1] Pulmonary tuberculosis only.

City reports for week ended February 21, 1925—Continued

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		
WEST NORTH CENTRAL—continued											
Iowa:											
Davenport	3	1	2	2	----	----	0	0	----	1	----
Des Moines	8	10	3	0	----	----	0	0	----	1	----
Sioux City	2	0	1	0	----	----	0	0	----	0	----
Waterloo	3	2	0	4	----	----	0	0	----	2	----
Missouri:											
Kansas City	13	101	2	5	0	11	0	0	0	6	112
St. Joseph	3	5	0	0	0	1	0	0	0	1	34
St. Louis	27	116	2	8	0	16	0	0	0	5	246
North Dakota:											
Fargo	2	6	1	0	0	0	0	0	0	0	1
Grand Forks	1	0	1	0	----	----	0	0	----	0	----
South Dakota:											
Aberdeen	----	2	----	0	----	----	----	0	----	2	----
Sioux Falls	3	0	1	0	0	0	0	0	0	0	7
Nebraska:											
Lincoln	3	0	0	3	0	0	0	1	1	2	13
Omaha	6	5	2	17	0	2	1	0	0	2	45
Kansas:											
Topeka	1	0	1	0	0	1	0	0	0	1	10
Wichita	3	4	2	4	0	0	0	0	0	8	31
SOUTH ATLANTIC											
Delaware:											
Wilmington	2	1	0	0	0	0	0	1	0	1	32
Maryland:											
Baltimore	36	37	0	0	0	21	1	0	0	82	256
Cumberland	1	0	0	0	----	----	1	0	----	----	----
Frederick	2	0	0	0	0	0	0	0	0	----	4
District of Col.:											
Washington	19	33	1	4	1	11	1	1	1	7	159
Virginia:											
Lynchburg	0	0	0	0	0	0	0	0	0	2	13
Norfolk	1	2	0	0	0	2	0	0	0	9	----
Richmond	3	3	0	0	0	3	1	0	0	1	65
Roanoke	0	0	1	0	0	0	0	0	0	1	17
West Virginia:											
Charleston	1	1	1	0	0	2	1	0	0	3	16
Huntington	1	1	0	5	----	----	0	0	----	0	----
Wheeling	1	0	0	0	0	0	1	0	0	0	20
North Carolina:											
Raleigh	1	0	0	4	0	1	0	0	0	1	16
Wilmington	1	0	0	5	0	1	1	0	0	1	13
Winston-Salem	1	0	0	7	0	2	0	0	0	3	23
South Carolina:											
Charleston	1	0	0	0	0	4	0	0	0	0	28
Columbia	0	0	0	0	0	0	0	1	0	3	18
Greenville	0	0	0	11	0	0	0	0	0	0	4
Georgia:											
Atlanta	4	2	3	2	0	4	0	0	2	4	----
Brunswick	0	0	0	0	0	0	0	0	0	----	2
Savannah	1	----	0	----	----	----	0	----	----	----	----
Florida:											
St. Petersburg	1	0	1	0	0	0	0	0	0	0	17
Tampa	0	0	0	0	0	1	1	1	0	0	36
EAST SOUTH CENTRAL											
Kentucky:											
Covington	1	1	0	0	0	2	1	0	0	0	27
Louisville	4	6	1	2	0	3	1	1	0	1	75
Tennessee:											
Memphis	2	9	2	2	0	4	0	3	0	1	70
Nashville	2	15	1	3	0	3	0	1	0	0	42
Alabama:											
Birmingham	2	7	0	84	1	8	1	0	0	4	97
Mobile	0	0	1	0	0	3	0	0	0	0	27
Montgomery	1	1	1	2	0	0	0	1	0	3	16

City reports for week ended February 21, 1925—Continued

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		
WEST SOUTH CENTRAL											
Arkansas:											
Fort Smith	1	2	1	1			0	0		6	
Little Rock	1	1	0	0	0	2	0	0	0	0	
Louisiana:											
New Orleans	4	12	3	0	0	20	2	8	3	8	210
Shreveport		0		0	0	3		0	0	0	32
Oklahoma:											
Oklahoma	2	6	4	0	0	2	0	0	0	0	24
Tulsa	1	0	2	0			1	0			
Texas:											
Dallas	1	4	3	0	0	3	0	0	0		54
Galveston	0	0	0	5	0	0	1	1	0	0	15
Houston	1	7	1	12	0	5	1	0	0	0	61
San Antonio	1	1	1	0	0	7	0	0	0	0	57
MOUNTAIN											
Montana:											
Billings	1	6	0	0	0	1	0	0	0	6	8
Great Falls	2	3	1	4	0	0	0	1	0	0	11
Helena	1	0	0	0	0	2	0	0	0		8
Missoula	1	1	0	0	0	0	0	0	0	0	4
Idaho:											
Boise	1	1	1	0	0	0	0	0	0	0	4
Colorado:											
Denver	13	12	3	0	0	9	0	0	0	2	79
Pueblo	1	0	1	0	0	4	1	2	1	0	11
New Mexico:											
Albuquerque	2	0	0	0	0	2	0	0	0	0	12
Utah:											
Salt Lake City	3	2	3	0	0	3	1	1	0	4	38
Nevada:											
Reno	1	1	1	5	0	0	0	0	0	0	4
PACIFIC											
Washington:											
Seattle	9	17	2	21			0	1		20	
Spokane	5	1	9	0			0	0		6	
Tacoma	3	0	3	2	0	1	0	0	0	2	26
Oregon:											
Portland	6	4	6	12	0	4	1	0	0	3	
California:											
Los Angeles	15	35	3	43	1	34	2	5	0	30	254
Sacramento	2	0	0	1	0	4	1	1	1	1	30
San Francisco	18	11	4	7	2	16	1	1	0	14	156

City reports for week ended February 21, 1925—Continued

Division, State, and city	Cerebrospinal meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
NEW ENGLAND									
New Hampshire:									
Concord	0	0	0	0	0	0	0	1	0
Massachusetts:									
Boston	1	0	4	2	0	0	0	1	1
Fall River	0	0	0	0	0	0	0	1	0
Springfield	1	1	0	0	0	0	0	0	0
Connecticut:									
New Haven	0	0	1	0	0	0	0	0	0
MIDDLE ATLANTIC									
New York:									
New York	0	0	9	5	0	0	1	1	0
Pennsylvania:									
Philadelphia	1	1	0	0	0	0	0	0	0
EAST NORTH CENTRAL									
Ohio:									
Cleveland	2	1	1	2	0	0	0	0	0
Indiana:									
Indianapolis	0	1	0	0	0	0	0	0	0
Illinois:									
Chicago	2	3	1	0	0	0	0	0	0
Wisconsin:									
Milwaukee	0	0	1	0	0	0	0	1	0
WEST NORTH CENTRAL									
Missouri:									
St. Louis	0	0	1	0	0	0	0	0	0
SOUTH ATLANTIC									
Delaware:									
Wilmington	0	0	0	0	0	0	0	0	2
Maryland:									
Baltimore	1	0	1	0	0	0	0	0	0
District of Columbia:									
Washington	0	0	1	0	0	0	0	0	0
South Carolina:									
Columbia	0	0	0	0	0	1	0	0	0
EAST SOUTH CENTRAL									
Tennessee:									
Memphis	0	0	0	0	1	1	0	0	0
WEST SOUTH CENTRAL									
Arkansas:									
Little Rock	0	1	0	0	0	0	0	0	0
Louisiana:									
New Orleans	0	0	0	0	1	1	0	0	0
Oklahoma:									
Oklahoma	0	0	0	0	0	1	0	0	0
Texas:									
Dallas	0	0	0	0	1	0	0	0	0
Houston	0	1	0	0	0	1	0	0	0
San Antonio	0	0	0	0	0	1	0	0	0
PACIFIC									
Oregon:									
Portland	1	0	0	0	0	0	0	0	0
California:									
San Francisco	1	0	0	0	0	0	0	0	1

The following table gives the rates per hundred thousand population for 105 cities for the 10-week period ended February 21, 1925. The population figures used in computing the rates were estimated as of July 1, 1923, as this is the latest date for which estimates are available. The 105 cities reporting cases had an estimated aggregate population of nearly 29,000,000 and the 97 cities reporting deaths had more than 28,000,000 population. The number of cities included in each group and the aggregate populations are shown in a separate table below.

Summary of weekly reports from cities, December 14, 1924, to February 21, 1925—Annual rates per 100,000 population [1]

DIPHTHERIA CASE RATES

	Week ended—									
	Dec. 20	Dec. 27	Jan. 3	Jan. 10	Jan. 17	Jan. 24	Jan. 31	Feb. 7	Feb. 14	Feb. 21
Total	[2] 197	150	[2] 155	69	[3] 172	[3] 163	[4] 166	[3] 175	[3] 168	[5] 150
New England	221	189	258	256	179	171	199	191	246	241
Middle Atlantic	187	149	140	181	188	175	155	171	165	163
East North Central	185	134	151	132	141	130	[4] 135	145	132	123
West North Central	299	168	176	143	255	199	251	255	259	209
South Atlantic	150	134	146	173	[3] 196	[3] 138	128	[3] 153	[3] 183	[5] 160
East South Central	149	51	91	120	91	80	97	63	69	80
West South Central	195	116	148	144	195	162	148	176	162	125
Mountain	248	209	191	239	153	239	134	191	95	162
Pacific	[2] 207	226	[2] 129	194	206	223	293	270	180	165

MEASLES CASE RATES

Total	[2] 143	105	[2] 158	215	[3] 141	[3] 213	[4] 214	[3] 254	[3] 297	[5] 384
New England	194	278	380	395	440	497	484	576	661	720
Middle Atlantic	115	235	121	169	157	187	205	205	287	373
East North Central	317	138	294	417	127	379	[4] 373	453	515	688
West North Central	19	10	10	19	12	27	21	17	31	27
South Atlantic	24	35	53	83	[3] 43	[3] 38	37	[3] 49	[3] 98	[5] 114
East South Central	11	0	17	29	46	74	91	51	74	51
West South Central	19	14	9	5	23	14	14	37	51	14
Mountain	57	19	115	134	267	248	286	782	153	620
Pacific	[2] 37	70	[2] 83	194	160	55	17	61	29	64

SCARLET FEVER CASE RATES

Total	[2] 314	244	[2] 297	369	[3] 355	[3] 370	[4] 364	[3] 412	[3] 400	[5] 391
New England	552	512	669	661	561	596	534	614	564	606
Middle Atlantic	268	225	286	324	294	326	322	373	407	376
East North Central	311	230	243	383	375	369	[4] 379	426	397	432
West North Central	601	468	527	757	755	804	779	871	728	742
South Atlantic	213	132	203	160	[3] 243	[3] 189	185	[3] 255	[3] 277	[5] 166
East South Central	210	126	172	229	183	183	217	97	212	223
West South Central	185	65	83	148	116	195	204	162	121	125
Mountain	239	191	162	382	534	305	258	334	382	248
Pacific	[2] 134	133	[2] 138	189	183	220	226	258	177	186

[1] 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, 1923.
[2] Los Angeles, Calif., not included in calculating the rate. Report not received at time of going to press.
[3] Wilmington, Del., not included.
[4] Racine, Wis., not included.
[5] Savannah, Ga., not included.

Summary of weekly reports from cities, December 14, 1924, to February 21, 1925—Annual rates per 100,000 population—Continued

SMALLPOX CASE RATES

	Week ended—									
	Dec. 20	Dec. 27	Jan. 3	Jan. 10	Jan. 17	Jan. 24	Jan. 31	Feb. 7	Feb. 14	Feb. 21
Total	[2] 42	41	[2] 40	57	[3] 58	[3] 70	[4] 67	[3] 76	[3] 79	[5] 66
New England	0	0	0	0	0	0	0	0	0	0
Middle Atlantic	2	2	3	3	10	6	9	2	4	2
East North Central	14	20	27	40	39	48	[4] 35	39	35	56
West North Central	209	205	129	220	193	180	195	145	193	126
South Atlantic	22	28	39	30	[3] 64	[3] 38	45	[3] 62	[3] 98	[5] 69
East South Central	314	183	372	395	217	675	652	823	675	532
West South Central	51	19	32	65	32	32	60	125	139	83
Mountain	29	48	48	29	57	95	48	29	162	86
Pacific	[2] 106	122	[2] 69	148	212	209	177	267	220	215

TYPHOID FEVER CASE RATES

Total	[2] 56	35	[2] 37	36	[3] 21	[3] 17	[4] 18	13	[3] 12	[5] 11
New England	30	17	25	15	25	20	7	30	20	0
Middle Atlantic	101	57	58	49	21	20	19	13	6	10
East North Central	33	24	28	23	23	11	[4] 10	8	6	6
West North Central	15	19	4	6	10	6	12	0	10	4
South Atlantic	30	37	41	55	[3] 21	[3] 11	37	[3] 17	[3] 20	[5] 8
East South Central	51	34	40	51	17	29	23	11	40	34
West South Central	56	28	37	70	70	42	60	23	46	42
Mountain	10	0	0	10	0	48	19	29	19	38
Pacific	[2] 14	15	[2] 5	26	6	15	3	17	12	23

INFLUENZA DEATH RATES

Total	[2] 16	15	19	21	[3] 22	[3] 22	[4] 23	[3] 30	[3] 28	[5] 30
New England	15	15	3	17	27	10	27	47	27	17
Middle Atlantic	17	14	21	20	18	20	16	24	22	21
East North Central	9	16	10	16	15	18	[4] 12	13	17	18
West North Central	9	7	9	13	2	20	15	20	11	22
South Atlantic	22	14	26	35	[3] 47	[3] 23	39	[3] 49	[3] 55	[5] 55
East South Central	23	51	63	46	46	63	74	69	63	74
West South Central	41	15	51	41	87	92	82	97	122	153
Mountain	48	10	38	19	29	10	38	57	57	57
Pacific	[2] 17	12	12	20	12	12	20	41	4	12

PNEUMONIA DEATH RATES

Total	[2] 172	157	203	192	[3] 215	[3] 211	[4] 206	[3] 225	[3] 222	[5] 216
New England	134	114	174	122	157	216	241	211	239	241
Middle Atlantic	191	178	226	228	260	234	230	253	231	216
East North Central	146	126	165	152	152	142	[4] 145	164	168	184
West North Central	68	92	101	90	107	120	118	134	131	131
South Atlantic	248	205	250	246	[3] 294	[3] 275	252	[3] 315	[3] 270	[5] 253
East South Central	297	206	303	292	189	320	303	326	320	320
West South Central	163	229	341	260	449	362	229	352	464	408
Mountain	276	219	229	229	248	324	315	191	277	219
Pacific	[2] 86	147	188	184	163	208	217	196	192	213

[2] Los Angeles, Calif., not included in calculating the rate. Report not received at time of going to press.
[3] Wilmington, Del., not included. [4] Racine, Wis., not included. [5] Savannah, Ga., not included.

Number of cities included in summary of weekly reports and aggregate population of cities in each group, estimated as of July 1, 1923

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
Total	105	97	28,898,350	28,140,934
New England	12	12	2,098,746	2,098,746
Middle Atlantic	10	10	10,304,114	10,304,114
East North Central	17	17	7,032,535	7,032,535
West North Central	14	11	2,515,330	2,381,454
South Atlantic	22	22	2,566,901	2,566,901
East South Central	7	7	911,885	911,885
West South Central	8	6	1,124,564	1,023,013
Mountain	9	9	546,445	546,445
Pacific	6	3	1,797,830	1,275,841

FOREIGN AND INSULAR

BRAZIL

Mortality, 1917–1924, inclusive—Bahia.—The following information in regard to mortality at Bahia, Brazil, has been taken from the annual report of the Director of Public Health:

Deaths, 1917–1924, inclusive

Year	Number of deaths	Year	Number of deaths
1917	4,947	1921	5,385
1918	5,996	1922	5,522
1919	8,946	1923	5,315
1920	6,330	1924	5,754

These figures are exclusive of stillbirths. The latest census, taken in 1920, gives the population as 283,422 inhabitants. Although the population has undoubtedly increased since that year, the present estimate of 320,000 may be subject to error and the mortality rate quoted (17.98) may be too low. The number of stillbirths reported is as follows: 1922—623 stillbirths; 1923—641; 1924—607.

Principal causes of death, 1924.—The principal causes of death at Bahia during the year 1924 were given as follows:

Disease	Deaths	Disease	Deaths
Bronchitis and broncho-pneumonia	388	Malaria	367
Diarrhea and enteritis, infantile	555	Tuberculosis, pulmonary	998
Dysentery	282	Typhoid fever	188
Heart disease	171		

Mortality from other diseases.—In addition, 14 deaths from beriberi, 2 from leprosy, 69 from meningitis, and 7 from plague were reported.

Yellow fever.—One death from yellow fever was reported, but this was not properly chargeable to the city, as it occurred on board a steamship on which a case was being transported from a coast town. The last case of yellow fever occurring at Bahia was reported in September, 1923.

ECUADOR

Plague—Smallpox—Guayaquil—January 16–31, 1925.—During the period January 16 to 31, 1925, 11 cases of plague with 3 deaths, and

one case of smallpox were reported at Guayaquil, Ecuador. During the same period, out of 10,839 rats taken at Guayaquil, 40 rats were found plague-infected.

ITALY

Mortality, 1915–1924, inclusive—Mortality from tuberculosis—Genoa.—During the period 1915–1924, inclusive, 55,698 deaths from all causes were reported for the city of Genoa, Italy, the greatest number of deaths, viz, 8,826, being reported for the year 1918 (population, 317,093), and the lowest, viz, 4,641 (population, 328,200) for the year 1924. The total number of deaths from tuberculosis reported was 6,527, the greatest number, viz, 873, being for the year 1918, and the lowest, viz, 564, for the year 1924.

LITHUANIA

Typhoid fever—Typhus fever—April–December, 1924.—Typhoid fever and typhus fever have been reported in the Republic of Lithuania as follows: April–June, 1924: Typhoid fever, 141 cases with 6 deaths; typhus fever, 202 cases with 12 deaths. July–December, 1924; Typhoid fever, 436 cases with 18 deaths; typhus fever, 60 cases with 4 deaths. Population, 2,028,972.

PANAMA CANAL

Communicable diseases—January, 1925.—During the month of January, 1925, communicable diseases were reported in the Canal Zone, Colon, and Panama, as follows:

Disease	Canal Zone	Colon	Panama	Non-resident	Total
Chicken pox	6	1	24		31
Diphtheria		1	3		4
Dysentery	1		4	1	6
Hookworm disease	1	5	44	56	106
Malaria	86	2	18	43	149
Measles	4		5		9
Meningitis			1		1
Mumps	1				1
Pneumonia		2	18		20
Tuberculosis	4	4	21		29
Typhoid fever				2	2
Whooping cough	34	14	4		52

PARAGUAY

Summary of work of sanitary campaign, 1924.—During the year 1924, the work of the sanitary campaign undertaken in Paraguay against hookworm infection was reported for Asuncion, Guarambare, Ita, and Itaugua, as follows: Total number of treatments, 51,964, in a total population of 74,183 (white, 37,144). The number of persons found positive for *uncinaria* was 9,033; for other parasites, 1,041, the total examined for parasites being 13,010. The total number of houses inspected was 11,826, of which 2,367 were found to

have sanitary latrines; 1,751 new latrines were constructed. The number of conferences and lectures given was 343, the attendance being 24,159. There were reported 4,568 vaccinations against smallpox.

PERSIA

Mortality—Smallpox, Typhoid fever, Typhus fever—April 20–December 21, 1924.—During the period April 20 to December 21, 1924, 12 deaths from smallpox, 120 deaths from typhoid fever, and 4 deaths from typhus fever were reported at Teheran, Persia. Population, estimated, 250,000; census of 1922, 210,000.

RUSSIA

Malaria—Ukraine—January-October, 1924.—The following information, transmitted from Kharkov, Russia, shows that 829,147 cases of malaria were notified in the Ukraine, Russia, from January to October, 1924, inclusive. The greatest prevalence of the disease was stated to have been the Donets and Yekaterinoslav Provinces.

UNION OF SOUTH AFRICA

Plague—January 4–17, 1925—Infection among wild rodents.—Plague has been reported in the Union of South Africa as follows: January 4 to 10, 1925—4 cases, 1 death, occurring in natives and on farms; January 11 to 17, 1925—6 cases (one fatal, white), with 2 deaths, occurring on farms. Spread of plague infection among wild rodents has been shown to have occurred from the Liebensberg Vlie River and Wilge Valleys in the Frankfort district [1] to the Vaal River near Villiers and eastward as far as the Standerton Town Commonage and on both the north and south sides of the Vaal River.

Suspect cases previously reported proved negative.—The deaths of two Europeans, husband and wife, on farms in Boshof District, reported for weeks ended December 27, 1924, and January 3, 1925, were proved negative for plague and it was concluded that they were due to acute pneumonia. For distribution of plague occurrence according to localities, see page 532.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

The reports contained in the following tables must not be considered as complete or final as regards either the lists of countries included or the figures for the particular countries for which reports are given.

Reports Received During Week Ended March 13, 1925 [2]

CHOLERA

Place	Date	Cases	Deaths	Remarks
Ceylon:				
Colombo	Jan. 18–24	1	1	
India				Dec. 28, 1924–Jan. 3, 1925: Cases, 2,245; deaths, 1,327.
Calcutta	Jan. 11–17	10	10	
Madras	Jan. 18–24	20	19	

[1] Public Health Reports, Feb. 20, 1925, p. 392.
[2] From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received During Week Ended March 13, 1925—Continued

PLAGUE

Place	Date	Cases	Deaths	Remarks
British East Africa:				
Kenya—				
Tanganyika	Dec. 7-27	14	10	
Uganda	Nov. 1-30	62	58	
Ceylon:				
Colombo	Jan. 18-24		1	
Ecuador:				
Guayaquil	Jan. 16-31	11	3	Plague rats: 40 out of 10,839 rats taken.
India				Dec. 28, 1924-Jan. 3, 1925: Cases, 2,785; deaths, 2,375.
Bombay	Jan. 11-17	1	1	
Madras	Dec. 28-Jan. 3	157	108	
Indo-China:				
Saigon	Jan. 11-17	2	1	Including 100 square kilometers of surrounding territory.
Java:				
East Java—				
Soerabaya	Dec. 21-27	5	6	
West Java—				
Cheribon	Nov. 25-Dec. 22		67	District.
Pekalongan	do		120	District. At two localities.
Straits Settlements:				
Singapore	Jan. 11-17	2	1	
Syria:				
Beirut	Jan. 11-20	1		
Union of South Africa				Jan. 4-17, 1925: Cases, 10; deaths, 3. Native—cases, 9; deaths, 2. White—one case, one death.
Cape Province—				
De Aar District	Jan. 4-10	2		Natives. On farms.
Orange Free State—				
Bloemfontein District	Jan. 11-17	1	1	Native. On farm.
Steynsburg District	Jan. 4-10	1		Native. On farm. Province not stated.
Transvaal—				
Boshof District	Jan. 11-17	5	1	Native, 4 cases; white, one fatal case. On farms.
Smithfield	Jan. 11-17	1		

SMALLPOX

Algeria:				
Algiers	Jan. 1-31	5		
Canada:				
British Columbia—				
Vancouver	Feb. 15-21	27		
Manitoba—				
Winnipeg	Feb. 21-27	1		
Ceylon:				
Colombo	Jan. 18-24	2		
China:				
Amoy	Jan. 4-17			Present.
Hongkong	Dec. 28-Jan. 3	1	1	
Shanghai	Jan. 18-24		1	Chinese.
Chosen:				
Seoul	Dec. 1-31	1		
Egypt:				
Alexandria	Jan. 15-28	7		
India				Dec. 28, 1924-Jan. 3, 1925: Cases, 1,893; deaths, 471.
Bombay	Jan. 11-17	11	8	
Calcutta	Jan. 11-17	86	58	
Do	Mar. 5			Reported epidemic
Karachi	Jan. 25-31	13	3	
Madras	Jan. 18-24	45	8	
Indo-China:				
Saigon	Dec. 28-Jan. 3	6		
Do	Jan. 4-10	3	1	
Java:				
East Java—				
Soerabaya	Dec. 21-27	49	11	
Persia:				
Teheran				Sept. 23-Dec. 21, 1924: Deaths, 12.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received During Week Ended March 13, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Portugal:				
Lisbon	Feb. 1-7	6		
Spain:				
Malaga	Feb. 8-14		5	
Syria:				
Aleppo	Feb. 1-7	15	8	Estimated.
Tunis:				
Tunis	Feb. 5-18	33	61	
Union of South Africa:				
Cape Province				Jan. 11-17, 1925: Outbreaks.
Transvaal				Jan. 4-10, 1925: Outbreaks.

TYPHUS FEVER

Algeria:				
Algiers	Jan. 1-31	3	3	
Greece:				
Saloniki	Jan. 25-31	1		
Poland				Nov. 16-Dec. 6, 1924: Cases, 147; deaths, 5.
Union of South Africa:				
Cape Province				Jan. 4-17, 1925: Outbreaks.
Orange Free State				Jan. 11-17, 1925: Outbreaks.

Reports Received from December 27, 1924, to March 6, 1925 [1]

CHOLERA

Ceylon				June 29-Nov. 29, 1924: Cases, 9; deaths, 8.
Colombo	Nov. 16-22	1		
Do	Jan. 11-17	1	1	
India				Oct. 19-Dec. 27, 1924: Cases, 24,919; deaths, 14,901.
Bombay	Nov. 23-Dec. 20	4	4	
Calcutta	Oct. 26-Jan. 3	59	51	
Do	Jan. 4-10	10	10	
Madras	Nov. 16-Jan. 3	69	40	
Do	Jan. 4-17	54	34	
Rangoon	Nov. 9-Dec. 20	9	2	
Do	Jan. 4-10	4	3	
Indo-China				Aug. 1-Sept. 30, 1924: Cases, 14; deaths, 10.
Province—				
Anam	Aug. 1-31	1	1	
Cambodia	Aug. 1-Sept. 30	6	5	
Cochin-China	do	7	4	
Saigon	Nov. 30-Dec. 6	1		
Siam:				
Bangkok	Nov. 9-29	4	2	

PLAGUE

Azores:				
Fayal Island—				
Castelo Branco	Nov. 25			Present with several cases.
Feteira	do	1		
St. Michael Island	Nov. 2-Jan. 3	30	13	
British East Africa:				
Tanganyika Territory	Nov. 23-29	3		
Uganda	Aug.-Oct., 1924	180	153	
Canary Islands:				
Las Palmas				Stated to have been infected with plague Sept. 30, 1924.
Realejo Alto	Dec. 26	3	1	Vicinity of Santa Cruz de Teneriffe.
Teneriffe—				
Santa Cruz	Jan. 3	1		In vicinity.

[1] From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 27, 1924, to March 6, 1925—Continued

PLAGUE—Continued

Place	Date	Cases	Deaths	Remarks
Celebes:				
Macassar	Oct. 29			Epidemic.
Ceylon:				
Colombo	Nov. 9-Jan. 3	12	9	
Do	Jan. 4-17	1	3	One plague rodent.
China:				
Foochow	Dec. 28-Jan. 3			Present.
Nanking	Nov. 23-Jan. 31			Do.
Shing Hsien	Oct., 1924		790	
Ecuador:				
Chimborazo Province—				
Alausi District	Jan. 14		14	At two localities on Guayaquil and Quito Railway.
Guayaquil	Nov. 16-Dec. 31	9	3	Rats taken, 27,004; found infected, 92.
Do	Jan. 1-15	6	4	Rats taken, 8,248; rats found infected, 28.
Egypt				Year 1924: Cases, 373. Jan. 1-28, 1925: Cases, 15.
City—				
Alexandria	Year 1924	2	2	Last case, Nov. 26.
Ismailia	do	1	1	Last case, July 6.
Port Said	do	6	4	Last case, Dec. 7.
Suez	do	20	13	Last case, Dec. 20.
Province—				
Dakhalia	Jan. 1-8	1	1	
Kalioubiah	do	3		
Menoufieh	do	7	3	
Gold Coast				Sept.-Oct., 1924: Deaths, 42.
Hawaii:				
Honokaa	Nov. 4	1		Plague-infected rodents found Dec. 9, 1924, and Jan. 15, 1925.
India				Oct. 19-Dec. 27, 1924: Cases, 25,369; deaths, 19,130.
Bombay	Nov. 22-Jan. 3	4	3	
Do	Jan. 4-10	1	1	
Karachi	Nov. 30-Dec. 6	2	1	
Do	Jan. 4-24	10	9	
Madras Presidency	Nov. 23-Dec. 20	528	379	
Rangoon	Oct. 26-Jan. 3	26	25	
Do	Jan. 4-10	8	6	
Indo-China				Aug. 1-Sept. 30, 1924: Cases, 25; deaths, 20.
Province—				
Anam	Aug. 1-Sept. 30	4	4	
Cambodia	do	18	15	
Cochin-China	do	3	1	
Japan	Aug. 10-Nov. 15	12		
Java:				
East Java—				
Blitar	Nov. 11-22			Province of Kediri; epidemic.
Pare	Nov. 29			Do.
Soerabaya	Nov. 16-Dec. 13	53	55	
West Java—				
Cheribon	Oct. 14-Nov. 3		14	
Do	Nov. 18-24		13	
Pekalongan	Oct. 14-Nov. 3		29	
Do	Nov. 18-24		13	
Tegal	Oct. 14-Nov. 24		10	
Madagascar				Nov. 1-Dec. 15, 1924: Cases, 254; deaths, 218.
Provinces—				
Itasy	Nov. 1-Dec. 15	4	2	
Moramanga	do	49	34	
Tananarive	Oct. 16-Dec. 15	223	208	Tananarive City (interior), Oct. 16-Nov. 30: Cases, 8; deaths, 7.
Towns (ports)—				
Fort Dauphin	Nov. 1-Dec. 15	12	5	
Majunga	Nov. 1-30	1	1	
Tamatave	do	1	1	
Mauritius Island				Sept. 7-Oct. 18, 1924: Cases, 60; deaths, 53.
Nigeria				Aug.-Oct., 1924: Cases, 309; deaths, 256.
Siam:				
Bangkok	Dec. 28-Jan. 3	1	1	
Siberia:				
Transbaikalia—				
Turga	Oct., 1924		3	On Chita Railroad.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 27, 1924, to March 6, 1925—Continued

PLAGUE—Continued

Place	Date	Cases	Deaths	Remarks
Straits Settlements:				
Singapore	Nov. 9–15	1	1	
Do	Jan. 4–10	1	1	
Turkey:				
Constantinople	Jan. 9–15	5	5	
Union of South Africa:				
Cape Province—				
De Aar District	Nov. 22–Jan. 3	4	1	Native.
Dronfield	Dec. 7–13	1		8 miles from Kimberley.
Kimberley	Dec. 7–27	3	2	
Maralsburg District	Nov. 22–Dec. 13	4	2	Bubonic, on Goedshoop Farm.
Orange Free State—				
Bloemfontein District	Dec. 21–Jan. 3	5	2	
Ficksburg District	Dec. 28–Jan. 3	1	1	
Hoopstad District	Dec. 7–13	1		On farm.
Kroonstad District	Nov. 22–Jan. 3	2	1	
Philippolis District	Dec. 21–27	1		
Vredefort District	Dec. 7–20	2	2	On farms.
Transvaal—				
Boshof District	Dec. 7–Jan. 3	3	3	On farm.
Wolmaransstad District.	Nov. 22–29	1	1	On Farm Wolverspruit Vaal River. Native.
On vessel:				
S. S. Conde				At Marseille, France, Nov. 6, 1924. Plague rat found. Vessel left for Tamatave, Madagascar, Nov. 12, 1924.
Steamship	November, 1924	1	1	At Majunga, Madagascar, from Djibuti, Red Sea port.

SMALLPOX

Algeria				July 1–Dec. 20, 1924: Cases, 372.
Arabia:				
Aden	Jan. 25–31	1		Imported.
Bolivia:				
La Paz	Nov. 1–Dec. 31	20	11	
Brazil:				
Pernambuco	Nov. 9–Jan. 3	100	27	
British East Africa:				
Uganda—				
Entebbe	Oct. 1–31	4		
British South Africa:				
Northern Rhodesia	Oct. 28–Dec. 15	57	2	
Canada:				
British Columbia—				
Vancouver	Dec. 14–Jan. 3	32		
Do	Jan. 4–Feb. 14	135		
Victoria	Jan. 18–Feb. 7	2		
Manitoba—				
Winnipeg	Dec. 7–Jan. 3	14		
Do	Jan. 4–Feb. 14	29		
New Brunswick—				
Bonaventure and Gaspe Counties.	Jan. 1–31	1		
Northumberland	Feb. 8–14	1		County.
Ontario				Nov. 30–Dec. 27, 1924: Cases, 33.
Hamilton	Jan. 24–30	1		Dec. 28, 1924, to Jan. 31, 1925: Cases, 27.
Ceylon				July 27–Nov. 29, 1924: Cases, 27; deaths, 1.
China:				
Amoy	Nov. 9–Jan. 24			Present.
Antung	Nov. 17–Dec. 28	5		
Do	Jan. 5–18	4		
Foochow	Nov. 2–Jan. 27			Do.
Hongkong	Nov. 9–Dec. 6	5	1	
Nanking	Jan. 4–17			Do.
Shanghai	Dec. 7–27	1	2	
Czechoslovakia				Apr.–June, 1924: Case, 1; occurring in Province of Moravia.
Ecuador:				
Guayaquil	Nov. 16–Dec. 15	4		

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 27, 1924, to March 6, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Egypt:				
Alexandria	Nov. 12–Dec. 31	10		
Do	Jan. 8–14	1		
Esthonia				Dec. 1–31, 1924: Cases, 2.
France				July–Nov., 1924: Cases, 69.
Germany				June 29–Nov. 8, 1924: Cases, 7.
Gibraltar	Dec. 8–14	1		
Gold Coast				July–Sept., 1924: Cases, 82; deaths, 1.
Great Britain:				
England and Wales	Nov. 23–Jan. 3	472		
Do	Jan. 4–24	351		
Newcastle-on-Tyne	Jan. 18–Feb. 7	5		
Greece				Jan.–June, 1924: Cases, 170; deaths, 27.
Do				July–Nov., 1924: Cases, 36; deaths, 26.
Saloniki	Nov. 11–Dec. 22	3		
India				Oct. 19–Dec. 27, 1924: Cases, 10,671; deaths, 2,386.
Bombay	Nov. 2–Jan. 3	30	18	
Do	Jan. 4–10	6	3	
Calcutta	Oct. 26–Jan. 3	307	170	
Do	Jan. 4–10	82	43	
Karachi	Nov. 16–Jan. 3	16	2	
Do	Jan. 4–17	13		
Madras	Nov. 16–Jan. 3	122	48	
Do	Jan. 4–17	28	15	
Rangoon	Oct. 26–Jan. 3	86	28	
Do	Jan. 4–10	33	4	
Indo-China				Aug. 1–Sept. 30, 1924: Cases, 223; deaths, 76.
Province—				
Anam	Aug. 1–Sept. 30	49	11	
Cambodia	do	40	9	
Cochin-China	do	115	49	
Saigon	Nov. 16–Dec. 27	11	5	Including 100 sq. km. of surrounding country.
Tonkin	Aug. 1–Sept. 30	19	7	
Iraq:				
Bagdad	Nov. 9–Dec. 27	2	1	
Italy				June 29–Dec. 6, 1924: Cases, 61.
Jamaica				Nov. 30–Jan. 3: Cases, 50. Reported as alastrim.
Do				Jan. 4–31, 1925: Cases, 43. Reported as alastrim.
Kingston	Nov. 30–Dec. 27	4		Reported as alastrim.
Japan				Aug. 1–Nov. 15, 1924: Cases, 4.
Java:				
East Java—				
Pasoeroean	Oct. 26–Nov. 1	9	1	
Do	Nov. 12–19			Epidemic in two native villages.
Soerabaya	Oct. 19–Dec. 20	613	197	
West Java—				
Batam	Oct. 14–20	2		
Batavia	Oct. 21–Nov. 14	2		
Do	Dec. 20–Jan. 2	19	4	
Cheribon	Oct. 14–Nov. 24	15		
Pekalongan	do	22		
Preanger	Nov. 18–24	1		
Latvia				Oct. 1–Nov. 30, 1924: Cases, 5.
Mexico:				
Durango	Dec. 1–31		5	
Do	Jan. 1–31		5	Town and district.
Guadalajara	Dec. 23–29		1	
Do	Jan. 6–12		1	
Mexico City	Nov. 23–Dec. 27	5		
Do	Jan. 11–31	5		
Monterey				Jan. 24, 1925: Outbreak.
Salina Cruz	Dec. 1–31	1	1	
Tampico	Dec. 11–31	5	4	
Do	Jan. 1–Feb. 10	23	8	
Vera Cruz	Dec. 1–Jan. 3		10	
Do	Jan. 5–Feb. 15		25	
Villa Hermosa	Dec. 28–Jan. 10			Present. Locality, capital, State of Tabasco.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 27, 1924, to March 6, 1925—Continued

SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Nigeria				Jan.-June, 1924: Cases, 357; deaths, 87.
Do				July-Oct., 1924; Cases, 10; deaths, 2.
Peru:				
Arequipa	Nov. 24-30		1	
Poland				Sept. 21-Nov. 29, 1924: Cases, 19; deaths, 2.
Portugal:				
Lisbon	Dec. 7-Jan. 3	17		
Do	Jan. 4-31	39		
Oporto	Nov. 30-Dec. 27	3	2	
Do	Jan. 11-17	1		
Russia				Jan-June, 1924: Cases, 9,683, July-Sept., 1924: Cases, 1,251.
Siam:				
Bangkok	Dec. 28-Jan. 3	1	1	
Spain:				
Barcelona	Nov. 27-Dec. 31		5	
Cadiz	Nov. 1-Dec. 31		51	
Madrid	Year 1924		40	
Malaga	Nov. 23-Jan. 3		97	
Do	Jan. 4-Feb. 7		58	
Valencia	Nov. 30-Dec. 6	2		
Switzerland:				
Lucerne	Nov. 1-Dec. 31	19		
Syria:				
Aleppo	Nov. 23-Dec. 27	13		
Do	Jan. 4-31	30	7	
Damascus	Jan. 6-13	2		
Tunis:				
Tunis	Nov. 25-Dec. 29	42	35	
Do	Jan. 1-14		29	
Do	Jan. 22-Feb. 4		32	
Turkey:				
Constantinople	Dec. 13-19	5		
Union of South Africa				Nov. 1-30, 1924: Cases, 7.
Cape Province	Nov. 9-Jan. 3			Outbreaks.
Orange Free State	Nov. 2-8			Do.
Transvaal	Nov. 9-Dec. 20			Do.
Uruguay				Jan.-June, 1924: Cases, 101; deaths, 2.
Do				July, 1924: Cases, 25; deaths, 3.
On vessel:				
S. S. Habana	Feb. 18	1		At Santiago de Cuba, from Kingston, Jamaica.

TYPHUS FEVER

Algeria				July 1-Dec. 20, 1924: Cases, 101; deaths, 14.
Algiers	Nov. 1-Dec. 31	5	1	
Bolivia:				
La Paz	do	3		
Bulgaria				Jan.-June 1924: Cases, 191; deaths, 28.
Do				July-Oct., 1924: Cases, 5.
Chile:				
Concepcion	Nov. 25-Dec. 1		1	
Do	Jan. 6-12		2	
Iquique	Nov. 30-Dec. 1		2	
Talcahuano	Nov. 16-Dec. 20		5	
Do	Jan. 4-10		1	
Valparaiso	Nov. 25-Dec. 7		4	
Do	Jan. 11-31		4	
Chosen:				
Seoul	Nov. 1-30	1	1	
Egypt:				
Alexandria	Dec. 3-9	1	1	
Cairo	Oct. 1-Dec. 16	12	8	
Esthonia				Dec. 1-31, 1924: Cases, 5.
France				July-Oct., 1924: Cases, 7.
Gold Coast				Oct. 1-31, 1924: 1 case.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 27, 1924, to March 6, 1925—Continued

TYPHUS FEVER—Continued

Place	Date	Cases	Deaths	Remarks
Greece				May–June, 1924: Cases, 116; deaths, 8.
Do				July–Nov., 1924: Cases, 35; deaths, 4.
Saloniki	Nov. 17–Dec. 15	3	2	
Japan				Aug. 1–Nov. 15, 1924: Cases, 2.
Latvia				Oct.–Nov., 1924: Cases, 16.
Lithuania				Aug.–Oct., 1924: Cases, 15; deaths, 1.
Mexico:				
Durango	Dec. 1–31		1	
Guadalajara	Dec. 23–29		1	
Mexico City	Nov. 9–Jan. 3	80		Including municipalities in Federal District.
Do	Jan. 11–31	29		Do.
Palestine				Nov. 12–Dec. 8, 1924: Cases, 7.
Ekron	Dec. 23–29	1		
Jerusalem	do	2		
Do	Jan. 20–26	1		
Mikveh Israel	do	1		
Peru:				
Arequipa	Nov. 24–30		1	
Poland				Sept. 28–Nov. 15, 1924: Cases, 232; deaths, 17.
Portugal:				
Lisbon	Dec. 29–Jan. 4		2	
Oporto	Jan. 4–Feb. 7	2		
Rumania				Jan.–June, 1924: Cases, 2,906; deaths, 328.
Do				July–Aug., 1924: Cases, 89; deaths, 12.
Constanza	Dec. 1–10	1		
Russia				Jan. 1–June 30, 1924: Cases, 92,600. July–Sept., 1924: Cases: 5,225.
Leningrad	June 29–Nov. 22	12		
Spain:				
Madrid	Year 1924		3	
Malaga	Dec. 21–27		1	
Sweden:				
Goteborg	Jan. 18–24	1		
Tunis				July 1–Dec. 20, 1924: Cases, 40.
Turkey:				
Constantinople	Nov. 15–Dec. 19	6	1	
Do	Jan. 2–22	6		
Union of South Africa:				
Cape Province	Nov. 1–30	89	16	Dec. 21–Jan. 3: Outbreaks.
East London	Nov. 16–22	1		Dec. 14–20: Outbreaks.
Natal	Nov. 1–30	105	45	
Orange Free State	do	21	2	Dec. 7–Jan. 3: Outbreaks.
Transvaal	do	18	3	
Yugoslavia				Aug. 3–Oct. 18, 1924: Cases, 17; deaths, 2.
Belgrade	Nov. 24–Dec. 7	4		

YELLOW FEVER

Gold Coast	October, 1924	3	3	