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## EFFECT OF ACIDIFICATION ON TOXICITY OF *B. BOTULINUS* TOXIN.<sup>1</sup>

By J. C. GEEGER, Epidemiologist, United States Public Health Service, Associate Professor of Epidemiology, University of Chicago; and W. E. GOUWENS, Instructor in Bacteriology, University of Chicago.

Bronfenbrenner and Schlesinger<sup>2</sup> have stated that the toxicity of crude filtrates of cultures of *B. botulinus* may be greatly increased by acidification (approximately pH 4.0). Outbreaks of botulism have occurred following the consumption of vegetables, such as string beans and beets, served in the form of salads and thus containing vinegar.<sup>3</sup> The definite knowledge of any increase in toxicity due to the addition of an acid might therefore become of practical importance. It seemed desirable, therefore, to repeat these experiments.

Two toxic materials were employed: (a) Home-canned vegetables known to have caused outbreaks of botulism; (b) canned vegetables inoculated with strains of *B. botulinus* isolated from foods in fatal outbreaks.

(a) Tests were made on home-canned corn obtained from the Ismay, Mont., outbreak of September, 1922, and on home-canned string beans from the Okanogan, Wash., outbreak of October, 1922. In both instances the vegetables showed the presence of *B. botulinus* toxin, type A, and from both foods the organism was later isolated. The hydrogen ion concentration of the liquid portion of the home-canned corn was pH 6.4, while that of the beans was pH 4.6. The beans were known to have been served cold, in a salad to which vinegar had been added.

The same procedure was used with both vegetables. Material was removed from the container, ground in sterile distilled water with sterile sand, filtered, and centrifuged. The M. L. D. of the supernatant liquid was determined against white mice by injecting, intraperitoneally, 1 c. c. amounts of distilled water dilutions. In both instances the M. L. D. was found to be 0.00,001 c. c., on the basis of the original material. A series of dilutions (1-100 to 1-100,000,000) was made with the toxic supernatant liquid and acidified to pH 3.0 with hydrochloric acid. A second series was acidified to the same degree with lactic acid. One c. c. of each of these dilutions was injected intraperitoneally into white mice immediately after

<sup>1</sup> From the Department of Hygiene and Bacteriology, University of Chicago.

<sup>2</sup> Bronfenbrenner and Schlesinger: Proc. Soc. Exp. Biol. and Med., 1921, 19, p. 1; Jour. Am. Med. Assoc., 1922, 78, p. 1519; Science, 1922, 56, 280.

<sup>3</sup> U. S. Public Health Service: Public Health Bulletin No. 127, pp., 8, 11, 18, 43, and 47

acidification and after standing in an ice box for 1 hour, 1, 2, 3, 4, 6, 8, 13, 18, 25, and 34 days. Control tests showed that there was no change in the M. L. D. of the original nonacidified centrifugate during the time in which the experiments were in progress. In no case did acidification have any effect upon the toxicity of the centrifugates from the home-canned vegetables, the M. L. D. of each remaining at 0.00,001 c. c.

(b) These experiments have been supplemented by using toxic material prepared by inoculating commercially canned string beans and corn with strains of *B. botulinus*, type A, which had been isolated from vegetables known to have caused fatal outbreaks of botulism. Four strains were used. After 10 days incubation at 37° C. the cans were opened and toxic centrifugates obtained in the same manner as in the previous experiments. The M. L. D. for each was determined against white mice. Acidification with acetic acid was first tried, since this is the acid commonly present in salad dressings. The toxic centrifugates were acidified in the following manner: A series of acetic acid-sodium acetate mixtures was prepared to obtain varying hydrogen ion concentrations. A stock dilution of the toxic centrifugate in distilled water was so prepared that when it was added to a buffered acid mixture in the proportion of one part of the former to six parts of the latter, 0.6 c. c. of the resulting mixture represented 1 M. L. D. of the original toxin. The hydrogen ion concentrations of the buffer mixtures were not altered by this small proportion of the highly diluted toxic centrifugate. To avoid errors that would creep into the work if a standard volume of 1 c. c. of constantly increasing dilutions were injected, we chose to determine a possible variation in toxicity by using different amounts of one standard mixture. Acidified toxic centrifugates of pH 4.85, 4.0, and 3.0 were chosen for the experiments. Toxicity tests were made one-half, 1, 2, 6, and 24 hours after acidification of the original centrifugates. After each time interval white mice were injected, intraperitoneally, with 2, 1, two-thirds, and one-third M. L. D., respectively (1.2, 0.6, 0.4, and 0.2 c. c.), of the acidified mixtures. At each time the specified amounts were injected into three mice, two of which served as duplicate tests, while the third, previously injected with a protective dose of homologous antitoxin, served as a control.

When the mixtures of pH 4.85 were used, the mice receiving more than 1 M. L. D. died within 48 hours. The mixtures of pH 4.0 killed the mice receiving 2, 1, and two-thirds M. L. D. The mixtures of pH 3.0 killed the mice receiving 2, 1, and two-thirds M. L. D. and 50 per cent of the mice receiving one-third M. L. D. However, at all three pH values, whenever death of normal mice occurred, the control immunized mice also died. Evidently death was due to

some factor other than the botulism toxin. Experiments were therefore made with the acetic acid-sodium acetate mixtures containing no toxin, with the results given in the following table:

*Experiments with acetic acid-sodium acetate mixtures.*

pH.	Amount injected.	Average length of time lapsing before death.
	c. c.	
3.0.....	1.2	Less than 5 minutes.
3.0.....	0.6	4-6 hours.
4.0.....	1.2	10 minutes.
4.0.....	0.6	20-24 hours.
4.5.....	1.2	All alive.
4.85.....	0.6	Do.

The acetic acid-sodium acetate mixtures were therefore responsible for the death of the mice; and the higher the hydrogen ion concentration (i. e., the lower the pH value) the more rapidly death occurred. That the effects were not due to the acetate ions was shown by injecting white mice intraperitoneally with 1 c. c. of N/1 sodium acetate. This solution was not sufficiently toxic to produce death, although it contained more acetate ions than the acetic acid-sodium acetate mixtures previously used.

Experiments on the effect of acidification on the toxicity of botulism toxin were also made with hydrochloric acid buffered with sodium citrate, mixtures of pH 4.6, 4.2, 3.8, 3.2, and 2.3 being used. These buffered mixtures, in the absence of the toxin, failed to kill mice even when injected in amounts of 1.2 c. c. No increase in the potency of the botulism toxin was noted.

There is evidently a selective action of the different acids employed. Since acetic acid is the acid present in many salads, and hydrochloric acid is present in the free and combined states in the stomach contents, these are the two acids which, from a clinical standpoint, are of greatest importance with reference to a possible increase in the potency of the botulism toxin. However, the following two kinds of solutions were also employed: Lactic acid-calcium lactate solutions of pH 4.0, 3.6, 3.2, and 2.8, and potassium acid phthalate-hydrochloric acid solutions of pH 4.8, 4.0, 3.6, and 3.0. None of these mixtures caused death of white mice in amounts of 1 c. c.

#### SUMMARY AND CONCLUSIONS.

(1) Toxins of four strains of *B. botulinus* were not increased in potency at any hydrogen ion concentration, regardless of the length of time of exposure. The acid mixtures employed in this study were hydrochloric acid-sodium citrate and acetic acid-sodium acetate mixtures.

(2) The injection of 1 c. c. of a buffered acetic acid of pH 4.0 causes the death of mice. This occurs whether *B. botulinus* toxin

is present or absent. With greater concentration of the hydrogen ions, death is more rapid, and less than 1 c. c. is sufficient to cause death in 24 hours.

(3) Hydrochloric acid-sodium citrate, hydrochloric acid-potassium acid phthalate, and lactic acid-calcium lactate mixtures between the limits pH 4.0 and 2.3 do not kill white mice when injected intraperitoneally in 1 c. c. amounts. The acetic acid therefore appears to have a selective action upon white mice. This is not due to the acetate ions or undissociated sodium acetate molecules alone.

### MALARIA ENTERING THE PORT OF LONDON, 1922.

Malaria in malignant form took a prominent place among the infectious diseases entering the port of London on vessels during the year 1922. On 37 of the vessels entering the port during that year, most of these 37 ships coming from Indian ports, there were 170 cases of malaria with 6 deaths.

The following information is taken from the Annual Report of the Medical Officer of Health for the port of London, 1922:

#### *Malaria on vessels, port of London, 1922.*

Date of arrival of vessel.	Where from.	Number of cases.	How cases were dealt with.
1922.			
Jan. 10	Dakar.....	8	Treated on board.
16	Baratu.....	1	Died on board.
Feb. 7	Bombay.....	1	Admitted to dock hospital.
Mar. 1	Mauritius.....	3	Two to hospital; 1 on board.
8	Port Harcourt.....	8	Treated on board.
9	Outward bound.....	1	Admitted to port hospital.
17	Bombay.....	1	Do.
Apr. 21	.....	1	Admitted to Greenwich Hospital.
29	Mauritius.....	2	Died on board.
May 8	Calcutta.....	1	Treated on board.
10	Buenos Aires.....	1	Do.
June 9	Bombay.....	2	Do.
July 7	Opobo.....	2	Landed at Las Palmas.
21	Beira.....	23	Twenty-two treated on board; 1 to Greenwich Hospital.
Aug. 3	.....	2	Landed at Port Said.
8	Calcutta.....	2	Treated on board.
9	.....	1	Admitted to Greenwich Hospital.
22	Beira.....	1	Died on board.
26	Sydney.....	1	Do.
27	Cuddalore.....	1	Do.
Sept. 26	Beira.....	7	Six treated on board; 1 to London Fever Hospital.
Oct. 8	Bombay.....	6	Treated on board.
24	Java.....	1	Do.
26	Dairen.....	1	Admitted to dock hospital.
Nov. 1	Brisbane.....	2	Treated on board.
13	Bombay.....	3	Do.
16	West Africa.....	14	Six port hospital; 7 Greenwich Hospital; 1 on board.
16	.....do.....	1	Treated on board.
18	Java.....	1	Greenwich Hospital.
25	Rangoon.....	2	Treated on board.
Dec. 6	Genoa.....	1	Do.
11	Bombay.....	43	Do.
14	Durban.....	6	Do.
18	.....	2	Greenwich Hospital.
22	Bombay.....	8	Treated on board.
23	Calcutta.....	1	Do.
30	Sydney.....	8	Do.

The port medical officer states:

"The well-known malarial centers of the East and West African coasts and of India will afford instances of malaria which have occurred during the voyage on every incoming ship from ports situated therein.

"The questions have only to be pushed to arrive at the case, which is generally reported as 'now well.'

"On the other hand, many febricula are reported as 'malaria' by way of definite diagnosis where definition is clearly impossible. 'Malaria' and 'influenza' share the misdiagnoses of febrile cases with 'cold' and 'chill.'

"The definitely malarial invasions of a ship are mostly detected, and temporary cure of symptoms is effected by means of quinine. The masters and stewards of ships which trade in infected regions are usually quick in detecting malaria, from long experience. This does not always apply where the Protean forms of subtertian malaria are concerned, though in this disease quinine is usually given a successful trial on instinct.

"My impression is that the seafaring community which goes into the Tropics is far more infected than appears from any record. \* \* \*"

#### ILLUSTRATIVE SHIPS.

The following illustrative ships are cited by the port medical officer as examples of the amount of infection on some of the vessels, the nature of the masters' reports, and the manner in which the disease is frequently viewed on shipboard.

The S. S. *Hunstanworth*, from Rufisque, West Africa, arrived at the mouth of the Medway on November 16, 1922. The master declared 8 cases of malaria, 3 of pneumonia, and 1 case of peritonitis.

The ship left Rufisque on November 5. The malaria came on after the vessel had left Las Palmas, Canary Islands. Every man of the crew of 24 had been ill; and only about four men were fit to man the ship at the time of arrival. The vessel had taken on cargo up the river and among swamps. Four of the crew had been taken on at Las Palmas, where they had been in hospital, from another ship, which had also been at Rufisque. One of these four men subsequently came into Denton Hospital. He had the subtertian parasite in his blood and was severely ill upon his admittance to hospital.

The vessel had proceeded to Rochester before details could be fully learned, but four men who were sent into Denton Hospital from Rochester, one with delirium, showed the subtertian parasite—ring forms only.

The case of "peritonitis" (severe vomiting) died, as did also another patient.

The S. S. *Hesione*, from Bombay, arrived at Gravesend December 4, and reported 42 cases of malaria as occurring when the ship was at Bombay, and subsequently up the Malabar coast. The type of the disease was apparently not severe. The cases were treated as they occurred, at the various ports. The last case had occurred 15 days before arrival. The crew was free from fever; but upon examination, several members were found to be anemic and "below par." The master reported a good deal of malaria on Bombay ships.

The S. S. *Chama*, arriving December 14, had visited every port of importance in the Bight of Benin, coast of West Africa, and had been "coasting" since September. There were two cases of malaria on board on arrival, and a total of six cases in all had occurred. Five grains of quinine was given daily to all hands from September 3 to November 20 as a preventive measure. It was stated that the health of the crew appeared to show the value of this treatment.

The S. S. *Hortensius* arrived from Beira at Rochester July 21 with a report of "about 22 cases of malaria, all well now," indicative of the unimportance attached to the disease. The medical officer states: "A subsequent single notification of malaria from the Seamen's Hospital, in a case which came from this ship on July 22, is at once a commentary on the report and a clear indication in one case of the condition of infection which possibly exists in nearly all the cases."

The S. S. *Caledonia* reported 77 cases of "influenza" during the voyage from Bombay, October 7-27, the latter date being the date of arrival at the port of London. Subsequent notifications were made from the ship and from the Seamen's Hospital. The subtertian parasite was found in the blood of the patients at the Seamen's Hospital, and the port medical officer had notice of two similar findings in two patients landed from the vessel at Marseille and a further notification of a benign tertian case on December 12. The report of the medical officer goes on to state that "the outbreak was almost entirely confined to those of the crew occupying quarters on the starboard side of the ship. The passengers were not affected. Most had 'recovered' at the time of arrival. Those who were still ill were the cases notified as malaria, and suggest, together with the fact that the starboard side of the ship was alongside the quay in Bombay, that the majority of the cases, if not all, were malaria."

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## MEETING OF THE AMERICAN PUBLIC HEALTH ASSOCIATION.

Fifty-Second Annual Meeting to be Held In Boston, October 8-11, 1923.

The American Public Health Association extends to the public health profession and other interested persons a cordial invitation to attend its fifty-second annual meeting, in Boston, Mass., October 8 to 11, 1923.

The annual meetings of this association are always important events in the public-health world, but the meeting this year is of more than usual interest, since it ends the first 12 months of the new program adopted as a result of the reorganization of the association in 1922.

Two general sessions and 26 meetings of the scientific sessions will be held this year. In addition, many trips of technical and general interest have been planned around the historic city of Boston as part of the entertainment and educational program. On Monday evening, October 8, the formal opening session will be held, followed by a reception. On Wednesday evening, October 10, Sir Thomas Oliver, distinguished English industrial hygienist, and Dr. George E. Vincent, president of the Rockefeller Foundation, will address the second general session. The scientific program, embracing all branches of public health, will be held according to sections as follows: Public health administration, laboratory, sanitary engineering, vital statistics, child hygiene, food and drugs, industrial hygiene, public health nursing, health education and publicity.

Among the important subjects scheduled for discussion are food inspection, growth of children, full-time health officers, mental hygiene in the school program, nutrition work, the effect of so-called "moonshine" liquors, standards for schoolhouse construction and sanitation, epidemiology, better birth registration, organic heart disease, the etiology of common colds, water supply and purification, and mosquito control.

An important report of the committee on municipal health department practice will be presented in the public health administration section. At this time the announced plan for the awards to cities for distinctive community service will be discussed. The problems of health officers in small communities will be specially considered at a round-table discussion scheduled for Wednesday morning. The clinic on printed matter, which has proved valuable in past years, will be held again this year by the section on health education and publicity. At this clinic, samples of public health publicity will be examined and criticized by experts. Of special interest also is the report of the committee on health problems in education, of the child hygiene section.

In the September issue of the American Journal of Public Health will be found the preliminary annual meeting program arranged by sections, and the October number of the Journal will contain additional information.

Members of the association traveling by rail to Boston may secure a reduction of one-fourth the regular round-trip rate.

Headquarters will be at the Copley-Plaza Hotel.

## STATE AND INSULAR HEALTH AUTHORITIES, 1923.

### DIRECTORY, WITH DATA AS TO APPROPRIATIONS AND PUBLICATIONS.

Directories of the State and insular health authorities of the United States for each year from 1912 to 1922 have been published in the Public Health Reports<sup>1</sup> for the information of health officers and others interested in public-health activities. These directories have been compiled from data furnished by the respective State and insular health officers and include data as to appropriations and publications.

Where an officer has been reported to be a "whole-time" health officer, that fact is indicated by an asterisk (\*). For this purpose a "whole-time" officer is defined as "one who does not engage in the practice of medicine or any other business, but devotes all his time to official duties."

#### ALABAMA.

Board of censors of the State medical association, acting as a committee of public health:

W. W. Brandon, governor, ex officio chairman, Montgomery.

S. W. Welch, M. D., Montgomery.

W. D. Partlow, M. D., Tuscaloosa.

J. N. Baker, M. D., Montgomery.

V. P. Gaines, M. D., Selma.

S. G. Gay, M. D., Selma.

E. S. Sledge, M. D., Mobile.

A. N. Steele, M. D., Anniston.

H. S. Ward, M. D., Birmingham.

B. L. Wyman, M. D., Birmingham.

R. S. Hill, M. D., Montgomery.

Executive health officer:

\*S. W. Welch, M. D., State health officer, Montgomery.

Registrar of vital statistics:

\*H. G. Perry, M. D., Montgomery.

State laboratory:

\*L. C. Havens, M. D., director, Montgomery.

State sanitary engineer:

\*G. H. Hazlehurst, C. E., M. C. E., Montgomery.

Assistant sanitary engineers:

\*H. G. Menke, B. C. E., Montgomery.

\*C. C. Kiker, B. C. E., Montgomery.

\*J. C. Carter, E. M., Montgomery.

\*E. B. Johnson, C. P. II., Montgomery.

\*E. M. Craig, Montgomery.

\*N. H. Rector, Montgomery.

\*W. D. Wrightson, Montgomery.

Epidemiologists:

\*K. F. Maxcy, assistant surgeon, United States Public Health Service, Montgomery.

\*T. H. D. Griffiths, assistant surgeon, United States Public Health Service, Montgomery.

County organization:

\*D. L. Cannon, M. D., director, Montgomery.

Public health nursing:

\*Jessie L. Marriner, R. N., director, Montgomery.

\*Elizabeth J. Mackenzie, R. N., assistant director, Montgomery.

\*Francis Montgomery, assistant director, Montgomery.

Venereal disease control:

\*W. C. Blasingame, director, Montgomery.

Field lecturer:

A. J. Dickinson, Birmingham.

Communicable diseases:

Inspection:

\*C. A. Abele, Ch. E., director, Montgomery.

\*T. B. S. Matthews, assistant director, Montgomery.

\*T. A. Belser, assistant director, Montgomery.

Chief clerk:

\*Bessye Tucker, Montgomery.

#### ALASKA.

Board of health:

Scott C. Boas, governor, Juneau.

Harry C. De Vigne, M. D., commissioner of health, Juneau.

Executive health officer:

Harry C. De Vigne, M. D., commissioner of health, Juneau.

Assistant commissioners of health:

Wm. Ramsey, M. D., Council.

J. A. Sutherland, M. D., Fairbanks.

W. H. Chase, M. D., Cordova.

Appropriation for 1923-24..... \$12,000

#### ARIZONA.

Board of health:

Geo. W. P. Hunt, governor, president, Phoenix.

John W. Murphy, attorney general, vice president, Phoenix.

F. T. Fahlen, M. D., secretary, Phoenix.

<sup>1</sup> Reprints Nos. 83, 123, 190, 268, 344, 405, 488, 544, 605, 706, and 775 from the Public Health Reports.

**Executive health officer:**

**F. T. Fahlen, M. D.,** State superintendent of public health, Phoenix.

**Executive secretary:**

\*Texana Lea Williams, Phoenix.

**State registrar of vital statistics:**

F. T. Fahlen, M. D., Phoenix.

**Bureau for control of venereal diseases:**

F. T. Fahlen, M. D., director, Phoenix.

**Child hygiene division:**

\*Mrs. Chas. R. Howe, director, Phoenix.

\*Carolina Valenzuela, R. N., field nurse, Phoenix.

\*Margaret O'Neil, R. N., field nurse, Phoenix.

\*Elizabeth Arnold, R. N.

\*Cathlyn Kessler, R. N., field nurse, Phoenix.

**Bureau of vital statistics:**

\*Mrs. Ruby L. Jacquemin, statistician, Phoenix.

**Director State laboratory:**

\*Miss Jane H. Rider, Tucson.

**Appropriations for fiscal year ending June 30, 1924:**

**Salaries—**

State board of health..... \$9,500  
State laboratory..... 4,500

**Operating expense—**

State board of health..... 6,755  
State laboratory..... 766

**Traveling expense—**

State board of health..... 2,800  
State laboratory..... 334

Total..... 24,655

**ARKANSAS.**

**Board of health:**

Leonidas Dirby, M. D., president, Harrison.

O. L. Williamson, M. D., Marianna.

R. O. Norris, M. D., Tuckerman.

E. H. Stevenson, M. D., Fort Smith.

H. L. Montgomery, M. D., Gravelly.

S. A. Southall, M. D., Lonoke.

F. O. Mahony, M. D., El Dorado.

**Executive health officer:**

\*C. W. Garrison, M. D., State health officer, Little Rock.

**Bureau of vital statistics:**

\*Mrs. Mary Ellis Brown, statistician, Little Rock.

**Hygienic laboratory:**

\*Wm. L. Holt, M. D., acting director, Little Rock.

**Bureau of sanitation and malaria control:**

\*M. Z. Bair, chief sanitary engineer, Little Rock.

**Bureau of venereal disease control:**

\*C. W. Garrison, M. D., director, Little Rock.

**Bureau of child hygiene:**

\*Frances Sage Bradley, M. D., director, Little Rock.

**Appropriations for biennial period ending June 30, 1925:**

Executive department, salaries and miscellaneous..... \$27,800  
Bureau of vital statistics, salaries and miscellaneous..... 28,800  
Payment local registrars..... 29,000

**Appropriations for biennial period ending June 30, 1925—Continued.**

Bureau of venereal disease control..... \$25,000  
Malaria control..... 10,000  
Bureau of sanitation..... 11,400  
Bureau of child hygiene..... 15,000  
Hygienic laboratory..... 17,000  
Total..... 164,000

**CALIFORNIA.**

**Board of health:**

George E. Ebright, M. D., president, San Francisco.

Fred F. Gundrum, M. D., vice president, Sacramento.

Walter M. Dickie, M. D., secretary, Sacramento.

A. J. Scott, jr., M. D., Los Angeles.

Edward F. Glaser, M. D., San Francisco.

Adelaide Brown, M. D., San Francisco.

Robert A. Feers, M. D., Colfax.

**Attorney for board of health:**

John C. McFarland, Los Angeles.

**Executive health officer:**

\*Walter M. Dickie, M. D., secretary and executive officer, State board of health, Sacramento.

\*Mason E. Franklin, assistant to the secretary, Sacramento.

**Epidemiologist:**

\*Frank L. Kelly, M. D., San Francisco.

**District health officers:**

\*Allen F. Gillihan, M. D., northern division.

\*Galvin Telfer, M. D., southern division.

**Sanitary inspector:**

\*Edward T. Ross, Sacramento.

**Bureau of vital statistics:**

\*L. E. Ross, director, Sacramento.

**Bureau of registration of nurses:**

\*Anne C. Jamme, R. N., director, San Francisco.

**Bureau of tuberculosis:**

\*Edith L. M. Tate-Thompson, director, Sacramento.

**Bureau of food and drugs:**

\*Erwin J. Lea, director, Berkeley.

**Bureau of communicable diseases:**

\*W. H. Kellogg, M. D., director, Berkeley.

**Bureau of social hygiene:**

\*Elizabeth McManus, director, Los Angeles.

**Bureau of sanitary engineering:**

\*C. G. Gillespie, C. E., director, Berkeley.

**Bureau of child hygiene:**

\*Ellen S. Stadtmuller, M. D., director, San Francisco.

**Appropriations for biennial period ending June 30, 1925:**

For salaries of employees State board of health..... \$306,298.00  
For support of State board of health..... 248,338.00  
Total..... 554,636.00

**Other sources of revenue:**

Fees for registration of nurses, \$15 each.  
Renewal of registration certificate, \$1 per year.  
Licensing of cold-storage warehouses, rated according to capacity.  
Fines for violation of pure food and drugs act.  
Fees for certified copies of records.

**Publications issued by health department:**

- Biennial report.
- Weekly bulletin.

**COLORADO.**

**Board of health:**

- G. K. Olmsted, M. D., president, Denver.
- C. W. Thompson, M. D., vice president, Pueblo.
- Tracy R. Love, M. D., secretary, Denver.
- M. Ethel V. Fraser, M. D., Denver.
- G. W. Bumpus, D. O., Denver.
- Sherman Williams, M. D., Denver.
- S. R. McKelvey, M. D., Denver.
- J. M. Barney, M. D., Denver.
- A. W. Scott, Fort Collins.

**Executive health officer:**

- Tracy R. Love, M. D., secretary State board of health, Denver.

**Bacteriologist:**

- \*Wm. C. Mitchell, M. D., Denver.

**Medical inspector:**

- \*J. W. Morgan, M. D., Denver.

**State food and drug commissioner:**

- \*S. H. Loeb, Denver.

**Division of venereal diseases:**

- \*S. R. McKelvey, M. D., director, Denver.

**Appropriations for fiscal year ending Nov. 30, 1924:**

Salaries.....	\$23,800
Detention-home fund.....	1 25,000
Laboratory equipment.....	1 2,000
Printing and publications.....	1,250
Traveling expenses.....	4,800
Samples and supplies.....	600
Venereal diseases.....	20,000
Incidental expenses.....	1 2,000
<b>Total.....</b>	<b>79,450</b>

1 Years 1923 and 1924.

**CONNECTICUT.**

**Public health council:**

- Edward K. Root, M. D.
- S. B. Overlock, M. D.
- C.-E. A. Winslow, D. P. H.
- James W. Knox.
- Robert A. Cairns, C. E.
- James A. Newlands.

**Executive health officer:**

- \*Stanley H. Osborn, M. D., C. P. H., commissioner of health, Hartford.

**Bureau of laboratories:**

- C. J. Bartlett, M. D., director.

**Bureau of sanitary engineering:**

- J. Frederick Jackson, director.

**Bureau of preventable diseases:**

- Millard Knowlton, M. D., C. P. H., director.

**Bureau of vital statistics:**

- \*William C. Welling, director.

**Bureau of public health nursing:**

- \*Margaret K. Stack, R. N., director.

**Bureau of child hygiene:**

- \*A. Elizabeth Ingraham, M. D.

**Division of venereal diseases:**

- Daniel E. Shea, M. D., director.

**Bureau of public health instruction:**

- Elizabeth Nickerson.

**Division of mental hygiene:**

\_\_\_\_\_ (vacant).

Paul Waterman, M. D.

**Appropriations for fiscal year ending June 30, 1924:**

General administrative expenses.....	\$17,500.00
Salary, commissioner.....	5,000.00
Purchase and free distribution of antitoxin.....	20,000.00
Preventable diseases.....	17,500.00
Vital statistics.....	15,000.00
Sanitary engineering.....	20,000.00
Laboratory.....	30,000.00
Child hygiene.....	27,500.00
Public health nursing.....	10,000.00
Venereal disease control work.....	10,000.00
Mental hygiene.....	5,000.00
<b>Total.....</b>	<b>177,500.00</b>

**Federal appropriation, venereal disease control.....**

**1,306.05**

**Publications issued by health department:**

- Weekly bulletin.
- Monthly bulletin.
- Annual vital statistics report.
- Biennial report of State department of health.

**DELAWARE.**

**State health and welfare commission:**

- Wm. P. Orr, M. D., president, Lewes.
- Mrs. Chas. Warner, vice president, Wilmington.
- Robert E. Ellegood, M. D., Wilmington.
- Margaret I. Hardy, M. D., Wilmington.
- Mrs. Julia S. Ashbrook, Wilmington.
- Mrs. Harland I. Huston, secretary, Seaford.
- W. P. Peirce, M. D., Milford.

**Executive health officer:**

- \*Arthur T. Davis, M. D., Dover.

**Pathologist and bacteriologist:**

- \*Herbert J. Watson, Newark.

**Supervisor of nurses:**

- \*Marie T. Lockwood, R. N.

**Appropriations for the fiscal year ending June 30, 1924:**

Rural sanitation.....	\$3,000
Vital statistics.....	2,000
Pathological and bacteriological laboratory.....	9,000
Diphtheria antitoxin and immunizing agents.....	1,500
Venereal disease, control work.....	2,000
Child welfare.....	25,000
Tuberculosis.....	45,000
<b>Total.....</b>	<b>87,500</b>

**DISTRICT OF COLUMBIA.**

**Executive health officer:**

- \*William C. Fowler, M. D., health officer, Washington.

**Assistant health officer:**

- \*George M. Boteler, M. D., Washington.

**Chief clerk and deputy health officer:**

- \*Arthur G. Cole, Washington.

**Chief bureau of preventable diseases and director bacteriological laboratory:**

- \*John T. Sprague, M. D., Washington.

**Bacteriologist:**

\*John A. Noble, Washington.

**Serologist:**

\*W. F. Landon, Washington.

**Chemist:**

\*Thomas Malcolm Price, Ph. D., Washington.

**Chief sanitary inspector:**

\*C. R. Holman, Washington.

**Chief food inspector:**

\*Reid R. Ashworth, D. V. S., Washington.

**Chief medical and sanitary inspector of schools:**

\*Joseph A. Murphy, M. D., Washington.

**Appropriations for the fiscal year ending**

June 30, 1924:

Salaries.....	\$100,896
Prevention of communicable diseases.....	40,000
Disinfecting service.....	6,000
Isolation wards at hospitals.....	16,500
Milk and food inspection and regulation.....	7,200
Dispensary service, including treatment of tuberculosis and venereal diseases.....	12,500
Establishing and maintaining a child hygienic service.....	18,000
Miscellaneous.....	12,235
<b>Total.....</b>	<b>213,325</b>

**Publications issued by health department:**

Weekly report by health department.

Annual report of health officer.

Monthly statement of average grade of milk sold.

**FLORIDA.**

**Board of health:**

Calvin T. Young, M. D., president, Plant City.

Charles H. Mann, Jacksonville.

F. Clifton Moore, M. D., Tallahassee.

**Executive health officer:**

\*Raymond C. Turck, M. D., State health officer, Jacksonville.

**Bureau of vital statistics:**

\*Stuart G. Thompson, D. P. H., director, Jacksonville.

**Bureau of sanitary engineering:**

\*George W. Simons, jr., Jacksonville.

**Bureau of diagnostic laboratories:**

\*B. L. Arms, M. D., director, Jacksonville.

**Bureau of communicable disease and health units:**

**Bureau of child welfare:**

\*Mrs. Laurie Jean Reid, R. N., director, Jacksonville.

**Appropriation for health department:**

One-half mill tax levied upon the assessable property of the State; increased from one-quarter mill by 1923 legislature. Money becomes available Jan. 1, 1924.

**Fiscal year ends December 31.**

**Publications issued by health department:**

Pamphlets covering all phases of public health.

Public health information disseminated through the weekly and daily papers of the State.

Florida Health Notes.

**GEORGIA.**

**Board of health:**

W. H. Doughty, jr., M. D., president, Augusta.

James H. McDuffie, M. D., vice president, Columbus.

T. F. Abercrombie, M. D., secretary, Atlanta.

Charles H. Richardson, M. D., Macon.

A. D. Little, M. D., Thomasville.

John W. Daniel, M. D., Savannah.

W. I. Hailey, M. D., Hartwell.

Fred D. Patterson, M. D., Cuthbert.

Robert F. Maddox, Atlanta.

A. C. Shamblin, M. D., Rome.

J. C. Vernaer, M. D., Commerce.

J. L. Walker, M. D., Waycross.

M. S. Brown, M. D., Fort Valley.

M. L. Brittain, State superintendent of schools, ex officio, Atlanta.

Peter F. Bahnsen, State veterinarian, ex officio, Atlanta.

**Executive health officer:**

\*T. F. Abercrombie, M. D., commissioner, Atlanta.

\*Joe P. Bowdoin, M. D., deputy commissioner, Atlanta.

**Division of venereal disease control:**

\*Joe P. Bowdoin, M. D., director, Atlanta.

**Division of county health work:**

\*C. E. Waller, M. D., director, Atlanta.

**Division of malaria control:**

\*M. A. Fort, M. D., director, Atlanta.

**Division of laboratories:**

\*T. F. Sellers, director, Atlanta.

**Division of sanitary engineering:**

\*H. C. Woodfall, director, Atlanta.

**Division of serology:**

\*E. L. Webb, director, Atlanta.

**State tuberculosis sanatorium:**

\*Edson W. Glidden, 2d, M. D., superintendent, Alto.

**Bureau of vital statistics:**

\*W. A. Davis, M. D., director, Atlanta.

**Division of child hygiene:**

\*Alice Moses, M. D., director, Atlanta.

\*Ida M. Alexander, M. D., assistant director, Atlanta.

**Georgia training school for mental defectives:**

\*George H. Preston, M. D., Gracewood.

**Division of accounting and purchasing:**

\*C. L. Tinsley, director, Atlanta.

**Appropriations for the fiscal year ending**

Dec. 31, 1923:

General appropriation.....	\$81,431.00
State tuberculosis sanatorium.....	50,000.00
Venereal disease control.....	10,000.00

Total appropriation by legislature. 141,431.00

Venereal disease control (Federal Government funds)..... 2,739.40

Central administration, county health work (International Health Board funds)..... 1,600.00

Central administration, malaria control (International Health Board funds)..... 4,400.00

Maternity and infancy (Federal Government funds)..... 13,000.00

Grand total..... 163,170.40

<sup>1</sup> For fiscal year ending June 30, 1924.

**HAWAII**

**Board of health:**

- F. E. Trotter, M. D., president and executive officer, Honolulu.
- J. A. Matthewman, attorney general, Honolulu.
- P. Withington, M. D., Honolulu.
- D. S. Bowman, Honolulu.
- E. A. Mott-Smith, Honolulu.
- J. Ordenstein, Honolulu.
- George Denison, Honolulu.

**Executive health officer:**

- \*F. E. Trotter M. D., president of the board of health, Honolulu.

**Secretary:**

- \*M. R. Weir, Honolulu.

**Bacteriologist:**

- A. N. Sinclair, M. D., Honolulu.

**Tuberculosis bureau:**

- A. L. Davis, M. D., director, Honolulu.

**Health officer:**

- James T. Wayson, M. D., Honolulu.

**Sanitary engineer:**

- \*S. W. Tay, Honolulu.

**Food commissioner and analyst:**

- \*M. B. Bairos, Honolulu.

**Oahu insane asylum:**

- \*W. A. Schwallie, M. D., superintendent, Honolulu.

**Leper settlement:**

- \*J. D. McVeigh, superintendent, Kalaupapa, Molokai.
- \*W. J. Goodhue, M. D., resident physician, Kalaupapa, Molokai.

**Chief sanitary inspector, Hawaii:**

- \*C. Charlock, Hilo.

**Chief sanitary inspector, Maui:**

- \*G. Weight, Wailuku.

**Chief sanitary inspector, Kaula:**

- \*F. B. Cook, Waimea.

**Appropriations, 1923-1925:**

**Board of health—**

Salary, president.....	\$12,000
Salary, public health officer.....	8,400
Salary, secretary.....	6,600
Salaries, office employees.....	22,200
Expenses, office.....	10,200
Expenses, board of medical examiners.....	200
Revision public health laws and sanitary code.....	1,200

**Bureau of vital statistics—**

Salary, registrar general.....	5,400
Salaries, deputies and clerks.....	9,000
Salary, registrar, Honolulu.....	3,600
Expenses, office registrar general.....	7,000
Expenses, office registrar, Honolulu.....	600
Printing vital statistics, 1921-1923.....	1,600
Purchase of equipment.....	700

**Bureau of sanitary engineering—**

Salary, sanitary engineer.....	9,600
Salary, draftsman.....	3,600
Expenses.....	2,400

**Sanitation—**

Salary, chief sanitary inspector, Oahu.....	6,000
Salaries, clerks, sanitary and mosquito inspectors, Oahu....	66,720

**Appropriations, 1923-1925—Continued.**

**Sanitation—Continued.**

Salary, chief sanitary inspector, Hawaii.....	\$9,000
Salaries, sanitary inspectors and clerks, Hawaii.....	34,800
Salary, chief sanitary inspector, Maui.....	5,400
Salary, chief sanitary inspector, Kaula.....	5,400
Sanitary expenses, Territory....	21,600
Salaries and expenses, plague campaign.....	60,000
Expenses, mosquito campaign....	5,400
Pure food and drug bureau—	
Salaries.....	18,300
Expenses and assistants.....	4,200
Bacteriological bureau—	
Salary, bacteriologist and pathologist.....	6,000
Expenses and assistants.....	3,000
Government physicians—	
Salaries.....	58,800
Hawaii.....	\$27,240
Maui.....	13,800
Kaula.....	8,160
Oahu.....	9,600
(Provided, however, that no salary shall be allowed or paid unless physicians employed or appointed in the several districts shall treat the indigent sick free of charge in such district or districts, as the case may be.)	
Medical supplies for schools.....	5,000
Quarantine and medical service—	
Salaries.....	22,200
Expenses.....	31,200
Quarantine stations—	
Repairs, maintenance, equipment, and salaries, Honolulu...}	17,500
Repairs, maintenance, equipment, and salaries, Hilo.....}	

**Care of lepers and their children—**

**KALAUAPAPA.**

Salary, superintendent.....	11,400
Salary, physician.....	10,800
Salary, dentist (not prorated)....	8,100
Eye treatment (not prorated)....	2,500
Salaries, assistants and attendants, Bishop Home and Baldwin Home.....	9,000
Salaries, sheriff and police.....	4,800
Allowance, patients.....	37,050
Allowance, needy blind patients, extra \$5 per month.....	4,800
Transfer buildings, Kalawao to Kalaupapa.....	12,000
Construction, roads.....	3,600

**KALIHI HOSPITAL.**

Salary, matron.....	4,200
Salary, officer for lepers.....	4,200
New buildings and equipment....	19,800
Automobile truck.....	1,000

Appropriations, 1923-1925—Continued.  
Care of lepers and their children—  
Continued.

**KALAUAPAPA AND KALEHI.**

Wages, nurses, laborers, attendants, and mechanic.....	\$112,850
Expenses, segregation hospitals and maintenance.....	298,000
Medical supplies and equipment.....	26,344
Amusements.....	3,000
Incidentals.....	2,000

**KAPIOLANI GIRLS' HOME.**

Salaries.....	12,840
Maintenance.....	27,500

**KALIHU BOYS' HOME.**

Salaries.....	15,600
Maintenance.....	21,000

Repairs, segregation hospital, Hilo.....	2,000
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Prevention and cure of tuberculosis— Salaries.....	81,360
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Expenses, including purchase of automobiles.....	48,648
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Purchase and installation of X-ray machine.....	3,500
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Cure and treatment of tubercular patients in sanitariums.....	288,768
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Oahu, Leahi Home. \$126,000

Maui, Kula Sanitarium..... 60,000

Kauai, Samuel Machelona Memorial Hospital..... 48,000

Hawaii, Puumale Home..... 54,768

Improvements  
Puumale Home..... 7,200

Insane asylum— Salary, superintendent.....	8,400
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Pay roll.....	166,116
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Maintenance.....	99,300
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New buildings for female patients.....	20,000
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Amusements.....	600
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Upkeep and repairs to buildings.....	5,500
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Compensation to patients for labor.....	600
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Dental supplies.....	600
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Sanitarium— Salaries, employees.....	19,680
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Maintenance.....	15,800
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Venereal-disease clinic— Salaries.....	10,800
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Expenses.....	4,200
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Insuring and protecting radium.....	1,000
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Purchase radium.....	2,500
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Total..... 1,923,776

Publications issued by health department:  
Annual report of president.

Registrar-general's report.

**IDAHO.**

Department of public welfare:

\*David Burrell, commissioner.

\*F. W. Almond, M. D., medical adviser.

\*Paul A. Mader, bacteriologist.

\*William Vernon Leonard, chemist.

Department of public welfare—Continued.

\*A. H. Wilson, dairy, food, drug, hotel, and sanitary inspector.

\*C. K. Macey, dairy, food, drug, hotel, and sanitary inspector.

Executive health officer:

\*David Burrell, commissioner of public welfare, Boise.

Appropriations for biennial period ending Jan. 3, 1925:

Administrative—  
Personal services (salaries and wages)..... \$39,600

Services other than personal..... 9,650

Supplies..... 2,750

Fixed charges..... 320

Equipment..... 1,500

Venereal-disease control—  
Personal services (salaries and wages)..... 200

Services other than personal..... 2,745

Supplies..... 55

Capital outlay..... 2,000

Quarantining venereal-disease patients in venereal-disease control..... 1,200

Total..... 69,620

**ILLINOIS.**

Director of public health:

\*Isaac D. Rawlings, M. D., Springfield.

Assistant director of public health:

\*Thomas H. Leonard, M. D.

Division of sanitation and engineering:

\*Harry F. Ferguson, C. E., chief sanitary engineer.

Division of communicable diseases:

\*J. J. McShane, M. D., D. P. H., chief.

Division of child hygiene and public-health nursing:

\*C. W. East, M. D., chief.

Division of tuberculosis:

\*Thomas H. Leonard, M. D., acting chief.

Division of laboratories:

\*Thomas G. Hull, Ph. D., chief.

Division of vital statistics:

\*Sheldon L. Howard, registrar.

Division of public-health instruction:

\*Baxter K. Richardson, chief.

Division of social hygiene:

\*C. C. Copelan, M. D., chief.

Division of hotel and lodging-house inspection:

\*W. W. McCulloch, superintendent.

Appropriations for fiscal year ending June 30, 1924:

Salaries..... \$261,360

Salaries State officers..... 12,600

Office expenses..... 10,250

Traveling expenses..... 51,800

Operating, supplies and expenses..... 101,210

Equipment and repairs..... 9,200

Contingent..... 13,850

Printing..... 20,000

Postage..... 6,650

Operating emergency..... 10,446

Total..... 497,366

Publications issued by health department:

Illinois Health News (monthly).

Social Hygiene (monthly).

Weekly press bulletin.

**INDIANA.**

**Board of health:**

- Hugh A. Cowing, M. D., president, Muncie.
- Adah McMahan, M. D., vice president, La Fayette.
- Charles B. Kern, M. D., La Fayette.
- John H. Green, M. D., North Vernon.
- Dr. William F. King, secretary, Indianapolis.

**Executive health officer:**

- \*William F. King, M. D., State health commissioner, Indianapolis.

**Assistant State health commissioner:**

- \*J. G. Royse, M. D., Indianapolis.

**Division of statistics:**

- \*H. M. Wright, director, Indianapolis.

**Laboratory of hygiene:**

- \*A. G. Leng, M. D., C. P. H., director, Indianapolis.

**Division of food and drugs:**

- \*Ivy Miller, State food and drug commissioner, Indianapolis.

**Traveling milk laboratory:**

- \*Frank C. Wilson, director, Indianapolis.

**Water and sewage laboratory:**

- \*L. A. Geupel, sanitary engineer, Indianapolis.

**Division of child hygiene:**

- \*Ada E. Schweitzer, M. D., director, Indianapolis.

**Division of tuberculosis:**

- \*H. W. McKane, M. D., director, Indianapolis.

**Division of epidemiology:**

- \*A. G. Long, M. D., C. P. H., director, Indianapolis.

**Division of venereal diseases:**

- \*J. G. Royse, M. D., director, Indianapolis.

**Division of school hygiene:**

- \*H. R. Condrey, director, Indianapolis.

**Division of housing:**

- \*A. E. Wert, director, Indianapolis.

**Department of public health nursing:**

- \*Ina M. Gaskill, R. N., director, Indianapolis.

Appropriations for fiscal year ending September 30, 1924, \$170,000.

**IOWA.**

**Board of health:**

- C. S. Grant, M. D., president, Iowa City.
- Frank T. Launder, M. D., Garwin.
- N. E. Kendall, governor, Des Moines.
- W. C. Ramsay, secretary of state, Des Moines.
- G. C. Haynes, auditor of state, Des Moines.
- W. J. Burbank, treasurer of state, Des Moines.
- Hans V. Pedersen, sanitary engineer, Des Moines.
- G. F. Severs, M. D., Centerville.
- Henry C. Eschbach, M. D., Albia.
- C. S. Grant, M. D., Iowa City.

**Executive health officer:**

- \*Rodney P. Fagen, M. D., State health commissioner, Des Moines.

**Assistant secretary:**

- \*H. W. Grete, Des Moines.

**Chief clerk:**

- \*L. V. Clemens, Des Moines.

**Laboratories:**

- \*Don M. Griswold, M. D., director, Iowa City.

**Sanitary engineer:**

- \*Hans V. Pedersen, Des Moines.

**Bureau of venereal diseases:**

- W. S. Conkling, M. D., director.

**Lecturer in charge of women's work:**

- \*Jeannette F. Throckmorton, M. D.

**State housing commissioner:**

- \*Edwin H. Sands.

**Appropriations for fiscal year ending June 30, 1924:**

State board of health work.....	\$10,000
Housing department.....	5,000
Bacteriological laboratory.....	22,000
Antitoxin department.....	2,000
Vital statistics.....	10,000
Salaries of employes.....	19,900
Social hygiene.....	25,000
<b>Total.....</b>	<b>93,900</b>

(The above does not include special appropriation for clerical assistance.)

**Publications issued by health department:**

- Biennial report.
- Quarterly bulletin.

**KANSAS.**

**Board of Health:**

- Jos. E. Hawley, M. D., president, Burr Oak.
- J. J. Entz, M. D., vice president, Marion.
- H. L. Aldrich, M. D., Caney.
- Henry Smith, M. D., Washington.
- D. E. Smith, M. D., Kansas City.
- O. D. Walker, M. D., Sallina.
- J. T. Axtell, M. D., Newton.
- C. A. Fisher, M. D., Paola.
- C. H. Lerrigo, M. D., Topeka.
- Harry K. Allen, attorney.

**Executive health officer:**

- Milton O. Nyberg, M. D., secretary State board of health, Topeka.

**Division of vital statistics:**

- J. W. Davies, State registrar, Topeka.

**Division of communicable diseases and sanitation:**

- C. H. Kinnaman, M. D., chief, Topeka.

**Division of foods and drugs:**

- Frank Rowland, assistant chief food and drug inspector, Topeka.

**Division of child hygiene, and public health nursing:**

- Helen Moore, M. D., chief, Topeka.

**Division of water and sewage:**

- Prof. Albert Jewell, chief, Lawrence.

**Division of public health education:**

- Milton O. Nyberg, M. D., director, Topeka.

**Division of venereal diseases:**

- Milton O. Nyberg, acting assistant surgeon, U. S. P. H. S., director, Topeka.

**Water and sewage laboratories at Kansas University:**

- Prof. Albert Jewell, director, Lawrence.

**Food laboratory at Kansas University:**

- Prof. E. H. S. Bailey, director of food analyses, Lawrence.

**Drug laboratory at Kansas University:**

- Prof. L. E. Sayre, director of drug analyses, Lawrence.

**Food laboratory at Kansas Agricultural College:**

- Prof. H. H. King, director of food analyses, Manhattan.

**Public health laboratory, Topeka:**

- William Levin, D. P. H., director, Topeka.

**Appropriations for fiscal year ending June 30, 1924:**

Salaries.....	\$20,700
Miscellaneous.....	4,500
Water and sewage division.....	3,000
Free distribution of antitoxins, etc.....	2,500
Suppression of communicable diseases.....	10,000
Public health laboratory.....	7,000
Division of child hygiene.....	7,500
Division of food and drugs.....	6,000
Division of venereal diseases.....	3,000
<b>Total.....</b>	<b>64,200</b>

**Other sources of revenue:**

Marriage fees, approximately \$10,000.  
Water and ice analysis fees, approximately \$14,000.

Food and drug laboratories at Kansas University maintained by university maintenance fund, and food laboratory at Kansas Agricultural College maintained by agricultural college maintenance fund.

Publications issued by health department:  
Monthly bulletin.  
Biennial report.

**KENTUCKY.**
**Board of health:**

L. S. McMurry, M. D., president, Louisville.  
W. W. Richmond, M. D., Clinton.  
George T. Fuller, M. D., Mayfield.  
H. H. Carter, D. O., Shelbyville.  
Joseph E. Wells, M. D., Cynthiana.  
George S. Coon, M. D., Louisville.  
F. A. Stine, M. D., Newport.  
O. C. Dilly, M. D., Louisville.  
A. T. McCormack, M. D., secretary, Louisville.

**Executive health officer:**

\*A. T. McCormack, M. D., State health officer, Louisville.

**Bureau of vital statistics:**

\*J. F. Blackerby, director, Louisville.

**Bureau of bacteriology:**

\*Lillian H. South, M. D., director, Louisville.

**Bureau of sanitary engineering:**

\*F. C. Dugan, State sanitary engineer, Louisville.

**Bureau of food, drugs, and hotels:**

\*Sarah H. Vance, director, Louisville.

**Bureau of venereal diseases:**

\*Jethra Hancock, M. D., Louisville.

**Bureau of tuberculosis:**

\*J. S. Lock, M. D., director, Louisville.

**Bureau of public health nursing:**

\*Marian Williamson, R. N., director, Louisville.

**Bureau of child hygiene:**

\*Annie S. Veech, M. D., Louisville.

**Bureau of prevention of trachoma and blindness:**

\*C. B. Kobert, M. D., director, Louisville.

**Bureau of public health education:**

\*Mrs. Maud Strittmatter, R. N., acting director, Louisville.

**Bureau of county health work:**

\*P. E. Blackerby, M. D., director and assistant State health officer, Louisville.

**Bureau of mental hygiene:**

Frank O'Brien, M. D., director, Louisville.

**State tuberculosis sanitarium:**

\*S. W. Bates, superintendent, Louisville.

Total income for fiscal year ending June 30, 1923, \$217,352.51.

Publications issued by health department:  
Monthly bulletin.

**LOUISIANA.**
**Board of health:**

Oscar Dowling, M. D., Shreveport.  
J. M. Mosely, M. D., Arcadia.  
T. T. Tarlton, M. D., Grand Coteau.  
L. C. Chamberlain, M. D., New Orleans.  
B. A. Ledbetter, M. D., New Orleans.  
M. W. Swords, M. D., secretary, New Orleans.

**Executive health officer:**

\*Oscar Dowling, M. D., president State board of health, New Orleans.

**Bacteriologist:**

W. H. Seemann, M. D., New Orleans.

**Registrar:**

J. Geo. Dempsey, M. D., New Orleans.

**Sanitary engineers:**

\*John H. O'Neill, New Orleans.  
H. S. Henning, Assistant.

**Child hygiene:**

\*Agnes Morris, New Orleans.  
Maud Loeber, M. D., medical director, New Orleans.

**Analyst:**

\*J. Roy Keeny, Phar. D., New Orleans.

**Bureau of venereal diseases:**

\*Leonard C. Scott, acting assistant surgeon, U. S. P. H. S., New Orleans.

**Bureau of Public Health Administration:**

\*K. E. Miller, surgeon, U. S. P. H. S., New Orleans.

**Medical entomology:**

\*Geo. E. Beyer, New Orleans.

**Appropriations for fiscal year ending June 30, 1924:**

Isolation hospital at Alexandria.....	\$12,500
Venereal disease control work.....	12,500
General.....	75,000
<b>Total.....</b>	<b>100,000</b>

**Other source of revenue:**

Fees from inspection of oil.

**Publications issued by health department:**

Monthly bulletin.  
Quarterly bulletin.  
Annual almanac.  
Biennial report.  
Miscellaneous leaflets.

**MAINE.**
**Public health council:**

C. F. Kendall, M. D., chairman, Augusta.  
F. N. Whittier, M. D., Brunswick.  
J. Q. Gulnac, Bangor.  
Hiram Ricker, South Poland.  
W. N. Miner, M. D., Calais.

**Executive health officer:**

\*C. F. Kendall, M. D., State commissioner of health, Augusta.

**Division of administration:**

\*C. F. Kendall, M. D., Augusta.

**Division of communicable diseases:**

\*A. G. Young, M. D., director, Augusta.

**Division of laboratories:**

\*John Hewat, M. D., director, Augusta.

**Division of sanitary engineering:**

\*Elmer W. Campbell, D. P. H., Augusta.

**Division of vital statistics:**

\*C. F. Kendall, M. D., State registrar, Augusta.

**Division of venereal diseases:**

\*George H. Coombs, M. D., director, Augusta.

**Division of public health nursing and child hygiene:**

\*Edith L. Soule, R. N., Augusta.

**Division of dental hygiene:**

\_\_\_\_\_, director.

**District health officers:**

\*J. L. Pepper, M. D., South Portland.

\*E. P. Goodrich, M. D., Lewiston.

\*J. W. Loughlin, M. D., Damariscotta.

\*H. L. Lombard, M. D., Presque Isle.

\*H. D. Worth, M. D., Bangor.

\*G. H. Hutchins, M. D., Waterville.

\*William N. Tukey, M. D., Machias.

**Appropriations for fiscal year ending June 30, 1924:**

Salaries and clerk hire.....	\$33,000
Office expense and epidemic fund.....	20,000
District and local health officers.....	38,000
Venereal-disease control work.....	14,000
<b>Total.....</b>	<b>105,000</b>

**Other source of revenue:**

Census Bureau, Washington, D. C., about \$800.

**Publications issued by the department of health:**

Annual report of department of health.

Annual report on vital statistics.

Bimonthly bulletin.

**MARYLAND.**

**Board of health:**

John S. Fulton, M. D., chairman, Baltimore.

William H. Welch, M. D., Baltimore.

Alexander Armstrong, attorney general, Baltimore.

William W. Ford, M. D., Baltimore.

C. Hampson Jones, M. D., Baltimore.

Tolley A. Biays, Baltimore.

Benjamin C. Perry, M. D., Bethesda.

E. F. Kelly, Phar. D., Baltimore.

**Executive health officer:**

\***John S. Fulton, M. D.**, director of health, Baltimore.

**Division of public health nursing:**

\*Lydia R. Martin, R. N., chief, Baltimore.

**Division of public health education:**

\*Gertrude B. Knipp, chief, Baltimore.

**Bureau of communicable diseases:**

\*Robert H. Riley, M. D., chief, Baltimore.

**Bureau of vital statistics:**

Frederic V. Beitler, M. D., Baltimore.

**Food and drug commissioner:**

\*A. L. Sullivan, chief, Baltimore.

**Bureau of bacteriology:**

\*R. C. Salter, chief, Baltimore.

**Bureau of sanitary engineering:**

\*Abel Wolman, chief, Baltimore.

**Bureau of chemistry:**

\*Wyatt W. Randall, Ph. D., chief, Baltimore.

**Bureau of personnel and accounts:**

\*Walter N. Kirkman, chief, Baltimore.

**Bureau of child hygiene:**

J. H. Mason Knox, jr., M. D., chief, Baltimore.  
Appropriations for fiscal year ending

Sept. 30, 1923:

Salaries.....	\$192,068.00
Expenses.....	88,429.05

Total..... 280,497.05

**Publications issued by health department:**

Annual report.

**MASSACHUSETTS.**

**Public health council:**

Eugene R. Kelley, M. D., chairman, Boston.

Roger I. Lee, M. D., Cambridge.

J. E. Lamoureaux, M. D., Lowell.

Richard C. Strong, M. D., Boston.

Warren C. Jewett, Worcester.

Sylvester E. Ryan, M. D., Springfield.

James L. Tighe, Holyoke.

**Executive health officer:**

\***Eugene R. Kelley, M. D.**, State commissioner of public health, Boston.

**Division of administration:**

\*\_\_\_\_\_, director.

**Division of communicable diseases:**

\*Bernard W. Carey, M. D., director, Boston.

**Division of sanitary engineering:**

\*X. H. Goodnough, director and chief engineer, Boston.

**Division of water and sewage laboratories:**

\*H. W. Clark, director and chemist, Boston.

**Division of biologic laboratories:**

\*Benjamin White, Ph. D., director and pathologist, Boston.

**Division of food and drugs:**

\*Herman C. Lythgoe, director and analyst, Boston.

**Division of hygiene:**

\*Merrill E. Champion, M. D., director, Boston.

**Division of tuberculosis sanatoria:**

\*Sumner H. Remick, M. D., director, Boston.

**Appropriations for department of public health, 1923:**

**Division of administration—**

Salary of commissioner.....	\$7,500.00
Personal services.....	12,400.00
Other than personal.....	7,300.00

**Division of hygiene—**

Personal services of director and assistants.....	22,200.00
Services other than personal..	17,100.00
Personal services in connection with maternal and infant hygiene.....	29,030.00
Expenses in connection with maternal and infant hygiene.....	16,020.00

**Division of communicable diseases—**

Personal services of director district health officers, etc..	58,700.00
Services other than personal..	20,000.00

(The appropriations made in the following items are in addition to any Federal funds now in the treasury or hereafter received which may be used for these purposes.)

Appropriations for department of public health,  
1923—Continued.

Subdivision of venereal diseases—	
For personal services.....	\$14,087.00
Services other than personal..	22,400.00
Manufacture and distribution of arsphanamine—	
For personal services.....	8,970.00
Services other than personal..	8,890.00
Wassermann laboratory—	
For personal services.....	11,000.00
For expenses of laboratory... .	5,600.00
Antitoxin and vaccine lymph—	
For personal services.....	35,620.00
Other services.....	30,000.00
Inspection of foods and drugs—	
For personal services.....	36,250.00
Other services.....	12,500.00
Water supply and disposal of sewage, engineering division—	
For personal services.....	41,900.00
For other services.....	10,700.00
Water supply and disposal of sewage, division of water and sewage laboratories—	
For personal services.....	29,500.00
For other services.....	7,700.00
State examiners of plumbers—	
For personal services.....	5,000.00
Penikese Islands—	
For services of caretaker.....	1,500.00
Division of tuberculosis—	
For personal services.....	15,600.00
Services other than personal..	3,800.00
Payment of subsidies.....	180,028.64
For maintenance of and for certain improvements at the Lakeville, North Reading, Rutland, and Westfield State sanatoria.....	903,710.00
<b>Total.....</b>	<b>1,574,998.64</b>

Publications issued by department of public health:  
Monthly bulletin.  
Annual report.  
Miscellaneous pamphlets dealing with health  
matters.

**MICHIGAN.**

Advisory council of health:

Guy L. Kiefer, M. D., president, Detroit.  
C. C. Stemons, M. D., Grand Rapids.  
Frank M. Gowdy, M. D., St. Joseph.  
Leland W. Carr, Lansing.  
Robert B. Harkness, Houghton.

Executive health officer:

\*Richard M. Olin, M. D., State health commissioner, Lansing.

Deputy health commissioner:

\*George H. Ramsey, M. D., Lansing.

Bureau of engineering:

\*E. D. Rich, C. E., director.  
\*William Hirn, C. E., assistant engineer.  
\*Ernest F. Badger, chemical engineer.  
\*John M. Hopler, C. E., S. E., assistant engineer.  
\*Willard F. Shepherd, B. S. E., assistant engineer.  
\*Chas. L. Orr, water inspector.

Bureau of laboratories:

\*C. C. Young, Ph. D., director.  
\*Minna Crooks, R. N., bacteriologist.  
\*R. L. Kahn, D. Sc., immunologist.  
\*A. B. Haw, clinical pathologist.  
\*S. R. Johnson, D. V. S., veterinary pathologist.  
\*Chas. L. Bliss, chemist.

Bureau of nursing and child hygiene:

\*Blanche Haines, M. D., director.

Bureau of communicable diseases and vital statistics:

\*W. J. V. Deacon, M. D., D. P. H., director.

Bureau of institutional health administration:

Bureau of education:

\*Marjorie Delavan, director.

Bureau of embalming:

\*F. J. Pienta, director.

Appropriations for fiscal year ending June  
30, 1924:

Personal service.....	\$175,000
Supplies.....	34,000
Contractual service.....	32,500
Fixed charges.....	26,000
Outlay for equipment.....	12,800
<b>Total.....</b>	<b>280,300</b>
Institutional health—	
Personal service.....	25,400
Supplies.....	500
Traveling expense.....	3,000
Outlay for equipment.....	1,750
<b>Total.....</b>	<b>30,650</b>
Antitoxin operation.....	67,500
Child hygiene and public-health nursing.....	30,000
<b>Grand total.....</b>	<b>408,450</b>

Publications issued by health department:

Monthly bulletin.  
Annual report.  
Communicable disease pamphlets.  
Sex hygiene pamphlets.  
Child hygiene pamphlets.  
Engineering bulletins.

**MINNESOTA.**

Board of health:

C. L. Soolfield, M. D., President, Benson.  
S. Marx White, M. D., vice president, Minneapolis.  
N. M. Watson, M. D., Red Lake Falls.  
L. P. Wolf, C. E., St. Paul.  
R. C. Hunt, M. D., Fairmont.  
H. R. Weirick, M. D., Hibbing.  
J. A. Thabes, M. D., Brainerd.

Executive health officer, Capitol, St. Paul:

\*A. J. Chesley, M. D., secretary and executive officer.

Division of records, Capitol, St. Paul:

\*O. C. Pierson, director.

Division of preventable diseases, University Campus, Minneapolis:

\*O. McDaniel, M. D., director.  
\*E. M. Wade, chief of laboratories.

Division of sanitation, University Campus, Minneapolis.

\*H. A. Whittaker, director.

Division of vital statistics, Capitol, St. Paul:

\*Mrs. Gerda C. Pierson, director.

Division of venereal diseases, University Campus, Minneapolis:

H. G. Irvine, M. D., director.

\_\_\_\_\_, educational supervisor (vacant).

\*Audrey Walton, chief social worker.

Division of child hygiene, University Campus, Minneapolis:

\*E. C. Hartloy, M. D., director.

\*Ruth Houlton, R. N., superintendent of public-health nursing.

Appropriations for fiscal year ending June 30, 1924:

General fund.....	\$20,000
Vital statistics.....	12,000
Communicable diseases.....	25,000
Laboratories.....	42,500
Sanitary engineering.....	7,000
Free antitoxin.....	10,000
Prevention of blindness.....	1,000
Venereal diseases.....	25,000
Protection for maternity and infancy..	15,000
<b>Total.....</b>	<b>157,500</b>

Other sources of revenue:

Aid from county and city for branch laboratory at Duluth.....	900
U. S. P. H. S. venereal-disease aid (1924 only).....	2,258
"Sheppard-Towner" aid, \$15,000+ \$5,000 (gift).....	20,000

Publications issued by health department:  
Educational pamphlets.  
Biennial report.

**MISSISSIPPI.**

Board of health:

- W. W. Hall, M. D., president, Shelby.
- J. H. McNeill, M. D., Olive Branch.
- B. Lampton Crawford, M. D., Tylertown.
- T. F. Elkin, M. D., Tupelo.
- H. F. Garrison, M. D., Clinton.
- L. L. McDougal, M. D., Boonville.
- C. D. Mitchell, M. D., Jackson.
- I. L. Parsons, M. D., Brookhaven.
- T. W. Reagan, M. D., Union.
- E. M. Gavin, M. D., Overtt.
- W. H. Watson, M. D., Brandon.
- J. H. Windham, M. D., Ecpu.

Executive health officer:

\*W. S. Leathers, M. D., executive officer, State board of health, Jackson.

Bureau of vital statistics:

\*R. W. Hall, M. D., director, Jackson.

Bureau of child welfare:

\*F. J. Underwood, M. D., director, Jackson.

Hygienic laboratory:

\*C. R. Stingily, M. D., director, Jackson.

Bureau of sanitary inspection:

\*Robt. Longino, M. D., chief sanitary inspector, Jackson.

Bureau of sanitary engineering:

\*H. A. Kroeze, C. E., State sanitary engineer, Jackson.

Bureau of rural sanitation:

\*C. C. Applewhite, M. D., director, Jackson.

\*C. M. Shipp, M. D., epidemiologist in charge of malaria control work, Jackson.

Bureau of venereal diseases:

\*Hardie Hays, M. D., director, Jackson.

Bureau of public health nursing:

\*Mary D. Osborne, R. N., director, Jackson.

Appropriations for fiscal year ending Dec. 31, 1923:

Administrative office.....	\$23,000
Bureau of vital statistics.....	12,000
Municipal sanitation.....	12,000
Rural sanitation.....	27,000
Hygienic laboratory.....	20,000
Child welfare.....	30,000
Venereal diseases.....	16,000
<b>Total.....</b>	<b>140,000</b>

Publications issued by health department:

- Biennial report.
- Monthly bulletin.

**MISSOURI.**

Board of health:

- Emmett P. North, M. D., president, St. Louis.
- R. S. Vitt, M. D., vice president, St. Louis.
- E. E. Brunner, M. D., Carrollton.
- Cortez F. Enloe, M. D., secretary, Jefferson City.
- T. A. Son, M. D., Bonne Terre.
- T. H. Wilcoxon, M. D., Bowling Green.
- J. R. McVay, M. D., Kansas City.

Executive health officer:

\*Cortez F. Enloe, M. D., secretary of State board of health, and State commissioner of health, Jefferson City.

Bureau of vital statistics:

\*James Wark, statistician, Jefferson City.

Division of child hygiene:

\*Irl Brown Krause, M. D., director, Jefferson City.

Division of rural sanitation:

\*Thomas Farran, jr., M. D., director, Jefferson City.

Division of venereal disease:

\*R. L. Russell, M. D., director, Jefferson City.

Division of prevention of blindness:

Wm. H. Pickett, M. D., director, Jefferson City.

Division of sanitary engineering:

\*George W. Putnam, director, Jefferson City.

Appropriations for biennial period ending Dec. 31, 1924:

Board of health fund, bureau of license.....	\$20,000
Salaries.....	35,100
Salaries of sanitary engineering department, suppressing of venereal diseases and tuberculosis, and the continuation and support of child hygiene and rural sanitation work...	50,700
Cooperative rural sanitation and child hygiene work.....	100,000
Laboratory and contingent expense...	36,000
Prevention of blindness, epidemic and laboratory services and biologics.....	50,000
<b>Total.....</b>	<b>291,800</b>

\$100,000 of the above appropriation is being withheld by the governor until State revenues are sufficient for a release.

**MONTANA.****Board of Health:**

D. J. Donohue, M. D., president, Butte.  
 E. M. Porter, M. D., vice president, Great Falls.  
 B. L. Pampel, M. D., Livingston.  
 E. G. Balsam, M. D., Billings.  
 L. H. Fligman, M. D., Helena.

**Executive health officer:**

\*W. F. Cogswell, M. D., secretary, Helena.

**Division of communicable diseases:****Division of child welfare:**

\*Hazel Dell Bonness, M. D., director, Helena.

**Division of Food and Drugs:**

\*H. M. Shea, director, Helena.

**Division of vital statistics:**

\*W. F. Cogswell, M. D., State registrar, Helena.

\*L. L. Benepe, deputy State registrar, Helena.

**Division of water and sewage:**

W. M. Cobleigh, director, Bozeman.

\*H. B. Foote, bacteriologist, Bozeman.

**Water and sewage laboratory and food and drug laboratory:**

W. M. Cobleigh, director, Bozeman.

E. J. Quinn, analyst, Bozeman.

**Hygienic laboratory:**

\*Richard M. Johnson, bacteriologist, Helena.

**Appropriations for the year ending June 30, 1924:**

(Appropriations for salaries and expenses of State board of health are made in lump sum. The budget given is tentative and not arbitrarily fixed. Unexpended sums of one division may be diverted to other divisions when deemed necessary.)

**General administration—**

Salaries..... \$6,800.00

Expenses..... 1,910.00

Division of child welfare..... 8,704.92

Hygienic laboratory..... 6,900.00

Inspection of water plants..... 4,000.00

Food and water laboratory..... 3,325.00

Enforcing food and drugs law..... 4,650.00

Division of communicable diseases... 4,425.00

Division of vital statistics..... 2,975.00

Board of entomology (Rocky Mountain spotted fever work)..... 14,228.00

Total..... 57,914.92

**Other source of revenue:**

Fees for embalmers' licenses.

**Publications issued by health department:**

Monthly bulletin.

Special bulletin on communicable diseases.

Biennial report.

**NEBRASKA.****Department of health and welfare:**

J. D. Case, M. D., superintendent, Lincoln.

**Bureau of health—**

Executive health officer and epidemiologist:

J. D. Case, M. D., superintendent, department of health and welfare, Lincoln.

**Bacteriologist:**

\*L. O. Vose, Lincoln.

**Division of venereal diseases:**

\*P. H. Bartholomew, M. D., director, Lincoln.

**Department of health and welfare—Continued.****Bureau of health—Continued.****Statistician:**

\*May F. Hyland, Lincoln.

**Division of child hygiene:**

\*Mrs. C. H. England, director.

**Sanitary engineer:**

\_\_\_\_\_ (vacant).

**Medical examining board:**

J. E. Spatz, M. D., Fairfield.

H. J. Lehnhoff, M. D., Lincoln.

E. T. McGuire, M. D., Mead.

**Appropriations for biennial period**

ending June 30, 1925:

Salaries..... \$45,000

Maintenance..... 23,000

Total..... 68,000

**NEVADA.****State board of health:**

Jas. G. Scrugham, governor, president, Carson City.

S. L. Lee, M. D., secretary, Carson City.

W. G. Greathouse, secretary of state.

W. H. Hood, M. D., Reno.

Henry Albert, M. D., Reno.

**Executive health officer:**

\*S. L. Lee, M. D., secretary, State board of health, Carson City.

**State hygienic laboratory at State University:**

Henry Albert, M. D., director, Reno.

**Appropriation for fiscal year ending Dec.**

31, 1924:

Salary of secretary..... \$5,000

State board of health..... 3,800

Total..... 8,800

**Publications issued by health department:**

Biennial report.

Special bulletins

**NEW HAMPSHIRE.****Board of health:**

Robert Fletcher, Ph. D., C. E., president, Hanover.

D. E. Sullivan, M. D., Concord.

George C. Wilkins, M. D., Manchester.

Sibley G. Morrill, M. D., Concord.

Fred H. Brown, governor, Somersworth.

Irving A. Hinkley, attorney general, Laconia.

**Executive health officer:**

\*Charles Duncan, M. D., secretary State board of health, Concord.

**Laboratory of hygiene:**

\*Charles D. Howard, chemist, Concord.

\*Clara Israeli, M. D., bacteriologist, Concord.

William R. McLeod, assistant bacteriologist, Concord.

\*Joseph X. Duval, inspector, Concord.

\*Charles L. Pool, sanitary engineer.

Robert Fletcher, C. E., engineer, Hanover.

**Bacteriological laboratory:**

H. N. Kingsford, M. D., bacteriologist, Hanover.

**Venereal disease division:**

\*Charles A. Weaver, M. D., Manchester.

Appropriations for fiscal year ending June 30, 1925:

State board of health.....	\$28,650
Laboratory of hygiene.....	18,300
Vital statistics.....	5,300
Total.....	52,250

Publications issued by health department:  
 Bulletin.  
 Biennial report.

**NEW JERSEY.**

Board of health:  
 Thomas B. Lee, M. D., president, Camden.  
 Clyde Potts, C. E., vice president, Morristown.  
 Oliver Kelly, Oak Tree.  
 H. E. Winter, V. M. D., Plainfield.  
 J. Oliver McDonald, M. D., Trenton.  
 Harold J. Harder, C. E., Paterson.  
 David D. Chandler, Newark.  
 Henry Spence, M. D., Jersey City.  
 Mrs. James E. Van Horne, Trenton.  
 Miss Margaret McNaughton, Jersey City.  
 J. E. H. Guthrie, D. D. S., Newark.

Executive health officer:  
 \*Jacob C. Price, M. D., director of health, Trenton.

Bureau of bacteriology:  
 \*John V. Mulcahy, chief, Trenton.

Bureau of chemistry:  
 \*John E. Bacon, chief, Trenton.

Bureau of administration:  
 \*Charles J. Merrell, chief, Trenton.

Bureau of food and drugs:  
 \*Walter W. Scofield, chief, Trenton.

Bureau of child hygiene:  
 Julius Levy, M. D., consultant, Trenton.

Bureau of local health administration:  
 \*David C. Bowen, chief, Trenton.

Bureau of engineering:  
 \*H. P. Croft, chief, Trenton.

Bureau of vital statistics:  
 \*David S. South, chief, Trenton.

Bureau of venereal-disease control:  
 A. J. Casselman, M. D., consultant, Trenton.

Appropriations for fiscal year ending June 30, 1924:

Salaries.....	\$140,000
Miscellaneous.....	73,800
Child hygiene.....	60,000
Venereal-disease control.....	25,000
Total.....	298,800

Publications issued by health department:  
 Monthly bulletin.  
 Annual report.

**NEW MEXICO.**

Board of public welfare:  
 Mrs. Francis S. Wilson, chairman, Santa Fe.  
 Dr. R. O. Brown, secretary, Santa Fe.  
 Mr. A. J. Connell, Otowi.  
 Mrs. B. Archibald, East Las Vegas.  
 Mrs. Max Nordhaus, Albuquerque.

Executive health officer:  
 \*G. S. Luckett, M. D., director of public health, Santa Fe.

Division of preventable diseases:  
 \*G. S. Luckett, M. D., chief, Santa Fe.

Division of vital statistics:  
 \*P. M. Ruleau, chief, Santa Fe.  
 Division of sanitary engineering and sanitation:  
 \*Paul S. Fox, B. S. in C. E., chief, Santa Fe.  
 Divisions of public health nursing and child hygiene:  
 \*Helen B. Fenton, R. N., chief, Santa Fe.  
 Division of county health work:  
 \*D. B. Williams, M. D., chief, Santa Fe.  
 Public health laboratory:  
 \*Myrtle Greenfield, chief, Albuquerque.  
 Appropriation for the years 1924 and 1925, \$28,500.00 per annum.

**NEW YORK.**

Public health council:  
 \*Simon Flexner, M. D., LL. D., chairman, New York.  
 Homer Folks, LL. D., New York.  
 Henry N. Ogden, C. E., Ithaca.  
 T. Mitchell Prudden, M. D., LL. D., New York.  
 Jacob Goldberg, M. D., Buffalo.  
 Stanton P. Hull, M. D., Petersburg.

Executive health officer:  
 \*Matthias Nicoll, jr., M. D., commissioner of health, Albany.

Deputy commissioner of health:  
 \*Paul B. Brooks, M. D., Albany.

Secretary:  
 Edward H. Marsh, M. D.

Executive clerk:  
 \*Fenimore D. Beagle, Albany.

Division of public health education:  
 \*B. R. Rickards, director, Albany.

Division of sanitation:  
 \*Charles A. Holmquist, C. E., director, Albany.

Division of vital statistics:  
 \*Otto R. Eichel, M. D., director, Albany.

Division of child hygiene:  
 \*Florence L. McKay, M. D., director, Albany.

Division of communicable diseases:  
 \*Edward S. Godfrey, M. D., director, Albany.

Division of tuberculosis:  
 \*Jonathan Pearson, M. D., director, Albany.

Division of venereal diseases:  
 \*J. S. Lawrence, M. D., director, Albany.

Division of laboratories and research:  
 \*Augustus B. Wadsworth, M. D., director, Albany.

Division of public health nursing:  
 \*Mathilde S. Kuhlman, R. N., director, Albany.

Appropriations for fiscal year ending June 30, 1924:

Personal service.....	\$618,570
Maintenance and operation.....	328,652
Division of maternity, infancy, and child hygiene.....	130,000
Division of maternity, infancy, and child hygiene, special.....	76,000
For State aid to county laboratories.....	25,000
Total.....	1,178,222

Construction of addition to laboratories..... 75,000

Grand total..... 1,253,222

**Other sources of revenue:**

Fees from certified transcripts of birth, death, and marriage certificates, approximately \$1,000 per annum.

Licensing laboratories, \$311.

Sale of serums, \$4,000.

**Publications issued by health department:**

- Monthly Health News.
- Health Officers' Bulletin.
- Vital Statistics Bulletin.
- Public Health Nurses' Bulletin.

**NORTH CAROLINA.**

**Board of health:**

- J. Howell Way, M. D., president, Waynesville.
- Richard H. Lewis, M. D., LL.D., Raleigh.
- Thomas E. Anderson, M. D., Statesville.
- A. J. Crowell, M. D., Charlotte.
- Chas. O'H. Laughinghouse, M. D., Greenville.
- E. J. Tucker, D. D. S., Roxboro.
- Cyrus Thompson, M. D., Jacksonville.
- D. A. Stanton, M. D., High Point.
- James P. Stowe, Ph. G., Charlotte.

**Executive health officer:**

\*W. S. Rankin, M. D., secretary State board of health and State health officer, Raleigh.

**Assistant secretary:**

\*G. M. Cooper, M. D., Raleigh.

**Assistant to the secretary:**

\*Ronald B. Wilson, Raleigh.

**Laboratory of hygiene:**

\*C. A. Shore, M. D., director, Raleigh.

**Deputy State registrar:**

\*F. M. Register, M. D., Raleigh.

**Bureau of medical inspection of schools:**

\*Roy C. Mitchell, M. D., Raleigh.

**Bureau of engineering and inspection:**

\*H. E. Miller, C. E., director, Raleigh.

**Bureau of maternity and infancy:**

\*K. P. B. Bonner, M. D., director, Raleigh.

**Bureau of county health work:**

\*E. F. Long, M. D., Raleigh.

**Appropriations for fiscal year ending June 30, 1924:**

State board of health (executive office).....	\$46,140.34
Vital statistics.....	20,000.00
Laboratory of hygiene.....	75,000.00
School inspection.....	60,000.00
County health work.....	121,600.00
Epidemiology.....	} 30,000.00
Veneral disease control work.....	
Maternity and infancy.....	22,259.66
Engineering and inspection.....	50,000.00
<b>Total.....</b>	<b>425,000.00</b>

**Other sources of revenue:**

International Health Board.....	10,000.00
Federal Government.....	32,706.63
Counties, for county health work.....	150,000.00
Fees paid the laboratory.....	23,000.00

**Publications issued by health department:**

- Monthly Bulletin.
- Special bulletins.
- Biennial Report.

**NORTH DAKOTA.**

**Advisory health council:**

Minnie J. Nielson, superintendent public instruction, ex officio, Bismark.

J. Grassick, M. D., president North Dakota Tuberculosis Association, ex officio, Grand Forks.

Arne Oftedal, M. D., Fargo.

Fannie Dunn Quain, M. D., Bismark.

F. E. Householder, D. D. S., Minot.

**State health officer:**

\*A. A. Whittemore, M. D.

**Child hygiene and public health nursing:**

Louisa E. Boutelle, M. D., director.

Edith Olson, R. N., assistant.

**Bureau of venereal diseases:**

F. R. Smyth, M. D., surgeon U. S. P. H. S. (Reserve), director, Bismark.

**Appropriations for biennial period ending June 30, 1925:**

**Salaries—**

State health officer.....per year..	\$3,600.00
Clinical assistant.....do.....	2,400.00

**Miscellaneous—**

July 1, 1923, to June 30, 1924.....	3,000.00
July 1, 1924, to June 30, 1925.....	2,750.00

**Maternity and child hygiene**

per year.....	1,000.00
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**Independent of State board of health—**

Donation to North Dakota Tuberculosis Association...per year..	5,000.00
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Appropriation for venereal disease work.....per year..	6,274.24
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Appropriation for public health laboratories in university budget.....per year..	15,000.00
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**OHIO.**

**Public health council:**

John E. Monger, M. D., chairman, Columbus.

G. D. Lummis, M. D.

C. O. Probst, M. D.

F. C. Croxton.

R. M. Calfee.

James E. Bauman, secretary.

**Executive health officer:**

John E. Monger, M. D., director of health, Columbus.

**Assistant director of health:**

\*James E. Bauman.

**Division of administration:**

\*James E. Bauman, chief.

\*C. A. Orrison, chief clerk.

**Bureau of publicity—**

\*Paul Mason, director.

**Division of communicable diseases:**

\*Frank G. Boudreau, M. D., chief.

\*E. J. Schwartz, M. D., chief epidemiologist.

**Bureau of venereal diseases:**

\*C. P. Robbins, M. D., chief.

**Bureau of trachoma clinics—**

\*R. B. Tate, M. D., chief.

**Bureau of local health organization—**

\*E. R. Shafer, M. D., chief.

Division of sanitary engineering:  
 \*W. H. Dittoe, chief.  
 Bureau of plumbing inspection—  
 \*A. A. Manchester, chief.

Division of laboratories:  
 \*Fred Berry, chief.

Division of vital statistics:  
 \*Irvin C. Plummer, chief.

Division of hygiene:  
 \*R. G. Leland, M. D., chief.  
 Bureau of tuberculosis—  
 \*J. A. Frank, M. D., chief.  
 Bureau of child hygiene—  
 \_\_\_\_\_, chief.  
 Bureau of hospitals—  
 \*James A. Weis, chief.

Division of public health nursing—  
 \*V. Lota Lorimer, R. N., chief.

Division of industrial hygiene:  
 \*Nelson C. Dysart, M. D., chief.

Appropriations for fiscal year ending June 30, 1924:

Personal service.....	\$178,420
Maintenance.....	128,051
State aid for health districts.....	225,000
<b>Total.....</b>	<b>531,471</b>

Publications issued by health department:  
 Monthly public health journal.

**OKLAHOMA.**

Executive health officer:  
 \*A. E. Davenport, State health commissioner, Oklahoma.

Assistant State health commissioner:  
 \*J. P. Folan, Oklahoma.

Chemist:  
 \*L. K. Cecil, Oklahoma.

Bacteriologist:  
 \*Jennie Cecil, Oklahoma.

Sanitary engineer:  
 \*H. J. Dárcey, Oklahoma.

Director of publicity:  
 \*G. Harrison, Oklahoma.

Bureau of vital statistics:  
 \*Antoinette Sebastian, Oklahoma.

Appropriations for fiscal year ending June 30, 1925:

Salary of commissioner of health.....	\$3,600.00
Salary of assistant commissioner of health.....	2,400.00
Salary of chief clerk.....	1,800.00
Salary of bookkeeper.....	2,000.00
Salaries, 3 stenographers (1 at \$1,800, 1 at \$1,500, 1 at \$1,200).....	4,500.00
Contingent fund—administrative.....	10,000.00
Salary of director of publicity.....	2,400.00
Salary of stenographer.....	1,500.00
Contingent fund—public health education.....	1,000.00
Salary of State chemist.....	3,000.00
Salary of assistant State chemist.....	2,400.00
Salary of bacteriologist.....	3,000.00
Salary of assistant bacteriologist.....	2,400.00
Salary of record clerk.....	1,800.00
Contingent fund—Laboratory.....	10,000.00
Salary of engineer.....	3,000.00

Appropriations for fiscal year ending June 30, 1925—Continued.

Contingent fund—sanitary engineering.....	1,800.00
Salary, 4 supervisors, \$2,400 each per annum.....	9,600.00
Hotel and traveling expense, 4 supervisors.....	9,600.00
Salaries, 8 inspectors, \$1,800 each per annum.....	14,400.00
Contingent fund—sanitary inspection.....	14,400.00
Salary of registrar.....	2,400.00
Salary of assistant registrar.....	1,800.00
Salaries, 3 statistical clerks, \$1,500 each.....	4,500.00
Contingent—vital statistics.....	4,000.00
Contingent—bureau of control epidemics.....	15,000.00
Contingent—bureau distribution biologies.....	10,000.00
Contingent—bureau of venereal diseases.....	20,000.00
Bureau of child welfare.....	21,370.52

**OREGON.**

Board of health:  
 J. H. Rosenberg, M. D., president, Prineville.  
 George E. Houck, M. D., vice president, Roseburg.  
 Frederick D. Stricker, M. D., secretary and State health officer, Portland.  
 C. J. Smith, M. D., Portland.  
 W. B. Morse, M. D., Salem.  
 C. M. Barbee, M. D., Portland.  
 W. T. Phy, M. D., Hot Lake.

Executive health officer:  
 \*Frederick D. Stricker, M. D., secretary and State health officer, Portland.

Assistant State health officer:  
 \*H. S. Capps, M. D., Portland.

Register of vital statistics:  
 \*Frederick D. Stricker, M. D., Portland.

Division child hygiene and public health nursing:  
 \*Estella Ford Warner, M. D., chief, Portland.

Director laboratory:  
 \*Wm. Levin, D. P. H., Portland.

Appropriation for fiscal year ending December 31, 1923, \$40,000.

Publications issued by health department:  
 Annual report.  
 Biennial report.  
 Quarterly bulletin.  
 Pamphlets and posters.  
 Weekly letter.

**PENNSYLVANIA.**

Department of health:  
 Advisory board—  
 Edgar M. Green, M. D., Easton.  
 A. A. Cairns, M. D., City Hall, Philadelphia.  
 Samuel R. Haythorn, M. D., Pittsburgh.  
 Howard C. Frontz, M. D., Huntingdon.  
 Lewis Taylor, M. D., Wilkes-Barre.  
 Charles F. Mebus, C. E., Philadelphia.

## Department of health—Continued.

## Executive health officer—

\_\_\_\_\_, secretary of health.

\*William G. Turnbull, M. D., deputy secretary of health.

## Bureau of communicable diseases—

\*J. Moore Campbell, M. D., Harrisburg—

## Division of epidemiology—

\*J. Moore Campbell, M. D., Harrisburg.

## Division of tuberculosis—

\*John D. Donnelly, M. D., Harrisburg.

## Division of genito-urinary clinics—

\*Edgar S. Everhart, M. D., Le-moyne.

## Division of restaurant hygiene—

\*John M. Delaney, chief, Harrisburg.

## Bureau of vital statistics—

\*Wilmer R. Batt, M. D., Harrisburg.

## Bureau of engineering—

W. L. Stevenson, chief engineer, Harrisburg—

## Division of sanitary engineering—

H. E. Moses, Harrisburg.

## Division of housing—

H. F. Bronson, Harrisburg.

## Division of milk control.

Ralph E. Irwin, Camp Hill.

## Bureau of tuberculosis sanatoria—

## Mont Alto Sanatorium—

\*Royal H. McCutcheon, M. D., Mont Alto.

## Cresson Sanatorium—

\*Thos. H. A. Stites, M. D., Cresson.

## Hamburg Sanatorium—

\*Henry A. Gorman, M. D., Hamburg.

## Bureau of child health—

\*J. Bruce McCreary, M. D., Shippensburg—

## Pre-school division—

\*Mary Riggs Noble, M. D., Harrisburg.

## School division—

\*J. Bruce McCreary, M. D., Shippensburg.

## Dental division—

\*C. J. Hollister, D. D. S., Harrisburg.

## Bureau of finance—

\*Clinton T. Williams, Harrisburg—

## Division of accounts—

\*Clinton T. Williams, Harrisburg.

## Division of purchases—

\*Charles H. Clappier, jr., Harrisburg.

## Division of supplies—

\*Roy Miller, Harrisburg.

## Division of laboratories—

\*John L. Laird, M. D., Philadelphia.

## Division of nursing—

\*Alice M. O'Halloran, R. N., Harrisburg.

## Division of public health education—

\*William C. Miller, M. D., Harrisburg.

## Division of drug control—

\*James N. Lightner, Lancaster.

## Division of newspapers—

\*Lida R. Beckwith, Harrisburg.

## PHILIPPINE ISLANDS.

## Council of hygiene, advisory board to the director of health:

Fernando Calderon, M. D., president, Manila.

Leoncio Lopez Rizal, M. D., secretary, Manila.

Gervasio Ocampo, M. D., Manila.

José Albert, M. D., Manila.

Benito Valdez, M. D., Manila.

Eulogio P. Revilla, LL. B., Manila.

Tomas Earnshaw, Manila.

## Executive health officer:

\*Vicente de Jesus, M. D., director of health, Manila.

## Assistant director of health:

\*Salvador V. del Rosario, M. D., Manila.

## Division of provincial sanitation:

\*Jacobo Fajardo, M. D., chief, Manila.

## Division of Manila sanitation:

\*Andres Catanjal, M. D., chief, Manila.

## Office of statistics and epidemiology:

\*Manuel Gomez, M. D., chief, Manila.

## Office of health education:

\*José P. Bantug, M. D., chief, Manila.

## Office of public health nursing:

\*Carmen R. Leogardo, R. N., chief, Manila.

## Clerical office:

\*Mamerto Tianco, chief, Manila.

## Office of property:

\*Generoso S. Quintero, chief, Manila.

## Office of sanitary engineering:

\*Manuel Mañosa, C. E., chief, Manila.

## Appropriations for fiscal year ending Dec. 31, 1923:

Salaries and wages..... \$423,689.00

Miscellaneous expenses..... 837,372.50

Aid to specially organized Pro-

vinces..... 203,450.00

Appropriation for the treatment

of segregated lepers..... 125,000.00

School of Nursing in Baguio..... 3,600.00

Total..... 1,583,111.50

## Publications issued by the health service:

Daily news bulletin.

Monthly bulletin.

Annual report.

Occasional pamphlets.

## PORTO RICO.

## Insular board of health:

Pedro Gutierrez Igaravidez, M. D., president, San Juan.

\*José Lugo Vifa, M. D., secretary, San Juan.

W. A. Glines, M. D., San Juan.

Angel M. Pesquera, pharmacist, San Juan.

Charles Hartzell, attorney, San Juan.

José S. Díaz, M. D., San Juan.

José S. Belaval, M. D., San Juan.

G. A. Ramirez de Arellano, engineer, San Juan.

## Executive health officers:

\*Pedro N. Ortis, M. D., commissioner of health, San Juan.

\*A. Fernós Isern, M. D., assistant commissioner of health, San Juan.

## Division of property and accounts:

\*Abelardo Santiago, chief, San Juan.

## Division of sanitary engineering:

\*G. A. Ramirez de Arellano, sanitary engineer, San Juan.

**Bacteriological laboratory:**

\*Pablo Morales Otero, M. D., director, San Juan.

**Chemical laboratory:**

\*R. del Valle Sárraga, chemist, director, San Juan.

**Division of transmissible diseases and statistics:**

\*M. O. de la Rosa, M. D., chief, San Juan.

**Appropriations for each of the fiscal years ending June 30, 1924, and June 30, 1925:**

Office of the commissioner of health.....	\$265,483.50
Leper colony.....	33,150.25
Quarantine hospital.....	14,185.00
Antituberculosis sanatorium of Porto Rico.....	194,171.90
Blind asylum.....	51,071.00
Insular insane asylum.....	125,943.00
Education and maintenance of poor deaf and dumb children...	1,200.00
Care of tuberculosis patients in the sanatorium at Ponce under the control of the department of health.....	20,000.00
Control and prevention of tuberculosis.....	100,000.00
For the control and prevention of venereal diseases.....	12,000.00
Bureau of social welfare.....	60,000.00
Extermination of mosquitoes and control and suppression of malaria.....	60,000.00
Suppression of anemia.....	60,000.00
Extermination of rats.....	40,000.00
Control and suppression of infantile tetanus and ophthalmia neonatorum.....	3,000.00
Emergency fund for the control and suppression of epidemics...	30,000.00
Girls' charity school.....	87,941.75
Boys' charity school.....	120,392.60
<b>Total.....</b>	<b>1,258,539.00</b>

**RHODE ISLAND.**

**Board of health:**

R. Morton Smith, M. D., president, Riverpoint  
Thomas J. McLaughlin, M. D., vice president, Woonsocket.

Alexander B. Briggs, M. D., Ashaway.

Norman M. MacLeod, M. D., Newport.

William F. Williams, M. D., Bristol.

Joseph M. Bennett, M. D., Providence.

M. S. Budlong, M. D., Providence.

**Executive health officer:**

\*B. U. Richards, M. D., secretary State board of health and State registrar, statehouse, Providence.

**Pathologist:**

Lester A. Round, Ph. D., Providence.

**Chemist:**

Stephen De M. Gage, Providence.

**Appropriations for 11 months ending Nov. 30, 1923:**

Executive department.....	\$22,882.75
Chemical laboratory.....	15,507.28
Pathological laboratory.....	16,672.49
Child-welfare division.....	16,500.00
<b>Total.....</b>	<b>71,562.52</b>

**SOUTH CAROLINA.**

**Executive committee, board of health:**

Robert Wilson, jr., M. D., chairman, Charleston.

R. A. Marsh, M. D., Edgefield.

C. C. Gambrell, M. D., Abbeville.

E. A. Hines, M. D., Seneca.

W. R. Wallace, M. D., Chester.

William Egleston, M. D., Hartsville.

S. C. Calder, Ph. G., Greenville.

W. M. Lester, M. D., Columbia.

Samuel M. Wolfe, attorney general, Columbia.

Walter E. Duncan, comptroller general, Columbia.

**Executive health officer:**

\*James A. Hayne, M. D., State health officer, Columbia.

**Department of county health units:**

\*L. A. Riser, M. D., Columbia.

**Bureau of child hygiene and supervisor of public health nursing:**

\*Miss Ada Taylor Graham, R. N., Columbia.

**Bureau of venereal diseases:**

\*James A. Hayne, M. D., Columbia.

**Laboratory department:**

\*H. M. Smith, M. D., in charge, Columbia.

\*E. R. Cain, chief bacteriologist, Columbia.

**Bureau of vital statistics:**

\*C. W. Miller, Columbia.

**Bacteriologist and chemist:**

F. L. Parker, jr., M. D., Ph. D., Columbia.

**South Carolina Sanatorium:**

\*Ernest Cooper, M. D., superintendent, Columbia.

**Epidemiologist:**

\*A. H. Hayden, M. D., Columbia.

**Sanitary engineer:**

\*E. L. Filby, C. E., Columbia.

**State hotel inspector:**

\*J. H. Woodward, Columbia.

**Appropriations for fiscal year ending Dec. 31, 1923:**

Administrative office.....	\$49,469.30
Bureau of child hygiene.....	10,000.00
Bureau of vital statistics.....	7,390.00
Maternity-infancy work.....	6,000.00
Laboratory.....	11,500.00
Bureau of rural sanitation.....	19,247.90
Malaria cooperative work.....	14,700.00
Tuberculosis sanatoria.....	54,675.00
Hotel inspection.....	5,190.00
<b>Total.....</b>	<b>177,572.20</b>

**Publications issued by health department:**

Annual report.

Bulletins of various departments.

**SOUTH DAKOTA.**

**Board of health:**

J. W. Freeman, M. D., president, Lead.

R. D. Alway, M. D., vice president, Aberdeen.

J. Howard Smith, M. D., Huron.

H. R. Kenaston, M. D., Bonesteel.

Park B. Jenkins, M. D., superintendent, Wau-  
bay.

**Executive health officer:**

\*Park B. Jenkins, M. D., superintendent and executive officer, Wau-  
bay.

**Division of vital statistics:**

## Division of preventable diseases:

\*Park B. Jenkins, M. D., director.

## Division of child hygiene:

\*Clara Edna Hayes, M. D., director.

\*Miss Florence Walker, R. N., supervisor of public health nursing.

## Division of sanitary engineering:

\*A. H. Wieters, director.

## Division of education and publicity:

M. C. Haecker, director.

## Division of medical licensure:

H. R. Kenaston, M. D., director.

## Division of records and accounts:

\*Edna Jenkins, director.

## State laboratories at Vermilion:

\*J. C. Ohlmacher, M. D., director.

## Appropriations for the fiscal years

1923-24 and 1924-25:

	1923-24	1924-25
Salary, superintendent.....	\$3,200	\$3,200
Administration, vital statistics, sanitary engineering, child hygiene.....	17,600	17,600
Education and publicity.....	5,500	5,500
Medical licensure.....	1,000	1,000
Records and accounts.....	3,000	3,000
Biological products.....	2,500	2,500
General maintenance.....	4,000	4,000
Preventable diseases.....	4,000	4,000
Separate appropriation for child hygiene.....	10,000	10,000
Total.....	60,800	60,800

## TENNESSEE.

## Department of public health:

\*C. B. Crittenden, M. D., commissioner, Nashville.

## Division of vital statistics:

\*J. B. Bond, M. D., superintendent, Nashville.

## Division of rural sanitation:

\*E. L. Bishop, M. D., C. P. H., superintendent, Nashville.

## Division of laboratories:

William Litterer, M. D., bacteriologist, Nashville.

## Division of sanitary engineering:

\*Howard R. Fullerton, director, Nashville.

## Division of venereal-disease control:

\*C. B. Crittenden, M. D., acting director, Nashville.

## State supervising nurse:

\*Miss M. G. Nisbet, R. N., Nashville.

## Division of maternity and child welfare:

\*Evelyn G. Chase, R. N., director, Nashville.

## Appropriations for biennial period ending

June 30, 1925:

Administration.....	\$17,400
Epidemic fund.....	5,000
Trachoma fund.....	4,000
Vital statistics fund.....	24,800
Sanitary engineering fund.....	21,800
Laboratory fund.....	29,440
Rural sanitation fund.....	32,200
Maternity and child welfare fund.....	20,000
Venereal-disease control fund (exclusive of Federal allotment amounting to \$2,211.59).....	15,571.30
Total.....	170,211.30

## Other sources of revenue:

International Health Board, rural sanitation, \$32,200.

United States Department of Labor, maternity and child welfare, \$25,000.

United States Public Health Service, venereal disease control, \$2,211.59.

International Health Board, cooperation in malaria control; American Red Cross, cooperation in nursing service; United States Public Health Service, cooperation in malaria control; individual counties and cities in State, cooperation in malaria control, rural sanitation, and maternity and child welfare.

## TEXAS.

## Board of health:

M. F. Bledsoe, M. D., Port Arthur.

Thomas B. Fisher, M. D., Dallas.

A. C. Scott, M. D., Temple.

W. H. Holland, M. D., Santa Anna.

A. F. Beverly, M. D., Austin.

Frank Paschal, M. D., San Antonio.

## Executive health officer:

State health officer.

## Bureau of laboratory:

Miss Bettie Lee Hampil, director, Austin.

## Bureau of rural sanitation:

Aleck P. Harrison, M. D., director, Austin.

## Bureau of vital statistics:

\*Robert A. Tate, M. D., Austin (in charge).

## Bureau of communicable diseases:

Robert A. Tate, M. D., director, Austin.

## Bureau of venereal diseases:

\*J. B. Hall, M. D., director, Austin.

## Bureau of food and drugs:

W. W. Battle, P. H. D., director, Austin.

## Bureau of child hygiene:

\*H. Garst, M. D., director, Austin.

\*Miss Celia M. Crosse, R.N., advisory nurse, Austin.

Lucy Henderson, R. N., advisory nurse, Austin.

\*Miss Ella Yeager, R. N., maternity home inspector, Austin.

## Bureau of sanitary engineering:

V. M. Ehlers, C. E., director, Austin.

E. G. Eggert, assistant sanitary engineer, Austin.

Carl Martin, sanitarian, Austin.

E. W. Steel, sanitary engineer, Austin.

## Appropriations for fiscal year ending

Aug. 31, 1924:

General.....	\$141,317.62
Bureau of vital statistics.....	12,900.00

Total..... 154,217.62

## Publications issued by health department:

Biennial report.

Quarterly health magazine.

Pamphlets, leaflets, and placards.

Radio health talks.

Weekly newspaper articles.

## UTAH.

## Board of health:

Fred Stauffer, M. D., president, Salt Lake City.

T. B. Beatty, M. D., secretary, Salt Lake City.

Joseph R. Morrell, M. D., Ogden.

**Board of health—Continued.**

Mrs. Valeria B. Young, Salt Lake City.  
 Carl Hopkins, Ogden.  
 S. S. Burnham, D. D. S., Salt Lake City.  
 Charles J. Ullrich, C. E., Salt Lake City.

**Executive health officer:**

\*T. B. Beatty, M. D., State health commissioner, Salt Lake City.

**Appropriations for biennial period ending Mar. 31, 1925:**

Salaries .....	\$25,760
Office expenses .....	5,890
Travel .....	4,400
Equipment .....	700
Child hygiene .....	13,240
<b>Total .....</b>	<b>49,990</b>

Publications issued by health department:  
 Quarterly bulletin.  
 Biennial report.

Fiscal year ends Dec. 31.

**VERMONT.**

**Board of health:**

F. Thomas Kidder, M. D., chairman, Woodstock.  
 William G. Ricker, M. D., St. Johnsbury.  
 Edward J. Rogers, M. D., Pittsford.

**Executive health officer:**

\*Charles F. Dalton, M. D., secretary State board of health, Burlington.

**Laboratory of hygiene:**

\*Charles F. Whitney, M. D., director, Burlington.

**Sanitary engineer:**

J. W. Votey, C. E., Burlington.

**Sanitary inspector:**

\*Chas. A. Ravey, M. D., Burlington.

**Division of venereal diseases:**

\*Chas. A. Ravey, M. D., Burlington.

**Division of tuberculosis:**

\*H. W. Slocum, Burlington.

**Division of poliomyelitis:**

\*W. L. Aycock, M. D., research, Burlington.  
 \*Bertha E. Weisbrod, R. N., after-care, Burlington.

**Appropriations for fiscal year ending June 30, 1924:**  
 Total budget, \$40,000.

**Other sources of revenue:**

Private donations for study and treatment of infantile paralysis.

**Publications issued by health department:**

Quarterly bulletin.  
 Biennial report.

**VIRGINIA.**

**Board of health:**

W. M. Smith, M. D., president, Alexandria.  
 J. B. Fisher, M. D., secretary, Midlothian.  
 J. T. Wilson, Richmond.  
 W. T. Graham, M. D., Richmond.  
 Mrs. Chas. Hall Davis, Petersburg.  
 John T. Daniel, Cape Charles.  
 Isaac Peirce, M. D., Tazewell.  
 W. F. Drewry, M. D., Petersburg.  
 T. J. George, M. D., Stuart.  
 H. T. Marshall, M. D., University of Virginia.  
 Guy R. Harrison, D. D. S., Richmond.  
 Hugh J. Hagan, M. D., Roanoke.  
 L. T. Royster, M. D., Norfolk.  
 A. L. Tynes, M. D., Staunton.

**Executive health officer:**

\*Ennon G. Williams, M. D., State health commissioner, Richmond.

**Assistant health commissioner:**

\*Roy K. Flannagan, M. D., Richmond.

**Registrar of vital statistics:**

\*W. A. Piecker, M. D., Richmond.

**Bacteriologist:**

\*A. H. Straus, Richmond.

**Sanitary engineer:**

\*Richard Messer, C. E., Richmond.

**Bureau of child welfare:**

\*Mary E. Brydon, M. D., director.

**Public health nursing:**

\*Nannie B. Minor, R. N., director.

**Tuberculosis education:**

\*Agnes D. Randolph, R. N., director.

**Appropriations for fiscal year ending Feb. 28, 1924:**

Administration .....	\$24,464
Sanitary engineering .....	15,450
Publicity .....	5,400
Rural sanitation .....	25,000
Malaria .....	5,000
Inspection of convict camps .....	750
Laboratory .....	15,000
Child welfare and public health nursing .....	38,020
Veneral diseases .....	10,000
Control of epidemics .....	5,000
Vital statistics .....	19,935
For collection and publication of marriage and divorce statistics .....	2,855
Prevention of blindness .....	2,300
<b>Total .....</b>	<b>169,174</b>

**Publications issued by health department:**

Monthly bulletin.  
 Biennial report.

**WASHINGTON.**

**Board of health:**

Paul A. Turner, M. D., director of health, chairman.

W. W. Brand, M. D.

James H. Egan, M. D.

R. E. Elvins, M. D.

Herbert C. Lieser, M. D.

C. E. Dorisy, C. E., secretary, Seattle.

**Executive health officer:**

\*Paul A. Turner, M. D., director of health, Seattle.

**Epidemiologist:**

\*A. U. Simpson, M. D., Seattle.

**Chief of laboratory:**

\*A. U. Simpson, M. D., Seattle.

**Sanitary engineer:**

\*C. E. Dorisy, C. E., Seattle.

**Registrar:**

\*C. E. Dorisy, C. E., Seattle.

**Division of child hygiene:**

\*H. E. Coe, chief.

\*Jane Teare Dohlgan, assistant chief.

\*Florence Struthers, supervising nurse.

**Appropriation for biennial period ending March 31, 1925:**

Operations .....	\$79,000
Capital outlays .....	1,832
<b>.....</b>	<b>\$80,832</b>
Division of child hygiene .....	10,000
Tuberculosis hospitals .....	190,000
(State aid to local sanatoria.)	

## WEST VIRGINIA.

## Public health council:

- W. M. Babb, M. D., president, Keyser.  
 J. L. Pyle, M. D., Chester.  
 W. T. Henshaw, M. D., commissioner of health,  
 Charleston.  
 H. G. Camper, M. D., Welch.  
 O. H. Jennings, Williamson.  
 V. T. Churchman, M. D., Charleston.  
 Thos. L. Harris, Parkersburg.

## Executive health officer:

- \*W. T. Henshaw, M. D., commissioner of  
 health, Charleston

## Division of sanitary engineering.

- \*Ellis S. Tisdale, director, Charleston.  
 \*R. C. Beckett, Charleston.  
 \*Chas. H. Young, Charleston.

## Division of vital statistics:

- \*Carl F. Raver, M. D., M. P. H., Charleston.

## Division of child welfare and public health nursing:

- \*Jean T. Dillon, R. N., director, Charleston.  
 \*Edna M. Hardsaw, R. N., field supervisor.  
 \*Gertrude H. Wuesthoff, R. N., field supervisor.

## Hygienic laboratory:

- \*Chas. E. Gabel, Ph. D., Charleston.  
 \*Lucy F. Gabel, chemist, Charleston.

## Bureau of venereal diseases:

- \*W. S. Robertson, M. D., director, Charleston.

## Bureau of rural sanitation:

- \*M. V. Ziegler, passed assistant surgeon, U. S.  
 P. H. S., director, Charleston.

## Division of public health education:

- Ada L. Coddington, director.

Appropriations for fiscal year ending June  
30, 1923:

For general use.....	\$80,000
Salary of commissioner.....	4,800
Bureau of venereal diseases.....	21,000
Total.....	85,800

## Other sources of revenue:

- Fees for granting certificates to practice medi-  
 cine.  
 Fees from laboratory work for private individ-  
 uals.

Expense of cooperative work with the Federal  
 Government—Sheppard-Towner Act relating to  
 maternal and infant hygiene, \$5,000.

## Publications issued by health department:

- Quarterly bulletin.  
 Annual report.

## WISCONSIN.

## Board of health:

- Wm. F. Whyte, M. D., president, Madison.  
 L. A. Steffen, M. D., Antigo.  
 E. S. Hayes, M. D., Eau Claire.  
 G. Windesheim, M. D., Kenosha.  
 C. A. Richards, M. D., Rhinelander.  
 Otho Fiedler, M. D., Sheboygan.  
 C. A. Harper, M. D., health officer, Madison.  
 \*L. W. Hutchcroft, assistant State health of-  
 ficer, Madison.

## Executive health officer:

- \*C. A. Harper, M. D., State health officer,  
 Madison.

## Bureau of vital statistics:

- \*C. A. Harper, M. D., State registrar, Madison.

## Bureau of communicable diseases:

- \*H. M. Guilford, M. D., director, Madison.

## Bureau of sanitary engineering:

- \*C. M. Baker, State sanitary engineer, Madison.  
 \*E. J. Tully, chemical engineer, Madison.

## Bureau of education:

- \*L. W. Bridgman, acting director, Madison.

## Bureau of child welfare and public health nursing:

- \*Mrs. Mary P. Morgan, director, Madison.

## Bureau of nursing education:

- \*Adda Eldredge, R. N., director, Madison.

Bureau of plumbing and domestic sanitary en-  
 gineering:

- \*Frank R. King, State domestic sanitary en-  
 gineer, Madison.

## Bureau of social hygiene:

- \*H. M. Guilford, M. D., director, Madison.

## Laboratory service:

- \*W. D. Stovall, M. D., director State labora-  
 tories, Madison.  
 \*M. S. Nichols, chemist State laboratory,  
 Madison.

- \*Katherine Wattawa, director branch labora-  
 tory, Rhinelander.

- \*Dorothy Packard, director cooperative labora-  
 tory, Superior.

- \*A. H. Broche, M. D., director cooperative  
 laboratory, Oshkosh.

- \*Henry Miller, director cooperative laboratory,  
 Kenosha.

- \*Josephine Foote, director cooperative labora-  
 tory, Wausau.

- \*Ruth Kuhns, director, cooperative laboratory,  
 Green Bay.

- \*Marion Anderson, director, cooperative  
 laboratory, Beloit.

Appropriations for fiscal year ending June  
30, 1924:

General administration.....	\$51,000
Emergency appropriation for epi- demics.....	7,500
Branch laboratory and State coopera- tive laboratories.....	9,000
Prevention of infantile blindness.....	1,000
Venereal disease control work.....	36,370
Bureau of sanitary engineering.....	17,000
Bureau of communicable diseases.....	13,300
Bureau of child welfare and public health nursing.....	23,000
Comfort station supervision.....	5,600
Licensing of embalmers, hotels and restaurants, plumbers, beauty par- lors, nurses, and barbers.....	57,650
Total.....	220,820

## Publications issued by health department:

- Quarterly bulletin.  
 Biennial report.

**WYOMING.**

**Board of health:**

- C. Y. Beard, M. D., Cheyenne.
- R. W. Hale, M. D., Thermopolis.
- G. M. Anderson, M. D., secretary and executive officer, Cheyenne.
- Earl E. Whedon, Sheridan.
- Edw. S. Lauzer, M. D., Rock Springs.

**Executive health officer:**

- \*G. M. Anderson, M. D., State health officer, Cheyenne.

**Infant and maternal hygiene:**

Louise Buford, R. N., supervisor.

Appropriations for biennial period ending Mar. 31, 1924:

State board of health.....	\$10,000
Salary of secretary.....	8,000
Salary board members.....	500
Bureau of maternity and infant hygiene.....	6,000
<b>Total.....</b>	<b>24,500</b>

Publications issued by health department:  
 Biennial report.  
 Binonthly bulletin.

**DEATHS DURING WEEK ENDED SEPTEMBER 15, 1923.**

*Summary of information received by telegraph from industrial insurance companies for week ended September 15, 1923, and corresponding week of 1922. (From the Weekly Health Index, September 18, 1923, issued by the Bureau of the Census, Department of Commerce.)*

	Week ended Sept. 15, 1923.	Corresponding week, 1922.
Policies in force.....	54, 927, 298	50, 560, 741
Number of death claims.....	9, 316	7, 850
Death claims per 1,000 policies in force, annual rate.....	8. 8	8. 1

*Deaths from all causes in certain large cities of the United States during the week ended September 15, 1923, infant mortality, annual death rate, and comparison with corresponding week of 1922. (From the Weekly Health Index, September 18, 1923, issued by the Bureau of the Census, Department of Commerce.)*

City.	Week ended Sept. 15, 1923.		Annual death rate per 1,000, corre- sponding week, 1922.	Deaths under 1 year.		Infant mor- tality rate, week ended Sept. 15, 1923. <sup>a</sup>
	Total deaths.	Death rate. <sup>1</sup>		Week ended Sept. 15, 1923.	Corre- sponding week, 1922.	
<b>Total.....</b>	5, 635	10. 3	10. 2	818	834	.....
Akron, Ohio.....	18	4. 5	4. 5	4	3	47
Albany, N. Y. <sup>2</sup> .....	32	14. 2	11. 2	4	2	88
Atlanta, Ga.....	69	16. 1	15. 2	5	4	.....
Baltimore, Md. <sup>2</sup> .....	166	11. 2	12. 0	27	34	79
Birmingham, Ala.....	45	12. 0	11. 5	8	8	.....
Boston, Mass.....	141	9. 5	11. 5	24	37	69
Bridgeport, Conn.....	29	10. 5	8. 7	5	0	69
Buffalo, N. Y.....	92	8. 9	11. 4	25	29	105
Cambridge, Mass.....	21	9. 8	8. 0	5	1	89
Camden, N. J. <sup>2</sup> .....	21	8. 8	13. 3	1	7	17
Chicago, Ill. <sup>2</sup> .....	496	9. 0	10. 2	99	93	89
Cleveland, Ohio <sup>2</sup> .....	141	8. 3	8. 9	19	30	52
Columbus, Ohio.....	77	15. 4	11. 7	15	11	156
Dallas, Tex.....	40	11. 8	11. 8	7	2	.....
Dayton, Ohio.....	26	8. 2	10. 6	6	3	99
Denver, Colo.....	60	11. 5	15. 2	9	13	.....
Des Moines, Iowa.....	16	5. 9	.....	0	.....	.....
Detroit, Mich.....	222	11. 6	8. 4	60	37	120
Duluth, Minn.....	11	5. 4	.....	0	0	0
Erie, Pa.....	22	10. 2	7. 6	2	2	41
Fall River, Mass. <sup>2</sup> .....	24	10. 3	9. 9	5	5	71
Flint, Mich.....	30	13. 3	.....	7	.....	139
Fort Worth, Tex.....	18	6. 5	8. 2	1	3	.....
Grand Rapids, Mich.....	23	8. 2	8. 4	3	2	47
Houston, Tex.....	46	15. 5	9. 4	3	4	.....
Indianapolis, Ind.....	82	12. 5	11. 4	9	5	69
Jacksonville, Fla.....	30	15. 6	11. 2	2	2	.....
Jersey City, N. J.....	63	10. 6	12. 8	11	14	74
Kansas City, Kans.....	29	13. 1	11. 9	4	5	92
Kansas City, Mo.....	65	9. 6	11. 2	10	11	.....
Los Angeles, Calif.....	197	15. 4	13. 3	21	21	79
Louisville, Ky.....	64	13. 0	13. 6	5	3	54
Lowell, Mass.....	16	7. 2	9. 6	2	8	35

Deaths from all causes in certain large cities of the United States during the week ended September 15, 1923, infant mortality, annual death rate, and comparison with corresponding week of 1922. (From the Weekly Health Index, September 18, 1923, issued by the Bureau of the Census, Department of Commerce.)—Continued.

City.	Week ended Sept. 15, 1923.		Annual death rate per 1,000, corresponding week, 1922.	Deaths under 1 year.		Infant mortality rate, week ended Sept. 15, 1923. <sup>2</sup>
	Total deaths.	Death rate. <sup>1</sup>		Week ended Sept. 15, 1923.	Corresponding week, 1922.	
Lynn, Mass. ....	15	7.6		0		0
Memphis, Tenn. ....	46	14.1	14.9	4	4	
Minneapolis, Minn. ....	78	9.9	9.4	8	4	43
Nashville, Tenn. <sup>3</sup> .....	43	18.5	9.5	5	4	
New Bedford, Mass. ....	22	8.8	15.9	5	16	78
New Haven, Conn. ....	38	11.5	8.3	5	1	65
New Orleans, La. ....	120	15.5	13.6	10	19	
New York, N. Y. ....	1,064	9.4	8.3	140	146	56
Bronx Borough. ....	109	6.8	6.1	12	16	42
Brooklyn Borough. ....	331	8.0	7.9	42	46	45
Manhattan Borough. ....	485	11.2	9.3	69	69	67
Queens Borough. ....	111	10.8	8.2	11	12	59
Richmond Borough. ....	28	11.4	11.3	6	3	109
Newark, N. J. ....	65	7.7	8.6	13	14	61
Norfolk, Va. ....	20	6.6	11.7	3	3	53
Oakland, Calif. ....	40	8.7	11.2	8	6	103
Omaha, Nebr. ....	58	14.8	14.3	6	4	65
Paterson, N. J. ....	26	9.7	10.5	2	6	32
Philadelphia, Pa. ....	368	10.0	10.3	44	50	57
Pittsburgh, Pa. ....	143	12.2	12.6	28	23	97
Portland, Oreg. ....	42	8.0	7.6	4	2	40
Providence, R. I. ....	57	12.3	9.5	12	3	98
Richmond, Va. ....	34	9.8	12.9	8	7	98
Rochester, N. Y. ....	63	10.3	9.7	5	12	39
St. Louis, Mo. ....	190	12.3	9.2	21	16	
St. Paul, Minn. ....	52	11.2	10.4	7	6	65
Salt Lake City, Utah <sup>3</sup> .....	24	9.9	8.8	1	2	16
San Antonio, Tex. ....	37	10.4	11.4	7	2	
San Francisco, Calif. ....	129	12.5	14.0	5	9	30
Seattle, Wash. ....	57	9.4	7.1	5	6	44
Spokane, Wash. ....	21	10.5	8.5	1	2	22
Springfield, Mass. ....	29	10.5	7.8	4	6	57
Syracuse, N. Y. ....	30	8.5	12.7	2	8	26
Tacoma, Wash. ....	16	8.2		2		50
Toledo, Ohio. ....	44	8.5	10.2	4	11	49
Trenton, N. J. ....	27	11.1	10.8	3	8	85
Utica, N. Y. ....	18	9.1		3		64
Washington, D. C. ....	86	10.2	12.4	14	14	80
Wilmington, Del. ....	19	8.4	9.0	2	5	41
Worcester, Mass. ....	34	9.2	10.8	5	3	57
Yonkers, N. Y. ....	17	8.2	8.4	4	3	87
Youngstown, Ohio. ....	31	12.2	9.1	8	6	100

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

<sup>2</sup> Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1922. Cities left blank are not in the registration area for births.

<sup>3</sup> Deaths for week ended Friday, Sept. 14, 1923.

# 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 STATE SUMMARIES.

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 Sept. 22, 1923.

ALABAMA.		CALIFORNIA.	
	Cases.		Cases.
Cerebrospinal meningitis.....	1	Cerebrospinal meningitis—Los Angeles.....	1
Dengue.....	4	Diphtheria.....	182
"Devil's grip".....	42	Influenza.....	9
Diphtheria.....	68	Lethargic encephalitis:	
Dysentery.....	27	San Francisco.....	1
Influenza.....	9	Upland.....	1
Malaria.....	312	Measles.....	285
Measles.....	66	Poliomyelitis:	
Mumps.....	1	Los Angeles.....	3
Pellagra.....	9	Los Angeles County.....	4
Pneumonia.....	14	Ontario.....	3
Scarlet fever.....	22	San Bernardino County.....	1
Smallpox.....	5	Scarlet fever.....	49
Tetanus.....	1	Smallpox.....	8
Tuberculosis.....	29	Typhoid fever.....	16
Typhoid fever.....	72		
Whooping cough.....	12		
ARIZONA.		COLORADO.	
			(Exclusive of Denver.)
Diphtheria.....	4	Chicken pox.....	3
Pneumonia.....	1	Diphtheria.....	46
Scarlet fever.....	9	Measles.....	8
Tuberculosis.....	1	Mumps.....	10
Typhoid fever.....	3	Pneumonia.....	1
		Scarlet fever.....	8
		Tuberculosis.....	77
		Typhoid fever.....	8
ARKANSAS.		CONNECTICUT.	
Chicken pox.....	5	Cerebrospinal meningitis.....	2
Diphtheria.....	8	Chicken pox.....	1
Hookworm disease.....	1	Diphtheria.....	17
Influenza.....	21	Dysentery (bacillary).....	1
Malaria.....	149	Influenza.....	1
Measles.....	22	Malaria.....	4
Mumps.....	110	Measles.....	5
Pellagra.....	4	Mumps.....	2
Poliomyelitis.....	1	Pneumonia (lobar).....	4
Scarlet fever.....	5	Poliomyelitis.....	10
Smallpox.....	6	Scarlet fever.....	24
Trachoma.....	1	Tuberculosis.....	36
Tuberculosis.....	6	Typhoid fever.....	14
Typhoid fever.....	36	Whooping cough.....	13
Whooping cough.....	21		

DELAWARE.		INDIANA—continued.	
	Cases.		Cases.
Diphtheria .....	4	Poliomyelitis—White County .....	1
Measles .....	1	Scarlet fever .....	49
Pneumonia .....	1	Smallpox .....	9
Scarlet fever .....	7	Tuberculosis .....	18
Tuberculosis .....	5	Typhoid fever .....	28
Typhoid fever .....	5		
FLORIDA.		IOWA.	
Cerebrospinal meningitis .....	2	Diphtheria .....	60
Diphtheria .....	10	Poliomyelitis .....	1
Influenza .....	7	Scarlet fever .....	49
Malaria .....	70	Smallpox .....	2
Pneumonia .....	37	Typhoid fever .....	4
Poliomyelitis .....	1		
Typhoid fever .....	17	KANSAS.	
		Cerebrospinal meningitis .....	1
		Chicken pox .....	2
		Diphtheria .....	34
		Dysentery (bacillary) .....	1
		German measles .....	2
		Influenza .....	1
		Measles .....	20
		Mumps .....	1
		Pneumonia .....	3
		Poliomyelitis .....	6
		Scarlet fever .....	53
		Smallpox .....	1
		Tuberculosis .....	44
		Typhoid fever .....	51
		Whooping cough .....	46
GEORGIA.		LOUISIANA.	
Chicken pox .....	1	Dengue .....	9
Conjunctivitis .....	1	Diphtheria .....	17
Diphtheria .....	26	Malaria .....	46
Dysentery (bacillary) .....	2	Measles .....	7
Hookworm disease .....	9	Pneumonia .....	11
Influenza .....	4	Scarlet fever .....	3
Malaria .....	36	Smallpox .....	4
Measles .....	39	Tuberculosis .....	20
Mumps .....	1	Typhoid fever .....	17
Pneumonia .....	8		
Scarlet fever .....	8	MAINE.	
Septic sore throat .....	1	Chicken pox .....	3
Smallpox .....	2	Diphtheria .....	11
Tuberculosis (all forms) .....	8	Measles .....	20
Typhoid fever .....	24	Pneumonia .....	3
Typhus fever .....	3	Scarlet fever .....	5
Whooping cough .....	5	Tuberculosis .....	12
		Typhoid fever .....	8
		Whooping cough .....	51
ILLINOIS.		MARYLAND. <sup>1</sup>	
Cerebrospinal meningitis—Iroquois County....	1	Cerebrospinal meningitis .....	1
Diphtheria:		Chicken pox .....	7
Cook County .....	108	Diphtheria .....	33
Kane County .....	9	Dysentery .....	11
Scattering .....	54	Influenza .....	1
Influenza .....	6	Malaria .....	1
Lethargic encephalitis—Cook County .....	1	Measles .....	21
Pneumonia .....	125	Mumps .....	1
Poliomyelitis:		Paratyphoid fever .....	1
Cook County .....	11	Pellagra .....	1
Du Page County .....	1	Pneumonia (all forms) .....	25
Kane County .....	1	Scarlet fever .....	33
Stephenson County .....	1		
Scarlet fever:			
Cook County .....	49		
McLean County .....	16		
Scattering .....	59		
Typhoid fever:			
Cook County .....	9		
Peoria County .....	12		
Scattering .....	55		
Whooping cough .....	140		
INDIANA.			
Cerebrospinal meningitis—Delaware County....	1		
Diphtheria .....	54		
Measles .....	25		
Pneumonia .....	1		

<sup>1</sup> Week ended Friday.

MARYLAND—continued.

	Cases.
Septic sore throat.....	1
Tetanus.....	1
Tuberculosis.....	75
Typhoid fever.....	61
Whooping cough.....	51

MASSACHUSETTS.

Cerebrospinal meningitis.....	2
Chicken pox.....	26
Conjunctivitis (suppurative).....	4
Diphtheria.....	137
German measles.....	3
Influenza.....	2
Lethargic encephalitis.....	2
Malaria.....	1
Measles.....	35
Mumps.....	21
Ophthalmia neonatorum.....	21
Pneumonia (lobar).....	27
Poliomyelitis.....	7
Rabies.....	1
Scarlet fever.....	75
Septic sore throat.....	1
Trachoma.....	2
Tuberculosis (all forms).....	115
Typhoid fever.....	25
Whooping cough.....	64

MICHIGAN.

Diphtheria.....	144
Measles.....	59
Pneumonia.....	23
Scarlet fever.....	136
Smallpox.....	19
Tuberculosis.....	67
Typhoid fever.....	49
Whooping cough.....	67

MINNESOTA.

Chicken pox.....	2
Diphtheria.....	98
Measles.....	90
Pellagra.....	1
Pneumonia.....	3
Poliomyelitis.....	6
Scarlet fever.....	223
Smallpox.....	9
Tuberculosis.....	57
Typhoid fever.....	13
Whooping cough.....	11

MISSISSIPPI.

Diphtheria.....	45
Scarlet fever.....	11
Typhoid fever.....	15

MISSOURI.

Chicken pox.....	2
Diphtheria.....	110
Epidemic sore throat.....	11
Influenza.....	4
Measles.....	22
Mumps.....	2
Ophthalmia neonatorum.....	1
Poliomyelitis.....	1
Scarlet fever.....	57

MISSOURI—continued.

	Cases.
Smallpox.....	3
Tetanus.....	1
Trachoma.....	14
Tuberculosis.....	44
Typhoid fever.....	41
Whooping cough.....	67

MONTANA.

Diphtheria.....	6
Poliomyelitis:	
Great Falls.....	1
Troy.....	1
Scarlet fever.....	5
Typhoid fever.....	9

NEW JERSEY.

Cerebrospinal meningitis.....	2
Chicken pox.....	7
Diphtheria.....	85
Influenza.....	4
Malaria.....	1
Measles.....	25
Pneumonia.....	22
Poliomyelitis.....	17
Scarlet fever.....	21
Smallpox.....	1
Typhoid fever.....	21
Whooping cough.....	26

NEW MEXICO.

Diphtheria.....	18
Measles.....	6
Mumps.....	1
Poliomyelitis—Albuquerque.....	1
Scarlet fever.....	2
Tuberculosis.....	20
Typhoid fever.....	22
Whooping cough.....	2

NEW YORK.

(Exclusive of New York City.)

Cerebrospinal meningitis.....	4
Diphtheria.....	107
Influenza.....	3
Lethargic encephalitis.....	6
Measles.....	109
Pneumonia.....	51
Poliomyelitis.....	12
Scarlet fever.....	110
Smallpox.....	1
Typhoid fever.....	44
Whooping cough.....	160

NORTH CAROLINA.

Chicken pox.....	13
Diphtheria.....	231
Measles.....	151
Scarlet fever.....	81
Septic sore throat.....	4
Smallpox.....	10
Trachoma.....	1
Typhoid fever.....	35
Whooping cough.....	257



**SUMMARY OF CASES REPORTED MONTHLY BY 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.	Fellagra.	Felonyellitis.	Scarlet fever.	Smallpox.	Typhoid fever.
<i>July, 1923.</i>										
Arizona.....		9			10		1	12	3	6
<i>August, 1923.</i>										
Arizona.....		32			8			9		6
Colorado.....	3	145			124		1	44		67
Idaho.....		6			10			12	8	28
Indiana.....		111	18		145		1	78	42	60
Louisiana.....		95	4	78	89	30	2	15	7	127
Maryland.....	1	112	13	33	198		2	128	1	375
Massachusetts.....	10	564	11	3	271	2	26	282		64
Minnesota.....		245	3	1	81		15	306	43	65
New York.....	16	660	37	45	1,164		281	425	25	383
Wisconsin.....	5	211	16		283		9	234	31	36

**CITY REPORTS FOR WEEK ENDED SEPT. 8, 1923.**

**ANTHRAX.**

City.	Cases.	Deaths.
New Jersey: Camden.....	1	

**CEREBROSPINAL MENINGITIS.**

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Sept. 8, 1923.		City.	Median for previous years.	Week ended Sept. 8, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
California:				New Jersey:			
Bakersfield.....	0		1	Jersey City.....	0	1	
Los Angeles.....	0	1		New York:			
Pasadena.....	0		1	Cohoes.....	0	2	1
San Diego.....	0	1	1	New York.....	4	1	1
Illinois:				Yonkers.....	0	1	
Chicago.....	1	1		Pennsylvania:			
Massachusetts:				Chester.....	0	1	
Cambridge.....	0	1		Philadelphia.....	0		2
New Bedford.....	0		1	Pittsburgh.....	0	1	
Somerville.....	0	1		Wisconsin:			
Michigan:				Kenosha.....	0		1
Detroit.....	0	1					
Missouri:							
St. Louis.....	1	4	2				

**DIPHTHERIA.**

See p. 2288; also Current State summaries, p. 2278, and Monthly summaries by States, above.

## CITY REPORTS FOR WEEK ENDED SEPT. 8, 1923—Continued.

## INFLUENZA.

City.	Cases.		Deaths, week ended Sept. 8, 1923.	City.	Cases.		Deaths, week ended Sept. 8, 1923.
	Week ended Sept. 9, 1922.	Week ended Sept. 8, 1923.			Week ended Sept. 9, 1922.	Week ended Sept. 8, 1923.	
Alabama:				Massachusetts:			
Birmingham.....		1		Boston.....		3	
California:				Missouri:			
Long Beach.....	1			Kansas City.....	1		
Los Angeles.....		1		St. Joseph.....			1
Oakland.....		1	1	New Jersey:			
Pasadena.....		1		Long Branch.....		1	
San Francisco.....	2	1	1	Newark.....	1	4	
Stockton.....		1		New York:			
Connecticut:				Cohoes.....	1		
Hartford.....	1			Middletown.....	1		
District of Columbia:				New York.....	4	8	1
Washington.....		3		Ohio:			
Florida:				Columbus.....			1
Tampa.....	1			Pennsylvania:			
Illinois:				Philadelphia.....	3	1	2
Chicago.....	2	4		Pittsburgh.....		2	
Louisiana:				West Virginia:			
Baton Rouge.....	1			Charleston.....	1		
New Orleans.....	1						
Maryland:							
Baltimore.....		3	1				

## LEPROSY.

City.	Cases.	Deaths.
Louisiana:		
New Orleans.....	2	1

## LETHARGIC ENCEPHALITIS.

Nebraska:		
Omaha.....		1

## MALARIA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama:			Kansas:		
Birmingham.....	15		Topeka.....	1	
Montgomery.....	6		Louisiana:		
Tuscaloosa.....	2		New Orleans.....	1	1
Arkansas:			Maryland:		
Little Rock.....	2		Baltimore.....	1	
Connecticut:			Michigan:		
New Britain.....	1		Benton Harbor.....	1	
Florida:			New Jersey:		
Tampa.....		1	Nowark.....	1	
Georgia:			New York:		
Brunswick.....	1		New York.....	2	
Macon.....	6		Ohio:		
Savannah.....	1		Cleveland.....	1	
Illinois:			Tennessee:		
Chicago.....		1	Memphis.....	14	

## CITY REPORTS FOR WEEK ENDED SEPT. 8, 1923—Continued.

## MEASLES.

See p. 2288; also Current State summaries, p. 2278, and Monthly summaries by States, p. 2282.

## PELLAGRA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Georgia:			Pennsylvania:		
Atlanta.....		1	Philadelphia.....		1
New Mexico:			South Carolina:		
Albuquerque.....	1	1	Charleston.....		3
North Carolina:			Columbia.....		3
Greensboro.....		2	Texas:		
			Houston.....		1

## PNEUMONIA (ALL FORMS).

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama:			Massachusetts—Continued.		
Birmingham.....		7	Somerville.....	2	
Mobile.....	1		Springfield.....	1	
California:			Winchester.....		1
Eureka.....		1	Worcester.....		3
Long Beach.....		1	Michigan:		
Los Angeles.....	11	6	Alpena.....	1	
Oakland.....		1	Detroit.....		21
Richmond.....		1	Flint.....		1
Riverside.....	1		Grand Rapids.....	1	
Sacramento.....		3	Highland Park.....	1	
San Bernardino.....		1	Kalamazoo.....		1
San Diego.....		1	Pontiac.....	2	1
San Francisco.....	8	3	Minnesota:		
Santa Ana.....		1	Faribault.....		1
Stockton.....		1	Minneapolis.....		1
Colorado:			St. Paul.....		2
Denver.....		3	Missouri:		
Connecticut:			Kansas City.....	7	6
New Britain.....		1	St. Joseph.....		1
New Haven.....	2		Montana:		
District of Columbia:			Great Falls.....		1
Washington.....		8	Nebraska:		
Florida:			Omaha.....		1
Tampa.....	2		New Hampshire:		
Georgia:			Keene.....		1
Atlanta.....	11	11	Manchester.....		1
Savannah.....	3		New Jersey:		
Illinois:			Camden.....		2
Bloomington.....		1	Elizabeth.....		2
Chicago.....	58	28	Hackensack.....	2	
Decatur.....		1	Kearny.....	2	1
Evanston.....	1		Morristown.....	1	
Jacksonville.....		1	Newark.....	17	7
Peoria.....		3	Passaic.....		1
Quincy.....	1		Paterson.....	1	
Springfield.....		1	Perth Amboy.....		1
Indiana:			Trenton.....		2
East Chicago.....		1	New Mexico:		
Indianapolis.....	4		Albuquerque.....		1
South Bend.....		1	New York:		
Terre Haute.....		1	Albany.....	2	
Kansas:			Buffalo.....	9	3
Wichita.....	1		Jamestown.....		1
Kentucky:			Middletown.....	1	
Louisville.....	7		New York.....	96	74
Louisiana:			Rochester.....		4
New Orleans.....	6		Rome.....	2	
Maryland:			Syracuse.....	3	1
Baltimore.....	21		Troy.....		1
Massachusetts:			Yonkers.....	1	
Boston.....	4		North Carolina:		
Brookline.....	1		Greensboro.....		1
Chelsea.....		1	Winston-Salem.....		2
Everett.....	2		Ohio:		
Framingham.....		2	Ashtabula.....		1
Haverhill.....		1	Barberton.....		1
Lowell.....		1	Canton.....		1
New Bedford.....		2	Cincinnati.....		4
Newton.....		1	Cleveland.....	19	16
Pittsfield.....	1		Columbus.....		1
Salem.....		1	Dayton.....	1	

## CITY REPORTS FOR WEEK ENDED SEPT. 8, 1923—Continued.

## PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Ohio—Continued.			Texas:		
East Youngstown.....		1	El Paso.....	3	1
Kenmore.....	1	.....	Galveston.....		2
Niles.....		2	Houston.....		1
Toledo.....		2	San Antonio.....		3
Youngstown.....		1	Utah:		
Zanesville.....		2	Salt Lake City.....		1
Oklahoma:			Virginia:		
Oklahoma.....		2	Lynchburg.....		2
Oregon:			Norfolk.....		1
Portland.....		3	Richmond.....		2
Pennsylvania:			West Virginia:		
Philadelphia.....	27	19	Huntington.....		2
Pittsburgh.....		20	Wheeling.....		1
Rhode Island:			Wisconsin:		
Providence.....		3	Kenosha.....		1
South Carolina:			Madison.....		1
Columbia.....		1	Milwaukee.....		3
South Dakota:					
Sioux Falls.....		1			
Tennessee:					
Memphis.....		1			
Nashville.....		2			

## POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Sept. 8, 1923.		City.	Median for previous years.	Week ended Sept. 8, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
California:				Minnesota:			
Los Angeles.....	0	1	1	Duluth.....	0	3	.....
Connecticut:				Nebraska:			
Meriden.....	0	1	.....	Omaha.....	0	5	3
New Haven.....	0	1	.....	New Jersey:			
District of Columbia:				East Orange.....	0	1	.....
Washington.....	0	1	.....	Newark.....	0	2	.....
Illinois:				New York:			
Bloomington.....	0	1	1	New York.....	4	32	.....
Chicago.....	3	8	.....	Schenectady.....	0	1	.....
Elgin.....	0	2	.....	Syracuse.....	0	2	.....
Iowa:				Yonkers.....	0	1	.....
Council Bluffs.....	0	6	.....	Ohio:			
Marshalltown.....	0	2	.....	Akron.....	0	2	.....
Kansas:				Cleveland.....	1	1	.....
Topeka.....	0	4	.....	Columbus.....	0	1	.....
Maine:				Pennsylvania:			
Portland.....	0	1	.....	Philadelphia.....	0	2	.....
Massachusetts:				Pittsburgh.....	1	1	.....
Boston.....	2	2	2	Wilkes-Barre.....	0	4	.....
Braintree.....	0	1	.....	Washington:			
Leominster.....	0	1	.....	Seattle.....	0	2	.....
Lowell.....	0	1	.....	Wisconsin:			
				Milwaukee.....	0	1	.....

## RABIES IN ANIMALS.

City.	Cases.	City.	Cases.
California:		Missouri:	
Los Angeles.....	13	Kansas City.....	2
Kansas:		New Jersey:	
Lawrence.....	1	East Orange.....	2
Kentucky:		Tennessee:	
Owensboro.....	1	Memphis.....	1
Massachusetts:			
Malden.....	1		

## CITY REPORTS FOR WEEK ENDED SEPT. 8, 1923—Continued.

## SCARLET FEVER.

See p. 2288; also Current State summaries, p. 2278, and Monthly summaries by States, p. 2282.

## SMALLPOX.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Sept. 8, 1923.		City.	Median for previous years.	Week ended Sept. 8, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
California:				Missouri:			
Los Angeles.....	0	1	.....	St. Louis.....	0	2	.....
San Diego.....	0	1	.....	New York:			
Connecticut:				Niagara Falls.....	0	1	.....
New Haven.....	0	1	.....	Ohio:			
District of Columbia:				Cleveland.....	0	1	.....
Washington.....	0	1	.....	Zanesville.....	0	1	.....
Illinois:				Oklahoma:			
Chicago.....	0	1	.....	Tulsa.....	0	1	.....
Decatur.....	0	3	.....	Vermont:			
Springfield.....	0	1	.....	Burlington.....	0	1	.....
Indiana:				Virginia:			
Kokomo.....	0	1	.....	Roanoke.....	0	1	.....
Muncie.....	0	6	.....	Washington:			
Iowa:				Everett.....	0	1	.....
Davenport.....	0	4	.....	Seattle.....	0	2	.....
Sioux City.....	0	1	.....	Spokane.....	0	1	.....
Michigan:				Tacoma.....	0	1	.....
Grand Rapids.....	0	2	.....	Yakima.....	0	1	.....
Holland.....	0	1	.....	Wisconsin:			
Jackson.....	0	1	.....	Janesville.....	0	1	.....
Minnesota:				Kenosha.....	0	4	.....
Hibbing.....	0	1	.....	Superior.....	0	7	.....
Minneapolis.....	2	1	.....				
St. Paul.....	1	1	.....				

## TETANUS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California:			Maryland:		
San Diego.....	1	1	Baltimore.....	1	.....
Connecticut:			Minnesota:		
Bristol.....	1	1	St. Paul.....	.....	2
Hartford.....	1	1	Missouri:		
New Haven.....	1	.....	St. Louis.....	2	2
Illinois:			North Carolina:		
Chicago.....	6	3	Raleigh.....	.....	1
Indiana:			Texas:		
East Chicago.....	.....	1	El Paso.....	.....	1
Iowa:					
Dubuque.....	1	.....			

## TUBERCULOSIS.

See p. 2288; also Current State summaries, p. 2278.

## CITY REPORTS FOR WEEK ENDED SEPT. 8, 1923—Continued.

## TYPHOID FEVER.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Sept. 8, 1923.		City.	Median for previous years.	Week ended Sept. 8, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
<b>Alabama:</b>				<b>Michigan—Continued.</b>			
Birmingham.....	4	7	1	Flint.....	4	3	
Mobile.....	2	1		Highland Park.....	0	1	
Montgomery.....	0	4	1	<b>Minnesota:</b>			
Tuscaloosa.....	0	1		Duluth.....	0	1	
<b>Arkansas:</b>				Minneapolis.....	1	6	
Little Rock.....	2	2		St. Paul.....	1	2	
<b>California:</b>				<b>Missouri:</b>			
Los Angeles.....	4	4	1	Kansas City.....	2	3	
Oakland.....	1	1		St. Louis.....	10	9	2
Sacramento.....	1	1		Springfield.....	0		1
San Bernardino.....	0	1		<b>Montana:</b>			
San Francisco.....	1	1		Missoula.....	0	1	
<b>Colorado:</b>				<b>New Jersey:</b>			
Denver.....	5	3		Bayonne.....	0	1	
<b>Connecticut:</b>				Bloomfield.....	0	1	
Bridgeport.....	1	1		Camden.....	3	2	
Manchester.....	0	1		East Orange.....	0	1	
Milford.....	0	1		Elizabeth.....	0	1	1
New Britain.....	0	1		Newark.....	3	2	
New Haven.....	3	8	1	Trenton.....	0	1	1
New London.....	0	1		<b>New Mexico:</b>			
<b>District of Columbia:</b>				Albuquerque.....	3	1	
Washington.....	5	8	2	<b>New York:</b>			
<b>Georgia:</b>				Albany.....	1	2	
Albany.....	0	1		Amsterdam.....	1	1	
Atlanta.....	3	2		Buffalo.....	4	3	1
<b>Augusta:</b>				Ithaca.....	0	1	
Augusta.....	0	3		Lockport.....	0	1	
Macon.....	1	1		New York.....	54	51	11
Savannah.....	1	1		Rochester.....	1	5	
<b>Illinois:</b>				Syracuse.....	2	1	
Alton.....	0	1		Watertown.....	0	1	
Chicago.....	14	12	1	Yonkers.....	1	1	
Decatur.....	1	2		<b>North Carolina:</b>			
Elgin.....	0	1		Greensboro.....	0	2	
Peoria.....	0	1		Raleigh.....	0		1
Springfield.....	0	2		Winston-Salem.....	4	2	1
<b>Indiana:</b>				<b>North Dakota:</b>			
East Chicago.....	0	1		Fargo.....	0	1	
Hammond.....	1	1		<b>Ohio:</b>			
Huntington.....	0	1		Akron.....	2	3	
Indianapolis.....	3	1		Barberton.....	0	1	
<b>Iowa:</b>				Bucyrus.....	0	1	
Marshalltown.....	0	1		Cincinnati.....	2	1	
Sioux City.....	0	2		Cleveland.....	5	7	2
<b>Kansas:</b>				Columbus.....	3	3	
Coffeyville.....	1	1		Dayton.....	1	4	
Hutchinson.....	1	2		Kenmore.....	0	1	
Kansas City.....	0	3		Lorain.....	0	1	
Wichita.....	3	2		Mansfield.....	0	1	
<b>Kentucky:</b>				Middletown.....	0	1	
Louisville.....	6	3		Teledo.....	2	6	1
Owensboro.....	1	1		Zanesville.....	2	2	
<b>Louisiana:</b>				<b>Oklahoma:</b>			
New Orleans.....	6	2		Oklahoma.....	1	1	1
<b>Maine:</b>				Tulsa.....	4	2	
Lewiston.....	0	1		<b>Pennsylvania:</b>			
<b>Maryland:</b>				Altoona.....	2	1	
Baltimore.....	16	12	2	Bethlehem.....	2	2	
<b>Massachusetts:</b>				Bristol.....	0	1	
Beverly.....	0	2		Coatesville.....	0	1	
Boston.....	6	7		Erie.....	0	2	
Cambridge.....	0	1	1	Harrisburg.....	0	2	
Chelsea.....	1	1		Johnstown.....	2	5	
Haverhill.....	1	1		Lancaster.....	0	1	
New Bedford.....	2	1		Philadelphia.....	22	12	1
North Adams.....	0	2		Pittsburgh.....	8	8	2
Quincy.....	0	1		Wilkes-Barre.....	1	1	
Waltham.....	0	1		Woodlawn.....	2	5	
<b>Michigan:</b>				York.....	1	1	
Ann Arbor.....	0	1					
Detroit.....	13		1				

CITY REPORTS FOR WEEK ENDED SEPT. 8, 1923—Continued.

TYPHOID FEVER—Continued.

City.	Median for previous years.	Week ended Sept. 8, 1923.		City.	Median for previous years.	Week ended Sept. 8, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
South Carolina:				Virginia—Continued.			
Charleston.....	2	3		Portsmouth.....	0	1	1
Columbia.....	0	1		Richmond.....	4	5	
Tennessee:				Roanoke.....	2	1	2
Knoxville.....	0	3	3	Washington:			
Memphis.....	4	7	1	Everett.....	0	2	
Nashville.....	6	5	1	Seattle.....	3	1	
Texas:				Spokane.....	0	1	
Austin.....	0	30	1	Tacoma.....	1	2	
Dallas.....	3	2	1	West Virginia:			
Fort Worth.....	1	3		Bluefield.....	0	3	1
Galveston.....	0	1		Charleston.....	2	2	
Houston.....	0	1		Clarksburg.....	2	1	
Waco.....	1	1		Fairmont.....	2	2	
Utah:				Martinsburg.....	0	1	
Provo.....	6	1		Morgantown.....	1	1	
Salt Lake City.....	1	5		Wheeling.....	0	3	2
Virginia:				Wisconsin:			
Lynchburg.....	1	2		Wausau.....	0	2	
Norfolk.....	2	3					

TYPHUS FEVER.

City.	Cases.	Deaths.
Georgia:		
Savannah.....		1

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:										
Birmingham.....	178,806	62	12		2		3		17	8
Dothan.....	10,034	1	2		3		1			
Mobile.....	60,777	15	4				1			1
Montgomery.....	43,464	14	2							1
Tuscaloosa.....	11,996		3						1	
Arkansas:										
Fort Smith.....	28,870						1			
Little Rock.....	65,142						3		1	
North Little Rock.....	14,048			1			2			
California:										
Alameda.....	28,806	4					1		2	
Bakersfield.....	18,638	4								
Eureka.....	12,923	13		1					2	4
Glendale.....	15,536	5							2	2
Long Beach.....	55,593	14	4		1		2			2
Los Angeles.....	576,673	173	43		2		8	1	50	18
Oakland.....	216,261	39	21	2	1				2	
Pasadena.....	45,354	13							2	
Richmond.....	16,843	1					1		1	
Riverside.....	19,341	6							6	
Sacramento.....	65,908	19	3							4
San Bernardino.....	18,721	12								2
San Diego.....	74,683	20	1		1		4		1	
San Francisco.....	506,676	124	24	5	163	1	3		20	9
Santa Ana.....	15,485	2					1			
Stockton.....	19,441	6								
Santa Barbara.....	40,296	13	3				2			1
Vallejo.....	21,107	3	2							

## CITY REPORTS FOR WEEK ENDED SEPT. 8, 1923—Continued.

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Colorado:										
Denver .....	256,491	65	6				7			12
Pueblo .....	43,050	13	11						2	1
Trinidad .....	10,906				1					
Connecticut:										
Bridgeport .....	143,555	28	4				2		7	
Bristol .....	20,620	3	1							
Danbury (town) .....	22,325	8							1	
Fairfield (town) .....	11,475	2								
Greenwich (town) .....	22,123				1					
Hartford .....	138,036	44	2						2	2
Manchester (town) .....	18,370	2								
Meriden (city) .....	29,967								1	
Milford (town) .....	10,193	3	2							
New Britain .....	59,516	13	4							
New Haven .....	162,537	35	1		1		2		2	1
New London .....	25,688	10								
Norwich (city) .....	22,304	5	2							
District of Columbia:										
Washington .....	437,571	105	2	1	4		7		21	11
Florida:										
Tampa .....	51,608	19			1				1	
Georgia:										
Albany .....	11,555								1	
Atlanta .....	200,616	74	4	1			5		2	4
Augusta .....	52,545	22	3			1	1		1	3
Brunswick .....	14,413	4								
Macon .....	52,995								6	
Rome .....	13,252		2							
Savannah .....	83,252	30			2					1
Idaho:										
Boise .....	21,393	2								
Illinois:										
Alton .....	24,682	7								
Aurora .....	36,397	4	3						3	
Bloomington .....	28,725	11	1				1		2	
Centralia .....	12,491	6								
Chicago .....	2,701,705	510	57	3	10	1	28		88	28
Cicero .....	44,995	4	1							
Decatur .....	43,818	8					1			
Elgin .....	27,454	6			1				1	
Evanston .....	37,234	11	2				2		2	
Forest Park .....	10,768		1							
Freeport .....	19,669	4					1			
Galesburg .....	23,834	5								
Jacksonville .....	15,713	5							1	1
Kewanee .....	16,026	3							1	1
La Salle .....	13,050	2					1		1	
Oak Park .....	39,858	15	1							
Pekin .....	12,066						1			
Peoria .....	76,121	17					1			2
Quincy .....	35,978	12	1							
Rock Island .....	35,177	4	1							
Rockford .....	65,651	5	1				1			
Springfield .....	59,133	15	1						4	1
Indiana:										
Anderson .....	29,767	2					2			
Crawfordsville .....	10,139	2								
East Chicago .....	35,967	11					2			1
Elwood .....	10,790	2								
Frankfort .....	11,585	8					1			
Gary .....	55,378	9					1			
Hammond .....	36,004	6					2			
Huntington .....	14,000	3	1							
Indianapolis .....	314,134	74	2		2				7	7
Kokomo .....	30,067	11	1							1
La Fayette .....	22,486	4								1
Logansport .....	21,626	8	8	1						
Michigan City .....	19,457	2								
Mishawaka .....	15,195	4					1			1
Muncie .....	36,524	8								1
Newcastle .....	14,458	3								
South Bend .....	70,983	13	2	1	1		4		9	
Terre Haute .....	66,083	23	3				6			

## CITY REPORTS FOR WEEK ENDED SEPT. 8, 1923—Continued.

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<b>Iowa:</b>										
Burlington.....	24,057	6	3							
Council Bluffs.....	36,162	4	2							
Davenport.....	56,727	6	1				1			
Dubuque.....	39,141						1			
Marshalltown.....	15,731						2			
Muscatine.....	16,063	8								
Sioux City.....	71,227				3		1		1	
<b>Kansas:</b>										
Coffeyville.....	13,452	6	1							
Fort Scott.....	10,693	3								
Hutchinson.....	23,298		1						1	
Kansas City.....	101,177		1		4		4		3	
Lawrence.....	12,456	1								
Topeka.....	50,022	7			2		5		1	1
Wichita.....	72,217	23	3				2			
<b>Kentucky:</b>										
Covington.....	57,121	15		1			1		2	
Henderson.....	12,169	1								
Louisville.....	234,891	85	1				2		11	6
Owensboro.....	17,424		1				2		1	
Paducah.....	24,735		1							
<b>Louisiana:</b>										
New Orleans.....	387,219	124	5						22	12
<b>Maine:</b>										
Auburn.....	16,985				1		1			
Bangor.....	25,978								1	
Biddeford.....	18,008	3								
Lewiston.....	31,791	10			1				1	
Portland.....	69,272	10	1							
<b>Maryland:</b>										
Baltimore.....	733,826	211	8	1	4		10		33	19
Cumberland.....	9,537	9								1
Frederick.....	11,066	3								
<b>Massachusetts:</b>										
Amesbury (town).....	10,036	2								
Arlington (town).....	18,665	1								
Attleboro.....	19,731	4								1
Belmont (town).....	10,749	2								
Beverly.....	22,541	4								
Boston.....	748,063	138	69	2	8	1	17		48	4
Braintree (town).....	10,580	3								1
Brookline.....	37,748	3	1						2	
Cambridge.....	109,694	24	6	1	1				4	
Chelsea.....	43,184	3	2						1	
Chicopee.....	36,214	12							1	1
Clinton.....	12,979	2	1							
Danvers.....	11,108		1							
Dedham.....	10,792	4								
Easthampton.....	11,261						1			
Everett.....	40,120	6					1			
Fall River.....	120,485	30	8				2			2
Frammingham.....	17,033	6					1		1	
Gardner.....	16,971	4							1	
Greenfield.....	15,462	2	1							
Haverhill.....	53,884	10					4			1
Holyoke.....	60,203	12	6				1		2	2
Lawrence.....	94,270	17							1	
Leominster.....	19,744	2	2							
Lowell.....	112,759	29			1		2		6	2
Lynn.....	99,148	16	5				1		3	
Malden.....	49,103	7	4	1			2			
Medford.....	39,038	4	2						1	
Melrose.....	18,204	1					1			
Methuen.....	15,180	2								
New Bedford.....	121,217	28							6	3
Newburyport.....	15,618	3								
Newton.....	46,054	9							1	
North Adams.....	22,282	5								1
Northbridge.....	10,174	2							1	
Peabody.....	19,552	4	1							1
Pittsfield.....	41,763	9	1						4	
Plymouth.....	13,045	6								
Quincy.....	47,876	10	5	1			2		2	

## CITY REPORTS FOR WEEK ENDED SEPT. 8, 1923—Continued.

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Population Jan. 1, 1922.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<b>Massachusetts—Continued.</b>										
Beverly.....	28,883	2								
Barnstable.....	42,529	4	6	2			1			1
Somerville.....	92,901	18	1				2		4	1
Southbridge.....	14,245	3					1			
Springfield.....	128,614	30	3				3		6	1
Taunton.....	37,137	7							3	1
Wakefield.....	13,025	2	1						2	
Waltham.....	30,915	3							3	
Watertown.....	21,457	1			1					
Webster.....	13,258	1								
Westfield.....	18,604	1								
Winchester.....	10,465	2								
Woburn.....	18,574	4								
Worcester.....	179,754	45	10	2			5		9	3
<b>Michigan:</b>										
Ann Arbor.....	19,516	10								
Battle Creek.....	36,164		1				2			
Benton Harbor.....	12,233	3	2					1		
Detroit.....	993,678	224	21	1	7		29		28	21
Flint.....	91,599	28	13	1	2		1		3	
Grand Rapids.....	137,634	29	6	1			4		2	1
Hamtramck.....	48,615	3	7							1
Highland Park.....	46,409	11					1			
Jackson.....	48,374	6	1				11			
Kalamazoo.....	46,487	14	9		2		1		2	1
Marquette.....	12,718	2			1					
Muskegon.....	36,570	8								
Pontiac.....	34,273	11					9		4	
Sault Ste. Marie.....	12,696				1					
<b>Minnesota:</b>										
Duluth.....	98,917	6					5		5	
Faribault.....	11,660	5	1		21		1			
Hibbing.....	15,089		1				4			
Mankato.....	12,469								1	
Minneapolis.....	360,552	81	11				21		23	10
Rocheater.....	13,722	15								
St. Cloud.....	15,873		2				1			
St. Paul.....	234,698	51	25	1	2		11		7	2
Winona.....	19,143						1			
<b>Missouri:</b>										
Independence.....	11,686		4				4			
Kansas City.....	324,410	73	12	1	2		9		8	3
St. Joseph.....	77,939	27	2							
St. Louis.....	772,897	153	10	1	5		12		35	6
Springfield.....	39,631	11								
<b>Montana:</b>										
Anaconda.....	11,668				13					
Billings.....	15,100	1			1					
Great Falls.....	24,121	5							1	
Helena.....	12,937	7								1
Missoula.....	12,668	5								
<b>Nebraska:</b>										
Lincoln.....	54,948	10								
Omaha.....	191,601	46	10	1			1			
<b>Nevada:</b>										
Reno.....	12,016	1								
<b>New Hampshire:</b>										
Berlin.....	16,104	4								
Concord.....	22,167	3					1		1	
Dover.....	13,029	1								
Keene.....	11,210	1			28					
Manchester.....	78,384	20	2				2			1
Nashua.....	28,379	11			3					
<b>New Jersey:</b>										
Asbury Park.....	12,400	3								
Bayonne.....	76,754		2						5	
Bloomfield.....	22,019	1								
Camden.....	116,309	17	1						3	
Clifton.....	20,470	3	3							
East Orange.....	50,710	5							1	1
Elizabeth.....	95,783		10						1	2
Garfield.....	19,331	3								
Hackensack.....	17,667	6								
Hoboken.....	68,166	10	1				1		1	

CITY REPORTS FOR WEEK ENDED SEPT. 8, 1923—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Popu-lation Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber-culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New Jersey—Continued.										
Jersey City.....	298, 103	.....	2	.....	1	.....	.....	.....	3	.....
Kearny.....	26, 724	.....	.....	.....	1	.....	.....	.....	1	.....
Long Branch.....	13, 521	.....	.....	.....	.....	.....	.....	.....	3	.....
Morristown.....	12, 548	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newark.....	414, 524	81	5	.....	5	.....	1	.....	19	9
Orange.....	33, 268	3	1	.....	.....	.....	.....	.....	2	.....
Passaic.....	63, 841	12	10	1	.....	.....	2	.....	1	.....
Paterson.....	135, 875	.....	5	.....	1	.....	.....	.....	2	.....
Perth Amboy.....	41, 707	12	2	1	.....	.....	.....	.....	1	.....
Phillipsburg.....	16, 923	4	.....	.....	.....	.....	.....	.....	1	1
Plainfield.....	27, 700	4	.....	.....	.....	.....	.....	.....	.....	.....
Summit.....	10, 174	1	.....	.....	.....	.....	.....	.....	.....	.....
Trenton.....	119, 289	24	6	.....	.....	.....	1	.....	5	5
West Hoboken.....	40, 074	1	.....	.....	.....	.....	.....	.....	.....	.....
West New York.....	29, 926	3	1	.....	.....	.....	1	.....	.....	.....
West Orange.....	15, 573	1	1	.....	.....	.....	.....	.....	.....	.....
New Mexico:										
Albuquerque.....	15, 157	14	.....	1	.....	.....	.....	.....	.....	4
New York:										
Albany.....	113, 344	.....	2	.....	1	.....	1	.....	2	.....
Amsterdam.....	33, 524	9	1	.....	.....	.....	.....	.....	3	1
Buffalo.....	506, 775	112	15	1	2	.....	4	.....	11	10
Cohoes.....	22, 987	7	.....	.....	.....	.....	.....	.....	.....	.....
Elmira.....	45, 393	10	.....	.....	.....	.....	.....	.....	.....	.....
Geneva.....	14, 648	0	.....	.....	.....	.....	.....	.....	.....	.....
Glens Falls.....	16, 638	4	.....	.....	.....	.....	.....	.....	.....	.....
Hornell.....	15, 025	0	.....	.....	.....	.....	.....	.....	.....	.....
Ithaca.....	17, 004	8	3	.....	.....	.....	.....	.....	2	1
Jamestown.....	38, 917	12	.....	.....	1	.....	.....	.....	.....	.....
Little Falls.....	13, 029	2	.....	.....	.....	.....	.....	.....	.....	.....
Lockport.....	21, 306	2	.....	.....	.....	.....	.....	.....	.....	.....
Mount Vernon.....	42, 726	6	.....	.....	1	.....	.....	.....	.....	.....
New York.....	5, 620, 048	1, 049	60	5	36	1	16	.....	156	184
Newburgh.....	30, 366	6	.....	.....	.....	.....	.....	.....	.....	.....
Niagara Falls.....	50, 760	7	.....	.....	.....	.....	.....	.....	2	.....
North Tonawanda.....	15, 482	3	.....	.....	1	.....	.....	.....	.....	.....
Olean.....	20, 506	2	.....	.....	.....	.....	.....	.....	.....	.....
Peekskill.....	15, 968	7	2	.....	1	.....	.....	.....	1	.....
Rochester.....	295, 750	56	4	.....	.....	.....	.....	.....	9	.....
Rome.....	26, 341	11	2	.....	2	.....	.....	.....	.....	2
Saratoga Springs.....	13, 181	6	.....	.....	.....	.....	10	.....	.....	.....
Schenectady.....	88, 723	14	17	.....	5	.....	.....	.....	.....	.....
Syracuse.....	171, 717	38	3	1	3	.....	3	.....	.....	.....
Troy.....	72, 013	19	2	.....	1	.....	9	1	.....	.....
Watertown.....	31, 285	11	1	.....	1	.....	2	.....	6	.....
White Plains.....	21, 031	3	.....	.....	.....	.....	.....	.....	1	.....
Yonkers.....	100, 176	19	2	.....	.....	.....	1	.....	.....	2
North Carolina:										
Durham.....	21, 719	6	3	.....	2	.....	.....	.....	.....	.....
Greensboro.....	43, 525	11	1	.....	1	.....	2	.....	.....	1
Raleigh.....	24, 418	10	1	.....	.....	.....	.....	.....	.....	1
Rocky Mount.....	12, 742	2	.....	.....	.....	.....	.....	.....	.....	.....
Salisbury.....	13, 884	4	.....	.....	.....	.....	.....	.....	.....	1
Winston-Salem.....	48, 395	14	3	1	2	.....	4	.....	.....	.....
North Dakota:										
Fargo.....	21, 961	4	.....	.....	.....	.....	.....	.....	.....	1
Grand Forks.....	14, 010	.....	.....	.....	.....	.....	2	.....	.....	.....
Ohio:										
Akron.....	208, 435	20	6	.....	1	.....	.....	.....	1	.....
Ashtabula.....	22, 082	6	.....	.....	.....	.....	.....	.....	.....	2
Barberton.....	18, 811	6	1	.....	.....	.....	.....	.....	.....	1
Bucyrus.....	10, 425	2	.....	.....	.....	.....	.....	.....	.....	.....
Cambridge.....	13, 104	6	.....	.....	.....	.....	1	.....	.....	.....
Canton.....	87, 091	15	5	.....	.....	.....	.....	.....	.....	2
Chillicothe.....	15, 831	2	.....	.....	.....	.....	.....	.....	.....	.....
Cincinnati.....	401, 247	111	4	.....	.....	.....	1	.....	.....	.....
Cleveland.....	796, 841	169	21	2	2	.....	12	.....	13	13
Cleveland Heights.....	15, 236	.....	.....	.....	.....	.....	.....	.....	25	10
Columbus.....	237, 031	74	6	1	.....	.....	1	.....	2	.....
Dayton.....	152, 559	37	4	.....	.....	.....	2	.....	.....	.....
East Cleveland.....	27, 292	6	.....	.....	.....	.....	1	.....	.....	.....
East Youngstown.....	11, 237	2	.....	.....	.....	.....	.....	.....	.....	.....
Findlay.....	17, 021	2	.....	.....	.....	.....	.....	.....	1	.....

<sup>1</sup> Pulmonary only.



CITY REPORTS FOR WEEK ENDED SEPT. 8, 1923—Continued.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<b>Rhode Island—Continued.</b>										
Newport	30,255	5	2							1
Pawtucket	64,248	13	1				1			1
Providence	237,595	53		1		1	1	3		3
<b>South Carolina:</b>										
Charleston	67,957	22	1		2					2
Columbia	37,524	24		1	3				2	4
Greenville	23,127	0								
<b>South Dakota:</b>										
Sioux Falls	25,202	5					1			1
<b>Tennessee:</b>										
Chattanooga	57,895	0	4				2			
Knoxville	77,818						2			
Memphis	162,351	37	3				1		4	4
Nashville	118,342	41		1			1		6	5
<b>Texas:</b>										
Austin	34,876	7	1				1		1	
Beaumont	40,422	8					1			1
Corpus Christi	10,522	2								
Dallas	158,976	24	3						4	1
El Paso	77,560	23			1		1			5
Fort Worth	106,482	19	4	1			2		1	
Galveston	44,255	8	1				1		1	
Houston	138,276	38	3		1					4
San Antonio	161,379	50					1			6
Waco	38,500	5								1
<b>Utah:</b>										
Provo	10,303	2			1					
Salt Lake City	118,110	25			1	1			3	
<b>Vermont:</b>										
Burlington	22,779	4					1			
<b>Virginia:</b>										
Alexandria	18,060	7								1
Charlottesville	10,688	0								
Lynchburg	30,070	5	2		1					
Norfolk	115,777								1	4
Petersburg	31,012	6	3				1		1	1
Portsmouth	54,387	14					1			
Richmond	171,667	40	4	1	1				5	5
Roanoke	50,842	19	3	1			1		1	
<b>Washington:</b>										
Seattle	315,312	6			2		2		33	
Spokane	104,437	1					3			
Tacoma	96,965	2					4			
Walla Walla	15,503									
Yakima	18,539		1		4		1		1	
<b>West Virginia:</b>										
Bluefield	15,282	4								1
Charleston	39,608	8	1				1			
Clarksburg	27,869	5	2				5			
Fairmont	17,851		1							
Huntington	52,177	22	3	1			2			3
Morgantown	12,127	1							1	
Wheeling	56,208	16	1				3			
<b>Wisconsin:</b>										
Appleton	19,561	4					1			
Ashland	11,334	3	1				2			1
Beloit	21,284	9					5			2
Eau Claire	20,906				2				1	
Fond du Lac	23,427	5								
Green Bay	31,017				1		1			
Janesville	18,293	5								
Kenosha	40,472	10	1							
Madison	38,378	9	1				1		1	
Manitowoc	17,363								1	
Marinette	13,610								1	
Milwaukee	457,147	22			3		10		11	2
Oshkosh	33,162	4	1							
Racine	58,593	13	2	1			1			
Sheboygan	30,955	8	1	1			3		1	
Superior	39,671	5					1			
Waukesha	12,538				1					
Wausau	18,661		4				1			
West Allis	13,745				3					

## FOREIGN AND INSULAR.

### CHILE.

#### Influenza—Iquique.

During the three weeks ended August 18, 1923, 30 deaths from influenza were reported at Iquique, Chile. (Population, 40,000.)<sup>1</sup>

### COLOMBIA.

#### Yellow Fever—Bucaramanga.

During the period July 30 to August 26, 1923, yellow fever was reported still present at Bucaramanga, Colombia.<sup>2</sup>

### CUBA.

#### Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Disease.	Sept. 1-10, 1923.		Remain- ing under treatment Sept. 10, 1923.
	New cases.	Deaths.	
Diphtheria.....	3	.....	2
Leprosy.....	1	1	14
Malaria.....	24	1	28
Paratyphoid fever.....	1	1	.....
Typhoid fever.....	9	3	36

<sup>1</sup> From abroad, 1.

<sup>2</sup> From the interior, 14.

<sup>3</sup> From the interior, 11.

### GREAT BRITAIN.

#### Births and Deaths—Second Quarter, 1923—Scotland.<sup>3</sup>

The tables given below were compiled from figures published in the "Quarterly Return of Births, Deaths, and Marriages Registered in Scotland During the Quarter Ending June 30, 1923," issued by the registrar general of Scotland.

The following are extracts from the Return:

"Deaths registered in Scotland during the quarter numbered 16,319. \* \* \* The quarterly death rate was 13.3 per thousand. This rate is 1.3 less than that of the previous quarter, 1.2 less than that of the second quarter of last year, 0.8 less than the mean of those of the second quarters of the preceding five years, and 1.6 less than

<sup>1</sup> Public Health Reports, Sept. 7, 1923, p. 2105, and Sept. 14, 1923, p. 2188.

<sup>2</sup> Public Health Reports, Mar. 23, 1923, p. 650, and subsequent issues.

<sup>3</sup> Birth, death, and marriage rates in Scotland, by quarters, for 10 years, 1913 to 1922, inclusive, and for the first quarter of 1923, were published in the Public Health Reports, vol. 38, No. 27, July 6, 1923, p. 1532.

the mean of those of the second quarters of the preceding 10 years. In 1921 the death rate of the second quarter was 13.2, but with the exception of that one year, the death rate now recorded is lower than those of all previous second quarters since the institution of national registration, and that is since 1855. There are only three previous second quarters in which the death rate was less than 14 per thousand, these three being those of 1918, 1919, and 1921. \* \* \*

“Deaths of children less than 1 year old numbered 2,292, and as the births registered during the quarter numbered 29,139, these deaths equal an infant mortality rate of 79 per thousand births. \* \* \* The infantile mortality rate is 19 less than that of the previous quarter and 22 less than that of the second quarter of last year. \* \* \* The infantile mortality rate of the quarter is lower than in all recent second quarters with the exception of that of 1921, when it was 76.”

*Birth and death rates in Scotland, April to June, inclusive, 1923.*

	Scotland.	Larger burghs.	Smaller burghs.	County districts.
Births per 1,000 population.....	23.8	25.2	21.6	22.9
Deaths per 1,000 population.....	13.3	13.9	13.3	12.4
Deaths of children under 1 year per 1,000 births.....	79.0	86.0	73.0	68.0

*Deaths and annual death rates by cause of death per 100,000 population in Scotland during the second quarter of 1923.*

Disease.	Number of deaths.	Death rate per 100,000 population.	Disease.	Number of deaths.	Death rate per 100,000 population.
Cerebrospinal meningitis.....	17	1.4	Puerperal diseases—Contd.		
Diarrhea and enteritis (under 2 years).....	178	14.5	Other diseases of the puerperal state.....	121	9.9
Diphtheria.....	102	8.3	Scarlet fever.....	83	6.8
Dysentery.....	2	.2	Smallpox.....	0	.....
Erysipelas.....	53	4.2	Syphilis.....	51	4.2
Influenza:			Tetanus.....	2	.2
Sole cause of death.....	33	2.7	Tuberculosis:		
With pneumonia.....	56	4.6	Pulmonary.....	1,103	90.0
With other diseases.....	60	4.9	Other forms.....	560	45.7
Lethargic encephalitis.....	48	3.9	Typhoid fever.....	15	1.2
Malaria.....	1	.1	Typhus fever.....	0	.....
Measles.....	291	23.7	Whooping cough.....	336	27.4
Pneumonia:			Bright's disease.....	424	34.6
Lobar and unspecified.....	775	63.2	Cancer.....	1,579	128.8
Broncho.....	561	45.8	Diabetes.....	143	11.7
Polomyelitis.....	5	.4	Diseases of the heart.....	1,757	143.4
Puerperal diseases:			All causes.....	16,319	1,331.6
Puerperal sepsis.....	53	4.3			

**MADAGASCAR.**

**Plague—Tananarive.**

A case of pneumonic plague was reported at Tananarive, island of Madagascar, during the period July 1–15, 1923.

## MALTA.

## Disease Prevalence—July, 1923.

Disease prevalence was reported in the island of Malta, during the month of July, 1923, as follows:

Disease.	Cases.	Remarks.
Chicken pox.....	1	Including 3 cases of broncho-pneumonia.
Influenza.....	5	
Malaria.....	1	
Pneumonia.....	4	
Poliomyelitis (infantile paralysis).....	1	
Trachoma.....	226	
Undulant fever.....	183	
Whooping cough.....	64	

Population, officially estimated, 218,510.

## PANAMA CANAL.

## Communicable Diseases—August, 1923.

Communicable diseases were notified for the Panama Canal during the month of August, 1923, as follows:

Disease.	Canal Zone.	Colon.	Panama.	Nonresident.	Total.
Chicken pox.....	3	9	7	1	20
Diphtheria.....	1	2	8	—	11
Dysentery (amebic).....	—	2	2	1	5
Hookworm infection.....	3	18	17	37	75
Leprosy.....	—	—	—	1	1
Malaria.....	117	9	7	29	162
Measles.....	32	4	8	1	45
Pneumonia.....	1	2	—	—	3
Meningitis, tuberculous.....	1	—	—	—	1
Trachoma.....	—	1	—	—	1
Tuberculosis.....	4	10	18	6	38
Whooping cough.....	4	—	—	—	4

## POLAND.

## Communicable Diseases—June 17–July 14, 1923.

During the period June 17 to July 14, 1923, communicable diseases were reported in Poland as follows:

June 17–23, 1923.

Disease.	Cases.	Deaths.	Districts and cities showing greatest number of deaths.
Cerebrospinal meningitis.....	12	4	Congress of Poland.
Diphtheria.....	64	4	Former German Poland.
Measles.....	347	6	Warsaw; Lwow (cities).
Scarlet fever.....	234	22	Stanislawow.
Smallpox.....	13	1	Do.
Tuberculosis.....	139	188	Warsaw (city).
Typhoid fever.....	230	13	Krakow.
Typhus fever.....	181	13	Polesia.
Typhus fever, recurrent.....	25	1	Nowogrodek.
Whooping cough.....	88	6	Lodz; Stanislawow.

## POLAND—Continued.

June 24-30, 1923.

Disease.	Cases.	Deaths.	Districts and cities showing greatest number of deaths.
Cerebrospinal meningitis.....	15	3	Congress of Poland.
Diphtheria.....	33	5	Silesia.
Measles.....	269	6	Posen.
Scarlet fever.....	181	20	Warsaw and Lodz (cities).
Smallpox.....	13	1	Krakow (city).
Tuberculosis.....	148	148	Warsaw (city).
Typhoid fever.....	141	12	Warsaw and Tarnopol.
Typhus fever.....	103	7	Lwow.
Typhus fever, recurrent.....	10	.....	.....
Whooping cough.....	96	3	Congress of Poland.

July 1-7, 1923.

Cerebrospinal meningitis.....	9	4	Warsaw (city).
Diphtheria.....	47	5	Posen.
Measles.....	314	6	Lodz (city).
Scarlet fever.....	177	15	Congress of Poland.
Smallpox.....	6	1	Stanislawow.
Tuberculosis.....	135	218	Lwow.
Typhoid fever.....	164	14	Do.
Typhus fever.....	162	7	Lublin.
Typhus fever, recurrent.....	9	.....	.....
Whooping cough.....	112	8	Krakow.

July 8-14, 1923.

Cerebrospinal meningitis.....	10	8	Lodz; Kielce.
Diphtheria.....	52	5	Lodz.
Measles.....	321	10	Do.
Scarlet fever.....	208	31	Tarnopol.
Smallpox.....	3	.....	.....
Tuberculosis.....	105	201	Lwow.
Typhoid fever.....	186	25	Warsaw.
Typhus fever.....	124	9	Wilno.
Typhus fever, recurrent.....	15	2	Lwow; Nowogrodek.
Whooping cough.....	77	3	Stanislawow.

## Other Diseases—Anthrax—Dysentery—Malaria.

During the period June 17 to 30, 1923, there were reported in Poland 70 cases of dysentery with 10 deaths, the districts showing greatest mortality being Krakow, Lodz, and Silesia, and 449 cases of malaria with 2 deaths occurring in the city of Warsaw. During the period July 1 to 14, 1923, 2 cases of anthrax with 1 death, the fatality occurring in Kielce district, and 75 cases of dysentery with 13 deaths, with greatest mortality from the disease reported in former Austrian Poland and Lodz, were reported in Poland.

## PORTUGUESE WEST AFRICA.

## International Congress of Tropical Medicine—Loanda.

Information has been received under date of July 26, 1923, in regard to the meeting of the First International Congress of Tropical Medicine at Loanda, Province of Angola, Portuguese West Africa, which was held during the period July 15 to 23, 1923. The congress was stated to have been largely attended. Among the important results anticipated is the formulation of intercolonial quarantine regulations for the West African coast.

## SIERRA LEONE.

## Quarantine Declared Against Rufisque—Plague.

Under date of August 8, 1923, quarantine was declared by Sierra Leone, West Africa, against Rufisque, French West Africa, on account of plague, more than one nonimported case of plague having been notified at that place.<sup>1</sup>

## SYRIA.

## Lethargic Encephalitis—Beirut—Damascus.

Lethargic encephalitis has been reported in Syria, as follows: *Beirut*—August 1 to 10, 1923, one case; *Damascus*—week ended July 12, 1923, one case; week ended August 12, 1923, two cases.<sup>2</sup>

## 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 list of countries included or the figures for the particular countries for which reports are given.

Reports Received During Week Ended September 28, 1923.<sup>3</sup>

## CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>India</b> .....				July 1-14, 1923: Cases, 2,357; deaths, 1,294.
Bombay.....	July 22-28.....	75	43	
Calcutta.....	July 29-Aug. 4.....	48	35	
Madras.....	Aug. 5-18.....	4	3	
Rangoon.....	July 29-Aug. 4.....	2	1	
<b>Indo-China</b> .....				Nov. 1-30, 1923: Cases, 121; deaths, 47 (native); European, one case.
Province—				
Annam.....	Nov. 1-30.....	76	16	
Cambodge.....	do.....	41	26	
Cochin-China.....	do.....	6	5	Native. European, one case.

## PLAGUE.

<b>Ceylon:</b>				
Colombo.....	July 29-Aug. 11.....	5	4	Plague rats, 4.
<b>Egypt:</b>				Jan. 1-Aug. 23, 1923: Cases, 1,319; deaths, 643.
City.....				One case bubonic; foreign.
Alexandria.....	Aug. 17-20.....	3	2	
Port Said.....	Aug. 23.....	1	1	
Suez.....	Aug. 17-23.....	2	1	
<b>India</b> .....				July 1-14, 1923: Cases, 952; deaths, 677.
Bombay.....	July 22-28.....	4	3	
Karachi.....	Aug. 5-11.....	3	1	
Madras Presidency.....	Aug. 12-18.....	495	254	
Rangoon.....	July 29-Aug. 4.....	20	17	
<b>Indo-China</b> .....				Nov. 1-30, 1923: Cases, 68; deaths, 65.
Province—				
Annam.....	Nov. 1-30.....	12	9	
Cochin-China.....	do.....		1	
<b>Madagascar:</b>				
City—				
Tananarive.....	July 1-15.....	1		Pneumonic.
<b>Straits Settlements:</b>				
Singapore.....	July 22-28.....	1	1	
<b>Syria:</b>				
Beirut.....	July 14-31.....	2		

<sup>1</sup> Public Health Reports, Sept. 14, 1923, pp. 2190 and 2191.

<sup>2</sup> Public Health Reports, June 29, 1923, p. 1505, and July 6, 1923, p. 1563.

<sup>3</sup> 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 September 28, 1923—Continued.

**SMALLPOX.**

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers .....				July 1-31, 1923: Cases, 2.
Brazil:				
Rio de Janeiro .....	Aug. 4-18 .....	10		
Chile:				
Talcahuano .....	Aug. 12-18 .....	1		Landed from vessel.
Chosen:				
Fusan .....	July 1-31 .....	22	6	
Seoul .....	do .....	6	7	
Egypt:				
Cairo .....	May 14-June 10 .....	5	2	Aug. 1-15, 1923: One case.
Finland:				
India:				July 1-14, 1923: Cases, 1,963; deaths, 505.
Bombay .....	July 22-28 .....	6	7	
Calcutta .....	July 29-Aug. 11 .....	1	1	
Karachi .....	Aug. 5-11 .....		1	
Madras .....	do .....	12	2	
Rangoon .....	July 29-Aug. 4 .....	3	1	
Indo-China:				Nov. 1-30, 1923: Cases, 115; deaths, 39.
Provinces—				
Annam .....	Nov. 1-30 .....	3	1	
Cambodia .....	do .....	43	16	
Cochin-China .....	do .....	69	22	
Mexico:				
Guadalajara .....	Sept. 2-8 .....		1	
Mexico City .....	Aug. 5-18 .....	32		
Persia:				
Teheran .....	Mar. 22-Apr. 1 .....		7	District.
Poland:				June 11-30, 1923: Cases, 26; deaths, 2. July 1-14, 1923: Cases, 9; deaths, 1.
Portugal:				
Lisbon .....	July 30-Aug. 25 .....	1	4	
Oporto .....	Aug. 19-25 .....	7	3	
Sierra Leone:				
Freetown .....	July 16-31 .....	1		Landed from S. S. Tsad. From Southampton via Las Palmas.
Spain:				
Valencia .....	Aug. 19-25 .....	4		
Switzerland:				
Basel .....	July 15-Aug. 25 .....	8		
Zurich .....	Aug. 19-25 .....	1		
Union of South Africa:				
Cape Province .....	July 30-Aug. 4 .....			Outbreaks.
Orange Free State .....	July 23-29 .....			Do.
Transvaal .....	July 30-Aug. 4 .....			Do.
On vessel:				
S. S. Tsad .....	July 16-31 .....	1		At Freetown, Sierra Leone, Africa, from European and West African ports.
S. S. — .....	Aug. 12-18 .....	1		Landed at Talcahuano, Chile.

**TYPHUS FEVER.**

Algeria:				
Algiers .....				July 1-31, 1923: Cases, 1; deaths, 2.
Egypt:				
Alexandria .....	Aug. 6-12 .....	1	1	
Cairo .....	May 6-June 10 .....	16	15	
Port Said .....	Aug. 13-19 .....	1		
Finland:				Aug. 1-15, 1923: Paratyphus fever, 16 cases.
Mexico:				
Mexico City .....	Aug. 5-18 .....	27		Including municipalities in Federal District.
Persia:				
Teheran .....	July 1-14 .....		1	
Poland:				June 17-30, 1923: Cases, 287; deaths, 20. July 1-14, 1923: Cases, 286; deaths, 16. Recurrent typhus: June 17-23, 1923: Cases, 35; deaths, 1. July 1-14, 1923: Cases, 24; deaths, 2.
Spain:				
Barcelona .....	Aug. 23-29 .....		1	
Madrid .....	July 1-31 .....		2	
Union of South Africa:				
Cape Province .....	July 23-29 .....			Outbreaks.
Orange Free State .....	do .....			Do.

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

### Reports Received During Week Ended September 28, 1923—Continued.

#### YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Colombia: Bucaramanga.....	July 3-Aug. 26.....			Present.

### Reports Received from June 30 to September 21, 1923.<sup>1</sup>

#### CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China: Shanghai.....	Aug. 28.....			Reported moderately prevalent.
India: Bombay.....	June 3-30.....	34	23	Apr. 15-June 30, 1923: Cases, 19,470; deaths, 14,608.
Do.....	July 1-21.....	9	8	
Calcutta.....	May 6-June 30.....	371	300	
Do.....	July 8-28.....	68	49	
Madras.....	June 3-30.....	2		
Do.....	July 1-7.....	1		
Rangoon.....	May 13-June 30.....	18	15	
Do.....	July 1-21.....	5	4	
Indo-China: City—				Oct. 1-31, 1922: Cases, 92; deaths, 53. Preceding month: Cases, 24; deaths, 14. October, 1921: Cases, 100; deaths, 61.
Saigon.....	May 20-June 30.....	12	11	
Do.....	July 1-28.....	13	12	Do.
Province—				
Annam.....	Oct. 1-31.....	68	39	Preceding month: Cases, 2; deaths, 1.
Cambodge.....	do.....	2	1	Preceding month: Cases, 3.
Cochin-China.....	do.....	21	13	Preceding month: Cases, 19; deaths, 13.
Tonkin.....	do.....	1		Preceding month: No cases.
Iraq (Mesopotamia): Bassorah.....	Aug. 21.....			Present. Port declared infected since Aug. 6, 1923.
Philippine Islands: City—				
Manila.....	June 10-16.....	2	1	Death in foreign case from Ching-kang, China.
Province—				
Bulacan.....	May 17-23.....	1		
Capiz.....	May 27-June 2.....	1	1	
Cebu.....	Apr. 8-21.....	1	1	
Cotabato.....	Apr. 8-14.....	1	1	
Laguna.....	May 6-June 9.....	2	1	
Mountain.....	Mar. 25-31.....	1	1	
Pangasinan.....	June 24-30.....	2	2	
Russia (Soviet).....				Jan. 1-May 15, 1923: Cases, 10.
Siam: Bangkok.....	May 13-June 30.....	10	11	
Do.....	July 1-21.....	4	2	

#### PLAGUE.

Algeria: Algiers.....	Aug. 11-20.....	2	1	Actual dates of occurrence, Aug. 16 and 17, 1923.
St. Eugène.....	Aug. 1-20.....	2	2	Locality 5 miles north of Algiers.
Australia: Sydney.....	June 30.....	1	1	
Azores: St. Michael Island.....	May 6-26.....	12	5	In one locality.
Brazil: Porto Alegre.....				Jan. 1-Mar. 31, 1923. Deaths, 19.

<sup>1</sup> 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 June 30 to September 21, 1923—Continued.

### PLAGUE—Continued.

Place.	Date	Cases.	Deaths.	Remarks.
<b>British East Africa:</b>				
<b>Kenya—</b>				
Kisumu.....	June 10-16.....	2	1	
Tanganyika.....	May 6-June 2.....	3	3	Territory.
Uganda.....	Apr. 1-30.....	7	5	
<b>Canary Islands:</b>				
Las Palmas.....	June 7.....	1		
<b>Ceylon:</b>				
Colombo.....	May 6-June 30.....	18	19	Plague rats, 33.
Do.....	July 1-28.....	21	19	Plague rats, 14.
<b>China:</b>				
Amoy.....	May 13-June 25.....		10	
Do.....	July 1-28.....		6	
Foochow.....	May 27-June 23.....			Present.
Do.....	July 8-28.....			Reported as epidemic.
Hongkong.....	Apr. 29-June 30.....	63	40	
Do.....	July 1-28.....	23	28	
<b>Manchuria—</b>				
Yakoshih.....	May 31.....	1	1	Station on Eastern Chinese Railway. Occurring in parabanagan (marmot) hunter. Bubonic.
<b>Nanking—</b>				
Do.....	June 17-30.....			Rodent plague present.
Do.....	July 1-Aug. 4.....			Do.
<b>Ecuador:</b>				
Guamate.....	Aug. 1-15.....	9	2	Country district.
Guayaquil.....	July 1-15.....	2	2	May 16-June 30, 1923: Rats examined, 13,800; found infected, 39. July 1-Aug. 15, 1923: Rats examined, 13,450; found infected, 23.
Santa Ana (Manabi).....	July 16-Aug. 15.....	7	3	Jan. 1-June 21, 1923: Cases, 1,051; deaths, 548. May 1-29: Cases, 345. Jan. 1-June 24, 1923: Cases, 1,069. Jan. 1-Aug. 2, 1923: Cases, 1,279; deaths, 630. July 23-29, 1923: Cases, 47.
<b>Egypt.....</b>				
<b>City—</b>				
Alexandria.....	Jan. 7-June 24.....	35	15	May 1-29, 1923: Cases, 14.
Do.....	July 1-22.....	5		
Port Said.....	Jan. 7-June 24.....	24	12	May 1-29, 1923: Cases, 13.
Do.....	July 1-29.....	17		
Sues.....	Mar. 2-June 15.....	12	7	May 1-29, 1923: Cases, 3.
Do.....	July 16-22.....	1		
<b>Province—</b>				
Assiout.....	May 1-29.....	64		Deaths not reported.
Benisonet.....	do.....	7		Do.
Fayoum.....	do.....	14		Do.
Garbieh.....	do.....	2		Do.
Geizeh.....	do.....	3		Do.
Girgeh.....	do.....	123		Do.
Keneh.....	do.....	22		Do.
Menoufieh.....	do.....	34		Do.
Minieh.....	do.....	46		Do.
<b>Hawaii:</b>				
<b>Hamakua.....</b>				
Plague-infected rats: Pohakaa, May 23, 1923, 1 rat; vicinity of Pacific Sugar Co. mill, June 2, 1 rat; Aug. 2, 1 rat at Hamakua Mill Co. plantation. Aug. 16, plague rat found at Kapulena.				
<b>Honokaa.....</b>				
July 20, 1923: One plague rat; July 30, 2 plague rats: Honokaa Sugar Co. mill and Honokaa village.				
<b>India.....</b>				
Apr. 29-June 23, 1923: Cases, 5,783; deaths, 4 481.				
<b>Bombay.....</b>				
Do.....	Apr. 29-June 30.....	503	411	
Do.....	July 1-21.....	11	10	
Calcutta.....	May 6-June 9.....	13	13	
Karachi.....	May 13-June 30.....	110	85	Plague rats, 5.
Do.....	July 1-Aug. 4.....	41	37	
Madras Presidency.....	May 13-June 30.....	254	141	
Do.....	July 1-Aug. 4.....	541	294	
Rangoon.....	May 6-June 30.....	260	229	
Do.....	July 1-28.....	142	120	

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

### Reports Received from June 30 to September 21, 1923—Continued.

#### PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China.....				Oct. 1-31, 1922: Cases, 93; deaths, 89. Preceding month: 70 cases; 68 deaths.
City—				
Saigon.....	June 24-30.....	5	5	Including 100 square kilometers of surrounding country.
Do.....	July 1-7.....	1	1	Do.
Province—				
Annam.....	Oct. 1-31.....	15	14	Preceding month, 15 deaths.
Cambodge.....	do.....	75	75	Preceding month, 51 deaths.
Cochin China.....	do.....	3		Preceding month, 4 cases, 2 deaths.
Iraq (Mesopotamia):				
Bagdad.....	May 1-June 30.....	335	224	
Java.....				May 1-June 30, 1923: Deaths, 912.
Province—				
Djokjakarta.....	June 1-30.....		5	
Kedoe.....	do.....		135	
Pekalongan.....	do.....		48	
Samarang.....	do.....		143	
Soerabaya.....	do.....		1	
Soerakarta.....	do.....		109	May 16, 1923: Epidemic in 5 districts.
Madagascar.....				Apr. 1-June 15, 1923: Cases, 74; deaths, 71. Bubonic, pneumonic, septicemic.
Province—				
Tananarive.....	Apr. 1-June 30.....	57	54	
Tananarive.....	Apr. 16-June 30.....	21	21	
Mauritius Island.....				May 4-21, 1923: 2 cases.
Port Louis.....	May 4.....	1		
Mexico:				
Tampico.....				Apr. 15-21, 1923: 1 plague rat. Aug. 8, 1923: At Dona Cecelia, a suburb of Tampico, 1 plague-infected rat found. From Jan. 1 to Aug. 8, 1923, plague-infected rats found, 5.
Palestine:				
Jaffa.....	June 19-July 16.....	10	1	Bubonic and septicemic.
Peru.....				May 1-June 30, 1923: Cases, 111; deaths, 68. July 1-31, 1923: Cases, 23; deaths, 12.
Locality—				
Ayabaca.....	May 16-June 30.....	15	13	
Do.....	July 1-31.....	4	2	
Callao.....	May 1-June 30.....	5	3	
Do.....	July 1-31.....	1	1	
Canete.....	May 16-June 30.....	3	2	
Do.....	July 1-31.....	6	3	
Cerro Azul.....	May 1-31.....	3	1	
Chiclayo.....	May 1-June 30.....	9	2	
Do.....	July 1-31.....	5	3	
Cutervo.....	May 1-15.....	2	1	
Huancabamba.....	May 1-June 30.....	34	25	
Huacho.....	July 1-31.....	1		
Hualal.....	June 1-30.....	2	2	
Do.....	July 1-31.....	3	1	
Lima (city).....	May 1-31.....	17	8	
Do.....	July 1-31.....	2	1	
Lima (country).....	May 1-31.....	7	4	
Do.....	July 1-31.....	1	1	
Mollendo.....	June 1-30.....	1	1	
Salaverry.....	May 1-June 30.....	11	3	
Trujillo.....	do.....	2	3	
Russia.....				Jan. 1-May 15, 1923: Few cases in Far East regions.
Senegal:				
Dakar.....	July 1-31.....	4	4	Reported to have come from port of Rufisque, Senegal.
Rufisque.....	Aug. 6.....			Present.
Siam:				
Bangkok.....	Apr. 29-June 30.....	31	30	
Do.....	July 1-21.....	5	4	

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.****Reports Received from June 30 to September 21, 1923—Continued.****PLAGUE—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Siberia.....	.....	.....	.....	Sporadic cases of plague reported yearly in localities vicinity of stations Matsievskaya and Borzia, Transbaikal Railway.
Haramhor.....	May 6.....	1	1	Village in zone of endemic tarabagan (marmot) plague, Transbaikal region.
Station No. 83.....	.....	.....	.....	Station on Transbaikal Railway. Marmot plague during recent years.
Soktu.....	.....	.....	.....	Do.
Straits Settlements:				
Singapore.....	May 6-June 30.....	6	8	
Syria:				
Beirut.....	May 12-June 20.....	3	.....	
Do.....	July 1-10.....	2	.....	

**SMALLPOX.**

Place.	Date.	Cases.	Deaths.	Remarks.
Algiers:				
Algiers.....	May 1-31.....	2	.....	
Do.....	Aug. 1-10.....	1	.....	
Arabia:				
Adoh.....	May 27-June 2.....	.....	2	
Do.....	July 8-Aug. 11.....	7	1	
Azores:				
St. Michael Island.....	July 15-21.....	7	.....	Mild.
Bolivia:				
La Paz.....	Apr. 1-June 30.....	2	3	
Brazil:				
Pernambuco.....	May 6-June 16.....	5	.....	
Do.....	July 1-28.....	16	1	
Rio de Janeiro.....	May 13-June 23.....	25	3	
Do.....	July 15-Aug. 4.....	8	.....	
Rio Grande do Sul.....	.....	.....	.....	Jan. 1-Mar. 31, 1923: Present with some mortality.
British East Africa:				
Kenya—				
Mombasa.....	May 20-26.....	1	.....	From vessel from Bombay.
Tanganyika.....	Apr. 29-June 9.....	3	.....	Territory.
Uganda—				
Entebe.....	Apr. 1-30.....	4	.....	
Canada:				
Alberta—				
Calgary.....	May 27-June 2.....	1	.....	Infection from Deer Lodge, Mont.
British Columbia—				
Vancouver.....	May 27-June 30.....	33	1	
Do.....	July 1-14.....	5	1	
Victoria.....	Aug. 5-25.....	2	.....	
Manitoba—				
Winnipeg.....	June 3-30.....	1	.....	
Do.....	July 1-31.....	1	.....	
New Brunswick—				
Kent County.....	July 1-7.....	1	.....	
Ontario.....	.....	.....	.....	June 1-30, 1923: Cases, 13. July 1-Aug. 31, 1923: Cases, 23.
London.....	July 15-21.....	1	.....	
Toronto.....	June 24-30.....	3	.....	
Do.....	July 15-21.....	1	.....	
Quebec—				
Quebec.....	June 10-16.....	1	.....	Varioloid.
Saskatchewan—				
Moose Jaw.....	July 8-14.....	1	.....	
Regina.....	June 24-30.....	3	.....	
Ceylon:				
Colombo.....	May 6-June 2.....	23	1	
Chile:				
Concepcion.....	May 22-June 11.....	.....	3	June 1-30, 1923: Cases, 2. July 1-31, 1923: 1 death.
Valparaiso.....	May 7-June 23.....	6	121	June 10-16, 1923: 29 cases reported from 2 districts.
Do.....	July 1-28.....	12	10	July 30, 1923: 25 cases in Lazaretto. Aug. 6: 20 cases. Aug. 14: 60 cases present.

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

Reports Received from June 30 to September 21, 1923—Continued.

## SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>China:</b>				
Amoy.....	May 13-June 23.....		3	June 19-25, 1923. Present.
Do.....	July 1-Aug. 4.....			Present.
Aantung.....	May 14-20.....	1		
Chungking.....	May 13-June 30.....			Present and endemic.
Do.....	July 1-Aug. 4.....			Do.
Foochow.....	May 13-July 28.....			Present.
Hongkong.....	Apr. 29-June 30.....	98	82	
Do.....	July 1-28.....	37	34	
<b>Manchuria—</b>				
Dairen.....	May 21-27.....	1		
Harbin.....	May 7-June 24.....	5		
Do.....	July 1-22.....	3		
Mukden.....	May 13-20.....	1		
Nanking.....	May 13-June 23.....			Do.
Do.....	June 24-Aug. 4.....			Do.
Shanghai.....	May 21-June 3.....	4		Foreign.
Do.....	July 2-Aug. 5.....	1	3	Case, foreign; deaths, Chinese.
<b>Chosen (Korea):</b>				
Chemulpo.....	May 1-31.....	1		
Fusan.....	May 1-June 30.....	4		
Gensan.....	May 1-31.....	1		
Seoul.....	May 1-June 30.....	42	13	
<b>Cuba:</b>				
Antilla.....	July 8-14.....		2	From Preston.
<b>Czechoslovakia.</b>				
Province—				Jan.-Mar., 1923: Cases, 15; Apr.-June, 1923: Cases, 16; deaths, 4.
Bohemia.....	Jan. 1-Mar. 31.....	15	4	
<b>Ecuador:</b>				
Alausi.....	July 16-31.....	3		
Guayaquil.....	May 16-30.....	1		
<b>Egypt:</b>				
Cairo.....	Mar. 12-May 6.....	17	4	
Esthonia.....	June 1-30.....	4		
Finland.....				May 1-15, 1923: 1 case.
<b>Great Britain:</b>				
Birmingham.....	June 18-30.....	3		
Bristol.....	June 28.....			Present.
Cardiff.....	June 3-30.....	6		
Gloucester.....	June 28.....			123 cases reported in hospital; present in rural districts. July 15, 1923: Present. Aug. 9, 1923: 33 cases in isolation hospital; two weeks previously about 250 cases present in hospital.
Do.....	July 12.....	19		May 1-31, 1923: Cases, 211.
Nottingham.....	June 3-9.....	1		
Do.....	July 8-21.....	2		
<b>Greece:</b>				
Athens.....	May 1-31.....	53		
Patras.....	Apr. 24-June 15.....		19	
Saloniki.....	Apr. 30-May 20.....	2	2	
Do.....	June 25-July 8.....	2	3	
<b>Guadeloupe (West Indies):</b>				
Basse Terre.....	Aug. 17.....			Present in epidemic form. (Reported as alastrim.) Aug. 17, 1923: Stated to be officially declared present.
Pointe à Pitre.....	do.....			Present. Estimated from 2,000 to 3,000 cases.
Hungary.....	July 15-Aug. 4.....	28		
<b>India:</b>				
Bombay.....	Apr. 22-June 30.....	298	141	Apr. 15-June 30, 1923: Cases, 8,112; deaths, 2,933.
Do.....	July 1-21.....	40	22	
Calcutta.....	May 13-June 9.....	12	9	
Do.....	July 1-14.....	10	10	
Karachi.....	May 13-June 30.....	24	8	
Do.....	July 1-Aug. 4.....	11	2	
Madras.....	May 13-June 23.....	91	16	
Do.....	July 8-Aug. 4.....	19	7	
Rangoon.....	May 6-June 30.....	125	67	
Do.....	July 1-28.....	28	11	
<b>Indo-China:</b>				
Saigon.....	May 20-June 30.....	34	23	Including 100 surrounding square kilometers.
Do.....	July 1-28.....	31	18	
<b>Iraq (Mesopotamia):</b>				
Bagdad.....	Apr. 1-June 30.....	32	11	

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

Reports Received from June 30 to September 21, 1923—Continued.

## SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Italy:				
Turin.....	May 28-June 3....	1		
Do.....	July 2-15.....	2		
Jamaica:				May 27-June 30, 1923: Cases, 226.
Kingston.....	May 27-June 30....	39		July 1-Aug. 18, 1923: Cases, 194.
Do.....	July 1-Aug. 18....	33		(Reported as alastrim.)
Japan:				
Kobe.....	May 28-June 10....	2		
Do.....	July 2-8.....	1		
Java:				
East Java—				
Soerabaya.....	Apr. 22-June 30....	187	22	
Do.....	July 15-21.....	19	2	
West Java—				
Batavia.....	May 5-June 8.....	17	3	Province.
Do.....	June 30-July 20....		1	
Latvia.....				Apr. 1-May 31, 1923. Cases, 8.
Mexico:				
Aguascalientes.....	July 8-14.....		1	
Chihuahua.....	June 11-24.....	7		
Guadalajara.....	July 22-Aug. 25....		8	June 1-30, 1923: Cases, 15; deaths, 2.
Mexico City.....	May 19-June 30....	164		Including municipalities in Federal district.
Do.....	July 1-Aug. 4.....	111		
Palestine:				
Jaffa.....	June 5-11.....	1		
Persia:				
Tabriz.....	Apr. 1-June 30....		2	District.
Tcheraan.....	Feb. 22-June 14....		30	
Poland.....				Apr. 29-June 16, 1923: Cases, 1,835; deaths, 41.
Portugal:				
Lisbon.....	May 20-June 30....	35	3	
Do.....	July 1-Aug. 18....	30	2	
Oporto.....	June 10-30.....	6	3	
Do.....	July 9-Aug. 18....	27	15	
Portuguese, West Africa:				
Angola—				
Loanda.....	Apr. 1-21.....		2	
Rhodesia (British Africa):				
Northern Rhodesia.....	May 8-14.....	21	8	
Southern Rhodesia.....	May 3-16.....	4	2	
Siam:				
Bangkok.....	Apr. 29-June 30....	90	53	
Do.....	July 1-21.....	51	27	Sept. 8, 1923: Reported prevalent.
Sierra Leone:				
Kaballa.....	May 1-15.....	1		
Pujehun.....	May 16-31.....	1		In Sembahun district.
Spain:				
Barcelona.....	May 31-June 6.....		1	
Do.....	June 28-Aug. 1....		3	
Seville.....	July 19-25.....		1	
Valencia.....	May 15-June 30....	44	2	
Do.....	July 1-Aug. 18....	36	4	
Switzerland:				
Basel.....	May 27-June 30....	4		
Do.....	July 8-Aug. 18....	4		
Berne.....	May 20-June 30....	11		
Do.....	July 1-28.....	10		
Lucerne.....	May 1-June 7.....	36		
Do.....	July 1-31.....	14		
Zurich.....	May 20-June 23....	10		
Do.....	July 15-21.....	6		
Syria:				
Aleppo.....	do.....	6		
Damascus.....	May 15-June 11....	7		
Tunis:				
Bizerta.....	June 10-20.....	1		
Tunis.....	June 11-17.....	1		
Do.....	June 26-July 1....	1		
Turkey:				
Constantinople.....	May 13-June 26....		45	
Do.....	June 27-Aug. 7....	1	10	

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

## Reports Received from June 30 to September 21, 1923—Continued.

### SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Union of South Africa.....				May 1-June 30, 1923: Cases, 66; deaths, 1 (colored).
Cape Province.....				May 1-31, 1923: Cases, 32 (colored).
Do.....	May 6-June 30.....			Outbreaks.
Do.....	July 1-21.....			Do.
East London.....	July 8-14.....	1		
Natal.....	July 8-14.....			Do.
Orange Free State.....	Apr. 29-June 30.....			Do.
Do.....	July 1-21.....			Do.
Transvaal.....				May 1-31, 1923: 1 case.
Do.....	July 15-21.....			Outbreaks.
Yugoslavia.....				July 1-7, 1923: Cases, 8; deaths, 1.
Province—				
Bosnia-Herzegovina.....	July 1-7.....	1		
Croatia-Slavonia.....	do.....	4	1	
Serbia.....	do.....	2	1	
Belgrade.....	June 10-16.....	1	1	
Do.....	July 8-14.....		1	
Zagreb.....	June 24-30.....	1		
Woiwodina.....	July 1-7.....	1		
On vessels.....				
S. S. Kargola.....	May 20-26.....	1		At Mombasa, British East Africa. Vessel arrived from Bombay Mar. 25, 1923.
S. S. Makura.....	May 26.....	2		Two cases in quarantine (reported as alastrim). Vessel left Victoria, B. C., Apr. 28, 1923. Touched at Honolulu.

### TYPHUS FEVER.

Algeria:					
Algiers.....	May 1-June 30.....	66	19		
Do.....	Aug. 11-20.....	1			
Argentina:					
Rosario.....	May 25-31.....		3		
Bolivia:					
La Paz.....	June 1-30.....	4			
Bulgaria:					
Sofia.....	Apr. 22-June 23.....	11	2		Paratyphus, 2 cases, 2 deaths.
Do.....	July 15-Aug. 11.....	15	1		
Chile:					
Concepcion.....	May 22-June 18.....		3		
Do.....	Aug. 7-13.....		1		
Talcahuano.....	May 13-19.....	1			
Valparaiso.....	May 7-June 23.....		26		June 11, 1923: 34 cases in Salvador Hospital. July 30: 45 cases in hospital. Aug. 6: 58 cases.
Do.....	July 1-Aug. 18.....		43		Aug. 12-18, 1923: 82 cases stated to be present.
China:					
Antung.....	May 28-June 24.....	12			
Do.....	July 16-22.....	1			
Hankow.....	May 19-25.....	1			
Manchuria—					
Harbin.....	May 6-13.....	1			
Mukden.....	May 14-20.....	2			
Czechoslovakia.					
Province—					
Bohemia.....	Apr. 1-June 30.....	8			Jan.-Mar., 1923: Cases, 191; deaths, 6. Apr. 1-June 30, 1923: Cases, 132; deaths, 4.
Moravia.....	do.....	2			Paratyphoid A, 1; paratyphoid B, 20.
Russinia.....	do.....	98	1		
Silesia.....	do.....	1	1		
Slovakia.....	do.....	23	2		
Estonia.....					June 1-30, 1923: Recurrent typhus, 1 case; paratyphus, 2 cases.
Egypt:					
Alexandria.....	May 14-June 24.....	7	5		
Do.....	June 25-July 29.....	5	3		
Cairo.....	Apr. 12-May 6.....	20	10		
France:					
Marseille.....	Mar. 1-May 31.....		3		

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

## Reports Received from June 30 to September 21, 1923—Continued.

### TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Germany:</b>				
Coblenz.....	May 27-June 2.....	.....	1	
Hamburg.....	May 20-26.....	3	.....	
Do.....	July 29-Aug. 4.....	1	.....	Case developed July 28, 1923, at Emigration Hall, Hamburg.
Königsberg.....	May 13-June 2.....	2	.....	
Stettin.....	May 27-June 9.....	1	1	
<b>Greece:</b>				
Athens.....	May 1-31.....	150	5	
Do.....	July 22-31.....	.....	1	May 1-31, 1923; Cases, 876.
Patras.....	Apr. 24-June 15.....	.....	30	
Piræus.....	May 1-June 30.....	356	11	
Do.....	July 1-10.....	3	.....	
Saloniki.....	Apr. 30-June 24.....	56	16	Apr. 30-May 27, 1923; Recurrent typhus: Cases, 3; deaths, 3.
Do.....	July 9-15.....	1	.....	
<b>Guatemala:</b>				
Guatemala City.....	Apr. 1-June 30.....	.....	5	
<b>Hungary:</b>				
Budapest.....	Jan. 1-June 2.....	48	12	Jan. 1-May 19, 1923: Cases, 318; deaths, 36. In 11 counties.
<b>Iraq (Mesopotamia):</b>				
Bagdad.....	Apr. 1-June 30.....	3	.....	
<b>Japan:</b>				
Nagasaki.....	July 2-8.....	1	.....	
<b>Latvia:</b>				
.....	.....	.....	.....	Apr. 1-June 30, 1923: Cases, 231. Paratyphus, 5 cases.
<b>Mexico:</b>				
Mexico City.....	May 20-June 30.....	75	.....	Including municipalities in Federal District.
Do.....	July 1-Aug. 4.....	46	.....	Do.
Guadalaajara.....	June 1-July 31.....	2	.....	
San Luis Potosi.....	July 29-Aug. 4.....	.....	1	
Do.....	July 1-31.....	1	.....	
<b>Palestine:</b>				
Jaffa.....	May 22-28.....	2	.....	
Do.....	June 26-Aug. 6.....	5	.....	Relapsing fever, 1 case.
Jerusalem.....	May 22-28.....	1	.....	
<b>Persia:</b>				
Tabriz.....	Apr. 1-14.....	2	.....	
Teheran.....	Feb. 22-June 14.....	.....	4	
<b>Poland:</b>				
.....	.....	.....	.....	Mar. 4-Apr. 7, 1923: Cases, 2,253; deaths, 172. Recurrent typhus: Cases, 338, deaths, 6. Apr. 29-June 16, 1923: Cases, 1,919; deaths, 157. Recurrent typhus: Cases, 302; deaths, 2.
<b>Portugal:</b>				
Oporto.....	June 10-16.....	1	.....	
Do.....	July 1-21.....	3	.....	
<b>Rumania:</b>				
Kishineff.....	May 1-June 30.....	41	.....	
<b>Russia:</b>				
European Russia and autonomous republics.....	Jan. 1-Apr. 30.....	93,999	.....	Jan. 1-Apr. 30, 1923: Cases, 106,854. (Corresponding period 1922: Cases, 847,516.) Feb. 1-28, 1923: Cases, 17,577. Recurrent, Jan. 1-Feb. 28, 1923: Cases, 43,540.
Siberia, Caucasus, and Central Asia.....	.....do.....	9,921	.....	
Waterways and railways.....	.....do.....	2,934	.....	
<b>Spain:</b>				
Barcelona.....	June 21-27.....	.....	1	
Madrid.....	May 1-31.....	.....	1	
<b>Syria:</b>				
Aleppo.....	May 20-June 16.....	4	2	
Do.....	July 15-21.....	3	1	July 8-14, 1923: Present.
Beirut.....	May 1-10.....	1	.....	
<b>Tunis:</b>				
Tunis.....	May 28-June 24.....	3	2	
Do.....	July 9-15.....	1	1	
<b>Turkey:</b>				
Constantinople.....	May 13-June 26.....	.....	19	
Do.....	June 27-Aug. 4.....	2	1	

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.****Reports Received from June 30 to September 21, 1923—Continued.****TYPHUS FEVER—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Union of South Africa.....				May 1-June 30, 1923: Cases, 230; deaths, 47 (colored). White—Cases, 15; deaths, 1. Total, 245 cases, 48 deaths.
Cape Province.....				May 1-31, 1923: Cases, 49 (colored) white, 5.
Do.....	Apr. 29-June 30...			Outbreaks.
Do.....	July 1-21.....			Do.
Natal.....				May 1-31, 1923: One case (colored).
Orange Free State.....				May 1-31, 1923: Cases, 45 (colored).
Do.....	May 6-June 16.....			Outbreaks.
Do.....	July 15-21.....			Do.
Transvaal.....				May 1-31, 1923: Cases, 7.
Johannesburg.....	May 1-June 30.....	4	4	
Yugoslavia.....				July 1-7, 1923: Cases, 4.
Province—				
Bosnia-Herzegovina....	July 1-7.....	4		
Croatia—				
Zagreb.....	May 27-June 2.....	1		

**YELLOW FEVER.**

<b>Brazil:</b>				
Bahia.....	May 13-June 30...	25	6	
Do.....	July 1-Aug. 4.....	9	3	
<b>Colombia:</b>				
Bucaramanga.....	June 25-July 29...			Present.