PUBLIC HEALTH REPORTS

VOL. 49 NOVEMBER 30, 1934 NO. 48

EXPERIMENTAL PSITTACOSIS IN THE POCKET GOPHER [1]

By V. M. HOGE, *Passed Assistant Surgeon, United States Public Health Service*

INTRODUCTION AND LABORATORY OBSERVATIONS

From the time of Ritter's recognition and report of psittacosis as a clinical entity in 1879 to the widespread epidemic of 1929–30, the disease was considered one peculiar to parrots alone and incapable of being transmitted to man. With the advent of the epidemic of 1929–30, psittacosis emerged from the status of being a little-known sporadic disease to become one of universal interest.

Extensive study of the disease was then undertaken by research workers in many countries, and a considerable amount of this work has been directed to the search for additional hosts, both as potential vectors of psittacosis and as animals suitable for experimental and diagnostic studies. This line of research has revealed that a surprisingly large number of both birds and mammals are more or less susceptible to the disease. In 1929, Barros (1) reported instances of several human cases in Argentina contracted from sick thrushes and one case from an Italian cardinal bird. In 1930, Thompson (2) reported 3 cases from exposure to infected love birds, and in the following year 2 cases occurred from infected canaries (3). Sturdee and Scott (4) have reported that they were able to infect chickens, but were unable to infect pigeons, green finches, or linnets. Levinthal (5) was able to infect the Japanese rice bird, and this bird has since been used extensively for diagnostic purposes. Rivers and Berry (6) found that rabbits and guinea pigs were susceptible by intracerebral inoculation, but were refractory to the disease by other methods of inoculation.

Of great practical importance was the discovery of Krumwiede (7) et al, that white mice were relatively uniformly susceptible to psittacosis, that a fairly characteristic reaction was obtained, and that these animals were therefore satisfactory for diagnostic studies. Much of the hazard and expense incident to the use of psittacine birds for this purpose was thereby eliminated.

Psittacosis is, then, as has been shown, a disease capable of attacking, at least experimentally, a wide variety of hosts. In practically

[1] From the Psittacosis Laboratory of the U. S. Public Health Service, Pasadena, Calif.

every instance, however, the susceptible animals have been numbered among the domesticated varieties. During the course of our studies on psittacosis, it was decided to determine whether any of the more common wild animals were susceptible. For this purpose we selected three of the most common animals found wild in southern California, namely, the wild rat (*Rattus norvegicus* Linnaeus), the ground squirrel (*Citellus beecheyi beecheyi* (Richardson)) and the pocket gopher (*Thomomys bottae bottae*). We were unable to infect either the rat or squirrel by massive subcutaneous inoculations or by feeding, but the gopher proved to be highly susceptible to psittacosis by all methods of infection.

The pocket gopher (*Thomomys bottae bottae*) is native to Southern California and is one of a great number of closely related species, the habitat of which includes most of the middle and western States. The common name is derived from a peculiarity of its anatomical structure, consisting of two large cheek pouches, or pockets, opening on either side of the mouth and extending back to the shoulders, and which are used for carrying food.

The adult animal is dark reddish brown in color and measures 8 to 10 inches in length from the tip of the nose to the root of the tail, with long claws and powerful legs and shoulders. The animals prefer soft fertile soil in which they dig almost endless tunnels just beneath the roots of the grass and other vegetation, which constitutes their chief food supply. This mode of living accounts for their choice of lawns and gardens as their favorite abode, and in which they do a great amount of damage. Two to six offspring are produced at a time and several litters are born during the year.

Although gophers are very numerous in this section of the country, they are, due to their living habits, rather infrequently seen and extremely difficult to obtain alive. For this reason our studies were limited to 16 animals. Of these, 11 were infected with psittacosis and 5 normal animals were studied for comparison.

The virus used consisted of 2 strains, 1 of which was from a fatal human case and had been carried through more than 100 mouse passages. The other strain was more recently isolated from a parrakeet which had been responsible for a nonfatal human case and had gone through only 3 mouse passages. No difference was apparent in the results obtained from the two strains. The dosage ranged from 0.2 to 0.25 cc of a 1-percent suspension of virulent mouse spleen, the inoculations being made subcutaneously on the back. This dosage had previously been found to kill white mice almost uniformly in 7 to 8 days. As shown in the accompanying table, the average killing time for the gophers was somewhat less than that for the mice, although heretofore white mice have been considered the most susceptible mammal.

TABLE I.—*Summary of laboratory observations*

Gopher no.	Dosage of 1:100 suspension of virulent mouse spleen	Route of inoculation	Killing time	Gross pathology			Microscopic pathology		Virus recovered by mouse inoculation	Culture of heart blood	Remarks
				Injection of abdominal wall and peritoneum	Enlargement of liver and spleen	Necrosis of liver	Spleen: L.C.L. bodies in impression smears	Liver: L.C.L. bodies in impression smears			
	cc.		*Days*								
1	0.25	S.C.	6	+++	++	++	+++	++	Yes	Neg.	Not studied histologically.
2	.25	S.C.	3	+++	++	----	+++	++	Yes	Neg.	
3	.25	S.C.	5	++++	++	----	+++	++	Yes	Neg.	Do.
4	-----	Contact	24, 6, 2	-----	+	----	-----	-----	Yes	Neg.	3 separate contacts in 24 days.
5	(1)	G.I.	17	++++	+++	----	++	+	Yes	Neg.	Pleomorphic gram. neg. rods.
6	.2	S.C.	4	+	+	++	++	-----	Not inoc.	Neg.	
7	.2	S.C.	3	+++	++	----	++	++	Yes	Neg.	
8	.2	S.C.	1	-----	-----	----	-----	-----	Not inoc.	Neg.	Accidentally killed within 24 hours.
9	(1)	G.I.	8	+	++	----	++++	+++	Yes	Neg.	Virus from G. through mice and back to gopher.
10	.2	S.C.	7	++++	++	----	+++	++	Yes	Neg.	
11	.2	S.C.	3	+	+++	----	+++	++	Yes	Neg.	Virus recently isolated from parrakeet.
NORMAL CONTROLS											
1	-----	-----	-----	-----	-----	----	-----	-----	No	Neg.	
2	-----	-----	-----	-----	-----	----	-----	-----	No	Neg.	
3	-----	-----	-----	-----	-----	----	-----	-----	No	Neg.	
4	-----	-----	-----	-----	-----	----	-----	-----	No	Neg.	

[1] Indefinite.

At autopsy the gophers dying from psittacosis presented a quite constant and characteristic picture. In almost every animal, regardless of the method of infection, an extensive hemorrhagic infiltration of the abdominal wall and peritoneum was noted. In degree, the amount of infiltration ranged from slight in 1 or 2 animals, to frank intra-abdominal hemorrhage in others. Enlargement of the liver and spleen with increased friability of the spleen was a constant finding, but macroscopic areas of necrosis, which is a common finding in the livers of mice, were noted in only 2 of the animals, and in these the gross appearance differed from that seen in the liver of mice. However, the number of L.C.L. bodies, which we consider indicative of psittacosis, was found in impression smears of the spleen and liver to exceed in almost every gopher the number usually seen in similar smears from mice. In 9 of the animals, in addition to the demonstration of L.C.L. bodies in impression smears, the virus was recovered from the gopher spleen by inoculation into white mice. In the other two recovery was not attempted. In almost every instance it

was found that the killing time in mice was reduced by a few days for 2- or 3-mouse passages, after which the original killing time of 7 to 8 days was reestablished.

Heart-blood cultures were taken on all animals used, both normal and infected, and in only one was infection of the blood stream found to exist. This is in direct contrast with the results seen in white mice when used for experimental work with psittacosis, as these animals are very frequently found to be infected with one or more of several strains of bacteria of the Salmonella group. Such infections, while sometimes defeating the purpose of an experiment, can and frequently do exist coincidentally with psittacosis without materially affecting the accuracy of the experiment.

CONCLUSIONS

The results of this experiment naturally bring to mind the question as to whether or not the pocket gopher is or could ever become a natural vector of psittacosis. We have no evidence that infection with this disease has ever occurred in this animal in its wild state. In view, however, of the animal's habitat, its mode of living, and its ready susceptibility to psittacosis, the possibility that such infection could occur must be admitted; that such infection, if it did occur, could be carried to a noninfected aviary seems quite unlikely and practically impossible in the case of well-built and well-kept aviaries.

Another interesting possibility brought out by this experiment is the use of this animal for diagnostic studies. Our experiments, although limited, seem to prove conclusively that this gopher is more uniformly susceptible to psittacosis than white mice. In addition, the apparent resistance of this animal to the infections so frequently met with in the use of white mice removes much of this difficulty which, in our experience, has often been considerable. The greatest objection, of course, in the use of this animal for experimental purposes is the difficulty in obtaining it. It is entirely possible, however, that the animal could be reared in captivity. Although we have not attempted any breeding experiments, we have found that these animals thrive in captivity, requiring no more space and less attention than is required to raise white rats.

REFERENCES

(1). El Dia Medico (Buenos Aires), 2: 319 (1929).
(2). Proc. Royal Soc., 4: 451 (1930).
(3). Pub. Health Rep. (Wash.), 45: 2014 (1930).
(4). Sturdee, E. L., and Scott, Wm.: Pub. Health and Med. Subj. No. 61, Ministry of Health, Great Britain, October 1930.
(5). Levinthal, W.: Med. Welt., 4: 588 (1930).

(6). Rivers, T. M., and Berry, G. P.: Proc. Soc. Exp. Bio. and Med., 27: 802 (1930).
(7). Krumwiede, C., McGrath, M., and Oldenbusch, C.: Science, 71: 262 (1930)

THE PATHOLOGY OF PSITTACOSIS IN THE POCKET GOPHER [1]

By R. D. Lillie, *Surgeon*, and V. M. Hoge, *Passed Assistant Surgeon, United States Public Health Service*

On gross examination of pocket gophers inoculated with psittacosis virus these animals generally present enlargement of the liver and spleen, congestion of the abdominal wall, often a thin hemorrhagic peritoneal exudate, and, in some animals, small foci of necrosis in the liver.

Impression smears from the spleen generally show more or less numerous coccoid rickettsiae, in some animals extraordinarily numerous.

Material for histologic examination was available in 5 gophers dying 3 to 6 days after subcutaneous inoculation on the back, in 2 dying, respectively, 8 days after a single feeding and 14 days after the first of a series of feedings with infective material, in 1 accidentally killed within 24 hours of inoculation and in 1 gopher exposed to infection by contact 24, 6, and 2 days before death. From the paucity and early histologic type of the lesions in this last animal we are inclined to consider the last contact to be the infecting contact. In addition, tissues from 5 presumably normal, uninoculated gophers were studied for comparison.

Material was fixed as promptly as possible after death in Orth's fluid, washed in running water, and preserved and shipped from Pasadena to Washington in 70-percent alcohol. Dehydration was completed with acetone, then clearing was done in cedar oil or gasoline and embedding in paraffin *in vacuo*, followed according to our usual technique (1). Paraffin sections were stained by a modified Romanowsky technique [2] and by iron chloride hematoxylin and picrofuchsin.

[1] From the National Institute of Health, Washington, D.C., and the Psittacosis Laboratory of the U.S. Public Health Service, Pasadena, Calif.

[2] We have further modified this method since its publication (2), and now proceed as follows: 0.6 gm of dry Balch method eosinate of polychrome methylene blue is dissolved in 25 cc C.P. glycerin and 75 cc reagent methyl alcohol. This is the stock stain and is stored in small, tightly stoppered, full bottles rather than in one large bottle, as it apparently deteriorates in partly filled containers. For staining take 2 cc of stock stain, 3 cc of methyl alcohol, 3 cc of C.P. acetone, and 35 cc of phosphate buffer solution of pH 5.3 (M NaH_2PO_4, 65 cc, and M/15 Na_2HPO_4, 26 cc). Stain for 30 minutes, rinse in distilled water, dehydrate in acetone, clear in xyol, mount in heavy liquid petrolatum, U.S.P., and seal with pyroxylin cement.

TABLE 1.—*Summary of protocols, with distribution and type of histologic lesions*

Gopher no.	Pathology no.	Killing time	Route of inoculation	Liver							Spleen		Brain
				Foc. coag. necrosis (infarct)	Isol. coag. cells	Foc. fibrino. Karyorrh. necr.	Hyal. cap. thromb.	Swoll. Kupffer cells	Rickettsiae	Midzonal fatty degen.	Thrombonecrosis of pulp. fibrinocas.	Rickettsiae	
		Days											
7	5353	3	S.C.	lh.	+	------	----	+	+	+++	0	0	—
11	5589	3	S.C.	Small	+	++	+	+	—	—	+++	Few	—
6	5352	4	S.C.	Small	+	++	+	+	+	Sl.	0	0	—
10	5587	6	S.C.	—	+	++	+	(?)	—	—	++	Few	—
2	5099	6	S.C.	—	+	++	—	+	+	—	+++	+++	0
9	5588	8	G.I.	Small	++	++	—	+	+	—	++	+	—
*5	5354	14	G.I.	—	+	++	—	+	+	—	+++	+	—
8	5462	1	S.C.	—	—	lh.	—	—	—	—	—	—	—
4	5463	24, 6, 2	Contact	+h	Few	—	—	—	—	+	0	0	O
NORMAL CONTROLS													
1	5355	------	----------	—	—	—	—	—	—	—	0	0	0
2	5464	------	----------	—	—	—	—	—	—	—	—	—	—
3	5466	------	----------	—	—	—	—	—	—	—	—	—	—
4	5465	------	----------	—	—	—	—	—	—	—	0	0	—
5	5488	------	----------	—	—	—	—	—	—	—	—	—	O—

Gopher no.	Pathology no.	Days	Route of inoculation	Adrenal	Heart, cloudy swelling	Lungs						Kidney		
						Congestion	Foc. alv. hem.	Ser. alv. exud.	Alv. epeth. desquam.	Interstit. edema	Hyal. cap. thromb.	Parench. degen.	Pelvic infiltration Macro.	Pelvic infiltration Lympho.
7	5353	3	S.C.	—	+	—	—	—	—	+	Rare	++	—	—
11	5589	3	S.C.	—	+	+	Slt.	++	—	—	—	+++	++	+
6	5352	4	S.C.	Infarct	+	—	—	—	—	—	—	++	—	—
10	5587	6	S.C.	0	±	—	—	—	—	—	—	A	—	—
2	5099	6	S.C.	0	±	++	+	+	—	—	—	++	—	—
9	5588	8	G.I.	—	—	+	+	+	Few	—	—	+	—	—
*5	5354	14	G.I.	—	—	+	++	—	—	—	Bact. and cas.	*+	—	—
8	5462	1	S.C.	0	—	—	—	—	—	—	—	0	—	—
4	5463	24, 6, 2	Contact	—	—	—	—	—	—	—	—	++	—	—
NORMAL CONTROLS														
1	5355	------	----------	—	+	—	—	—	—	—	—	+	—	—
2	5464	------	----------	—	—	—	—	—	—	—	—	—	—	—
3	5466	------	----------	—	—	—	—	—	—	—	—	+	—	—
4	5465	------	----------	0	—	—	—	—	—	—	—	—	—	—
5	5488	------	----------	—	—	+	+	—	—	—	—	—	—	—

A=Autolyzed; O=No tissue examined.

* This animal also showed an obvious bacteremia, and the glomerular necroses seen in it were attributed to that cause.

The histologic findings are summarized in table 1.

The liver generally shows scattered, isolated, coagulated necrotic liver cells with strongly oxyphil cytoplasm and nuclei in varying phases of karyolysis or less often karyorrhexis. Less often small clumps of coagulated liver cells are found, forming small focal necroses. Small hyaline capillary thrombi occur in about half of the animals. Usually there are variably numerous small (100μ) rounded foci of fibrinocaseous necrosis composed of a fairly close network of rather coarse fibrin enmeshing pyknotic nuclear fragments and sometimes marginally an occasional coagulated liver cell. Kupffer cell swelling is much less marked than in mice (unpublished data, Lillie, and Rivers and Berry (3)) or parrots and parrakeets (Lillie (4), Rivers, Berry, and Sprunt (5), Elkeles and Schneider (6), Pesch and Siegmund (7)) being confined to scattered, isolated, vacuolated endothelial cells. An occasional finding was a midzonal finely vacuolar degeneration of the liver cells, probably fatty in nature. Owing to the mode of preparation of the material, fat stains could not be used. Rickettsiae were not numerous and were usually confined to swollen Kupffer cells and to the small hyaline thrombi, once also in the fibrinocaseous focal necroses. This distribution resembles that seen in mice (unpublished data, Lillie). The organisms are usually coccoid or less often diplococcoid in form, occasionally bacilliform.

The spleen generally shows a widespread fibrinous thrombosis of the pulp, accompanied by karyorrhexis in the tissue cells, grading into caseous necrosis. This thrombosis is interspersed with unthrombosed areas crowded with red corpuscles. Reticulum cell swelling is not readily identifiable on account of the extensive degenerative changes. Rickettsiae were often identifiable in the thrombosed areas as minute, deeply basophil coccoid and diplococcoid bodies, occasionally also as short, solid, deeply basophilic rods and longer lightly basophil bacillary forms with deeply stained polar granules. The splenic follicles sometimes showed some cell separation and oedema and occasionally accumulation of nuclear fragments in clear spaces and swollen follicular reticulum cells.

The kidneys regularly showed more or less pronounced swelling and finely granular cytoplasmic degeneration of the epithelial cells of the convoluted and Henle loop tubules. Focal glomerular thrombonecroses were present in gopher no. 5, but were associated with an obvious bacteremia and were considered assignable to that cause rather than to psittacosis.

In one gopher (no. 11) the areolar tissues of the renal pelvis showed an extensive and focally quite dense cellular infiltration, chiefly by monocytes, phagocytic macrophages, and some lymphocytes. There were a few foci of karyorrhexis and of early caseous necrosis, as well as scattered small hemorrhages.

In one animal (no. 6) the adrenal showed an area of hemorrhagic and coagulative necrosis involving two-thirds of the medulla and adjoining cortex, with the exception of the subcapsular cell layer. Centrally this necrotic area contained a thrombosed necrotic artery, and hence was considered as an infarct. No adrenal lesions were present in the other animals.

The heart muscle showed some swelling and finely granular degeneration of fibers, usually not to the extent of obscuring the cross striations, in the animals dying soonest after inoculation. This change was more pronounced in the muscle fibers of cardiac type which surround the major pulmonary veins. (This type of venous musculature does not extend to smaller pulmonary veins in gophers, as it does in mice.)

The lungs of about half the animals showed irregular congestion, alveolar hemorrhage, and serous alveolar exudation, occasionally with a few large, round, desquamated alveolar epithelial cells with characteristic epithelial nuclei. One animal showed periarterial and peribronchial oedema, with some accumulation of fragmenting cells in the dilated lymphatics. Another showed small areas of interstitial lymphocyte infiltration. A peribronchial lymph nodule in one gopher showed karyorrhexis in its germinal center.

The brain showed no lesions other than minor autolytic changes.

CONCLUSIONS

Gophers inoculated with psittacosis virus present a quite consistent and fairly characteristic pathologic picture. It is characterized by focal fibrinocaseous necroses, isolated coagulated cells, occasional small coagulation necroses and slight Kupffer cell swelling in the liver, extensive fibrinokaryorrhectic pulp thrombonecrosis in the spleen, congestion, hemorrhage and oedema in the lungs of some animals, and cloudy swelling in the heart muscle and kidney.

REFERENCES

(1) Lillie, R. D.: An inexpensive apparatus for routine paraffin embedding in vacuo. Arch. Path. (1933), **16**: 232.

(2) Lillie, R. D., and Pasternack, J. G.: Romanowsky staining of tissues with buffered solutions. Arch. Path. (1932), **14**: 515.

(3) Rivers, T. M., and Berry, G. P.: Psittacosis. II. Experimentally induced infections in mice. J. Exp. Med. (1931), **54**: 105.

(4) Lillie, R. D.: The pathology of psittacosis in animals and the distribution of *Rickettsia psittaci* in the tissues of man and animals. Nat. Inst. Health Bull. 161, Washington, Gov't Print. Off., 1933, pp. 47–66.

(5) Rivers, T. M., Berry, G. P., and Sprunt, D. H.: Psittacosis I. Experimentally induced infections in parrots. J. Exp. Med. (1931), **54**: 91.

(6) Elkeles, G., and Schneider, *in* Elkeles, G., and Barros, E.: Die Psittacosis (Papageienkrankheit) mit besonderer Berücksichtigung der Pandemie

des Jahres 1929/30. Ergebn. d. Hyg., Bakt., Immunitätsf. u. exp. Ther. (1931), 12: 529.

(7) Pesch, K. L., and Siegmund, H.: Untersuchungen über den Erreger der Psittakosis. Arch. f. Hyg. u. Bakt. (1930), 105: 1.

THE CONSTITUTIONAL PSYCHOPATH AS THE WARDEN'S PROBLEM [1]

By H. C. Hill, *Warden, United States Northeastern Penitentiary, Lewisburg, Pa.*

After listening to the preceding papers this afternoon, I feel that I possibly will not talk to the point expected, because I have just learned that the very fine paper [2] written by the very able doctors and psychologists of Chillicothe, Ohio, and discussed by the gentlemen who have preceded me, had been proposed for discussion, although for some reason or other I did not have the opportunity of examining it. I beg your indulgence, therefore, if my remarks are not in line with the program.

For a mere warden to endeavor to discuss the proper treatment of psychopathic personalities before such a group as this is almost fantastic. I have never yet read or heard of a solution of this problem; and to protect myself in the discussion of a technical subject, the scientific entanglements of which I must avoid, I think it better for me to dismiss the term "psychopathic personality", as does Dr. Menninger in "The Human Mind", and simply refer to these individuals as he does, with the word "perverse." They are headed cross-stream, playing at the game but breaking all the rules. Their defectiveness is in their emotional functioning, and they simply cannot keep out of trouble. They may achieve some good in the world, but the world pays dearly for it, and the net total of their lives is "in the red."

What causes constitutional psychopathy is beyond human ken. The various treatments that have been tried on individuals so afflicted, according to all the scientific literature that I have been able to assimilate, amount to nothing. In some States, such as Kansas, these individuals are committed to State hospitals for detention, but they usually escape. In the Federal service, unless they are frankly psychotic, these constitutional psychopaths, or perverse, "ornery" individuals, constitute a real problem for any warden, and I know of no place where a more honest effort has been made to help them adjust themselves than in the Northeastern Penitentiary, but I cannot point with pride to the results.

[1] Presented at the Conference on Medical and Psychiatric Services of the Federal Penal and Correctional System, held at Springfield, Mo. Sept. 13–15, 1934.

[2] See Public Health Reports for Nov. 9, 1934, pp. 1325–1339, and Nov. 16, 1934, pp. 1365–1371, for previous papers read at the conference.

One of the outstanding problems that have confronted the custodial officers of our Institution is exemplified in the case of an individual whom I shall call John Doe. This case may be of particular interest here because Doe served time under both Warden Zerbst and Warden Aderhold before coming to Northeastern and is now finishing a sentence at Milan, Mich. This man was born in Russia, of an apparently respectable family, and came to this country when he was 16 years of age. He had an elementary education in music given to him by his father, who was a musician, and after arriving here he traveled with various carnival companies and circuses as a member of their musical organizations, so that he acquired what psychiatrists call a "roving disposition." In 1918 he enlisted in the Regular Army as a musician and served for 4 years as such in the Sixteenth Cavalry Band. He had no criminal record prior to this time; but after his discharge in 1921 he was sentenced to a term of 2 years in Lansing, Mich., for burglary and in 1927 he was committed to Leavenworth for a year and a day and in 1928 to Atlanta for 2 years, both times for violation of the Dyer Act. In 1932 he was again arrested on the same charge and sent to Leavenworth for a period of 5 years, whence he was transferred to the Northeastern Penitentiary in January 1933. Upon his admission there his psychometric examination indicated that he had an I. Q. of 88 and a mental age of 14.1, with a definite indication of psychopathic personality without psychosis.

Shortly after his receipt at Northeastern my attention was attracted to him by his request to be allowed to play the saxophone during church services, and I was impressed with his pleasant manner and apparent gratitude toward the elderly woman who accompanied him on the piano. But Doe resented his transfer from Leavenworth; and when his request to be returned there was denied, he became very vindictive and swore that he would make himself so objectionable that we would have to send him back for our own protection. Shortly after this he got into trouble with an officer in the dining room, and on his way to the deputy's office made threats against this officer's life. After 5 days in isolation he put in a request for an interview with me, which was granted. At this interview his attitude was most disrespectful and threatening. From then on he was continuously in trouble, refusing to work and refusing to cooperate with the officials of the Institution, particularly the deputy warden, in any way. While doing his best to make himself obnoxious, he wrote numerous letters to "my Senators", as he called them, to the Attorney General, and to Mr. Bates, making all sorts of insinuations and finally charges against the various officials of the Institution. I referred him to the Bureau of Prisons as a man who would undoubtedly prove to be a real institutional problem, and I followed his career closely in an effort to give him such treatment as was warranted by our belief

that some improvement might be accomplished in his behavior attitude. The deputy and I held frequent conferences about him and endeavored to treat him with all the fairness commensurate with the policy of the Institution, but it seemed that the more we did for him the farther we were from our goal.

Finally I sent for Doe to come to my office, and after a lengthy discussion told him that I felt that possibly our entire program of treatment for him had been wrong, that both the deputy and I were going to turn the matter over to him for final adjudication, and that the next morning the three of us would have a meeting and give him an opportunity to tell us where he would like to work and what kind of treatment he thought would be of greatest benefit to him personally, without regard for the institutional problems involved. At that meeting he said that it could not be possible that we wanted to be fair with him, but that he would try us out, and that if we would assign him to the orchestra, place him in first grade, and make one or two other concessions, he was sure we would have no further trouble with him. We did all this; and on the second day the deputy, in passing through the dining room, where the orchestra was playing, stepped over to Doe and as pleasantly as possible asked him how he was getting along. His reply to the deputy was, "Go to hell and leave me alone."

No disciplinary action was taken for this insolence, but 2 or 3 days later he created a disturbance in the mess hall and endeavored to incite other men to do the same, and he made himself such a general nuisance that the officers complained to the deputy that they were not being sufficiently supported by him in the treatment of such an offender. Doe was again placed on a disciplinary report on account of his intensely bitter attitude, was placed in isolation, and was reduced to third grade.

At various times he was referred to the hospital for a psychiatric examination, and both Dr. Wilson and Dr. Pescor intimated that he was developing a frank psychosis, although Dr. Jackson did not concur in this opinion. Dr. Wilson said that he thought he could straighten Doe out if we would transfer him to the hospital under his direction. This action was taken in a final effort to solve this problem which had been causing us so much anxiety, and for a while he progressed very well, solely because he was given an assignment and allowed to do virtually as he pleased. However, he became so obnoxious to the custodial department in its attempt to enforce discipline in the hospital that he was again placed in isolation and his transfer to some other institution was finally recommended to Mr. Bates as the only remedial action which might have any beneficial results.

In a conference with Superintendent Ryan, of Milan, Mich., to whose institution Doe was transferred, Mr. Ryan informed me that this man was just as much a problem with him as he was at Northeastern. He was continually in trouble, firing a barrage of threatening and intimidating letters and promising Mr. Ryan that he would have him removed from his position within a very few months.

This man presents to me a real problem in what is known as "constitutional psychopathy." I know of no other man coming to my attention as warden of two institutions who has given me so much concern and with whom I have labored so zealously and without rancor; and I can frankly, though regretfully, say that I have felt a sense of defeat in having him transferred after a futile struggle against his threats and determination to make himself so unmanageable that such action would be necessary.

This is not a unique case in our experience, for we are confronted almost daily with recurring instances of the perverse and "ornery" actions of these so-called "psychopathic personalities"; and I earnestly hope that this conference, with all its learned psychiatrists, psychologists, and medical experts, will evolve a method of treatment of these cases which will answer the call for much-needed help by at least one warden in the Federal service.

COURT DECISION ON PUBLIC HEALTH

Termination of services of city school medical inspector upheld.—(New Jersey Supreme Court; *Skladzien* v. *Board of Education of City of Bayonne et al.*, 173 A. 600; decided July 10, 1934.) On August 3, 1931, by resolution of the board of education of the city of Bayonne, the prosecutor (plaintiff) was reappointed school medical inspector for a term of 3 years. He had previously been in the service of the board in a like capacity for a 5-year term. On March 16, 1933, the city board of education adopted a resolution terminating the prosecutor's services as medical inspector. Section 229 of the school law provided:

> Every board of education shall employ a competent physician to be known as the medical inspector, and may also employ a nurse and fix their salaries and terms of office. Every board of education shall adopt rules for the government of the medical inspector and nurse, which rules shall be submitted to the State board of education for approval.

Among the rules of the city board of education was the following:

> 91. The chief medical inspector and medical inspectors shall be appointed in the first instance for a term of 1 year and thereafter in case of reappointment for a term of 3 years in the discretion of the board. * * *

The resolution terminating the prosecutor's services was brought up for review by a writ of certiorari, the position of the prosecutor being: (1) The statute (sec. 229) authorized an appointment for a fixed term; (2) rule 91 permitted a reappointment for 3 years; and (3) he was reappointed for a 3-year term and, consequently, could not be molested (except for some delinquency, which was not the case here) until his term expired. The decision of the supreme court was adverse to the prosecutor and the following are the court's findings briefly summarized:

(*a*) Since the terms of three members of the city board of education expired each year, a new board came into being each year.

(*b*) The prosecutor had no rights, contractual in nature, that had been violated. The post of medical inspector was an office and not a position and the acceptance of a public office did not create a contract between the parties.

(*c*) Generally, unless the term be fixed by statute, presently in force, or by ordinance or rule under legislative sanction, by direct delegation of that right of municipal control to the appointing power, the term of an appointee to office cannot be longer than coterminous with that of the appointing power.

(*d*) Section 229 granted the board the right of administration only, with its essential incidents, which do not possess the quality of legislation.

(*e*) It was not the legislative intent to prevent a succeeding board of education from exercising its prerogative of appointing a medical inspector of its own selection.

(*f*) That the prosecutor rendered services up to March 16, 1933, and that from February 1 to March 16, 1933, the board received his reports and paid him a salary did not amount to a ratification of his employment.

(*g*) As the prosecutor's employment might be terminated by the new board, the preferring of charges against him was unnecessary.

DEATHS DURING WEEK ENDED NOV. 10, 1934

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

	Week ended Nov. 10, 1934	Corresponding week, 1933
Data from 86 large cities of the United States:		
Total deaths	7,993	7,485
Deaths per 1,000 population, annual basis	11.1	10.4
Deaths under 1 year of age	574	507
Deaths under 1 year of age per 1,000 estimated live births	53	[1] 43
Deaths per 1,000 population, annual basis, first 45 weeks of year	11.3	10.8
Data from industrial insurance companies:		
Policies in force	67,043,800	67,499,001
Number of death claims	10,802	10,871
Death claims per 1,000 policies in force, annual rate	8.4	8.4
Death claims per 1,000 policies, first 45 weeks of year, annual rate	9.8	9.7

[1] Data for 81 cities.

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 Nov. 17, 1934, and Nov. 18, 1933

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Nov. 17, 1934, and Nov. 18, 1933

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933
New England States:								
Maine	2	7	2	1	18	6	0	0
New Hampshire					28	12	0	0
Vermont	4	1			3	4	0	0
Massachusetts	9	29			73	292	1	0
Rhode Island	3	3			1		0	0
Connecticut	3	26	4	3	209	5	0	2
Middle Atlantic States:								
New York	48	44	[1] 20	[1] 15	702	287	8	1
New Jersey	30	20	13	15	41	23	2	4
Pennsylvania	57	83			429	138	0	3
East North Central States:								
Ohio	132	83	59	4	159	9	1	0
Indiana	72	102	58	30	137	15	1	3
Illinois	112	55	22	22	318	21	4	8
Michigan	21	26		1	46	72	2	1
Wisconsin	8	11	9	25	136	67	2	0
West North Central States:								
Minnesota	6	18	1		140	80	0	1
Iowa [2]	13	25			92	2	0	0
Missouri	84	64	33	12	99	22	2	0
North Dakota	5	15	2	1	43	27	0	1
South Dakota	4	5	1		12	148	1	0
Nebraska	31	12		9	9	6	0	0
Kansas	27	22	1		131	8	0	1
South Atlantic States:								
Delaware	1	4					0	1
Maryland [2]	18	29	6	5	44	6	1	0
District of Columbia	11	13	1		1	11	0	0
Virginia	73	95			139	28	1	0
West Virginia	77	62	33	32	109	1	0	0
North Carolina	73	149	1	28	94	138	2	4
South Carolina [3]	13	31	328	385	13	119	0	0
Georgia [4]	45	48				92	0	1
Florida	16	16	1	1	6	1	0	0

Footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Nov. 17, 1934, and Nov. 18, 1933—Continued

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933
East South Central States:								
Kentucky	96	142	33	----	218	5	0	0
Tennessee	65	65	34	49	19	114	1	3
Alabama [2]	76	45	92	22	122	21	0	1
Mississippi	30	32	----	----	----	----	0	0
West South Central States:								
Arkansas	3	30	13	15	----	36	0	0
Louisiana	25	61	4	11	4	5	0	1
Oklahoma [5]	20	72	35	47	6	38	2	0
Texas [3]	58	346	127	175	7	35	2	1
Mountain States:								
Montana	1	6	4	7	36	----	0	0
Idaho	----	----	3	1	----	4	0	0
Wyoming	----	2	----	----	2	22	0	0
Colorado	7	3	----	----	107	2	0	0
New Mexico	5	14	----	1	41	19	2	0
Arizona	4	5	1	15	18	2	1	0
Utah [2]	2	----	2	----	23	41	0	0
Pacific States:								
Washington	1	13	----	----	104	55	0	1
Oregon	1	1	31	22	26	18	0	0
California	56	53	37	55	50	172	2	4
Total	1,448	1,988	1,011	1,009	4,015	2,229	38	

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933
New England States:								
Maine	1	1	20	14	0	0	4	2
New Hampshire	1	3	5	19	0	0	0	0
Vermont	0	2	----	9	0	0	1	0
Massachusetts	2	0	125	170	0	0	5	2
Rhode Island	0	0	10	12	0	0	1	0
Connecticut	0	0	34	60	0	0	0	1
Middle Atlantic States:								
New York	4	10	288	328	0	0	12	16
New Jersey	0	2	134	118	0	0	6	5
Pennsylvania	3	15	400	443	0	0	23	32
East North Central States:								
Ohio	8	0	721	457	3	0	10	5
Indiana	1	2	188	177	0	2	7	8
Illinois	3	2	513	381	1	1	15	14
Michigan	6	1	252	300	0	0	9	9
Wisconsin	4	2	313	72	17	18	6	0
West North Central States:								
Minnesota	4	0	80	64	10	5	1	5
Iowa [2]	1	0	64	95	1	3	3	3
Missouri	2	0	92	130	6	0	19	6
North Dakota	0	2	39	52	0	0	0	2
South Dakota	0	0	25	11	1	0	3	1
Nebraska	4	3	31	45	0	4	1	0
Kansas	1	1	79	131	1	0	5	4
South Atlantic States:								
Delaware	0	0	5	4	0	0	2	5
Maryland [1]	2	0	102	91	0	0	15	13
District of Columbia	0	0	26	17	0	0	1	3
Virginia	1	0	127	113	0	0	2	8
West Virginia	1	0	148	125	0	1	19	11
North Carolina	1	1	127	234	0	0	6	4
South Carolina [3]	0	1	12	5	0	0	4	8
Georgia [4]	0	0	25	17	0	0	2	12
Florida	0	0	----	2	0	0	3	3

Footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Nov. 17, 1934, and Nov. 18, 1933—Continued

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933	Week ended Nov. 17, 1934	Week ended Nov. 18, 1933
East South Central States:								
Kentucky	2	1	93	122	0	1	21	10
Tennessee	0	3	92	113	0	0	14	11
Alabama [3]	0	0	38	46	0	0	7	7
Mississippi	1	0	19	22	0	0	5	5
West South Central States:								
Arkansas	0	1	2	15	0	1	4	4
Louisiana	2	1	20	27	1	0	11	19
Oklahoma [5]	0	0	18	36	1	8	30	14
Texas [3]	2	0	49	108	5	4	65	50
Mountain States:								
Montana	3	0	17	15	0	0	0	3
Idaho	0	0	4	2	0	3	1	1
Wyoming	1	0	17	11	3	0	0	1
Colorado	0	0	173	21	9	22	0	3
New Mexico	1	0	26	32	0	0	14	16
Arizona	1	0	17	11	0	0	3	0
Utah [2]	0	0	31	6	0	0	0	1
Pacific States:								
Washington	4	5	36	39	20	1	3	5
Oregon	3	1	39	41	0	6	6	1
California	21	4	164	225	1	5	14	9
Total	91	64	4,840	4,588	80	85	383	342

[1] New York City only.
[2] Week ended earlier than Saturday.
[3] Typhus fever, week ended Nov. 17, 1934, 7 cases as follows: South Carolina, 1; Alabama, 4; Texas, 2.
[4] Dengue, week ended Nov. 17, 1934, Georgia, 197 cases.
[5] 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
October 1934										
Alabama	1	291	59	984	84	11	5	114	0	51
Iowa	5	69	3	----	102	----	7	217	6	72
Michigan	5	67	3	15	157	----	58	734	1	74
Minnesota	1	65	5	----	215	----	26	252	119	14
New Jersey	3	68	81	1	73	----	1	337	0	36
New York	7	129	----	9	488	----	28	901	0	94
Ohio	1	462	100	12	485	----	64	1,787	----	117
Rhode Island	----	11	----	----	8	----	0	54	0	4
South Carolina	----	315	653	1,346	11	68	2	33	0	38
South Dakota	1	16	17	----	53	----	11	74	6	11
Tennessee	2	284	60	207	68	7	12	316	1	89
West Virginia	3	329	71	----	152	----	9	590	0	101
Wyoming	----	4	----	----	5	----	2	39	4	5

October 1934

	Cases
Anthrax:	
New York	1
Chicken pox:	
Alabama	22
Iowa	133
Michigan	609
Minnesota	500
New Jersey	437
New York	798
Ohio	904
Rhode Island	62
South Carolina	15
South Dakota	82
Tennessee	47
West Virginia	36
Wyoming	15
Dengue:	
Alabama	543
South Carolina	5
Diarrhea:	
South Carolina	191
Diarrhea and enteritis:	
Ohio (under 2 years)	28
Dysentery:	
Alabama (amoebic)	4
Iowa	1
Michigan	7
Minnesota (amoebic)	7
Minnesota (bacillary)	6
New Jersey (amoebic)	1
New Jersey (bacillary)	41
New York (amoebic)	6
New York (bacillary)	132
Ohio	1
Tennessee	6
West Virginia	2
Food poisoning:	
Ohio	19
German measles:	
New Jersey	28
New York	71
Ohio	23
Rhode Island	6
Tennessee	1
Wyoming	3
Hookworm disease:	
South Carolina	42
Impetigo contagiosa:	
Iowa	1
South Dakota	2
Tennessee	9
Jaundice, epidemic:	
Minnesota	7
Lead poisoning:	
Ohio	24

October 1934—Continued

	Cases
Lethargic encephalitis:	
Alabama	3
Iowa	1
Michigan	2
Minnesota	3
New Jersey	3
New York	8
Ohio	18
South Carolina	2
Tennessee	1
Mumps:	
Alabama	6
Iowa	60
Michigan	68
New Jersey	195
Ohio	112
Rhode Island	3
South Carolina	62
South Dakota	30
Tennessee	14
West Virginia	5
Wyoming	2
Ophthalmia neonatorum:	
Alabama	1
Minnesota	2
New Jersey	2
New York	6
Ohio	78
Rhode Island	1
South Carolina	4
Paratyphoid fever:	
Michigan	3
Minnesota	1
New York	18
South Carolina	1
Tennessee	1
Puerperal septicemia:	
Ohio	3
Rabies in animals:	
Alabama	56
New Jersey	7
New York [1]	2
South Carolina	25
Rocky Mountain spotted fever:	
South Dakota	1
Scabies:	
Tennessee	1
Septic sore throat:	
Iowa	1
Michigan	43
New York	23
Ohio	160
Tennessee	14
West Virginia	4
Wyoming	1

October 1934—Continued

	Cases
Tetanus:	
Alabama	6
Michigan	1
New Jersey	3
New York	7
Ohio	2
South Dakota	1
Trachoma:	
Alabama	2
New Jersey	1
Ohio	3
Tennessee	22
Trichinosis:	
Michigan	6
New Jersey	4
New York	12
Ohio	1
Tularaemia:	
Iowa	2
Michigan	1
Minnesota	10
Ohio	1
Typhus fever:	
Alabama	24
New York	1
South Carolina	5
Undulant fever:	
Alabama	6
Iowa	21
Michigan	8
Minnesota	6
New Jersey	1
New York	13
Ohio	11
South Carolina	1
West Virginia	1
Vincent's infection:	
Michigan	46
New York [1]	44
Tennessee	3
Whooping cough:	
Alabama	79
Iowa	34
Michigan	588
Minnesota	179
New Jersey	672
New York	2,006
Ohio	592
Rhode Island	77
South Carolina	85
South Dakota	55
Tennessee	131
West Virginia	140
Wyoming	12

[1] Exclusive of New York City.

CASES OF VENEREAL DISEASES REPORTED FOR SEPTEMBER 1934

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 [1]				
Arizona	26	0.57	179	3.95
Arkansas [2]	400	2.14	342	1.83
California	1,548	2.55	1,833	3.02
Colorado [3]				
Connecticut	182	1.11	184	1.12
Delaware	187	7.76	42	1.74
District of Columbia	160	3.23	119	2.40

Footnotes at end of table.

CASES OF VENEREAL DISEASES REPORTED FOR SEPTEMBER 1934—Continued

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
Florida	477	3.07	63	0.41
Georgia	715	2.46	448	1.54
Idaho	0	0	0	0
Illinois	1,319	1.69	1,271	1.62
Indiana	240	.73	145	.44
Iowa [3]	113	.46	160	.64
Kansas	93	.49	87	.46
Kentucky	242	.91	311	1.17
Louisiana	117	.54	94	.43
Maine	34	.42	40	.50
Maryland	981	5.90	327	1.97
Massachusetts	284	.66	556	1.29
Michigan	429	.85	359	.71
Minnesota	319	1.23	371	1.43
Mississippi	1,049	5.12	1,820	8.89
Missouri	542	1.48	459	1.25
Montana [1]				
Nebraska	41	.29	73	.52
Nevada [3]				
New Hampshire	13	.28	27	.58
New Jersey	494	1.16	284	.68
New Mexico [2]	53	1.22	36	.83
New York	4,846	3.74	1,752	1.35
North Carolina	1,186	3.62	411	1.25
North Dakota [1]				
Ohio [3]	590	.87	307	.45
Oklahoma				
Oregon	30	.31	95	.97
Pennsylvania	324	.33	246	.25
Rhode Island	76	1.08	46	.66
South Carolina [3]	274	1.57	372	2.13
South Dakota	11	.16	28	.40
Tennessee	1,115	4.19	713	2.68
Texas	620	1.03	208	.35
Utah [3]				
Vermont [1]				
Virginia [2]	387	1.59	300	1.23
Washington	147	.92	275	1.72
West Virginia [3]				
Wisconsin [4]	46	.15	177	.59
Wyoming [3]				
Total	19,710	1.71	14,560	1.26

[1] Has been reporting regularly but no report received for the current month.
[2] Incomplete.
[3] Not reporting.
[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 Nov. 10, 1934

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	1	6	0	1	2	0	23
New Hampshire:											
Concord	0		0	0	0	2	0	0	0	0	11
Nashua	0		0	0	0	2	0	0	0	0	
Vermont:											
Barre	0		0	0	0	0	0	0	0	0	3
Burlington	0		0	0	0	3	0	0	1	0	7
Massachusetts:											
Boston	5		1	5	20	25	0	6	2	33	223
Fall River	0		0	15	2	0	0	1	0	7	26
Springfield	0		0	1	5	4	0	1	0	1	29
Worcester	0		0	1	7	19	0	0	0	17	53

City reports for week ended Nov. 10, 1934—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								
Rhode Island:											
Pawtucket	0		0	0	0	0	0	0	0	0	8
Providence	1		0	0	5	4	0	2	0	6	71
Connecticut:											
Bridgeport	0		0	0	2	3	0	1	0	0	35
Hartford	0		0	114	3	6	0	2	0	1	57
New Haven	0		1	0	1	0	0	1	0	0	47
New York:											
Buffalo	1		1	6	11	29	0	4	0	25	119
New York	36	18	6	21	98	78	0	88	3	218	1,363
Rochester	0		0	14	5	14	0	1	0	8	71
Syracuse	0		0	0	2	7	0	1	0	14	49
New Jersey:											
Camden	1	2	0	0	1	3	0	0	0	5	28
Newark	0	1	0	2	5	9	0	6	0	34	97
Trenton	0		0	1	6	17	0	1	1	5	39
Pennsylvania:											
Philadelphia	11	3	1	3	26	52	0	19	2	175	459
Pittsburgh	3	3	2	20	15	58	0	6	1	5	131
Reading	1		0	0	3	8	0	2	0	9	30
Scranton	0			4		0	0		0	10	
Ohio:											
Cincinnati	11	1	1	1	12	36	0	4	0	7	120
Cleveland	7	18	2	0	10	40	0	14	1	30	164
Columbus	11	2	2	10	7	36	0	2	0	3	78
Toledo	0		0	4	3	7	0	2	0	4	77
Indiana:											
Fort Wayne	6		0	0	3	2	0	1	0	0	35
Indianapolis	12		0	2	9	22	0	8	1	15	
South Bend	0		0	14	0	3	0	1	0	2	21
Terre Haute	0		0	0	1	0	0	1	0	0	16
Illinois:											
Chicago	23	5	4	31	51	232	0	31	0	59	642
Springfield	1	1	0	0	2	6	0	1	0	8	22
Michigan:											
Detroit	18		0	29	21	93	0	14	0	54	229
Flint	6		0	3	0	3	0	1	2	12	27
Grand Rapids	0		0	0	4	17	0	0	0	1	25
Wisconsin:											
Kenosha	0		0	1	1	8	0	0	0	10	5
Madison	0			0		2	0		0	2	11
Milwaukee	0		0	12	5	220	0	5	0	48	81
Racine	0		0	0	0	13	0	0	0	0	18
Superior	0		0	0	0	0	0	0	0	0	8
Minnesota:											
Duluth	0		0	9	2	1	0	0	0	2	26
Minneapolis	3		0	16	4	16	0	3	0	14	103
St. Paul	1	1	1	1	8	3	0	2	0	7	71
Iowa:											
Davenport	1			1		1	0		0	0	
Des Moines	1			0		11	0		0	0	17
Sioux City	0			2		0	0		0	5	0
Waterloo	2			26		1	0		0	1	
Missouri:											
Kansas City	4		1	1	3	10	0	3	0	2	80
St. Joseph	4		0	0	3	1	0	1	0	0	16
St. Louis	31		0	2	9	20	0	4	1	11	169
North Dakota:											
Fargo	0		0	0	2	0	0	0	0	15	6
Grand Forks	0			0		1	0		0	0	
South Dakota: Aberdeen	0			1		2	0		0	4	
Nebraska: Omaha	11		0	2	3	11	0	1	0	1	47
Kansas:											
Topeka	0		0	0	3	2	0	0	1	1	18
Wichita	3		0	0	1	2	0	0	1	0	32
Delaware:											
Wilmington	2		0	0	0	0	0	0	0	1	35
Maryland:											
Baltimore	4	3	0	3	18	32	0	14	0	33	223
Cumberland	1	1	0	0	0	1	0	1	0	0	11
Frederick	0		0	0	0	0	0	0	0	2	2
District of Columbia:											
Washington	11		0	1	9	31	0	11	1	9	148
Virginia:											
Lynchburg	1		0	1	2	16	0	0	0	0	6
Richmond	0		1	0	4	5	0	3	0	7	51
Roanoke	5		0	0	2	13	0	0	0	1	15

City reports for week ended Nov. 10, 1934—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								
West Virginia:											
Charleston	4	1	0	1	1	11	0	0	0	1	13
Huntington	2	----	----	0	----	9	0	----	0	0	----
Wheeling	1	----	0	0	1	5	0	0	0	5	21
North Carolina:											
Raleigh	2	----	0	0	3	0	0	0	1	0	17
Wilmington	0	----	0	0	4	1	0	2	0	0	13
Winston-Salem	8	----	0	1	2	4	0	0	1	9	20
South Carolina:											
Charleston	0	27	2	0	3	2	0	0	0	0	28
Columbia	0	----	0	0	3	0	0	1	0	0	30
Greenville	2	----	0	1	0	3	0	0	0	0	6
Georgia:											
Atlanta	5	18	2	0	6	12	0	5	0	5	109
Brunswick	0	----	0	0	0	1	0	0	0	0	4
Savannah	1	1	0	0	4	0	0	2	0	3	32
Florida:											
Miami	1	----	0	1	0	1	0	2	0	0	43
Tampa	3	----	0	0	2	1	0	2	1	0	20
Kentucky:											
Ashland	1	----	0	0	0	0	0	0	1	0	0
Lexington	5	----	0	0	1	4	0	2	5	2	25
Tennessee:											
Memphis	5	----	1	1	9	9	0	5	4	8	82
Nashville	9	----	0	1	0	3	0	0	2	9	55
Alabama:											
Birmingham	10	1	1	1	2	6	0	5	0	1	68
Mobile	3	----	0	0	6	0	0	0	0	3	30
Montgomery	1	----	----	1	----	2	0	----	0	0	----
Arkansas:											
Fort Smith	----	----	----	----	----	----	----	----	----	----	----
Little Rock	2	----	0	0	2	2	0	2	4	0	4
Louisiana:											
New Orleans	17	----	0	0	13	8	0	17	7	0	167
Shreveport	1	----	0	0	2	1	0	0	1	0	19
Oklahoma:											
Oklahoma City	1	3	0	0	6	0	0	0	0	2	42
Texas:											
Dallas	3	----	0	0	6	2	0	6	2	0	56
Fort Worth	5	----	0	0	1	1	0	0	0	0	30
Galveston	0	----	0	0	2	0	0	0	0	0	13
Houston	6	----	1	0	8	2	0	8	0	0	77
San Antonio	----	----	----	----	----	----	----	----	----	----	----
Montana:											
Billings	0	----	0	5	0	2	0	0	0	0	10
Great Falls	0	----	0	21	0	0	0	0	0	0	4
Helena	0	----	0	0	0	1	0	0	0	0	5
Missoula	0	----	0	0	1	0	0	0	0	0	5
Idaho:											
Boise	0	----	0	0	2	1	0	0	0	0	7
Colorado:											
Denver	1	35	0	72	7	90	0	9	0	4	72
Pueblo	0	----	0	0	1	2	0	0	0	3	10
New Mexico:											
Albuquerque	1	----	0	0	0	3	0	6	1	2	13
Utah:											
Salt Lake City	0	----	0	8	4	15	0	1	0	15	47
Nevada:											
Reno	0	----	0	0	1	0	0	0	0	0	2
Washington:											
Seattle	0	----	1	0	7	2	7	4	1	7	98
Spokane	0	----	0	5	4	4	0	2	0	2	33
Tacoma	0	----	0	0	4	0	2	0	0	3	31
Oregon:											
Portland	0	----	0	0	2	20	0	2	0	0	70
Salem	0	----	----	0	----	0	0	----	0	0	----
California:											
Los Angeles	23	7	0	4	10	32	0	20	1	2	296
Sacramento	1	1	1	0	5	4	0	3	0	0	29
San Francisco	1	1	2	8	5	21	0	11	0	6	185

City reports for week ended Nov. 10, 1934—Continued

State and city	Meningococcus meningitis		Poliomyelitis cases
	Cases	Deaths	
Massachusetts:			
Boston	0	0	1
Fall River	1	1	0
New York:			
New York	2	2	1
Ohio:			
Cincinnati	1	1	2
Indiana:			
Indianapolis	0	0	1
Illinois:			
Chicago	1	1	2
Michigan:			
Detroit	1	0	3
Minnesota:			
St. Paul	0	[1] 1	4
Kansas:			
Topeka	0	0	1
District of Columbia:			
Washington	1	1	0
North Carolina:			
Wilmington	0	0	1
Tennessee:			
Memphis	0	1	0
Oklahoma:			
Oklahoma City	0	1	0
Montana:			
Missoula	0	0	2
Washington:			
Seattle	0	0	1
Oregon:			
Portland	0	0	2
California:			
Los Angeles	0	1	7

[1] Nonresident.

Dengue.—Cases: Atlanta, 30; Savannah, 139; Miami, 2; Tampa, 5; New Orleans, 3; Charleston, S.C., 1.
Pellagra.—Cases: Chicago, 1; Baltimore, 1; Washington, D. C., 1; Wilmington, N. C., 1; Charleston, S. C., 1; Montgomery, 1; New Orleans, 3.
Lethargic encephalitis.—Cases: New York City, 2; Trenton, 1; St. Louis, 1; Memphis, 1.
Typhus fever.—Cases: Montgomery, 1; New Orleans, 1; Charleston, S.C., 3.

FOREIGN AND INSULAR

CANADA

Provinces—Communicable diseases—2 weeks ended November 3, 1934.—During the 2 weeks ended November 3, 1934, 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			1	2	3					6
Chicken pox		9		191	526	98	236	62	175	1,297
Diphtheria		3	8	46	26	32	8		3	126
Dysentery				2	5				9	16
Erysipelas				6	5	8		2	6	27
Influenza		10		9	4	1			15	39
Lethargic encephalitis							1			1
Measles		196	47	199	166	14	71	29	13	735
Mumps					89		3	8	73	173
Paratyphoid fever				10						10
Pneumonia		2			11				7	20
Poliomyelitis		1		5	29		2	2	1	40
Scarlet fever	21	34	17	282	255	44	43	29	84	809
Smallpox							1			1
Trachoma				1					2	3
Tuberculosis	3	9	14	91	69	5	25	5	24	245
Typhoid fever		8		136	26	3	2	4	3	182
Undulant fever				11						11
Whooping cough		17	10	432	169	41	56	10	85	820

CUBA

Provinces—Notifiable diseases—4 weeks ended October 20, 1934.—During the 4 weeks ended October 20, 1934, 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	1	1		9		2	13
Chicken pox					3	9	12
Diphtheria			2	1		2	5
Hookworm disease		1		5			6
Leprosy		1		1		19	21
Malaria	974	3	83	2,566	840	8,632	13,098
Measles		3	8	11		1	23
Poliomyelitis	7	6		1	2		16
Scarlet fever		1	2			1	4
Tuberculosis	7	29	30	55	2	83	206
Typhoid fever	2	13	24	81	49	35	204

PANAMA CANAL ZONE

Communicable diseases—July–September 1934.—During the months of July, August, and September 1934, certain communicable diseases, including imported cases, were reported in the Panama Canal Zone and terminal cities, as follows:

Disease	July		August		September	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Chicken pox	11		4		6	
Diphtheria	12		10		7	
Dysentery (amoebic)	18	2	13		8	
Dysentery (bacillary)	1					
Leprosy	2	2	2		2	
Malaria	178	1	128	3	84	2
Measles	1		2		1	
Meningococcus meningitis	2	1				
Mumps	4					
Pneumonia		16		30		21
Poliomyelitis			1			
Scarlet fever	1					
Tuberculosis		28		29		19
Typhoid fever	3	1	5	4	5	2
Whooping cough	17		24	1	13	1

PUERTO RICO

Notifiable diseases—4 weeks ended November 3, 1934.—During the 4 weeks ended November 3, 1934, cases of certain notifiable diseases were reported in the municipalities of Puerto Rico, as follows:

Disease	Cases	Disease	Cases
Chicken pox	20	Pellagra	1
Diphtheria	50	Pink eye	8
Dysentery	44	Ringworm	1
Erysipelas	1	Syphilis	37
Filariasis	3	Tetanus	2
Influenza	3,650	Tetanus, infantile	3
Malaria	1,751	Trachoma	28
Measles	89	Tuberculosis	1,149
Mumps	21	Typhoid fever	12
Ophthalmia neonatorum	2	Whooping cough	119
Paratyphoid fever	2		

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 tables 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		Apr. 1–28, 1934	Apr. 29–May 26, 1934	May 27–June 30, 1934	July 1–28, 1934	Week ended— August 1934 4	11	18	25	September 1934 1	8	15	22	29	October 1934 6	13	20	27
Ceylon: Colombo	C	------	------	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------
China:																		
Amoy	C	------	------	------	[1] 1	------	------	------	------	------	------	------	------	------	------	------	------	------
Canton	C	------	------	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Fort Bayard	C	------	------	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Hankow	C	------	------	------	2	------	------	------	------	------	------	------	------	------	------	------	------	------
Shanghai	C	------	------	------	2	1	------	------	------	------	------	------	------	------	------	------	------	------
Tientsin	C	------	------	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------
India	C	7,719	13,008	22,932	39,308	15,284	14,901	14,611	13,551	13,021	12,561	9,708	------	------	------	------	------	------
	D	3,813	6,146	12,315	21,179	7,592	7,570	7,523	6,814	6,517	6,352	4,812	------	------	------	------	------	------
Bombay Presidency	C	425	957	830	2,985	2,688	3,253	2,619	2,804	1,502	1,437	1,121	1,094	820	------	------	------	------
	D	221	486	393	1,005	868	1,124	1,065	1,068	608	571	430	434	317	------	------	------	------
Bombay	C	7	[2] 77	3	1	------	1	------	------	1	------	1	------	------	------	------	------	------
Calcutta	C	574	465	476	294	49	46	43	44	44	30	32	34	43	27	22	27	34
Chittagong	C	7	16	6	9	------	------	------	2	1	------	------	------	------	------	------	------	1
Madras Presidency	C	507	614	1,410	2,463	1,806	1,937	1,667	1,473	1,176	876	579	556	------	------	------	------	------
	D	272	330	729	1,093	755	936	815	678	528	446	293	265	------	------	------	------	------
Madras	C	------	1	25	5	52	37	33	23	8	21	10	7	14	3	3	------	1
	D	------	------	15	3	17	14	12	12	1	10	5	3	10	3	2	------	------
Punjab	C	------	------	------	------	------	------	------	------	28	------	------	6	1	------	------	------	------
	D	------	------	------	------	------	------	------	------	20	------	------	4	1	------	------	------	------
Rangoon	C	1	2	------	------	------	------	------	------	1	------	------	------	------	------	------	------	------
Vizagapatam	C	------	------	------	------	------	2	1	1	------	6	------	------	------	------	------	------	------
India (French):																		
Chandernagor	D	11	4	2	6	------	------	------	------	------	------	------	------	1	------	------	------	------
Karikal	C	------	------	------	1	------	------	7	9	7	11	14	8	7	2	3	------	------
Mahe	C	------	11	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Pondichery	C	2	------	------	6	24	20	16	46	33	21	4	------	1	------	------	------	------

Place		May 1934			June 1934			July 1934			August 1934			September 1934		
		1-10	11-20	21-31	1-10	11-20	21-30	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-30
Indo-China (see also table below):																
Baclieu	D			2												
Pnom-Penh	C		1			2										
	D		2		1											
Poulo Condor Island	C			3												
Philippine Islands:																
Bohol Province	C	2														
	D	2														
Occidental Negros Province	C	3														
	D	3														
Rizal Province—Manila	C			1												
Siam	C		4	1	1											
On vessels:																
S. S. *Narbada* at Singapore from Calcutta	D	1														
S. S. *Viking II* at Calcutta from Aden	C		1													
S. S. *Cape Ortegal* at Calcutta from Bombay	C			1												
S. S. *Jaladurga* at Calcutta from Rangoon	C			2												
S. S. *Khostan* at Calcutta from Karachi	C				1											
S. S. *Erinpura* at Port Swettenham	C							1								
S. S. *Aronda* at Rangoon from Calcutta	C									1						
Indo-China (French) (see also table above):																
Cambodia [2]	C	11	8		1		2	1	1		2					
	CD	1	4		1		2	1	1		1					
Cochin-China [2]	CD	6	4	4		10	9	4	2	6	1		2			1
	D	6	4	4		8	3	4	2	4	1		1			1

[1] Suspected.

[2] Includes 4 imported cases.

[3] Reports incomplete.

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

PLAGUE [1]

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

Place		Apr. 1–28, 1934	Apr. 29–May 26, 1934	May 27–June 30, 1934	July 1–28, 1934	Week ended— August 1934 4	11	18	25	September 1934 1	8	15	22	29	October 1934 6	13	20	27
Angola. (See table below.)																		
Argentina (see also table below): Santiago de Estero Province.[2]																		
Azores. (See table below.)																		
Belgian Congo	C	1		6	8													
Bolivia. (See table below.)																		
British East Africa (see also table below):																		
Kenya	C		2	9	1			2	3	8	1	2	1	1	1			
Uganda	C	15	67	215	131	37	22	19	23	16	12	15	12	15	18	23		
	D	14	64	208	122	37	22	17	25	14	14	15	12	14	18	22		
Ceylon: Colombo [3]	C	12	9		1								1					
	D	10	9	1	1													
Plague-infected rats		2	1								1							
China (see also table below):																		
Fort Bayard.[4]																		
Manchuria [5]	D				22	8												
Tanghai Island	C			7														
Dutch East Indies:																		
Java—Batavia	C														[6] 2	3		
	D														2	3		
West Java	C	1,882	1,609	1,273	1,148	369	441	472		485								
	D	1,881	1,609	1,273	1,144	368	441	472		485								
Ecuador. (See table below.)																		
Egypt:																		
Alexandria—Plague-infected rats			P	P	P	P		P		P		P		P		P		
Asyut	C	26	22	6														
Faiyum	C	1	1															
Gharbiya	C		1	6	22													
	D			2	6													
Minufiya	C			1														
Minya	C			8														
Provinces.[7]																		

Hawaii Territory:																		
Hawaii Island—Hamakua district—																		
Kalopa—Plague-infected rats																		1
Kukaiau—Plague-infected rats				1														
Paauhau [8]—Plague-infected rats																	1	
Paauilo	C			1														
Pohakea—Plague-infected rats																		1
Maui Island—Makawao district—																		
Kahului (9 miles from)—Plague-infected rats																2		
Paia—Plague-infected rats																1		
India	C	11,196	4,905	774	921	579	606	870	977	1,161	1,350	1,223						
	D	8,673	3,825	657	578	320	370	491	596	728	807	763						
Bassein	C	7	3	7	5	3	2					1			1		1	
Plague-infected rats		2		1	1	2			1	1			2			1		
Bombay Presidency	C	617	439	218	379	329	247	415	473	431	601	541	685	671				
	D	425	301	143	220	168	143	244	287	268	322	321	415	434				
Bombay	C	4	3	1	1								1					
Plague-infected rats		2	3	2									2			1		
Delhi	C	1																
Madras Presidency	C	39	34	42	194	77	64	93	99	135	150	117	74					
	D	28	11	15	98	37	37	43	48	62	82	70	52					
Moulmein	C							1										
	D							1										
Punjab	C														P		18	11
	D																10	7
Rangoon	C	3	3	5	1	1				2		1						
Plague-infected rats		2	3	3			1											
Indo-China (see also table below):																		
Bentre	C						1											
Longxuyen	C			1														
Pnom-Penh	D		2	4	1		1											
Sadec	C			1														
Saigon and Cholon	C		3	4	1		1				1							
Vinhlong	C			1														
Iraq: Baghdad	C		1	3	1													
Libya	C			5														
	D			1														
Madagascar. (See table below.)																		
Morocco—Tangier.[9]																		
Peru (see also table below): Salaverry—Plague-infected rats				1														

[1] Including plague in the United States and its possessions.
[2] A report dated May 17, 1934, states that 15 deaths from plague occurred up to that date in Santiago de Estero Province, Argentina.
[3] During the week ended Nov. 3, 1934, 3 plague-infected rats were reported in Colombo, Ceylon.
[4] During the week ended June 2, 1934, suspected cases of plague were reported in Fort Bayard, Kwangchowan Territory, China.
[5] A report dated Sept. 29, 1934, states the following numbers of deaths from plague have been reported in certain districts of Manchuria, China: Changling, 5; Chengchiatun, 32; Chienan, 26; Fuyu, 4; Nungan, 132; Shuangshan, 11; Tungliao, 106.
[6] Imported.
[7] During the week ended Nov. 3, 1934, 1 case of plague was reported in the Provinces of Egypt.
[8] During the week ended Nov. 3, 1934, 1 case of human plague with 1 death was reported in Paauhau, Hamakua district, Hawaii Territory.
[9] Plague has been reported in Tangier, Morocco, as follows: 4 cases during the week ended Nov. 3, and 1 case during the week ended Nov. 10, 1934.

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

PLAGUE—Continued

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

Place		Apr. 1–28, 1934	Apr. 29–May 26, 1934	May 27–June 30, 1934	July 1–28, 1934	Week ended— August 1934 4	11	18	25	September 1934 1	8	15	22	29	October 1934 6	13	20	27
Senegal. (See table below.)																		
Siam	C	6	1	2														
South-West Africa.[10]																		
Tunisia: Tunis—Plague-infected rats				4														
Union of South Africa: Orange Free State	C	5																
United States:																		
California:																		
Human plague—Tulare County	C			1														
Plague-infected ground squirrels:																		
Kern County		64	26															
Modoc County				[11] 36	2													
Tulare County		43	33	6														
Oregon: Lake County	C		1															
	D		1															
On vessel: S. S. *Barjora* at Rangoon from Moulmein	C										1							
	D										1							

[10] From January to June 30, 1934, 20 cases of plague were reported in Ovamboland, South-West Africa.
[11] Includes 1 plague-infected wood-rat.

Place		April 1934	May 1934	June 1934	July 1934	August 1934	September 1934
Angola	C	------	2	------	------	------	------
Argentina (see also table above)	C	------	------	2	2	6	11
Azores	C	2	3	3	5	------	------
Bolivia	C	P	P	------	------	------	------
British East Africa (see also table above):							
Kenya	C	------	5	6	------	------	------
Uganda	C	16	90	------	------	------	------
China: Kwangchowan	C	------	------	21	10	3	------
	D	------	------	12	4	3	------
Ecuador	C	------	------	7	------	------	------
Indo-China (see also table above):							
Cambodia	D	6	5	4	2	3	3
Cochin-China	C	------	3	9	8	2	1
Madagascar (central region)	C	250	87	71	97	160	291
	D	242	83	71	96	158	283
Peru (see also table above)	C	6	------	1	------	1	------
Senegal:							
Dakar [13]	C	19	9	33	55	52	17
	D	16	8	27	47	47	19
Diourbel [13]	C	------	------	------	------	5	1
	D	------	------	------	------	3	1
Louga [13]	C	------	------	2	------	------	------
	D	------	------	2	------	------	------
Rufisque [13]	C	------	------	18	33	42	18
Sebikotane [13]	C	------	9	------	------	------	------
Thies [13]	C	10	26	64	50	39	6
Tivaouane [13]	C	13	35	32	27	82	26

[13] Reports incomplete.

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

SMALLPOX

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

Place		Apr. 1–28, 1934	Apr. 29–May 26, 1934	May 27–June 30, 1934	July 1–28, 1934	Week ended— August 1934 4	11	18	25	September 1934 1	8	15	22	29	October 1934 6	13	20	27
Algeria:																		
Algiers Department	C	2	1	1	1													1
Constantine Department	C	1		2							1							1
Oran Department	C			3														
Angola. (See table below.)																		
Belgian Congo[1] (see also table below)	C				1	1	1			5								
Bolivia. (See table below.)																		
Brazil: Porto Alegre (alastrim)	C		1	2	2	1	4											
British East Africa:																		
Kenya	C	46	6	13	93	28	5	73	63	18	27	6	50	15				
Tanganyika	C	66	4	40	2		4		2			38	5					
British Somaliland	C	11	10		16						2	5			1			
British South Africa:																		
Northern Rhodesia	C			28							1	15						
Southern Rhodesia	C	12	14					1	1				1					
Bulgaria	C		6															
Cameroun (French). (See table below.)																		
Canada:																		
British Columbia	C	[2]3							[2]1									
Manitoba	C												[2]1					
Saskatchewan	C														[2]1		[2]1	
Ceylon: Colombo	C											4	7	6	2	1		
China:																		
Amoy	C	15	22	22	6	3												
Canton	C	9	1	1														
Dairen	C	104	74	45	6					2								
Foochow	C	P		P	P		P		P				P		P			
Hangchow	C	2	5		2													
Hankow	C	1	1	1							1							
Hong Kong	C	33	[4]22	10						1								
Kwantung Leased Territory	C	73	18	24														
Macao	D	7	3	1														
Nanking	C	1																
Shanghai	C	119	5	25	8		1	2			1							1
South Manchuria Railway Zone	C	57	23	18														

Swatow	C	1	6	7		1													
Tientsin	C	3		1	2														
Chosen. (See table below.)																			
Dahomey. (See table below.)																			
Dominican Republic: Santo Domingo	C		1	1															
Ecuador. (See table below.)																			
Egypt:																			
Alexandria	C								2										
Aswan	C	18	3	3	4														
Asyut	C	4	6	2															
Cairo	C	11	2	3	1	1	3			1									
Dakahliya	C		1																
Damietta	C			1															
Faiyum	C		17	55	2										1				
Gharbiya	C	4	10	4															
Girga	C		13	7	4														
Minya	C	11	9	8	15	2	1								2				
Port Said	C		1																
Qena	C	1	1	4															
Sharkiya	C																		
Provinces	C																	41	33
Eritrea	C	76	74	89	39	10	9	1	11	5	1	1	3	3	3	1	42		
Finland. (See table below.)			1			1													
France. (See table below.)																			
Gibraltar	C	4																	
Gold Coast. (See table below.)																			
Great Britain:																			
England and Wales	C	21	11	10	3									1		1			
London	C	20	10	7												1			
London and Great Towns	C	21	10	8										1		1			
Greece: Salonika	C		4	9	7		4	4									1		
Guatemala. (See table below.)																			
Honduras:																			
Belize	D			1															
Tegucigalpa	C	2	P	P			4	P			2								
India	C	34,292	36,595	29,379	16,344	2,765	3,070	4,217	2,596	1,884	2,404	1,542							
	D	7,164	8,185	7,028	3,966	655	751	1,234	629	459	596	360							
Bassein	C	7	1	5	1	1													
	D	5	1	1	1	1													
Bombay Presidency	C	2,760	3,181	2,803	1,000	275	246	310	303	178	267	207	243	207					
	D	516	577	555	249	58	62	62	55	42	44	36	46	32					
Bombay	C	42	26	13	5	1	2		1	1		2	5	6	1	1	6		
	D	28	11	9	2	1	1		1			1	4	1	3	1	1		
Calcutta	C	254	157	73	23	2	1	1	3			12		4	1	2			
	D	205	112	60	18	2	1	2	3			3	2	4					
Cochin	C	17	8	1															
Karachi	C	14	14	7	18	1	3	2				2	1						

[1] A report dated Oct. 23, 1934, states that 142 cases of smallpox with 10 deaths have been reported in Belgian Congo.
[2] Includes 1 imported case.
[3] For 2 weeks.
[4] Includes 2 imported cases.

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

SMALLPOX—Continued

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

Place		Apr. 1–28, 1934	Apr. 29–May 26, 1934	May 27–June 30, 1934	July 1–28, 1934	Week ended— August 1934 4	11	18	25	September 1934 1	8	15	22	29	October 1934 6	13	20	27
India—Continued.																		
Madras Presidency	C	8,538	7,932	6,223	3,576	918	817	973	689	651	604	522	558					
	D	1,360	1,247	1,162	588	183	141	167	125	139	94	98	94					
Madras	C	72	64	35	34	6	9		4	5	7	4	1	5	7	8		1
Negapatam	C	7	5	8	7			3	1	1			2		1	4		3
Rangoon	C	79	37	10	6		1	2			1	1				2	1	
Tuticorin	C				6						1	1		1	1		1	
Vizagapatam	C	22	33	4	3	4	1	1	2					1				
India (French):																		
Chandernagor	D	4	2	2	1			1	1	1								
Karikal	C		1										1		1			
Pondichery	C	165	96	134	131	62	31	32	45	66	56	40	29	45	40	33		
	D	96	60	72	78	35	13	28	27	22	44	30	19	32	38	19		
India (Portuguese)	C						27											
Indo-China (see also table below):																		
Haiphong	C	26	17	7						1								
Pnom-Penh	C	1																
Tourane	C	6	5	24	17	2	2	4	1	3					3			1
Iraq	C	31	27	88	13		4		1			6	1	4	2	1		
Amara liwa	C		2															
Arbil	C				15								3	3	2			
Baghdad	C	1		1			1	1					[1]		1			
Basra	C	4	5															
Italy:																		
Genoa	C					4	3	1		2								
Milan	C										1	1						
Ivory Coast. (See table below.)																		
Japan	C		12	7	6													
Aomori Prefecture	C				3													
Kobe	C	1			1													
Nagasaki	C		1															
Osaka	C	3	2	2														
Tokyo	C	1																
Liberia.[6]																		

Mexico:																		
Chihuahua	C				1						1							
Guadalajara	D		1															
Mazatlan.[7]																		
Mexico, D. F.	C	22	14	12	5	3			3	2	3	2						
Monterrey	C					1												
Piedras Negras	C		1															
Rosita	C		11															
San Luis Potosi	D	2	2		1													
Teitipac.[7]																		
Torreon	D	2	1	1														
Morocco. (See table below.)																		
Mozambique. (See table below.)																		
Nigeria	C	717	1,277	136		159		57	23		163		[3] 52					
Lagos	C	12	15	9	2		1	1	1	1	1	3						
Nyassaland. (See table below.)																		
Palestine	C		2	7														
Persia	C				2	3								2	2	4		
Teheran	C		1		7	1												
	D	3		1						1								
Peru. (See table below.)																		
Poland	C		1		1								1			1		
Portugal (see also table below):																		
Lisbon	C	2	8	6	4										1			1
Oporto	C	3												1				
Portugese East Africa. (See table below.)																		
Salvador	C	[3] 42	60	35	[3] 21			[9] 30		[3] 10	2				[6] 13			
Siam	C	24	5	96	6						32				2	1		
Sierra Leone	C	40	77	226	67	[3] 54		[3] 26				[3] 143		[3] 242				
Spain	C	28	64	131	54	10	18	7	12	11	5	4		9	3	5	6	
Straits Settlements: Singapore	C	1	1														1	
Sudan (Anglo-Egyptian)	C	19		7	3			4				1					1	
Syria:																		
Beirut	C		2			1	1											
Provinces	C	55	31	31	50	6	5	12	9		28	27	17	6	13	14	11	13
Trans-Jordan	C			2	1													
Turkey. (See table below.)																		
Union of South Africa: Cape Province	C	P																

[3] For 2 weeks.
[5] Imported.
[6] A report dated June 27, 1934, states that an epidemic of smallpox has occurred in Sanoyea, near Monrovia, Liberia. All sanitary measures are taken.
[7] A report dated Aug. 27, 1934, states that smallpox has appeared in the suburbs of Mazatlan, Sinaloa, Mexico; the report also states that 104 deaths from smallpox have occurred in Teitipac, Oaxaca, Mexico.
[8] For 3 weeks.
[9] For 4 weeks.

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

SMALLPOX—Continued

[...icates cases; D, deaths; P, present]

On vessels:

S. S. *Yuen Sang* at Hong Kong from Swatow	1 case	Apr.	3, 1934
S. S. *Ramsay* at Singapore from Vladivostok	1 case	Apr.	27, 1934
S. S. *Talma* at Moji	1 case	Apr.	27, 1934
S. S. *Kut Sang* at Hong Kong from Amoy	Present	May	9, 1934
S. S. *Tjinegara* at Hong Kong	Present	May	16, 1934
S. S. *Britannia* at Port Said from Liverpool	1 case	May	31, 1934
S. S. *Rohna* at Penang from Madras	1 case	June	14, 1934

On vessels—Continued.

S. S. *Rajula* at Penang	1 case	June	28, 1934
S. S. *Rohna* at Penang from Madras	1 case	July	12, 1934
S. S. *Tacoma* at Moji from Dairen	1 case	July	28, 1934
S. S. *Ethiopa* at Rangoon from Madras	1 case	Sept.	3, 1934
S. S. *Ussuri Maru* at Kobe from Dairen	1 case	Sept.	24, 1934
S. S. *Rohna* at Penang from Madras	1 case	Oct.	4, 1934

Place		April 1934	May 1934	June 1934	July 1934	August 1934	September 1934
Angola	C	48	35	-------	-------	----------	----------
Belgian Congo (see also table above)	C	104	67	110	360	204	183
Bolivia	C	20	-------	-------	82	136	70
Cameroun (French)	C	105	-------	-------	-------	----------	----------
Chosen	C	28	65	25	18	2	----------
Dahomey	C	-------	5	-------	83	31	----------
Ecuador	C	-------	-------	-------	1	----------	----------
Finland	C	-------	-------	-------	1	----------	----------
France	C	-------	10	-------	-------	3	2
Gold Coast	C	11	-------	-------	-------	----------	----------
Guatemala	C	-------	-------	-------	-------	1	----------

Place		April 1934	May 1934	June 1934	July 1934	August 1934	September 1934
Indo-China (see also table above)	C	703	592	215	192	150	87
	D	69	76	39	29	39	18
Ivory Coast	C	11	-------	4	2	----------	----------
Morocco	C	19	3	2	5	2	8
Mozambique	C	-------	-------	-------	3	4	6
Nyasaland	C	149	36	63	31	16	----------
Peru	D	18	16	29	24	100	----------
Portugal (see also table above)	C	68	110	40	70	----------	----------
	D	3	1	5	4	----------	----------
Portuguese East Africa	C	1	34	5	3	4	6
Turkey	C	3	5	2	17	4	16

TYPHUS FEVER

Place		Apr. 1–28, 1934	Apr. 29–May 26, 1934	May 27–June 30, 1934	Week ended— July 1934				August 1934				September 1934					October 1934		
					7	14	21	28	4	11	18	25	1	8	15	22	29	6	13	20
Algeria:																				
Algiers Department	C	13	------	18	------	------	1	------	------	------	1	------	------	------	------	------	------	1	------	------
Constantine Department	C	20	41	91	12	10	3	7	3	6	3	------	3	1	1	------	------	1	------	------
Bone	C	1	------	------	------	------	------	------	------	------	1	------	1	------	------	------	------	------	------	------
Oran Department	C	1	5	5	1	------	1	------	------	------	10	------	------	------	------	------	------	------	------	------
Azores. (See table below.)																				
Basutoland. (See table below.)																				
Belgian Congo [1]	C	------	------	208	53	2	49	31	52	30	26	------	13	19	13	12	5	4	7	6
Bolivia. (See table below.)																				
British East Africa: Uganda	C	17	2	6	------	------	------	------	------	------	------	1	------	------	------	------	------	------	------	------
Bulgaria	C	38	45	19	------	------	------	2	------	------	------	------	------	------	------	------	------	------	------	------
Chile	C	------	[2] 1,192	1,044	215	308	353	304	------	------	------	------	------	------	------	------	------	------	------	------
Concepcion	C	------	------	------	8	5	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Iquique	C	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	[3] 4	------	------
Santiago	C	108	164	321	63	107	94	101	73	------	------	------	------	------	------	------	------	------	------	------
Tarapaca Province.[4]																				
Valparaiso	C	10	11	22	11	10	3	6	2	8	7	4	3	8	6	2	2	------	6	3
China:																				
Hangchow	C	------	------	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Hankow	C	------	------	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Harbin	C	------	P	3	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Nanking	C	2	3	3	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Shanghai	C	1	------	3	------	------	------	------	------	------	------	------	------	------	1	------	------	------	------	------
South Manchuria Railway Zone	C	1	1	3	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Tientsin	C	1	5	2	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Chosen. (See table below.)																				
Czechoslovakia. (See table below.)																				
Egypt:																				
Alexandria	C	9	4	9	1	------	1	------	1	------	------	------	------	------	------	------	------	------	------	1
Asyut	C	------	7	4	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Beheira	C	------	347	263	16	14	15	7	7	9	15	------	------	1	------	------	------	------	------	------
Cairo	C	9	7	1	1	1	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Dakahliya	C	27	139	67	7	5	1	4	2	5	------	------	------	------	------	------	------	------	------	------

[1] From Apr. 18 to May 27, 1934, 256 cases of typhus fever with 7 deaths were reported in Belgian Congo.
[2] For 9 weeks.
[3] Imported.
[4] A report dated July 13, 1934, states that 41 cases of typhus fever with 7 deaths have been reported in the villages of Usmagama and Pachica, Tarapaca Province, Chile.

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

TYPHUS FEVER—Continued

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

Place		Apr. 1–28, 1934	Apr. 29–May 26, 1934	May 27–June 30 1934	Week ended— July 1934				August 1934				September 1934					October 1934		
					7	14	21	28	4	11	18	25	1	8	15	22	29	6	13	20
Egypt—Continued.																				
Damietta	C	12	5	2		1													1	
Faiyum	C			2															1	
Gharbiya	C	62	328	193	39	7	13	12	12	4	6			1		2			1	
Girga	C		1	1						1										
Minufiya	C		127	87	6	8	10	2		3	2									
Minya	C								1											
Port Said	C	1		4																
Qena	C			13	1				1	5									1	2
Sharkiya	C			22		7	1	7	1		2			1						
Provinces	C	1,641	1,360	695	83	44	49		25	28	27	18	13	4	10	2	6	2	3	3
Estonia	C										1									
Finland (See table below.)																				
Greece (see also table below): Salonika	C									3	3					1	1	1		
Guatemala. (See table below.)																				
Hungary	C															1				
Iraq	C	47	27	65																
Baghdad	C	23	6	4						2		1	1					1		
Kirkuk liwa	C	68	41	59																
Mosul liwa	C							14	3						3					
Irish Free State:																				
Cork County—Castletown	C					5														
Waterford County—Lismore	C													1				1		
Wicklow County—Altidore	C						7													
Italy:																				
Leghorn	C									1		1		2	1	1				
Palermo	C				1															
Japan:																				
Aomori Prefecture	C								3	1										
Kobe	C																	1		
Nagasaki	D															1				
Latvia. (See table below.)																				
Lithuania	C	62	12	4	8		6	3	3	2		2				2			2	

Mexico:																				
Guadalajara	D													1						
Mexico, D. F.	C	79	64	108	13	18	6	1	8	12	5	9	4	11	6					
Saltillo	D														2				1	
San Luis Potosi	D			1			1											1		1
Torreon	C					1			1										1	
Morocco	C	69	34	45	3	4	3	8	36	6		1	1							
Palestine	C			4		4	1					1	2		1			1	1	2
Persia	C	76	230	217	33	39	26	14	9	21	13	6	17	5	6	10	9	4	8	
Teheran	C	8	36	22	3	4	4	14	1	4	1	1	2		2	3	3	1		
Peru. (See table below.)																				
Poland	C	679	426	284	33	40	30	45	20	20	25	12	10	13	9	8	13	13	9	13
	D	37	28	23	2	5	2	3	1		1	4		1	1			3	1	
Portugal (see also table below): Oporto	C				1									1						
Rumania. (See table below.)																				
Scotland	C		[a]																	
Spain: Catalonia	C			27																
Straits Settlements: Singapore	C							2												
Syria: Beirut	C								1											
Trans-Jordan	C	11	6	16		4			3	1										
Tunisia:																				
Tunis	C	12	2	22	1							1							1	
Provinces	C	146	90	99	12	9	13	12		13	1			1	2		15	2		4
Turkey. (See table below.)																				
Union of South Africa. (See table below.)																				
Yugoslavia. (See table below.)																				

Place		April 1934	May 1934	June 1934	July 1934	August 1934	September 1934
Azores	C	9					
Basutoland	C	81					
Bolivia	C	38	98	46	39	91	33
Chosen	C	7		6	41	23	
Czechoslovakia	C	78	66	20	3		
Finland	C		4				
Greece	C	2	3		9	10	7
Guatemala	C	26	42	18	24	36	31
Latvia	C		3				
Peru	C	59	24	59	43	24	63

Place		April 1934	May 1934	June 1934	July 1934	August 1934	September 1934
Portugal	C	9	28	21		4	
Rumania	C	349	176	73	16	24	16
Turkey	C	41	39	15	9	22	10
Union of South Africa:							
Cape Province	C	132	119	250	289	272	
Natal	C	8	7	10	26	15	
Orange Free State	C	454	343	884	709	510	
Transvaal	C		8	38	24	12	
Yugoslavia	C	445	398	118	58	27	12

[a] Includes 1 imported case.

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

YELLOW FEVER

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

Place		Apr. 1–28, 1934	Apr. 29–May 26, 1934	May 27–June 30, 1934	Week ended— July 1934 7	14	21	28	August 1934 4	11	18	25	September 1934 1	8	15	22	29	October 1934 6	13	20
Brazil:																				
Amazonas State—Fonte Boa	C							1												
Bahia State: Victoria Bank	C			1																
Ceara State:																				
Carius	C	1	1	1																
Iguatu	D	1				1			1											
Novo Oriente	C							1												
Santa Quiteria	C			1																
Mato Grosso State: Coronel Ponce	C		1																	
Para State—St. Sebastian	C		1												1					
French West Africa—Guinea—Kindia	C																			
Gambia: Bathurst.[1]																				
Gold Coast: N'Kaw Kaw	C					1														
Ivory Coast:																				
Abidjan	C			3													1			
	D			2				1									1			
Agboville	C														1					
Bingerville	C									1										
Bobo-Diolasso	D																			[2]1
Rubino	C		2																	
Niger Territory:																				
Maradi	C													1						
Zinder	C							1	2	1	2								1	
	D							1	2		2								1	
Senegal: Matam	C		1																	
Sudan (Anglo-Egyptian): Wau	C			1																

[1] During the week ended Nov. 17, 1934, 1 case of yellow fever was reported at Bathurst, Gambia.
[2] Suspected.

×