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TUBERCULOSIS AMONG THE EX-SERVICE MEN.

WITH SPECIAL REFERENCE TO ITS BEARING ON PUBLIC HEALTH.[1]

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A general impression apparently prevails among the laity that the incidence of tuberculosis was greatly increased in the United States by the World War. It is not surprising that this idea is current. Care of the disabled has naturally been a matter of general solicitude. Difficulties encountered in providing sanatorium treatment were given wide publicity and sometimes were exaggerated. Moreover, the appalling increase in tuberculosis which occurred during the war in most countries of Europe, and which still prevails in Austria and Russia, has become common knowledge. Among all those nations, including some nonbelligerents, whose food supplies were seriously affected and who felt keenly the stress of war and its results, tuberculosis increased, indeed, to an alarming extent. It is natural, therefore, although this country was fortunately spared the pinch of famine, the desolation of invasion, and many of the fears, griefs, deprivations, and other forms of stress which try the spirit, waste the body, and, therefore, pre dispose to tuberculosis, that our citizenry should anticipate an increase of tuberculosis here and, in the same pride with which they demanded a place in the fighting line, count their casualties in kind.

It may be recalled that in 1919, when making a forecast of hospital needs, it was estimated by the Public Health Service that approximately 12,000 beds would be required within two years for tuberculous veterans. It is also a fact that by the end of April, 1922, there were 11,346 tuberculous veterans hospitalized at Government expense in the United States, as well as considerable numbers receiving compensation for that disability who declined hospital care. The incidence of tuberculosis was, however, only slightly increased in the United States during the war, either among males

[1] Read before the section on preventive and industrial medicine and public health at the Seventy-Third Annual Session of the American Medical Association, St. Louis, May, 1922, and printed in the Journal of the American Medical Association, vol. 79, No. 5, July 29, 1922, pp. 370-374.

of military age or any other class of population. The forecast of hospital needs referred to above, which has proved to be approximately correct, was made merely in accordance with the known incidence of tuberculosis among the general population in the age groups concerned. A glance at the curve (Fig. 1) shows how sensitive the tuberculosis mortality is to collateral influences. The slight but perceptible rise in 1916 and 1917 is presumably due to the increase in living costs or perhaps, more exactly, the degree to which this increase exceeded that in wages or other rewards for production. To these causes must be added in 1918 that of the epidemic of influenza. There seems little doubt that these increases were not related to actual participation in the war.

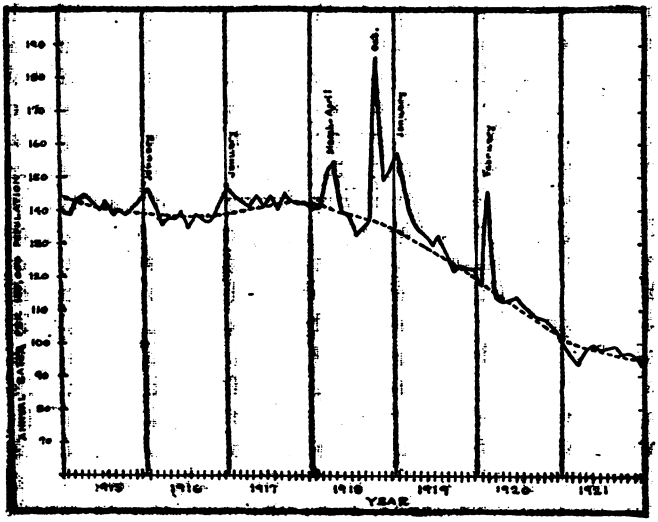


FIG. 1.—Recent decline in mortality from all forms of tuberculosis. Monthly rates from 1915 to 1921 in 24 States (in 1921, provisional data for only 15 States were available), with normal seasonal variation eliminated.

The curve (Fig. 2) comparing the mortality rates of 1915 and 1920, shows a marked postwar decline in tuberculosis mortality which is even more marked among males, including those of military age, than among females. It is, I think, generally accepted that the incidence of tuberculosis in any country, in both sexes and at every age except infancy and childhood alone, reflects with great precision the living and industrial conditions prevailing. It is therefore not strange that tuberculosis was not increased among our troops, who were generally well fed, well housed, and well clothed, or, except to a very slight degree, among the population as a whole.

The war risk insurance act of October 6, 1917, promised hospital care to disabled veterans, but made no provisions for the construc-

tion or operation of hospitals, nor did it name the agency whereby the proposed care was to be provided. It was, of course, impossible to reckon at that time with the desire which manifested itself, as soon as the armistice was signed, for discharge from military and

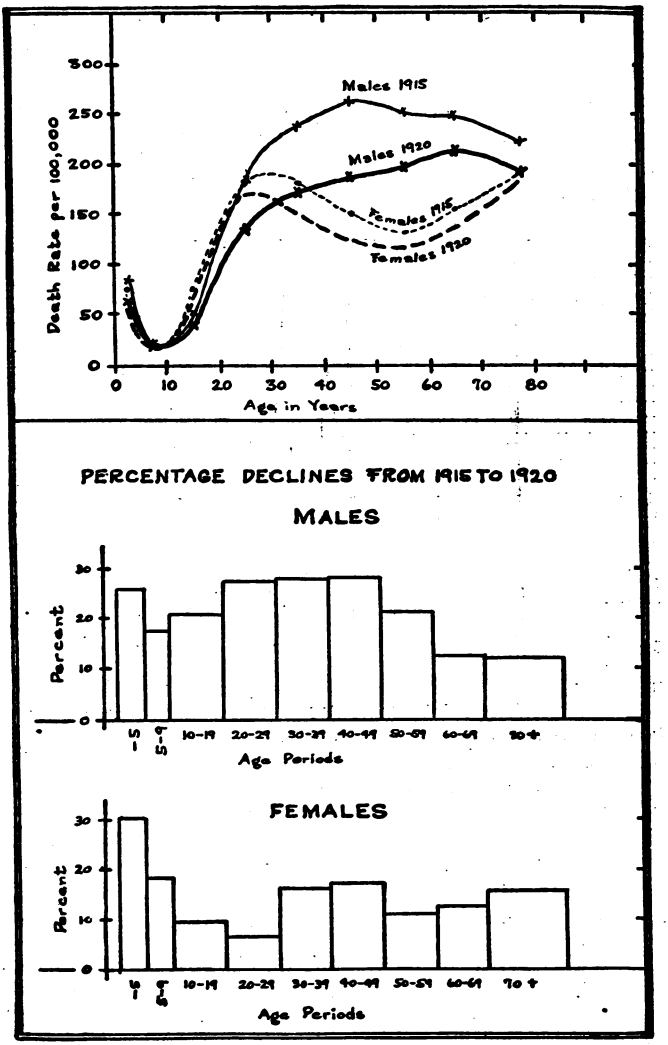


FIG. 2.—Specific death rates for all forms of tuberculosis in twenty-four registration States compared for 1915 and 1920.

naval service. This prevented extensive use of military and naval hospitals for discharged men, who usually evidenced a distaste for all things connected with military life. It was a perfectly natural reaction, considering the psychology of the situation, and one which

in no way reflects upon the excellent treatment provided by the Navy and Army hospitals.

TABLE I.—*Mortality from tuberculosis in the United States, 1915 and 1920.*[1]

Age period (years).	Death rate per 100,000.				Per cent decrease in mortality in 1920 over 1915.	
	Males.		Females.			
	1915	1920	1915	1920	Males.	Females.
All forms:						
All ages	156.1	117.2	124.4	107.8	24.9	13.3
Under 5	84.5	62.5	77.2	53.9	26.2	30.2
5–9	22.6	18.6	22.9	18.7	17.7	18.3
10–19	49.6	39.3	76.1	68.9	20.8	9.5
20–29	186.3	134.5	184.3	172.2	27.8	6.6
30–39	240.7	173.0	183.1	153.2	28.1	16.3
40–49	263.9	189.0	152.4	125.6	28.4	17.6
50–59	252.9	198.2	134.1	119.3	21.6	11.0
60–69	248.4	216.6	158.7	138.7	12.8	12.6
70 and over	220.2	193.5	193.4	162.8	12.1	15.8
Pulmonary tuberculosis:						
All ages	136.0	102.9	107.5	94.1	24.3	12.5
Under 5	25.8	21.2	25.7	18.2	17.8	29.2
5–9	7.9	7.0	9.9	8.9	11.4	10.1
10–19	40.3	31.6	66.8	60.2	21.6	9.9
20–29	171.2	124.6	171.8	160.8	27.2	6.4
30–39	225.1	162.6	169.9	143.2	27.8	15.7
40–49	245.1	177.1	140.2	113.9	27.7	18.7
50–59	234.1	184.1	120.4	106.9	21.4	11.2
60–69	226.1	199.5	141.7	125.3	11.8	11.6
70 and over	196.3	177.8	173.9	141.5	9.4	18.6

[1] Specific death rates per hundred thousand for males and females compared for 1915 and 1920 in 24 registration States, with percentages of decrease; on revised intercensal population estimates for July 1, 1915, and July 1, 1920, but using the 1915 sex and age distribution. The 24 States are those constituting the death registration area in 1915. Acknowledgments are made to Dr. W. H. Davis, chief statistician for vital statistics, Bureau of the Census, for the use of mortality data from original tabulation sheets.

It was not, therefore, until March 3, 1919, that by act of Congress the Public Health Service was named as the principal agency whereby hospital and medical care was to be provided. The emergency was serious. To place a properly trained physician in each city or large town in all parts of the United States, to find hospital beds for the widely scattered disabled veterans who applied for examination and treatment in all parts of the United States, and to equip, man, and operate such institutions in various parts of the country as could be converted to hospital use—these were some of the urgent problems that arose. The tuberculosis patients caused considerable concern, and it was early apparent that emergency hospital provision was at once necessary. Congress in failing to act favorably on the recommendations contained in House Document No. 481, which was transmitted by the Secretary of the Treasury, December 8, 1919, reflected the idea, not wholly extinct among medical men, that permanent hospitals are not necessary for the treatment of tuberculosis. The estimates made in House Document No. 481 provided for the construction, among other institutions, of 19 hospitals for tuberculosis, with an aggregate capacity of 9,330 beds, at an approximate cost of $32,500,000. This was for tuberculosis hospitals alone. The

plan contemplated the construction of permanent institutions located near the centers of population to be served. It visioned ample grounds, with lawns and trees, and restful environments in salubrious but not isolated places. Unfortunately, however, the treatment of tuberculosis became associated in its early history with the tent, the shack, the lean-to, with life in the open under primitive conditions. The early advice, "Go West and rough it," was recalled. It was necessary to explain again and again that a tuberculous patient needs highly specialized care, calling for modern hospital facilities. It was necessary for this conviction to find place gradually, and for public sentiment to lead the way to the necessary appropriations.

As an evidence of the difficulties encountered at one critical period, it may be mentioned that on December 24, 1919, the President approved the amendment to the war risk insurance act which increased the allowance for total temporary disability from $30 to $80 a month. On the same day, in anticipation of an increased number of claimants, the Public Health Service solicited the assistance of the American Legion to find additional hospital accommodations for tuberculous patients, believing that the criticism which the Government was at that time facing might be in part ameliorated or its cause mitigated by concerted effort of the comrades of those needing treatment, to find hospitals suitable for their care. The Legion in response sent out requests from its headquarters to posts in all parts of the United States, and its members cooperated with our field officers to the desired end. A glance at Figure 4 will show the extent to which contract hospitals were utilized in this very trying period. We are all familiar with the criticisms which arose concerning their use. I have no apologies to make. The institutions were representative of the medical care prevailing in the respective communities at that time. Some of the institutions were excellent; others were unsuitable and were abandoned as rapidly as their unsatisfactory condition was determined by the district inspectors detailed for the duty. Whether it would have been better for the Federal Government to arrange with State sanatoriums and those operated by other political units for the care of all tuberculous patients in this manner is open to question. The plan had many advocates among members of the National Tuberculosis Association. A plan whereby such hospitals might have been enlarged by Federal funds for tuberculous veterans was foredoomed to failure because of the distaste evidenced on every hand to the admission of veterans to any hospital which cared for free patients, or, according to the vernacular, "charity patients." Objections were made to the use of State sanatoriums, county sanatoriums, and such excellent institutions as Oak Forest in Chicago, Seaview Hospital in New York City, and the Branch Hospital in Cincinnati. There appeared, therefore, no choice but to proceed with the development

of temporary hospitals for which some funds were provided, which funds, however, according to the law, could not be used for permanent construction.

The character of the temporary Army hospitals of the cantonment type is too well known to merit a description. The widely separated, one-story wards, the connecting corridors with numerous inclines, the numerous heating units, the fire risks, the difficulty of supplying hot food, are well known. The sagging foundations, warped floors, and leaky roofs of these temporary buildings were eloquent allies at a time when it was necessary to plead for new hospitals. Some of the attacks made upon the Government, notably in the case of

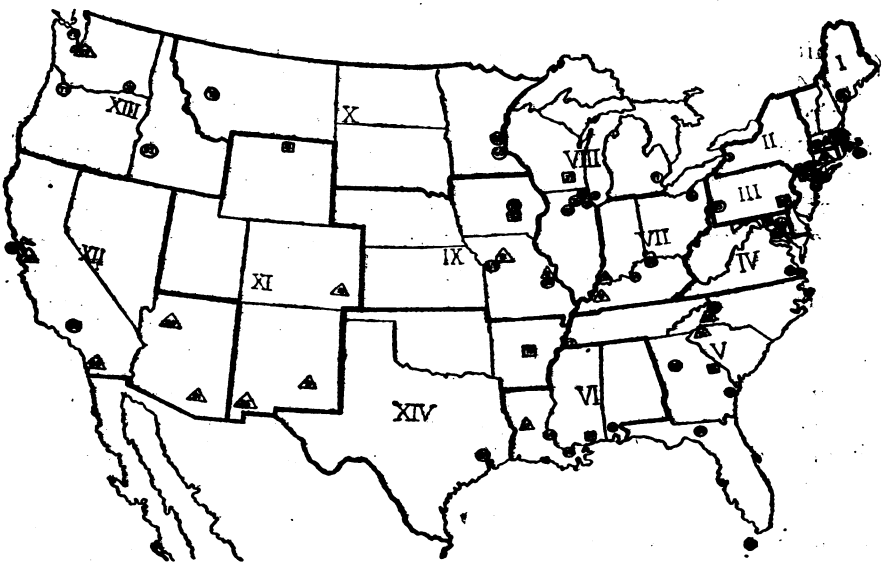


FIG. 3.—Location of United States Public Health Service Hospitals, January, 1922: Circles indicate general hospitals; triangles, tuberculosis hospitals; squares, neuropsychiatric hospitals, the numbers being definitely located in Table 3.

the Fox Hills Hospital, were, possibly, not wholly devoid of a well-meant but ill-advised effort to force the appropriation of necessary funds to build permanent institutions.

The tuberculosis hospitals taken over from the Army, in addition to those at Markleton, Pa., and Deming, N. Mex., which were abandoned as unsatisfactory as soon as more suitable hospitals had been obtained, were:

No. 24, Palo Alto, Calif., 650 beds.
No. 26, Greenville, S. C., 700 beds.
No. 27, Alexandria, La., 600 beds.
No. 41, New Haven, Conn., 500 beds.
No. 50, Prescott, Ariz., 765 beds.
No. 55, Fort Bayard, N. Mex., 1,120 beds.
No. 60, Oteen, N. C., 1,100 beds.
No. 64, Camp Kearney, Calif., 550 beds.

To supplement these, a temporary hospital of 290 beds, intended chiefly for winter use, was established at Tucson, Ariz., at Pastime Park, cottages built from salvaged lumber supplementing the existing buildings. The abandoned Indian school at Tacoma, Wash., was also converted into a temporary hospital of 278 beds. One of the difficulties in operating hospitals of this group was the lack of quarters for personnel. The Public Health Service has a corps of commissioned officers, but lacks an enlisted personnel. Its employees are all civilians who may leave at will and whose contentment is often conditioned on the presence of their families, of schools, social advantages, and other refinements of living not demanded or expected under military conditions. From the patients' point of view it must also be admitted that the gloomy outlook afforded by the war-time buildings, now 4 years old, is depressing.

From the beginning of the work by the Public Health Service the hospitalization and the transfer of patients was, so far as possible, decentralized. A disabled soldier coming under observation at any point in the field and found to be in need of hospital care was immediately offered it, if not in a hospital operated by the Government, then in the best contract hospital available. According to a custom which has prevailed in the Public Health Service for more than a hundred years, tuberculous patients are routinely admitted as a temporary measure to any of its general medical and surgical hospitals. The tuberculosis wards in our hospitals in Boston, New York, Baltimore, Chicago, and other large cities, which were important clearing stations, often contained several hundred patients each. The tuberculous patients at Fox Hills, indeed, sometimes outnumbered all others. The resolution which the American Medical Association adopted at the Boston session last year, advocating this practice for civil hospitals, has served to disarm unjust criticism and to strengthen the Government in a useful practice. Your action, therefore, wisely taken in the general interests of public health everywhere, has served the Government in a trying administrative problem.

The demand for climatic change was another heritage from an earlier generation. Tuberculous patients and their friends demanded a transfer to special climates from northern, southern, eastern, western and central portions of the United States. The spirit of restlessness engendered by the war was manifest. As a further evidence of this, a popular report is current that 25,000 tuberculous ex-soldiers are found to have migrated to Colorado alone, only 2 per cent of the hospital patients coming under observation in that State being natives of Colorado. It was necessary to refuse many unwise requests for the removal of tuberculous patients, unsuited by reasons of physical condition, from hospitals where they were under treatment to other

hospitals in the arid Southwest. So far as I am aware, however, there are no instances in which a sick man in any part of the United States was not provided with, or at least offered, hospital care, of the standard prevailing in that community, without more than a few days' delay. The most insistent demands were made for the transfer of terminal cases. "Give this dying man a chance" was a frequent expression typical of the character of requests daily received. It was exceedingly difficult and sometimes futile to attempt to explain that the importance thus attributed to climatic influence is out of harmony with modern scientific thought, nor was the problem rendered easier by the fact that large numbers of reputable physicians throughout the country appeared to entertain views long since believed obsolete.

The hospitals devoted to the care of veterans were manned almost exclusively by personnel from the military and naval forces. Medical

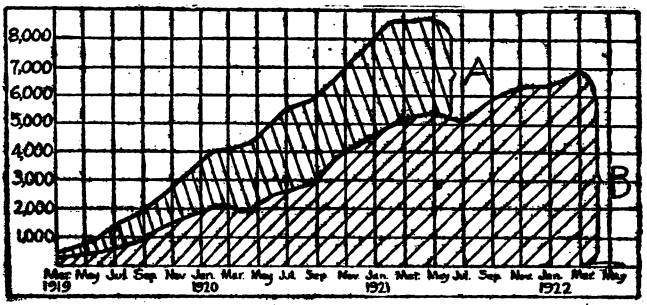


Fig. 4.—Hospital care of tuberculous veterans of the World War, U. S. Public Health Service, March, 1919, to June, 1922; patients in Army, Navy, and soldiers' home hospitals not included. A, contract and other institutions; responsibility and control transferred to the U. S. Veterans' Bureau, June, 1921. B, Public Health Service hospitals; administration of veterans' hospitals transferred to U. S. Veterans' Bureau by Executive order, April 29, 1922.

officers, nurses, reconstruction aides, dietitians, and laboratory technicians were almost without exception with military experience, many of them having served overseas. All, therefore, were well prepared to sympathize fully with the needs of their patients. The American Legion is well represented in membership among both patients and personnel, and at some of the hospitals the local post constitutes the largest in the community, and sometimes the largest in the State.

It need cause no surprise that special training in tuberculosis for officers was necessary. The lack of adequate instruction in this specialty in most medical schools is well known, while the exclusion of tuberculosis patients from general hospitals, a still all too common custom, and the practice of sending tuberculous patients "away" have combined to alienate the average physician from a knowledge of tuberculosis. The excellent Army schools in tuberculosis which

were conducted under the auspices of Col. George E. Bushnell, retired, had trained a considerable number of Army medical officers, some of whom continued on duty with the Public Health Service. With these and a few other skilled men as a nucleus, the training of a sufficient number of medical officers was undertaken to provide proper care for patients in hospitals. A summer school was conducted at Oteen, and numerous short courses in diagnosis were held at various places, every tuberculosis hospital being required to give its medical personnel a prescribed course in training which, during the last three years, has naturally been applied to a considerable number of medical officers stationed therein or assigned for the purpose. Doctor Palmer, who, together with Doctor Boswell, has consented to discuss my subject, is one of the five experts who were engaged to visit our tuberculosis hospitals to assist in establishing a suitable standard of treatment and to strengthen weak points. Since he visited more hospitals and visited them oftener than the others, he is perhaps better qualified than any other person to tell impartially, just as he told me in his official reports, the facts about the hospitals as he found them.

TABLE II.—*Hospital activities of Public Health Service*

Veterans admitted to hospital	264,000
Hospital relief days	14,397,500
Outpatient (dispensary) treatments	2,042,200
Physical examinations	1,459,200

NOTE.—The normal hospital operations of the Public Health Service, in providing relief for merchant seamen and its other beneficiaries in the 25 marine hospitals still remaining, amounted last year (one year only) to the following:

Old line patients admitted to hospital	44,756
Hospital relief days	1,121,171
Physical examinations	79,759

It is not possible to tabulate the tuberculosis patients with respect to the stage of disease in which they were admitted, these figures not being available at the present time. Many were admitted with doubtful diagnosis, claiming compensation for and giving a history of symptoms which indicated tuberculosis. Some of these had been exposed to war gases or were convalescent from epidemic pneumonia. In all, approximately 65,000 veterans were admitted to hospitals, including both Government and civil institutions, up to May 1 of this year. It early became necessary to differentiate between patients having tuberculosis for which they required treatment and those with healed or quiescent tuberculosis which did not require hospital care. Numbers of patients were discharged within a few weeks after admission, a board of properly qualified medical officers having determined that they were nontuberculous, in a clinical sense.

TABLE 3.—*Location of United States Public Health Service Hospitals.*

No.	
2.	Boston.
3.	Buffalo.
5.	Chicago.
6.	Cleveland.
7.	Detroit.
8.	Evansville, Ind.
9.	Fort Stanton, N. Mex.
10.	Key West, Fla.
11.	Louisville, Ky.
12.	Memphis, Tenn.
13.	Mobile, Ala.
14.	New Orleans.
15.	Pittsburgh.
16.	Portland, Me.
17.	Port Townsend, Wash.
18.	St. Louis.
19.	San Francisco.
20.	Savannah, Ga.
21.	Stapleton, N. Y.
22.	Vineyard Haven, Mass.
24.	Palo Alto, Calif.
25.	Houston, Tex.
26.	Greenville, S. C.
27.	Alexandria, La.
29.	Norfolk, Va.
30.	Chicago.
32.	Washington, D. C.
34.	East Norfolk, Mass.
35.	St. Louis.
36.	Boston.
37.	Waukesha, Wis.
38.	New York.
41.	New Haven, Conn.
42.	Perryville, Md.
43.	Ellis Island, N. Y.
44.	West Roxbury, Mass.
45.	Biltmore, N. C.
48.	Atlanta, Ga.
49.	Philadelphia.
50.	Prescott, Ariz.
51.	Tucson, Ariz.
52.	Boise, Idaho.
53.	Dwight, Ill.
54.	Arrowhead Springs, Calif.
55.	Fort Bayard, N. Mex.
56.	Baltimore.
57.	Knoxville, Iowa.
59.	Tacoma, Wash.
60.	Oteen, N. C.
61.	Staten Island, N. Y.
62.	Augusta, Ga.
63.	Lake City, Fla.
64.	Camp Kearney, Calif.
65.	St. Paul.
66.	Carville, La.
67.	Kansas City, Mo.
68.	Minneapolis.
69.	Fort Thomas, Ky.
70.	New York.
71.	Sterling Junction, Mass.
72.	Helena, Mont.
73.	Chicago.
74.	Gulfport, Miss.
75.	Colfax, Iowa.
76.	Maywood, Ill.
77.	Portland, Oreg.
78.	North Little Rock, Ark.
*.	Sheridan, Wyo.
*.	Dawson Springs, Ky.
*.	Walla Walla, Wash.
*.	Excelsior Springs, Mo.
*.	Las Animas, Colo.
*.	(Bronx) New York.
*.	Norfolk, Va.
*.	Rutland, Mass.

*The asterisks and the numbers are reproduced on the map (Fig. 3).

While final statistics have not been published, the general impression prevails that war gases were not an important cause of clinical tuberculosis. In this connection, the following observation made by the Surgeon General of the Army in a recent report is pertinent:

In the year 1918 there were one and one-half times as many cases of tuberculosis per thousand among all troops in France as there were among those gassed, and in 1919 there were more than one and three-fourths times as many tuberculosis cases per thousand among all troops as there were among the gassed troops.

The mental attitude of patients is indicated in some measure by the fact that out of 9,200 patients discharged from service hospitals between July 1, 1921, and May 1, 1922, 3,132, or more than one-third, left against advice and without permission, treatment not having been completed. Those discharged for disciplinary reasons during the same period numbered 189. Many of these patients, presumably, sought readmission to other hospitals in accordance with the spirit of unrest which still prevails, although to a less degree than formerly, among ex-service men. The frequency of departures from the hospital against medical advice has been ascribed in part by experienced hospital executives to the custom whereby the Veterans' Bureau provides transportation home for those so departing for the first time. Homesick men, at some distance from their friends, and finding sanatorium regimen irksome, are tempted to take advantage of this opportunity to return to their families. Men also who have at their own expense unwisely sought climatic treatment at distant places may enter the nearest Government hospital, even for the express purpose of claiming transportation home. It is somewhat significant that the small temporary hospital at Tucson, Ariz., with a capacity of less than 300 beds, discharged 488 against advice between March 15, 1920, and April 23, 1922, which is more than half of its total discharges during that period. This hospital is one to which, with few exceptions, no transfers are made by the Government, as it is merely an emergency hospital for ex-service men found in Tucson in need of medical care.

Special treatments, including induced pneumothorax, heliotherapy, both natural and artificial, occupational therapy, including physiotherapy, and vocational training as applied therapeutic exercise, were encouraged in all the tuberculosis hospitals. Some of the best results in tuberculous laryngitis were obtained at hospitals in the arid Southwest, with sunlight and silence. Some research work related to the presence of small pneumothorax as a common but hitherto unrecognized accompaniment of active pulmonary tuberculosis was carried out at New Haven by Surgeons Barlow and Thompson, the results of which will shortly be published as a bulletin of the Hygienic Laboratory. The number of cases of bone and joint tuberculosis coming under observation has been rather surprising, approximately 3 per cent of tuberculous patients admitted to hospital having non-pulmonary disease. Of these, approximately two-thirds had involvement of the bones and joints.

Remembering that approximately one-third of all veteran hospital patients are the tuberculous, an idea of the operations relating to this class may be obtained from the summary of the total hospital activities of the Public Health Service during the three years since the work was undertaken, given in Table II.

The medical work which the Public Health Service was called on to perform for the Bureau of War Risk Insurance and its successor, the United States Veterans' Bureau, is now history. The field organization, including the 14 district supervisors' offices and their sub-agencies, reaching practically into every county of the United States, was turned over in June, 1921. The control of contract hospitals was relinquished also at that time. The Veterans' Bureau, having further perfected its organization, finally felt itself ready to assume the administration of the veterans' hospitals, which were, accordingly, turned over to Director Forbes by Executive order, May 29, 1922. This transfer consisted of 57 hospitals, with 17,500 beds, 13,057 patients (of whom 5,271 were tuberculous), and a personnel of 11,347, including 925 physicians and dentists, 1,425 nurses, 425 reconstruction aides, and 110 dietitians. I take this occasion to pay public tribute, before a body which has ever honored fidelity, to the professional men and women who, having been identified with the organization and operation of these hospitals for many months during very trying periods, were transferred from the Public Health Service to the Veterans' Bureau for continued duty of the same character. Their loyalty has been instant and unvarying, their patience untiring, their zeal unflagging, and their devotion unfailing, in the cause of the disabled veteran and the Government, whose obligations they strive to fulfill.

SEPARATION OF TOXIC AND NONTOXIC CELLS FROM CULTURES OF AN ANAEROBE ISOLATED FROM LARVÆ OF THE GREEN FLY.

By IDA A. BENGTSON, Assistant Bacteriologist, United States Public Health Service.

In attempting to obtain an unquestionably pure culture of the spore-forming anaerobe recently isolated from larvæ of a species of the green fly[1] the single cell method of Barber was employed.

The culture used was one developed from a well isolated single colony, fished from a deep liver-agar culture into meat medium, which consisted of one part of chopped meat and two parts of water, the whole adjusted to a reaction of p_H 8.0. This culture was toxic, causing the death of mice in about four hours, in a dose of 0.2 c. c.

A single cell (spore) culture derived from this culture was found to be nontoxic for mice, though the appearance of the growth in meat medium was identical with that of the growth previously obtained. Two other single cells (spores) were isolated; one was found to be toxic and the other nontoxic. These three cultures were designated *a*, *b*, *c*, *a* and *c* being nontoxic and *b* toxic.

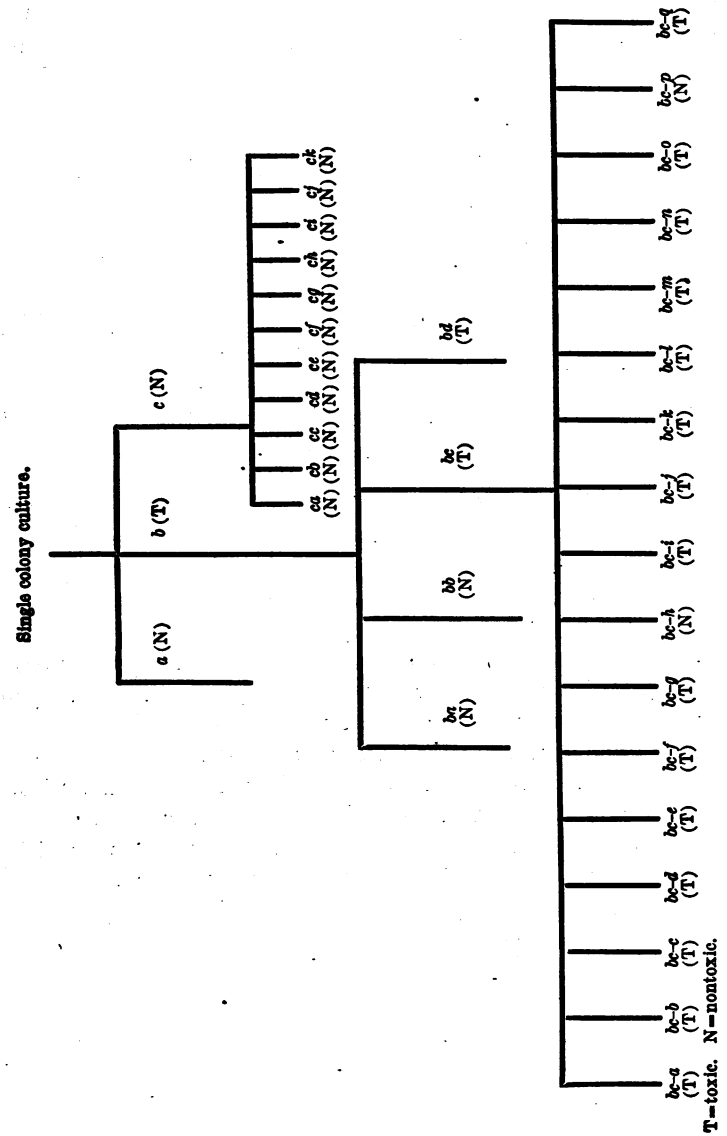
[1] Pub. Health. Rep., 1922, 37, 164-170. Reprint No. 726.

A comparison was made of the morphological and cultural characteristics of the three cultures. The media used included meat medium, litmus milk, liver broth, and ordinary glucose broth in fermentation tubes. Two subcultures of each culture were used. Morphologically, all the cultures were identical, consisting of rods with terminal spores.

All of the cultures showed a similar appearance in the meat medium. The growth in this medium, in contrast to that of single cell cultures of Types A and B of the botulism organism, is distinguished by the absence of any evidence of proteolysis. There is no reduction in the volume of meat, no darkening or blackening of the meat, no comminution of the particles of meat, no darkening of the supernatant broth, and no pronounced odor. A slight acidity was produced in litmus milk, but no coagulation or digestion of casein occurred. All of the cultures failed to grow in glucose broth fermentation tubes. In the liver broth fermentation tubes, culture *a* failed to grow. One of the subcultures of *b* showed a granular growth within 24 hours; but this was precipitated on opening the tube and making a smear, and no further growth occurred. The growths of the second subculture of *b* (toxic) and the two subcultures of *c* (nontoxic) were similar and unusual in that there was no evidence of growth in any of the tubes during the first 10 days. After this time a granular growth appeared. The cultures were left undisturbed and continued to grow, and all had produced gas to the amount of 20 to 25 per cent at the end of two weeks.

The similarity in morphology and in cultural reactions and the unusual behavior in the liver broth indicate the essential cultural identity of the toxic and nontoxic types.

Further single cell isolations were made from cultures *b* (toxic) and *c* (nontoxic). From *b*, two nontoxic cultures (*ba* and *bb*) and two toxic (*bc* and *bd*) were obtained. From *c*, eleven nontoxic cultures have thus far been obtained. From culture *bc*, 17 single cell isolations have been made, 15 of these being toxic and 2 nontoxic. The results are graphically presented in the accompanying diagram.


Single colony culture.
a (N)
b (T)
c (N)
ca (N)
cb (N)
cc (N)
cd (N)
ce (N)
cf (N)
cg (N)
ch (N)
ci (N)
cj (N)
ck (N)
ba (N)
bb (N)
bc (T)
bd (T)
bc-a (T)
bc-b (T)
bc-c (T)
bc-d (T)
bc-e (T)
bc-f (T)
bc-g (T)
bc-h (N)
bc-i (T)
bc-j (T)
bc-k (T)
bc-l (T)
bc-m (T)
bc-n (T)
bc-o (T)
bc-p (N)
bc-q (T)
T=toxic. N=nontoxic.

The two kinds of cultures have remained true to type, with one possible exception. Three months after the beginning of this work all single-cell cultures were retested on mice with the results given below, the subscript figure representing the number of the transplant in meat media. Toxicity tests throughout have been made by inoculation of 0.2 c. c. of the culture intraperitoneally into mice. Characteristic symptoms usually develop within an hour or two and death occurs soon thereafter.

a_6(N)..... S.	c_3(N)..... S.
b_9(T)..... +3 hrs.	
ba_4(N)..... S.	bc_4(T)..... +2½ hrs.
bb_2(N)..... S.	bd_4(T)..... S. (bd_1, bd_2, bd_3, all toxic).
bc-a_4(T)..... +5 hrs.	bc-j_3(T)..... +3½ hrs.
bc-b_4(T)..... +2 hrs.	bc-k_3(T)..... +2 hrs.
bc-c_4(T)..... +2 hrs.	bc-l_3(T)..... +7 hrs.
bc-d_4(T)..... +7 hrs.	bc-m_3(T)..... +2 hrs.
bc-e_3(T)..... +3 hrs.	bc-n_3(T)..... +1 hr.
bc-f_3(T)..... +4½ hrs.	bc-o_3(T)..... +2 hrs.
bc-g_3(T)..... +3½ hrs.	bc-p_3(N)..... S.
bc-h_3(N)..... S.	bc-q_3(T)..... +2½ hrs.
bc-i_3(T)..... +3½ hrs.	
ca_3(N)..... S.	cd_3(N)..... S.
cb_3(N)..... S.	ce_3(N)..... S.
cc_3(N)..... S.	

S=survived. +=died (hrs.).

All of the cultures except one gave results the same as when first isolated. The culture *bd* originally toxic had become nontoxic, though tests with cultures incubated for a longer period showed a low toxicity, the death of mice occurring after a period of delay.

All cultures, including six more single-cell cultures isolated from the nontoxic culture *c*, were again tested on mice a month later, and in this case the results were consistent throughout with those obtained when the single-cell isolations were first made, the culture *bd* proving fatal to mice in seven hours.

The study is of interest in that it has been demonstrated that certain individuals in cultures originally toxic may apparently spontaneously lose their property of producing toxin. Just what factors are concerned in this phenomenon are problematical. A slight difference in the composition or reaction of the medium suggests itself as a possible explanation; but successive transplants of nontoxic cultures have always proved nontoxic, and it thus appears that once a culture loses its property of producing toxin it is not regained, regardless of any slight difference in the medium. The passage of the cultures through fly larvæ (*Lucilia sericata*) failed to change the toxic properties of the two types, all toxic cultures remaining toxic

and all the nontoxic cultures remaining nontoxic at the end of the experiment. The results suggest the possibility of the transformation of toxic cultures of other toxin-producing anaerobes, such as the organisms of tetanus and of botulism, Types A and B, into nontoxic types.

MOSQUITO CONTROL AT TRINIDAD ASPHALT LAKE, BRITISH WEST INDIES.

According to reports made by the American consul at Trinidad, British West Indies, one of the most serious difficulties in the production of asphalt at the famous Trinidad Lake, and also with petroleum developments in the immediate vicinity, has been the high incidence of malaria. Conditions at the lake are extremely favorable for mosquito breeding. The asphalt lake is about 20 feet below the level of the surrounding ground surface, and is gradually being lowered by the mining operations, affording a natural catchment area for rain water, accumulations of which are found between the mound-shaped masses of asphalt on the lake and in "pitch holes," "pitch cones," and grassy bottomed pools and drains adjacent to the lake.

It has been found difficult both to drain off the water and to fill up the water holes. Ordinary dug drains are soon refilled by the slowly moving currents of asphalt; and if holes are filled, the material is soon drawn down underneath the surface. Electrically driven pumps are used to pump off water that is drained into a sump at one edge of the lake. These drains connect with the pits from which the asphalt is taken, but within a few days they close in and become flush with the surface of the lake.

During the dry season, from February to May, the ordinary roadside drains in the country about the lake tend to dry up, but breeding places for mosquitoes are perpetuated in pitch holes and seepages, a large number of which are found within a mile of the lake. Sometimes a "pitch cone" will develop within a few hours, and, expanding under the pressure of gas, finally bursts, leaving a depression which holds water.

Owing to the heretofore ineffectual drainage, about the only check to mosquito propagation has been that resulting from the presence of several varieties of larvæ-eating fish which are found in large numbers in the water holes. For a number of years a large asphalt company operating at the lake has made serious attempt at mosquito control, adopting remedial measures that seemed practicable, including drains to carry off the rainfall, the spraying of pools with crude oil, keeping the brush and grass cut, and screening the bungalows of the employees. In 1919 the company placed a medical officer in

charge of mosquito-control work in the district under the company's jurisdiction. All drains were cleaned of vegetation as far as possible; but it was found that the work of keeping the drains in good condition was expensive, owing to the luxuriant growth of vegetation during the rainy season and the scouring action of the tropical rains, eroding the sides and bottoms of the drains. Crude-oil spray was used on pools, but was not found satisfactory as the film was broken up by the wind and rainfall.

Finally an ingenious and successful method was devised of lining the sides and bottoms of the drains in a manner that prevented the growth of vegetation and resisted the scouring action of the heavy rains. The method was as follows:

The drain was cleaned of vegetable matter, and liquid asphalt was poured on the sides and bottom. Sand was then sifted over the asphalt, about 1 cubic foot to 8 square yards. A piece of oily waste was placed at one end of the drain and ignited. Oil was then sprayed on by means of a hand pump as the fire spread along the course of the drain, the liquid asphalt burning with intense heat. The heating of the liquid asphalt and sand to a high temperature gave a hard asphalt wearing surface on the sides and bottom of the drain.

The work of lining the drains is done during the dry season.

The approximate cost of lining is 14½ to 20 cents per square yard.

The benefits derived from the drains made by the improved method are shown in the great reduction in the malaria rate, which dropped, in the districts in which the work was done, from 798 per 1,000 employees in 1920 to 265 in 1921. In the village of La Brea, over which the asphalt company has no control, the malaria case rate was 602 in 1920 and 590 in 1921, a slight reduction in 1921, which may or may not have resulted from the work done in the other localities.

MALARIA INCIDENCE AMONG THE EMPLOYEES OF THE PANAMA CANAL.

In view of the fact that there have appeared recently in the public press, inaccurate statements regarding the incidence of malaria among the employees of the Panama Canal, there is printed below a table giving the monthly incidence rates for the years 1918–1921, and for January to July, 1922. The data were furnished by the chief quarantine officer of the Panama Canal.

Malaria incidence (monthly rates) per 1,000 employees of the Panama Canal.

Month.	Year.				
	1918	1919	1920	1921	1922
January	2.53	2.95	2.62	1.53	1.08
February	2.54	3.57	1.51	1.21	1.29
March	2.03	4.34	1.57	1.19	.86
April	2.24	1.66	.22	.37	.28
May	1.86	2.72	.36	.72	1.65
June	1.50	3.53	2.44	1.69	1.96
July	1.66	7.04	1.97	1.89	2.21
August	1.93	3.15	2.75	1.87	.....
September	.98	2.06	2.31	1.13	.....
October	.76	1.03	2.36	1.01	.....
November	1.51	1.48	1.25	.88	.....
December	3.40	2.00	1.17	1.37	.....

HEALTH OFFICER LIABLE FOR INCONSIDERATE TREATMENT OF PATIENT REMOVED TO ISOLATION HOSPITAL.

The Supreme Court of Kansas has recently affirmed a judgment for actual and punitive damages against a local health officer for inhuman and inconsiderate treatment of a patient quarantined in an isolation hospital.[1] The patient brought an action for damages against the health officer, charging that official with gross and wanton negligence and carelessness in the performance of his duties. The supreme court in its opinion stated as follows:

A health officer, while required to obey his lawful orders and perform his official duty, is never excused for wanton conduct and inhuman treatment to patients suffering from serious illness, * * *.

* * * Of course, in removing her he [the health officer] was acting in a governmental capacity, but persons who act in that capacity are required to treat other human beings in a reasonably humane and considerate manner. The law no less than humanity requires humane and decent treatment of those who must be segregated from their usual conveniences and friends, and whoever acts with utter disregard of this requirement renders himself liable. * * *.

DEATHS DURING WEEK ENDED SEPTEMBER 2, 1922.

Summary of information received by telegraph from industrial insurance companies for week ended September 2, 1922, and corresponding week 1921. (From the Weekly Health Index, September 6, 1922, issued by the Bureau of the Census, Department of Commerce.)

	Week ended Sept. 2, 1922.	Corresponding week 1921.
Policies in force	50,246,953	46,081,835
Number of death claims	7,043	6,270
Death claims per 1,000 policies in force, annual rate	7.3	7.1

[1] Moody *v.* Wickersham, 207 Pac. 847.

Deaths from all causes in certain large cities of the United States during the week ended September 2, 1922, infant mortality, annual death rate, and comparison with corresponding week of 1921. (From the Weekly Health Index, September 6, 1922, issued by the Bureau of the Census, Department of Commerce.)

City.	Estimated population July 1, 1922.	Week ended Sept. 2, 1922. Total deaths.	Week ended Sept. 2, 1922. Death rate.[1]	Annual death rate per 1,000, corresponding week 1921.	Deaths under 1 year. Week ended Sept. 2, 1922.	Deaths under 1 year. Corresponding week 1921.	Infant mortality rate, week ended Sept. 2, 1922.[2]
Total	27,521,245	5,328	10.1	11.0	877	1,030	.....
Akron, Ohio	[3] 208,436	20	5.0	8.6	5	14	53
Albany, N. Y.	116,223	28	12.6	12.2	3	2	67
Atlanta, Ga.	220,047	65	15.4	14.3	10	16	.....
Baltimore, Md.	762,222	165	11.3	12.8	39	19	110
Birmingham, Ala.	191,017	51	13.9	12.3	7	6	.....
Boston, Mass.	[3] 754,017	185	12.6	11.8	36	38	96
Bridgeport, Conn.	[3] 143,555	20	7.3	8.7	1	4	12
Buffalo, N. Y.	528,163	101	10.0	12.4	31	37	122
Cambridge, Mass.	110,944	25	11.8	11.3	6	1	110
Camden, N. J.	121,915	34	14.5	11.3	7	5	107
Chicago, Ill.	2,833,288	506	9.3	10.0	84	101	.....
Cleveland, Ohio.	854,003	124	7.6	9.6	25	40	64
Columbus, Ohio.	253,455	57	11.7	12.8	8	8	84
Dallas, Tex.	171,974	37	11.2	13.6	4	6	.....
Dayton, Ohio.	161,824	29	9.3	15.2	2	6	34
Denver, Colo.	267,591	56	10.9	13.5	7	11	.....
Detroit, Mich.	[3] 993,678	175	9.2	10.4	46	41	89
Fall River, Mass.	120,790	32	13.8	16.4	9	14	126
Fort Worth, Tex.	114,717	28	12.7	.....	4	.....	.....
Grand Rapids, Mich.	143,572	25	9.1	8.9	7	6	117
Houston, Tex.	150,087	40	13.9	7.6	8	4	.....
Indianapolis, Ind.	333,257	69	10.8	11.8	7	12	53
Jersey City, N. J.	305,911	46	7.8	11.0	15	14	96
Kansas City, Kans.	113,801	36	16.5	9.5	6	2	139
Kansas City, Mo.	343,988	85	12.9	13.0	9	11	.....
Los Angeles, Calif.	634,866	177	14.5	13.9	29	13	120
Louisville, Ky.	236,877	53	11.7	13.3	4	6	43
Lowell, Mass.	114,423	24	10.9	11.0	4	7	67
Memphis, Tenn.	167,862	56	17.4	12.9	9	4	.....
Milwaukee, Wis.	476,603	75	8.2	10.6	13	24	64
Minneapolis, Minn.	400,970	64	8.3	8.9	9	13	49
Nashville, Tenn.	122,832	38	14.0	15.0	4	5	.....
New Bedford, Mass.	127,542	30	12.3	14.6	12	15	178
New Haven, Conn.	169,957	19	5.8	10.0	3	9	37
New Orleans, La.	399,616	108	14.1	14.3	16	16	.....
New York, N. Y.	5,839,746	987	8.8	10.2	152	210	59
Newark, N. J.	431,792	75	9.1	9.7	14	16	62
Norfolk, Va.	124,915	23	9.6	14.6	2	3	35
Oakland, Calif.	283,279	43	9.6	8.5	5	2	63
Omaha, Nebr.	200,739	35	9.1	15.1	2	7	22
Paterson, N. J.	138,521	23	8.7	14.0	3	6	46
Philadelphia, Pa.	1,894,500	366	10.1	10.9	54	76	64
Pittsburgh, Pa.	607,902	123	10.6	12.6	23	39	74
Portland, Oreg.	269,240	39	7.6	9.6	3	2	30
Providence, R. I.	241,011	58	12.5	12.2	12	15	95
Richmond, Va.	178,365	55	16.1	13.7	9	11	110
Rochester, N. Y.	311,543	51	8.5	11.3	7	10	54
St. Louis, Mo.	795,008	141	9.2	10.7	10	12	.....
St. Paul, Minn.	239,836	50	10.9	10.7	7	6	66
Salt Lake City, Utah.	123,918	21	8.8	14.6	4	5	60
San Antonio, Tex.	178,056	42	12.3	.....	9	.....	.....
San Francisco, Calif.	529,792	120	11.8	11.0	14	5	81
Seattle, Wash.	[3] 315,312	51	8.4	7.2	2	1	17
Spokane, Wash.	104,445	13	6.5	11.5	2	3	43
Springfield, Mass.	140,052	28	10.4	10.7	7	8	104
Syracuse, N. Y.	181,012	43	12.4	13.5	5	10	60
Toledo, Ohio.	260,717	44	8.8	9.9	8	12	78
Trenton, N. J.	125,075	39	16.3	12.3	5	8	77
Washington, D. C.	[3] 437,571	105	12.5	12.3	16	14	92
Worcester, Mass.	188,449	43	11.9	13.5	8	6	87
Yonkers, N. Y.	105,422	10	4.9	10.1	1	2	21
Youngstown, Ohio.	144,970	22	7.9	10.1	4	8	53

[1] Annual rate per 1,000 population.
[2] Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1921. Cities left blank are not in the registration area for births.
[3] Enumerated population Jan. 1, 1920.

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 STATE SUMMARIES.

Telegraphic Reports for Week Ended September 9, 1922.

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

ALABAMA.

	Cases.
Dengue	1
Diphtheria	48
Hookworm disease	14
Malaria	50
Pellagra	1
Poliomyelitis	1
Scarlet fever	26
Tuberculosis	22
Typhoid fever	40

ARKANSAS.

Chicken pox	3
Diphtheria	14
Hookworm disease	2
Influenza	2
Malaria	193
Measles	2
Pellagra	8
Scarlet fever	9
Tuberculosis	20
Typhoid fever	42
Whooping cough	27

CALIFORNIA.

Cerebrospinal meningitis—Inyo County	1
Diphtheria	71
Glanders—Santa Clara County	1
Influenza	2
Leprosy:	
Alameda County	1
King City	1
Los Angeles	1
Monterey County	1
San Joaquin County	1
Lethargic encephalitis—Visalia	1
Measles	5
Smallpox	3
Typhoid fever	15

COLORADO.

(Exclusive of Denver.)

	Cases.
Chicken pox	4
Diphtheria	5
Jaundice (infectious)	2
Measles	2
Mumps	1
Poliomyelitis	1
Scarlet fever	3
Tuberculosis	53
Typhoid fever	16
Whooping cough	7

CONNECTICUT.

Chicken pox	6
Diphtheria	24
Influenza	4
Measles	3
Pneumonia (lobar)	8
Poliomyelitis	3
Scarlet fever	21
Smallpox	1
Tetanus	1
Tuberculosis (all forms)	26
Typhoid fever	9
Whooping cough	27

FLORIDA.

Dengue	236
Diphtheria	19
Influenza	10
Malaria	14
Pneumonia	3
Smallpox	3
Trachoma	1
Typhoid fever	5

GEORGIA.

Chicken pox	1
Dengue	188

GEORGIA—continued.	Cases.
Diphtheria	112
Dysentery (amebic)	1
Hookworm disease	20
Influenza	19
Malaria	67
Mumps	1
Pneumonia	1
Scarlet fever	20
Septic sore throat	5
Smallpox	2
Tuberculosis (pulmonary)	7
Typhoid fever	26
Whooping cough	5

ILLINOIS.

Cerebrospinal meningitis:	
McLean County	1
Rock Island County	1
Winnebago County	1
Diphtheria:	
Chicago	74
Scattering	106
Influenza	4
Pneumonia	74
Poliomyelitis:	
Bond County	1
Chicago	3
Cook County	1
Crawford County	1
Douglas County	1
Henry County	1
Kane County	1
Madison County	1
Scarlet fever:	
Chicago	33
De Kalb County	10
Winnebago County	11
Scattering	82
Smallpox	3
Typhoid fever:	
Chicago	8
Scattering	85
Whooping cough	238

INDIANA.

Diphtheria	52
Poliomyelitis:	
Delaware County	1
St. Joseph County	1
Scarlet fever	47
Smallpox	12
Typhoid fever	29

IOWA.

Diphtheria	32
Scarlet fever	26
Smallpox	1
Typhoid fever	7

KANSAS.

Cerebrospinal meningitis	2
Chicken pox	1
Dengue	1
Diphtheria	52
German measles	2
Influenza	2

[1] Week ended Friday.

KANSAS—continued.	Cases.
Measles	6
Mumps	3
Pneumonia	9
Poliomyelitis	1
Scarlet fever	62
Smallpox	2
Tuberculosis	31
Typhoid fever	36
Whooping cough	46

LOUISIANA.

Dengue	134
Diphtheria	14
Malaria	34
Scarlet fever	4
Typhoid fever	26

MAINE.

Chicken pox	3
Diphtheria	14
Measles	2
Scarlet fever	26
Tuberculosis	5
Typhoid fever	9
Whooping cough	5

MARYLAND.[1]

Chicken pox	5
Diarrhea enteritis	8
Diphtheria	34
Dysentery	7
Influenza	5
Malaria	9
Measles	4
Mumps	5
Paratyphoid fever	1
Pneumonia (all forms)	30
Poliomyelitis	2
Scarlet fever	17
Septic sore throat	2
Tuberculosis	26
Typhoid fever	40
Whooping cough	25

MASSACHUSETTS.

Cerebrospinal meningitis	3
Chicken pox	14
Conjunctivitis (suppurative)	7
Diphtheria	104
German measles	1
Hookworm disease	4
Influenza	5
Lethargic encephalitis	1
Malaria	1
Measles	38
Mumps	12
Ophthalmia neonatorum	15
Pneumonia (lobar)	20
Poliomyelitis	19
Scarlet fever	55
Tetanus	2
Trachoma	2
Tuberculosis (all forms)	136
Typhoid fever	26
Whooping cough	115

MINNESOTA.	Cases.
Chicken pox	1
Diphtheria	58
Measles	5
Pneumonia	1
Poliomyelitis	6
Scarlet fever	69
Smallpox	11
Tuberculosis	64
Typhoid fever	9

MISSISSIPPI.	
Cerebrospinal meningitis	1
Diphtheria	54
Scarlet fever	12
Smallpox	1
Typhoid fever	29

MONTANA.	
Diphtheria	8
Poliomyelitis	4
Scarlet fever	2
Septic sore throat	1
Smallpox	2
Typhoid fever	3

NEBRASKA.	
Chicken pox	1
Diphtheria	3
Measles	6
Mumps	2
Pneumonia	1
Scarlet fever	5
Smallpox	1
Typhoid fever	7
Whooping cough	2

NEW JERSEY.	
Chicken pox	6
Diphtheria	79
Dysentery	1
Influenza	2
Malaria	1
Measles	37
Pneumonia	16
Poliomyelitis	1
Scarlet fever	36
Typhoid fever	15
Whooping cough	100

NEW MEXICO.	
Chicken pox	3
Diphtheria	17
Pneumonia	1
Scarlet fever	1
Tuberculosis	23
Typhoid fever	12
Whooping cough	1

NEW YORK.	
(Exclusive of New York City.)	
Cerebrospinal meningitis	5
Diphtheria	89
Influenza	2
Measles	46
Pneumonia	51
Poliomyelitis	33

[1] Deaths.

NEW YORK—continued.	Cases.
Scarlet fever	106
Tetanus	1
Typhoid fever	36
Whooping cough	219

NORTH CAROLINA.	
Cerebrospinal meningitis	3
Chicken pox	7
Diphtheria	403
German measles	3
Lethargic encephalitis	1
Measles	11
Scarlet fever	96
Septic sore throat	9
Smallpox	6
Typhoid fever	91
Whooping cough	91

OREGON.	
Diphtheria	4
Measles	2
Pneumonia	[1]4
Scarlet fever	2
Smallpox	5
Tuberculosis	26
Typhoid fever:	
Union County	8
Scattering	3

SOUTH DAKOTA.	
Cerebrospinal meningitis	1
Diphtheria	10
Measles	1
Poliomyelitis	2
Scarlet fever	8
Tuberculosis	6
Typhoid fever	4

TEXAS.	
Dengue	305
Diphtheria	58
Pellagra	12
Pneumonia	8
Scarlet fever	13
Smallpox	4
Typhoid fever	59

VERMONT.	
Chicken pox	2
Measles	1
Scarlet fever	9
Typhoid fever	1
Whooping cough	16

WASHINGTON.	
Chicken pox	8
Diphtheria	8
Measles	4
Mumps	6
Pneumonia	2
Scarlet fever	9
Smallpox	1
Tuberculosis	48
Typhoid fever:	
Camas	13
Scattering	18
Whooping cough	48

WEST VIRGINIA.	Cases.
Diphtheria	8
Scarlet fever	15
Typhoid fever	6
WISCONSIN.	
Milwaukee:	
Chicken pox	2
Diphtheria	5
Measles	10
Pneumonia	3
Poliomyelitis	1
Scarlet fever	10
Smallpox	1
Tuberculosis	16
Typhoid fever	1
Whooping cough	34
Scattering:	
Cerebrospinal meningitis	3
Chicken pox	7
Diphtheria	23

WISCONSIN—continued.	Cases.
Scattering—Continued.	
Lethargic encephalitis	1
Measles	27
Poliomyelitis	6
Scarlet fever	32
Smallpox	4
Tuberculosis	17
Typhoid fever	10
Whooping cough	96
WYOMING.	
Pneumonia	1
Rocky Mountain spotted or tick fever—Converse	1
Scarlet fever	2
Smallpox	2
Tuberculosis	1
Typhoid fever	2

Delayed Report for Week Ended September 2, 1922.

KENTUCKY.	Cases.
Cerebrospinal meningitis:	
Jefferson County	3
Perry County	1
Rowan County	1
Chicken pox	1
Diphtheria:	
Jefferson County	12
Laurel County	9
Pike County	14
Scattering	56
Dysentery	14
Influenza	8
Malaria	4
Measles	12
Pneumonia	18

KENTUCKY—continued.	Cases.
Scarlet fever	18
Septic sore throat	4
Smallpox—Knox County	14
Tetanus	1
Trachoma	[1] 145
Tuberculosis	68
Typhoid fever:	
Jefferson County	16
Laurel County	11
Marion County	12
Perry County	8
Scattering	69
Vincent's angina	2
Whooping cough	21

SUMMARY OF CASES REPORTED MONTHLY BY STATES.

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
August, 1922.										
Connecticut	12	97	3	3	131	.....	9	65	1	57
District of Columbia	.....	23	.....	.....	9	.....	.....	12	.....	24
Massachusetts	6	482	7	2	338	1	55	210	.....	101

[1] Including many cases of long standing.

RECIPROCAL NOTIFICATION.

Connecticut—August, 1922.

Cases of communicable diseases referred during August, 1922, to other State health departments by department of health of the State of Connecticut.

Disease and locality of notification.	Referred to health authority of—	Why referred.
Cerebrospinal meningitis:		
Hebron, Conn.	State department of health, Albany, N. Y.	Onset of disease while en route from Brooklyn, N. Y., to Hebron, Conn. Fatal case.
Diphtheria:		
East Haddam, Conn.	do	Throat culture was reported positive after patient had gone to his home in New York City.
Norwalk, Conn.	State department of public health, Boston, Mass.	Father and child, contacts with a diphtheria case in Norwalk, Conn., returned to their home in Springfield, Mass.
Plainfield, Conn.	State department of health, Albany, N. Y.	Patient with positive throat culture went to Brooklyn, N. Y.
Measles:		
Stonington, Conn.	State department of public health, Boston, Mass.	Onset of disease one day after arrival in Stonington, Conn., from Springfield, Mass.
Poliomyelitis:		
Branford, Conn.	do	Patient was taken sick in Branford, Conn., where she arrived from her home in West Springfield, Mass.
Scarlet fever:		
Fairfield, Conn.	State department of health, Albany, N. Y.	Onset of disease two days after arrival in Fairfield Conn., from Brooklyn, N. Y.
Putnam, Conn.	State board of health, Concord, N. H.	Onset of disease three days after arrival in Putnam from South Acworth, N. H.
New London, Conn.	State department of health, Albany, N. Y.	Onset of disease while en route from New York City to New London, Conn.
Do.	State board of health, Baltimore, Md.	Onset of disease three days before leaving Baltimore for New London, Conn.
Tuberculosis (pulmonary):		
New Britain, Conn.	State board of health, Concord, N. H.	Home of patient is Hanover, N. H.
Norwalk, Conn.	State department of health, Albany, N. Y.	Patient left sanitarium in Hartford for her home in Arlington, Mass.

LEPROSY.

Laredo, Tex.

A case of leprosy, in the person of a Mexican citizen (J. G.), was notified at Laredo, Tex., June 6, 1922. The patient has been deported.

CITY REPORTS FOR WEEK ENDED AUGUST 26, 1922.

ANTHRAX.

City.	Cases.	Deaths.
Montana:		
Great Falls	1	

CITY REPORTS FOR WEEK ENDED AUGUST 26, 1922—Continued.

CEREBROSPINAL MENINGITIS.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Aug. 26, 1922.		City.	Median for previous years.	Week ended Aug. 26, 1922.	
		Cases.	Deaths.			Cases.	Deaths
California:				Nebraska:			
Los Angeles	0	1	.....	Omaha	0	1	.....
Connecticut:				New Jersey:			
Norwich	0	1	1	Newark	1	.....	2
Florida:				New York:			
Tampa	.....	1	.....	New York	4	5	1
Indiana:				Ohio:			
Kokomo	0	.....	1	Akron	0	1	.....
Iowa:				Pennsylvania:			
Sioux City	0	1	.....	Pittsburgh	0	1	.....
Maryland:				Texas:			
Baltimore	0	3	1	Galveston	0	.....	1
Massachusetts:				Vermont:			
Boston	0	1	.....	Burlington	0	1	1
Fall River	0	1	.....	West Virginia:			
Michigan:				Bluefield	0	.....	2
Detroit	1	1	.....	Wisconsin:			
Highland Park	0	2	.....	Beloit	.....	1	.....
Missouri:							
Kansas City	0	1	1				
St. Louis	0	1	.....				

DENGUE.

City.	Cases.	Deaths.
Florida:		
Tampa	60	.....
Georgia:		
Brunswick	80	.....

DIPHTHERIA.

See p. 2270; also Telegraphic weekly reports from States, p. 2260, and Monthly summaries by States, p. 2263.

INFLUENZA.

City.	Cases.		Deaths, week ended Aug. 26, 1922.	City.	Cases.		Deaths, week ended Aug. 26, 1922.
	Week ended Aug. 27, 1921.	Week ended Aug. 26, 1922.			Week ended Aug. 27, 1921.	Week ended Aug. 26, 1922.	
California:				Massachusetts:			
Los Angeles	3	1	.....	Brookline	.....	1	.....
Oakland	1	.....	.....	Cambridge	.....	1	.....
San Diego	.....	1	1	Michigan:			
San Francisco	1	.....	.....	Detroit	1	.....	.....
Stockton	1	.....	.....	Missouri:			
District of Columbia:				Kansas City	.....	1	1
Washington	2	.....	.....	New Jersey:			
Georgia:				Jersey City	1	.....	.....
Valdosta	.....	.....	1	West Orange	.....	2	.....
Illinois:				New York:			
Chicago	3	.....	.....	New York	2	4	.....
Kansas:				Niagara Falls	1	.....	.....
Topeka	1	.....	.....	Ohio:			
Louisiana:				Springfield	1	.....	.....
New Orleans	.....	1	1	Pennsylvania:			
Maryland:				Philadelphia	.....	1	1
Baltimore	.....	1	1	West Virginia:			
				Charleston	3	.....	.....

CITY REPORTS FOR WEEK ENDED AUGUST 26, 1922—Continued.

LETHARGIC ENCEPHALITIS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California:			Massachusetts:		
San Francisco	1	[illegible]1	Salem	1	1
Connecticut:			Nebraska:		
New Haven	1	.....	Omaha	.....	1

MALARIA.

Alabama:			Louisiana:		
Anniston	1	.....	Baton Rouge	1	.....
Birmingham	2	.....	New Orleans	2	1
Mobile	.....	1	New Jersey:		
Arkansas:			Newark	4	.....
Little Rock	5	.....	Passaic	1	.....
North Little Rock	2	.....	New York:		
California:			New York	4	.....
Berkeley	1	.....	Pennsylvania:		
Los Angeles	1	.....	Philadelphia	1	.....
Sacramento	1	.....	Tennessee:		
San Francisco	1	.....	Memphis	25	5
Santa Ana	1	.....	Texas:		
Georgia:			Dallas	4	.....
Albany	42	.....	Houston	.....	1
Macon	8	.....			
Illinois:					
Danville	1	.....			
Springfield	1	.....			

MEASLES.

See p. 2270; also Telegraphic weekly reports from States, p. 2260, and Monthly summaries by States, p. 2263.

PELLAGRA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Georgia:			Ohio:		
Atlanta	.....	1	Cleveland	1	.....
Augusta	.....	1	South Carolina:		
Louisiana:			Charleston	.....	1
Baton Rouge	1	.....	Texas:		
			Galveston	.....	1

PNEUMONIA (ALL FORMS).

Alabama:			Illinois—Continued.		
Birmingham	.....	1	Freeport	1	.....
California:			Oak Park	.....	1
Long Beach	.....	1	Springfield	5	2
Los Angeles	25	9	Indiana:		
Oakland	.....	2	East Chicago	.....	2
Sacramento	.....	1	Hammond	.....	1
San Diego	.....	2	Indianapolis	.....	8
San Francisco	5	2	Iowa:		
Colorado:			Council Bluffs	.....	2
Denver	.....	3	Muscatine	.....	1
Connecticut:			Kansas:		
Bridgeport	3	.....	Wichita	.....	2
Greenwich	1	.....	Kentucky:		
Hartford	.....	1	Lexington	.....	1
New Haven	.....	4	Louisville	4	3
Stonington	.....	1	Louisiana:		
District of Columbia:			New Orleans	18	16
Washington	.....	3	Maine:		
Georgia:			Biddeford	.....	1
Atlanta	.....	3	Portland	2	.....
Augusta	.....	2	Sanford	.....	1
Illinois:			Maryland:		
Danville	1	.....	Baltimore	12	5
Elgin	.....	1	Cumberland	2	.....

CITY REPORTS FOR WEEK ENDED AUGUST 26, 1922—Continued.

PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.
Massachusetts:		
Boston		10
Fall River		4
Framingham		1
Lowell		2
Lynn		1
Melrose		1
New Bedford		3
Newton	1	
Quincy	1	
Taunton		1
Winthrop	1	
Woburn		1
Worcester		2
Michigan:		
Ann Arbor	1	
Battle Creek	1	
Detroit	17	6
Grand Rapids	2	1
Hamtramck	1	
Highland Park	1	
Jackson		1
Kalamazoo		1
Marquette		1
Muskegon	4	
Pontiac	1	
Saginaw	2	
Minnesota:		
Duluth	1	
Minneapolis		3
St. Paul		2
Missouri:		
Kansas City	7	5
St. Joseph		1
Montana:		
Butte		2
Nebraska:		
Omaha		2
New Jersey:		
Elizabeth		5
Hoboken		1
Jersey City	2	
Kearny	1	
Newark	16	3
Orange		1
Passaic		1
Paterson	1	
Plainfield		1
Trenton		1
West Hoboken		1
West Orange	1	
New York:		
Albany	3	
Buffalo	11	9
Cohoes	1	
Ithaca	1	
Lackawanna	1	
New York	133	54
Poughkeepsie		1
Rochester	7	3
Saratoga Springs	2	
Syracuse	6	
Troy	1	
White Plains		1
North Carolina:		
Rocky Mount		1
Ohio:		
Akron	1	
Canton		1
Cleveland	9	8
Columbus		3
Dayton	1	
Lima	1	
Youngstown		1
Oklahoma:		
Oklahoma		3
Oregon:		
Portland		5
Pennsylvania:		
Philadelphia	45	31
Rhode Island:		
Providence		1
South Carolina:		
Charleston		1
South Dakota:		
Sioux Falls		1
Texas:		
Dallas		1
Galveston		3
Houston		3
Utah:		
Salt Lake City		1
Virginia:		
Norfolk		2
Portsmouth		1
Richmond		1
Roanoke		1
Wisconsin:		
Kenosha		1
Milwaukee	2	

POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Aug. 26, 1922.	
		Cases.	Deaths.
Connecticut:			
Bridgeport	0	2	
Fairfield	0	1	
Massachusetts:			
Attleboro	0	1	
Boston	1	4	
Fall River	0	3	
Newton	0	1	1
Somerville	0	2	
Montana:			
Billings	0	14	1
New Jersey:			
Asbury Park	0	1	
Newark	0	2	
Perth Amboy	0	1	
New York:			
Auburn	0	3	
Ithaca	0	2	
New York—Cont'd.			
New York	2	5	
Rome	0	1	
Syracuse	0	2	
Ohio:			
Dayton	0	1	
Pennsylvania:			
Philadelphia	0	2	
Rhode Island:			
Pawtucket	0	1	
Providence	0	4	
Texas:			
Dallas	0		1
West Virginia:			
Parkersburg	0	1	
Wisconsin:			
Milwaukee	0	1	

CITY REPORTS FOR WEEK ENDED AUGUST 26, 1922—Continued.

RABIES IN ANIMALS.

City.	Cases.	City.	Cases.
California:		Missouri:	
Los Angeles	8	Kansas City	1
Oakland	1	Ohio:	
Pasadena	2	Martins Ferry	1
Kentucky:		Tennessee:	
Louisville	3	Memphis	2

SCARLET FEVER.

See p. 2270; also Telegraphic weekly reports from States, p. 2260, and Monthly summaries by States, p. 2263.

SMALLPOX.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Aug. 26, 1922.		City.	Median for previous years.	Week ended Aug. 26, 1922.	
		Cases.	Deaths.			Cases.	Deaths
California:				Ohio:			
Los Angeles	1	6	.....	Columbus	0	2	.....
Oakland	1	1	.....	Toledo	0	2	.....
Colorado:				Oregon:			
Denver	4	4	.....	Portland	5	5	.....
Minnesota:				Virginia:			
Minneapolis	3	2	.....	Portsmouth	0	1	.....
St. Paul	1	1	.....	Washington:			
Montana:				Vancouver	1	2	.....
Billings	1	1	.....	West Virginia:			
New York:				Fairmont	0	2	.....
Niagara Falls	0	1	.....	Wisconsin:			
North Dakota:				Milwaukee	0	2	.....
Grand Forks	0	1	.....	Superior	0	2	.....

TETANUS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California:			Missouri:		
San Francisco	1	.....	St. Louis	1	.....
Connecticut:			Massachusetts:		
Hartford	1	1	Melrose	1	.....
Kentucky:			North Carolina:		
Louisville	1	.....	Winston-Salem	.....	1
Louisiana:			Texas:		
New Orleans	.....	1	Waco	.....	1
Maryland:					
Baltimore	.....	1			

TUBERCULOSIS.

See p. 2270; also Telegraphic weekly reports from States, p. 2260.

CITY REPORTS FOR WEEK ENDED AUGUST 26, 1922—Continued.

TYPHOID FEVER.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Aug. 26, 1922.	
		Cases.	Deaths.
Alabama:			
Anniston	0	4	
Birmingham	13	2	1
Mobile	3		1
Arkansas:			
Little Rock	1	1	
California:			
Los Angeles	4	6	1
Oakland	2	1	
Richmond	0	1	
Riverside	0		1
Sacramento	1	3	2
San Bernardino	0	2	
Colorado:			
Denver	4	1	
Connecticut:			
Bridgeport	1	1	
Bristol	0	1	
Fairfield	0	1	
Hartford	4	1	
New Haven	5	4	
District of Columbia:			
Washington	11	4	1
Florida:			
Tampa		1	
Georgia:			
Albany	1	1	
Atlanta	5	7	
Brunswick	0	1	
Macon	2	5	
Illinois:			
Alton	0	1	
Danville	1	1	1
Decatur	1	1	
Mattoon	0	1	
Rockford	0	1	
Springfield	1	1	
Indiana:			
Indianapolis	5	3	
Kokomo	0	1	1
Muncie	0	1	
Kansas:			
Atchison	0	1	
Coffeyville	1	1	
Kansas City	2	4	
Salina	1	1	
Topeka	1	2	
Kentucky:			
Lexington	1	1	
Louisville	9	10	1
Owensboro		1	
Paducah	0	6	
Louisiana:			
Baton Rouge	0	1	
New Orleans	8	2	
Maine:			
Portland	1	4	
Maryland:			
Baltimore	13	7	
Massachusetts:			
Attleboro	0	1	
Boston	11	5	
Fall River	7	1	
Lynn	2	1	
Melrose	0	1	1
Pittsfield	0	1	
Somerville	0	2	
Springfield	1	3	
Taunton	0	1	
Westfield	0	1	
Winchester	1	1	
Worcester	2		2
Michigan:			
Battle Creek	0		1
Detroit	13	4	1
Flint	6	4	1
Highland Park	1	1	
Minnesota:			
Minneapolis	3	6	1
Missouri:			
Kansas City	5	3	2
St. Louis	13	10	2
Montana:			
Missoula	0	1	
Nebraska:			
Lincoln	0		1
New Hampshire:			
Berlin	0		1
Concord	0	2	1
New Jersey:			
Atlantic City	3	1	
Elizabeth	0	2	
Jersey City	1	1	
Newark	6	4	
Paterson	0	1	
Trenton	1	2	1
New Mexico:			
Albuquerque	0	1	
New York:			
Albany	1	2	
Buffalo	3	5	
Elmira	0	1	
Hudson	0	1	
Ithaca	0	2	
Mount Vernon	1	1	1
New York	66	46	8
Niagara Falls	1	1	
Rochester	1	3	1
Rome	1	1	
Schenectady	0	2	
Troy	1	1	
Watertown	2	1	
North Carolina:			
Charlotte	0	1	
Durham	4	2	
Raleigh	0	4	
Winston-Salem	6	1	3
Ohio:			
Bucyrus	2		1
Canton	1	7	
Chillicothe	0	1	
Cleveland	7	7	1
Columbus	3	1	
Dayton	1	1	
East Cleveland	0	2	
Lima	1	1	
Lorain	0	2	
Marion	2	1	
Newark	0	1	
Piqua	1	1	
Springfield	1	1	
Tiffin	0	1	
Toledo	3	2	
Youngstown	0		1
Oklahoma:			
Oklahoma	1	2	
Oregon:			
Portland	0	1	
Pennsylvania:			
Allentown	2	1	
Altoona	1	1	
Bradford	0	1	
Butler	0	1	
Canonsburg		3	

CITY REPORTS FOR WEEK ENDED AUGUST 26, 1922—Continued.

TYPHOID FEVER—Continued.

City.	Median for previous years.	Week ended Aug. 26, 1922.	
		Cases.	Deaths.
Pennsylvania—Contd.			
Carrick		1	
Easton	0	1	
Erie	2	2	
Homestead	0	2	
Philadelphia	13	23	1
Phoenixville	0	1	
Pittsburgh	4	4	
Pottstown	0	1	
Reading	3	1	
Rhode Island:			
Pawtucket	0	1	
South Carolina:			
Charleston	1	5	
Columbia	0	4	
Tennessee:			
Knoxville	2	2	1
Memphis	1	2	1
Nashville	14	2	
Texas:			
Dallas	4	4	1
El Paso	0	1	
Fort Worth	1	1	1
Vermont:			
Barre	0	1	
Virginia:			
Charlottesville		2	
Danville	1	1	1
Lynchburg	1	1	
Norfolk	5	1	
Portsmouth		2	
Richmond	4		1
Washington:			
Seattle	1	1	
Tacoma	1	1	
Yakima	0	1	
West Virginia:			
Bluefield	1	2	
Clarksburg		1	
Fairmont	0	2	
Huntington	3	2	
Martinsburg	0	1	
Wheeling	2	2	
Wisconsin:			
Green Bay	0	1	
Sheboygan	0	3	
Wyoming:			
Cheyenne	0	1	

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:										
Anniston	17,734		19		1				1	
Birmingham	178,806	36	6				3		6	3
Mobile	60,777	22	1							3
Montgomery	43,464	9	1		1		2			
Tuscaloosa	11,996		7							
Arkansas:										
Fort Smith	28,870	10					1			
Little Rock	65,142		1						1	
North Little Rock	14,048						1			
California:										
Alameda	28,806	4	1							
Berkeley	56,036	6	1		2				1	
Glendale	13,536	8								
Long Beach	55,593	17			1				4	1
Los Angeles	576,673	165	34	2			6	1	41	18
Oakland	216,261	28	9				2		1	2
Pasadena	45,354	10			1				2	
Richmond	16,843	4								
Riverside	19,341	7							2	1
Sacramento	65,908	17	2						4	2
San Bernardino	18,721	6								3
San Diego	74,683	24	3				1		1	3
San Francisco	506,676	119	23	1	3		4		18	9
Santa Ana	15,485	5	1							
Santa Barbara	19,441	3								
Santa Cruz	10,917	5					1			
Vallejo	21,107	3								
Colorado:										
Denver	256,491	59	32	1			8			12
Pueblo	43,050	5	2	1						
Connecticut:										
Bridgeport	143,555	27	1		5		1		13	3
Bristol	20,620	0							2	
Derby	11,238	1								
Fairfield (town)	11,475						1			

CITY REPORTS FOR WEEK ENDED AUGUST 26, 1922—Continued.

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

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Connecticut—Continued.										
Greenwich (town)	22,123						2			
Hartford	138,036	28	2	1	2		2			2
Manchester (town)	18,370	2					1			
Milford (town)	10,193	3								
New Haven	162,573	34	1		2		3		6	2
New London	25,688	3							1	
Norwalk	27,743	8								1
Norwich (city)	22,304	4							2	
Stonington (town)	10,236	2	2							
District of Columbia:										
Washington	437,571	108	8		2		1		22	7
Florida:										
Tampa	51,608	12	1							
Georgia:										
Atlanta	200,616	66	20	3			11	1		4
Augusta	52,548	27	1							
Macon	52,995		4		2					
Rome	12,252		5							
Valdosta	10,783	4							1	
Idaho:										
Boise	21,393	2								
Pocatello	15,001	3								
Illinois:										
Alton	24,682	7	2				1			
Aurora	36,397	19	2				1		4	1
Blue Island	11,424	5	2				1			
Cantralia	12,491	1								
Champaign	15,873								1	
Cicero	44,995	5	1							
Danville	33,776	7	1				1		4	
Decatur	43,818	4	1						1	
Elgin	27,454	6								
Evanston	37,234	5			1					
Freeport	19,669		1						1	
Galesburg	23,824	7								
La Salle	13,050	2								
Mattoon	13,552	0							1	
Oak Park	39,858	7								
Peoria	76,121	23	2				2			2
Quincy	35,978	13								1
Rockford	65,651	12	1		4		1			1
Springfield	59,183	18								
Indiana:										
Anderson	29,767	3	2							1
Crawfordsville	10,129	2								
East Chicago	35,967	11		1						1
Frankfort	11,585	1								
Hammond	36,004	9								
Huntington	14,009	3								
Indianapolis	314,194	93	10	1	2		2		13	10
Kokomo	30,067	7					1			
La Fayette	22,486	3								
Logansport	21,626	6					1			
Mishawaka	15,195	3	1							
Muncie	36,524	3								
South Bend	70,983									1
Terre Haute	66,083	14	4	1			1			2
Iowa:										
Burlington	24,057	12	1							
Council Bluffs	36,162	11	2				1			1
Des Moines	126,468		4				3		1	
Dubuque	39,141									
Iowa City	11,267		1							
Marshalltown	15,731		1		1					
Mason City	20,065	3	4							
Muscatine	16,068	3							1	
Ottumwa	22,003		1							
Sioux City	71,227						5			
Waterloo	36,230				2		7			
Kansas:										
Coffeyville	13,452	2			1					
Fort Scott	10,693	3	1							
Kansas City	101,177		3				3		6	

CITY REPORTS FOR WEEK ENDED AUGUST 26, 1922—Continued.

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

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Kansas—Continued.										
Lawrence	12,456	6								
Parsons	16,028	4								
Salina	15,085	3								
Topeka	50,022	11	5				5		2	
Wichita	72,217	30	5		1		8	1		
Kentucky:										
Covington	57,121	10					1			1
Lexington	41,534	14							1	
Louisville	234,891	58	5				2		16	7
Owensboro	17,424		1							
Paducah	24,735		4		3					
Louisiana:										
Baton Rouge	21,782	3	1							
New Orleans	387,219	117	8				8		28	6
Maine:										
Auburn	16,985	2								
Bangor	25,978		1						2	
Bath	14,731	4								
Biddeford	18,008	17								1
Lewiston	31,791	6							1	
Portland	69,272	18	1							
Sanford (town)	10,691	3								
Waterville	13,351				2					
Maryland:										
Baltimore	733,826	173	16	2	7		8		43	12
Cumberland	29,837	3	1				1			
Massachusetts:										
Amesbury (town)	10,036	0					2			
Arlington (town)	18,665	4							3	1
Attleboro	19,731	4							3	
Belmont (town)	10,749	3	2							
Beverly	22,561	3			2		1			
Boston	748,060	170	67	1	26	1	12		46	12
Braintree (town)	10,580	2								2
Brookline	37,748	6	1							2
Cambridge	109,694	20	1		2		2		2	3
Chelsea	43,184	10							1	
Chicopee	36,214	4								
Clinton	12,979	5								
Danvers	11,108		1							
Easthampton	11,261		2							
Everett	40,120	5	1						2	1
Fall River	120,485	38	1		4				3	3
Framingham	17,033	4								
Gardner	16,971	0							1	
Greenfield	15,462	0	1							
Haverhill	53,884	16	2						4	
Leominster	19,744	7								
Lowell	112,759	25	2	1			1		4	2
Lynn	99,148	18	2		2		2		4	
Malden	49,103	7	1				1		1	
Medford	39,038	8								1
Melrose	18,204	7			1					
Methuen	15,189	1								
New Bedford	121,217	23	5						4	
Newburyport	15,618	2			4					
Newton	46,054	8							3	
North Adams	22,282	5								
Northampton	21,951	7	2		1		1			1
Pittsfield	41,763	15							1	1
Plymouth	13,045	8								
Quincy	47,876	8	1		1		1			
Salem	42,529	10		1	2		1		1	
Somerville	93,091	17	5		1		1			
Springfield	129,614	22	2		1				3	1
Taunton	37,137	12							2	1
Wakefield	13,025	2								
Waltham	30,915	10			1		1		3	
Watertown	21,457	3								
West Springfield	13,443	2								
Westfield	18,604	2	2							
Winchester	10,485	2								
Winthrop	15,455	4			1					1

CITY REPORTS FOR WEEK ENDED AUGUST 26, 1922—Continued.

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

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Massachusetts—Continued.										
Woburn	16,574	4								
Worcester	179,754	38	3				2		4	2
Michigan:										
Ann Arbor	19,516	10	1				1			2
Battle Creek	36,164	2	2		1		2			1
Benton Harbor	12,233	5	2				1			1
Detroit	993,678	154	16	2	4		23	1	42	9
Flint	91,599	15	9		4		3		6	
Grand Rapids	137,634	24	2		1		2		1	2
Hamtramck	48,615	0	5				2			
Highland Park	46,499	7					1			
Holland	12,183	2								
Jackson	48,374	8		1	1					1
Kalamazoo	48,487	14	4						10	1
Marquette	12,718	5								2
Muskegon	36,570	5	4	1			1			
Pontiac	34,273	7	1		1					1
Port Huron	25,944	6			1					
Saginaw	61,903	12	1				2			
Sault Ste. Marie	12,096	1					1			
Minnesota:										
Duluth	98,917	13	7	1			3		3	3
Hibbing	15,089		1				8			
Mankato	12,469						1			
Minneapolis	380,582	69	16		1		7		23	7
Rochester	13,722	9								
St. Paul	234,698	35	15				3		10	
Winona	19,143	3					1			
Missouri:										
Joplin	29,902				1					
Kansas City	324,410	89	4				1		7	8
St. Joseph	77,939	28	3				1			1
St. Louis	772,897	142	16				5		30	8
Springfield	39,631	9								
Montana:										
Anaconda	11,668	2								
Billings	15,100	5								
Butte	41,611	13								2
Great Falls	24,121	5	3		1				1	
Missoula	12,668	4								
Nebraska:										
Lincoln	54,948	11								1
Omaha	191,601	42	3	1			1			1
Nevada:										
Reno	12,016	4								
New Hampshire:										
Berlin	16,104	7								
Concord	22,167	6								
Dover	13,029	6	1							
Keene	11,210	2					1			
Manchester	78,384	14	1		1					
New Jersey:										
Asbury Park	12,400	3								
Atlantic City	50,707	15			2				1	
Bayonne	76,754								2	
Belleville	15,660								3	
Bloomfield	22,019	4							1	
Clifton	26,470	2	1		1					
East Orange	50,710	3								1
Elizabeth	95,783	11	1				5		1	
Englewood	11,627	2								
Garfield	19,381	0	1						2	
Hackensack	17,667	2								
Hoboken	68,166	16	3						1	1
Jersey City	298,103		7				1		6	
Kearny	26,724	4							1	
Morristown	12,548	6								1
Newark	414,524	74	6		6		2		21	5
Orange	33,268	4	2		2		1		1	
Passaic	63,841	16	4		1		1			2
Paterson	135,875						1		7	
Perth Amboy	41,707	4	8		1				1	

CITY REPORTS FOR WEEK ENDED AUGUST 26, 1922—Continued.

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

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New Jersey—Continued.										
Phillipsburg	16,923	6								
Plainfield	27,700	8							1	
Summit	16,174	2							1	
Trenton	119,289	30	5		1		3			2
Union (town)	28,651						1			
West Hoboken	46,674	5							1	2
West New York	29,926	1	1							
West Orange	15,573		1							
New Mexico:										
Albuquerque	15,157	3					2			1
New York:										
Albany	113,344		3		1				4	
Auburn	36,192	7	1							
Buffalo	506,775	107	8	1	1		10	1	17	4
Cohoes	22,987	6	2	1					1	1
Elmira	45,393		1							
Geneva	14,648	0								
Glens Falls	16,638	5								
Hornell	15,625	4								
Hudson	11,745	6								
Ithaca	17,004	6								
Jamestown	38,917	13					2	1	3	
Lackawanna	17,918	2							1	
Little Falls	13,029	1								
Lockport	21,308	4							1	
Mount Vernon	42,726	4	1				1		1	
New York	5,620,048	1,050	107	4	35	3	33	1	[1]316	[1]104
Newburgh	30,366	10			1					2
Niagara Falls	50,760	17	3		2		1		1	
North Tonawanda	15,432	1								
Peekskill	15,868	1			5					
Port Chester	16,573	3								
Poughkeepsie	35,000	9							3	
Rochester	295,750	64	3		5		4		10	4
Rome	26,341	8	1							1
Saratoga Springs	13,181	3					1		1	1
Schenectady	88,723	13					7			
Syracuse	171,717	34	13				2		4	2
Troy	72,013	11	1						1	
Watertown	31,285	11								
White Plains	21,031	8			1					
North Carolina:										
Charlotte	46,338	18	26						2	1
Durham	21,719	8	2	1					1	
Raleigh	24,418	10	2				1			1
Rocky Mount	12,742	4		1						
Salisbury	13,884	3								
Wilmington	33,372	10					1			1
Winston-Salem	48,395	17	7	1			2		3	
North Dakota:										
Grand Forks	14,010						1			
Ohio:										
Akron	208,435	22	1				10			
Ashtabula	22,082	3								
Barberton	18,811	4	1				1			1
Bucyrus	10,425	1								
Cambridge	13,104	4								
Canton	87,091	13	6				1			1
Chillicothe	15,831	3								
Cleveland	796,841	168	18	2	5		16	1	28	21
Cleveland Heights	15,236		1		1					
Columbus	237,031	45	2		5		4		8	5
Dayton	152,559	39	2				3		2	
East Cleveland	27,292	5			1					1
Findlay	17,021	3								
Fremont	12,468	1								
Lancaster	14,706	5	1	1						
Lima	41,326	9			1					
Mansfield	27,824	8								
Marion	27,891		1							
Martins Ferry	11,634	4	1				1			

[1] Pulmonary tuberculosis only.

CITY REPORTS FOR WEEK ENDED AUGUST 26, 1922—Continued.

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

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ohio—Continued.										
New Philadelphia	10,718				1					
Newark	26,718	6	1						1	
Norwood	24,966	3	1				1			
Piqua	15,044	4								
Salem	10,305	3			1					
Sandusky	22,897	5								
Springfield	60,840	13	2				1		2	1
Tiffin	14,375	5								1
Toledo	243,164	61	12	2	10	1	3		17	6
Youngstown	132,358	35	11	1	1				3	1
Zanesville	29,569	6	2						1	1
Oklahoma:										
Oklahoma	91,295	28	4			2			1	
Oregon:										
Portland	258,288	52	2		1		1		8	3
Pennsylvania:										
Allentown	73,502		4							
Altoona	60,331		2							
Ambridge	12,730		1		1					
Beaver Falls	12,802				2					
Bethlehem	50,358		4						2	
Braddock	20,879								1	
Bristol	10,273		2		1					
Butler	23,778		1							
Canonsburg	10,632		1		1					
Carbondale	18,640		1							
Carnegie	11,516								4	
Chester	58,030				3		1			
Coatesville	14,515				1					
Columbia	10,836		1							
Connellsville	13,804		1							
Donora	14,131		1							
Duquesne	19,011		1							
Easton	33,813								1	
Erie	93,372		3						12	
Greensburg	15,033						1			
Harrisburg	75,917		1		2		1		1	
Hazelton	32,277		1							
Jeannette	10,627		1							
Johnstown	67,327		3				1		3	
Lancaster	53,150		3				2		1	
McKee's Rocks	16,713		8							
McKeesport	46,781						1			
Mahanoy City	15,599				1					
Monessen	18,179						1			
Mount Carmel	17,469						1			
Nanticoke	22,614		1							
New Castle	44,938						1			
Norristown	32,319		1		2					
North Braddock	14,928						1			
Oil City	21,274						1		1	
Philadelphia	1,823,779	389	43		41	2	17		86	26
Pittsburgh	588,343		24		21		15		11	
Pottsville	21,876				1					
Reading	107,784		2		2				3	
Scranton	137,783		2		1					
Shamokin	21,204								1	
Sharon	21,747		1							
Shenandoah	24,726		1		1					
Steelton	13,428				1					
Sunbury	15,721						2			
Tamaqua	12,363						1			
Uniontown	15,692		1				1			
Washington	21,480		1				5			
Wilkes-Barre	73,833				2		1			
Wilkinsburg	24,403		3		4		2		2	
Williamsport	36,198		1							
Woodlawn	12,495		3		7					
York	47,512		2				4		1	
Rhode Island:										
Cumberland (town)	10,077	2								
Newport	30,255	5								
Pawtucket	64,248	10								
Providence	237,595	53	4		3		2			1

CITY REPORTS FOR WEEK ENDED AUGUST 26, 1922—Continued.

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

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
South Carolina:										
Charleston	67,957	22					2			5
Columbia	37,524		1							
Greenville	23,127	4	1				3			1
South Dakota:										
Sioux Falls	25,202	13	3							2
Tennessee:										
Chattanooga	57,895		1				1			
Knoxville	77,818		2				1		3	
Memphis	162,351	56	14				2		10	2
Nashville	118,342	39	5				1		8	1
Texas:										
Beaumont	40,422	2								
Corpus Christi	10,522	5							1	1
Dallas	158,976	45	7		1		3		2	
El Paso	77,560	28	4							5
Fort Worth	106,482	24	3				3		7	1
Galveston	44,255	18								2
Houston	138,276	30					1			2
Waco	38,500	6	2				1			
Utah:										
Salt Lake City	118,110	17	1	1						
Vermont:										
Barre	10,008						1			
Burlington	22,779	13								
Rutland	14,954	1								
Virginia:										
Alexandria	18,060	5								
Danville	21,539	6	1						1	1
Lynchburg	30,070	7					1		1	1
Norfolk	115,777		4		1		1		3	1
Petersburg	31,012	6	3				3			
Portsmouth	54,387	18			1					2
Richmond	171,667	36	6	1			6		13	4
Roanoke	50,842	16	5				2		2	
Washington:										
Aberdeen	15,337						1			
Bellingham	25,585						2			
Seattle	315,312		2		1		1			
Spokane	104,437		5				1			
Vancouver	12,637						1			
West Virginia:										
Bluefield	15,282	2	4							
Clarksburg	27,869	5								
Fairmont	17,851		1							
Huntington	50,177	20	1							2
Moundsville	10,669	4								
Parkersburg	20,050	5								
Wheeling	56,208	12	1							1
Wisconsin:										
Appleton	19,561								2	
Beloit	21,284	2								
Fond du Lac	23,427	2								
Green Bay	31,017		1							
Janesville	18,293	6	1							
Kenosha	40,472	10								
La Crosse	30,421				1		2			
Madison	38,378				1					
Milwaukee	457,147		7		12		3		4	
Oshkosh	33,162	2					1			
Racine	58,593	10	1		1		1		1	1
Sheboygan	30,955		2						2	
Stevens Point	11,371						1			
Superior	39,671	5	2				1			
Wyoming:										
Cheyenne	13,829	3							1	1

FOREIGN AND INSULAR.

PLAGUE ON VESSEL.

Steamship "Dumbea"—From Mauritius—At Suez.

The mail steamship *Dumbea*, from the Island of Mauritius, arrived August 5, 1922, at Suez, Egypt, with a case of plague on board. The patient, a French sailor, had been ill two days previous to arrival and on August 4 presented symptoms suspicious of plague. The patient was landed at the Wells of Moses and was declared positive for plague August 6. The vessel, which was destined for Marseille, France, passed the canal under quarantine, after disinfection.

HAWAII.

Plague—Plague-Infected Rats.

A death from plague occurred August 16, 1922, at the quarantine station, Hilo, Hawaii, in a Japanese from Pohakea, Hamakua.

Two plague-infected rats were reported found, August 12, at Honokaa plantation.

PANAMA.

Communicable Diseases—July, 1922.

Communicable diseases were reported to the chief health officer, Panama Canal, during the month of July, 1922, as follows:

Disease.	Panama.	Colon.	Canal Zone.	Nonresident.	Total.
Chicken pox	3	4	3	.....	10
Diphtheria	13	2	2	.....	17
Hookworm disease	30	.....	21	.....	51
Leprosy	.....	1	.....	1	2
Malaria	13	8	124	43	188
Measles	12	.....	.....	.....	12
Mumps	.....	.....	1	.....	1
Pneumonia	9	12	2	.....	23
Scarlet fever	2	.....	.....	.....	2
Smallpox	1	2	.....	1	4
Tuberculosis	6	5	2	4	17
Typhoid fever	1	.....	.....	3	4

PORTUGUESE WEST AFRICA.

Plague—Guinea.

Under date of August 24, 1922, plague was reported present in Guinea, Portuguese West Africa.

RUMANIA.

Cholera—Bessarabia.

Under date of July 29, 1922, 11 cases of cholera with 1 death were reported as having occurred at Rascautzi, and 1 case was reported at Cobusea, Province of Bessarabia, Rumania, July 24, 1922. On August 11 three cases were reported at the village of Codaeshti, and cholera was stated to be present among troops in garrison in the prefecture of Orhei, northern section of the Province.

RUSSIA.

Communicable Diseases—Lettonia—June, 1922.

Communicable diseases have been reported in the Province of Lettonia, Russia, for the month of June, 1922, as follows:

Disease.	Cases.	Disease.	Cases.
Cerebrospinal meningitis	3	Smallpox	21
Diphtheria	44	Typhoid fever	57
Measles	33	Typhus fever	111
Poliomyelitis (infantile paralysis)	26	Typhus fever, recurrent	16
Scarlet fever	127	Whooping cough	107

UNION OF SOUTH AFRICA.

Smallpox—Typhus Fever—June, 1922.

During the month of June, 1922, 61 cases of smallpox, with 2 deaths occurring in the colored population and 3 cases occurring in the white population, were reported in the Union of South Africa. During the same period, 484 cases of typhus fever with 80 deaths occurring among the colored population and 9 cases among the white population were reported. (For distribution according to States, see table pp. 2280, 2281.)

VIRGIN ISLANDS.

Contagious Diseases—July, 1922.

The occurrence of contagious diseases in the Virgin Islands during the month of July, 1922, has been reported as follows.

Island and disease.	Cases.	Remarks.
In St. Thomas and St. John:		
Chancroid	1	
Gonococcus infection	4	Imported.
Malaria	1	Tertian. Imported.
Syphilis	5	Secondary, 3.
Tuberculosis	1	Chronic pulmonary.
In St. Croix:		
Chancroid	3	Imported, 1.
Dengue	6	
Dysentery	1	Entamebic.
Filariasis	6	Bancrofti.
Gonorrhea	2	
Trachoma	1	
Tuberculosis	1	Chronic pulmonary.

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

Reports Received During Week Ended September 15, 1922.[1]

The reports contained in the following tables must not be considered as complete or final, either as regards the list of countries included or the figures for the particular countries for which reports are given.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Shanghai	Aug. 1-6	1	11	Case, foreign; deaths, native.
India:				
Calcutta	July 23-29	7	6	
Rangoon	July 9-15	10	5	Received out of date.
Philippine Islands:				
City—				
Manila	July 16-29	3		
Province—				
Batangas	July 2-8	3	2	
Marinduque	June 25-July 1	3	3	
Pangasinan	June 18-24	3	1	
Rizal	do	1		
Rumania:				
Bessarabia—				
Cobusca	July 24	1		
Codaeshti		3		Reported Aug. 11.
Orhei				Prefecture. Cholera reported Aug. 11 among troops in garrison.
Rascautzi		11	1	Reported July 29.
Syria:				
Aleppo	Aug. 6-12			Present in interior.

PLAGUE.

Asia Minor:				
Smyrna	Aug. 6-12	3	1	District.
Brazil:				
Porto Alegre	July 30-Aug. 5	1		
China:				
Amoy	July 16-22			Present.
Hongkong	July 16-29	29	23	
Egypt				Jan. 1-Aug. 10, 1922: Cases, 414; deaths, 185.
City—				
Alexandria	Aug. 7-10	3		
Port Said	Aug. 10	1	1	
Suez	Aug. 7-8	2	1	One case Aug. 5, imported from Mauritius on steamship Dumbea.
Province—				
Assiout	Aug. 5	1	1	
Benisouef	Aug. 7	1	1	
Minieh	Aug. 9	5	1	
Hawaii:				
Honokaa	Aug. 12			Two plague rats.
Pohakea	Aug. 16	1	1	Japanese. Death at quarantine station, Hilo.
India:				
Rangoon	July 9-15	32	32	Received out of date.
Java				June 1-30, 1922: Cases, 222; deaths, 259. In five provinces.
Mesopotamia:				
Bagdad	June 1-30	110	78	
Palestine:				
Jerusalem	Aug. 8-14	4		Native quarter of Jaffa.
Portuguese West Africa:				
Guinea				Reported present, Aug. 24, 1922.
On vessel:				
S. S. Dumbea	Aug. 5	1		At Suez, Egypt, from Island of Mauritius. Patient ill two days previous to arrival. Declared positive Aug. 6.

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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

Reports Received During Week Ended September 15, 1922—Continued.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Para	Aug. 7–20	32		
Canada:				
Ontario—				
Ottawa	Aug. 20–26	1		
Toronto	Aug. 13–19	2		
Saskatchewan—				
Saskatoon	Aug. 20–26	1		
Chile:				
Concepcion	July 18–31		6	
Talcahuano	July 22–30		5	
China:				
Amoy	July 16–22			Present.
Chungking	July 16–29			Do.
Hongkong	July 16–22	2	2	
Nanking	July 16–29			Do.
Tsingtau	July 24–30	2	1	
Chosen:				
Fusan	July 1–31	13	9	
Seoul	do	23	8	
Dominican Republic:				
San Pedro de Macoris	July 30–Aug. 11	51	2	Including surrounding country.
Santo Domingo	Aug. 13–19		1	
Egypt:				
Alexandria	July 23–29	1	1	
Great Britain:				
Liverpool	Aug. 13–19	1		At port hospital.
London	Aug. 6–12	3		
Greece:				
Saloniki	June 19–25		1	
Do	July 17–23		1	
India:				
Calcutta	July 23–29	3	1	
Rangoon	July 9–15	3	1	Received out of date.
Japan:				
Taiwan Island	July 22–Aug. 10	27	4	
Mesopotamia:				
Bagdad	June 1–30	24	13	
Mexico:				
Guadalajara	July 1–31	4	1	
Mexico City	July 16–22	23		Including municipalities in Federal District.
Panama				July 1–31, 1922: Cases, 4, of which 1 in nonresident and not locally reported.
Colon	July 1–31	2		
Panama	do	1		
Portugal:				
Lisbon	July 31–Aug. 6		9	
Russia:				
Lettonia	June 1–30	21		
Switzerland:				
Zurich	Aug. 6–12	4		
Yugoslavia:				
Belgrade	July 17–23	2	1	
Union of South Africa				June 1–30, 1922: Colored—cases, 61; deaths, 2. White—cases, 3.
Cape Province				June 1–30, 1922: Colored—cases, 55; deaths, 2. White—cases, 3.
Do	July 9–15			Outbreaks.
Natal	do			Do.
Transvaal				June 1–30, 1922: Colored—cases, 6.
Do	July 9–15			Outbreaks.

TYPHUS FEVER.

Chile:				
Concepcion	July 18–31		2	
Valparaiso	July 18–24		1	
China:				
Antung	July 10–Aug. 6	6		
Egypt:				
Port Said	Aug. 7–19		1	

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

Reports Received During Week Ended September 15, 1922—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Germany:				
Berlin	July 16–22		3	
Stuttgart	July 22–Aug. 5	1	1	
Greece:				
Saloniki	June 12–18	2		Russian refugees.
Mesopotamia:				
Bagdad	June 1–30	1	1	
Mexico:				
Mexico City	July 16–22	13		Including municipalities in Federal District.
Netherlands:				
Amsterdam	July 30–Aug. 5	1		
Russia:				
Lettonia	June 1–30	111		Recurrent typhus, 16 cases.
Union of South Africa				June 4–30, 1922: Colored—cases, 484; deaths, 80. White—cases, 9.
Cape Province				June 1–30, 1922: Colored—cases, 399; deaths, 69. White—cases, 9.
Do				Outbreaks.
Natal				June 1–30, 1922: Colored—cases, 31; deaths, 3.
Orange Free State				June 1–30, 1922: Colored—cases, 48; deaths, 8.
Transvaal				June 1–30, 1922: Colored—cases, 6.

Reports Received from July 1 to September 8, 1922.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Amoy	May 14–June 24	1	4	
Shanghai	June 25–July 31	198		Aug. 4–10: Deaths, 11. July 29: Stated to be 250 cases in Chinese isolation hospital.
Tientsin	July 25	2	2	Foreign concession.
Greece:				
Athens	June 29	1	1	
Saloniki	June 7–17	30	11	At quarantine station, among passengers from vessel carrying Russian refugees.
India				Feb. 26–June 17, 1922: Deaths, 32,649. (Report for week ended Feb. 25, 1922, not received.)
Bombay	Apr. 23–June 17	12	5	
Calcutta	Apr. 23–June 24	536	378	
Do	June 25–July 22	32	32	
Madras	May 21–June 17	3	1	
Do	July 16–29	3	2	
Rangoon	May 7–June 24	116	65	
Do	June 25–July 22	69	44	
Philippine Islands:				
Manila	May 21–June 24	8		
Do	June 25–July 15	5		
Province—				
Bataan	June 4–10	1		
Batangas	May 26–June 24	15	11	
Do	June 25–July 1	2	1	
Bulacan	Apr. 30–May 6	1	1	
Camarines Sur	Mar. 25–Apr. 1	1	1	
Laguna	Apr. 16–22	1		
Mindoro	Apr. 23–29	1		
Nueva Ecija	June 11–17	1	1	
Pampanga	Apr. 16–June 24	6	5	
Do	June 25–July 8	1	1	
Rizal	Apr. 2–May 27	2	1	
Tarlac	May 21–June 10	4	4	
Poland:				
Rovno	June 10–16	5	2	Repatriation station: Cases occurring among persons repatriated from Russia.
Do	July 11–Aug. 5	33	8	
Zamosc	Aug. 21		1	

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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

Reports Received from July 1 to September 8, 1922—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Rumania:				
Crangasi				To July 31, 1922: Cases, 11; deaths, 6. First case in soldier from frontier on Dniester River. Crangasi, a suburb of Bucharest.
Siam:				
Bangkok	Apr. 30–June 17	15	9	
Do	July 2–15	5	2	
Syria:				
Aleppo	May 27–June 3			A few cases in interior.
Do	June 25–Aug. 5			Present in interior.
On vessel:				
S. S. Chios	July 16	1		At Kavak quarantine station, Bosporus, from Novorossysk, a Russian Black Sea port. Case occurred in a recognized carrier. Vessel carried refugees for Saloniki, Greece. Six bodies buried at sea, 12 landed at Kavak during stay.

PLAGUE.

Algeria:				
Oran	Aug. 1–10		1	
Asia Minor:				
Smyrna	May 28–June 17	3	1	
Do	June 30–July 29	3		
Australia:				
New South Wales—				
Sydney	June 1–15	2		Apr. 2–June 10, 1922: 19 plague-infected rats found.
Azores:				
St. Michaels Island	June 25–July 22	18	3	At Arrifes and Ribeira, about 9 miles from port of Ponta Delgada.
Brazil:				
Bahia	June 11–17	1		May 7–June 4: Rodent; occurring in 1 section of the city. Many dead rats found.
Pernambuco	May 7–13	1		
British East Africa:				
Kenya Colony				Mar. 1–May 31, 1922: Cases, 187; deaths, 172.
Nairobi	Feb. 1–28	15	15	
Ceylon:				
Colombo	May 6–June 24	13	10	Plague rats, 5.
Do	June 25–July 22	9	8	Plague rats, 9.
China:				
Amoy	May 7–June 24		87	May 20: From 10 to 20 deaths reported daily.
Do	June 25–July 15		76	
Canton	May 1–June 30	28	23	
Foochow	May 7–June 10	5	4	June 17–24: Present. June 21: Mildly epidemic; 2 fatal cases in foreign physicians.
Do	July 2–8	2		June 25–July 1, 1922: Prevalent.
Hongkong	June 4–24	176	104	
Do	June 25–July 15	80	56	
Ecuador:				
Guayaquil	June 1–15			Rats found infected, 16; examined, 3,400.
Do	July 1–31			Rats examined, 9,200; found infected, 6.
Egypt				Jan. 1–June 29, 1922: Cases, 280; deaths, 120. Jan. 1–Aug. 3, 1922: Cases, 401; deaths, 179.
City—				
Alexandria	June 1–28	21	6	
Do	July 2–Aug. 2	10	5	
Port Said	June 12–25	2	5	Septicemic, 1.
Do	July 2–Aug. 2	23	17	Foreign, cases, 2; deaths, 2.
Suez	May 24–June 25	7	6	
Do	July 10	1	1	

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

Reports Received from July 1 to September 8, 1922—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Egypt—Continued.				
Province—				
Assiout	May 30–June 23	14	8	Septicemic, 1.
Do	July 11–25	5	2	
Benisouef	May 26–June 30	19	7	
Do	July 2–25	27	12	
Fayoum	June 3–29	8	4	
Do	July 2–20	13	3	
Gharbieh	May 26–June 30	37	13	
Do	July 2	3		
Menoufieh	July 20	1	1	
Minieh	June 2–29	24	7	
Do	July 14–Aug. 3	10	5	
Greece:				
Patras	Apr. 24–June 25	5	3	
Hawaii:				
Hamakua	June 30–July 4	1	1	At Kalopa Homesteads. Case, Hawaiian.
Do	July 8			Hamakua Mill Co. One plague rat trapped; found positive, July 14, 1922.
Kalopa	July 13	1	1	Contact with case at Kalopa Homesteads, July 4.
Paauhau	June 30			One plague rat trapped at Paauhau Gulch, June 29; found positive, June 30, 1922.
Paauilo	July 7		1	At Pohakea, Japanese.
Pohakea	Aug. 1	1	1	Japanese child; case reported positive for plague Aug. 6, 1922. Form, pneumonic.
Pohakuhaku	July 12	1	1	Hawaiian. Reported positive, July 19.
India				Apr. 23–June 17, 1922: Cases, 6,075; deaths, 4,642. June 25–July 8, 1922: Cases, 501; deaths, 375.
Bombay	Apr. 23–June 24	168	123	
Do	June 25–July 1	5	3	
Calcutta	Apr. 23–June 24	56	54	
Do	June 25–July 22	11	11	
Karachi	May 23–June 24	59	55	
Do	June 25–July 8	3	3	
Madras Presidency	May 21–June 24	74	36	
Do	June 25–July 29	225	126	
Rangoon	May 6–June 24	175	161	
Do	June 25–July 29	93	84	
Indo-China:				
Saigon	Apr. 23–June 24	30	21	
Italy:				
Catania	June 17	1		
Japan:				
Osaka	July 11–20	7	6	Reported as having occurred during past month, cases, 9; deaths, 8.
Java				Month of April, 1922: Report of the 7 Provinces of Java: Cases, 413; deaths, 495. May 1–31, 1922: Cases, 293; deaths, 310, occurring in 6 Provinces.
East Java—				
Soerabaya	May 7–June 24	3	3	
Soerakarta—				
Keporen	May 20			Epidemic.
Madagascar:				
Tananarive Province—				
Anketrina	May 4		1	Native village; disease stated to have been present since about Apr. 27, 1922. (Name of locality corrected.)
Tamatave	Aug. 21			Present.
Tananarive	May 29–June 18	2	1	
Mesopotamia:				
Bagdad	Apr. 1–May 31	158	110	
Mexico;				
Vera Cruz	June 30			One plague-infected rat.
Palestine:				
Jerusalem	July 4–Aug. 7	28	2	In native quarter of Jaffa.
Peru				May 1–15, 1922: Cases, 36; deaths, 19. June 1–30, 1922; Cases, 87; deaths, 15.
Philippine Islands:				
Manila	June 3	1	1	From S. S. Taisang from Amoy, China.

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

Reports Received from July 1 to September 8, 1922—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Portugal:				
Lisbon	July 31–Aug. 6		1	
Senegal:				
Dakar	June 1–30	1	1	
Siam:				
Bangkok	Apr. 30–June 3	4	3	
Do	July 2–15	2	2	
Straits Settlements:				
Singapore	Apr. 30–June 24	8	9	
Do	July 9–15	1	1	
Syria:				
Beirut	July 30	2		
Tunis:				
Tunis	June 30–July 27	3	1	July 20 and 21: Cases reported.
Union of South Africa:				
Orange Free State—				
Grootkom Farm	May 7–13			One dead plague-infected rodent found. Locality adjoins Truscart's Berg Farm, on which plague-infected mouse was found preceding week.
Rendezvous Ry. Station.	May 14–20			Plague-infected wild rodent found near.
On vessels:				
S. S. Ardeola	June 25–July 8			At Liverpool. Four plague-infected rats found dead. Vessel from Las Palmas, Canary Islands, June 26, 1922.
Greek vessel ———	July 19			At Messina, Italy. Cases on board. Vessel not allowed to enter.
S. S. Southgate	May 30	1		At Thursday Island quarantine, Australia. Vessel left Calcutta May 2; Rangoon, May 9. Vessel badly rat infested.
S. S. Taisang	June 1–3	1	1	At Manila, P. I., from Amoy, China. Patient landed at Manila June 1, 1922. The Taisang was 2½ days en route direct from Amoy.

SMALLPOX.

Arabia:				
Aden	May 7–June 24	69	21	
Do	July 2–Aug. 5	38	20	
Argentina:				
Rosario	June 1–30		3	
Asia Minor:				
Smyrna	May 14–June 24	4		In district.
Do	June 25–July 15	12		Do.
Bolivia:				
La Paz	Mar. 1–Apr. 30	97	16	
Brazil:				
Bahia	June 25–July 1	1	1	
Para	May 29–June 25	8		
Do	July 3–Aug. 6	77	1	
Rio de Janeiro	May 14–June 24	48	12	
Do	June 25–July 29	48	8	
Sao Paulo	Apr. 10–June 11	3	10	
British East Africa:				
Kenya Colony				Apr. 1–May 31, 1922: Cases, 10.
Dar es Salaam	Apr. 16–June 10	28		
Nairobi	Mar. 1–31	22	2	
Zanzibar	May 1–June 10	36	6	
Do	June 24–July 1	2		
Canada:				
Alberta—				
Calgary	June 18–24	1		
Manitoba—				
Winnipeg	May 6–June 17	3		
New Brunswick—				
Kent County	June 25–July 1	2		
Madawaska County	June 4–17	6		

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

Reports Received from July 1 to September 8, 1922—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
Ontario—				
Fort William and Port Arthur.	Aug. 6-19	2		
Hamilton	July 30-Aug. 12	2		
North Bay	June 3-17	2		
Do	July 16-Aug. 12	3		
Ottawa	June 11-July 1	17		
Do	July 2-Aug. 19	13		
Toronto	June 18-July 29	6		
Ceylon:				
Colombo	May 14-29	1		
Do	July 16-22	1		
Chile				Prevalent, July 3, 1922, throughout southern Provinces.
Concepcion	Mar. 14-June 20		71	
Do	June 27-July 17		11	
Quillon				In Concepcion Province; Epidemic in May, 1922, with 60 reported cases. To June 5. Epidemic.
Do	June 27-July 3			Epidemic.
San Patricio	May 16-22	13		
Talcahuano	May 22-June 24	33	19	May 16-22, 1922: Present.
Do	June 25-July 2	5	2	
Temuco				Province of Cautin; epidemic in May, 1922.
Valparaiso	Mar. 26-June 19		115	Incomplete; several districts not reporting.
Do	June 25-July 30		46	
China:				
Amoy	May 7-20			Present. June 18-24; 1 death.
Antung	May 29-June 18	4		
Do	July 3-16	5		
Chungking	May 28-June 24			Present.
Do	June 25-July 15			Do.
Foochow	May 14-20	1		
Hankow	June 25-July 1	1		
Hongkong	May 14-June 24	41	32	
Manchuria—				
Dairen	May 15-June 18	4	1	
Do	June 26-July 17	4	1	
Harbin	May 22-28	1		
Mukden	June 18-24			Present.
Do	July 16-22			Do.
Nanking	May 7-June 24			Do.
Do	June 25-July 15			Do.
Shanghai	May 22-28	1		Native.
Tientsin	May 14-20			Present.
Tsingtau	May 9-June 18	4	3	Including leased territory of Kiaochow, Japanese population along Shantung Railway and Japanese residents, Tsinan.
Do	June 26-July 16	3	2	Do.
Chosen (Korea):				
Chemulpo	May 1-31	1		
Fusan	May 1-June 30	147	69	
Seoul	do	26	5	
Cuba:				
Antilla	June 18-24	1		Reported for Preston.
Cienfuegos	June 24-July 1	1		
Santiago	June 1-30	3		
Dominica	Aug. 5			Present. Aug. 28: Epidemic. Island in Leeward Islands.
Dominican Republic:				
San Pedro de Macoris	May 21-June 24	167	2	City and country. Corrected report.
Do	July 16-29	62	1	Including vicinity.
Do	June 25-July 22	136	1	City and district.
Santo Domingo	June 4-24	3	9	Including vicinity.
Do	June 25-July 29	2	4	July 30-Aug. 5, 1922: A few cases, city and vicinity.
Ecuador	July 16-31	2		
Egypt:				
Cairo	Apr. 30-May 20	9	3	
Port Said	May 7-June 17	2		

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

Reports Received from July 1 to September 8, 1922—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Finland	June 1–30	2		
Do	July 1–15	1		
Fiume	June 13–19	1		
Do	July 10–16	1		
France:				
Paris	June 1–10	1	1	
Great Britain:				
Halifax				Outbreak reported under date of June 17, 1922.
Huddersfield				Do.
London	July 30–Aug. 5	1	1	
Sheffield	May 28–June 17	5		
Southampton	June 18–24	2		
Greece:				
Saloniki	May 1–June 25	3	*1	
Syra Island	May 26	12	5	
Haiti:				
Cape Haitien	June 11–17	1		
Plaine du Nord	do			Vicinity of Cape Haitien. Present.
India				Feb. 26–Mar. 25, 1922: Deaths, 1,162 (date of report corrected). Mar. 26–May 20, 1922: Deaths, 6,015. June 4–17: Cases, 1,941; deaths, 651.
Bombay	Apr. 23–June 24	38	17	
Calcutta	do	84	67	
Do	June 25–July 22	11	10	
Karachi	May 23–June 24	35	9	
Do	July 16–Aug. 1	14	4	
Madras	May 14–June 24	207	94	June 19–25: Cases, 30; deaths, 15.
Do	July 2–29	180	91	
Rangoon	May 7–June 24	37	16	
Do	July 2–22	21	6	
Japan:				
Kobe	June 19–25	2		
Taiwan Island	June 11–30	26	3	
Yokohama	May 29–June 25	4	2	
Do	June 26–July 20	48	8	
Java:				
West Java—				
Batavia	Apr. 28–June 30	20	3	City and Province.
Do	July 9–21	7	6	
Luxemburg	June 15–30	1	1	
Malta	May 1–June 15	4		
Mesopotamia:				
Bagdad	Apr. 1–May 31	12	7	
Mexico:				
Chihuahua	June 22–July 2		1	
Guadalajara	May 1–31	7		
Manzanillo	June 6–25		4	Estimated cases, 4 to 10.
Do	June 27–July 3	6	1	Estimated.
Mexico City	May 21–June 24	129		Including municipalities in Federal District. Report, June 11–17, not received.
Do	June 25–July 15	68		Including municipalities in Federal District.
Nogales	July 22–Aug. 5	26	3	State of Sonora.
San Luis Potosi	July 23–Aug. 19		7	
Torreon	July 1–31		1	
Panama:				
Colon	July 16–31	1		
Peru				May 1–15, 1922: Cases, 5; deaths, 4. June 1–30, 1922: Cases, 16; deaths, 7.
Poland				Mar. 26–June 3, 1922: Cases, 1,022 deaths, 218.
Portugal:				
Lisbon	May 29–June 25	6	8	Corrected report.
Do	June 26–July 30	44	22	July 22–Aug. 5: Cases, 19; deaths, 4.
Portuguese West Africa:				
Angola—				
Loanda	June 25–July 1		1	
Russia:				
Esthonia	May 1–June 30	6		
Lettonia	May 1–31	30		
Senegal:				
Dakar	June 1–30	4	4	

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

Reports Received from July 1 to September 8, 1922—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Spain:				
Barcelona	June 22–28		1	
Do	June 29–July 5		1	
Coruna	June 11–17		1	
Huelva	Apr. 1–June 30		4	
Seville	June 11–17	36		Week ended June 11: Many cases.
Do	June 18–July 30		87	
Valencia	May 21–27	1		
Straits Settlements:				
Singapore	Apr. 30–June 5	11	2	
Switzerland:				
Basel	May 28–June 3	1		
Berne	May 14–20	1		
Do	July 9–Aug. 5	4		
Lucerne	July 1–31	1		
Zurich	Apr. 23–June 24	9		
Do	June 25–Aug. 5	19		
Syria:				
Aleppo	June 4–24			Present.
Damascus	June 18–24		2	
Do	June 25–July 23	7	2	
Tunis:				
Tunis	July 17–23	1		
Turkey:				
Constantinople	May 21–June 24	21	6	
Do	June 25–July 29	12	2	
Union of South Africa				Apr. 1–May 31, 1922: Cases, 117; deaths, 10 (colored); white, cases, 33.
Cape Province				Apr. 1–May 31, 1922: Cases, 82; deaths, 1 (colored); white, 3 cases.
Do	June 4–17			Outbreaks.
Do	June 25–July 1			Do.
Natal				Apr. 1–May 31, 1922: Cases, 20; deaths, 8 (colored); white, 20 cases.
Orange Free State				May 1–31, 1922: Cases, 12; deaths, 1 (colored).
Do	June 4–17			Outbreaks.
Southern Rhodesia	May 11–June 28	67	4	
Do	June 29–July 12	29		
Transvaal				Apr. 1–May 31, 1922: Cases, 48 (colored); white, 10 cases.
Do	June 4–17			Outbreaks.
Johannesburg	May 1–31	1		
Virgin Islands:				
St. Thomas	June 5–18	1	1	At quarantine. From vessel from Dominican Republic.
Yugoslavia				Sept. 4–24, 1921: Cases, 11; deaths, 4.
Croatia—				
Zagreb	June 4–10	1		
Serbia				Oct. 23–29, 1921: Cases, 5.
Belgrade	June 11–17	1		
On vessels:				
S. S. Changsha	May 11	1		At Hongkong, China. Case landed from vessel; patient, intending passenger. Vessel proceeded to Australian ports.
S. S. Comeric	do	1		At sea, en route to Durban, S. A., from Sydney, Australia. (Public Health Reports, June 23, 1922, p. 1555.)
Schr. Fancy Mc	May 28			At St. Thomas, Virgin Islands. From San Pedro de Macoris, Dominican Republic. One case removed to quarantine June 5, died June 18.
S. S. Shelley	Apr. 19	1		At sea, en route from Hongkong. Vessel left Hongkong Apr. 17. Arrived Thursday Island quarantine, Australia, Apr. 28, 1922. Case, member of crew; type, confluent hemorrhagic.

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

Reports Received from July 1 to September 8, 1922—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
On vessels—Continued.				
S. S. St. Albans	May 18	1		At Thursday Island quarantine, Australia. Case in person of Chinese steerage passenger. Vessel left Shimonoseki, Japan, for Melbourne via Hongkong and Manila. Left Thursday Island for Australian ports.

TYPHUS FEVER.

Algeria:				
Algiers	May 1–31	16	4	
Oran	June 1–30	3	1	
Do	July 1–Aug. 10		3	
Asia Minor:				
Smyrna	May 14–June 24	8		City and district. Corrected report.
Do	June 25–Aug. 5	7		District.
Austria:				
Vienna	May 7–June 10	3	1	
Do	July 2–15	2	1	
Bolivia:				
La Paz	Mar. 1–Apr. 30	15	8	
Bulgaria:				
Sofia	May 28–June 17	4		
Chile:				
Concepcion	Apr. 11–May 29		10	
Do	June 27–July 3		1	
Valparaiso	Apr. 2–22		6	
China:				
Antung	May 15–21	1		
Foochow	May 14–20	1		
Hankow	July 9–15	1	1	
Manchuria—				
Harbin	May 8–June 11	4		
Do	June 26–July 2	3		
Czechoslovakia:				
Prague	June 11–17	1		
Danzig (Free City)	June 4–10	1		
Egypt:				
Alexandria	June 4–24	9	6	
Do	June 25–July 29	12	3	July 22–29: 1 imported paratyphoid.
Cairo	Mar. 19–May 20	61	40	Relapsing fever, Mar. 26–Apr. 8: 1 case.
Port Said	May 28–June 3	1		
Do	July 2–8	1		
Germany				May 1–6, 1922: Five cases typhus fever at quarantine station of Osternothafen, in persons returning from Russia.
Berlin	Apr. 30–June 24		7	
Do	June 25–July 1		3	
Coblenz	July 2–Aug. 5	5		
Königsberg	May 28–June 3	1		
Greece:				
Saloniki	May 1–June 18	25	1	
Mesopotamia:				
Bagdad	Apr. 1–May 31	6	1	
Mexico:				
Mexico City	Apr. 23–June 24	111		Including municipalities in Federal District.
Do	June 25–July 8	23		Do.
Norway:				
Province—				
Finmarken	July 26–Aug. 5	12	2	Occurring in 3 localities.
Palestine:				
Jerusalem	June 27–July 3	1		
Persia:				
Teheran	Mar. 22–Apr. 22		1	
Poland				Mar. 26–Apr. 22, 1922: Cases, 7,155. Apr. 23–June 3, 1922: Cases, 7,178; deaths, 499. Recurrent typhus—Mar. 26–Apr. 22, 1922: Cases, 4,515; deaths, 155. Apr. 23–May 6, 1922: Cases, 1,598; deaths, 34. (Corrected report.) May 7–June 3, 1922: Cases, 2,817; deaths, 72.
Warsaw	Apr. 23–June 24	156		Among transient and permanent residents.

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

Reports Received from July 1 to September 8, 1922—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Portugal:				
Oporto	May 4–June 24	9	4	
Do	June 29–July 5	1		
Seixal	Aug. 4	1		Village opposite Lisbon.
Rumania				Apr. 1–May 31, 1922: Cases, 62.
Cities—				
Bucharest	May 1–31	14		
Cerenauti	do	5		
Chisinau	Apr. 1–30	21		
Cluj	May 1–31	18		
Constanza	do	1		
Galata	do	1		
Sulina	do	2		
Provinces—				
Bucovina	Jan. 1–31	35	13	
Chisinau	Apr. 1–30	14		Recurrent typhus: Cases, 7.
Transylvania	Jan. 1–31	16	3	
Russia:				
Esthonia	Apr. 1–June 30	41		
Lettonia	Apr. 1–May 31	524		Recurrent typhus: Cases, 24.
Spain:				
Madrid	May 1–June 30		16	
Seville	May 21–June 3		1	
Tunis:				
Tunis	June 4–10	2		
Turkey:				
Constantinople	May 21–June 24	16		
Do	July 9–29	11	2	
Union of South Africa				April. 1–May 31, 1922: Cases, 733; deaths, 134 (colored); white, 8 cases.
Cape Province				Apr. 1–May 31, 1922: Cases, 638; deaths, 125 (colored); white, 7 cases.
Do	June 4–24			Outbreaks.
Natal				Apr. 1–May 31, 1922: Cases, 26; deaths, 4 (colored).
Do	June 4–17			Outbreaks.
Do	June 25–July 1			Do.
Orange Free State				Apr. 1–May 31, 1922: Cases, 49; deaths, 2 (colored); white, 1 case.
Do	June 4–24			Outbreaks.
Transvaal				Apr. 1–May 31, 1922: Cases, 23; deaths, 2 (colored).
Do	May 28–June 3			Outbreaks.
Do	June 18–July 1			Do.
Johannesburg	May 1–June 30	7	1	
Yugoslavia				Aug. 7–13, 1921: 2 new cases; (1921.)
Bosnia-Herzegovina	Aug. 7–13	1		Do.
Croatia-Slavonia	Sept. 4–10	1		
Serbia—				
Belgrade	May 6–June 3	2		
Voivodina	Aug. 7–13	1		(1921.)
From vessels:				
S. S. Chios	July 18	1		At Kavak quarantine station, Bosporus, from Novorossysk, a Russian Black Sea port. Vessel carried refugees for Saloniki, Greece. Six bodies buried at sea, 12 landed at Kavak.
S. S. Smolensk	June 14	1	1	From Danzig, May 30, 1922. At embarkation detention camp, Southampton, England. Public Health Reports, June 30, 1922, p. 1610.

YELLOW FEVER.

Mexico:				
Tampico	July 27–29	1	1	From Panuco. Patient brought to Tampico on eighth day of illness.
Do	Aug. 30		6	Of these, 5 with origin at Panuco, State of Vera Cruz; 1 with origin at Tampico.