# PUBLIC HEALTH REPORTS

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. No. 16

# POLIOMYELITIS (INFANTILE PARALYSIS).

### PREVALENCE IN CITIES DURING 1916.

The table which follows shows the recorded prevalence of poliomyelitis during the year 1916 in cities of the United States having over 100,000 population. The cities have been divided into groups according to their population and arranged in each group in the order of the prevalence of the disease as indicated by the recorded cases. Data are given for all the cities of the United States having an estimated population of 100,000 or over as of July 1, 1916, with the exception of Cambridge, Mass., and Memphis, Tenn.

City.	Indicated case rate per 1,000 inhabit- ants.	Indicated fatality rate per 100 cases.	Cases reported.	Deaths regis- tered.	Popula- tion July 1, 1916 (esti- mated by U. S. Census Bureau).
Over 500,600 inhabitants:  St. Louis, Mo  Los Angeles, Cal.  Cleveland, Ohio.  Pittsburgh, Pa.  Detroit, Mich.  Chicago, Ill.  Baltimore, Md.  Philadelphia, Pa.  Bostum, Mass.  New York, N. Y.  From 300,000 to 500,000 inhabitants:  Seattle, Wash.  Buffalo, N. Y.  Milwaukee, Wis.  New Orleans, La.  San Francisco, Cal.  Washington, D. C.  Cincinnati, Ohio.  Minneapolis, Minn.  Jersey City, N. J.  Newark, N. J.  From 200,000 to 300,000 inhabitants:  Kangas City, Mo.  Denver, Colo.  Rochester, N. Y.  Columbus, Ohio.  Louisville, Ky.  Portland, Oreg.  Lodisville, Ky.  Portland, Oreg.  Lodismapolis, Ind.  St. Paul, Minn.  Providence, R. I.	.038 .056 .059 .105 .114 .348 .588 .861 1.610	82. 61 1 21. 05 15. 79 35. 29 26. 67 17. 19 34. 15 30. 52 24. 42 27. 13 38. 46 12. 50 9. 09 6. 45 15. 38 15. 38 16. 06 26. 37	23 119 38 34 600 285 205 1,006 651 9,023 8 13 116 222 22 21 21 117 7 111 115 115 119 21 80	19 46 12 16 49 70 307 159 2,448 5 2 2 2 2 2 2 6 4 11 375 375	757, 309 503, 812 674, 073 579, 090 571, 784 2, 497, 722 589, 621 1, 709, 518 7, 56, 476 5, 602, 841 348, 558 436, 535 371, 747 463, 516 363, 454 306, 345 408, 345 4

<sup>1</sup> The health officer states that cases are known not to be completely reported.

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City.	Indicated case rate per 1,000 inhabit- ants.	Indicated fatality rate per 100 cases.	Cases reported.	Deaths regis- tered.	Population July 1, 1916 (estimated by U. S. Cansus Bureau).
From 100,000 to 200,000 inhabitants:  Spokane, Wash Nashville, Tenn Oakland, Cal Tacoma, Wash Dallas, Tex. Fort Worth, Tex Atlanta, Ga Youngstown, Ohio. Salt Lake City, Utah Houston, Tex Omaha, Nebr Reading, Pa San Antonio, Tex. Lawrence, Mass. Fall River, Mass. Birmingham, Ala Scranton, Pa. Des Moines, Iowa Richmond, Va. Dayton, Ohio. Lowell, Mass Worcester, Mass New Bedford, Mass. Grand Rapids, Mich Albany, N. Y Lynn, Mass. Hartford, Conn. Toledo, Ohio. Bridgeport, Conn. Camden, N. J. New Haven, Conn. Paterson, N. J. Springfield, Mass Syracuse, N. Y Trenton, N. J.	.009 .010 .016 .019 .021 .028 .036 .036 .036 .046 .057 .070 .078 .110 .118 .128 .134 .150 .153 .178 .249 .269 .430 .559 .574 .600 .621 .635 .708	100.00 50.00 100.00 75.00 42.86 28.57 20.50 11.76 33.33 15.00 17.65 18.75 14.76 18.75 14.29 16.13 22.73 30.14 31.82 16.13 22.73 30.14 31.89 20.79 20.27,95	1 1 2 2 2 4 4 3 4 4 6 6 5 7 7 7 120 117 220 117 221 232 284 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	1 2 3 3 3 4 3 3 1 6 4 4 1 4 10 25 22 22 22 22 24 50	150, 328 117, 507 198, 604 112, 770 124, 527 104, 562 190, 558 108, 385 117, 399 112, 307 109, 381 122, 831 100, 560 128, 366 181, 762 146, 811 101, 508 156, 687 127, 224 111, 593 112, 579 102, 425 110, 900 191, 554 121, 579 106, 233 149, 685 138, 443 105, 942 111, 593

<sup>1</sup> The health officer states that cases are known not to be completely reported.

### POLIOMYELITIS IN NEW ZEALAND.

# THE PREVALENCE OF POLIOMYELITIS (INFANTILE PARALYSIS) IN THE WELLINGTON HEALTH DISTRICT, 1914-1916.

The first important epidemic prevalence of poliomyelitis in New Zealand occurred early in the year 1914 and was fairly widespread throughout the Dominion. In the Wellington Health District the disease was generally diffused, but only 65 cases were reported, the largest number occurring in any one week being 8. In 1915 only 3 cases, occurring between March 26 and December 30, were notified in the district. In 1916 the disease again became epidemic in the district, with a total of 339 cases reported from January 31 to April 30, 1916. The first cases occurred simultaneously in three widely separated localities. The monthly totals were: January, 3 cases; February, 65 cases; March, 178 cases; April, 93 cases.

As regards age groups, the greatest number of cases, viz, 71, occurred in the group of 1 to 2 years. The sex distribution was, male, 199; female, 140.

Of the 339 cases in 1916, 46 terminated fatally, 28 deaths occurring in males and 18 in females. Six deaths occurred in infants under

1 year of age, six in the age group 1 year to 2 years, and nine each in the groups of 15 to 20 and 20 to 30 years. The disease occurred generally along the lines of railway traffic. The total estimated population of Wellington Health District, which includes the Provinces of Wellington, Taranaki, Hawkes Bay, Marlborough, and Nelson, and Cook County, is 379,102.

### BIOLOGICAL PRODUCTS.

### NOTICE TO THOSE CONCERNED.

In view of the fact that some establishments licensed for the manufacture and sale of biological products located in Germany have not been inspected within the time required by regulation and on account of present conditions will be inaccessible to inspection for an indefinite period of time, the department has revoked the licenses of these establishments, and notification of this fact is hereby given to all concerned.

The establishments in question with their license numbers and products are the following:

No. of license.	Name.	Products.
12	Chemische Fabrik auf Actien, Berlin, Germany.	Antigonococcus vaccine, antistreptococcic serum, diphtheria antitoxin, and tuberculin.
24	Farbwerke, vormals Meister Lucius und Brüning, Hoechst on Main, Ger- many.	Antidysenteric serum, antimeningococcic serum, anti- pneumonic serum, antistreptococcic serum, antit- tanic serum, diphtheria antitoxin, tubercullins.
29	The Behringwerk, Marburg, Germany.	
31	E. Merck, Darmstadt, Germany	Antimeningococcic serum, antipneumonic serum, antitreptococcic serum, diphtheria antitoxin, jequiritol serum, leucofermantin (antitryptic sheep serum), normal horse serum (liquid and dried), tuberculins, and bacterial vaccines prepared from colon bacillus, dysentery bacillus, gonococcus pneumococcus, sta-
	Talle & Ca. Dishuish Commons	phylococci, streptococci, and typhoid bacillus.  Tuberculin (Rosenbach).
32 39	Kalle & Co., Biebrich, Germany Pharmaceutisches Institut Ludwig	Antidysenteric serum.
· 39	Wilhelm Ganz, Oberursel bei Frank- l' fort a. M., Germany.	Anterysonicon Serum.
55	Chemische Fabrik Güstrow, Güstrow i. M., Germany.	Staphylococcus vaccine.

# DETECTION OF HYDROCYANIC ACID GAS.

### USE OF SMALL ANIMALS FOR THIS PURPOSE.

By S. B. GRUBBS, Surgeon, United States Public Health Service.

Instructions issued on November 4, 1916, to officers of the Public Health Service on the subject of hydrocyanic acid gas fumigation of vessels directed that "Before declaring it safe to enter holds, a captive animal (guinea pig, rat, cat, etc.) shall be lowered and exposed to the aerial content of such compartments, and the effect produced, if any, shall be a guide in estimating the amount of gas present."

Just what dilution of hydrocyanic acid gas should be considered dangerous to man can not be definitely stated, but in fumigating the holds of vessels any gas that brings on vertigo may cause a fatal fall. In trying to determine this point several volunteers have breathed gas from ½ and from ½ ounce sodium cyanide per 1,000 cubic feet for two minutes and one and one-half minutes, respectively, without feeling any effect, but this has at other times caused dizziness. In these cases the men were breathing quietly and the effects would doubtless be considerably increased and the danger of falling would be greater if the same men were undergoing physical exertion such as climbing out of the hold of a vessel. The writer believes that where work must be done and a climb is required to reach the open air a mixture of 0.024 per cent hydrocyanic acid gas (one-half ounce sodium cyanide per 1,000 cubic feet) should be considered the limit of safety.

With this limitation in mind the susceptibility of small animals usually available for the purpose of testing holds has been studied. A good test animal may be said to be one that is readily obtained and easily handled and that promptly shows visible symptoms when breathing the gas in considerable dilution, but does not soon die after showing systoms.

The following experiments were made in a practically air-tight room of about 500 cubic feet. The gas was generated in a jar placed in the center of the room, and time in each case was reckoned from the minute the sodium cyanide was dropped into the acid. The animals were confined in small cages placed in front of a window in one corner of the room 4 feet above the floor. They were about 5 feet from the generator. Ninety-six to ninety-eight per cent sodium cyanide, 1 ounce of which in 1,000 cubic feet gives approximately 0.048 per cent of hydrocyanic acid gas, was used.

 $<sup>^1</sup>$  Passed Asst. Surg. Friench Simpson has noted that employees exposed to the fumes of cyanide in their routine work seemingly acquire a considerable resistance to the effects of gas.

	1 ounc 1,000 temp	1,000 cubic feet; temperature 40° F.	444	ounce NaCN per 1,000 cubic feet; temperature 40° F.	dounce 1,000 c tempera	ounce NaCN per 1,000 cubic feet; temperature 17° F.	d ounce 1,000 temper	ounce NaCN per 1,000 cubic feet; temperature 40° F.	y ounce 1,000 tempe	ounce NaCN per 1,000 cubic feet; temperature 80° F.	de ounce 1,000 tempe	ounce NaCN per 1,000 cubic feet; temperature 35° F.	dounce 1,000 tempe	ounce NaCN per 1,000 cubic feet; temperature 35° F.
	First effect.	Final result.	First effect.	Final result.	First effect.	Final result.	First effect.	Final result.	First effect.	Final result.	First effect.	Final result.	First effect.	Final result.
	Min- utes.		Min- utes.		Min- utes.		Min- utes.		Min- utes.		Min- wtes.		Min- utes.	
Guinea pig	10	Dead; 20 minutes.	35	Removed alive; 1 hour; re-	8	Alive; 1 hour; died later.	None.	None	None.	(No effects; 1 )				
Adult wild rat							9 6 	Dead; 42 minutes.	22	Dead; 50				•
								hour; died later.		· mmnces.				
Half-grown wild	:						<b>9</b>	Alive; 1 hour; re- covered.	<u></u>	Dead; 50 minutes.				
							3	Dead; 25 minutes.		,				
Adult tame rat	8	Dead; 15   minutes.	<del>^</del> _	Dead; 40 minutes.	13 5	Removed alive; 10 minutes. Removed alive; 15 minutes.	t~ 00	Alive; 1 hour; re- covered. Alive; 1 hour; re-	· · · · · · · · · · · · · · · · · · ·	Removed alive; 1 hour; recovered.	01	Removed; 25 min- utes; re- covered.	None.	Removed; 1 hour;
Half-grown tame	يـــ						25	Alive; 1 hour; re-	و	Removed alive; 1				
rat.					<u>:</u>		9	Dead; 33	•	hour; died later.				
Mouse				•	52 4	Dead; 25 minutes. Removed alive; 10	,	A A	.s	Dead; 40 minutes.	01	Removed; 25 min- utes; re- covered.	© ———	(Dead; 30 minutes.
Cat				50 minutes	۔			(Dead; 33)		Removed alive; 1				
					_			munnes.	_	covered.	_			
		-			145	Dead: 24 minutes. Dead; 8					2	Desd; 20	بہ	(Dead; 40
apariow				•		minutes. Dead: 3 minutes.				•	1		: 	mmutes.
Pigeon					<u>.</u>	(Dead: 9 minutes.	<u></u>				<u> </u>		•	
		1 Seconds	nds.							2 Not noted.	٠			

From these experiments and from our regular work the following observations may be made:

Guinea pigs.—Although usually available and easily handled, guinea pigs are quite resistant to hydrocyanic acid gas and may easily show no symptoms after 5 or 10 minutes in percentages of gas that may be dangerous to man. They are, therefore, the least suited of animals tried, and if used to detect cyanide gas due allowance for their superior resisting powers should be made.

Sparrows.—These birds are very susceptible indicators, but die almost immediately after showing the first symptoms. It is believed that canary birds, which are used by the Bureau of Mines to indicate the presence of carbon monoxide gas, would act in the same way. Sparrows are usually plentiful and are easily trapped.

Mice.—Mice are slightly less susceptible than sparrows. They may be bred in captivity with little care and are easily handled. On the other hand, they are too small to be easily watched from the deck in case they are lowered to the bottom of the square of the hatch of an ordinary vessel, and quickly die if exposed to wet or cold.

Cats.—Cats have certain advantages in cyanide testing. They feel the effects of the gas about as quickly as rats or mice, and their efforts to escape at this time are both violent and noisy, allowing an opportunity to remove the animal before fatal results occur. A disadvantage is that a cat, unless kept caged constantly, may effectively resist capture, especially after being used once.

Rats.—It was at first thought that there would be a difference in susceptibility between wild and tame rats and between adult and young rats, but as will be seen the difference is not constant and may be disregarded. Rats, while slightly less susceptible to hydrocyanic acid gas than mice, are probably the best animals for routine use when everything is considered. Wild rats become easily terrified and may injure themselves. Tame rats do not have this fault, may be easily reared in captivity, and may be handled without difficulty. They should be protected from extremes of heat and cold at all times, as otherwise they may die unexpectedly.

Directions for raising rats and mice are given at the end of this article.

### Conclusions.

Sparrows or other small birds are the most delicate live indicators for hydrocyanic acid gas, but are not recommended for routine work.

Mice or tame rats are almost as susceptible as sparrows and are probably the best test animals available.

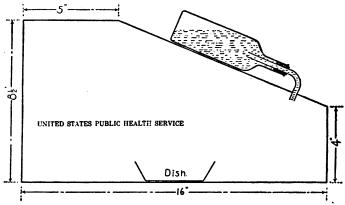
Cats are sufficiently susceptible and with care the same animal may be used several times.

Guinea pigs are quite resistant to the effects of the gas and should never be used where rats are available.

If guinea pigs be the only test animals obtainable, exposure should be prolonged and other allowances made for these animals' increased resistance to the gas, as indicated in the included table.

#### DIRECTIONS FOR RAISING RATS AND MICE.1

Breeding cages.—Rats: Cages measure (see diagram), 16 inches long, 8½ inches high at back, 4 inches high in front, and have a door 5 inches square on top. Each cage sets in a galvanized-iron tray 15 by 17 by 3½ inches. The racks on which these cages are placed are most conveniently made to hold five tiers of cages. The measurements of these racks are 78 inches high, 64 inches wide, 31 inches deep. This provides for two rows of cages, one facing on either side of the rack. The racks are made skeleton fashion of strips of creosoted wood about 1½ by 1½ inches for uprights; 4½ by ½ inch for cross strips. The cages themselves are made of wire screening of one-half inch mesh. The food is placed in clean porcelain dishes, one to a cage. Water is provided through a bottle with a glass tube inserted through a rubber cork (see diagram). Each tray is filled to the depth of a half inch under the cage with clean sawdust, which is changed once a week. The food consists of a daily feeding of four parts corn to one part sun-



Section of rat cage. Door is on inclined top.

flower seed, a mash of bread and milk smeared on the meshes of the cage once a day, and large squares of dog biscuit wired to the back of the cage.

Mice: The methods for mice differ mainly in using smaller sized cages, viz, 9 by 9 by 7 inches, and more cages to the rack. The mouse racks are made of the same material as the rat racks except that the cages rest on solid boards.

The racks are 60 inches high, 72 inches long, and 14 inches deep. This accommodates 10 cages to the shelf, 1 row deep and 4 tiers to the rack. These cages are not set on trays as the rat cages are, but rest on clean sawdust distributed along each shelf. Mesh for mouse cages should be one-quarter inch to prevent young from falling or crawling through. The same food is used as for rats.

Bresds best suited for raising.—Rats: The hardiest rats are those derived from the Norway breed Mus norvegicus, which is the common gray rat in our cities. When caught wild they so preserve their wild temperament that they are rather difficult to propagate, but tamed varieties of these which show a high fertility can be procured from laboratories or fanciers.

Mice: The best breeds of mice may all be classified under the common house mouse, since domesticated varieties have come from the common house mouse Mus musculus.

<sup>&</sup>lt;sup>1</sup> Written for this report by Prof. W. E. Castle and Mr. L. C. Dunn, Bussey Institution for Research in Applied Viology, Harvard University.

The albino, black, and gray varieties are the best breeders. The yellow varieties are especially to be avoided, since the size of the litter and length of breeding period are both less favorable to procuring large numbers. These yellow mice also have a tendency toward an early accumulation of fat which hinders their breeding.

Number of litters that may be expected per year.—From each pair of rats about 6 to 10 litters may be expected during life. They are mature at three months and reach the climax of their breeding ability at about one year. Ordinarily they will not breed after a year and a half old. For the mice this number is slightly larger and the breeding time about the same.

Number in each litter.—Rat litters average about 8. The period of gestation in rats is about 30 days, for mice exactly 21 days. Mouse litters average 6.

Destruction of young by older animals.—Both rats and mice, especially those recently caught, show a tendency to eat their first litter. This possibility decreases with the length of time in captivity and with the age of the animal. The eating is usually done by other females in the cage, so that the best method of prevention is:

- 1. Isolate the pregnant mothers from breeding cages.
- 2. Limit the number of mothers bred in any one cage.

Breeding age.—Rats breed at about three months and mice at about one to two months.

Number and sex to each cage.—For both rats and mice the best number has been found to be three females and one male to each cage.

Effects of temperature on breeding.—Both rats and mice breed best at the temperatures ordinarily maintained for human living purposes, say between 65° F. and 70° F. The temperature should be constant and variations above or below normal, although producing no specific effects, reduce the number of young that may be expected and the general vigor of the animals.

Miscellaneous information.—Cleanliness and clean food are important. Shredded tissue paper should be supplied to each cage for nesting. Both rats and mice are subject to the attack of an itch mite, which produces sores, especially on tails and ears. The prevention for this is the elimination of all suspected animals, and the cure is repeated dipping in lukewarm solution of creolin and water, 1 to 100. Cages may be sterilized by dipping in a boiling solution made up in the same way.

# 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.

### Minnesota.

Collaborating Epidemiologist Bracken reported that during the period from March 17 to April 14, 1917, 86 cases of cerebrospinal meningitis, with 33 deaths, were notified in Minnesota, making a total of 124 cases, with 58 deaths, reported since January 1, 1917.

### State Reports for March, 1917.

Place.	New cases reported.	Place.	New cases reported:
District of Columbia	7	Massachusetts—Continued. Norfolk County—	
Maryland: Baltimore City	17	Quincy	1
Dorchester County— Cambridge	3	Boston	17
Total	20	Vermont: Burlington	1
Massachusetts: Berkshire County— Pittsfield	2	Wisconsin: Columbia County	1
Bristol County— Fall River Norton (town)	1	Grant County Milwaukee County	1
Swansea (town)	i	Oneida County Pierce County Vernon County	2 2
Essex County— Beverly Lynn Peabody (town)	1	Walworth County	
Middlesex County— Lowell	1	Total	15

### Arkansas Report for January, 1917.

During the month of January, 1917, cases of cerebrospinal meningitis were notified in Arkansas as follows: One case each in Mississippi and Polk Counties.

### CEREBROSPINAL MENINGITIS—Continued.

### City Reports for Week Ended Mar. 31, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.  Baltimore, Md. Boston, Mass. Bridgeport, Conn. Buffalo, N. Y. Chicago, Ill. Ciucinnati, Ohio. Cleveland, Ohio. Columbus, Ohio. Dayton, Ohio. Detroit, Mich. Duluth, Minn. Evansville, Ind. Fall River, Mass. Hartford, Conn. Kansas City, Mo. Lincoln, Nebr. Lynn, Mass.	1 5 2 4 1 2 3 1 7 4	3 1 1 3 3	Milwaukee, Wis. Montclair, N. J. Newark, N. J. New York, N. Y. Niagara Falls, N. Y. Omaha, Nebr. Philadelphia, Pa. Pittsfield, Mass. Portsmouth, Va. St. Louis, Mo. St. Paul, Minn. Salt Lake City, Utah. Sioux City, Iowa. Toledo, Ohio. Washington, D. C. Wheeling, W. Va.	5 37 4 1 2 10 2 1	11

### DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 579.

## ERYSIPELAS.

### City Reports for Week Ended Mar. 31, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio. Ann Arbor, Mich. Baltimore, Md. Binghamton, N. Y. Boston, Mass. Brockton, Mass. Brockton, Mass. Brothe, Mont. Chicago, Ill. Cincinnati, Ohio. Cleveland, Chio. Cumberland, Md. Dayton, Chuo. Detroit, Mich. Duluth, Minn. El Paso, Tex. Hartford, Conn. Kalamazoo, Mich. Kansas City, Mo. Lancaster, I'a. Lexington, Ky.	1 1 1 6 1 41 11 1 8 1	3 3 1	Milwaukee, Wis. Newark, N. J. New Yor N. Y. Philadelphia, Pa.	6 8 8 5 5 16 1 2 2 2 2 2 3 3 5 5 2 1	

## MALARIA.

## Massachusetts Report for March, 1917.

Place.	New cases re- ported.	Place.	New cases re- ported.
Massachusetts: Bristol County— Fall River	1 1 1	Massachusetts—Continued. Suffolk County— Boston Worcester County— Douglas (town). Total.	1 1 5

### MALARIA—Continued.

### Arkansas Report for January, 1917.

Place.	New cases re- ported.	Place.	New cases re- ported.
Arkansas: Carroll County Clay County Cleveland County Greene County Jackson County Lard County Jackson County Lafayette County Mississippi County Newton County	1 6 12 6 4 16 19	Arkansas—Continued. Ouachita County Perry County Phillips County. Polk County. Pope County. Sevier County White County.	1

### City Reports for Week Ended Mar. 31, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Charleston, S. C Detroit, Mich			Richmond, Va	1 2	

### MEASLES.

### California Los Angeles.

Senior Surg. Brooks reported that during the week ended April 7, 1917, 301 cases of measles were notified in Los Angeles, Cal.

### Illinois-Cairo.

Acting Asst. Surg. Barrows reported that during the week ended April 7, 1917, 648 cases of measles, with 4 deaths, were notified in Cairo, Ill.

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 579.

### PELLAGRA.

### State Reports for March, 1917.

During the month of March, 1917, one case of pellagra was notified in Maryland, at Nanticoke, Wicomico County, and one case in Massachusetts, at Lowell, Middlesex County.

### Arkansas Report for January, 1917.

Place.	New cases reported.	Place.	New cases reported.
Arkansas: Cleveland County Drew County Logan County.	4 3 1	Arkansas—Continued. Polk County Pepe County Total	1 3 12

### PELLAGRA—Continued.

## City Reports for Week Ended Mar. 31, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala Charleston, S. C. Concord, N. H.		1 2 1	Lexington, Ky	2	1 1 2

### PNEUMONIA.

### City Reports for Week Ended Mar. 31, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Allentown, Pa.  Baltimore, Md.  Berkeley, Cal.  Binghamton, N. Y.  Braddock, Pa. Canton, Ohio. Chicago, Ill. Cleveland, Ohio. Covington, Ky. Dayton, Ohio. Detroit, Mich. Deltroit, Mich. Grand Rapids, Mich. Harrisburg, Pa. Kalamazoo, Mich. Kansas City, Mo. Lancaster, Pa.	325 44 1 1 13	30 5 3 182 59 2 62 4 1	Lorain, Ohio Los Angeles, Cal. Newark, N. J. New Castle, Pa. Pasadena, Cal Philadelphia, Pa Pittsburgh, Pa Racine, Wis Reading, Pa Rochester, N. Y Saginaw, Mich Salt Lake City, Utah San Diego, Cal Sandusky, Ohio San Francisco, Cal Schenectady, N. Y Toledo, Ohio Wilkinsburg, Pa.	10 43 3 1 144 32 1	5 15 15 33 1 10 4 4 1 1 2 2 2 2 5 4 5

## POLIOMYELITIS (INFANTILE PARALYSIS).

### State Reports for March, 1917.

Place.	New cases reported.	Place.	New cases reported
Maryland: Baltimore County— Roland Park. Canton.  Total.  Massachusetts: Essex County— Beverly. Middlesex County— Lowell Newton. Woburn. Plymouth County— Bridgewater (town). Whitman (town)	1 1 2 2 1 1 1 1 1 1	Massachusetts—Continued. Suffolk County— Boston  Total  Vermont: Washington County— Duxbury Waterbury  Total  Wisconsin: Eau Claire County	2 8 1 5 6

## Arkansas Report for January, 1917.

During the month of January, 1917, two cases of poliomyelitis were notified in Logan County, Ark.

# City Reports for Week Ended Mar. 31, 1917.

Place,	Cases.	Deaths.	Place.	Cases.	Deaths.
Chicago, Ill. Fort Wayne, Ind. New York, N. Y	1 1 3		Toledo, Ohio		1

### RABIES IN ANIMALS.

### City Report for Week Ended Mar. 31, 1917.

During the week ended March 31, 1917, two cases of rabies in animals were reported in Buffalo, N. Y.

### SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 579.

### SMALLPOX.

### Connecticut.

Collaborating Epidemiologist Black reported that during the two weeks ended April 14, 1917, new cases of smallpox were notified in Connecticut as follows: Bristol, 4; Hartford, 1; Naugatuck, 1; New London, 1; Newtown, 6; Southington, 3; Waterbury, 1.

### Illinois-Cairo.

Acting Asst. Surg. Barrows reported that during the week ended April 7, 1917, 8 new cases of smallpox were notified in Cairo, Ill.

### Minnesota.

Collaborating Epidemiologist Bracken reported that during the week ended April 14, 1917, three new foci of smallpox infection were reported in Minnesota, cases of the disease having been notified as follows: Chisago County, Franconia Township, 1; Redwood County, Granite Rock Township, 1; Swift County, De Graff, 1.

### Oregon-Astoria.

Surg. Ebert reported that during the period of 14 days ended April 7, 1917, 28 cases of smallpox were notified in Astoria, Oreg.

### State Reports for March, 1917.

			Vaccination history of cases.			
lace.	New cases reported.	Deaths.	Number vaccinated within 7 years pre- ceding attack.	Number last vacci- nated more than 7 years preceding attack.	never suc-	Vaccination history not obtained or uncertain.
Maryland: Baltimore City	7				7	
Massachusetts: Worcester County— Worcester	5			3	. 2	

# SMALLPOX—Continued.

# Miscellaneous State Reports.

Arkansas (Jan. 1-31):  Calhoun 5 Chippewa County 12 Columbia County 3 Dallas 1 Dane County 14 Garland 14 Douglas County 7 Greene 15 Dunn County 4 Hempstead 7 Ean Claire County 3 Jackson 7 Ean Claire County 1 Mississippi 53 La Crosse County 5 Phillips 1 LaCrosse County 5 Phillips 1 LaCrosse County 1 Polk 12 Lincoln County 1 Prairie 3 Manitowoe County 1 Pulaski 4 Marathon County 1 St. Francis 7 Marinette County 2 St. Francis 7 Marinette County 1 White 12 Milwaukee County 5 Total 156 Pierce County 5 Multnomah County 6 Price County 5 Multnomah County 7 Portland 4 Walworth County 1 Price County 1 Rock County 1 Price County 1 Rock Rock Rock 1 Rock Rock Rock Rock Rock Rock	Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Rutland County	Arkansas (Jan. 1-31): Calhoum Clay Dallas Garjand Greene Hempstead Jackson Lawrence Mississippi Phillips Polk. Prairie Pulaski St. Francis White  Total Oregon (Feb. 1-28): Multnomah County— Portland Vermont (Mar. 1-31): Washington County Rutland County	5 5 5 1 14 15 5 7 7 7 10 53 3 4 7 7 12 156 4 1		Wisconsin (Mar. 1-31)—Con. Chippewa County Columbia County Dane County Donglas County Donglas County Ban Claire County Green County La Crosse County La fayette County Lafayette County Manitowo County Maritowo County Marinette County Marinete County Monroe County Pierce County Price County Price County Rock County Walworth County Washington County Washington County Washington County Wanpaca County Wanpaca County Wanpaca County Wanpaca County	12 3 14 7 4 3 1 1 5 1 2 1 2 1 2 2 1 2 2 4 2 2 1 4 2 1 4 2 1 2 4 2 1 4 2 2 4 2 4	

# City Reports for Week Ended Mar. 31, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio Ann Arbor, Mich Austin, Tex Baltimore, Md Butte, Mont Cleveland, Ohio Covington, Ky Danville, Ill Davenport, Iowa Detroit, Mich El Paso, Tex Evansville, Ind Flint, Mich Fort Worth, Tex Galveston, Tex Grand Rapids, Mich Indianapolis, Ind. Kansas City, Mo La Crosse, Wis Lima, Ohio Little Rock, Ark Madison, Wis	2 11 2 3 3 7 6 8 8 2 2 1 1 4 2 2 2 7 7 4 4 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	1	Marinette, Wis Minneapolis, Minn Muscatine, Iowa New Castle, Pa New Orleans, La New York, N. Y. Oklahoma City, Okla Omaha, Nebr Rockford, Ill St. Joseph, Mo St. Louis, Mo St. Louis, Mo St. Paul, Minn Salt Lake City, Utah San Francisco, Cal Seattle, Wash Springfield, Ill Toledo, Ohio Topeka, Kans Wichita, Kans Zanesville, Ohio	38 2 15 10 16 1 17 6 3 1 17 11 14 5	

### TETANUS.

# City Reports for Week Ended Mar. 31, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
El Paso, Tex	1 2		New York, N. YQuincy, III	1	1 1

## TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 579.

# TYPHOID FEVER.

## State Reports for March, 1917.

Place.	New cases re- ported.	Place.	New cases reported.
District of Columbia	9	Massachusetts—Continued.	
303.		Hampden County—	l .
Maryland:	30	Unicopee	1 2 1
Baltimore City	30	Ludlow (Town)	1 1
Allegany County— Cumberland	2	Russell (Town)	li
Gilmore	1	Chicopee. Holyoke. Ludlow (Town). Russell (Town). Springfield.	ĺ
Western Maryland Hospital	1	II MIGGIESEX COUNTY—	
Anne Arundel County—	_	Cambridge Concord (Town)	1 1
Brooklyn	2	Everett	1 1 1 6 1 4
Revel Station	1	Lowell	l å
Ellicott City	2	Malden (Town)	ĭ
Ellicott City Highlandtown	3	Newton	- Ā
Charles County—		Somerville	1
Charles County— Hughesville	1	Westford (Town)	1
Cecil County—	_	Norfolk County—	_
Chesapeake City Union Hospital	1	Wrentham (Town) Plymouth County—	1
Dorchester County—	1	Product County—	2
Elhotts	1	Brockton	2
Frederick County—	•	Suffolk County—	_
Brunswick	1	Boston	7
Walkersville (R. F. D.)	3	Worcester County— Ashburnham (Town)	
Garrett County— Friendsville		Ashburnham (Town)	1
Friendsville	1	Fitchburg	1
Harford County— Fallston	2	Westborough (Town)	1
Howard County—	2	Worcester	6
Ellicott City	13	W GLCCSVCI	
Ellicott City	ĭ	Total	69
Kent County—	_		
Chestertown	2	Vermont:	
Millington Prince George County— Camp Springs (R. F. D.) Somerset County— Crisfield (R. F. D.)	1	Addison County	4 2
Prince George County—	1	Fronklin County	11
Somerset County-	-	Franklin County Grand Isle County	'n
Crisfield (R. F. D.)	1	wasnington County	ĩ
Washington County—	- 1	Windham County Windsor County	1
Hancock	1	Windsor County	1
Wicomico County— Wetipquin			
Wetipquin	1	Total	21
Total	74	Wisconsin:	
1001		Bayfield County	2
Massachusetts:		Brown County	2
Barnstable County—	- 1	Buffalo County	1
Chatham (Town)	1	Door County	12
Berkshire County—	- 1	Eau Claire County	4
Great Barrington (Town)	1	Grant County	i
Bristol County—	6	Manitowoc County	3
Fall River	2	Milwaukee County	15
Essex County—	-	Price County	1
Haverhill	1	Racine County	1
Lawrence	3	Richland County	1 1
Lynn	4	Rusk County	6
Methuen (Town)	1	Sheboygan County	i
Peabody (Town)	i	TIMEDASO COUNTY	
Rockport (Town)	î	Total	52
Peabody (Town).  Rockport (Town).  Saugus (Town).  Franklin County.	2		
Franklin County— Greenfield (Town)	1		

### TYPHOID FEVER—Continued.

### Oregon Report for February, 1917.

Place.	New cases reported.	Place.	New cases reported.
Oregon: Clackamas County Clatsop County Columbia County Jackson County Lane County	2 1 1	Oregon—Continued. Multnomah County— Portland Umatilla County. Total	7 1 17

### Arkansas Report for January, 1917.

Place.	New cases reported.	Place.	New cases reported.
Arkansas: Cleveland County. Izard County. Mississippi County Newton County Perry County.	1 4 1	Arkansas—Continued. Pope. Sevier County Washington County Total.	4 3 2 22

### City Reports for Week Ended Mar. 31, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Albany, N. Y. Baltimore, Md. Beaver Falls, Pa. Binghamton, N. Y. Birmingham, Ala. Boston, Mass. Brockton, Mass. Buffalo, N. Y. Canton, Ohio. Chicago, Ill. Chicopee, Mass. Cincinnati, Ohio. Cleveland, Ohio. Coffeyville, Kans. Covington, Ky. Detroit, Mich. Fall River, Mass. Galveston, Tex. Garand Rapids, Mich.	4 6 3 1 1 2 2 1 1 1 1 2 7 2 1	1	Milwaukee, Wis. Minneapolis, Minn. Newark, N. J. New Bedford, Mass. New Castle, Pa. New Haven, Conn. New London, Conn. New Orleans, La. New York, N. Y. Norristown, Pa. Perth Amboy, N. J.	55 11 11 12 22 11 22 10 10 11 66 11 22	1
Indianapolis, Ind. Jackson, Mich. Kalamazoo, Mich. Kansas City, Kans. Kansas City, Mo. Lawrence, Mass. Los Angeles, Cal. Lowell, Mass. Lynn, Mass. Manchester, N. H.	6 1 1 1 1 4 1	1	San Francisco, Cal. South Bend, Ind. Springfield, Mass. Syracuse, N. Y. Toledo, Ohio. Troy, N. Y. Wilkinsburg, Pa. Watertown, N. Y. Wilmington, Del.	1 1 1 2 1	j

### TYPHUS FEVER.

### Texas.

Senior Surg. Pierce reported that during the two weeks ended April 7, 1907, one new case of typhus fever was notified at Laredo, Tex., making a total of 79 cases of the disease reported from points on the Mexican border since July 1, 1916.

During the 14-day period ended April 7, 1917, 134,345 persons were inspected at points along the Mexican border. Of this number 8,909 were disinfected for destruction of vermin and 3,366 were vaccinated. Thirty persons were refused admission because of illness.

# PREVENTABLE DISEASES. Massachusetts Report for Week Ended Mar. 31, 1917.

	Cases reported.		Cases reported.
Anthrax Cerebrospinal meningitis Chicken pox Diphtheria Dysentery German measles Malaria Measles Mumps	197 1 171 1	Ophthalmia neonatorum Poliomyelitis (infantile paralysis) Scarlet fever Septic sore throat Trachoma. Tuberculosis (pulmonary). Tuberculosis (other forms). Typhoid fever. Whooping cough.	1 184 1 4 160 9

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

### State Reports for March, 1917.

	c	ases report	ed.		Cases reported.				
Place.	Diph- theria.	Measles.	Scarlet fever.	Place.	Diph- theria.	Measles.	Scarlet fever.		
District of Co- lumbia Maryland	142 125	517 1, 289	54 132	Massachusetts Vermont Wisconsin	859 32 236	2, 857 2, 224 632	721 100 1,329		

### State Reports for January and February, 1917.

During the month of January, 1917, 29 cases of diphtheria, 891 cases of measles, and 27 cases of scarlet fever were reported in Arkansas.

During the month of February, 1917, 3 cases of diphtheria, 1,175 cases of measles, and 111 cases of scarlet fever were reported in Oregon.

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

# City Reports for Week Ended Mar. 31, 1917.

	Popula- tion as of July 1, 1916	Total deaths	Diph	theria.	Me	sles.		erlet ver.	Tu cul	ber- osis.
City.	(estimated by U. S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases,	Desths.	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. St. Louis, Mo. From 300,000 to 500,000 inhabitants:	589, 621 756, 476 2, 497, 722 674, 073 571, 784 503, 812 5, 602, 841 1, 709, 518 579, 090 757, 309	278 277 850 256 282 141 1,668 680 209 285	14 82 200 33 114 5 290 91 31 86	1 21 7 10 1 30 15 2 6	123 172 1,060 150 121 350 1,051 107 154 644	1 1 6 1 2 1 9 7 3 5	14 56 564 15 327 17 216 36 7	3 20 4	37 63 227 42 47 61 397 125 27	40 36 81 23 22 18 193 77 12 25
Buffalo, N. Y. Cineinnati, Ohio Jersey City, N. J. Milwaukee, Wis. Minneapolis, Minn Newark, N. J. New Orleans, La. San Francisco, Cal. Seattle, Wash. Washington, D. C. From 200,000 to 300,000 inhabitants:	468, 558 410, 476 306, 345 436, 535 363, 454 408, 894 371, 747 463, 516 348, 639 363, 980	222 156 79 146 	24 17 11 8 29, 24 10 21 1 26	3 1 1 2	15 55 15 19 14 92 43 144 139 167	1	19 10 27 120 21 23 1 30 7	2	29 33 29 34 46 31 37	22 24 12 5 20 32 19 12 18
Columbus, Ohio Indianapolis, Ind Kansas City, Mo Portland, Oreg Providence, R. I. Rochester, N. Y. St. Paul, Minn. From 100,000 to 200,000 inhabit-	214, 878 271, 708 297, 847 295, 463 254, 960 256, 417 247, 232	70 41 104	9 4 7 3 28 8 8	1 1 1	93 591 234 90 19 49 96	2 1 2	6 13 89 22 12 81 12	1 1 1	7 12 2 1  12 16	5 8 2 10 5 11
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. Lowell, Mass. Lynn, Mass Lynn, Mass Nashville, Tenn New Bedford, Mass New Haven, Conn Omaha, Nebr Reading, Pa Richmond, Va Salt Lake City, Utah Springfield, Mass. Syracuse, N. Y Tacoma, Wash Toledo, Ohio Trenton, N. J Worcester, Mass. From 50,000 to 100,000 inhabit- ants:	104, 199 181, 762 121, 579 112, 981 106, 233 127, 224 128, 386 104, 562 128, 291 110, 900 113, 245 102, 425 107, 560 117, 057 118, 158 149, 685 165, 470 109, 381 156, 687 117, 399 105, 942 155, 624 111, 593 111, 593 111, 593 111, 594	45 37 37 30 58 21 30 23 37 48 25 48 25 44 42 23 38	3 2 3 10 11 14 7 1 5 6 10 4	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	300 2220 100 67 67 2 2 79 46 46 87 2226 7 4 46 48 18 57 3 2 2 107 7 9 2 20 7 9 107 107 107 107 107 107 107 107 107 107	2 4 4	7 1 2 8 8 2 2 1 1 15 7 2 2 2 10 10 1 2 2 3 4 11 1 15 8 3 4 1 4 8 1 9 9	1 2	9 12 5 7 7 7 7 4 4 3 3 10 9 9	67 6 84 42 23 21 84 42 66 33 10 10 53
ants: Akron, Ohio. Allentown, Pa. Atlantic City, N. J. Bayonne, N. J. Berkeley, Cal. Binghamton, N. Y. Brockton, Mass. Canton, Mass. Charlesten, S. C. Covington, Ky.	85, 625 63, 505 57, 660 69, 893 57, 653 53, 973 67, 449 60, 852 60, 734 57, 144	21 8 15 38 15 13 31	16 3	2	102 41 38 34 2 1 6	i	3 11 4 2 6 1 3		2 5 2 3	2 4 1

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

## City Reports for Week Ended Mar. 31, 1917—Continued.

	Popula- tion as of July 1, 1916	Total deaths	1 -	theria	. Mea	asles.	Sca fer	rlet ver.	Tu cul	iber- losis.
City.	(estimated by U. S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 50,000 to 100,000 inhabit-										
ants—Continued. Duluth, Minn	94, 495	9	1		9	1	7	l	1	2
Duluth, Minn Elizabeth, N. J El Paso, Tex Evansville, Ind Fint, Mich Fort Wayne, Ind Harrisburg, Pa Hoboken, N. J Johnstown ,Pa Kamas City, Kans Lancaster, Pa Little Rock, Ark Malden, Mass Manchester, N. H	1 86,690		9		. 5		10		5	2 2
El Paso, Tex	63,705	55	1	1	24	3	1			. 18
Evansville, Ind	76,078 54,772	27 18	1 3		149 25	4		····i	3	4
Fort Wayne Ind	76, 183	21	ı		20		46	1	i	i
Harrisburg, Pa.	1 72,015	27 22	2		4				6	l
Hoboken, N. J	77, 214 68, 529		3		5		5		9	4
Johnstown ,Pa	68,529	34	2		13		8			7
Lancaster Pa	99, 437 50, 853		3		17 14		22 1		3	
Little Rock, Ark	57.343	13			48		i		l	
Malden, Mass	51,155	16 22	6		11		1			
Manchester, N. H	78, 283	22	1		4		2			<u>-</u>
Mobile Ala	58, 221 53, 794	28	2		22	1	1		6	5 1 3 2
New Britain, Conn Norfolk, Va	89,612	• • • • • • •	_		34		2			3
Oklahoma City, Okla Passaic, N. J. Pawtucket, R. I.	92, 943	21	1		28		ĩ			2
Passaic, N. J	92, 943 71, 744	15	5						2	1
Pawtucket, R. I	59,411	14	3		1					i
Portland, Me	63, 867	19	1	• • • • • •	1 5					·····2
Sacramento Col	55, 185 66, 895	18 25	····i	• • • • • •	8	2	3		5	5
Saginaw, Mich	55,642	18					13		ĭ	1
St. Joseph, Mo.	85, 236	33 23	5		2		4		ī	2 4
San Diego, Cal	53, 330	23	1		41		1		20	4
Schenectady, N. Y	99,519	21	2		115		8		2	2
Somerville Mess	57, 078 87, 039	30	6	i	3		2 3	• • • • •	3	
San Diego, Cal Schenectady, N. Y Sioux City, Iowa Somerville, Mass South Bend, Ind	68 946	23	·		2		6	• • • • • •		3 3 3 2
South Bend, Ind. Springfield, Ill. Troy, N. Y. Wichita, Kans.	61, 120	8	2		7					3
Troy, N. Y	77, 916 70, 722		2		50		11		5	2
Wichita, Kans	70, 722	• • • • • • • • • • • • • • • • • • • •			151		2		• • • • <u>•</u> •	·····i
Wilkes-Barre, Pa. Wilmington, Del.	76, 776 94, 265	25 48	1	i	4.		1 5		7	1
From 25,000 to 50,000 inhabitants:	34, 200	40	1	-			9		•••••	• • • • •
Alameda, Cal.	27,732	4			5		3		1	l
Auburn, N.Y	27, 732 37, 385	10	1				1			1
Austin, Tex	34,814	7	2		5		1		• • • • • • •	1
Brookine, Mass	32,730   27,632	6 8	3 3 2		2 1		1		1	····i
Butte Mont	43, 425	31	2		31					i
Chelsca, Mass	46, 192	14	4		3		3		4	î
Chicopée, Mass	29,319	8	2		2		1		3	1
Cumberland, Md	26,074	9.			6		ا-ي		2	3
Davennort Iowa	32,4261 48,811	6			12		2		• • • • • •	•••••
From 25,000 to 50,000 inhabitants: Alameda, Cal. Auburn, N. Y. Austin, Tex. Brookline, Mass. Butler, Pa. Butte, Mont. Chelsea, Mass. Chicopee, Mass. Cumberland, Md. Danville, Ill. Davenport, Iowa. Dubuque, Iowa. East Chicago, Ind. East Orange, N. J. Elgin, Ill. Everett, Mass.	39.873				3		6		2	·····ż
East Chicago, Ind	28, 743		1		16					<del>-</del>
East Orange, N. J.	42.458	10	2		8	• • • • •	2		1	· · •
Eigh, III	28, 203 39, 233	10 11	9	• • • • • •	38	• • • • • •	1 2		2	i
Everett, Mass Everett, Wash	35, 486	8	9	•••••	24	• • • • • • • • • • • • • • • • • • • •	- 2		- 4	i
Fitchburg, Mass	41,781	10	3		2.				i	
Fitchburg, Mass	41,863	11	3 1		8 .				1	3
Haverhill, Mass	48,477		22	1	1 .		5		4	4 1 3
Jackson, Mich	35,363 48,886	16	2	• • • • • •	31 !.	• • • • •	5		1 6	ī
Kalamazoo, Mich Kenosha, Wis. Kingston, N. Y. Knoxville, Tenn La Crosse, Wis. Lexington, Ky.	31,576	21 4	3 1	· · · · · · · · · · · · · · · · · · ·	18		5		î	
Kingston, N. Y.	26,771	8	•		1				ا.ث	····i
Knoxvillé, Tenn	38,676								3	•••••
La Crosse, Wis	31,677	5	1		• • • • • • • • • • • • • • • • • • • •		4		2	•••••
Lexington, Ky	41,097	14	····ː	•••••	16 .		1 .			2 1
Lincoln Nobe	35, 384 46, 515	6 21	3	•••••	96 i.		23		···i	ı
Long Beach, Cal	27, 587	8					2		î l	• • • • • •
Lorsin, Ohio	27, 587 36, 964		2		2		2			• • • • •
Lims, Ohio Limcoln, Nebr Long Béach, Cal Lorsin, Ohio Lynchburg, Va Madison, Wis. Medford, Mass	32,940	6	.		7				3	<b>.</b>
Madison, Wis	30,699		٠٠٠٠ إ٠٠١	-	; -	•••••	22		2	· · · · •
mediord, Mass	26, 234	5	21.		14  .		2 !.			• • • • •

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

## City Reports for Week Ended Mar. 31, 1917-Continued.

-i.	Popula- tion as of July 1, 1916	Total deaths	Diph	theria.	Me	asles.		arlet ver.		ber- osis.
City.	by U.S.   8	from all causes.	Cases.	Desths.	Сазез.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabit-										
ants—Continued.  Montclair, N. J.  New burgh, N. Y.  New Castle, Pa.  Newport, R. I.  Newport, R. I.  Newton, Mass.  Niagara Falls, N. Y.  Norristown, Pa.  Ogden, Utah.  Orange, N. J.  Pasadena, Cal.  Perth Amboy, N. J.  Pittsfield, Mass.  Portsmouth, Va.  Quincy, Mass.  Racine, Wis.  Racanoke, Va.			1	l	١.		١.	1	١ ـ	4
Montclair, N. J	-26,318 29,603	6 19			1	ļ	1		3	····· <u>·</u>
New Castle, Pa	41, 133	15			7	1			1 *	, ,
Newport, Ky	31, 927	8					1		i	i
Newport, R. I	30, 108	9			l <u></u> .					
Newton, Mass	43,715	11	1		42		1		ļ <u>.</u> .	
Niagara Falls, N. Y	37, 353	18 14	<b></b> .		26	·	2		3	] <u>.</u>
Norrisiowii, Fa	31, 401 31, 404	11	] <u>-</u>	• • • • • •	5		5	]	i	3
Orange N I	33,080	12	2		3				i	1 3
Pasadena, Cal.	46, 450	9			12					,
Perth Amboy, N. J	41, 185		2		1				2	l
Pittsfield, Mass	38,629	17			1	{	6	[	1	
Portsmouth, Va	39,651	13			22		5			- 1
Quincy, III	36,798	9 11	1		15		1 2			
Pacino Wis	38, 136 46, 486	18	• • • • • • •		• • • • • •		î		3	2 2
Roamoke, Va.  Roamoke, Va.  San Jose, Cal.  Steubenville, Ohio.  Superior, Wis.  Taunton, Mass.  Topeka, Kans.  Waltham Mass	43, 284	14	1		85		2		3	4
San Jose, Cal.	00, 502				ii		3		ĭ	
Steubenville, Ohio	27, 445	8					1			
Superior, Wis	46, 226	7	1		1		2			
Taunton, Mass	36, 283	13			2		3		1	
Topeka, Kans	48,726	12	4	····i	77		4	• • • • • •		1
Watertown N V	30, 570 29, 894	12	* 1	• •	8		• • • • • •		• • • • •	• • • • • •
West Hoboken N. J.	43, 139	12	2		5		2		1	
Wheeling, W. Va	43, 139 43, 377 33, 809	21			5				î	3
Williamsport, Pa	33, 809		1		39		1			
Wilmington, N. C	29,892	9			22					1
Waitham, Mass. Watertown, N. Y. West Hoboken, N. J. Wheeling, W. Va. Williamsport, Pa. Williamsport, Pa. Wilmington, N. C. Winston-Salem, N. C. Zanesville, Ohio	31, 155	17			13		1		5	1
Zanesville, Ohio From 10,000 to 25,000 inhabitants: Ann Arbor, Mich Beaver Falls, Pa	30,863	15			• • • • •		2			• • • • • •
Ann Arbor Mich	15,010	15	1	.	13		17	- 1	1	
Beaver Falls, Pa	13, 532	10	- 1		13		11		- 1	• • • • •
Draudock, ra	21,685		2							• • • • • • • • • • • • • • • • • • •
Cairo, Ill	15, 794	6			35					3
Clinton, Mass	1 13, 075	6			12		1		1	3 1 1
Coffeyville, Kans	17, 548	••••••			7		:.			1
Colosburg III	22,669 24,276	5	2 4		2		1			• • • • •
Harrison N T	16, 950	6	1		3		3		2	• • • • •
Kearny, N. J.	23, 539	9	î		i		3		2	•••••
Kokomo, Ind	23, 539 20, 930	8			5					2 1
Long Branch, N. J	15, 395	5			12					• • • • •
Cairo, III. Clinton, Mass. Coffeyville, Kans. Concord, N. H. Galesburg, III. Harrison, N. J. Kearny, N. J. Kokomo, Ind. Long Branch, N. J. Marinette, Wis. Melrose, Mass. Morristown, N. J.	1 14,610	5 3 5		-			1		1	• • • • • • •
Meirose, Mass	17, 445 13, 284	5			4				•••••	ļ
Mirroratina Towa	17,500	3	• • • • • • • • • • • • • • • • • • • •	• • • • • • •	3		1	•••••	2	1
Nanticoke Pa	23, 126	7	2		3			• • • • • • • • • • • • • • • • • • • •		• • • • •
Newburyport, Mass	15, 248	4 .			23				3	· · · · · · ·
Morristown, N. J.  Muscatine, Iowa Nanticoke, Pa Newburyport, Mass New London, Conn North Adams, Mass NorthAnmton Mass	20, 985	5 .			1			].		•••••
North Adams, Mass	1 22, 019	5 .	.		1	···i	1	.	ا.يا	
Northampton, Mass	19,926 ].		.		11	1	1 .	•••••	1	1
Portsmouth N H	23,805	10	• • • • •   •		2		3		3	• • • • •
Rocky Mount, N. C.	11,666 . 12,067	4	.	.	4		* 1		••••••	• • • • •
Rutland, Vt.	14, 831	3	i i		i		3			· · · · · ·
Sandusky, Ohio	12,067 14,831 20,193	21			3	1.			3	i
North Adams, Mass. North Adams, Mass. North Adams, Mass. Plainfield, N. J. Portsmouth, N. H. Rocky Mount, N. C. Rutland, Vt. Sandusky, Ohio. Saratoga Springs, N. Y. Steelton, Pa. Wiltinsburg, Pa.	13, 821	6	4 .		7		3 .			•••••
Steelton, Pa	15, 548	6 .		.		.				
W MRIIISDUIE, I d	23, 228	12 .		-			1  .		2	••••••
Woburn, Mass	15,969 .									1

<sup>&</sup>lt;sup>1</sup> Population Apr. 15, 1910; no estimate made.

## FOREIGN.

### CHILE.

## Plague-Antofagasta-Tacna.

The occurrence of two cases of plague at Antofagasta and one case at Tacna, Chile, was reported March 12, 1917.

### CUBA.

### Communicable Diseases-Habana.

Communicable diseases have been notified at Habana as follows:

	Mar. 11-	Remain- ing under	
Disease.	New cases.	Deaths.	ment Mar. 20, 1917.
Diphtheria	3		. 6
Leprosy	18	1	9 18
Measles. Paratyphoid fever.	29		33
Scarlet fever	1		2
Smallpox	10 5	2	$\frac{1}{33}$

### GREAT BRITAIN.

### Further Relative to Anthrax-Longwood.

A case of anthrax was reported March 8, 1917, at Longwood, near Huddersfield, England, in the person of an employee in a woolen mill. On March 15 another case was reported as occurring in an employee of the same mill.

### Anthrax-Todmorden, Yorkshire.

Two cases of anthrax have been recently reported at Todmorden, Yorkshire, among employees engaged in handling hides. The hides used were imported from Batavia, Java.

### Plague-Infected Rats-Hull.

Two plague-infected rats were found at Hull, England, during the week ended March 17, 1917. The rats were found dead in the hold of the steamship *Venetia* which left Bombay January 20, arriving at Hull, via Portland, England, March 9, 1917.

### MAURITIUS.

### Plague.

A recurrence of plague was reported December 9, 1916, in the island of Mauritius, with a total to February 3, 1917, of 20 cases with 11 deaths. The infected localities are in the district of Port Louis. The last previously reported cases of plague in Mauritius occurred in June, 1916.

RUSSIA.

### Typhus Fever-Poland.

During the period from October 1 to December 2, 1916, 1,538 cases of typhus fever were reported in Poland. Of these, 611 cases occurred at Warsaw and 201 cases at Lodz.

# CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER. Reports Received During the Week Ended Apr. 20, 1917.1

#### CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				Outbreak with 72 cases reported
macao				Mar. 1, 1917.
India:	I	ł	i	
Bassein	Jan. 21-Feb. 3		13	
Bombay	Feb. 4-10		1	
Calcutta	do	1	9	
Madras	do	1		~
Moulmein			2	
Rangoon	Jan. 28-Feb. 10	4	3	•
Indo-China:				
Provinces				Dec. 1-31, 1916: Cases, 77; deaths
Anam	Dec. 1-31	27	15	44.
Cambodia	do	24	17	•
Cochin-China		25	12	
Tonkin	do	1		
Persia:				
Enzeli	Mar. 21-Sept. 9	74	37	
Kazvin	July 18-Sept. 19	107	65	
Recht	Mar. 21-Oct. 14	165	60	*
Teheran	Aug. 3-Oct. 18	428	409	At 2 localities in vicinity: Cases
Straits Settlements:				64; deaths, 38.
Singapore	Feb. 11-17	1	1	·

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

### Reports Received During the Week Ended Apr. 20, 1917—Continued.

### PLAGUE.

	FLA.	GUE.		
Place.	Date.	Cases.	Deaths.	Remarks.
Chile:	,			
Antolagasta	Mar. 12	2		
TacnaIndia	do	1		Jan 28-Feb 3 1917: Cases
Bassein	Jan. 21-Feb. 3		12	Jan. 28-Feb. 3, 1917: Cases, 18,726; deaths, 14,776.
Bombay	Jan. 28-Feb. 10	28	25	
Karachi Madras	Feb. 11-17 Feb. 4-10	5 1	3	
Madras Presidency	do Jan. 21-Feb. 3	623	383	
Prome	Jan. 21-Feb. 3	<u></u> -	37	
Rangoon	Jan. 28-Feb. 10 Jan. 21-Feb. 3	57	52 11	
Indo-China:	100.0			
Provinces	Dec 1 91	<u>.</u> .	2	Dec. 1-31, 1916: Cases, 15; deaths,
AnamCambodia	Dec. 1-31do	5 10	10	12.
Japan:				
Taiwan Island—	E-1 15 01		3	
Tansui	Feb. 15-21 Dec. 9-Feb. 3	3 20	11	District of Port Louis.
Siam:	. 1			
Bangkok	Feb. 4-17	8.	6	
Straits Settlements: Penang	Jan. 28-Feb. 3	2	1	
Singapore	Feb. 11-24	2	2	
			l	
•	SMAL	LPOX.		
Australia:				
Queensland—				
Thursday Island, quar-	Feb. 8	1		On steamship St. Albans from
antine station.				On steamship St. Albans from Kobe via Hongkong. Vessel pr. ceeded in quarantine to Townsville, Brisbane, and Syd- ney, arriving Feb. 16. Re- leased Feb. 23.
Austria-Hungary:				_
Austria— Prague	Jan. 21-27	1		•
Prague Vienna	Feb. 11-17	1		
Hungary— Budapest	Jan. 28-Feb. 24	29	5	
Brazil:	Jan. 20-1 CO. 24	23	١	
Rio de Janeiro	Feb. 25-Mar. 10	15	6	
Canada: Manitoba—				
Winnipeg	Mar. 25-31	2		
China:	I			Descent
Amoy Dairen Hongkong	Feb. 11-17			Present.
Hongkong	Feb. 18-Mar. 3 Feb. 25-Mar. 10	3i	22	
Egypt:				
AlexandriaGreece:	Feb. 12-Mar. 4	3	2	
Athens	Feb. 27-Mar. 5		1	
India:	T 00 P-1 10		-	
Bombay	Jan. 28-Feb. 10 Feb. 4-17	10 50	7 6	
Rangoon	Jan. 28-Feb. 10	15	ĭ	•
Indo-China:			1	Dec. 1-31, 1916; Cases, 236;
Provinces	•••••••		•••••	deaths, 63.
Anam	Dec. 1-31	21	1	•
Cambodia	do	8 152	2 40	
Cambodia	do	152 55	20	
Italy:	1			D
Italy: Turin Mexico:	Feb. 26-Mar. 4	3	1	Roumanian refugees.
Mexico: Monterey	Mar. 12-25		2	
Russia:	l		1	
Archangel	Jan. 15-28	15 44	3 26	
Moscow	Dec. 31-Jan. 13	31	9	

# Reports Received During the Week Ended Apr. 20, 1917—Continued.

### SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia—Continued.				Oct. 1-Dec. 2, 1916: Cases, 38
Warsaw	Oct. 1-Dec. 2	25		Oct. 1-Dec. 2, 1910. Cases, 90
Siberia— Vladivostok	Jan. 29-Feb. 4	7	2	
Spain: Valencia	Feb. 25-Mar. 3	. 1		
Straits Settlements: Penang	Jan. 28-Feb. 17	8	1	
Singapore	Feb. 11-17	1		
Switzerland: Basel	Feb. 25-Mar. 3	7		
Funisia: Tunis	Feb. 24-Mar. 2	2	2	

### TYPHUS FEVER.

	1	1	1	
Austria-Hungary:			ł	
Austria—	ĺ		İ	ł
	Jan. 28-Feb. 24	1 4	1	'
Prague		1	[	i
Vienna	Jan. 2-Mar. 3	31		
Hungary—	l	l	1	
Budapest	Jan. 28-Feb. 24	10	1	
Egypt:			1	1
Alexandria	Feb. 12-Mar. 4	142	28	
	reb. 12-Mai. 4	170		
Germany:	D		1	D
Marienwerder district	Dec. 3-9	1		Prison camp.
Neidenburg	Oct. 29-Nov. 18	7		=
Great Britain:		Í		
Belfast	Mar. 11-17	10		
	Mai. 11-11	10		
Greece:	T 44 TO 3 40	ŀ		•
Saloniki	Jan. 14-Feb. 17		13	
Russia:		l	1	
Archangel	Jan. 15-28	15	4	
Moscow	Dec. 25-31	35	4	
Petrograd	Dec. 31-Jan. 13	8		
	1 ec. 31-Jan. 13			0-4 4 D 0 4044 G
Poland				Oct. 1-Dec. 2, 1916: Cases, 1,538;
Lodz	Oct. 1-Dec. 2	201	20	deaths, 119. In invaded re-
Warsaw	ldo	611	36	gions.
Siberia-		l		<b>0</b>
Vladivostok	Jan. 28-Feb. 4	1	1	
				Fab 7 1017: 74
Turkey in Asia				Feb. 7, 1917: 54 cases reported in
	'			Army of the Orient.
		l	1	_

# Reports Received from Dec. 30, 1916, to Apr. 13, 1917. CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Chosen (Korea)India:	AugDec. 29	1,998		
Bassein	Dec. 31-Jan. 6		1 1	
Bombay		13	12	
Do		6	5	
Calcutta			· 161	Oct. 8-14, 1916: Cases, 3.
Do			49	,,
Madras				_
Do			4	Dec. 17-23, 1916: One case.
Moulmein	Dec. 31-Jan. 6		1	•
Rangoon	Nov. 26-Dec. 30	ͺ 5	6	
Ďo		4	4	
Indo-China				Apr. 1-June 30, 1916: Cases, 4,540;
				deaths, 2,869.
Do				July 1-Nov. 30, 1916: Cases, 2,907;
Provinces—				deaths, 2,354.
Anam		1,381	2,309	
Do			529	
Cambodia	May 1-June 30	47	13	
Do	July 1-Nov. 30	140	99 1	

## Reports Received from Dec. 30, 1916, to Apr. 13, 1917—Continued.

### CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China—Continued.				
Provinces—Continued.	Ann 1 Tuma 90	269	111	
Cochin-China Do	Apr. 1-June 30 July 1-Sept. 30	98	111 59	
Kwang-Tcheou-Wan	July 1-Nov. 30	271	264	
Laos	Apr. 1-June 30	102	57	
Do	July 1-Nov. 30 Apr. 1-June 30 July 1-Nov. 30	652 2,780	630 1,385	İ
Tonkin Do	July 1-Nov. 30	998	725	
Saigon	Dec. 25-31	4	3	
Do	Jan. 29-Feb. 4	3	3	
Japan: Fukuoka	Jan. 19	33	1	
Nagasaki	Nov. 27-Dec. 3	9	4	
Do Osaka	Feb. 19-25	1 23	1	A 10 Dec 07 1010 General 075
Usaka	Nov. 16-Dec. 25	23	57	Aug. 13-Dec. 25, 1916: Cases, 971
Do	Dec. 26-Jan. 25	19	10	deaths, 754. Jan. 6-16, 1917: Cases, 9. Aug. 14
Taiwan Island—			į	1916-Jan. 25, 1917: Cases, 990
Keelung	Nov. 13-Dec. 23	5	7	deaths, 641.
Do Taihoku	Feb. 18-24do	14	1 5	
Tokvo	Jan. 23–Feb. 4	4	l	
Yokohama	Nov. 6-Dec. 3	5	3	
Districts	do	1	1	
East Java	Oct. 14-17	5	3	
West Java				Nov. 17-Dec. 14, 1916: Cases, 135
Batavia	Nov. 17-Dec. 7	23	9	deaths, 65.
Mazanderan Province—				
Amol	Nov. 16			Epidemic.
Ferikenar	Nov. 30	8	8	•
Philippine Islands: Manila	Oct. 29-Dec. 30	201	70	Not praviously reported Cons
Do	Dec. 31-Feb. 17	13	7	Not previously reported: Cases, 54; deaths, 2.
Provinces				Oct. 29-Dec. 9, 1916; Cases, 4,191; deaths, 2,030. Dec. 17-30, 1916; Cases, 282; deaths, 188. Dec. 31, 1916-Feb. 10, 1917; Cases, 938;
Albay	Oct. 29-Dec. 9	246	147	deaths, 2,030. Dec. 17-30, 1916;
Ďo Do	Dec. 17-30 Dec. 31-Feb. 17	20 56	10 42	1016-Feb. 10 1017: Cases 028:
Antique	Nov. 18-25	8	. 7	deaths, 707.
Do	Dec. 31-Feb. 17	47	46	
BataanDo	Oct. 29-Dec. 9 Dec. 17-23 Dec. 31-Jan. 6	93 2	77 2	
Do	Dec. 31-Jan. 6	2	3	
Batangas	Oct. 29-Nov. 18	1	1	
BoholDo	Oct. 29-Dec. 9 Dec. 17-23	46 1	18	•
Bulacan	Oct. 29-Dec. 9	96	67	
Do	Dec. 17-23	10	6	-
Camarines	Oct. 29-Dec. 9	61	37	
CapizDo	Dec. 17-30	45 27	34   23	
Do	Dec. 31-Feb. 17	125	98	
Cavite	Oct. 29-Dec. 9	156	113	
Do	Dec. 17-30 Dec. 31-Feb. 10	24 45	13 33	
Cebu	Dec 24-30	12	6	•
Do	Jan. 7-Feb. 17 Oct. 29-Dec. 9	71	32	
Iloilo	Oct. 29-Dec. 9 Dec. 17-30	237	148	
Do Do	Dec. 31-Feb. 10	37 51	31 41	
Laguna	Nov. 2-25	12	10	
Levie	Oct. 29-Dec. 9	127	98	
Do	Dec. 17-30 Dec. 31-Feb. 17	90 338	62 271	
Masbate	Dec. 17-23	8	2	
Mindanao	Jan. 14-Feb. 3	25	18	
Mindoro	Dec. 31-Feb. 3	128	79	
Micamia		127		
Misamis Do	Oct. 29-Dec. 9 Dec. 17-30		12	
Misamis Do	Dec. 17-30	17 37	12 27	
Misamis Do	Dec. 17-30	17		•

## Reports Received from Dec. 30, 1916, to Apr. 13, 1917—Continued.

### CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands—Contd. Provinces—Continued. Pampanga Do. Do. Rizal Do. Romblon Samar Do. Sorsogon Do. Tayabas Zambales Straits Settlements: Singapore Do. Turkey in Asia. Aleppo. Bagdad Beirut Tarsus	Dec. 3-9 Dec. 17-23 Dec. 31-Jan. 6 Oct. 29-Dec. 9 Dec. 17-30 Dec. 31-Jan. 27 Jan. 28-Feb. 3 Nov. 5-18 Dec. 31-Feb. 17 Nov. 5-18 Oct. 29-Dec. 2 Dec. 17-23 Jan. 21-Feb. 17 Nov. 5-18 Oct. 29-Dec. 2 Dec. 17-33 Dec. 9-15 Nov. 6-30 Dec. 7-12 Nov. 7	4 6 1 1 277 4 4 2 2 9 1 13 1 15 1 1 7 7 2 1 1 7 2 1 1	2 10 123 71 2 53 1 1	Sept. 22-Dec. 12, 1916; Cases, 258 deaths, 117. July 14-Dec. 25, 1916; Cases, 9,542; deaths, 4,897.
Turkey in Europe: Constantinople	Oct. 1-Nov. 17	. 8	1	
			<u>!</u>	
	PLA	AGUE.	7	
Brazil: Bahia Do	Nov. 5-Dec. 16 Jan. 7-Feb. 24	15 4	9 3	Jan. 1-Nov. 11, 1916: Cases, 14; deaths, 7. Nov. 5-11: Cases, 4; deaths, 2.
	Jan. 16-Feb. 16	• • • • • • •		June 1-Nov. 6, 1916: Cases, 67; deaths, 51. Present in interior cities.
Pernambuco, State Ceylon: Colombo	Oct. 28-Dec. 30	50	30	July 23-29, 1916: Cases, 9:
Do Chile: Tocopilla	Dec. 31-Jan. 27 Sept. 12	18 1	16	deaths, 8.
China: Amoy, vicinity Chaochowfu	Nov. 19–Dec. 2 Feb. 24.			Present. Present. 26 miles from Swatow.
Hongkong	Dec. 24–30 Jan. 21–Feb. 3	1 24	1 12	Present in vicinity.
Kansu Province— Taochow	Oct. 1-24		20	Pneumonic. Reported present. in other localities in Province.
Santa Rosa	Oct. 1-Dec. 31 Sept. 1-Dec. 31 Jan. 1-31 Nov. 1-Dec. 31 Jan. 1-31 Oct. 1-31 Sept. 1-30 Jan. 1-31	2 347 104 2 1 1 1	116 43 1	Sept. 1-Dec. 31, 1916: Cases, 353; deaths, 119. Jan. 1-31, 1917: Cases, 106; deaths, 43.  Jan. 1-Dec. 30, 1916: Cases, 1,702;
Do Port Said	Nov. 12-Dec. 25 Feb. 21	4 1 1 5 1 2 2	3 1	deaths, 828, Jan. 1-Feb. 16, 1917: Cases, 14; deaths, 6. 10 case on s. s. Proton, arrived Nov. 16, 1916, from Sidi Barani and Sollum.
lawaii:	Apr. 4	1	1	Present.

# Reports Received from Dec. 30, 1916, to Apr. 13, 1917—Continued.

### PLAGUE-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
India				Oct. 15-Dec. 23, 1916: Cases
Bassein	Oct. 22-Dec. 30 Dec. 31-Jan. 13		8	deathe 22 528 Ion 14 27 1017
Bombay	Nov. 5-Dec. 30	73	59	Cases, 50,422; deaths, 40,153. Oct. 8-14, 1916: Cases, 13; deaths 7. Received out of date
Do Karachi	Dec. 31-Feb. 3 Oct. 29-Dec. 23	58	52	7. Received out of date
Karachi Do	Dec. 24-30	3	2	Original report lost on s. s. Arabia.
Do	Dec. 31-Feb. 3	1 3	2	Alabia.
Madras	Nov. 19-Dec. 30 Dec. 31-Feb. 3 Nov. 5-Dec. 30	7	5	Oct. 8-14, 1916: Cases,1; deaths, 1
Do	Nov 5-Dec 30	5,854	3,932	Oct 8-14 1016: Cases 524: deaths
Do	.  Dec. 31–Feb. 3	3,705	2,485	Oct. 8-14, 1916: Cases, 534; deaths 353. Sept. 17-23, 1916: Cases
Mandalay	Oct. 28-Dec. 30		3	429; deaths, 280.
Moulmein Prome	Dec. 3-9 Oct. 22-Dec: 30		177	ĺ
Do	Dec. 31-Jan. 13		49	
Rangoon	Oct. 28-Dec. 30	43 70	39 65	Oct. 1-7, 1916: Cases, 9; deaths, 9.
Toungoo	Dec. 31-Jan. 27 Oct. 22-Dec. 30	10	12	
Do	Dec. 31-Jan. 13		4	
ndo-China Provinces—				Apr. 1-June 30, 1916: Cases, 325 deaths, 148. July 1-Nov. 30
Anam	Apr. 1-June 30	142	83	1916: cases, 215; deaths, 130.
Do	July 1-Nov. 30	70	47	
Cambodia Do	Apr. 1-June 30 July 1-Nov. 30	43 47	41 44	
Cochin-China	Apr. 1-June 30	135	63	·
Do	July 1-Nov. 30	58	22	
Kwang-Tcheou-Wan Tonkin	Oct. 1-31	29 2	8	
Saigon	Nov. 6-Dec. 17	9	3	
Do	Jan. 1-Feb. 4	10	7	
apan: Nagoya Taiwan Island—	Dec. 10-16	2		
Shirin	Feb. 18-24	1	1	Three miles from Taihoku.
Yokkaichiava:	Nov. 12-Dec. 16	32	12	
East Java				Aug. 26-Dec. 31, 1916; Cases, 133
Djocjakarta Residency.	Nov. 4-Dec. 31 Aug. 26-Dec. 31	2	2	deaths, 116.
Kediri Residency  Madioen Residency	Aug. 26-Dec. 31	20 8	18 8	•
Pasoeroean Residency	do	š	3	
Samarang Residency Surabaya Residency	Dec. 2-31	6	6	
Surabaya Residency	Aug. 26-Dec. 31 do	49 28	49 28	
Mid-Java—		20	20	
Samarang	do	1	1	
iam: Bangkok	Oct. 22-Dec. 30	12	10	
BangkokDo	Jan. 14-20	ĩ	ĭ	
raits settiements:	Oat 00 Dec 20	7	7	
Singapore	Oct. 22-Dec. 30 Dec. 31-Feb. 3	7	6	
nion of South Africa:			•	
Cape of Good Hope State—	Oct. 31-Nov. 12	2	2	Motel Oct 22-New 12 1916
Uitenhage district Orange Free State—	Oct. 31-Nov. 12	2	2	Total, Oct. 23-Nov. 12, 1916: Cases, 24; deaths, 13.
Winburg district	Feb. 5-11	6	2	On a farm.
Transvaal— Potchefstroom district	Dec. 21-Jan. 21	12	12	On two adjoining farms.
T 000H035W00H district.	<b>_</b>			· · · · · · · · · · · · · · · · · · ·
	SMAL	LPOX.		
ustralia:	1		i	
New South Wales— Coonamble	Dec. 8	1		
ustria-Hungary:	200.0	•		
Austria—	No. 10 Dec 2	ا	.	
Vienna	Nov. 12-Dec. 9	8	1	
Hungary— Budapest	Nov. 5-Dec. 23	73	2	

# Reports Received from Dec. 30, 1916, to Apr. 13, 1917—Continued.

### SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:	Nov. 12- Dec. 23	5		
DoRio de Janeiro Do	Jan. 7-Mar. 3 Nov. 12-Dec. 30 Dec. 31-Feb. 21	50 91	12 26	
Canada: Alberta—	Feb. 1-28	2		
Lethbridge British Columbia— Vancouver	Feb. 18-24	1		
Victoria Manitoba— Winnipeg	Feb. 11-17do	3		·
Ontario— Kingston Sarnia	Mar. 11-17 Jan. 28-Feb. 10	1 3		
TorontoCeylon:	Jan. 28-Mar. 31 Dec. 31-Jan. 6	6 1		
China: AmoyAntung	Oct. 31-Dec. 9 Jan. 8-14	<u>2</u>	1	Present. Dec. 10-16, 1916: Cases, 3.
Canton Chungking. Do	Nov. 1-Dec. 20 Oct. 28-Dec. 30 Dec. 31-Feb. 17		14	Present.
Dairen Do	Nov. 5-Dec. 30 Dec. 31-Feb. 17	63 39	8 16	In vicinity, Jan. 14-20, 1917, 1
Foochow	Oct. 29-Dec. 16 Nov. 6-Dec. 17 Oct. 28-Dec. 30	3 349	243	Present.
Do	Dec. 31-Feb. 24 Jan. 21-27	436	364	Present in vicinity.  Present. Vicinity of Swatow.
MukdenDoNanking	Dec. 9-30 Dec. 31-Mar. 18			Do. Do. Do.
Shanghai Tientsin Do	Dec. 17-39	1	1	ъ.
Tsingtao	Dec. 1-9	2 3 58	2	
EspinalCuba:	Feb. 17			Present. Suburt of Cartagena.
Casa Blanca	Jan. 12	1		Vicinity of Habana. Case landed Jan. 1, 1917, from s. s. Alfonso XII, from Santander, Spain.
Encrucijada	Jan. 10	1		In Santa Clara Province. Case landed from s. s. Montevideo, from Barcelona, via Las Palmas, Canary Islands, and Porto Rico; arrived at Habana Jan.
Guanabacoa	Jan. 9	1		6, 1917. Vicinity of Habana. Case landed from s. s. Montevideo.
Habana Ecuador:	Jan. 10-20	2		At Mariel quarantine station. From s. s. Montevideo.
Guayaquil Egypt: Alexandria	Nov. 1-30 Dec. 25-31	10	1 3	
Do	Jan. 8-Feb. 11 June 11-July 1 July 2-Oct. 21	50 60	1 20 20	
Port Said Do	June 11-17 Aug. 20-Sept. 9	1 2	1	
Marseille Do Paris.	Oct. 1-Dec. 31 Feb. 1-28 Dec. 17-23	······································	16 2	
DoGermany:	Jan. 14–20	2	1	
Hamburg district		52 J		

# Reports Received from Dec. 30, 1916, to Apr. 13, 1917—Continued.

### SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Great Britain:				·
Liverpool	Feb. 4-Mar. 3	3	1	
Greece: Athens	Jan. 1-15	l	. 5	
Hawaii:	1			
Honolulu	Jan. 9	1		From s. s. Tenyo Maru from oriental ports.
Do	Jan. 24	1		From s. s. Ecuador from Hong- kong.
India:	į	1	l	
Bombay	Dec. 10-30 Dec. 31-Feb. 3	5	1 1	Oct. 8-14, 1916: Cases, 3; deaths, 3. Received out of date. Orig-
Do Calcutta	Nov. 5-Dec. 2	35	12 2	inal report lost on s. s. Arabia.
Karachi.	Dec. 31-Jan. 13	2		marreport lost on S. S. Atabla.
Madras	Nov. 5-Dec. 30	85 57	19	1
Do	Dec. 31-Feb. 3	57	17	<u> </u>
Moulmein	Oct. 28-Nov. 14 Oct. 28-Dec. 30	17	- 1	
Do	Dec. 31-Jan. 27	3	î	
ndo-China:		_	_	
Provinces—	Amn 1 Tours 80			Amp 1 Tune 80 1010 General
AnamDo	Apr. 1-June 30 July 1-Nov. 30	45 93	8 42	Apr. 1-June 30, 1916: Cases, 334; deaths, 28. July 1-Nov. 30, 1916: Cases, 357; deaths, 131.
Cambodia	Apr. 1-June 30	30	ii	1916: Cases, 357: deaths, 131
Do	July 1-Oct. 31	16	8	,,, 2011
Cochin-China	Apr. 1-June 30	44	5	,
Do Laos	July 1-Nov. 30 Aug. 1-Oct. 31	184 39	59 16	
Tonkin.	Apr. 1-June 30	215	4	
Do	July 1-Nov. 30	14	5	
Saigon	Nov. 6-Dec. 31 Jan. 1-Feb. 4	28	.7	
Do	Jan. 1-Feb. 4	48	14	
taly: Turin apan:	Feb. 19-25	5	1	Roumanian refugees.
apan: Ehime	JanFeb			Present.
Hyogo	do			Do.
KagawaKobe	Nov. 28-Dec. 10			Do.
Kobe	Nov. 28-Dec. 10	4	.1	
Do: Kochi.	Jan. 1-Mar. 11 JanFeb	65	15	Present.
Osaka	Jan. 22-Mar. 5	225	42	
ava:				
East Java	Non 4 10	••••••	• • • • • • • • • • • • • • • • • • • •	Sept. 16-Dec. 31, 1916: Cases, 92;
Surabay Mid-Java	Nov. 4-10	. 1	• • • • • • • • • • • • • • • • • • • •	deaths, 2. Sept. 16-Dec. 29, 1916: Cases, 227;
Samarang	Nov. 4-10.	3		deaths, 24.
West Java				Sept. 29-Dec. 28, 1916: Cases, 408:
Batavia	Sept. 29-Dec. 28	54 22	9	deaths, 63.
Do	Dec. 29-Jan. 11	22	- 1	
Durango	Feb. 17			Present; also in vicinity.
Mexico City	Feb. 17. Dec. 10-30.	20		,
Do Nuevo Laredo	Dec. 31-Mar. 3 Dec. 10-30	72		
Vera Cruz	Feb. 18–24	- 1·	·····i'l	
ew Zealand:			- [	
Auckland	Feb. 4-10	4 .		
orway: Trondhjem	Jan. 1-31	2		
hilippine Islands:	Jan. 21-Feb. 10	12	<u>'</u>	July 30-Dec. 30, 1916: Cases, 10.
ortugal:		[		July 30-1/ec. 30, 1910. Cases, 10.
Lisbonortuguese East Africa:	Nov. 19-Dec. 2	6 .		
Lorenco Marques	Sept. 1-30		1	
	Nov. 25-Dec. 29	6	1	
Aichangeleesessessessessesses		29	5	
Do I	Jan. 1-Feb. 13	20		AT 40 05 4040 C
Do I	Oct. 16Dec. 18	95	23	Nov. 13-25, 1916: Cases, 35; deaths,
Moscow	Jan. 1–Feb. 13 Oct. 16–Dec. 18 Oct. 8–Dec. 30 Dec. 31–Jan. 27	95 180		Nov. 13–25, 1916: Cases, 35; deaths, 8.

## Reports Received from Dec. 30, 1916, to Apr. 13, 1917—Continued.

### SMALLPOX—Continued.

SMALLPOX—Continued.				
Place.	Date.	Cases.	Deaths.	Remarks.
Srain:				·
Cadiz	. Nov. 1-Dec. 31	l	3	
Madrid	do		144	Jan. 1-Dec. 31, 1916: Deaths, 405.
Do	. Jan. 1-31		35 15	
Malaga Seville	Sept. 1-Nov. 30 Nov. 1-30		22	
Do	. Jan. 1-Feb. 28	Í	16	
Valencia	.  Nov. 19-Dec. 23	5	1	
Do Straits Settlements:	. Jan. 14-Mar. 10	6		
Penang	. Oct. 28-Dec. 30	16	3	•
Do	. Dec. 31-Mar. 3	21	3	
Singapore	. Nov. 19-Dec. 30	3	2	
Do Sweden:	. Jan. 7-13	1	1	
Gothenburg	Jan. 28-Feb. 3	<b></b>	1	
Switzerland:			_	·
Basel	. Nov. 5-11	1		
Do Tunisia:	Dec. 31-Feb. 10	19	• • • • • • • • • • • • • • • • • • • •	
Tunis	. Nov. 25-Dec. 15	51	27	-
Do	Dec. 30-Mar. 9	66	21	
Turkev in Asia:				~
Trebizond	Nov. 11-Dec. 30 Dec. 31-Feb. 3	1 5	1 4	
Do Union of South Africa:	. Dec. 31-1-60. 3		7	
Johannesburg	Sept. 10-Dec. 30	45		'
Do	Dec. 31-Jan. 27	6		
Venezuela: Maracaibo	Mar. 3-24		18	
On vessel:	Mai. 3-24	•••••	10	
S. S. Nippon Maru	Jan. 22	<b>2</b>		Landed at Yokohama quaran-
	7 0. 7.1.0			tine.
Do	Jan. 24-Feb. 3	9	3	En route to Honolulu. Vessel from oriental ports.
*				nom oriental ports.
Argentina:	TYPḤUS	FEVE	<b>≀.</b>	
Argentina: Rosario Austria-Hungary: Austria-	Nov. 1-30		1	
Vienna	Nov. 5-Dec. 30	21	2	
Do	Dec. 31-Jan. 20	6	2	
Hungary—			_	
Budapest Do	Nov. 5-Dec. 30 Jan. 14-20	3 10	1 3	
Belgium:	Jan. 14-20	10	°	
Ghent	Oct. 29-Nov. 4		1	
Liege	do	• • • • • • • •	1	
Do China:	Jan. 28-Feb. 3	• • • • • • • •	1	
Antung				•
	Nov. 27-Dec. 10	6		*
Antung	Jan. 15-21	2		
Hankow	Jan. 15-21	2 1		
Hankow Tientsin	Jan. 15-21 Nov. 12-18 Oct. 29-Nov. 4	2 1 1		•
HankowTientsinTsingtao	Jan. 15-21	2 1		
HankowTientsinTsingtaoCuba: Santiago	Jan. 15-21 Nov. 12-18 Oct. 29-Nov. 4	2 1 1	1	
HankowTientsinTsingtaoCuba: Santiago	Jan. 15-21 Nov. 12-18 Oct. 29-Nov. 4 Dec. 28-Feb. 24	2 1 1 4		Nov. 10-25 1018: 1 cese: Dec
Hankow Tientsin Tsingtao Cuba: Santiago Egypt: Alexandria.	Jan. 15-21	2 1 1 4 1 28	12	Nov. 19-25, 1916: 1 case; Dec. 17-23, 1916: Cases, 4
Hankow Tientsin Tsingtao Cuba: Santiago Egypt: Alexandria. Do Cairo.	Jan. 15-21 Nov. 12-18 Oct. 29-Nov. 4 Dec. 28-Feb. 24	2 1 1 4 1 28 129 275		Nov. 19-25, 1916: 1 case; Dec. 17-23, 1916: Cases, 4.
Hankow Tientsin Tsingtao. Cuba: Santiago Egypt: Alexandria Do Cairo Do.	Jan. 15-21 Nov. 12-18 Oct. 29-Nov. 4 Dec. 28-Feb. 24 Dec. 7-13 Nov. 12-Dec. 31 Jan. 1-Feb. 11 July 2-Oct. 28	2 1 1 4 1 28 129 275 285	12 25 142 149	Nov. 19-25, 1916: 1 case; Dec. 17-23, 1916: Cases, 4.
Hankow Tientsin. Tsingtao Cuba: Santiago. Egypt: Alexandria. Do. Cairo. Do. Port Said	Jan. 15-21. Nov. 12-18. Oct. 29-Nov. 4. Dec. 28-Feb. 24.  Dec. 7-13.  Nov. 12-Dec. 31. Jan. 1-Feb. 11. June 11-July 1. July 2-Oct. 28. June 11-17.	2 1 1 4 1 28 129 275 285 285	12 25 142 149 9	Nov. 19-25, 1916: 1 case; Dec. 17-23, 1916: Cases, 4.
Hankow Tientsin Tsingtao Cuba: Santiago Egypt: Alexandria. Do. Cairo. Do Port Said Do	Jan. 15-21 Nov. 12-18 Oct. 29-Nov. 4 Dec. 28-Feb. 24 Dec. 7-13 Nov. 12-Dec. 31 Jan. 1-Feb. 11 July 2-Oct. 28	2 1 1 4 1 28 129 275 285	12 25 142 149	Nov. 19-25, 1916: 1 case; Dec. 17-23, 1916: Cases, 4.
Hankow Tientsin Tsingtao Cuba: Santiago. Egypt: Alexandria. Do. Cairo. Do. Port Said Do. Germany: Berlin.	Jan. 15-21 Nov. 12-18 Oct. 29-Nov. 4 Dec. 28-Feb. 24 Dec. 7-13 Nov. 12-Dec. 31 Jan. 1-Feb. 11 June 11-July 1 July 2-Oct. 28 June 11-17. July 2-Oct. 14	2 1 1 4 1 28 129 275 285 20 10	12 25 142 149 9 8	Nov. 19-25, 1916: 1 case; Dec. 17-23, 1916: Cases, 4.
Hankow Tientsin Tsingtao Cuba: Santiago Egypt: Alexandria Do Caro Do. Pot Said Do. Germany: Berlin Bremen.	Jan. 15-21.  Nov. 12-18. Oct. 29-Nov. 4. Dec. 28-Feb. 24.  Dec. 7-13.  Nov. 12-Dec. 31. Jan. 1-Feb. 11. June 11-July 1. July 2-Oct. 28. June 11-17. July 2-Oct. 14.  Oct. 15-Dec. 23. Oct. 22-Dec. 30.	2 1 1 4 1 28 129 275 285 20 10	12 25 142 149 9 8	Nov. 19-25, 1916: 1 case; Dec. 17-23, 1916: Cases, 4.
Hankow Tientsin. Tsingtao Cuba: Santiago Egypt: Alexandria. Do. Cairo. Port Said Do. Germany: Berlin. Bremen. Do. Do. Do.	Jan. 15-21.  Nov. 12-18. Oct. 29-Nov. 4. Dec. 28-Feb. 24.  Dec. 7-13.  Nov. 12-Dec. 31. Jan. 1-Feb. 11. June 11-July 1. July 2-Oct. 28. June 11-17. July 2-Oct. 14.  Oct. 15-Dec. 23. Oct. 22-Dec. 30. Dec. 31. Jan. 13.	2 1 1 4 1 28 129 275 285 20 10	12 25 142 149 9 8	Nov. 19-25, 1916: 1 case; Dec. 17-23, 1916: Cases, 4.
Hankow Tientsin Tsingtao Cuba: Santiago Egypt: Alexandria. Do Cairo. Do Port Said Do Germany: Berlin Bremen. Do Frankfort-on-Main	Jan. 15-21.  Nov. 12-18. Oct. 29-Nov. 4. Dec. 28-Feb. 24.  Dec. 7-13.  Nov. 12-Dec. 31. Jan. 1-Feb. 11. June 11-July 1. July 2-Oct. 28. June 11-17. July 2-Oct. 14.  Oct. 15-Dec. 23. Oct. 22-Dec. 30. Dec. 31. Jan. 13.	2 1 1 4 1 28 129 275 285 20 10	12 25 142 149 9 8 8 7	Nov. 19-25, 1916: 1 case; Dec. 17-23, 1916: Cases, 4.
Hankow Tientsin. Tsingtao Cuba: Santiago Egypt: Alexandria. Do. Cairo. Do Port Said Do. Germany: Berlin. Bremen. Do Frankfort-on-Main Königsberg. Do	Jan. 15-21.  Nov. 12-18. Oct. 29-Nov. 4. Dec. 28-Feb. 24.  Dec. 7-13.  Nov. 12-Dec. 31. Jan. 1-Feb. 11. June 11-July 1. July 2-Oct. 28. June 11-17. July 2-Oct. 14.  Oct. 15-Dec. 23. Oct. 22-Dec. 30. Dec. 31. Jan. 13.	2 1 1 4 1 28 129 275 285 20 10	12 25 142 149 9 8	Nov. 19-25, 1916: 1 case; Dec. 17-23, 1916: Cases, 4.
Hankow Tientsin Tsingtao Cuba: Santiago Egypt: Alexandria Do Cairo Do. Port Said Do Germany: Berlin Bremen Do Frankfort-on-Main Königsberg	Jan. 15-21.  Nov. 12-18. Oct. 29-Nov. 4. Dec. 28-Feb. 24.  Dec. 7-13.  Nov. 12-Dec. 31. Jan. 1-Feb. 11. June 11-July 1. July 2-Oct. 28. June 11-17. July 2-Oct. 14.  Oct. 15-Dec. 23. Oct. 22-Dec. 30.	2 1 1 4 1 28 129 275 285 20 10	12 25 142 149 9 8 8 7	Nov. 19-25, 1916: 1 case; Dec. 17-23, 1916: Cases, 4.

# Reports Received from Dec. 30, 1916, to Apr. 13, 1917—Continued.

### TYPHUS FEVER-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Great Britain:				
Cork	Jan. 7-Feb. 3	. 1	1	
Glasgow	Dec. 3-30	. 4		
Do	Jan. 7-13		. 1	
Greece:	N 5 D 05		١	
Saloniki	Nov. 7-Dec. 25 Dec. 26-Jan. 1		. 36	
Do	Dec. 20-Jan. 1		. 9	
Java: East Java			l .	Sept. 16-Dec. 16, 1916: Cases, 10.
Mid-Java				Sept. 16-Dec. 29, 1916; Cases, 87;
Samarang	Nov. 4-Dec. 1	10		deaths, 7.
West Java		1		Sept. 29-Dec. 28, 1916: Cases, 185;
Batavia	Sept. 29-Dec. 28	139	12	deaths, 13. Dec. 29, 1916-Jan.
Do	Dec. 29-Jan. 18	42	1	18, 1917: Cases, 53; deaths, 2.
Mexico:		İ	1	
Aguascalientes	Dec. 22			Epidemic.
Ciudad Juarez				July, 1916-Feb. 5, 1917: Cases, 100 (estimated).
<sup>1</sup> D	Dec 10		i	100 (estimated).
Durango	Dec. 12			Present. Estimated deaths
Mexico City	Dec. 3-30	835		daily shout 25 Procent
Do	Dec. 31-Mar. 3	1,028		daily, about 25. Present throughout year 1916.
Nuevo Laredo	Dec. 10-16	4		July 1-Dec. 16, 1916: Cases, 28.
Netherlands:	200, 10 200000000	i -		val.j = 2 at at at a at a at a at a
Rotterdam	Nov. 26-Dec. 30	8		İ
Do	Feb. 4-10	1		
Russia:				
Archangel	Nov. 25-Dec. 29	29	.9	
Do	Jan. 1-Feb. 10	17	11	
Moscow	Oct. 16-Dec. 10 Oct. 8-Dec. 30	92 155	13 44	
Vladivostok	Jan. 22-28	100	4.1	
Spain:	Jan. 22-20	•		
Madrid	Nov. 1-Dec. 31		3	Jan. 1-Dec. 31, 1916: Deaths, 35.
Do	Jan. 1-Feb. 28		3	,
Straits Settlements:				
Penang	Feb. 25-Mar. 3	1		•
Sweden:	Nov. 28-Dec. 4	1		
StockholmDo.	Dec. 31-Jan. 6	3		
Switzerland:	Dec. 31-Jan. U			
Basel	Feb. 18-24	1		
Zurich	Dec. 3-9	1		
Do	Jan. 1-31	3		
Tunisia:				
Tunis	Dec. 16-22	1		
Turkey in Asia:	0.4.40.00			
Haifa Trehizond	Oct. 16-22 Dec. 17-30	1 3	3	
Do	Dec. 31-Feb. 3	3	3	
D0	Dec. 31-rep. 3			
<u> </u>	YELLOW	FEVE	₹.	
Dth.	1			
Brazil: Espirito, Santo, State	Jan. 27-Feb. 26	18	4	
Ecuador:	Val. 21-1 CD. 20	• 1	•	
Babahoyo	Nov. 1-30	1	1	
Chobo	do	1		
Duran	Oct. 1-31	1		
Guayaquil	Sept. 1-Dec. 31	46	24	
Do	Jan. 1-31	17	7	
Milagro	Sept. 1-30 Oct. 1-31	1 2	·····i	
Do	Jan. 1-31	íl	- 1	
Fold coast	AUT. 1_01	1		In 1915: Cases, 2; deaths, 2. Eu-
				ropean and native.
i	i			