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### THE ACTIVITY OF WILD AMERICAN DIGITALIS.

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States Public Health Service.

The necessity for the utilization of every available source in the collection of crude material for the preparation of botanic drugs has perhaps never been so urgent as at the present time. obvious reasons the price of crude drugs has advanced greatly within the past few years, among these drugs being digitalis. Under normal conditions the greater part of the supply of digitalis came from Germany and Austria, and since these sources of supply have been removed the available stock has been greatly diminished. At the outbreak of the European war, when a shortage in the supply of crude botanic drugs was first felt, many original articles and editorials appeared in the various drug and pharmaceutical journals for the purpose of awakening an interest in drug-plant culture. suggesting this means as a remedy for the shortage. Although interest in the growing of drug plants is increasing constantly, there are so many difficulties in the way of their successful production on a commercial scale that the cultivation of digitalis for example has not been extensive enough to fill the present need. mum quotation on ordinary digitalis leaves, as given in the Druggists Circular for November, 1913, was 30 cents per pound, while for Allen's powdered leaves the maximum quotation was \$1 per pound. The same drug journal for November, 1916, gave maximum quotations of 80 cents for the former and \$2 for the latter, although drug cultivation was encouraged during these years.

Recently Wilbert <sup>1</sup> called attention to a hitherto neglected source for obtaining digitalis, namely, in the collection of the wild-growing plant which has escaped from cultivation and has now become a "weed" in various sections of the United States. Fortunately the digitalis which is now found growing wild in great abundance in California, Oregon, Washington, and to some extent in West Virginia is the Pharmacopæial variety, *Digitalis purpurea*. However, if the wild-growing American digitalis is to be of commercial im-

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<sup>1 &</sup>quot;The Source and Supply of Medicines with Special Reference to the interference Caused by the European War," Martin I. Wilbert, United States Public Health Reports, Oct. 9, 1914, pp. 2715-2718.

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portance for the manufacture of the official preparations of digitalis. its activity must be at least as great as that required by the Pharmacopicia. This question, therefore, was investigated by examining the activity of four samples of wild-growing leaves which were collected in the State of Oregon during the season of 1916 and one sample of wild-growing leaves obtained from the State of Washington during the same season. For the purpose of comparison examination was also made of cultivated digitalis leaves (Digitalis purpurea) which were grown in the State of Washington during the season of Inclusion was also made of two samples of cultivated digitalis leaves of the season of 1914 which were examined shortly after their harvest, one sample being grown in Wisconsin, the other in Tinctures were made according to the United States Pharmacopæia method from all the samples and their activity was determined physiologically by the method originally adopted by the Hygienic Laboratory, which is now the method recommended by the Pharmacopæia, namely, the one-hour frog method. The Oregon digitalis was obtained through the kindness of Mr. I. E. Gaston, a student in the medical department of the University of Oregon.

A sample of the undried Oregon leaves was submitted for identification to the writer, who submitted them to Dr. W. W. Stockberger, of the United States Department of Agriculture, and by whom they were identified as Digitalis purpurea. All of the Oregon digitalis was collected near Astoria, Oreg. Sample 1 consisted of leaves gathered from first-year plants about six weeks after the flowering time for digitalis. They were rather dark green in color, the hairs being practically free from soil. They were well dried, crushing easily when rolled between the fingers. Sample 2 consisted of leaves gathered from second-year or older plants, about six weeks after They were light green in color, well dried and free flowering time. from soil. Sample 3 consisted of leaves collected from flowering plants (second-year or older plants); while sample 4 consisted of leaves from plants which had partially dried on the stalk and were vellowish-green in color.

According to Mr. Gaston all the samples which he collected were found growing upon soil containing considerable clay. He states that they will thrive on practically any soil that will absorb moisture readily. The largest and best leaves were from plants which grew on moist ground where the plants were shaded about half the day. Too much shade seemed to prevent their proper development, while long exposure to the sun caused the leaves to turn yellowish. All of the samples were air-dried immediately after the leaves were collected, except sample 4, which was dried on the stalk for the most part. The procedure used for samples 1, 2, and 3 was as follows: The freshly gathered leaves were spread out in thin layers on floors over which the air could circulate freely, and stirred frequently, at least every

other day. They will retain their green color if dried in this way and if stirred frequently do not mold. About three weeks were required to dry them thoroughly, inasmuch as rainy weather was present during about half of the time.

Samples 5 and 6 were collected and dried by Prof. A. W. Linton, of the University of Washington College of Pharmacy. Sample 5 consisted of leaves from plants growing wild near Seattle, Wash., being collected in August while the plants were in blossom. They were air-dried, being very dry and brittle, and were tinged with yellow. Sample 6 consisted of leaves from cultivated plants of second-year growth, which were obtained from the drug garden of the College of Pharmacy, University of Washington. They were collected in November, 1916, and are the second growth of leaves for the season. The air-dried leaves were green and, like sample 5, were very brittle. Sample 7 consisted of leaves from first-year cultivated Wisconsin digitalis collected in 1914, before flowering had occurred. The dried leaves were green and were free from soil. They were supplied by Prof. Edward Kremers, of the University of Wisconsin, being raised on the university drug farm. Sample 8 consisted of leaves from first-year cultivated digitalis which was grown in Cincinnati, Ohio. It was collected in November and was supplied by Prof. John Uri Lloyd. It was yellowish green when dried. The method in which the last two samples were dried is unknown. As previously stated, these samples were all examined by the one-hour frog method. value by this method together with a short description of the sample will be given in the table below. The doses of the tinctures given in the table represent mils per gram of body weight.

Sample No.	Description of sample.	Lethal dose of ouabain.	Lethal dose of standard tincture digitalis.	Lethal dose of sample tincture.	Corrected lethal dose of sample tincture.
1 2 3 4 5 6 7 8	Oregon, wild, 1916		0.0066 .0066 .0054 .0054 .0054	0.004 .005 .004 .003 .011 .007 .003	0.0036 .0045 .0044 .0033 .0121 .0077

Samples 1 and 2 were assayed on a lot of frogs received in October; samples 3 to 6, inclusive, were assayed on a lot of frogs received one month later. All of the samples were assayed on Rana pipiens, which were all obtained from the same dealer. Since the frogs used in the standardization of samples 7 and 8 were not standardized against ouabain, no comparative figures can be computed for these samples. It may be stated, however, that the resistance of the frogs usually lies within a range of 10 per cent.

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The United States Pharmacopæia IX requires that by the above method 0.006 mil of the tincture of digitalis per gram of frog weight shall be necessary to stop the heart of the frog in one hour. From the above table it is seen that all of the samples of wild Oregon digitalis were stronger than the pharmacopæial standard.

While this investigation has shown that of the tinctures made from wild-growing digitalis, the Oregon samples were several times stronger than that grown in Washington, we should not conclude that wild Oregon digitalis is generally more active than wild Washington digitalis. Further examination of the latter would be necessary to determine this point definitely. Inasmuch as the tincture made from cultivated Washington digitalis is weaker than the tinctures made from any of the Oregon samples, it is likely that the correct explanation of the decreased activity of Washington digitalis is to be sought in sources other than in the manner of growing.

Table 1 also shows that cultivated digitalis is not necessarily less active than wild digitalis and that individual samples may be as active as the most active sample made from wild leaves.

What was especially surprising to the writer was to find that sample 4, which was made from leaves that had partially dried on the stalk, was the most active of the Oregon samples. As stated before, these leaves were yellowish-green in color and would ordinarily be regarded as leaves of poor quality.

Again, when we consider the samples made from wild Oregon leaves we find that the time of collection of the leaves with reference to the flowering time of the plants has little to do with their activity, since sample 1, which was collected from first-year plants, was a little more-active than sample 3, which was collected from flowering plants.

The fact that all of these samples were air-dried is of especial significance, inasmuch as almost every writer on the subject of digitalis activity considers that special methods of drying are necessary to secure a good product. Newcomb 1 prefers the use of drying ovens and artificial heat maintained at 100° C. for eight-hour periods on three successive days. This method is considered by him to destroy the ferments contained in the leaves without injury to the active principles; besides, it fixes the green color which is a valuable commercial asset.

From the above investigation we may conclude that the wild digitalis which is found in the Northwestern States may be utilized as a source of supply for making the various official preparations of digitalis, and that by using ordinary methods in handling and preparing the leaves we may secure a highly active product, which compares favorably with the activity of cultivated leaves grown under more favorable conditions.

<sup>&</sup>quot;Digitalis, Its Cultivation, Collection, and Preparation"; Edwin L. Newcomb, Am. J. Pharm., 1912, v. 84, p. 201.

# 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.

### CEREBROSPINAL MENINGITIS.

State Reports for January, 1917.

Place.	New cases re- ported.	Place.	New cases re- ported.
Indiana: Elkhart County. Jackson County. Marion County. Pulaski County. Whitley County.  Total.  Ohio: Cuyahoga County— Cleveland. Hamilton County— Cincinnati. Montgomery County— Dayton. Summit County— Akron. Tuscarawas County Total.	3 1 1 1 2	Virginia: Floyd County. Franklin County. Lee County. Louisa County. Nansemond County— Suffolk. Norfolk County— Portsmouth. Orange County. Rockingham County— Dayton. Smyth County. Tazewell County— Richlands. Total.	2

### City Reports for Week Ended Feb. 17, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio. Boston, Mass Chicago, Ill. Detroit, Mich. Elizabeth, N. J. Hartford, Conn. Manchester, N. H. Milwaukee, Wis. Newark, N. J. New Bedford, Mass. New Orleans, La.	2 2 1 5 1	<u>2</u>	New York, N. Y. Omaha, Nebr. Philadelphia, Pa. Pittsburgh, Pa. Providence, R. I. St. Joseph, Mo. St. Louis, Mo. St. Paul, Minn Toledo, Ohio Wheeling, W. Va.	1 4 1	

### DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 391.

# ERYSIPELAS. City Reports for Week Ended Feb. 17, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Allentown, Pa	1		Milwaukee, Wis		
Ann Arbor, Mich Baltimore, Md	3		Nashville, Tenn Newark, N. J.	5	
Beaver Fálls, Pa	1		New York, N. Y		
Boston, Mass Bridgeport, Conn	1	2	Niagara Falls, N. Y Omaha, Nebr Passaic, N. J.	5	
Buffalo, N. Y Camden, N. J	5	1	Passaic, N. J. Philadelphia, Pa	1	
Canton, Ohio	1	i	Pittsburgh, Pa	8	
Chicagó, Ill	33 3	3	Portland, Oreg	2	,
Jieveland. Ohio	5	3	Rochester, N. Y.		
Columbus, Ohio Denver, Colo		1	Sacramento, Cal	13	· · · · · · · · · · · · · · · · · · ·
Detroit, Mich	7	2	St. Paul, Minn San Diego, Cal	4	
Erie, Pá Fort Wayne, Ind		1	San Francisco, Cal	3	
Hartford, Connackson. Mich.			Superior, Wis	1	
Calamazoo, Mich	2		Wichita Kans	9	
Cansas City, Moos Angeles, Cal	3		Wilkinsburg, l'a	1 2	
falden, Mass			,	- 1	

### LEPROSY.

### City Reports for Week Ended Feb. 17, 1917.

During the week ended February 17, 1917, one case of leprosy was reported in New Orleans, La., and one case in San Diego, Cal.

# MALARIA.

### State Reports for January, 1917.

Place.	New cases re- ported.	Place.	New cases reported.	
Kansas: Butkr County— Augusta	1	Virginia—Continued. Loudoun County. Louisa County. Lucaphurg County.	2	
Virginia: Accomac County. Bloxom. Albemarle County. Alexandria County. Appomattox County. Botelourt County. Brunswick County. Campbell County. Altavista. Caroline County. Bowling Green. Charles City County. Elizabeth City County Elizabeth City County Elizabeth City County Franklin County. Franklin County. Gloucester County. Greenesville County. Emporia. North Emporia Halifax County. South Boston Hanover County Henrico County.	2 4 4 2 1 9 1 5 2 2 1 2 3 6 3 15 15 8 8 3 17 4	Lunenburg County Victoria.  Mecklenburg County.  Middlesex County.  Urbanna.  Nansemend County.  Suffolk.  Nelson County.  Northampton County.  Northumberland County.  Northumberland County.  Pittsylvania County  Princes Anne County  Prince Edward County  Prince Edward County  Prince George County  Hopewell.  Prince William County.  Rockingham County  Scott County.  Southampton County  Southampton County  Stafford County.  Siafford County.  Surry County.  Claremont  Sussex County  Warwick County.  Warwick County.  Westmoreland County.  Westmoreland County.  Colonial Beach.  York County.	1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
King and Queen County King William County Lancaster County— Irvington	2 2	Total	379	

### MEASLES.

### California-Los Angeles.

Senior Surg. Brooks reported that during the week ended February 24, 1917, 142 cases of measles were notified in Los Angeles, Cal. One hundred and sixty-nine cases were reported during the previous week.

### Illinois-Cairo.

Acting Asst. Surg. Barrows reported that during the week ended February 24, 1917, 128 cases of measles were notified in Cairo, Ill., making a total of 288 cases reported since January 1, 1917.

### Texas-Hill County.

Asst. Surg. Witte, on February 26, 1917, reported the occurrence of an epidemic of measles in Hill County, Tex., beginning about December 1, 1916.

Washington—Seattle.

Surg. Lloyd reported that during the week ended February 17, 1917, 205 cases of measles, with 1 death, were notified in Seattle, Wash., making a total of 6,722 cases, with 13 deaths, reported since the beginning of the epidemic, February 15, 1916.

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 391.

# PELLAGRA. State Reports for January, 1917.

Place.	New cases reported.	Place.	New cases reported.
Kansas;  Wyandotte County— Kansas City  Virginia: Botetourt County Elizabeth City County— Hampton Fauquier County	1	Virginia—Continued. Fluvanna County. Italifax County. Middlesex County. New Kent County. Powhatan County. Princess Anne County. Total.	1 3 1 1

### City Reports for Week Ended Feb. 17, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala. Charleston, S. C. Nashville, Tenn	1	2	Norfolk, Va	1	1

### PNEUMONIA.

## City Reports for Week Ended Feb. 17, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	
Allentown, Pa.  Ann Arbor, Mich.  Atlantic City, N. J.  Saltimore, Md.  Serkeley, Cal.  Singhamton, N. Y.  Braddock, Pa.  hicago, Ill.  leveland, Ohio.  offeyville, Kans.  Payton, Ohio.  etvoit, Mich.  uluth, Minn.  llint, Mich.  rand Rapids, Mich.  farrisburg, Pa.  ackson, Mich.  ohnstown, Pa.  alamazoo, Mich.  ansas City, Mo.  ancaster, Pa.  exington, Ky.	222 1 6 2 304 559 1 5 8 4 4 4 2 2 2 1 9 10 3	23 1 5 161 52 7 25 1 2 1 2 5	Newark, N. J. New Castle, Pa. Newport, K.y. Norristown, Pa. Oakland, Cal Pasadena, Cal	3 1 75 1 3 1 1 152 42 42 27 2 2 2 27 6	200 - 200 -

## POLIOMYELITIS (INFANTILE PARALYSIS).

### State Reports for January, 1917.

Place.	New cases 1e- ported.	Place.	New cases re- ported.
Indiana: Boone County Owen County Posey County Vigo County  Total  Iowa: Ida County Jones County Polk County  County  Total  T	1 1 1 1 1 1 1	Ohio—Continued.  Montgomery County.  Muskingum County.  Zanevville.  Putnam County.  Summit County.  Akron.  Wood County.  Total.  Virginia:  Bedford County.  Powhatan County.  Roskbridge County.  Russell County.  Honaker.  Smyth County.  Wise County.  Total.	1
Pomeroy	. 1	Stevens County	

### City Reports for Week Ended Feb. 17, 1917.

Place.	Cases. Deaths.		Place.	Cases.	Deaths.
Chicago, Ill. Detroit, Mich. Kansas City, Mo. Newark, N. J	1 1 1	1	Newburgh, N. Y New York, N. Y Wilmington, N. C	1 1	1

#### RABIES IN ANIMALS.

### City Reports for Week Ended Feb. 17, 1917.

During the week ended February 17, 1917, seven cases of rabies in animals were reported in Buffalo, N. Y., and two cases were reported in St. Paul, Minn.

### SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 391.

### SMALLPOX.

#### Connecticut.

Collaborating Epidemiologist Black reported that during the week ended February 24, 1917, 12 new cases of smallpox were notified in Connecticut. Eleven of these cases occurred at Waterbury and 1 case at Old Lyme.

Minnesota.

Collaborating Epidemiologist Bracken reported that during the week ended March 3, 1917, two new foci of smallpox infection were reported in Minnesota, cases of the disease having been notified as follows: Crow Wing County, Pequot, 3; Morrison County, Parker Township, 1.

Texas—Galveston.

Surg. Bahrenburg reported that 5 cases of smallpox were notified on March 6, and 1 case on March 8, 1917, at Galveston, Tex.

### State Reports for January, 1917.

	<del>-</del>					
			Vaccination history of cases.			
Place.	New cases reported.	Deaths.	Number vaccinated within 7 years pre- ceding attack.	Number last vaccinated more than 7 years preceding attack.		Vaccination history not obtained or uncertain.
Kansas:						
Barber County—		l	l			1
Medicine Lodge R. F. D.	1	í	!	i l		1
Bourbon County—	•		•••••		• • • • • • • • • • • • • • • • • • • •	•
Fort Scott	1	ļ			1	
Butler County—	•		•••••		•	
Augusta R. F. D	9		_	1	8	
Chasa County-			•••••	-	•	•••••
Elmdale R. F. D	7			1	6	
Clark County—	•			- 1	•	••••••
Englewood	1				1	
Clay County-	_			,,	-	
Morgansville R. F. D	1				1	
Vining	4				4	
Doniphan County-	-				-	
Blair R. F. D	6				6	
Denton R R D	3				3	
Deniphan R. F. D Severance R. F. D Troy R. F. D Wathena R. F. D	4	<i></i>			4	
Severance R. F. D	7				7	
Troy R. F. D	8				8	•••••
Wathena R. F. D	5				5	
Douglas County—				١ .		
Lawrence	3				3	
Ellis County—	· ·					
Ellis R. F. D	1				1	
Hays	5				5	•••••
Walker R. F. D	1		اا		1	

## SMALLPOX—Continued.

## State Reports for January, 1917—Continued.

			Vaccination history of cases.			
Place.	New cases reported.	Deaths.	Number vaccinated within 7 years pre- ceding attack.	Number last vacci- nated more than 7 year preceding attack.	Number never suc- cessfully vaccinated	Vaccination history not obtained or uncertain.
Kansas-Continued.						
Greenwood County—	1				-	١,
Fall River	,			1		1
Danville R. F. D	i			1	. 1	
Johnson County— Kenneth	1	<u> </u>				1
Labette County— Altamont R. F. D	3				3	-
Lyon County-	_				1	
Emporia R. F. D Marion County—	2				1	1
Burns	1 2			1	1 2	
Florence	. 1				ī	
Montgomery County— Caney	1				1	
Morris County— Dunlap, R. F. D.	2				` <sub>2</sub>	
Memana County-	3				3	
Baileyville	1				i	
Rooks County— Palco R. F. D	1				1	
Sedgwick County— Wichita.	3				3	
. Shawnee County—						•••••
Topeka Smith County—	15	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	2	13	• • • • • • • • • • • • • • • • • • • •
Portis R. F. D Sumner County—	5	• • • • • • • • • • • • • • • • • • • •			5	
Wellington R. F. D	1				1	• • • • • • • • • • • • •
Washington County— Clifton R. F. D.	4				4	
Vining Washington R. F. D	$\frac{2}{1}$			2	<u>1</u>	•••••
Wyandotte County—				••••••		
Kansas City	3				3	
Total	122			7	111	4
Ohio:	10					
Ashtabula County Belinont County	4				$\begin{bmatrix} 7 \\ 2 \end{bmatrix}$	3 2
Clark County Crawford County—	5				5	••••
Bucyrus	1 40		1			
Darke County—	40					40
Greenville Erie County	1				1	
Franklin County— Columbus.	2				2	•
Geauga County	ĩ				1	· · · · · · · · · · · · · · · · · · ·
Harrison County	1 1	· · · · · · · · · · · · · · · · · · ·				1 1
Lucas County— Toledo	26					26
Mahoning County	15				2	13
Miami County	9 4 1			1	8	4
Summit County	1   .				1 12	
Trumbull County	20	· · · · · · · · · · · · · · · · · · ·		2	4	14
Tuscarawas County	1 .					1 1
Wood County	1 .				1 .	
Total	157		1	3	46	107

### SMALLPOX—Continued.

### Miscellaneous State Reports.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Colorado (Jan. 1-31):			Iowa (Jan. 1-31)—Continued.		
Larimer County	•1		Wapello County	1	
Indiana (Jan. 1-31):			Washington County	1 1	
Boone County	1	l	Webster County	89	
Clark County	13		Total	154	
Clay County	1		1000	104	
Delaware County			North Dakota (Jan. 1-31):		
Fulton County	3		Burleigh County	1	
Gibson County	10 11		Cass County	2	
Hamilton County Hancock County	3		Foster County	2	
Howard County	i		Golden Valley County	3	
Jackson County	10		Grand Forks County	2	
Jay County	īŏ		Grant County	5 3	
Johnson County	3		Kidder County Morton County		
Lake County	1		Mountrail County	2	
Laporte County	1	1	Sargent County	ĩ	
Madison County	3		Stutsman County		1
Marion County	25				
Marshall County	1		Total	28	
Miami County	1	••••••	Virginia (Jan. 1-31):		\
Monroe County Noble County	i		Halifax County	4	
Orange County	î	• • • • • • • • • • • • • • • • • • • •	Henry County.	i	
Owen County	2		Norfolk County	2	
Parke County			Portsmouth	1	
Pike County	4		Pittsylvania County		
Posey County	5		Chatham		
Pulaski County	1		Prince Edward County	2	
Putnam County	20		Rappahannock County	1	
Spencer County	8		Smyth County	5	
St. Joseph County	1 4		Tazewell County— Pocahontas.	4	
Sullivan County Tippecanoe County	4	• • • • • • • • • • • • • • • • • • • •	Wythe County	i	
Tipton County	25		Wytheville		
Vanderburgh County	67		11,000		
Vermilion County	4		Total	72	
Vigo	232	1	Washington (Jan. 1-31):		
Warren County	1		Columbia County—		
Warrick County	2		Dayton	1	 
Wayne County	2	• • • • • • • • •	King County—	-	
White County	22		Beattle	6	
Total	508	2	Lewis County		
I Utal	303		Toledo	3	
Iowa (Jan. 1-31):			Lincoln County	2	• •
Allamakee County	1		Wilbur	4	
Boone County			Spokane County— Spangle.	1	
Dallas County	1		Spokane		
Des Moines County	1		Stevens County		
Greene County	3		Marcus	î	
Henry County	18		· Whatcom County-	- 1	
Ida County	.3	•••••	Bellingham	1	
Lee County	15 9	••••••			
Linn CountyLouisa County	2	••••••	Total	55	
Monona County	î		Wyoming (Jan. 1-31):		
Polk County.	7 1		Laramie County—	ı	
Tama County	i		Goshen	1	
	-		1		

### SMALLPOX—Continued.

### City Reports for Week Ended Feb. 17, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Ann Arbor, Mich	1		McKeesport, Pa	.4	
Austin, Tex		2		21	
Birmingham, Ala				5	
Butte, Mont	4		Oklahoma City, Okla	4	
Cairo, III	2		Omaha, Nebr	6	
Chicago, Ill	3			5	
Cleveland, Ohio	7		Rockford, Ill	1	
Danville, Ill	7	1	St. Joseph, Mo	8	
Detroit, Mich	6	İ	St. Louis, Mo	5	
Duluth, Minn	4			. 6	
Elgin, Ill	1				
Evansville, Ind	. 2				
Flint, Mich.			San Francisco, Cal	6	
Galveston, Tex	3		Sioux City, Iowa	6	
Indianapolis, Ind				ĭ	
Lexington, Ky				î	••••
Little Rock, Ark	2		Topeka, Kans	3	
Madison, Wis	ĩ		Wichita, Kans.	1	

### TETANUS.

### City Reports for Week Ended Feb. 17, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md	1	1	New York, N. Y	1 1	

### TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 391.

### TYPHOID FEVER.

### State Reports for January, 1917.

Place.	New cases reported.	Place.	New cases reported.
Indiana: Allen County. Daviess County Dearborn County Delaware County. Floyd County. Gibson County. Hancock County. Huntington County Johnson County. Kosciusko County. Lake County Laporte County.	3 12 1 7 4 1 1	Kansas: Allen County— Iola R. F. D. Atchison County— Atchison. Barton County— Claffin R. F. D. Ellinwood. Bourbon County— Fort Scott Brown County— Hiawatha Horton. Butler County— Whitewater	1
Marion County. Randolph County Rush County St. Joseph County Union County. Vanderburg County Wayne County Wells County	7 1 2 16 1 2 3 1 1	Whitewater Cheyenne County— St. Francis. Cloud County— Concordia Crawford County— Pittsburg Dickinson County— Herington. Ford County— Spearville R. F. D	1 1 1 1 3

## TYPHOID FEVER—Continued.

## State Reports for January, 1917—Continued.

Place.	New cases reported.	Place.	New cases reported.
Kansas—Continued.		Ohio-Continued.	
Harper County— Harper		Lucas County—	
Harper	1	Toledo	12
Jewell County— Formosa R. F. D	1	Mahoning County Meigs County—	1
Kearny County—	•	Pomerov	1
I.Akin	1		3
Montgomery County— Coffeyville		Montgomery County—	١ .
Reno County—	1	Miami County— Montgomery County— Dayton Muskingum County Noble-County Perry County Richland County— Mansfield.	2 3
Hutchinson	1	Noble-County	ĭ
Sylvia Republic County—_	2	Perry County	1
Republic County-		Richland County—	١.
Munden R. F. D	1	Mansfield Sandusky County—	1
Rice County— Sterling R. F. D	1	Fremont	3
Riley County—	-	Scioto County—	1
Riley County— Manhattan	1	Portsmouth	1
Sedgwick County—	1	Seneca County—	1
Wichita	•	FostoriaTiffin	2
Goodland	1	Stark County-	_
Sumner County—		Canton	4
Ashton R. F. D	1	Trumbull County—	3
Conway Springs	*	New Philadelphia	I I
Fredonia	1	Warren County	i
Wyandotte County— Kansas City R. F. D	ł	Wyandot County	4
Kansas City R. F. D	3		
Total	33	Total	142
10001		Virginia:	
North Dakota:		Accomac County	1
Burke County	1	Tangier	1 2
McHenry County	i	Alleghany County—	-
Burke County Burkeigh County McHenry County Morton County Nelson County Pembina County Rolette County	î	Accomac County Tangier Albemarle County Alleghany County Covington Appomattox County Appomattox County	1
Nelson County	1	Appomattox County	2 1 1 1 2 1
Pembina County	1	Augusta County Bland County	1
Rolette County	2	Botefourt County.	1
Total	8	Troutville	2
		Troutville. Buchanan County.	1
Ohio:		ii Campbell County—	Į.
Ashland County— Ashland	9	Lynchburg	1 1
Ashtabula County Belmont County Brown County	2 7	Caroline County Charlotte County Culpeper County Fauquier County Floyd County	Ī
Belmont County	3	Culpeper County	1
Brown County	8	Fauquier County	3
Butler County— Hamilton	1	Frederick County	2
Clark County	í!	Gloucester County	1
Clark County Clermont County Clinton County Columbiana County Columbiana County	3	Frederick County Gloucester County Grayson County Fries	1 1 1 1 2 2 1 1 1 2 1 1 1 2 2 2 1 1 1 2 2 2 2 1 1 1 2
Clinton County	1	Fries	1
Columbiana County	1 16	Halifax County Hanover County Henrico County Richmond	1
Crawioru County	21	Henrico County	î
Cuyahoga County Defiance County—	1	Richmond	2
Deliance	1		1
Delaware County	1	King and Queen County King George County	1
Erie County— Sandusky	1		3
Fairfield County	î	Lee County Loudoun County Mockleyburg County	5
Fayette County	1	Loudoun County	2
Sandusky	12	Mecklenburg County Montgomery County	2
	2	Norfolk County—	1
Hamilton County—	3	Norfolk	2
Cincunnati. Hardin County. Highland County.	1	Northumberland County	2 2 1
Highland County	2	Nottoway County	1
Huron County	1	Page County—	1
	3 1	Shenandoah	
Jefferson County	i	! Pittsvlvania County	1
Lake County	3 2	Pittsylvania County	1
Jefferson County	2	Pittsylvania County Rappahannock County Roanoke County Salem	

# TYPHOID FEVER—Continued. State Reports for January, 1917—Continued.

Place.	New cases reported.	Place.	New cases reported.
Virginia—Continued. Sussex County Tazewell County Richlands Warren County Front Royal Warwick County Washington County Westmoreland County Westmoreland County Colonial Beach Wise County Norton St. Paul Wythe County Wythe County Wythe County Wythe County Wytheology Total Washington:	1 1 1 2 1 1 2 1 1 1 1 1 1	Washington—Continued. King County— Seattle. Prierce County— Buckley. Tacoma. Skagit County— Mount Vernon Whitman County— Tekoa Yakima County— North Yakima  Total  Wyoming: Lincoln County Fremont County Unita County Unita County.	4 1 9 37 20 1
Clarke County— Camas Ridgefield Island County	5 1 2	Carbon County	

### City Reports for Week Ended Feb. 17, 1917.

Beaver Falls, Pa.   5	Place.	Cases.	Place.	Cases.	Deaths.	
Baltimore, Md.   2   New Castle, Pa.   9	Albany, N. Y			New Bedford, Mass.	1	
Baltimore, Md. 2   New Castle, Pa. 9   Seaver Falls, Pa. 5   New Orleans, La. 2   2   Strmingham, Ala. 4   1   New York, N.Y. 38   Soston, Mass. 2   Oakland, Call. 2   2   Cambridge, Mass. 1   Philadelphia, Pa. 2   Cambridge, Mass. 1   Pritsburgh, Pa. 7   Canton, Ohio. 1   Portland, Oreg. 4   Charleston, S. C. 1   Providence, R. I. 1   Charleston, S. C. 1   Providence, R. I. 1   Charleston, S. C. 1   Providence, R. I. 1   Chicago, Ill. 2   Reading, Pa. 1   Columbus, Ohio. 2   Reading, Pa. 1   Columbus, Ohio. 1   Rochester, N.Y. 2   Covington, Ky. 1   Sacramento, Cal. 1   Denver, Colo. 2   St. Louis, Mo. 1   Denver, Colo. 2   St. Louis, Mo. 1   Denver, Colo. 2   St. Louis, Mo. 1   San Diego, Cal. 2   East Chicago, Ind. 2   San Francisco, Cal. 8   Evansyille, Ind. 1   South Bend, Ind. 5   South Bend, Ind. 7   South Bend, Ind. 7   Satlebenyille, Ohio. 2   Callebo, Ohio. 2   Cal	Allentown, Pa			Newburyport, Mass	1	
Seaver Falls, Pa.   5	Baltimore, Md	2	1	New Castle, Pa	9	1
Boston, Mass   2   Oakland, Cal   2   2   3   3   1   1   1   1   1   1   1   1	Beaver Falls, Pa	5		New Orleans, La.	2	1
Joston, Mass.         2         Oakland, Cal.         2           Juffalo, N. Y.         3         1         Philadelphia, Pa.         2           Jambridge, Mass.         1         Pittsburgh, Pa.         7           Janton, Ohio.         1         Providence, R. I.         1           Harleston, S. C.         1         Providence, R. I.         1           Hicago, Ill.         2         Reading, Pa.         1           Johnst, Ohio.         2         Reading, Pa.         1           Johnst, Ohio.         1         Rochester, N. Y.         2           Ovington, Ky.         1         Sacramento, Cal.         1           Jayton, Ohio.         2         St. Louis, Mo.         1           Jerroit, Mich.         2         St. Louis, Mo.         1           Jerroit, Mich.         2         San Diego, Cal.         8           Jeast Chicago, Ind.         2         San Francisco, Cal.         8           Vansville, Ind.         1         Schenectady, N. Y.         7           Verett, Mass.         1         Springfield, Ill.         1           Jairt, Mich.         3         1         Springfield, Ill.         1           Jairt, Mich.	Birmingham, Ala	4	1	New York, N.Y.	38	
Buffalo, N.Y.       3       1       Philadelphia, Pa.       2         ambridge, Mass.       1       1       Pritsburgh, Pa.       7         anton, Ohio.       1       Portland, Oreg.       4         harleston, S.C.       1       Providence, R. I.       1         hicago, Ill.       2       Racine, Wis.       2         incinnati, Ohio.       2       Reading, Pa.       1         oblimbus, Ohio.       1       Rochester, N.Y.       2         ovington, Ky.       1       Sacramento, Cal.       1         Denver, Colo.       2       St. Louis, Mo.       1         Denver, Colo.       2       St. Paul, Minn.       2         Detroit, Mich.       2       San Diego, Cal.         Sast Chicago, Ind.       2       San Francisco, Cal.       8         Evansville, Ind.       1       Schenectady, N. Y.       7         Everett, Mass.       1       South Bend, Ind.       1         Ilint, Mich.       3       1       Springfield, Ill.       1         ialveston, Tex.       1       Steubenville, Ohio.       1         iartford, Conn.       3       Trenton, N.J.       2         ackson, Mich.       3	Boston, Mass	2	1	Oakland, Cal	2	1
Ambridge, Mass   1	But <b>falo,</b> N. Y	3		Philadelphia, Pa	$\bar{2}$	
2   2   3   4   4   5   5   6   6   6   6   6   6   6   6	ambridge, Mass	1		Pittsburgh, Pa	7	
harleston, S. C	anton, Ohio		1	Portland, Oreg	4	
Thicago, Ill.   2   Rachie, Wis.   2	harleston, S. C	1		Providence, R. I	í.	
Olimbus, Ohio	hicago, Ill	2	1	Racine, Wis	2	
Columbus, Ohio		2		Reading, Pa.	ĩ	
ovington, Ky     1     Sacramento, Cal     1       bayton, Ohio     2     St. Louis, Mo     1       benver, Colo     2     I St. Paul, Minn     2       betroit, Mich     2     I San Diego, Cal     8       ast Chicago, Ind     2     San Francisco, Cal     8       vansville, Ind     1     Schenectady, N. Y     7       verett, Mass     1     South Bend, Ind       lint, Mich     3     I Springfield, III     1       alveston, Tex     1     Steubenville, Ohio     1       actford, Conn     1     I Toledo, Ohio     2       ackson, Mich     3     Trenton, N. J     2       aclamazoo, Mich     1     Washington, D. C     3       a Crosse, Wis     1     Wilkes-Barre, Pa     2       owell, Mass     1     Wilkinsburg, Pa     1       anchester, N. II     1     York, Pa     2				Rochester, N. Y.	2	
Dayton, Ohio   2		<b></b> l	1	Sacramento, Cal.	ī	
Ast Chicago, Ind   2   San Francisco, Cal.	Dayton, Ohio	2		St. Louis, Mo	î	
Ast Chicago, Ind   2   San Francisco, Cal.	Penyer, Colo	2	i	St. Paul Minn	9	
Ast Chicago, Ind   2   San Francisco, Cal.	etroit Mich	2	î	San Diego, Cal	- 1	
1   Schenectady, N Y   7	ast Chicago, Ind	2	•	San Francisco Cal		
South Bend, Ind.	vansville Ind	_	1	Schenectady N V	2	
Iint, Mich	verett Mass	1	-	South Rend Ind	• ,	• • • • • • • • • • • • • • • • • • • •
Steubenville, Ohio   1	lint Mich	- 3		Springfield III		
Contact   Cont	alveston Tay			Staubanvilla ()hio	1	• • • • • • • • • • • • • • • • • • • •
ackson, Mich     3     Trenton, N. J.     2       alamazoo, Mich     1     Washington, D. C.     3       a Crosse, Wis.     1     Wilkes-Barre, Pa.     2       owell, Mass.     1     Wilkinsburg, Pa.     1       anchester, N. H.     1     York, Pa.     2				Tolada Ohio	1	• • • • • • • • •
.aiamazoo, Mich. 1 Washington, D. C. 3 a c Crosse, Wis. 1 Wilkes-Barre, Pa. 2 owell, Mass. 1 Wilkinsburg, Pa. 1 [anchester, N. II York, Pa. 2]		7		Trouton X I	2	
a Crosse Wis	alamazoo Mich	3				
anchester, N. H				William Danna Do	3	• • • • • • • •
anchester, N. H			• • • • • • • • • • • • • • • • • • • •	Wilkinshame Do	2	
anchester, v. H	on about or V. II	1		Vank Da	1	
	anchester, N. H	1	1	Zanesville, Ohio	2	

### TYPHUS FEVER.

### Texas.

Senior Surg. Pierce reported that during the week ended February 24, 1917, no new case of typhus fever was notified at El Paso or Laredo, Tex.; 43,656 persons were inspected. Of this number 4,535 were disinfected for destruction of vermin, and 1,045 were vaccinated. Three sick persons were detained for observation and 61 were refused admission because of illness.

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS. State Reports for January, 1917.

	Ca	ses reporte	ed.		Cases reported.			
State.	Diph- theria.	Measles.	Scarlet fever.	State.	Diph- theria.	Measles.	Scarlet fever.	
Indiana Iowa Kansas North Dakota	409 41 156 33	4, 145 933 131	490 94 251 37	Ohio	629 251 25 5	2,716 3,388 3,985 75	1, 125 165 120 10	

## City Reports for Week Ended Feb. 17, 1917.

	Popula- tion as of July 1, 1916	Total deaths	Diph	theria.	Меа	sles.	Sca fev	rlet er.	Tul	ber- osis.
City.	(estimated by United States Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants: Baltimore, Md. Boston, Mass Chicago, Ill. Cleveland, Ohio. Detroit, Mich. Los Angeles, Cal. New York, N. Y. Philadelphia, Pa. Pittsburgh, Pa. St. Louis, Mo. From 300,000 to 500,000 inhabit-	756, 476 2, 497, 722 674, 073 571, 784 503, 812 5, 602, 841 1, 709, 518 579, 090	229 287 898 102 250 153 1.775 668 225 282	23 73 184 39 91 25 278 96 19 85	2 5 30 2 7 1 28 9 1 6	25 136 485 74 23 169 389 22 109 310	11 11 1  11	7 24 474 20 186 14 167 30 9	1 23 7 1 1	25 49 353 39 27 73 349 113 12 48	45 29 70 42 27 30 204 77 18 25
ants: Buffalo, N. Y Cineinnati, Ohio Jersey City, N. J. Milwaukee, Wis. Minneapolis, Minn Newark, N. J. New Orleans, I.a. San Francisco, Cal Washington, D. C. From 200,000 to 300,000 inhabitants:	410,476 306,345 436,535 363,454 408,894 371,747	173 159 144 156 173 147	26 15 6 15 10 11 9 34 10	2 1 2 3 3		3 2	22 134 19 16	3	25 26 12 14 26 62 23 14	16 31 4 15 32 19
Columbus, Okio Denver, Colo. Indianapolis, Ind. Kansas City, Mo Portland, Oreg. Providence, R. I. Rochester, N. Y St. Paul, Minn. From 100,000 to 200,000 inhabit-	271, 708 297, 847	72 68 51 107 87 76	9 2 13 9 2 24 3 8	2 2	6	1	4 9 59 29	1	39 12 6 10 14	7 10 10 2 8 3 12
ants: Albany, N. Y. Birmingham, Ala Bridgeport, Conn Cambridge, Mass. Camden, N. J. Dayton, Ohio Fall River, Mass. Fort Worth, Tex. Grand Rapids, Mich Hartford, Conn Lawrence, Mass. Lynn, Mass. Lynn, Mass. New Haven, Conn Oakland, Cal. Omaha, Nebr Reading, Pa Richmond, Va Salt Lake City, Utah	181, 762 121, 579 112, 981 106, 233 127, 224 128, 363 104, 562 128, 291 110, 900 100, 560 113, 245 102, 425 117, 057 18, 158	73 57 55 55 20 33 54 31 57 27 48 32 52 23 63 28	3 4 3 2 11	9 1 1 2	16 7 41 117 43 31 2 3 15 5 103 24 31 45	5 1 2 1	1 3 7 4 13 5 2 19 1 3 1 5 2 3 1 7 14 3 7 14 13 7 14 14 15 15 15 16 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	1	10 11 2 4 3 6 14 5 5 4 4 4 9 8 2 4	11 11 85 56 31 44 56 22 10 44 44 66 29 22 22

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

# City Reports for Week Ended Feb. 17, 1917—Continued.

	Popula- tion as of July 1, 1916	Total	Diph	theria.	Mea	asl <b>es</b> .		arlet ver.		uber- losis.
City.	(estimated by United States Census Bureau).	deaths from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Desths.	Cases.	Deaths.
From 100,000 to 2),000 inhabitants—Continued.										
Tacoma, Wash. Toledo, Ohio. Trenton, N. J. Worcester, Mass. From 50,000 to 100,000 inhabit-	112,770 191,554 111,593 163,314	25 68 48 61	1 6 7	1 1	14 3 3 5		64 17	i	. 5	5 1 7
ants: Akron, OhioAllentown, Pa	85, 625 63, 505	19	12 5	1	36		5 4		. 5	ļ <u>.</u>
Akron, Ohio Allentown, Pa Atlantic City, N. J Bayonne, N. J Berkeley, Cal Binghamton, N. Y Brockton, Mass Canton, Ohio Charleston, S. C. Covington, Ky Duluth, Minn Elizabeth, N. J Erie, Pa. Evansville, Ind	57,660 69,893	8	1		29	¦	2 3		4 4	· · · · · · ·
Berkeley, Cal	57, 653 53, 973	15 26	2 10	1	12				i 3	
Brockton, Mass	67, 449 60, 852	16	1		16 1	• • • • • •	1		2	3
Charleston, S. C.	60, 852 60, 734	18 24	5	1		• • • • • •	5 1			2 3
Covington, Ky Duluth, Minn	57, 144 94, 495	15	2 1		5		3		1 2	1
Elizabeth, N. J Erie. Pa	86,690 75,195	32	2				2 5			4 32
Evansville, Ind	76,078	27	5		81		. 1		1	32
Fort Wayne, Ind	76, 183	17 23	3 5	2	4		8	1		2
Harrisburg, Pa Hoboken, N. J	72,015 77,214	30 15	3 8	····i	2 .		ii		4 2	3
Johnstown, Pa Lancaster, Pa	77, 214 68, 529 50, 853	24	2 2		4					
Little Rock, Ark	57, 343	23	1		67					
Malden, Mass	51, 155 78, 283	18 32	4 2		1 1					1
Mobile, Ala	58, 221 53, 794	21	····i		7	. 1		•••••		1
Norfolk, Va	89,612 [.						1		1	4
Norfolk, Va. Oklahoma City, Okla. Passaic, N. J. Portland, Me. Rockford, Ill.	92, 943 71, 744	19 23	3		}		5		1	i
Rockford, Ill	63, 867 55, 185	14					2 2			1 1
Caginam Mich	66, 895 55, 642	28 15	2		2		23		2	2
St. Joseph, Mo	85, 236	29	7				3			2
St. Joseph, Mo. San Diego, Cal. Schenectady, N. Y. Sioux City, Iowa. Somerville, Mass. South Bend, Ind.	53, 330 99, 519	16 29	1		19 75		1 4		5 4	1
Sioux City, Iowa	57,078   . 87,039	31	9	····i	4	•••••	3	• • • • •	<u>2</u>	·····ż
South Bend, Ind Springfield, Ill	68,948 61,120	28 25	1 .				27	2	ĩ	4
Troy, N. Y	77,916 .	25	6				10		9	1 4
Wichita, Kans. Wilkes-Barre, Pa Wilmington, Del.	70,722   . 76,776	28	4	i	66		4		4 3	<b>2</b>
Wilmington, Del York, Pa	94, 265 51, 656	50  .	4	····i			1	1	1	• • • • • •
rom 25.000 to 50.000 inhabitants:		6 .	- 1	-	,,		_		2	•••••
Alameda, Cal	27, 732 37, 385. 34, 814 32, 730 27, 632	11	i .		11		16		2	1
Austin, Tex Brook!ine, Mass	31,814	26 17	$\begin{bmatrix} 2\\1 \end{bmatrix}$ .	1 .	3	3	1		4	3 1
Bufler, Pa. Butte, Mont.	27,632 43,425	8 28	1 2 .	1 .	25				29	<u>.</u>
Chelsea, Mass	46, 192 29, 319	13	2		!.		1		2	i
Cumberland, Md	26,074	14	$\begin{bmatrix} 2\\2 \end{bmatrix}$ .		''i'.		3		ī	i
Danville, Ill. Dubuque, Iowa	32, 261 30, 873	23	:-::  <u>-</u>		11 .		1		1	1
East Chicago, Ind. East Orange, N. J.	28,743 42,458	8	3 .		1 .		3 2		3	i
rigin, ill	28, 203	10 .			64 .		4  .			
	39, 233		3  .		1  .		4 .		2	1
Everett, Mass Everett, Wash	35, 486	9 .	.		127  .	.				
Everett, Wash Fitchburg, Mass Galveston, Tex Haverhill, Mass	39, 233 35, 486 41, 781 41, 863	9 13 13	1		127				1 3 1	i

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

### City Reports for Week Ended Feb. 17, 1917—Continued.

	Popula- tion as of July 1, 1916	Total deaths	Diph	theria.	Mea	sles.	Sea fev	rlet er.	Tu cul	ber- osis.
City.	(estimated by United States Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabit-										
ants—Continued. Kalamazoo, Mich Kenosha, Wis	48,886	22			6		4		7	4
Kenosha, Wis	31,576 38,676	6	1		28		5	•••••	2 4	
La Crosse, Wis	31,677	8		1	l		i		ı î	2
Lexington, Ky	31,677 41,097	23	····		21		1			8
Kenosna, Wis Knoxville, Tenn La Crosse, Wis Lexington, Ky Lima, Ohio Lincoln, Nebr Long Beach, Cal Lorain, Ohio Lynchburg, Va Madison, Wis McKesnort, Pa	35,384 46,515	8 13	1 2		16		11		i	
Long Beach, Cal.	27,587	12			1		1		1	
Lorain, Ohió	27,587 36,964 32,940	٠			3		3		2	••••••
Lynchburg, Va	32,940 30,699	6		• • • • • • •	12		···ii		í	
McKeesport, Pa	47,521	22	2				ī			
Mediord, Mass. Motclair, N. J. Nashua, N. H. Newburgh, N. Y. New Castle, Pa	26,234	4			32			• • • • • •	2 2	
Montclair, N. J	26,318 27,327	5 8	•••••		1 17				2	
Newburgh, N. Y.	29,603	10					[]		i	
New Castle, Pa	41,133				5		1	• • • • • •		
Newport, Ky Newton, Mass Niagara Falls, N. Y	31,927 43,715	13 12	i		20			•••••	5 1	. 1
Newton, Mass	37, 353 1	12			3					
Ogden, Utah	31.404	10	2		26		5			·····i
Ogden, Utah Orange, N. J	33,680 (	22 23	1	• • • • • •	1 5		1	• • • • • •	5 2	1
Pasadena, Cal	46,450 41,185	23	5		3		····i		4	
Pittsfield, Mass	38,629 (	18	1		1				4	2
Portsmouth, Va	39,651 1	.6	2		11		9			·····i
Quincy, Ill	36,798 38,136	15 6	4	••••	2 6				2	i
Racine, Wis.	46,486				1		2		1 1	
Roanoke, Va	43, 284	12	2		55				1	
San Jose, Cal	38,902 27,445	9 12	2	•••••	2	•••••	1	•••••	1	2
Steubenville, Unio	46 996	9	î		2					2 3
Portsmouth, Va. Quincy, Ill. Quincy, Mass. Racine, Wis. Roanoke, Va. San Jose, Cal. Steubenville, Ohio. Superior, Wis. Taunton, Mass. Topeka, Kans. Waitham Mass	36,283	29				· · · · <u>·</u> ·				3
Topeka, Kans	48,720	11 12	3 2	• • • • • •	66 1	1	2	1	• • • • • •	
Waltham, Mass Watertown, N. Y Wheeling, W. Va	30,570 29,894	9			3					2 1
Wheeling W. Va	43,377	18	2		2		1 1		1	
Williamsport, Pa Wilmington, N. C	33,809	•••••	3		6 34	• • • • •	1		·····i	····i
Wilmington, N. C	29,892 31,155	15 <b>2</b> 6			51		6			7
Zanesville, Ohio	30,863	17					2		1	1
Zanesville, Ohio From 10,000 to 25,000 inhabitants:	15.010	6	1	l	1		3			
Ann Arbor, Mich Beaver Falls, Pa	15,010 13,532	v	•	• • • • • • • • • • • • • • • • • • • •	•				i	
Braddock, Pa	13,532 21,685						1			
Braddock, Pa. Cairo, Ill.	15 704 1		1		64	•••••		•		1
Clinton, Mass Coffeyville, Kans Concord, N. H. Galesburg, III. Kearny, N. J.	1 13,075 17,548 22,669 24,276	7			1					<b>.</b>
Concord. N. H.	22,669	ii	2		3		1			· · · · · •
Galesburg, Ill	24,276	2 9	2			• • • • • • •	• • • • • • •			· · · · · •
Kearny, N. J.	23,539 20,930	11	7	····i	8	i	····i		2 1	····i
Kokomo, Ind Long Branch, N. J. Marinette, Wis. Morristown, N. J. Muscatine, Iowa	15,395	2			1		1			<b></b>
Marinette, Wis	15,395 1 14,610 13,284 17,500	2 7			1	• • • • • •	;-	• •••	• • • • • •	
Morristown, N. J	13,284	7			49	····i				
Nanticoke Pa	23, 126	5	1		'				2	<b>.</b>
Nanticoke, Pa. Newburyport, Mass. New London, Conn. North Adams, Mass. Northampton, Mass. Plainfield, N. J. Rocky Mount, N. C. Britland Vt.	23, 126 15, 243 20, 985 1 22, 019	8		1	3 !		1		• • • • • •	<del>-</del>
New London, Conn	20,985	11		····i	···i	····i				
North Adams, Mass	19,926 (	6			15		1		1	2
Plainfield, N. J.	23, 805 12, 067	6	]		;;-	•••••	1			1
Rocky Mount, N. C	12,067	6 10	···· <sub>2</sub> ·		14 18		iii		1	
Rutland, Vt	14,831 13,821	6		!	!				!	
Steelton, Pa	15,548	š						· • • • •	····i	i
Wilkinsburg, Pa Woburn, Mass	15,548 23,228 15,969	5	1	•••••	1	••••	2			i
Wohurn, Mass.	15,909	9		•••••	•••••	····i		· · · · · · · · · · · · · · · · · · ·		_

### FOREIGN.

#### BRAZIL.

#### Yellow Fever-Victoria.

Yellow fever was reported present at Victoria, Brazil, January 27, 1917. Later information shows the occurrence of 13 cases with 5 deaths from January 13 to February 5, 1917.

### CUBA.

### Communicable Diseases-Habana.

## Communicable diseases have been notified at Habana as follows:

,	Feb. 1-10, 1917.		Remain- ing under		Feb. 1	Remain- ing under		
Disease.	New cases.	Deaths.	reat- ment Feb. 10, 1917.	Disease. New	New cases.	Deaths.	treat- ment Feb. 10, 1917.	
Diphtheria. Leprosy. Malaria. Meesles. Paratyphoid fever	1 6 23 1	1	3 10 32 18 3	Scarlet fever Smallpox. Typhoki fever Varicella	5 8 4	4	5 2 31 2	

### JAPAN.

### Plague-Subsidence at Nagoya and Yokkaichi.

Information dated January 23, 1917, indicates the subsidence of plague at Nagoya and Yokkaichi, Japan, no case having been notified at Nagoya since December 24, and none at Yokkaichi later than December 16, 1916. The outbreak at Yokkaichi began early in November, and from November 12 to December 16, 1916, 32 cases with 12 fatalities were notified. The population of Yokkaichi is about 27,000.

#### MEXICO.

### Typhus-Durango.

According to information dated February 17, 1917, typhus became epidemic at Durango during the fall of 1916, having been present throughout the year. It is believed that the infection was introduced from Zacatecas, where, during the winter of 1915–16, the disease was epidemic. During the period from November 1 to 15, 1916, the daily number of typhus deaths at Durango was estimated at 15. By

January 15, 1917, the estimated number of daily fatalities from typhus was 25. The estimated population of Durango during that period was from 45,000 to 50,000. Typhus is reported present on ranches in the vicinity of Durango, with a high rate of mortality.

### PERU.

### Paragonimiasis-Made Notifiable.

Paragonimiasis has been recognized since 1910 as existing in Peru. The disease is believed to have been introduced by Asiatic immigration occurring during the past 15 years. The first appearance of the infection was observed on some estates situated near the coast. Paragonimiasis has been included among the diseases made notifiable in Peru.

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

Reports Received During the Week Ended Mar. 9, 1917.1.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:	Dec 17 00			
Rangoon	Dec. 17-30 Dec. 31-Jan. 6	3 2	3 2	
Japan:	Dec. 31-Jan. V	_		
Osaka	Jan. 21-25	3	2	Aug. 13, 1916-Jan. 25, 1917: Cases, 990; deaths, 641.
Java:		1	l	D 1 14 1010 G
West Java Batavia	Dec. 1-7	1		Dec. 1-14, 1916: Cases, 4; deaths, 2.
Philippine Islands:	Dec. 1-1			
Manila	Jan. 14-20	1	. 1	Last previous case, Jan. 4, 1917.
Provinces				Jan. 14-20, 1917: Cases, 112;
Albay	Jan. 14-20	19	14	deaths, 90.
Capiz	do	7 2	6	
Tloilo	do	5	2 6	
Leyte	do	45	35	
Mindanao	do	21	14	
Misamis	do	9	8	
Negros Occidental	do	4	5	
Turkey in Asia	Dec. 15-25	3	3	July 14-Dec.25, 1916: Cases, 9,542;
Aleppo	Dec. 9-15	•••••	1	deaths, 4,897.
	PLA	GUE.		
Brazil:				
Bahia	Jan. 7–13	1	1	
Colombo	Dec. 31-Jan. 6	2	2	
Bassein	Dec. 24-30		· 2	
Bombay	Jan. 7-13	8	8	
Madras Presidency	do	781	524	
Mandalay	Dec. 24-30		1	
Prome	do		23 15	
Rangoon	Dec. 31-Jan. 6	16 10	8	
Toungoo	Dec. 24-30		2	
Java:	200.21 00		-	
East Java			. <b></b>	Nov. 4-17, 1916: Cases, 23; deaths,
Residencies—		اء	_ 1	23. Nov. 18-Dec. 1, 1916:
Samarang	Nov. 18-Dec. 1	3	3	Cases, 15; deaths, 15.
Surabaya	do	3	3 9	
Surakarta		•	9	
<del></del> '	<u> </u>		<u>'</u>	·····

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources.

Place.

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

Date. Cases. Deaths.

Remarks.

# Reports Received During the Week Ended Mar. 9, 1917—Continued. SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
			1	
Brazil: Bahia	Ton 7 12	١,		·
Rio de Janeiro	Jan. 7-13 Dec. 31-Feb. 5	53	12	•
Canada:	Da. 01-1 co. 0	"	1	
Victoria	Feb. 11-17	1	1	
Winnipeg	do	3	1	-
Ceylon:	Dec. 31-Jan. 6	1	1	Troops mand
Colombo	Dec. 31-Jan. 6	1 1		From port.
Chungking	Dec. 24-30		1	Present.
Do	Dec. 31-Jan. 6 Jan. 7-20			. Do.
Dairen	Jan. 7-20	17	1	1 case in vicinity Jan. 14-20, 1917.
Egypt: Alexandria	Jan. 8-14	١.	١.	
France:	Jan. 8-11	. 1	1	
Marseille	Dec. 1-31		2	
Germany:			_	
Hamburg, district	Dec. 31-Jan. 6	22		In 12 localities.
Great Britain:	Feb. 4-10	١.	i	1
LiverpoolGreece:	F 60. 4-10	1		1
Athens.	Jan. 1-15		5	
India:			1	
Bombay	Jan. 7–13	4	4	1
Karachi	do	1		
MadrasRangoon	do	8	3	
Do	Dec. 17–30 Dec. 31–Jan. 6	٥	i	
Japan:	200.01 044		-	
_ Kobe	Jan. 21-28	24	5	
Java	N 10 D 1	_	l	* **
East Java Mid Java	Nov. 18-Dec. 1	5 50	7	
West Java		30	' '	Dec. 1-14, 1916: Cases, 36;
Batavia	Dec. 1-14	13		deaths, 7.
Mexico:				
Durango	Feb. 17			Present. Also present in vi-
Spain:				cinity.
Malaga	Nov. 1-30		13	
Switzerland: Basel	Jan. 14-20	3		
Tunisia:	Jan. 14-20	3,	• • • • • • • • • • • • • • • • • • • •	
Tunis	Jan. 20-26	6	6	•
<u> </u>		· ·		· · · · · · · · · · · · · · · · · · ·
	TYPHUS	FEVE	<b>R.</b> .	
	1			
Austria-Hungary:		- 1		
Austria— Vienna	Dec. 21-30	1	1	
Do.	Dec. 24-30 Dec. 31-Jan. 6	3		
Egypt:		•		
Alexandria	Jan. 8-28	47	10	
Cairo	Sept. 17-30	7	3	
Germany: Berlin	Dec. 10-23.	į	. 2	
Königsberg	Jan. 7-13	3		
Great Britain:		- 1	• • • • • • • • • • • • • • • • • • • •	
Cork	Jan. 28-Feb. 3		1	
Greece:	D. 10.10	- 1		
Saloniki	Dec. 12-18	••••••	6	
Mid-Java	Nov. 18-Dec. 1	11	- 1	•
Samarang	do	3		
West Java		] .		Dec. 1-14, 1916: Cases, 29; deaths,
Mexico:	Dec. 1-7	25	2	2.
	JanFeb			Present. Estimated deaths daily about 25. Present
ł		ı	- 1	throughout year 1916.
**************************************	YELLOW	PPVPn	<u>'</u>	
	IELLU W	revel(		
Brazil:		1	i	
Victoria	Jan. 13-Feb. 5	13	5	

# Reports Received from Dec. 30, 1916, to Mar. 2, 1917.

### CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Nov. 5-Dec. 73	13	12	1
Calcutta	Oct. 15-Dec. 30		161	Oct. 8-14, 1916; Cases, 3.
Madras	Nov. 5-1 ec. 16	5	2	
Do	Oct. 15-Dec. 30 Nov. 5-1 ec. 16 Dec. 31-Jan. 6	3		
Rangoon	Nov. 26-Dec. 16	2	3	
ndo-China			;•••••	June 1-July 31, 1916: Cases, 3,578
l'rovinces—	T 1 20	446	367	deaths, 2,578.
Anam	June 1-30	636	505	•
Do Cambodia	July 1-Sept. 30 June 1-30	13	3.3	
Do	July 1-Sept. 30	22	18	į
Cochin-China	June 1-30	137	76	
Do	July 1-Sept. 30	98	59	
Kouang-Tchcou-Wan	do	216	200	
1.aos	June 1-30 July 1-Sept. 30	40	29	
Do Tonkin	July 1-Sept. 30	637	616	
Tonkin	June 1-30	1,276	775	
Do	July 1-Sept. 30	969	709	
apan:				
Fukuoka	Jan. 19 Nov. 27-Dec. 3	33		
Nagasaki	Nov. 27-Dec. 3	. 9	. 4	
Osaka	Nov. 16-Dec. 25	23	57	Aug. 13-Dec. 25, 1916: Cases, 971
_				deaths, 754.
Do	Dec. 26-Jan. 11	16	8	Jan. 6-16, 1917: Cases, 9.
Taiwan Island—	N- 10 D 00		7	•
Keelung	Nov. 13-Dec. 23	.5		
Taihoku	do	14	5 3	
Yokohama Districts	Nov. 6-Dec. 3 do	5	1	
ava:	uo	•		
East Java	Oct. 14-17	5	3	
West Java				Nov. 17-30, 1916: Cases, 131
Batavia	Nov. 17-30	22	9	deaths, 63.
hilippine Islands:				
Manila	Oct. 29-Dec. 30	201	70	Not previously reported: Cases
Do	Dec. 31-Jan. 6	3	1	49; deaths, 2.
Provinces				49; deaths, 2. Oct. 29-Dec. 9, 1916: Cases, 4,191 deaths, 2,030. Dec. 17-30, 1916 Cases, 282; deaths, 188. Dec. 31, 1916-Jan. 13, 1917: Cases, 263: deaths, 198.
Albay	Oct. 29-1)ec. 9	246	147	deaths, 2,030. Dec. 17-30, 1916
Ďo	Dec. 17-30 Dec. 31-Jan. 13	20	10	Cases, 282; deaths, 188. Dec
Do	Dec. 31-Jan. 13	11	10	31, 1916-Jan. 13, 1917; Cases
Antique	Nov. 18-25	8	7	268; deaths, 198.
Do	Dec. 31-Jan. 6	2 93	4	
Bataan	Oct. 29-Dec. 9 Dec. 17-23	2	77	
Do	Dec 31-Ion 6	2	3	
Ratangae	Dec. 31-Jan. 6 Oct. 29-Nov. 18 Oct. 29-Dec. 9	î	il	
BatangasBohol	Oct. 29-Doc. 9	46	18	
Do	Dec. 17-23.	ĭ		
Bulacan	Oct 29-Dec 9	96	67	
Do	Dec. 17-23	10	6	
Camarines	Dec. 17-23. Oct. 29-Dec. 9	61	37	
Capiz	do l	45	34	
Do	Dec. 17-30	27	23	
Do	Dec. 31-Jan. 13	20	14	
Cavite	Oct. 29-12ec. 9	156	113	
Do	Dec. 17-30	24	13	
Do	Dec. 31-Jan. 13 Dec. 24-30 Jan. 7-13	28	17	
CebuDo	Dec. 24-30	12	6	
Do	Jan. 7-13	4	2	
Iloilo	Oct. 29-Dec. 9	237	148	
Do	Dec. 17-30	37	31	•
Do	Dec. 31-Jan. 13	33	25	
Laguna	Nov. 2-25. Oct. 29-Dec. 9	12	10	
Leyte Do	Dec. 17-30	127	98 62	
Do	Dec. 31-Jan. 13	90 73	60	
Masbate	Dec. 17-23	8	2	
Mindoro	Dec 31-Jan 13	7	6	
Misamis	Oct. 29-Dec 9	126	79	
Do	Oct. 29-Dec. 9 Dec. 17-30	17	12	
D0	Jan. 1-13	3	ĩ	
Negros Occidental	Oct. 29-Dec. 9 Dec. 24-30	910	553	•
Do Condemian	Dec 24 30	ii	5	
DU				
Do Do Pampanga	Jan. 7-13.	32	22	

## Reports Received from Dec. 30, 1916, to Mar. 2, 1917—Continued.

### CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands—Contd.				
Provinces—Continued.	l i		1	
Pampanga	Dec. 17-23	6	5	
Ďo	Dec. 31-Jan. 6	1	1	1
Rizad	Oct. 29-Dec. 9	27	14	i
Do		4		
Do	Dec. 31-Jan. 6	ī		
Samar	Nov. 5-18	13	10	l .
Do	Dec. 31-Jan. 6	51	33	l
Sorsogon		131	71	}
	Dec. 17-23	1	2	
Tayabas		ī	1	
Zambales	Oct. 29-Dec. 2	71	ī	
Straits Settlements:	000.20 200.2	•	•	
Singapore	Oct. 22-28	2	2	
Turkey in Asia	000.22	-	_	Sept. 22-Dec. 12, 1916; Cases, 258
Bagdad	Nov. 6-30	17	6	deaths, 117.
Beirut	Dec. 7-12	- 2	ĭ	404125, 2271
Tarsus	Nov. 7	7	i	
Turkey in Europe:		•	-	
Constantinople	Oct. 1-Nov. 17	8	1	

## PLAGUE.

				· · · · · · · · · · · · · · · · · · ·
Brazil: Bahia	Nov. 5-Dec. 16	15	9	Jan. 1-Nov. 11, 1916: Cases, 14; deaths, 7. Nov. 5-11: Cases, 4;
Joazeiro				deaths, 2. June 1-Nov. 6, 1916: Cases, 67; deaths, 51.
Ceylon: Colombo	Oct. 28-Dec. 30	50	30	July 23-29, 1916: Cases, 9; deaths, 8.
Chile: Tocopilla	Sept. 12	1	1	davis, o.
Amoy, vicinity Hongkong Kansu Province—	Nov. 19-Dec. 2 Dec. 24-30		i	Present.
Taochow	Oct. 1-24		20	Pneumonic. Reported present in other localities in Province.
Ecuador	Oct. 1-31		7	Sept. 1-Nov. 30, 1916: Cases, 156; deaths, 57.
Do	Oct. 1-31 Nov. 1-30	43 88	13 35	
NobolSanta Rosa	Oct. 1-31 Sept. 1-30	1	1 1	
Egypt	Nov. 12-Dec. 25	4	3	Jan. 1-Dec. 30, 1916: Cases, 1,702; deaths, 823. 1 case on s. s. Proton, arrived
Port Said Do India	Dec. 11	1	i	Nov. 16, 1916, from Sidi Barand and Sollum. Oct. 15-Dec. 23, 1916; Cases.
BasseinBombayDo	Nov. 5-Dec. 30	73	5 59	89,512: deaths, 67,068. Oct. 8-14, 1916: Cases, 13; deaths,
KarachiDo	Oct. 29-Dec. 23 Dec. 24-30	8 3 1	6 2 1	7. Received out of date. Original report lost on s. s. Arabia.
Do Madras Do	Nov. 19-Dec. 16 Dec. 30-Jan. 6	1 6 3	1 3 2	Oct. 8-14, 1916: Cases, 1; deaths, 1.
Madras Presidency Do Mandalay	Nov. 5-Dec. 16 Dec. 31-Jan. 6	4,003 851	2,677 590 2	Oct. 8-14, 1916: Cases, 534; deaths, 353. Sept. 17-23, 1916: Cases, 429; deaths, 280.
MoulmeinProme	Dec. 3-9 Oct. 22-Dec. 23		1 154	
Rangoon	Oct. 28-Dec. 16 Oct. 22-Dec. 9		24 10	Oct. 1-7, 1916: Cases, 9; deaths, 9.

## Reports Received from Dec. 30, 1916, to Mar 2, 1917—Continued.

### PLAGUE—Continued.

	-AUDAGI	-Contin	ueu.	
Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China				June 1-30, 1916: Cases, 75; deaths
Provinces—				5; July 1-Sept. 30, 1916; Cases
Anam	June 1-30	27	10	164; deaths, 98.
Do	July 1-Sept. 30		32	1
Cambodia	June 1-30	17	16	1
Do	July 1-Sept. 30	33	31	1
Cochin-China	June 1-30	31	18	1
Do	July 1-Sept. 30	53	19	
Kouang-Tcheou-Wan	July 1-31		6	1
Saigon	Nov. 6-19	3	1	
Japan:		_		i e
Nagoya	Dec. 10-16	2		
Yokkaichi	Nov. 12-Dec. 16	32	12	1
Java:		1	l	l
East Java				Aug. 26-Nov. 3, 1916: Cases, 63
Djocja Residency	Nov. 4-17	1	1	deaths, 62.
Kediri Residency	Aug. 26-Nov. 3	18	16	į .
Madioen	do	8	8	•
Pasoeroean Residency	go	3	3	
Samarang Surabaya Residency	do	5	5	
Surabaya Residency	Aug. 20-Nov. 17	27 15	28	
Surakarta Residency Mid-Java—	Aug. 20-Nov. 3	15	15	
Samarang	do	1		
Siam:	ao	1	1	
Bangkok.	Oct. 22-Dec. 2	5	3	
Straits Settlements:	Oct. 22-Dec. 2	3	٥	
Singapore	do	5	• 5	
Union of South Africa:		J	J	
Cape of Good Hope State—				
Uitenhage district	Oct. 31-Nov. 12	2	2	Total, Oct. 23-Nov. 12, 1916 Cases, 24; deaths, 13.
	SMAL	LPOX.		Cessos, az, wedding, 10.

	· · · · · · · · · · · · · · · · · · ·	,		<del> </del>
Australia:		1	}	
New South Wales—	i	i	ł ·	
Coonamble	Dec. 8	1 1	į.	i
Austria-Hungary:	200.0	1 -		· ·
Austria—		1	ì	1
Vienna	Nov. 12-Dec. 9	8	1	f
Hungary-	11012 Dec. 5	"		1
Budapest	Nov. 5-Dec. 23	73	2	
Brazil:	1101.0-200.25		1 -	
Bahia	Nov. 12-Dec. 23	5	1	
Rio de Janeiro	Nov. 12-Dec. 30	50	12	
Canada:	100.12-Dec. 30	1 50	12	
Ontario-		1	1	<b>f</b>
Sarnia	Jan. 28-Feb. 10	3	l	
Toronto	do	2		
China:				
Amov	Oct. 31-Dec. 9		ł	Present. Dec. 10-16, 1916: Cases
Autoy	Oct. 31-Dec. 5			3.
Antung	Jan. 8-14.	2	1	٥.
Antung Canton.	Nov. 1-Dec. 20		14	
Chungking	Oct. 28-Dec. 23		14	Present.
Dairen	Nov. 5-Dec. 30	63	8	Tresent.
Do	Dec. 31-Jan. 6	5	7	
Foochow.	Oct. 29-Dec. 16		•	Do.
Harbin	Nov. 6-19	2		<i>D</i> 0.
	Oct. 28-Dec. 30	349	243	
Hongkong Do	Dec. 31-Jan. 6	69	40	
Mukden	Dec. 9-30	09	10	Do.
Mukden	Dec. 31-Jan. 13			Do.
Do	Nov. 12-25			Do. Do.
Nanking	Dec. 17-30.	·····i	·····i	10.
Tientsin	Dec. 1-9	3	1	
Tsingtao	Dec. 1-9	٥	• • • • • • • • •	
Cuba: Casa Blanca	Tom 10			Visinity of Hobons Com- land
Casa Bianca	Jan. 12	1		Vicinity of Habana. Case land-
j				ed Jan. 1, 1917, from s. s. Al- fonso XII, from Santander.
1				Spain.

### Reports Received from Dec. 30, 1916, to Mar. 2, 1917—Continued.

### SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Cuba—Continued, Encrucijada	Jan. 10	1		In Santa Clara Province. Case landed from s. s. Montevideo from Barcelona, via Las Pal- mas, Canary Islands, and Porto
Guanabacoa  Habana	Jan. 9	1 2		Rico; arrived at Habana Jan. 6, 1917. Vicinity of Habana. Case landed from s. s. Montevideo. At Mariel quarantine station. From s. s. Montevideo.
Ecuador: Guayaquil	Nov. 1-30	10	1	From s. s. Montevideo.
Egypt:	Dec. 25–31 June 11–July 1	50	3 20	
Cairo	July 2-Sept. 9 June 11-17 Aug. 20-Sept. 9	59 1 2	20 20 1	
France: Marseille	Oct. 1-Nov. 30 Dec. 17-23	i	14	
Hawaii: Honolulu	Jan. 9	1		From s. s. Tenyo Maru from oriental ports.
DoIndia:	Jan. 24	1		From s. s. Ecuador from Hong- kong.
Bombay	Dec. 10-30 Dec. 31-Jan. 6 Nov 5-Dec. 2	5 8	1	Oct. 8-14, 1916: Cases, 3; deaths, 3. Received out of date. Orig- inal report lost on s. s. Arabia.
Calcutta	Nov 5-Dec. 2 Dec. 31-Jan. 6 Nov. 5-Dec. 16 Dec. 31-Jan. 6	1 22 11	8 5	
MoulmeinRangoonIndo-China	Oct. 28-Nov. 4 Oct. 28-Dec. 16	14	1	June 1-30, 1916: Cases, 53; deaths,
Provinces— Anam Do	June 1-30 July 1-Sept. 30	4 22	1 10	11. July 1-Sept. 30, 1916: Cases, 157; deaths, 83.
Cambodia Do Cochin-China	June 1-30 July 1-Sept. 30 June 1-30	11 14 19	4 6 5	
Do	July 1-Sept. 30 Aug. 1-Sept. 30 June 1-30.	81 19 19	35 16 1	
Do Saigon Japan:	Nov. 6-Dec. 10	11 26	5 6	
Kobe Do Java:	Nov. 28-Dec. 10 Jan. 1-7	1	1	
East JavaSurabaya Mid-Java	Nov. 4-10	1		Sept. 16-Nov. 10, 1916: Cases, 77; deaths, 2. Sept. 16-Nov. 17, 1916: Cases, 111;
Samarang West Java Batavia	Nov. 4-10 Sept. 29-Nov. 30	3 35	8	deaths, 11. Sept. 29-Nov. 30, 1916: Cases, 330; deaths, 49.
Mexico: Mexico City Do	Dec. 10–30 Dec. 31–Jan. 6	20 6		
Nuevo Laredo	Dec. 10-30 Nov. 19-Dec. 2	1 6		
Lisbon	Sept. 1-30		1	
Archangel	Nov. 25-Dec. 29 Oct. 16-Dec. 18 Oct. 8-Nov. 25	6 43 95	1 12 31	Nov. 13-25, 1916: Cases, 35; deaths, 8.
Fouth Africa: Johannesburg Fpain:	Nov. 26-Dec. 2	- 15		
CadizMadridMalaga	Nov. 1-Dec. 31 do Sept. 1-Oct. 31		144 2	Jan. 1-Dec. 31., 1916: Deaths, 405.
SevilleValenciaDo	Nov. 1-30 Nov. 19-Dec. 23 Jan. 14-20	5 1	22 1	

## Reports Received from Dec. 30, 1916, to Mar. 2, 1917—Continued.

### SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Straits Settlements: Penang Singapore	Oct. 28-Dec. 23 Nov. 19-Dec. 23	14	3	·
Switzerland: Basel Do	Nov. 5-11	1 6		
Tunisia: Tunis Do	Nov. 25-Dec. 15 Dec. 30-Jan. 19	51 27	27 7	
Turkey in Asia: Trebizond Union of South Africa:	Nov. 11-Dec. 30	1	1	
Johannesburg On vessel:	Sept. 10-Nov. 28	25		Yandad at Walahama anan
S. S. Nippon Maru Do	Jan. 22 Jan. 24-Feb. 3	9	3	Landed at Yokohama quaratine. En route to Honolulu. Ves from oriental ports.
	TYPHUS	FEVE	R.	
Argentina: Rosario	Nov. 1-39		1	
Austria-Hungary: Austria—		20		
Vienna Hungary— Budapest	Nov. 5-Dec. 23 do	3	1	
Belgium: Ghent Liege	Oct. 29-Nov. 4 do		. 1	
China: Antung Hankow	Nov. 27-Dec. 10 Nov. 12-18	6		٠.
Tientsin Cuba: Santiago	Oct. 29-Nov. 4 Dec. 7-13	1	1	
Egypt: Alexandria	Nov. 12-Dec. 31	28	12	Nov. 19-25, 1916: 1 case; De
Do	Jan. 1-7 June 11-July 1 July 2-Sept. 16	275 252	3 142 133	17-23, 1916: Cases, 4.
Port Said	June 11-17 July 2-Sept. 2	20 7	9 6	
BerlinBremenFrankfort-on-Main	Oct. 15-Dec. 9 Oct. 22-Nov. 18 Nov. 12-18	1	5 2 1	
Königsberg Do Nuremberg	Nov. 12-Dec. 23 Dec. 31-Jan. 6 Oct. 29-Nov. 11	5 3	5 1	
Great Britain: CorkGlasgow	Jan. 7-13 Dec. 3-30	1 4		
Do Greece: Saloniki	Jan. 7-13 Nov. 7-Dec. 11		1 25	
Java: East Java Mid-Java				Sept. 16-Nov. 3, 1916; Casès, 9, Sept. 16-Nov. 10, 1916; Cases, 5
Samarang West Java Batavia	Nov. 4-10 Sept. 29-Nov. 30	7	9	deaths, 7. Sept. 29-Nov. 30, 1916: Cases, 13 deaths, 10.
Mexico: Aguascalientes Ciudad Juarez	Dec. 22			Epidemic.
Durango	Dec. 12	835		July, 1916-Feb. 5, 1917: Case 100 (estimated). Present.
Mexico City	Dec. 3-30 Dec. 31-Jan. 6 Dec. 10-16	162 4		July 1-Dec. 16, 1916; Cases, 28.
Netherlands: Rotterdam	Nov. 26-Dec. 30	8	<u>.</u> l	·

### Reports Received from Dec. 30, 1916, to Mar. 2, 1917—Continued.

### TYPHUS FEVER-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.	
Russia:	Nov. 25-Dec. 29	29	9		
Moscow	Oct. 16-Nov. 25	55	1 4		
Petrograd	Oct. 8-Dec. 2	139	42		
Spain:					
Madrid	Nov. 1-Dec. 31		3	Jan. 1-Dec. 31, 1916: Deaths, 35.	
Sweden:				•	
Stockholm	Nov. 28-Dec. 4	1			
Do	Dec. 31-Jan. 6	. 3			
Switzerland:			1		
Zurich	Dec. 3-9	1			
Do	Jan. 7-13	1			
Tunisia:					
Tunis	Dec. 16-22	1			
Turkey in Asia:					
Haifa	Oct. 16-22	1			
Trebizond	Dec. 17-30	3	3		
			<u> </u>		
	YELLOW FEVER.				

Brazil: Victoria	Jan. 27			Present.	
Ecuador: Babahoyo	Nov. 1-30	1	1		
Duran Guayaquil Do	Oct. 1-31 Sept. 1-30 Oct. 1-31	1 17 15	5 12		
Do Milagro Gold Coast	Nov. 1-30 (Sept. 1-30 (Oct. 1-31	1 2	1	In 1915: Cases, 2; deaths, 2.	Eu-
				ropean and native.	

