Public Health Reports

Vol. 57 • JUNE 12, 1942 • No. 24

DISTRIBUTION OF HEALTH SERVICES IN THE STRUCTURE OF STATE GOVERNMENT*

CHAPTER V-SANITATION BY STATE AGENCIES

By Joseph W. Mountin, Assistant Surgeon General, and Evelyn Flook, United States Public Health Service

Current public health programs, which embrace some thirty-five separate categories of activity, represent a blending of old and new concepts concerning public responsibility in matters pertaining to community and personal health; yet the basic objective of any public health program has always been the control of communicable diseases. Since it was discovered quite early that certain types of disease are transmitted through food and water, environmental sanitation soon became one of the outstanding public health weapons. Development of this specific field of activity parallels the development of the entire public health movement. In other words, the scope of environmental sanitation, like that of the whole public health realm, has expanded with the passage of time. Whereas the first sanitation efforts were directed primarily toward abatement of nuisances, sanitary supervision of water supplies and sewage disposal facilities may be regarded as the earliest definitive measures. These several efforts have gradually broadened until they now include prevention

^{*}From the States Relations Division. This is the first section of the fifth chapter of the third edition of Public Health Bulletin No. 184. The two remaining sections of this chapter, Sanitation of Foods and Drugs and of Food-handling Establishments and Miscellaneous Sanitation Activities, will be published in the next issue of the Public Health Reports. 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.

Succeeding chapters will be published in subsequent issues of the PUBLIC HEALTH REPORTS.

June 12, 1942 886

of stream pollution; sanitation of milk, shellfish, and other foods, as well as the food-handling establishments; recreational sanitation, covering swimming pools, bathing beaches, roadside picnic grounds, and camps of various kinds; housing and plumbing control; garbage collection and disposal; and control of insect vectors of disease. Recently there has been a distinct revival of interest in air sanitation, which covers temperature, humidity, dust, smoke, fumes, odors, and bacteria—especially the viruses.

Naturally, this expansion has not occurred with complete uniformity among the several States. Neither has it been entirely centered within the health department, the agency normally responsible for activities designed to promote and conserve human health. same time, certain common characteristics have been observed consistently in all State sanitation programs. While these facts are known in a general way, the literature apparently contains no source material which depicts the situation as it exists State by State. True. Public Health Bulletin No. 184 (Revised), "Health Departments of States and Provinces of the United States and Canada," 1 pictures the sanitary engineering function of State health departments as it applied in 1930. However, since the last decade has witnessed such remarkable growth in the many branches of public health endeavor, statements contained in this publication now appear to be outmoded. Consequently, a third edition of Public Health Bulletin 184bringing information up to date as of the year 1940—was undertaken.

From data collected by the United States Public Health Service in pursuance of this project, it is possible to describe the sanitation activities carried on, not by the health department alone but by all official agencies of State government during the survey year (1940), together with the extent to which agreement and disagreement obtain among the various plans. Construction of such a picture is the purpose of this article which is the fifth chapter of the series "Distribution of Health Services in the Structure of State Government," the third edition of Public Health Bulletin No. 184. As pointed out in previous chapters of this series, the survey referred to was limited to activities having a direct bearing on human health. Only those carried on by all departments of State government were included; contributions of voluntary and local health agencies were not taken into account.

Because of the numerous ramifications of the complete problem of sanitation, discussion is facilitated by grouping activities of the several agencies of State government under three major headings,

¹ Ferrell, John A., Smillie, Wilson G., Covington, Platt W., and Mead, Pauline A.; International Division of the Rockefeller Foundation for the Conference of State and Provincial Health Authorities of North America; Health Departments of States and Provinces of the United States and Canada. Public Health Bulletin No. 184 (Revised). United States Government Printing Office, Washington, 1932.

² See footnote ².

namely, sanitation of water supplies and sewerage systems, control of foods and drugs, and miscellaneous sanitation activities. Each field of service will be accorded a separate section in this report and the functions of State agencies in over-all programs for the several branches of sanitation will be summarized according to the extent of their participation in any one or any combination of the following types of activities: Regulation, promotion, education, supervision and/or consultation, financial aid, and direct service.

SANITATION OF WATER SUPPLIES AND SEWERAGE SYSTEMS

Water supplies and sewerage systems which serve a community are classified as "public," and those which serve a single family are designated as "private." Between these two extremes are facilities termed "semipublic"—those designed for tourist camps, roadside parks, comfort stations, industrial establishments, schools, hospitals, or other institutions serving a number of persons but not connected with public accommodations. Because the existing types of water supplies and sewage disposal facilities are so widely diversified, their sanitary control involves problems ranging from the design and operation of a complex municipal water purification or sewage treatment plant to the location of a private well or septic tank. In other words, the province of sanitation extends from simple inspections to technical engineering procedures.

For the most part, State 3 concern is centered primarily in the routine control of public water supplies and sewerage systems, with secondary consideration for those of a semipublic or private nature. At the same time, industrial wastes receive particular attention when they represent a source of stream pollution. The health department is the official agency having major responsibility, but in nearly threefourths of the jurisdictions one or more other units of State government collaborate with the health department on special features of the program. For instance, several departments of labor participate in the regulation of industrial water supplies and sewerage systems; school sanitation is sometimes the joint concern of the departments of education and health; a number of State universities cooperate with the health department in training operators of water and sewage treatment plants; and special sanitary water boards or commissions supplement services of the health department in prevention of stream Divided control obtains to a greater degree in the field pollution. of sewerage than in the regulation of water supplies.

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

June 12, 1942 888

Table 1.—Official State agencies participating in the sanitary control of water supplies and sewage disposal facilities in each State and Territory, the District of Columbia, and the Virgin Islands*

			De	partmen	t of Stat	e governi	nent		
State or Territory	Health	Agriculture	Labor	Education	Independent State laboratory	State university or college	Independent de- partment of en- gineering, public	State water board or commission, State sanitary	Other
Alabama	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			. x					
Arizona	X				. X				
Arkansas	♣				-	· · · · · · · · · · · · · · · · · · ·			
California	₩ 💠		X		·	X			
Colorado	Ŷ		^	x		1 ^		X	.
Delemen	Ŷ			1 ^				_ ^	
Delaware District of Columbia	Î						X		X
Florida	Î					X			1 ^
Georgia	Ŷ					1 -			
Idaho a	Ϋ́								
Illinois	Ϊ					X		X	X
Indiana	Ϊ́х				1	1			X
Iowa.	X	X				X			
Kansas	X					X			
Kentucky	X					l			
Louisiana	X					X			X
Maine •	X						X		
Maryland	X		X						
Massachusetts	X		X X X	l		X		l	
Michigan	X		X	X				X	
Minnesota	X		X			X			
Mississippi	X				. X	x			
Missouri	X				-	X		- 	
Montana	X				-				
Nebraska	X					<u></u>			
Nevada	X					X			
New Hampshire	X		X	X					
New Jersey	X		X			X		X X X	
New Mexico	₹.		x	x		x		₩	
New York	Y.		A	A		_ A			
North Carolina	→				X				
North DakotaOhio	- ♦				^				▼
Oklahoma	Ŷ			X		¥		×	_ A
Oregon	Ŷ			^		X		X X X	
Pennsylvania	Ŷ			X				Ŷ	
Rhode Island	Ŷ		X						
South Carolina.	Ÿ								
South Dakota	X	X						X	
Tennessee	$\bar{\mathbf{x}}$!				X			X
Texas	X			X					
Utah	X								
Vermont	X								
Virginia	X	X		X					
Washington	X		X				X		X
West Virginia	X							X	
Wisconsin	X					X		X	
Wyoming	X			X					
Alaska	X								
Hawaii	X								
Puerto Rico	X								
Virgin Islands	X								
Virgin Islands	X								

^{*}Any differences between information presented in this table and corresponding entries in table 1, ch. I. of this series are the result of further refinement of the data since publication of the initial article.

The department of health 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).

Table 1 identifies the State agencies which contribute in any way to the sanitary control of water supplies or sewerage systems, irrespective of whether the character of such facilities is public, semipublic, or private. However, this tabulation does not distinguish between the agency chiefly accountable and those rendering service of an auxiliary nature. Such information may be obtained from table 2.

This second table is designed to summarize precise functions of the various State agencies participating in sanitary supervision of all types of water supplies and sewerage facilities. The code system used for identification of agencies engaged in specific activities is explained at the end of the table. Not only does this tabulation emphasize variations among the several States, but it also highlights differences within a single State in its concern for the three classes of facilities, public, semipublic, and private.

Uncontrolled sources of drinking water and heterogeneous methods of sewage disposal have given rise to many health problems. Certain aspects of these problems have been selected for regulatory control among State agencies which seek correction of environmental conditions hazardous to health. Without exception, some regulatory power over water supplies and sewerage systems has been delegated to each State health department, but extent of authority varies according to the classification of facilities. Health departments have what may be regarded as exclusive regulatory jurisdiction over municipal water supplies, except in the District of Columbia and Maine where an independent department of engineering and a department of public utilities, respectively, operate for this purpose. When regulation of the treatment and disposition of municipal sewage is involved, however, the health department authority of 10 States is reinforced by extended power given to especially created sanitary water boards, commissions, or authorities which exist for the sole purpose of controlling, preventing, and abating pollution of bodies of water. As a rule, the health department is the active agent for these special sanitation groups which generally consist of ex-officio membership and function largely for purposes of fact-finding or regulation.

The specific items covered by the regulatory functions of State health departments with respect to municipal water supplies and sewage disposal are not always the same. Some which are more frequently included pertain to elimination of cross connections, submission of plans prior to construction or extension of facilities, requirement of plant operating records, establishment of training standards for operators of public water supply systems and sewage treatment plants, laboratory checking of adequacy of treatment, and methods of preventing stream pollution.

Table 2.—Department of State government* responsible for specific activities designed to control sanitation of water supplies and sewerage systems in each State and Territory, the District of Columbia, and the Virgin Islands

			8	tate or	Territo	ry		
Activity	Alabama	Arizona	Arkansas	California	Colorado	Connecticut	Delaware	District of Columbia
Promulgates and/or enforces State laws, rules, and regulations governing water supplies and sewage disposal facilities of:								
Municipalities	, 1	1	1 1	1 1	1 . 1	1,85	1	7,9
SchoolsIndustries	1,4	1	1	1b, 3 e	1, 3 1, 3 1, 3	1,4b	1	7,9 15,7,9 15,7,9 15,7,9
Camps, roadside parks, and comfort stations	1 1 b	1	1 1 b	1, 3 1 b	1,3 1d	1	1 1 b	1 b, 7, 9 1, 7, 9
Private premises Promotes local programs of control (including	•		•	1	•			1, 1, 9
entic tanks and for repairing wells)	1	1	1	1	1	1.	16	
Conducts educational programs in water supply and sewage disposal for:								
The general public	1	1	1	1	1	1	1	16
Operators of public water systems and sewage treatment plants	1	İ	1	1,6	1, 6	1		7 5
Supervises and/or provides consultation service to	_		_	"	-,"	_		
local organizations (including W. P. A. projects for constructing privies and septic tanks and for							İ	
repairing wells Distributes and/or administers financial grants-in-	1	1	1	1	1	1 •	1	
aid to local health units for sanitation activities	1 f	1 4	1 4	1 *	1 1	1 *		
Operates a direct service program: Approves plans for public water supplies (in-					1			
cluding treatment plants) and sewerage in-	1	(8)	l ı	1 5 8	. 1	1,86	1	7 6
stallations or extensions	•		٠,	1.5	•	1, 6 -	•	,
systems— Periodically		1 6	1 6		1 b	1	1.	7.0
Routinely, but not at regular intervals	1	1 •	1.	1	ī٠	<u>-</u> -	16	1670
Upon request or complaint only Provides laboratory service for testing safety								
of water from public supplies, adequacy of sewage treatment by public plants, and/or		1						
degree of stream pollution	1	5•	1	1	1	1	1.	1
Licenses or certifies operators of public water systems and sewage treatment plants			1 =			1		
Approves plans for installations of water sup- plies and sewage disposal facilities of semi-							l	l
public places (camps, industries, schools, other institutions, etc.)				١	١.			١,,
other institutions, etc.) Inspects semipublic water supplies and sew-			1	1 4	1	11851	1	1,7
age disposal facilities—		ŀ				1 · h	1.	
PeriodicallyRoutinely, but not at regular intervals			1 •	1.	1ь3ь	1 b b	ĺъ	1 6 7 6
Upon request or complaint only	1 b	1 b		1 6 3 6	1 •			1070
semipublic supplies			1	1	1 k	1 h	1	
Condemns and closes to use unsatisfactory semipublic supplies			1	1	1	1 b		
Inspects private water supplies and sewage disposal facilities—								
Pariodically								1 •
Routinely, but not at regular intervals Upon request or complaint only Makes laboratory tests of water samples from		1	1•	1	1		i	1 b
Makes laboratory tests of water samples from private supplies		5 k		1	1 k	1 k	1 k	1
Engages in activities to control stream pollu-								
tion from— Municipal sewage		1	1	ļ	.1	1, 8	1 d	7
Mine drainageIndustrial waste		1	1 1	1 1	1 d	8		7
Other and/or unspecified sewage or waste Furnishes direct advisory service to individu-	14		ī	1		8		7
als, corporations, and municipalities as to								
construction and maintenance of most suit- able type of water supply or sewerage system.	1,45	ı	1	1	1	1	1	1
Renders additional service not covered in this	1	_	1	1	1	1	1	1
classification	1		'	*	*	•	•	

Table 2.—Department of State government responsible for specific activities designed to control sanitation of water supplies and sewerage systems in each State and Territory, the District of Columbia, and the Virgin Islands—Continued

				State or	Territ	ory		
Activity	Florida	Georgia	Idabo •	Illinois	Indiana	Iowa	Kansas	Kentucky
Promulgates and/or enforces State laws, rules, and regulations governing water supplies and sewage disposal facilities of:								
Municipalities Schools Industries Camps, roadside parks, and comfort stations	1 1 1 1	1 1 1		1 9,8 b 1 9,8 b 1 9,8 b 1 9,8 b	1,9 b 1 1,9 b	1 1 d 1 d 1 d, 2	1 1 1	1 1 1 1 1
Private premises Promotes local programs of control (including W. P. A. projects for constructing privies and septic tanks and for repairing wells)	1	1	1	1 4,8 b	1	1 d	1	1 6
Conducts educational programs in water supply and sewage disposal for: The general public	1	1	1	1	1	1	1	,
Operators of public water systems and sewage treatment plants Supervises and/or provides consultation service to local organizations (including W. P. A. proj-	1, 6 b	1	1	1,6	1	1, 6	1, 6	1 •
ects for constructing privies and septic tanks and for repairing wells) Distributes and/or administers financial grants- in-aid to local health units for sanitation activi-	1	1	1	1,8 6	1	1	1	1
ties Operates a direct service program: A proves plans for public water supplies (in-	11	1'	1'		1'	1 1	11	11
cluding treatment plants) and sewerage installations or extensions Inspects public water supplies and sewerage systems	1	1	1	1 0,8 5	1 1 b	1 1 5	1 1 1 1 1	1
Periodically. Routinely, but not at regular intervals. Upon request or complaint only. Provides laboratory service for testing safety	1	1		i •	i •	1.	i •	
of water from public supplies, adequacy of sewage treatment by public plants, and/or degree of stream pollution Licenses or certifies operators of public water	1	1	1	1	1 1	1, 6	1 4,64	1.
systems and sewage treatment plants				1				
other institutions, etc.) Inspects semipublic water supplies and sewage disposal facilities— Periodically.	1 b	1 h	1 b h	1,8bh	1	1 b h	1 h	1
Routinely, but not at regular intervals	1 •			1 •	1 •	${1 b b \choose 2 b}$		1
Upon request or complaint only	} 1	1 b	1	1 5,8 5	1 b	1 * 1 *,6 *	{ 1 i k 6 i k	} 1
semipublic supplies	1	1	1		1	2	1	1
Periodically Routinely, but not at regular intervals Viscontinuous at regular intervals			1•	<u>1</u>		i	1 •	<u>i</u>
Upon request or complaint only Makes laboratory tests of water samples from private supplies Engages in activities to control stream pollu-	} 1 *	1 1 k	1 k	1	1 1 k	1 k, 6 k	{ 1 i k 6 i k	} 1 1 2
tion from— Municipal sewage Mine drainage Industrial waste Other and/or unspecified sewage or waste.	1 1 1	1 6	1 =	8 8 8	1, 9 1, 9 1, 9 1, 9	1 1 1	1 1 1	1 1 1 1
Furnishes direct advisory service to individuals, corporations, and municipalities as to construction and maintenance of most suitable type of water supply or sewerage	-		• •		-, -	-		
system	1	1	1	1, 9	1	1	1	1
classification	1	1	1	8	1		1	1

Table 2.—Department of State government responsible for specific activities designed to control sanitation of water supplies and sewerage systems in each State and Territory, the District of Columbia, and the Virgin Islands—Continued

Territory, the District of Columbia, ar	State or Territory							
Activit y	Louisiana	Maine •	Maryland	Massachusetts	Michigan	Minnesota	Mississippi	Missouri
Promulgates and/or enforces State laws, rules, and regulations governing water supplies and								
sewage disposal facilities of: Municipalities Schools Industries Camps, roadside parks, and comfort stations Private premises Promotes local programs of control (including	1 1 1 1	7 ° 1 b 1 1 1 b	1 1 b 1 1 1 b	3 •	1,8 b d 4 3,8 b d 1 b 1 b	1 1,3 1 1 b	1 1 1 b 1 1 b	
W. P. A. projects for constructing privies and septic tanks and for repairing wells)	1		1	1.	1•	1 •	1	1
and sewage disposal for: The general public Operators of public water systems and sewage	1	1,7 •	1	1	1	1	1	1
treatment plants. Supervises and/or provides consultation service to local organizations (including W. P. A. projects for constructing privies and septic	1, 6		1	1,6	1	1, 6	1	1,6
tanks and for repairing wells) Distributes and/or administers financial grants-	1	1 •, 7	1	1 •	1•	1 •	1	1
in-aid to local health units for sanitation activi- ties	1 *		1'	1 1	1 f		11	1
(including treatment plants) and sewerage installations or extensions. Inspects public water supplies and sewerage systems—	1	1 4, 7	1	1	1	1	1	
PeriodicallyRoutinely, but not at regular intervals Upon request or complaint only	1 b 1 e	1 °, 7 ° 1 b b	1	1	1 b 1 •	1 ° 1 b	1	1
Provides laboratory service for testing safety of water from public supplies, adequacy of sewage treatment by public plants, and/or degree of stream pollution Licenses or certifies operators of public water	1	1	1	1	1	1	1, 5	1
systems and sewage treatment plants					1			
schools, other institutions, etc.) Inspects semipublic water supplies and sewage disposal facilities—	1 1 b b	1 1 h	1 k	1 h	1•	15	1 6 6	
Periodically Routinely, but not at regular intervals	10	1 h	1 °		{ 1 b h 3 s h	}		1
Upon request or complaint only			1 b b b 3 b b	} 1 6		1		
semipublic supplies Condemns and closes to use unsatisfactory	1	1	1	1 1	1 1	1		1
semipublic supplies	1			1				
Routinely, but not at regular intervals Upon request or complaint only Makes laboratory tests of water samples from	1 •	1 5	1 •	1	1 •	1•	1 •	
private supplies Engages in activities to control stream pollution from—	1 k	1 k	į k	1 k	1, 8	1 k	1 k	1''
Municipal sewage Mine drainage Industrial waste Other and/or unspecified sewage or waste. Warnighes direct advisory service to indi-	9	7 d 7 d	i i	1 d	1, 8 1, 8 1, 8	1 1	1 	
Furnishes direct advisory service to indi- viduals, corporations, and municipalities as to construction and maintenance of most suitable type of water supply or sewerage								
system	1	1,7 1	1	1	1	1	1 1	

Table 2.—Department of State government responsible for specific activities designed to control sanitation of water supplies and sewerage systems in each State and Territory, the District of Columbia, and the Virgin Islands—Continued

Territory, the District of Columbia	a, and the Virgin Islands—Continued								
		.,		State	or Territo	ory	,		
Activity	Montana	Nebraska	Nevada	New Hampshire	New Jersey	New Mexico	New York	North Carolina	
Promulgates and/or enforces State laws, rules,									
and regulations governing water supplies and sewage disposal facilities of: Municipalities	1 1 d	1 1 d	1 1	1,4	1,8 b d 1 d (1 b d, 3 o	1,8b d	1,8 b d 1 b, 4 ∫1 b, 3 c	1	
Industries	1 4	1.	1	1	{ 8p q	}1,8 b d	[86 d	ֿ ען	
rivate premises.	1 d 1b d		1 1 6	1 1	1 d	1 1 b	1	1 1	
Promotes local programs of control (including W. P. A. projects for constructing privies and septic tanks and for repairing wells)		. 1	1		1	1	1 •	1	
ply and sewage disposal for: The general public	1	1	1	1	1	1	1	1	
Operators of public water systems and sewage treatment plants	1		1 •	1	6		1, 6	1	
Supervises and/or provides consultation service to local organizations (including W. P. A. projects for constructing privies and septic tanks and for repairing wells)	1	1	1	1.	1	1	1 • 4 •	1	
Distributes and/or administers financial grants-in-aid to local health units for sanita-	•	•	1			•	' ' '		
tion activities					1'	1'	1'	1'	
Approves plans for public water supplies (including treatment plants) and sew- erage installations or extensions	1	1		1	1	. 1	1	1	
age systems— Periodically	1 5	1			1 5	1 6	1		
Routinely, but not at regular intervals. Upon request or complaint only	1 °		1	1 °	1 •	1 *			
Provides laboratory service for testing safety of water from public supplies, adequacy of sewage treatment by public plants and/or degree of stream pollution. Licenses or certifies operators of public water systems and sewage treatment	1	1.	1, 6	. 1	1	1	1	1•	
plants Approves plans for installations of water					1		1		
supplies and sewage disposal facilities of semipublic places (camps, industries, schools, other institutions, etc.)	1 b	1 b d	1 1 5	1 1 b			1	1	
Periodically				3 b h 4 b h	} 1 •	1	1 •	1 b	
Upon request or complaint only Makes laboratory tests of water samples	1 •	1 6 6	1 b h		164	1 •	1 6	1 •	
from semipublic supplies	1 k		1	1	1		1	1 k	
Inspects private water supplies and sewage disposal facilities—	1		1	1	1	1	1	1	
Periodically Routinely, but not at regular intervals							1 b	<u>î</u>	
Upon request or complaint only	1.	1.	1 1 k	1 b	1 1 k	1 •	10	1 1	
from private supplies Engages in activities to control stream pol-	1 k	1 k	1.	1	1-			1-	
lution from— Municipal sewage Mine drainage Industrial waste	1 1 1			1	8 8 8	1 8 d 8 d	1, 8	1 1 1	
Other and/or unspecified sewage or	1			1			1, 8	1	
wasta Furnishes direct advisory service to indi- viduals, corporations, and municipalities as to construction and maintenance of most suitable type of water supply or		,				_			
sewerage system	1	1	1	1	1	1	1	1	
this classification	1	1	1	1	1	1	1	t	

Table 2.—Department of State government responsible for specific activities designed to control sanitation of water supplies and sewerage systems in each State and Territory, the District of Columbia, and the Virgin Islands—Continued

Terruory, the District of Columbia,				State or	Territo	ry		
Activity	North Dakota	Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island	South Carolina	South Dakota
Promulgates and/or enforces State laws, rules, and regulations governing water supplies and sewage disposal facilities of:								
M unicipalities Schools Industries Camps, roadside parks, and comfort stations Private premises	1,5° 1,5°	1 1 1 1 1	1, 4 1, 8 1	1,8 bd 1,8 bd 1,8 bd 1 b	1,8 b 1,4 b 1,8 b 1	1,3 ° 1,1	1 1 1 1	8 b 4 2
Private premises Promotes local programs of control (including W. P. A. projects for constructing privies and septic tanks and for repairing wells). Conducts educational programs in water supply and sewage disposal for:	1	1 •	1	1	1		1	1
THE SCHOOL PURIOR TOTAL	1	1	1	1	1	1	1	1
Operators of public water systems and sew- age treatment plants	1	1	1, 6	1, 6			1	1
tanks and for repairing wells) Distributes and/or administers financial grants-	1	1 •	1	1	1	1	1	1
in-aid to local health units for sanitation ac- tivities	1'	1 *	1'	1 *			1'	1'
Approves plans for public water supplies (including treatment plants) and sewerage installations or extensions Inspects public water supplies and sewerage	1	1	1	1,8 b d	1	1 Þ	1	1
systems— Periodically	1	1 6	<u>-</u> -			1 6	1	
Routinely, but not at regular intervals. Upon request or complaint only. Provides laboratory service for testing safety of water from public supplies, adequacy		1 •	1	1,8 b d	1	1		1.6
of sewage treatment by public plants, and/or degree of stream pollution Licenses or certifies operators of public water	1	1 •	1	1 • 6 •	1	1	1•1	1
systems and sewage treatment plants Approves plans for installations of water supplies and sewage disposal facilities of semipublic places (camps, industries,		1	1 0 5					
schools, other institutions, etc.) Inspects semipublic water supplies and sewage disposal facilities—	1	1 b		1 h	1 b	••••	1 6	1 6
Periodically Routinely, but not at regular intervals Upon request or complaint only	1°, 5° 1 b	1 b b	8 b h	1 • 8 b h	1 h 1 b h	1 • 1 b	1 6	1 h, 2 b h
Makes laboratory tests of water samples from semipublic supplies	1, 5	1	 -	1	1	1	1	1
Condemns and closes to use unsatisfactory semipublic supplies		1 4		1	1	1		
Periodically Routinely, but not at regular intervals Upon request or complaint only	<u>i</u>		16	1	1	1 b 1 •	1	i
Makes laboratory tests of water samples from private supplies	1 k			1 k	1	1 k	1 k	1 k
Engages in activities to control stream pol- lution from— Municipal sewage	1	1	1	8	1, 8	1	1	1,8
Mine drainage	1 1 1	1 1 1	8 1,8 1,8	8 8 8	1,8	1 1 1	1 1	1, 8 1, 8
as to construction and maintenance of most suitable type of water supply or sew-	1	1	1	1	1	1	1	1
erage system Renders additional service not covered in this classification.	1	1	1		1	1	1	1

Table 2.—Department of State government responsible for specific activities designed to control sanitation of water supplies and sewerage systems in each State and Territory, the District of Columbia, and the Virgin Islands—Continued

Terruory, the District of Columbia	da, and the Virgin Islands—Continued							
				State	or Terri	itory		
▲ctivity	Tennessee	Teras	Utah	Vermont	Virginia	Washington	West Virginia	Wisconsin
Promulgates and/or enforces State laws, rules, and regulations governing water supplies and sewage disposal facilities of:						(1.744		
Municipalities	1	1	1	1	1	1,7•d	}1,8 b d	1,864
Schools	1 b, 9 b	1 1	1	1 1	1 5,4 •	1,3	1,8 b d	1,8 6 4
tions	9	1	1,1	1	1	1 1 d	1	1 1
Private premises Promotes local programs of control (including		1	1 6	1.	1	'	1	٠ ،
W. P. A. projects for constructing privies and septic tanks and for repairing wells) Conducts educational programs in water supply and sewage disposal for:	1	1	1	1.	1	1	1	1
The general public Operators of public water systems and	1	1	1	1	1	1	1	1
Supervises and/or provides consultation serv-	1,6 •	1,4			1.	1	1	1,6
ice to local organizations (including W. P. A. projects for constructing privies and septic tanks and for repairing wells) Distributes and/or administers financial grants-in-ald to local health units for sanita-	1	1	1	1 •	1	1	1	1
tion activities	1 *	1 *	1'		1 4	1 *	11	11
Approves plans for public water supplies (including treatment plants) and sewer- age installations or extensions	1	1		1	1 • =	1	1	1
Inspects public water supplies and sewerage systems— Periodically———————————————————————————————————	1		1.					1.
Routinely, but not at regular intervals	•	1.	1.	1	1	1	1	1
Upon request or complaint only		1 6						
pollution Licenses or certifies operators of public water systems and sewage treatment	1	1	1.	1.	1 •	1.	1	1
plants Approves plans for installations of water supplies and sewage disposal facilities of semipublic places (camps, industries,	1 • •	1					1	
schools, other institutions, etc.)		1		1	1=	1 k	1	
Periodically Routinely, but not at regular inter-			 		1 •			1 • h
vals Upon request or complaint only	1 b b	1 • 1 b	1 1	1 b	1 b	·i	1 b b 1 °	<u>1</u> è
Makes laboratory tests of water samples from semipublic supplies		1	1	1	1	1 k	1	1
Condemns and closes to public use un- satisfactory semipublic supplies		1		1		1	1	1
Inspects private water supplies and sew- age disposal facilities— Periodically. Routinely, but not at regular inter-			 -					
vals Upon request or complaint only		1•		1.	_i -	i		<u>i</u>
Makes laboratory tests of water samples from private supplies Engages in activities to control stream		1 k		1 k	1 k	11	1	1 k
pollution from— Municipal sewage Mine drainage	1	1	1 1			1, 9	1, 8 1, 8	1, 8 1, 8
Industrial waste	i	1	1			1,9	1,8	1,8
wasta		1	1 1	1 =	145	 '	1,8	1, 8

Table 2.—Department of State government responsible for specific activities designed to control sanitation of water supplies and sewerage systems in each State and Territory, the District of Columbia, and the Virgin Islands—Continued

_	State or Territory								
Activity	Tennessee	Texas	Utah	Vermont	Virginia	Washington	West Virginia	Wisconsin	
Operates a direct service program—Con. Furnishes direct advisory service to individuals, corporations, and municipalities as to construction and maintenance of most suitable type of water supply or sewerage system Renders additional service not covered in this classification	1	1	1	1	1, 2	1	1	1	

		Stat	e or Terr	itory	
Activity	Wyoming	Alaska	Нажай	Puerto Rico	Virgin Islands
Promulgates and/or enforces State laws, rules, and regulations governing water supplies and sewage disposal facilities of: Municipalities	1,4 b 1 1 1 1 b	1 1 1	1 1 1 1 1 1 b	1 1 1 1	1 1 1 b 1 b
repairing wells). Conducts educational programs in water supply and sewage disposal for: The general public Operators of public water systems and sewage treatment	1	1 •	1 • 1 1	1	1
plants Supervises and/or provides consultation service to local organizations (including W. P. A. projects for constructing privies and septic tanks and for repairing wells) Distributes and/or administers financial grants-in-aid to local health units for sanitation activities	1	1 •	1 • 1 f	1 1 t	1•
Operates a direct service program: Approves plans for public water supplies (including treatment plants) and sewerage installations or extensions Inspects public water supplies and sewerage systems— Periodically Routinely, but not at regular intervals	1	1	1 1 ° 1 b	1 1 b 1 c	
Upon request or complaint only Provides laboratory service for testing safety of water from public supplies, adequacy of sewage treatment by public plants, and/or degree of stream pollution Licenses or certifies operators of public water systems and sewage treatment plants	1	1	1	1 •	1 •
Approves plans for installations of water supplies and sewage disposal facilities of semipublic places (camps, industries, schools, other institutions, etc.)	1		1	1	
Periodically Routinely, but not at regular intervals Upon request or complaint only Makes laboratory tests of water samples from semipublic	1 ° 1 b	1 h 1 b h	1 b	1	1 ° 1 b
supplies	1	1	1		·

See Code at end of table.

TABLE 2.—Department of State government responsible for specific activities designed to control sanitation of water supplies and sewerage systems in each State and Territory, the District of Columbia, and the Virgin Islands—Continued

		Stat	e or Terr	ritory	
Activity	Wyoming	Alaska	Hawaii	Puerto Rico	Virgin Islands
Operates a direct service program—Continued. Inspects private water supplies and sewage disposal facilities— Periodically. Routinely, but not at regular intervals. Upon request or complaint only. Makes laboratory tests of water samples from private supplies. Engages in activities to control stream pollution from—Municipal sewage Mine drainage. Industrial waste. Other and/or unspecified sewage or waste. Furnishes direct advisory service to individuals, corporations, and municipalities as to construction and maintenance of most suitable type of water supply or sewerage system. Renders additional service not covered in this classification.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

•Code:

Department of health
 Department of agriculture

3. Department of labor, labor and industry, labor and statistics, industrial commission, etc.

 Department of education, public instruction, etc.
 Independent State laboratory, State laboratory department
 State university or college
 Independent department of engineering, department of public utilities, department of public service. 8. State water commission, State water board, stream control commission, sanitary water board, State

sanitary authority, committee of water pollution, interstate stream commission, etc.

9. Other departments or offices of State government

• The department of health 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)

b Sewage disposal facilities only.

b Sewage disposal facilities only.

Water supplies only.

Under special conditions only: When water supplies are endangered, when stream pollution is involved, when cross connections are concerned, when nuisances are created, when shellfish-producing waters are involved, in case of actual or threatened disease, if more than a specified number of persons is served, in the absence of local service, and/or if municipal facilities are privately owned.

For general sanitation activities, but not for W. P. A. community sanitation projects.

As part of grant-in-aid to local health units for general health work.

Not required, but a voluntary activity; no regulatory authority, but promotional and advisory activity. For selected types of facilities only: Tourist and/or C. C. C. camps, roadside supplies, dairy farms, institutions, schools, industries, new plants, approved facilities, and/or other selected types or groups of facilities.

facilities

i Service provided, but on a fee basis.

i Laboratory of the State health department makes only bacteriological examinations; chemical analyses, which are required quarterly, must be made by private chemists.

Lupon request or complaint; occasionally; for special studies; and/or for verification of local findings.

Has authority, but little or no activity carried on.

Sanitation of semipublic water and sewerage systems usually falls within the scope of State authority also, but the health department is less apt to have full regulatory power over semipublic facilities than over those classified as public, or municipal. Not only do special sanitary commissions or water boards and the independent department of engineering which have already been referred to share responsibility for control of semipublic sewerage systems, but nine departments of education participate in regulation of school sanitation and as many departments of labor promulgate and/or enforce regulations pertaining to sanitation within industrial establishments.

June 12, 1942 898

Nevertheless, this amount of split control does not alter the fact that the health department maintains the leading regulatory position with respect to sanitation of water and sewerage facilities of schools, industries, hospitals and other institutions, camps, roadside parks, and the like. In some States, authority over semipublic facilities does not include both the water supply and the sewerage system but is limited to one or the other. Furthermore, State intervention may be restricted to special conditions such as the endangering of public water supplies, creation of a nuisance, involvement of stream pollution, or service affecting more than a specified number of persons. From table 2 may be determined the States and the agencies which have limited and broad regulatory authority over the several types of semipublic facilities.

Relatively little State regulatory control is maintained over the water supplies and sewage disposal facilities of private premises. Actually, less than one-third of the States routinely have such control over both types of facilities. Conversely, 10 States report no regulation whatever; in 21, the regulatory function as applied to private premises is limited to methods of sewage disposal; and in 5, State regulation applies to special conditions only.

All State health departments having local counterparts engage in promotional activities for extension of sanitation services at that Stimulation of local endeavors is accomplished largely through furnishing supervision and advice to sanitation personnel affiliated with the local health organizations. This is a particularly important function of the State health department engineers. Direct promotional and educational measures which members of the State staff rely upon as effective approaches to the problem of sanitation fall into two distinct categories. One type of educational activity is designed for the general public, while the other includes more specialized instruction for operators of water systems and sewage treatment plants. Conferences with local officials, lectures before service clubs and citizens' associations, and distribution of pertinent literature are the means usually selected for securing installation of new or extension of old facilities. Furnishing suggestions, assistance, and cooperation in the development of new public water supplies and sewerage facilities also constitutes a major health department function.

The general promotional and educational efforts of State health departments are not limited to facilities classified as public. In rural areas public installations are impossible or impractical and individual facilities must be maintained. To meet such needs, the health department circulates standards and specifications which are recommended for springs, wells, and surface water supply systems as well as corresponding information regarding installation of septic tanks or sanitary privies for use on semipublic or private premises. One of

the outstanding promotional enterprises of State health departments is sponsorship of community sanitation projects conducted by the Federal Work Projects Administration and including construction and repair of privies, septic tanks, and wells. Such sponsorship entails defining the work proposed, outlining procedures to be followed, securing orders, determining personnel required, estimating total and unit costs, and attending to such other details as might be necessary for securing approval by the Work Projects Administration. In other words, the State health department is the motivating force behind the cooperating agency which renders the actual direct service.

The functioning of water and sewage treatment plants cannot be considered either satisfactory or safe unless competent personnel are employed for their operation. Nevertheless, only about one-fifth of the State health departments have any control-through licensing, certification, or establishment of standards of training—over the qualifications of persons serving in this capacity. Consequently, the knowledge and ability of plant operators varies considerably according to differences in requirements set up by the individual cities. an effort to level off these inequalities, about four-fifths of the State health departments have undertaken some sort of in-service training for operators of water and sewage treatment plants who may be inadequately prepared for their task. Such training may be restricted to personal instruction given by engineers of the State health department at individual conferences which usually follow their periodic investigation of the plant operation, or it may be supplemented by short group courses conducted by the health department either independently or in cooperation with the State university. Attendance at these short courses is largely on a voluntary basis. Other types of in-service training sponsored by several States each are regional conferences, traveling schools held at selected points throughout the State, home study courses, and apprenticeship training.

No financial grants-in-aid are made to local health units specifically for water and sewerage activities; yet almost without exception some portion of the allotment made by a State health department to local units for general health work is expended for salaries of local engineers or sanitarians, who, in turn, are directly working for improvement of existing water and sewerage systems and for installation of additional new systems.

Direct service rendered by State agencies for water safety and proper sewage disposal, as well as regulatory control exercised over these features, varies according to the several types of facilities. Activities classified as direct State service for municipal systems may be described according to one or a combination of the following categories: (1), Technical review and approval of source of public water supplies and of construction plans for installation and extension of public water and

June 12, 1942 900

sewage treatment plants and systems; (2), inspection of plant operation; (3), laboratory testing of samples to determine safety of water and adequacy of sewage treatment; and (4), licensing or certification of plant operators. For the most part, the health department is the direct service agent of the State, but all branches of service are not performed with the same degree of uniformity.

Since the safety of public water supplies and sewage treatment is dependent upon provision of special structures, mechanical equipment, and treatment chemicals, staff engineers of all but 10 State health departments routinely examine in detail plans for both water and sewage treatment plants and systems prior to their installation or extension. Two more health departments render such service for municipal sewage disposal facilities only and 1, for water supplies only; 4 do not require that engineering plans and specifications be submitted for review, but make complete checks when they are voluntarily presented. In 3 States, the sanitary water board, State water commission, or similar organization supplements health department service in review and approval of plans for sewer systems and treatment plants, while an independent department of engineering and a department of public utilities function in this capacity in 1 State each.

Periodic inspectional service provided by the State agencies for municipal water and sewerage facilities ranges from weekly to biennial visits, with more than one-fourth of the States reporting that investigations of both types of facilities are made routinely, but at irregular intervals. Source material collected in connection with this survey does not reveal specific items covered in the inspections made by State engineers, but suggests that details of such investigations vary in accordance with complexity of the system or treatment plant under observation.

Practically all States provide laboratory service for checking the safety of water from public supplies. This is usually a health department performance, but in a few States maintenance of the public health laboratory is a joint function of the health department and State university or college. In two more jurisdictions an independent State laboratory affords facilities for testing the safety of water samples from municipal systems. Laboratory testing of the adequacy of sewage treatment is less uniformly practiced by State agencies, inasmuch as a fourth of the States report the absence of such service. It should be noted that three of the States which test municipal water and sewage samples do so only on a fee basis. In the remaining States listed such service is free.

Licensing of plant operators is a form of direct service which is very closely allied with the regulatory function of the agency. Although a few State health departments have initiated licensing sys-

tems through a voluntary certification plan, in the majority of States this procedure is carried out in accordance with specific statutory requirements.

While the types of direct service afforded semipublic water supplies and sewage disposal systems by State agencies are similar to those provided public facilities, the extent of such service varies markedly for the two classes of installations. The semipublic group, it will be recalled, includes camps, roadside recreation parks, comfort stations, schools, industries, hospitals, or other like institutions not connected with a public water supply or sewer system. As a rule, such water supplies are obtained from untreated springs or wells, and septic tanks are used as the means of sewage disposal. Twenty-two States report routine review and approval of construction plans for all kinds of semipublic water or sewerage systems. In 13 additional areas, such service is available for particular kinds of semipublic places only. For instance, one health department may check all school specifications, whereas another may concentrate on the water and sewerage of tourist camps. Still another variation of this branch of service is that rendered when plans for semipublic places are submitted voluntarily. Reports of nearly one-fourth of the jurisdictions indicate that no action whatever is taken from the State level upon plans for proposed semipublic water and sewerage installations.

Inspections of semipublic facilities by State personnel are rarely made at stated intervals even in those States which report inclusion of such service as an item of their programs. Irregular inspectional schedules predominate and investigation of semipublic facilities upon request or complaint only is not uncommon. It should be emphasized that absence of periodic State inspectional service does not necessarily imply that no supervision is extended over the water and sewerage of places maintaining their own facilities, but serving groups of people. In general, it is the policy of State health departments to delegate most of such activity to their local subdivisions, thus conserving the time and energies of the State staff for handling municipal problems and especially troublesome semipublic situations. Where there are not organized local health units, however, any supervision which is maintained over semipublic accommodations must necessarily emanate from the State agency.

With one important difference, circumstances under which State laboratory facilities are available for testing water samples from semipublic supplies are much the same as those described for samples collected from municipal sources. The difference referred to occurs in seven States which do not routinely test samples from semipublic supplies, but render such service upon request only. Condemnation of unsatisfactory semipublic supplies and subsequent closing thereof is a practice resorted to by about two-thirds of the health departments.

June 12, 1942 902

Practically all direct service pertaining to water supplies and sewage disposal facilities of private premises which is supplied by State personnel to individual families is furnished on a request basis. While both inspectional and laboratory service are included in these requests, direct advisory service consisting primarily of recommended standards and specifications constitute by far the greatest bulk of aid given by State health departments for facilities of private premises. Such direct advisory service is not to be confused with the advisory and supervisory function discussed earlier in this report. The previous item applied to the relationship between State and local engineering personnel rather than to specific advice given individuals regarding the most suitable type of water supply or sewerage system.

Probably the most notable mass effort of State health departments for improvement of environmental sanitation of private premises is their joint participation with the Federal Work Projects Administration and organized local health units in extensive privy construction A few States have expanded this activity to include construction of septic tanks and repair of wells. The actual role of the State health agency in these projects is usually defined as development, promotion, and supervision. Over three-fourths of the health departments reported such participation. Northeastern States are less apt to engage in community sanitation programs of this type than are States of any other section of the country. About two-fifths of the health departments reported a cooperative arrangement with Federal loan agencies whereby the health department approves the water supply and sewage disposal facilities on private properties for which Federal loans are sought.

Additional activities which are closely related to the main problems of water supply and sewage disposal and which are carried on to a varying extent by engineers of the several State health departments include certification of the drinking water used on common carriers and control of the sale of bottled water and water used as a source of ice supplies.

From the foregoing discussion, it is obvious that there is a definite pattern to State activities for safety of water supplies and sewage disposal facilities, not only with respect to content of the program but also from the standpoint of the agency primarily responsible and the types of auxiliary agencies which participate in special features of the complete control plan. That considerable variation obtains among the States in extent and intensity of service is recognized; yet it is significant that in this field of public health endeavor some agreement has been reached as to effective control methods and scope of State responsibility.

PLAGUE INFECTION REPORTED IN THE UNITED STATES DURING 1941

IN HUMAN BEINGS

Two fatal cases of plague in human beings were reported in the United States in 1941, both in Siskiyou County, California. The first case occurred in a 10-year-old boy, residing near Montague, with onset on June 14 and death on June 26. The diagnosis was confirmed bacteriologically. The second case occurred in a 5-year-old boy living 1 mile northwest of Mount Shasta City, about 50 miles from the locality in which the other case occurred. The diagnosis was confirmed by animal inoculation and the isolation of pure cultures.

The source of infection in each case was believed to have been ground squirrels; and the distance between the two localities in which the cases occurred indicated widespread rodent infection in the area. This was subsequently proved to be the case by the finding of plague infection in pools of fleas taken from ground squirrels in various localities in Siskiyou County.

IN RODENTS AND PARASITES

Plague infection in rats, wild rodents, and parasites from rodents was reported during 1941 in 8 western States—California, Colorado, Idaho, Montana, New Mexico, North Dakota, Oregon, and Washington. It was found for the first time in North Dakota. On July 12, 1941, the infection was proved in fleas collected on June 23 from ground squirrels (C. richardsonii) shot in a locality about 7 miles northeast of Crosby, Divide County, and about 6 miles south of the Saskatchewan-North Dakota boundary. It is believed that this locality is the farthest east in which plague infection has been found in wild rodents or their ectoparasites in the United States. The farthest east where the infection had previously been proved to be present was Dona Ana County, New Mexico, where an infected kangaroo rat was found in 1939.

Infected rats and infected fleas from rats were found in San Francisco and Richmond, Contra Costa County, California, during the year.

The accompanying table lists the areas in which plague infection was reported to the Public Health Service during 1941. It is not to be inferred that these reports give the complete picture of the presence of the infection among wild rodents in the Western States, as the field forces engaged in the work, the areas included in the investigations, and the seasonal periods during which the work is undertaken are limited. They do, however, demonstrate the continuance of a wide distribution and an expanding area of proved foci.

The presence of infection in animal tissue or parasites was demonstrated by laboratory examination, inoculation of laboratory animals

with tissue from rodents, and mass inoculation with emulsion of parasites.

Plague infection in wild rodents and their ectoparasites as reported to the Public Health Service during 1941

State and county	Date 1	Infection found in—
California:		
Alameda County	July 2	2 pools of fleas from rats (R. norvegicus), in Berkeley and Oakland.
Contra Costa County	May 13	Tissue from 2 rats (R. norvegicus) taken on garbage dump in Richmond.
DoKern County	June 24 May 7	Pool of fleas from 68 rats taken on garbage dump in Richmond.
Do	May 7 May 16	Tissue from 2 ground squirrels (C. beeckeyt). Tissue from ground squirrel (C. beeckeyt) and 3 pools of fleas from ground squirrels.
Do	May 24	3 nools of fleas from ground squirrels (C. heecheui)
Do	May 29 June 3	Pool of fleas from ground squirrels (C. beecheyi). 2 pools of fleas from ground squirrels (C. beecheyi). Pool of fleas from ground squirrels (C. beecheyi). Pool of fleas from ground squirrels (C. beecheyi).
Do	June 11	Pool of fleas from ground squirrels (C. beeckeyi).
Do	June 18	Pool of fleas from ground squirrels (C. beecheyi).
Do	June 20 June 26	Tissue from ground squirrel (C. beccheyi). Pool of fleas from ground squirrel burrows; 2 pools of fleas from
Do	June 30	ground squirrel. (C. beeckeyi). Ground squirrel.
Do	July 2	2 pools of fless from ground squirrels 6 miles from Davis Ranger Station and ground squirrel from Keene (all squirrels C. beecheyi).
Do	July 5	Pool of fleas from 1 ground squirrel found dead 3 miles south of Davis Ranger Station; in ground squirrel from ranch 6 miles south of Davis Ranger Station.
Do	July 9	2 pools of fleas from ground squirrels taken 2 and 6 miles south of Davis Ranger Station; 3 ground squirrels, pool of 36 ticks and pool of fleas from ground squirrels taken near Keene.
Do	July 12	3 ground squirrels and pool of fleas from ground squirrels taken near Keene.
Do	July 18	2 ground squirrels and 3 pools of fleas from ground squirrels (C. bescheyi).
Do	July 24 Aug. 26	Pool of fleas from ground squirrels (C. beecheyi). Pool of fleas from ground squirrels (C. beecheyi).
Do	Nov. 17	Tissue from ground squirrels (C. fisheri).
Los Angeles County		Pool of floor from ground equipped (C heatheut) from Common
Monterey County	-	dump, ½ mile east of Gorman. Pool of fleas from ground squirrels from Hunter Liggett Military Reservation, 25 miles southwest of King City. 7 ground squirrels from Hunter Liggett Military Reservation. Pool of fleas from Hunter Liggett Military Reservation and pool of fleas from Hunter Liggett Military Reservation and pool of fleas from Hunter Liggett Military Reservation and pool of fleas from Hunter Liggett Military Reservation.
Do	June 30 July 2	7 ground squirrels from Hunter Liggett Military Reservation.
Do	July 5	3 pools of fleas from Hunter Liggett Military Reservation and
San Bernardino County	Sept. 17	Pool of fleas and pool of lice (approximately 500) from 1 golden
San Francisco (city and county).	June 3	mantled ground squirrel. Pool of fless from 2 rats (R. norvegicus) caught in the vicinity of
Do	June 24	the 1200 block of Folsom St., San Francisco. A rat (R. norvegicus) trapped at 1740 Kirkwood Ave., San Francisco.
Santa Cruz County	July 9	Pool of fleas from ground squirrels taken 6 miles east of Watson- ville.
Shasta County	Dec. 2 Dec. 31	2 pools of fleas from ground squirrels (C. douglasii). Pool of fleas from ground squirrels (C. douglasii and C. lateralis
		sp.).
Siskiyou County	July 24 Aug. 8	2 pools of fleas from ground squirrels (C. douglasii). 2 pools of fleas from ground squirrels (C. douglasii) and pool of
Do	Aug. 19	fleas from burrows. Tissue from ground squirrel (C. douglasii) and pool of fleas from ground squirrels (same sp.).
Do	Aug. 26	3 pools of fleas from ground squirrels (C. douglasii).
Do:	Aug. 26 Sept. 4	3 pools of fleas from ground squirrels (C. douglasit). Tissue from ground squirrel (C. douglasit) and 2 pools of fleas
Do	_	from ground squirrels (same sp.). Tissue from 1 ground squirrel (sp. unknown) found dead, and 1 ground squirrel (C. douglasii) and 2 pools of fleas from same sp.
Do	Sept. 29	3 pools of fleas from ground squirrels (C. douglasti).
Do Do Do	Sept. 30 Oct. 16	3 pools of fleas from ground squirrels (C. douglasti). Tissue from ground squirrel (C. douglasti). Pool of fleas from chipmunks and 3 pools of fleas from ground
Do	Oct. 22	squirrels (C. douglasti). Pool of flees from ground squirrels (C. douglasti)
Do Do	Nov. 17	Pool of fless from ground squirrels (C. douglasit). Pool of fless from ground squirrels (C. douglasit).
Do	Dec. 2	2 pools of fleas from ground squirrels (C. douglasii).
Date of reports that infection	had been	proved.

Plague infection in wild rodents and their ectoparasites as reported to the Public Health Service during 1941—Continued

State and county	Date	Infection found in—
Colorado: San Miguel County	July 29	Tissue from ground squirrel (C. variegatus grammurus); tissue from 2 marmots (Marmota flaviventris); pool of fleas from 5 marmots.
Idaho: Canyon County Payette County Ada County	May 23 May 23 June 3	Pool of fleas from ground squirrels. Pool of fleas from ground squirrels. 2 pools of fleas from ground squirrels (C. mollis sp.)
Montana: Beaverhead County Do	July 23 July 29 Aug. 4	Pool of fleas from ground squirrels (C. columbianus). Pool of fleas from ground squirrels (C. columbianus). Tissue from 2 ground squirrels.
Valencia County	Sept. 20	2 pools of fleas from prairie dogs (Cynomys gunnisoni zuniensis).
North Dakota: Divide County	July 12	Fleas from ground squirrels (C. rickardsonii) shot in a locality about 7 miles northeast of Crosby and about 6 miles south of Canadian border.
Do	July 29	3 pools of fleas from ground squirrels (C. richardsonii).
Oregon: Malheur County Harney County	June 3 Aug. 14	Pool of fleas from 1 marmot (Marmota flaviventris avara). Tissue from ground squirrel (C. oregonus).
Washington: Stevens County	July 29	Tissue from ground squirrel ($C.\ columbianus$) and pool of fleas from ground squirrels.

PREVALENCE OF COMMUNICABLE DISEASES IN THE UNITED STATES

April 26-May 23, 1942

The accompanying table summarizes the prevalence of nine important communicable diseases, based on weekly telegraphic reports from State health departments. The reports from each State are published in the Public Health Reports under the section "Prevalence of disease." The table gives the number of cases of these diseases for the 4-week period ended May 23, 1942, the number reported for the corresponding period in 1941, and the median number for the years 1937—41.

DISEASES ABOVE MEDIAN PREVALENCE

Measles.—For the four weeks ended May 23 there were 93,056 cases of measles reported, as compared with 172,184, 44,682 and 61,913 reported cases for the corresponding period in 1941, 1940 and 1939, respectively. While the number of cases was only about 55 percent of last year's figure for this period, it was almost one and one-half times the 1937–41 median incidence, which is represented by the 1939 figure. In the Middle Atlantic, South Atlantic and East South Central regions the disease was considerably less prevalent than it was at this time last year and the numbers of cases were also well below the normal seasonal expectancy, but in all other regions the disease was unusually prevalent, the excesses over the normal seasonal incidence ranging from 20 percent in the East North Central region to more than 7 times the 1937–41 median in the Pacific region.

June 12, 1942 · 906

Meningococcus meningitis.—For the current 4-week period there were 336 cases of meningococcus meningitis reported—the highest number recorded for this period of the year since 1937, when 504 cases were reported for the period corresponding to the current one. The excesses were reported from widely scattered regions, the Atlantic Coast, West South Central and Pacific, and was confined largely to certain States in the regions. Of the total cases, New York reported 71, Maryland 27, Massachusetts 25, Texas 19, California 17, Virginia 16, and New Jersey 16 cases. While the current incidence is considerably above that of recent years, it represents a decline from the preceding 4-week period when 390 cases were reported, which figure will probably represent the highest seasonal incidence as a further decline in cases may be expected during the summer months.

Poliomyelitis.—The poliomyelitis situation was most favorable during the current 4-week period. The number of cases (73) was only slightly above the incidence in 1941, which figure (70 cases) also represents the 1937-41 median incidence for this period. An increase of this disease normally occurs at this season of the year. The current figure represented about a 40-percent increase over the preceding 4-week period, but there was no indication of any unexpected increase in any section.

DISEASES BELOW MEDIAN PREVALENCE

Diphtheria.—The incidence of diphtheria (757 cases) reported for the four weeks ended May 23 was less than 90 percent of the incidence during the corresponding period in 1941 and only about 60 percent of the 1937–41 median incidence for this period. In the West South Central region the number of cases stood at about the normal seasonal level but in all other regions the incidence was relatively low.

Influenza.—The number of cases of influenza reported for the country as a whole was also comparatively low, approximately 5,200 cases being reported, as compared with 7,530 cases for this period in 1941, and an average of 5,650 cases in the years 1937–41. All regions except the West South Central and Mountain regions reported a relatively low incidence; in the former region the number of cases was about normal for this season of the year, while in the latter region, the incidence was about 75 percent above the average seasonal incidence.

Scarlet fever.—For the four weeks ended May 23 there were 11,551 cases of scarlet fever reported, as compared with approximately 13,880, 19,800, and 16,000 cases for the corresponding period in 1941, 1940, and 1939, respectively. The incidence was slightly higher in the New England States than might be expected, but in all other regions the numbers of cases were lower than the 1937–41 average figures for this period. For the country as a whole the current incidence was the lowest on record for this period of the year.

Smallpox.—The number of cases of smallpox remained at an unusually low level, the 75 cases reported for the current period being only about 35 percent of the low incidence reported in 1941 (218 cases) and less than 7 percent of the 1937—41 median figure for this period. However, one case was reported from New Hampshire during the week ended May 16, which is the first case of this disease reported from the New England region since July 1939, when 6 cases were reported from Connecticut.

Typhoid fever.—A few more cases of typhoid fever occurred during the current period than were reported for the corresponding period in 1941, but the number (384) was only about 75 percent of the 1937–41 average incidence for this period. The 108 cases occurring in the South Atlantic region represented an increase of approximately 20 percent over the seasonal expectancy in that region, but in all other regions the incidence was relatively low.

Whooping cough.—This disease was also considerably less prevalent during the current period than it was at this time in 1941, approximately 15,000 cases being reported, as compared with approximately 21,000 last year; the number of cases was also about 10 percent below the preceding 4-year average incidence.

MORTALITY, ALL CAUSES

The average mortality rate from all causes in large cities for the four weeks ended May 23, based on data received from the Bureau of the Census, was 11.5 per 1,000 inhabitants (annual basis). The rate was about 20 percent above that for the corresponding period in 1941, but it was slightly lower than the average rate (11.6) for the years 1939-41.

Number of reported cases of 9 communicable diseases in the United States during the 4-week period Apr. 26-May 23, 1942, the number for the corresponding period in 1941, and the median number of cases reported for the corresponding period. 1937-41

Division	Current period	1941	5-year median	Current period	1941	5-year median	Current period	1941	5-year median
	I	Diphther	ia	1	nfluenza	, 1		Measles	1
United States	757	856	1, 221	5, 196	7, 530	5, 650	93, 056	172, 184	61, 913
New England Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central Mountain Parific	27 112 113 73 118 64 158 46 46	26 140 157 77 147 68 119 58	31 242 273 84 177 81 159 58	5 41 169 93 1, 577 374 1, 850 797 290	14 81 301 118 2, 751 343 2, 701 476 745	15 81 444 142 2, 012 517 1, 842 453 376	9, 578 12, 447 11, 276 9, 969 7, 852 1, 635 6, 894 8, 311 25, 094	6, 623 54, 701 52, 497 7, 336 27, 077 9, 174 7, 589 4, 324 2, 863	5, 193 19, 646 9, 189 5, 269 9, 119 6, 204 4, 094 3, 956 3, 451
		ningococ neningiti		Po	oliomyeli	tis	Se	arlet fev	er
United States	336	181	181	73	70	70	11, 551	13, 832	18, 074
New England Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central Mountain Pacific	48 97 12 11 74 25 34 4 31	11 38 22 9 45 32 14 2 8	11 44 22 14 45 32 19 5	3 8 8 4 20 13 11 2 4	0 8 6 1 16 11 11 5 12	1 6 8 3 16 9 11 3 14	1, 458 3, 802 3, 208 1, 041 708 372 174 262 526	1, 206 4, 590 4, 189 1, 141 718 714 337 335 602	1, 206 5, 371 6, 236 1, 445 725 411 337 454 862
	8	mallpox		Typho typ	oid and p phoid fev	para- er	Who	oping co	ugh ²
United States	75	218	1, 142	384	377	514	15, 291	21, 484	² 16, 819
New England Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central West South Central Mountain Pacific	1 0 12 9 8 14 27 1 3	0 0 59 84 10 15 14 8 28	0 0 226 440 7 28 61 59 98	14 51 49 19 108 42 75 9	27 56 38 14 91 55 53 18 25	20 59 71 23 91 54 119 30 32	1, 632 4, 149 3, 615 475 1, 596 680 998 513 1, 633	1, 605 3, 100 4, 175 1, 749 3, 225 836 1, 661 1, 543 3, 590	1, 478 3, 353 3, 160 895 2, 791 681 1, 642 1, 075 2, 421

Mississippi, New York, and Pennsylvania excluded; New York City included.
 Mississippi excluded.
 Four years only (1938-41).

DEATHS DURING WEEK ENDED MAY 30, 1942

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

	Week ended May 30, 1942	Correspond ing week, 1941
Data from 87 large cities of the United States: Total deaths. Average for 3 prior years. Total deaths, first 21 weeks of year. Deaths per 1,000 population, first 21 weeks of year, annual rate. Deaths under 1 year of age. Average for 3 prior years. Deaths under 1 year of age, first 21 weeks of year. Data from industrial insurance companies: Policies in force. Number of death claims. Death claims per 1,000 policies in force, annual rate. Death claims per 1,000 policies, first 21 weeks of year, annual rate.	7, 843 7, 734 184, 539 12. 4 535 472 11, 784 64, 981, 793 11, 135 8, 9	7, 729 187, 920 12.6 469 . 10, 949 64, 478, 825 9, 717 7.9 10.4

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 JUNE 6, 1942. Summary

Each of the nine common communicable diseases included in the following weekly table continued at a favorably low incidence during the current week. As for several weeks past, three of these diseases—influenza, measles, and meningococcus meningitis—are above the 5-year (1937-41) median expectancy, but the incidence of none of these diseases is high.

As compared with the preceding week the number of cases of meningococcus meningitis declined from 81 to 68 (5-year median, 49), and of poliomyelitis from 19 to 17 (5-year median, 36). The number of smallpox cases increased from 34 to 36, but the current incidence is below that for the corresponding period of any prior year. Illinois reported 8 cases, Arkansas 7, and Wisconsin 5.

Of 21 cases of Rocky Mountain spotted fever, 9 cases were reported in the Mountain States, and of 35 cases of endemic typhus fever, 10 cases occurred in Texas, 7 in Georgia, and 6 in Alabama. Two cases were reported in New York.

Other diseases reported during the week include 1 case of leprosy in Texas and 1 case in California, 9 cases of amebic, 200 cases of bacillary, and 89 cases of unspecified dysentery, and 13 cases of tularemia.

The death rate for 88 large cities in the United States for the current week is 11.4 per 1,000 population, as compared with 11.0 for the preceding week and a 3-year (1939-41) average of 11.3. The cumulative rate to date (first 22 weeks) is 12.3 as compared with 12.5 for the corresponding period last year.

Telegraphic morbidity reports from State health officers for the week ended June 6, 1942, and comparison with corresponding week of 1941 and 5-year median.

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

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

	D	iphthe	ria		Influer	128		Measle	ss.	M mei	eningi ingoco	tis, occus
Division and State	w	eek ed—	Me- dian		eek led—	Me-	w end	eek led—	Me-	w	eek ed—	Ме
•	June 6, 1942	June 7, 1941	1937- 1941	June 6, 1942	June 7, 1941	dian 1937- 1941	June 6, 1942	June 7, 1941	dian 1937– 1941	June 6, 1942	June 7, 1941	dian 1937- 1941
NEW ENG.												
Maine New Hampshire Vermont Massachusetts Rhode Island Connecticut	0 0 0 5 0	0	0 0 2 0 0	8		1	113 27 155 1, 037 220 404	10 5 84 7 1,078	10 79 976 81	3 2 0 4 0 0	0 0 0 3 0 1	0 0 0 2 0
MID. ATL. New York New Jersey Pennsylvania	9 1 7	24 6 14	20 7 17	1 9 2		6 4		2, 295	1, 256	18 3 17	3 1 3	5 1 6
E. NO. CEN. Ohio	6 3 29 3	14 4 20 1	15 4 28 6	8 10 5	7	6 11 1	241 289	537 1, 260 1, 434	442 454 832	0 0 0	1 1 1	3 1 2 2
Wisconsin	0	4	3	22	20	23	1, 284	1,865	1, 219	0	0	0
Minnesota	3 1 2 0 1 0	2 1 1 1 1 0 4	2 2 3 0 1 0 3	1 1 1 2 9	2	14 2	391 234 172 15 27 290 214	587 97 14	88 177 71 14 4 27 357	0 1 0 0 0 0	00000	0 0 0 0 0
SO. ATL.									1			
Delaware Maryland Dist. of Col. Virginia West Virginia North Carolina South Carolina Georgia Florida	0 5 1 7 0 10 3 0	0 1 0 6 8 5 3 4	0 1 4 6 7 2 2 3	95 2 154 12	91 4 80 20 14	2 1 47 6 1 80 8	6 195 59 97 108 439 105 103 73	69 462 199 973 393 1, 182 332 440 198	36 129 110 607 59 459 64 153 62	0 1 1 2 2 1 0 1	0 4 0 1 1 0 0 0	0 1 0 1 2 0 1 0
E. SO. CEN. Kentucky Tennessee Alabama Mississippi 3	3 0 1 3	6 1 3 3	6 2 6 3	7 18	29 14	3 20 14	50 151 77	593 365 179	154 116 148	1 1 1 2	0 0 2 0	0 1 3 0
W. SO. CEN. Arkansas Louisiana. Oklahoma. Texas MOUNTAIN	7 2 2 17	4 1 1 4	3 4 4 20	7 30 239	5 1 3 245	12 4 10 156	77 62 57 423	181 18 117 516	45 18 117 420	1 0 0 1	0 3 0 0	0 0 0 1
Montana Idaho Wyoming Colorado New Mexico Arizona Utah i Nevada	0 0 1 4 1 0 0	1 0 0 8 0 10 0	0 1 1 6 1 2 0	31 36 1	18 · 1 60 5	2 1 27	88 57 32 336 45 62 811 13	40 31 14 282 212 104 30 13	86 25 14 151 38 33 86	0000000	0000000	0 0 0 0 0 0
PACIFIC Washington Oregon California	1 0 13	1 1 16	1 1 20	3 3 33	15 7 495	8 50	425 102 4, 202	30 72 600	40 72 600	0 0 3	1 3 2	0 0 2
Total= 22 weeks See footnotes at end of			236 9, 267 7	754 6, 059 4	1, 161 81, 659	731 155, 775	16, 646 108, 494	28, 409 743, 842	14, 169 301, 185	68 1, 716	32 1, 063	49 1, 063

Telegraphic morbidity reports from State health officers for the week ended June 6, 1942, and comparison with corresponding week of 1941 and 5-year median—Continued.

Continued.						•						
	Po	liomye	litis	s	carlet fe	ver		Smallpo	x	Ty parat	phoid yphoid	and l fever
Division and State	w	eek ed	Me- dian	end	eek led—	Me- dian	W end	eek ed—	Me- dian	end	eek led-	M e-
	June 6, 1942	June 7, 1941	1937- 41	June 6, 1942	June 7, 1941	1937- 41	June 6, 1912	June 7, 1941	1937- 41	June 6, 1942	June 7, 1941	1937- 41
NEW ENG.		i								l	l	
Maine New Hampshire Vermont Massachusetts Rhode Island Connecticut MID. ATL	0 0 0 0	0 1 0 1 0	Ŏ	28 19 244 9	3 0 5 166 9 35	166 9	0 0 0 0	0 0 0 0	0 0 0 0 0	0 1 0 2 0 0	0 0 5	0
New York New Jersey Pennsylvania	0 0 0	3 0 1	3 0 0		411 173 297	519 131 292	0	0	0 0 0	5 0 11	2	7 2 7
E. NO. CEN.												
Ohio Indiana Illinois Michigan ² Wisconsin	0 0 1 0 1	0 3 0 2	0 2 0 1	211 44 142 38 111	229 42 180 125 79	235 75 320 262 103	1 1 8 0 5	1 12 5 1	2 22 12 2 2	1 3 3 0 0	6 0 5 1 1	6 1 5 3 1
W. NO. CEN.							_					
Minnesota Iowa Missouri North Dakota South Dakota Nebraska Kansas	3 0 0 0 0 0	0 0 0 1 0	00000	35 26 43 16 15 13 42	40 7 55 0 1 6 27	70 45 55 4 15 13 38	0 0 1 0 0 0	0 0 0 2 1	16 21 28 0 5 1 6	1 6 2 0 0	3 0 2 1 0 0	1 0 2 1 0 0
SO. ATL.	l						ı					
Delaware	0 1 0 0 0 0 0	0 1 0 0 0 0 1 1	0 0 0 0 1 1 1	14 67 4 15 17 16 1 12 2	17 36 8 19 18 24 3 9	30 8 19 21 14 5 6	0 0 0 1 0 1	0 0 0 0 0 1 0	. 0 0 0 0 0	0 4 1 3 2 4 15 3	1 · 0 7 2 3 4 9 12	0 2 1 6 3 8 9
E. 80. CEN.	- 1		i				ı	-	l		ŀ	
Kentucky Tennessee Alabama Mississippi ²	1 0 3 0	1 0 1 0	1 0 1 0	25 27 16 5	41 40 12 3	35 32 8 2	0 3 1 0	3 2 1 2	1 2 0 0	2 4 2 6	4 4 2 2	5 4 8 3
W. SO. CEN.	ا					ا				ا		10
Arkansas Louisiana Oklahoma Texas	0 0 3	0 0 2 0	0 1 0 0	4 5 11 35	1 4 7 21	2 4 10 30	7 4 0 0	1 1 5 0	2 0 8 5	5 15 1 11	5 3 3 11	10 10 7 13
MOUNTAIN			ا۔									
Montana Idaho Wyoming Colorado New Mexico Arizona Utah ! Nevada	000000	0 0 1 0 0	0 0 0 0 0	11 2 11 29 2 4 9	11 7 2 21 0 6 6	12 6 4 30 9 5	0003	0 1 0 0 0 0	2 1 0 4 0 0 0	0 1 2 0 0	0 1 0 2 1 1	0 1 0 1 2 1 0
PACIFIC	·	j	.		l				- 1	1		
Washington Oregon California	1 1 1	0 0 5	0 0 6	22 8 105	19 9 103	23 11 137	0	2 0 0	2 7 2	1 1 3	0 2 3	1 2 7
Total	17	29	36	2, 137	2, 338	3, 099	36	42	242	123	124	192
22 weeks	453	495	495 7	8, 950	78, 846 1	03, 808	507	1,000	6, 750	1, 823	1, 871	2, 606

See footnotes at end of table.

Telegraphic morbidity reports from State health officers for the week ended June 6 1942—Continued

	Who	oping ugh	<u> </u>		We	ek ende	ed June	6, 1942			
Division and State	Week	ended-		D	ysenter	У	En-		Rocky Moun- tain	Tula-	Ty.
	June 6, 1942	June 7, 1941	An- thrax	Ame- bic	Bacil- lary	Un- speci- fied	cepha- litis, infec- tious	Lep- rosy	spot- ted fever	remia	phus fever
NEW ENG.											
Maine New Hampshire New Hampshire Vermont Massachusetts Rhode Island Connecticut MID. ATL.	31 3 63 240 19 91	14 6 7 286 27 58	0000	0000	0 0 1 0	0 0 0 0	0	0 0 0 0	0	0000000	0 0 0 0 0
New York New Jersey Pennsylvania	381 420 233	359 122 330	0 0 0	2 0 0	3 0 0	0		0	0 0 1	0 0 0	2 0 0
E. NO. CEN. Ohio	131 54 268 130 211	325 35 102 318 125	0 0 0 0	0 0 1 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0000	0 3 0	0 0 0 0	0 0 0 0
W. NO. CEN. Minnesota	31 16 18 6 2 13 63	87 33 53 28 5 11 157	0 0 0 0 0	1 1 0 0 0 0	0 0 0 0 0	0 0 1 0 0 0	1 0 0 2 1 0	00000	0 0 0 0 0	1 0 1 0 0 0	0 0 0 0 0
80. ATL. Delaware	1 50 21 64 57 112 126 62 9	0 108 11 65 58 347 92 27 7	000000000000000000000000000000000000000	0 0 0 0 0 0	0 0 0 0 0 0 20	0 1 0 53 0 0 0	0 0 0 0 0 0	00000000	0 2 0 3 0 1 0	000000000000000000000000000000000000000	0 0 0 0 0 0 4 7
Kentucky Tennessee Alabama Mississippi 3	70 48 53	52 51 55	0 0 0	0	2 0 0 0	0 6 0	0 1 1 0	0	0 0 0	1 1 0 0	0 1 6 0
W. SO. CEN. Arkansas Louisiana Oklahoma Texas MOUNTAIN	17 4 4 147	60 4 24 294	0 0 0	0 0 0 1	2 1 0 166	0 0 0	0 0 0 0	0 0 0 1	0 0 1 0	0 2 0 1	0 2 0 10
Montana Idaho Wyoming Colorado New Mexico Arisona Utah 3 Nevada	14 3 3 43 4 14 33 6	6 17 12 185 55 40 62 15	000000000000000000000000000000000000000	0 0 0 0 0	0 0 0 0 1 0 0	0 0 0 0 28 0	0 0 1 0 0	0000000	0 0 4 3 0 0 0 2	0 3 0 0 0	0 0 0 0 0
PACIFIC Washington Oregon California	41 22 313	123 24 894	0	0 0 2	0 0 4	0 0 0	0 0 2	0 0 1	0	0	0 0
Total	3, 765	5, 176	0	9	200	89	13	2	21	13	35
22 weeks	84, 303	103, 062									

¹ New York City only.

² Period ended earlier than Saturday.

WEEKLY REPORTS FROM CITIES

City reports for week ended May 23, 1942

This table lists the reports from 90 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.

	eria	litis, ous,	Influ	enza	29882	go-	s i u	. y 0 -	fever	Cases	and boid es	ing-
	Diphtheria cases	Encephalitis, infectious, cases	Cases	Deaths	Measles,	Meningitis, meningo- cocous, capes	Pneumonia deaths	Poliomye litis cases	Scarlet fer	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping
Atlanta, Ga	0 1 0 0	0 0 0 0	4 1 7	1 1 0 0	212 0 5 2	0. 4 0 0 0	3 6 0 0	0 0 0 0	0 40 0 0 3	0 0 0 0	1 0 0 0 0	5 51 10 0 3
Boise, Idaho Boston, Mass Bridgeport, Conn Brunswick, Ga Buffalo, N. Y	0 0 0 0	0 0 0 0		0 0 0 0	18 399 31 4 21	0 2 0 0 0	0 6 1 2 9	0 0 0 0	0 85 9 0 6	0 0 0 0	0 0 0 0	0 53 1 0 7
Camden, N. J. Charleston, S. C. Charleston, W. Va. Chicago, Ill Cincinnati, Ohio.	0 1 0 13 0	0 0 0 0	1 1 2	0 0 0 0 1	0 4 0 48 3	0 0 0 0	2 2 0 26 0	0 0 0 0 1	2 0 0 74 18	0 0 0 0	0 0 0 0	5 0 0 113 8
Cleveland, Ohio	0 0 0 0	0 0 0 0	3 1	0 0 0 0 1	13 34 0 0 15	3 0 0 0 0	5 1 2 0 4	0 0 0 0	45 6 0 0 3	0 0 0 0	.0 0 0 0	32 8 0 0 1
Denver, Colo	3 3 0 0 0	0 0 0 0	13	0 0 0 0	151 20 2 38 16	0 0 0 0	5 8 0 1 1	0 0 0 0	147 7 17 0	0 0 0 0	0 0 0 0	8 110 3 0 2
Flint, Mich Fort Wayne, Ind Frederick, Md Galveston, Tex Grand Rapids, Mich	0 0 0 0	0 0 0 0		0 0 0 0	0 0 0 5 4	0 0 0 0	2 2 0 3 1	0 0 0 0	1 1 0 0 1	0 0 0 0	0	3 2 0 6 11
Great Falls, Mont Hartford, Conn Helena, Mont Houston, Tex Indianapolis, Ind	0 1 0 1 0	0 0 0 0	1	0 0 0 0	31 148 18 13 131	0 0 0 0	2 2 0 2 6	0 0 0 0	0 4 0 0 6	0 0 0 0	0 0 0 1	1 16 0 2 22
Kansas City, Mo Kenosha, Wis Little Rock, Ark Los Angeles, Calif Lynchburg, Va	5 0 0 2 0	0 0 0 0	4 11	0 0 0 2 0	75 13 2 481 0	0 0 0 2 0	1 1 0 12 2	0 0 0 0	26 1 0 14 0	0 0 0 0	0 0 0 0	1 15 1 9 41
Memphis, Tenn Milwaukee, Wis Minneapolis, Minn Missoula, Mont Mobile, Ala	0 0 1 0 1	0 0 0 0	i	0 0 0 0 1	38 272 372 17 1	0 0 0 0	2 2 0 0 2	0 0 0 0	1 24 17 0 1	0 0 0 0	0 0 0 0 2	9 44 9 0
Nashville, Tenn Newark, N. J New Haven, Conn New Orleans, La New York, N. Y	0 0 0 1 14	0 0 0 0 1	1 2 5	1 0 0 2 1	3 345 76 23 127	0 1 0 1 17	2 4 0 3 44	0 0 0 0	0 24 0 4 191	0 0 0 0	0 0 0 3 2	0 47 4 2 224
Omaha Neb Philadelphia, Pa Pittsburgh, Pa Portland, Me Providence, R. I	0 1 0 0	0 1 0 0		0 1 0 0 0	103 54 10 14 178	0 0 1 0 0	1 7 9 0 4	0 0 0 0	4 121 19 0 9	0 0 0 0	0 1 0 0 0	0 97 19 5 45
Pueblo, Colo Racine, Wis Raleigh, N. O Reading, Pa Richmond, Va	1 0 1 0 1	0 0 0		0 0 0	275 9 3	0 0 0	0 0 0 1 2	0 0 0	3 8 0 1 0	0 0 0 0	0 0 0	9 22 2 8 4

City reports for week ended May 23, 1942—Continued

	eria	ditis, ous,	Infl	enza	cases	itis,	onia	1 y e -	fever	Carees	and hoid	in g-
	Diphtheria cases	Encephalitis, infectious, cases	Cases	Deaths	Measles,	Meningitis, meningo- coccus, cases	Pneumonis deaths	Poliomye litis cases	Scarlet f	Smallpox cases	Typhoid and paratyphoid lever cases	Whooping-
Roanoke, Va. Rochester, N. Y. Sacramento, Calif. Saint Joseph, Mo. Saint Louis, Mo.	0 0 2 1 0	0 0 0 0		0 0 0 0	0 7 70 3 68	0 0 0 0	0 1 3 2 7	0 0 0 0	0 7 1 0 10	0 0 0 0	0 0 0 0	0 5 38 0 3
Saint Paul, Minn Sait Lake City, Utah San Antonio, Tex San Francisco, Calif Savannah, Ga	0 0 0 1 0	0 0 0 0	2	0 1 0 0 1	120 368 19 291 0	0000	6 0 6 7 0	0 0 0 0	2 1 0 5 0	0 0 0 0	000	18 3 1 0 2
Seattle, Wash Shreveport, La. South Bend, Ind. Spokane, Wash Springfield, Ill	0 0 0 0	0 0 0 0		0 0 0 0	202 3 5 59 7	3 0 0 0	3 1 0 1 0	0 0 0 0	0 0 4 0 5	0 0 0 0	1 0 0 0 0	22 0 1 1 0
Springfield, Mass	1 0 0 0 0	0 0 0 0		0 0 0 0	79 1 447 16 50	0 0 1 0 0	5 0 2 3 0	0000	10 5 1 2 0	0 0 0 0	0 0 2 0 0	7 0 23 3 2
Terre Haute, Ind	0 0 0 2 0	0 0 0 0	1	0 0 0 0	0 15 0 97 3	0 0 0 2 0	0 1 3 7 2	0 0 0 0	0 0 5 12 2	0 0 0 0	0000	0 4 2 9 0
Wichita, Kans	0 0 0 0	0 0 0 0	1	0 0 0 0	87 5 5 9 6	0 0 0 0	6 2 2 0 9	0 0 0 0	1 1 0 3 11	0 0 0 0	0 0 0 0	6 0 13 0 70

Anthrax.—Cases: Philadelphia, 1.

Dysentery, amebic.—Cases: Baltimore, 1; New York, 3; Philadelphia, 1.

Dysentery, bacillary.—Cases: Baltimore, 2; Hartford, 2; New York, 3.

Leprosy.—Cases: New Orleans, 1.

Tularemia.—Cases: Boise, 1; Philadelphia, 1.

Typhus fever.—Cases: New Orleans, 1; Philadelphia, 1.

Rates (annual basis) per 100,000 population, for the group of 90 cities in the preceding table (estimated population, 1942, 34,134,198)

Period	Diph- theria cases	Influ Cases	Deaths	Mea- sles cases	Pneu- monia deaths	Scarlet fever cases	Small- pox cases	Ty- phoid fever cases	Whooping cough cases
Week ended May 23, 1942	8.86	9. 47	2. 14	905. 09	43. 23	158. 10	0.00	1. 99	203. 63
Average for week, 1937-41	14.20	10. 50	4. 01	1 683. 93	64. 07	256. 74	2.16	3. 55	192. 21

¹ Median.

FOREIGN REPORTS

CANADA

Provinces—Communicable diseases—Week ended May 9, 1942.—During the week ended May 9, 1942, cases of certain communicable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

Disease	Prince Edward Island	Nova Scotia	New Bruns- wick	Que- bec	Onta- rio	Mani- toba	Sas- katch- ewan	Alber- ta	British Colum- bia	Total
Cerebrospinal meningitis ChickenpoxDiphtheriaDysentery	4	3 22 17	3	5 1 34 17 2	7 286 2	1 22 2	21 1	1 49 3	3 116	23 650 42 8
German measles Influenza Lethargic encephalitis		1 9		20	63	2 1	9	13	25 36	135 47 1
Measles	2 8	2 6 12		476 155	160 459 19	142 113 3	14 220 1	16 4 5	25 421 13	835 1, 421 56
Scarlet fever	7	12	14	181	2 24	23	34	86	45	626
Tuberculosis	2	9	8	63	50		ī	7	22	162
fever Undulant fever				13	3	1	3 1	11	_1	17 7
Whooping cough Other communicable dis-		20	2	147	111	8		19	75	382
eases	5	14		3	220	39	2	3	6	292

CUBA

Habana—Communicable diseases—4 weeks ended May 2, 1942.— During the 4 weeks ended May 2, 1942, certain communicable diseases were reported in Habana, Cuba, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Diphtheria Leprosy Malaria Measles Poliomyelitis	24 1 16 26 1	2 1	Rabies	1 1 5 81	2 8

Provinces—Notifiable diseases—4 weeks ended April 25, 1942.— During the 4 weeks ended April 25, 1942, cases of certain notifiable diseases were reported in the Provinces of Cuba as follows:

Disease	Pinar del Rio	Habana 1	Matanzas	Santa Clara	Cama- guey	Oriente	Total
Cancer Chickenpox	2	. 3	2	8 3	3	18 12	33 18
Diphtheria Hookworm disease		16 30		2	9	1	18 28 30
Leprosy Malaria Measles	36	1 17 24	1	1 1 2	1	439 1	7 498 28
Poliomyelitis		1 1				1	1 1
Tuberculosis	12 8	164 89	12 9 2	51 42	23 7	33 20	295 175 2
Yaws						1	ī

The city of Habana is also included.

PANAMA CANAL ZONE

Notifiable diseases—January-March 1942.—During the months of January, February, and March, 1942, certain notifiable diseases were reported in the Panama Canal Zone and terminal cities as follows:

Disease	Jan	uary	Feb	uary	March	
Disease	Cases	Deaths	Cases	Deaths	Cases	Deaths
Chickenpox	8		14		10	
Dinhtheria	16		7		11	
Dysentery (amebic)	12	1	9	2	6	3
Dysentery (bacillary)	10	10	6	3	6	5
Leprosy				1		
Malaria	460	10	386	6	866	4
Measles	302	0	90	1	82	
Meningococcus meningitis	3	1 1	2			
Mumps Paratyphoid fever					2	
Pneumonia	1 65	35	1 36	24	1 38	19
Relapsing fever		∞	. 30	24	. 90	19
Tuberculosis	1 10	47	16	37	17	30
Typhoid fever		l *'	3		i	300
Typhus fever	i				î	
Whooping cough.	1 16	3			12	

¹ In the Canal Zone only.

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.

Plague

China.—Plague has been reported in China as follows: Chekiang Province, April 1-10, 1942, 4 cases; Fukien Province, Jan. 1-Apr. 5, 1942, plague appeared in 11 localities; Hunan Province, week ended April 18, 1942, 2 cases; Suiyan Province, pneumonic plague appeared in epidemic form during the period Jan. 1-Apr. 4, in the northwestern area.

Peru.—During the period April 1-30, 1942, plague was reported in Peru as follows: Lima Department, 8 cases, 6 deaths; Piura Department, 6 cases.

Yellow Fever

Brazil.—Acre Territory.—During the period January 26-28, 1942, 2 deaths from yellow fever were reported in Acre Territory, Brazil.

X