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DISTRIBUTION OF HEALTH SERVICES IN THE STRUCTURE OF STATE GOVERNMENT*

CHAPTER X—STATE HEALTH DEPARTMENT ORGANIZATION

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All previous chapters in this series of discussions* dealing with provisions made by State governments for the numerous services now accepted as being significant in the improvement of personal and community health have followed a more or less uniform plan insofar as presentation of the material is concerned. That is, some particular

*From the States Relations Division. This is the tenth and final chapter of the third edition of Public Health Bulletin No. 184. It was originally planned to include a summary article, a large part of which would be devoted to reproduction of the schedule developed for collection of this material and the instructions governing its use. However, demands—growing out of the war effort—upon the time of the authors, together with limitations placed on printing, have made impractical complete realization of the original plan. Previous chapters are:

Mountin, Joseph W., and Flook, Evelyn: Distribution of health services in the structure of State government—Chapter I. The composite pattern of State health services. Pub. Health Rep., 56:1673 (August 22, 1941). Reprint No. 2306.

Mountin, Joseph W., and Flook, Evelyn: Distribution of health services in the structure of State government—Chapter II. Communicable disease control by State agencies. Pub. Health Rep., 56:2233 (November 21, 1941). Reprint No. 2334.

Mountin, Joseph W., and Flook, Evelyn: Distribution of health services in the structure of State government—Chapter III. Tuberculosis control by State agencies. Pub. Health Rep., 57:65 (January 16, 1942). Reprint No. 2348.

Mountin, Joseph W., and Flook, Evelyn: Distribution of health services in the structure of State government—Chapter IV. Venereal disease control by State agencies. Pub. Health Rep., 57:553 (April 17, 1942). Reprint No. 2369.

Mountin, Joseph W., and Flook, Evelyn: Distribution of health services in the structure of State government—Chapter V. Sanitation by State agencies. Pub. Health Rep., 57:885 (June 12, 1942) and 57:917 (June 19, 1942). Reprint No. 2386.

Mountin, Joseph W., and Flook, Evelyn: Distribution of health services in the structure of State government—Chapter VI. Medical and dental care by State agencies. Pub. Health Rep., 57:1195 (August 14, 1942) and 57:1235 (August 21, 1942). Reprint No. 2395.

Mountin, Joseph W., and Flook, Evelyn: Distribution of health services in the structure of State government—Chapter VII. Maternity-child health activities by State agencies. Pub. Health Rep., 57:1791 (November 27, 1942). Reprint No. 2425.

Mountin, Joseph W., and Flook, Evelyn: Distribution of health services in the structure of State government—Chapter VIII. Industrial health activities by State agencies. Pub. Health Rep., 58:33 (January 8, 1943). Reprint No. 2439.

Mountin, Joseph W., and Flook, Evelyn: Distribution of health services in the structure of State government—Chapter IX. Central State services affecting all branches of public health work. Pub. Health Rep., 58:249 (February 12, 1943). Reprint No. 2448.

segment of public health was the basis of consideration, and the aggregate State effort toward solving the problems involved was described by tracing throughout the entire structure of State government the scope of all official activities pertaining thereto. Identity of each agency was established, together with its functional relationship to the health problem in question. Finally, in each instance, a rough approximation was given of the cost of the services described. At no time were the services of any one agency featured above that of any other except as the difference in function and performance warranted. In other words, since it was known that dispersion rather than concentration of responsibility characterizes State organization for certain health services, it has been the sustained objective to picture the over-all distribution of authority and service rather than to restrict consideration to the work of the official State health agency alone.

A review of the nine chapters which cover the complete list of health activities investigated impresses one with the variation that exists among the States with respect to assignment of responsibility for activities significant to the promotion, conservation, or restoration of health. At the same time, it is emphasized that for most activities, with the exception of medical and institutional care, the health department is the principal agency charged with health work; furthermore, that where several agencies are involved, the health department usually carries the major portion of the program or assumes leadership in promotion and guidance of the over-all plan. In some instances, it even initiates service on a voluntary basis because—for one reason or another—the agency officially responsible is inactive. Because of these circumstances, it was decided that more detailed analysis of the internal organization of health departments is essential to the completion of this study. Consequently, the present chapter—which is the final one of the series—will be devoted to a description of health department organization, with some reference to number and professional classification of personnel employed and to operating expenditures.

From the standpoint of organization, official State health agencies may be described in three distinct parts—the policy-forming and/or advisory body, the chief executive officer, and the State health department. The policy-forming and/or advisory body is variously designated as the State board of health, the State committee of public health, the public health council, or the advisory health board. The chief executive officer may be referred to as the State health officer, the superintendent of health, the executive secretary of the State board of health, the director of public health, or the State health commissioner. The State health department is the administrative branch of the organization. It is divided into bureaus, divisions,

units, or services—each headed by a chief or director who is responsible for administration of a specific program delegated thereto. For the most part, the chief executive officer and members of the health department staff are full-time employees of the State and serve on a salary basis. Members of the State board of health or advisory council, on the other hand, meet with specified frequency or as occasions demand and are compensated only for their expenses and, in a nominal way, for the time spent on official duty.

For expediency in discussion, the chief executive officer of the State health department will be referred to as the State health officer, and the policy-forming and/or advisory body, as the State board of health. However, from table 1 may be determined the official designation of each in all States, the District of Columbia, the Territories, and the Virgin Islands. The method by which each is appointed is recorded, likewise. This table also denotes the composition of each State¹ board of health.

¹ The term "State" as used in the discussion which follows includes the States, the Territories, the District of Columbia, and the Virgin Islands.

TABLE 1.—Official designation of the chief executive officer of the State health department and the policy-forming and/or advisory body, and method of appointment of each

State	Chief executive officer of State health department	Appointed or elected by	Official designation and required membership	Policy-forming and/or advisory body	Appointed or elected by
	Official designation				
Alabama.....	State health officer.....	Elected by State committee of public health and approved by State medical association.	State committee of public health—10 members, all physicians.		Elected by State medical association.
Arizona.....	Superintendent of health.....	Governor, by and with consent of the senate.	State board of health—3 members, Governor, attorney general, and superintendent of health.		Ex-officio membership.
Arkansas.....	Executive secretary of the State board of health and State health officer.....	State board of health, with approval of the Governor.	State board of health—7 members, all physicians.		Governor.
California.....	Director of public health and executive officer of the State board of health.....	Governor.....	State board of health—8 members, 7 of whom must be physicians and 1 a dentist.		Do.
Colorado.....	Secretary and executive officer of the State board of health.....	State board of health.....	Colorado State board of health—9 members.....		Do.
Connecticut.....	Commissioner of health.....	Governor.....	Public health council—6 members, 2 of whom must be physicians and 2 sanitary engineers.		Do.
Delaware.....	Executive secretary of the State board of health.....	State board of health.....	State board of health—8 members, 4 of whom must be physicians.		Do.
District of Columbia.....	Health officer of the District of Columbia.....	Commissioners of the District of Columbia.	Commissioners of the District of Columbia (2 civilian commissioners and 1 engineer commissioner from the United States Army Engineer Corps).		President of the United States, by and with advice of the United States Senate.
Florida.....	State health officer.....	Governor.....	State board of health—3 members.....		Governor. The State medical association nominates 2 physicians from each congressional district, of whom Governor appoints 1. Laymen and dentists appointed by the Governor from the State at large.
Georgia.....	Director of State department of health.....	State board of health.....	State board of health—14 members and the Governor who is an ex-officio member. Majority of the board must be physicians, 1 from each congressional district. There must also be 2 dentists and 2 laymen.		Governor.
Iaaho.....	Director of the division of public health.....	Commissioner of public welfare, with approval of the board.	State board of public welfare—5 members.....		Do.
Illinois.....	Director of the department of public health.....	Governor, confirmed by the senate.	Advisory committee to the director of public health—7 members, all physicians.		Do.
Indiana.....	State health commissioner and executive officer of the State board of health.....	Governor.....	State board of health—8 members.....		Do.
Iowa.....	State commissioner of health.....	Governor, approved by the senate.	State board of health—5 appointive members, physicians, and 6 ex-officio members: Governor, secretary of state, commissioner of health, State treasurer, and secretary of agriculture.		Do.

Kansas.....	Secretary of the State board of health.	State board of health.....	State board of health—10 members, all physicians except 1 who is preferably an attorney.	Governor, approved by the senate
Kentucky.....	Commissioner of health.	.....do.....	Kentucky State board of health—9 members, 8 of whom must be physicians and 1 a pharmacist.	8 members by the Governor—1 elected by the board. He is secretary and commissioner of health.
Louisiana.....	President of the Louisiana State board of health.	Governor, with consent of the senate.	Louisiana State board of health—8 members and a president, 5 of whom must be physicians, 1 a dentist, 1 an educator connected with the State public school system, and 1 a druggist—each member to be chosen from a different congressional district.	Governor, with advice and consent of the senate.
Maine.....	Director of health.....	Commissioner of health and welfare, approved by the Governor's council.	Advisory council of health and welfare—7 members.	Governor, approved by the Governor's council.
Maryland.....	Director of health.....	Governor.....	State board of health—9 members: 4 physicians, 1 civil engineer, 1 pharmacist, 1 dentist, and 2 ex-officio members—the attorney general of the State and the commissioner of health of Baltimore City.	Governor, with advice and consent of the senate.
Massachusetts.....	Commissioner of public health.....	Governor, with advice and consent of the public health council.	Public health council—6 appointive members, 3 of whom must be physicians, and the commissioner of public health, who is an ex-officio member of the council.	Governor, with advice and consent of the public health council.
Michigan.....	Commissioner of health.....	Governor, confirmed by the senate.	State council of health—5 members, 4 of whom must be physicians and 1 a dentist.	Governor.
Minnesota.....	Secretary and executive officer of the State board of health.	State board of health.....	Minnesota State board of health—9 members.....	Do.
Mississippi.....	Executive officer of the Mississippi State board of health.	.....do.....	Mississippi State board of health—10 members, 9 appointive and 1 elected by the board to serve as executive officer; 8 of the appointive members must be physicians and 1 a dentist.	Governor, with approval of the senate from nominations supplied by State medical and dental associations, respectively. 3 physicians are nominated from each congressional district and 3 dentists from the State at large.
Missouri.....	Commissioner of health.....	Governor.....	State board of health of Missouri—7 members, 6 of whom must be physicians.	Governor.
Montana.....	Secretary of the State board of health and executive officer.	State board of health.....	State board of health of Montana—5 members, all physicians.	Governor, from a list submitted by the State medical association.
Nebraska.....	Director of the department of health.	Governor.....	None.....	Governor.
Nevada.....	Secretary of the State board of health and State health officer.	State board of health, with approval of Governor.	State board of health—5 members, 2 of whom shall be physicians, 1 a dentist, and 1 the Governor.	Governor.
New Hampshire.....	Secretary of the State board of health.	State board of health.....	State board of health—7 members: the Governor, the attorney general, 3 physicians, 5 civil engineer, and one person who is neither physician nor engineer.	Do.
New Jersey.....	Director of health.....	.....do.....	State board of health—12 members, not more than 6 to belong to the same political party, 2 women, at least 3 physicians, 2 sanitary engineers, 1 veterinarian, 1 dentist, and 1 pharmacist.	Governor, by and with advice of the senate.

TABLE 1.—Official designation of the chief executive officer of the State health department and the policy-forming and/or advisory body, and method of appointment of each—Continued

State	Chief executive officer of State health department		Policy-forming and/or advisory body
	Official designation	Appointed or elected by	
New Mexico	Director of State department of public health	State board of public health	Governor, by and with consent of the senate.
New York	Commissioner of health	Governor	Governor.
North Carolina	Secretary-treasurer of the State board of health and State health officer	State board of health, approved by the Governor.	5 members by Governor and 4 members by the State medical society.
North Dakota	State health officer	Public health advisory council	Governor.
Ohio	State director of health	Governor, by and with consent of the senate, from a list of not less than 6 physicians certified to him by the public health council.	Do.
Oklahoma	Commissioner of health	Governor	Governor, with consent of the senate.
Oregon	State health officer and executive officer of the State board of health	State board of health	Governor, with advice and consent of the senate.
Pennsylvania	Secretary of health	Governor	Governor.
Rhode Island	State director of health	Governor, confirmed by the senate	Ex-officio membership.
South Carolina	State health officer	Governor, upon recommendation of the executive committee of the State board of health	Governor.
South Dakota	Superintendent of the board of health	Governor designates 1 member of the board to be superintendent.	Governor.
Tennessee	Commissioner of public health	Governor	Governor, from lists submitted by the Tennessee State Medical Association, Pharmaceutical Association, Congress of Parents and Teachers, and federated women's clubs, respectively.

Official designation and required membership

Appointed or elected by

State board of public health.
Public health council—8 members, 2 of whom must be physicians, and 1 a sanitary engineer.
North Carolina State board of health—9 members, including 2 physicians, 1 pharmacist, 1 engineering and 1 dentist.
Public health advisory council—8 members, 3 appointive; 1 physician, 1 dentist, and 1 woman, and 2 ex-officio; Attorney general and superintendent of public instruction.
Public health council—6 members, 3 of whom shall be physicians, no 2 from any one congressional district.

None.
Oregon State board of health—9 members, 7 of whom must be physicians, 1 a dentist, and 1 a pharmacist.
Advisory board of health, 4 physicians, 1 civil engineer, and 1 dentist.
Advisory council to the director of health—6 members.

State board of health—"The South Carolina Medical Association together with the controller general shall be known as the State board of health." Note: The executive committee of the State board of health (7 members) performs functions delegated to State boards of health as generally recognized.
State board of health—5 members, 4 of whom must be physicians, and 1 an osteopath.

Tennessee public health council—9 members, 6 of whom must be physicians (2 from each of the 3 grand divisions of the State), 1 a dentist, 1 a pharmacist, and 1 a representative of women's organizations.

Texas.....	State health officer.....	State board of health.....	Texas State board of health—9 members, 6 of whom must be physicians, 1 a dentist, 1 a pharmacist, and 1 an engineer.	Governor.
Utah.....	State health commissioner.....	Governor to the board, and elected by board as secretary, 1, 6, State health commissioner.	State board of health—7 members, majority of whom shall be physicians and 1 a civil engineer.	Do.
Vermont.....	Executive officer and secretary of State board of health.	State board of health, with approval of the Governor.	State board of health—3 members.....	Governor, with advice and consent of the senate.
Virginia.....	Commissioner of health.....	Governor.....	State board of health—7 members, at least 2 of whom must be members of the State dental society and 1 a member of the State dental association.	Governor.
Washington.....	Director, department of health.....	Governor, with consent of the senate.	State board of health—6 members, 1 of whom must be an experienced physician and the others experienced in matters of sanitation.	Do.
West Virginia.....	Commissioner of health.....	Governor, with advice and consent of the senate.	Public health council—8 members, including the commissioner of health, 7 members must be physicians and 1 a dentist.	Do
Wisconsin.....	State health officer.....	State board of health.....	State board of health—7 members.....	Governor, with consent of the senate.
Wyoming.....	State health officer.....	Governor, confirmed by the senate.	State board of health—6 members, 4 of whom are physicians and 1 a dentist.	Governor.
Alaska.....	Commissioner of public health.	Governor, confirmed by the senate.	None.	Governor: (6 members appointive, the attorney general, ex-officio).
Hawaii.....	Territorial commissioner of public health.	Board of health.....	Board of health—7 members: the attorney general, 2 physicians, and other lay members.	Governor, with consent of the senate.
Puerto Rico.....	Commissioner of health.....	Governor, with consent of the senate.	Insular board of health—9 members, 4 of whom must be physicians, 1 a dentist, 1 a veterinarian, 1 a lawyer, 1 a civil engineer, and 1 an expert chemist.	
Virgin Islands.....	Commissioner of health.....	Secretary of the Interior of the United States.	None.....	

By summarizing the data presented in table 1, one finds that the State health officers of 28 jurisdictions are appointed by the Governor, while those of 21 States are appointed by the State board of health. In 12 States, however, gubernatorial appointees must be confirmed by the senate and in 2, by the board of health. Conversely, in 4 States where appointments are made by the board of health the approval of the Governor is required, and in another the State medical association must approve the selection. Miscellaneous practices are followed in the 4 States where neither the Governor nor the board of health appoints the health officer. For instance, in the District of Columbia the board of district commissioners performs this function, while in the Virgin Islands it is done by the United States Secretary of the Interior. In Idaho and Maine—where the health department is really a division (Idaho) and bureau (Maine) of public health, subordinate to the department of public welfare (Idaho) and the department of health and welfare (Maine)—the commissioner of the principal governmental unit appoints the director of health.

Most States prescribe by statute certain general qualifications which a State health officer must have. Phraseology most commonly used to describe those qualifications is as follows, "The State health officer shall be a physician who is licensed to practice in the State, and who is skilled and experienced in sanitary science and public health." A few jurisdictions are more specific and require that the health officer shall have practiced at least 5—sometimes 10—years within the State or that he shall have had a designated amount of public health training or actual experience in health department administration. Less than half a dozen States list no requirements whatever. States are almost evenly divided as to whether or not the State health officer is a member of the State board of health. In 3 States he may be selected either from within or without the board. The term of office of a State health officer varies from 2 years in 8 States to an indefinite period in 16. Four years represents the term of office most frequently designated.

There is some variation in the amount of independence which State health officers are permitted to exercise as executive officers of State boards of health. Usually, however, the health officer is authorized to execute and enforce all laws, rules, and regulations pertaining to the public health and to act as the direct agent of the board, performing all of its duties when this body is not in session. Expressed otherwise, as executive officer of the State board of health, the State health officer carries out all obligations of the board for protection of the public health. As administrative head of the State health department he directs, plans, and supervises all activities of the department and employs such means as may be necessary for administration of the health laws and sanitary code. More specifically, he is responsible for all funds allocated to the State health department, for appointment

and removal of health department personnel, and for supervision over county boards of health and county health officers. Frequently, he prepares rules and regulations for adoption by the State board of health, or at least makes recommendations to that policy-forming group regarding new policies or changes in old ones.

Functions of the State board of health vary from those which are solely advisory to those which are completely regulatory, including the exercise of executive and police powers for enforcement of all State laws pertaining to public health. The most usual duties are identified with the promulgation of rules and regulations, particularly the drafting and revising of State sanitary codes. Occasionally, the board of health has appointive authority, though it is more apt to be empowered only to approve appointments which have been made by the State health officer. Approval of all health department budgets is another duty sometimes imposed upon the board, though generally this also is a prerogative of the State health officer. In rare instances, functions of the State board of health are nominal only, this group being dominated by the Governor, some other unit of State government, or the State medical association.

Membership of the State boards of health ranges in number from 3 to 14. In some States it is stipulated that a certain part or even all of the members shall be physicians; in others, it is required that at least 1 member shall be a dentist, a civil or sanitary engineer, a pharmacist, an attorney, a veterinarian, an osteopath, or a woman; in still others, certain State officials are ex-officio members of the board of health by virtue of the elective office which they hold. Several States make no restrictions as to the professional status of the board members.

In all but a few States, members of the State board of health are appointed by the Governor. His selections must be approved by the senate in about a dozen States. In several, the State medical association supplies a list of nominees from which appointments are made by the Governor. Members of the State board of health serve from 2 years in one State to 7 years in three, with 6 years representing the most common period of service. The terms of individual members are overlapping in nearly three-fourths of the States. Ex-officio members, of course, serve as members so long as they occupy the office which determines their ex-officio position.

In order that State health activities might be administered as efficiently as possible, it has been found expedient to organize the health department into bureaus, divisions, services, or units representing the several health specialties and to place at the head of each bureau a director or chief who is administratively responsible for activities delegated to his particular branch of the department. The identity and number of such bureaus or divisions is not uniform.

In the relatively populous States where a large staff is employed, the health department is a complex organization having as many as 20 separate units, most of which deal with a single segment of public health or a related group of problems. Health departments of smaller States, on the other hand, have but half a dozen or so units. Under this set-up it is necessary for each director-in-charge to administer several programs. Usually services having close interrelationship are combined. Since, for the country as a whole, there are innumerable combinations, it is practically impossible to describe a "typical" health organization.

It was decided, therefore, that perhaps the clearest picture of health department organization for the country as a whole could be portrayed by listing all health activities which have been covered by this entire study² and showing for each the States that have established within their health departments a special bureau, division, service, or unit for administration of that particular activity. This information has been recorded in table 2. The symbol B is used to indicate that the service has an exclusive bureau status. In the same table, A is used to identify the health departments which—without having a distinct unit for the purpose—still participate in given activities. When participation is restricted to advisory service or broad regulatory authority only and does not involve an active program, this situation is indicated by the use of footnotes. Finally, there are a number of State health departments which do not participate in any way in certain activities listed. These are indicated by dashes. Activities have been placed in major and minor administrative groupings according to the arrangement most frequently found in health department organization.

The 1940 Directory of State and Insular Health Authorities³ has been used as the authority for determining activities given bureau status. In addition to the bureaus and divisions listed in this publication, State hospitals administered by the State health department also are classified as B. Unless otherwise indicated, an activity designated as A is presumed to be an activity within the primary administrative grouping under which it is listed. When an activity is associated with a bureau other than that under which it appears, or when a major listing does not have bureau status, the A is followed by the Roman numeral identifying the particular bureau or division charged with the service. It is recognized, of course, that there is a certain amount of cross-administration which cannot be portrayed by the system utilized in table 2. When responsibility for a certain

¹ See text footnote⁶.

² Directory of State and Insular Health Authorities. Pub. Health Rep., 66:10 (January 3, 1941). Reprint 2222.

activity is divided between two separate bureaus or divisions, credit is given the one carrying the major portion of the burden. However, no attempt is made at single assignment of accountability for general services, such as health education and licensure, where a number of bureaus participate in particular phases of the activity. Footnotes are used to explain situations of this sort.

TABLE 2.—Organization of State health departments as defined by the establishment of separate bureaus, divisions, services, or units for specified health activities *

Activity	State or Territory								
	Alabama	Arizona	Arkansas	California	Colorado	Connecticut	Delaware	District of Columbia	Florida
I. Vital statistics.....	B	A XV	B	B	B	B	B	B	B
II. Communicable disease control, general.....	B	A XVII	B	B	B	B	B	B	B
Hookworm.....	A								A
Pneumonia.....	A XI				A	A XV	A	A	
III. Tuberculosis control (field service).....	A II	A XVII	B	B	B	A II	A IV	B	B
IV. Tuberculosis hospitalization.....	A 5			A 6			B	B	
V. Venereal disease control.....	A II	A XVII	B	B	B	A II	A II	B	B
VI. Maternity-child health activities, general.....	B	B	B	B	B	B	B	B 1	B
Crippled children's services.....	(?)			B	B	B	A	A	(?)
Prevention of blindness.....	A	(?)	A	A V	A B	A XV	A XII	A	A XVI
VII. Dental services.....	A VI		B	A VI	B	B	B	A VI	B
VIII. Sanitation, general.....	B	B	B	B 1	B	B	B	B	B
Water supplies and sewage disposal facilities.....	A	A	A	A	A	A	A	A	A
Milk control.....	A		B	A	(?)	A XII	A	A IX	A
Shellfish control.....	A			A		A	A		A
Housing control.....					A			A	
Plumbing control.....					B	(?)	(?)		(?)
Smoke, fumes, and odors control.....				A	A				
Rodent control.....	A	(?)		A					
Garbage collection and disposal.....	(?)			(?)	(?)	A	(?)		A
Malaria control.....	A		B	A					B
Pest mosquito control.....	(?)		(?)	(?)					(?)
Sanitation of hotels, restaurants, and tourist camps.....	A	A	A	A	A IX	A	A	A IX	A
Sanitation of miscellaneous establishments **.....	A	A	A	A	A	A	A	A	A
IX. Food and drug control.....	A 8, VIII	A 9, XII	(?)	B 1	B	{A 5, XII, B 10}	A VIII	B	{A 5, VIII, B 10}
X. Industrial health activities.....	A II	(?)	(?)	B	A VIII	B	(?)	(?)	(?)
XI. Medical care, general***.....				B				B	
Mental disorders.....	(?)		A II		(?)	B	A XV	A	A XV
Cancer.....	B	(?)	B	B	B	B	B	B	B
XII. Laboratory services.....	A XV	B	A II	A II	A II	B	A II	B	B
XIII. Health education.....				A II	A VI	B	A VI	A I	A VI
XIV. Licensure ****.....									
XV. Administration, general.....	B	B	B	B	B	B 13	B	B 13	B
Accounting.....	A	A	A	A	A	A	A	A	B
XVI. Public health nursing.....	A VI	B	B	B	B	B	A VI	A B	B
XVII. Local health administration.....	A XV	B	B	B	A II	B	A XV		B

See footnotes at end of table.

TABLE 2.—Organization of State health departments as defined by the establishment of separate bureaus, divisions, services, or units for specified health activities—Continued

Activity	State or Territory								
	Georgia	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana	Maine
I. Vital statistics.....	B	B	B ¹	B	B	B	B	B	B
II. Communicable disease control, general.....	B	A ^{xvii}	B	B	B	B	B ¹	A ^{xvii}	B
Hookworm.....	A ²	A ^{xvii}	B	A ⁱⁱ	A	A	A ³	A ⁱⁱⁱ	A
Pneumonia.....	A	A ^{xvii}	B	A ⁱⁱ	A	A	A ³	A ⁱⁱⁱ	A
III. Tuberculosis control (field service).....	B	A ^{xvii}	A ⁱⁱ	A ⁱⁱ	B	B	B	B	A ⁱⁱ
IV. Tuberculosis hospitalization.....	B	A ³	B	B	B	B	B	B	B
V. Venereal disease control.....	A ⁱⁱ	A ^{xvii}	B	B	B	B	B	B	B
VI. Maternity-child health activities, general.....	B	B	B	B	B	B	B	B	B
Crippled children's services.....	(?)	A	A	A	A	A	A	A	A
Prevention of blindness.....	(?)	(?)	A ⁱⁱ	A	A	A ^{xii}	B	A ^{xvii}	A
VII. Dental services.....	A	B	B	A ^{vi}	A ^{vi}	B	B	A	A
VIII. Sanitation, general.....	B	B	B ¹	B ¹	B	B	B	B ¹	B
Water supplies and sewage disposal facilities.....	A	A	A	A	A	A	A	A	A
Milk control.....	(?)	A	A	B	(?)	A ^{ix}	A ^{ix}	A ^{ix}	A
Shellfish control.....								A ^{ix}	
Housing control.....				A	A ³				
Plumbing control.....				A	(?)		A	A	A
Smoke, fumes, and odors control.....			A						A
Rodent control.....	A					(?)		A	
Garbage collection and disposal.....	(?)		(?)	A	A		(?)	A	
Malaria control.....	B	A	A	A	A		(?)	A	(?)
Pest mosquito control.....			(?)	(?)		(?)		(?)	
Sanitation of hotels, restaurants, and tourist camps.....	A	A	B	A			A ^{ix}	A ^{ix}	A
Sanitation of miscellaneous establishments**.....	A	A	A	A	A	A	A	A	A
IX. Food and drug control.....		A ^{viii}	A	B ¹		B	A	B	
X. Industrial health activities.....	(?)	B	B	B	A ^{viii}	A ^{viii}	(?)	(?)	A ³
XI. Medical care, general***.....									
Mental disorders.....							B		
Cancer.....	B	(?)	B	A ^{xiii}	A ⁱⁱ	A ^{xv}		A ^{vi}	B
XII. Laboratory services.....	B	B	B	B	B	B	B	A	B
XIII. Health education.....	A ⁱ	A ⁱⁱ	B	B	B	B	B	A ⁱⁱ	A ^{xv}
XIV. Licensure ****.....	A ^{vi}		A ^{vi}		B		B		B
XV. Administration, general.....	B	B	B	B ¹²	B	B	B	B	B
Accounting.....	A	A	A	A	A	A	A	A	A
XVI. Public health nursing.....	B	B	A ^{vi}	B	B	A ^{vi}	B	A ^{vi}	A
XVII. Local health administration.....	B	B	B	B	B	B	B	B	B

Activity	State or Territory								
	Maryland	Massachusetts	Michigan	Minnesota	Mississippi	Missouri	Montana	Nebraska	Nevada
I. Vital statistics.....	B		B	B	B	B	B	B	B
II. Communicable disease control, general.....	B	B	B	B	B	A ^{xvii}	B	B	B
Hookworm.....					A				
Pneumonia.....	A ^{xv}	A	A	A	A	B	A		
III. Tuberculosis control (field service).....	A ⁱⁱ	B	A ⁱⁱ	A ⁱⁱ	A ^{iv}	A ^{xvii}	A ⁱⁱ	B	A ^{xv}
IV. Tuberculosis hospitalization.....		B			B				
V. Venereal disease control.....	A ⁱⁱ	B	A ⁱⁱ	B	B	B	A ⁱⁱ	A ⁱⁱ	B

See footnotes at end of table.

TABLE 2.—Organization of State health departments as defined by the establishment of separate bureaus, divisions, services, or units for specified health activities—Continued

Activity	State or Territory								
	Maryland	Massachusetts	Michigan	Minnesota	Mississippi	Missouri	Montana	Nebraska	Nevada
VI. Maternity-child health activities, general.....	B	B	B	B	B	B	B	B	B
Crippled children's services.....	A ^{II}	A ^{XV}							A
Prevention of blindness.....	A ^{XV}	A ^{XII}	A ^{II}	A	A	B	A	(?)	A
VII. Dental services.....	A ^{XV}	A ^{VI}	B	B	B	B	(?)	B	B
VIII. Sanitation, general.....	B	B	B	B	B	B		B ^I	B ^I
Water supplies and sewage disposal facilities.....							B	A	A
Milk control.....	A	A	A	A	A	A			(?)
Shellfish control.....	A ^{IX}	A ^{IX}	A	A	B	(?)			
Housing control.....	A ^{IX}	A			A				(?)
Plumbing control.....	(?)	(?)	(?)	A ^{XV}		(?)			(?)
Smoke, fumes, and odors control.....									(?)
Rodent control.....									(?)
Garbage collection and disposal.....	A	(?)	(?)	A	(?)		(?)		(?)
Malaria control.....				A	B	A			
Pest mosquito control.....		A		(?)	(?)				A
Sanitation of hotels, restaurants, and tourist camps.....				B	A		A ^{IX}		
Sanitation of miscellaneous establishments**.....	A	A ^{IX}	A	A	A	A		A	A
IX. Food and drug control.....	B	A	A	A	A ^{XIV}	B	A	A	A
X. Industrial health activities.....	A	B	B	A ^{10, XV}	(?)	B	B		A ^{VIII}
XI. Medical care, general***.....	A ^{VIII}	(?)	B	A ^{II}	B	A ^{VIII}	B	(?)	(?)
Mental disorders.....	A ^{VI}								
Cancer.....		B	A ^{XV}	(?)	A ^{XV}	(?)	A ^{II}		
XII. Laboratory services.....	B ^I	B	B	B	B	B	B	B	B
XIII. Health education.....	B	A ^{VI}	B	B	B	B	A ^{VI}	A ^{II}	A ^{XV}
XIV. Licensure****.....	A ^I	A ^{III}	A ^{VIII}	A ^{XV}	A ^{XV}	B		B	
XV. Administration, general.....	B ^{II}	B	B	B	B	B	B	B	B
Accounting.....	B	A	A	A	A	A	A	A	A
XVI. Public health nursing.....	B	A ^{VI}	B	B	B	B	A ^{VI}	A	A ^{VI}
XVII. Local health administration.....	A ^{XV}	A ^{XV}	B	B	B	B	B		A ^{II}

Activity	State or Territory								
	New Hampshire	New Jersey	New Mexico	New York	North Carolina	North Dakota	Ohio	Oklahoma	Oregon
I. Vital statistics.....	B	B	B	B	B	B	B	B	B
II. Communicable disease control, general.....	B	A ^{XVII}	A ^{XVII}	B	B	B	A ^{VI}	A	A ^{XV}
Hookworm.....								A	
Pneumonia.....	A ^{XV}	A ^{XVII}	A ^{XVII}	B		A	A ⁴	A	
III. Tuberculosis control (field service).....	A ^{XV}	(?)	A ^{XVII}	B	(?)	A ^{II}	A ^{VI}	B	A ^{XV}
IV. Tuberculosis hospitalization.....				B					
V. Venereal disease control.....	B	B	B	B	A ^{II}	A ^{II}	A ⁴	B	B
VI. Maternity-child health activities, general.....	B	B	B	B	B ^I	B	B	B	B
Crippled children's services.....	B			B	A ^{II}				
Prevention of blindness.....	A		A ^{XVII}	(?)	A ^{II}		A ^{VI}	A ^{II}	A
VII. Dental services.....		B	A ^{VI}	A ^{VI}	B	(?)	A ^{VI}	B	A

See footnotes at end of table.

TABLE 2.—Organization of State health departments as defined by the establishment of separate bureaus, divisions, services, or units for specified health activities—Continued

Activity	State or Territory								
	New Hampshire	New Jersey	New Mexico	New York	North Carolina	North Dakota	Ohio	Oklahoma	Oregon
VIII. Sanitation, general.....	B	B	B	B	B	B	B	B	B
Water supplies and sewage disposal facilities.....	A	A	A	A	A	A	(?)	A	A
Milk control.....	A	B	A	A	A	A		A	A
Shellfish control.....	A	B			A				A
Housing control.....									
Plumbing control.....	A			(?)		(?)	A	(?)	B
Smoke, fumes, and odors control.....	A					A			
Rodent control.....					A ^{II}				
Garbage collection and disposal.....	(?)		(?)	(?)		(?)	A ³	(?)	(?)
Malaria control.....		A ^{XVII}	A		A ^{II}	(?)	(?)	B	(?)
Pest mosquito control.....						(?)	(?)		(?)
Sanitation of hotels, restaurants, and tourist camps.....	A	A ^{IX}		A	A			A ^{IX}	B
Sanitation of miscellaneous establishments **.....	A ^{VIII}	(?)	A	A	A	A	A	A	B
IX. Food and drug control.....	A ^{VIII}	B	(?)	B ¹⁰	A ^{VIII}	A	(A, 5)	A	B
X. Industrial health activities.....	A ^{VIII}	(?)	(?)	(?)	B	(?)	A ⁴	B	(?)
XI. Medical care, general ***.....		A ^V		A ^{1, XV}					
Mental disorders.....		A ^{VI}							
Cancer.....	A ^{XV}	(?)	(?)	B ¹		A ^{XV}	(?)		B
XII. Laboratory services.....	B	B ¹	B	B	B	B	B	B	B
XIII. Health education.....	A ^{XV}	A ^{XV}	A ^{II}	B	A ^{VI}	A ^{XV}	A ^{II}	B	B
XIV. Licensure ****.....		A ^{II}	A ^{VI}	B	B	A ^{XV}	A ^{VI}	B	B
XV. Administration, general.....	B	B	B	B	B	B	B ¹³	B	B
Accounting.....	A	A	A	B	A	A	A ¹	B	A
XVI. Public health nursing.....	B	B	B	B	A ^{XVII}	A ^{VI}	B	B	B
XVII. Local health administration.....	A ^{II}	B	B	B	B	A	A ^{XV}	B	B

Activity	State or Territory								
	Pennsylvania	Rhode Island	South Carolina	South Dakota	Tennessee	Texas	Utah	Vermont	Virginia
I. Vital statistics.....	B	B	B	B	B	B	B	A ^{XV}	B
II. Communicable disease control, general.....	A ^{XVII}	B	B	B	B	A ^{XVII}	B	B	B
Hookworm.....									
Pneumonia.....	A ^{XVII}	A	A ^{XII}		A	A ^{XII}	A	A	A
III. Tuberculosis control (field service).....	B	A ^{II}	A ^{IV}	A ^{II}	B	B	A ^{II}	B	B
IV. Tuberculosis hospitalization.....	B	B	B		A ¹		B		B
V. Venereal disease control.....	A ^{XVII}	A ^{II}	B	A ^{II}	A ^{II}	B	B	A ^{II}	B
VI. Maternity-child health activities, general.....	B	B	B	B	A ^{XVII}	B	B	B	B
Crippled children's services.....	B	B	B	A	A ^{XV}		B	B	B
Prevention of blindness.....	A	A	(?)	A ^{II}	A ^{XV}	A		A ^{II}	A ¹
VII. Dental services.....	A ^{VI}	A ^{VI}	B	A ^{VI}	A ^{XVII}	B	B	A ^{VI}	B

See footnotes at end of table.

TABLE 2.—Organization of State health departments as defined by the establishment of separate bureaus, divisions, services, or units for specified health activities—Continued

Activity	State or Territory								
	Pennsylvania	Rhode Island	South Carolina	South Dakota	Tennessee	Texas	Utah	Vermont	Virginia
VIII. Sanitation, general.....	B	B	A XV	B	B	B ¹	B	B	B
Water supplies and sewage disposal facilities.....	A	A	A XV	A	A	A	A	A	A XVII
Milk control.....	B	A	A XV	A	A	A IX	A	A	A (7)
Shellfish control.....		A	A XV			A			A (7)
Housing control.....	B							A	
Plumbing control.....						(7)			
Smoke, fumes, and odors control.....	A								(7)
Rodent control.....			A XV			A			
Garbage collection and disposal.....	(7)	(7)		A		A			(7)
Malaria control.....			A XV		A II	B			A (7)
Pest mosquito control.....			(7)			(7)			(7)
Sanitation of hotels, restaurants, and tourist camps.....	A	A	A XV	A		A		A	A
Sanitation of miscellaneous establishments **.....	A	A	A XV	A	A	A	A	A	
IX. Food and drug control.....	A 10, XVII	{ A 5, VIII B 10 }	A 5, XV			B		A VIII	
X. Industrial health activities.....	A XVII	A II	B	(7)	A 3, II	B	B	A III	B
XI. Medical care, general ***.....									
Mental disorders.....	A XVII	A XV	(7)		A XV	A V		(7)	
Cancer.....	A XVII	A II	B		(7)	A XII			
XII. Laboratory services.....	A XVII	B	B	B	B	B	B	B	B
XIII. Health education.....	A XVII	A XV	A II	A II	A XV	B	B	A II	B
XIV. Licensure ****.....	B	B		B		A II	A VI		
XV. Administration, general.....	B II	B	B	B	B	B	B II	B	B
Accounting.....	B	A VI	A	B	A	A	B	A	A
XVI. Public health nursing.....	B	A VI	A VI	B	A XVII	A VI	B	B	A
XVII. Local health administration.....	B		B	A XV	B	B	B		B

Activity	State or Territory							
	Washington	West Virginia	Wisconsin	Wyoming	Alaska	Hawaii	Puerto Rico	Virgin Islands
I. Vital statistics.....	B	B	B	B		B	A II	
II. Communicable disease control, general.....	B	B	B	B	B	B	B	
Hookworm.....							A XVII	
Pneumonia.....		A 3, XII	A XII		A II	A		
III. Tuberculosis control (field service).....	A II	B	A II	A II	B	B	B	B
IV. Tuberculosis hospitalization.....			B			A 4	B	B
V. Venereal disease control.....	A II	B	B	A XII	A II		B	B
VI. Maternity-child health activities, general.....	B	B	B	B	B	B	B	B
Crippled children's services.....				A	A	B	A	A
Prevention of blindness.....	(7)	A	A I	(7)	A	A	A	A VI
VII. Dental services.....	A VI	B	B	A VI	A VI		A VI	

There is no departmentalization in the health department

See footnotes at end of table.

TABLE 2.—Organization of State health departments as defined by the establishment of separate bureaus, divisions, services, or units for specified health activities—Continued

Activity	State or Territory							
	Washington	West Virginia	Wisconsin	Wyoming	Alaska	Hawaii	Puerto Rico	Virgin Islands
VIII. Sanitation, general.....	B	B	B ¹	B	B	B	B ¹	There is no departmentalization in the health department
Water supplies and sewage disposal facilities.....	A	A	A	A	A	A	A	
Milk control.....	A	A			A	A	B	
Shellfish control.....	A				A		A	
Housing control.....						A	B	
Plumbing control.....			A ^{xiv}		(?)	A	A	
Smoke, fumes, and odors control.....						A	B	
Rodent control.....	A		A			A	(?)	
Garbage collection and disposal.....	(?)		A	(?)	(?)	A	(?)	
Malaria control.....			A			A ⁱⁱ	A ⁱⁱ	
Pest mosquito control.....			(9)			(9)	(9)	
Sanitation of hotels, restaurants, and tourist camps.....		A	A ^{xiv}		A	A	A	
Sanitation of miscellaneous establishments **.....	A	A ^{xiv}	A ^{xiv}	A	A ^{viii}	A ⁱⁱ	A ⁱⁱ	
IX. Food and drug control.....	(?)	B	B	(?)		A ^{viii}	A ^{viii}	
X. Industrial health activities.....						A ⁱⁱ	B	
XI. Medical care, general ***.....	(?)	(?)				B	B	
Mental disorders.....	(?)	(?)				A ⁱⁱ	(9)	
Cancer.....	(?)		A ^{xv}				B ⁱ	
XII. Laboratory services.....	B	B	B	B	B	A ⁱⁱ	A ^{xv}	
XIII. Health education.....	B	B	A ⁱⁱ	A ^{vi}	A ^{xv}	A ^{xv}	A ^{xv}	
XIV. Licensure ****.....		B	B			A ⁱⁱ	A ⁱⁱ	
XV. Administration, general.....	B	B	B	B	B	B	B ⁱⁱ	
Accounting.....	A	A	A	A	A	A	B	
XVI. Public health nursing.....	B	B	B	A ^{vi}	B	B	A ^{xvii}	
XVII. Local health administration.....	A ^{xv}	B	A ^{xv}				B	

*Code:

A—Activity, but no special bureau, division, service, or unit. Unless otherwise indicated, an activity designated as A is presumed to be an activity within the primary administrative grouping under which it is listed. When an activity is associated with a bureau other than that under which it appears, or when any major listing does not have bureau status, the A is followed by the Roman numeral identifying the particular bureau or division charged with the service.

B—Bureau, division, service, or unit as reported to the United States Public Health Service for the 1940 Directory of State and Insular Health Authorities [Pub. Health Rep., 66:10 (January 3, 1941). Reprint 2222], plus hospitals administered by the State health department. In a few instances, where supplemental data pointed to an omission in the directory reports, a B status has been accorded the activity in question.

** Swimming pools, barber shops, and/or beauty parlors.

*** Medical services for migratory laborers and for clients of vocational rehabilitation programs, as well as for the unspecified needy are included.

**** Includes any one or any combination of the following professions and facilities rendering health services: Members of the healing arts (physicians, osteopaths, chiropractors, optometrists, nurses, dentists, dental hygienists, and pharmacists), midwives, embalmers and funeral directors, barbers and beauticians, operators of water and sewage treatment plants, hospitals, and/or other health facilities or personnel.

¹ Two separate bureaus are established for carrying on this activity.

² Activity of the bureau of malaria which is not included in the major administrative groupings of this table.

³ Activity not of a routine nature: Engaged in to a limited extent—in the absence of local service, upon request or complaint, or voluntarily, because the agency having authority is inactive.

⁴ Activity of the bureau of adult hygiene which is not included in the major administrative groupings of this table.

⁵ Does not operate a State hospital, but subsidizes local hospitals.

⁶ Indirectly only: Official activity limited to general nursing service, laboratory service, general medical care, or antimalaria measures.

⁷ No active program; however, broad powers of the State health department include regulatory authority; advisory service is given upon request; or some educational measures are engaged in.

⁸ Food control only.

⁹ The State public health laboratory is not actually a part of the State health department, but is financially aided by the State board of health.

¹⁰ Drug control only.

¹¹ No single bureau is charged with this activity. Various bureaus participate in its several phases.

¹² In addition to the general administrative office, there is a separate unit charged with one of the following: Selection and training of personnel, procurement and distribution of supplies, social service, or law enforcement.

While most health department bureaus and divisions have been established for administration of activities designed to correct one or more specific health problems or to supply central services affecting all branches of public health work, most State health organizations also include one or more divisions for such purposes as business management or supervision of personnel engaged in generalized health services. In order that the picture of health department organization might be complete, these units have been listed in the stub of table 2 as addenda to the specialized health activities. The purpose of this procedure is to show the frequency with which they operate, either as separate entities or as subsidiary services within other units. Contributions of these three administrative and supervisory units (general administration, public health nursing, and local health administration) have been referred to in earlier chapters as they applied to special service categories. However, there has been no discussion of the over-all functions of these units as distinguishable sections of the State health agency. Therefore, a brief résumé of such functions is appropriate at this point.

General administration occupies the nuclear position in health department organization. For the most part, an administrative unit is composed of a health officer and his immediate staff, engaged primarily in directing legislative relations, coordinating the work of service units, maintaining contacts with the State board of health, and carrying out necessary fiscal procedures. Frequently, the operation of such projects as merit systems, legal administration, personnel and accounts, and stenography are combined in the functions of the executive office, while occasionally purchase of all equipment and supplies and handling of all travel and communications for the entire health department are duties allocated to the division of administration rather than to each specialized division involved in performance of service.

Public health nursing when listed separately as a State-level activity is essentially an administrative and supervisory service. Most of the States that have no independent nursing units assign nurses to their respective State bureaus or to local health projects, often providing in the bureau of maternal and child health some means of coordinating nursing activity.

Arrangements for the supervision of local health services are by no means shaped to one pattern. In several States there are no organized local health services outside of the larger municipalities; thus no particular medium of general supervision by the State is exercised. A few health departments which participate financially in the support of local health agencies have not established integral means of supervision. Others have vested all supervisory power in the unit for

central administration, the deputy State health officer often acting as director of local health administration, while in others, local supervision has been made subordinate to the bureau of epidemiology. Approximately three-fifths of the States, however, maintain divisions specifically designed for liaison work—principally supervision and consultation—with local health units.

Careful study of the information recorded in table 2 reveals that in 1940 certain health activities were almost always given bureau status in health department organization, while other programs without exception represented adjuncts to previously established units. For instance, during that year, the health departments of more than 40 States operated bureaus or divisions for general administration, collection and preservation of vital statistics, general communicable disease control, improvement of maternity and child health, general sanitation, and provision of diagnostic laboratory services. Moreover, between 30 and 40 States reported separate health department units set up especially for venereal disease control, generalized public health nursing, and local health administration.

At the other end of the scale, it is observed that not a single health department included a bureau, division, service, or unit identified exclusively with smoke, fumes, or odors control, garbage collection and disposal, pest mosquito control, rodent control, or hookworm control; and in only one State each were separate units maintained for housing control, and shellfish sanitation. Plumbing control, supervision of hotels and restaurants, psychiatric services, prevention and care of blindness, pneumonia control, and general medical care of the needy are other types of health activities which are administered as separate and independent projects by not more than five States. It is true, of course, that the absence of specialized units for particular health services does not imply necessarily that nothing is being done in these fields. As shown in table 2, health department personnel participate in many activities which are not organized as separate bureaus or divisions.

Falling between the upper and lower limits cited, from the standpoint of frequency with which distinct units are established by State health departments, are the remaining health activities under consideration. More than 5 but less than 10 States maintained divisions organized specifically for cancer services, for malaria control, and for milk sanitation. Tuberculosis hospitals and divisions of licensure, of industrial hygiene, of food and drug control, of accounts, and of crippled children's services were reported by State health departments numbering from 10 to 20, while from 20 to 30 departments have formed separate units for tuberculosis field services, for dental services, and for health education.

Some consideration should be given perhaps to the placement of health activities which are not set up as separate units in health department organization. Of the group which are administered as subordinate functions of other sections in more than half of the States, milk sanitation and sanitation of hotels and restaurants and of swimming pools are usually carried by the bureau or division of sanitary engineering which often was established primarily for supervision of water supplies and sewage disposal facilities. There are some States, however, in which hotel and restaurant sanitation is one phase of a broad program of food and drug control; there are others in which milk control is delegated to the bureau of foods and drugs. Pneumonia control and tuberculosis field services when not operated as distinct enterprises are apt to be included in the programs of general communicable disease control. Activities for the prevention of infant blindness, which are usually associated with distribution of silver nitrate, are divided between numerous health department bureaus, outstanding among which are divisions of maternity and child hygiene, general communicable disease control, laboratories, and the central office of administration. Health education activities, likewise, are scattered among various bureaus when no single unit is established for this purpose.

Between one-fourth and one-half of the States operate the following health activities as auxiliary services, and usually they are placed in the main units indicated: Shellfish sanitation, malaria control, and food and drug control in the division of sanitary engineering; dental care and public health nursing in the division of maternity and child health; venereal disease control in the division of preventable diseases or epidemiology; and cancer services in either the office of central administration or the division of preventable diseases. Licensure of personnel and facilities rendering health services—unless performed by a bureau or division established especially for that purpose—is apt to be split among the units to which the various professional groups or facilities are most closely related. For instance, sanitation personnel (operators of water and sewage treatment plants) are certified by the division of sanitary engineering; midwives and maternity hospitals are licensed by the bureau of maternity and child health; tuberculosis hospitals, by the bureau of tuberculosis; and, occasionally, members of the healing arts and embalmers, by the office of general administration. When licensing of plumbers, barbers, and beauticians falls within health department jurisdiction it is usually handled by a separate division.

As demonstrated by table 2, there is no unanimity of health department organization; a variety of schemes prevail for the setting up of health department bureaus and divisions. Several of these are

illustrated by the copies of organization charts shown here. These particular charts have been chosen because they portray a wide range in organizational development and in arrangements for providing direct services. Figure A represents a department that is extremely simple in structure, as well as one which is conspicuously centralized. Only a few counties in this State have full-time health organization; therefore, the State department is called upon to furnish the bulk of

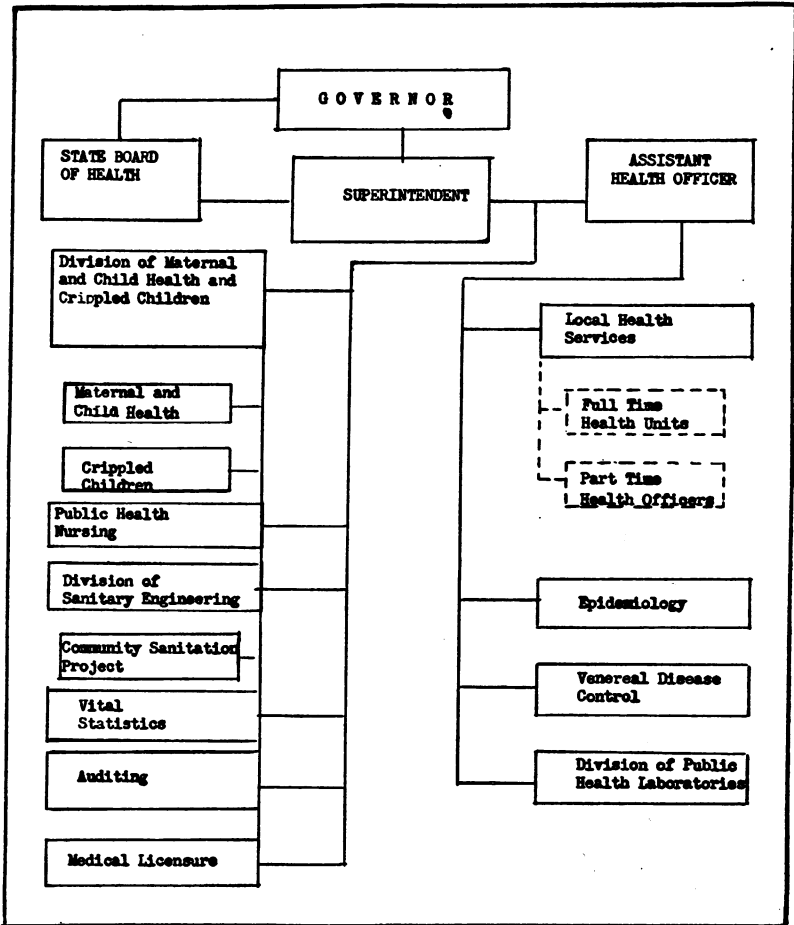


FIGURE A.—Health department organization.

services available. Figure B illustrates marked decentralization of the services afforded. Since there is provision for local service in over half of the counties of this jurisdiction, it is the State policy to expand further such local organizations and to operate through them rather than directly from the State level. Figure C depicts a most elaborate scheme of organization. Moreover, it represents a combination of the service plans portrayed by figures A and B, that

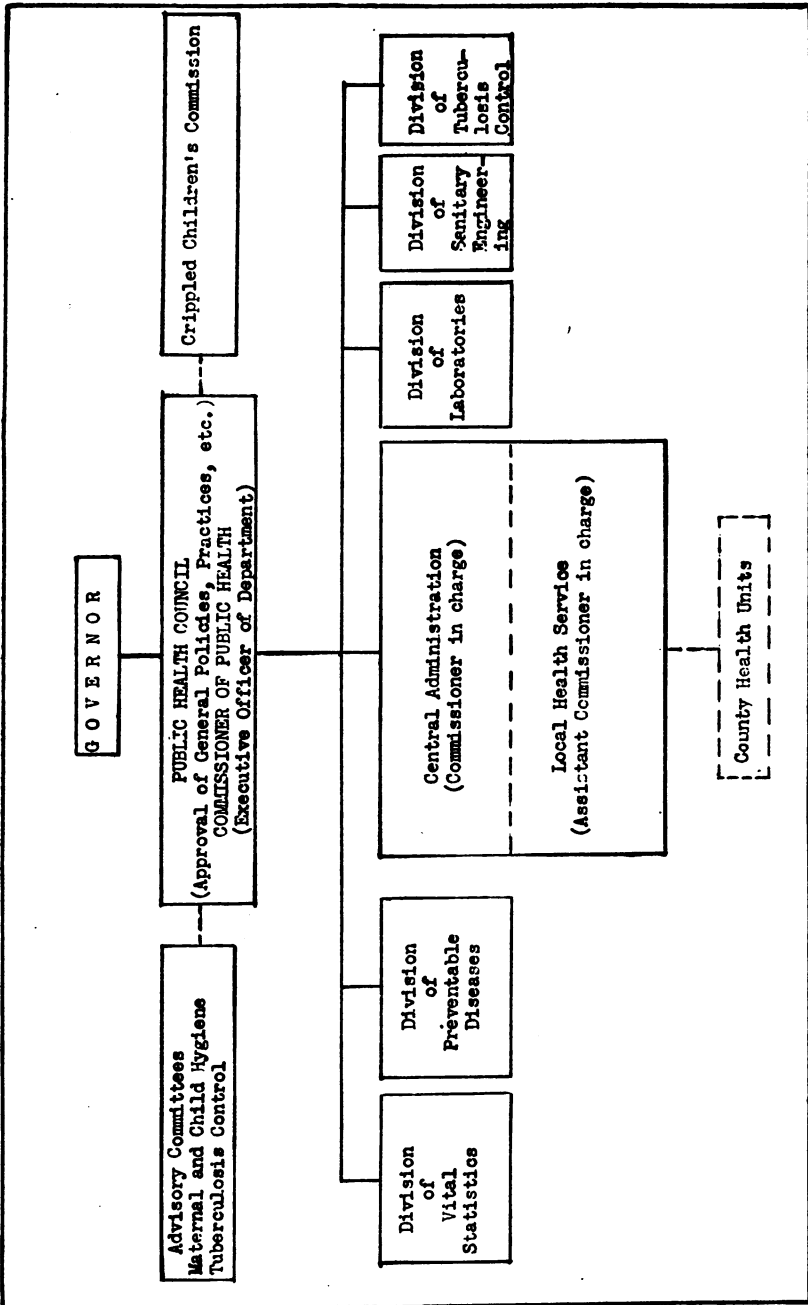


FIGURE B.—Health department organization.

is, provision of direct service by both the State and local units of government.

In an effort to compensate for inadequacies of local services, to insure better distribution of service available from the State level, and/or to facilitate supervision over local health activities, 16 State

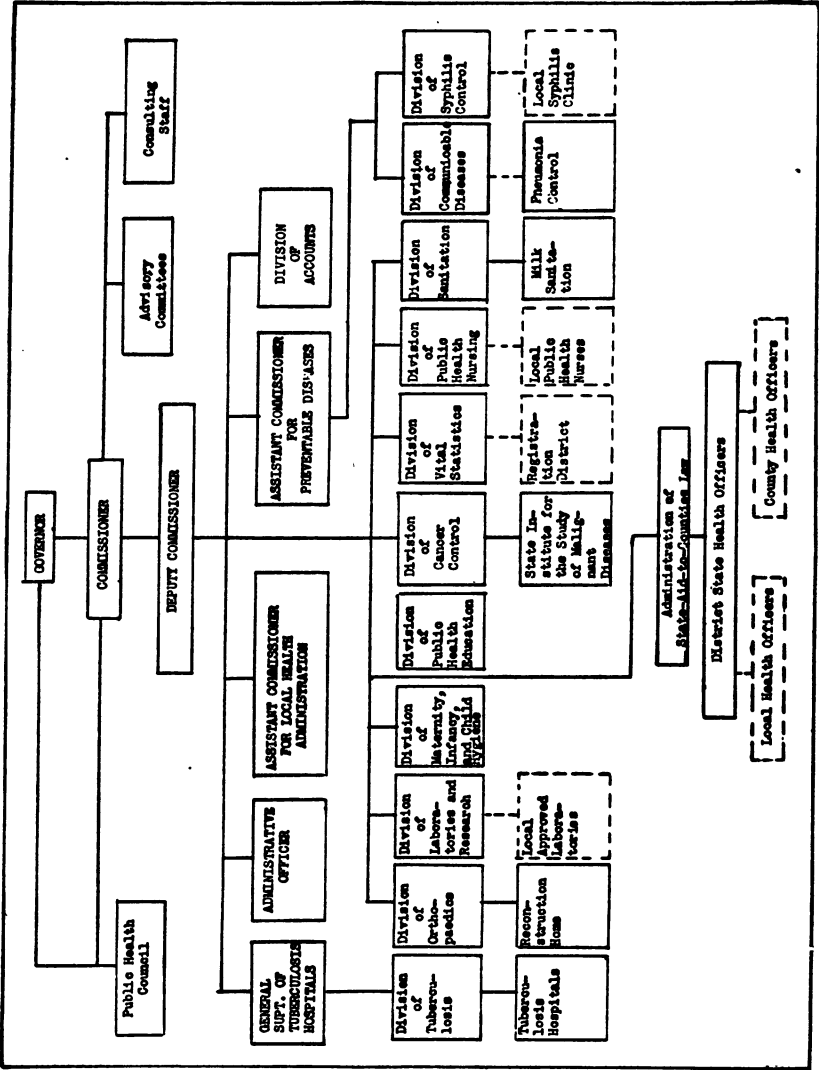


FIGURE C.—Health department organization.

health departments in 1940 had established one or more State health districts, with headquarters located at a strategic point in the area served. The number of such districts formed ranged from 1 in North Dakota to 19 in Illinois and in New York. In 10 of the 16 States which had established health districts, the entire State was covered

by the formation; in the remaining 6, only selected areas within the State were organized in this manner. A medical director, nurse, sanitary engineer, and clerk usually constitute the minimum staff of a State health district. Duties of these personnel are sometimes wholly supervisory and advisory to the local health units operating within the State district. In other instances, where no organized local units exist, personnel of the State district are charged with the rendering of direct service such as is provided ordinarily by counties or other political subdivisions. Under a third set-up, their commitments embrace both supervisory and advisory activities and the rendering of direct service.

Still a third important distinction in health department organization is the administration of tuberculosis or other special hospitals. As shown by the organization charts of the States included here, operation of such hospitals may or may not be a health department function.

ADMINISTRATIVE AND FIELD PERSONNEL EMPLOYED BY STATE HEALTH DEPARTMENTS

Further evidence of the variation which exists in health department organization is found in the size of staff maintained by the several State health agencies. According to table 3, the number of State health department employees ranges from 28 in Alaska to 1,282 in New York. As a matter of fact, the health department staffs of 7 States comprise less than 50 members each, whereas those of 2 exceed 1,000. All figures are exclusive of institutional personnel because consideration of the internal administration of hospitals operated by State health departments is beyond the scope of this study. Again it should be emphasized that these differences are not necessarily indicative of corresponding differences in either the quality or quantity of health service available to the residents of a given community. Locally employed health department personnel may or may not complement the services rendered by the State staff. It is entirely possible that there may be strong organizations at both the State and local levels. On the other hand, a strong State staff may have been developed to compensate for local inadequacies. Again, because of concentration upon development of local health departments, minimal activity may characterize the State agency. Finally, some States may be deficient in both respects.

Not only do State health departments differ with respect to the size of their complete staffs, but they also show some dissimilarity in their composition. In some States the number of public health nurses exceeds the number of sanitation personnel employed; in others, the reverse is true. Likewise, the number of physicians is sometimes larger and sometimes smaller than either of the aforementioned professional categories.

TABLE 3.—Full-time personnel, exclusive of those in institutions, of different professional classifications employed by State health departments

State or Territory	Number of persons of each classification employed full time by State health departments											
	All classifications	Physicians	Nurses	Dentists	Sanitation personnel		Technicians*	Health educators	Administrators not covered by other classifications	Clerical and records personnel	Laborers	Other and unclassified personnel
					Engineers	Others						
Total.....	11,269	889	1,903	133	611	1,019	1,226	148	85	3,740	537	978
Alabama.....	232	24	38	2	17	7	43	1	2	61	20	17
Arizona.....	31	3	3	—	2	1	4	1	1	16	—	—
Arkansas.....	67	6	7	3	6	1	11	—	—	31	2	—
California.....	374	46	50	4	2	70	35	3	1	154	1	8
Colorado.....	110	7	36	1	1	9	8	—	2	38	3	5
Connecticut.....	174	14	17	1	10	4	37	2	4	74	3	8
Delaware.....	64	6	18	—	2	4	11	—	1	17	4	1
District of Columbia.....	302	13	94	—	2	52	31	1	—	74	5	30
Florida.....	195	20	16	2	8	29	29	2	—	73	15	1
Georgia.....	195	22	15	—	28	—	32	4	—	77	17	—
Idaho.....	36	2	3	—	4	3	9	—	1	12	1	1
Illinois.....	480	42	89	6	36	25	52	9	1	176	31	13
Indiana.....	223	15	42	2	20	41	20	2	1	56	8	16
Iowa.....	168	16	44	1	18	6	15	1	5	51	3	8
Kansas.....	95	7	6	1	13	8	20	1	1	35	2	1
Kentucky.....	187	15	6	8	6	19	18	3	4	95	11	2
Louisiana.....	470	13	15	—	7	150	7	—	—	41	2	235
Maine.....	127	12	35	1	8	5	14	1	—	45	—	6
Maryland.....	135	5	2	1	10	9	18	1	—	63	13	13
Massachusetts.....	420	40	34	2	27	17	88	12	—	148	25	27
Michigan.....	377	20	9	2	20	1	59	3	11	93	—	159
Minnesota.....	272	16	41	2	20	22	32	2	—	120	12	3
Mississippi.....	123	10	9	—	5	3	17	1	—	63	3	12
Missouri.....	230	24	64	3	14	39	8	2	2	63	10	1
Montana.....	43	4	4	—	3	4	8	2	—	16	1	—
Nebraska.....	55	8	15	1	1	2	4	—	3	19	—	2
Nevada.....	35	3	14	1	1	3	4	—	1	8	—	—
New Hampshire.....	70	4	21	—	6	4	11	—	—	22	—	2
New Jersey.....	315	15	84	1	13	24	40	5	8	97	14	14
New Mexico.....	51	4	6	—	2	3	9	2	1	21	—	3
New York.....	1,282	88	207	2	72	21	121	4	1	437	100	229
North Carolina.....	185	10	10	30	13	8	33	1	1	68	7	4
North Dakota.....	53	6	11	—	7	1	6	1	1	18	2	—
Ohio.....	153	4	6	2	16	5	19	2	—	84	11	4
Oklahoma.....	132	17	35	1	6	9	16	—	1	36	—	11
Oregon.....	60	4	6	1	4	3	5	1	—	32	—	4
Pennsylvania.....	1,013	44	226	2	54	164	41	20	5	416	15	26
Rhode Island.....	118	8	21	—	5	20	20	—	5	29	6	4
South Carolina.....	126	19	20	6	9	—	17	2	1	51	1	—
South Dakota.....	41	4	6	—	5	2	2	—	—	19	2	1
Tennessee.....	284	52	45	3	11	2	42	29	—	81	13	6
Texas.....	351	25	48	6	31	31	75	15	5	84	9	22
Utah.....	130	12	58	2	3	7	7	1	1	32	1	6
Vermont.....	74	8	12	1	2	3	5	1	—	20	1	1
Virginia.....	392	60	37	22	9	63	27	1	—	99	3	1
Washington.....	64	6	6	—	4	4	10	1	2	28	2	1
West Virginia.....	81	7	8	—	12	5	10	1	1	33	4	—
Wisconsin.....	201	26	32	1	17	17	15	5	6	74	3	5
Wyoming.....	34	3	14	—	1	—	4	1	1	9	1	—
Alaska.....	28	3	14	—	1	2	2	—	—	5	1	—
Hawaii.....	261	7	66	—	5	47	17	1	—	56	53	9
Puerto Rico.....	498	31	79	7	12	35	34	—	1	167	79	53
Virgin Islands.....	52	9	—	2	—	5	4	—	—	3	17	3

* Includes all technical laboratory personnel, irrespective of their acquired skills; also X-ray technicians, physiotherapists, and dental hygienists.

For the entire country, clerical and records personnel head the list from the standpoint of numerical preponderance. One-third of the total number of health department employees (11,269) fall within the clerical and records classification. Not only do clerical and records

personnel occupy the leading position for the country as a whole, but they maintain that position in over three-fourths of the States. While one or more persons of this classification are attached to practically every health department bureau or division, by far the largest number are assigned to the vital statistics section. For individual jurisdictions the health department clerical staff ranges from 3 persons in the Virgin Islands to 437 in New York.

In the aggregate, nurses constitute the second largest group of health department employees, over 1,900 of them being reported by the 53 health agencies under discussion. Extreme variation, which is determined by the State's general service policy, characterizes the number of nurses employed by separate departments. Sixteen State health organizations reported less than 10 nurses each, while 3 reported more than 100. Eighteen nurses were employed by the health department occupying the median position. As indicated earlier in this report, nurses of independent nursing units are engaged primarily in administrative and supervisory service. However, those assigned to other health department bureaus, such as venereal disease divisions, tuberculosis or industrial hygiene units, or divisions of maternity and child hygiene, usually render a certain amount of specialized direct service. Those attached to the offices of State health districts also perform actual field services, but usually under this set-up the nursing done is of a generalized nature.

Sanitation personnel, including engineers, milk specialists, and general sanitary inspectors, follow nurses in point of numbers. The field of activity of sanitation personnel is broad and varied. Outstanding among their responsibilities are supervision of water supplies and sewage disposal facilities, food and drug control—including milk and shellfish sanitation, hotel and restaurant inspection, and miscellaneous sanitation activities, as well as malaria and plague control. Sanitation personnel are customarily assigned to divisions or subdivisions of sanitary engineering, to bureaus of food and drugs, or—when such services are organized separately—to hotel and restaurant supervision or malaria or rodent control. Considerably less than half of the health department employees participating in sanitation activities are engineers. Although, in the aggregate, engineers are exceeded by less highly trained sanitation personnel, this situation is reversed in 25 States. In fact, 3 State health departments employ engineers only for their sanitation work.

The term "technicians" covers a widely diversified group composed of X-ray technicians, physical therapists, dental hygienists, and all technical laboratory personnel, irrespective of their acquired skills. Glass washers, nontechnical aides, and the like are classified as laborers, however. Among the health department employees listed as tech-

nicians, those identified with laboratory work outnumber all others combined.

Among the employees listed as "other and unclassified," nutritionists constitute the largest group for which identity was established. Social workers also make up a sizable portion of this heterogeneous category which totals somewhat less than 1,000 persons.

No single professional group more clearly reflects the simplicity or complexity of health department organization than does the number of physicians employed. It is generally conceded that directors of all health activities except vital statistics, sanitation, public health nursing, health education, dentistry, and business management preferably should be physicians. In health departments where only 2 or 3 physicians are employed, numerous functions are—of necessity—merged and combined under one medical director. On the other hand, in States where health departments employ upwards of 25 physicians, a much greater degree of specialization is possible. Not only are marked differences in the number of separate units operated by State health departments suggested by these figures, but also is diversity in the internal composition of the various bureaus indicated. In health departments employing few medical personnel, the division director often represents the only physician engaged in a particular activity. In those having a lengthy roster of physicians, the division director has several medical assistants. Finally, States that utilize the health district system employ a relatively larger number of physicians than those which do not. A total of nearly 900 medical personnel serve on the health department staffs of the 48 States, the District of Columbia, the Territories, and the Virgin Islands. Physicians employed by the middle 50 percent of the States number from 6 to 20.

Dentists constitute the smallest single professional group. In health departments that have no division of dental hygiene or oral health as a separately defined section, dentists almost always are assigned to the bureau of maternity and child health.

It is obvious, therefore, that no common pattern obtains either for the size of a complete health department staff or for the proportion of personnel of each professional classification which are selected. No attempt has been made to review differences among the States with respect to qualifications of the personnel of each type who are employed.

EXPENDITURES BY STATE HEALTH DEPARTMENTS

In the aggregate, efforts of official State health departments to conserve, improve, and restore the health of individuals and communities are costing nearly 53 million dollars per year,⁴ an amount

⁴ Because of variations in fiscal periods, figures cover the most recent year for which information was available at the date of interview.

equivalent to \$0.395 per capita. These figures include support of the organizational structure and of all activities engaged in by members of the State health department staff, plus financial grants made by this State agency to health departments, hospitals, laboratories, and special health projects operated by counties, cities, or other political subdivisions.

For individual jurisdictions, health department expenditures range from about \$103,000 in Nevada to nearly \$7,000,000 in New York. (See table 4.) When related to the population involved, however, neither of these States represents an extreme. On a per capita basis, two States (Delaware and Rhode Island), the Territories, the District of Columbia, and the Virgin Islands each reported an expenditure in excess of \$1, while Ohio reported the lowest figure (\$0.134). In view of the general governmental organization of these jurisdictions, it is to be expected that they should occupy such remote positions. Five of the seven health departments spending more than \$1 per person are responsible for operation of State tuberculosis and/or general hospitals—a particularly expensive item in the complete health department program. Furthermore, the District of Columbia health agency has no counterparts operating at a lower level since its functions more closely resemble those of a city than of a State health department. In other words, both in the District of Columbia and in the Virgin Islands the central government carries the entire burden. Delaware and Rhode Island, likewise, administer a relatively large volume of direct health service through the State central and district offices rather than through local health units. Ohio, on the other hand, follows an organizational scheme in which the county and other local governmental units are dominant. Consequently, it is the policy here for the State to rely in large measure upon these local units to provide the bulk of health services. The middle 50 percent of the States expend between 25 and 50 cents per capita for operation of State health departments.

TABLE 4.—Approximate total and per capita annual expenditures* by the health departments of each State and Territory, the District of Columbia, and the Virgin Islands, and proportion of the total amount which was expended for each of several broad categories of service

State or Territory	Approximate annual health department expenditure*		Percent of total expended for each service category			
	Total	Per capita	Central office services	Field services	Local grants	Hospitals
Total.....	\$52,896,200	\$0.395	23.3	35.2	21.3	20.2
Alabama.....	1,145,900	.404	21.4	32.0	46.6	.....
Arizona.....	176,700	.354	40.3	20.9	38.8	.....
Arkansas.....	642,400	.330	22.7	20.3	57.0	.....
California.....	2,451,400	.355	17.8	43.4	38.8	.....
Colorado.....	463,300	.412	38.9	44.1	17.0	.....
Connecticut.....	562,000	.329	38.2	56.7	5.1	.....
Delaware.....	448,300	1.682	25.3	25.5	5.1	44.1
District of Columbia.....	2,658,500	4.009	12.4	29.2	.....	58.4
Florida.....	551,800	.291	38.1	41.8	20.1	.....
Georgia.....	1,145,700	.367	30.6	34.3	19.6	15.5
Idaho.....	253,400	.483	31.0	47.4	21.6	.....
Illinois.....	1,544,700	.196	18.8	72.0	9.2	.....
Indiana.....	664,900	.194	25.6	65.0	9.4	.....
Iowa.....	478,600	.189	33.1	58.8	8.1	.....
Kansas.....	405,000	.225	28.9	40.9	30.2	.....
Kentucky.....	1,010,500	.355	21.7	16.2	50.9	11.2
Louisiana.....	1,027,700	.435	17.9	53.4	28.7	.....
Maine.....	370,700	.438	21.9	78.1	.....	.....
Maryland.....	763,500	.419	32.5	13.9	53.6	.....
Massachusetts.....	3,793,400	.879	7.3	41.0	13.8	37.9
Michigan.....	1,321,000	.251	51.4	18.2	30.4	.....
Minnesota.....	694,300	.249	21.8	74.4	3.8	.....
Mississippi.....	909,100	.416	22.7	17.5	39.2	20.6
Missouri.....	721,000	.191	24.5	61.3	14.2	.....
Montana.....	168,200	.301	27.0	41.7	31.3	.....
Nebraska.....	258,700	.197	54.4	45.6	.....	.....
Nevada.....	102,900	.933	57.4	42.6	.....	.....
New Hampshire.....	207,400	.422	36.0	57.6	6.4	.....
New Jersey.....	918,400	.221	26.0	67.9	6.1	.....
New Mexico.....	222,100	.418	43.0	18.5	38.5	.....
New York.....	6,990,400	.519	33.6	11.6	16.3	38.5
North Carolina.....	1,183,900	.331	21.9	34.1	44.0	.....
North Dakota.....	176,600	.275	33.9	47.3	18.8	.....
Ohio.....	926,200	.134	24.9	19.2	55.9	.....
Oklahoma.....	541,200	.232	32.0	34.9	33.1	.....
Oregon.....	284,100	.261	29.3	29.6	41.1	.....
Pennsylvania.....	3,683,200	.373	20.1	37.5	.....	42.4
Rhode Island.....	792,600	1.111	12.9	30.7	.....	56.4
South Carolina.....	886,000	.466	11.6	31.6	28.3	28.5
South Dakota.....	204,800	.319	21.3	43.2	35.5	.....
Tennessee.....	1,133,400	.389	28.7	40.1	31.2	.....
Texas.....	1,127,400	.178	26.5	36.4	37.1	.....
Utah.....	445,900	.810	12.9	68.0	1.6	17.5
Vermont.....	181,600	.506	30.6	69.4	.....	.....
Virginia.....	1,872,900	.700	11.4	30.4	22.3	35.9
Washington.....	286,900	.165	38.5	24.5	37.0	.....
West Virginia.....	395,100	.208	43.5	22.7	33.8	.....
Wisconsin.....	643,400	.205	33.8	58.2	8.0	(b)
Wyoming.....	109,300	.436	18.7	83.3	.....	.....
Alaska.....	171,200	2.344	22.8	70.1	7.1	.....
Hawaii.....	1,115,400	2.635	19.0	40.7	40.3	.....
Puerto Rico.....	3,507,200	1.876	12.5	28.6	24.0	34.9
Virgin Islands.....	146,000	5.866	10.4	20.1	.....	69.5

* Because of variations in fiscal periods, figures cover the most recent year for which information was available at the date of interview.

^a Because of New York's method of operation and reporting, it was not feasible to segregate all costs for the 19 State health districts from expenditures for general administration. Therefore, the proportion recorded for "central services" is inflated, while expenditures for "field services" appear to be much lower than is actually the case.

^b Although operation of tuberculosis hospitals is now a function of the health department in Wisconsin, records for a complete fiscal year were not available under the new administrative set-up.

Further study of the fiscal data submitted by State health departments reveals that not only do gross and per capita expenditures vary markedly from State to State, but the purposes for which such funds were used are inconstant also. This lack of uniformity is

demonstrated in table 4. For facility of comparison, four broad categories of health department service have been established. The first, "central office services," includes expenditures for all general administrative and supervisory activities (general administration, local health administration, accounting procedures, maintenance of personnel records, law enforcement, supervision and coordination of public health nursing activities, and administration of the merit system), collection and processing of vital statistics, health education—both for the general public and for professional health workers, laboratory services, and licensure of professions and facilities rendering health services. The second, "field services," covers disbursements for all activities of the State health department carried on by its own staff in connection with specific health objectives such as general communicable disease control, tuberculosis control—exclusive of hospitalization, venereal disease control, maternity and child health services, sanitation in its broadest concept, pneumonia services, cancer services, mental hygiene, dentistry, and general medical care of the needy. The third category, "local grants," represents money allocated by State health departments to local health units, hospitals, or laboratories for services approved by the State but administered by some unit of local government. Local financial participation in the same projects is not included. Finally, the fourth service group, "hospitals," refers to expenditures for the maintenance and operation of all State hospitals, irrespective of whether such institutions are for treatment of special conditions such as tuberculosis, crippling disorders of children, cancer, trachoma, and rheumatism or for general medical care of the needy.

For the country as a whole, field services receive the highest proportion of health department funds, 35 percent of the total, while each of the other classes of service accounts for not less than 20 nor more than 23 percent. Within the separate States, however, this harmony is completely lacking. For instance, several State health departments spend more than three-fourths of their entire financial resources upon field services, while some concentrate as much as 70 percent of their total funds on hospital care. Other States follow the plan of allotting to local health units, hospitals, and laboratories more than half of all money available to the State health agency, and in still other jurisdictions more than 50 percent is devoted to central office services. Perhaps the clearest understanding of the extent to which variation exists among State health departments in their allocation of funds to broad types of service may be gained by studying each column of table 4 separately and then comparing the focal points for each.

The proportion of money expended by individual State health departments which is utilized for central office services ranges from

7 to 57 percent, with the middle half of the States reporting that between 20 and 34 percent is charged to central office services affecting all branches of public health work and available to the State as a whole and to general management of the organization. Typical of the services affecting all branches of public health work are activities related to the collection, processing, and preservation of vital statistics; laboratory services; training of public health personnel; refresher courses for private practitioners; educational measures for the general public; and licensure of professions and facilities rendering health service. Under general management are included direction of public relations, coordination of operating bureaus, carrying out necessary fiscal procedures, administration of merit systems, and law enforcement. Attention should be called to the fact that not all of the variation noted in the distribution of health department funds results from disagreement regarding the category of service to be emphasized. Some of it is explained by difference in accounting practices. Occasionally purchase of equipment and supplies, and travel for the entire department are charged to general administration rather than to the recipient divisions which are engaged in field services. In another State, because of its method of reporting, it was impossible to segregate operating costs for 19 State health districts from expenditures for general administration. Both of these irregular circumstances—which fortunately occur so seldom that the general picture is not distorted—lead to an inflated proportion for “central services” in the particular States involved, while expenditures for “field services” there appear to be much lower than they are in actuality.

A marked degree of health department concentration upon “field services” is apparent, not only from the leading position of such activities among other categories of service for the country as a whole, but also from the number of States in which there is a relatively high investment in field activities (health services related to specific problems). Fifteen State health departments reported that more than 50 percent of their total disbursements were expended for field services. Outstanding among such services are epidemiological investigations; operation of diagnostic and treatment clinics of various types; performance of immunizations; provision of field nursing service; distribution of drugs and biologicals for preventive and therapeutic purposes; physical inspection of school children; and sanitation activities. In only a dozen States was less than 25 percent of the total amount expended devoted to health department endeavors such as those listed. This grouping of the States is in striking contrast to that observed for “central office services” in which half of the States fall below the 25 percent mark.

Support of local health services through distribution of financial grants-in-aid by the central health agency was practiced to some

extent in all but 9 of the States and Territories at the time of this survey. Within discrete States, the proportion of State health department funds that are, in turn, allocated to local units stretches from 2 to 57 percent of the total. Four State health departments allot more than half of their entire financial assets to their local counterparts, but State participation in local health services to this degree is the exception rather than the rule. The more common policy of State health agencies is to assign smaller amounts to local health projects. Exclusive of the 9 States which made no contribution whatever to local efforts for improvement of the public health, 21 allotted to local health services less than one-fourth of the total amount they expended.

In only 14 of the 53 health departments does operation of any type of State hospital fall within the jurisdiction of the health department. Even in these 14 States, the proportion of total health department funds expended for hospital maintenance and operation varies from 11 to 70 percent. Nine of these States allot more than one-third of their health department resources for hospital administration, while 3 of them spend more than one-half of the total amount for this purpose.

Differences, such as those which have been pointed out, in application of health department funds are further indications of diversity of pattern in the organization and functions of State health departments. That dissimilarity exists also in the source of financial support of State health agencies is demonstrated by the information presented in table 5. From this tabulation one learns that—for the country as a whole—the bulk of money expended by State health departments (63 percent of the total) is appropriated by State legislative bodies, while about one-third of the entire cost is borne by the Federal Government through its system of grants-in-aid. Federal assistance has been extended to State health departments under authority of two pieces of special legislation—(1), titles V and VI of the Federal Social Security Act, and (2), the Venereal Disease Control Act. Title V funds are distributed to States for maternity and child health services and for correction or alleviation of the crippling conditions of children. The purposes to be accomplished by title VI grants are stabilization of the basic health department structure, development of better organization, promotion or extension of health services for which no particular financial arrangement has been made, and training of personnel. Venereal disease control funds, as the designation implies, are utilized exclusively for reduction of the incidence of the venereal diseases. Less than 2 percent of the full amount reported as State health department expenditures represents contributions of local governments to the State agency, while scarcely more than this fraction is derived from miscellaneous sources, notably

contributions by voluntary organizations having special health interests, license and inspection fees, and scattered service charges such as those made for water analyses or for furnishing copies of vital statistics records.

TABLE 5.—Approximate total and per capita annual expenditures* by the health departments of each State and Territory, the District of Columbia, and the Virgin Islands, and proportion of the total amount which was derived from each specified source

State or Territory	Approximate annual health department expenditure*		Percent of total derived from each source					
	Total	Per capita	State	Local	U. S. Public Health Service Title VI	U. S. Public Health Service V. D. funds	U. S. Children's Bureau Title V	Other
Total.....	\$2,896,200	\$0.395	63.1	1.6	17.1	5.3	10.4	2.5
Alabama.....	1,145,900	.404	42.1	-----	25.7	12.4	12.7	7.1
Arizona.....	176,700	.354	25.7	-----	31.6	7.8	33.8	1.1
Arkansas.....	642,400	.330	36.1	-----	34.8	15.7	12.8	0.6
California.....	2,451,400	.355	62.7	4.9	12.8	6.9	10.5	2.2
Colorado.....	463,300	.412	31.4	6.1	26.9	7.0	28.6	-----
Connecticut.....	562,000	.329	65.4	-----	17.7	4.4	12.5	-----
Delaware.....	448,300	1.682	78.3	-----	9.5	1.2	11.0	-----
District of Columbia.....	2,658,500	4.009	93.4	-----	2.4	0.2	4.0	-----
Florida.....	551,800	.291	41.9	-----	24.5	5.8	17.3	10.5
Georgia.....	1,145,700	.367	57.5	0.3	25.6	5.2	11.4	-----
Idaho.....	253,400	.483	38.5	-----	28.6	5.8	27.1	-----
Illinois.....	1,544,700	.196	55.7	-----	27.4	7.2	8.9	0.8
Indiana.....	664,900	.194	50.2	1.6	29.2	8.0	11.0	-----
Iowa.....	478,600	.189	33.9	5.5	37.7	8.4	10.3	4.2
Kansas.....	405,000	.225	32.9	-----	33.6	13.0	17.6	2.9
Kentucky.....	1,010,500	.355	54.9	-----	22.4	5.6	10.0	7.1
Louisiana.....	1,027,700	.435	70.2	-----	16.6	3.4	9.8	-----
Maine.....	370,700	.438	34.1	5.2	17.5	2.3	24.6	16.3
Maryland.....	763,500	.419	57.5	-----	17.1	3.2	22.2	-----
Massachusetts.....	3,793,400	.879	87.9	-----	5.6	1.6	4.9	-----
Michigan.....	1,321,000	.261	47.0	1.2	20.8	8.6	8.4	14.0
Minnesota.....	694,300	.249	44.7	11.1	26.5	4.6	11.1	2.0
Mississippi.....	909,100	.416	51.4	-----	23.4	10.4	11.2	3.6
Missouri.....	721,000	.191	32.6	5.0	37.6	10.7	14.5	0.2
Montana.....	168,200	.301	36.0	-----	34.5	1.6	27.9	-----
Nebraska.....	258,700	.197	17.0	4.0	22.2	3.0	12.7	41.1
Nevada.....	102,900	.933	22.2	10.5	30.7	3.0	32.1	1.5
New Hampshire.....	207,400	.422	41.6	-----	24.4	5.8	26.7	1.5
New Jersey.....	918,400	.221	58.5	-----	24.4	7.3	9.8	-----
New Mexico.....	222,100	.418	27.7	-----	32.2	3.9	36.2	-----
New York.....	6,990,400	.519	85.0	-----	8.4	2.6	3.9	0.1
North Carolina.....	1,183,900	.331	36.0	-----	26.4	4.4	19.4	13.8
North Dakota.....	176,600	.275	32.2	3.4	33.9	1.4	25.5	3.6
Ohio.....	926,200	.134	40.5	-----	33.4	14.5	11.6	-----
Oklahoma.....	541,200	.232	34.2	-----	34.5	16.3	7.8	7.2
Oregon.....	284,100	.261	27.9	-----	32.3	10.4	23.9	5.5
Pennsylvania.....	3,693,200	.373	78.2	-----	10.7	3.2	7.9	-----
Rhode Island.....	792,600	1.111	84.1	-----	6.9	1.3	6.5	1.2
South Carolina.....	886,000	.466	50.9	2.5	22.0	5.8	17.9	0.9
South Dakota.....	204,800	.319	27.8	-----	36.0	3.1	33.1	-----
Tennessee.....	1,133,400	.389	32.3	8.3	26.6	5.9	15.0	11.9
Texas.....	1,127,400	.178	22.8	-----	37.0	23.1	16.0	1.1
Utah.....	445,900	.810	53.8	7.8	15.3	3.1	19.4	0.6
Vermont.....	181,600	.506	38.8	3.4	23.7	0.6	29.7	3.8
Virginia.....	1,872,900	.700	55.5	16.5	13.6	5.7	8.4	0.3
Washington.....	286,900	.165	35.0	-----	37.1	14.4	12.3	1.2
West Virginia.....	395,100	.208	36.9	-----	37.7	5.8	13.5	6.1
Wisconsin.....	643,400	.205	44.9	-----	24.8	3.5	9.0	17.8
Wyoming.....	109,300	.436	36.5	0.3	25.2	1.5	26.5	-----
Alaska.....	171,200	2.344	17.3	14.3	23.7	1.2	40.7	2.8
Hawaii.....	1,115,400	2.635	84.4	1.0	5.2	1.2	5.6	2.6
Puerto Rico.....	3,507,200	1.876	81.7	-----	7.5	3.4	7.4	-----
Virgin Islands.....	146,000	5.866	85.7	-----	11.8	2.5	-----	-----

* Because of variations in fiscal periods, figures cover the most recent year for which information was available at the date of interview.

In the break-down of health department expenditures by source of funds, as in practically all analyses of fiscal data submitted by State health agencies, national averages fail to reveal situations within individual jurisdictions. In support of this statement, it is found that although nearly two-thirds of the aggregate amount expended by State health departments of the entire country is appropriated by State legislative bodies, 31 departments reported that less than 50 percent of their operating costs were derived from this source. Consequently, it is appropriate that some consideration should be given the monetary support of a few departments selected at random, which represent extremely divergent financial constitution. The health department of Nebraska, for example, receives from State taxes only 17 percent of the total sum it spends. Here a sizable portion (41 percent) is acquired from examining and licensing fees. Other health departments to which the respective States appropriate less than 25 percent of the operating costs are Nevada, Texas, and Alaska. In each of these jurisdictions, Federal aid is relied upon to meet the major portion of the health department's obligations. By way of contrast, it is observed that the State treasury supplies more than three-fourths of the money expended by health departments of the District of Columbia, Massachusetts, the Virgin Islands, New York, Hawaii, Rhode Island, Puerto Rico, Pennsylvania, and Delaware. Since administration and support of one or more State hospitals is included in the functions of each of these departments, the financial picture is weighted accordingly.

Federal aid, which, in large measure, has been extended to State health departments on a basis of financial need and special health problems, represents, in practically all instances, the major augmentation to State appropriations for State health department operation. At the same time, the financial structure of nearly a dozen health departments contains other consequential elements. In these States, participation by local official agencies or amounts obtained from miscellaneous sources (principally fees and contributions by voluntary agencies) account for upwards of 10 percent of the total.

Not only are there sharp distinctions among the States as to the relative amount of assistance granted health departments from all forms of Federal aid combined, but there is dissimilarity also with respect to the particular Federal fund which predominates. For separate States, title VI grants represent anywhere from 2 to 38 percent of the health department disbursements, while venereal disease control funds make up less than 1 percent of the total in one jurisdiction and more than 23 percent in another. Title V funds, likewise, account for as little as 4 or as much as 40 percent of the entire outlay for health department operation. Variation in the weight of title V funds may be explained partially by the fact that not all

health departments are responsible for administration of crippled children's programs, for which a substantial fraction of title V money is allotted.

It cannot be said that the purchasing power of a State completely governs the sum utilized for maintenance and operation of the health department. When the States were arrayed in declining order of wealth—measured by per capita spendable money income,⁵ divided into quarters, and the median per capita health department expenditure determined for each quarter, the results were as follows: Wealthiest quarter, \$0.436; second quarter, \$0.346; third quarter, \$0.258; and poorest quarter, \$0.378. These findings indicate that States lowest in the scale of wealth have accelerated their efforts to meet special health problems, irrespective of their financial limitations. This performance of the poorest quarter has been influenced in part by the allocation formula used by the Federal Government for regulation of grants-in-aid, whereby added weight is given to the financial need and special health problems of the respective States. Except in the case of this single group, State wealth appears to be a substantial element in determining the amount allocated by the various States to health services.

Analysis of expenditures by geographic position⁶ of the several States reveals that health department disbursements of the Northeastern, Western, and Southern areas are appreciably higher than are those of the Central States. Median per capita expenditures of each are cited herewith: Northeastern, \$0.472; Western, \$0.412; Southern, \$0.361; and Central, \$0.201. It is recognized, of course, that there is interrelationship between geographic location and wealth, thus making it difficult to segregate the exact weight of either State characteristic. However, in view of the very marked differences which were found, it is believed that location as well as wealth is a contributing element. The fact that States of the central grouping are relatively wealthy, yet geographically rank lowest from the standpoint of per capita expenditures, is a good example of the influence of location.

⁵ Martin, John L., National Income Division, Department of Commerce: *Income Payments to Individuals by States, 1929-39. Survey of Current Business, October 1940.*

⁶ The established geographic areas with the States contained therein are as follows:

Northeastern: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, and the District of Columbia.

Southern: Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas.

Central: Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.

Western: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, and California.

DISCUSSION

Dissimilarity characterizes State health department organization, for the number of component bureaus, divisions, and subdivisions—each with a director or chief responsible for the unit's activities—may vary from 6 to 20. Furthermore, no constant plan is followed in the combining of activities when several health programs are administered within a single bureau or division. The division of preventable diseases or epidemiology may operate for control of the general communicable diseases only, or it may include venereal disease control, tuberculosis control, or both. In a few instances, cancer services are performed through the division of preventable diseases. In still other States epidemiology and local health administration are combined under one director. Again, local health administration may be associated with rural sanitation. Crippled children's services are sometimes set up as a separate division; in another State, they are administered by the bureau of maternity and child health; in still another, they are merged with communicable disease control, while under yet another arrangement they are handled by the administrative office of the State health officer. Cancer service, likewise, or even tuberculosis control, is occasionally delegated to the immediate supervision of the State health officer. Public health nursing may be organized as a separate entity or it may be an adjunct of the division of maternity and child health. Dental hygiene, also, sometimes has separate existence and again is a subsidiary unit of the maternity and child health set-up. Hotel and restaurant sanitation in some States falls within the province of the food and drug division; in others it is a function of the division of sanitary engineering; and in a third group there is a special inspectional unit created specifically for this purpose.

Notwithstanding the many differences in the internal make-up of State health departments, there are certain salient organizational characteristics which are more or less uniform. Each State health agency is composed of a policy-forming or advisory body, an executive officer, and an administrative department composed of several bureaus or divisions dealing with particular health specialties. Even within the administrative departments, certain dissimilarities of which have been delineated, there is almost always a basic formation made up of a general administrative office, a public health laboratory, and bureaus of epidemiology, vital statistics, sanitary engineering, and maternity and child hygiene.

The executive officer of the State health department is appointed by the Governor in 28 States and by the State board of health in 21. In the 4 remaining jurisdictions, miscellaneous practices are followed.

The States are almost evenly divided as to whether or not the State health officer should be a member of the State board of health. Functions of the State board of health vary from those which are solely advisory to those which are completely regulatory, including the exercise of executive and police powers for enforcement of all State laws pertaining to public health. Under the latter system, the executive officer and members of the health department serve as agents of the board for performance of enforcement obligations.

For the entire country the roster of State health department employees numbers in excess of 11,000. Alaska has the smallest staff, with 28 members, and New York the largest, with 1,282. Thus the picture of disparity in organization is intensified. Proportionate composition as well as size of the staff varies from State to State. The degree of specialization in health department organization and activity is reflected particularly by the number of physicians employed. In departments having only two or three, numerous functions are assigned to one medical director, thus limiting the time and attention he is able to give to any specific problem. For the country as a whole, clerical and records personnel outnumber health department employees of any other classification. Nurses rank next in numerical order, and sanitation personnel—engineers, milk specialists, and general sanitary inspectors—are third.

Aggregate expenditures of State health departments, reaching nearly \$53,000,000 per year and amounting to \$0.395 per capita, are not evenly distributed among the individual States. One jurisdiction reported disbursement of more than \$5 per person, while another reported a corresponding outlay of less than \$0.15. These differences further illustrate the variations which typify State health department organization and activity. Inclusion of hospital administration among the health department functions is a particularly important determinant in these differences. Although financial aid from the Federal Government has, to some extent, lessened the effect of State wealth upon the amount of money expended for operation of State health department services, it does not entirely counterbalance the effect of a State's ability to purchase service. For the country as a whole, about one-third of the total amount expended by State health departments represents Federal grants; however, there are some jurisdictions in which this proportion reaches approximately 75 percent. Geographic position appears to be another influential factor which operates for unlikeness in health department expenditures, but perhaps the most weighty constituent is one which cannot be computed in exact terms, namely, the complementary health service rendered at the local level.

Although National averages indicate relatively even allotment of State health department funds to the four broad categories of service

labeled "central office services," "field services," "local grants," and "hospitals," this regularity does not obtain among all States. Neither is there a uniform pattern for concentration upon any single service category.

DEATHS DURING WEEK ENDED MARCH 20, 1943

[From the Weekly Mortality Index, issued by the Bureau of the Census, Department of Commerce]

	Week ended Mar. 20, 1943	Corresponding week, 1942
Data for 88 large cities of the United States:		
Total deaths.....	9,838	8,865
Average for 3 prior years.....	8,964	
Total deaths, first 11 weeks of year.....	110,978	101,960
Deaths under 1 year of age.....	693	558
Average for 3 prior years.....	519	
Deaths under 1 year of age, first 11 weeks of year.....	7,857	6,199
Data from industrial insurance companies:		
Policies in force.....	65,444,262	64,938,889
Number of death claims.....	13,266	13,541
Death claims per 1,000 policies in force, annual rate.....	10.6	10.9
Death claims per 1,000 policies, first 11 weeks of year, annual rate.....	10.7	10.3

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

REPORTS FROM STATES FOR WEEK ENDED MARCH 27, 1943

Summary

Reports received for the current week show that, of the 9 communicable diseases included in the following tables, the incidence of only measles and meningococcus meningitis is above the 5-year (1938-42) medians. Increases over the preceding week's figures were reported for only diphtheria and measles.

A total of 572 cases of meningococcus meningitis was reported for the week, as compared with 614 for the preceding week. The cumulative total for the first 12 weeks of the year is 5,231, as compared with 842 for the same period in 1942 and with 3,161 for the first 12 weeks of 1930, the largest number recorded for the corresponding period of any prior year for which comparable data are available. Current reports show decreases from the average incidence of the past 3 weeks in the West North Central, South Atlantic, East South Central, Mountain, and Pacific States. In the West South Central group a slight decrease is shown from the figures of the week immediately preceding, while in the Pacific States a slight increase was recorded. The largest numbers reported by individual States for the current week, with figures for the preceding week in parentheses, are as follows: New York, 51 (64); Pennsylvania, 44 (32); California, 43 (29); New Jersey, 38 (29); Virginia, 33 (53); Massachusetts, 30 (34); Rhode Island, 29 (24); Michigan, 24 (7); Mississippi, 23 (44); Maine, 20 (12); Texas, 20 (28).

Other reports for the week include: Dysentery, 271; infectious encephalitis, 12; tularemia, 15; and endemic typhus fever, 49.

Deaths recorded during the week in 89 large cities of the United States aggregated 9,858, as compared with 9,869 for the preceding week and a 3-year average of 9,001. The accumulated figure for the first 12 weeks of the year is 121,158, as compared with 111,297 for the same period of 1942.

Telegraphic morbidity reports from State health officers for the week ended March 27, 1943, and comparison with corresponding week of 1942 and 5-year median

In these tables a zero indicates a definite report, while leaders imply that, although none were reported, cases may have occurred.

Division and State	Diphtheria			Influenza			Measles			Meningitis, meningococcus		
	Week ended		Med-ian 1938-42	Week ended		Med-ian 1938-42	Week ended		Med-ian 1938-42	Week ended		Med-ian 1938-42
	Mar. 27, 1943	Mar. 28, 1942		Mar. 27, 1943	Mar. 28, 1942		Mar. 27, 1943	Mar. 28, 1942		Mar. 27, 1943	Mar. 28, 1942	
NEW ENG.												
Maine.....	0	1	0	2	2	2	5	151	151	20	1	0
New Hampshire.....	0	0	0	1	5	1	29	18	18	1	0	0
Vermont.....	0	0	0	-----	-----	-----	387	39	24	1	0	0
Massachusetts.....	1	1	3	-----	-----	-----	1,706	929	700	30	8	4
Rhode Island.....	0	1	0	-----	-----	-----	31	243	18	29	0	0
Connecticut.....	0	0	2	4	-----	6	349	518	94	7	2	0
MID. ATL.												
New York.....	30	31	30	112	111	128	2,413	563	1,615	51	20	5
New Jersey.....	6	1	4	15	16	16	1,526	672	672	38	3	1
Pennsylvania.....	10	10	21	2	-----	-----	2,362	1,206	1,206	44	8	5
E. NO. CEN.												
Ohio.....	2	12	6	16	14	14	634	260	260	7	0	0
Indiana.....	4	14	14	23	36	38	262	155	155	9	0	1
Illinois.....	12	29	24	17	35	35	1,262	741	741	14	2	1
Michigan ²	3	6	6	20	3	3	904	232	289	24	2	2
Wisconsin.....	6	3	1	44	24	184	1,260	886	886	3	1	0
W. NO. CEN.												
Minnesota.....	5	5	0	1	1	2	121	786	214	4	0	0
Iowa.....	1	4	3	-----	-----	9	333	395	169	0	0	0
Missouri.....	2	5	9	5	1	71	586	645	384	19	2	2
North Dakota.....	0	1	1	9	5	8	61	78	64	1	0	0
South Dakota.....	2	7	0	1	1	1	202	14	3	0	0	0
Nebraska.....	0	3	2	3	19	7	349	239	85	2	0	0
Kansas.....	12	2	3	11	12	14	760	608	608	5	0	0
SO. ATL.												
Delaware.....	0	0	0	-----	-----	-----	136	7	7	1	0	0
Maryland ²	3	1	2	6	8	19	91	632	196	17	6	1
Dist. of Col.....	0	0	3	1	4	2	91	88	68	6	2	1
Virginia.....	8	6	11	404	524	524	662	298	427	33	4	3
West Virginia.....	3	4	8	20	67	67	73	280	280	1	2	3
North Carolina.....	9	8	15	180	68	68	11	1,028	1,085	14	2	1
South Carolina.....	6	3	6	920	435	559	127	259	259	13	2	1
Georgia.....	5	6	8	79	84	141	298	216	216	7	2	1
Florida.....	1	2	5	14	4	10	65	171	178	3	0	1
E. SO. CEN.												
Kentucky.....	3	4	6	14	19	38	752	106	137	13	4	3
Tennessee.....	3	6	5	96	47	117	401	118	118	9	0	1
Alabama.....	13	5	6	264	228	269	342	495	495	8	4	2
Mississippi ²	1	2	6	-----	-----	-----	-----	-----	-----	23	0	0
W. SO. CEN.												
Arkansas.....	4	4	8	114	172	187	96	172	172	4	1	1
Louisiana.....	2	10	8	10	-----	14	197	100	100	14	1	2
Oklahoma.....	3	7	7	76	143	165	74	264	86	8	0	1
Texas.....	41	35	35	1,243	1,049	1,277	1,359	2,914	800	20	2	2
MOUNTAIN												
Montana.....	0	3	2	43	14	4	320	53	53	0	0	0
Idaho.....	0	1	0	5	3	-----	101	92	82	2	0	0
Wyoming.....	0	2	1	40	130	2	191	71	61	1	0	0
Colorado.....	15	10	9	19	56	23	772	238	238	3	0	0
New Mexico.....	1	1	1	3	18	15	33	130	116	0	0	1
Arizona.....	0	0	2	138	165	173	53	204	20	0	0	0
Utah ²	2	0	1	11	39	22	354	266	266	2	0	0
Nevada.....	0	0	-----	-----	-----	-----	50	52	-----	0	0	-----
PACIFIC												
Washington.....	2	1	1	6	5	8	686	291	291	8	3	0
Oregon.....	1	0	3	34	36	36	438	144	144	10	0	0
California.....	24	16	16	91	252	181	1,127	6,343	541	43	6	4
Total.....	246	272	289	4,016	3,755	4,438	24,632	24,410	24,410	572	90	52
13 weeks.....	3,437	3,814	4,668	53,969	57,885	100,056	184,226	183,023	183,023	5,231	842	638

See footnotes at end of table.

Telegraphic morbidity reports from State health officers for the week ended March 27, 1943, and comparison with corresponding week of 1942 and 5-year median—Con.

Division and State	Poliomyelitis			Scarlet fever			Smallpox			Typhoid and paratyphoid fever		
	Week ended		Median 1938-42	Week ended		Median 1938-42	Week ended		Median 1938-42	Week ended		Median 1938-42
	Mar. 27, 1943	Mar. 28, 1942		Mar. 27, 1943	Mar. 28, 1942		Mar. 27, 1943	Mar. 28, 1942		Mar. 27, 1943	Mar. 28, 1942	
NEW ENG.												
Maine.....	0	0	0	6	20	17	0	0	0	0	0	0
New Hampshire.....	0	0	0	22	36	4	0	0	0	0	0	0
Vermont.....	0	0	0	21	5	7	0	0	0	0	0	0
Massachusetts.....	2	0	0	606	368	194	0	0	0	0	1	0
Rhode Island.....	0	0	0	17	16	16	0	0	0	0	0	0
Connecticut.....	0	0	0	78	41	81	0	0	0	0	1	1
MID. ATL.												
New York.....	0	2	0	587	545	699	0	0	0	6	4	4
New Jersey.....	0	0	0	160	174	225	0	0	0	1	1	1
Pennsylvania.....	2	0	0	323	603	417	0	0	0	2	7	8
E. NO. CEN.												
Ohio.....	1	0	0	249	261	310	1	0	5	2	2	3
Indiana.....	0	1	1	76	132	182	2	2	6	4	3	1
Illinois.....	0	2	2	210	311	520	1	1	5	3	1	4
Michigan ¹	0	1	0	126	284	267	0	1	2	5	2	2
Wisconsin.....	1	0	0	294	148	148	0	0	1	2	0	0
W. NO. CEN.												
Minnesota.....	0	0	0	41	95	95	0	0	5	0	1	0
Iowa.....	0	0	0	67	79	79	0	0	13	0	0	1
Missouri.....	0	1	0	110	125	125	0	2	8	2	1	2
North Dakota.....	0	1	0	3	23	16	0	0	1	0	0	0
South Dakota.....	0	0	0	18	46	18	0	0	1	0	0	0
Nebraska.....	0	0	0	34	54	31	0	0	0	0	0	0
Kansas.....	0	1	0	96	106	106	0	0	1	0	0	1
SO. ATL.												
Delaware.....	0	0	0	11	60	14	0	0	0	0	0	0
Maryland.....	0	0	0	107	81	55	0	0	0	0	0	0
Dist. of Col.....	0	0	0	20	13	23	0	0	0	0	0	0
Virginia.....	0	0	0	55	33	33	0	0	0	1	2	3
West Virginia.....	0	1	0	39	31	42	0	0	0	0	1	2
North Carolina.....	0	0	0	26	25	37	3	0	0	5	0	0
South Carolina.....	0	1	0	10	0	4	0	0	0	0	1	1
Georgia.....	1	1	1	14	10	10	0	0	0	1	6	3
Florida.....	1	0	0	4	1	8	0	0	0	1	5	2
E. SO. CEN.												
Kentucky.....	0	0	1	55	81	105	2	1	1	0	0	1
Tennessee.....	0	0	0	40	47	47	0	1	1	1	2	2
Alabama.....	0	2	1	17	18	16	0	0	1	1	4	2
Mississippi ²	0	0	0	16	6	6	1	1	0	1	4	3
W. SO. CEN.												
Arkansas.....	0	1	1	16	2	6	1	2	3	2	1	3
Louisiana.....	0	0	0	10	1	11	0	2	0	6	2	3
Oklahoma.....	0	0	1	14	17	24	3	2	2	1	0	2
Texas.....	8	2	1	36	40	59	2	4	6	2	6	11
MOUNTAIN												
Montana.....	0	0	0	6	23	21	0	0	0	0	0	0
Idaho.....	0	0	0	3	6	6	0	0	1	0	0	0
Wyoming.....	0	0	0	57	9	9	0	0	0	0	0	1
Colorado.....	0	1	0	57	37	37	1	0	2	0	0	1
New Mexico.....	0	0	0	2	10	10	0	0	0	1	2	2
Arizona.....	0	0	0	25	8	8	0	0	0	2	0	0
Utah ¹	1	0	0	61	42	22	4	0	0	0	0	0
Nevada.....	0	0	0	1	2	2	0	0	0	0	0	0
PACIFIC												
Washington.....	0	1	0	42	53	46	0	0	1	0	1	2
Oregon.....	0	0	1	19	13	18	0	0	2	0	0	1
California.....	1	5	2	200	99	177	0	0	4	1	4	3
Total	18	24	24	4,107	4,260	4,912	19	19	72	53	65	89
12 weeks	320	290	290	246,702	48,344	56,107	319	265	882	638	907	916

See footnote^a at end of table.

Telegraphic morbidity reports from State health officers for the week ended March 27, 1943, and comparison with corresponding week of 1942 and 5-year median—Con.

Division and State	Whooping cough			Week ended March 27, 1943								
	Week ended		Median 1938-42	An- thrax	Dysentery			En- ceph- alitis, infec- tious	Lep- rosy	Rocky Mt. spot- ted fever	Tula- remia	Ty- phus fever
	Mar. 27, 1943	Mar. 28, 1942			Ame- bic	Bacil- lary	Un- speci- fied					
NEW ENG.												
Maine.....	37	43	52	0	0	0	0	0	0	0	0	0
New Hampshire.....	3	24	4	0	0	0	0	0	0	0	0	0
Vermont.....	16	47	32	0	0	0	0	0	0	0	0	0
Massachusetts.....	232	251	189	0	0	1	0	1	0	0	0	0
Rhode Island.....	50	49	25	0	0	0	0	0	0	0	0	0
Connecticut.....	57	72	72	0	0	0	0	0	0	0	0	1
MID. ATL.												
New York.....	308	455	449	0	17	8	0	1	0	0	0	0
New Jersey.....	227	236	199	0	0	0	0	1	0	0	0	0
Pennsylvania.....	321	211	281	0	0	1	0	0	0	0	0	0
E. NO. CEN.												
Ohio.....	167	195	195	0	0	0	0	0	0	0	0	0
Indiana.....	34	41	41	0	0	0	0	0	0	0	0	0
Illinois.....	138	194	114	0	2	0	0	2	0	0	0	0
Michigan ¹	233	201	199	0	0	0	0	0	0	0	0	0
Wisconsin.....	192	146	126	0	0	0	0	0	0	0	1	0
W. NO. CEN.												
Minnesota.....	76	38	42	0	1	0	0	1	0	0	0	0
Iowa.....	27	19	19	0	0	0	0	1	0	0	0	0
Missouri.....	30	20	27	0	0	0	1	0	0	0	0	0
North Dakota.....	17	8	9	0	0	0	0	0	0	0	0	0
South Dakota.....	0	9	9	0	0	0	0	0	0	0	0	0
Nebraska.....	10	27	9	0	0	0	0	0	0	0	0	0
Kansas.....	65	32	39	0	1	0	0	2	0	0	2	0
SO. ATL.												
Delaware.....	11	3	7	0	0	0	0	0	0	0	0	0
Maryland ²	91	42	52	0	0	0	1	0	0	0	0	0
Dist. of Col.....	33	19	14	0	0	0	0	0	0	0	0	0
Virginia.....	48	23	68	0	0	0	22	0	0	0	0	0
West Virginia.....	16	48	48	0	0	0	0	0	0	0	0	0
North Carolina.....	151	152	271	0	0	0	0	0	0	0	0	3
South Carolina.....	52	57	111	0	0	0	0	0	0	0	0	2
Georgia.....	33	29	18	0	2	0	0	0	0	0	2	15
Florida.....	14	20	20	0	2	2	0	0	0	0	0	14
E. SO. CEN.												
Kentucky.....	31	105	74	0	0	0	0	0	0	0	3	0
Tennessee.....	125	23	29	0	1	0	3	0	0	0	3	0
Alabama.....	43	40	40	0	0	0	0	0	0	0	0	4
Mississippi ¹				0	0	0	0	0	0	0	1	3
W. SO. CEN.												
Arkansas.....	46	8	20	0	0	0	0	0	0	0	2	0
Louisiana.....	4	7	13	0	0	0	0	0	0	0	0	1
Oklahoma.....	27	22	22	0	0	0	0	0	0	0	0	0
Texas.....	451	187	255	0	5	176	0	2	0	0	0	6
MOUNTAIN												
Montana.....	8	5	5	0	0	0	0	0	0	0	0	0
Idaho.....	0	12	11	0	0	0	0	0	0	0	0	0
Wyoming.....	1	7	1	0	1	0	0	0	0	0	1	0
Colorado.....	20	18	24	0	0	3	0	1	0	0	0	0
New Mexico.....	8	11	13	0	0	1	0	0	0	0	0	0
Arizona.....	19	60	42	0	0	0	17	0	0	0	0	0
Utah ¹	46	44	44	0	0	0	0	0	0	0	0	0
Nevada.....	1	11		0	0	0	0	0	0	0	0	0
PACIFIC												
Washington.....	27	77	77	0	0	0	0	0	0	0	0	0
Oregon.....	12	18	18	0	0	0	0	0	0	0	0	0
California.....	435	319	319	0	0	3	0	0	0	0	0	0
Total.....	4, 053	3, 685	4, 201	0	32	194	45	12	0	0	15	49
12 weeks.....	47, 025	47, 294	49, 468									

¹ New York City only.² Period ended earlier than Saturday.³ Revised figures show, instead of those previously given, for the week ended Feb. 13, 1943, 1 case of poliomyelitis in Florida, and for the week ended Feb. 27, 1943, 110 cases of scarlet fever and 1 case of smallpox in Indiana.

WEEKLY REPORTS FROM CITIES

City reports for week ended March 13, 1943

This table lists the reports from 57 cities of more than 10,000 population distributed throughout the United States, and represents a cross section of the current urban incidence of the diseases included in the table.

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Poliovirus cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
Atlanta, Ga.	0	0	22	1	11	3	7	0	0	0	0	3
Baltimore, Md.	2	0	5	0	36	12	23	0	45	0	0	67
Barre, Vt.	0	0	0	0	2	0	0	0	0	0	0	0
Billings, Mont.	0	0	0	0	0	0	1	0	1	0	0	2
Birmingham, Ala.	0	0	12	0	3	0	4	0	2	0	1	3
Boise, Idaho	0	0	0	0	0	0	0	0	0	0	0	0
Boston, Mass.	0	0	1	1	218	6	16	1	129	0	1	27
Bridgeport, Conn.	0	0	0	0	6	0	1	0	7	0	0	2
Brunswick, Ga.	0	0	1	1	6	0	1	0	0	0	0	0
Buffalo, N. Y.	0	0	1	1	115	2	6	0	8	0	0	7
Camden, N. J.	1	0	1	0	21	0	2	0	0	0	0	1
Charleston, S. C.	0	0	123	0	11	1	1	1	1	0	0	6
Charleston, W. Va.	0	0	0	0	0	0	0	0	4	0	0	0
Chicago, Ill.	7	0	6	2	449	7	41	0	56	9	0	63
Cincinnati, Ohio	0	0	0	0	100	0	6	0	44	0	0	5
Cleveland, Ohio	1	1	6	1	8	2	13	0	62	0	0	40
Columbus, Ohio	0	0	2	2	7	0	0	0	23	0	0	2
Concord, N. H.	0	0	0	0	0	0	2	0	0	0	0	0
Cumberland, Md.	0	0	0	0	1	0	1	0	1	0	0	2
Dallas, Tex.	1	0	0	0	3	2	2	1	3	0	0	8
Denver, Colo.	2	0	24	1	443	1	7	0	6	0	0	4
Detroit, Mich.	1	0	4	0	209	4	38	0	34	0	0	141
Duluth, Minn.	0	0	0	0	0	0	2	0	16	0	0	9
Fall River, Mass.	0	0	0	0	1	0	1	0	3	0	0	4
Fargo, N. Dak.	0	0	0	0	0	0	0	0	0	0	0	2
Flint, Mich.	1	0	0	0	15	0	0	0	1	0	0	8
Fort Wayne, Ind.	0	0	0	0	0	0	1	0	3	0	0	0
Frederick, Md.	0	0	0	0	1	0	0	0	0	0	0	0
Galveston, Tex.	0	0	0	0	0	0	5	0	1	0	0	0
Grand Rapids, Mich.	0	0	0	0	4	0	2	0	3	0	0	21
Great Falls, Mont.	0	0	0	0	23	1	1	0	0	0	0	3
Hartford, Conn.	0	0	0	0	26	2	0	0	2	0	0	4
Helena, Mont.	0	0	0	0	48	0	0	0	0	0	0	0
Houston, Tex.	2	0	0	0	15	0	9	0	1	0	0	3
Indianapolis, Ind.	1	0	0	0	181	0	10	0	12	0	0	11
Kansas City, Mo.	0	0	1	1	63	4	4	0	67	0	0	4
Kenoa, Wis.	0	0	0	0	1	0	0	0	1	0	0	1
Little Rock, Ark.	0	0	0	0	1	0	3	0	2	0	0	0
Los Angeles, Calif.	5	0	30	0	117	4	7	1	36	0	1	30
Lynchburg, Va.	0	0	0	0	0	0	4	0	0	0	0	18
Memphis, Tenn.	0	0	8	2	87	2	9	0	7	0	0	9
Milwaukee, Wis.	0	0	0	0	302	3	5	0	156	0	0	25
Minneapolis, Minn.	2	0	1	1	10	4	4	0	14	0	0	0
Missoula, Mont.	0	0	0	0	3	1	0	0	0	0	0	0
Mobile, Ala.	0	0	1	1	1	0	6	0	2	0	0	0
Nashville, Tenn.	0	0	2	2	75	0	3	0	2	0	0	12
Newark, N. J.	0	1	5	0	97	1	4	0	12	0	0	9
New Haven, Conn.	0	0	0	0	3	0	4	0	6	0	0	1
New Orleans, La.	0	0	5	3	65	8	13	1	9	0	0	1
New York, N. Y.	16	1	12	1	376	44	93	0	329	0	2	77
Omaha, Nebr.	0	0	0	0	10	0	6	0	9	1	0	4
Philadelphia, Pa.	1	0	2	1	1,037	11	26	9	133	0	0	80
Pittsburgh, Pa.	0	0	4	3	0	2	13	0	7	0	0	33
Portland, Me.	0	0	0	0	0	3	4	0	1	0	0	18
Providence, R. I.	0	0	17	0	2	5	2	0	3	0	0	29

City reports for week ended March 13, 1943—Continued

	Diphtheria cases	Etiology, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Pollomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
Pueblo, Colo.....	0	0		0	3	0	1	0	1	0	0	8
Racine, Wis.....	0	0		0	7	0	0	0	41	0	0	0
Reading, Pa.....	0	0		0	135	0	0	0	4	0	0	0
Richmond, Va.....	0	0		2	12	4	3	0	1	0	0	0
Roanoke, Va.....	0	0		0	0	0	3	0	1	0	0	0
Rochester, N. Y.....	0	0		0	26	1	4	0	12	0	1	26
Sacramento, Calif.....	0	0		0	17	3	4	0	2	0	1	3
Saint Joseph, Mo.....	0	0		1	5	0	1	0	5	0	0	0
Saint Louis, Mo.....	0	0	4	0	43	5	10	0	17	0	0	10
Saint Paul, Minn.....	0	0		0	5	1	5	0	7	0	0	43
San Antonio, Tex.....	2	0	1	3	10	0	7	0	2	0	0	1
San Francisco, Calif.....	0	0	4	2	80	7	14	0	18	0	0	22
Savannah, Ga.....	0	0	32	7	3	3	1	0	0	0	0	0
Seattle, Wash.....	0	0		3	93	3	4	0	2	0	0	4
Shreveport, La.....	0	0		0	0	0	5	0	1	0	0	0
South Bend, Ind.....	0	0		0	5	0	0	0	1	0	0	3
Spokane, Wash.....	0	0		0	210	1	1	0	0	0	0	2
Springfield, Mass.....	0	0		0	4	0	0	0	77	0	0	0
Superior, Wis.....	0	0		0	0	0	0	0	1	0	0	0
Syracuse, N. Y.....	0	0		0	26	1	2	0	7	0	0	12
Tacoma, Wash.....	0	0		0	8	0	0	0	0	0	0	2
Tampa, Fla.....	0	0		0	6	0	5	0	1	0	0	0
Terre Haute, Ind.....	0	0		0	0	0	2	0	0	0	0	0
Topeka, Kans.....	0	0		0	96	1	1	0	3	0	0	5
Trenton, N. J.....	1	0	1	0	51	0	3	0	15	0	0	2
Washington, D. C.....	0	0		0	72	2	14	0	15	0	0	25
Wheeling, W. Va.....	0	0		0	0	0	2	0	1	0	0	3
Wichita, Kans.....	1	0		0	27	0	4	0	5	0	0	5
Wilmington, Del.....	0	0		0	16	1	0	0	1	0	0	1
Wilmington, N. C.....	0	0		0	9	0	7	0	0	0	0	7
Winston-Salem, N. C.....	0	0		0	0	0	0	0	1	0	0	24
Worcester, Mass.....	0	0		0	294	0	10	0	17	0	0	5
Total.....	47	3	331	43	5,476	168	536	5	1,523	1	7	1,049
Corresponding week 1942.....	65	2	234	40	4,281	22	553	2	1,663	2	15	1,054
Average, 1938-42.....	99		522	¹ 65	² 4,663		¹ 538		1,611	17	22	1,065

Dysentery, amebic.—Cases: Boston, 1; New York, 26.

Dysentery, bacillary.—Cases: Buffalo, 1; Charleston, S. C., 2; Chicago, 1; Detroit, 2; Los Angeles, 4; New York, 1.

Dysentery, unspecified.—Cases: San Antonio, 4.

Typhus fever.—Cases: Atlanta, 1; New Orleans, 1; New York, 1; Tampa, 1.

¹ 3-year average, 1940-42.

² 5-year median.

PLAGUE INFECTION IN TACOMA, WASH.

Plague infection has been reported proved in two pools of fleas from rats, *R. norvegicus*, taken on March 8 in frame buildings in industrial sections of Tacoma, Wash.; one a pool of 68 fleas from 114 rats and the other a pool of 27 fleas from 31 rats.

TERRITORIES AND POSSESSIONS

Panama Canal Zone

Notifiable diseases—January 1943.—During the month of January 1943, certain notifiable diseases were reported in the Panama Canal Zone and terminal cities, as follows:

Disease	Panama		Colon		Canal Zone		Outside the Zone and terminal cities		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Chickenpox.....	20		5		12				37	
Diphtheria.....	8		5		12		3		18	
Dysentery (amebic).....	5	1	1		1		2		9	1
Dysentery (bacillary).....	2				2		3		7	2
Leprosy.....							1	2	1	2
Malaria ¹	41	2	6	1	357	2	329	4	733	9
Measles.....	7				11		2		20	
Meningitis, meningococcus.....					2				2	
Mumps.....	22				11		2		35	
Paratyphoid fever.....					3		2		5	
Pneumonia.....		20		4	70	1		1	70	26
Relapsing fever.....							1		1	
Scarlet fever.....					1				1	
Tuberculosis.....		31		6	11	1		12	11	50
Typhoid fever.....	2						1		3	
Whooping cough.....					4				4	

¹ Both carriers.

² Includes 139 recurrent cases.

³ Cases reported in the Canal Zone only.

FOREIGN REPORTS

CANADA

Provinces—Communicable diseases—Week ended February 27, 1943.—During the week ended February 27, 1943, cases of certain communicable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

Disease	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Chickenpox.....		32	1	147	304	31	63	16	48	642
Diphtheria.....	1	21	5	147	21	2	8	1		59
Dysentery (bacillary).....				148						148
Encephalitis, infectious.....									1	1
German measles.....				32	16	8	3	5	7	71
Influenza.....		28			153	29			13	223
Measles.....		31		189	375	48	219	14	117	993
Meningitis, meningococcus.....		1	1	1	2	1		1		7
Mumps.....	4	187	74	59	1,246	192	99	156	173	2,190
Poliomylitis.....				1						1
Scarlet fever.....		20	6	124	161	47	38	33	13	442
Tuberculosis (all forms).....	2	4	12	114	49	21	18	12	32	264
Typhoid and paratyphoid fever.....		2		10						12
Undulant fever.....				2						2
Whooping cough.....				162	112	31	15	36	10	366

IRAQ

Cerebrospinal meningitis.—The following table shows the numbers of new cases of cerebrospinal meningitis and deaths from the same disease reported in all of Iraq for the first 8 weeks of 1943. The centers of infection are chiefly Baghdad, Hillah, and Basra.

Week ended—	Cases	Deaths	Week ended—	Cases	Deaths
<i>1943</i>			<i>1943—Continued</i>		
January 2.....	4	2	January 30.....	21	1
January 9.....	9	1	February 6.....	16	2
January 16.....	12	0	February 13.....	28	0
January 23.....	5	1	February 20.....	17	1

JAMAICA

Notifiable diseases—4 weeks ended March 13, 1943.—During the 4 weeks ended March 13, 1943, cases of certain notifiable diseases were reported in Kingston, Jamaica, and in the island outside of Kingston, as follows:

Disease	Kingston	Other localities	Disease	Kingston	Other localities
Chickenpox.....	4	3	Puerperal fever.....		1
Diphtheria.....	2	2	Tuberculosis.....	22	63
Dysentery.....		1	Typhoid fever.....	7	35
Erysipelas.....	1		Typhus fever.....	1	1
Leprosy.....		3			

SWEDEN

Notifiable diseases—January 1943.—During the month of January 1943, cases of certain notifiable diseases were reported in Sweden as follows:

Disease	Cases	Disease	Cases
Cerebrospinal meningitis.....	9	Poliomyelitis.....	25
Diphtheria.....	195	Scarlet fever.....	2,561
Dysentery.....	56	Syphilis.....	44
Epidemic encephalitis.....	2	Typhoid fever.....	3
Gonorrhoea.....	1,299	Undulant fever.....	2
Paratyphoid fever.....	26	Well's disease.....	9

REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

NOTE.—Except in cases of unusual prevalence, only those places are included which had not previously reported any of the above-mentioned diseases, except yellow fever, during the current year. All reports of yellow fever are published currently.

A cumulative table showing the reported prevalence of these diseases for the year to date is published in the PUBLIC HEALTH REPORTS for the last Friday in each month.

(Few reports are available from the invaded countries of Europe and other nations in war zones.)

Plague

Peru.—During the month of January 1943, plague was reported in Peru, as follows: Libertad Department—Trujillo, 4 cases; Moche, 1 case; rural, 1 case; Lima Department—Lima, 1 case, 1 death, and rodent plague.

Smallpox

Algeria.—For the period February 11–20, 1943, 49 cases of smallpox were reported in Algeria, including 2 cases in Oran and 2 cases in Philippeville.

Indochina.—For the period January 1 to February 20, 1943, 313 cases of smallpox were reported in Cochinchina and 405 cases in Tonkin, Indochina.

Typhus Fever

Algeria.—For the period February 11–20, 1943, 363 cases of typhus fever were reported in Algeria, including cases reported in certain ports as follows: Algiers, 9; Bone, 6; Philippeville, 19; Oran, 64; Mostaganem, 1.

Germany.—During the first 7 weeks of 1943, 800 cases of typhus fever were reported in Germany.

Hungary.—For the week ended March 6, 1943, 8 cases of typhus fever were reported in Hungary.

Rumania.—For the period March 1–7, 1943, 593 cases of typhus fever, including 31 cases in Bucharest, were reported in Rumania.

Slovakia.—For the week ended February 20, 1943, 8 cases of typhus fever were reported in Slovakia.

Spain.—For the 2 weeks ended February 6, 1943, 21 cases of typhus fever, including 10 cases in Barcelona, were reported in Spain.

COURT DECISION ON PUBLIC HEALTH

Venereal diseases—quarantine—city ordinance upheld.—(Arkansas Supreme Court; *City of Little Rock et al. v. Smith*, 163 S.W.2d 705; decided July 13, 1942.) The appellee pleaded guilty to a charge of violating certain sections of an ordinance of the city of Little Rock prohibiting immorality and prostitution. The ordinance also provided that a person convicted of such a violation could be examined and, if found to be infected with a venereal disease in a communicable stage, committed by the city health officer to a hospital or other place designated by such officer as a place of quarantine in the State if such infected person failed to take treatment adequate for the protection of the public health. After her conviction the appellee was detained and examined by the city health officer, found to be venereally infected, and ordered quarantined in the public health center in Hot Springs.

In a habeas corpus proceeding by the appellee the question presented to the Supreme Court of Arkansas was whether the above-mentioned ordinance provisions were valid as being within the police power of the city. The court referred to the proceeding as one to compel the appellee "to be quarantined, segregated, from the public, to the end that she may be cured of the venereal diseases with which she is infected, and that she may not communicate them to others." After reviewing certain statutes, the appellate court was of the view that the State's power to legislate in the protection of the public health had been granted and delegated to municipalities and that its exercise by the city in the instant ordinance provisions must be held to be within the grant unless it could be said that the power conferred on the city health officer was unreasonable. Applying the rule stated in a prior decision, the court found itself unable to say that the power conferred was "clearly outside the scope of reasonable and legitimate regulation."

Relative to a statutory provision that the city council should have "the power to establish a board of health, with jurisdiction for one mile beyond the city limits; and for quarantine purposes, in cases of epidemic, five miles," the court held that this had no reference to the place where a person could be confined for quarantine purposes but referred only to the extent of the jurisdiction beyond the city limits for the better protection of the inhabitants of the city.

Another section of the statutes required the city health officer to perform the duties prescribed for him "under the directions, rules, regulations, and requirements of the State board of health." One of the State board's regulations empowered any health authority, when in his discretion he believed that the public health required it, to "commit any commercial prostitute or other person apprehended

and examined and found afflicted with" certain diseases, "who refuses or fails to take treatment adequate for the protection of the public health, to a hospital or other place in the State." This rule, said the court, "is authority to the city health officer to commit appellee outside the city of Little Rock and to confine her at the Government health center in Hot Springs."

The conclusion of the supreme court was that the ordinance provisions involved were not unconstitutional and void. The judgment of the trial court was reversed and the cause remanded with directions to dismiss the petition for the writ of habeas corpus and to remand appellee into the custody of the sheriff for isolation and quarantine as ordered by the city health officer.