

PUBLIC HEALTH REPORTS

VOL. 37

MAY 5, 1922

No. 18

HOW LONG DOES A MOSQUITO RETAIN MALARIA PARASITES ?

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The following observations have been made recently in a preliminary study to determine the maximum length of time the plasmodium of malaria will remain viable in infected mosquitoes. In connection with this work, observations were made in regard to the longevity of anopheline mosquitoes. The determination of the average duration of infection in the mass of mosquitoes is of great sanitary importance, as is admitted by many writers on tropical parasitology.

It has an important application in the control of malaria by quinine sterilization of carriers, especially under tropical conditions. Also, quinine, to be an effective prophylactic, must be dispensed in immunizing doses as long as infected mosquitoes exist, else these mosquitoes may reinfect the human host once sterilized by quinine. Sanitary measures can not be safely discontinued in a region as long as infection persists in either host. It is important to know in connection with the control of malaria whether the time an *Anopheles* remains infective is materially less than its active life.

Accurate information relative to the longevity of the insect and the viability of the *Plasmodium* have an intimate bearing on the question of the latency of infection in the mosquito during hibernation. A study of the longevity of mosquitoes may also give us important information regarding the influence of food requirements and temperature on their activities.

Another interesting, if not important, sanitary application of the knowledge of duration of infection lies in the still unsolved question of the existence of an animal reservoir host for malaria. This question is constantly brought up by tropical travelers and explorers, in connection with the probability of acquiring malaria in localities where it is alleged no human being has set foot for a long period. It is reputed that some animal other than man is the host of the malarial fever indigenous to these tropical regions. This problem can not be considered intelligently unless it is known how

long mosquitoes harbor malaria parasites. If the longevity of the parasites in the mosquito under such conditions were known, it might be less difficult to account for the responsible host of the infection in supposedly uninhabited regions.

It must be appreciated that probably not more than 3 per cent of anophelines in the worst malarious districts of the United States are responsible for the majority, if not all, of the new infections of malaria that occur in those districts. This fact indicates the importance of a study of individual variations in the insect host in connection with gametocyte control.

The following data relative to the duration of life of the mosquito and its infectivity were obtained from preliminary studies conducted in the Public Health Service malaria laboratory at Memphis, Tenn., during 1920 and 1921.

LENGTH OF MOSQUITO LIFE.

The maximum length of time any anopheline was kept alive was 231 days. A laboratory-bred specimen of *A. punctipennis* was fed on dates and water exclusively and kept in a lantern globe at a relatively low temperature (45° to 75° F.) from May 24, 1920, to January 10, 1921. In one trial the average life of 85 specimens was found to be 90.4 days. Eight specimens lived from 175 to 203 days. In another trial 6 laboratory-bred specimens of *A. punctipennis* were allowed one feeding of blood and kept for the remainder of the time on water and the juice of dates. The temperature of the container was maintained, as before, between 45° and 75° F. These mosquitoes lived 176, 184, 186, 196, and 217 days, respectively.

In only one series were sufficient data obtained to give a comparison of the average life of the three species of mosquitoes common in this region. These specimens were given 1 to 3 feedings of blood, followed by a diet of fruit juices. The temperature of the containers was 48° to 76° F. The longevity was recorded as follows:

A. punctipennis (22 specimens)—100 days.

A. crucians (4 specimens)—65 days.

A. quadrimaculatus (6 specimens)—73 days.

A male specimen of *A. punctipennis* kept on fruit juices and water lived 89 days.

It is interesting to note that a culicine (*Culex territans*) kept under the same conditions as the other species mentioned lived a period of 265 days. It is stated that this particular species does not partake of mammalian blood, but sustains life on a vegetable diet, as, in this instance, fruit juices. It is supposed to thrive normally on the blood of frogs.

DURATION OF INFECTION.

In this connection the writer has reported previously that a specimen of *Anopheles punctipennis* fed on a patient harboring *Plasmodium vivax* was found to retain a few scattered sporozoites, apparently degenerated, in two lobes of its salivary glands, for a period of 158 days. These organisms were presumably dead, lacking definite nucleus and devoid of motility.¹

In the present series, 61 specimens of *A. punctipennis*, 8 specimens of *A. quadrimaculatus*, and 2 specimens of *A. crucians* were fed to engorgement on a patient in whose blood a moderate number of crescents were found. The mosquitoes were then kept at room temperature, 59° to 83° F., for six days, then placed in a cool chamber (temperature 44° to 78° F.), and given a diet of date juice and water for the remainder of the time. At the end of seven days a specimen of *A. punctipennis* was dissected; no parasites were found. Beginning on the thirty-fourth day after blood feeding, one, or more, of the mosquitoes was dissected daily. The longest period between feeding upon a human crescent carrier and dissection was 95 days. No signs of infection were observed in any of the specimens from this lot, with the exception of the glands of three mosquitoes (all *A. punctipennis*) in which were found disintegrated forms, probably dead sporozoites.

Several specimens of presumably infected *A. punctipennis* of another lot were applied to volunteers in order to test the viability of sporozoites possibly remaining in the glands. Four specimens of mosquitoes were induced to bite as late as 74 days after obtaining blood from a crescent carrier. No infections resulted from the inoculations during an observation period of 30 days. Upon dissection of these mosquitoes at various times, nucleated, sluggishly motile bodies, indistinguishable from sporozoites, were found in the glands of two of them. These two then retained living parasites of *P. falciparum* from 83 to 92 days.

In a similar test, an inoculation experiment on a human host proved successful 55 days after the infection of the mosquito. The new host proved to have clinically and microscopically a typical infection due to *P. falciparum*. The mosquito used in this experiment was dissected 13 days later, giving a maximum duration of infection of 68 days. Here typical, very active sporozoites were found.

A suggestion as to the possible range in duration of infectibility of anophelines is indicated in the following experiment:

¹ Mayne, Bruce: Can the Mosquito Convey Infection from a Malaria Patient Undergoing Treatment? Does Sporogony Affect Mosquito Life? Public Health Reports, vol. 35, No. 23, July 9, 1920, pp. 1664-1669. Reprint No. 602.

The same specimen of *A. punctipennis* that produced malaria after a period of 55 days was applied to another volunteer host on the sixty-seventh day and failed to communicate the infection. As noted above, this specimen was dissected on the sixty-eighth day and living sporozoites were found in its salivary glands. It had received one meal each from patient and volunteer host. In a similar test, under identical conditions, another specimen failed to convey the infection when applied to a volunteer host upon the sixty-first day, although this mosquito was found to harbor viable sporozoites when dissected 9 days later. The third specimen of this series harbored living sporozoites 71 days after obtaining gametocytes from the patient, although attempted transmission to a second host on the sixty-sixth day after infection failed.

During the present study, 95 days was the longest time that apparently dead sporozoites were found within the salivary glands of specimens of *A. punctipennis* infected with *P. falciparum*; and in those infected with *P. vivax*, 105 days was the maximum period.

TEST ADOPTED FOR DETERMINING VIABILITY OF SPOROZOITES.

The criteria for the presence of living sporozoites in the salivary glands of mosquitoes used in these experiments, other than that of inoculation into a human host, were as follows:

(a) *Motility*.—The well-recognized typical writhing movements with the occasional end to end motion of translation, sometimes followed by a gradual migration out of the field.

(b) *Staining*.—In the absence of characteristic motility, identification by means of Giemsa staining was relied on. Usually this means is ample to distinguish between viable and degenerated forms and to rule out extraneous objects, such as crystals, rod-shaped bacilli, and filiform artefacts generally.

(c) *Chemical test*.—A rough test, as suggested by Wenyon, for the elimination of sporozoitelike bodies which may be confusing to the worker, is suspension of suspected material for several hours on a glass slide in media such as physiological salt solution, distilled water, and dilute acids. Artefacts disappear under this treatment.

SUMMARY.

1. The longest period of survival of uninfected *Anopheles* kept under artificial conditions on a diet of split dates and water, at a temperature of 45° to 75° F., was 231 days. A lot of 85 specimens of *A. punctipennis* kept without blood lived an average of 90.4 days. Eight of these were kept a period of 175 to 203 days. In mosquitoes of this species, given 1 to 3 feedings of blood previous to a diet of fruit juices, 22 specimens averaged a longevity of 100

days, and 6 specimens lived 176 to 217 days. A single specimen of *Culex territans* survived 265 days on a diet exclusively of fruit juices at a temperature of 48° to 76° F.

2. Plasmodia of malaria distinctly recognizable by their morphology and staining were detected in the salivary glands of five specimens of *A. punctipennis*, 68, 70, 71, 83, and 92 days, respectively, after infection. These mosquitoes had been allowed to bite a crescent carrier on a single occasion and were maintained at room temperature (59° to 83° F.) for 6 days, then kept in a container registering temperatures of 44° to 78° F. for the remainder of the experiment.

3. Plasmodia of malaria proved to be viable by inoculation into a human host from the bite of a mosquito infected 55 days previously. Mosquitoes failed to convey malaria plasmodia through their biting, 61, 66, and 67 days, respectively, after becoming infected (gland sporozoites obtained). These three mosquitoes were kept under conditions identical with those in which viable sporozoites were demonstrated in the five specimens mentioned above.

ON THE PROBABLE IDENTITY OF THE CHITTENDEN-UNDERHILL PELLAGRALIKE SYNDROME IN DOGS AND "BLACK-TONGUE."

WITH REPORT OF NECROPSY FINDINGS IN TWO CASES OF BLACK-TONGUE.

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We desire to invite attention to the striking similarity and probable identity of Chittenden and Underhill's pellagralike syndrome in dogs and the condition known to American veterinarians as "black-tongue."¹

In August, 1917, Chittenden and Underhill reported the production in dogs of a pathological condition which they regarded as closely resembling human pellagra. The condition was described as follows:

"The onset of the pathological symptoms is generally very sudden. Usually the first abnormal manifestation is a refusal to eat, and examination will reveal nothing to account for the loss of appetite. The animal lies quietly in its pen and is apathetic. After continued refusal to eat for a day or two, the mouth of the dog will present a peculiar and characteristic appearance. The inner surface of the cheeks and lips and the edges of the tongue are so covered with pustules as to give the impression of a mass of rotten flesh. The odor from these tissues is foul and almost unbearable. When stroked with absorbent cotton the mucous lining of the mouth comes

¹ Synonyms: Sore mouth, southern canine plague, dog typhus, dog typhoid, gastroenteritis hemorrhagica, Stuttgart dog epizootic.

away in shreds. Intense salivation is present. The teeth appear to be solid and normal. A bloody diarrhea is present, attempts at defecation being very frequent and resulting in the passage of little more than a bloody fluid of foul odor. In some cases, the thorax and upper part of the abdomen may contain many pustules half an inch in diameter which are filled with pus organisms. No other skin lesions are prominent. Death usually results without any particularly striking features.

"At autopsy two types of conditions are recognizable: In the animals presenting foul mouth and bloody diarrhea the chief interest centers in the lower bowel and rectum, which exhibit an intense hemorrhagic appearance. With these animals dying rapidly from convulsions the only visible abnormality of the alimentary tract is the presence in the duodenum of one or more large ulcers."

This pathological condition was induced by these workers by feeding a diet of boiled peas, cracker meal, and cottonseed oil. It was also induced, but with much greater difficulty, with a diet of meat, cracker meal, and lard.

"Blacktongue" appears to have been first described in 1852 from Munich by Hofer as "typhoid of dogs."² Hofer mentions among the symptoms an abrupt onset, vomiting, retching, and loss of appetite. The mucous membrane of the mouth is described as either dirty red or yellow, with an evil smelling saliva drooling from the angles of the mouth. He remarks that he never observed the typical typhoidal stool, but in pernicious cases there was a bloody discharge. At necropsy he found congestion of the gastric and intestinal mucosa with ulceration scattered throughout the digestive tract.

Nearly 50 years later, Klett (1899), without knowing of Hofer's observation, made a careful and extensive clinical study of the condition in the course of an outbreak at Stuttgart. A brief summary of Klett's clinical observations follows:

Onset very abrupt with vomiting, followed by loss of appetite and by thirst. The dog is indifferent to his surroundings, and his strength is diminished.

The buccal, less often the pharyngeal, mucosa is brownish or dark red with erosions and pustules. The mucosa of the tongue is similarly altered. In advanced cases the mucosa of the mouth, pharynx, and tongue becomes covered with a thick chocolate-colored coating. The mouth invariably gives off an extremely foul odor.

Constipation and constipated stools are the rule, but in some cases there is uncontrollable diarrhea of a bloody character.

The conjunctiva is invariably injected.

The temperature is not above normal. In some cases convulsions of a clonic character may occur.

Other European students have confirmed and, in some details, extended Klett's observations, as the result of which it appears that

² Hofer's "Typhus der Hunde" has in the literature been erroneously translated into "dog typhus." The German typhus is the English typhoid, and it was typhoid that Hofer meant.

some variation in the severity of the disease, but more particularly in the prominence or severity of the individual manifestations, may occur. Thus the inflammation of the mouth may be slight—it may occur without any erosions or ulcerations; on the other hand, it appears that the inflammation may be so severe as to lead to destruction (gangrenous) of the anterior part of the tongue. Similarly the gastric, duodenal, and rectal mucosa may be but slightly congested or it may be severely inflamed and ulcerated.

No extensive study of the disease as it occurs in dogs in the United States seems to have been made. There are, however, several published notes describing the salient features of the disease. The following outline is based on these American accounts and on our own observations.

Onset is rather abrupt, with lassitude, loss of appetite, occasionally vomiting, and thirst; the animal, though trying often, may be unable to take water. The mouth early gives off a characteristic offensive, nauseating odor and soon becomes sore. Salivation develops early, and the drooling saliva may become bloody.

The buccal and lingual mucosa becomes more or less extensively injected and inflamed. In some cases the congestion becomes very marked, the mucosa then presenting more or less extensive purplish red areas. The tongue, more particularly the free anterior portion, may be thus affected; the margin may be bright red. Both tongue and cheeks may become covered with a dirty, gray, slimy coating suggestive of a diphtheritic membrane. It is probably this appearance that led Kerr (1914) to suggest the name "canine diphtheria" for the disease.

The mouth may present erosions and ulcers. Vomiting may occur, and either constipation or diarrhea may be present; constipation is more often a symptom of the onset, diarrhea of the later stages. When there is diarrhea the stools may be bloody, particularly in cases with fatal termination. The temperature may at times be considerably elevated.

The disease appears to end in death in about 75 per cent of cases, running its course in these in some four to eight days.

The American literature on the post-mortem findings is extremely meager. The following notes are of two necropsies made by us at Spartanburg, S. C., on August 11, 1921. The dogs were Chesapeake Bay retrievers, one a male, the other a female, both under 2 years of age. One had died 24 hours and the other 10 to 15 hours previously.

In both animals the lingual and buccal mucosa was found markedly but unevenly congested, the congestion involving the mucosa of the lips and opposing gums. There was also some congestion of the mucosa of the larynx and epiglottis.

The gastric mucosa showed a patch of moderate congestion in the region of the pylorus.

In one of the dogs there was marked congestion of the mucosa of the large gut throughout its whole length, including the rectum; in the other no gross change in this part of the bowel was apparent.

The contents of the gastro-intestinal tract was small in amount; in one it was seemingly of a mucous nature, in the other more watery. In both it was yellow-tinged, probably from the medication administered just before death. This yellow tinting was also observed to affect the lingual mucosa and the buccal secretion.

Examination of the lungs, heart, liver, spleen, and kidneys disclosed no gross lesions.

The disease has quite generally been regarded as infectious. This view seems to be based mainly on its occasional epizootic occurrence and in a measure on the observation that at times after the occurrence of one case in a kennel a considerable number, perhaps all, of the other dogs are affected. More commonly, however, none of the other dogs is attacked, and one finds such observations as the following: "The disease seems to be infectious, and yet I have seen dogs drink and eat with the dogs affected with sore mouth and not contract the disease" (Heiny). "We have five or six dogs of our own and always have from three to five cases of black tongue at the hospital, but have never had more than one case of it in our own dogs" (Browning).

The results of the recorded experimental attempts at transmission from sick to well dogs do not lend much support to the conception that the disease is an infection, for with one or two doubtful exceptions, these attempts have frankly failed.

Just as Chittenden and Underhill recognized the resemblance of their experimentally induced condition in dogs to pellagra, so there have been those who have been struck by the resemblance of the naturally occurring disease "black tongue" to the disease in man.

The first, as far as we have been able to find, to call attention to this is Spencer, of Concord, N. C. In a brief note he states that "after studying these two maladies, I am forced to the conclusion that the so-called black tongue is canine pellagra and have carried on a limited number of experiments to that end."

Four years later, Cary (1920), of Auburn, Ala.; recognizing the resemblance of black tongue to the experimental condition reported by Chittenden and Underhill, classed "black tongue" among deficiency diseases and referred to the similarity of the manifestations of "sore mouth" in dogs to those of pellagra in man.

Of interest in this connection is the suggestion by Saunders (1920), of Waco, Tex., of some connection between "sore mouth of dogs" and pellagra. He writes as follows: "Some five years ago I bought a very fine dog in New Jersey and brought him to Texas. The second year in Texas he died with what the veterinarian pronounced 'sore mouth.' Now, a dog dying with sore mouth was as novel to me as was

a man dying with pellagra. I noticed that my dog was losing hair from his front legs (paws). In commenting on the cause of my dog's death with my friends I find that it is a relatively common disease, and that there is a large strip of country east of town on a branch called the Tehuacana, where they can not have dogs, as they all die of the sore mouth. Now, this strip of country has furnished some 40 or 50 pellagrins to the near-by doctors for treatment. The question is, How much the dog plays in the etiology, or are they both, man and dog, infected from the same source, or is the sore mouth a different disease and is it a coincidence that they are found here side by side?"

At this juncture it may be remarked that black tongue seems to have a geographic distribution in the United States singularly like that of pellagra. Seemingly it occurs principally, if not exclusively, in the South. Seasonally it is reported to occur most frequently in summer and autumn and to affect cur dogs less than those of higher grade. There is some evidence that it may occur more than once in the same animal.

The resemblance of black tongue to the experimental condition described by Chittenden and Underhill is so striking that it appears to us well-nigh certain that the two are identical; but before this identity can be accepted as definitely established, much additional work will have to be done. The possibility, if not the probability, that black tongue in dogs may prove to be the analogue of pellagra in man emphasizes the importance of such further investigations. In this the individual practitioner can take an important part by observing and recording the circumstances of the occurrence of this interesting condition in dogs and the efficacy of a strictly dietary treatment consisting of milk, eggs, and fresh meat.

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HEALTH WORK IN A MODEL VILLAGE.

SECOND ANNUAL REPORT OF THE DEPARTMENT OF HEALTH, PERRY POINT, MD.

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Introduction.

The United States Public Health Service owns a tract of land comprising 516 acres adjoining the town of Perryville, Md. This reservation, upon which was constructed during the war an enormous ammonium nitrate plant and a model village to house the employees, was transferred to the Public Health Service by an act of Congress in 1919. The reservation, known as Perry Point, forms a peninsula of land projecting into the Chesapeake Bay at the point where the Susquehanna River and Mill Creek empty.

The activities of Perry Point may be divided under three heads:

Hospital.—The United States Public Health Service Hospital No. 42, known now as the United States Veterans' Bureau Hospital, is located in the center of the reservation. The capacity of the hospital is 430 beds; the type of patients received is psycho-neurotic. Closely connected with the hospital is the Veterans' Bureau Pre-Vocational School. There is now under construction another hospital of 300-bed capacity.

Village.—The village consists of 200 houses, store buildings, a theater, club house, schoolhouse, and fire department. The supervision and custody of the village comes directly under the Medical Officer in Charge.

Supply depot.—The supply depot is a branch of the purveying service. It occupies nearly all the large plant buildings, storing vast quantities of hospital supplies and equipment and motor transportation equipment. This material is shipped to the various hospitals and stations of the Public Health Service. During the year 1921, 17,890,114 pounds of supplies were received at this station and 10,330,943 pounds were shipped away.

Organization.

The organization of a whole-time health department dates back to January, 1920, when the writer was detailed to Perry Point to establish a health department and to carry on its activities. The

factors which make necessary a health department on this reservation are summarized below.

- I. To carry out United States Public Service principles and plans, i. e.—
 - a. To do on its own reservation what it advises other municipalities to do;
 - b. To assist in standardizing, as far as possible, public health problems which are common to all communities of a similar size;
 - c. To carry on public health work on the same economical basis as would be required of a health department where appropriation would naturally be limited.
- II. To supervise public health problems which would not be cared for by the State or county, since this is a Government reservation.
- III. To protect the health of hospital patients, vocational trainees, and other Federal beneficiaries.
- IV. To prevent communicable diseases from being introduced by the large number of employees working on the reservation but living in the nearby towns.

In carrying out the program of the health department, close relations were established with the State department of health, the county health officer, and the county public health nurse.

Activities.

The activities of the health department may be grouped as follows:

1. Administration.
2. Vital Statistics.
3. Communicable Diseases.
4. Child Hygiene and School Inspection.
5. Sanitary engineering.
6. Food Inspection.
7. Public Health Education.

VITAL STATISTICS.

Population.—The population figures referred to in this report represent the actual figures compiled from a house to house census taken on June 14, 1921. When reference is made to the population of Perry Point only people living in the village are included. Patients, nurses, aides, and servants are included in the hospital population, which is subject to change during the year.

The following table is self-explanatory:

TABLE I.—*Census report of Perry Point, June 14, 1921.*

Population in village.....	807
Population in hospital (nurses, aids, patients, servants).....	575
Total population on reservation.....	1,382

	White.		Colored.		Total.
	Male.	Female.	Male.	Female.	
Population in village.....	411	378	9	9	807
Patients.....	386	0	10	0	396
Nurses, aids, orderlies, etc.....	58	33	41	47	179
Total.....	855	411	60	56	1,382

AGE DISTRIBUTION OF VILLAGE POPULATION.

Age group.	White.		Colored.		Total.
	Male.	Female.	Male.	Female.	
Under 1 year.....	13	15	0	0	28
1 to 5 years.....	40	34	0	1	75
6 to 10 years.....	47	39	1	1	88
11 to 20 years.....	48	63	1	1	113
21 to 30 years.....	79	91	2	3	175
31 to 40 years.....	93	68	2	2	165
41 to 50 years.....	52	39	1	1	93
51 to 60 years.....	32	18	2	0	52
61 to 70 years.....	7	8	0	0	15
71 years and over.....	0	3	0	0	3
Total.....	411	378	9	9	807

Birth rate.—The high birth rate of 1920 was nearly equaled during 1921.

TABLE II.—*Comparative birth rates, 1919–1921.*

Year.	Perry Point.			Cecil County, rate per 1,000 population.	State of Maryland, rate per 1,000 population.	United States registration area, rate per 1,000 population.
	Popula-tion.	Number of births.	Rate per 1,000 popula-tion.			
1921.....	807	31	38.41	27.31	25.12	23.70
1920.....	839	33	39.33	23.00	23.60	22.30
1919.....				23.78		

^a Unofficial.

TABLE III.—*Tabulation of births, by months, 1920 and 1921.*

Month.	1921			1920		
	Male.	Female.	Total.	Male.	Female.	Total.
January.....	1	2	3	1	1	2
February.....	1	1	2	2	1	3
March.....	1	1	2	0	1	1
April.....	2	0	2	1	2	3
May.....	2	2	4	3	4	7
June.....	1	1	2	0	2	2
July.....	1	0	1	0	1	1
August.....	1	2	3	0	3	3
September.....	3	2	5	0	1	1
October.....	3	0	3	3	0	2
November.....	1	2	3	2	2	5
December.....	1	0	1	1	2	3
Total.....	18	13	31	13	20	33

Death rate.—During the year 1921 there were two deaths in the village, making the death rate per 1,000 population lower than the rate for 1920.

TABLE IV.—*Comparative death rates, 1919–1921.*

Year.	Perry Point.			Cecil County.	State of Maryland.	U. S. registration area.
	Popula-tion.	Number of deaths.	Rate per 1,000 popu-lation.	Rate per 1,000 popu-lation.	Rate per 1,000 popu-lation.	Rate per 1,000 popu-lation.
1921.....	807	2	2.47	^a 15.36	.....	.....
1920.....	839	3	3.57	13.85	14.69	13.08
1919.....	.....	.....	.....	16.89	15.66	12.87

^a Unofficial.

TABLE V.—*Causes of death in Perry Point, 1921.*

	Number.	Age.
Diabetes.....	1	64 years.
Premature birth.....	1	1 hour.

Infant mortality.—It is interesting to note that with a high birth rate, there is maintained, as in 1920, a surprisingly low infant mortality rate.

TABLE VI.—*Comparative infant mortality rates, 1919–1921.*

Year.	Perry Point.			Cecil County.	State of Maryland.	U. S. registration area.
	Number of births.	Number of deaths.	Infant mortality rate.	Infant mortality rate.	Infant mortality rate.	Infant mortality rate.
1921.....	31	1	32.26	.....	.....	.....
1920.....	33	1	30.30	90.24	102.76	86.00
1919.....	.....	.....	.....	110.09	104.91	86.60

TABLE VII.—Comparative vital statistics, 1921 and 1920, Perry Point, Md.

Year.	Popu- tion.	Birth rate.	Death rate.	Infant mortality rate.	Still births.
1921.....	807	38.41	2.47	32.26	0
1920.....	839	30.33	3.57	30.30	4

COMMUNICABLE DISEASES.

Considerable stress has been placed upon the immediate reporting of communicable diseases by doctors, householders, and school children, thus enabling prompt isolation or quarantine. All householders on the reservation have received a copy of the State law governing the reporting of diseases by householders. Physicians practicing in the village were instructed to report their cases to the health officer as soon as diagnoses were made. Employees working on the reservation, but living in various parts of the county, have received notices instructing them to report all cases of communicable diseases occurring in their homes.

Morbidity reports were received from the State department of health each day. They were valuable because they reported diseases which were prevalent in the county and were used as a check on employees coming from homes where there was a disease.

The proximity of the reservation to the town of Perryville made the introduction of diseases from that town quite possible. Since there had been no quarantine enforcement in Perryville, the writer requested of the State department of health that he be deputized to act as quarantine officer in the district contiguous to the reservation. This request was granted and the authority proved valuable, especially during a mild epidemic of scarlet fever which occurred in Perryville during March and April.

TABLE VIII.—Morbidity reported for Perry Point and Cecil County, 1920 and 1921.

Disease.	Perry Point.		Cecil County.	
	1921	1920	1921	1920
Influenza.....	14	21	40	444
Whooping cough.....	16	0	51	14
Measles.....	10	7	6	225
Scarlet fever.....	3	0	62	23
Chicken pox.....	4	17	18	21
Diphtheria.....	1	3	25	27
Poliomyelitis.....	1	0	1	0
Typhoid fever.....	0	0	26	17
Pneumonia (all forms).....	0	1	36	61
Mumps.....	0	1	3	12
Erysipelas.....	0	1	3	0
Malaria.....	0	0	1	0
Encephalitis.....	0	0	2	0
Typhus fever.....	0	0	1	0
Infant diarrhea.....	0	0	1	0
Tuberculosis.....	0	2	0	0
Total.....	49	53	273	844

TABLE IX.—Morbidity reported, by months, Perry Point, 1921.

Disease.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Chicken pox.....	0	2	2	0	0	0	0	0	0	0	0	0	4
Diphtheria.....	0	1	0	0	0	0	0	0	0	0	0	0	1
Influenza.....	0	6	8	0	0	0	0	0	0	0	0	0	14
Measles.....	1	0	0	0	0	0	1	7	1	0	0	0	10
Poliomyelitis.....	0	0	0	0	0	0	0	0	1	0	0	0	1
Scarlet fever.....	1	0	2	0	0	0	0	0	0	0	0	0	3
Whooping cough.....	0	0	3	10	3	0	0	0	0	0	0	0	16
Total.....	2	9	15	10	3	0	1	7	2	0	0	0	49

Laboratory control of diseases.—The department of health has excellent facilities for prompt diagnosis of laboratory specimens. Cultures and specimens can be sent to the laboratory of the State department of health in Baltimore, or they can be examined in the laboratory connected with the hospital.

The number of specimens from Perry Point examined by both laboratories for 1921 were few in number, as Table X shows.

TABLE X.—Laboratory examinations for village, 1921 and 1920.

Where made.	Throat culture for diphtheria.				Blood specimen for malaria, 1921.	
	1921		1920		Positive.	Negative.
	Positive.	Negative.	Positive.	Negative.		
United States Public Health Service laboratory.....	0	5	5	31	0	0
State department laboratory.....	0	8	5	55	0	1
Total.....	0	13	10	86	0	1

A supply of vaccine, antitoxins, and viruses is kept on hand for emergency cases.

Prophylaxis.—During the school year all school children who were not given the Schick test the previous year were tested, and those reacting were actively immunized.

Table XI is self-explanatory.

TABLE XI.—Results of Schick test.

Grade.	Number tested.	Number reacting.	Per cent reacting.	Number immunized.
Kindergarten.....	15	9	60.0	9
First.....	40	19	47.5	12
Second.....	7	2	28.5	1
Third.....	9	8	88.8	4
Fourth.....	13	3	23.1	3
Fifth.....	9	1	11.1	1
Sixth.....	8	2	25.0	1
Seventh.....	5	1	20.0	1
Eighth.....	2	0	00.0	0
Teachers.....	7	3	42.8	3
Total.....	115	48	41.7	35

COMPARISON OF 1921 WITH 1920.

	1921.	1920.
Number of children given Schick test.....	115	100
Number of children reacting to test.....	48	33
Percentage reacting.....	41.7	33.3
Number actively immunized.....	35	33

CHILD HYGIENE AND SCHOOL INSPECTION.

Baby health conference.—During the month of September a baby health conference was held in the clubhouse. The object of this conference was threefold: First, to determine the development and condition of each baby by a careful physical examination; second, to determine any physical defects; and third, to bring before the parents practical ideas in child care and training.

A committee from the women's club visited every mother having a baby under 3 years of age. At that time the object of the conference was explained to the mothers, and their babies were enrolled for examination at a definite hour on a certain day. Seventy-two babies were eligible for enrollment, and 70 were in attendance.

The examinations were made by Dr. Osincup, a pediatricist of the Public Health Service. He was assisted by the county public health nurse. Club women took charge of the dressing rooms and assisted the mothers in getting their babies ready for examination.

Data obtained from the mothers, together with the results of the examination, were placed on a record card (Form No. 11, furnished by the United States Public Health Service.

The educational features of the conference were very beneficial. An exhibit made up of 70 different charts and posters on care, feeding, and training of babies was installed in the clubhouse. Several lectures were delivered to mothers, and an illustrated lecture was given to the public and was followed by a moving-picture film entitled "Our Children."

It is believed that the enthusiasm aroused as the results of this conference will assist the department in establishing a child health center on the reservation in spring.

The data contained in the following tables were compiled from the cards filled out for each child.

TABLE XII.—Statistical report on baby health conference.

Age of babies examined.	Boys.	Girls.	Total.
3 months and under.....	3	1	4
4 to 6 months.....	5	1	6
7 to 12 months.....	6	9	15
13 to 18 months.....	2	7	9
19 to 24 months.....	7	6	13
25 to 30 months.....	4	5	9
31 to 36 months.....	10	4	14
Total number examined.....	37	33	70

TABLE XII.—Statistical report on baby health conference—Continued.

Feeding, nutrition, and physical condition.	Boys.		Girls.		Total.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Breast fed exclusively or until seventh month.....	15	40.5	14	42.4	29	41.5
Bottle fed exclusively.....	11	29.7	8	24.2	19	27.1
Breast fed short time exclusively, then bottle exclusively.....	11	29.7	11	33.3	22	31.4
Orange or tomato juice given—						
Daily.....	14	37.8	11	33.3	25	35.7
Irregularly.....	10	27.0	9	27.3	19	27.1
Never.....	13	35.1	13	39.4	26	37.1
Bottle babies 15 months and under—						
Receiving cow's milk.....	3	8.1	5	15.1	8	11.4
Receiving some kind of commercial "baby's food" or condensed milk.....	7	18.9	7	21.2	14	20.0
Nutrition:						
Excellent.....	7	18.9	9	27.3	16	22.9
Good.....	16	43.2	9	27.3	25	35.7
Fair.....	7	18.9	8	24.2	15	21.4
Poor.....	6	16.2	7	21.2	13	18.6
Very poor.....	1	2.7	0	0	1	1.4
Evidence of rickets.....	8	21.6	6	18.2	14	20.0
Suspected adenoids.....	7	18.9	5	15.1	12	17.1
Enlarged tonsils.....	6	16.2	3	9.1	9	12.8

NUMBER OF BREAST OR BOTTLE FEEDINGS IN 24 HOURS FOR BABIES 12 MONTHS AND UNDER.

	Boys.	Girls.	Total.
Number of babies 12 months and under.....	14	11	25
Irregularly fed in 24 hours.....	3	3	6
4 feedings in 24 hours.....	2	1	3
5 feedings in 24 hours.....	1	1	2
6 feedings in 24 hours.....	4	2	6
7 feedings in 24 hours.....	3	3	6
8 feedings in 24 hours.....	1	1	2

HYGIENE IN BEDROOM.

	Boys.		Girls.		Total.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Sleeping alone.....	36	97.3	30	90.9	66	94.3
No other persons in bedroom.....	11	29.7	4	12.1	15	21.4
1 other person in bedroom.....	3	8.1	3	9.1	6	8.6
2 other persons in bedroom.....	11	29.7	10	30.3	21	30.0
3 other persons in bedroom.....	7	18.9	13	39.4	20	28.6
4 other persons in bedroom.....	4	10.8	2	6.0	6	8.6
No data.....	1	2.7	1	3.0	2	2.8
Bedroom windows open.....	37	100.0	33	100.0	70	100.0

School inspection.—Immediately after the babies health conference the school children of the reservation were given a thorough examination. The results of this examination are contained in Table XIII.

TABLE XIII.—Medical inspection of school children.

	Boys.		Girls.		Total.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Children examined.....	77		65		142	
Defective children.....	61	79.2	51	78.5	112	78.9
Nondefective children.....	16	20.8	14	21.5	30	21.1

RESULTS OF EXAMINATION.

Defective teeth.....	50	65.0	41	63.0	91	64.0
Defective tonsils.....	9	11.7	8	12.3	17	11.9
Symptoms of adenoids.....	26	33.8	11	16.9	37	26.0
Defective vision.....	7	9.1	16	24.6	23	16.2
Defective hearing.....	3	3.9	0	0	3	2.1
Defective heart.....	2	2.6	1	1.5	3	2.1

NUTRITION.

Good.....	48	62.2	42	64.6	90	63.4
Fair.....	26	33.8	20	30.8	46	32.4
Poor.....	3	3.9	3	4.6	6	4.2

USE OF TOOTHBRUSH.

Daily.....	31	40.2	34	52.3	65	45.7
Occasionally.....	27	35.1	21	32.3	48	33.8
Never.....	19	24.7	10	15.4	29	20.4

DISTRIBUTION OF DEFECTIVE TEETH.

One tooth.....	8	10.4	3	4.6	11	7.7
Two teeth.....	11	14.3	8	12.3	19	13.3
Three teeth.....	9	11.7	11	16.9	20	14.1
Four teeth.....	8	10.4	10	15.4	18	12.7
Five teeth.....	4	5.2	2	3.1	6	4.2
Six teeth.....	4	5.2	3	4.6	7	4.9
Seven teeth.....	3	3.9	2	3.1	5	3.5
Eight teeth.....	3	3.9	1	1.5	4	2.8
Twelve teeth.....	0	0	1	1.5	1	.7

DISTRIBUTION OF PHYSICAL DEFECTS (PERCENTAGES BASED ON TOTAL WITH DEFECTS).

Teeth only.....	27	44.3	23	45.1	50	44.6
Tonsils only.....	0		0		0	
Adenoids only.....	5	8.2	2	3.9	7	6.2
Vision only.....	3	4.9	6	11.8	9	8.0
Hearing only.....	0		0		0	
Tonsils, adenoids.....	3	4.9	1	1.9	4	3.6
Teeth, adenoids.....	9	14.7	3	6.0	12	10.7
Teeth, vision.....	2	3.3	5	9.8	7	6.2
Teeth, tonsils.....	0		5	9.8	5	4.5
Vision, adenoids.....	1	1.6	0		1	.9
Hearing, adenoids.....	1	1.6	0		1	.9
Tonsils, vision.....	0		1	1.9	1	.9
Teeth, tonsils, adenoids.....	7	11.5	1	1.9	8	7.1
Teeth, hearing, adenoids.....	2	3.3	0		2	1.8
Teeth, vision, adenoids.....	1	1.6	2	3.9	3	2.7
Teeth, tonsils, adenoids, vision.....	0		2	3.9	2	1.8

NONDEFECTIVE CHILDREN COMPARED WITH DEFECTIVE CHILDREN.

Nondefective.....	16	20.8	14	21.5	30	21.1
Defective.....	61	79.2	51	78.5	112	78.9
Teeth brushed daily:						
Nondefective.....	9	56.2	10	71.4	19	63.3
Defective.....	22	36.1	24	47.0	46	41.0

TABLE XIII.—*Medical inspection of school children—Continued.*

NONDEFECTIVE CHILDREN COMPARED WITH DEFECTIVE CHILDREN—continued.

	Boys.		Girls.		Total.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Teeth brushed occasionally:						
Nondefective.....	5	31.2	2	14.3	7	23.3
Defective.....	22	36.1	19	37.2	41	36.6
Teeth never brushed:						
Nondefective.....	3	18.7	1	7.1	4	13.3
Defective.....	16	26.2	9	17.6	25	22.3
Nutrition good:						
Nondefective.....	16	100.0	11	78.6	27	90.0
Defective.....	32	52.2	31	60.9	63	56.2
Nutrition fair:						
Nondefective.....	2	12.5	2	14.3	4	13.3
Defective.....	24	39.3	18	35.3	42	37.5
Nutrition poor:						
Nondefective.....	0	.....	0	.....	0	.....
Defective.....	3	5.0	3	5.3	6	5.3

Weighing and measuring.—Once each month the children were weighed and measured. The results of these weighings were placed on classroom charts and on the monthly report cards for the information of the children and the parents.

Table XIV shows the results of the December weighing for each grade. Following this table is a comparison of the September and December results.

TABLE XIV.—*Weight and height records, Perry Point School, December, 1921.*

Grade.	Number examined.	Normal or above.		10 per cent below to normal.		More than 10 per cent below normal.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Kindergarten.....	4	4	100.0	0	0	0	0
First.....	29	16	55.1	9	31.0	4	13.8
Second.....	24	8	33.3	10	41.6	6	25.0
Third.....	16	6	37.5	8	50.0	2	12.5
Fourth.....	20	8	40.0	11	55.0	1	5.0
Fifth.....	14	8	57.1	5	35.7	1	7.1
Sixth.....	16	7	43.7	6	37.5	3	18.7
Seventh.....	11	4	36.3	5	45.5	2	18.2
Eighth.....	7	5	71.4	1	14.3	1	14.3
Total.....	141	66	46.8	55	39.1	20	14.2

SEPTEMBER, 1921, AND DECEMBER, 1921, COMPARED.

	September.		December.	
	Number.	Per cent.	Number.	Per cent.
Total weighed and measured.....	143	.....	141	.....
Normal or above.....	35	24.5	66	46.8
10 per cent below to normal.....	58	40.5	55	39.0
More than 10 per cent below normal.....	50	34.9	20	14.2

JUNIOR HEALTH DEPARTMENT.

The health department was handicapped somewhat without the services of a public-health nurse. To offset this handicap, a Junior Department of Health was organized among the school children. The department consisted of a junior health officer and five inspectors, one from each room. Assisted by the teachers, each classroom endeavored to receive the highest number of health credits by the following achievements:

1. Highest percentage of children of normal weight.
2. Highest percentage of children who have had physical defects corrected since the medical inspection.
3. Highest personal hygiene record, which included brushing the teeth at least twice each day, sleeping with windows open, having clean hands and fingernails each day, having a clean handkerchief each day, and keeping the health pledge each week.
4. Cleanliness of classroom.
5. Nearest correct temperature of classroom.
6. Thorough airing of classroom at least three times each day.

The interest which the children took in this work was remarkable and resulted in the correction of many physical defects, a higher nutritional standard, better personal cleanliness, and a healthier school.

Children's playground.—During the three summer vacation months a trained playground director was appointed to supervise our children's playground. This proved a valuable addition to our activities, and was beneficial in more ways than one. During the three months, 130 different children attended the playground. The daily average attendance was 23.

"Cho Cho," the health clown.—The biggest attraction of the year for the children was the entertainment given by Cho Cho, the health clown. This performance showed each child just how to play the game of health. It served as a climax or reward for all the public-health work done by the children during the year.

SANITARY ENGINEERING.

Malaria control.—Mosquito-control operations started in April and lasted through October. The work consisted of digging new drainage ditches, maintaining old ditches, filling in and draining swampy places, and oiling. There are on the reservation approximately 6 miles of ditches which require systematic inspection and maintenance, 3 miles of shore line, and numerous swamps which require attention. All of the work in connection with mosquito control was done by three trained men.

It was evident that there was decidedly less breeding of Anopheles and Culex than during previous years. There were no cases of malaria reported on the reservation during the year. Nevertheless, there is a possibility that the malaria plasmodium may be introduced by patients, laborers, and colored help, many of whom come from communities where malaria fever is prevalent.

The following table summarizes the malaria control work for the year:

TABLE XV.—Report of malaria-control operations, 1921.

Month.	Salaries.	Travel.	Oil.	Total.	Ditching (feet).		Main-tenance	Filling in.	Oil used.
					Old.	New.			
April.....	\$124.80		\$15.00	\$139.80	1,895	790	Feet. 5,065	Cu. ft. 8,000	Gals. 176
May.....	110.00		14.00	124.00	1,233	979	2,969	2,550	53
June.....	244.57	\$32.52		277.39	1,000	500	1,100	500	10
July.....	265.84			265.84	2,130		2,400	1,200	110
August.....	306.07		11.50	317.57	1,790	1,009	5,900	1,390	171
September.....	204.49		11.50	215.99	835	425	3,595	1,100	130
October.....	68.64			68.64	100		500		15
Total.....	1,324.41	32.82	52.00	1,409.23	8,983	3,694	21,539	14,740	665

COMPARISON OF WORK AND EXPENDITURES, 1921 AND 1920.

	Expendi-tures.	Ditching (feet).		Main-tenance.	Filling in.	Oil used.
		Old.	New.			
1921.....	\$1,409.23	8,983	3,694	Feet. 21,539	Cu. ft. 14,740	Gals. 665
1920.....	1,803.93	5,150	7,542	7,990	2,905	566

Water supply.—The raw-water supply for the reservation comes from the Susquehanna River. The water is pumped from the intake channel by electrically-driven pumps through 30-inch mains to a mechanical filtration plant. As the water enters the settling chamber, samples are taken at two-hour intervals and analyzed to determine the amount of coagulant necessary to precipitate the suspended matter. The turbidity of the raw water varies greatly, and therefore the coagulant, alum sulphate, must be varied accordingly. The alkalinity of the water is also subject to change during the course of a day.

After settling for about two hours, the water flows by gravity into the rapid sand filters. Filtration takes place at the rate of 2 inches in 55 seconds. As the filtered water flows into the clear-water basin, liquid chlorine is added.

The capacity of the plant is estimated to be 1,500,000 gallons a day.

Bacterial and chemical analyses of the raw and filtered water are made each day.

During the year the following number of water samples were analyzed for various towns:

Town.	Number of samples analyzed.
North East.....	3
Wilmington.....	3
Perryville.....	4
Tome Institute (swimming pool).....	7
Tome Institute (drinking water).....	12
Total.....	29

General sanitation.—Under the heading of general sanitation are included the sanitary inspections of houses, basements, garbage and trash cans, and garbage and trash disposal places, and the investigation of sanitary nuisances. This work was done throughout the year at irregular intervals.

Rat campaign.—Owing to the fact that there is no incinerator on the reservation in which trash and garbage could be burned, the present dumping places harbor many rats which, in the course of the year, work their way to the village in large numbers. To combat these pests, a rat-trapping campaign was started in July and continued throughout the year. During the six-month period 375 rats were trapped and many others were poisoned.

Fly campaign.—Fly-breeding places on the reservation are comparatively few. The manure from the stables is removed at least twice each week and spread upon the land used for farming. The hog-feeding pens are cleaned daily, and the uneaten garbage is hauled away. The garbage cans around the hospital kitchens are kept in a clean condition at all times, and the daily collection of garbage throughout the village, limits breeding around the houses and other buildings.

There are, however, three places where flies either breed or gather for food in large numbers; they are the garbage-disposal fields, the trash dumps, and the garbage feeding floors.

A number of large flytraps were placed around the hog pens and other places where flies collected. It is estimated that over 50 pounds of flies were caught during two months. According to Dr. L. O. Howard, Chief Bureau of Entomology, United States Department of Agriculture, 50 pounds of flies would represent over 2,300,000 single flies.

Food inspections.—Regular inspections of food-handling places, such as the hospital kitchens, diet kitchens, dining rooms, store-rooms, etc., were made during the year. Inspections were also made of the grocery stores, meat markets, restaurants, boarding houses,

etc. The sanitary conditions in all these places have improved considerably during the year.

Milk supply.—The milk supply for the village is received from the Aberdeen Dairy, located about 6 miles from the reservation. The milk which is received from the farmers early each morning is pasteurized immediately, under the supervision and instruction of the local health department. After the milk is cooled to 50° it is hauled by truck to the reservation. Under this schedule the milk when it reaches the consumers is less than six hours old. Bacteriological and chemical samples are collected and analyzed twice each week. The results of these examinations are shown in Table XVI.

The milk supply for the hospital was obtained from two sources; during the first and third quarters from the Aberdeen Dairy, and during the second and fourth quarters from the Lancaster Dairy. The results of bacteriological and chemical analyses of both supplies are included in the table.

TABLE XVI.—*Bacteriological and chemical analyses of milk, monthly averages of butter fat, and temperature and bacteria per c. c. for the year 1921.*

Month.	Aberdeen milk for village.				Aberdeen milk for hospital.				Lancaster milk for hospital.		
	Number of samples.	Butter fat.	Temperature (degrees F.).	Bacteria per c. c.	Number of samples.	Butter fat.	Temperature (degrees F.).	Bacteria per c. c.	Butter fat.	Temperature (degrees F.).	Bacteria per c. c.
January.....	8	3.82	.....	26,000	8	4.0	.....	22,400	.....	.....	.....
February.....	6	3.86	.....	26,000	6	3.86	.....	15,400	.....	.....	.....
March.....	8	3.73	.....	117,160	8	3.75	.....	71,800	.....	.....	.....
April.....	9	3.85	61	22,700	9	.....	.....	.....	3.66	49	104,000
May.....	9	4.0	60	15,900	9	.....	.....	.....	3.6	58	49,000
June.....	8	3.8	65	57,700	8	.....	.....	.....	3.5	58	87,400
July.....	9	3.6	71	87,000	9	3.6	68	93,000	.....	.....	.....
August.....	9	3.49	63	118,300	9	3.5	58	156,200	.....	.....	.....
September.....	9	3.46	56	118,000	9	3.56	55	21,000	.....	.....	.....
October.....	8	3.9	55	44,300	8	.....	.....	.....	3.67	53	83,500
November.....	8	4.1	56	68,000	8	.....	.....	.....	3.8	52	82,000
December.....	7	3.99	52	17,700	7	.....	.....	.....	3.59	51	207,700
Yearly average.....	.....	3.8	59	59,800	.....	3.7	60	63,300	3.63	54	102,300

PUBLIC HEALTH EDUCATION.

It was the aim of the department to advise the people of the reservation and all others concerned, of the activities of the health department; also, to educate them to a better understanding of the term "public health service." This was done through lectures, circular letters, bulletins, exhibits, and newspapers. Several newspapers published the series of articles prepared by the Public Health Service on "The Growing Child" and "Your Baby." The bulletins most widely distributed are listed below.

Issued by the United States Public Health Service:

Typhoid Fever; Its Causation and Prevention.
 Malnutrition.
 Children's Teeth, a Community Responsibility.
 Transmission of Disease by Flies.
 Safe Milk.
 Care of the Baby.
 The Summer Care of the Baby.
 Keep Well Series, Nos. 1 to 11.
 Health Almanac.
 Cooling Milk on the Farm.

Issued by the Children's Bureau, Department of Labor:

Prenatal Care.
 Infant Care.
 Child Care.

Issued by the Bureau of Education, Department of the Interior:

Teaching Health.
 Diet for School Children.
 Summer Health and School Play.

The following gives the number of bulletins and department circulars distributed during the year.

Month.	Government bulletins.	Health department circulars.
January.....	200	.....
February.....	100	40
March.....	.....	1,100
April.....	2,200	.....
May.....	75	500
June.....	110	.....
September.....	175	280
October.....	20	.....
December.....	10	500
Total.....	2,890	2,400

Garbage Disposal by Feeding Hogs.¹

For approximately two and one-half years garbage has been disposed of upon the reservation by feeding it to hogs. The experience gained, certain results, and conclusions arrived at relative to the practice of disposing of garbage in this manner are enumerated below.

Daily collections of garbage are made from the hospital and village. This collection is made by one man, using a one-horse dump cart. The garbage is handled but once, being dumped directly from the cart onto the feeding floor at the hog house. By collecting daily and feeding the hogs on the same day that the collection is made, the garbage has the greatest food value. It has not soured, molds have not formed, and there is less likelihood of having any food poisoning. Daily collections are undoubtedly the best; but if this is not practicable, collections should be made not less than three times a week.

The dump cart used for the collection of garbage has a metal body with hinged covers, which allows it to be cleaned easily. It is the

¹ By C. H. Taylor, Farm Manager.

same type of sanitary dump cart in use at the United States Army encampments.

The amount of garbage collected per day varies with the season. The largest amount, though not necessarily of the greatest feeding value, is collected usually during July, August, and September. Rather than overfeed the hogs, any excess garbage, together with the refuse cleaned from the feeding floor, is dumped in any available field on the farm. This excess garbage and refuse is either cultivated into the soil or plowed under within one week from the time it was dumped. The fertilizing value of the garbage and refuse is considerable, at least enough to pay for the additional labor involved in plowing it under.

The hogs are fed upon a concrete feeding floor, which is thoroughly cleaned each day. No garbage or refuse is allowed to remain on the floor over two feeding periods. The hogs are usually fed about 2 o'clock in the afternoon. They have access to the feeding floor during the afternoon and evening, but are shut off the floor the next morning.

In order to feed garbage to hogs with any degree of safety, it is of the utmost importance that the hogs be given the sero-simultaneous treatment against hog cholera. If hogs are purchased, this should be given on the day they arrive. If breeding and raising pigs are carried on, the pigs should be treated at weaning time. There is considerable difference in opinion regarding the treatment of pigs. Some advocate giving the pigs the "serum alone" treatment at weaning time, followed in about six weeks with the sero-simultaneous treatment. Others give the sero-simultaneous treatment when the pigs are weaned. The latter method has been used on the reservation and satisfactory results have been obtained.

Whether it is more profitable to purchase feeders, averaging about 90 pounds in weight, or to breed and raise the pigs, is dependent upon many conditions which are more or less of local character. The amount of land and the buildings or building space available may decide the question. More land, more buildings or hog houses, and more small lots will be required if breeding is carried on. It will require more labor, for the sows and pigs will, for a short time at least, need attention, and in general require more attention than the same number of feeders.

On the other hand, the garbage feeding plant may be located in a section where feeders can not be purchased locally. This will necessitate buying at some market and shipping, possibly, a considerable distance, incurring in this manner the risk incident to shipping and loss in weight. By breeding, the exact type or breed desired may be had, which will not be possible if feeders are purchased. Generally speaking, breeding will probably be better for the small feeding plant, with a capacity not exceeding 50 to 60 hogs; but for the larger feeding plant it will doubtless be more profitable to purchase feeders.

As to the feeding of brood sows and pigs, the practice on the reservation has been to feed the sows a mixture of mill feed for a short time before and after farrowing; and to feed the pigs corn meal, middling, tankage, etc., for a few weeks after weaning. It is believed that better results will be obtained from this method of feeding than that of giving the sows and pigs nothing but the garbage.

The average number of hogs fed each month during the year 1921 was 70. The population of the reservation, including the village and hospital, was approximately 1,380. There was an excess of garbage most of the time and at all times the garbage supply was sufficient to properly feed the hogs on hand.

The hogs gained in weight on an average of from 1½ to 1½ pounds per day. They gained this amount consistently throughout the time that feeding of garbage was carried on.

The labor costs have been small. One man working nine hours each day can collect the garbage from this hospital and village daily, clean the feeding floors, feed the hogs, and haul all refuse and excess garbage to the fields. The cost of collecting the garbage is charged to the village and hospital; the time devoted to feeding, cleaning feeding floors, etc., is charged to the hogs.

The following will indicate to what extent the disposing of garbage by feeding hogs was profitable here during the year 1921:

Total costs for year 1921	\$1, 073. 65
Total credits for year 1921	1, 975. 70
Profits, or net receipts	902. 05

The costs include all labor charge to hogs, feed, serum and virus purchased.

The credits include the value of the hogs killed, dressed, and delivered to the hospital.

Summary.

This report outlines the activities of the health department on the United States Public Health Service Reservation at Perryville, Md., during 1921, its second year. The following are the outstanding features of the report:

1. The high birth rate, 38.41, the low death rate, 2.47, and the low infant mortality rate, 32.25, are of vital interest.
2. A comparatively small number of communicable diseases occurred on the reservation during the year.
3. Over 90 per cent of the school children are either naturally immune from diphtheria as determined by the Schick test, or have been actively immunized.
4. The medical examination of babies and school children resulted in the correction of many physical defects at an early age.
5. The Junior Health Department organized in the school is playing an important rôle in the "health game."

6. The safe water and milk supplies played an important part in maintaining a health standard.

7. Under sanitary engineering work, mosquito control operations are outstanding. The almost complete absence of the mosquito as a pest, as well as a carrier of malaria, helps to make this reservation a desirable dwelling place and a suitable place for United States Veterans' hospitals.

8. Garbage disposal at an annual profit of \$902 for a community of 1,382 population.

FEDERAL ALLOTMENTS TO STATES FOR COOPERATIVE VENEREAL DISEASE WORK.

The following table gives the schedule of allotments to States of the sum of \$225,000 for cooperative work with the Division of Venereal Diseases, United States Public Health Service, appropriated by the act of February 17, 1922, entitled "An act making appropriations for the Treasury Department for the fiscal year ending June 30, 1923, and for other purposes." (Allotted on the basis of population, 1920 census.)

State.	Population, 1920 census.	Distribution by per capita method.	State.	Population, 1920 census	Distribution by per capita method.
Alabama.....	2,348,174	\$4,997.98	Nevada.....	77,407	\$164.75
Arizona.....	334,162	711.25	New Hampshire.....	443,083	943.08
Arkansas.....	1,752,204	3,729.48	New Jersey.....	3,155,900	6,717.18
California.....	3,426,861	7,293.91	New Mexico.....	360,350	766.99
Colorado.....	939,629	1,999.96	New York.....	10,385,227	22,104.46
Connecticut.....	1,380,631	2,938.61	North Carolina.....	2,559,123	5,448.97
Delaware.....	223,003	474.65	North Dakota.....	646,872	1,376.84
District of Columbia.....	437,571	931.35	Ohio.....	5,759,394	12,258.59
Florida.....	968,470	2,061.34	Oklahoma.....	2,028,283	4,317.10
Georgia.....	2,895,832	6,163.64	Oregon.....	738,389	1,667.41
Idaho.....	431,866	919.21	Pennsylvania.....	8,720,017	18,560.14
Illinois.....	6,485,280	13,803.61	Rhode Island.....	604,397	1,286.43
Indiana.....	2,930,390	6,237.19	South Carolina.....	1,683,724	3,583.73
Iowa.....	2,404,021	5,116.84	South Dakota.....	636,547	1,354.86
Kansas.....	1,769,257	3,765.78	Tennessee.....	2,337,885	4,976.06
Kentucky.....	2,416,630	5,143.68	Texas.....	4,663,228	9,925.46
Louisiana.....	1,798,509	3,828.04	Utah.....	449,396	956.52
Maine.....	768,014	1,634.68	Vermont.....	352,428	750.13
Maryland.....	1,449,661	3,085.53	Virginia.....	2,309,187	4,914.99
Massachusetts.....	3,852,356	8,199.65	Washington.....	1,356,621	2,887.50
Michigan.....	3,668,412	7,808.05	West Virginia.....	1,463,701	3,115.42
Minnesota.....	2,387,125	5,080.88	Wisconsin.....	2,632,067	5,602.23
Mississippi.....	1,790,618	3,811.24	Wyoming.....	194,402	413.78
Missouri.....	3,404,055	7,245.37			
Montana.....	548,889	1,168.28	Total.....		225,000.00
Nebraska.....	1,296,372	2,759.26			

DEATHS DURING WEEK ENDED APR. 22, 1922.

Summary of information received by telegraph from industrial insurance companies for week ended Apr. 22, 1922, and corresponding week, 1921. (From the Weekly Health Index, Apr. 25, 1922, issued by the Bureau of the Census, Department of Commerce.)

	Week ended Apr. 22, 1922.	Corresponding week, 1921.
Policies in force.....	48,819,583	46,621,006
Number of death claims.....	9,851	8,293
Death claims per 1,000 policies in force, annual rate.....	10.5	9.3

Deaths from all causes in certain large cities of the United States during the week ended Apr. 22, 1922, infant mortality, annual death rate, and comparison with corresponding week of 1921. (From the Weekly Health Index, Apr. 25, 1922, issued by the Bureau of the Census, Department of Commerce.)

City.	Estimated population July 1, 1922.	Week ended Apr. 22, 1922.		Annual death rate per 1,000, corresponding week, 1921.	Deaths under 1 year.		Infant mortality rate, week ended Apr. 22, 1922. ³
		Total deaths.	Death rate. ¹		Week ended Apr. 22, 1922.	Corresponding week, 1921.	
Total.....	27, 615, 673	6, 852	12.9	12.9	982	970	.....
Akron, Ohio.....	208, 435	28	7.0	6.8	5	6	53
Albany, N. Y.....	116, 223	33	14.8	19.0	4	4	90
Atlanta, Ga.....	220, 047	59	14.0	17.6	8	5	.....
Baltimore, Md.....	762, 222	201	13.8	13.4	24	34	68
Birmingham, Ala.....	191, 017	37	10.1	16.2	6	9	.....
Boston, Mass.....	764, 017	223	15.2	14.8	32	30	86
Bridgeport, Conn.....	143, 555	32	11.6	10.4	5	.....	62
Buffalo, N. Y.....	528, 163	133	13.1	11.9	22	18	87
Cambridge, Mass.....	110, 944	28	13.2	14.6	4	4	73
Camden, N. J.....	121, 915	32	13.7	11.8	3	3	46
Chicago, Ill.....	2, 833, 288	602	12.7	12.3	119	106	.....
Cincinnati, Ohio.....	404, 865	142	13.3	13.7	11	11	73
Cleveland, Ohio.....	854, 003	104	10.0	10.0	34	26	88
Columbus, Ohio.....	253, 455	60	12.3	13.2	3	7	32
Dallas, Tex.....	171, 974	42	12.7	12.3	4	5	.....
Dayton, Ohio.....	161, 824	40	12.9	11.5	3	3	51
Denver, Colo.....	267, 591	70	13.6	17.8	6	13	.....
Detroit, Mich.....	993, 678	213	11.2	11.5	41	57	79
Fall River, Mass.....	120, 790	36	15.5	15.1	5	8	70
Fort Worth, Tex.....	114, 717	23	10.5	.....	.....	.....	.....
Grand Rapids, Mich.....	143, 572	32	11.6	10.3	3	4	50
Houston, Tex.....	150, 087	40	13.9	15.2	5	6	.....
Indianapolis, Ind.....	333, 257	96	15.0	13.8	11	7	84
Jersey City, N. J.....	305, 911	86	14.7	12.6	12	10	76
Kansas City, Kans.....	105, 688	27	13.3	17.1	6	6	139
Kansas City, Mo.....	343, 988	110	16.7	13.8	18	14	.....
Los Angeles, Calif.....	634, 866	191	15.7	16.2	24	18	100
Louisville, Ky.....	236, 877	61	13.4	11.9	15	3	162
Lowell, Mass.....	114, 423	30	13.7	14.7	8	4	135
Memphis, Tenn.....	167, 832	57	17.7	14.5	6	5	.....
Milwaukee, Wis.....	476, 603	95	10.4	8.5	18	9	88
Minneapolis, Minn.....	400, 970	79	10.3	11.3	7	13	38
Nashville, Tenn.....	122, 832	33	14.0	16.2	6	10	.....
New Bedford, Mass.....	127, 542	42	17.2	12.1	11	4	164
New Haven, Conn.....	169, 987	47	14.4	12.5	6	8	73
New Orleans, La.....	399, 616	121	15.8	16.3	19	20	.....
New York, N. Y.....	5, 830, 746	1, 446	12.9	12.1	226	194	87
Newark, N. J.....	431, 792	111	13.4	13.5	14	11	62
Norfolk, Va.....	124, 915	20	8.3	10.8	4	3	71
Oakland, Calif.....	233, 379	37	8.3	10.6	4	3	50
Omaha, Nebr.....	200, 739	70	18.2	14.6	5	8	54
Paterson, N. J.....	138, 521	40	13.1	15.6	3	7	46
Philadelphia, Pa.....	1, 894, 500	444	12.2	14.1	63	78	75
Pittsburgh, Pa.....	607, 902	136	11.7	17.2	27	28	86
Portland, Oreg.....	269, 240	58	11.2	11.6	5	10	49
Providence, R. I.....	241, 011	59	12.8	11.8	5	11	40
Richmond, Va.....	178, 365	49	14.3	16.9	3	9	37
Rochester, N. Y.....	311, 548	65	10.9	11.4	9	12	69
St. Louis, Mo.....	795, 008	199	13.1	12.7	22	14	.....
Salt Lake City, Utah.....	123, 918	15	6.3	16.3	2	3	30
San Francisco, Calif.....	529, 792	145	14.3	16.1	7	13	40
Seattle, Wash.....	315, 312	57	9.4	9.2	1	5	85
Spokane, Wash.....	104, 445	24	12.0	17.0	4	4	85
Springfield, Mass.....	140, 052	40	14.9	11.9	5	4	74
Syracuse, N. Y.....	181, 012	48	13.8	13.8	6	9	72
Toledo, Ohio.....	260, 717	43	8.6	9.9	4	5	39
Trenton, N. J.....	125, 075	48	20.0	14.9	11	2	168
Washington, D. C.....	437, 571	140	16.7	15.2	14	20	80
Wilmington, Del.....	115, 568	26	11.7	13.8	6	3	117
Worcester, Mass.....	188, 449	43	11.9	12.4	8	11	87
Yonkers, N. Y.....	105, 422	24	11.9	12.1	4	3	83
Youngstown, Ohio.....	144, 970	30	10.8	10.8	5	10	66

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 Apr. 29, 1922.

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

ARKANSAS.		Cases.	GEORGIA.		Cases.
Chicken pox.....		6	Chicken pox.....		28
Diphtheria.....		1	Diphtheria.....		24
Hookworm disease.....		1	Dysentery (amebic).....		3
Influenza.....		52	Hookworm disease.....		2
Malaria.....		29	Influenza.....		295
Measles.....		5	Malaria.....		10
Pellagra.....		4	Measles.....		3
Scarlet fever.....		5	Mumps.....		10
Smallpox.....		4	Pellagra.....		2
Tuberculosis.....		2	Pneumonia.....		9
Typhoid fever.....		3	Polioomyelitis.....		1
Whooping cough.....		12	Scarlet fever.....		4
			Septic sore throat.....		3
			Smallpox.....		34
			Tetanus.....		1
			Tuberculosis (all forms).....		24
			Typhoid fever.....		12
			Whooping cough.....		13
			ILLINOIS.		
			Cerebrospinal meningitis:		
			Chicago.....		1
			Equality.....		1
			Mount Carroll.....		1
			Newton.....		1
			Piatt County—Cerro Gordo Township.....		1
			Virden.....		1
			Diphtheria:		
			Chicago.....		93
			Cicero.....		10
			Scattering.....		46
			Influenza.....		25
			Lethargic encephalitis:		
			Chicago.....		1
			Pekin.....		1
			Pneumonia.....		323
COLORADO.		Cases.			
(Exclusive of Denver.)					
Chicken pox.....		18			
Diphtheria.....		13			
Influenza.....		4			
Mumps.....		2			
Pneumonia.....		4			
Scarlet fever.....		7			
Smallpox.....		3			
Tuberculosis.....		111			
Typhoid fever.....		1			
Whooping cough.....		1			
FLORIDA.		Cases.			
Diphtheria.....		13			
Influenza.....		8			
Malaria.....		13			
Ophthalmia neonatorum.....		1			
Paratyphoid fever.....		1			
Pneumonia.....		1			
Scarlet fever.....		1			
Smallpox.....		4			
Typhoid fever.....		10			

ILLINOIS—continued.

	Cases.
Scarlet fever:	
Chicago.....	64
Jacksonville.....	10
Oregon.....	13
Scattering.....	76
Smallpox:	
Pekin.....	9
Peoria.....	10
Scattering.....	21
Typhoid fever.....	12
Whooping cough.....	115

IOWA.

Diphtheria.....	17
Scarlet fever.....	45
Smallpox.....	11

KANSAS.

Chicken pox.....	41
Diphtheria.....	21
Influenza.....	17
Measles.....	4
Mumps.....	6
Pneumonia.....	26
Poliomyelitis.....	8
Scarlet fever.....	38
Smallpox.....	13
Tuberculosis.....	43
Typhoid fever.....	6
Whooping cough.....	18

LOUISIANA.

Diphtheria.....	9
Influenza.....	49
Scarlet fever.....	4
Smallpox.....	15
Typhoid fever.....	16

MARYLAND.¹

Cerebrospinal meningitis.....	1
Chicken pox.....	59
Diphtheria.....	18
German measles.....	4
Influenza.....	42
Lethargic encephalitis.....	1
Malaria.....	2
Measles.....	309
Mumps.....	160
Pneumonia (all forms).....	62
Scarlet fever.....	63
Septic sore throat.....	4
Smallpox.....	2
Tuberculosis.....	80
Typhoid fever.....	3
Whooping cough.....	19

MASSACHUSETTS.

Cerebrospinal meningitis.....	1
Chicken pox.....	110
Conjunctivitis (suppurative).....	14
Diphtheria.....	145
German measles.....	30
Influenza.....	26
Lethargic encephalitis.....	5

MASSACHUSETTS—continued.

	Cases.
Measles.....	1,010
Mumps.....	146
Ophthalmia neonatorum.....	15
Pneumonia (lobar).....	114
Poliomyelitis.....	1
Scarlet fever.....	174
Septic sore throat.....	2
Tetanus.....	1
Trachoma.....	1
Tuberculosis (all forms).....	167
Typhoid fever.....	10
Whooping cough.....	99

MISSISSIPPI.

Diphtheria.....	10
Scarlet fever.....	4
Smallpox.....	3
Typhoid fever.....	8

MONTANA.

Diphtheria.....	4
Rocky Mountain spotted or tick fever—Pinc-view.....	1
Scarlet fever.....	6
Smallpox.....	19

NEBRASKA.

Chicken pox.....	15
Diphtheria.....	11
German measles.....	1
Influenza.....	51
Measles:	
Fillmore County.....	14
Knox County.....	19
Lincoln.....	25
Omaha.....	21
Scattering.....	15
Mumps.....	27
Scarlet fever:	
Dawson County.....	14
Scattering.....	22
Smallpox.....	7
Whooping cough.....	4

NEW JERSEY.

Chicken pox.....	119
Diphtheria.....	95
Influenza.....	12
Malaria.....	1
Measles.....	1,053
Pneumonia.....	108
Poliomyelitis.....	1
Scarlet fever.....	212
Typhoid fever.....	6
Whooping cough.....	148

NEW MEXICO.

Diphtheria.....	23
Influenza.....	25
Measles.....	1
Pneumonia.....	9
Scarlet fever.....	8
Smallpox.....	2
Tuberculosis.....	20

¹ Week ended Friday.

NEW YORK.		VERMONT.	
(Exclusive of New York City.)		Cases.	Cases.
Coreobrospinal meningitis.....	2	Chicken pox.....	13
Diphtheria.....	107	Diphtheria.....	11
Influenza.....	80	Influenza.....	1
Lethargic encephalitis.....	6	Measles.....	31
Measles.....	653	Mumps.....	6
Pneumonia.....	259	Pneumonia.....	1
Scarlet fever.....	177	Scarlet fever.....	31
Typhoid fever.....	14	Whooping cough.....	12
Whooping cough.....	166		
NORTH CAROLINA.		WASHINGTON.	
Chicken pox.....	93	Chicken pox.....	37
Diphtheria.....	22	Diphtheria.....	23
Measles.....	50	Influenza.....	3
Scarlet fever.....	11	Measles.....	11
Septic sore throat.....	6	Mumps.....	57
Smallpox.....	31	Pneumonia.....	3
Typhoid fever.....	7	Scarlet fever.....	26
Whooping cough.....	112	Smallpox.....	22
		Tuberculosis.....	10
		Typhoid fever.....	1
		Whooping cough.....	41
OREGON.		WEST VIRGINIA.	
Chicken pox.....	13	Diphtheria.....	4
Diphtheria.....	7	Scarlet fever.....	9
Influenza.....	12	Smallpox.....	4
Measles.....	2	Tuberculosis.....	5
Mumps.....	5	Typhoid fever.....	2
Pneumonia.....	13		
Scarlet fever.....	7	WISCONSIN.	
Septic sore throat.....	1	Milwaukee:	
Smallpox.....	9	Chicken pox.....	31
Tuberculosis.....	10	Diphtheria.....	8
Whooping cough.....	1	German measles.....	2
		Influenza.....	1
		Measles.....	3
		Pneumonia.....	23
		Scarlet fever.....	11
		Smallpox.....	2
		Tuberculosis.....	18
		Typhoid fever.....	2
		Whooping cough.....	52
SOUTH DAKOTA.		Scattering:	
Chicken pox.....	10	Chicken pox.....	57
Diphtheria.....	5	Diphtheria.....	17
Measles.....	14	German measles.....	8
Pneumonia.....	2	Influenza.....	175
Scarlet fever.....	16	Measles.....	19
Smallpox.....	5	Pneumonia.....	11
Tuberculosis.....	4	Poliomyelitis.....	1
Typhoid fever.....	1	Scarlet fever.....	79
		Smallpox.....	20
		Tuberculosis.....	23
		Typhoid fever.....	6
		Whooping cough.....	54
TEXAS.			
Chicken pox.....	30		
Diphtheria.....	13		
Influenza.....	25		
Measles.....	83		
Pellagra.....	2		
Pneumonia.....	24		
Smallpox.....	53		

¹ Deaths.

Delayed Reports for Week Ended Apr. 22, 1922.

DISTRICT OF COLUMBIA.		KENTUCKY—continued.	
	Cases.		Cases.
Chicken pox.....	44	Septic sore throat.....	1
Diphtheria.....	11	Smallpox.....	1
Measles.....	21	Tonsillitis.....	3
Scarlet fever.....	7	Tuberculosis:	
Smallpox.....	3	Jefferson County.....	24
Tuberculosis.....	28	Scattering.....	3
Typhoid fever.....	1	Typhoid fever.....	5
Whooping cough.....	5	Whooping cough.....	10
KENTUCKY.		MAINE.	
Chicken pox.....	8	Chicken pox.....	6
Diphtheria:		Diphtheria.....	5
Jefferson County.....	10	German measles.....	1
Scattering.....	5	Influenza.....	42
Influenza.....	44	Measles.....	1
Measles:		Mumps.....	1
Jefferson County.....	8	Pellagra.....	1
Scott County.....	9	Pneumonia.....	6
Scattering.....	20	Scarlet fever.....	36
Mumps.....	4	Tuberculosis.....	7
Pneumonia.....	17	Typhoid fever.....	2
Scarlet fever.....	2	Whooping cough.....	22

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.	Polio-myelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
1922.										
Alabama (March).....		40	1,129	20	61	5	1	33	132	37
Colorado (February).....	2	137	134		25			41	157	13
Colorado (March).....	2	111	1,574		87		1	254	86	10
Delaware (March).....		13	29	1	9			403		5
Hawaii (March).....		51	177		48			2		16
Iowa (March).....	2	75	18		11		2	279	139	2
Kansas (March).....	5	199	1,752		37			335	87	11
Maine (March).....	4	38	1,123		49			182	5	5
Mississippi (March).....	2	69	13,417	4,415	42	301	1	11	98	72
New Jersey (March).....	9	545	684		2,525		2	1,407	2	27
North Dakota (March).....		17			4			66	115	
Ohio (March).....	4	749	1,925		2,306		5	1,214	438	61
Oregon (March).....	2	84	502		10			103	86	7
Virginia (March).....	10	172	13,173	112	598	9	4	79	83	30
Washington (March).....		78	343		34		2	123	233	11
Wyoming (March).....		4	558		4			19	62	6

CITY REPORTS FOR WEEK ENDED APR. 15, 1922.

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 Apr. 15, 1922.		City.	Median for previous years.	Week ended Apr. 15, 1922.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				New Jersey—Continued.			
Birmingham.....	0	.....	1	Newark.....	3	2	1
Georgia:				Passaic.....	0	1	.....
Valdosta.....	0	.....	1	New York:			
Illinois:				Elmira.....	0	1	1
Chicago.....	4	.....	1	Ithaca.....	0	.....	1
Indiana:				New York.....	9	6	3
Mishawaka.....	0	1	1	North Carolina:			
Iowa:				Rocky Mount.....	0	.....	1
Sioux City.....	0	1	1	Ohio:			
Kentucky:				Cleveland.....	2	.....	1
Covington.....	0	.....	1	Piqua.....	0	.....	1
Massachusetts:				Pennsylvania:			
Cambridge.....	0	1	.....	Carlisle.....	0	1	.....
Fall River.....	0	1	.....	Philadelphia.....	2	3	1
Springfield.....	0	1	.....	Pittsburgh.....	0	1	.....
Michigan:				Texas:			
Detroit.....	2	.....	1	Houston.....	0	.....	1
Port Huron.....	0	1	1	West Virginia:			
Missouri:				Bluefield.....	0	.....	1
St. Louis.....	2	2	1	Charleston.....	0	1	1
New Jersey:				Huntington.....	0	.....	1
Bayonne.....	0	1	.....	Wisconsin:			
Hackensack.....	0	.....	1	Milwaukee.....	1	2	.....

DIPHTHERIA.

See p. 1098; also Telegraphic weekly reports from States, p. 1088, and Monthly summaries by States, p. 1091.

INFLUENZA.

City.	Cases.		Deaths, week ended Apr. 15, 1922.	City.	Cases.		Deaths, week ended Apr. 15, 1922.
	Week ended Apr. 16, 1921.	Week ended Apr. 15, 1922.			Week ended Apr. 16, 1921.	Week ended Apr. 15, 1922.	
Alabama:				Illinois:			
Anniston.....	.....	.....	2	Chicago.....	26	37	10
Mobile.....	.....	.....	1	Decatur.....	.....	2	1
California:				Elgin.....	.....	.....	1
Long Beach.....	2	.....	.....	Springfield.....	.....	1	1
Los Angeles.....	7	16	4	Indiana:			
Oakland.....	.....	1	.....	Anderson.....	.....	.....	1
Riverside.....	.....	1	.....	East Chicago.....	.....	.....	1
Sacramento.....	.....	.....	2	Gary.....	.....	.....	1
San Francisco.....	9	11	3	Hammond.....	.....	.....	1
Stockton.....	1	.....	.....	Indianapolis.....	.....	.....	2
Colorado:				Terre Haute.....	.....	.....	1
Denver.....	.....	.....	2	Kansas:			
Connecticut:				Wichita.....	.....	.....	1
Bridgeport.....	1	2	1	Louisiana:			
Meriden.....	5	.....	.....	Baton Rouge.....	1	.....	.....
New Britain.....	1	.....	.....	New Orleans.....	.....	5	6
Norwalk.....	.....	.....	1	Maine:			
Stonington.....	3	.....	.....	Portland.....	.....	.....	1
District of Columbia:				Maryland:			
Washington.....	1	5	3	Baltimore.....	9	21	2
Florida:				Cumberland.....	.....	1	1
Tampa.....	.....	1	.....	Massachusetts:			
Georgia:				Attleboro.....	1	.....	.....
Atlanta.....	2	4	1	Boston.....	9	7	3
Augusta.....	.....	11	.....	Braintree.....	.....	1	.....

CITY REPORTS FOR WEEK ENDED APR. 15, 1922—Continued.

INFLUENZA—Continued.

City.	Cases.		Deaths, week ended Apr. 15, 1922.	City.	Cases.		Deaths, week ended Apr. 15, 1922.
	Week ended Apr. 16, 1921.	Week ended Apr. 15, 1922.			Week ended Apr. 16, 1921.	Week ended Apr. 15, 1922.	
Massachusetts—Contd.				New York—Continued.			
Cambridge.....	5	1	.....	Poughkeepsie.....		4	.....
Fall River.....		5	2	Rochester.....	3		1
Haverhill.....	9		.....	Saratoga Springs.....		3	.....
Lynn.....		1	.....	North Carolina:			
Quincy.....	1	2	.....	Wilmington.....			1
Saugus.....	3	1	.....	Ohio:			
Somerville.....		1	.....	Cambridge.....		1	.....
Waltham.....	1		.....	Cincinnati.....	1		4
Worcester.....	3		.....	Cleveland.....		2	3
Michigan:				Columbus.....			4
Detroit.....	1	8	2	Mansfield.....		2	1
Grand Rapids.....		1	.....	Norwood.....		1	1
Highland Park.....	1	1	.....	Piqua.....		2	.....
Port Huron.....		1	1	Youngstown.....			1
Sault Ste. Marie.....		4	.....	Oregon:			
Minnesota:				Portland.....		1	2
Faribault.....			4	Pennsylvania:			
Hibbing.....		2	.....	Philadelphia.....	4	9	9
Minneapolis.....			1	Rhode Island:			
Rochester.....			1	Providence.....			2
Missouri:				South Carolina:			
Kansas City.....		3	1	Charleston.....			1
St. Louis.....		1	.....	Greenville.....			6
Nevada:				South Dakota:			
Reno.....		1	.....	Sioux Falls.....	3		.....
New Jersey:				Tennessee:			
Bayonne.....	1		.....	Nashville.....			1
East Orange.....	3		.....	Texas:			
Harrison.....	1		.....	Dallas.....	2		1
Jersey City.....	2		.....	Waco.....	1		.....
Kearny.....	6	2	.....	Utah:			
Newark.....	9	14	1	Salt Lake City.....			2
Orange.....		1	.....	Virginia:			
New York:				Danville.....	2		.....
Albany.....		5	.....	Petersburg.....		1	.....
Binghamton.....	2		.....	Richmond.....			1
Buffalo.....		6	1	Washington:			
Cohoes.....	1		.....	Seattle.....	2		.....
Ithaca.....			1	Spokane.....	4		.....
Jamestown.....	1		.....	Wisconsin:			
Mount Vernon.....	2		.....	Eau Claire.....			3
New York.....	176	42	17	Milwaukee.....			2
North Tonawanda.....	4		.....			

LETHARGIC ENCEPHALITIS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Illinois:					
La Salle.....	1	.....		
Oak Park.....		1			

MALARIA.

Alabama:			Maryland:		
Tuscaloosa.....	4	.....	Baltimore.....	1	.....
Arkansas:			New York:		
Little Rock.....	3	.....	New York.....	1	2
Florida:			Tennessee:		
Tampa.....	5	.....	Memphis.....	1	.....
Georgia:			Texas:		
Albany.....	1	.....	Dallas.....	1	.....
Savannah.....	1	.....		
Louisiana:					
New Orleans.....	1	.....		

CITY REPORTS FOR WEEK ENDED APR. 15, 1922—Continued.

MEASLES.

See p. 1098; also Telegraphic weekly reports from States, p. 1088, and Monthly summaries, by States, p. 1091.

PELLAGRA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Georgia:			Tennessee:		
Atlanta.....		1	Nashville.....	1	
Massachusetts:			Virginia:		
Boston.....	1		Petersburg.....	1	

PNEUMONIA (ALL FORMS).

Alabama:			Iowa:		
Birmingham.....		4	Burlington.....	5	2
Mobile.....		1	Council Bluffs.....		2
Montgomery.....		1	Kansas:		
California:			Kansas City.....	4	
Berkeley.....	1		Topoka.....		2
Eureka.....	2		Wichita.....		3
Los Angeles.....	28	11	Kentucky:		
Oakland.....		6	Covington.....		5
Richmond.....		1	Lexington.....		1
Sacramento.....		4	Louisville.....	17	12
San Bernardino.....		1	Louisiana:		
San Diego.....		1	New Orleans.....		6
San Francisco.....	14	6	Maine:		
Santa Ana.....		1	Auburn.....		2
Stockton.....		5	Biddeford.....	2	
Colorado:			Lewiston.....		2
Denver.....		15	Portland.....	1	
Connecticut:			Maryland:		
Bridgeport.....	3		Baltimore.....	54	32
Fairfield.....		1	Cumberland.....		1
Greenwich.....	3		Massachusetts:		
Hartford.....	7	2	Adams.....	1	
Manchester.....		1	Arlington.....		2
Meriden.....	3		Belmont.....	1	
Milford.....		1	Beverly.....		1
New London.....		1	Boston.....		20
Stamford.....	2		Braintree.....		1
Delaware:			Cambridge.....	7	4
Wilmington.....		4	Chelsea.....	2	
District of Columbia:			Easthampton.....		1
Washington.....		25	Fall River.....		6
Florida:			Framingham.....	3	
Tampa.....		2	Greenfield.....		1
Georgia:			Haverhill.....	3	2
Atlanta.....		13	Holyoke.....	3	2
Brunswick.....	1		Lawrence.....	3	1
Savannah.....		3	Leominster.....	3	2
Illinois:			Lowell.....		9
Aurora.....		2	Lynn.....	4	2
Chicago.....	319	63	Malden.....	5	3
Chicago Heights.....		2	Medford.....	1	
Cicero.....	4	1	Melrose.....		2
Decatur.....	3	2	Methuen.....	1	
East St. Louis.....		1	New Bedford.....		8
Elgin.....		1	Newburyport.....	1	
Evanston.....	2		Newton.....	2	1
Freeport.....		1	Pittsfield.....	4	3
Jacksonville.....		1	Quincy.....		3
Kewanee.....	4	1	Salem.....		1
Mattoon.....	1		Saugus.....	1	
Oak Park.....	4	1	Somerville.....	5	
Rock Island.....	3		Southbridge.....	1	
Springfield.....	2	1	Springfield.....	5	3
Indiana:			Taunton.....		1
East Chicago.....		2	Waltham.....	2	1
Elkhart.....		1	Watertown.....		1
Fort Wayne.....		3	Winthrop.....	2	2
Huntington.....		1	Woburn.....		1
Indianapolis.....		15	Worcester.....	6	4
Kokomo.....		1	Michigan:		
Muncie.....		1	Ann Arbor.....	2	
South Bend.....		2	Battle Creek.....	1	
Terre Haute.....		1	Detroit.....	83	31

CITY REPORTS FOR WEEK ENDED APR. 15, 1922—Continued.

PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Michigan—Continued.			New York—Continued.		
Flint.....	7	3	Rochester.....	28	10
Grand Rapids.....	7	1	Rome.....		1
Hamtramck.....	2	1	Saratoga Springs.....	2	1
Highland Park.....	11	1	Schenectady.....	13	7
Ishpeming.....	2	1	Syracuse.....	24	7
Jackson.....	1	1	Troy.....	7	6
Kalamazoo.....	1	1	Watertown.....	3	
Marquette.....	1	1	White Plains.....	1	
Pontiac.....	1		Yonkers.....		5
Port Huron.....	2	1	North Carolina:		
Minnesota:			Raleigh.....		1
Austin.....		2	Wilmington.....		3
Duluth.....	2	1	Winston-Salem.....		1
Hibbing.....	1	1	Ohio:		
Minneapolis.....	1	6	Akron.....	8	
Rochester.....	1	7	Barberton.....	1	
St. Paul.....	1	7	Cambridge.....		1
Missouri:			Canton.....		1
Kansas City.....	20	13	Chillicothe.....		1
St. Joseph.....		6	Cincinnati.....		5
Springfield.....		2	Cleveland.....	50	25
Montana:			Cleveland Heights.....	1	
Billings.....		1	Columbus.....		1
Missoula.....	3	1	Dayton.....	1	
Nebraska:			East Youngstown.....		2
Omaha.....		6	Findlay.....		1
Nevada:			Ironton.....		1
Reno.....	2		Lima.....		2
New Hampshire:			Lorain.....	1	
Concord.....		2	Mansfield.....	2	
Dover.....		2	Middletown.....		1
Nashua.....		5	Newark.....		1
New Jersey:			Piqua.....	2	
Atlantic City.....	2	1	Springfield.....		1
Bloomfield.....		1	Steubenville.....	1	
Clifton.....		1	Toledo.....		4
Elizabeth.....		3	Youngstown.....		3
Englewood.....	2		Zanesville.....	4	
Hackensack.....		1	Oklahoma:		
Harrison.....	1		Oklahoma.....		1
Hoboken.....		2	Oregon:		
Jersey City.....	9		Portland.....		1
Kearny.....	2	1	Pennsylvania:		
Montclair.....		3	Philadelphia.....	80	70
Morristown.....		1	Rhode Island:		
Newark.....	59	18	Newport.....		1
Orange.....	11	1	Pawtucket.....		2
Passaic.....		2	Providence.....		9
Paterson.....	7		South Carolina:		
Perth Amboy.....		2	Charleston.....		1
Phillipsburg.....		1	Greenville.....		1
Plainfield.....	4		South Dakota:		
Trenton.....	8	1	Sioux Falls.....		2
West Hoboken.....		1	Tennessee:		
West New York.....		1	Memphis.....		3
West Orange.....	1		Nashville.....		7
New Mexico:			Texas:		
Albuquerque.....		1	Dallas.....		4
New York:			El Paso.....		6
Albany.....	16		Fort Worth.....		1
Auburn.....		3	Galveston.....		1
Buffalo.....	32	15	Houston.....		4
Cohoes.....	2		Waco.....		1
Elmira.....	6	2	Utah:		
Hornell.....	1		Salt Lake City.....		7
Hudson.....	2	1	Vermont:		
Ithaca.....	1		Burlington.....		3
Jamestown.....	2	1	Rutland.....	1	
Lackawanna.....	3	1	Virginia:		
Lockport.....	5	1	Lynchburg.....		3
Middletown.....		1	Norfolk.....		4
Mount Vernon.....		1	Portsmouth.....		2
Newburgh.....	2		Richmond.....		7
New York.....	449	224	Roanoke.....		1
Niagara Falls.....		4	West Virginia:		
North Tonawanda.....		1	Bluefield.....		2
Peekskill.....	3	1	Charleston.....		2
Port Chester.....	2	1	Huntington.....		3
Poughkeepsie.....	6	3	Wheeling.....		1

CITY REPORTS FOR WEEK ENDED APR. 15, 1922—Continued.

PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Wisconsin:			Wisconsin—Continued.		
Beloit.....		1	Racine.....		1
Fond du Lac.....	1		Superior.....		1
Kenosha.....	6		Wyoming:		
Milwaukee.....	10		Cheyenne.....		1

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 Apr. 15, 1922.	
		Cases.	Deaths.
New York:			
New York.....	1	1	
Pennsylvania:			
Pittsburgh.....	0	1	

RABIES IN ANIMALS.

City.	Cases.	City.	Cases.
California:		Kentucky:	
Los Angeles.....	6	Louisville.....	3
Pasadena.....	1	North Carolina:	
		Winston-Salem.....	1

SCARLET FEVER.

See p. 1098; also Telegraphic weekly reports from States, p. 1088, and Monthly summaries by States, p. 1091.

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 Apr. 15, 1922.		City.	Median for previous years.	Week ended Apr. 15, 1922.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				Colorado:			
Birmingham.....	3	1		Denver.....	14	20	5
Mobile.....	1	6		Connecticut:			
California:				Bridgeport.....	0	5	1
Berkeley.....	0	1		Georgia:			
Los Angeles.....	3	1		Atlanta.....	6	8	
Oakland.....	0	1		Augusta.....	0	2	
Richmond.....	0	1		Savannah.....	0	4	
Stockton.....	0	3		Valdosta.....	0	1	

CITY REPORTS FOR WEEK ENDED APR. 15, 1922—Continued.

SMALLPOX—Continued.

City.	Median for previous years.	Week ended Apr. 15, 1922.		City.	Median for previous years.	Week ended Apr. 15, 1922.	
		Cases.	Deaths.			Cases.	Deaths.
Illinois:				North Carolina:			
Champaign.....		1		Durham.....	0	5	
Chicago.....	1	3	2	Wilmington.....	0	1	
Pekin.....	0	7		Winston-Salem.....	4	1	
Peoria.....	0	14		North Dakota:			
Indiana:				Fargo.....	1	2	
Elkhart.....	2	2		Ohio:			
Hammond.....	1	1		Cincinnati.....	3	1	
Muncie.....	1	2		Columbus.....	0	1	
Iowa:				Fremont.....	0	4	
Cedar Rapids.....	7	1		Hamilton.....	1	1	
Clinton.....	0	2		Mansfield.....	1	1	
Muscatine.....	0	1		Springfield.....	0	7	
Kansas:				Oklahoma:			
Atchison.....	2	1		Oklahoma.....	8	2	
Hutchinson.....	0	3		Oregon:			
Kansas City.....	6	1		Portland.....	2	15	
Leavenworth.....	0	2	1	South Dakota:			
Salina.....	5	1		Sioux Falls.....	6	1	
Wichita.....	2	2	1	Tennessee:			
Maryland:				Memphis.....	7	1	
Baltimore.....	1		1	Nashville.....	0	3	
Michigan:				Texas:			
Alpena.....	0	1		El Paso.....	1	2	
Ann Arbor.....	0	2		Waco.....	0	1	
Detroit.....	14	1		Utah:			
Port Huron.....	0	1		Salt Lake City.....	13	1	
Minnesota:				Virginia:			
Duluth.....	3	1		Danville.....	0	3	
Faribault.....		2		Washington:			
Hibbing.....	0	2		Aberdeen.....	19	2	
Mankato.....	0	1		Everett.....	0	2	
Minneapolis.....	28	9		Seattle.....	6	2	
St. Paul.....	9	8		Spokane.....	19	15	
Missouri:				Tacoma.....	0	2	
Kansas City.....	12	7	2	West Virginia:			
Montana:				Bluefield.....	5	2	
Missoula.....	0	1		Parkersburg.....	0	1	
Nebraska:				Wisconsin:			
Omaha.....	12	1		Eau Claire.....	0	1	
New York:				Superior.....	0	10	
Niagara Falls.....	0	1		Wausau.....	0	1	

TETANUS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Indiana:			Texas:		
Terre Haute.....		1	Fort Worth.....	1	1
			Galveston.....		1
			Houston.....	1	

TUBERCULOSIS.

See p. 1098; also Telegraphic weekly reports from States, p. 1088.

CITY REPORTS FOR WEEK ENDED APR. 15, 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 Apr. 15, 1922.		City.	Median for previous years.	Week ended Apr. 15, 1922.	
		Cases.	Deaths.			Cases.	Deaths.
Alabama:				New Jersey:			
Birmingham.....	1	2		Newark.....	1	1	
Mobile.....	1	1		Passaic.....	0	1	
Arkansas:				Rahway.....	0	1	
Little Rock.....	0	1		Trenton.....	0	2	
California:				New York:			
San Francisco.....	3	4		Buffalo.....	1	2	
Stockton.....	0	4		Hornell.....		1	
Colorado:				Jamestown.....	0	1	
Denver.....	0	1		Lackawanna.....	0	2	
Connecticut:				Lockport.....	0	3	
Derby.....	0	1	1	New York.....	11	3	2
Hartford.....	0	1		North Tonawanda.....	0	1	
District of Columbia:				Rochester.....	0	2	1
Washington.....	1	1		Ohio:			
Georgia:				Akron.....	0	1	
Albany.....		1		Cincinnati.....	2	1	
Augusta.....	0	1		Cleveland.....	3	1	
Macon.....	0	1		Dayton.....	0	1	
Illinois:				Ironton.....	1	1	
Chicago.....	4	1		Springfield.....	0	1	
Indiana:				Oregon:			
Hammond.....	0	1		Portland.....	0		1
Iowa:				Pennsylvania:			
Waterloo.....		4		New Kensington.....	0	1	
Louisiana:				Philadelphia.....	5	3	
New Orleans.....	4	4		Pittsburgh.....	1	2	
Maine:				Reading.....	0	1	
Portland.....	1	2		Woodlawn.....	0	1	
Massachusetts:				York.....	0	2	
Boston.....	3	1	1	Tennessee:			
Cambridge.....	0	1		Memphis.....	0	1	
Worcester.....	0	4		Texas:			
Michigan:				Galveston.....	0	1	
Detroit.....	6	3	1	West Virginia:			
Missouri:				Charleston.....	1		1
St. Louis.....	2	2		Wisconsin:			
Montana:				Milwaukee.....	1	1	
Missoula.....	0	1	1				

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City.	Population Jan. 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:										
Birmingham.....	178,270	63	1		9				6	7
Mobile.....	60,151	18							1	3
Montgomery.....	43,464	12				1				2
Tuscaloosa.....	11,996		1							
Arkansas:										
Hot Springs.....	11,695	5			1					
Little Rock.....	64,997					1			2	
North Little Rock.....	14,048					1			1	
California:										
Alameda.....	28,806	8				6				
Berkeley.....	55,886	9		5	1	1			1	1
Eureka.....	12,923	7				1				1
Long Beach.....	55,393	19		2		2				1
Los Angeles.....	576,673	188		32	3	19			43	25
Oakland.....	216,361	51		5	2	2			7	4
Pasadena.....	45,354	18		1		2			1	
Richmond.....	16,843	4		1						

CITY REPORTS FOR WEEK ENDED APR. 15, 1922—Continued.

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

City.	Popula- tion Jan. 1, 1920, sub- ject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Indiana—Continued.										
Gary.....	55,378	18		1	2		1			
Hammond.....	36,004	10	1		1		1			
Huntington.....	14,000	5	1							
Indianapolis.....	314,194	86	4		42		8		3	8
Kokomo.....	30,067	11		1						1
La Fayette.....	22,488	9	2						1	
Logansport.....	21,626	4							3	
Mishawaka.....	15,195	4					1		2	
Muncie.....	36,624	6			1					
South Bend.....	70,983	6					1		8	1
Terre Haute.....	66,083	10			1		6			
Iowa:										
Burlington.....	24,057						1		3	1
Cedar Rapids.....	45,566		2							
Clinton.....	24,151		5				1			
Council Bluffs.....	36,162	8	1	1	4					
Davenport.....	56,727		1				1			
Mason City.....	20,065	4	1				2			
Muscatine.....	16,068	6					1			
Sioux City.....	71,227	1	3							
Waterloo.....	36,230				2					
Kansas:										
Atchison.....	12,630						1			
Coffeyville.....	13,452	2								
Fort Scott.....	10,693	2	1						1	
Hutchinson.....	23,298	1	1				1		1	1
Kansas City.....	101,177		2		3		1		2	
Lawrence.....	12,456	5							5	
Parsons.....	16,028	5					1			1
Salina.....	15,085	6					2			
Topeka.....	50,022	12	1		2		1		1	
Wichita.....	72,128	33	4	1	2		6			1
Kentucky:										
Covington.....	57,121	23			9					5
Lexington.....	41,534	17			45				1	2
Louisville.....	234,891	73	1		10	1			31	4
Paducah.....	24,735						3			
Louisiana: New Orleans.....	387,219	110	7	1	1		4		39	18
Maine:										
Auburn.....	16,985	4								1
Bath.....	14,731	5								
Biddeford.....	18,008	3								1
Lewiston.....	31,791	13			1		2	1	2	1
Portland.....	69,272	20	4				5			2
Sanford.....	10,691	3								
Maryland:										
Baltimore.....	733,826	200	20	2	237	1	32		35	20
Cumberland.....	29,837	12	2				1		1	
Massachusetts:										
Adams.....	12,967	4								
Amesbury.....	10,036	1	1							
Arlington.....	18,665	5								
Attleboro.....	19,731	0							1	
Belmont.....	10,749	1							2	
Beverly.....	22,551	3	1		3		1			
Boston.....	748,060	259	54	1	218	1	43		45	23
Braintree.....	10,580	4								3
Brookline.....	37,748	5	2		3		4			
Cambridge.....	109,694	25	3		70	1	6		6	4
Chelsea.....	43,184	9	2				1		4	
Chicopee.....	36,214	6	2	1	3				1	
Danvers.....	11,108		1							
Dedham.....	10,792	0								
Easthampton.....	11,261	1	1							
Everett.....	40,120	6			5				3	
Fall River.....	120,485	36	2				5		6	3
Framingham.....	17,033	3					2		2	
Gardner.....	16,971	7					1			
Greenfield.....	15,462	5			1		1			
Haverhill.....	53,884		8				2		2	1
Holyoke.....	60,203	17	1		33		1		2	1
Lawrence.....	94,270	24	1		41		1		3	
Leominster.....	19,744	6					1		1	
Lowell.....	112,479	40	3		3		2		1	1

CITY REPORTS FOR WEEK ENDED APR. 15, 1922—Continued.

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

City.	Population Jan. 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Massachusetts—Continued.										
Lynn.....	99,148	38	6		6		3		7	10
Malden.....	49,103	14	3		12		4			1
Medford.....	39,038	10	1		1				1	
Melrose.....	18,204	5	1		1		4		3	
Methuen.....	15,189	3			17		6			
New Bedford.....	121,217	38	3		1		10		12	3
Newburyport.....	15,618	7			11					1
Newton.....	45,054	14	1		11		3		2	
North Adams.....	22,282	8								
Northampton.....	21,951	8			2		1		2	
Pittsfield.....	41,751	15	4	1	2		1		2	
Plymouth.....	13,045	1								2
Quincy.....	47,576	12	1		17		1		2	
Salem.....	42,529	16	2		39					
Saugus.....	10,874	0			1					
Somerville.....	93,091	16	10	1	26		2		6	
Southbridge.....	14,245	2							1	
Springfield.....	129,563	40			33		1		4	2
Taunton.....	37,137	13			2				2	1
Wakefield.....	13,025	2	2		14					
Waltham.....	30,915	14			5		2			1
Watertown.....	21,457	5			3				1	1
Webster.....	13,258	3								
Westfield.....	18,604	6			4					
Weymouth.....	15,057	3								
Winthrop.....	15,455	3					1			
Woburn.....	16,574	6								
Worcester.....	179,754	33	3	1	5	1	7	1	5	1
Michigan:										
Alpena.....	11,101		1				2			
Ann Arbor.....	19,516	9	8	1			1			
Battle Creek.....	36,164		1		14		2			
Benton Harbor.....	12,233	0								
Detroit.....	993,739	223	45	3	357	11	43		48	23
Flint.....	91,599	13	1		3		8			
Grand Rapids.....	137,634	26	11		2		5		5	2
Hamtramck.....	48,615	1	1		7	1				
Highland Park.....	46,499	9	2		72		1			
Ishpeming.....	10,500	4								
Jackson.....	48,374	11							11	
Kalamazoo.....	48,858	20	11	1			8		1	1
Marquette.....	12,718	5					1			
Pontiac.....	34,273	12	1		40					
Port Huron.....	25,944	8			6					
Saginaw.....	61,903	9	2		1	1			1	1
Sault Ste. Marie.....	12,096	2	1		1		1		1	
Minnesota:										
Austin.....	10,118	5								
Duluth.....	98,917	16	1				3	1	7	2
Faribault.....	11,069	7			1					
Hibbing.....	15,089	5					4			
Mankato.....	12,499						5		1	
Minneapolis.....	380,582	74	16	2	45		31		20	6
Rochester.....	13,722	22					4		1	1
St. Cloud.....	15,873									
St. Paul.....	234,595	56	5	1	25		26		28	3
Virginia.....	14,022								2	
Winona.....	19,143								1	
Missouri:										
Cape Girardeau.....	10,252	0								
Jefferson City.....	14,490	2								
Joplin.....	29,855						1			
Kansas City.....	324,410	96	5		24		3	1	4	4
St. Joseph.....	77,939	32	2				2	2		
St. Louis.....	772,897	200	31		4		16		20	9
Springfield.....	39,631	16								1
Montana:										
Anaconda.....	11,668	3								
Billings.....	15,100	3								
Great Falls.....	24,121	7	2						1	
Missoula.....	12,668	3								
Nebraska:										
Omaha.....	191,601	62		1	33		3			2

CITY REPORTS FOR WEEK ENDED APR. 15, 1922—Continued.

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

City.	Popula- tion Jan. 1, 1920, sub- ject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Nevada:										
Reno.....	12,016	4								
New Hampshire:										
Berlin.....	16,104	4								
Concord.....	22,167	10	2				3		1	
Dover.....	13,029	5			5					
Keene.....	11,210	3								
Nashua.....	28,379	12								
New Jersey:										
Asbury Park.....	12,400	4			1					
Atlantic City.....	50,632	10			1		2		7	
Bayonne.....	76,754		1		30		3		3	
Belleville.....	15,660						2			
Bloomfield.....	22,019	4			28		3		1	2
Clifton.....	26,470	1			4					
Elizabeth.....			3				7		3	1
Englewood.....	11,627		2		2		1		1	
Garfield.....	19,381	3					4		1	
Hackensack.....	17,667	11	1	1	8		2			1
Harrison.....	15,721				4		1			
Hoboken.....	68,166	16			30				1	
Jersey City.....	297,864		9		71		32		11	
Kearny.....	26,724	7	1		7		5			1
Montclair.....	28,810	8			5		1		1	
Morristown.....	12,548	4		1	1		1		1	
Newark.....	414,216	107	9		156	3	29		20	8
Orange.....	33,268	3	1				7			
Passaic.....	63,824	11	1		5		9		2	1
Paterson.....	135,866		2		71		6		11	
Perth Amboy.....	41,707	3	1		6		3		2	
Phillipsburg.....	16,923	4								
Plainfield.....	27,780	4	2		4		5		2	1
Rahway.....	11,042	3	1					1		
Summit.....	10,174	2			1				2	
Trenton.....	119,289	42	1		29	3	6		4	4
Union.....	20,651		1		11		2		1	
West Hoboken.....	40,068	10			12		3		2	
West New York.....	29,926	5			11		3			1
West Orange.....	15,573	4	1		3		3		1	
New Mexico:										
Albuquerque.....	15,157	10						1		4
New York:										
Albany.....	113,344		3		2		3		5	
Auburn.....	36,192	9							2	
Buffalo.....	506,775	167	14		3		32	1		17
Cohoes.....	22,987	1	1							
Elmira.....	45,305	24			47					1
Fulton.....	13,043	4								
Geneva.....	14,048	5								
Glens Falls.....	16,638	2							2	
Hornell.....	15,025	4			14				1	
Hudson.....	11,745	9	2				1			2
Ithaca.....	17,004	12	4	1						
Jamestown.....	38,917	8			20		1			
Lackawanna.....	17,918	3	2							
Lockport.....	21,308	4					2		1	
Middletown.....	18,420						1		2	2
Mount Vernon.....	42,726	7			1		2		4	
Newburgh.....	30,866	11			14					
New York.....	5,621,151	1,577	244	27	2,086	53	354	13	1,244	117
Niagara Falls.....	50,760	9	6	1	3		9	1	3	1
North Tonawanda.....	15,482	5	2				2			
Olean.....	20,506	4								1
Peekskill.....	15,868	5			5	1				
Port Chester.....	16,573	8							1	
Poughkeepsie.....	35,000	11			39	1				1
Rochester.....	295,750	90	2	1	13		4		17	5
Rome.....	26,341	9					4			1
Saratoga Springs.....	13,181	5					1		1	
Schenectady.....	88,723	26	2		1		4		1	1
Syracuse.....	171,717	48	10		2		16	1	9	2
Troy.....	72,013	20	2				2		5	1

Pulmonary tuberculosis only.

CITY REPORTS FOR WEEK ENDED APR. 15, 1922—Continued.

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

City.	Population Jan. 1, 1920, subject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New York—Continued.										
Watertown.....	31,285	10					2		2	1
White Plains.....	21,031	4			33					
Yonkers.....	100,226	26	5	1	49	1	10			2
North Carolina:										
Durham.....	21,719	1							2	
Greensboro.....	19,861	1								
Raleigh.....	24,418	12								2
Rocky Mount.....	12,742	6								
Salisbury.....	13,884	0								
Wilmington.....	33,372	8					1			1
Winston-Salem.....	48,396	12	1				2		5	2
North Dakota:										
Fargo.....	21,961	0								
Grand Forks.....	14,010				1					
Ohio:										
Akron.....	208,435	39	7		66		5		17	
Ashtabula.....	22,082	5								
Barberton.....	18,811	2	1	1						
Bucyrus.....	10,426	5								2
Cambridge.....	13,104	5			8					
Canton.....	87,091	12	3		73		1			1
Chillicothe.....	15,531	4								1
Cincinnati.....	401,247	98	7		161	2	10		29	6
Cleveland.....	796,836	204	19	3	193	2	51		58	15
Cleveland Heights.....	15,236				2		1			
Columbus.....	237,031	70	8	1	7		4		5	5
Dayton.....	152,559	32					2		5	
East Cleveland.....	27,292	4			8					
East Youngstown.....	11,237	4								
Findlay.....	17,021	2					2			
Fremont.....	12,468	5								
Hamilton.....	39,675	6					1			
Ironton.....	14,007	7	1							
Kemora.....	12,683								2	
Lima.....	41,306	15	5		3		2			
Lorain.....	37,295	1	1		1		1			
Mansfield.....	27,524	5								
Marion.....	27,891	1					1		1	
Martins Ferry.....	11,634	2							1	
Middletown.....	23,594	3							1	
Newark.....	26,718	9	2				1			1
Niles.....	13,080	4	7	1	1		2			
Norwood.....	24,966	2	3		16					
Piquets.....	15,044	8								2
Salem.....	10,305	4					1			
Springfield.....	60,840	13							3	1
Steubenville.....	28,506	8	1				3		1	4
Toledo.....	243,109	51	6		23		4	1	5	
Youngstown.....	132,358		2		23	1	4			
Zanesville.....	29,569	8	3				2			
Oklahoma:										
Oklahoma.....	91,258	21	2				1		3	3
Tulsa.....	72,075	1	1		6		2			
Oregon:										
Portland.....	258,288	65	8		1		3		6	3
Pennsylvania:										
Allentown.....	73,502		2		3		1		1	
Altoona.....	60,331		2				1			
Ambridge.....	12,730		2						1	
Beaver Falls.....	12,802		3							
Berwick.....	12,181				8					
Bethlehem.....	50,358		8		2		1			
Braddock.....	20,879				2				3	
Bradford.....	15,525						2			
Bristol.....	10,273		1							
Butler.....	28,778						1			
Carlisle.....	10,916				21					
Carnegie.....	11,516				1				1	
Carrick.....	10,504		1							
Chambersburg.....	13,171				2					
Charleroi.....	11,516								1	
Chester.....	58,030				1		3			
Coatesville.....	14,515						1			

CITY REPORTS FOR WEEK ENDED APR. 15, 1922—Continued.

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

City.	Popula- tion Jan. 1, 1920, sub- ject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Pennsylvania—Continued.										
Connellsville.....	13, 804		3							
Dickson City.....	11, 049								1	
Dubora.....	14, 131		1							
Duquesne.....	13, 681					1				
Easton.....	19, 011						1			
Easton.....	33, 813									
Erie.....	93, 372		1				2		5	
Farrell.....	15, 536				1		2			
Harrisburg.....	75, 917		4		2					
Hazleton.....	32, 277		1		44		2			
Jeannette.....	10, 627		1							
Johnstown.....	67, 327				21		2		2	
Lancaster.....	53, 150		1		1				1	
Lebanon.....	24, 643						3			
McKeesport.....	45, 975		2		5					
McKee's Rocks.....	16, 713		3							
Mahanoy City.....	15, 599				1					
Meadville.....	14, 568								1	
Nanticoke.....	22, 614		1							
New Castle.....	44, 938		2		38		2			
New Kensington.....	11, 987				2					
Norristown.....	32, 319		4		1		4			
North Braddock.....	14, 928		2		1					
Oil City.....	21, 274								1	
Old Forge.....	12, 237		3						1	
Olyphant.....	10, 236		1						1	
Philadelphia.....	1, 823, 158	562	54	3	53	1	120	1	62	54
Phoenixville.....	10, 484				1					
Pittsburgh.....	583, 193		17		37		28		11	
Plymouth.....	16, 500				27					
Pottstown.....	17, 431						1			
Pottsville.....	21, 876				2					
Punxsutawney.....	10, 311						1			
Reading.....	107, 784		11		14				3	
Scranton.....	137, 783		1		10		2			
Shamokin.....	21, 204		1		8				1	
Sharon.....	21, 747				2					
Shenandoah.....	24, 726		2		10					
Steelton.....	13, 423		1						1	
Sunbury.....	15, 721				6		1			
Swissvale.....	10, 903		1							
Tamaqua.....	12, 363		1		14					
Uniontown.....	15, 692				1		6			
Warren.....	14, 256		2		1					
Washington.....	21, 480						1			
West Chester.....	11, 717						2		1	
Wilkes-Barre.....	73, 333		5		14		2		1	
Wilkinsburg.....	24, 403		2		4		1			
Williamsport.....	36, 198		1		7		3			
Woodlawn.....	12, 495		1		5		1			
York.....	47, 512						1		1	
Rhode Island:										
Cranston.....	29, 407	4					1			
Newport.....	30, 255	5	5				4			
Pawtucket.....	64, 243	22					1			
Providence.....	237, 595	63	9		4					2
South Carolina:										
Charleston.....	67, 957	19								3
Columbia.....	37, 524		1		1					
Greenville.....	23, 127	2								
South Dakota:										
Sioux Falls.....	25, 176	6					1			
Tennessee:										
Knoxville.....	77, 818				13				1	1
Memphis.....	162, 351	64	2				4		7	8
Nashville.....	118, 342	60	2					3	3	12
Texas:										
Beaumont.....	40, 422	7								1
Corpus Christi.....	10, 522	3	1							
Dallas.....	158, 976	42	6	1	106		2		2	2
El Paso.....	77, 543	23	1		1		2			8
Fort Worth.....	103, 432	17	1							

CITY REPORTS FOR WEEK ENDED APR. 15, 1922—Continued.

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

City.	Popula- tion Jan. 1, 1920, sub- ject to correction.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Texas—Continued.										
Galveston.....	44,255	9	1							1
Houston.....	138,076	47	2			1				5
Waco.....	38,500	4								
Utah:										
Salt Lake City.....	118,110	42	3		1	1	2			7
Vermont:										
Burlington.....	22,779	9					3			
Rutland.....	14,954	5								
Virginia:										
Alexandria.....	18,090	5								1
Danville.....	21,539	8								1
Lynchburg.....	29,938	16								1
Norfolk.....	115,777		2	1			3			5
Petersburg.....	31,002	11			1					2
Portsmouth.....	54,387	13			1		1			
Richmond.....	171,667	57			59		1		13	7
Roanoke.....	50,842	17	5				1			1
Washington:										
Aberdeen.....	15,337				1					
Bellingham.....	25,570						1			
Everett.....	27,644		1							
Seattle.....	315,652		2				7			
Spokane.....	104,437		3				3			
Tacoma.....	96,965		2							
Vancouver.....	12,637				1		1			
Yakima.....	18,539		1							
West Virginia:										
Bluefield.....	15,282	10								2
Charleston.....	39,603	14								
Clarksburg.....	27,869	5			2		3			1
Fairmont.....	17,851		3		5		2			
Huntington.....	50,177	13								1
Martinsburg.....	12,515				18					
Morgantown.....	12,127		1		2					
Moundsville.....	10,669	2			10		2			
Parkersburg.....	20,050	4								
Wheeling.....	54,322	6			2		3		9	1
Wisconsin:										
Ashland.....	11,334						2			
Beloit.....	21,284	5					3			2
Eau Claire.....	20,890								1	
Fond du Lac.....	23,427	7					1			
Janesville.....	18,293	3	2							
Kenosha.....	40,472	10	6	3			1			1
Madison.....	38,378		1		4		5		2	
Marinette.....	13,610						1			
Milwaukee.....	457,147		10		4		4		8	
Oshkosh.....	33,162	17					1			1
Racine.....	58,598	15	6		1		7	1	3	
Sheboygan.....	30,955		1				1			
Stevens Point.....	11,371						1			
Superior.....	39,624	2					4		1	
Wausesa.....	12,558		1				2			
West Allis.....	13,765								1	
Wyoming:										
Cheyenne.....	13,829	5			1					

FOREIGN AND INSULAR.

PLAGUE ON VESSEL.

Steamship "City of Genoa"—At Dunkirk, France.

The steamship *City of Genoa* from Karachi and Bombay, India, arrived, March 24, 1922, at Dunkirk, France, with several cases of plague on board. One of these cases terminated fatally after removal to hospital on shore. The vessel was released April 5, 1922.

Recent history of the *City of Genoa* shows that the vessel left Bombay February 28, 1922, arriving at Suez, Egypt, March 11, with a case of plague on board and history of a plague death en route. From March 12 to 15, 1922, two cases of plague with one death were reported at Port Said, Egypt, occurring in members of the crew of the *City of Genoa*. It was stated that numerous rats were observed in the hold of the vessel during the last previous stay of the *City of Genoa* at Liverpool, England.¹

AUSTRALIA.

Plague—Sydney.

During the week ended April 22, 1922, three cases of plague were reported at Sydney, Australia.

GREAT BRITAIN.

Typhus Fever—London.

Under date of April 29, 1922, one case of typhus fever was reported at London, England. It was stated that the disease was probably contracted at Warsaw, where the patient had recently visited.

PORTUGUESE WEST AFRICA.

Plague—Mossamedes.²

Under date of March 22, 1922, the epidemic of plague which has been reported present at Mossamedes, Portuguese West Africa, was stated to be nearly extinct, only 11 cases having been reported during the month of March to date as occurring in the vicinity of Mossamedes, and no cases having been reported in the city of Mossamedes since the end of February, 1922. Some foci were reported still existent in the vicinity of the city, March 22, 1922.

¹ Public Health Reports, Apr. 21, 1922, p. 971. ² Public Health Reports Apr. 7, 1922, p. 849.

RUSSIA.

Cholera—Typhus Fever—Lithuania.

Under date of February 19, 1922, 30 cases of cholera were reported present in Lithuania, Russia, with a mortality of 33 per cent, and 400 cases of typhus fever with a mortality of 7 per cent. The infected areas were stated to be in the country surrounding Kovno.

Communicable Diseases—Latvia—January-February, 1922.¹

During the period January 1 to February 28, 1922, communicable diseases were reported in Latvia, Russia, as follows:

Disease.	January, 1922.	February, 1922.	Disease.	January, 1922.	February, 1922.
	Cases.	Cases.		Cases.	Cases.
Diphtheria.....	60	96	Typhoid fever.....	108	57
Measles.....	131	176	Typhus fever.....	288	178
Paratyphoid fever.....	4	5	Typhus, recurrent.....	28	7
Scarlet fever.....	206	188	Whooping cough.....	43	25
Smallpox.....	22	16			

Population, census of December 31, 1921, 1,727,500.

UNION OF SOUTH AFRICA.**Plague-Infected Ground Squirrel.**

A plague-infected ground squirrel was reported found, February 17, 1922, on Rientfontein Farm, about 10 miles north of Bothaville, Orange Free State. The squirrel was found in a dying condition in a burrow containing numerous dead mice. A guinea pig inoculated from material obtained from the squirrel died seven days after inoculation with typical features of plague.

Plague Mortality Among Rodents.

Under date of February 25, 1922, suspicious mortality which had been observed among rodents on Geluksfontein Farm, about a mile from Mirage Siding and 10 miles northwest of Bothaville, was stated to have been due to plague.

¹ Public Health Reports, Mar. 24, 1922, p. 723.

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

Reports Received During Week Ended May 5, 1922.¹

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India: Calcutta.....	Mar. 12-18.....	53	44	Present, Feb. 19, 1922, with 30 cases and mortality of 33 per cent, in Kovno and vicinity.
Russia: Lithuania.....				

PLAGUE.

Australia: New South Wales— Sydney.....	Apr. 16-22.....	3		
Azores: St. Michael Island.....	Mar. 5-Apr. 1.....	11	6	Occurring at Arifes, Capelas, Fenses, Livramonto, and Ribeira Grande, from 3 to 9 miles from port of Ponta Delgada.
Brazil: Bahia.....	Feb. 24-Mar. 2.....	1	1	
Pernambuco.....	Feb. 26-Mar. 4.....	1	1	
China: Hongkong.....	Apr. 2-15.....	80	45	Chinese.
Egypt:				Jan. 1-Mar. 30, 1922: Cases, 56; deaths, 26.
City—				
Port Said.....	Mar. 21.....	1	1	
Suez.....	Mar. 27-30.....	6	2	
Province:				Septicemic.
Assiout.....	Mar. 25.....	1	1	
Gharbieh.....	Mar. 27.....	1	1	
Girgeh.....	Mar. 22-30.....	4		
France: Dunkirk.....	Mar. 24.....		1	In hospital. From steamship City of Genoa from Bombay.
India: Calcutta.....	Mar. 12-18.....	2	2	
Madagascar: Tananarive.....	Jan. 29-Feb. 19.....	17	10	Present in surrounding country.
Portuguese West Africa: Angola— Mossamedes.....	Mar. 1-22.....	11		In vicinity; no cases reported in city since Feb. 23, 1922.
Turkey: Constantinople.....	Mar. 26-Apr. 1.....		1	
Union of South Africa: Orange Free State— Geluksfontein Farm.....	Feb. 25.....			Plague mortality among rodents.
Rientfontein Farm.....	Feb. 17.....			Plague-infected ground squirrel found.
On vessel: Steamship City of Genoa.....	Mar. 24.....			At Dunkirk, France, Mar. 24, 1922, from Bombay and Karachi, via Suez and Port Said, Egypt; several cases. Vessel left Bombay Feb. 28, 1922. Plague death en route; plague case landed Suez, Mar. 11; 2 cases landed Port Said Mar. 12, 1922. Rats numerous in hold during last stay at Liverpool.

SMALLPOX.

Algeria: Algiers.....	Mar. 5-31.....	2		
Canada: Ontario.....				Mar. 1-31, 1922: Cases, 113.
Mexico: Mexico City.....	Mar. 5-18.....	47		
Russia: Latvia.....				Jan.-Feb., 1922: Cases, 38.

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 May 5, 1922—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers.....	Mar. 5-31.....	5	.....
Oran.....	Mar. 21-31.....	4	3	
China:				
Harbin.....	Feb. 27-Mar. 19.....	10	.....
Egypt:				
Alexandria.....	Mar. 26-Apr. 1.....	3	.....
Cairo.....	Jan. 29-Feb. 11.....	4	1	
Great Britain:				
London.....	Apr. 29.....	1	.....	Stated to have probably been contracted at Warsaw.
Mexico:				
Mexico City.....	Mar. 5-18.....	46	.....
Rumania:				
Cahul.....	Jan. 1-31.....	6	.....
Russia:				
Latvia.....	.....	.....	.....	Jan.-Feb., 1922: Cases, 456.
Lithuania.....	.....	.....	.....	Feb. 19, 1922: 400 cases reported present in Kovno and vicinity. Mortality, 7 per cent.

YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Pernambuco.....	Feb. 26-Mar. 4.....	1	.....
Mexico:				
State—				
Vera Cruz.....	.....	.....	.....	March, 1922: One case on plantation 105 miles from port of Vera Cruz.

Reports Received from December 31, 1921, to April 28, 1922.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India				Oct. 2-Dec. 31, 1921: Deaths, 37,749. (Corrected report.)
Bombay.....	Oct. 30-Nov. 5.....	1	.....	Jan. 1-28, 1922: Deaths, 2,328.
Do.....	Jan. 29-Feb. 4.....	1	1	
Calcutta.....	Oct. 23-Dec. 31.....	71	60	
Do.....	Jan. 1-Mar. 11.....	233	201	
Karachi.....	Nov. 6-12.....	.....	1	
Madras.....	Dec. 11-31.....	4	7	
Do.....	Jan. 1-Feb. 4.....	10	7	
Rangoon.....	Oct. 1-Dec. 31.....	30	24	
Do.....	Jan. 1-Feb. 25.....	30	25	
Indo-China:				
Saigon.....	Nov. 6-12.....	1	1	
Do.....	Jan. 29-Feb. 18.....	24	23	Including 100 km. surrounding country.
Java:				
West Java—				
Batavia.....	Nov. 1-7.....	2	2	At Lebak.
Philippine Islands:				
Manila.....	Nov. 13-Dec. 31.....	49	18	
Do.....	Jan. 1-Mar. 11.....	82	27	
Province—				
Bulacan.....	Dec. 25-31.....	1	.....
Do.....	Feb. 12-18.....	1	1	
Cavite.....	Jan. 1-7.....	1	1	
Cebu.....	Jan. 8-14.....	1	.....
Pampanga.....	Dec. 25-31.....	1	.....
Rizal.....	Jan. 15-28.....	18	12	
Zambales.....	Dec. 11-31.....	31	18	
Do.....	Jan. 1-7.....	5	4	
Poland				Aug. 14-Sept. 10, 1921: Cases, 4; deaths, 1.

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

Reports Received from December 31, 1921, to April 28, 1922.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Kharkoff.....	Jan. 28.....	.....	.....	Present.
Kief.....	Dec. 15-Jan. 11....	259	.....
Latvia—				
Riga.....	.....	.....	.....	At quarantine station in October, 1921: One case.
Odessa.....	Jan. 28.....	.....	.....	Present.
Siam:				
Bangkok.....	Oct. 23-Dec. 24....	8	4	
Do.....	Jan. 29-Mar. 4....	7	3	

PLAGUE.

Asia Minor:				
Smyrna.....	Nov. 27-Dec. 3....	1	1	
Australia:				
New South Wales—				
Sydney.....	.....do.....	2	1	Dec. 7-13: 4 plague rats. Jan. 15-21, 1922: 1 plague rat.
Do.....	Jan. 29-Apr. 15....	11	2	Mar. 28-Apr. 1, 1922: Cases reported, 6 to 10; 1 death.
Queensland—				
Aramac.....	Mar. 19-25.....	1	1	Inland town on railroad about 150 miles from coast.
Brisbane.....	Oct. 30-Dec. 31....	27	20	Total, Aug. 22-Dec. 31, 1921: Cases, 41; deaths, 27. Total infected rats, 54. Total cases, Jan. 1-Mar. 13, 1922: 10. Total infected rats, 10.
Do.....	Jan. 1-Mar. 18....	10	.....
Bundaberg.....	Mar. 5-11.....	1	.....
Cairns.....	Oct. 30-Dec. 31....	6	3	Plague rats, 9.
Do.....	Jan. 1-7.....	.....	1	Pestis minor.
Cooktown.....	Oct. 30-Nov. 5....	1	.....
Ingham.....	.....	.....	.....	Nov. 6-Dec. 24, 1921: Plague rats, 14. Jan. 1-14, 1922: 2 plague rats.
Inisfail.....	.....	.....	.....	Nov. 27-Dec. 3, 1921: 1 plague rat.
Ipswich.....	Dec. 11-17.....	1	1	
Port Douglas.....	Nov. 13-19.....	1	1	
Townsville.....	Nov. 20-Dec. 3....	2	2	Total cases, 27; deaths, 18.
Do.....	Jan. 1-14.....	.....	2	To Jan. 14, 1922: Cases, 32; deaths, 21.
Azores:				
Islands—				
Fayal.....	Jan. 16-22.....	2	2	Nov. 27-Dec. 31, 1921: Cases, 23; deaths, 9. Jan. 1-21, 1922: Cases, 13; deaths, 8. Jan. 22-Mar. 4, 1922: Cases, 51; deaths, 25; occurring at Arrifes, Capelas, Fenaes, Ribeira Grande, and Santo Antonio; distance from port of Ponta Delgada, 3 to 9 miles.
St. Michael.....	.....	.....	.....
Arrifes.....	Dec. 25-31.....	1	1	3 miles from port.
Do.....	Jan. 1-7.....	1	.....
Fenaes d'Ajuda.....	Nov. 27-Dec. 3....	.....	.....	Present. 6 miles from port.
Do.....	Jan. 15-21.....	3	2	
Ribeira Grande.....	Nov. 13-Dec. 10....	19	8	9 miles from port.
Do.....	Jan. 8-14.....	9	6	
Livramonto.....	Dec. 4-10.....	2	.....	Vicinity of Ponta Delgada.
Ponta Delgada.....	.....do.....	1	.....
Brazil:				
Bahia.....	Oct. 30-Dec. 31....	13	12	
Do.....	Jan. 1-Feb. 18....	13	10	
Para.....	Feb. 6-12.....	.....	1	
Porto Alegre.....	Feb. 12-18.....	3	2	
Rio de Janeiro.....	Jan. 22-28.....	1	1	
British East Africa:				
Uganda.....	Aug. 1-Dec. 31....	256	229	Aug. 1-Oct. 31, 1921: Reports of inspectors, deaths, 343; reports of chiefs, deaths, 651.

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

Reports Received from December 31, 1921, to April 28, 1922—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Cape Verde Islands: St. Vincent.....	Mar. 16.....			Present; no plague mortality reported during previous 5-month period. August, 1921: Cases, 6; deaths, 3.
Ceylon: Colombo.....	Oct. 30-Dec. 31....	13	10	Oct. 30-Dec. 24, 1921: Rodent plague, 6. Infected rats, 11.
Do.....	Jan. 1-Mar. 4.....	23	21	
Chile: Antofagasta.....				Mar. 5-11, 1922: 1 plague rat.
China: Amoy.....	Feb. 18-Mar. 4.....			Present in surrounding country.
Hongkong.....	Nov. 20-Dec. 17....	6		
Do.....	Jan. 1-Mar. 11.....	58	33	
Ecuador: Guayaquil.....	Nov. 16-Dec. 31....	18	6	Rats examined, 2,958; found infected, 90. Total, July-Dec. 15, 1921: Cases, 28. Jan. 1-Mar. 15, 1922: Rats examined, 14,800; found infected, 375.
Do.....	Jan. 1-Mar. 15.....	36	13	
Naranjito.....	Mar. 1-15.....	1		
Egypt: City—				Jan. 1-Dec. 31, 1921: Cases, 356; deaths, 153. Jan. 1-Mar. 16, 1922: Cases, 43; deaths, 22.
Alexandria.....	Dec. 5-30.....	7	2	
Do.....	Jan. 17-Mar. 16....	8	5	Feb. 12-18, 1922: 1 plague rodent.
Port Said.....	Dec. 20.....	1		Mar. 12-16, 1922: One case, one death, septicemic.
Do.....	Mar. 15.....	1	1	
Suez.....	Nov. 22-Dec. 31....	16	9	
Do.....	Jan. 2-Mar. 14.....	5	3	
Provinces—				
Assouan.....	Feb. 28.....	1	1	Septicemic.
Fayoum.....	Feb. 17-Mar. 9.....	5	1	
Gharbich.....	Feb. 17-28.....	4		Do.
Girgeh.....	Jan. 12.....	1		Do.
Kenah.....	Dec. 1.....	1		Pneumonic, 1 case, 1 death; septicemic, 1 case.
Do.....	Jan. 21-Feb. 28....	4	3	Septicemic.
Minieh.....	Feb. 21-Mar. 9.....	3	3	
Great Britain: Liverpool.....				Mar. 31, 1922: Finding of 3 plague-infected rats reported; place, warehouse in which material from steamship Warwickshire was stored. ¹
Greece: Preveza.....	Feb. 8.....			Outbreak. Port on the Ionian Sea.
India: Bombay.....	Oct. 23-Dec. 24....	7	6	Oct. 23-Dec. 31, 1921: Cases, 8,690; deaths, 6,458 (reports, weeks ended Dec. 3 and 17, 1921, missing). Jan. 1-Feb. 25, 1922: Cases, 18,711; deaths, 14,543.
Do.....	Jan. 1-Feb. 25.....	68	48	
Calcutta.....	Jan. 29-Mar. 4.....	5	5	
Karachi.....	Nov. 6-Dec. 31....	5	5	
Do.....	Jan. 1-Mar. 18.....	137	102	
Madras.....	Dec. 11-17.....	1		
Madras Presidency.....	Nov. 13-Dec. 31....	2,047	1,438	
Do.....	Jan. 1-Mar. 18.....	3,703	2,656	
Rangoon.....	Oct. 1-Dec. 31....	139	129	
Do.....	Jan. 1-Feb. 25.....	257	231	
Indo-China: Saigon.....				Nov. 6-Dec. 24, 1921: Rodent plague, 10. Jan. 9-Feb. 4, 1922: Rodent plague, 8.
Italy: Catania.....	Nov. 27.....	1	1	Total, Oct. 16-Nov. 27, 1921: Cases, 8 (of which 1 doubtful); deaths, 5. Jan.-Feb., 1922: 28 plague-infected rats found. 17 miles from city of Naples.
Naples (Province)— Torre Annunziata.....	Oct. 22-Dec. 27....	2		
Venice.....	Oct. 27.....	1		
Java: East Java—				Islands of Java and Madoera:
Soerabaya.....	Oct. 30-Dec. 10....	11	12	Nov. 1-Dec. 31, 1921: Deaths, 1,781. Jan. 1-31, 1922: Deaths, 976.
Do.....	Jan. 1-Feb. 18.....	6	6	

¹ Public Health Reports, Mar. 31, 1922, p. 734.

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

Reports Received from December 31, 1921, to April 28, 1922—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Madagascar: Tananarive.....	Jan. 23-29.....	9	5	Bubonic, cases 6, deaths 2; pneumonic, 1 fatal case; septicemic, cases 2, deaths 2. Bubonic and septicemic plague present in surrounding country. Feb. 4, 1922: Present Mar. 2: Among natives. Entire city reported infected.
Mauritius (Island).....				Jan. 23-Feb. 6, 1922: Cases, 12; deaths, 3.
Port Louis.....	Oct. 29-Dec. 30....	241	142	Plague-infected rats, 176; plague-infected cats, 36. (Corrected report.) Dec. 1-30, 1921; Dead rats found, 155; dead cats, 4.
Do.....	Dec. 31-Jan. 22....	16	6	Dead rats found, Dec. 31, 1921-Jan. 11, 1922, 17.
Mesopotamia: Bagdad.....	Oct. 1-31.....	1	1	
Mexico: Tampico.....	Mar. 26-Apr. 1....	1		Dec. 18-31, 1921: Infected rodents found, 5; total, Jan. 1-Dec. 31, 1921, infected rodents, 322; Jan. 1-Apr. 8, 1922, 14 plague-infected rodents.
Vera Cruz.....				One infected rodent caught Dec. 5, 1921. Apr. 4, 1922: 1 plague-infected rodent found.
Peru.....				Nov. 17-Dec. 31, 1921: Cases, 94; deaths, 35. Occurring in Callao, Huacho, Huaras, Lima, Magdalena Vieja, Paita, Salaverry, and Sechura, Jan. 1-Feb. 28, 1922: Cases, 141; deaths, 62. (Corrected report to Feb. 15, 1922.)
Localities—				
Bambamarca.....	Jan. 1-15.....			Present. Rural.
Barranco.....	Jan. 16-31.....	1		
Callao.....	Jan. 1-Feb. 28....	7	4	Rural. Year, 1921: Deaths, 30.
Casma.....	Feb. 1-28.....	11	3	
Chiclayo.....	Jan. 16-Feb. 28....	19	16	
Chilca.....	Jan. 16-Feb. 15....	11	2	
Cutervo.....	Jan. 1-15.....	1		Rural.
Guadalupe.....	Jan. 1-31.....	7	2	
Huacho.....	Jan. 1-Feb. 15....	3		
Hualgayoc.....	Jan. 16-31.....			Province. Present.
Huaral.....	Jan. 1-15.....	2		
Jayanca.....	do.....			Present.
Lambayeque.....	Jan. 16-Feb. 15....	3	1	
Lima.....	Jan. 1-Feb. 28....	14	4	In district, 20 cases; 6 deaths.
Mollendo.....	Feb. 1-28.....	3		
Pacasmayo.....	do.....	1		
Payta.....	Jan. 1-Feb. 28....	28	21	
Piura.....	Feb. 1-15.....	1		
Salaverry.....	Jan. 16-31.....	1		
San Pedro.....	Jan. 1-15.....	1		
Sullana.....	Jan. 1-Feb. 28....	3	3	
Trujillo.....	Feb. 1-15.....			Present.
Tumbez.....	do.....	4		
Portugal: Lisbon.....	Dec. 15.....	1	1	
Portuguese West Africa: Angola—				
Loanda.....	Oct. 9-Nov. 5.....		2	
Mossamedes.....	Feb. 14.....			Present.
Rhodes (Island) (Aegean Sea). Penegal:	Oct. 13.....	3	1	
Dakar.....	Feb. 1-28.....	2		Jan. 1-31, 1922: 1 rodent plague.
Siam: Bangkok.....	Oct. 23-Dec. 31....	7	5	
Do.....	Jan. 8-Mar. 4.....	35	26	
Straits Settlements: Singapore.....	Nov. 6-Dec. 31....	3	2	
Do.....	Jan. 15-Mar. 4....	34	15	

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

Reports Received from December 31, 1921, to April 28, 1922—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Syria:				
Beirut.....	Oct. 9-Nov. 20....	10	4	
Turkey:				
Constantinople.....	Jan. 1-7.....	1		
Union of South Africa:				
Orange Free State—				
Boschrand Farm.....	Jan. 25.....	3	3	10 miles from Kroonstad.
Bothaville.....	Nov. 19.....			Plague-infected mouse found.
Hoopstad.....	Dec. 4-10.....	1		In native herd boy.
Klipfontein (Farm).....	Feb. 10.....	1	1	12 miles from Bothaville. Plague infection found in rats on adjoining farm, week ended Feb. 4, 1922.
On vessel:				
S. S. City of Genoa.....	Mar. 9-15.....	4	2	At Suez and Port Said, Egypt, from Karachi and Bombay, India, for Plymouth, England: One fatal case at sea en route to Suez; 1 case on arrival. At Port Said, 2 cases, of which 1 fatal.
S. S. Polycarp.....	Feb. 3.....	1		At Para, Brazil, from Ceara, via Manos, Maranham, and Para; for New York.
S. S. Tango Maru.....	Dec. 31.....	1		At Thursday Island Quarantine, Australia, from Kobe, via Nagasaki, Hongkong, Manila, and Zamboanga.
S. S. Warwickshire.....	Feb. 12.....			At Liverpool, England, from Rangoon. Plague rats, 27; 1 plague mouse.

SMALLPOX.

Algeria:					
Algiers.....	Jan. 1-Feb. 23....	2			
Arabia:					
Aden.....	Dec. 25-31.....		1		
Do.....	Jan. 8-14.....		1		
Asia Minor:					
Smyrna.....	Jan. 15-21.....	1			In district.
Bolivia:					
La Paz.....	Aug. 1-Dec. 31....	60	41		
Do.....	Jan. 1-31.....	15	9		
Brazil:					
Bahia.....	Nov. 6-Dec. 17....	4			
Do.....	Jan. 8-Feb. 4.....	2			
Rio de Janeiro.....	Nov. 13-Dec. 31....	13	2		
Do.....	Jan. 1-Mar. 11....	34	8		
Santos.....	Feb. 20-25.....		1		
Sao Paulo.....	Oct. 31-Dec. 25....	11			
Do.....	Dec. 26-Jan. 8....	2			
British Africa:					
Uganda.....	Aug. 1-Dec. 31....	33	6		
Canada:					
British Columbia—					
Vancouver.....	Dec. 25-31.....	3			
Do.....	Jan. 29-Feb. 4....	1			
Victoria.....	Mar. 12-13.....	1			
Manitoba.....					Year 1921: Cases, 71.
Winnipeg.....	Nov. 20-Dec. 3....	2			
New Brunswick—					
Charlotte County.....					Dec. 17, 1921: 31 cases previously reported, occurring at Andersonville and Blacks Harbor. Dec. 18-24, 1921: Cases, 3. Dec. 25-31, 1921: Cases, 2. Feb. 19-20, 1922: Cases, 2.
St. Stephen.....	Dec. 11-17.....	2			Dec. 11-31, 1921: Cases, 3. Feb. 12-25, 1922: Cases, 4.
Restigouche County.....					20 miles from Campbellton.
Charlo.....	Feb. 19-25.....	2			
Westmoreland County.....	Mar. 5-Apr. 1....	16			
York County.....	Dec. 11-17.....	1			
Do.....	Jan. 29-Feb. 4....	1			

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

Reports Received from December 31, 1921, to April 28, 1922—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
Ontario				
Fort William and Port Arthur.....	Jan. 1-21.....	3		Dec. 1-31, 1921: Cases, 128. Jan. 1-31, 1922: Cases, 170; Feb. 1-28, 1922: Cases, 185.
Hamilton.....	Jan. 22-Mar. 25.....	4		
Kingston.....	Jan. 17-Feb. 11.....	5		
Niagara Falls.....	Dec. 11-24.....	2		Jan. 16-20, 1922: Two cases reported.
Do.....	Jan. 15-Apr. 10.....	40		
North Bay.....	Feb. 12-18.....	1		
Ottawa.....	Dec. 11-24.....	17		
Do.....	Jan. 1-Apr. 15.....	34		
Sault Ste. Marie.....	Jan. 15-21.....	1		
Toronto.....	Dec. 11-24.....	4		
Do.....	Jan. 1-Apr. 8.....	54		
Windsor.....	Jan. 8-Mar. 4.....	3		
Quebec				
Montreal.....	Dec. 11-24.....	1		
Saskatchewan				
Regina.....	Jan. 1-Feb. 11.....	4		
Saskatoon.....	Dec. 1-18.....	6		
Do.....	Feb. 5-18.....	3		
Canal Zone:				
Ancon.....				Admitted to hospital by transfer from Panama, Nov. 30, 1921, 1 case. Arrived on sailing vessel from a village on south coast.
Ceylon:				
Columbo.....	Nov. 27-Dec. 3.....	1		Port case.
Do.....	Jan. 29-Mar. 4.....	5		One port case.
Chile:				
				Jan.-Sept., 1921: Cases, 5,500 (approximately); deaths, 2,500 (approximately). Nov. 15-21, 1921: Diffused in southern provinces; not epidemic.
Concepcion.....	Nov. 23-Dec. 26.....		25	Nov. 15-21, 1921: Present. In vicinity, at Hualqui, cases, 32; deaths, 5. Dec. 4-17, 1921: Present.
Do.....	Dec. 27-Jan. 30.....		21	Present.
Coronel.....	Nov. 15-Dec. 17.....			Present.
Curanilahue.....	Nov. 15-21.....	4		
Lota.....				Oct. 28, 1921-Jan. 31, 1922: Cases, 878; deaths, 338. Reported Mar. 16.
Ollague.....	Mar. 12-25.....	1		From beginning of outbreak to Feb. 15, 1922: Cases, 87.
Osorno.....	Nov. 15-Dec. 24.....	6		Jan. 8-28, 1922: Present.
Talcahuano.....	Jan. 29-Feb. 18.....	5		From beginning of outbreak to Feb. 15, 1922: Cases, 122.
Do.....	Nov. 15-21.....	9		
Temuco.....	Nov. 15-21.....	5		
Valparaiso.....	Oct. 23-Dec. 31.....		94	
Do.....	Jan. 1-Mar. 25.....		39	
China:				
Amoy.....	Nov. 16-Dec. 31.....		7	Nov. 23-29, 1921: Present. Jan. 22-28, 1922: Present.
Do.....	Jan. 1-Mar. 18.....		13	
Antung.....	Nov. 28-Dec. 18.....	4		
Canton.....	Dec. 1-31.....		1	Present.
Changsha.....	Jan. 16-22.....	1		
Chungking.....	Nov. 6-Dec. 31.....			Do.
Do.....	Jan. 1-Mar. 4.....			Do.
Foochow.....	Nov. 6-Dec. 31.....			Do.
Do.....	Jan. 1-Mar. 18.....			Do.
Hankow.....	Nov. 13-Dec. 31.....			Do.
Do.....	Jan. 1-21.....	2		
Harbin.....	Nov. 14-Dec. 11.....	5		
Do.....	Dec. 26-Mar. 12.....	4		
Hongkong.....	Dec. 3-31.....	5		
Do.....	Jan. 1-Mar. 11.....	50	36	
Mukden.....	Nov. 20-Dec. 31.....			Do.
Do.....	Jan. 15-Mar. 18.....			Do.
Nanking.....	Nov. 20-Dec. 17.....			Do.
Do.....	Jan. 15-Mar. 15.....			Do.
Shanghai.....	Oct. 31-Dec. 31.....	23	194	Cases, foreign; deaths, Chinese and foreign. Populations: Native, 780,000; foreign, 24,000. Corrected report.
Do.....	Jan. 2-Mar. 19.....	34	501	Cases, foreign; deaths, native. Jan. 14, 1922: Seriously prevalent. In Mission Hospital.
Tientsin.....	Dec. 11-17.....	2		
Tsingtau.....	Jan. 1-Feb. 19.....	31	11	

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

Reports Received from December 31, 1921, to April 28, 1922—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Chosen (Korea):				
Fusan.....	Dec. 1-31.....	3	1	
Do.....	Jan. 1-Feb. 28.....	80	19	
Gensan.....	Feb. 1-28.....	1		
Seoul.....	Jan. 1-Feb. 28.....	8	3	
Colombia:				
Cartagena.....	Nov. 22-28.....		1	
Santa Marta.....	Feb. 19-25.....			Present.
Cuba.				
Antilla.....	Dec. 12-31.....	8		Dec. 4-31, 1921: Cases, 351. Jan. 1-31, 1922: Cases, 257.
Do.....	Jan. 8-Feb. 4.....	13	1	At Preston.
Cienfuegos.....	Jan. 22-Apr. 1.....	19	1	Two cases from outside city limits.
Santiago.....	Jan. 1-Feb. 28.....	8	1	
Dominican Republic.				
Puerto Plata.....	Jan. 13.....	100	5	Oct. 1-31, 1921: Cases, 653; deaths, 54. Jan. 2-Feb. 4, 1922: Cases, 6,922; deaths, 153.
San Pedro de Macoris.....	Nov. 20-Dec. 31.....	31	1	In district, widely diffused, with 1,009 estimated cases with 100 deaths.
Do.....	Jan. 14-Feb. 4.....	122		Estimate of about 500 cases of smallpox in the district of Macoris; of this 50 within the city limits.
Santo Domingo.....	Nov. 15-Dec. 5.....			In surrounding country. Feb. 12-25: 66 cases. Feb. 26-Apr. 1: About 60 cases.
Ecuador:				
Guayaquil.....	Nov. 16-Dec. 2.....	7		In district, 401 cases estimated.
Do.....	Jan. 1-Feb. 28.....	3		Dec. 17-24, 1921: Present in vicinity. Jan. 9-16, 1922: In surrounding country, 1,745 cases (estimated). Mar. 19-Apr. 1, 1922: About 20 cases, with 1 death, in surrounding country.
Egypt:				
Alexandria.....	Nov. 26-Dec. 2.....	1	1	
Cairo.....	do.....	2		
Port Said.....	Dec. 29-28.....	1		Dec. 16-23, 1921: 1 case.
Do.....	Jan. 22-23.....	1		
Finland.				
Do.....				Nov. 16-30, 1921: 1 case.
Fiume.				
Do.....				Feb. 1-15, 1922: Cases, 19.
Great Britain:				
Manchester.....	Jan. 1-7.....	4		Dec. 27, 1921-Jan. 2, 1922: Cases, 2.
Nottingham.....	Dec. 4-31.....	19		
Do.....	Jan. 8-28.....	3		
Swansea.....	Jan. 17-23.....	2		Imported on vessel from Persian Gulf.
Haiti.				
Cape Haitien.....	Dec. 11-24.....	8		Jan. 22-Mar. 25, 1922: A few cases.
Do.....	Jan. 1-Feb. 18.....	21	1	
Port au Prince.....	Dec. 11-31.....			Present.
Do.....	Jan. 15-21.....	2		
India.				
Bombay.....	Oct. 23-Dec. 31.....	3	2	Oct. 2-8, 1921: Deaths, 28. Oct. 23-Nov. 19, 1921: Deaths, 266.
Do.....	Jan. 1-Feb. 25.....	12	2	Nov. 27-Dec. 31, 1921: Deaths, 533. Jan. 1-28, 1922: Deaths, 700.
Calcutta.....	Nov. 13-Dec. 31.....	37	28	
Do.....	Jan. 1-Mar. 11.....	199	146	
Kanachi.....	Nov. 11-Dec. 31.....	28	9	
Do.....	Jan. 1-Mar. 18.....	102	66	
Madras.....	Nov. 13-Dec. 31.....	183	59	
Do.....	Jan. 1-Mar. 18.....	812	278	
Rangoon.....	Oct. 1-Dec. 31.....	6		
Do.....	Jan. 15-Feb. 25.....	85	1	
Indo-China:				
Saigon.....	Dec. 18-24.....	1		City and district.
Do.....	Jan. 8-Feb. 18.....	8	3	Do.
Italy:				
Catania.....	Feb. 20-23.....	1		In Province.
Genoa.....	Nov. 10-20.....	1		
Messina—				
Messina.....	Nov. 28-Dec. 4.....	1		
Pettineo.....	Nov. 14-Dec. 4.....	2		
Venice.....	Jan. 30-Feb. 5.....	2		

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

Reports Received from December 31, 1921, to April 28, 1922—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Japan:				
Kobe.....	Jan. 23-29.....	3	1	
Nagasaki.....	Mar. 13-19.....	1		
Taiwan Island.....	Dec. 1-31.....	2	1	
Do.....	Feb. 14-Mar. 10.....	2	1	
Yokohama.....	Jan. 9-29.....	3		Corrected report.
Java:				
East Java—				
Soerabaya.....	Jan. 1-7.....	4		
West Java—				
Bandoeng.....	Nov. 19-Dec. 8.....	2		
Batavia.....	Nov. 18-Dec. 22.....	11	9	City and Province.
Do.....	Dec. 30-Mar. 2.....	5	3	In Province: Cases, 23; deaths, 4;
Buitenzorg.....	Nov. 25-Dec. 3.....	7	1	13 cases, with 3 deaths, not
Krawang.....	Nov. 18-24.....	1		locally stated. Feb. 3-Mar. 2,
Lebak.....	Nov. 18-Dec. 8.....	7	4	1922: Cases, 15, deaths, 2.
Pandeglang.....	Nov. 25-Dec. 1.....		1	
Tangerang.....	Nov. 18-Dec. 8.....	5	1	
Liberia:				
Grand Bassa County.....	Nov. 30.....			Present at Lower Buchanan.
Mesopotamia:				
Bagdad.....	Oct. 1-Nov. 30.....	117	50	Epidemic with high mortality
				November, 1921.
Mexico:				
Chihuahua.....	Dec. 5-11.....		1	
Do.....	Jan. 23-Feb. 19.....		2	
Guadalajara.....	Nov. 1-Dec. 31.....	6		
Do.....	Jan. 1-Feb. 28.....	31	5	
Mexico City.....	Nov. 20-Dec. 31.....	64		Including municipalities in Fed-
				eral District.
Do.....	Jan. 1-Mar. 4.....	139		Do.
Monterey.....	Apr. 12.....		2	Epidemic.
Saltillo.....	Jan. 29-Feb. 4.....		1	From San Salvador, Zacatecas.
San Luis Potosi.....	Dec. 18-24.....		2	
Do.....	Jan. 8-Apr. 1.....		18	
Torreon.....	Dec. 1-31.....		134	
Do.....	Jan. 1-Feb. 28.....		82	
Newfoundland:				
St. Johns.....	Feb. 4-10.....	1		
Nicaragua:				
Managua.....	Mar. 5.....			Present.
Palestine:				
Jerusalem.....	Jan. 10-Feb. 20.....	27		
Panama:				
Bocas del Toro Province—				
Sursutba.....	Jan. 18-Feb. 8.....	11		Village 24 miles from Almirante.
Chiriqui Province.....	Dec. 22.....			Present.
Do.....	Jan. 26.....			Present with center of prevalence
				at Boquete Bajo. At Boquete
				Bajo, Jan. 22-Mar. 23, 1922, 59
				admissions to lazaretto: on
				Mar. 20, 1922, 16 cases of small-
				pox, confluent type.
Panama.....	Dec. 14.....	1		On Dec. 21, 1921: 1 additional
				case from country district of
				Sabanas admitted to hospital.
				Total admissions, Jan. 1-Dec.
				21, 1921, 207.
Peru:				
Lima.....	Nov. 1-Dec. 31.....		3	
Poland.....				Aug. 14-Dec. 31, 1921: Cases, 578;
				deaths, 146. Exclusive of
				Brest-Litovsk, Minsk, and
				Wilno districts.
Portugal:				
Lisbon.....	Nov. 13-Dec. 31.....	48	12	
Do.....	Jan. 1-28.....	46	1	
Portuguese East Africa:				
Lourenco Marques.....	Oct. 1-Nov. 5.....	2	4	
Portuguese West Africa:				
Angola—				
Loanda.....	Oct. 9-Dec. 31.....		7	
Do.....	Jan. 1-14.....		3	
Rumania:				
Bucharest.....	Nov. 1-31.....		33	
Chisinau.....	Dec. 1-31.....	33		

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

Reports Received from December 31, 1921, to April 28, 1922—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Esthonia.....	Oct. 1-Dec. 31.....	38		
Latvia.....	do.....	75		
Do.....	Jan. 1-31.....	15		
Senegal:				
Dakar.....	Jan. 1-Feb. 28.....	5	3	
Serbia:				
Belgrade.....	Oct. 2-Nov. 26.....	16	4	
Siam:				
Bangkok.....	Oct. 23-Nov. 5.....	1		
Siberia:				
Vladivostok.....	Feb. 22-28.....	1	1	
Spain:				
Barcelona.....	Jan. 8-14.....		1	
Huelva.....	Oct. 1-Dec. 31.....		3	
Do.....	Jan. 1-31.....	1	1	
Malaga.....	Nov. 1-Dec. 31.....		60	
Do.....	Jan. 1-31.....		8	
Seville.....	Nov. 16-Dec. 31.....		7	
Do.....	Jan. 8-Mar. 25.....		55	
Valencia.....	Jan. 22-Mar. 25.....	5	1	
Straits Settlements:				
Singapore.....	Nov. 6-Dec. 24.....	49	13	
Do.....	Jan. 1-Mar. 4.....	135	30	
Switzerland:				
Glarus, Canton.....	Dec. 10.....			Epidemic.
Lucerne.....	Feb. 1-23.....	12		
St. Gall.....	Feb. 12-13.....	1		
Zurich.....	Dec. 10.....	2		In vicinity.
Do.....	Mar. 12-13.....	5		
Syria:				
Adana.....	Dec. 18-24.....			Present.
Do.....	Jan. 1-14.....			Do.
Aleppo.....	Dec. 18-24.....			Do.
Do.....	Jan. 1-Mar. 4.....			Do.
Alexandretta.....	do.....			Do.
Beirut.....	Oct. 9-Nov. 13.....	5	2	
Do.....	Jan. 8-Feb. 25.....	20	9	Dec. 29, 1921-Jan. 4, 1922: Cases, 14; deaths, 2.
Cilicia.....	Jan. 8-Feb. 4.....			Present.
Diarbekir.....	Dec. 18-24.....			Do.
Do.....	Jan. 1-Feb. 4.....			Do.
Mersina.....	Dec. 18-24.....			Do.
Do.....	Jan. 1-7.....			Do.
Urfa.....	Dec. 18-24.....			Do.
Do.....	Jan. 1-Feb. 4.....			Do.
Tunis:				
Tunis.....	Nov. 26-Dec. 23.....	17	15	
Do.....	Jan. 1-Feb. 4.....	4	5	
Turkey:				
Constantinople.....	Nov. 27-Dec. 24.....	20	4	
Do.....	Jan. 15-Mar. 25.....	104	21	
Union of South Africa:				
Cape Province.....	Nov. 5-Dec. 31.....			Nov. 1-Dec. 31, 1921: Cases, 326; deaths, 6 (colored). White, 10 cases.
Do.....	Jan. 8-Feb. 11.....			Outbreaks. Nov. 1-Dec. 31, 1921: Cases, 42; deaths, 1 (colored). Outbreaks.
Natal.....	do.....			Outbreaks. Nov. 1-Dec. 31, 1921: Cases, 209; deaths, 5 (colored). Outbreaks. Nov. 1-Dec. 31, 1921: cases, 8 (colored).
Orange Free State.....	Oct. 23-Dec. 24.....			Outbreaks... Natives.
Do.....	Feb. 5-11.....			Outbreaks. Dec. 1921: Cases, 15.
Southern Rhodesia.....	Dec. 29-Feb. 22.....	149		Nov. 1-Dec. 31, 1921: Cases, 22 (colored). Among white population, 8 cases, State not designated.
Transvaal.....	Oct. 23-Dec. 31.....			Outbreaks.
Do.....	Jan. 1-Feb. 11.....			Outbreaks. Dec. 1921: Cases, 15.
Johannesburg District.....	Dec. 1-31.....	1		
Do.....	Jan. 1-7.....			Outbreaks.
Venezuela:				
Ciudad Bolivar.....	Mar. 22.....	3		

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

Reports Received from December 31, 1921, to April 28, 1922—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Yugoslavia.....				July 3-30, 1921: Cases, 37.
Bosnia Herzegovina.....	July 3-9.....	2		
Croatia.....	do.....	1		
Dalmatia.....	do.....	1		
Serbia.....	do.....	3		
Belgrade.....	Dec. 11-17.....	4		
Do.....	Jan. 1-Feb. 18.....	6		
Slovenia.....	July 3-9.....	1		
Voivodina.....	do.....	3		
On vessel:				
S. S. Victoria.....	Jan. 16.....	1	1	At Thursday Island Quarantine, Australia. Vessel left Hongkong Jan. 3; case isolated, Jan. 10. Vessel left for Townsville, Sydney, and Melbourne. Released at Melbourne Feb. 4, 1922.
S. S. West O'Rowa.....	Jan. 5-8.....	3	1	At Kobe, Japan, from Shanghai, China.
S. S. —.....	Jan. 17-23.....	2		At Swansea, Wales, from Persian Gulf.

TYPHUS FEVER.

Algeria:				
Algiers.....	Nov. 1-Dec. 31.....	3		
Do.....	Jan. 11-Mar. 10.....	4		
Oran.....	Dec. 21-31.....	1		
Do.....	Jan. 1-Mar. 20.....	20	8	
Asia Minor:				
Brousa.....	Jan. 15-21.....	1		
Austria:				
Vienna.....	Dec. 4-31.....	10		
Do.....	Jan. 1-28.....	9	1	
Bolivia:				
La Paz.....	Aug. 1-Dec. 31.....	121	98	
Do.....	Jan. 1-31.....	15	12	
Brazil:				
Sao Paulo.....	Feb. 6-12.....	12	2	
Bulgaria:				
Sofia.....	Dec. 18-24.....	1		
Do.....	Feb. 12-Mar. 18.....	2		
Chile:				
Concepcion.....	Nov. 22-Dec. 26.....		3	
Do.....	Jan. 3-30.....		3	
Talcahuano.....	Jan. 29-Feb. 18.....	3		
Valparaiso.....	Oct. 23-Nov. 26.....		6	
Do.....	Jan. 1-7.....		1	
China:				
Antung.....	Dec. 26-Jan. 1.....	1		
Do.....	Feb. 6-12.....	1		
Harbin.....	Nov. 7-Dec. 25.....	12		
Do.....	Dec. 26-Mar. 12.....	27		Jan. 23, 1922: Reported extending from Soviet Russia, along railway line to maritime provinces.
Czechoslovakia:				
Prague.....	Jan. 22-Feb. 18.....	3		
Danzig (free city).....	Feb. 23.....	1		In district, at Zoppot. In merchant from Warsaw.
Egypt:				
Alexandria.....	Nov. 19-Dec. 31.....	3	1	
Do.....	Jan. 15-Feb. 25.....	17	5	
Cairo.....	Oct. 1-Dec. 31.....	18	14	
Do.....	Jan. 1-28.....	6	4	
Port Said.....	Jan. 22-Feb. 11.....	2		
Finland:				
Helsingfors.....	Jan. 1-31.....	1		In courier from Moscow.
Germany:				
Breslau.....	Dec. 25-31.....	2	1	
Do.....	Jan. 1-Feb. 5.....	55	8	Including district.
Frankfort-on-Oder.....	Feb. 16.....	26		In persons returning from Russia.
Hamburg.....	Dec. 11-17.....	4		
Great Britain:				
Birkenhead.....	Apr. 6.....	13	3	Vicinity of Liverpool.
Glasgow.....	Dec. 25-31.....	1		

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

Reports Received from December 31, 1921, to April 23, 1922—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:				
Saloniki.....	Jan. 23-29.....	1	.....
Italy:				
Palermo.....	Jan. 15-28.....	8	1	
Mesopotamia:				
Bagdad.....	Oct. 1-Dec. 31.....	3	9	
Mexico:				
Mexico City.....	Nov. 20-Dec. 31.....	242	.....	Including municipalities in Federal District.
Do.....	Jan. 1-Feb. 25.....	268	.....	Do.
San Luis Potosi.....	Dec. 18-24.....	.....	1	Dec. 25-31, 1921: Present.
Do.....	Jan. 8-Feb. 25.....	.....	.....	Present. One death.
Palestine:				
Jerusalem.....	Dec. 27-Mar. 27.....	12	.....
Poland.....				Aug. 14-Nov. 5, 1921: Cases, 2,399; deaths, 173. Nov. 6-Dec. 3, 1921: Cases, 1,512; deaths, 105. Nov. 20-Dec. 10, 1921: Cases, 1,162; deaths, 89. Dec. 4-31, 1921: Cases, 3,500; deaths, 313. Jan. 1-7, 1922: Cases, 1,322. All statistics are exclusive of Brest-Litovsk, Minsk, and Wilno districts.
District—				
Bialystok.....	Nov. 20-Dec. 10.....	116	8	
Do.....	Jan. 1-7.....	253	.....
Galicja—				
Lemberg.....	Jan. 3.....	229	.....	Jan. 1-7, 1922: Cases, 61.
Kielce.....	Nov. 20-Dec. 10.....	31	8	
Do.....	Jan. 1-7.....	28	.....
Krakow.....	Nov. 20-Dec. 10.....	45	6	
Do.....	Jan. 1-7.....	53	.....
Lodz.....	Nov. 20-Dec. 10.....	67	.....
Do.....	Jan. 1-7.....	41	.....
Lublin.....	Nov. 20-Dec. 10.....	69	.....
Do.....	Jan. 1-7.....	147	.....
Lwow.....	Nov. 20-Dec. 10.....	121	16	
Nowogrod.....	do.....	249	15	
Polesia.....	do.....	83	5	
Do.....	Jan. 1-7.....	450	.....
Posen.....	do.....	1	.....
Stanislawow.....	Nov. 20-Dec. 10.....	88	8	
Do.....	Jan. 1-7.....	54	.....
Tarnopol.....	Nov. 20-Dec. 10.....	86	17	
Do.....	Jan. 1-7.....	28	.....
Volhynia.....	Nov. 20-Dec. 10.....	89	4	
Do.....	Jan. 1-7.....	107	.....
Warsaw.....	Nov. 20-Dec. 10.....	81	2	
Do.....	Jan. 1-7.....	32	.....
Warsaw City.....	Nov. 20-Dec. 10.....	47	5	
Do.....	Jan. 1-7.....	67	.....
Portugal:				
Oporto.....	Jan. 8-Apr. 1.....	24	2	
Rumania:				
Bucharest.....	Nov. 1-30.....	3	.....
Chisinau.....	Nov. 1-Dec. 31.....	28	.....	Dec. 1-31, 1921: Recurrent typhus cases, 10.
Russia.....				Nov. 29-Dec. 10, 1921: In Soviet Russia, cases, 7,681.
Esthonia.....				
Do.....	Oct. 1-Dec. 31.....	53	.....
Do.....	Jan. 1-31.....	36	.....	Recurrent typhus, 29 cases.
Latvia.....				(Corrected report) Oct. 1-Nov. 30, 1921: Cases, 127.
Do.....	Oct. 1-Dec. 31.....	341	.....	Recurrent typhus, 28 cases.
Do.....	Jan. 1-31.....	288	.....
Libau.....	Jan. 15-Feb. 1.....	4	.....
Lithuania.....				
Do.....	Jan. 1-31.....	814	73	Recurrent typhus: Cases, 357; deaths, 12.
Perm.....				Oct. 1-31, 1921: Cases, 83. Nov. 1-30, 1921: Cases, 2,389.
Nov. 23-Dec. 10.....		1,408	.....
Saratov District—				
Markstadt.....				Sept. 1-Dec. 31, 1921: Cases 1,987; mortality, about 10 per cent; hospital cases.
Serbia:				
Belgrade.....	Oct. 2-Nov. 26.....	3	2	

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

Reports Received from December 31, 1921, to April 23, 1922—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Siberia.....				Jan. 23, 1922: Present in western districts.
Chita.....	Dec. 26.....			Epidemic.
Vladivostok.....	Dec. 25-31.....	5	1	
Spain:				
Madrid.....	Dec. 1-31.....	1		
Do.....	Jan. 1-31.....	2		
Syria:				
Aleppo.....	Mar. 19-25.....			Present.
Diarbekir.....	Mar. 5-Apr. 1.....			Do.
Mardin.....	do.....			Do.
Tunis:				
Tunis.....	Feb. 5-Mar. 25.....	4	3	
Turkey:				
Constantinople.....	Nov. 20-Dec. 31.....	19		
Do.....	Jan. 1-Mar. 25.....	98		
Union of South Africa.....				Nov. 1-Dec. 31, 1921: Cases, 1,388; deaths, 205 (colored). White, 20 cases; deaths, 4.
Cape Province.....				Oct. 23-Dec. 24, 1921: Outbreaks. Nov. 1-Dec. 31, 1921: Cases, 1,053; deaths, 153 (colored). Among white population, 19 cases, 3 deaths.
Do.....				Jan. 1-Feb. 11, 1922: Outbreaks. One death in European at Jenseville, Dec. 6, 1921.
East London.....	Oct. 30-Dec. 24.....	3		Natives.
Do.....	Jan. 29-Feb. 11.....	2		Outbreaks. Stated to be prevalent only in Newcastle District.
Natal.....	Nov. 5-Dec. 17.....			Nov. 1-Dec. 31, 1921: Cases, 135; deaths, 25 (colored).
Orange Free State.....	Nov. 13-Dec. 31.....			Outbreaks. Nov. 1-Dec. 31, 1921: Cases, 153; deaths, 21 (colored).
Do.....	Jan. 1-Feb. 11.....			Outbreaks.
Durban.....	Jan. 15-21.....	1		Imported.
Transvaal.....	Jan. 8-Feb. 11.....			Outbreaks. Nov. 1-Dec. 31, 1921: Cases, 35; deaths, 4 (colored). White, one case, one death.
Johannesburg District.....	Jan. 12-18.....	26	4	
Venezuela:				
Maracaibo.....	Dec. 20-26.....		1	
Yugoslavia.....				July 3-30, 1921: Cases, 13.
Bosnia Herzegovina.....	July 3-9.....	1		
Croatia—				
Zagreb.....	Jan. 1-Feb. 25.....	3		
Montenegro.....	July 3-9.....	3		

YELLOW FEVER.

Brazil:				
Pernambuco.....	Feb. 19-25.....	1	1	
Mexico.....				Year 1921: Cases, 115; deaths, 53.
Colima (State).....				Year 1921: Cases, 7; deaths, 4.
Colima.....	Oct. 27.....	4	3	
Manzanillo.....	Aug. 21.....	3	1	
Jalisco (State).....				Year 1921: Cases, 13; deaths, 7.
Guadalajara.....	Nov. 1-30.....	1	1	Imported.
Puerta Vallarta (Las Penas).....	Oct. 5-Dec. 17.....	13	5	
Do.....	Jan. 31.....		1	
Tonila.....	Aug. 31.....	1	1	
Quintana Roo (Territory)—				
Payo Obispo.....	Aug. 8.....	1	1	
Sinaloa (State).....				Year 1921: Cases, 18; deaths, 9.
Culliacan.....	Sept. 17.....	4	1	
Guamuchil.....	Oct. 10.....	1		
Mazatlan.....	Aug. 21.....	1	1	Imported.
Palmar de los Leales.....	Sept. 30.....	12	7	
Tamaulipas (State).....				Year 1921: Cases, 1; deaths, 1.
Tampico.....	Jan. 11.....	1	1	

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

Reports Received from December 31, 1921, to April 28, 1922—Continued.

YELLOW FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Mexico—Continued.				
Vera Cruz (State).....	Year 1921: Cases, 75; deaths, 31. Oil camp.
Alamo.....	June 21.....	4	1	
Alvarado.....	July 3.....	1	1	
Barra de Penn.....	July 18.....	1	1	
Cordoba.....	Sept. 22.....	5	3	
Cosamaloapam.....	July 18.....	14	6	
Nogales.....	Oct. 28.....	1	1	
Orizaba.....	.....do.....	1	.....
Papantla.....	Jan. 14.....	6	3	
Providencia.....	Oct. 28.....	3	.....
Purga.....	Feb. 7.....	1	1	
Rancho de Santa Rosa.....	Oct. 8.....	2	.....
Rancho "El Jaguey".....	Sept. 14.....	2	2	
San Pablo (Papantla).....	Sept. 12.....	1	.....
San Ildefonso.....	Oct. 17.....	2	.....
Tierra Blanca.....	Sept. 24—Nov. 12..	4	3	
Tlacotalpan.....	Sept. 14.....	1	1	
Tuxpam.....	Jan. 3.....	8	2	
Vera Cruz.....	Jan. 15.....	18	7	