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LEPROSY

The Effect of a Vitamin B_1 Deficient Diet on the Incubation Period of Rat Leprosy

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We have been unable to find any reports in the literature of experimental work on the possible relationship between vitamin B_1 deficiency and rat leprosy. Muir and Henderson (*1*), in 1928, reported the results of studies on the virulence of rat leprosy in rats fed diets deficient in vitamin A and vitamin B. They did not separate vitamin B_1 from vitamin B_2 (G). They reported their results from two experiments in which the rats were fed diets deficient in the vitamin B complex. In one experiment the leprous material was inoculated subcutaneously into 5 rats and in the other intraperitoneally into 4 rats. In their report, the results of the experiments with diets rich in protein decomposition products were combined with the results with vitamin A and vitamin B deficient diets so that no analysis of the results with the vitamin B deficient diet alone can be made.

Lamb (*2*) in 1935 published a paper on the effect of malnutrition on rat leprosy. He also conducted his experiments with a diet deficient in the vitamin B complex, and not with diets deficient in vitamin B_1 and B_2 separately. He inoculated the leprous material, both subcutaneously and intravascularly, into rats fed on diets deficient in the vitamin B complex.

Relative to the intravascular injection, the author states: "It is quite evident * * * that the deficient diets allowed, in most cases, a very marked increase in the development of lesions." And relative to the subcutaneous injection, he states: "In the case of the animals on diets deficient in vitamin B complex, the usual type of lesion was a smaller, less actively growing granuloma with a tendency toward fibrosis and healing, while in the control rats the lesion was a 'normal', spreading type." Further, "Subcutaneous inoculation of rat leproma in a large number of rats on many kinds of dietary deficiencies yielded generally negative results."

With rats fed on a starchy diet plus taro-root and fish, and inoculated subcutaneously, Lamb obtained results which suggested increased susceptibility to rat leprosy. He also found that diets deficient

in the vitamin B complex and somewhat low in protein produced an extensive increase in visceral lesions of rat leprosy in rats inoculated intravascularly.

EXPERIMENTS WITH RATS FED ON A VITAMIN B_1 DEFICIENT DIET

The composition of the vitamin B_1 deficient diet was as follows:

Articles of diet	Percent
Casein (purified) [1]	18
Wesson oil [2]	3
Cod-liver oil	2
Salt mixture [3]	4
Autoclaved yeast [4]	15
Corn starch	58

[1] The casein is first leached in daily changes of acidulated water according to McCollum's method (Bull. Johns Hopkins Hospital, vol. 33, p. 398) and is then baked in an electric oven at 140°-142° C. for 24 hours. About 10 pounds are then packed in a metal percolator, wet with ether, and allowed to stand overnight. The following morning the ether is allowed to drip; fresh ether is added in the afternoon, and the process repeated for 3 days, or until the percolate is clear. The casein is then removed, air dried, repacked in the percolator with 95-percent alcohol, and allowed to drip after standing overnight. This is repeated 3 times. At the end of the third day fresh alcohol is added, and allowed to drip overnight. The casein is then removed and air dried.

[2] A commercial vegetable oil, presumably cottonseed oil.

[3] The salt mixture is prepared according to Osborne and Mendel, J. Biol Chem., 1919, vol. 37, p. 572.

[4] Pure dried brewer's yeast autoclaved for 2½ hours at 15 pounds pressure.

The control diet was prepared as follows:

Articles of diet	Percent
Whole wheat flour	50.0
Skim milk powder	34.4
Sodium chloride	1.0
Cornmeal (yellow)	12.5
Calcium carbonate	2.0
Cod-liver oil	0.1

Method of handling the rats.—Lots of 5 to 10 rats were placed in metal cages with wire-mesh bottoms. The rats had access to food and water at all times. Our aim was to keep the rats so depleted that they failed to gain in weight, or at the most gained very slowly, but not sufficiently depleted to cause polyneuritis or death.

In the first experiments many of the rats died. In the later experiments the rats were weighed frequently, at times daily, and those rats which showed a marked loss of weight or symptoms of polyneuritis were given small doses of yeast until they gained slightly in weight. In this way we were able to keep most of the rats alive for a considerable length of time. In experiment IV we were able to keep 38 of 40 depleted rats alive for a period of 8 weeks. Depleted rats have been kept alive for 7 months, during which time they have gained but 50 percent of their original weight while the controls have gained as much as 450 percent.

Material.—The source of the strain of rat leprosy used in these experiments was from two wild rats trapped in Jacksonville, Fla.[1]

[1] Received through the courtesy of Dr. R. S. Wynn.

The first rat was received on March 3, and the second on May 7, 1934. Subcutaneous lepromata were removed from the rats, emulsified, and injected into white rats. Strains of rat leprosy were thus established.

Inoculum.—The method of preparing the inoculum in each experiment has been the same. The lepromata have been removed aseptically, slightly macerated, and placed in a saturated solution of sodium carbonate. While in the carbonate solution they have been kept at 37° C. for 2½ to 3 hours, after which the carbonate has been washed off, the material ground with sterile sand, and emulsified in normal saline. The emulsion has then been filtered through 2 or 3 thicknesses of fine-mesh gauze, and inoculated.

Method of inoculation and dosage.—In order to detect the lesions and satisfactorily follow their development in the living rat, all inoculations were made subcutaneously into the lower left abdominal segment. The material was inoculated alternately into control and test rats to assure as uniform doses as possible. In the one experiment in which large rats were used, the amount of the inoculum injected was 0.5 cc, but in the remainder of the experiments, in which small, young rats were used, 0.25 cc of the inoculum was injected.

Lesions produced.—The lesion is first noted as a minute, hard, palpable kernel at the site of inoculation. These small, hard lesions gradually increase in size but remain circumscribed for some time. They later become less circumscribed and more diffuse and have the character of spreading lesions. In some of the animals kept alive for a sufficient length of time the lepromata increase in size to such an extent that they cover the entire abdomen. After 5 months a few of the lesions have broken down, and in some the infection has become generalized, as shown by the finding of typical granulomata in the spleen and cervical lymph glands.

Pathology (By Passed Assistant Surgeon J. G. Pasternack).—The earliest lesions were confined to the subcutis. They consisted of pale, polygonal, and polyhedral cell formations which were assembled in round or elongated groups and cords or formed discrete and fused small nodular granulomata. The cells have small, round leptochromatic nuclei and an ample zone of pale meshed or vacuolated cytoplasm, hence the designation "foam cells." The surrounding connective tissue shows minor grades of fibroblast proliferation, edema, and lymphocyte infiltration.

The older lesions are very extensive, usually occupy the entire hypoderm, and involve more or less of the underlying muscle tissue.

The tissue reaction may take one of two forms. The one type shows sheets of foam cells more or less subdivided into bulky lobules entirely replacing the hypoderm. These continuous masses are entirely avascular, do not undergo necrotic changes, and show no inflammatory reaction in their vicinity.

The second type consists of discrete miliary and bulky conglomerate granulomata of elongated and compressed foam cells. The conglomerate granulomata frequently show central caseous necrosis. Multinucleated giant cells in small numbers are frequently present. The granulomata are avascular, but the connective tissue of the hypoderm shows capillary vascularization, fibroblast proliferation and lymphocyte infiltration in and around the granulomata.

In all lesions the foam cells and the giant cells are always packed with acid-fast bacilli. Acid-fast bacilli are not infrequently seen within fibroblasts and histiocytes some distance from the foam-cell formations. Acid-fast bacilli were only rarely seen within nerve bundles and muscle fibers in the site of the lesion.

The lymphnodes in the vicinity of the lesion frequently showed minute concentric granulomata in variable numbers. The epithelioid cells forming these granulomata always contained smaller or larger numbers of acid-fast bacilli.

In the spleens from two of the rats some Malpighian follicles showed one to several minute concentric epithelioid granulomata the cells of which contained small to moderate numbers of acid-fast bacilli. Small lymphnodes embedded in the salivary glands of these animals showed similar miliary granulomata but they were richer in acid-fast bacilli.

Experiment I

On October 24, 1934, 24 white rats, weighing from 147 to 264 grams, were inoculated, subcutaneously, with 0.5 cc of an emulsion of a leproma from a leprous white rat. Of the 24 rats, 18 were placed on the deficient diet and 6 on the control diet. The experimental rats were placed on the diet on the day of inoculation and therefore were not depleted before being inoculated. However, 1 week after inoculation, 9 of the 18 experimental rats were depleted, and 2 weeks after inoculation all were depleted, as indicated by loss of weight or failure to gain.

Palpable lesions were first noted 8 weeks after inoculation. After 8 weeks, 1 (6.6 percent) of the 15 living, after 12 weeks 4 (28.5 percent) of the 14 living, and after 16 weeks 11 (84.6 percent) of the 13 living rats on the deficient diet had palpable lesions, while at the end of the latter period but 1 of the 6 (16.6 percent) rats on the control diet had palpable lesions.

Experiment II

On October 24, 1934, 48 white rats, weighing from 38 to 65 grams, were divided into two groups comparable as to weight. Twenty-four of the rats were placed on the deficient diet on October 24, and 12 on October 31. The 24 rats on the deficient diet and the 12 rats on the control diet were all inoculated, subcutaneously, on November 7,

1934, with 0.25 cc of a leproma from a leprous white rat. At the time of inoculation 22, or 62.8 percent, of 35 rats (1 rat died before the inoculation) on the deficient diet were depleted, as indicated by failure to gain or lose weight.

Palpable lesions were first noted 4 weeks after inoculation. After 4 weeks, 11 (40.7 percent) of the 27 living, after 6 weeks 12 (60.0 percent) of the 20 living, and after 8 weeks 12 (66.6 percent) of the 18 living rats on the deficient diet had palpable lesions, while after 8 weeks but 1 (9.0 percent) of the 11 living rats on the control diet had a palpable lesion.

ERRATUM

The last part of the last sentence in the paragraph at the top of page 859 should read: "as indicated by failure to gain or loss of weight."

male rats, weighing from 41 to 67 grams, were divided into two groups of comparable weights. On December 11, 1934, 50 were placed on the vitamin B_1 deficient diet and 50 on the control diet. On December 26, 1934, 15 days after being placed on the diet, they were all inoculated, subcutaneously, with 0.25 cc of an emulsion of a leproma of a leprous white rat. At the time of inoculation, 27 (54 percent) of those on the deficient diet were depleted. Palpable lesions in these rats were first noted 3 weeks after inoculation. After 4 weeks, 11 (23.9 percent) of the 46 living, after 6 weeks 13 (38.2 percent) of the 34 living, and after 8 weeks 14 (66.6 percent) of the 21 living rats on the deficient diet had palpable lesions, while after 8 weeks but 5 (13.5 percent) of the 37 living rats on the control diet exhibited palpable lesions.

At the end of 8 weeks the average gain in weight of the living rats on the deficient diet was 39.6 percent, while the average gain of those on the control diet was 248 percent.

Experiment IV

In this experiment 88 rats, weighing from 51 to 88 grams, were divided into two groups of comparable weights. On February 8, 1935, 45 were placed on the deficient diet and 43 on the control diet. On February 26, 1935, after 18 days on the diets, all were inoculated, subcutaneously, with 0.25 cc of an emulsion made from lepromata from two of the depleted rats in experiment II. The lepromata from which the inoculum was made were removed 3 months after they had been first noted. At the time of inoculation 41, or 91.1 percent, of those on the deficient diet were depleted.

Palpable lesions in these rats were first noted 2 weeks after inoculation. After 2 weeks, 4 (8.8 percent) of the 45 living, after 4 weeks 16 (41 percent) of the 39 living, after 6 weeks 23 (60.5 percent) of

the 38 living, and after 8 weeks 33 (86.8 percent) of the 38 living rats on the deficient diet had palpable lesions. Of those on the control diet, after 4 weeks 1 (2.4 percent) of the 41 living, after 6 weeks 7 (17.9 percent) of the 39 living, and after 8 weeks 21 (56.7 percent) of the 37 living rats had palpable lesions. At the end of 8 weeks the average gain of the living rats on the deficient diet was 45.8 percent, while the average gain of those on the control diet was 113.2 percent.

It will be noted that figures and percentages are given only for the rats that were living at the stated intervals. Those which developed palpable lesions but died before the time of any one of the examinations are not included in the figures for the later examinations. This is evident in the third experiment, in which many of the rats died. The figures show that 8 weeks after inoculation 14 (66.6 percent) of the 21 living rats had palpable lesions. During the 8 weeks, 9 of the rats with palpable lesions and 20 rats without palpable lesions died and, therefore, were not included in the final summary of the experiment.

TABLE 1.—*Summary of experiments*

Experiment	Diet	Number of rats	Depleted at time of inoculation		Amount of inoculum (cc)	2 weeks after inoculation			3 weeks after inoculation			4 weeks after inoculation			6 weeks after inoculation			8 weeks after inoculation		
			Number	Percent		Number living	With palpable lesions		Number living	With palpable lesions		Number living	With palpable lesions		Number living	With palpable lesions		Number living	With palpable lesions	
							Number	Percent		Number	Percent		Number	Percent		Number	Percent		Number	Percent
Rat II	Vitamin B_1 deficient	36	22	62.8	0.25	34	(*)	------	29	(*)	------	27	11	40.7	20	12	60.0	18	12	66.6
	Control	12	------	------	.25	12	(*)	------	12	(*)	------	12	1	8.3	11	1	9.0	11	1	9.0
Rat III	Vitamin B_1 deficient	50	27	54.0	.25	49	0	------	49	8	16.3	46	11	23.9	34	13	38.2	21	14	66.6
	Control	50	------	------	.25	48	0	------	45	1	2.2	42	3	7.1	38	3	7.8	37	5	13.5
Rat IV	Vitamin B_1 deficient	45	41	91.1	.25	45	4	8.8	40	12	30.0	39	16	41.0	38	23	60.5	38	33	86.8
	Control	43	------	------	.25	42	0	------	41	0	------	41	1	2.4	39	7	17.9	37	21	56.7
Human I	Vitamin B_1 deficient	20	13	65.0	.25	11	0	------	19	4	21.0	19	13	68.4	19	14	73.6	19	17	89.4
Human II	Vitamin B_1 deficient	19	8	42.1	.25	17	0	------	16	2	12.5	16	3	18.7	16	8	50.0	16	10	62.5

* Not examined.

Since there appeared to be a shortening of the incubation period of rat leprosy in rats on the vitamin B_1 deficient diet, it was decided to repeat the experiments with human leprous tissue.

Lepromata were removed from two human cases.[2] Neither of the lesions was very acute. The leproma from the first patient was erythematous and somewhat fibrotic, while that from the second patient was less erythematous and more fibrotic. In these experiments the material was treated and the inoculum prepared in the same manner as that used in the experiments with rat leprosy.

Experiment I

Twenty white rats, weighing from 70 to 156 grams, were placed on the vitamin B_1 deficient diet on February 20, 1935. On March 9, after 17 days on the deficient diet, they were inoculated, subcutaneously, with 0.25 cc of an emulsion of the leproma from the first human case. Thirteen of the rats were depleted at the time of inoculation, and 18 one week later.

No rats on the control diet were inoculated, because none of comparable age and weight were available when the human material was received.

Palpable lesions in the rats on the deficient diet were first noted 3 weeks after the inoculation. After 3 weeks 4 (21.0 percent) of the 19 living, after 4 weeks 13 (68.4 percent) of the 19 living, after 6 weeks 14 (73.6 percent) of the 19 living, and after 8 weeks 17 (89.4 percent) of the 19 living rats had palpable lesions. By the end of 9 weeks all of the living rats had palpable lesions.

The lesions in these rats appeared to be identical, grossly, with those of rat leprosy.

Experiment II

Nineteen white rats, weighing from 87 to 151 grams, were placed on the vitamin B_1 deficient diet on February 27, 1935. On March 9, after 10 days on the deficient diet, they were inoculated, subcutaneously, with 0.25 cc of an emulsion made from a leproma of the second human case. Eight of the rats were depleted at the time of inoculation. No rats on the control diet were inoculated, for the reasons given in experiment I.

Palpable lesions in the rats on the deficient diet were first noted 3 weeks after inoculation. After 3 weeks 2 (12.5 percent) of the 16 living, after 4 weeks 3 (18.7 percent) of the 16 living, after 6 weeks 8 (50.0 percent) of the 16 living, after 8 weeks 10 (62.5 percent) of the 16 living, and after 10 weeks 12 (75.0 percent of the 16 living rats

[2] Obtained through the courtesy of Surg. O. E. Denny, Medical Officer in Charge, U. S. Marine Hospital (National Leprosarium), Carville, La.

had palpable lesions. The lesions in the rats in this experiment appeared to be identical, grossly, with those of the previous experiment and with those of rat leprosy.

In both experiments with the human material the lesions have continued to increase in size up to the present time (11 weeks after inoculation).

We feel that no definite conclusions can be drawn from these experiments with human material. Before we can state that a vitamin B_1 deficient diet makes rats more susceptible to human leprosy, and that a strain of human leprosy has been established in the rat, it will be necessary to carry the human leprosy through several generations of rats.

SUMMARY

Four experiments have been conducted in which white rats on a vitamin B_1 deficient diet and rats on a control diet have been inoculated, subcutaneously, with rat leprosy.

The incubation period of rat leprosy in the rats on the vitamin B_1 deficient diet was appreciably shorter than in the rats on the control diet.

In two experiments, white rats on a vitamin B_1 deficient diet were inoculated, subcutaneously, with human leprous material. Local lesions were produced which have continued to increase in size.

REFERENCES

(1) Muir, E., and Henderson, J. N.: Indian Jour. Med. Res., Vol. 15 (1928), p. 807.
(2) Lamb, Alvin R.: Am. Jour. Hyg., Vol. 21 (1935), p. 438.

RATIFICATION OF THE INTERNATIONAL SANITARY CONVENTION FOR AERIAL NAVIGATION

On June 5, 1935, the United States Senate ratified, with two reservations, the International Sanitary Convention for Aerial Navigation, which was opened for signature at The Hague on April 12, 1933, and signed on behalf of the United States on April 6, 1934. Following is the Senate resolution of ratification, with the reservations:

Resolved (*two-thirds of the Senators present concurring therein*), That the Senate advise and consent to the ratification of Executive G, Seventy-fourth Congress, first session, the International Sanitary Convention for Aerial Navigation, which was opened for signature at The Hague on April 12, 1933, and was signed on behalf of the United States on April 6, 1934, subject to the following two reservations:

(1) With reference to article 61 no amendments to the convention will be binding on the Government of the United States of America or territory subject to its jurisdiction unless such amendments be accepted by the Government of the United States of America;

(2) The Government of the United States of America reserves the right to decide whether from the standpoint of the measures to be applied a foreign district is to be considered as infected, and to decide what requirements shall be applied under special circumstances to aircraft and personnel arriving at an aerodrome in the United States of America or territory subject to its jurisdiction.

The ratification will have to be deposited with the Government of the Netherlands before the convention is proclaimed by the President. The convention provides that as soon as 10 ratifications have been deposited, the Government of the Netherlands will draw up a procès-verbal and transmit copies to the Governments of the high contracting parties and to the Office International d'Hygiene publique, and the convention shall come into force on the one hundredth and twentieth day after the date of the procès-verbal. Ten ratifications have already been deposited with the Netherlands Government, and the convention will come into effect on August 1, 1935.

DEATHS DURING WEEK ENDED JUNE 8, 1935

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

	Week ended June 8, 1935	Corresponding week, 1934
Data from 86 large cities of the United States:		
Total deaths	8,155	8,182
Deaths per 1,000 population, annual basis	11.4	11.4
Deaths under 1 year of age	571	634
Deaths under 1 year of age per 1,000 estimated live births	52	59
Deaths per 1,000 population, annual basis, first 23 weeks of year	12.4	12.3
Data from industrial insurance companies:		
Policies in force	67,830,119	67,799,549
Number of death claims	13,156	13,185
Death claims per 1,000 policies in force, annual rate	10.1	10.1
Death claims per 1,000 policies, first 23 weeks of year, annual rate	10.5	10.8

PREVALENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

CURRENT WEEKLY STATE REPORTS

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers

Reports for Weeks Ended June 15, 1935, and June 16, 1934

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended June 15, 1935, and June 16, 1934

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended June 15, 1935	Week ended June 16, 1934	Week ended June 15, 1935	Week ended June 16, 1934	Week ended June 15, 1935	Week ended June 16, 1934	Week ended June 15, 1935	Week ended June 16, 1934
New England States:								
Maine	1			1	260	11	0	0
New Hampshire						37	0	0
Vermont	1				16	30	0	0
Massachusetts	12	6			334	885	1	2
Rhode Island	2	3			472	14	0	0
Connecticut	2	3	1		667	210	0	2
Middle Atlantic States:								
New York	34	32		[1] 9	2,904	970	15	5
New Jersey	14	13	2	6	2,007	682	5	0
Pennsylvania	26	36			1,586	1,958	4	2
East North Central States:								
Ohio	24	20	53	17	1,927	1,386	6	4
Indiana	20	11	5	10	129	420	1	1
Illinois	61	40	34	20	1,068	1,827	10	7
Michigan	8	9			2,356	403	2	1
Wisconsin	3	4	25	11	1,651	1,762	0	0
West North Central States:								
Minnesota	2	5	2	1	190	117	4	1
Iowa [2]	16	12	5		121	190	4	3
Missouri	13	14	54	10	195	159	6	2
North Dakota	2				34	53	3	0
South Dakota	2	3			17	98	0	0
Nebraska		5			89	59	2	0
Kansas	13	10	17	1	321	287	0	2
South Atlantic States:								
Delaware	3	2			9	50	1	0
Maryland [2 3]	5	10	2	2	98	668	9	1
District of Columbia	2	8		1	30	27	0	0
Virginia [2]	4	6			183	776	10	1
West Virginia	13	8	26	12	213	115	4	0
North Carolina	5	12	2	13	56	595	5	1
South Carolina	1	3	56	77	18	127	0	0
Georgia [4]	3	4				61	0	0
Florida	6	9	1		9	104	0	0
East South Central States:								
Kentucky	2	3	3		179	364	1	0
Tennessee	6	8	5	5	21	153	2	0
Alabama [4]	7	8	30	5	68	333	0	0
Mississippi [2]	5	6					0	1

See footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended June 15, 1935, and June 16, 1934—Continued

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended June 15, 1935	Week ended June 16, 1934	Week ended June 15, 1935	Week ended June 16, 1934	Week ended June 15, 1935	Week ended June 16, 1934	Week ended June 15, 1935	Week ended June 16, 1934
West South Central States:								
Arkansas	5	2	47	6	35	5	0	0
Louisiana [4]	9	12	15	7	90	124	0	1
Oklahoma [5]		2	10	21	36	59	0	2
Texas [4]	20	46	31	58	22	752	4	0
Mountain States:								
Montana [3]		7	21	1	202	37	1	0
Idaho [3]		1			19	5	0	0
Wyoming [3]		1	1		5	76	0	0
Colorado	4	9			238	470	0	1
New Mexico			1	1	7	81	1	0
Arizona	1	1		2	7	10	1	0
Utah [3]		1		4	3	17	0	0
Pacific States:								
Washington		1			365	202	2	0
Oregon [3]	4	3		13	144	40	1	0
California [3]	30	31	30	30	1,097	942	3	1
Total	391	430	479	344	19,498	17,751	108	41
First 24 weeks of years	14,715	16,493	101,610	46,047	641,383	621,909	3,411	1,301

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended June 15, 1935	Week ended June 16, 1934	Week ended June 15, 1935	Week ended June 16, 1934	Week ended June 15, 1935	Week ended June 16, 1934	Week ended June 15, 1935	Week ended June 16, 1934
New England States:								
Maine	0	0	21	17	0	0	1	2
New Hampshire	0	0	2	2	0	0	0	0
Vermont	0	0	2	11	0	0	0	0
Massachusetts	1	1	188	166	0	0	1	2
Rhode Island	0	0	5	10	0	0	0	1
Connecticut	0	0	77	41	0	0	2	1
Middle Atlantic States:								
New York	1	8	748	496	0	0	7	13
New Jersey	1	2	162	114	0	0	4	4
Pennsylvania	0	3	373	338	0	0	10	7
East North Central States:								
Ohio	1	9	446	396	4	1	9	16
Indiana	1	1	77	47	0	1	3	0
Illinois	2	1	950	351	2	1	4	15
Michigan	0	0	216	287	0	0	4	10
Wisconsin	1	1	365	223	3	11	0	0
West North Central States:								
Minnesota	2	0	220	52	7	2	11	1
Iowa [3]	0	1	54	59	8	0	3	1
Missouri	0	1	28	28	2	8	7	10
North Dakota	0	0	34	4	1	0	0	0
South Dakota	0	1	5	6	7	0	0	0
Nebraska	0	1	9	9	15	4	0	0
Kansas	0	0	45	30	29	7	7	8
South Atlantic States:								
Delaware	0	0	4	3	0	0	0	1
Maryland [3] [5]	0	0	53	26	0	0	8	4
District of Columbia	0	0	26	5	0	0	0	1
Virginia [3]	3	2	20	20	0	0	6	12
West Virginia	0	0	37	44	0	0	7	16
North Carolina	57	2	21	18	1	0	16	4
South Carolina	0	0	1	1	0	0	32	20
Georgia [4]	0	1	5	1	0	0	40	20
Florida	0	0	1	3	0	0	15	1
East South Central States:								
Kentucky	0	0	13	14	0	0	9	20
Tennessee	0	1	8	4	0	2	17	11
Alabama [4]	2	0	5	5	0	0	23	14
Mississippi [3]	1	2	7	5	0	0	9	8

See footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended June 15, 1935, and June 16, 1934—Continued

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended June 15, 1935	Week ended June 16, 1934	Week ended June 15, 1935	Week ended June 16, 1934	Week ended June 15, 1935	Week ended June 16, 1934	Week ended June 15, 1935	Week ended June 16, 1934
West South Central States:								
Arkansas	0	0	3	1	0	0	8	4
Louisiana [4]	7	0	5	1	0	1	16	22
Oklahoma [4]	0	0	4	5	1	3	3	6
Texas [4]	0	1	28	43	9	25	19	50
Mountain States:								
Montana [2]	0	1	8	1	7	2	0	0
Idaho [2]	1	2	9	-------	0	2	0	0
Wyoming [2]	0	0	10	2	7	10	0	1
Colorado	0	0	126	21	2	3	0	4
New Mexico	0	0	6	4	0	3	0	3
Arizona	0	3	25	3	0	0	6	2
Utah [2]	0	0	75	4	0	1	0	0
Pacific States:								
Washington	0	2	36	42	29	3	2	2
Oregon [2]	0	0	15	29	2	2	2	2
California [2]	20	273	155	142	10	7	10	7
Total	101	320	4,733	3,134	146	99	321	326
First 24 weeks of year	719	1,385	165,315	135,680	4,529	3,407	3,713	4,294

[1] New York City only.
[2] Rocky Mountain spotted fever, week ended June 15, 1935, 25 cases, as follows: Iowa, 1; Maryland, 3; Virginia, 2; Montana, 5; Idaho, 4; Wyoming, 7; Oregon, 1; California, 2.
[3] Week ended earlier than Saturday.
[4] Typhus fever, week ended June 15, 1935, 15 cases, as follows: Georgia, 7; Alabama, 6; Louisiana, 1; Texas, 1. Exclusive of Oklahoma City and Tulsa.

SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of cases reported monthly by States is published weekly and covers only those States from which reports are received during the current week.

State	Meningococcus meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
March 1935										
Colorado	-------	31	-------	-------	4,049	-------	1	1,343	28	3
April 1935										
Colorado	7	23	-------	-------	3,165	-------	0	1,112	14	2
May 1935										
California	43	143	182	10	8,692	15	22	1,298	77	41
Florida	1	16	11	20	160	24	3	14	0	22
Georgia	4	26	138	212	74	53	3	26	-------	53
Iowa	12	40	105	-------	1,688	-------	3	355	21	6
Maine	-------	9	7	-------	647	-------	0	36	0	4
Massachusetts	10	39	-------	-------	1,751	4	3	981	0	16
New Jersey	12	100	42	2	9,497	-------	3	764	0	10
North Carolina	10	53	23	-------	722	89	44	61	1	18
Ohio	66	130	164	2	7,809	-------	1	2,588	0	21
South Carolina	1	46	413	540	83	109	2	17	2	33

March 1935

	Cases
Colorado:	
Chicken pox	434
Impetigo contagiosa	1
Mumps	197
Rocky Mountain spotted fever	2
Septic sore throat	3
Vincent's infection	16
Whooping cough	112

April 1935

	Cases
Colorado:	
Chicken pox	371
Impetigo contagiosa	1
Mumps	212
Rocky Mountain spotted fever	5
Vincent's infection	6
Whooping cough	118

May 1935

	Cases
Actinomycosis:	
California	1
Anthrax:	
New Jersey	1
Chicken pox:	
California	4,924
Florida	109
Georgia	132
Iowa	347
Maine	174
Masssachusetts	1,129
New Jersey	1,760
North Carolina	413
Ohio	1,771
South Carolina	75
Conjunctivitis:	
Georgia	5
Dengue:	
Florida	5
Georgia	1
South Carolina	2
Diarrhea and enteritis:	
Ohio (under 2 years)	6
South Carolina	695
Dysentery:	
California (amoebic)	17
California (bacillary)	12
Florida (amoebic)	1
Georgia (amoebic)	2
Georgia (bacillary)	79
Massachusetts (amoebic)	1
Massachusetts (bacillary)	1
New Jersey (bacillary)	1
Epidemic encephalitis:	
California	5
Georgia	1
Maine	2

May 1935—Continued

	Cases
Epidemic encephalitis—Continued.	
Massachusetts	1
New Jersey	2
Ohio	5
South Carolina	1
Food poisoning:	
California	28
Ohio	38
German measles:	
California	4,816
Iowa	547
Maine	631
Massachusetts	9,786
New Jersey	3,736
North Carolina	139
Ohio	3,738
Granuloma, coccidioidal:	
California	3
Hookworm disease:	
Georgia	459
South Carolina	76
Jaundice, epidemic:	
California	1
Lead poisoning:	
Massachusetts	1
Ohio	9
Leprosy:	
California	2
Mumps:	
California	1,800
Florida	218
Georgia	145
Iowa	1,050
Maine	52
Massachusetts	674
New Jersey	1,012
Ohio	1,842
South Carolina	268
Ophthalmia neonatorum:	
California	3
Massachusetts	126
New Jersey	2
North Carolina	4
Ohio	8
South Carolina	6
Paratyphoid fever:	
California	3
New Jersey	1
North Carolina	2
Ohio	1
South Carolina	5
Puerperal septicemia:	
Ohio	6
Rabies in animals:	
California	120
Maine	2
Massachusetts	23
New Jersey	9
South Carolina	58

May 1935—Continued

	Cases
Rabies in man:	
New Jersey	1
Rocky Mountain spotted fever:	
California	1
North Carolina	1
Screw worm infection:	
Georgia	1
Septic sore throat:	
California	14
Georgia	13
Massachusetts	18
North Carolina	18
Ohio	257
Tetanus:	
California	5
Georgia	4
Maine	1
Massachusetts	1
New Jersey	2
Ohio	1
Trachoma:	
California	17
Massachusetts	1
Ohio	1
Trichinosis:	
California	6
Maine	2
Tularaemia:	
Georgia	4
Ohio	1
South Carolina	1
Typhus fever:	
Florida	1
Georgia	19
North Carolina	6
Undulant fever:	
California	19
Florida	1
Georgia	5
Iowa	13
Massachusetts	3
New Jersey	3
North Carolina	3
Ohio	3
Vincent's infection:	
Maine	1
Whooping cough:	
California	1,125
Florida	74
Georgia	153
Iowa	60
Maine	98
Massachusetts	504
New Jersey	1,571
North Carolina	1,422
Ohio	554
South Carolina	193

CASES OF VENEREAL DISEASES REPORTED FOR APRIL 1935

This statement is published monthly for the information of health officers in order to furnish current data as to the prevalence of the venereal diseases. The figures are taken from reports received from State health officers. They are preliminary and are, therefore, subject to correction. It is hoped that the publication of these reports will stimulate more complete reporting of these diseases.

State	Syphilis		Gonorrhea	
	Cases reported during month	Monthly case rates per 10,000 population	Cases reported during month	Monthly case rates per 10,000 population
Alabama	476	1.76	94	.35
Arizona	106	2.34	129	2.85
Arkansas [1]	423	2.26	146	.78
California	1,384	2.28	1,346	2.22
Colorado [2]				
Connecticut	206	1.25	72	.44
Delaware	150	6.22	29	1.20
District of Columbia	159	3.21	132	2.67
Florida	199	1.28	77	.50
Georgia	1,155	3.97	358	1.23
Idaho	0	0	0	0
Illinois	1,471	1.88	1,161	1.48
Indiana	269	.82	258	.78
Iowa [1]	116	.47	148	.60
Kansas	90	.47	51	.27
Kentucky	219	.83	295	1.11
Louisiana	272	1.26	127	.59
Maine	36	.45	48	.60
Maryland	827	4.97	171	1.03
Massachusetts	498	1.15	508	1.18
Michigan	537	1.06	467	.93
Minnesota	369	1.42	303	1.17
Mississippi	1,097	5.36	1,716	8.38
Missouri	251	.68	88	.24
Montana [1]	59	1.10	46	.86
Nebraska	40	.29	69	.50
Nevada [2]				
New Hampshire	12	.26	7	.15
New Jersey	686	1.64	302	.72
New Mexico [1]	55	1.26	25	.58
New York	6,117	4.72	1,467	1.13
North Carolina	1,413	4.31	364	1.11
North Dakota	13	.19	46	.67
Ohio	712	1.05	186	.27
Oklahoma [1]	191	.92	173	.83
Oregon	84	.85	90	.92
Pennsylvania	301	.31	215	.22
Rhode Island	76	1.08	46	.66
South Carolina [1]	336	1.92	448	2.56
South Dakota	9	.13	19	.27
Tennessee	859	3.22	434	1.63
Texas	491	.82	130	.22
Utah [3]				
Vermont	12	.33	35	.97
Virginia [1]	342	1.40	257	1.05
Washington	191	1.19	189	1.18
West Virginia [3]				
Wisconsin [4]	34	.12	119	.40
Wyoming [2]				
Total	22,343	1.84	12,391	1.02

[1] Incomplete.
[2] Not reporting.
[3] Has been reporting regularly but no report received for current month.
[4] Only cases of syphilis in the infectious stage are reported.

NOTE.—Surveys in which all medical sources have been contacted in representative communities throughout the United States have revealed that the monthly rate per 10,000 population is 6.6 for syphilis and 10.2 for gonorrhea.

WEEKLY REPORTS FROM CITIES

City reports for week ended June 8, 1935

This table summarizes the reports received regularly from a selected list of 121 cities for the purpose of showing a cross section of the current urban incidence of the communicable diseases listed in the table. Weekly reports are received from about 700 cities, from which the data are tabulated and filed for reference.

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Smallpox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Maine:											
Portland	0	------	0	0	2	2	0	0	1	8	23
New Hampshire:											
Concord	0	------	0	0	0	2	0	0	0	0	14
Nashua	0	------	--------	0	-------	0	0	-------	0	0	--------
Vermont:											
Barre	------	------	------	------	------	------	------	------	------	------	------
Burlington	0	------	0	3	0	0	0	0	0	0	5
Massachusetts:											
Boston	2	------	0	77	29	49	0	5	0	28	209
Fall River	1	------	0	5	3	6	0	2	0	4	27
Springfield	0	------	0	70	2	12	0	1	0	5	32
Worcester	0	------	0	9	3	13	0	0	1	1	32
Rhode Island:											
Pawtucket	0	------	0	5	0	1	0	0	0	0	16
Providence	1	------	0	494	4	6	0	2	0	19	69
Connecticut:											
Bridgeport	1	------	0	11	1	9	0	2	0	0	30
Hartford	------	------	------	------	------	------	------	------	------	------	------
New Haven	0	------	0	91	1	1	0	1	0	3	39
New York:											
Buffalo	0	------	0	31	15	63	0	8	0	12	127
New York	29	6	5	1,698	145	419	0	86	5	182	1,465
Rochester	0	------	0	33	10	10	0	0	1	21	63
Syracuse	0	------	0	290	4	23	0	1	0	14	44
New Jersey:											
Camden	2	------	1	0	2	4	0	2	0	9	32
Newark	0	2	0	362	3	14	0	4	0	66	72
Trenton	0	------	0	1	4	10	0	3	0	1	45
Pennsylvania:											
Philadelphia	7	4	3	103	35	86	0	23	1	77	537
Pittsburgh	3	2	2	153	24	39	0	8	1	23	164
Reading	0	------	0	158	2	2	0	1	0	0	10
Scranton	0	------	--------	15	-------	7	0	-------	0	2	--------
Ohio:											
Cincinnati	2	------	0	9	8	13	0	9	0	6	145
Cleveland	3	11	2	474	16	65	0	17	0	36	183
Columbus	0	------	0	67	4	16	0	6	0	1	88
Toledo	0	1	1	89	8	15	0	5	0	9	77
Indiana:											
Fort Wayne	5	------	0	1	1	3	0	0	0	0	27
Indianapolis	2	------	0	77	11	11	0	2	0	16	94
South Bend	0	------	0	0	0	2	0	0	0	0	--------
Terre Haute	0	------	0	1	0	0	0	1	0	0	15
Illinois:											
Chicago	25	------	2	741	54	538	0	34	1	97	690
Springfield	0	------	0	7	2	6	1	1	0	4	22
Michigan:											
Detroit	3	------	0	583	30	68	0	20	0	114	284
Flint	0	------	0	1	4	0	0	1	0	6	32
Grand Rapids	0	------	0	136	1	16	0	0	0	17	28
Wisconsin:											
Kenosha	0	------	0	8	2	7	0	0	0	5	10
Milwaukee	0	------	0	632	5	76	0	4	0	23	99
Racine	0	------	0	167	1	33	0	0	0	11	11
Superior	0	------	0	26	0	0	0	0	0	1	12
Minnesota:											
Duluth	0	------	0	16	3	1	0	0	0	1	29
Minneapolis	3	------	0	24	8	80	1	1	2	9	98
St. Paul	0	------	0	7	10	37	0	2	3	4	56
Iowa:											
Davenport	0	------	--------	1	-------	2	0	-------	0	0	--------
Des Moines	1	------	0	122	0	6	1	0	0	0	39
Sioux City	1	------	--------	1	-------	2	0	--------	0	4	--------
Waterloo	0	------	--------	0	-------	4	0	-------	0	1	--------
Missouri:											
Kansas City	1	------	0	14	15	10	0	3	0	2	107
St. Joseph	1	------	0	1	0	4	0	0	0	0	4
St. Louis	15	------	0	12	6	20	0	6	0	8	178

City reports for week ended June 8, 1935—Continued

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Smallpox cases	Tuberculosis deahts	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
North Dakota:											
Fargo	0		0	0	0	9	0	0	0	0	10
Grand Forks	0			0		0	0		0	0	
South Dakota:											
Aberdeen	0		0	0		0	0		0	3	
Nebraska:											
Omaha	4		0	38	6	4	2	3	0	0	57
Kansas:											
Topeka											
Wichita	0		0	8	4	0	0	1	0	0	30
Delaware:											
Wilmington	2		0	6	3	5	0	1	1	2	21
Maryland:											
Baltimore	4		0	39	19	33	0	10	0	8	199
Cumberland	0		0	1	0	1	0	0	0	0	7
Frederick	0		0	1	0	0	0	0	0	0	3
District of Col.:											
Washington	7		0	34	14	23	0	13	1	4	172
Virginia:											
Lynchburg	0		0	0	3	0	0	0	0	32	12
Norfolk	0		0	3	2	1	0	4	1	0	32
Richmond	0		0	18	2	0	0	0	0	2	44
Roanoke	0		1	6	1	1	0	0	0	1	17
West Virginia:											
Charleston	0		0	11	1	1	0	0	0	2	8
Huntington	0			3		2	0		0	0	
Wheeling	0		0	38	1	0	0	0	0	1	19
North Carolina:											
Raleigh	0		0	0	0	0	0	0	0	0	10
Wilmington	0		0	0	0	0	0	0	2	4	9
Winston-Salem	1		0	0	1	0	0	2	0	11	15
South Carolina:											
Charleston	0		0	0	4	0	0	0	0	0	21
Columbia											
Greenville	0		0	0	1	0	0	0	0	0	8
Georgia:											
Atlanta	2	3	1	1	3	3	0	8	3	12	81
Brunswick	0		0	0	0	0	0	0	0	0	4
Savannah	0		0	0	2	0	0	5	0	0	30
Florida:											
Miami	1		0	3	1	3	0	4	0	2	22
Tampa	0		0	6	2	0	0	4	12	3	26
Kentucky:											
Ashland	0			3		0	0		0	0	
Lexington	0		0	10	2	1	0	2	0	2	17
Tennessee:											
Memphis	1		0	1	3	4	0	10	0	1	103
Nashville	0		0	0	2	2	0	2	0	1	53
Alabama:											
Birmingham	0	1	0	16	2	2	0	1	5	6	53
Mobile	0		0	2	2	1	0	0	0	0	18
Montgomery	1			0		0	0		0	3	
Arkansas:											
Fort Smith	0			0		0	0		0	8	
Little Rock											
Louisiana:											
New Orleans	5	1	0	13	9	4	0	20	1	1	151
Shreveport	0		0	0	3	0	0	1	1	0	24
Oklahoma:											
Oklahoma City	0	5	1	7	2	1	0	2	0	0	41
Texas:											
Dallas	3		0	1	0	2	0	3	0	0	50
Fort Worth	0		0	0	0	0	0	0	0	0	24
Galveston	0		0	0	1	1	0	2	0	0	17
Houston	3		0	2	7	5	1	3	2	3	89
San Antonio	3		0	1	7	4	0	5	0	0	57
Montana:											
Billings	0		0	19	2	1	0	0	0	0	10
Great Falls	0		0	3	3	0	0	0	0	3	8
Helena	0		0	6	1	0	0	0	0	12	6
Missoula	0		0	0	0	0	0	0	0	0	
Idaho:											
Boise	0		0	1	0	0	0	0	0	0	6
Colorado:											
Denver	3		0	134	4	62	0	3	0	1	79
Pueblo	0		0	15	0	5	0	0	0	2	8

City reports for week ended June 8, 1935—Continued

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Smallpox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
New Mexico:											
Albuquerque	0	------	0	4	2	1	0	2	0	4	11
Utah:											
Salt Lake City	1	------	2	3	4	110	0	3	0	0	34
Nevada:											
Reno	0	------	0	2	0	1	0	0	0	0	6
Washington:											
Seattle	0	------	1	242	2	11	2	4	1	0	83
Spokane	0	------	0	35	2	4	0	1	0	5	29
Tacoma	0	------	0	2	0	0	5	0	0	0	20
Oregon:											
Portland	0	------	1	26	3	11	0	4	0	1	80
Salem	0	------	------	1	------	1	0	------	0	0	------
California:											
Los Angeles	10	14	0	87	13	30	8	20	1	11	353
Sacramento	0	------	0	121	5	17	0	2	0	3	31
San Francisco	1	4	0	157	3	20	0	11	0	58	152

State and city	Meningococcus meningitis		Poliomyelitis cases
	Cases	Deaths	
Massachusetts:			
Worcester	0	1	0
Rhode Island:			
Providence	2	2	0
New York:			
New York	24	7	2
Pennsylvania:			
Philadelphia	3	0	0
Ohio:			
Cincinnati	1	1	0
Cleveland	2	0	0
Columbus	1	1	0
Toledo	2	2	0
Indiana:			
Indianapolis	1	0	0
Illinois:			
Chicago	14	3	0
Michigan:			
Detroit	1	0	0
Minnesota:			
Minneapolis	1	2	0
Iowa:			
Sioux City	1	0	0
Missouri:			
Kansas City	3	3	0
St. Joseph	1	0	0
St. Louis	3	1	0
Nebraska:			
Omaha	1	0	0
Maryland:			
Baltimore	10	1	0
District of Columbia:			
Washington	10	2	0
Virginia:			
Norfolk	4	2	0
North Carolina:			
Winston-Salem	0	1	0
Florida			
Miami	1	0	0
Tennessee:			
Memphis	0	2	0
Alabama:			
Birmingham	2	0	0
Louisiana:			
New Orleans	1	0	2
Oklahoma:			
Oklahoma City	1	0	0
Oregon:			
Portland	4	1	0
California:			
Los Angeles	1	2	7
Sacramento	1	0	1
San Francisco	0	1	0

Dengue: Miami, 1 case.

Epidemic encephalitis.—Cases: New York,1; Philadelphia, 1; Pittsburgh, 2; Detroit, 1; Fargo, 1; Atlanta, 1; New Orleans, 1.

Pellagra.—Cases: Boston, 1; Charleston, S. C., 2; Savannah, 4; New Orleans, 1; Los Angeles, 3; San Francisco, 1.

Rabies in man: Atlanta 1 death.

Typhus fever.—Cases: Charleston, S. C., 1; Savannah, 1; Tampa, 1; Montgomery, 1; Fort Worth, 1.

FOREIGN AND INSULAR

CANADA

Provinces—Communicable diseases—2 weeks ended June 1, 1935.—During the 2 weeks ended June 1, 1935, cases of certain communicable diseases were reported by the Department of Pensions and National Health of Canada as follows:

Disease	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Cerebrospinal meningitis				2	1					3
Chicken pox		8	2	289	568	45	41	50	159	1,162
Diphtheria		4	2	23	10		5		1	45
Dysentery				4	1					5
Erysipelas				6	6	3			2	17
Influenza			6		22	178			70	276
Measles		55	44	1,440	4,828	175	68	145	182	6,937
Mumps		15	2		412	264	23	38	20	774
Paratyphoid fever		1			1					2
Pneumonia (all forms)		1			24		2		12	39
Poliomyelitis				1	1					2
Scarlet fever		16	3	239	214	27	4	19	63	585
Smallpox					1		1			2
Tuberculosis	6	30	38	91	115	17	51	7	32	387
Typhoid fever			1	38	6	2	2	2	1	52
Undulant fever					6		7			13
Whooping cough			1	107	353	66	91	6	91	715

CUBA

Provinces—Notifiable diseases—4 weeks ended June 1, 1935.—During the 4 weeks ended June 1, 1935, cases of certain notifiable diseases were reported in the Provinces of Cuba, as follows:

Disease	Pinar del Rio	Habana	Matanzas	Santa Clara	Camaguey	Oriente	Total
Cancer	2	3		2	2		9
Chicken pox			1	1			2
Diphtheria			2	4			6
Hookworm disease	1			11			12
Leprosy				1	1	9	11
Malaria	96	5	12	162	70	171	516
Measles	28	5	12	27	2	1	75
Poliomyelitis	1			4			5
Scarlet fever				1			1
Tuberculosis	5	6	24	38	20	43	136
Typhoid fever		10	8	40	44	15	117

ITALY

Communicable diseases—4 weeks ended April 28, 1935.—During the 4 weeks ended April 28, 1935, cases of certain communicable diseases were reported in Italy, as follows:

Disease	Apr. 1-7		Apr. 8-14		Apr. 15-21		Apr. 22-28	
	Cases	Communes affected	Cases	Communes affected	Cases	Communes affected	Cases	Communes affected
Anthrax	14	14	11	11	4	4	9	8
Cerebrospinal meningitis	16	14	21	18	21	19	19	18
Chicken pox	399	137	442	125	475	132	375	136
Diphtheria and croup	533	296	558	281	585	261	411	245
Dysentery	4	4	3	3	1	1	2	1
Hookworm disease	24	6	24	8	11	7	12	5
Lethargic encephalitis	5	5	4	4	1	1	3	3
Measles	2,816	376	2,357	381	3,448	413	2,412	391
Paratyphoid fever	27	24	26	21	25	20	26	21
Poliomyelitis	6	6	9	9	10	9	3	3
Puerperal fever	39	36	47	42	37	34	35	32
Scarlet fever	319	121	334	113	415	122	348	121
Typhoid fever	147	103	178	111	148	92	142	93
Undulant fever	87	62	83	56	64	43	57	38
Whooping cough	283	92	293	95	289	93	281	90

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

From medical officers of the Public Health Service, American consuls, International Office of Public Hygiene, Pan American Sanitary Bureau, health section of the League of Nations, and other sources. The reports contained in the following table must not be considered as complete or final as regards either the list of countries included or the figures for the particular countries for which reports are given.

CHOLERA

[C indicates cases; D, deaths; P, present]

Place		Oct. 28–Nov. 24, 1934	Nov. 25–Dec. 29, 1934	Dec. 30, 1934–Jan. 26, 1935	Jan. 27–Feb. 23, 1935	Week ended— March 1935 2	9	16	23	30	April 1935 6	13	20	27	May 1935 4	11	18	25
Ceylon:																		
Colombo	C				22	4	1											
	D				17	3												
Peliyagoda	C				22													
	D				17													
China:																		
Canton	C																1	
Swatow	C																1	
India	C	16,176	17,836	16,371	14,613	3,370	3,568	3,358	4,557	5,430	5,565	6,019	5,949	5,571				
	D	8,559	8,452	8,582	7,696	1,719	1,913	1,741	2,298	2,563	2,942	3,163	3,410	3,145				
Assam	C	327	645	874	127	47	40	51	87	105	354	435	633	616	569	543	631	662
	D	133	274	419	82	22	21	25	42	59	157	270	361	416	387	295	380	403
Bassein	C		15	8	6	3				1	1	3	2	15	15	5	2	
	D		9	9	4	1	1				1	3	1	9	12	6	2	
Bombay Presidency	C	872	592	90	150	74	32	32	48	48	31	13	51	51	96	69	17	
	D	383	256	45	59	37	12	17	18	14	11	8	29	18	39	39	11	
Bombay	C						6							1				
Calcutta	C	78	166	174	444	154	186	154	157	187	151	163	206	262	186	256	190	193
Chittagong	C	1	12		4	2	3			9	7		9	3	6	6	18	4
Madras Presidency	C	1,901	5,157	7,693	6,473	875	843	696	691	633	818	513	596	505				
	D	895	2,469	4,115	3,340	473	413	360	363	318	403	292	271	249				
Madras	C	59	28	25	6	1		1	1			1		1				
	D	32	12	17	3				1									
Porto Novo	C		P															
Mergui	C				2													
Moulmein	C			1	26	4	2		[1]2			4	[1]2					1
Negapatam	C	1		12	2	1	2		9	2	3	5		2				
Punjab	C															P	3	2
Rangoon	C		1	21	34		2	3	3	[1]1	7	3	3	3	1	5	2	3
Tuticorin	C			1						[1]1	18		14	5	2	4		

[1] Imported.

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

CHOLERA—Continued

[C indicates cases; D, deaths; P, present]

Place		Oct. 28–Nov. 24, 1934	Nov. 25–Dec. 29, 1934	Dec. 30, 1934–Jan. 26, 1935	Jan. 27–Feb. 23, 1935	Week ended— March 1935 2	9	16	23	30	April 1935 6	13	20	27	May 1935 4	11	18	25
India (French):																		
Chandernagor	C					1				16	14	34	10	4				
Karikal	C	2	11	55	28	5	8	2	2				1					
Pondichery	C	10	29	50	27	2		1	4	2	2		1	9				
India (Portuguese)	C		10															
Indo-China (see also table below):																		
Kandal	C			2														
Pnom-Penh	C		2		1					1								
Siam:																		
Bangkok	C						1											
Nagara Rajsima—Roy Ech	C					13												
	D					2												
On vessels:																		
S. S. *Ellenga* at Rangoon from Calcutta	C			1														
S. S. *Tilawa* at Cocanada	C				[1]1													
S. S. *Egra* at Rangoon	C			[1]1														
S. S. *Santhia* at Rangoon from Calcutta	C				1													
S. S. *Incomati* at Colombo	C							1										
	D							1										
S. S. *Pasha* at Rangoon from Moulmein	C						1											
S. S. *Khandalla* at Rangoon	C							1										
S. S. *Juna* at Moulmein from Mergui	C							1										
S. S. *Karoa* at Rangoon	C							1										
S. S. *Ethiopia* at Madras from Rangoon	C												1					
	D												1					
S. S. *Ellenga* at Rangoon	C												1					

[1] Suspected.

Place		January 1935			February 1935			March 1935			April 1935			May 1935
		1-10	11-20	21-31	1-10	11-20	21-28	1-10	11-20	21-31	1-10	11-20	21-30	1-10
Indo-China (French) (see also table above):														
Cambodia [3]	C	----	----	2	1	3	----	3	----	1	1	1	2	17
	D	----	----	2	1	3	----	3	----	1	1	1	2	12
Cochin-China [3]	C	----	1	----	----	2	----	2	1	1	1	1	1	3
	D	----	1	----	----	1	----	2	1	1	1	1	1	2

[3] Reports incomplete.

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

PLAGUE[1]

[C indicates cases; D, deaths; P, present]

Place		Oct. 28–Nov. 24, 1934	Nov. 25–Dec. 29, 1934	Dec. 30, 1934–Jan. 26, 1935	Jan. 27–Feb. 23, 1935	Week ended— March 1935					April 1935				May 1935			
						2	9	16	23	30	6	13	20	27	4	11	18	25
Argentina (see also table below):																		
Pampa Territory—Victorica	C																1	
	D																1	
Santiago de Estero Province—Frias	C		1															
Azores. (See table below.)																		
Bechuanaland Protectorate	C												1		1			
Plague-infected rats													P					
Belgian Congo	C	14		4					1									
Bolivia: Tomina Province. (See table below.)																		
Brazil:																		
Alagoas State	C		5															
	D		2															
Ceara State	C		2															
British East Africa (see also table below):																		
Kenya	C	5	4					1		1								
Tanganyika	C									1								
Uganda	C	79	122	79	50	4	11	2	10		20	15	25	35	23	32	28	
	D	75	114	76	49	4	11	2	10		19	14	23	34	22	32	27	
Canary Islands: Las Palmas	C			1														
Ceylon: Colombo	C	2	1		2	2	2						1			4		
	D	2	1		2	2	2						1			4		
Plague-infected rats		3						4			5	8	1	1				
China (see also table below):																		
Amoy	C					[2] 1										[2] 1		
Kangping.[3]																		
Manchuria: Mansantun [4]	D		4															
Dutch East Indies:																		
Cheribon	C				[2] 1													
West Java	C	1,658	2,905	2,425	1,795	340	371	298	296									
	D	1,658	2,900	2,425	1,794	340	371	297	296									
Ecuador (see also table below):																		
Egypt:																		
Alexandria	C															1		
Plague-infected rats		P	P	P	P	P		P		P		P		P		P		

Asyut	C	2				1				2		1		3	11		1	
Beni-Suef	C	1																
Girga	C			1	1					1								1
Hawaii Territory:																		
Hawaii Island—Hamakua district—Plague-infected rats																	1	
Kalopa—Plague-infected rats		3																
Paauhau	C	1							1									
	D	1								1								
Plague-infected rats										2								
Pohakea—Plague-infected rats														1				
Maui Island—Makawao district—Kahului (9–10 miles from)—Plague-infected rats																		
India	C	4,167	4,549	5,852	6,863	1,713	1,915	1,528	1,966	1,990	2,080	1,271	1,530	1,291				
	D	2,424	2,875	3,503	3,882	990	1,031	955	1,094	1,144	1,067	878	952	1,010				
Bassein	C	3	1		1			2	2	2	5	1	2		1	2	1	
Plague-infected rats							1											
Bombay Presidency	C	2,093	1,331	1,074	1,233	209	268	192	142	163	111	96	64	35	45	18	13	
	D	1,109	823	603	686	114	144	122	72	96	55	52	25	22	18	10	8	
Bombay	C			1														
Madras Presidency	C	230	258	237	161	25	36	23	12	16	2	2	3	1				
	D	92	127	119	96	10	19	14	6	5	3	3	3	1				
Mandalay	C				2													
Moulmein	C						[2] 1					1	1			1		
	D						[2] 1											
Northwest Frontier Province	C							15										
	D							7										
Punjab	C	53	59	32	147	74	37	51	62	119	50	88	128	158	189	186	105	68
	D	35	45	19	61	39	18	33	27	78	18	42	63	100	109	113	60	45
Rangoon	C			1	[2] 1			1					1					
Plague-infected rats			1					1							1	1		
Indo-China (see also table below):																		
Bentre	C					1												
Kandal	C			1														
Longxuyen.[5]																		
Pnom-Penh	C	1	2														1	
Saigon and Cholon	C	2													1			
Tanghai Island	C											12						
Tayninh.[5]																		
Iraq:																		
Baghdad	C														1	2		
Baghdad Province	C														1			

[1] Including plague in the United States and its possessions.
[2] Imported.
[3] A report dated Jan. 29, 1935, states that up to Jan. 23, 79 cases of plague with 78 deaths were reported near Kangping, China; the report also states that up to Jan. 21, 50 deaths from plague were reported in 6 villages of the Pe Wang Fu District, northwest of Kangping.
[4] Up to Jan. 5, 1935, 44 cases of plague with 35 deaths were reported at Mansantun, Manchuria, China.
[5] During the week ended June 8, 1935, 1 case of plague was reported at Longxuyen, and 1 case of plague at Tayninh, Indo-China.

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

PLAGUE—Continued

[C indicates cases; D, deaths; P, present]

Place		Oct. 28–Nov. 24, 1934	Nov. 25–Dec. 29, 1934	Dec. 30, 1934–Jan. 26, 1935	Jan. 27–Feb. 23, 1935	Week ended— March 1935: 2	9	16	23	30	April 1935: 6	13	20	27	May 1935: 4	11	18	25
Madagascar. (See table below.)																		
Morocco:																		
Saffi Region	C									9		7	4	3	1			
	D									5	2	5	2	2	1			
Tangier	C	7																
Peru. (See table below.)																		
Senegal. (See table below.)																		
Siam:																		
Prachin—Nagara Nayok	C		4															
Nagara Rajsima	C				1													
Rajpuri	C			1		1												
South-West Africa. (See table below.)																		
Tunisia: Tunis—Plague-infected rats					1												2	
Union of South Africa:																		
Cape Province	C			3	3				5				1	3				
Orange Free State	C	3	3		39				9				10	19				
Transvaal	C								14									
United States:																		
California—Plague-infected ground squirrels—																		
Modoc County [6]														3	9	7	5	[7] 1
San Luis Obispo County														1				[8] 1
Oregon—Lake County—Plague-infected ground squirrels																1		1

[6] For the 2 weeks ended June 8, 1935, 26 plague-infected ground squirrels were reported in Modoc County, Calif.
[7] Plague-infected mouse.
[8] Plague-infected wood rat.

Place		November 1934	December 1934	January 1935	February 1935	March 1935	April 1935
Argentina (see also table above): Santa Fe	C				1	1	
Azores	C	1	1	2	3		
Bolivia: Tomina Province	C			4	4	4	
British East Africa (see also table above): Kenya	C	6					
China: Kwangchowan	C	3					20
	D	3					13
Ecuador:							
Chimborazo Province	C				4		
Loja Province	C				18	17	6
ndo-China (see also table above):							
Cambodia	D	4	2	1			
Cochin-China	C	2				1	2
Naotchao Island	C					20	18
Madagascar (central region)	C	431	381	510	491	211	
	D	410	364	502	472	203	
Peru	C	2	5	5	15	14	13
Libertad Department	C				9	5	
Lima Department	C	1	1	1	6	5	
Callao	C				3	2	
	D				2	2	
Plague-infected rats					4		
Lima	C			2	3	2	9
	D					1	7
Plague-infected rats				5	5		
Senegal:							
Dakar [9]	C	4	2	2	1	2	5
	D	3	2	2	1	2	4
Rufisque [9]	C	4		1			17
Theis [9]	C						3
Tivaouane [9]	C	3	1				5
South-West Africa: Ovamboland	C				[10] 88	29	

[9] Reports incomplete.
[10] For January and February.

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

SMALLPOX

[C indicates cases; D, deaths; P, present]

Place		Oct. 28–Nov. 24, 1934	Nov. 25–Dec. 29, 1934	Dec. 30, 1934–Jan. 26, 1935	Jan. 27–Feb. 23, 1935	Week ended— March 1935					April 1935				May 1935			
						2	9	16	23	30	6	13	20	27	4	11	18	25
Algeria: Constantine Department	C				1				2								1	
Belgian Congo (see also table below)	C	102		5														
Bolivia. (See table below.)																		
Brazil:																		
Recife	C		1															
Sergipe State	C	P																
British East Africa:																		
Kenya	C	17	13												2			
Tanganyika	C	14	63	2	3			15		11	3				3			
Uganda	C														1			
British Guiana	C														P			
British Somaliland	C	5		8	29	2	2	8	7	7	5	9	14	9	12	13		
British South Africa:																		
Northern Rhodesia	C				25			27										
Southern Rhodesia	C		1															
Canada:																		
Alberta	C	2	1															
Ontario	C				2						1 2							
Saskatchewan	C	1									1 1							
Canary Islands: Santa Cruz de Tenerife	C		3															
Ceylon:																		
Colombo	C	11	12	15	1										1			1
Galle	C							13	1									
Welitara	C					11	15	22	2									
China:																		
Amoy	C	1		1			1		5	1	2		1	1				
Canton	C	3	9	7	6	2	1	4	3	2		1	1					
Dairen	C		2	4	1	2			2					4				
Foochow	C	P	P	P	P		P		P		P		P		P		P	
Hangchow	C					1	2				2							
Hankow	C	1	16	19	15	2	2	8	1	1	3	4	3	1				
Hong Kong	C	2	2	8	9	6	3	2	1	2	1	2	3	6	6	2	2	
Macao	D	3	43	47	53	7	8	5	1	2	1	1				1		
Nanking	C		1	1	1		1	2	2						1	1		
Shanghai	C	1	8		4	1		2	1	3	1		1	1	3		4	5
Swatow	C				1				1	1								

Tientsin	C	3	7	6	11	2	4	2	1	1	5	1	2					
Tsingtao	C	3	2	11	17	3	7	1	5		4	7		2				
Chosen. (See table below.)																		
Colombia	C			11	23		5		2	1	12	4	1	8	2	24		
Barranquilla	C														1			
Bogota	C														1			
Dahomey. (See table below.)																		
Dutch East Indies: Balei	C			4														
Egypt:																		
Dakahliya	C				87	1			2	1		2	15	3	13			
Gharbiya	C					3												
Suez	C					[1]1												
Provinces	C	3	2	4	3	6		6	9							1		
Eritrea	C							1	3	1								
Finland. (See table below.)																		
Formosa	C			P														
France. (See table below.)																		
French Somaliland	C			11	16	2	6	5		1	1							
Great Britain: England and Wales	C	1																
Greece: Salonika	C			1	2	1	1	1	1	1	1							
Guatemala. (See table below.)																		
Honduras: Tela	C		7	2	8								6					
India	C	7,163	17,082	23,522	31,533	8,164	8,745	9,173	9,246	12,056	12,628	11,070	10,848	11,012				
	D	1,431	4,189	5,444	6,726	1,648	1,756	1,891	1,753	2,416	2,528	2,181	2,385	2,543				
Assam	C			27	27	9	12	6	3	17	13	4	4	11	10	6	6	34
Bassein	C			1											[2]1			
	D			2														
Bombay Presidency	C	1,245	2,834	4,816	7,778	2,222	2,128	2,456	2,053	2,834	2,996	2,739	2,531	2,231	2,467	2,094	2,033	
	D	204	578	1,019	1,445	412	427	486	386	530	541	506	455	468	414	376	337	
Bombay	C	5	18	87	235	59	81	91	91	119	109	111	119	116	78	81	67	58
	D	4	11	41	114	28	44	60	57	73	61	65	59	72	44	46	41	45
Calcutta	C	4	51	79	170	58	92	74	56	149	125	52	104	152	68	81	62	35
	D	1	32	52	103	34	47	47	33	80	110	43	69	104	58	57	48	25
Chittagong	C				[1]1	[2]2												
Cochin	C			2	6			3	1	1	2							
Karachi	C		7	11	32	8	10	8	11	2	12	10	10	11	3	3	11	6
Madras Presidency	C	2,753	2,727	5,324	4,939	1,246	1,196	1,149	1,284	1,218	1,389	1,103	852	1,022				
	D	446	408	851	835	180	185	205	216	186	180	203	189	148				
Madras	C	5	19	36	48	5	17	10	7	10	15	18	5	9	6	5	5	6
Moulmein	C				[1]1				1	1								1
Negapatam	C	3	24	33	43	12	21	8	9	11	5	10	2	3	5	1	4	3
Punjab	C	60	275	279	193	38	58	69	19	28	30	31	31	41	94	65	138	146
Rangoon	C	3	3	24	77	43	75	24	41	33	35	15	25	20	26	16	10	7
Tuticorin	C		3	4						1		28					5	
Vizagapatam	C	16	28	92	133	36	21	21	36	30	42	27	18	32	15	10	23	10
India (French):																		
Chandernagor	C				1	2				4	14		3	2				
Karikal	C	1	13	14	11	4	1		5	4	7	11	5	9				
Mahe	D	3																
Pondichery	C	89	132	91	78	17	13	23	32	25	15	31	25	25				
	D	45	99	70	72	16	13	20	26	16	15	24	15	24				

[1] For 2 weeks.

[2] Imported.

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

SMALLPOX—Continued

[C indicates cases; D, deaths; P, present]

Place		Oct. 28–Nov. 24, 1934	Nov. 25–Dec. 29, 1934	Dec. 30, 1934–Jan. 26, 1935	Jan. 27–Feb. 23, 1935	Week ended— March 1935 2	9	16	23	30	April 1935 6	13	20	27	May 1935 4	11	18	25
Indo-China (see also table below):																		
Haiphong	C			1			1	2				1	2	1	2	2	1	2
Pnom Penh	C						3	1	1	3								
Tourane	C	3	5	2	5		4	2										
Iran	C	4	1	4	7			1						1				
Teheran	C	2	2															
	D	1																
Iraq	C	1	33	34	7		3	1	2		1	6	1	2				
Arbil	C		3	1	4							2				1		
Basra	C		6									1	1					
Mosul liwa	C			9		6		1	2			1	1					
Japan (see also table below)	C	1	141															
Kobe	C				1													
Nagasaki	C				1	3												
Osaka	C																1	
Taiwan	D		2															
Lithuania. (See table below.)																		
Mexico:																		
Allende[3]																		
Chihuahua	C	2	17	7	8	3			15		[1]1			[4]10			[4]2	
Guadalajara	D																	1
Mazatlan	C									1				1				
Mexico, D. F	C		7	37	108	33	30	21	21	56	29	25						
Monterrey	C					1								2				
San Luis Potosi	D		1											1				
Vera Cruz	C								[2]1									
Morocco. (See table below.)																		
Mozambique. (See table below.)																		
Nigeria	C	115	328	78	372	34	50		86	344			14					
Lagos	C				1													
Nyasaland. (See table below.)																		
Palestine	C		1	2	4				2							1		2
Peru. (See table below.)																		
Poland	C	1								1								

Portugal (see also table below):																		
Lisbon	C	2	1			3		1	1		1	1						
Oporto	C	1	1												1			
Portuguese East Africa. (See table below.)																		
Salvador	C	10	28	88	74				[4] 24	24					19			
Saudi Arabia	C																	
Siam	C	13	20	24	2													
Bangkok	C			1	1													
Sierra Leone	C	[1] 60	172	111	295	[1] 95		[1] 19		[1] 9		[1] 19		[1] 177		[1] 53		
Spain	C	105	78	16	15	13		4	9	8	6	3	16	11	7	11	3	
Straits Settlements: Singapore	C													7			2	4
Sudan (Anglo-Egyptian)	C		12	13	9			4	1	3	12	1	8	2	1	1	2	2
Syria:																		
Damascus	C	33	49	6	2													
Provinces	C	116	114	22	4		2							1				
Trans-Jordan	C	[2] 1																
Tunisia	C			5													1	
Turkey. (See table below.)																		
Union of Soviet Socialist Republics. (See table below.)																		

[1] For 2 weeks.
[2] Imported.
[3] A report dated Dec. 28, 1934, states that about 48 cases of smallpox with 5 or 6 deaths had been reported at Allende, Mexico.
[4] For 3 weeks.

On vessels:

S. S. *Kwang-Si* at Jibuti	1 case	Nov.	24, 1934
S. S. *Varela* at Basra	1 case	Dec.	8, 1934
S. S. *Talma* at Hong Kong	1 case	Jan.	19, 1935
S. S. *Chilka* at Rangoon from Gopalpore	1 case	Jan.	23, 1935
S. S. *Aorangi* at Sydney from Vancouver	1 case	Jan.	24, 1935
S. S. *Hosang* at Singapore from Osaka	1 case	Feb.	2, 1935
S. S. *Rhona* at Port Swettenham from Madras	1 case	Feb.	22, 1935
S. S. *Mongolia* at Suez from Australia	1 case	Feb.	24, 1935
S. S. *Ellenga* at Rangoon	1 case	Feb.	26, 1935
S. S. *Suisang* at Singapore from Hong Kong	1 case	Feb.	27, 1935
S. S. *Empress of Britain* at Singapore from Bombay	1 case	Mar.	3, 1935
S. S. *Cremer* at Singapore from Amoy	1 case	Mar.	11, 1935
S. S. *Kutsang* at Hong Kong	1 case	Mar.	14, 1935
S. S. *Tatsuta Maru* at San Francisco	1 case	Mar.	14, 1935

On vessels:

S. S. *Tatsuta Maru* at San Francisco	1 case	Mar.	15, 1935
S. S. *Pendeen* at Port Said from Odessa	1 case	Mar.	16, 1935
S. S. *Anhui* at Singapore from Hong Kong	2 cases	Mar.	22, 1935
S. S. *Van Heutsz* at Singapore from Amoy	1 case	Mar.	26, 1935
S. S. *Mulbera* at Aden	1 case	Mar.	28, 1935
S. S. *Anshun* at Swatow from Hong Kong	1 case	Mar.	28, 1935
S. S. *Varsova* at Karachi	1 case	Mar.	30, 1935
S. S. *Jinkai Maru* at Singapore from Miike	1 case	Apr.	3, 1935
S. S. *Ozarda* at Tuticorin from Akyab	1 case	Apr.	3, 1935
S. S. *Ekma* at Rangoon from Calcutta	1 case	Apr.	12, 1935
S. S. *Ipoh* at Penang from Singapore	1 case	Apr.	12, 1935
S. S. *Hong Peng* at Singapore from Amoy	1 case	Apr.	17, 1935
S. S. *Anhui* at Singapore from Hong Kong	1 case	Apr.	18, 1935
S. S. *Jalagopal* at Rangoon from Chittagong	1 case	Apr.	19, 1935

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

SMALLPOX—Continued

[C indicates cases; D, deaths; P, present]

Place		November 1934	December 1934	January 1935	February 1935	March 1935	April 1935
Belgian Congo (see also table above)	C	110	-------	109	58	95	-------
Bolivia	C	53	35	52	42	42	36
Chosen	C	38	15	159	179	178	-------
Dahomey	C	1	-------	3	4	16	-------
Finland	C	-------	-------	-------	-------	-------	1
France	C	53	57	31	137	78	8
Guatemala	C	1	2	-------	2	1	-------
Indo-China (see also table above)	C	259	280	605	582	601	552
	D	22	25	67	69	53	92
Japan (see also table above)	C	-------	-------	21	8	-------	-------
Lithuania	C	-------	-------	1	-------	-------	-------
Morocco	C	7	5	-------	-------	3	8
Mozambique	C	36	-------	3	-------	-------	-------
Nyasaland	C	29	13	-------	13	26	-------
Peru	C	-------	36	37	6	16	-------
Portugal (see also table above)	C	150	99	54	55	43	-------
	D	27	16	4	9	2	-------
Portuguese East Africa	C	36	-------	-------	-------	-------	-------
Turkey	C	2	5	5	19	28	1
Union of Soviet Socialist Republics	C	388	392	-------	-------	-------	-------

TYPHUS FEVER

[C indicates cases; D, deaths; P, present]

Place		Oct. 28–Nov. 24, 1934	Nov. 25–Dec. 29, 1934	Dec. 30, 1934–Jan. 26, 1935	Week ended— February 1935				March 1935					April 1935				May 1935		
					2	9	16	23	2	9	16	23	30	6	13	20	27	4	11	18
Algeria:																				
Algiers Department	C	4	2	5	1	-------	-------	-------	5	-------	-------	6	1	-------	-------	4	14	3	6	10
Constantine Department	C	-------	14	12	3	11	6	5	13	15	9	15	6	23	13	11	37	1	3	8
Bone	C	-------	-------	2	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Constantine	C	2	1	1	-------	2	1	3	-------	1	2	-------	1	1	2	-------	-------	-------	-------	2
Oran Department	C	-------	2	-------	-------	-------	-------	-------	-------	-------	-------	-------	11	2	-------	-------	1	-------	-------	2
Southern Territories	C	-------	-------	-------	-------	-------	-------	-------	6	-------	-------	2	3	2	-------	1	-------	-------	6	-------
Basutoland	C	28	3	8	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------
Belgian Congo	C	12	4	4	-------	-------	-------	-------	-------	-------	1	-------	-------	-------	-------	-------	-------	-------	-------	-------
Bolivia. (See table below.)																				
British East Africa: Uganda	C	10	1	-------	-------	4	-------	-------	1	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

Bulgaria	C	7	13	10	1						1	3	3	2						
Chile	C	1,642	1,669	278																
Concepcion	C		5							8										
Iquique.[1]																				
Santiago	C		931							46										
Valparaiso	C	33	68	22	5	1		1		2	1		2		2	1		4		
China:																				
Hangchow	C										1									
Nanking	C										1							1		
Shanghai	C		4							1	2									
Tientsin	C			2																
Tsingtao	C														2					
Chosen. (See table below.)																				
Colombia	D			1																
Czechoslovakia. (See table below.)																				
Egypt:																				
Alexandria	C		1	1		1	2	2	3	1	3			5	4	4	8	4	4	4
Aswan	C	2	3							9	7	7	1		2	4	3	16	17	7
Asyut	C						1				4	6	1				1			
Beheira	C		17	22	44	23	37	58	34	34	53	50	52	57	72	63	51	55	41	45
Beni-Suef	C					3					2				1				1	
Cairo	C	1	1	1			3	4	2			3			4	1	1		1	2
Dakahliya	C	1		10	3	15	44	46	22	18	12	6	6	3	5	3	3	1	2	
Damietta	D		1																	
Gharbiya	C	6	6	33	38	41	73	84	61	40	58	30	35	36	54	38	52		45	51
Girga	C			1									7		1	1				
Minufiya	C	15	21	3	4	7	9	13	7	10	16	15	36	27	35	35	28	9	18	11
Minya	C												1	1	1	1	1	2		2
Port Said	C	2	2		1							1	1						[2]1	
Qena	C	1	6							1		1	2					1		2
Sharkiya	C		1		4	7	12	9	7	4	9	33	8		8	10	2	6		
Suez	C												1							
Provinces	C	29	59	143	87	95	182	217	137	118	168	152	163	151	199	172	153	154	135	131
Greece (see also table below); Salonika	C	4	5																	
Guatemala. (See table below.)																				
Hungary	C		8	1			1								4					13
Indo-China. (See table below.)																				
Iran	C	18	68	76	12	8	15	25	32	28	16	15	15	32		64	36	26	33	
Teheran	C			1							3		1	1				1	6	
Iraq:																				
Baghdad	C		1																	
Sulaimani liwa	C														1	19	22	8	1	
Irish Free State: Cork County—																				
Castletown	C									1										1
Latvia. (See table below.)																				
Libya: Tripolitania	C					2			2		2									
Lithuania	C	1	16	19	7	14	6	13	18	8	8	19	21	7		18	17	2	19	14
Mexico (see also table below):																				
Mexico, D. F	C		39	61	13	8	18	10	11	15	14	11	21	18	17					
Progreso	D											1								
Torreon	C	1	2				1													

[1] For the week ended Mar 9, 1935, 11 cases of typhus fever were reported at San Jose nitrate camp about 42 miles from Iquique, Chile.

[2] Imported.

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

TYPHUS FEVER—Continued

[C indicates cases; D, deaths; P, present]

Place		Oct. 28–Nov. 24, 1934	Nov. 25–Dec. 29, 1934	Dec. 30, 1934–Jan. 26, 1935	Week ended— February 1935				March 1935					April 1935				May 1935		
					2	9	16	23	2	9	16	23	30	6	13	20	27	4	11	18
Morocco	C	1	17	7	------	4	6	14	4	5	3	8	------	29	26	25	32	18	28	21
Palestine	C	------	------	2	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Haifa	C	4	4	------	------	------	1	1	------	------	1	------	------	------	1	1	------	------	[3] 1	------
Jaffa	C	------	1	2	------	------	------	------	------	------	------	------	------	------	1	------	------	------	4	[3] 1
Panama Canal Zone. (See table below.)																				
Peru. (See table below.)																				
Poland	C	61	124	199	69	82	57	83	84	128	118	114	136	163	128	138	168	150	174	139
	D	9	10	17	4	3	8	6	2	11	8	17	8	8	8	8	9	9	12	14
Portugal (see also table below):																				
Oporto	C	------	2	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Tarouca (near)	C	------	------	26	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Rumania. (See table below.)																				
Saudi Arabia	C	------	------	------	------	------	------	------	------	------	------	[3] 6	------	------	------	------	------	3	------	------
Straits Settlements: Singapore	C	------	------	1	------	------	------	2	------	------	------	1	------	------	1	------	2	1	------	------
Syria	C	------	------	------	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Trans-Jordan	C	------	------	------	------	------	2	------	------	4	2	------	------	1	3	4	9	1	6	2
Tunisia:																				
Tunis	C	1	4	------	------	------	------	------	------	1	------	------	2	5	9	11	7	1	5	3
Provinces	C	35	56	49	10	14	25	18	7	16	18	14	51	39	62	63	61	42	24	42
Turkey. (See table below.)																				
Union of South Africa. (See table below.)																				
Union of Soviet Socialist Republics. (See table below.)																				
Yugoslavia. (See table below.)																				
On vessel: S.S. *Nosa Prince* at San Francisco	C	------	------	------	------	------	------	------	------	------	------	------	1	------	------	------	------	------	------	------

[3] For 3 weeks.

Place		November 1934	December 1934	January 1935	February 1935	March 1935	April 1935
Bolivia	C	40	103	37	32	43	86
Chosen	C	41	29	55	126	179	
Czechoslovakia	C		7	15	18	52	
Greece	C	5	15	3	2	1	3
Guatemala	C	18	21	31	20	30	35
Indo-China (French)	C			2			
Latvia	C		8	2		1	
Mexico (see also table above)	C			150	33		
	D			40	11		
Panama Canal Zone	C			1	1		
Peru	C	52	17	13	32	10	
Portugal	C	8	27	12			
Rumania	C	85	127	246	240	433	
Turkey	C	20	32	22	45	56	25
Union of South Africa:							
Cape Province	C	223	163	158	128	100	
Natal	C	4	8	6	4	2	
Orange Free State	C	309	296	133	69	71	
Transvaal	C	39	29	14	16	21	
Union of Soviet Socialist Republics	C	7,114	10,129				
Yugoslavia	C	3	17	55	83	117	104

YELLOW FEVER

[C indicates cases; D, deaths; P, present]

Place		Oct. 28–Nov. 24, 1934	Nov. 25–Dec. 29, 1934	Dec. 30, 1934–Jan. 26, 1935	Week ended— February 1935				March 1935					April 1935				May 1935	
					2	9	16	23	2	9	16	23	30	6	13	20	27	4	11
Brazil:																			
Goyaz State [1]	D								1		4	1	5	1	1		8	5	1
Mato Grosso State: Coronel Ponce.[2]																			
Minas Geraes State [1]	D																	3	6
Colombia:																			
Intendencia of Meta—Restrepo	C								2										1
	D		3	4		1													
Villavicencio	D					1													
French Equatorial Africa: Middle Congo—Pointenoire	C										[3] 2								
Gambia:																			
Bathurst	C	1	2	1															
St. Mary's Island	C	2																	

[1] During the week ended June 1, 1935, 4 cases of yellow fever were reported in Goyaz State, and 6 cases of yellow fever were reported in Minas Geraes State, Brazil.
[2] During the month of October 1934, 1 case of yellow fever was reported at Coronel Ponce, Mato Grosso State, Brazil.
[3] Suspected.

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

YELLOW FEVER—Continued

[C incidicates cases; D, deaths; P, present]

Place		Oct. 28–Nov. 24, 1934	Nov. 25–Dec. 29, 1934	Dec. 30, 1934–Jan. 26, 1935	Week ended— February 1935				March 1935					April 1935				May 1935	
					2	9	16	23	2	9	16	23	30	6	13	20	27	4	11
Gold Coast:																			
Aperadi	C			3															
	D			1															
Kokobee	C	1																	
Oda	C			1															
Wenchi	C	1																	
Ivory Coast:																			
Banguoanou	C				1														
Bassam (near)	C											1							
Bobo-Diolasso	C							1											
Dibro	C		3																
	D		1																
Diekekro	C		1																
Dimbokro	C			1															
Gagnoa	C								1										
Ouagadougou	C							1											
Toumodi	C		16																
	D		10																
Zuenoula	C		1																
Nigeria: Kano	C		2	1															
Niger Territory: Zinder	C			1															
Sierra Leone:																			
Freetown	C										1	1							
Hill Station (near Freetown)	C			1															
Togo:																			
Agoueve	C																	1	
Koumea	C																	1	
Sokode.[4]																			

[4] During the week ended May 25, 1935, 1 case of yellow fever with 1 death was reported at Sokode, Togo.