

# PUBLIC HEALTH REPORTS

VOL. 45

NOVEMBER 14, 1930

NO. 46

## THE ESSENTIALS OF SMALLPOX VACCINATION<sup>1</sup>

By JAMES P. LEAKE, *Surgeon*, and JOHN N. FORCE, *Special Expert, United States Public Health Service*

### THE VACCINATION REACTION

When potent smallpox vaccine is applied below the superficial layers of the epidermis, irrespective of the method used for penetrating these layers, a reaction will take place, reaching a maximum which may be observed in from 1 to 14 days, depending on the degree of immunity of the subject. *Absence of this reaction indicates that the vaccine is incapable of protecting against smallpox, and not that the subject is immune.* Any one of the forms of this vaccination reaction, to be described below, is evidence of a successful vaccination.

If the subject has never been immunized by smallpox or by previous vaccination, the reaction will manifest itself as a primary *vaccinia*. A *papule* appears at the inoculation site from one to six days following the vaccination. This becomes vesiculated from one to three days later, the vesicle being surrounded by a narrow red margin or *areola*. This vesicle increases in diameter at the rate of approximately a millimeter a day. On about the seventh day the skin outside the areola begins to turn red; and this *area* of redness rapidly extends until the eighth to fourteenth day (usually the ninth or tenth), when the maximum diameter of the area is reached. After this day, the area rapidly fades, and the vesicle, already crusted in the center, extends slightly for a day or two, and then is soon completely replaced by a dark brown crust, though still surrounded for some days by a narrow areola. If kept dry, the *crust* will separate in approximately three weeks from the day of vaccination, leaving a red *scar*, which becomes white in a year or so. For a day or two during the development of the area, the axillary lymph nodes are usually swollen and tender, and fever and headache are generally present. All these symptoms abate promptly, often before the maximum of the local reaction is reached.

If the subject retains partial immunity, either through previous vaccination or an attack of smallpox, the reaction will be accelerated

<sup>1</sup> Revision of Reprint No. 686 from Public Health Reports, Vol. 36, No. 33, pp. 1975-1978, Aug. 19, 1921

in development, shortened in time, and decreased in severity. The papule will appear earlier, the vesicle will be smaller, and the area will be less extensive at the maximum of the reaction, which may occur at any time from four to seven days after vaccination. In this event the reaction is considered a *vaccinoid* (accelerated reaction or secondary vaccinia).

If the immunity is very high, the acceleration may be so great that the reaction consists only of a papule and areola, with the maximum diameter in from 8 to 72 hours after vaccination. In this case the reaction is designated *reaction of immunity* (immediate reaction). The time element of this reaction is of prime importance. If the papule and areola do not appear until the third day and *there is no vesiculation*, the reaction is not that of immunity but is due to an impotent vaccine, and the vaccination should be repeated with a fresh lot. Also with vaccine of less than full potency, a reaction similar to a reaction of immunity may be produced in a person who is not fully immune. This can not be considered a successful vaccination.

#### NECESSITY FOR KEEPING VACCINE VERY COLD

The expiration date on a package of smallpox vaccine indicates its expectancy of moderate potency under ordinary conditions. For reading reactions of immunity and for vaccinating persons actually exposed to smallpox, vaccine of full potency should be used, and the temperature of storage should therefore be lower than the upper limit stated on the package. Smallpox vaccine can not be kept too cold; it deteriorates even in an ice box. The freshest possible vaccine should be obtained; and this can be secured by arranging for small and frequent shipments direct from the manufacturing laboratory. The packages should be kept in the ice-making compartment of a refrigerating machine, or if a mechanical refrigerator is not available, in constant contact with ice, not merely on a shelf in an ice box. Metal or glass containers for storing in ice are convenient; but if there is occasional access to outside air, or changes in temperature, needles (except those in glass-sealed tubes) should be removed from the packages to prevent rusting. For use in the field, large quantities should be transported in ice-cream freezers, small quantities in rubber-stoppered test tubes, packed with shaved ice in the inner compartments of vacuum bottles. A good vacuum bottle will keep vaccine packed in this way ice cold up to 24 hours.

#### PREPARATION OF THE SITE FOR VACCINATION

The skin of the upper arm in the region of the depression formed by the insertion of the deltoid muscle should be gently but thoroughly cleansed with acetone on sterile gauze or cotton and wiped or allowed

to dry for a few seconds. Acetone is suggested as a cleansing agent rather than alcohol for the following reasons:

1. It is a more efficient cleanser.
2. It is cheaper.
3. It is not denatured with substances which may possibly affect the vaccination result.
4. It evaporates more rapidly.
5. Approximately 200 vaccinations performed after the use of acetone and alcohol on alternate subjects resulted in more successful vaccinations with acetone than with alcohol.

#### METHODS OF VACCINATING

1. *The multiple pressure method.*—In each package of capillary tubes there will be found a perforated rubber bulb with a diaphragm across the interior of the neck. Push an unbroken capillary tube through the neck of the bulb until about a quarter of an inch of the capillary tube appears beyond the bulb. Break the tip which has been pushed through and withdraw the tube until the broken end lies in the neck of the bulb. With sterile gauze, break the other tip of the capillary tube and drop the contents on the spot to be vaccinated by squeezing the bulb with the finger over the perforation.

The needle, which should be new, sharp, and sterile, is held parallel to the skin, with the forefinger and middle finger of the right hand above the needle and the thumb below, the needle pointing to the operator's left. The needle should be crosswise of the arm, so that the thumb of the operator does not interfere by hitting the skin. The *side* of the needle point is then pressed *very firmly* and rapidly into the drop about thirty times within five seconds (ten times for primary vaccinations), covering an area *not over one-eighth of an inch* in diameter. The area covered by the pressures can be kept small by steadying the last two fingers of one's hand against the arm of the person being vaccinated and by moving the hand from the wrist only. This rapid up-and-down motion of lifting the needle and pressing it against the skin should be quite perpendicular to the skin and needle and not in the direction of the long axis of the needle. The point is not driven into the skin, but at each pressure the elasticity of the skin will pull a fraction of an inch of the epidermis over the point of the needle so that the vaccine is carried into the deeper layers of the epidermis. If the skin has not been unduly rubbed in cleansing and if the pressure is entirely perpendicular to the needle, no signs of bleeding should occur and all evidence of trauma will fade out in less than six hours. Immediately after the pressures have been made, the remaining vaccine is gently wiped off the skin with sterile gauze and the sleeve pulled down, the whole operation of pressing and wiping taking less than 10

seconds—it is not necessary to rub the vaccine in, as with the other two methods.

The advantages of this method are its mildness and painlessness, the fact that it is more rapid than any other effectual and safe method, the very superficial implantation, the leaving of the epidermis nearly intact, the fact that no control site is necessary for estimating the amount of trauma in a reaction of immunity (since the evidence of trauma due to the operation has usually disappeared before the first observation for an early reaction is made), and the fact that the vaccine is wiped off immediately so that the uselessness of a dressing is obvious to the person vaccinated.

2. *The method of incision or linear abrasion.*—The vaccine is dropped on the skin as described for the multiple-pressure method. The underside of the arm is then grasped with the vaccinator's left hand, in order to stretch the skin where the vaccine has been dropped. This tension is maintained while the vaccine is being inserted. With the point of a sterile needle pressed through the drop of vaccine "*a very slight scratch, not exceeding the eighth part of an inch.*" (Jenner), is made down the arm. With the side of the needle or the flat end of a sterile toothpick, the vaccine is then gently rubbed across the scratch for at least 15 seconds.<sup>2</sup> The scratch should penetrate the epidermis, but not draw blood. The friction across the scratch may cause a slight oozing of blood-tinged serum, but this should not be sufficient to wash the vaccine out of the scratch.

3. *The drill method.*—In the drill method the epidermis is perforated by a small drill with a sharp cutting edge 2 mm. in width. The drill is made of carbon steel and the tip can be sterilized by flaming. The drill method is preferable for quantitative investigations or where there is a tendency to vaccinate too large an area, because of the uniformity of size of insertion.

If in capillary tubes the vaccine is prepared for insertion as previously described, but is not dropped on the skin until after the derma has been exposed. The skin is tightly drawn and the drill pressed against it perpendicularly. A single rotary turn is then made without altering the pressure. This will detach a small flake of epidermis, which should be brushed off with the edge of the drill. This exposes a circle of derma about 2 mm. in diameter and, if skillfully done, should cause no bleeding. The vaccine is dropped on this circle of exposed derma and rubbed in with a sterile toothpick, as described under the method of incision.

If the number of persons being vaccinated is large enough to warrant the expenditure of all the vaccine in a vial container at one clinic period, the vaccine may be supplied in vials and transferred directly to the arm with the sterile toothpick.

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<sup>2</sup> This recommendation is based on the results of a series of tests with different vaccines.

## NUMBER OF INSERTIONS

Multiple insertions should be used under the following conditions:

1. In case of exposure to smallpox.
2. In case of failure of previous vaccination.
3. In case there is any doubt as to the full potency of the vaccine on account of possible adverse conditions of transportation or storage.
4. In case the subject is not likely to return for revaccination in the event of failure.

When multiple insertions are used, they should be made not less than 2.5 cm. apart. A capillary tube should be used to each insertion.

## PRECAUTIONS

The vaccination site should not be exposed to direct sunlight until dry. *Dressings are unnecessary and are harmful if permitted to remain on the arm.* The small vesicles produced by any one of the above methods are reasonably tough and will dry without rupturing unless macerated by the excessive heat and moisture present under a vaccination shield or other nonmobile covering. This maceration is not prevented by the presence of openings in the vaccination shield. Vesicles and crusts should be kept dry. If necessary to prevent the soiling of the clothing, a fold of sterile gauze may be attached to the garment, not to the skin. Very rarely a severe "take" may require a few days of antiseptic dressings.

All primary vaccinations should be observed at the end of 10 and 15 days, and revaccinations should be observed in 2 and 4 days, in order to detect a possible reaction of immunity. *The vaccination should be considered successful as soon as this reaction of immunity appears and begins to subside,* provided vaccine of full potency has been used. A test for full potency is that the vaccine should give more than 50 per cent of vaccinoid reactions in the group of people vaccinated more than 10 years previously.

*Small insertions are insisted upon because the diameter of the lesion is dependent upon the area of the insertion, and the rapidity of healing is dependent upon the size of the lesion.*

## THE VACCINATION CERTIFICATE

The character of the vaccination reaction should be indicated on the vaccination certificate by noting *the day of greatest extent of redness.* This may be done conveniently by checking the day on the following record:

	Reaction of im- munity	Vaccinoid	Vaccinia
Days after vaccination.....	1 2 3	4 5 6 7	8 9 10 11 12 13 14

Encircle the number of the day after vaccination on which the greatest extent of redness was observed.

The number of successful insertions, the lot number of the virus, and the expiration date should also appear on the record.

## STATE AND INSULAR HEALTH AUTHORITIES, 1930

### 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 1929 have been published in the Public Health Reports<sup>1</sup> for the information of health officers and others interested in public-health activities. The present volume (1930), like those formerly issued, has been compiled from information furnished by the respective State and insular health officers, and includes 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" health officer is defined as "one who does not engage in the practice of medicine or in any other business, but devotes all of his time to official duties."

#### ALABAMA

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

Bibb Graves, governor, *ex officio* chairman.  
Montgomery.

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

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

Fred W. Wilkerson, M. D., Montgomery.

D. T. McCall, M. D., Mobile.

W. W. Harper, M. D., Selma.

J. S. McLester, M. D., Birmingham.

M. Y. Dabney, M. D., Birmingham.

A. L. Harlan, M. D., Alexander City.

S. A. Gordon, M. D., Marion.

J. M. Watkins, M. D., Troy.

Executive health officer:

\*J. N. Baker, M. D., State Health Officer,  
Montgomery.

Administrative assistant:

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

Secretary to State health officer:

\*Bessie Tucker, Montgomery.

Financial secretary:

\*Adna Eley Alldredge, Montgomery.

Registrar of vital statistics:

\*W. T. Fales, Montgomery.

\*Ethel Hawley, chief clerk, Montgomery.

Laboratories of the State Board of Health:

General director—

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

Assistant director—

\*Catherine R. Mayfield, Montgomery.

Anniston branch—

\*Katie Mae Wilson, Anniston.

Birmingham branch—

George A. Danison, Birmingham.

Mobile branch—

\*C. H. Waite, Mobile.

Tennessee Valley—

\*A. J. Perolio, M. D., Albany.

Tuscaloosa branch—

\*Lucile Watt, M. D., Tuscaloosa.

Selma branch—

\*Nellie K. Whitfield, Selma.

State sanitary engineer:

\*G. H. Hazlehurst, C. E., M. C. E., Mont-  
gomery.

Assistant sanitary engineers:

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

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

\*T. H. Milford, B. C. E., Montgomery.

Communicable disease control:

\*D. G. Gill, M. D., D. P. H., director, Mont-  
gomery.

W. E. Wilson, M. D., C. P. H., assistant  
director, Montgomery.

<sup>1</sup> Reprints Nos. 83, 123, 190, 286, 344, 405, 488, 544, 605, 706, 775, 871, 949, 1,043, 1,106, 1,188, 1,254, and 1,334, from the Public Health Reports.

**County organization:****Divisional directors—**

- \*C. L. Murphree, M. D., Montgomery.
- \*B. F. Austin, M. D., Montgomery.

**Director field training station:**

A. H. Graham, M. D., D. P. H., Opelika.

**Director in public health nursing:**

Mary I. Mastin, R. N., Opelika.

**Public health nursing:**

- \*Jessie L. Marriner, R. N., director, Montgomery.
- \*Frances C. Montgomery, R. N., assistant director, Montgomery.
- \*Annie Jewel Brown, R. N., assistant director, Montgomery.
- Margaret Murphy, R. N., assistant director, Montgomery.
- Catherine Corley, R. N., assistant director, Montgomery.

**Inspection:**

- \*C. A. Abele, Ch. E., director, Montgomery.
- \*H. J. Thrasher, assistant director, Huntsville.
- \*U. D. Franklir, dairy inspector, Huntsville.
- \*F. H. Downs, dairy inspector, Montgomery.
- \*J. W. Garrett, dairy inspector, Selma.
- \*H. W. Caldwell, D. V. M., dairy inspector, Montgomery.
- \*D. Cook, D. V. M., dairy inspector, Montgomery.
- \*C. G. Allen, dairy inspector, Montgomery.
- \*C. H. South, district inspector, oyster control, Mobile.
- \*B. F. Crane, district inspector, Birmingham.
- \*B. S. Coon, district inspector, Montgomery.

Appropriation for fiscal year ending September 30, 1930:

Central administration .....	\$493, 813
County health work, per county.....	2, 500
Inspection of dairy plants.....	12, 000

**ALASKA****Board of health:**

- George A. Parks, 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:**

- F. J. O'Hara, M. D., Nome.
- J. A. Sutherland, M. D., Fairbanks.

Appropriation for 1927-28, \$18,100.

**ARIZONA****State board of health:**

- John C. Phillips, governor, president, Phoenix.
- K. Berry Peterson, attorney general, vice president, Phoenix.
- R. J. Stroud, M. D., secretary, Tempe.

**Executive health officer:**

- \*R. J. Stroud, M. D., State superintendent of public health, Tempe.
- \*O. C. West, M. D., epidemiologist, Phoenix.

**Executive secretary:**

- \*Maud J. Tansey, Phoenix.

**State registrar of vital statistics:**

- \*R. J. Stroud, M. D., Tempe.

**State bureau of vital statistics:**

- \*Anna M. Galbraith, Phoenix.

**State laboratory:**

- \*Jane H. Rider, director, Tucson.
- \*Marion E. Stroud, bacteriologist, Tucson.

Appropriations for the years ending June 30, 1930 and 1931:

**State board of health—**

Salaries.....	\$12, 800
Operating expense.....	5, 450
Traveling expense.....	2, 500
Capital investment.....	500
Repairs and replacements.....	150

Total for one year..... 21, 400

Total for two years..... 42, 800

**State laboratory—**

Salaries.....	6, 840
Operating expense.....	700
Traveling expense.....	900
Capital investment.....	500

Total for one year..... 8, 940

Total for two years..... 17, 880

**ARKANSAS****Board of health:**

- E. L. Watson, M. D., president, Newport.
- O. L. Williamson, M. D., Marianna.
- A. S. Gregg, M. D., Fayetteville.
- R. M. Eubanks, M. D., Little Rock.
- L. D. Duncan, M. D., Waldron.
- W. P. Parks, M. D., Hot Springs.
- 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:**

- \*H. V. Stewart, associate director, Little Rock.

**Bureau of sanitation and malaria control:**

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

**Bureau of child hygiene:**

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

**County health units:**

- \*Gordon Hastings, M. D., director, Little Rock.

Appropriations for biennial period ending June 30, 1931:

<b>Executive department, salaries and miscellaneous.....</b>		<b>\$31, 600</b>
Bureau of vital statistics.....	36, 800	
Payment of local registrars.....	31, 000	
Malaria control.....	9, 760	
Bureau of sanitation.....	28, 400	
Bureau of child hygiene.....	3, 000	
Hygienic laboratory.....	21, 240	
County Health units.....	10, 000	
<b>Total.....</b>	<b>171, 800</b>	

## CALIFORNIA

## Board of public health:

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

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

Walter M. Dickie, M. D., director of public health, Sacramento.

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

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

Adelaide Brown, M. D., San Francisco.

Robert A. Peers, M. D., Colfax.

## Department of public health:

\*Walter M. Dickie, M. D., director of public health, Sacramento.

## District health officer:

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

## Chief sanitary inspector:

\*Edward T. Ross, Sacramento.

## Chief cannery inspector:

\*Milton P. Duffy, San Francisco.

## Vital statistics:

\*Mrs. Marie B. Strassburger, registrar, Sacramento.

## Bureau of registration nurses:

\*Sarah G. White, R. N., chief, Sacramento.

## Bureau of tuberculosis:

\*Edythe L. M. Tate-Thompson, chief, Sacramento.

## Bureau of food and drugs:

\*M. E. Jaffa, chief, Berkeley.

## Bacteriological laboratory:

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

## Bureau of sanitary engineering:

\*C. G. Gillespie, O. E., chief, Berkeley.

## Bureau of child hygiene:

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

## Malaria control:

\*Edward Stuart, O. E., in charge.

## Appropriations for biennial period ending June 30, 1931 (for eighty-first and eighty-second fiscal years):

## Administration—

For support, department of public health..... \$500,500

Aid to mosquito abatement districts..... 10,000

## Division of cannery inspection—

For support..... 148,720

(Payable from cannery inspection funds.)

## Nurses' registration bureau—

For support..... 34,680

## Tuberculosis bureau—

Allotment for support, \$47,900 included in item "for support, department of public health."

For subsidies..... 640,000

Orthopedics survey for aid to physically defective children... 8,200

Total..... 1,413,100

## Other sources of revenue:

Fees for registration of nurses, \$10 each.

Renewal of registration certificates, \$1 per year.

## Other sources of revenue—Continued.

Licensing of cold-storage warehouses, rated according to capacity.

Fines for violation of pure food and drugs act. Fees for licenses, \$10 each, and contributions, for credit to division of cannery inspection.

Fees for certified copies of records.

## Publications issued by health department:

Biennial report.

Weekly bulletin.

## COLORADO

## Board of health:

Sherman Williams, M. D., president, Denver.

S. R. McKelvey, M. D., secretary, Denver.

J. S. Hasty, M. D., Lamar.

Ben Beshoar, M. D., Trinidad.

Paul J. Connor, M. D., Denver.

Ralph M. Jones, D. O., Denver.

O. A. Davlin, M. D., Alamosa.

Charles W. Thompson, M. D., Pueblo.

William P. Gasser, M. D., Loveland.

## Executive health officer:

\*S. R. McKelvey, M. D., secretary, State board of health, Denver.

## Bacteriologist:

William C. Mitchell, M. D., Denver.

## Epidemiologist:

W. H. Twining, M. D., Denver.

## State food and drug commissioner.

\*S. H. Loeb, Denver.

## Division of social hygiene:

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

## Division of sanitary engineering:

\*Benjamin V. Howe, director, Denver.

## Division of plumbing inspection:

\*Irving H. Fuller, inspector, Denver.

## Appropriations for fiscal years ending June 30, 1930 and 1931:

	1930	1931
Salaries.....	\$27,300	\$27,300
Laboratory equipment and supplies.....	2,000	2,000
Printing and publications.....	2,800	2,800
Traveling expenses.....	5,000	5,000
Samples and supplies (food).....	300	300
Veneral disease.....	20,000	20,000
Incidental expenses.....	1,750	1,750
Total.....	50,150	50,150

## CONNECTICUT

## Public health council:

S. B. Overlock, M. D.

O. E. A. Winslow, D. P. H.

James W. Knox.

Edward P. Jones.

James A. Newlands.

David R. Lyman, M. D.

## Executive health officer:

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

## 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:**

\*Sarah R. Addison, R. N., director.

**Bureau of child hygiene:**

\*A. Elizabeth Ingraham, M. D.

**Bureau of public-health instruction:**

\*Elizabeth C. Nickerson, C. P. H.

**Bureau of laboratories:**

\*F. Lee Mickle, director.

**Bureau of sanitary engineering:**

\*Warren J. Scott, director.

**Division of occupational diseases:**

\*Albert S. Gray, M. D.

**Division of venereal diseases:**

\*Henry P. Talbot, M. D.

**Division of mental hygiene:**

\*James L. McCartney, M. D., chief.

**Division of mouth hygiene:**

Clyde R. Salmons, D. D. S., chief.

**Division of medical registration:**

\*Ruth H. Monroe, chief.

Appropriation for fiscal period ending June 30, 1931  
(two years), \$648,619.

**Publications issued by health department:**

Weekly bulletin.

Monthly bulletin.

Annual vital-statistics report.

Annual report of State department of health.

Miscellaneous pamphlets.

**DELAWARE****State board of health:**

William P. Orr, M. D., president, Lewes.

Mrs. Charles Warner, vice president, Wilmington.

Robert E. Ellegood, M. D., Wilmington.

Margaret I. Handy, M. D., Wilmington.

Mrs. F. G. Tallman, Wilmington.

W. R. Pierce, M. D., Milford.

Mrs. Arthur Brewington, Delmar.

Charles R. Jefferis, Jr., D. D. S., Wilmington.

**Executive health officer:**

\*Arthur C. Jost, M. D., C. M., Dover.

**Director of laboratory:**

\*Rowland D. Herdman, Dover.

**Director of child hygiene:**

\*Clealand A. Sargent, M. D., Dover.

**Sanitary engineer:**

\*Richard O. Beckett, Dover.

**Superintendent of Brandywine sanatorium:**

\*Lawrence D. Phillips, M. D., Marshallton.

**Superintendent of Edgewood sanatorium:**

\*Elizabeth Van Vranken, R. N., Marshallton.

**Appropriations for each fiscal year ending**

June 30, 1930 and 1931:

General administration..... \$75,000

Hygienic laboratory..... 9,000

Edgewood sanatorium for colored tuber-

culous patients..... 14,000

Brandywine sanatorium for white tuber-

culous patients..... 40,000

Total..... 138,000

Permanent improvement of Brandy-

wine sanatorium for white tubercu-

lous patients (1930)..... 35,000

Special vote for Brandywine sana-

torium..... 15,000

**Publications:**

Biennial report.

Bi-monthly health news.

Bulletins on health subjects.

**DISTRICT OF COLUMBIA****Executive health officer:**

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

**Assistant health officer:**

\*Edward J. Schwartz, M. D., Washington.

**Chief clerk and deputy health officer:**

\*Arthur G. Cole, Washington.

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

\*James G. Cumming, M. D., Washington.

**Bacteriologist:**

\*John E. Noble, Washington.

**Serologist:**

\*Jesse P. Porch, D. V. M., Washington.

**Chemist:**

\*John B. Reed, Washington.

**Chief sanitary inspector:**

\*J. Frank Butts, Washington.

**Director child hygiene service:**

\*Hugh J. Davis, M. D., 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, 1931:

Salaries..... \$187,790

Prevention of communicable diseases..... 48,000

Isolation wards at hospitals..... 24,000

Milk and food inspection and regula-

tion..... 8,300

Dispensary service, including treat-

ment of tuberculosis and venereal

diseases..... 29,000

Maintaining a child hygienic service..... 54,000

Hygiene and sanitation, public schools..... 101,980

Laboratory service..... 4,450

Miscellaneous..... 13,250

Total..... 470,770

**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:**

Chas. H. Mann, president, Jacksonville.

H. Mason Smith, M. D., Tampa.

W. D. Nobles, M. D., Pensacola.

**Executive health officer:**

\*Henry Hanson, M. D., State health officer,  
Jacksonville.

**Diagnostic laboratories:**

\*Paul Eaton, M. D., D. P. H., acting director,  
Jacksonville.

**Bureau of vital statistics:**

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

**Bureau of communicable diseases:**

\*F. A. Brink, M. D., director, Jacksonville.

**Bureau of sanitary engineering:**

\*E. L. Filby, C. E., director, Jacksonville.

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

\*Lucile Spires Blachly, M. D., director, Jacksonville.

**Appropriation for health department:**

One-half mill tax levied upon the assessable property of the State for the year ending June 30, 1930.

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.

Annual reports.

**GEORGIA****Board of health:**

Robert F. Maddox, president, Atlanta.

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

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

C. L. Ridley, M. D., Macon.

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

W. R. Neal, Savannah.

D. M. Carter, M. D., Madison.

J. G. Dean, M. D., Dawson.

John A. Rhodes, M. D., Crawfordville.

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

C. R. Brice, D. D. S. Gainesville.

A. A. Lawry, D. D. S., Valdosta.

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

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

J. M. Sutton, 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:**

\*M. E. Winchester, M. D., director, Atlanta.

**Division of laboratories:**

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

**Division of sanitary engineering:**

\*L. M. Clarkson, director, Atlanta.

**State tuberculosis sanatorium:**

\*M. F. Haygood, M. D., Superintendent, Alto.

**Bureau of vital statistics:**

\*Butler Toombs.

**Division of child hygiene:**

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

**Georgia training school for mental defectives:**

\*John W. Oden, M. D., superintendent.

**Division of accounting and purchasing:**

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

**Appropriations for the fiscal year ending**

Dec. 31, 1929:

General appropriation..... \$150,000

Venereal-disease control..... 10,000

Maternity and infant hygiene..... 5,000

**Appropriations for the fiscal year ending Dec. 31, 1929—Continued.**

State tuberculosis sanatorium..... \$250,000

Georgia training school for mental defectives..... 72,270

Total appropriation by legislature..... 487,270

Central administration, county health work (International Health Board funds)..... 4,200

Central administration, malaria control (International Health Board funds)..... 3,500

Grand total..... 494,970

**HAWAII****Board of health:**

F. E. Trotter, M. D., president and executive officer, Honolulu.

Harry R. Hewitt, attorney general, Honolulu.

F. J. Pinkerton, M. D., Honolulu.

D. S. Bowman, Honolulu.

Mark A. Robinson, Honolulu.

J. Ordenstein, Honolulu.

J. Platt Cooke, Honolulu.

**Executive health officer:**

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

**Assistant administrator:**

\*James T. Wayson, M. D., Honolulu.

**Secretary:**

\*Mae R. Weir, Honolulu.

**Bureau of sanitation:**

\*S. W. Tay, director, Honolulu.

\*Robert L. Lam, sanitary engineer, Honolulu.

\*A. K. Arnold, division supervisor, Oahu, Honolulu.

\*J. Caceres, division supervisor, Island of Hawaii, Hilo.

\*R. C. Lane, division supervisor, Island of Maui, Wailuku.

\*A. P. Christian, division supervisor, Island of Kauai, Kapaa.

**Health officer, Island of Hawaii:**

\*C. Charlock, Hilo.

**Registrar general of vital statistics:**

\*M. H. Lemon, registrar general, Honolulu.

**Bacteriologist:**

\*A. N. Sinclair, M. B., C. M., Honolulu.

**Tuberculosis bureau:**

\*S. E. Doolittle, M. D., Honolulu.

**Bureau of maternal and infant hygiene:**

\*Mabel L. Smyth, R. N., director, Honolulu.

**Food commissioner and analyst:**

\*M. B. Bairos, Honolulu.

**Territorial hospital:**

\*A. B. Eckerd, M. D., superintendent, Kaneohe, Oahu.

**Leprosarium:**

\*R. L. Cooke, superintendent, Kalaupapa, Molokai.

\*L. F. Luckie, M. D., physician, Kalaupapa, Molokai.

\*George B. Tuttle, M. D., assistant physician, Kalaupapa, Molokai.

## Appropriations, 1929-1931:

Board of health—General office—	
Salary, president.....	\$14, 400
Other personal services.....	68, 380
Other current expenses.....	15, 200
Repairs and alterations, Kalihi hospital, Kapiolani girls' home and Kalihi boys' home.....	16, 000
Motor vehicles.....	1, 800
Other equipment.....	750
Bureau of vital statistics—	
Personal services.....	30, 690
Other current expenses.....	12, 000
Equipment.....	400
Bureau of sanitation—	
Personal services.....	185, 800
Other current expenses.....	25, 000
Motor vehicles.....	5, 000
Other equipment.....	665
Plague campaign—	
Personal services.....	39, 450
Other current expenses.....	16, 000
Motor vehicles.....	800
Other equipment.....	730
Quarantine service: General service—	
Personal services.....	23, 720
Other current expenses.....	40, 000
Motor vehicles.....	800
Other equipment.....	500
Quarantine service: Quarantine stations—	
Personal services.....	6, 995
Other current expenses.....	8, 000
Equipment.....	450
Bacteriological laboratories—	
Personal services.....	12, 640
Other current expenses.....	3, 000
Equipment.....	500
Agents (Government physicians)—	
Personal services.....	79, 800
Pure food and drugs—	
Personal services.....	21, 600
Other current expenses.....	3, 750
Equipment.....	300
Tuberculosis: Government hospital (Puumale home)—	
Personal services.....	41, 450
Other current expenses.....	40, 000
Equipment.....	2, 000
Tuberculosis: Private hospitals—	
Contributions to Leahi home.....	168, 000
Contributions to Kula sanitarium.....	96, 000
Contributions to Samuel Mahelona Memorial Hospital.....	72, 000
General medical assistants and nursing—	
Personal services.....	122, 195
Other current expenses.....	35, 500
Motor vehicles.....	6, 500
Other equipment.....	1, 700
Territorial hospital: Sanitarium—	
Personal services.....	18, 240
Other current expenses.....	15, 577
Equipment.....	1, 017

## Appropriations, 1929-1931—Continued.

Territorial hospital—	
Personal services.....	\$261, 400
Other current expenses.....	199, 100
Motor vehicles.....	1, 500
Other equipment.....	78, 500
Highways, trails, etc.....	7, 500
Frame dormitories.....	25, 000
Leper settlement and Kalihi hospital—	
Personal services.....	217, 660
Other current expenses.....	442, 000
Motor vehicles.....	3, 700
Other equipment.....	8, 000.00
Highways, trails, etc.....	10, 000.00
Maternity ward, Kalaupapa.....	2, 000.00
New cottage at Kalaupapa.....	3, 000.00
Grants, subsidies, and contributions.....	21, 200.00
It being provided that from this amount of \$21,200 a cash allowance of \$10 per annum shall be paid to each inmate of the Kalihi hospital and the Kalaupapa settlement, which shall be paid quarterly.	
Kapiolani girls' home—	
Personal services.....	15, 330.00
Other current expenses.....	31, 000.00
Equipment.....	1, 550.00
Kalihi boys' home—	
Personal services.....	28, 180.00
Other current expenses.....	31, 000.00
Equipment.....	750.00
Boards of examiners—	
Personal services.....	250.00
Other current expenses.....	700.00
Maternal and infant hygiene—	
Personal services.....	36, 903.84
It being provided, however, that the sum of \$23,451.92 of the above appropriation of \$36,903.84, or such amount thereof as remains unexpended, shall not be available for appropriation in the event that Federal funds are provided and made available as the same have been heretofore available.	
Aiding indigent persons released from the Kalihi hospital and leper settlement, Kalaupapa—	
Grants, subsidies, and contributions.....	3, 500.00
Annual trips of children to visit parents, Kalaupapa—	
Other current expenses.....	800.00
Relief of persons released from Kalihi hospital and Kalaupapa—	
Grants, subsidies, and contributions.....	12, 000.00
Total.....	2, 697, 522.84

## Publications issued by health department:

- Annual report of president.
- Registrar general's report.
- Monthly morbidity and mortality report.

## IDAHO

## Department of public welfare:

C. K. Macey, commissioner.

\*W. V. Leonard, State chemist and sanitary engineer.

F. W. Almond, M. D., public health adviser.

\*Lawrence J. Peterson, bacteriologist.

\*Robert H. Pratt, dairy, food, drug, hotel, and sanitary inspector.

\*Robert Quarles, dairy, food, drug, hotel, and sanitary inspector.

## Executive health officer:

\*C. K. Macey, commissioner of public welfare, Boise.

## Bureau of child hygiene:

\*C. K. Macey, commissioner, ex officio State director, Boise.

## Appropriations for biennial period ending

Dec. 31, 1930:

Personal services .....	\$49,000
Other expenses .....	18,500
Veneral-disease control .....	5,000
Child hygiene .....	5,000

Total..... 75,500

## ILLINOIS

## Board of public-health advisers:

Clifford U. Collins, M. D., chairman.

James H. Hutton, M. D., secretary.

R. J. Coultas, M. D., vice chairman.

Arnold H. Kegel, M. D.

W. A. Evans, M. D.

## Director of public health:

\*Andy Hall, M. D., Springfield.

## Assistat director of public health:

\*A. C. Baxter, M. D.

## Division of sanitation and engineering:

\*Harry F. Ferguson, O. 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:

\*Grace S. Wightman, M. D., chief.

## Division of tuberculosis:

\*A. C. Baxter, M. D., acting chief.

## Division of laboratories:

\*Lloyd Arnold, M. D., acting 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:

\*William F. Behrens, superintendent.

## Appropriations for biennial period ending

June 30, 1931:

Salaries.....	\$308,140
Salaries State officers.....	30,400
Office expenses.....	22,500
Traveling expenses.....	130,850
Operation.....	193,834
Repairs and equipment.....	25,998
Contingent.....	30,000
Printing.....	52,000

Appropriations for biennial period ending  
June 30, 1931—Continued.

Postage.....	\$20,000
Rabies.....	6,000

Total..... 1,319,722

## Publications issued by health department:

Illinois Health Quarterly.

Illinois Health Messenger (bimonthly).

Weekly press bulletin.

Educational health circulars.

## INDIANA

## Board of health:

A. J. Hostetler, M. D., president, Lagrange.

Calvin R. Marshall, M. D., vice president, Indianapolis.

John H. Green, M. D., North Vernon.

T. W. Oberlin, M. D., Hammond.

William F. King, M. D., secretary, Indianapolis.

## Executive health officer:

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

## Division of vital statistics:

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

## Laboratory of hygiene:

\*C. F. Adams, M. D., B. S. A., director, Indianapolis.

## Division of food and drugs:

\*I. L. Miller, State food and drug commissioner, Indianapolis.

## Milk laboratory:

\*Frank C. Wilson, director, Indianapolis.

## Water and sewage laboratory:

\*Lewis S. Finch, sanitary engineer, Indianapolis.

## Division of child hygiene:

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

## Division of communicable diseases:

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

## Epidemiologist and assistant secretary:

\*V. K. Harvey, M. D., Indianapolis.

## Division of school hygiene:

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

## Division of housing:

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

## Department of public-health nursing:

\*Eva F. MacDougall, R. N., director, Indianapolis.

Appropriations for biennial period ending September 30, 1931, \$256,500 per annum.

## IOWA

## State department of health:

## EX OFFICIO

John Hammill, governor, Des Moines.

Ed. M. Smith, secretary of state, Des Moines.

R. E. Johnson, treasurer of state, Des Moines.

J. W. Long, auditor of state, Des Moines.

M. G. Thornburg, secretary of agriculture, Des Moines.

D. C. Steelsmith, M. D., State commissioner of health, Des Moines.

## APPOINTIVE BY GOVERNOR

H. R. Sugg, M. D., president, Clinton.  
 O. T. Lisan, M. D., Mount Ayr.  
 H. W. Plummer, M. D., Lime Springs.  
 W. A. Seidler, M. D., Jamaica.  
 J. D. Lowry, M. D., Fort Dodge.

## Executive health officer:

\*D. C. Steelsmith, M. D., C. P. H., commissioner  
 of health, Des Moines.

## Chief clerk:

\*Lynn Clemens, Des Moines.

## Secretary:

\*Naomi B. Wherry, Des Moines.

## Division of preventable diseases:

\*Howard A. Lanpher, M. D., C. P. H., director  
 and epidemiologist, Des Moines.

## Cooperative county health units:

\*E. R. Coffey, M. D.

## Division of vital statistics:

\*R. L. McLaren, director, Des Moines.

## Division of sanitary engineering:

\*A. H. Wieters, C. E., director, Des Moines.

## Division of public health nursing:

\*Edith S. Countryman, R. N., director, Des  
 Moines.

## Division of nursing education:

\*Maude E. Sutton, R. N., director, Des Moines.

## Division of public health education:

\*D. Pirie-Beyea, State lecturer, Des Moines.

## Division of examinations and licensures:

\*H. W. Grefe, director, Des Moines.

## Division of law enforcement:

\*Herman B. Carlson, LL. D., inspector, Des  
 Moines.

## Division of barber inspection:

\*John T. McGruder, chief inspector, Des  
 Moines.

## Division of cosmetology inspection:

\*Wanda Long, secretary, Des Moines.

## Housing work is carried on by engineering division.

Medical, nurses, dental, optometry, cosmetology,  
 chiropractic, osteopathy, embalming, podiatry,  
 and barber examining boards are combined in  
 State department of health.

Appropriations for fiscal year ending June  
 30, 1930:

For salaries and wages.....	\$40, 200
Miscellaneous traveling.....	2, 500
Antitoxin, vaccine, and other prophylactics.....	5, 000
Sanitary engineering and housing—	
Salaries and wages.....	14, 000
Traveling.....	6, 000
Equipment and laboratory.....	1, 000
Quarantine enforcement and other contingencies.....	4, 000
Dues in national organizations.....	200
Investigation of tuberculosis.....	4, 000
Traveling epidemiologist.....	1, 800
Traveling lecturer.....	1, 500
Stream pollution.....	625
Replacing car.....	500
New car.....	400
Total.....	81, 725

## Publications:

Biennial report.  
 Quarterly bulletin.  
 Health news-letter.

## KANSAS

## Board of health:

Clarence A. McGuire, M. D., president,  
 Topeka.

H. L. Aldrich, M. D., vice president, Caney.  
 George I. Thacher, M. D., Waterville.  
 John H. Henson, M. D., Mound Valley.  
 Charles W. Robinson, M. D., Atchison.  
 Clay E. Coburn, M. D., Kansas City.  
 Arthur J. Anderson, M. D., Lawrence.  
 Anna Perkins, M. D., El Dorado.  
 Walter J. Eilerts, M. D., Wichita.  
 Thomas H. Finnigan, attorney, Kansas City.

## Executive health officer:

\*Earle G. Brown, M. D., secretary State board  
 of health, Topeka.

## Division of vital statistics:

\*W. J. Davies, State registrar.

## Division of communicable diseases:

\*C. H. Kinnaman, M. D., epidemiologist,  
 Topeka.

## Division of foods and drugs:

\*Thomas I. Dalton, Ph. C., assistant chief food  
 and drug inspector, Topeka.

## Division of child hygiene:

\*J. C. Montgomery, M. D., chief, Topeka.

## Division of rural sanitation:

\*J. C. Montgomery, M. D., director, Topeka.

## Division of water and sewage:

Earnest Boyce, chief, Lawrence.

## Division of public-health education:

\*Earle G. Brown, M. D., director, Topeka.

## Division of venereal diseases:

\*Earle G. Brown, M. D., director, Topeka.

## Water and sewage laboratories at Kansas University:

Earnest Boyce, director, Lawrence.

## Food laboratory at Kansas University:

Prof. E. H. S. Bailey, director of food analysis,  
 Lawrence.

## Drug laboratory at Kansas University:

Prof. L. D. Havenhill, director of drug analysis,  
 Lawrence.

## Food laboratory at Kansas Agricultural College:

Prof. H. H. King, director of food analysis,  
 Manhattan.

## Public-health laboratory, Topeka:

\*Earle G. Brown, M. D., acting director,  
 Topeka.

Appropriations for the fiscal year ending June 30,  
 1930:

	Salaries	Total
Executive.....	\$5, 800	\$3, 750
Division of communicable diseases.....	4, 500	10, 700
Division of food and drugs.....	10, 400	15, 400
Division of child hygiene.....	7, 300	10, 000
Division of cooperative county health work.....		7, 500
Public health laboratory, including appropriation for the purchase of arsenamine for the treatment of indigent cases of syphilis.....	6, 340	10, 000
Division sanitation.....		3, 000
Board members.....		1, 250
Total.....	34, 340	66, 600

**Other sources of revenue:**

Marriage fees, approximately \$20,000.

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

**Publications issued by health department:**

Biennial report.

Weekly morbidity report.

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

E. M. Howard, M. D., president, Harlan.

Geo. S. Coon, Louisville.

A. T. McCormack, M. D., secretary, Louisville.

J. Watts Stovall, Grayson.

Lawrence T. Minish, M. D., Frankfort.

B. B. Keys, M. D., Murray.

F. L. Johnson, M. D., Livermore.

C. J. Johnson, D. O., Louisville.

Addison Dimmitt, Louisville.

**Executive health officer:**

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

**Bureau of county health work:**

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

\*J. W. Davis, M. D., assistant, Winchester.

\*V. A. Stille, M. D., assistant, Benton.

**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, C. E., director, Louisville.

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

\*Sarah Vance Dugan, director, Louisville.

**Bureau of venereal diseases:**

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

**Bureau of public health nursing:**

\*Margaret East, R. N., director, Louisville.

**Bureau of maternal and child health:**

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

\*Juanita Jennings, M. D., assistant.

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

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

**Bureau of budget:**

\*Elva Grant, director.

**Bureau of epidemiology:**

\*J. L. Jones, M. D., director, Louisville.

**Bureau of tuberculosis and State tuberculosis sanitarium:**

\*Paul A. Turner, M. D., director and superintendent, Louisville.

**Bureau of dental health:**

J. F. Owen, D. D. S., director, Lexington.

**Legislative appropriation for fiscal year ending June 30, 1931, \$315,000.****Publications issued by health department:**

Monthly bulletin.

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

J. A. O'Hara, M. D., president, New Orleans.

T. J. Labbe, St. Martinville.

S. de Nux, D. D. S., Marksville.

J. L. Kelly, M. D., Oak Grove.

(Other members to be appointed.)

Fannie B. Nelken, secretary.

**Executive health officer:**

\*J. A. O'Hara, M. D., president, New Orleans.

**Bacteriologist:**

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

**Registrar vital statistics:**

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

**Bureau of mental hygiene:**

H. R. Unsworth, M. D., director, New Orleans.

**Dairy and medical inspection:**

E. J. DeBergue, M. D., New Orleans.

**Bureau of public health administration:**

\*C. V. Akin, surgeon, U. S. P. H. S., director, New Orleans.

**Mosquito-malaria control:**

\*W. T. Browne, Ph. D., M. D., director, New Orleans.

**Sanitary engineer:**

\*John H. O'Neill, New Orleans.

**Analyst:**

\*Cassius L. Clay, New Orleans.

**Bureau of animal industry:**

\*G. T. Jackson, D. V. S., director, New Orleans.

**Sanitary inspection:**

Peter Rohrs, jr., chief, New Orleans.

**Dairy and milk products:**

H. N. Heffernan, technician, New Orleans.

**Auditor:**

Phil Arras, New Orleans.

**Appropriations for fiscal year:**

1930-31, \$406,000.

1931-32, \$406,000.

**Publications issued by health department:**

Quarterly bulletin.

Biennial report.

Miscellaneous leaflets.

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

C. F. Kendall, M. D., chairman, Augusta.

H. A. Kelley, D. D. S., Portland.

Annie Peabody, Portland.

J. G. Towne, M. D., Waterville.

O. R. Emerson, M. D., Newport.

Mrs. Agnes B. Hall, Hampden.

**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:**

\*William L. Holt, M. D., director, Augusta.

**Division of laboratories:**

\*Alfred G. Long, M. D., C. P. H., 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 social hygiene:**

\*William L. Holt, M. D., director, Augusta.

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

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

**Division of dental hygiene:**

\*Dorothy Bryant, D. H., Augusta.

**District health officers:**

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

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

\*R. L. Mitchell, M. D., Lewiston.

## District health officers—Continued.

- \*G. H. Hutchins, M. D., Waterville.
- \*L. W. Hadley, M. D., Machias.
- \*James W. Loughlin, M. D., Newcastle.
- \*B. F. Porter, M. D., Caribou.

## Appropriations for fiscal year ending June 30, 1930:

Salaries and clerk hire.....	\$39,000
Office expense and epidemic fund.....	22,000
District and local health officers.....	40,000
Veneral-disease control work.....	14,000
Maternity and child-welfare work.....	25,000
Branch State laboratory, Caribou.....	2,500
Aid for typhoid carriers.....	5,000

Total..... 147,500

## Other sources of revenue:

- Census Bureau, Washington, D. C., about \$800.
- License fees from camps, roadside eating and lodging places, about \$10,000.

## MARYLAND

## Board of health:

- Robert H. Riley, M. D., chairman, Baltimore.
- Thomas S. Cullen, M. D., Baltimore.
- Thomas H. Robinson, 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.
- Burt B. Ide, D. D. S., Baltimore.

## Executive health officer:

- \*Robert H. Riley, M. D., Dr. P. H., director of health, Baltimore.

## Division of personnel and accounts:

- \*Walter N. Kirkman, chief, Baltimore.

## Division of oral hygiene:

- \*Richard C. Leonard, D. D. S., chief, Baltimore.

## Division of legal administration:

- \*J. Davis Donovan, chief, Baltimore.

## Committee on public health education:

- \*Gertrude B. Knipp, secretary, Baltimore.

## Bureau of communicable diseases:

- \*Robert H. Riley, M. D., Dr. P. H., chief, Baltimore.
- \*C. H. Halliday, M. D., epidemiologist, Baltimore.
- \*C. W. G. Rohrer, M. D., diagnostician, Baltimore.

## Bureau of vital statistics:

- \*John Collinson, M. D., Dr. P. H., chief, Baltimore.

## Food and drug commissioner:

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

## Bureau of bacteriology:

- \*C. A. Perry, chief, Baltimore.

## Bureau of sanitary engineering:

- \*Abel Wolman, B. S. E., chief, Baltimore.

## Bureau of chemistry:

## Bureau of child hygiene:

- \*J. H. Mason Knox, Jr., M. D., chief, Baltimore.

## Appropriations for fiscal year ending September 30, 1930:

Salaries.....	\$280,317
Expenses.....	149,375
Emergency appropriation (epidemics, etc.).....	10,000

Total..... 439,692

## Publications issued by health department:

- Annual report.
- Weekly News Letter.
- Monthly bulletin.

## MASSACHUSETTS

## Public health council:

- George H. Bigelow, M. D., chairman, Boston.
- Roger I. Lee, M. D., Boston.
- Francis H. Lally, M. D., Milford.
- Richard P. Strong, M. D., Boston.
- Sylvester E. Ryan, M. D., Springfield.
- James L. Tighe, Holyoke.
- Gordon Hutchins, Concord.

## Executive health officer:

- \*George H. Bigelow, M. D., State Commissioner of public health, Boston.

## Secretary:

- \*Alice M. Ethier.

## Division of administration:

(Under direction of commissioner.)

## Division of communicable diseases:

- \*Clarence L. Scamman, M. D., director, Boston.

## Division of sanitary engineering:

- \*X. H. Goodnough, C. E., 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:

- \*Hermann C. Lythgoe, director and analyst, Boston.

## Division of child hygiene:

- \*M. Luise Diez, M. D., director, Boston.

## Division of tuberculosis sanatoria:

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

## Division of adult hygiene:

- \*Herbert L. Lombard, M. D., director, Boston.

## Appropriations for department of public health, 1930:

## Division of administration—

Salary of commissioner.....	\$7,500
Personal services.....	20,650
Services other than personal.....	15,500

## Division of child hygiene—

Personal services of director and assistants.....	40,000
Services other than personal.....	20,000

Personal services in connection with maternal and infant hygiene.....	21,200
Expenses in connection with maternal and infant hygiene.....	13,500

# **Appropriations for department of public health, 1930—Continued.**

## **Division of communicable diseases—**

Personal services of director,  
district health officers, etc..... \$71,000  
Services other than personal..... 21,500

Personal services in connection  
with control of venereal dis-  
eases..... 12,200

Expenses in connection with con-  
trol of venereal diseases..... 32,500

## **Wassermann Laboratory—**

For personal services..... 16,500

For expenses of laboratory..... 5,700

## **Antitoxin and vaccine laboratory—**

For personal services..... 67,700

Other services..... 42,375

## **Inspection of food and drugs—**

For personal services..... 50,500

Other services..... 15,250

## **For administering the shellfish law—**

Personal services..... 2,160

Other services..... 1,200

## **Water supply and disposal of sewage, engineering division—**

For personal services..... 72,000

For other services..... 21,000

## **Water supply and disposal of sewage, division of water and sewage laboratories—**

For personal services..... 42,000

For other services..... 8,000

## **Division of tuberculosis—**

For personal services..... 40,700

Services other than personal..... 10,660

For personal services of tubercu-  
losis clinic units..... 48,400

Services other than personal  
(clinic units)..... 29,600

Payment of subsidies..... 263,000

## **For maintenance of and for certain improvements at the Lakeville, North Reading, Rutland, and Westfield State sanatoria..... 1,433,190**

## **Division of adult hygiene—**

For personal services..... 39,700

For other expenses..... 37,000

## **Cancer hospital at Norfolk—**

For maintenance of and for cer-  
tain improvements..... 266,200

For care of radium after purchase..... 10,000

Total..... 2,798,385

## **MICHIGAN**

### **Advisory council of health:**

Robert B. Harkness, M. D., Houghton.  
Chalmers J. Lyons, D. D. Sc., Ann Arbor.  
Leo J. Dretzka, M. D., Detroit.  
Louis J. Hirschman, M. D., Detroit.

### **Executive health officer:**

\*C. C. Slemons, M. D., State health commis-  
sioner, Lansing.

### **Bureau of engineering:**

\*E. D. Rich, C. E., director.

\*John M. Hepler, assistant engineer.

\*Willard F. Shephard, B. S. E. assistant engi-  
neer.

### **Bureau of engineering—Continued.**

\*Raymond J. Faust, assistant engineer.

\*Herbert H. Hasson, assistant engineer.

\*Orla E. McGuire, assistant engineer.

\*F. B. Ransford, water inspector.

### **Bureau of laboratories:**

\*C. C. Young, Ph. D., Dr. P. H., director.

\*Minna Crooks, R. N., bacteriologist.

\*M. B. Kurtz, D. V. M. serologist.

\*Pearl Kendrick, bacteriologist, West Michigan  
division.

\*Ora Mills, bacteriologist, Houghton branch.

\*A. B. Haw, clinical pathologist.

\*Newton D. Larkum, Ph. D., immunologist.

\*Roy W. Pryor, Dr. P. H., immunologist.

\*Charles L. Bliss, toxicologist.

\*Bruce Robinson, superintendent, biologic  
plant.

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

\*Lillian R. Smith, M. D., director.

\*Florence H. Knowlton, M. D., physician.

\*Ida M. Alexander, M. D., prenatal consultant.

\*Helen de Spelder Moore, R. N., assistant  
director.

### **Bureau of records and statistics:**

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

### **Bureau of education:**

\*Marjorie Delavan, director.

\*Pearl Turner, assistant director.

\*Melita Hutzel, lecturer.

### **Bureau of embalming:**

\*Frank J. Pienta, director.

### **Bureau of preventive medicine:**

\*Don M. Griswold, M. D., Dr. P. H., director.

\*W. A. McIntosh, M. D., director, training  
station for health officers and public health  
nurses.

\*W. J. Murphy, M. D., field epidemiologist.

### **Bureau of mouth hygiene:**

\*William R. Davis, D. D. S. director.

### **Bureau of industrial hygiene:**

\*Frank A. Poole, M. D., director.

### **Bureau of rural hygiene:**

\*W. H. Pickett, M. D., director.

### **Appropriations for fiscal year ending June 30, 1931:**

Personal services..... \$300,000

Supplies..... } 126,000

Contractual service..... }

Outlay for equipment..... 9,900

Total..... 435,900

County health departments..... 20,000

Resort and roadside water inspection..... 16,000

Stream pollution..... 10,000

Buildings, biologic farm..... 7,500

Grand total..... 489,400

### **Publications issued by health department:**

Monthly bulletin.

Annual report.

Communicable disease pamphlets.

Sex hygiene pamphlets.

Child hygiene pamphlets.

Engineering bulletins.

Mouth hygiene pamphlets.

Scientific reprint series.

Rules and regulations.

Health officers' manual.



**MINNESOTA****Board of health:**

L. P. Wolff, C. E., president, St. Paul.  
 J. A. Thabes, M. D., vice president, Brainerd.  
 S. Marx White, M. D., Minneapolis.  
 C. L. Scofield, M. D., Benson.  
 N. M. Watson, M. D., Red Lake Falls.  
 N. G. Mortensen, M. D., St. Paul.  
 O. F. Melby, M. D., Thief River Falls.  
 W. H. Barr, M. D., Wells.  
 E. W. Fahey, M. D., St. Paul.

**Executive health officer, Old Capitol, St. Paul:**

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

**Division of administration, Old Capitol, St. Paul:**

\*O. C. Pierson, director.

**Division of vital statistics, Old Capitol, St. Paul:**

\*Gerda C. Pierson, director.

**Division of hotel inspection, Old Capitol, St. Paul:**

\*A. W. Lindberg, State hotel inspector.

**Division of preventable diseases (including venereal diseases), university campus, Minneapolis:**

\*O. McDaniel, M. D., director.  
 \*Lucy Heathman, chief of laboratories.  
 \*W. P. Greene, M. D., epidemiologist.  
 \*James E. Perkins, M. D., epidemiologist.  
 \*Ralph R. Sullivan, M. D., epidemiologist.

**Division of sanitation, university campus, Minneapolis:**

\*H. A. Whittaker, director.  
 \*O. E. Brownell, senior sanitary engineer.

**Division of child hygiene, university campus, Minneapolis:**

Everett C. Hartley, M. D., director.  
 \*Olivia Peterson, superintendent of public health nursing.

**Appropriation for fiscal year ending June 30, 1931:**

<b>Maintenance and vital statistics—</b>	
Salaries.....	\$34,000
Expenses.....	8,200
	<hr/> \$42,200
<b>Providing free antitoxin and other biological products.....</b>	14,575
<b>Venereal diseases.....</b>	17,500
<b>Sanitary engineering and laboratory....</b>	30,000
<b>Preventable diseases and laboratory....</b>	61,500
<b>Protection for maternity and infancy..</b>	33,000
<b>Indian health work.....</b>	10,000
<b>Hotel inspection.....</b>	37,000
<b>Total.....</b>	<hr/> 245,775

Publications issued by health department:  
 Educational pamphlets.

**MISSISSIPPI****Board of health:**

J. W. Lipscomb, M. D., president, Columbus.  
 Felix J. Underwood, M. D., secretary, Jackson.  
 S. E. Eason, M. D., New Albany.  
 L. B. Austin, M. D., Rosedale.  
 W. A. Dearman, M. D., Gulfport.  
 B. J. Shaw, M. D., State Springs.  
 W. H. Frizell, M. D., Brookhaven.  
 John Darrington, M. D., Yancey City.  
 Dudley Stearns, M. D., Newton.  
 Wm. R. Wright, D. D. S., Jackson.

**Executive health officer:**

\*Felix J. Underwood, M. D., executive officer, State board of health, Jackson.

**Bureau of vital statistics:**

\*R. N. Whitfield, M. D., director, Jackson.

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

\*Felix J. Underwood, M. D., acting director, Jackson.

\*Mary D. Osborne, R. N., supervisor, public health nursing, Jackson.

\*Gladys Eyrich, supervisor oral hygiene, Jackson.

**Hygienic laboratory:**

\*T. W. Kemmerer, M. D., director, Jackson.

**Bureau of sanitary engineering:**

\*H. A. Kroeze, C. E., director, Jackson.

\*N. M. Parker, D. V. S., State sanitary inspector, Jackson.

\*John M. Henderson, C. E., State sanitary inspector, Jackson.

\*Floyd Ratliff, State sanitary inspector, Jackson.

**Bureau of malaria control:**

\*Mark F. Boyd, M. D., C. P. H., director, Jackson.

**Bureau of county health work:**

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

**Bureau of communicable diseases:**

\*H. C. Ricks, M. D., C. P. H., director, Jackson.

State appropriation for period January 1, 1930, to December 31, 1930, \$195,000.

**Publications issued by health department:**

Biennial report.

Weekly health letters published in all newspapers of the State.

Health pamphlets.

**MISSOURI****Board of health:**

H. S. Gove, M. D., president, Linn.

Francis M. McCallum, M. D., vice president, Kansas City.

James Stewart, M. D., secretary, Jefferson City.

H. L. Kerr, M. D., Crane.

W. A. Clark, M. D., Jefferson City.

Ed Sanborn Smith, M. D., Kirksville.

Horace W. Carle, M. D., St. Joseph.

**Executive health officer:**

\*James Stewart, M. D., State health commissioner, Jefferson City.

\*Irl Brown Krause, M. D., assistant State health commissioner, Jefferson City.

**Epidemiology:**

\*R. L. Russell, M. D., assistant epidemiologist.

**Laboratories:**

\*R. L. Laybourn, bacteriologist.

**Sanitary engineering:**

\*W. Scott Johnson, chief engineer.

**Vital statistics:**

\*Ross Hopkins, M. D., statistician.

**Child hygiene and cooperative county health work:**

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

**Public health nursing:**

\*Pearl McIver, R. N., director.

## Appropriations for biennial period ending

December 31, 1930:

## Board of health—

Licensure.....	\$40, 000
Salaries.....	86, 000
Contingent.....	42, 000
Public health fund.....	159, 500
Laboratories and prevention of blindness.....	50, 000

Total..... 377, 500

## MONTANA

## Board of health:

E. G. Balsam, M. D., president, Billings.  
L. H. Fligman, M. D., vice president, Helena.  
E. M. Porter, M. D., Great Falls.  
George M. Jennings, M. D., Missoula.  
B. L. Pampel, M. D., Livingston.

## Executive health officer:

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

## Division of communicable diseases:

\*J. H. Crouch, M. D., epidemiologist, Helena.

## Division of child welfare:

\*Miss Alma Wretling, R. N., director, Helena.

## Division of food and drugs:

\*W. F. Cashmore, Jr., director, Helena.

\*Bert Kane, chemist, 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:

\*H. B. Foote, director, Helena.

W. M. Cobleigh, consultant, Bozeman.

\*Jacob W. Forbes, analyst, Helena.

## Hygienic laboratory:

\*Fred D. Stimpert, director, Helena.

\*Edith Kuhns, technician, Helena.

E. D. Hitchcock, M. D., consulting bacteriologist, Great Falls.

## Appropriations for the years ending—

	June 30, 1930	June 30, 1931
Salaries.....	\$31, 000	\$31, 000
Operating expenses.....	17, 300	17, 300
Capital repairs and replacements.....	2, 000	2, 000
Division of child welfare.....	15, 000	15, 000
Board of entomology (Rocky Mountain spotted fever work).....	25, 000	25, 000
Total.....	90, 300	90, 300
Other sources of revenue:		
Fees (about).....		12, 000
Rockefeller foundation.....		3, 650

## Publications issued by health department:

Special bulletins on communicable diseases.  
Biennial report.

## NEBRASKA

## Department of public welfare:

Ernest M. Pollard, secretary, Lincoln.

## Bureau of health—

## Executive health officer—

\*P. H. Bartholomew, M. D., director of public health, Lincoln.

## Collaborating epidemiologist—

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

## Bacteriologist—

\*L. O. Vose, Lincoln.

## Division of venereal diseases—

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

## Statistician—

\*Esther L. Stern, Lincoln.

## Division of child hygiene—

\*Bertha Riesland, chief clerk, Lincoln.

## Medical examining board—

W. R. Boyer, M. D., Pawnee City.

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

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

## Appropriations for biennial period ending

June 30, 1931—

Salaries.....	\$40, 000
Maintenance.....	22, 000

Total..... 62, 000

## NEVADA

## State board of health:

F. B. Balzar, governor, president, Carson City.

Edward E. Hamer, M. D., secretary and State health officer, Carson City.

W. G. Greathouse, secretary of State.

John Fuller, M. D., Reno.

A. J. Hood, M. D., Reno.

## Executive health officer:

\*Edward E. Hamer, M. D., Carson City.

## State hygienic laboratory at State university:

\*Vera E. Lautenschlager, acting director, Reno.

## Appropriations for 1927 and 1928:

Salary of secretary.....	\$5, 000
For State board of health.....	5, 100
For purchase of diphtheria antitoxin for free distribution.....	500
For bureau of vital statistics.....	500

Total..... 11, 100

## Publications issued by health department:

Biennial report.  
Special bulletins.

## NEW HAMPSHIRE

## Board of health:

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

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

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

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

Charles W. Tobey, governor.

Ralph W. Davis, attorney general, Manchester.

**Executive health officer:**

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

\*Harriet I. Parkhurst, chief clerk, Concord.

**Division of maternity, infancy, and child hygiene:**

\*Mary D. Davis, R. N., director and supervising nurse, Manchester.

**Department of vital statistics:**

\*Charles Duncan, M. D., registrar, Concord.

\*Bertha M. Watson, chief clerk, Concord.

**Division of chemistry and sanitation:**

\*Charles D. Howard, chief of division, Concord.

\*Harold Burrill, assistant chemist, Concord.

\*Harriet I. Albee, assistant chemist and bacteriologist, Concord.

\*Leonard W. Trager, assistant sanitary engineer, Concord.

\*Joseph X. Duval, chief inspector, Concord.

**Diagnostic and pathological department—**

\*William R. Macleod, serologist and diagnostic bacteriologist, Concord.

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

\*Benj. Jewell, assistant in pathological laboratory, Concord.

**Veneral disease division:**

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

**Appropriations for fiscal year ending June 30, 1930:**

State board of health..... \$50, 150

Laboratory of hygiene..... 17, 300

Vital statistics..... 3, 750

Total..... 71, 200

**Publications issued by health department:**

Bulletin.

Biennial report.

**NEW JERSEY****Board of health:**

Charles I. Lafferty, president, Atlantic City.

Harold J. Harder, C. E., vice president, Paterson.

David D. Chandler, Newark.

H. E. Winter, V. M. D., Plainfield.

J. Oliver McDonald, M. D., Trenton.

S. A. Cosgrove, M. D., Jersey City.

Mrs. Helen M. Berry, Newark.

Margaret McNaughton, Jersey City.

J. E. H. Guthrie, D. D. S., Newark.

J. Lynn Mahaffey, M. D., Camden.

Frank S. Tainter, C. E., Far Hills.

**Executive health officer:**

\*David C. Bowen, 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**

30, 1931:

Salaries..... \$203, 540. 00

Miscellaneous..... 67, 540. 00

Child hygiene..... 130, 298. 00

Venereal disease control..... 27, 612. 50

Total..... 428, 990. 50

**Publications issued by health department:**

Monthly bulletin.

Annual report.

**NEW MEXICO****Board of public welfare:**

Mrs. Francis C. Wilson, president, Santa Fe.

R. O. Brown, M. D., secretary, Santa Fe.

Mrs. A. M. Shortle, Albuquerque.

R. R. Ryan, Albuquerque.

H. A. Miller, M. D., Clovis.

**Executive health officer:**

\*Paul S. Fox; M. S. in C. E., acting director of public health, Santa Fe.

**Division of sanitary engineering and sanitation:**

\*Paul S. Fox, M. S. in C. E., chief, Santa Fe.

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

\*Edith Hodgson, R. N., chief, Santa Fe.

**Division of county health work:****Public health laboratory:**

\*Myrtle Greenfield, M. S., chief, Albuquerque.

**State registrar:**

\*Billy Tober, Santa Fe.

Appropriation for years 1930 and 1931, per annum, \$38,400. Fiscal year ends June 30.

**NEW YORK****Public health council:**

Simon Flexner, M. D., LL. D., chairman, New York.

Homer Folks, LL. D., vice chairman, Yonkers.

Henry N. Ogden, C. E., Ithaca.

Frederick F. Russell, M. D., New York.

Jacob Goldberg, M. D., Buffalo.

Stanton P. Hull, M. D., Petersburg.

Thomas Parran, jr., M. D. (ex officio) commissioner of health, Albany.

Edward H. Marsh, M. D., Dr. P. H., secretary, Albany.

**Executive health officer:**

\*Thomas Parran, jr., M. D., State commissioner of health, Albany.

**Deputy commissioner of health:**

\*Paul B. Brooks, M. D., Albany.

**Secretary:**

\*Edward H. Marsh, M. D., Dr. P. H., Albany.

**Executive officer:**

\*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:**

\*Joseph V. De Porte, Ph. D., director, Albany.

**Division of child hygiene:**

\*Elizabeth M. Gardiner, M. D., director, Albany.

**Division of communicable diseases:**

\*Edward S. Godfrey, jr., M. D., director, Albany.

**Division of tuberculosis:**

\*Robert Plunkett, M. D., director, Albany.

**Division of social hygiene:**

\*Albert Pfeiffer, 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.

**Division of orthopedics:**

\*Walter J. Craig, M. D., director, Albany.

**Institute for the study of malignant disease, Buffalo:**

\*Burton T. Simpson, M. D., director.

**Appropriations for fiscal year ending**

June 30, 1931:

Personal service.....	\$1,252,170.00
Maintenance and operation.....	536,290.00
Investigation of oyster beds (salaries included in personal service).....	730.00
Physically handicapped children (salaries included in personal service).....	12,400.00
State aid to county laboratories..	110,000.00
State aid to county health activities.....	355,237.80
Investigation of milk and cream..	90,000.00
Purchase of radium.....	300,000.00
Repairs.....	26,000.00

Total..... 2,682,877.80

**Other sources of revenue:**

Fees from certified transcripts of birth, death, and marriage certificates, \$1,913.11 per annum.

Licensing laboratories, \$461.

Sale of serums, \$1,037.59.

Licensing of embalmers and undertakers, \$17,578.

Registration of embalmers and undertakers, \$18,792.

**Publications issued by health department:**

Weekly Health News.

Monthly Vital Statistics Review.

Annual report.

**NORTH CAROLINA****Board of health:**

A. J. Crowell, M. D., Charlotte, president.

Thomas E. Anderson, M. D., Statesville.

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.

John B. Wright, M. D., Raleigh.

L. E. McDaniel, M. D., Jackson.

Charles C. Orr, M. D., Asheville.

**Executive health officer:**\*William P. Jacobs, M. D.,<sup>1</sup> State health officer.

\*Ronald B. Wilson, assistant to the secretary, Raleigh.

**Laboratory of hygiene:**

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

**Deputy State registrar:**

\*G. M. Cooper, M. D. (acting), Raleigh.

**Bureau of engineering and inspection:**

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

**Bureau of maternity and infancy:****Bureau of health education:**

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

**Bureau of epidemiology:**

\*H. A. Taylor, M. D., director, Raleigh.

**Appropriations for fiscal year ending June 30, 1931:<sup>2</sup>**

Administration.....	\$29,745
Vital statistics.....	25,630
Laboratory of hygiene.....	68,000
School inspection.....	58,980
County health work.....	123,415
Epidemiology.....	10,430
Maternity and infancy.....	50,580
Engineering and inspection.....	75,720
Health education.....	11,410
Life extension.....	9,100
Printing.....	20,900
Orthopedic clinics.....	10,000
Cancer control.....	2,500

Total..... 496,470

**Other sources of revenue:**

Special fees, \$49,800.

**Publications issued by health department:**

Monthly bulletin: The Health Bulletin.

Special bulletins.

Biennial report.

**NORTH DAKOTA****Advisory health council:**

Bertha R. Palmer, superintendent of public instruction, ex officio, Bismarck.

Fannie Dunn Quain, M. D., president North Dakota Tuberculosis Association, ex officio, Bismarck.

Arne Oftedal, M. D., Fargo.

Ella Clayton Smyth, Bismarck.

R. S. Towne, D. D. S., Bismarck.

**Executive health officer:**

\*A. A. Whittemore, M. D., State health officer, Bismarck.

**Child hygiene and public health nursing:**

\*Maysil M. Williams, M. D., director, Bismarck.

**Bureau of venereal diseases:**

\*Robert W. Allen, M. D., Bismarck.

**Bureau of sanitary engineering:**

\*A. L. Bavona.

**Bureau of vital statistics:**

\*Violetta Rocha, director.

<sup>1</sup> Doctor Jacobs probably will assume the duties of the office some time in December.<sup>2</sup> Only 80 per cent of appropriations available for expenditure.

## Appropriations for biennial period ending

June 30, 1931:

## For public health—

Salary.....	\$7, 200
Clerk hire.....	23, 200
Postage.....	1, 000
Supplies.....	1, 500
Furniture and fixtures.....	1, 000
Printing.....	3, 000
Miscellaneous.....	1, 000
Travel.....	1, 500
Card indexing.....	2, 500

## For division of child hygiene and public health nursing—

Salary.....	6, 000
Clerk hire.....	9, 600
Postage.....	3, 000
Supplies.....	200
Furniture and fixtures.....	100
Printing.....	4, 000
Miscellaneous.....	100
Travel.....	3, 000

## OHIO

## Public health council:

Chas. A. Neal, M. D., chairman, Columbus.  
 James E. Bauman, secretary.  
 G. D. Lummis, M. D.  
 C. O. Probst, M. D.  
 R. M. Calfee.  
 W. I. Jones, D. D. S.

## Executive health officer:

\*Chas. A. Neal, 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.

## Bureau of local health organization—

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

## Division of communicable diseases:

\*Finley Van Orsdall, M. D., chief.  
 \*T. W. Mahoney, M. D., chief epidemiologist.

## Bureau of venereal diseases—

## Bureau of prevention of blindness—

## Division of sanitary engineering:

\*F. H. Waring, chief.  
 Bureau of plumbing inspection—  
 \*A. A. Manchester, chief.

## Division of vital statistics:

\*Irva C. Plummer, chief.

## Division of laboratories:

\*Leo F. Ey, chief.

## Division of hygiene:

\*H. M. Austin, M. D., chief.

## Bureau of tuberculosis—

\*W. D. Tillson, M. D.

## Bureau of hospitals—

\*Pearl G. Thompson, chief.

## Bureau of dental hygiene—

\*L. G. Bean, D. D. S., chief.

## Division of child hygiene:

\*A. B. Lippert, M. D., chief.

## Bureau of public health education—

## Division of public health nursing:

\*Zoe McCaleh, R. N., chief.

## Division of industrial hygiene:

\*B. E. Neiswander, M. D., chief.  
 E. R. Hayhurst, M. D., consultant.

## Appropriations for 12 months ending December 31, 1929:

Personal services.....	\$230, 000
Maintenance.....	158, 073
State aid for health districts.....	250, 000

Total..... 638, 073

## Publications issued by health department:

Ohio Health News (semimonthly).

## OKLAHOMA

## Executive health officer:

\*Clyde W. Besson, M. D., State health commissioner, Oklahoma City.

## Assistant State health commissioner:

\*J. P. Polan, Oklahoma City.

## Bureau of vital statistics:

\*N. H. Moore.

## Bureau of laboratories:

\*D. T. Bowden, M. D., director of laboratory.

## Bureau of maternity and infancy:

\*Mable Sherin, director.

## Bureau of venereal disease control:

C. L. Brundage, M. D., director.

## Bureau of rural sanitation:

\*D. T. Bowden, M. D., director.

## Bureau of sanitary engineering:

\*H. J. Darcey, director.

## Bureau of public health education:

\*G. Harrison, director.

## Bureau of dental health education:

\*Pearl E. Wilson, R. N.

## Bureau of epidemiology:

\*G. F. Mathews, M. D.

## Appropriations for fiscal year ending June 30, 1931:

## Administration—

Commissioner.....	\$4, 800
Assistant commissioner.....	2, 400
Secretary and stenographer.....	1, 800
Bookkeeper.....	2, 000
Stenographers (1 at \$1,800, 1 at \$1,500, and 1 at \$1,200).....	4, 500

## Bureau of public health education—

Director.....	2, 400
Stenographer.....	1, 500

## Bureau of diagnostic laboratory—

Chemist.....	3, 000
Assistant chemist.....	2, 400
Bacteriologist.....	3, 000
Assistant bacteriologist.....	2, 400
Record clerk.....	1, 800
Extra help—janitor.....	1, 200
Manufacture vaccine.....	2, 500

## Bureau of sanitary engineering—

Engineer.....	3, 000
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# **Appropriations for fiscal year ending June 30, 1931—Continued.**

## **Bureau of pure food, drugs, and sanitary inspection—**

Supervisor (sanitary engineer)..... \$2,400  
Inspectors (6 at \$1,800 each)..... 10,800

## **Bureau of vital statistics—**

Registrar..... 2,400  
Assistant registrar..... 1,800  
Statistical clerks (3 at \$1,500 each) . 4,500

## **Bureau of maternity and infancy—**

Director..... 3,000  
Stenographer..... 1,500  
Head nurse..... 2,400  
Field nurses (4 at \$1,800 each)..... 7,200  
Printing, office supplies, and communications..... 7,000

Traveling expenses, including motor supplies and motor repairs... 5,000

Travel, all departments..... 17,500

Communication..... 3,000

Printing..... 3,500

Other expenses..... 2,100

Office supplies..... 1,200

Medical supplies..... 7,000

Office equipment..... 750

Laboratory equipment..... 900

## **Special appropriations unallocated:**

Control of venereal diseases..... 10,800

Epidemiology, disease prevention..... 5,000

Rural sanitation and disease control in the rural districts and county health units..... 35,000

Malaria control..... 10,000

Total..... 183,450

## **OREGON**

### **Board of health:**

W. B. Morse, M. D., president, Salem.  
J. H. Rosenberg, M. D., vice president, Prineville.

Frederick D. Stricker, M. D., secretary and State health officer, Portland.

George E. Houck, M. D., Roseburg.

W. T. Phy, M. D., Hot Lake.

N. E. Irvine, M. D., Lebanon.

H. H. Foksett, M. D., Portland.

### **Executive health officer:**

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

### **Registrar of vital statistics:**

\*Frederick D. Stricker, M. D., Portland.

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

\*Glendora Blakely, R. N., Portland.

### **Director of laboratory:**

\*William Levin, D. P. H., Portland.

Appropriations for fiscal year ending December 31, 1929, \$45,212.

### **Publications issued by health department:**

Annual report.

Biennial report.

Pamphlets and posters.

Weekly letter.

## **PENNSYLVANIA**

### **Department of health:**

#### **Advisory board—**

Theodore B. Appel, M. D., chairman.

H. C. Frontz, M. D., Huntingdon.

J. M. Wainwright, M. D., Scranton.

A. A. Cairns, M. D., Philadelphia.

S. R. Haythorn, M. D., Pittsburgh.

O. B. Auel, M. E., East Pittsburgh.

Charles F. Mebus, C. E., Glenside.

#### **Sanitary water board—**

Theodore B. Appel, M. D., chairman.

Charles E. Dorworth, secretary of forests and waters, Bellefonte.

Nathan R. Buller, commissioner of fisheries, Pleasant Mount.

P. T. Davis, Clearfield.

Dean Elmer A. Holbrook, Pittsburgh.

J. Norman Henry, M. D., Philadelphia.

W. L. Stevenson, chief engineer and secretary, Harrisburg.

#### **Executive health officers—**

\*Theodore B. Appel, M. D., secretary of health, Harrisburg.

\*J. Bruce McCreary, M. D., deputy secretary of health, Shippensburg.

### **Sanatoria:**

#### **Mont Alto sanatorium—**

\*R. H. McCutcheon, M. D., medical director, South Mountain.

#### **Cresson sanatorium—**

\*T. H. A. Stites, M. D., medical director, Cresson.

#### **Hamburg sanatorium—**

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

#### **Hospital for crippled children, Elizabethtown—**

\*Francis S. Chambers, M. D., medical director.

### **Bureau of communicable diseases—**

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

#### **Section of epidemiology—**

\*Harold B. Wood, M. D.

\*F. E. Coughlin, M. D.

#### **Section of tuberculosis—**

\*John B. Critchfield, M. D., Lock Haven.

#### **Genito-urinary section—**

\*Edgar S. Everhart, M. D., Lemoyne.

#### **Section of restaurant hygiene—**

\*Howard M. Haines, Harrisburg.

### **Bureau of sanitary engineering—**

\*W. L. Stevenson, C. E., chief engineer, Harrisburg.

#### **Section of waterworks and sewerage—**

\*H. E. Moses, Harrisburg.

#### **Section of roadside water supplies—**

\*Henry P. Drake.

#### **Section of housing—**

\*H. F. Bronson, C. E., Harrisburg.

#### **Section of nuisances—**

\*D. V. Ness.

#### **Section industrial waste—**

\*F. E. Daniels, Harrisburg.

**Sanatoria—Continued.****Bureau of milk control—**

\*Ralph E. Irwin, Camp Hill.

**Child health—school control—****Field supervision—**

\*C. W. Sheldon, M. D.

**School sanitation—**

\*John G. Ziegler, Lebanon.

**Preschool section—**

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

**Dental hygiene—**

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

**Bureau of finance—**

\*Clinton T. Williams, Harrisburg

**Section of accounts—**

\*E. J. MacNamara.

**Section of supplies—**

\*Roy G. Miller, Harrisburg.

**Bureau of vital statistics—**

\*Emily Jones, M. D., Johnstown.

**Bureau of laboratories—**

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

**Bureau of drug control—**

\*James N. Lightner, LL. B., Lancaster.

**Bureau of nursing—**

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

**Bureau of inspection—**

\*James Duffy, Marietta.

**Bureau of public health education—**

\*J. C. Funk, LL. B., Harrisburg.

**Appropriations for biennial period ending May 31, 1931:**

General health purposes and maintenance of sanatoria.....	\$5,266,500
Furnishings and equipment for hospital for crippled children.....	253,000
Sanitary water board.....	186,000
Construction for Mont Alto, Cresson, and Hamburg sanatoria.....	975,000

Total.....	6,662,500
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**PHILIPPINE ISLANDS<sup>1</sup>****Director of health:**

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

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

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

Regino G. Padua, M. D., secretary, Manila.

José Fabella, M. D., Manila.

Gervasio Ocampo, M. D., Manila.

José, Albert, M. D., Manila.

Benito Valdes, M. D., Manila.

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

Vicente Genato, Manila.

**Executive officer:**

\*Jacobo Fajardo, M. D., director of health, Manila.

**Assistant to the director:**

\*Regino G. Padua, M. D., Manila.

**Office of records and finance:**

\*Mamerto Tiano, chief, Manila.

**Office of property:**

\*Bonifacio Mencias, M. D., acting chief, Manila.

**Office of vital statistics:**

José Guidote, M. D., chief, Manila.

**Office of general inspection:**

\*Rafael Villafranca, M. D., chief, Manila.

**Public health education and publicity:**

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

**Public health nursing:**

\*Rosario Pastor, M. D., chief, Manila.

**Division of communicable diseases:**

\*Leoncio Lopez Rizal, M. D., chief, Manila.

**Division of metropolitan sanitation:**

\*Eugenio Hernando, M. D., chief, Manila.

**Division of hospitals, dispensaries, and laboratories:**

\*Eusebio D. Aguilar, M. D., chief, Manila.

**Leprosy section—**

\*Vicente Kierulf, M. D., chief.

**Culion Leper Colony:**

\*Sulpicio Chiyuto, M. D., chief, Manila.

**Division of provincial sanitation:**

\*Gabriel Intengan, M. D., chief, Manila.

**Division of malaria control:**

\*Cristobal Manalang, M. D., chief.

\*Antonio Ejercito, M. D., assistant chief

**Division of sanitary engineering:**

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

**Appropriations for fiscal year ending December 31, 1929:**

Salaries and wages.....	\$501,493
Miscellaneous expenses.....	985,887
Furniture and equipment.....	11,250
Total.....	1,498,630

**Special expenses—**

Continuation of treatment and diagnosis of lepers.....	125,000
Maintenance of regional treatment stations, etc.....	62,500
Aid to specially organized Provinces.....	270,550
Aid to the Province of Ilocos Sur for the operation, maintenance, and equipment of the Cervantes hospital.....	10,000
School of nursing in Baguio.....	5,250
Medicines, medical and surgical supplies for distribution to public-school dispensaries.....	5,000
General demonstration on a small scale of the practical control of beriberi.....	5,000
Contribution to the University of the Philippines for the operation of the School of Sanitation and Public Health.....	20,000
Control of malaria in the regularly and specially organized Provinces and municipalities and municipal districts.....	37,000

Total for special expenses.....	540,300
Grand total of appropriations.....	2,038,930

<sup>1</sup> Data supplied in 1929.

## Publications issued by the Philippine health service:

- Daily Service News.
- Weekly comparative epidemiological resúme.
- Weekly resúme of births and deaths.
- Monthly bulletin.
- Annual report.
- Occasional pamphlets.

## PORTO RICO

## Department of health:

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

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

## Insular board of health:

A. Fernós Isern, M. D., chairman, San Juan.

Donald C. Cook, San Juan.

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

Pablo Morales Otero, M. D., San Juan.

G. A. Ramirez de Arellano, San Juan.

R. López Sicardó, M. D., San Juan.

A. Ortiz Toro, San Juan.

Luis B. de la Vega, M. D., secretary, San Juan.

## Division of property and accounts:

\*Abelardo Santiago, chief, San Juan.

## Division of sanitary engineering:

\*Octavio Marciano, sanitary engineer, San Juan.

## Bacteriological laboratory:

\*Oscar Costa Mandry, M. D., director, San Juan.

## Chemical laboratory:

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

## Division of transmissible diseases:

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

\*E. Garrido Morales, M. D., epidemiologist, San Juan.

## Bureau of statistics:

\*Manuel A. Pérez, chief, San Juan.

## Appropriations for the fiscal year ending June 30, 1931:

Office of the commissioner of health.....	\$281,914.02
Lepor hospital.....	34,166.50
Quarantine hospital.....	12,700.00
Antituberculosis sanatorium of Porto Rico.....	139,070.50
Blind asylum.....	41,060.00
Institute for blind children.....	27,270.00
Insular insane asylum.....	194,570.00
Education and maintenance of poor deaf and dumb children.....	4,000.00
Care of tuberculosis patients in the sanatorium at Ponce under the control of the department of health.....	15,000.00
Control and prevention of venereal diseases.....	12,000.00
Care of 60 tuberculous patients of the municipality of San Juan at the antituberculosis sanatorium.....	12,500.00
Maintenance of the antituberculosis hospital of Caguas, under the direction of the department of health.....	6,000.00

## Appropriations for the fiscal year ending June 30, 1931—Continued.

Control and suppression of tuberculosis.....	\$60,000.00
Prevention of infantile mortality.....	27,000.00
Mosquito extermination and control and suppression of malaria.....	50,000.00
Suppression of anemia.....	100,000.00
Rat extermination.....	5,000.00
Ponce district hospital.....	30,360.00
Division of school hygiene.....	7,000.00
Girls' charity school.....	82,678.00
Boys' charity school.....	108,572.00
Sanitation fund.....	162,507.56
Total.....	1,413,368.58

## RHODE ISLAND

## Public health commission:

Thomas J. McLaughlin, M. D., chairman, Woonsocket.

James H. Prior, M. D., Providence.

Berton W. Storrs, M. D., Portsmouth.

John Champlin, Jr., M. D., Westerly.

Charles H. Holt, M. D., Pawtucket.

## Executive health officer:

Lester A. Round, Ph. D., director of public health and State registrar, State Office Building, Providence.

## Pathologist:

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

## Chemist:

Charles L. Poole, Providence.

## Appropriations for fiscal year ending November 30, 1929:

Executive department.....	\$31,505
Chemical laboratory.....	21,950
Pathological laboratory.....	23,863
Child welfare.....	23,720
Venereal diseases.....	8,460

Total..... 129,498

## SOUTH CAROLINA

## Executive committee, board of health:

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

L. D. Boone, M. D., Aiken.

Davis Furman, M. D., Greenville.

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

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

William Eggleston, M. D., Hartsville.

J. Lee Carpenter, Ph. G., Greenville.

F. M. Routh, M. D., Columbia.

George Dick, D. D. S., Sumter.

John M. Daniel, attorney general, Columbia.

A. J. Beattie, comptroller general, Columbia.

## Executive health officer:

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

## Department of county health units:

\*Ben F. Wyman, M. D., director, Columbia.

## Bureau of child hygiene:

\*Nellie Cunningham, R. N., supervisor of public health nursing, Columbia.

## Laboratory department:

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

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



**Bureau of vital statistics:**

\*C. W. Miller, chief clerk, Columbia.

**Bacteriologist and chemist:**

F. L. Parker, Jr., M. D., Ph. D., Charleston.

**South Carolina Sanatorium:**

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

**Epidemiologist:**

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

**Sanitary engineer:**

\*A. E. Legare, C. E., Columbia.

**Appropriations for fiscal year ending**

December 31, 1930:

Administrative office.....	\$12,260.00
Control of epidemic diseases.....	54,220.00
Bureau of child hygiene.....	9,970.00
Bureau of vital statistics.....	8,305.00
Laboratory.....	12,530.00
Bureau of rural sanitation.....	49,787.50
Division of sanitary engineering.....	13,390.00
Tuberculosis sanatoria.....	161,681.91
Aid for crippled children.....	12,400.00

Total..... 334,544.41

**Publications issued by health department:**

Annual report.

Bulletins of various departments.

**SOUTH DAKOTA****Board of health:**

H. J. Bartron, M. D., president, Watertown.

N. T. Owen, M. D., vice president, Rapid City.

A. C. Clark, M. D., Woonsocket.

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

P. B. Jenkins, M. D., superintendent, Waubay.

**Executive health officer:**

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

**Division of vital statistics:**

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

**Division of records and accounts:**

\*Edna Jenkins.

**Division of medical licensure**

H. R. Kenaston, M. D.

**Laboratories (at Vermilion):**

J. C. Ohlmacher, M. D.

**Division of child hygiene:**

\*Florence E. Walker, R. N.

**Division of epidemiology:**

\*A. E. Bostrom, M. D.

**Division of sanitary engineering:**

\*W. W. Towne, B. E.

**Appropriations:**

	1929-30	1930-31
Salaries and wages.....	\$21,500	\$21,500
Supplies and materials.....	2,500	2,500
Communication and travel.....	4,000	4,000
Printing, binding, and advertising.....	2,000	2,000
Light and power.....	250	250
Rents.....	1,560	1,560
Crippled children.....	2,500	2,500
Dues.....	50	50
Maternity and infancy work.....	5,000	5,000
Total.....	39,360	39,360

**TENNESSEE****Department of public health:****Central administration—**

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

\*H. S. Mustard, M. D., assistant commissioner, Nashville.

**Section of local organization—**

\*W. K. Sharp, Jr., M. D., director, Nashville.

**Section of child hygiene and public health nursing—**

\*H. S. Mustard, M. D., director, Nashville.

Miss M. G. Nisbet, supervising nurse, Nashville.

**Section of health education—**

\*H. S. Mustard, M. D., director, Nashville.

**Division of vital statistics—**

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

**Division of preventable diseases—**

\*J. A. Crabtree, M. D., C. P. H., director, Nashville.

**Section of epidemiology—**

\*H. C. Stewart, M. D., C. P. H., director, Nashville.

**Tuberculosis control section—**

\*R. S. Gass, M. D., director, Nashville.

**Division of laboratories—**

\*William Litterer, M. D., director, Nashville.

**Division of sanitary engineering—**

\*Roy J. Morton, C. E., director, Nashville.

**Appropriation for the fiscal period July**

1, 1929, to June 30, 1931—

General administration.....	\$40,200
Vital statistics.....	37,600
Sanitary engineering.....	51,300
Laboratories.....	67,840
Health education.....	14,400
Epidemiology.....	59,000
Local organization.....	285,600
Child hygiene and public health nursing.....	120,200
Tuberculosis control.....	90,000

Total..... 766,140

**Other sources of revenue—**

United States Department of Labor, maternity and child welfare, \$25,767.55 per annum. (Cooperation with Department of Labor ended June 30, 1929.)

International Health Board \$24,400 (variable) per annum.

International Health Board, cooperation in malaria control, epidemiology, and local organization, vital statistics. United States Public Health Service in malaria control. Individual counties and cities in State cooperation in malaria control, county health work, and child hygiene and public health nursing. United States Public Health Service cooperation in county health work, \$18,000 per annum.

## TEXAS

## Board of health:

J. M. Frazier, M. D., Belton.  
 J. S. Wooten, M. D., Austin.  
 A. A. Ross, M. D., Lockhart.  
 C. M. Rosser, M. D., Dallas.  
 E. W. Wright, M. D., Bowie.  
 Joe Gilbert, M. D., vice chairman, Austin.  
 J. C. Anderson, M. D., ex officio, president of the board and State health officer, Austin.

## Executive health officer:

\*J. C. Anderson, M. D., State health officer, Austin.

## Bureau of child hygiene:

\*H. N. Barnett, M. D., director.

## Bureau of vital statistics:

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

## Bureau of communicable diseases and hygienic laboratory:

S. W. Bohls, M. D., director.

## Bureau of sanitary engineering:

\*V. M. Ehlers, C. E., director.

## Bureau of foods and drugs:

\*E. G. Le May, Ph. G., director.

Appropriations for fiscal years 1929-1931, \$209,520 per annum.

## UTAH

## Board of health:

Joseph R. Morrell, M. D., president, Ogden.  
 T. B. Beatty, M. D., secretary, Salt Lake City.  
 Joseph H. Peck, M. D., Tooele.  
 John M. Wallace, Salt Lake City.  
 W. D. Donohoe, M. D., Salt Lake City.  
 R. A. Hart, C. E., Salt Lake City.  
 Barnet E. Bonar, M. D., Salt Lake City.

## Executive health officer:

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

## Bureau of vital statistics:

\*T. B. Beatty, M. D., State registrar.  
 \*Anna M. Bowen, deputy registrar.

## Bureau of child hygiene:

\*T. B. Beatty, director.

## Epidemiologist:

\*A. C. McKean, M. D.

## Sanitary engineer:

\*Leonard H. Male.

## Bacteriological laboratory:

\*E. H. Bramhall, bacteriologist.

Appropriations for two years ending June 30, 1931:

Salaries.....	\$42,456
Office expenses.....	8,000
Travel.....	3,800
Equipment.....	500
Child hygiene (to match Federal funds).....	13,000
Total.....	67,256

Publications issued by health department:

Quarterly bulletin.  
 Biennial report.

## VERMONT

## Board of health:

Edward J. Rogers, M. D., chairman, Pittsford.  
 William G. Ricker, M. D., St. Johnsbury.  
 John P. Gifford, M. D., Randolph.

## 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 engineering:

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

## Sanitary inspector:

\*Fred S. Kent, M. D., Burlington.

## Division of communicable diseases:

\*Fred S. Kent, M. D., Burlington.

## Division of tuberculosis:

\*H. W. Slocum, Burlington.

## Division of poliomyelitis:

\*W. L. Aycock, M. D., research, Burlington.  
 \*Lillian E. Kron, R. N., Burlington.

## Division of maternal and infant hygiene:

\*Nellie M. Jones, R. N., maternity, infancy, and child hygiene nurse.

Appropriations for fiscal year ending June 30, 1930:  
 Total budget, \$45,000.

## Other sources of revenue:

Private donations for study and treatment of infantile paralysis.

## Publications issued by health department:

Biennial report.

## VIRGINIA

## Board of health:

W. T. Graham, M. D., president, Richmond.  
 Mrs. W. M. Smith, Purcellville.  
 Frank Darling, Hampton.  
 J. A. McGuire, M. D., Norton.  
 Guy R. Harrison, D. D. S., Richmond.  
 George B. Lawson, M. D., Roanoke.  
 L. T. Royster, M. D., University.

## Executive health officer:

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

## Assistant health commissioner and director of rural health work:

\*Roy K. Flannagan, M. D., Richmond.  
 \*C. R. Keiley, associate director of rural health work.

## Registrar of vital statistics:

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

## Bacteriologist:

\*G. F. McGinnis, M. D., Richmond.

## Sanitary engineer:

Richard Messer, C. E., Richmond.

## Bureau of child welfare:

## Director public health nursing:

\*Nannie J. Minor, R. N., Richmond.

## Director mouth hygiene:

\*N. Talley Ballou, D. D. S., Richmond.

## Director tuberculosis out-patient service:

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

## Epidemiologist:

\*H. G. Grant, M. D.

Appropriations for the fiscal year ending June 30, 1931:

Administration.....	\$22,580
Sanitary engineering.....	22,085
Publicity.....	13,450
Town sanitation.....	4,500
Social hygiene.....	2,500

**Appropriations for the fiscal year ending  
June 30, 1930—Continued.**

Prevention of tuberculosis.....	\$65,000
Control of epidemics.....	10,975
Laboratories.....	24,340
Promotion of child health.....	57,380
Rural health work.....	95,000
Shellfish inspection and sanitation.....	26,000
Orthopedic treatment.....	25,000
Vital statistics.....	27,570
Collection and publication of marriage and divorce statistics.....	4,005
Prevention of blindness.....	2,360
<b>Total.....</b>	<b>402,645</b>

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

**WASHINGTON**

**Board of health:**

A. E. Stuht, M. D., director of health, chairman.  
Clarence A. Smith, M. D., Seattle.  
James H. Egan, M. D., Tacoma.  
Samuel L. Caldbick, M. D., Everett.  
John O'Shea, M. D., Spokane.  
H. W. Nightingale, secretary, Seattle.

**Executive health officer:**

\*A. E. Stuht, M. D., State director of health, Seattle.

**Epidemiologist:**

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

**Chief of laboratory:**

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

**Sanitary engineer:**

\*H. W. Nightingale, C. E., Seattle.

**Registrar:**

\*H. W. Nightingale, C. E., Seattle.

**Division of public health nursing:**

\*Mary Louise Allen, chief.

**Appropriation for two years ending March  
31, 1931.**

Operations.....	\$100,000
Tuberculosis hospitals—	
State aid to local sanatoria.....	125,000
Additional for King County hos- pital.....	30,000

**WEST VIRGINIA**

**Public health council:**

B. O. Robinson, M. D., president, Parkersburg.  
H. A. Barbee, M. D., Point Pleasant.  
W. S. Fulton, M. D., Wheeling.  
W. E. Neal, M. D., Huntington.  
A. H. Hoge, M. D., Bluefield.  
R. H. Walker, M. D., Charleston.  
W. T. Henshaw, M. D., commissioner of health, Charleston.

**Executive health officer:**

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

**Division of sanitary engineering:**

\*Ellis S. Tisdale, chief engineer, Charleston.  
\*John B. Harrington, assistant engineer, Charleston.  
\*H. K. Gidley, assistant engineer, Charleston.

**Division of vital statistics:**

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

**Division of child hygiene:**

\*R. H. Paden, M. D., director, Charleston.  
\*Edna M. Hardsaw, R. N., field advisory nurse, Charleston.  
\*Mildred McClelland, R. N., field advisory nurse, Charleston.

**Division of preventable diseases:**

\*W. T. Henshaw, M. D., acting director, Charleston.

**Bureau of venereal diseases:**

\*David Littlejohn, M. D., A. A., surgeon, U. S. P. H. S., director, Charleston.  
\*Ada Coddington McDermott, associate director, Charleston.

**Division of rural sanitation:**

\*David Littlejohn, A. A. surgeon, U. S. P. H. S., director, Charleston.

**Hygienic laboratory:**

\*Elizabeth I. Parsons, director, Charleston.  
\*Margaret K. Riffe, laboratory technician, Charleston.  
\*J. Roy Monroe, technician, Charleston.  
\*J. C. Harp, technician, Charleston.

**Bureau of public health education:**

\*Dorothea Campbell, director, Charleston.

**Appropriations for fiscal year ending June 30, 1931:**

For general use.....	\$126,000
Salary of commissioner.....	4,800
Vaccines.....	10,000

**Total..... 140,800**

**Other sources of revenue:**

Expenses of cooperative work with the Federal Government.

Expenses of cooperative rural health work with the Rockefeller Foundation.

**Publications issued by health department:**

Quarterly bulletin.  
Annual report.

**WISCONSIN**

**Board of health:**

G. Windeshelm, M. D., president, Kenosha.  
Joseph Dean, M. D., vice president, Madison.  
J. J. Seelman, M. D., Milwaukee.  
Mina B. Glasier, M. D., Bloomington.  
Stephen Cahana, M. D., Milwaukee.  
H. H. Ainsworth, M. D., Birchwood.  
O. A. Harper, M. D., State health officer, Madison.

**Executive health officer:**

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

**Assistant State health officer:**

\*G. W. Henika, M. D., Madison.

**Deputy State health officers:**

\*W. J. Miller, M. D., Madison.  
\*G. E. Hoyt, M. D., Milwaukee.  
\*V. A. Gudax, M. D., Oshkosh.  
\*I. D. Wiltrout, M. D., Chippewa Falls.  
\*R. L. Frisbie, M. D., Rhinelander.

**Bureau of vital statistics:**

\*C. A. Harper, M. D., State registrar, Madison.  
\*L. W. Hutchcroft, statistician, Madison.

**Bureau of communicable diseases:**

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

**Bureau of sanitary engineering:**

\*L. F. Warrick, State sanitary engineer, Madison.

\*O. J. Muegge, assistant sanitary engineer, Madison.

\*E. J. Beatty, assistant sanitary engineer, Madison.

\*Harold Ruf, assistant sanitary engineer, Madison.

\*E. J. Tully, chemical engineer, Madison.

**Bureau of education:**

\*John Culnan, acting director, Madison.

**Bureau of child welfare:**

\*Charlotte Calvert, M. D., acting director, Madison.

\*Eleanor Hutchinson, M. D., child-health physician, Madison.

\*Margaret Nelson, M. D., child-health physician, Madison.

\*Margaret J. Hatfield, M. D., child-health physician.

\*Helen Thayer, organizer of infant hygiene courses, Madison.

**Bureau of public-health nursing:**

\*Cornelia Van Kooy, R. N., director, Madison.

\*Edith L. Olson, R. N., field advisory nurse, Madison.

\*Ada Newman, R. N., field advisory nurse, Madison.

\*Irene Vaud Reuil, R. N., field advisory nurse, Madison.

**Bureau of nursing education.**

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

**Bureau of plumbing and domestic sanitary engineering:**

\*Frank R. King, State domestic sanitary engineer, Madison.

**Bureau of social hygiene:**

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

\*Aimee Zillmer, lecturer, Madison.

\*D. M. Warner, lecturer, Madison.

**Laboratory service:**

\*W. D. Stovall, M. D., director, State laboratories, Madison.

\*M. S. Nichols, chemist, State laboratory, Madison.

\*Anna Brandsmark, director, branch laboratory, Rhinelander.

\*Mildred Englebert, director, cooperative laboratory, Beloit.

\*Marjorie Bates, director, cooperative laboratory, Oshkosh.

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

**Laboratory service—Continued.**

\*Josephine Foote, director, cooperative laboratory, Wausau.

\*Martha Thompson, director, cooperative laboratory, Superior.

\*Clarissa McFetridge, director, cooperative laboratory, Green Bay.

**Appropriations for fiscal year ending June 30, 1930:**

General administration.....	\$54, 000
Emergency appropriation for epidemics.....	7, 500
Branch laboratory and State cooperative laboratories.....	9, 000
Prevention of infantile blindness.....	1, 500
Venereal disease control work.....	36, 370
Bureau of sanitary engineering.....	14, 000
Bureau of communicable diseases.....	13, 300
Prevention of stream and lake pollution.....	15, 000
Bureau of child welfare and public-health nursing.....	51, 000
Public health work and the investigation and prevention of disease among the Indians.....	15, 000
Comfort station supervision.....	5, 000
Licensing of embalmers, hotels and restaurants, plumbers, beauty parlors, nurses, and barbers.....	86, 642
<b>Total.....</b>	<b>308, 312</b>

**Publications issued by health department:**

Quarterly bulletin.

Biennial report.

**WYOMING****Board of health:**

Albert B. Tonkin, M. D., president, Riverton.  
William H. Roberts, M. D., vice president, Sheridan.

W. H. Hassed, M. D., secretary and executive officer, Cheyenne.

Galen A. Fox, M. D., Cheyenne.

B. V. McDermott, M. D., Hanna.

**Executive health officer:**

\*W. H. Hassed, M. D., State health officer, Cheyenne.

**Appropriations for biennial period ending**

Mar. 31, 1931:

State board of health.....	\$11, 000
Salary of secretary.....	8, 000
Maternal and infant welfare.....	7, 500
Bureau of vital statistics.....	3, 500

**Total..... 30, 000**

## CITY HEALTH OFFICERS, 1930

## Directory of Those in Cities of 10,000 or More Population

Directories of the city health officers in the cities of the United States having a population of 10,000 or more have been published in the Public Health Reports<sup>1</sup> for each year from 1916 to 1929 for the information of health officers and others interested in public-health activities. These directories have been compiled from data furnished by the health officers. The cities included in this directory are those whose populations have been estimated at 10,000 or more prior to the 1930 census.

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

City	Name of health officer	Official title
<b>Alabama:</b>		
Anniston.....	*George A. Cryer, M. D.....	County health officer.
Bessemer.....	*Robert V. Hazlewood, D. V. M.....	Director of sanitation.
Birmingham.....	*J. D. Dowling, M. D.....	County health officer.
Dothan.....	*Russell E. Neff, M. D.....	Do.
Florence.....	*W. D. Hubbard, M. D.....	County and city health officer.
Gadsden.....		
Mobile.....	*C. A. Mohr, M. D.....	County health officer.
Montgomery.....	*J. L. Bowman, M. D.....	Do.
Selma.....	*L. Tennent Lee, M. D.....	County and city health officer.
Tuscaloosa.....	*A. A. Kirk, M. D.....	Do.
<b>Arizona:</b>		
Douglas.....	Zachary Causey, M. D.....	City health officer.
Phoenix.....	Harry J. Felch, M. D.....	Do.
Tucson.....	Alvin Kirmse, M. D.....	Do.
<b>Arkansas:</b>		
Fort Smith.....	*James Edward Johnson, M. D.....	Medical director, United States Public Health Service.
Helena.....	*W. B. Bruce, M. D.....	Do.
Hot Springs.....	*J. F. Merritt, M. D.....	City and county health officer.
Jonesboro.....		
Little Rock.....	*C. R. Moon, M. D.....	City health officer.
North Little Rock.....	James A. Summers, M. D.....	City health officer and physician.
Pine Bluff.....	*George A. Hays, M. D.....	Director, health department.
<b>California:</b>		
Alameda.....	Arthur Hieronymus, M. D.....	Health officer and city physician.
Alhambra.....	*S. J. Stewart, M. D.....	District health officer.
Bakersfield.....	Peter J. Cuneo, LL. B., M. D.....	City health officer.
Berkeley.....	*Frank L. Kelly, M. D., D. P. H.....	Health officer.
Chico.....	C. E. Tovee.....	City health officer.
Eureka.....	William J. Quinn, M. D.....	Do.
Fresno.....	C. Mathewson, M. D.....	Do.
Glendale.....	*D. E. Smallhorst, M. D.....	District health officer.
Long Beach.....	*Grundy E. McDonald, M. D.....	City health officer.
Los Angeles.....	*George Parrish, M. D.....	Health officer.
	*G. S. Porter, M. D.....	First assistant health officer.
	<b>Divisional directors—</b>	
	*G. F. Schmelzel, M. D.....	Assistant health officer.
	*Harry Cohn, M. D.....	Director of tuberculosis.
	*A. V. Nasatir, M. D.....	Director of child welfare.
	*George M. Stevens, M. D.....	Epidemiologist.
	*Agnes M. Talcott.....	Chief nurse.
	*C. F. Kiley.....	Acting chief accountant.
	*F. W. Peterson.....	Director of vital statistics.
	*John Carman.....	Chief chemist.
	*L. V. Dieter, Phar. D.....	Director of laboratories.

<sup>1</sup> Reprints Nos. 346, 416, 494, 539, 599, 702, 767, 876, 930, 1025, 1103, 1177, 1257, and 1333 from the Public Health Reports.

City	Name of health officer	Official title
<b>California—Continued.</b> <b>Los Angeles—Continued.</b>	<b>Divisional directors—Continued.</b> *Mona Bettin, M. D. *F. D. Sweger *William Veit, D. V. M. *H. H. Matthieson *John Nelson *Frank Mefferd *E. F. McGonigle *A. M. Rogers, M. D. *Hannah J. Beatty, M. D. *Lyle McNeile, M. D. *C. K. Stewart *J. M. Cain J. W. Morgan, M. D. Mark L. Emerson, M. D. *J. D. Dunshee, M. D. Eugene F. Fontaine, M. D. Chas. R. Blake, M. D. *William B. Wells, M. D. *Herbert F. True, M. D. W. W. Fenton, M. D. *Alex M. Lesem, M. D. *William C. Hassler, Ph. G., M. D.	Chief bacteriologist. Director housing and sanitation. Director milk and meat inspection. Sanitary engineer. Chief meat inspector. Chief fruit and vegetable inspector. Chief clerk morbidity division. Director venereal clinic (male). Director venereal clinic (female). Director maternity division. Director of rodent division. Quarantine division. Health officer. Do. Do. District health officer. Commissioner of health. Health officer. City health officer and registrar. City health officer. Health officer. Health officer and local registrar.
Modesto.....	Thomas P. Lydon.....	Chief of division.
Oakland.....	Carl G. Hansen.....	Do.
Pasadena.....	Homer P. Thyle.....	Do.
Pomona.....	William D. Hobro.....	Do.
Richmond.....	Eleanor Stockton, Ph. H. N.....	Director field nursing.
Riverside.....	Thomas D. Maher, M. D.....	Director of child hygiene.
Sacramento.....	Robert Grosso, D. D. S.....	Chief dentist.
San Bernardino.....	Olga Bridgman, M. D.....	Psychologist.
San Diego.....	W. R. P. Clark, M. D.....	Director.
San Francisco.....	R. W. Burlingame, M. D.....	Chief clinician.
Division of sanitation (includes epidemiological and disinfection).	Anna D. MacRae, M. D.....	Director.
Dairy, milk, and food division (includes industrial division).	Clinton Davis.....	Chief chemist.
Meat and market division.	Percy R. Hennessy.....	Auditor.
Housing division.....	Leon M. Wilbor, M. D.....	Superintendent.
Plumbing division.....	Charles M. Wollenberg.....	Do.
Child-welfare division (includes social service).	Edmund Butler, M. D.....	Chief surgeon.
School-health division.	*Henry C. Brown, M. D.....	Health officer.
Dental division.....	*K. H. Sutherland, M. D.....	County health officer.
Psychological division.	*William H. Eaton, M. D.....	Health officer.
Chest clinic division (tuberculosis).	John T. Harrington, M. D.....	City health officer.
Social hygiene division.	*Wm. F. Reasner, M. D.....	District health officer.
Bacteriological division.	*John J. Sippy, M. D.....	Do.
Chemical laboratory.....	Edward A. Peterson, M. D.....	Health officer.
Auditing division.....	Carl H. Graf, M. D.....	Director of public health.
San Francisco Hospital.	O. R. Gillett, M. D.....	City health officer.
Laguna Honda Home.	*Bertram B. Jaffe, M. D.....	Manager of health and charity.
Emergency service.....	Burgett Woodcock, M. D.....	City health officer.
San Jose.....	*W. E. Buck, M. D.....	Chief, department of health.
Santa Ana.....	Charles O. McClure, M. D.....	City physician.
Santa Barbara.....	William H. O'Neil, M. D.....	Health officer.
Santa Cruz.....	*William F. Wild, M. D., C. P. H.....	Do.
Santa Monica.....	Benjamin B. Robbins, M. D.....	City health officer.
Stockton.....	James F. Young, M. D.....	Health officer.
Vallejo.....	Thomas F. Plunkett, M. D.....	Do.
<b>Colorado:</b>	Harvey B. Goddard, M. D.....	Do.
Boulder.....	Frank F. Simonton, M. D.....	Do.
Colorado Springs.....	*Laurence E. Poole, M. D., Dr. P. H.	Health officer and school physician.
Denver.....	Albert E. Austin, M. D.....	Health officer.
Greely.....	*Charles Porter Botsford, M. D.....	Superintendent of health.
Pueblo.....	D. C. Y. Moore, M. D.....	Chairman, board of health.
Trinidad.....	Joseph A. Cooke, M. D.....	Health officer.
<b>Connecticut:</b>	John H. Mountain, D.D.S., M.D.....	Do.
Ansonia.....	*Willis N. Butrick.....	Do.
Bridgeport.....	*Louis J. Dumont, M. D.....	Superintendent of health.
Bristol.....		
Danbury.....		
Derby.....		
East Hartford.....		
Enfield.....		
Fairfield.....		
Greenwich.....		
Hartford.....		
Manchester.....		
Meriden.....		
Middletown.....		
Milford.....		
Naugatuck.....		
New Britain.....		

City	Name of health officer	Official title
<b>Connecticut—Continued.</b>		
New Haven.....	*John L. Rice, M. D.....	Health officer.
New London.....	*Benjamin N. Pennell, D. V. S.....	Do.
Norwalk.....	Robert E. Perdue, M. D.....	Do.
Norwich.....	Edward J. Brophy, M. D.....	Do.
Orange.....		
Shelton.....	William S. Randall, Ph. B., M. D.....	City health officer.
Stamford.....	*Raymond D. Fear, M. D., Dr. P. H.....	Health commissioner.
Stonington (Mystic).....	D. Edward Taylor, M. D.....	Health officer.
Stratford.....	De Ruyter Howland, M. D.....	Town health officer.
Torrington.....		
Wallingford.....		
Waterbury.....	*Edward J. Godfrey, M. D.....	City health officer.
West Hartford.....	L. A. Cushman, M. D.....	Health officer.
Willimantic.....	Nathan Spector, M. D.....	City health officer.
Windham.....		
<b>Delaware:</b>		
Wilmington.....	Fred F. Armstrong, M. D.....	Secretary, board of health.
<b>District of Columbia:</b>		
Washington.....	*William O. Fowler, M. D.....	Health officer.
	Edward J. Schwartz, M. D.....	Assistant health officer.
	Arthur G. Cole.....	Chief clerk and deputy health officer.
Bureau of preventable diseases.....	James G. Cumming, M. D.....	Director.
Medical inspection of schools.....	Joseph A. Murphy, M. D.....	Do.
Food inspection.....	Reld R. Ashworth, D. V. S.....	Do.
Sanitary inspection.....	J. Frank Butts, L.L. B.....	Do.
Vital statistics.....	John H. Milligan.....	Do.
Chemical laboratory.....	John B. Reed.....	Do.
Bacteriological laboratory.....	John E. Noble.....	Do.
Serological laboratory.....	Jesse P. Porch, D. V. M.....	Do.
Child welfare and hygiene service.....	Hugh J. Davis, M. D.....	Do.
Pound.....	Walter R. Smith.....	Poundmaster.
<b>Florida:</b>		
Jacksonville.....	*Noble A. Upchurch, M. D.....	Health officer.
Key West.....	Harry C. Galey, M. D.....	City health officer.
Miami.....	*George N. MacDonell, M. D.....	Chief, division of health.
Orlando.....	Sylvan McElroy, M. D.....	City health officer.
Pensacola.....	Wm. D. Nobles, M. D.....	Do.
St. Petersburg.....	Wyman W. Harden, M. D.....	Health officer and city physician.
Tampa.....	*Chas. Wm. Bartlett, Jr., M. D.....	City health officer.
West Palm Beach.....	W. E. Van Landingham, M. D.....	Do.
<b>Georgia:</b>		
Albany.....	*Hugo Robinson, Ph. G., M. D.....	District commissioner of health.
Athens.....	*T. H. Johnston, M. D., Dr. P. H.....	Health commissioner.
Atlanta.....	*J. P. Kennedy, M. D.....	Health officer.
Augusta.....	Eugene E. Murphey, M. D.....	Commissioner of health.
Brunswick.....	*H. L. Akridge, M. D., Dr. P. H.....	Do.
Columbus.....	R. L. Williams, M. D.....	Health officer and city physician.
La Grange.....	*S. O. Rutland, M. D.....	County health officer.
Macon.....	*J. D. Applewhite, M. D.....	Health officer.
Rome.....	*B. V. Elmore, M. D.....	Commissioner of health.
Savannah.....	*Victor H. Bassett, M. D.....	District commissioner of health and city health officer.
Valdosta.....	*Gordon T. Crozier, M. D., Dr. P. H.....	City health officer.
Waycross.....	*Geo. E. Atwood, M. D., Dr. P. H.....	Commissioner of health.
<b>Idaho:</b>		
Boise.....	*W. H. Rhodes.....	Health officer.
Pocatello.....	H. H. Hughart, M. D.....	City physician.
Twin Falls.....		
<b>Illinois:</b>		
Alton.....	O. E. Carson, M. D.....	Health officer.
Aurora.....	Geo. W. Haan, M. D.....	Health officer and registrar.
Belleville.....	B. H. Portuondo, M. D.....	Public health officer.
Berwyn.....	*Preston E. Wright, M. D.....	Health director.
Bloomington.....	*Floyd E. Fielding, M. D.....	Director of public health.
Blue Island.....	*L. A. Burkhardt.....	Commissioner of health.
Cairo.....	C. L. Weber, M. D.....	Health officer.
Canton.....		
Centralia.....	Gilford N. Welch, M. D.....	Do.
Champaign.....	W. E. Schowengerdt, M. D.....	Do.
Chicago.....	*Arnold H. Kegel, M. D.....	Commissioner of health.
	G. Koehler, M. D.....	Assistant health commissioner.
	H. O. Jones, M. D.....	Do.
	Isaac D. Rawlings, M. D.....	Chief of bureau.
Bureau of communicable diseases.....		
Bureau of child welfare.....	Henry C. Niblack, M. D.....	Do.
Bureau of dental hygiene.....	Lon W. Morrey, D. D. S.....	Do.

City	Name of health officer	Official title
<b>Illinois—Continued.</b>		
Chicago—Continued.		
Bureau of laboratories and research.	F. O. Tonney, M. D.	Chief of bureau.
Bureau of hospitals.	Archibald L. Hoyne, M. D.	Do.
Bureau of sanitary engineering.	Joel I. Connolly	Do.
Bureau of vital statistics.	M. O. Heckard, M. D.	Do.
Bureau of dairy products.	Henry C. Becker, M. D. V.	Do.
Bureau of food inspection.	J. P. Kilcourse	Do.
Bureau of inspection service.	J. M. Murphy, M. D.	Do.
Chicago Heights	A. H. Pannenberg, M. D.	Commissioner of health.
Cicero	Jacob J. Hood, M. D.	Health commissioner.
Collinsville	R. H. Greaves, M. D.	Health officer.
Danville		
Decatur	*Charles Rainer Smith, M. D.	Director of public health.
East Moline	Henry Fowler, M. D.	Health commissioner.
East St. Louis	*Albert P. Lauman	Do.
Elgin	*A. L. Mann, M. D.	Executive officer, health department.
Evanston	*John W. H. Pollard, B. L., M. D.	Commissioner of health.
Forest Park	Wm. C. Masslow, M. D.	Do.
Freeport	E. L. Motsinger, M. D.	Do.
Galesburg	E. D. Wing, M. D.	Health commissioner.
Granite City	L. D. Darner, M. D.	Do.
Harvey		
Herrin	C. C. Humphrey	President, board of health.
Jacksonville		
Joliet	*Ed. J. Higgins, M. D.	Commissioner of health.
Kankakee	*O. K. Smith, M. D.	Health officer.
Kewanee	H. N. Heflin, M. D.	Commissioner of health.
La Salle	*Arlington Ailes, M. D., C. P. H.	Do.
Lincoln	Wilbur Montgomery	Health officer.
Marion	Alonzo N. Baker, M. D.	Health commissioner.
Mattoon	T. O. Freeman, M. D.	Do.
Maywood	Robert L. Reynolds, M. D.	Do.
Moline	E. A. Edlen, M. D.	City physician.
Mount Vernon		
Murphysboro	Louis R. Wayman, M. D.	Health officer.
Oak Park	Frank S. Needham, M. D.	Commissioner of health.
Ottawa	Paul G. Pomeroy, M. D.	Health officer.
Pekin	L. R. Clary, M. D.	City health officer.
Peoria	*Sandor Horwitz, M. D.	Commissioner of health.
Quincy	*Thomas W. Rhodes, Ph. G., M. D.	Public health officer.
Rock Island	Ralph Dart, M. D.	City physician.
Rockford	*N. O. Gunderson, M. D.	Commissioner of health.
Springfield	H. H. Tuttle, M. D.	Superintendent of health.
Streator	D. S. Conley, M. D.	City physician.
Urbana	Geo. F. Way, M. D.	City health officer.
Waukegan	Howard C. Hoag, M. D.	City health physician.
West Frankfort	C. E. Koons, M. D.	City health officer.
<b>Indiana:</b>		
Anderson	E. M. Conrad, M. D.	Secretary, city board of health.
Bloomington	R. A. De Motte, M. D.	City health officer.
Clinton	E. A. Evans, M. D.	Secretary, board of health.
Connersville	Herman W. Smelser, M. D.	Health officer.
Crawfordsville	Fred N. Daugherty, M. D.	Secretary, board of health.
East Chicago	Frank Henry Mervis, Ph. G., M. D.	Do.
Elkhart	I. J. Markel, M. D.	Do.
Elwood	T. S. Owen, M. D.	City health officer.
Evansville	L. E. Fritsch, M. D.	Secretary, board of health.
Fort Wayne	C. G. Miller, M. D.	Do.
Frankfort	C. A. Zinn, M. D.	Do.
Gary	Walter M. Behn, M. D.	Do.
Hammond	J. A. Chevigny, M. D.	Health commissioner.
Huntington	R. F. Frost, M. D.	Secretary, city board of health.
Indianapolis	*Herman G. Morgan, M. D.	Health commissioner.
Jeffersonville	Samuel L. Adair, M. D.	City health officer.
Kokomo	T. C. Cochran, M. D.	Do.
La Fayette	M. M. Lairy, M. D.	Secretary, city board of health.
La Porte	Jon Nelson Kelly, M. D.	Health officer.
Logansport	*Louis P. Deuner	Health inspector.
Marion	L. H. Eshleman, M. D.	Secretary, board of health.
Michigan City	Nelle C. Reed, M. D.	Do.
Mishawaka	M. D. Wygant, M. D.	Do.
Muncie	Herbert D. Fair, Ph. G., M. D.	Do.
New Albany	A. I. McKamy, Ph. D., M. D.	Do.



City	Name of health officer	Official title
<b>Indiana—Continued.</b>		
Newcastle.....	Walter Moses Stout, M. D.	Secretary, board of health.
Peru.....	W. H. Wagoner, M. D.	Do.
Richmond.....	M. F. Johnston, M. D.	Health commissioner.
South Bend.....	J. B. Berteling, M. D.	Secretary, board of health.
Terre Haute.....	John E. Dailey, M. D.	Do.
Vincennes.....	Robert G. Moore, M. D.	Do.
Wabash.....	Lester B. Rhamy, M. D.	Do.
Whiting.....	B. B. Reeve, M. D.	Do.
<b>Iowa:</b>		
Boone.....	Wm. Woodburn, M. D.	Health officer.
Burlington.....	George H. Steinle, M. D.	Health officer and city physician.
Cedar Rapids.....	B. G. Broghammer, M. D.	Health officer.
Clinton.....	Frank A. Hohenschuh, M. D.	Health officer and city physician.
Council Bluffs.....	D. C. Hankey, M. D.	City health officer.
Davenport.....	*Theodore J. Meyer.	Health officer.
Des Moines.....	*Harley L. Saylor, M. D.	Health commissioner.
Dubuque.....	Walter J. Connell, M. D., M. P. H.	Health director.
Fort Dodge.....	James P. Sharon, M. D.	City physician.
Fort Madison.....	Harold F. Noble, M. D.	Do.
Iowa City.....	Francis L. Love, M. D.	City health physician.
Keokuk.....	*Richard Evans.	Sanitation officer.
Marshalltown.....	M. U. Chesire, M. D.	Health officer.
Mason City.....	C. E. Dakin, M. D.	Director, department of health and sanitation.
Muscatine.....	Rodney M. Arey, M. D.	City health physician.
Ottumwa.....	*Benjamin Courshon, M. D.	Acting commissioner of public health and city physician.
Sioux City.....		Health physician.
Waterloo.....	Joseph E. Ridenour, M. D.	
<b>Kansas:</b>		
Arkansas City.....	E. W. Hellweg, M. D.	City physician.
Atchison.....	Chas. W. Robinson, M. D.	City and county health officer.
Chanute.....	James A. Butiz, M. D.	City health officer.
Coffeyville.....	A. Boese, M. D.	City physician and health officer.
Eldorado.....	R. J. Cabeen, M. D.	County health officer.
Emporia.....	*J. S. Fulton, M. D.	Field Agent, United States Public Health Service.
Fort Scott.....	C. L. Mosley, M. D.	City health officer.
Hutchinson.....	Guy R. Walker, M. D.	City physician.
Independence.....	Enoch C. Wickersham, M. D.	County health officer.
Kansas City.....	*S. D. Henry, M. D.	Director of health and sanitation.
Lawrence.....	E. R. Keith, M. D.	City health officer.
Leavenworth.....	A. L. Suwalsky, M. D.	City physician.
Newton.....	F. G. Bartel, M. D.	County health officer.
Parsons.....	M. C. Ruble, M. D.	City physician.
Pittsburg.....	H. J. Veatch, M. D.	City health officer.
Salina.....	S. T. Blades, M. D.	Health officer.
Topeka.....	*Aurel Goodwin, M. D.	Secretary, city board of health.
Wichita.....	*Russell E. Hobbs, M. D.	Director of public welfare.
<b>Kentucky:</b>		
Ashland.....	J. P. Riffe, M. D.	City health officer.
Covington.....	*Robert K. Galloway, M. D., M. P. H.	County health officer.
Henderson.....		
Lexington.....	*Charles H. Voorhies, M. D.	Health officer.
Louisville.....	C. H. Harris, M. D.	Director of health.
Newport.....		Do.
Owensboro.....	*George L. Thompson, M. D.	City health officer.
Paducah.....	H. P. Linn, M. D.	
<b>Louisiana:</b>		
Alexandria.....	J. A. Packer, M. D.	President, board of health.
Baton Rouge.....	T. Jeff McHugh, M. D.	City health officer.
Lake Charles.....	H. B. White, M. D.	Do.
Monroe.....	D. I. Hirsch, M. D.	President, board of health.
New Orleans.....	*William H. Robin, M. D.	Parish and city health officer.
Shreveport.....	*Arthur G. Heath, M. D.	President, board of health.
<b>Maine:</b>		
Auburn.....	E. Leathers, M. D.	Health officer.
Augusta.....	George A. Coombs, M. D.	Do.
Bangor.....	*Harry D. McNeil, M. D.	Local health officer.
Bath.....	H. B. Duca, D. O.	City health officer.
Biddeford.....	John W. Mahoney.	Local health officer.
Lewiston.....	*Robert J. Wiseman, jr., M. D.	Health officer.
Portland.....	*Thomas Tetreau, M. D.	Do.
Sanford.....	*C. W. Blagden, M. D.	Do.
South Portland.....	Waldo T. Skillin, M. D.	Do.
Waterville.....	*Arthur R. Daviau, M. D.	Do.
Westbrook.....	Patrick H. Welch.	Local health officer.

City	Name of health officer	Official title
<b>Maryland:</b>		
Annapolis	*C. Hampson Jones, M. D.	Commissioner of health and registrar of vital statistics.
Baltimore	*J. Frederick Hempel, M. D.	Assistant commissioner of health.
Bureau of bacteriology	*C. Leroy Ewing	Director.
Bureau of chemistry and food.	*R. S. Craig	Do.
Bureau of meat inspection.	*William Brenner, M. D.	Do.
Bureau of communicable diseases.	*Daniel S. Hatfield, M. D.	Do.
Bureau of sanitation.	*J. Frederick Hempel, M. D.	Do.
Bureau of nursing.	*Mrs. J. B. Laib	Do.
Bureau of child welfare.	*William H. F. Warthen, M. D.	Do.
Bureau of vital statistics.	*Howard A. Moore	Do.
Bureau of hospitals.	*Myron G. Tull, M. D.	Do.
Cumberland	*Harvey H. Weiss	Health officer and registrar of vital statistics.
Frederick	*E. C. Kefauver, M. D.	County and city health officer.
Hagerstown	Ernest F. Poole, M. D.	County health officer.
<b>Massachusetts:</b>		
Adams	J. F. McLaughlin, M. D.	Chairman, board of health.
Amesbury	Clarence S. Morse	Agent, board of health.
Arlington	*William H. Bradley	Do.
Athol	Marion B. Sibley, M. D.	Secretary, board of health.
Attleboro	William O. Hewitt, M. D.	Health officer.
Belmont	*Thomas F. Harris	Agent, board of health.
Beverly	*Alonzo O. Woodbury	Do.
Boston	*Francis X. Mahoney, D. V. M., M. D.	Health Commissioner.
Divisions—		
Medical.	*M. Victor Safford, M. D.	Deputy commissioner.
Communicable diseases.	*Frederick J. Bailey, M. D.	Do.
Bacteriological laboratory.	*Karl R. Bailey, M. D.	Do.
Food.	*P. H. Mallowney, D. V. M.	Do.
Child hygiene.	Charles F. Willnisky, M. D.	Do.
Sanitary.	*Thomas J. Donnellon	Do.
Tuberculosis	*George O'Donnell, M. D.	Director.
Braintree	Harry F. Vinton	Agent, board of health.
Brockton	Joseph H. Lawrence, M. D.	Health officer.
Brookline	Francis Parkman Denny, M. D.	Do.
Cambridge	Simon B. Kelleher, M. D.	Medical inspector.
Chelsea	*John F. Welch	Health officer.
Chicopee	*Gertrude M. De Witt	Agent, board of health.
Clinton	*Frederick E. Murphy	Do.
Danvers	*Hugo Nappe, R. N.	Health officer.
Dedham		
Easthampton	C. C. Buckner	Agent, board of health.
Everett	*William F. Hogan	Do.
Fall River	*Ernest M. Morris, M. D., C. M.	Health commissioner.
Fitchburg	*Fred R. Brigham	Agent, board of health.
Framingham	*David Moxon, C. P. H.	Do.
Gardner	*William P. O'Donnell	Do.
Gloucester	*P. E. Curley	Sanitary inspector.
Greenfield	*George P. Moore	Agent, board of health.
Haverhill	*George T. Lennon	Do.
Holyoke	*Daniel D. Mahoney	Do.
Lawrence	Aime D. V. Bourget	Chairman, board of health.
Leominster	*Hugh E. Crain	Agent, board of health.
Lowell	*John J. McNamara, M. D.	Acting health officer.
Lynn	James A. Dumas, M. D.	Commissioner of public health.
Malden	*May C. Welsh	Agent, board of health.
Marlboro	*John J. Cassidy	Do.
Medford	William Lanigan, M. D.	Health officer.
Melrose	Clarence P. Holden, M. D.	Chairman, board of health.
Methuen	*Albert Slack	Clerk, board of health.
Milford	Oscar C. Ayotte	Secretary, board of health.
Milton	Paul W. Kimball, M. D.	Agent, board of health.
Natick	Thomas F. Morris	Do.
New Bedford	*William G. Kirschbaum	Agent and executive officer.
Newburyport	*Wilbur N. O'Brien, Ph. G.	Agent, board of health.
Newton	*Francis George Curtis, M. D.	Chairman, board of health.
North Adams	*D. W. Hyde, S. E.	Agent, board of health.
Northampton	George R. Turner	Do.
Northbridge	D. C. Duggan	Chairman, board of health.
Norwood	James G. Mulvehill	Agent, board of health.
Palmer	J. P. Schneider, M. D.	Chairman, board of health.
Peabody	*Percy F. Murray	Agent, board of health.
Pittsfield	*Willys M. Monroe, M. D.	Health officer.
Plymouth	Walter D. Shurtleff, M. D.	Do.

City	Name of health officer	Official title
<b>Massachusetts—Continued.</b>		
Quincy.....	Edmund B. Fitzgerald, M. D.....	Health commissioner.
Revere.....	Francis Licata, M. D.....	Chairman, board of health.
Salem.....	*John J. McGrath.....	Agent, board of health.
Saugus.....	*Charles E. Light.....	Chairman, board of health.
Somerville.....	Frank L. Morse, M. D.....	Medical inspector.
Southbridge.....	*Albert R. Brown.....	Agent, board of health.
Springfield.....	*Jacob R. Sackett.....	Agent and health officer.
Taunton.....	Thomas F. Cusick, M. D.....	Chairman, board of health.
Wakefield.....	David Taggart.....	Health officer.
Waltham.....	Frederick L. MacDonald, M. D.....	Director of public welfare.
Watertown.....	*Arthur E. Burke, C. P. H., B. Sc. in P. H.....	Agent, board of health.
Webster.....	Bernard L. Plouffe, M. D.....	Chairman, board of health.
West Springfield.....	J. J. Lysaght.....	Agent, board of health.
Westfield.....	Robert M. Marr, M. D.....	Chairman, board of health.
Weymouth.....	F. L. Doucett, M. D.....	Clerk, board of health.
Winchester.....	*Maurice Dinneen.....	Agent, board of health.
Winthrop.....	*William D. Childress.....	Health officer.
Woburn.....	*Edward F. Gorman.....	Agent and secretary.
Worcester.....	*Thomas F. Kenney, M. D.....	Director of health and school hygiene.
<b>Michigan:</b>		
Adrian.....	J. P. Bland, M. D.....	Health officer.
Alpena.....	John A. Wessinger, M. D.....	Do.
Ann Arbor.....	*A. A. Hoyt, M. D.....	Health officer and registrar.
Battle Creek.....	G. W. Moore, M. D.....	Health officer.
Bay City.....	E. R. Taylor, M. D.....	Director of public health.
Benton Harbor.....	*S. C. Moore, M. D.....	Health commissioner.
Cadillac.....	C. A. Christensen, M. D.....	Commissioner of health.
Dearborn.....	Board of health—	
Detroit.....	William H. Maybury.....	President.
	William A. Evans, M. D.....	Vice president.
	L. O. Geib, M. D.....	
	Gustavus D. Pope.....	
	Executive staff, department of health—	
	*Henry F. Vaughan, D. P. H.....	Commissioner of health.
	Bert U. Estarbrook, M. D.....	Deputy commissioner.
	*Fred M. Meader, M. D.....	Deputy commissioner and director of medical service.
	*Carl E. Buck, D. P. H.....	Deputy commissioner and executive officer.
	*John F. Norton, Ph. D.....	Director of laboratories.
	A. C. Thompson, D. D. S.....	Director of school dental service.
	*Miss Grace Ross, R. N.....	Superintendent of nursing.
	Ward F. Seeley, M. D.....	Director of Herman Kiefer Hospital maternity division.
	Russell W. Alles, M. D.....	Director prenatal division.
	*Major John F. Roehl.....	Director of special investigation.
	*R. S. Dixon, M. D.....	Director of division of venereal dis- eases.
	*Henry D. Chadwick, M. D.....	Tuberculosis controller.
	*B. H. Douglas, M. D.....	Superintendent of William H. May- bury Sanatorium.
	*George E. Phillips.....	Superintendent of Herman Kiefer Hospital.
	*F. Gardner Legg, C. E.....	Director of sanitary engineering.
	*Edward C. Schultz.....	Director of dairy and food inspection.
	*Arthur P. Derby, M. D.....	Director of division of tuberculosis.
	Don W. Gudakunst, M. D.....	Director of division of school health service.
	Don J. Barnes, M. D.....	Director of division of child welfare.
	*F. B. Broderick, M. D.....	Director of division of hairdressers and cosmeticians.
	*G. Arthur Blakeslee.....	Director of division of vital statistics.
	C. E. Dutchess, M. D.....	Director of division of cancer control.
	*John E. Gordon, M. D.....	Epidemiologist.
Escanaba.....	Don D. Knapp, M. D.....	Health officer.
Flint.....	*Allison H. Edwards, M. D.....	Do.
Grand Rapids.....	C. R. Sheridan, M. D.....	Health commissioner.
Hamtramck.....	Wm. N. Braley, M. D.....	Health officer.
Highland Park.....	Wm. Westrate, M. D.....	Do.
Holland.....	*Louis Dorpat, M. D.....	Do.
Ironwood.....	*George G. Barnett, M. D.....	City health officer.
Ishpeming.....	*Floyd R. Town, M. D.....	Health officer.
Jackson.....	*Alvin H. Rockwell, M. D.....	Do.
Kalamazoo.....	*S. Rowland Hill, M. D.....	Health director.
Lansing.....	*T. R. Laughbaum, M. D.....	Health officer.
Marquette.....		
Monroe.....		
Mount Clemens.....	W. J. Kane, M. D.....	Do.
Muskegon.....	R. J. Harrington, M. D.....	Do.
Muskegon Heights.....		
Owosso.....	Harry T. Gray, M. D.....	City health officer.

City	Name of health officer	Official title
<b>Michigan—Continued.</b>		
Pontiac	*C. A. Neafie, M. D., M. S. P. H.	Director of public health.
Port Huron	A. L. Callery, M. D.	Health officer.
River Rouge	Claud Smith, M. D.	Do.
Saginaw	*Garland Weidner, M. D.	Do.
Sault Ste. Marie	E. A. Cornell, M. D.	Do.
Traverse City	George A. Holliday, D.D.S., M.D.	Do.
Wyandotte	Arthur P. Schulz, M. D.	Commissioner of health and sanitation.
<b>Minnesota:</b>		
Albert Lea	*C. J. Scheldrup	Health inspector.
Austin	J. K. McKenna, M. D.	Health officer
Brainerd		
Duluth	Lincoln A. Sukeforth, M. D.	Director of health.
Faribault	Fred U. Davis, M. D.	Health commissioner.
Hibbing	Theo. A. Estrem, M. D.	Health officer.
Mankato	John A. Butzer, M. D.	Do.
Minneapolis	*Francis E. Harrington, LL. D., M. D.	Commissioner of health.
Rochester	C. H. Mayo, M. D. <sup>1</sup>	Health officer.
St. Cloud	*J. N. Libert, M. D.	City physician.
St. Paul	*B. F. Simon, M. D.	Health officer.
Virginia	Robert P. Pearsall, M. D.	Do.
Winona	William V. Lindsay, M. D.	Do.
<b>Mississippi:</b>		
Biloxi	George F. Carroll, M. D.	City health officer.
Columbus	W. L. Stallworth, M. D.	Do.
Greenville	*Jno. W. Shackelford, M. D.	Director, county health department.
Hattiesburg	*W. D. Beacham, M. D.	Do.
Jackson	*W. E. Noblin, M. D.	City and county health officer.
Laurel	R. H. Foster, M. D.	Acting city health officer.
Meridian	*J. T. Googe, M. D.	Director, county health department.
Natchez	*Loren Wallin, M. D.	Do.
Vicksburg	*F. Michael Smith, M. D.	Do.
<b>Missouri:</b>		
Cape Girardeau	*Philip H. Steck	Health commissioner.
Carthage	Ephraim D. Hatcher, M. D.	City physician.
Columbia	W. A. Norris, M. D.	City health commissioner.
Hannibal	*E. M. Lucke, M. D.	Field agent, United States Public Health Service.
Independence	F. L. Cook, M. D.	City physician and milk inspector.
Jefferson City	William A. Clark, M. D.	City health officer.
Joplin	*M. B. Harutun, M. D.	Commissioner of health and sanitation.
<b>Kansas City</b>		
Moberly	*Calvin L. Cooper, M. D.	Director of health.
St. Joseph	Jesse Maddox, M. D.	City health Commissioner.
St. Louis	A. J. Smith, M. D.	Health officer.
	*Max C. Starkloff, M. D.	Health commissioner.
	*Max Kaufman	Deputy health officer.
Sanitary section	*Walter Cook	Director.
Vital statistics section	*Leon Grosch	Do.
Dental section	*Dr. Horbard Towles	Do.
Chemical-bacteriological section.	*Thomas Buckland	Chief chemist.
Communicable disease section.	*Dr. J. C. Willett	Chief bacteriologist.
Veneral disease section.	*Dr. J. A. Smith	Director.
Municipal visiting nurses.	*Dr. Eugene Brown	Chief physician.
Tuberculosis controller.	*Mrs. Bertha Yenicek	Director.
	*Dr. Howard Dell	Do.
Sedalia		
Springfield	*Lon Sharp	Commissioner of health and sanitation.
Webster Groves	Carl C. Irick, M. D.	Health commissioner.
<b>Montana:</b>		
Anaconda	J. L. O'Rourke, M. D.	City physician.
Billings	Albert E. Stripp, M. D.	City health officer.
Butte	Joseph J. Kane, M. D.	City physician.
Great Falls	*Frank L. Watkins, M. D.	Field agent, United States Public Health Service.
Helena	*Arthur Jordan, M. D.	Do.
Missoula	*F. D. Pease, M. D.	Health officer.
<b>Nebraska:</b>		
Grand Island	J. G. Woodin, M. D.	City physician.
Lincoln	M. F. Arnholt, M. D.	Superintendent of health.
North Platte	J. B. Redfield, M. D.	City physician.
Omaha	A. S. Pinto, M. D.	Health commissioner.
<b>Nevada:</b>		
Reno	A. F. Adams, Ph. G., M. D.	Secretary, board of health.

<sup>1</sup> Full-time deputy health officer, D. C. Lochead, M. D., D. P. H.

City	Name of health officer	Official title
<b>New Hampshire:</b>		
Berlin	*Eli A. Marcoux	Health officer and milk inspector.
Claremont	William P. Prescott	Health officer.
Concord	*Charles E. Palmer	Sanitary officer.
Dover	*Wm. E. Whiteley	Executive officer.
Keene	*Fred C. Nims	Health officer.
Laconia	J. Russell Perley, M. D.	Member, board of health.
Manchester	*Howard A. Streeter, M. D.	Health officer.
Nashua	*P. J. McLaughlin, M. D.	Do.
Portsmouth		
Rochester	C. E. Goodwin	Do.
<b>New Jersey:</b>		
Asbury Park	*B. H. Obert	Do.
Atlantic City	S. L. Salasin, M. D.	Do.
Bayonne	W. W. Brooke, M. D.	Do.
Belleville	*Eugene T. Berry	Do.
Bloomfield	*Joseph C. Saile, Ph. G., D. V. S., D. O.	Do.
Bridgeton	*John G. Robbins	Sanitary inspector.
Camden	*A. L. Stone, M. D.	Director of public health.
Cartaret	H. L. Strandberg, M. D.	Health officer.
Clifton	Jeremiah P. Quinlan	Do.
Collingswood	Harold K. Eynon, M. D.	Medical inspector.
Dover	*John G. Taylor	Health officer.
East Orange	*Frank J. Osborne	Health officer and registrar.
Elizabeth	*Louis J. Richards, S. B. in S. E.	Health officer.
Englewood	*John A. Manson	Sanitary inspector.
Garfield	Chas. B. Bleasby, M. D.	Health officer.
Gloucester City	J. Alonzo Beek, M. D.	Do.
Hackensack	*L. Van D. Chandler	Do.
Harrison	*John T. McClure	Do.
Hoboken	*J. F. X. Stack, M. D.	Health commissioner.
Irvington	*William S. Bailey	Acting health officer.
Jersey City	*James J. Hagan	Health officer.
Kearny	*Amos Field, Jr.	Do.
Lodi	H. H. Brevoort, M. D.	Health inspector.
Long Branch	*R. C. Erickson	Health officer.
Millville	Richard H. Knowles, Ph. G.	Do.
Montclair	*Carl T. Pomeroy, C. P. H.	Do.
Morristown	*John F. Kilkenny	Do.
New Brunswick	E. I. Cronk, M. D.	Do.
Newark	*Charles V. Craster, M. D., D. P. H.	Do.
Nutley	*Eugene H. Sullivan, R. N.	Health officer and registrar of vital statistics.
Orange	*Lenore Y. Wylie, R. N.	Do.
Passaic	John N. Ryan, M. D.	Health officer.
Paterson	*Fred P. Lee, M. D.	Do.
Perth Amboy	*Chas. S. Thompson, D. V. S.	Do.
Phillipsburg	Alma L. Williston, M. D.	Do.
Plainfield	*N. J. Randolph Chandler	Do.
Rahway	*Fred M. Williams	Do.
Ridgefield Park	*W. F. Reynolds, D. V. M.	Do.
Rutherford	*Marine Dunn	Sanitary inspector.
Summit	Henry Paul Dengler, M. D.	Health officer.
Trenton	*Alton S. Fell, M. D.	Do.
Union City	Grant P. Curtis, M. D.	Do.
Weehawken	J. M. Stein, M. D.	Town physician.
West New York	*Rudolph Kunze	Chief inspector.
West Orange	*David E. Buckley	Health officer.
Westfield	*Andrew Carney	Do.
<b>New Mexico:</b>		
Albuquerque	*James R. Scott, Ph. D., M. D.	County health officer.
<b>New York:</b>		
Albany	James W. Wiltse, M. D.	Health officer.
Amsterdam	P. J. Fitzgibbons, M. D.	Do.
Auburn	John W. Copeland, M. D.	Do.
Batavia	Emery F. Will, M. D.	Do.
Beacon	Charles B. Dugan, M. D.	Do.
Binghamton	Chalmer J. Longstreet, M. D.	Do.
Buffalo	*Francis E. Fronczak, LL. D., M. D., Dr. Sc. P. H.	Health commissioner.
	*Edward Durney, M. D.	Duputy health officer.
	*Charles A. Bentz, M. D.	Do.
	*Edward Durney, M. D.	Director.
Division of child hy- giene.		
Communicable disease and division of lab- oratories.	*Charles A. Bentz, M. D.	Do.
Division of vital sta- tistics.	*G. H. Westinghouse, M. D.	Registrar.
Division of sanitation.	*Frank Smering	Superintendent.
Division of food and drugs.	*Stephen Bateson	Do.

City	Name of health officer	Official title
<b>New York—Continued.</b>		
Cohoes.....	Matthew J. Keough, M. D.	Commissioner of health.
Corning.....	Henry E. Elwood, jr., M. D.	Health officer.
Cortland.....	*Daniel R. Reilly, M. D.	Health commissioner.
Dunkirk.....	George E. Ellis, M. D.	Health officer.
Elmira.....	Reeve B. Howland, M. D.	Do.
Endicott.....	D. W. Hardy, M. D.	Do.
Freeport.....	William H. Runcie, M. D.	Do.
Fulton.....	L. A. Simpson, M. D.	Do.
Geneva.....	C. W. Grove, M. D.	Do.
Glens Falls.....	*Virgil D. Selleck, M. D., C. P. H.	Do.
Gloversville.....	Alex. L. Johnson, M. D.	Do.
Herkimer.....	James W. Graves, M. D.	Do.
Hornell.....	George E. Taylor, M. D.	Do.
Hudson.....	William D. Collins, M. D.	Do.
Ilion.....	Frank B. Conterman, M. D.	Do.
Ithaca.....	*Lewell T. Genung, M. D.	Do.
Jamestown.....	William M. Sill, M. D.	Superintendent of public health.
Johnson City.....	Rollin O. Crosier, M. D.	Health officer.
Johnstown.....	Guy Vail Wilson, M. D.	Do.
Kingston.....	Lester E. Sanford, M. D.	Do.
Lackawanna.....	A. S. Culkowski, M. D.	Do.
Little Falls.....	George S. Eveleth, M. D.	Do.
Lockport.....	Ferdinand A. Kittinger, M. D.	Do.
Middletown.....	H. J. Shelley, M. D.	Do.
Mount Vernon.....	Frank W. Shipman, M. D.	Commissioner of health.
New Rochelle.....	*Edwin H. Coddington, M. D.	Health officer.
New York.....	*Shirley W. Wynne, M. D., Dr. P. H.	Commissioner of health.
Bureau—	Herman T. Peck, M. D.	Deputy commissioner of health.
General administration.	Bernard F. Plunkett.....	Director.
Records.....		Do.
Sanitation.....	William H. Pound, M. D.	Do.
Preventable diseases.	Edward L. Creeden, M. D.	Acting director.
Child hygiene.....	Jules L. Blumenthal, M. D.	Director.
Nursing.....	Miss Amelia H. Grant.....	Do.
Public health education.	Charles F. Bolduan, M. D.	Do.
Laboratories.....	William H. Park, M. D.	Do.
Food and drugs.....	B. H. Geertsema.....	Acting director.
Newburgh.....	Thomas J. Burke, M. D.	Health officer.
Niagara Falls.....	E. E. Gillick, M. D.	Do.
North Tonawanda.....	Henry C. Lapp, M. D.	Do.
Ogdensburg.....	John W. Benton, M. D.	Do.
Olean.....	John A. Johnson, M. D.	Health commissioner.
Oneida.....	Donald H. Conterman, M. D.	Health officer.
Oneonta.....		
Ossining.....	Robert R. Bloom, M. D.	Do.
Oswego.....	Harvey S. Albertson, M. D.	Do.
Peekskill.....	Harold H. Golding, M. D.	Do.
Port Chester.....	William J. Sheehan, M. D.	Do.
Port Jervis.....	G. Otto Pobe, M. D.	City health officer.
Poughkeepsie.....	*William H. Conger, M. D.	Health officer.
Rensselaer.....	Charles H. Harbinson, M. D.	Do.
Rochester.....	*George W. Goler, M. D.	Do.
Rome.....	Lewis N. Eames, M. D.	Do.
Salamanca.....	P. H. Bourne, M. D.	Do.
Saratoga Springs.....	Charles B. Small, M. D.	City health officer.
Schenectady.....	John H. Collins, M. D.	Commissioner of health.
Syracuse.....	*George C. Ruhland, M. D.	Do.
Tonawanda.....	John T. Harris, M. D.	Health officer.
Troy.....	James H. Flynn, M. D.	Commissioner of health.
Utica.....	Hugh H. Shaw, M. D.	Health officer.
Watertown.....	George B. Van Doren, M. D.	City health officer.
Watervliet.....	Charles A. Birmingham, M. D.	Commissioner of health.
White Plains.....	Edwin G. Ramsdell, M. D.	Health officer.
Yonkers.....	Clarence W. Buckmaster, M. D., C. P. H.	Commissioner of health.
<b>North Carolina:</b>		
Asheville.....	*D. E. Sevier, M. D.	Health officer.
Charlotte.....	*Wilbur Ashley McPhaul, M. D.	Superintendent of health.
Concord.....	*Daniel Greenlee Caldwell, M. D.	County health officer.
Durham.....	*Jesse H. Epperson, M. S., bacteriology and chemistry.	Superintendent of health.
Gastonia.....	Mc. G. Anders, M. D.	City physician and health officer.
Goldsboro.....	*L. W. Corbett, M. D.	Superintendent of health.
Greensboro.....	*C. Curtis Hudson, M. D.	Health officer.
High Point.....	Samuel S. Coe, M. D.	City physician.
Kinston.....	*Robert S. McGeachy, M. D.	Health officer.
New Bern.....	*D. E. Ford, M. D.	County health officer.
Raleigh.....	*A. C. Bulls, M. D.	Health officer.

City	Name of health officer	Official title
<b>North Carolina—Continued.</b>		
Rocky Mount.....	*Thurman H. Rose, M. D.....	Superintendent of health.
Salisbury.....	*Charles Wallace Armstrong, M. D.....	City and county health officer.
Wilmington.....	*John H. Hamilton, M. D.....	County health officer.
Wilson.....	*L. J. Smith, M. D.....	Health officer.
Winston-Salem.....	*R. L. Carlton, M. D.....	City health officer.
<b>North Dakota:</b>		
Fargo.....	*B. K. Kilbourne, M. D.....	City health officer.
Grand Forks.....	E. C. Haagensen, M. D.....	Do.
<b>Ohio:</b>		
Akron.....	*M. D. Ailes, LL. B., M. D.....	Director of health.
Alliance.....	Earl Musselman, LL. B., M. D.....	Health commissioner.
Ashland.....	C. B. Meuser, M. D.....	Director of welfare.
Ashtabula.....	A. J. Pardee, M. D.....	Health officer.
Barberton.....	W. A. Mansfield, M. D.....	Health commissioner.
Bellefontaine.....	A. J. McCracken, M. D.....	City health commissioner.
Bucyrus.....	W. G. Carlisle, M. D.....	Health commissioner.
Cambridge.....	C. L. Vorhies, M. D.....	Do.
Campbell.....	Jas. S. Mariner, M. D.....	Do.
Canton.....	F. M. Sayre, M. D.....	Do.
Chillicothe.....	*Raymond E. Bower, Ph. B., M. D.....	Do.
Cincinnati.....	*Wm. H. Peters, M. D.....	Do.
Cleveland.....	*H. L. Rockwood, M. D.....	Commissioner of health.
Division—		
Communicable diseases.....	T. G. Duncan, M. D.....	Director.
Child hygiene.....	R. J. Ochsner, M. D.....	Do.
Food and drug administration.....	H. J. Knapp, M. D.....	Do.
Meat and dairy.....	R. F. Leslie, D. V. M.....	Do.
Cleveland Heights.....	*Robert Lockhart, M. D.....	Director of health.
Columbus.....	*Nelson C. Dysart, Ph. C., M. D.....	Health commissioner.
Coshocton.....	*D. M. Criswell, M. D.....	Do.
Cuyahoga Falls.....	*R. H. Markwith, M. D.....	Do.
Dayton.....	*A. O. Peters, M. D.....	Do.
East Cleveland.....	G. W. Stober, M. D.....	Director of health.
East Liverpool.....	Edward W. Miskall, M. D.....	Health commissioner.
Elyria.....	G. E. French, M. D.....	Do.
Findlay.....	*K. B. Clark.....	Do.
Fostoria.....	*A. V. Parsell.....	Do.
Fremont.....	E. L. Vermilya, M. D.....	Do.
Hamilton.....	*C. J. Baldrige, B. L., M. D.....	Do.
Ironton.....	H. S. Allen, M. D.....	Do.
Lakewood.....	Wallace J. Benner, M. D.....	Do.
Lancaster.....	Clifford B. Snider, M. D.....	Do.
Lima.....	J. B. Poling, M. D.....	Do.
Lorain.....	Valloyd Adair, M. D.....	Do.
Mansfield.....	*Theodore R. Meyer, M. D.....	Do.
Marietta.....	J. B. McClure, M. D.....	Do.
Marion.....	*N. Sifritt, M. D.....	Do.
Martins Ferry.....	*John Donovan.....	Do.
Massillon.....	*John H. Williams.....	Do.
Middletown.....	*George D. Lummis, M. D.....	Do.
New Philadelphia.....	*Joseph Blickensderfer, M. D.....	Do.
Newark.....	W. H. Knauss, M. D.....	Do.
Niles.....	W. A. Werner, M. D.....	Do.
Norwood.....	L. O. Saur, M. D.....	Do.
Piqua.....	L. G. Whitney.....	Do.
Portsmouth.....	*R. W. De Crow, M. D.....	Do.
Salem.....	T. T. Church, M. D.....	Do.
Sandusky.....	*F. M. Houghtaling, M. D.....	Do.
Springfield.....	*Howard C. Lisle, Ph. G., M. D.....	Health director.
Steubenville.....	*Julius A. Pizzoferrato.....	Health commissioner.
Tiffin.....	J. A. Gosling, M. D.....	Do.
Toledo.....	*John L. Lavan, M. D.....	Do.
Warren.....	M. T. Knappenberger, M. D.....	Do.
Youngstown.....	H. E. Welch, M. D.....	Do.
Zanesville.....	David J. Evans, M. D.....	Do.
<b>Oklahoma:</b>		
Ardmore.....	Ambert Young Easterwood, M. D.....	City health officer.
Bartlesville.....	Elizabeth Chamberlin, M. D.....	City superintendent of health.
Chickasha.....	H. C. Antle, M. D.....	Do.
Enid.....	R. C. Baker, M. D.....	Do.
Guthrie.....	Wm. C. Miller, M. D.....	City physician and health officer.
McAlester.....	*Chas. M. Pearce, M. D.....	Superintendent of health.
Muskogee.....	A. W. Harris, M. D.....	City health officer.
Oklahoma City.....	*Walter H. Miles, M. D.....	Director of health.
Oklmulgee.....		
Sapulpa.....	J. M. Mattenlee, M. D.....	City physician.
Shawnee.....	T. C. Sanders, M. D.....	City superintendent of health.
Tulsa.....	*Harry J. McGuire, M. D.....	Superintendent of health.

City	Name of health officer	Official title
<b>Oregon:</b>		
Astoria.....	Nellie S. Vernon, M. D.....	City and county health officer.
Eugene.....	Seth M. Kerron, M. D.....	City health officer.
Portland.....	*John G. Abele, M. D.....	Do.
Salem.....	*V. A. Douglas, M. D.....	Do.
<b>Pennsylvania:</b>		
Alquippa.....	*James E. Tanner.....	Health officer.
Allentown.....	*J. Treichler Butz, D. D. S., M. D.....	Do.
Altoona.....	*T. G. Herbert.....	Chief, bureau of health.
Ambridge.....		
Beaver Falls.....	*Nelson W. Osmond.....	Health officer and plumbing inspec- tor.
Berwick.....		
Bethlehem.....		
Braddock.....	*Jas. E. Wills.....	Health officer.
Bradford.....	*Carl Peterson.....	Do.
Bristol.....	John M. Wright.....	Do.
Butler.....	*J. Fred Leetch.....	Do.
Canonsburg.....		
Carbondale.....	*P. J. Sheare.....	Do.
Carlisle.....	*John L. Glass.....	Do.
Carnegie.....	*Joseph Lewis.....	Ordinance officer.
Chambersburg.....	*Frank J. Croft.....	City health officer and secretary.
Charleroi.....	*W. M. Darby.....	Health inspector.
Chester.....	*Mark G. Murtaugh.....	Health officer and secretary.
Clairton.....	*F. F. Keller.....	Health officer.
Coatesville.....		
Columbia.....	G. M. Rodenhauer.....	Secretary, board of health.
Connellsville.....	D. H. Miner.....	Health officer.
Dickson City.....		
Donora.....	*Herman Lang.....	Do.
Du Bois.....	J. I. Brockbank, M. D.....	Do.
Dunmore.....	William Fenease.....	Do.
Duquesne.....		
Easton.....	J. A. Stotz, M. D.....	Do.
Ellwood City.....	*Louis Young.....	Do.
Erie.....	J. R. Smith, M. D.....	Do.
Farrell.....	*Harry Schmidt.....	Do.
Franklin.....	C. H. Brown, M. D.....	City health officer.
Greensburg.....	*T. Ray Hunter.....	Health officer.
Harrisburg.....	John M. J. Raunick, M. D.....	Health officer and director.
Hazleton.....	*William H. Pfaff.....	Health officer.
Homestead.....	W. E. Lawson, M. D.....	President, board of health.
Jeannette.....	*Charles Walter.....	Chief health officer.
Johnstown.....	L. W. Jones, M. D.....	Health officer.
Kingston.....	*J. F. Seward.....	Health officer and secretary, board of health.
Lancaster.....	*Benj. F. Charles.....	Health officer.
Lansford.....		
Latrobe.....	W. T. Osborne.....	Do.
Lebanon.....		
Lewistown.....	*H. E. Fetterolf.....	Do.
McKees Rocks.....		
McKeesport.....	*Daniel F. Marsh.....	Do.
Mahanoy City.....	*J. B. Kleindienst.....	Do.
Meadville.....	*John Laley.....	Do.
Monessen.....	*Francis E. Gibson.....	City health officer.
Mount Carmel.....	W. F. Stine.....	Health officer.
Nanticoke.....	*Daniel F. Sakowski.....	City health officer.
New Castle.....	William L. Steen, M. D.....	Health officer.
New Kensington.....	A. L. Davis.....	Do.
Norristown.....	*R. Ronald Dettre.....	Do.
North Braddock.....	*Michael J. Pastor.....	Do.
Oil City.....	*William J. Lewis.....	Do.
Old Forge.....	*Peter Janosky.....	Do.
Olyphant.....	*Ignatious Zewan.....	Do.
Philadelphia.....	*A. A. Cairns, M. D., Dr. P. H. *Michael C. Goglia.....	Director department of public health. Assistant director department of public health.
Bureau of health.....	*William J. Wolf.....	Secretary.
Bureau of hospitals.....	*William G. McAllister.....	Chief.
Philadelphia Gen- eral Hospital, Thirty-Fourth and Pine Streets.		
Philadelphia Hos- pital for Conta- gious Diseases, Second and Lu- zerne Streets.		
Philadelphia Hos- pital for Mental Diseases, By- berry.		



City	Name of health officer	Official title
<b>Pennsylvania—Continued.</b>		
Phoenixville	*Russell E. Deery	Health officer.
Pittsburgh	*Charles B. Maits, M. D.	Director, department of public health.
Bureau of infectious diseases (including municipal and tuberculosis hospitals).	*P. E. Marks, M. D.	Superintendent.
Bureau of sanitation	*Charles Parkinson	Do.
Bureau of child welfare.	*H. J. Benz, M. D.	Do.
Bureau of food inspection.	*J. C. McNeill, V. M. D.	Do.
Bureau of smoke regulation.	*H. B. Meller, C. E.	Do.
Pittston	*Michael A. McHale	Health officer.
Plymouth	H. G. Templeton, M. D.	Do.
Pottstown	*A. John André	Do.
Pottsville	*Chas. A. Heiser	Do.
Punkstawney	J. Frank Boney	Do.
Reading	*Ira J. Hain, M. D.	Do.
Scranton	Frank G. Bryant, M. D.	Director, department of health.
Shamokin		
Sharon	*L. C. Brainard	Sanitary officer.
Shenandoah	*Joseph Meluskey	Health officer.
Steelton	*E. G. Butler	Do.
Sunbury	*Victor A. Koble	Do.
Swissvale	*Samuel L. Glasgow	Do.
Tamaqua	Lamont Perrine	Do.
Taylor	E. E. Edwards, M. D.	Do.
Tyrone	A. D. Mencer	Do.
Uniontown	*W. C. Hall	Do.
Vandergrift	Thos. J. Wyatt	Do.
Warren	*R. N. Brown	Do.
Washington	*Thos. W. Henderson	Do.
Waynesboro	*Percy H. Snowberger	Do.
West Chester	Enoch P. Hershey	Do.
Wilkes-Barre		
Wilkesburg	*J. M. Snyder	Do.
Williamsburg	E. T. Clark	Do.
Williamsport	Robert F. Trainer, M. D.	Do.
Windber	S. W. McMullen	Chief of police.
York	J. Frank Small, M. D.	Director of public health.
<b>Rhode Island:</b>		
Bristol		
Central Falls	Adolph R. V. Fenwick, M. D.	Superintendent of health.
Cranston	Daniel S. Latham, M. D.	Do.
Cumberland		
East Providence		
Newport	Edward V. Murphy, M. D.	Commissioner of health.
Pawtucket	Florian A. Ruest, M. D.	Superintendent of health.
Providence	*Charles Value Chapin, M. D.	Superintendent of health and city registrar.
Warwick		
West Warwick	Daniel S. Harrop, M. D.	Health officer.
Westerly	Samuel C. Webster, Ph. G., M. D.	Superintendent of health.
Woonsocket	Thomas S. Flynn, M. D.	Health officer.
<b>South Carolina:</b>		
Anderson	*E. R. Van De Grift, D. V. M.	Commissioner of health.
Charleston	*Leon Banov, M. D.	City-county health officer.
Columbia	Paul Eugene Payne	Health officer.
Florence	*George D. Heath, M. D., Dr. P. H.	Health commissioner.
Greenville	*Irving S. Barksdale, M. D.	Commissioner of health.
Spartanburg		
Sumter	*J. R. Sumter	Health officer.
<b>South Dakota:</b>		
Aberdeen	M. C. Johnston, M. D.	City and county health officer.
Sioux Falls	Wm. E. Donahoe, M. D.	Health officer.
Watertown	George H. Richards, M. D.	City health officer.
<b>Tennessee:</b>		
Chattanooga	*Fred C. McIsaac, M. D.	Director of health.
Jackson	Hermion Hawkins, M. D.	City physician.
Johnson City	*S. S. Moody, M. D.	City health officer.
Knoxville	*W. H. Ennels, M. D.	Do.
Memphis	*L. M. Graves, M. D.	Superintendent of health department.
Nashville	*John Overton, M. D.	Health officer.
<b>Texas:</b>		
Abilene	Scott W. Hollis, M. D.	City and county health officer.
Amarillo	*H. H. Latson, M. D.	City health officer.
Austin	*Lee E. Edens, M. D.	Director of public health and welfare.
Beaumont	Dru McMickin, M. D.	City health officer.
Brownsville	Harry Kalman Loew, M. D.	Do.
Cleburne	M. T. Knox, M. D.	Do.

City	Name of health officer	Official title
<b>Texas—Continued.</b>		
Corpus Christi		City health officer.
Corsicana		Do.
Dallas	*Lane B. Cooke, M. D.	Director of public health.
Del Rio	B. F. Orr, M. D.	City health officer.
Denison	A. G. Sneed, M. D.	Do.
Eastland	E. R. Townsend, M. D.	Do.
El Paso	*P. R. Outlaw, M. D.	Do.
Fort Worth	*Arthur Heath Flickwir, surgeon, U. S. P. H. S.	Director of public health and welfare.
Galveston	Walter Kleberg, M. D.	City health officer.
Houston	*Allen C. Hutcheson, M. D.	Do.
Laredo		
Marshall	Galen Eads, M. D.	City physician.
Orange	J. E. Reeves, M. D.	Health officer.
Palestine	J. M. Colley, M. D.	City health officer.
Paris	D. S. Hammond, M. D.	Do.
Port Arthur	A. S. Pollock, M. D.	Do.
Ranger	Walter C. Palmer, M. D.	Do.
San Angelo	A. C. De Long, M. D.	Do.
San Antonio	*William A. King, M. D.	Do.
San Benito	*W. E. Spivey, M. D.	Director county health unit.
Sherman	A. L. Ridings, M. D.	City health officer.
Temple	Benjamin F. Lee, M. D.	Do.
Texarkana		
Tyler	Albert Woldert, Ph. G., M. D.	Do.
Waco	T. E. Tabb, M. D.	Do.
Wichita Falls	*Hartson D. Fillmore, M. D.	City physician.
<b>Utah:</b>		
Logan		
Ogden	N. Henry Savage, M. D.	Do.
Provo	John L. Aird, M. D.	Do.
Salt Lake City	W. Christopherson, Ph. G., M. D.	Health commissioner.
<b>Vermont:</b>		
Barre	Marshal Dana Lamb, M. D.	City health officer.
Bennington		
Burlington	Erald F. Foster, M. D.	Health officer.
Rutland	*Clare M. Cole	Do.
<b>Virginia:</b>		
Alexandria	*W. Lewis Schafer, M. D.	Health officer and clinician.
Charlottesville	*George B. Young, M. D.	Health officer.
Danville	*R. N. Garnett, M. D.	City health officer.
Lynchburg	*Mosby G. Ferrow, Ph. D.	Director of public welfare.
Newport News	*G. Colbert Tyler, M. D.	Health officer.
Norfolk	*Powhatan S. Schenck, M. D.	Health commissioner.
Petersburg		
Portsmouth	*Lonsdale J. Roper, M. D.	Director of public welfare.
Richmond	*W. Brownley Foster, M. D.	Director of public welfare and health officer.
Roanoke	*Coleman Bernard Ransone, M. D.	Health officer.
Staunton	*J. F. Fulton, M. D.	Do.
Suffolk	*Challis H. Dawson, M. D.	Director of health.
<b>Washington:</b>		
Aberdeen	B. O. Swinehart, M. D.	City health officer.
Bellingham	Isaac W. Powell, M. D.	Do.
Bremerton	P. L. Sanders, M. D.	Do.
Everett	C. W. Stomberg, M. D.	Do.
Hoquiam	E. L. Calhoun, M. D.	Do.
Seattle	*E. T. Hanley, M. D.	Commissioner of health.
Spokane	Ralph Hendricks, M. D.	Commissioner of public affairs and health officer.
Tacoma	*Herman S. Judd, M. D.	Director of health.
Vancouver	*Geo. H. T. Sparling, M. D.	Health officer and field agent, United States Public Health Service.
Walla Walla	*Jerry E. Vanderpool, M. D.	County and city health officer.
Yakima	*Lloyd Moffitt, M. D.	Do.
<b>West Virginia:</b>		
Bluefield	*David B. Lepper, M. D., C. P. H.	Director of health.
Charleston	Hugh B. Robins, M. D.	Health officer.
Clarksburg	*Benjamin F. Matheny, M. D.	City physician.
Fairmont	*J. A. Jamison, M. D.	City health officer.
Huntington	L. T. Vinson, M. D.	Do.
Martinsburg	*W. Ross Cameron, M. D.	City and county health officer.
Morgantown	*Harry H. Pierce, M. D., C. M.	City health officer.
Moundsville	C. E. Hutchinson, M. D.	City and county health officer.
Parkersburg	*Arthur D. Knott, M. D., Dr. P. H.	Do.
Wheeling	*William Hay McLain, M. D.	City-county health commissioner.
<b>Wisconsin:</b>		
Appleton	Frank P. Dohearty, M. D.	Health officer.
Ashland		
Beloit	*Clifford W. Andrews, M. D.	Do.
Eau Clair	L. H. Flynn, M. D.	Do.
Fond du Lac	*G. B. McKnight, M. D.	Health commissioner.

City	Name of health officer	Official title
Wisconsin—Continued.		
Green Bay.....	Henry S. Atkinson, M. D.....	City physician and health commissioner.
Janesville.....	Fred B. Welch, M. D.....	City health officer.
Kenosha.....	*G. Windesheim, M. D.....	Director of health.
La Crosse.....	*Anthony M. Murphy.....	Health officer.
Madison.....	*F. F. Bowman, B. L., M. D.....	Do.
Manitowoc.....	W. G. Kemper, M. D.....	Commissioner of health.
Marinette.....	J. Wm. Boren, M. D.....	Do.
Milwaukee.....	*John P. Koebler, M. D.....	Do.
	E. V. Brumbaugh, M. D.....	Deputy health officer.
	George P. Barth, M. D.....	Director.
School hygiene division.		
Division of venereal diseases.	William J. McKillip, M. D.....	Do.
Vital statistics.	George E. Adams.....	Deputy registrar.
Division of tuberculosis.	George R. Ernst, M. D.....	Director.
Contagious disease division.	M. R. French, M. D.....	Do.
Division of food and sanitary inspection.	Stanley Pilgrim, M. D.....	Do.
Bureau of laboratories.	R. W. Cunliffe.....	Do.
Division of child welfare.	E. V. Brumbaugh, M. D.....	Do.
Division of nurses.....	Alma Brunk, R. N.....	Do.
Oshkosh.....	*Edward Joseph Campbell, M. D.....	Health commissioner.
Racine.....	*W. W. Bauer, M. D.....	Health officer.
Sheboygan.....	*Gustav J. Hildebrand, M. D.....	Commissioner of public health.
Stevens Point.....	F. R. Krembs, M. D.....	Health officer.
Superior.....	*Geo. Hall Conklin, M. D.....	Health commissioner.
Waukesha.....	Frank M. Scheele, M. D.....	Do.
Wausau.....	*L. F. Bugbee.....	Health officer.
West Allis.....	*Samuel C. McCorkle, M. D.....	Health commissioner.
Wyoming:		
Casper.....	H. R. Lathrop, M. D.....	County and city health officer.
Cheyenne.....	N. C. Nelson, M. D.....	Do.

## DEATHS DURING WEEK ENDED OCTOBER 25, 1930

*Summary of information received by telegraph from industrial insurance companies for the week ended October 25, 1930, and corresponding week of 1929. (From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce)*

	Week ended Oct. 25, 1930	Corresponding week, 1929
Policies in force.....	75, 394, 853	74, 968, 195
Number of death claims.....	13, 092	13, 305
Death claims per 1,000 policies in force, annual rate.....	9. 1	9. 3

*Deaths<sup>1</sup> from all causes in certain large cities of the United States during the week ended October 25, 1930, infant mortality, annual death rate, and comparison with corresponding week of 1929. (From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce)*

The rates published in this summary are based upon mid-year population estimates derived from the 1930 census. The rates are not exactly comparable with similar rates published in the Public Health Reports earlier than the issue of August 22, 1930, which were based upon estimates made before the 1930 census was taken]

City	Week ended Oct. 25, 1930				Corresponding week, 1929		Death rate <sup>1</sup> for first 43 weeks	
	Total deaths	Death rate <sup>2</sup>	Deaths under 1 year	Infant mortality rate <sup>3</sup>	Death rate <sup>2</sup>	Deaths under 1 year	1930	1929
Total (78 cities).....	7, 383	11. 1	726	4 59	11. 8	733	12. 0	12. 7
Akron.....	38	7. 8	8	74	8. 7	6	8. 0	9. 4
Albany <sup>4</sup> .....	25	10. 2	2	41	15. 7	4	14. 7	16. 4
Atlanta.....	86	16. 7	10	102	9. 3	1	15. 9	16. 1
White.....	51		6	95		1		
Colored.....	35	( <sup>5</sup> )	4	115		0	( <sup>5</sup> )	( <sup>5</sup> )

See footnotes at end of table.

*Deaths<sup>1</sup> from all causes in certain large cities of the United States during the week ended October 25, 1930, infant mortality, annual death rate, and comparison with corresponding week of 1929—Continued*

City	Week ended Oct. 25, 1930				Corresponding week, 1929		Death rate <sup>2</sup> for first 43 weeks	
	Total deaths	Death rate <sup>1</sup>	Deaths under 1 year	Infant mortality rate <sup>1</sup>	Death rate <sup>1</sup>	Deaths under 1 year	1930	1929
Baltimore <sup>4</sup> .....	199	12.9	21	73	13.4	18	14.0	14.7
White.....	125		14	62		11		
Colored.....	74	( <sup>9</sup> )	7	112	( <sup>9</sup> )	7	( <sup>9</sup> )	( <sup>9</sup> )
Birmingham.....	49	9.8	4	38	14.3	12	13.7	16.1
White.....	21		0	0		8		
Colored.....	28	( <sup>9</sup> )	4	98	( <sup>9</sup> )	4	( <sup>9</sup> )	( <sup>9</sup> )
Boston.....	201	13.4	28	81	12.8	26	14.1	15.1
Bridgeport.....	26	9.2	1	17	9.6	3	11.0	12.2
Buffalo.....	116	10.5	10	45	13.5	10	13.0	14.1
Cambridge.....	25	11.5	2	40	12.0	1	11.9	12.6
Camden.....	23	10.2	3	53	16.0	8	13.5	14.6
Canton.....	25	12.3	3	80	13.0	2	10.0	11.4
Chicago <sup>1</sup> .....	569	8.7	53	47	10.3	50	10.4	11.3
Cincinnati.....	124	14.4	16	94	16.4	17	15.6	17.2
Cleveland.....	150	8.7	17	51	10.4	14	11.1	12.5
Columbus.....	68	12.2	12	118	16.6	13	15.6	14.9
Dallas.....	59	11.7	2		8.0	5	11.3	11.5
White.....	43		1			5		
Colored.....	16	( <sup>9</sup> )	1		( <sup>9</sup> )	0	( <sup>9</sup> )	( <sup>9</sup> )
Dayton.....	40	10.4	4	60	9.0	6	10.8	11.6
Denver.....	73	13.2	6	65	13.7	8	14.8	14.9
Des Moines.....	29	10.6	3	55	10.3	0	11.7	11.7
Detroit.....	268	8.8	43	66	10.6	39	9.3	11.3
Duluth.....	26	13.4	3	81	11.9	4	11.3	11.6
El Paso.....	22	11.2	6		13.0	6	17.3	19.8
Erie.....	32	14.4	2	44	6.8	2	11.2	12.4
Fall River <sup>1</sup> .....	16	7.3	0	0	8.6	2	11.9	13.8
Flint.....	22	7.3	4	47	7.2	4	9.2	10.8
Fort Worth.....	37	11.9	3		8.9	4	11.1	12.3
White.....	31		3			4		
Colored.....	6	( <sup>9</sup> )	0		( <sup>9</sup> )	0	( <sup>9</sup> )	( <sup>9</sup> )
Grand Rapids.....	30	9.3	5	75	7.5	2	10.3	10.2
Houston.....	63	11.2	9		8.9	4	12.2	12.7
White.....	45		5			1		
Colored.....	18	( <sup>9</sup> )	4		( <sup>9</sup> )	3	( <sup>9</sup> )	( <sup>9</sup> )
Indianapolis.....	84	12.0	10	75	12.9	5	14.7	14.8
White.....	67		6	52		4		
Colored.....	17	( <sup>9</sup> )	4	233	( <sup>9</sup> )	1	( <sup>9</sup> )	( <sup>9</sup> )
Jersey City.....	78	12.9	10	87	12.9	7	11.3	12.6
Kansas City, Kans.....	23	9.8	4	93	7.3	0	11.7	13.1
White.....	20		4	110		0		
Colored.....	3	( <sup>9</sup> )	0	0	( <sup>9</sup> )	0	( <sup>9</sup> )	( <sup>9</sup> )
Kansas City, Mo.....	98	13.0	8	67	12.8	6	13.5	14.0
Knoxville.....	23	11.3	0	0	15.1	3	13.7	14.0
White.....	19		0	0		3		
Colored.....	4	( <sup>9</sup> )	0	0	( <sup>9</sup> )	0	( <sup>9</sup> )	( <sup>9</sup> )
Los Angeles.....	246	10.3	18	54	10.0	17	11.0	11.4
Louisville.....	81	13.7	7	60	14.2	8	13.6	16.0
White.....	62		4	39		6		
Colored.....	19	( <sup>9</sup> )	3	199	( <sup>9</sup> )	2	( <sup>9</sup> )	( <sup>9</sup> )
Lowell <sup>1</sup> .....	27	14.0	3	79	13.4	2	13.5	14.2
Lynn.....	20	10.2	2	56	9.7	1	10.4	11.3
Memphis.....	70	14.4	11	129	17.1	12	17.1	19.1
White.....	35		5	80		7		
Colored.....	35	( <sup>9</sup> )	6	202	( <sup>9</sup> )	5	( <sup>9</sup> )	( <sup>9</sup> )
Milwaukee.....	118	10.8	14	61	9.8	9	9.8	11.0
Minneapolis.....	105	11.8	10	66	8.2	7	10.7	10.8
Nashville.....	36	12.8	11	173	17.8	6	17.4	18.9
White.....	20		4	84		3		
Colored.....	16	( <sup>9</sup> )	7	435	( <sup>9</sup> )	3	( <sup>9</sup> )	( <sup>9</sup> )
New Bedford <sup>1</sup> .....	21	9.7	1	26	8.3	1	10.9	12.1
New Haven.....	30	9.6	3	46	17.3	2	12.7	13.5
New Orleans.....	138	15.7	13	72	17.5	10	17.5	17.7
White.....	74		5	42		6		
Colored.....	64	( <sup>9</sup> )	8	130	( <sup>9</sup> )	4	( <sup>9</sup> )	( <sup>9</sup> )
New York.....	1,380	10.3	120	50	11.4	142	10.7	11.4
Bronx Borough.....	166	6.8	14	41	8.7	20	7.8	8.8
Brooklyn Borough.....	495	9.9	52	55	10.3	57	9.7	10.3
Manhattan Borough.....	529	14.9	40	51	16.7	53	16.1	16.5
Queens Borough.....	151	7.2	11	44	6.9	9	7.1	7.6
Richmond Borough.....	39	12.9	3	58	14.9	3	14.4	16.0

See footnotes at end of table.

*Deaths<sup>1</sup> from all causes in certain large cities of the United States during the week ended October 25, 1930, infant mortality, annual death rate, and comparison with corresponding week of 1929—Continued*

City	Week ended Oct. 25, 1930				Corresponding week, 1929		Death rate <sup>2</sup> for first 43 weeks	
	Total deaths	Death rate <sup>2</sup>	Deaths under 1 year	Infant mortality rate <sup>3</sup>	Death rate <sup>2</sup>	Deaths under 1 year	1930	1929
Newark, N. J.	101	11.8	13	68	11.0	11	12.0	12.8
Oakland	61	11.1	2	25	9.9	1	10.9	11.4
Oklahoma City	38	10.7	3	54	11.5	4	10.9	10.8
Omaha	55	13.4	4	49	14.2	6	13.5	13.7
Paterson	34	12.8	3	52	14.3	5	12.2	13.3
Philadelphia	455	12.1	34	51	12.4	38	12.5	13.2
Pittsburgh	160	12.4	23	82	13.2	23	13.8	14.8
Portland, Oreg.	78	13.6	7	87	12.0	4	12.2	12.7
Providence	49	10.2	1	9	13.3	2	13.0	14.6
Richmond	44	12.5	4	58	11.5	7	14.7	16.3
White	24	( <sup>4</sup> )	0	0		6		
Colored	20	( <sup>4</sup> )	4	171	( <sup>4</sup> )	1	( <sup>4</sup> )	( <sup>4</sup> )
Rochester	62	9.9	8	71	12.3	5	11.6	12.4
St. Louis	217	13.7	16	56	15.8	30	14.1	14.7
St. Paul	54	10.4	4	40	9.7	6	10.1	10.5
Salt Lake City <sup>5</sup>	46	17.1	5	79	13.6	3	12.3	13.0
San Antonio	51	10.4	7		14.3	5	14.8	14.5
San Diego	47	16.4	2	42	12.0	2	14.4	15.2
San Francisco	151	12.5	7	47	12.2	7	13.1	13.0
Schenectady	14	7.6	0	0	10.4	2	11.2	12.3
Seattle	71	10.2	7	71	10.6	1	10.9	11.2
Somerville	18	9.0	4	126	7.6	1	9.8	9.2
Spokane	34	15.3	4	104	12.7	2	12.4	12.8
Springfield, Mass.	31	10.8	1	17	13.0	7	12.2	12.9
Syracuse	54	13.6	5	62	12.7	8	11.8	13.2
Tacoma	34	16.6	2	55	13.7	1	12.4	11.9
Toledo	62	11.1	6	55	16.3	14	12.7	13.7
Trenton	38	16.1	4	77	16.6	5	16.8	17.1
Utica	33	16.7	2	56	12.2	1	14.7	15.7
Washington, D. C.	135	14.5	12	70	14.6	5	15.1	15.4
White	78	( <sup>4</sup> )	1	9		2		
Colored	57	( <sup>4</sup> )	11	196	( <sup>4</sup> )	3	( <sup>4</sup> )	( <sup>4</sup> )
Waterbury	14	7.2	2	49	8.3	3	9.4	9.5
Wilmington, Del.	28	13.9	2	48	14.9	5	14.6	14.0
Worcester	42	11.1	2	28	9.9	2	12.6	12.6
Yonkers	22	8.4	1	24	9.4	4	8.0	9.3
Youngstown	31	9.5	4	57	12.2	4	10.2	12.3

<sup>1</sup> Deaths of nonresidents are included. Stillbirths are excluded.

<sup>2</sup> These rates represent annual rates per 1,000 population, as estimated for 1930 and 1929 by the arithmetical method.

<sup>3</sup> Deaths under 1 year of age per 1,000 live births. Cities left blank are not in the registration area for births.

<sup>4</sup> Data for 73 cities.

<sup>5</sup> Deaths for week ended Friday.

<sup>6</sup> For the cities for which deaths are shown by color the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Louisville, 17; Memphis, 38; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 25.

<sup>7</sup> Population, Apr. 1, 1930; decreased 1920 to 1930; no estimate made.

# PREVALENCE OF DISEASE

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

## UNITED STATES

### CURRENT WEEKLY STATE REPORTS

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

Reports for Weeks Ended November 1, 1930, and November 2, 1929

*Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended November 1, 1930, and November 2, 1929*

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929
<b>New England States:</b>								
Maine.....	4	8	6	-----	3	29	0	0
New Hampshire.....	2	2	-----	-----	-----	6	0	0
Vermont.....	1	3	-----	-----	6	-----	0	0
Massachusetts.....	76	95	2	3	93	51	0	1
Rhode Island.....	11	14	-----	29	-----	-----	0	0
Connecticut.....	17	19	3	5	47	2	0	1
<b>Middle Atlantic States:</b>								
New York.....	78	114	17	116	93	183	11	11
New Jersey.....	66	126	6	6	48	28	1	6
Pennsylvania.....	100	232	-----	-----	126	262	5	5
<b>East North Central States:</b>								
Ohio.....	114	106	18	16	24	198	6	6
Indiana.....	36	32	7	-----	24	6	2	1
Illinois.....	175	226	11	17	31	103	6	12
Michigan.....	68	96	-----	4	54	103	6	10
Wisconsin.....	29	19	11	20	320	163	2	0
<b>West North Central States:</b>								
Minnesota.....	18	25	-----	2	8	33	1	1
Iowa.....	10	15	-----	-----	1	22	0	0
Missouri.....	47	41	-----	2	153	16	5	5
North Dakota.....	24	11	-----	-----	15	9	1	0
South Dakota.....	5	-----	-----	-----	-----	1	0	0
Nebraska.....	12	32	-----	4	15	7	0	0
Kansas.....	1	55	-----	1	40	50	23	0
<b>South Atlantic States:</b>								
Delaware.....	2	1	-----	3	1	1	0	0
Maryland <sup>1</sup> .....	34	19	11	13	4	12	1	0
District of Columbia.....	4	12	-----	-----	3	2	2	0
Virginia.....	-----	-----	-----	-----	-----	-----	-----	-----
West Virginia.....	34	34	20	12	23	28	0	0
North Carolina.....	167	268	11	4	5	1	0	1
South Carolina.....	60	68	449	506	-----	-----	0	0
Georgia.....	39	24	68	85	6	2	1	2
Florida.....	33	16	3	2	7	1	0	0
<b>East South Central States:</b>								
Kentucky.....	35	31	-----	-----	47	-----	2	4
Tennessee.....	45	81	31	40	9	39	1	4
Alabama.....	114	72	19	85	21	7	4	0
Mississippi.....	72	68	-----	-----	-----	-----	1	0

<sup>1</sup> New York City only.

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

*Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended November 1, 1930, and November 2, 1929—Continued*

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929
West South Central States:								
Arkansas.....	18	20	44	27	1	1	0	0
Louisiana.....	26	47	6	4	3	—	1	0
Oklahoma <sup>1</sup> .....	56	137	27	47	10	17	1	0
Texas.....	42	111	14	19	13	5	1	0
Mountain States:								
Montana.....	—	2	—	1	3	147	0	3
Idaho.....	—	1	—	—	4	9	0	3
Wyoming.....	—	—	2	—	—	1	0	3
Colorado.....	8	11	—	—	29	4	0	0
New Mexico.....	9	13	2	—	8	2	2	0
Arizona.....	13	32	1	6	30	3	1	9
Utah <sup>2</sup> .....	—	—	3	—	1	25	2	4
Pacific States:								
Washington.....	33	26	3	—	8	28	2	2
Oregon.....	2	8	29	17	31	10	0	2
California.....	50	55	30	24	131	59	1	3

  

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929
New England States:								
Maine.....	11	1	19	31	0	0	6	3
New Hampshire.....	1	0	4	11	0	0	1	0
Vermont.....	2	0	3	6	0	5	0	0
Massachusetts.....	33	4	128	156	0	0	5	7
Rhode Island.....	0	0	7	12	0	0	4	0
Connecticut.....	4	0	18	36	0	0	2	0
Middle Atlantic States:								
New York.....	18	14	210	192	0	20	29	33
New Jersey.....	1	2	107	86	0	0	12	9
Pennsylvania.....	5	12	261	250	0	7	64	42
East North Central States:								
Ohio.....	98	9	460	225	15	86	50	34
Indiana.....	13	0	173	115	14	101	22	6
Illinois.....	17	3	301	333	27	104	16	20
Michigan.....	18	2	129	199	13	81	18	11
Wisconsin.....	13	0	90	88	1	18	15	15
West North Central States:								
Minnesota.....	45	1	33	103	2	2	5	7
Iowa.....	12	6	41	49	11	40	8	2
Missouri.....	9	2	77	53	15	3	17	7
North Dakota.....	3	0	17	24	25	8	6	1
South Dakota.....	9	0	5	13	20	8	3	11
Nebraska.....	12	1	25	31	12	9	5	1
Kansas.....	79	3	5	86	0	11	3	5
South Atlantic States:								
Delaware.....	0	0	12	4	0	0	4	1
Maryland <sup>2</sup> .....	3	0	48	53	0	0	31	18
District of Columbia.....	0	0	9	5	0	0	3	0
Virginia.....	—	5	—	—	—	45	—	—
West Virginia.....	3	0	36	75	16	9	38	22
North Carolina.....	0	3	148	142	4	8	13	15
South Carolina.....	3	2	38	41	2	0	28	20
Georgia.....	0	0	45	40	0	0	14	4
Florida.....	0	0	5	14	0	0	3	2
East South Central States:								
Kentucky.....	1	0	90	71	0	—	22	8
Tennessee.....	1	1	34	79	3	0	24	27
Alabama.....	8	0	85	77	0	1	17	12
Mississippi.....	0	0	36	22	0	0	23	10
West South Central States:								
Arkansas.....	5	0	23	26	2	2	44	22
Louisiana.....	1	0	12	24	0	0	28	13
Oklahoma <sup>1</sup> .....	1	0	36	64	11	36	43	41
Texas.....	4	0	14	28	4	3	9	14

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

<sup>2</sup> Figures for 1930 are exclusive of Oklahoma City and Tulsa.

*Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended November 1, 1930, and November 2, 1929—Continued*

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929	Week ended Nov. 1, 1930	Week ended Nov. 2, 1929
<b>Mountain States:</b>								
Montana.....	2	0	16	30	1	3	6	9
Idaho.....	1	0	9	13	0	6	1	0
Wyoming.....	1	0	2	4	0	10	1	0
Colorado.....	3	0	38	16	5	3	7	1
New Mexico.....	0	1	2	3	0	2	10	4
Arizona.....	0	1	3	17	3	7	7	13
Utah <sup>1</sup> .....	0	0	3	4	0	0	0	3
<b>Pacific States:</b>								
Washington.....	2	3	31	46	29	15	16	12
Oregon.....	1	2	16	27	0	3	1	4
California.....	61	1	73	200	16	17	13	13

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

### SUMMARY OF MONTHLY REPORTS FROM STATES

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

State	Cerebro-spinal meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
<i>September, 1930</i>										
Arkansas.....	2	21	10	261	1	141	16	43	5	133
Montana.....	2	6			5		3	57		39
Nevada.....							2			1
Virginia.....	4	156	392	111	92	53	18	186	9	213
Wisconsin.....	5	28	71		104		47	153	20	32
<i>October, 1930</i>										
Georgia.....	1	111	138	459	43	42	7	126	1	130

<i>September, 1930</i>		Cases
<b>Chicken pox:</b>		
Arkansas.....	15	
Montana.....	28	
Nevada.....	4	
Virginia.....	74	
Wisconsin.....	134	
<b>Diarrhea and dysentery:</b>		
Virginia.....	848	
<b>Dysentery:</b>		
Montana.....	15	
<b>Hookworm disease:</b>		
Arkansas.....	13	
<b>Lethargic encephalitis:</b>		
Wisconsin.....	3	
<b>Mumps:<sup>1</sup></b>		
Arkansas.....	23	
Montana.....	12	
Wisconsin.....	118	
<b>Ophthalmia neonatorum:</b>		
Arkansas.....	1	
<b>Paratyphoid fever:</b>		
Arkansas.....	1	
<b>Septic sore throat:</b>		
Montana.....	4	
<b>Trachoma:</b>		
Arkansas.....	2	
Montana.....	8	

<b>Tularæmia:</b>	Cases
Nevada.....	1
Virginia.....	1
<b>Typhus fever:</b>	
Virginia.....	1
<b>Undulant fever:</b>	
Wisconsin.....	2
<b>Whooping cough:<sup>1</sup></b>	
Arkansas.....	45
Montana.....	51
Nevada.....	7
Virginia.....	204
Wisconsin.....	548

#### October, 1930

<b>Georgia:</b>	
Chicken pox.....	7
Dengue.....	4
Dysentery.....	22
Hookworm disease.....	38
Mumps.....	9
Paratyphoid fever.....	2
Septic sore throat.....	19
Typhus fever.....	24
Whooping cough.....	45

<sup>1</sup> Cases of mumps and whooping cough reported for Iowa in Public Health Reports for November 7, 1930, pp. 2764 and 2765, should have been for Idaho.



## GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

The 97 cities reporting cases used in the following table are situated in all parts of the country and have an estimated aggregate population of more than 32,130,000. The estimated population of the 91 cities reporting deaths is more than 30,570,000. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

*Weeks ended October 25, 1930, and October 26, 1929*

	1930	1929	Esti- mated expect- ancy
<i>Cases reported</i>			
Diphtheria:			
46 States.....	1, 674	2, 428	-----
97 cities.....	485	810	1, 022
Measles:			
45 States.....	938	1, 511	-----
97 cities.....	230	181	-----
Meningococcus meningitis:			
46 States.....	68	103	-----
97 cities.....	36	35	-----
Poliomyelitis: 46 States.....	397	104	-----
Scarlet fever:			
46 States.....	2, 510	2, 881	-----
97 cities.....	760	833	803
Smallpox:			
46 States.....	249	436	-----
97 cities.....	15	62	15
Typhoid fever:			
46 States.....	741	497	-----
97 cities.....	109	92	93
<i>Deaths reported</i>			
Influenza and pneumonia: 91 cities.....	551	675	-----
Smallpox: 91 cities.....	0	0	-----

## City reports for week ended October 25, 1930

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

If the reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1921 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviation from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and City	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
		Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND								
Maine:								
Portland.....	0	1	0	-----	0	0	0	1
New Hampshire:								
Concord.....	0	0	0	-----	0	0	0	0
Nashua.....	1	1	1	-----	0	0	0	0

## City reports for week ended October 25, 1930—Continued

Division, State, and City	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases re- ported	Mumps, cases re- ported	Pneu- monia, deaths reported
		Cases, estimated expect- ancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND—CON.								
Vermont:								
Barre.....	0	0	0	-----	0	0	0	0
Burlington.....	0	1	0	-----	0	0	0	0
Massachusetts:								
Boston.....	31	28	22	-----	1	23	3	21
Fall River.....	1	3	2	-----	0	0	0	1
Springfield.....	26	4	2	-----	0	0	0	2
Worcester.....	7	5	11	1	0	0	0	3
Rhode Island:								
Pawtucket.....	0	1	0	-----	0	0	0	2
Providence.....	11	8	4	-----	0	0	0	2
Connecticut:								
Bridgeport.....	1	4	0	-----	0	1	0	0
Hartford.....	6	5	2	-----	0	2	0	3
New Haven.....	0	1	1	-----	0	5	0	6
MIDDLE ATLANTIC								
New York:								
Buffalo.....	15	14	6	-----	0	8	2	11
New York.....	49	132	35	4	10	38	23	135
Rochester.....	14	5	0	-----	0	1	0	0
Syracuse.....	10	4	0	-----	0	0	1	4
New Jersey:								
Camden.....	1	8	1	-----	0	2	4	2
Newark.....	13	13	14	6	1	3	6	7
Trenton.....	3	2	1	-----	0	0	0	1
Pennsylvania:								
Philadelphia.....	50	56	9	1	3	6	10	56
Pittsburgh.....	4	25	9	-----	0	5	4	28
Reading.....	9	2	0	-----	0	0	4	1
EAST NORTH CENTRAL								
Ohio:								
Cincinnati.....	1	11	2	1	1	2	4	5
Cleveland.....	53	52	15	3	0	4	26	14
Columbus.....	28	5	1	-----	0	1	0	4
Toledo.....	36	9	9	-----	0	2	3	1
Indiana:								
Fort Wayne.....	3	5	3	-----	0	0	0	3
Indianapolis.....	11	14	3	-----	0	2	3	9
South Bend.....	5	2	1	-----	0	0	0	3
Terre Haute.....	0	2	1	-----	0	0	0	3
Illinois:								
Chicago.....	86	118	97	4	3	3	33	25
Springfield.....	0	0	2	-----	0	0	0	0
Michigan:								
Detroit.....	60	66	37	-----	1	4	6	10
Flint.....	8	6	0	-----	0	4	2	2
Grand Rapids.....	2	3	0	-----	0	0	1	1
Wisconsin:								
Kenosha.....	41	1	1	-----	0	0	2	1
Madison.....	4	2	0	-----	-----	0	10	-----
Milwaukee.....	49	18	6	-----	0	5	9	3
Racine.....	10	2	0	-----	0	0	1	1
Superior.....	1	0	0	-----	0	0	0	0
WEST NORTH CENTRAL								
Minnesota:								
Duluth.....	18	2	0	-----	0	0	0	1
Minneapolis.....	42	33	2	-----	1	3	15	3
St. Paul.....	20	13	0	-----	0	0	2	5
Iowa:								
Davenport.....	3	1	1	-----	-----	0	1	-----
Des Moines.....	1	4	0	-----	-----	0	0	-----
Sioux City.....	3	2	5	-----	-----	0	3	-----
Waterloo.....	9	1	0	-----	-----	0	0	-----
Missouri:								
Kansas City.....	19	11	7	-----	1	2	0	3
St. Joseph.....	1	2	0	-----	0	1	0	1
St. Louis.....	11	43	14	1	1	66	3	-----

## City reports for week ended October 25, 1930—Continued

Division, State, and City	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases re- ported	Mumps, cases re- ported	Pneu- monia, deaths reported
		Cases, estimated expect- ancy	Cases reported	Cases reported	Deaths reported			
WEST NORTH CENTRAL—CON.								
North Dakota:								
Fargo.....	14	0	0		0	0	6	0
Grand Forks.....	0	0	0			0	0	
South Dakota:								
Sioux Falls.....	0	1	0			0	0	
Nebraska:								
Omaha.....	1	14	4		0	1	1	5
Kansas:								
Topeka.....	1	3	2	2	0	1	1	0
Wichita.....	0	4	0		0	0	0	2
SOUTH ATLANTIC								
Delaware:								
Wilmington.....	0	3	0		0	0	0	0
Maryland:								
Baltimore.....	12	24	9	7	0	0	2	19
Cumberland.....	0	1	0		0	0	0	0
Frederick.....	0	0	0		0	0	0	0
District of Columbia:								
Washington.....	1	18	7	1	0	2	0	22
Virginia:								
Lynchburg.....	0	4	0		0	0	0	0
Norfolk.....	0	3	2		0	0	0	0
Richmond.....	1	22	10		1	2	0	0
Roanoke.....	1	7	4		0	0	0	0
West Virginia:								
Charleston.....	1	2	2		0	0	9	0
Wheeling.....	9	1	0		0	0	0	0
North Carolina:								
Raleigh.....	0	4	4		0	0	0	0
Wilmington.....	0	1	3		0	0	0	0
Winston-Salem.....	1	7	4	2	0	2	0	0
South Carolina:								
Charleston.....	0	1	0	29	0	0	0	0
Columbia.....	0	2	3		0	0	0	0
Greenville.....	0	2	1		0	0	0	0
Georgia:								
Atlanta.....	0	10	2	15	0	1	0	0
Brunswick.....	0	1	0		1	0	0	0
Savannah.....	0	2	4	5	0	0	0	0
Florida:								
Miami.....	0	2	1		0	1	1	0
Tampa.....	0	3	1		0	0	0	0
EAST SOUTH CENTRAL								
Kentucky:								
Covington.....	1	2	0		0	0	0	0
Tennessee:								
Memphis.....	8	10	12		0	0	0	0
Nashville.....	0	3	3		0	1	0	0
Alabama:								
Birmingham.....	0	7	9	2	0	3	0	0
Mobile.....	0	2	2	1	1	0	0	0
Montgomery.....	0	3	4			0	0	
WEST SOUTH CENTRAL								
Arkansas:								
Fort Smith.....		1						
Little Rock.....	0	1	0		0	0	0	1
Louisiana:								
New Orleans.....	0	12	4	1	0	0	0	12
Shreveport.....	0	2	0		0	0	0	0
Oklahoma:								
Muskogee.....	0	6	0		0	0	0	0
Oklahoma City.....	0	5	5		0	0	0	9
Tulsa.....	1	5	9			0	2	
Texas:								
Dallas.....	0	18	6		1	0	2	7
Fort Worth.....	23	6	6		0	0	0	0
Galveston.....	0	2	1		0	0	0	5
Houston.....	0	7	8		0	1	0	4
San Antonio.....	0	3	4		1	0	0	6

## City reports for week ended October 25, 1930—Continued

Division, State, and City	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneu- monia, deaths reported
		Cases, estimated expect- ancy	Cases reported	Cases reported	Deaths reported			
MOUNTAIN								
Montana:								
Billings.....	3	0	0	-----	0	0	0	0
Great Falls.....	6	0	0	-----	0	1	0	0
Helena.....	0	0	0	-----	0	0	0	0
Missoula.....	19	1	0	-----	0	0	0	0
Idaho:								
Boise.....	1	0	0	-----	0	1	0	0
Colorado:								
Denver.....	17	12	7	-----	1	2	5	6
Pueblo.....	1	1	0	-----	0	10	0	0
New Mexico:								
Albuquerque.....	0	0	1	-----	0	0	0	3
Arizona:								
Phoenix.....	0	0	0	-----	1	0	0	2
Utah:								
Salt Lake City....	9	4	0	-----	0	2	3	3
Nevada:								
Reno.....	0	0	0	-----	0	0	0	0
PACIFIC								
Washington:								
Seattle.....	24	5	13	-----	1	3	0	2
Spokane.....	6	3	0	-----	0	0	0	-----
Tacoma.....	8	4	7	-----	0	0	0	3
Oregon:								
Salem.....	1	0	1	-----	0	0	0	0
California:								
Los Angeles.....	18	37	25	11	1	6	8	13
Sacramento.....	3	2	2	1	1	0	5	3
San Francisco.....	15	14	3	2	0	0	7	3

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
NEW ENGLAND											
Maine:											
Portland .....	2	9	0	0	0	0	0	1	0	7	22
New Hampshire:											
Concord .....	1	3	0	0	0	0	0	1	0	0	8
Nashua .....	0	1	0	0	0	0	0	0	0	0	-----
Vermont:											
Barre .....	0	0	0	0	0	0	0	0	0	3	6
Burlington .....	0	0	0	0	0	0	0	0	0	0	12
Massachusetts:											
Boston .....	41	22	0	0	0	11	2	3	0	14	261
Fall River .....	3	1	0	0	0	1	0	2	0	0	16
Springfield .....	5	3	0	0	0	0	0	0	0	0	26
Worcester .....	8	17	0	0	0	0	0	0	0	4	42
Rhode Island:											
Pawtucket .....	1	3	0	0	0	0	0	0	0	5	11
Providence .....	5	4	0	0	0	7	1	2	0	9	49
Connecticut:											
Bridgeport .....	5	0	0	0	0	2	0	2	0	0	26
Hartford .....	3	1	0	0	0	1	0	1	0	3	31
New Haven .....	3	2	0	0	0	0	1	0	0	0	30
MIDDLE ATLANTIC											
New York:											
Buffalo .....	17	8	0	1	0	4	1	0	0	14	105
New York .....	68	46	0	0	0	84	15	14	2	110	1,380
Rochester .....	3	18	0	0	0	1	1	4	0	6	58
Syracuse .....	5	4	0	0	0	1	0	0	0	0	54

## City reports for week ended October 25, 1930—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
MIDDLE ATLANTIC— continued											
New Jersey:											
Camden.....	3	2	0	0	0	1	0	0	0	5	23
Newark.....	9	4	0	0	0	7	2	0	0	27	104
Trenton.....	1	6	0	0	0	3	1	3	0	1	38
Pennsylvania:											
Philadelphia.....	50	64	0	0	0	22	8	5	0	24	455
Pittsburgh.....	31	19	0	0	0	7	1	1	1	1	160
Reading.....	1	1	0	0	0	1	0	0	0	0	23
EAST NORTH CENTRAL											
Ohio:											
Cincinnati.....	11	14	0	2	0	8	0	0	0	0	124
Cleveland.....	22	39	0	0	0	8	1	0	1	7	150
Columbus.....	9	8	0	0	0	2	0	2	1	1	68
Toledo.....	10	8	1	0	0	5	1	0	0	1	62
Indiana:											
Fort Wayne.....	1	0	0	0	0	2	0	1	0	0	24
Indianapolis.....	11	20	1	0	0	7	0	0	0	7	—
South Bend.....	3	2	0	0	0	0	0	0	0	0	16
Terre Haute.....	2	2	0	0	0	0	1	0	0	0	21
Illinois:											
Chicago.....	74	92	0	1	0	30	4	2	0	52	569
Springfield.....	2	0	0	0	0	1	0	0	0	6	26
Michigan:											
Detroit.....	61	49	1	0	0	24	3	1	0	45	268
Flint.....	10	20	1	0	0	1	0	1	0	0	22
Grand Rapids.....	7	8	0	0	0	1	0	0	1	2	30
Wisconsin:											
Kenosha.....	2	2	0	0	0	0	1	1	0	0	4
Madison.....	1	4	1	0	—	—	0	0	—	5	—
Milwaukee.....	18	6	0	0	0	3	0	0	0	26	118
Racine.....	3	11	0	0	0	1	0	0	0	12	14
Superior.....	3	2	0	0	0	0	0	0	0	1	7
WEST NORTH CENTRAL											
Minnesota:											
Duluth.....	8	3	1	0	0	0	0	0	0	6	26
Minneapolis.....	40	3	0	0	0	1	0	0	0	5	105
St. Paul.....	18	10	1	0	0	4	1	0	0	0	59
Iowa:											
Davenport.....	0	0	0	1	—	—	0	1	—	0	—
Des Moines.....	9	6	0	0	—	—	0	0	—	0	29
Sioux City.....	2	6	0	0	—	—	0	0	—	1	1
Waterloo.....	2	0	0	0	—	—	0	0	—	0	—
Missouri:											
Kansas City.....	12	9	0	0	0	10	1	2	1	1	98
St. Joseph.....	3	3	1	0	0	0	0	0	0	0	24
St. Louis.....	31	12	1	0	0	8	4	2	0	2	217
North Dakota:											
Fargo.....	2	3	0	0	0	0	0	0	0	6	12
Grand Forks.....	2	0	1	1	—	—	0	0	—	0	—
South Dakota:											
Sioux Falls.....	2	0	1	1	—	—	0	0	—	0	8
Nebraska:											
Omaha.....	4	7	1	0	0	1	0	0	0	0	55
Kansas:											
Topeka.....	5	1	0	0	0	1	1	0	0	0	10
Wichita.....	5	3	1	0	0	1	0	0	0	0	28
SOUTH ATLANTIC											
Delaware:											
Wilmington.....	4	1	0	0	0	0	0	0	0	0	28
Maryland:											
Baltimore.....	13	16	0	0	0	15	6	12	1	13	199
Cumberland.....	0	1	0	0	0	0	0	1	0	0	9
Frederick.....	1	0	0	0	0	0	0	0	0	0	5
District of Colum- bia:											
Washington.....	15	18	0	0	0	4	2	2	0	13	135

## City reports for week ended October 25, 1930—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths reported	Typhoid fever			Whoop- ing cough, cases reported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths reported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
SOUTH ATLANTIC— continued											
Virginia:											
Lynchburg.....	2	1	0	0	0	1	1	2	0	2	9
Norfolk.....	2	3	0	0	0	0	0	0	0	0	—
Richmond.....	10	11	0	0	0	3	1	0	1	1	51
Roanoke.....	4	2	0	0	0	0	1	0	0	0	15
West Virginia:											
Charleston.....	2	0	0	0	0	0	1	2	0	1	22
Wheeling.....	2	2	0	0	0	0	0	0	0	0	21
North Carolina:											
Raleigh.....	2	1	0	0	0	0	0	0	0	0	12
Wilmington.....	1	4	0	0	0	0	0	0	0	0	8
Winston-Salem.....	3	3	0	0	0	0	0	0	0	0	14
South Carolina:											
Charleston.....	1	0	0	0	0	1	1	1	0	0	26
Columbia.....	1	2	0	0	0	0	0	0	0	0	6
Greenville.....	0	4	0	0	0	0	0	0	0	0	—
Georgia:											
Atlanta.....	8	19	0	0	0	6	1	0	0	0	86
Brunswick.....	0	0	0	0	0	1	0	0	0	0	5
Savannah.....	0	0	0	0	0	4	1	0	0	0	33
Florida:											
Miami.....	1	0	0	0	0	1	1	4	0	0	24
St. Petersburg.....											
Tampa.....	0	0	1	0	0	2	0	0	0	0	20
EAST SOUTH CENTRAL											
Kentucky:											
Covington.....	2	10	0	0	0	0	0	0	0	0	19
Tennessee:											
Memphis.....	5	6	0	0	0	2	3	9	0	5	70
Nashville.....	2	1	0	0	0	5	3	3	0	2	33
Alabama:											
Birmingham.....	5	5	0	0	0	3	1	2	1	2	49
Mobile.....	1	0	0	0	0	1	0	0	0	0	17
Montgomery.....	2	3	0	0	—	—	0	—	—	2	—
WEST SOUTH CENTRAL											
Arkansas:											
Fort Smith.....	0	—	0	—	—	—	0	—	—	—	—
Little Rock.....	3	0	0	0	0	0	1	0	0	0	—
Louisiana:											
New Orleans.....	5	9	0	0	0	9	3	4	0	6	138
Shreveport.....	1	0	0	0	0	0	0	0	0	0	23
Oklahoma:											
Muskogee.....	1	0	0	0	0	0	0	0	0	0	—
Oklahoma City.....	2	12	0	0	0	2	0	2	0	0	38
Tulsa.....	2	3	0	0	—	—	0	0	—	0	—
Texas:											
Dallas.....	6	6	0	0	0	1	1	1	1	2	59
Fort Worth.....	1	2	0	0	0	2	0	0	0	0	36
Galveston.....	0	0	0	0	0	0	0	1	0	0	16
Houston.....	2	1	0	1	0	4	0	0	0	0	63
San Antonio.....	0	3	0	1	0	5	0	1	1	0	51
MOUNTAIN											
Montana:											
Billings.....	0	0	0	0	0	0	0	0	0	2	6
Great Falls.....	1	5	1	0	0	0	0	0	0	0	12
Helena.....	0	0	0	0	0	0	0	0	0	0	2
Missoula.....	0	0	0	0	0	0	1	0	0	0	1
Idaho:											
Boise.....	0	0	0	0	0	0	0	0	0	0	3
Colorado:											
Denver.....	9	10	0	0	0	6	1	4	1	25	80
Pueblo.....	1	0	0	0	0	0	1	2	0	5	8
New Mexico:											
Albuquerque.....	1	0	0	0	0	5	0	1	0	0	11

## City reports for week ended October 25, 1930—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culo- sis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mate <sup>d</sup> expect- ancy	Cases re- ported	Cases, esti- mate <sup>d</sup> expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mate <sup>d</sup> expect- ancy	Cases re- ported	Deaths re- ported		
MOUNTAIN—con.											
Arizona:											
Phoenix.....	1	0	0	0	0	4	0	0	0	0	17
Utah:											
Salt Lake City.....	2	3	0	0	0	0	3	3	0	8	46
Nevada:											
Reno.....	0	1	0	0	0	0	0	0	0	0	6
PACIFIC											
Washington:											
Seattle.....	7	28	1	0	-----	-----	1	3	-----	8	71
Spokane.....	8	0	1	3	-----	-----	1	4	-----	0	-----
Tacoma.....	4	3	2	4	0	0	0	0	0	0	34
Oregon:											
Salem.....	0	1	0	1	0	0	0	0	0	0	-----
California:											
Los Angeles.....	20	8	0	2	0	23	2	1	0	14	246
Sacramento.....	2	1	0	0	0	3	1	0	0	4	30
San Francisco.....	10	4	0	0	0	16	1	0	0	0	133

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
<b>NEW ENGLAND</b>									
Maine:									
Portland.....	0	0	0	0	0	0	0	7	2
Massachusetts:									
Boston.....	1	1	0	0	0	0	2	12	1
Fall River.....	1	0	0	0	0	0	0	0	0
Rhode Island:									
Providence.....	0	0	0	0	0	0	0	1	0
<b>MIDDLE ATLANTIC</b>									
New York:									
Buffalo.....	0	0	0	0	1	0	1	0	0
New York.....	4	4	1	1	0	0	11	2	0
Syracuse.....	0	0	0	0	0	0	0	4	0
New Jersey:									
Trenton.....	0	0	0	0	0	0	0	1	1
Pennsylvania:									
Philadelphia.....	3	1	0	0	0	0	2	0	0
<b>EAST NORTH CENTRAL</b>									
Ohio:									
Cincinnati.....	0	0	0	0	0	0	0	4	0
Cleveland.....	4	1	0	0	0	0	2	10	0
Columbus.....	0	0	1	1	0	0	0	4	1
Indiana:									
Fort Wayne.....	0	1	0	0	0	0	0	0	0
Indianapolis.....	0	0	0	0	0	0	1	2	0
Illinois:									
Chicago.....	2	1	1	0	0	0	3	13	1
Springfield.....	0	0	0	0	0	0	0	2	1
Michigan:									
Detroit.....	2	0	3	0	0	0	1	5	0
Grand Rapids.....	0	0	0	0	0	0	0	2	1
Wisconsin:									
Madison.....	0	0	0	0	0	0	0	2	0
Milwaukee.....	0	0	0	0	0	0	0	1	0
Racine.....	0	0	1	1	0	0	0	0	0
Superior.....	0	0	0	1	0	0	0	0	0

## City reports for week ended October 25, 1930—Continued

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Death	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
<b>WEST NORTH CENTRAL</b>									
Minnesota:									
Minneapolis.....	0	0	0	0	0	0	1	2	0
Iowa:									
Des Moines.....	0	0	0	0	0	0	0	2	0
Waterloo.....	0	0	0	0	0	0	0	1	0
Missouri:									
Kansas City.....	0	0	0	0	0	0	0	4	2
St. Joseph.....	0	0	0	0	0	0	0	1	0
St. Louis.....	6	2	0	0	0	0	0	0	0
North Dakota:									
Fargo.....	0	0	0	0	0	0	0	1	0
South Dakota:									
Sioux Falls.....	0	0	0	0	0	0	0	1	0
<b>SOUTH ATLANTIC</b>									
Maryland:									
Baltimore.....	0	0	0	0	0	0	2	2	1
District of Columbia:									
Washington.....	0	0	1	0	0	0	1	1	1
Virginia:									
Lynchburg.....	0	0	0	0	0	1	0	0	0
North Carolina:									
Raleigh.....	0	0	0	0	0	1	0	0	0
South Carolina:									
Charleston.....	0	0	1	0	2	0	0	0	0
Greenville.....	0	0	0	0	0	0	0	1	0
Georgia: <sup>1</sup>									
Atlanta.....	0	0	0	0	2	2	0	0	0
Florida:									
Miami.....	0	0	0	0	1	0	0	0	0
<b>EAST SOUTH CENTRAL</b>									
Kentucky:									
Covington.....	1	1	0	0	0	0	0	0	0
Tennessee:									
Memphis.....	3	0	0	0	0	0	0	0	0
Nashville.....	0	0	0	0	0	1	0	0	0
Alabama:									
Birmingham.....	0	0	0	0	2	1	0	0	0
Montgomery.....	0	0	0	0	1	0	0	0	0
<b>WEST SOUTH CENTRAL</b>									
Louisiana:									
New Orleans.....	2	0	0	0	2	2	0	0	0
Shreveport.....	0	0	0	0	1	0	0	0	0
Oklahoma:									
Oklahoma City.....	0	0	0	1	0	1	0	1	0
Texas:									
Houston.....	0	0	0	0	0	1	1	0	0
<b>MOUNTAIN</b>									
Colorado:									
Denver.....	0	0	0	0	0	0	0	1	1
Utah:									
Salt Lake City.....	2	1	0	0	0	0	0	0	0
Nevada:									
Reno.....	0	0	0	0	0	0	0	1	0
<b>PACIFIC</b>									
Washington:									
Seattle.....	2	1	0	0	0	0	1	2	0
California:									
Los Angeles.....	2	0	0	0	0	1	0	7	1
Sacramento.....	0	0	0	0	2	1	0	0	0
San Francisco.....	1	0	0	0	0	0	0	18	1

<sup>1</sup> Typhus fever, 3 cases at Savannah, Ga.



The following table gives the rates per 100,000 population for 98 cities for the 5-week period ended October 25, 1930, compared with those for a like period ended October 26, 1929. The population figures used in computing the rates are approximate estimates, authoritative figures for many of the cities not being available. The 98 cities reporting cases have an estimated aggregate population of more than 32,000,000. The 91 cities reporting deaths have more than 30,500,000 estimated population.

*Summary of weekly reports from cities, September 21 to October 25, 1930—Annual rates per 100,000 population, compared with rates for the corresponding period of 1929*<sup>1</sup>

## DIPHTHERIA CASE RATES

	Week ended—									
	Sept. 27, 1930	Sept. 28, 1929	Oct. 4, 1930	Oct. 5, 1929	Oct. 11, 1930	Oct. 12, 1929	Oct. 18, 1930	Oct. 19, 1929	Oct. 25, 1930	Oct. 26, 1929
98 cities .....	58	83	<sup>2</sup> 62	97	72	112	71	135	<sup>3</sup> 79	134
New England .....	51	76	49	88	53	94	64	128	97	110
Middle Atlantic .....	33	60	43	62	42	75	35	88	36	86
East North Central .....	75	90	80	124	100	139	92	155	106	163
West North Central .....	57	100	<sup>4</sup> 62	108	66	123	74	167	65	137
South Atlantic .....	92	112	62	129	106	139	92	180	97	139
East South Central .....	34	137	115	157	108	232	162	171	202	185
West South Central .....	146	164	112	198	64	255	127	339	<sup>5</sup> 88	396
Mountain .....	60	26	<sup>5</sup> 9	26	43	0	17	70	60	26
Pacific .....	31	65	<sup>6</sup> 62	56	94	60	102	87	118	121

## MEASLES CASE RATES

98 cities .....	18	13	<sup>2</sup> 19	16	22	22	36	30	<sup>3</sup> 37	30
New England .....	42	18	33	34	31	16	44	58	69	29
Middle Atlantic .....	13	10	12	12	16	12	23	17	30	21
East North Central .....	13	13	5	12	11	29	14	40	16	47
West North Central .....	28	10	<sup>4</sup> 73	10	76	23	140	31	140	21
South Atlantic .....	9	13	20	11	11	9	7	9	13	9
East South Central .....	74	0	0	0	20	14	7	0	27	21
West South Central .....	11	11	7	0	0	4	4	4	<sup>5</sup> 4	15
Mountain .....	26	44	<sup>5</sup> 73	35	112	61	189	52	137	26
Pacific .....	19	24	<sup>6</sup> 27	65	24	65	66	72	21	63

## SCARLET FEVER CASE RATES

98 cities .....	72	95	<sup>2</sup> 74	102	97	114	123	138	<sup>3</sup> 123	138
New England .....	80	99	73	135	106	162	148	173	144	162
Middle Atlantic .....	33	42	49	48	54	48	90	69	82	75
East North Central .....	118	161	107	149	137	173	179	214	172	192
West North Central .....	76	108	<sup>4</sup> 73	119	91	140	114	173	114	173
South Atlantic .....	57	105	70	120	115	139	115	127	148	174
East South Central .....	128	75	74	82	182	123	148	232	169	109
West South Central .....	56	72	37	72	37	130	78	103	<sup>5</sup> 73	149
Mountain .....	94	139	<sup>5</sup> 118	131	283	148	232	157	163	235
Pacific .....	87	84	<sup>6</sup> 89	128	87	87	59	113	104	104

<sup>1</sup> The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimates as of July 1, 1930, and 1929, respectively.

<sup>2</sup> Kansas City, Mo., Great Falls, Mont., and Spokane, Wash., not included.

<sup>3</sup> Fort Smith, Ark., not included.

<sup>4</sup> Kansas City, Mo., not included.

<sup>5</sup> Great Falls, Mont., not included.

<sup>6</sup> Spokane, Wash., not included.

*Summary of weekly reports from cities, September 21 to October 25, 1930—Annual rates per 100,000 population, compared with rates for the corresponding period of 1929—Continued*

## SMALLPOX CASE RATES

	Week ended—									
	Sept. 27, 1930	Sept. 28, 1929	Oct. 4, 1930	Oct. 5, 1929	Oct. 11, 1930	Oct. 12, 1929	Oct. 18, 1930	Oct. 19, 1929	Oct. 25, 1930	Oct. 26, 1929
98 cities.....	3	4	* 1	7	2	7	2	12	* 2	10
New England.....	0	0	0	0	0	0	0	0	0	0
Middle Atlantic.....	0	0	0	0	0	1	0	0	0	0
East North Central.....	3	3	1	7	2	3	4	7	2	12
West North Central.....	13	8	10	2	6	13	0	21	0	31
South Atlantic.....	0	0	2	0	0	0	0	0	0	0
East South Central.....	0	0	0	48	0	0	0	0	0	0
West South Central.....	4	0	4	0	4	4	4	0	* 8	0
Mountain.....	0	96	* 0	52	0	96	26	122	0	52
Pacific.....	19	10	* 2	36	7	34	0	84	21	51

## TYPHOID FEVER CASE RATES

98 cities.....	18	20	* 20	16	21	26	17	17	* 18	15
New England.....	11	7	11	11	20	16	9	9	27	16
Middle Atlantic.....	14	12	15	14	14	10	11	8	13	8
East North Central.....	9	9	9	12	9	8	7	10	5	7
West North Central.....	15	23	* 13	15	9	8	15	25	8	6
South Atlantic.....	51	17	38	30	64	26	57	24	37	21
East South Central.....	20	82	67	21	47	27	47	68	94	48
West South Central.....	37	27	56	8	52	27	22	15	* 27	42
Mountain.....	43	313	* 118	113	43	749	34	192	77	200
Pacific.....	14	10	* 20	10	19	7	26	19	19	5

## INFLUENZA DEATH RATES

91 cities.....	3	5	* 3	6	5	8	5	8	5	9
New England.....	2	2	0	4	4	0	7	2	2	0
Middle Atlantic.....	2	5	2	7	7	8	4	6	7	12
East North Central.....	2	4	1	5	3	8	4	9	3	10
West North Central.....	0	3	10	6	6	3	3	9	9	3
South Atlantic.....	4	6	2	7	2	11	5	9	4	4
East South Central.....	15	0	15	0	0	22	0	7	7	22
West South Central.....	4	12	11	16	11	16	8	16	8	20
Mountain.....	0	17	* 18	0	9	26	9	17	9	17
Pacific.....	6	3	3	9	0	6	9	6	9	3

## PNEUMONIA DEATH RATES

91 cities.....	58	67	* 60	77	73	80	74	97	89	108
New England.....	35	72	40	36	64	74	80	97	91	63
Middle Atlantic.....	76	72	63	93	78	87	74	118	108	144
East North Central.....	48	54	54	61	55	65	51	81	53	91
West North Central.....	35	81	* 81	108	86	54	53	69	59	72
South Atlantic.....	51	60	48	81	79	103	88	81	125	112
East South Central.....	74	119	118	30	140	104	184	112	96	134
West South Central.....	77	94	77	113	119	113	96	90	134	86
Mountain.....	51	70	* 137	87	94	122	189	122	77	122
Pacific.....	49	38	49	47	49	57	80	82	74	44

\* Kansas City, Great Falls, Mont., and Spokane, Wash., not included.

\* Fort Smith, Ark., not included.

\* Kansas City, Mo., not included.

\* Great Falls, Mont., not included.

\* Spokane, Wash., not included.

\* Kansas City, Mo., and Great Falls, Mont., not included.

## FOREIGN AND INSULAR

### CANADA

*Provinces—Communicable diseases—Week ended October 25, 1930.*—The Department of Pensions and National Health of Canada reports cases of certain communicable diseases for the week ended October 25, 1930, as follows:

Province	Cerebro-spinal fever	Dysentery	Influenza	Poliomyelitis	Smallpox	Typhoid fever
Prince Edward Island <sup>1</sup> .....						
Nova Scotia.....						1
New Brunswick.....						3
Quebec.....				4		53
Ontario.....	1		4	37	16	13
Manitoba.....	1			4		
Saskatchewan.....				5		6
Alberta.....				4		3
British Columbia.....		10		1		17
Total.....	2	10	4	55	16	96

<sup>1</sup> No case of any disease included in the table was reported during the week.

*Quebec—Communicable diseases—Week ended October 25, 1930.*—The Bureau of Health of the Province of Quebec, Canada, reports cases of certain communicable diseases for the week ended October 25, 1930, as follows:

Disease	Cases	Disease	Cases
Chicken pox.....	90	Poliomyelitis.....	4
Diphtheria.....	59	Scarlet fever.....	105
Erysipelas.....	2	Smallpox.....	1
German measles.....	3	Tuberculosis.....	57
Influenza.....	5	Typhoid fever.....	53
Measles.....	52	Whooping cough.....	60
Mumps.....	33		

### DENMARK

*Communicable diseases—August, 1930.*—During the month of August, 1930, cases of certain communicable diseases were reported in Denmark as follows:

Disease	Cases	Disease	Cases
Cerebrospinal meningitis.....	4	Paratyphoid fever.....	22
Chicken pox.....	8	Pollomyelitis.....	18
Diphtheria and croup.....	369	Puerperal fever.....	17
Erysipelas.....	258	Scabies.....	693
German measles.....	4	Scarlet fever.....	201
Influenza.....	3,423	Tetanus.....	6
Lethargic encephalitis.....	6	Typhoid fever.....	24
Measles.....	645	Undulant fever (Bac. abort. Bang).....	48
Mumps.....	298	Whooping cough.....	1,301

## JAMAICA

*Communicable diseases—Four weeks ended October 11, 1930.*—During the four weeks ended October 11, 1930, cases of certain communicable diseases were reported in Kingston, Jamaica, and in the Island of Jamaica outside of Kingston as follows:

Disease	Cases		Disease	Cases	
	Kingston	Other localities		Kingston	Other localities
Chicken pox.....	1	8	Puerperal fever.....	---	1
Dysentery.....	1	1	Tuberculosis.....	25	69
Leprosy.....	---	3	Typhoid fever.....	14	74

## PANAMA CANAL ZONE

*Communicable diseases—September, 1930.*—During the month of September, 1930, certain communicable diseases, including imported cases, were reported in the Panama Canal Zone and terminal cities as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Cerebrospinal meningitis.....	1	---	Measles.....	8	---
Chicken pox.....	7	---	Mumps.....	1	---
Diphtheria.....	26	---	Pneumonia.....	---	32
Dysentery (amebic).....	12	---	Tuberculosis.....	---	25
Leprosy.....	---	1	Typhoid fever.....	3	2
Malaria.....	134	4	Whooping cough.....	9	---

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

From medical officers of the Public Health Service, American consuls, International Office of Public Hygiene, Pan American Sanitary Bureau, health section of the League of Nations, and other sources. 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.

## CHOLERA

[C indicates cases; D, deaths; P, present]

Place	May 4-31, 1930	June 1-28, 1930	June 29- July 26, 1930	Week ended—												Nov. 1- 11, 1930			
				August, 1930						September, 1930							October, 1930		
				2	9	16	23	30	6	13	20	27	4	11	18		25		
Afghanistan.....	C																		
China:																			
Amoy.....			1 P																
Canton.....	3	2										1	1						
Shanghai.....															1				
Shensi Province.....																			
Swatow.....																			
Tientsin.....																			
India:																			
Bassein.....	5	7		1			2	1											
Bombay.....																			
Calcutta.....	609	327	220	2	1	4	4	8				1	2	3	1	11			
Nagapatam.....	372	179	128	7	10	17	18	3	10			2	9	4	7	9			
Rangoon.....																			
India (French):																			
Chandernagor.....	6	3	1																
Karikal.....	6	2																	
India: Portuguese.....		3																	

<sup>1</sup> An outbreak of cholera was reported in June, 1930, in Afghanistan.

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

## CHOLERA—Continued

[C indicates cases; D, deaths; P, present]

Place	May 4-31, 1930	June 1-23, 1930	June 24- July 26, 1930	Week ended—												Nov. 1, 1930
				August, 1930				September, 1930				October, 1930				
				2	9	16	23	30	6	13	20	27	4	11	18	25
Indo-China (see also table below):																
Prompenh.....	C 1	40	32	5	3	3							1		1	
	D 5	18	22	3	2	1										
Saigon and Cholon.....	C 160	48	10	2	2	1							1		1	
	D 101	23	3		1											
Philippine Islands: <sup>1</sup>																
Ports—																
Cebu.....		1	65	5	4					1						
			36	4	4					1						
Iloilo.....			29	9	19	32	4	3	4							
			22	10	18	19	9	4	5	2	3	2	1	2		
Manila.....	C 1				1			16	13	10	4	2	1	2		
								5	6	1						
Provinces—																
Anique.....				14	3			3	2	25	12	8	12		28	
			7		3			2	1	14	12	7	8		10	
Bohol.....				54	54		30	30	14	4	4	1				
				29	32		18	12	9	6	2					
Bulacan.....		3	4	1				1	2	1				2		
		1						1	1	1			1			
Capiz.....			3	1	1											
			2	1												
Cebu.....	C 1	355	713	65	29	4				16	8					
	D 1	170	303	32	15	3				1						
Iloilo.....		2	309	143	209	127	92	71	60	61	46	18	7	13	12	10
		1	193	77	143	91	65	45	45	35	26	15	6	7	12	7
La Union.....																
Leyte.....		47	11													
		19														
Masbate.....		10	92	15	19											
		3	35	5	9											
Misamis, Occidental.....			3													
			3													
Negros, Occidental.....	C 10	140	568	151	79	45	68	40	43	24	15	8	10	5	5	12
	D 7	88	368	97	64	33	43	32	30	20	9	6	5	3	12	3



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

## PLAGUE

[C indicates cases; D, deaths; P, present]

Place	Apr. 6- May 3, 1930	May 4-31, 1930	June 1-28, July 29, 1930	June 29- Aug. 5, 1930	Week ended—												Nov. 1, 1930
					August, 1930				September, 1930				October, 1930				
					2	9	16	23	30	6	13	20	27	4	11	18	
Algeria:																	
Algiers.....			3		1		6	1	2	6	2	1	1	2	2		
Constantine.....			1														
Oran.....			3	1	1	1	1	1	2	3	4	1	4	4	2		
Philippeville.....														1	1		
Azores: Ponta Delgada.....	8																
	5																
Belgian Congo.....			2	1	1	1	1	2	3								
			2	1					3								
British East Africa (see also table below):																	
Tanganyika.....	44																
	20																
Uganda.....	117	227	406	228	52	67	62	55	44	40	57						
	105	195	328	213	50	64	62	53	37	39	55						
Canary Islands: Las Palmas.....				1													
Ceylon:																	
Colombo.....	1	6	3	3		1	1	1	2			1	1				
		5	1	3		1	1	1	3			1	1				
	4		1														
Chile: Antofagasta.....	1																
China: Manchuria—Tungliun and Nungan.....								30			P	2					
Dutch East Indies:																	
Batavia and West Java.....	87	82	98	84	19	30	20	14	13	14	26	26					
	81	82	98	84	19	30	20	14	12	14	20	24					
	8	5	4			1				1	1	1					
Plague-infected rats	173	185	202	217	45	51	47	45	55	54	67						
Java and Madura.....																	
Ecuador (see table below):																	
Egypt:																	
Alexandria.....	2	13	19	23	2	2	4	3	3	3	2	2	2	1	3	2	1
	2	3	9	10	2	1	3		5	1	2		3	1	1	1	3
Assiout.....	14	20	9	2													
	5	5	3	2													
Beni-Suef.....								1									







Place	Apr., 1930	May, 1930	June, 1930	July, 1930	Aug., 1930	Sept., 1930	Place	Apr., 1930	May, 1930	June, 1930	July, 1930	Aug., 1930	Sept., 1930
British East Africa (see also table above):							Madagascar—Continued.						
Kenya.....	16	171	107	97	87	---	Moromanga Province.....	3	1	3	---	---	---
Ecuador: Guayaquil.....	0	0	0	0	---	---	Tananarive Province.....	30	10	16	28	---	---
Plague-infected rats.....	0	0	0	0	---	---	Senegal:	38	14	16	28	---	---
Greece (see also table above).....	0	---	---	---	---	---	Baol <sup>1</sup> .....	24	13	2	62	70	48
Indo-China (see also table above).....	0	1	1	1	2	4	Dakar <sup>1</sup> .....	12	11	2	46	20	23
Madagascar (see also table above):							Louga <sup>1</sup> .....	52	52	52	140	108	8
Ambositra Province.....	4	---	---	---	---	---	Thies <sup>1</sup> .....	33	42	117	122	90	8
Antsirabe Province.....	14	1	3	24	---	---	Tiassouane <sup>1</sup> .....	10	27	21	103	33	61
Marinarivo Province.....	46	19	3	24	10	---		9	32	32	54	34	12
	46	5	1	1	---	---		71	135	43	119	110	20
	1	5	1	1	---	---		38	69	28	70	84	14
	1	---	---	---	---	---							

## SMALLPOX

Place	Week ended—												
	August, 1930				September, 1930				October, 1930				
	2	9	16	23	30	6	13	20	27	4	11	18	25
Algeria:													
Algiers.....													
Constantine.....		1	---	2	---	---	---	---	---	---	---	---	---
Arabia: Aden.....													
Bolivia: La Paz. <sup>1</sup>													
British East Africa (see also table below):													
Tanganyika.....	26	51	44	121	198	288	---	36	---	---	---	---	---
	4	---	3	30	4	55	---	1	---	---	---	---	---
British South Africa:													
Northern Rhodesia.....													
Southern Rhodesia.....													

<sup>1</sup> From Jan. 1 to May 31, 1930, 44 deaths from smallpox were reported in La Paz, Bolivia.

<sup>2</sup> Incomplete reports.





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

## SMALLPOX—Continued

[O indicates cases; D, deaths; P, present]

Place	Week ended—																				
	August, 1930					September, 1930					October, 1930										
	2	9	16	23	30	6	13	20	27	4	11	18	25								
India.—Continued.																					
Vizagapatam.....											1										
India (French):																					
Chandernagor.....																					
Karikal.....																					
Pondicherry Province.....																					
India (Portuguese).....																					
Indo-China (see also table below):																					
Pnompenh.....											2										
Saigon and Cholon.....																					
Iraq:																					
Baghdad.....																					
Basra.....																					
Mossoul Liwa.....											4	2									
Ivory Coast (see table below).																					
Jamaica (Jamastrim).....																					
Japan: Tokyo.....																					
Macao.....																					
Mexico (see also table below):																					
Jalisco (State) Guadaluajara.....																					
Juarez.....																					
Mexico City and surrounding territory.....																					



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

**SMALLPOX—Continued**

[C indicates cases; D, deaths; P, present]

[illegible]

## TYPHUS FEVER

[illegible]





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

## TYPHUS FEVER—Continued

[C indicates cases; D, deaths; P, present]

Place	Apr., 1930	May, 1930	June, 1930	July, 1930	Aug., 1930	Sept., 1930	Place	Apr., 1930	May, 1930	June, 1930	July, 1930	Aug., 1930	Sept., 1930
China: Harbin (see also table above).....	C	204	2	14	5	1	Lithuania.....	C	73	27	16	18	8
Chosen: Seoul.....	C	3	43	3	2	1	Turkey.....	D	4	4	2	1	1
Czechoslovakia.....	C	29	12	1	1	1	Yugoslavia.....	C	3	16	2	2	2
Greece: Athens.....	C	1	3	6	6	1		C	22	16	6		
Latvia.....	C	3	3	3	1	1		D	4	1			

## YELLOW FEVER

Brazil:	Cases	Gold Coast:	Cases
Mage, on the Leopoldina Ry., between Rio de Janeiro and Nictheroy, Apr. 22, 1930.....	2	July 10, 1930.....	1
Campos, Rio de Janeiro Province, May 23, 1930.....	1	Albosso, Aug. 5, 1930 (deaths).....	1
Para, June 23, 1930.....	2	Liberia, Monrovia, June 3, 1930.....	1
		Nigeria, Lagos, July 12, 1930 (probably laboratory infection).....	1