# PUBLIC HEALTH REPORTS

VOL. 35

**DECEMBER 24, 1920** 

No. 52

# SUPREME COURT OF THE UNITED STATES CONSTRUES SECTION 2 OF THE HARRISON ANTINARCOTIC ACT.

The Supreme Court of the United States has decided that the issuance of a prescription for a habit-forming drug by a physician not "in the course of his professional practice only" is a sale of the drug and a violation of section 2 of the Harrison Antinarcotic Act. The prescriptions were issued by the defendant, a physician, to persons who were not his patients and not previously known to him and who were professed drug addicts. The opinion, which was delivered by Mr. Justice Pitney, is as follows:

Plaintiff in error was indicted and convicted for violating section 2 of an act of Congress approved December 17, 1914, commonly known as the Harrison Antinarcotic Act (38 Stat., 785, Ch. 1). His motion in arrest of judgment having been overruled (253 Fed. Rep., 213), he brought the case here by direct writ of error under section 238, Judicial Code, upon the ground of the unconstitutionality of the act. Afterwards this question was set at rest by our decision in United States v. Doremus, 249 U. S., 86, sustaining the act; but our jurisdiction continues for the purpose of disposing of other questions raised in the record. Brolan v. United States, 236 U. S., 216; Pierce v. United States, 252 U. S., 239.

These questions relate to the sufficiency of the indictment, the adequacy of the evidence to warrant a conviction, the admissibility of certain evidence offered by defendant and rejected by the trial court, and the instructions given and refused to be given to the jury.

<sup>&</sup>lt;sup>1</sup> Sec. 2. That it shall be unlawful for any person to sell, tarter, exchange, or give away any of the aforesaid drugs except in pursuance of a written order of the person to whom such article is sold, bartered, exchanged, or given, on a form to be issued in blank for that purpose by the Commissioner of Internal Revenue. \* \* \* Nothing contained in this section shall apply—

<sup>(</sup>a) To the dispensing or distribution of any of the aforesaid drugs to a patient by a physician, dentist, or veterinary surgeon registered under this act in the course of his professional practice only: Provided, That such physician, dentist, or veterinary surgeon shall keep a record of all such drugs dispensed or distributed, showing the amount dispensed or distributed, the date, and the name and address of the patient to whom such drugs are dispensed or distributed, except such as may be dispensed or distributed to a patient upon whom such physician, dentist, or veterinary surgeon shall personally attend; \* \* \*

<sup>(</sup>b) To the sale, dispensing, or distribution of any of the aforesaid drugs by a dealer to a consumer under and in pursuance of a written prescription issued by a physician, dentist, or veterinary surgeon registered under this act: \* \* \*

<sup>&</sup>lt;sup>2</sup> Public Health Repts., Apr. 4, 1919, p. 688.

<sup>&</sup>lt;sup>3</sup> Public Health Repts., May 30, 1919, p. 1195.

The indictment contained 20 counts, differing only in matters of detail. Defendant was convicted upon 8 counts, acquitted upon the others. Each count averred that on a date specified, at Pittsburgh, in the county of Allegheny, in the western district of Pennsylvania, and within the jurisdiction of the court, defendant was a practicing physician, and did unlawfully, willfully, knowingly, and feloniously sell, barter, exchange, and give away certain derivatives and salts of opium, to wit, a specified quantity of morphine sulphate, to a person named, not in pursuance of a written order from such person on a form issued in blank for that purpose by the Commissioner of Internal Revenue under the provisions of section 2 of the act, "in manner following, to wit, that the said Jin Fuey Moy, at the time and place aforesaid, did issue and dispense" to the person named, a certain prescription of which a copy was set forth, and that said person "was not then and there a patient of the said Jin Fuey Moy, and the said morphine sulphate was dispensed and distributed by the said Jin Fuey Moy not in the course of his professional practice only; contrary to the form of the act of Congress," etc.

It is objected that the act of selling or giving away a drug and the act of issuing a prescription are so essentially different that to allege that defendant sold the drug by issuing a prescription for it amounts to a contradiction of terms, and the repugnance renders the indictment fatally defective. The Government suggests that the indictment fatally defective. clause as to issuing the prescription may be rejected as surplusage; but we are inclined to think it enters so intimately into the description of the offense intended to be charged that it can not be eliminated, and that unless defendant could "sell," in a criminal sense, by issuing a prescription, the indictment is bad. If "selling" must be confined to a parting with one's own property there might be difficulty. But by section 332 of the Criminal Code, "Whoever directly commits any act constituting an offense defined in any law of the United States, or aids, abets, counsels, commands, induces, or procures its commission is a principal." Taking this, together with the clauses quoted from section 2 of the antinarcotic act, it is easy to see, and the evidence in this case demonstrates, that one may take a principal part in a prohibited sale of an opium derivative belonging to another person by unlawfully issuing a prescription to the would-be purchaser. Hence there is no necessary repugnance between prescribing and selling, and the indictment must be sustained.

The evidence shows that defendant was a practicing physician in Pittsburgh, registered under the act so as to be allowed to dispense or distribute opium and its derivatives without a written order in official form, "in the course of his professional practice only"; that he was in the habit of issuing prescriptions for morphine sulphate without such written order and not in the ordinary course of professional practice; that he issued them to persons not his patients and not previously known to him, professed morphine users, for the mere purpose, as the jury might find, of enabling such persons to continue the use of the drug, or to sell it to others; in some cases he made a superficial physical examination, in others none at all; his prescriptions called for large quantities of morphine—8 to 16 drams at a time—to be used "as directed," while the directions left the recipient free to use the drug virtually as he pleased. His charges were not according to the usual practice of medical men, but according to the amount

of the drug prescribed, being invariably \$1 per dram. All the prescriptions were filled at a single drug store in Pittsburgh, the recipients being sent there by defendant for the purpose; and persons inquiring at that drug store for morphine were sent to defendant for a prescription. The circumstances strongly tended to show cooperation between defendant and the proprietors of the drug store. At and about the dates specified in the indictment—the spring of the year 1917—and for more than two years before, the number of prescriptions issued by defendant and filled at this drug store ran into the hundreds each month, all calling for morphine sulphate or morphine tablets in large quantities. In one case a witness who had procured from defendant two prescriptions—one in his own name for 10 drams, the other in the name of a fictitious wife for 6 drams and had been directed by defendant to the specified drug store in order to have them filled, asked defendant to confirm the prescriptions by telephone so there would be no trouble; to which defendant replied: "Oh, never mind; we do business together; we understand each other." On another occasion the same witness, having received from defendant two prescriptions for 8 drams each, one in his own name, the other in the name of the supposed wife, stating in one case a Cleveland address, in the other a Pittsburgh address, presented them at the drug store to be filled, and was told by the manager that he would not fill any more prescriptions under a Pittsburgh address; "they were taking too big a chance, and I must go back to the Chinaman and tell him what he told me, and he would understand the Chinaman would understand." Witness returned the two prescriptions to defendant, told him what the manager had said, and defendant retained those prescriptions and issued to the witness a new one for 16 drams in place of them, with which the witness returned to the drug store and procured the specified quantity of the drug.

In each case where defendant was found guilty the evidence fully warranted the jury in finding that he aided, abetted, and procured a sale of morphine sulphate without written order upon a blank form issued by the Commissioner of Internal Revenue; and that he did this by means of a prescription issued not to a patient and not in the course of his professional practice, contrary to the prohibition of section 2 of the act. Manifestly the phrases "to a patient" and "in the course of his professional practice only" are intended to confine the immunity of a registered physician, in dispensing the narcotic drugs mentioned in the act, strictly within the appropriate bounds of a physician's professional practice, and not to extend it to include a sale to a dealer or a distribution intended to cater to the appetite or satisfy the craving of one addicted to the use of the drug. A "prescription" issued for either of the latter purposes protects neither the physician who issues it nor the dealer who knowingly accepts and fills it. Webb

v. United States, 4 249 U.S., 96.

Errors assigned to the instructions given and refused to be given by the trial judge to the jury are disposed of by what we have said. \* \* \*

The judgment under review is affirmed.

## PUBLIC HEALTH ENGINEERING ABSTRACTS.

Water-supply statistics of metered cities.—American City, vol. 23, No. 6, December, 1920, p. 613-620.

Water-supply statistics from over 1,000 cities in the United States or Canada having at least 1 per cent of their services metered are tabulated to show population, ownership of waterworks, source of supply, number having filtration plants, number using sterilization, average daily and per capita consumption, number having meters at pumps, number of services, per cent services metered, meter rates per 1,000 gallons for domestic and commercial uses, and minimum annual charge.

Water-supply problems in Roumania.—George C. Whipple, professor of sanitary engineering, Harvard University. *American City*, vol. 23, No. 6, December, 1920, p. 580-582.

In Roumania the water supplies vary from the most primitive wells of olden times to modern, well-constructed public works. Rural conditions prevail generally. In most of the villages water is obtained from one or more community wells, which in many cases have substantial well curbs of masonry or concrete, usually round and covered with a roof. Water is drawn up in a bucket operated by a windlass, but well sweeps and other devices are also used.

The cities and towns obtain their water supplies from ground waters, in a few instances from mountain supplies, and in others from the Danube River. The river supplies are filtered. Before the war ozone disinfecting apparatus was used in connection with filtration. Or the plains about 30 cities and towns with populations in excess of 2,500, and in the case of 10, over 10,000, have no public water supplies.

Bucharest, the capital of Roumania, has three sources of supply, a filtered river water, and two well-water supplies, with a total maximum daily consumption of 25,000,000 gallons. The hardness of the river water is 40 p. p. m., of the well waters, 120 p. p. m.

At present, lack of facilities for making even minor waterworks repairs results in lack of service. Due to lack of adequate water-supply systems, the country is open to the menace of cholera and other water-borne diseases. In the past cholera has not been prevalent in Roumania, but the typhoid rates in many places have been quite high.

A study of Massachusetts water supplies and the typhoid rate.— H. W. Clark, chief chemist, Massachusetts Department of Public Health. *Journal of New England Water Works Association*, September, 1920.

Preference is stated for a water that is pure rather than an impure water purified. Mr. Clark recounts the great reduction in the typhoid

fever rate in Massachusetts during the last 35 years, a decrease from 45 per 100,000 to 2.6 per 100,000; the present rate is stated to be the lowest in the country and as low as in England and Wales. Though the introduction and improvement of public water supplies is considered the largest factor in this decrease, other reforms in sanitation—such as public sewer systems, increased vigilance over milk and food supplies—are given credit for aiding in the reduction. Unlike in many sections of the country, the public water supplies in Massachusetts, with one exception (Lawrence), do not take their raw water from sources which receive the direct discharge of municipal wastes. The installation of public sewer systems in this State is, therefore, of greatest advantage for removing wastes without contaminating water supply sources. The remaining typhoid fever is considered to be caused by the typhoid carriers in the State.

It is reported that 12 per cent of the population of the State uses filtered water and only seven municipalities have chlorine plants in operation at any time. The Massachusetts policy has been to obtain a water supply for every city or town that can be used for all domestic purposes without any purification treatment other than storage. Almost phenomenal success in accomplishing this is claimed with over a hundred surface supplies in use.

A discussion by G. A. Johnson, Frank Green, M. N. Baker, and others, which followed the presentation of the paper, appeared to claim that insufficient emphasis was given by Massachusetts to the safeguarding of water supplies from protected watersheds by filtration and chlorination. It was the opinion of the first two mentioned, that the fine record of Massachusetts for freedom from water-borne diseases would not be maintained without more consideration being accorded to these secondary and tertiary protective measures.

New method of applying alum directly to filter beds at Oshkosh, Wis.—R. A. Maddock, chemist in charge water purification works, Oshkosh, Wis. *Engineering & Contracting*, vol. 54, No. 23, December 8, 1920, p. 553.

The city of Oshkosh obtains its water supply from Lake Winnebago, whose greatest depth is only 28 feet. The resulting turbidity and the suspended matter contained in the water requires careful filtration.

After a series of experiments the writer found the following method of applying alum solution not only saved a large amount of the wash water and alum, but prevented water of an inferior grade from passing into the clear-water basin.

A measured amount of alum solution of known concentration was applied directly to the water in the filter bed, the filter bed having been washed first and the water lowered. The solution was allowed

to stand long enough to form a mat of aluminum hydrate over the sand surface before the filter was again put in operation.

The average amount of alum used by this procedure was 40 pounds per day, a saving of an average of 760 pounds per day over the old method. The saving in money for alum and wash water averaged \$7,000 per year.

# STUDIES IN THE TREATMENT OF MALARIA.

ABSTRACTS OF THE STUDIES WHICH WERE MADE AT THE REQUEST OF THE BRITISH WAR OFFICE.

By BRUCE MAYNE, Biologist, and MILDRED M. Moss, Microscopist, United States Public Health Service.

These studies were presented in the papers published in the Annals of Tropical Medicine and Parasitology, June 30, 1917, to March 12, 1919. The patients treated were adult males, infected in Macedonia and East Africa 6 to 12 months previously, and all had more or less quinine during that period. Most of them showed clinical symptoms, though a few were treated during an apyrexial period. All showed parasites on the day of beginning treatment or a few days previously. Parasite examinations were made frequently, often daily, during and after treatment. By relapse is meant parasitic relapse. Febrile relapses occurred in all cases of relapse, sometimes a few days later than the first appearance of parasites in the blood.

In estimating the percentage of relapses an arbitrary observation period of 60 days following cessation of treatment was chosen. Whenever it was not possible to follow cases for this period, two percentages are given, the minimum representing the number of relapses actually observed, the maximum including those cases which were not observed for the full 60-day period and which must be counted as possible relapses.

# Conclusions Drawn o the Treatme t of Malaria.

#### QUININE.

1. Oral administration of quinine sulphate in doses of 10 grains on each of 2 consecutive days causes only temporary cessation of clinical symptoms and disappearance of parasites from peripheral blood in simple tertian malaria, but has no curative effect. If the doses given on each of the two days do not exceed 30 grains, relapses occur within two or three weeks. A curative effect is manifest when the dose given on each of the two days reaches 45 grains and becomes more marked as it is increased to 90 grains. The dose of 90 grains prevents 62 per cent of cases relapsing (53-165 days' observation).

- 2. Of the various forms of continuous treatment used, that of 45 grains daily for from three to eight weeks is the best, resulting in 36.8-52.6 per cent of relapses, as compared with a minimum of 60-80 per cent of relapses in cases treated with smaller doses (20-30 grains).
- 3. Of the various forms of interrupted treatment, that of 45 grains of quinine sulphate on two consecutive days weekly, from four to eight weeks, is the best, resulting in 28.6-38.1 per cent of relapses, as compared with a minimum of 41.2 per cent in cases treated with smaller doses.
- 4. Comparison of 2 and 3.—In both 30 and 45 grain doses the palliative results of the interrupted treatment are better than those of the corresponding continuous treatment. (Note.—The number of cases under observation was not the same.) Also, 45 grains twice weekly is better than 30 grains twice weekly or than 30 grains daily, both as a palliative and as a curative treatment.
- 5. Quinine sulphate orally in doses of 120 grains on each of two consecutive days represents the maximum amount of the drug that can be tolerated by the average case.
- 6. Of 405 cases treated (simple tertian) 43 per cent relapsed during the first 15 days after cessation of treatment, 19.5 per cent during the second 15 day period, 3 per cent during the third, and 1 per cent during the fourth. If a case of simple tertian malaria has not relapsed parasitically within four weeks after cessation of treatment his risk of relapse is only 13 per cent, whereas if he has not relapsed within six weeks his risk of subsequent relapse is reduced to less than 5 per cent.
- 7. In two series treated with 90 grains of quinine sulphate on each of two consecutive days only, the curative results were 57 to 62 per cent of cures in Series I (76 cases), and 3 to 6 per cent of cures in Series II (89 cases). The quinine solution was identical. Taking into consideration cases from Saloniki only, thus eliminating the strain of parasites as a factor, 65 per cent of Series I were cured and only 3 per cent of Series II. The length of time between first reporting sick and treatment and between arrival in England and treatment were eliminated as factors. In Series I, patients were treated during the period July-September, 1917. In Series II, patients were treated during the period January-April, 1918. After a study of meteorological observations it was seen that the higher the mean daily temperature, the higher the percentage of cures. The conclusion was reached that the season of the year affected the treatment of malaria.
- 8. Second comparison of continued and interrupted treatments.—Given a total weekly dose of quinine as a palliative, it is better to divide it into two equal parts and administer it on each of two consecutive days than to divide it into six equal parts and administer it

on each of six consecutive days. As a palliative, interrupted treatment is preferable to continuous treatment in simple tertian malaria.

- 9. Under quinine treatment of 30 or 45 grains daily, crescents do not persist in the cutaneous blood in the majority of cases for more than three weeks.
- 10. An intramuscular injection of 15 grains of quinine bihydrochloride on each of two consecutive days only, exerts in the case of  $P.\ vivax$  a constant and rapid effect on both temperature and parasites; in the case of  $P.\ falciparum$  the action on temperature and trophozoites is also well defined, though relapses occur more quickly than in the case of  $P.\ vivax$ ; whereas in the two cases of  $P.\ malarix$  treated in the same way there is little if any effect on the parasites, but in one of the two cases the temperature was controlled.
- 11. At what time after cessation of treatment (quinine) do relapses occur in simple tertian malaria? Eight hundred cases (including cases cited in No. 6) were treated with varying doses of quinine. The time incidence of relapses were tabulated in three ways:
- (a) With reference to the relapses themselves, i. e., the percentage of the total relapses which occur during each period of time. The percentages were as follows: 83.2 per cent during the first 20-day period; 13.74 per cent during the second 20-day period; 2.58 per cent during the third 20-day period; 0.17 per cent during the fourth 20-day period; none during the fifth; 0.17 per cent during the sixth; and 0.17 per cent during the seventh.
- (b) With reference to the total cases treated, i. e., the percentage of the total cases treated which relapsed during each 20-day period. These were as follows: 60.6 per cent relapsed during the first 20-day period; 10.2 per cent during the second; 2 per cent during the third; 0.2 per cent during the fourth; and none during the fifth.
- (c) With reference to remainders, i. c., the incidence among cases treated, less those which had previously relapsed. These were as follows: 60.6 per cent during the first 20-day period; 26.4 per cent during the second; 7.5 per cent during the third; 1.1 per cent during the fourth; and none during the fifth.

#### REMEDIES FOR MALARIA OTHER THAN QUININE.

Intravenous injections of tartar emetic do not cause the disappearance of any stage of malaria parasites from the peripheral blood, either in cases of *P. vivax* or *P. falciparum*. These injections do not control either the rigors or the fever of acute malaria.

Intramuscular injections of amylopsin and trypsin proved to be of no value in the treatment of 10 cases of acute simple tertian malaria.

Single intravenous injections of novarsenobenzol-billon, in doses varying from 0.45 to 0.9 gram, control the febrile paroxysms and

cause the disappearance of parasites from the cutaneous blood, as a rule, within 1 day in simple tertian malaria. Parasitic relapses occur on an average in 21 days. The curative effect in the doses used is practically nil.

Quinotoxin hydrochloride in the doses used, 5 and 10 grains, on each of two consecutive days, has practically no action on the parasites or on the fever, and so is inferior in its action to similar doses of quinine sulphate in simple tertian malaria.

A single intravenous injection of 0.2 gram of disodo-luargol caused a temporary disappearance of parasites from the cutaneous blood and controlled symptoms in simple tertian malaria. A relapse occurred within three weeks. Smaller doses were ineffective.

Collosol manganese in the dose used is of no value in the treatment of simple tertian malaria.

Small doses of arsenic in combination with quinine are not more efficacious as a palliative than the small dose of quinine alone.

Liquor arsenicalis in large doses (30 minims daily for eight weeks) controls febrile relapses, but has less control over parasites. The combination of quinine and arsenic in large doses is superior to arsenic alone. As a curative, large doses of arsenic with quinine gave 12.5 per cent of relapses.

Novarsenobenzol-billon in the doses used (0.45-0.9 gram) is of no value in the treatment of malignant tertian malaria. A combination of arsenic with quinine in the doses used (30 grains quinine and 0.9 gram novarsenobenzol-billon) is not more effective than quinine alone.

The action of novarsenobenzol-billon on  $P.\ vivax$  is marked. In this infection its action is even more rapid and efficient than that of quinine, a single intravenous injection causing the disappearance from the cutaneous blood of all stages of the parasites within 24 hours. In the case of  $P.\ falciparum$  and  $P.\ malariæ$ , novarsenobenzol-billon in the same dosage has no appreciable effect on temperature or on parasites.

A combination of novarsenobenzol-billon and quinine is more effective in simple tertian malaria than either novarsenobenzol-billon or quinine alone.

The accompanying tables summarize the data presented in these papers:

CABLE I.

Type and number of cases.	Substance and dose.	Length of treatment.	Method of ad- ministration.	Toxic effect.	Palliative offect.	Curative effect and relapses.
Simple tertian— 20 cases. Simple tertian— 8 cases.	Bihydrochlorido, 15 grains in 2 c. c. of water daily. Bihydrochloride, 15 grains	On 2 consecutive days.	Intravenously	Slight pain and tenderness.  Of 127 injections, thrombosts occurred in 4 patients, 2 in ach arm and 2 in 1 arm only; no other noticeable symp-	Cessation of febrile paroxysms within 2 days: disappearance of parasites from peripheral blood. Tempetature to normal in 1-3 days: disappearance of parasites in 2-5 days.	95 per cent of cases relapsed in 10-18 days. 66 to 100 per cent of relapses in 8-14 days.
Simple tertian— 13 cases.  Malignant tertian—7 cases.	Bihydrochloride, 10 grains, 6 injections in 12 cases; 10 grains, 5 injections in 10 abs. I take. I take. In 2 cases; 10 grains, 1 injection in 2 cases; 10 grains, 4-6 injections	10-12 days	do	Vollis.	Temperature to normal after 1-3 injections; disappearance of parasites after 1-4 injections.  Temperature controlled for few days; parasites not eradicated.	93 per cent of relapse in 8-18 days. No curative effect.
Simple tertian— 38 cases.	in 5 cases. Quinine alkaloid, 15-30 grains, 1 or 2 injections.	1-2 days	Intramuscularly.	Subcutaneous injections resulted in sloughing; some pain	Cessation offebrile paroxysms and disappearance of parasites in 1-2 days.	82 per cent of relapses in 60 days.
Simple tertian— 12 cases. Simple tertian— 18 cases.	Sulphate, 5 grains daily	2 days On 2 consecutive	Orallydodo	and sugnt swelling.	In 10 cases fever subsided in 1-3 days; 1 case in 8 days; 1 case no effect. Temperature to normal in 1-4 days; parasites disappeared in 1-3 days in	93 per cent of relapses in 60 days. 100 per cent relapses in 3-15 days.
Simple tertian— 10 cases. Simple tertian— 14 cases. Do	Sulphate, 10 grains dailySulphate, 15 grains dailySulphate, 30 grains daily	op.	op op		Temperature to normal in 1-2 days, parasitos disappeared in 2-3 days. Temperature to normal in 1-2 days, parasitos disappeared in 1-3 days. Temperature to normal in 1-6 days.	100 per cent relapses in 10-18 days. 100 per cent relapses in 8-22 days. 100 per cent relapses in
Simple tertian— 12 cases. Do	Sulphate, 45 grains dailySulphate, 60 grains daily	do	do		paractics disappeared in 1-4 days.  Temperature to normal in 1-3 days, paractics disappeared in 1-3 days.  Temperature to normal in 1-2 days.	7-20 days. 83 per cent relapses in 13-25 days. 58 per cent relapses in
Simple tertian—76 cases. Simple tertian—5 cases. Simple tertian—14 cases.	Sulphate, 90 grains dailySulphate, 20 grains daily		Orally and intramuscularly.  Orallydo	dodo Orally and in- Desfness and dimness tramuscularly. or vision, vomiting, and giddiness for 2-3 and giddiness for 2-3 days.	paisaires unsappeared in 1-3 usys.  do  Temperature to normal in 1 day; parasites disappeared in 4 cases in 1-3 day; present at intervals in 1 case. Temperature to normal in 1-2 days; parasites disappeared in 2-5 days.	39 per cent relapses in 14-57 days. 60-80 per cent relapses in 3-33 days. 71 per cent relapses in 3-49 days.

Simple tertian— 1. 29 cases. Simple tertian— 19 cases.	do	S wecks		cases ablo	Temperature to normal in 1-5 days, parasites disappeared in 1-3 days. Temperature to normal in 1-2 days, parasites disappeared in 1-3 days.	83 per cent relapses in 6-38 days. 37 per cent relapses in 4-37 days.
	on 2		ор	ireal metr.	op.	39-55 per cent relapses in 1-15 days.
Simple tertian—	Sulphate, 15 grains on 2 consecutive	2-11 weeks	op		do	No observations.
Simple tertian-	Sulphate, 30 grains on 2 consecutive	2-12 weeks	qo		Temperature to normal in 1-5 days;	Po
Simple tertian—	days weekly. Sulphate, 45 grains on 2 consecutive	4-8 weeks	do		parasites disappeared in 1-3 days. Temperature to normal in 1-3 days;	21-55 per cent relapses
29 cases. Simple tertian—	days weekly. Sulphate, 120 grains on 2 consecutive	2 days	qo	Only 16 cases able to	parasites disappeared in 1-4 days. Temperature to rormal in 1-4 days;	in 5-18 days. 60 per cent relapses in
	· ·			deaft ess, bli di ess, collapse, not lasting more than 1 week		
Simple tertian— 24 cases.	Sulphate, 90 grains daily	On 2 consec- utive days	dp	. :	Temperature to normal in 1-2 days; parasites disappeared in 1-3 days.	46-50 per cent relapses in 3-57 days.
	op.	weeks. On 2 consec- utive days.	do	Quinire poisoning, 2-3 days.	Temperature to normal in 1-3 days; parasites disappeared in 1-5 days.	94 per cent relapses in 12-53 days.
Simple tertian—30 cases.	Binydrochloride, 30 grainsintramuscu- larly; 30 grains orally. Sulphate, 5 grains daily 6 days in week	12 days8 weeks	Orally		Temperature to normalin I day; parasites disappeared in 1-4 days.	87 per cent relapses in 8-6 days. 81-83 per cent relapses
47 cases.				-	temperature to normal in 1-5 days in others, parasites disappeared in	in 60 days.
Simple tertian-	Sulphate, 15 grains on each of 2 consec-	do	op		Temperature to normal in 1-5 days;	79-84 per cent of cases
Simple tertian—	Subject 15 grains daily 6 days in	op	do		Temperature to normal in 4 days;	64-66 per cent cases
Simple tertian—74 cases.	Sulphate, 45 grains on each of 2 consecutive days weekly.	do	ф.		Temperature to normalin 4 days; parasites disappeared 1-4 days.	80-85 per cent relapses in 1-47 days.
Simple tertian—30 cases.	Bihydrochloride, 15 grains daily	2 days	Intramuscularly		Te: perature to normalin 3 days; parasites disappeared 1-4 days.	70 per cent relapses in 6-25 days.
Malignant ter- tian-29 cases.	do	do	do		rings disappeared in 4 days; cres-	100 per cent relapses in 3-21 days.
Malignant ter-	Sulphate, 30 grains on each of 2 con-	5 weeks	Orally		Temperature to normal in 1-3 days;	Not observed.
Simple tertian—10 cases.	Security days weekly.  Tartar ometic, 2.2-10.1 grains (total), 2-6 injections.	10-14 days	Intravenously	Coughing and vomit- ing and in I case col-	Lides disappeared in 1-4 days.  Lid not controllever or eradicate parasites.	No effect.
Simple tertian—	Quinine, 20 grains daily, 10 days	9 days	OrallyIntravenously	-ander	Fever controlled; parasites disap-	100 per cent relapses in 14 days.
Malignant ter- tian-10 cases.	'Internations.' 'Fartar emetic, 4.5-11.2 grains (total), 3-6 injections.	5-12 days	ор.	Coughing and vomit- ing in several cases.	No effect	No effect.

# TABLE I-Continued.

Type and number of cases.	Substance and dose.	Length of treatment.	Method of administration.	Toxic effect.	Palliative effect.	Curative effect and relapses.
Double injection with simple and malignant tertian—	Tartaremetic, 4.3 grains (total)	12 days	Intravenously		No effect	No effect.
Simple tertian— 10 cases.	le oftrypsin and 1 to 10 c. c. normal	1-7 days	Into muscle below the scapula.	Some swelling and ten- derness.	Fever controlled in 3 cases only; parasites persisted.	Do.
Simple tertian— 20 cases. Simple tertian—	Sanuc, 1-3 injections. Natural procession of the state of	1 daydo	Intravenously		Temperature to normal in 1-3 days; parasites disappeared in 1-2 days. Temperature to normal in 1-2 days;	90 per cent relapses in 11-105 days. 16 per cent relapses in
Simple tertian— 21 cases.	Injection. Novarsenobenzol-billon, 0.9 gram		ф		parasites disappeared 1-2 days.	10-46 days. 95 per cent relapses in 5-63 days.
Simple tertian— 9 cases. Simple tertian—	Quintoxin, 5 grains, 5 cases, 10 grams, daily, 4 cases. Disade-luades, 0.1 gram on first day, or free cases, or	2 days 5 days	Orally		No effect. None.	No effect. None.
Simple tertian— 9 cases. Simple tertian—	Disodo-luargol, 0.2 gram	1 day	do		Temperature to normal in 2 days; parasites disappeared in 1-3 days. None.	100 per cent relapses in 7-17 days. None.
Simple tertian—3 cases.	consecutive days Liquor arsenicalis, 45 minims daily 2 cases, 7 days;	2 cases, 7 days;	Orally		do	Do.
Simple tertian— 2 cases.		days. 13–18 days	Intramuscularly Orally		(Symptoms controlled by quinine; no	Do.
Simple tertian— 28 cases.	Liquor arsenicalis, 15 minims; quinine hydrochloride, 5 grains daily.	8 weeks	op		Temperature to normal in 5 days; parasites disappeared in 1-7 days in 21	82-86 per cent relapses in 1-37 days.
Simple tertian— 25 cases.	Liquor arsenicalis, 15 minims; liquor strychine, 15 minims; quinine hy- drochloride, 5 eroms deily.	ф	do.		Temperature to normal in 8 days; para- asifes disappeared in 1-7 days in 21	75-85 per cent relapses in 1-26 days.
Simple tertian— 26 cases.	Quinine hydrochloride, 5 grains daily	ор	do		Temperature to normal in 3 days; in 16 cases, parasites disappeared in	62-69 per cent relapses in 60 days.
Simple tertian— 14 cases.	Liquor arsenicalis, 30 minims dally	do	ор		1-10 days. Temperature to normal in 10 days; in 3 asses parasites disappeared in 2-6	85 per cent relapses in 1-42 days.
Simple tertian— 33 cases.	Liquor arsenicalis, 30 minims daily Quinine bihydrochloride, 15 grains on first 2 days.	s weeks—2 weeks on 1 week off.	Intramuscularly		Temperature to normal in 2 days, para- sites disappeared in 1-4 days.	12.5 per cent of cases relapsed in 1–15 days.

None.	100 per cent relapses in 6-17 days.	100 per cent relapses in 14 days.	100 per cent relapses 1-38 days.	77-82 per cent relapses in 1-58 days.	. No effect.	Do.	32 per cent relapses in 13-48 days.	8-17 per cent relapses in 68 days.	in 60 days. 20–66.6 per cent relapses in 60 days.
None. None. None.	Temperature to normal in 2 days; rings 100 per cent relapses in disappeared in 3 days.	Temperature to normal in 2 days; rings disappeared in 2 days.	Temperature to normal in 3 days; rings   100 per cent relapses   disappeared in 3 days.	Temperature to normal in 1-4 days; parasite examinations not made.	No effect	Temperature controlled in 1 case; no other effect.	to normal in 1 day; para- eared in 1 day.	(Temperature to normal in 2 days; parasites disappeared in 1 day Temperature to normal in 2 days; para-	sites disappeared in 2-3 days. {Temperature to normal in 3-4 days; } { parasites disappeared in 1-4 days.
				Grains 30-40 well tolerated: grains 45 caused tremors and	vomiting.				
Intravenously	Intramuscularly Intravenously	Intramuscularly Orally	Intramuscularly	Orally	Intravenously	Intramuscularly	Intravenously	Intravenously Intramuscularly	Orally.
1 day	2 days	15 days	16 days	4 weeks	2 days	do	op	16'days	15 days
Malignant ter- Novarsenobenzol-billon, 0.45-0.9 gram.   1 day Intravenously		Bihydrochloride, 15 grains on each of 2 consecutive days.	Liquor arsenicalis, 30 minims daily Bihydrochloride, 15 grains on first, second, eighth, ninth, fifteenth, and	Quinine sulphate, 30 grains daily for 3 4 weeks. weeks and 45 grains daily for I week.	Quartan-2 cases Novarsenobenzol-billon, 0.9 grams, 2 2 days	injections. Quinine bibydrochloride, 15 grains, 2do	enzol	Novarsenobenzol-billon, 6.9 gram, 3   16 days   Injections.   Binydrochloride, 15 grains, 6 injections   2 days   Binydrochloride, 15 grains, 2 injections   2 days	
Malignant ter-	Malignant ter- tian—10 cases.	Malignant ter- tian-1 case.	Malignant ter- tian-16 cases.	Simple tertian— 22 cases.	Quartan—2 cases	Do	Simple tertian— 41 cases.	Simple tertian— 12 cases. Simple tertian—	18 cases. Simple tertian— 45 cases.

The following is a review of four short papers which were contributed subsequently and which afford a comparative study in the response to treatment of Europeans and natives of tropical countries:

I. Oral Administration of Quinine or Quinine and Arsenic for Short Periods to Young Native Children Infected with Malignant Tortian Malaria. By J. W. S. Macfie and M. W. Fraser.

II. Oral Administration of Quinine Sulphate, Grains 20, to Adult Natives Infected with Malignant Tertian Malaria. By J. W. S. Macfie.

III. Oral Administration of Quinine Sulphate, Grains 10, Daily for Two Consecutive Days Only to Native Schoolboys Infected with Malignant Tertian Malaria. By J. W. S. Macfie.

IV. Oral Administration of Quinine Sulphate to Natives Infected with Quartan and Simple Tertian Malaria. By J. W. S. Macfie.

These observations, recorded in a series of four papers published in the Annals of Tropical Medicine and Parasitology for June 30, 1920, were conducted at Accra, in Gold Coast, West Africa, all of the patients being natives infected in Gold Coast, and the periods of observation extending from July to December, 1919. In all cases the presence of trophozoites in the cutaneous blood was determined microscopically on the day that treatment began, although the patients, with few exceptions, appeared to be healthy. The period of observation after treatment, except in Series II of the table (50 days), was 60 days. Treatment was given on two consecutive days (in a few cases on one day only), 20 grains of quinine sulphate in the case of adults, 10 grains (in a few instances, 20 grains) in the case of children. The administration of arsenic in addition to quinine, as tried in the first experiment, did not cause the resulting percentage of relapses to vary from that following the administration of quinine By relapse is indicated parasitic relapse, since very few of alone. the patients gave history of febrile relapse.

In the following table the subjects of the experiments in the three papers dealing with malignant tertian are grouped according to age. Under the percentage of relapses a double percentage is given in some cases, indicating that some of the patients passed from observation before the usual period of 60 days had elapsed, and while no relapse had occurred up to that time they are included in the maximum percentages of relapses possible.

TABLE II.

Sories.	Number of patients treated.	Age.	Per cent of re- lapses.
I ii iii iii ii ii ii ii ii ii ii ii ii	17 19 13 19 11	6 months to 7 years 5 to 8 years 9 to 11 years. 12 to 14 years. 15 to 18 years Adults	63 54-69

The author accounts for the fact that the rate of parasitic relapse diminishes with increasing age by development of tolerance in the natives. He concludes that "the power of the natives to cope with malaria infections begins to make itself felt early in life, has already attained a considerable degree of efficiency by the age of 5 to 8 years, thereafter is maintained during adolescence with a remission at the age of puberty, and is enhanced in adult life." In comparing these results with experiments conducted with adult Europeans at Liverpool, he notes that the percentage of relapses among Europeans exceeded even that of native children at Accra, owing, perhaps. to the failure of Europeans to develop tolerance or to the natural differences found in the disease in tropical and temperate climates.

The fourth paper deals with a similar treatment of 20 cases of quartan and simple tertian malaria and tends to confirm the conclusion drawn in the three other papers that in these types, as in malignant tertian malaria, the percentage of relapses in native adults is less than that in young children and in other than very young children is decidedly less in natives of the Tropics than in Europeans treated in England.

# VENEREAL DISEASE INCIDENCE AT DIFFERENT AGES.1

A Tabulation of 8,413 Case Reports in Indiana.

By MARY L. KING and EDGAR SYDENSTRICKER, Statistician, United States Public Health Service.

In a preceding publication 2 emphasis was placed upon the need for statistical data relating to the incidence and prevalence of venereal diseases. It was pointed out that such data, when properly analyzed, would assist in defining more clearly the particular problems involved at this stage of the antivenereal disease campaign and might afford some guidance in determining the directions in which pre-

<sup>1</sup> From the Statistical Office, United States Public Health Service. Prepared in cooperation with the Division of Venereal Diseases, United States Public Health Service. Acknowledgments are made to the State Board of Health of Indiana for the use of the case reports.

<sup>&</sup>lt;sup>3</sup> Pierce, C. C., and Sydenstricker, Edgar Some Possibilities in the Statistical Analysis of Case Reports of Venereal Discuses: Public Health Reports, Aug. 27, 1920. (35: 2046-2055.)

ventive effort might be most effectively expended. In the absence of complete records of venereal-disease prevalence in typical population groups, particularly in relation to various social conditions that probably influence its incidence, the suggestion was made that case reports should be utilized to the full extent of their practical value.

In accordance with this suggestion, certain tabulations and analyses of the case reports of venereal diseases in several States are being undertaken in the Statistical Office of the United States Public Health Service. This work necessarily is an experiment because of certain known limitations of the data. In the first place, on no possible assumption can these case reports be regarded as including all of the cases of venereal diseases actually existing or occurring within a given period for any locality or area. In the second place, they are probably restricted to certain types or stages—to those cases which were at stages when infected persons were impelled to seek a physician's advice. Cases which were latent or which exhibited no acute or troublesome symptoms may be regarded as almost wholly unreported. The reports can be considered, therefore, at best as only samples of this general type in various population groups and classes. It is realized that special care must be taken in any analysis of them, and that a great deal of caution must be exercised in drawing definite conclusions. Obviously such observations as can be made must be stated in relative terms rather than in terms of actual incidence, and conclusions drawn therefrom can be regarded as only tentative. But, in spite of these limitations, it was felt that the material contains certain information which would be of distinct value were it made available. Furthermore, it was believed that practical suggestions for improving the system and methods of venercal disease notification would be afforded only if an actual attempt were made to utilize some of the ever-accumulating reports.

Through the courtesy of the State Board of Health of Indiana, about 8,400 white case reports of venereal diseases were made available for study. These reports, while incomplete for any single detail, show for large proportions of the cases the following information: Nativity, sex, age, marital condition, and occupation of person affected; and for each diagnosis the duration and stage of the present attack, the source of infection, and place where exposure to infection occurred. In the present paper only the distribution according to age of cases of gonorrhea, syphilis, chancroid, and their various combinations is considered. The age distribution is compared for the different diseases as well as for persons of different sexes and marital conditions. Further presentation of the data in other details is planned for a later article.

Since the cases actually reported can be considered only as a sample of the total number of cases of a given type actually existing among the population of Indiana, the assumption is necessary that the age distribution of this sample is similar to that of the total. The validity of such an assumption is, of course, debatable, but, in our opinion it is a reasonable one, within broad limits, for two reasons: (1) A large proportion of the cases were reported by physicians practicing in families, who had the opportunity for observing the incidence of disease in a population whose age distribution approaches that of the general population of a community or section; (2) while a certain proportion of cases, especially at certain ages, did not come to the attention of the family physician, these cases probably constitute a considerable part of the clientele of the specialist and of the clinic. The reports of the latter class of cases would tend to counterbalance the failure of family physicians to see them in the course of their practice. The indicated variations in age incidence based upon case reports must, however, be regarded as open to serious question. Only when an accurately observed incidence among a definitely enumerated population is available can we be certain of the true variations for a given population group.

The term "age" as here employed is the age at which infection occurred, or "age at onset." It is doubtful whether or not the reports are as accurate in this respect as could be desired. The age at onset was computed for each case from the record of the "duration" of infection and of the age of the patient at the date on which the report was made. In many cases the data as to duration of infection were incomplete. The age at onset, therefore, for any group may be regarded probably as somewhat too high, especially for unmarried men, although a comparison of the age distribution of cases where no data as to duration were given with that of cases where the age at onset could be determined did not indicate any marked divergences.

A summary of the cases under consideration is given in Table I, in which the cases are classified according to diagnosis and the sex of the person affected. Fifty-six per cent, or 4,708 of the total cases, were affected with gonorrhea; 35 per cent, or 2,969, with syphilis; and 2 per cent, or 188, with chancroid. There was a total of 8,413 cases, the additional 548 cases representing the various combinations of gonorrhea, syphilis, and chancroid. Gonorrhea and chancroid were relatively more frequent among male cases of venereal diseases, and syphilis relatively more frequent among female cases. The combination of gonorrhea and syphilis was found in over 10 per cent of female cases as against only 3 per cent of male cases.

TABLE I.—Number of cases of venereal diseases among white persons reported to Indiana State health department Jan. 1, 1918-Mar. 1, 1920, and proportion of total cases which were specified infections, by sex.

#### NUMBER.

Disease.	Both sexes.a	Male.	Female.
All venereal diseases Gonorrhea Gonorrhea (alone) Syphilis Syphilis (alone) Chancroid Chancroid (alone) Gonorrhea and syphilis Gonorrhea and chancroid Syphilis and chancroid Gonorrhea, syphilis, and chancroid	8, 413 5, 181 4, 708 3, 479 2, 969 337 188 399 38 75	6, 374 4, 133 3, 881 2, 278 1, 988 314 179 191 36 69 30	2, 031 1, 038 822 1, 198 978 23 9 208 2 6 6
PER CENT.			
All venereal diseases Gonorrhea Gonorrhea (alone) Syphilis Syphilis (alone) Chancroid Chancroid (alone) Gonorrhea and syphilis Gonorrhea and chancroid Syphilis and chancroid Gonorrhea, syphilis, and chancroid	100. 0 61. 8 55. 9 41. 3 35. 3 4. 0 2. 2 4. 7 . 5 . 9	100.0 64.9 60.9 35.7 31.2 4.9 2.8 3.0 .6 1.1	100.0 51.0 40.4 59.0 48.1 1.1 .4 10.2 .1 .3

a Including cases for which sex was not stated.

Table II.—Number of reported cases of venereal diseases according to age and sex among white persons in Indiana.

Reported age at		nereal ases.	Gono	rrhea.	Syp	hilis.	Char	croid.
onset.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Total	6,136	1,930	4,000	. 999	2,174	1, 132	303	22
Under 15	72	105	26	60	48	53		
15	24	58	18	49	6	21		
16	87	78	67	57	22	34		2
17	179	117	137	85	45	42	6	1
18[	333	150	265	100	75	72	14	2
19	463	170	363	95	108	98	13	
20	426	130	307	73	121	76	28	1
21	459	116	355	59	138	74	26	l
22	388	111	285	57	105	69	26	1
23	363	89	2-3	53	115	46	16	
24	367	116	234	51	136	78	22	
25-29	1,229	236	792	130	445	176	60	5
30-34	683	165	389	69	290	103	42	ä
35-39	486	121	257	38	231	88	26	i
40-44	243	53	114	14	123	41	14	
45 and over	304	65	148	. 9	161	56	15	

The number of cases of all venereal diseases and of gonorrhea, syphilis, and chancroid is given in Table II, in which the cases are classified according to age and sex groups. In the appendix more detailed tables may be found, showing the number of cases of all venereal diseases and of gonorrhea, syphilis, and chancroid, by single years of age at the time of onset for both sexes and various marital conditions.

The distribution of cases according to age does not, of course, afford a true picture of incidence unless the population at the various ages is taken into consideration. Since the reports are incomplete, a morbidity rate per 1,000 of population is misleading and should be avoided. But while we can not properly use morbidity rates, we can find the relative variations in incidence by utilizing a series of ratios computed by the following method:

First, the percentage distribution of the 1910 white population in Indiana was computed in such detail according to age as the census reports permitted. Second, the percentage distribution of the venereal disease cases was computed according to age, using the same groups as were employed in obtaining the distribution of population. Third, the percentage of cases in each age group was divided by the percentages of the population in the corresponding age group. This was done for both sexes and for all venereal diseases, as well as for gonorrhea and syphilis separately. Using the broader age groups published for persons of different marital conditions, similar computations were made for venereal diseases among males and females of different marital conditions.

Table III.—Relative variations a in the incidence of venereal diseases according to age and sex among white persons in Indiana.

Reported age at		enercal ases.	Gond	orrhea.	Syp	hilis.	Char	ncroid.
onset.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Under 15.	4	18	2	20	8	16		
15	21	161	25	262	15	99		
16	74	202	87	286	52	150		45
17	151	317	177	446	107	194	101	23
18	277	377	338	486	176	309	232	44
19	402	466	482	503	264	458	224	1,20
20	369	334	409	362	296	332	484	22
21	428	327	477	321	341	356	454	
2	349	306	394	301	267	324	466	242
3	321	244	345	281	289	215	284	24
24	338	334	331	284	354	383	403	
25-29	239	174	236	153	244	183	232	26
30–34	153	116	134	94	184	130	188	18
5-39	113	91	91	55	151	113	120	66
0-11	64	45	46	23	95	60	74	
5 and over	21	15	15	4	32	22	21	

a The relative numbers in this table are a series of ratios obtained by dividing the percentage of total cases at each are by the percentage of the total population at the corresponding age. The population used was that of 1910.

The resulting ratios are not morbidity rates. They may be described as indices of the variations in age incidence of the disease or diseases in question among persons of specified sex and marital condition. Obviously, if all cases were reported and the population accurately was enumerated for the specified period during which the cases occurred, the indices or relative variations thus obtained would be the same as those based on morbidity rates.

The indices of age incidence for both sexes are given in Table III and are plotted in Figures 1, 2, and 3. Three indications may be noted: (1) That venereal diseases have their highest incidence in the young adult ages between 17 and 25; (2) that genorrhea apparently

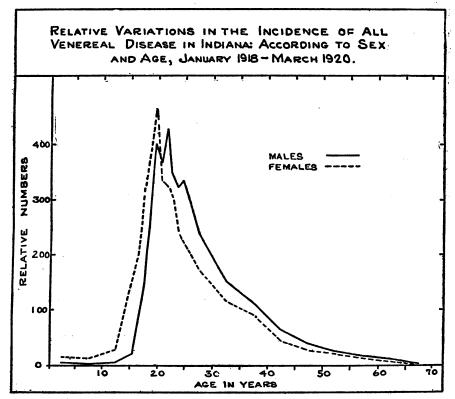


FIGURE 1.

tends to reach its highest incidence earlier than do syphilis and chancroid; (3) that the incidence of each of the three diseases occurs at younger ages among females than among males.

The peak in incidence for females is definitely at the age of 19 fo all venereal diseases, and each for the three diseases, except syphilis, the curves being clearly unimodal. In the case of males, however, the curve is less regular, but it seems to be evident that the ages of highest incidence of gonorrhea are 19-21, of syphilis 19-24, and of chancroid 20-24. For some reason the curve for males is in each instance not definitely unimodal, and in the case of syphilis is definitely bimodal.

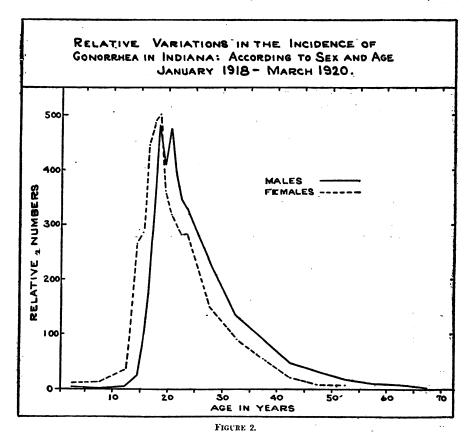


Table IV.—Relative variations a in the incidence of venercal diseases according to age among white persons of both sexes, compared for 10 cantonment zones and Indiana.

	М	ale.	Fer	nale.
Reported age at onset.	14 can- tenment zenes.	Indiana.	14 can- tenment zenes.	Indiana.
Under 15.  15.  16.  17.  18.  19.  20.  21.  22.  23.  24.	58 233 300 571 557 493 580 609 313	4 21 74 151 277 402 369 428 349 324 338	19 53 191 447 409 650 382 319 317 188	18 161 2022 317 377 466 334 327 306 244 334
25-29 30-34 35-39 40-44 45 and over.	244 158 57 40 22	239 153 113 64 21	165 65 45 30 20	174 116 91 45

a The relative variations in this table are a series of ratios obtained by dividing the percentage of total cases at each age by the percentage of the total population at the corresponding age. The population distribution used for the 10 cantenment zones was that enumerated in sample areas in several zones in 1918-19 in the course of special influenza surveys, and that for Indiana was as of the 1910 census.

A comparison of the relative variations in age incidence of venereal discases among persons of either sex as found for Indiana with those found for 10 cantonment zones reveals a striking similarity.<sup>3</sup> For females the peaks of the two curves occur in the same year, at the age of 19. In the case of males the ascending limbs are quite similar and both reach a peak at the age of 19; in the 10 cantonment zones, however, the curve is definitely bimodal, and a second peak occurs at the age of 23. The suggestion is afforded that the incidence of

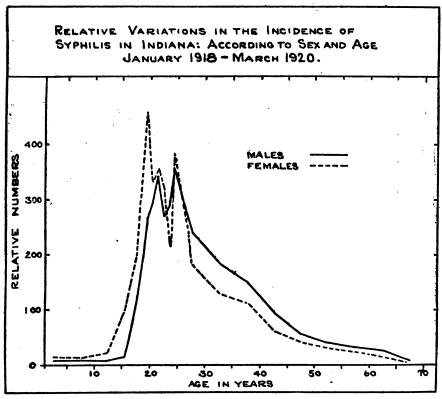


FIGURE 3.

venereal diseases was confined in Indiana to a younger group of males than in the 10 cantonment zones.

The age curves of venereal disease incidence are compared for married and single persons in Table V and Figure 4. In making this comparison it is important to bear in mind that the incidence presumably is at the age at which infection occurred, while marital condition is that at the age when the existence of the infection was reported.

Pierce, C. C., and Sydenstricker, Edgar: Loc. cit.

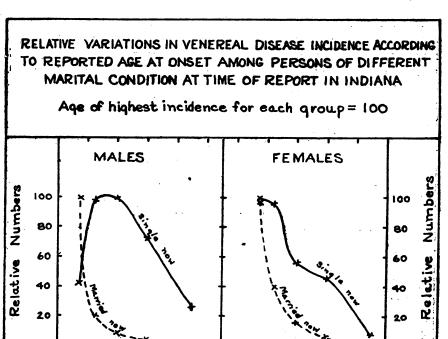


FIGURE 4.

10

20

AGE IN YEARS

10

20

AGE IN YEARS

Table V.—Relative variation in the incidence of venereal diseases according to age among white persons of both sexes and different marital conditions in Indiana.

#### SINGLE.

Reported age at onset.	i	al di seases.	(ione	rrhea.	Syp	hilis	Chan	ercid.
reported age at onset.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
15-19 20-24 25-34 35-44 45 and over	60 141 142 104 38	121 117 71 57 11	70 148 129 77 24	143 106 39 36	42 126 166 165 69	100 129 102 76 23	34 155 173 112 31	108 71 156 119

#### MARRIED.

15–19	377 104 83	697 278 117 51 15	1, 774 394 175 74 21	863 305 121 32 47	2, 037 356 150 94 27	618 277 111 61 20	377 140 108 34	158 89 176
-------	------------------	-------------------------------	----------------------------------	-------------------------------	----------------------------------	-------------------------------	-------------------------	------------------

a The relative numbers in the table are a series of ratios obtained by dividing the percentage of total cases at each age by the percentage of the total population at the corresponding age, for each sex and marital group. The population distribution used was that of 1910.

The curves are quite dissimilar for males who have married and for those who have remained single. For males married at the time of report the incidence in the age period 15-19 was nearly 5 times as high as in the age period 20-24, and over 10 times as high as in later age periods. In sharp contrast to this is the curve for males remaining single. Here the incidence in the age period 20-34 is over twice that in the age period 15-19, and remains relatively high in the period 35-44. This contrast tends to confirm the frequent observation that marriage greatly reduces venereal infections among In fact, if the proportion of males at each age period who were single, according to the 1910 census for Indiana, be compared with the variations in venereal disease incidence among males, a rather high degree of correlation is indicated  $(r = 0.85 \pm 0.19)$ . the case of females the curves tend to be more similar, but in interpreting them two considerations should be regarded as possible: (1) That infections among single females occur chiefly among that class described as prostitutes (commercial and clandestine); and (2) that infections among married females occur chiefly after marraige. If the age curves for married males be compared with that for married females, the curve for females tends to lag behind that for males. suggesting that the age at onset occurs among married females even later than in the case of males of the same group. When this indication is taken into consideration with the fact that females marry at younger ages than males, the contrast between premarital infection in the case of males and post-marital infection in the case of females is further emphasized. The relatively high—very high—incidence among women of younger ages, presumably soon after marriage, is an outstanding indication.

## Summary.

- 1. For the purpose of throwing some light upon the question of the age incidence of venereal infections, and in the absence of complete data for any definitely and accurately observed population group, certain tabulations were made of approximately 8,400 case reports of venereal diseases among white persons in Indiana.
- 2. Considering these cases as fair samples of the total cases of that type which actually exist in the population under consideration, indices of venereal disease incidence according to age of onset were computed for persons of both sexes and of different marital condition by adjusting the age distribution of cases to that for the population of Indiana in 1910.
- 3. While the data can not be considered conclusive, they suggest the following points:
  - (a) The greatest incidence of venereal infections occurs in early adult ages, between 17 and 25. This is true of both males and females.

(b) The incidence of venereal infections is earlier among females than males. The modal or peak age for females is 19 years, while that for males is approximately 21 years.

(c) While the data are not definite on this point, the evidence suggests that among persons married at the time of report, venereal infections were largely premarital in the case of males

and postmarital in the case of females.

- (d) There is a wide divergence in the incidence curves for males who were married previous to the time of report and for males who had remained single. In the one case, infections were confined chiefly to the younger adult ages (under 20); in the other, the incidence in the adult ages (20-24) was considerably higher than in the younger ages. The effect of marriage apparently was to greatly lessen the incidence of venereal infection among males.
- (e) Gonorrhea apparently occurs at slightly younger ages than syphilis or chancroid among both males and females.
- 4. In view of the limitations of the data with respect to the number of cases reported, the stage at which disease was reported, the possible errors in determining accurately the age at which infection occurred, and the use of the 1910 age distribution of population, these observations can not, of course, be regarded as definitely conclusive.

#### Appendix.

TABLE A.—Number of cases of venereal diseases reported to Indiana State Health Department among white persons during the period Jan. 1, 1918, to Mar. 1, 1920, by single years of age, and by sex and marital condition.

· · · · · · · · · · · · · · · · · · ·															
		7	otal.					Male.				Fe	male.		
Age by single years.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition, unknown.	Total.	Single,	Married.	Widowed, sepa- rated, divorced.	Marital condition, unknown.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition, unknown.
Total	8, 405	5,096	2,795	261	253	6,374	4,320	1,724	123	207	2,031	776	1,071	138	46
Age not stated	339	150	123	9	54	<b>23</b> 8	123	66	2	47	101	27	60		7
All known ages	8,066	4,946	2,659	252	199	6, 136	4, 197	1,658	121	160	1,930	749	1,011	131	39
Under 1	23	22	1			16 3 3 1	16				7	6	1		••••
2	4 19	10				3	3 3				7	7	• • • • • •		••••
3	19 6 9	6 9	• • • • • •			1	1				5	5			
4	1	9	•••••			2	2		•••••		1	7	• • • • • •		••••
6	5 8 7	8				3	3				3 5 3 8	5			••••
7	7	7				4	4			••••	3	3			
9	13 9	13 9				2 3 4 5 3	3				6	8 6			••••
10	13	13		]		4	4			]	- 1	9			
11	2	2									9	2			••••
12	13 2 12 20 36	11 17	3			7 6 13	4	2			5 14	13	1	••••	••••
14	36	32	4				11	2			14 23	13 21	2		
15	82	66 137	16		اا	24 87 179 333 463	22	.2			58 78 117	44	14		
16	165 <b>29</b> 6	247	24 40	3	1	179	74 165	10	2	6	117	63 89	14	1	• • • •
18	483 633	392	24 40 75 106	3 9 18	6 7 20	333	303 402	8 24 39	2 6	4	150	63 82 89 87	32 51 67	7	3
19	633	489	106	18	20	463	402	39	6	16	170	87	67	12	4

Table A.—Number of cases of renereal diseases reported to Indiana State Health Department among white persons during the period Jan. 1, 1918, to Mar. 1, 1920, by single years of age, and by sex and marital condition—Continued.

			Tota			1		Maic.				Female.				
Age by single years.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition, unknown.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition, unknown.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition, unknown.	
20	556 605 499 452 483 359 360 300 283 213	403 451 331 293 293 222 193 161 138 116	127 130 142 129 156 117 145 125 130 87	18 20 11 11 10	12 12 14 9 11 4 7	489 388 363 367 296 294 240 219 180	296 274 262 211 183 151 124	69 75 77 90 70 94 81 86 65	4 4 4 4 5 5 5 5 5 5 5	11 11 8 11 8 9 4 4	116 111 89 116 63 66 60 64 33	51 45 33 19 31 11 8 10 14 9	61 67 52 66 47 51 44 44 22	7 6 10 14 16 4 5 6 3 2 2 3 3	1 4 3	
31 32 33 34 35 36 37 38 39 40 41	156 179 138 151 171 137 96 134 69 94	79 71 62 65 69 59 40 54 27 39	66 94 67 76 92 66 44 76 35	6 9 4 5 5 6 5 4 6	55 53 56 67 7	138 108 125 138 102 85 105 56	75 65 52 68 52 68 52 • 38	50 63 44 58 63 42 39 54 25	5 3 6 1 3 4 2 3 3 5 2 2 2 2	5 2 3 6 5	23 41 30 26 33 35 11 29 13	4 6 4 3 1 7 2 6 2 3	16 31 23 20 29 24 5	3 3 2 1 4 2 1 2	1 2 2 1	
42 43 44 45 46 47 48 49 50 51	64 52 37 47 32 35 16 35 19 23	15 21 13 16 6 14 7 3 12 9	277 411 277 222 25 211 15 25 111 200 160	6 1 2 2 2 2	4 1 1	48	14 20 11 14 6 13 7 3 12 9	28 22 18 22 16 10 19 11	3 2 2 3 1 2 1	3 1 	8 16 7 6 8 6 8 7 1 3 4 4	1 2 2	13 5 4 3 5 6 6	3 2 1	i i	
53 54 55 55 56 57 58 59 60 61	14 14 11 14 12 12 12 5 10 6	3 6 2 2 1 4 3 2 2	13 9 7 8 7 9 3 6	3 1 1	1	19 10 9 8 11 10 10 4 6 5	3 3 6 2 2 1 4 3 2 3	10 5 5	3 1 1 2	1	4 5 3 3 1 2 1 4 1	1	3 1 2 3 1 2 1 4 1		1	
63 64 65 68 67 68 69	9 3 1 3 1	3 1 1 1	4 2 3 3	2	1	9 3 3 1 3 1	1 1 1	4 2 3	1	1						
71	1 1 1	1				2 1 1 1 1	1	1								
86	1	1				1	1									

Table B.—Number of cases of gonorrhea reported to Indiana State Health Department among white persons during the period Jan. 1, 1918, to Mar. 1, 1920, by single years of age and by sex and marital condition.

** The state of th		Т	otal.					Male.		<del></del>		Fe	male.		
Age by single years.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition, unknown.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition,	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Maritul condition, unknown.
Total	5,176	3, 464	1,427	135	150	4, 138	2,986	952	71		<u> </u>	478	475	64	21
Age not stated	177	100		4	23	138			1	21		17	17	3	2
All known ages	4,999	3, 364	1,377	131	127			919	70	108		461	458	61	19
Under 1	7	7	• • • • •	••••		5	5		•••••		2	2			<i>: -</i>
2	5	5				2	2				3	3	,		· · · · ·
3	3	3				;				• • • •	2 3	3			
4	3	3		••••		1	1			••		2			••••
5	2 3 3 3 3	2	• • • • •	••••						• • • •	2 3 3	2			••••
7	3	3									3	3			· · · •
8	3	3									3	3			
9		3				1	1			• • • •	2	2	]		••••
10	5	5			• • • •	1	1			• • • •	4	1			,
12	7	6	····i			3	3				4	3	····i	::::	••••
13	13	12	1			3	2	1			10	10			· · · · •
14	28	27	1			10	10				18	17	1		• • • •
15	67	54	13	ال:	:	18	17	1		••••	49	37 47 65	12	;	• • • •
17	124 222	107 193	13	3	1	67 137	60 128	4	2	1 5	57 85	65	9 18	2	• • • • ·
18	365	314	13 22 39 57	3 2 5 12	1 5 7 15	265	249	11	1	4	100	65 53	28 33	4	 3 2
19	458	374	57		15	363	321	24	1 5	13	95	53		7	
20	380	300	63	6 7 9 12 7	11	307	269	26	2 3 3 2 4 6 3 2	10	73	31	37 28 32	4	1
21	414 342	326 242	71	7	10 8	355 285	300 223	43 51	3	9 8	59 57	26 19	28	4 6 9	1
23	306	212	83 72 81	12	10	253	201	43	3	6	53	11	29	9	4
24	285	187	81	7	10	234	173	50	2	9	51	14	29 31	5	i
25	229	154	63	6	6	200	149	42	4	5	29	. 5	21 25 20	2	1
26	225	124	85	9	7	194	121	60	6	7	31	3	25	3	• • • •
27	183 152	111	63 71	6	6 7 3 2	158 125	109 72	43 50	3	5 7 3 1	25 27	5	21	3	···i
29	152 133	77 76	54	2		115	73	41	ĩ	]	18	5 3 2 5 3	13	2	<del>.</del>
30	129	56	64	3	6	107	55	45	2	5	22	1	19	1	1
31	84	45	33	4	2	77	44	28	3	2	7 12	1	5	1	
32	96 73	42 29	64 33 50 37	2	6 2 2 3	84 56	41 27	28 39 25	2	2	12	1	11 12		• • • •
34	76	32	41	4 2 4 2	1	65	30	32	2	5 2 2 3 1	ii	1 1 1 2 2	· 9	"	
35	95		47	2	3	85	43	38	2 3 2 1 2 2 2		10	- 1	9		1
36	52	27	18	3	4	44	24 17	14	2	2	8	3	4	i.	
37	46 76	18	24	;	4	39	17 30	20 .		2	7 12	1) 5)	6	;	2
39	26	43 27 18 35 12	24 38 12	3 2		64 25	12	32 11	2 2		'ī .	၂	ĭ.		•••
40	48	21	25	1		45	21	22	2		3		3		
41	21	6	12	2 3 2	1	18	6	9	2	i	3		3.		•••
42	25 17	7	14 7	3	1	22 15	7	11 6	3	1	3 .		3 .	; -	
44	17	6 7 8 2	11	1		14	6 7 8 11	12	1		3	····i	2	. 1	•••
45	25	8	15	2	1		8	13	1		3	1	2	1	•••
46	17	4	10.	]	3	22 16	4	9		3	ĭ.		1.		•••
47	13	6	7.	-		12	6	6.			1.		1.	-	•••
48	11	2 1	9¦. 6.	::: :		11	2	9 6							•••
50	14	6	6	1	1		6	6	1		1				
51	9	4	5.	1	1	7	4	3.			2	:::::	2	::: .	
52	9	1	6.	-	]	7	4	6 .							•••
53 54	4 .		4 . 5 .	-	··i	4.	;	4.		··i	····i	-	····i :	-	• • •
1			1		1	ď	1:			1	1		1.	-	• • •
55 56	5	1 2	1 .	::: ·		5	2	3.	•••••	::: :					• • •
57	4 7 2 5 2 5		3 . 2 . 3	:		13 7 7 4 6 2 5 2 5	1 1 2 1 1	2	:				:	:	•••
58	5	i	3	1.		5	1	3	1.	-			-	-	
59	2	1	1].	1-	,	4	7]	1 .	••••i•	1-	· · · · · · I	l-	(-	<b> </b> -	• • •

Table B.—Number of cases of gonorrhea reported to Indiana State Health Department among white persons during the period Jan. 1, 1918, to Mar. 1, 1920, by single years of age, and by sex and marital condition—Continued.

		Т	otal.					Malc.				Fo	male.		
Age by single years.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition, unknown.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition, unknown.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition,
60	4 1 3 2	3 1 1	1	2		4 1 3 2	3 1 1	1	2 1						
6565	2 1 1	1	2 1			2 ! 1	i	2 i							
70 71 72	1	1				1	1						•••••		
74 75 76 77	1	1				1	1								
78 79				••••											· · · •

Table C.—Number of cases of syphilis reported to Indiana State Health Department among white persons during the period Jan. 1, 1918, to Mar. 1, 1920, by single years of age, and by sex and marital condition.

		Т	otal.					Male.			Female.					
Age by single years.	Total.	Single.	Married.	Widowed, sapa- rated, divorced.	Marital condition unknown.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition unknown.	Total.	Single.	Married.		Marital condition unknown.	
Total	3, 476	1,748	1, 476	150	102	2,278	1,367	781	53	74	1, 198	381	692	97	28	
Age not stated All known ages	170 3,306	56 1,692	77 1,399			104 2, 174	43 1,324	: 1	1 52	26 48		13 368	43 649	-	5 23	
Under 1	16		1			11	11				5	4	1	• • • •	<b>-</b>	
1	16 3 5 3 6	3		• • • •		3 1	3	·····	• • • • • •		4	4	• • • • • •		- <b></b>	
3	3	3				î	î				2	2				
4.,		- 1	• • • • • •			1	1				.5	5	•••••	••••	••••	
6	3 5 5	3		••••	• • • • •	2 3	2				2	2		::::		
7	.5	5				4	4					1			••••	
9	11 6	11 6				5 2	3 2				6	4		i		
10	•	8				3	3				5	5				
11	8 2 6	2 5	····-;				•••••				5 2 2	2: 1	••••••		• • • •	
13	10 12	7	3		::::	4	2	2		::::1	6	5 7	i		• • • •	
14	;	9	3			4	2	2			8	1	1		••••	
15	27 56	18 40	. 9 15	;		6 22	5 15	1			21 34	13 25 24	8 8	;	· · · •	
17	87	64	15 20	2 5	···i	45	40	4		···i	42	24	16	2		
18. 19.	147 206	101 132	40 58	5 11	1 5	75 108	60 87	13 16	2 2	3	42 72 98	41 45	16 27 42	2 3 9	1 2	

TABLE C.—Number of cases of syphilis reported to Indiana State Health Department among white persons during the period Jan. 1, 1918, to Mar. 1, 1920, by single years of age, and by sex and marital condition—Continued.

		T	otal.					Male.				Fe	male.		
Age by single years.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition,	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition, unknown.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition,
20	197 212 174 161 214	112 137 96 84 108	74 67 65 66 86	9		12: 13: 10: 11: 13: 13:	1 8 8 10 5 8 5 7 6 9	4 32 9 28 0 21 6 35		3 1 1 3 2 2 2 2	76 74 69 46 78	28 28 16 8 17	42 39 44 31 45	5 4 8 6	
24	141 140 119 134 87		60 65 65 62 40	5 2 5 6		100 100 100 80 90		7 29	3	3	39 40 38 41	6 6 7 9 7	31 30 27 27	2 2 4 3	
29	93 72 86 71 76	41 43 32 29 35 33	40 44 33 47 32 37	8 4 9 8 8 16 5 5 5 6 6 3 3 4 7 7 2 3	200000	66 54 55 56 56			2 1 4	3 3 2	25 18 30 19	7 4 3 5 4	20 12 21 13 12	54 86 14 2 2 4 3 3 2 2 1 3 2 2 1 3 2	  i
34	76 82 83 52 60 42	33 29 31 23 19 15		3 3 4 1 4		57 56 47 41 30				ļ	39 40 38 41 18 25 19 16 25 27 5 19	1 1 3 1 3			2
89	42 48 26 40 34 21	15 18 10 9 13	48 48 23 40 22 27 14 26 19 10	2 1 3 1					3 1 1 1	;	12 13 5 13 5	1 3 1 3 2 3 1 1 1 1	21 21 26 9 7 3 10 4	1 2 1 2	1
14	21 22 16 18 24 8		10 11 7 16 5	1 1 2 2	 1 1 1	1 17					13 5 13 5 5 5 5 7 7	1 2 1	1 4 4 6 1	2	i
9	21 9 15 10 6	8 3 8 5 1 7 5 5 1 2 2 4 2 1	13 4 9 9	1 1		19 7 11			1		2 2 4 4	1	1 2 4 3	1	· · · · ·
5	9 10 8 7	2 4 2 1	4 6 6 5	i	1	6 2 6 7 7 5 2	2 4 2 1		i		3 1 2		3 1 2		1
9 0 1 2 3	6 5 1 7	1 2 1 3 1	2 5 2	1	····	2 4 1 7	1 2 1 3	1 1 1	1	1	4		4		
5 5 7	3 1 1 2	i	1 2			3 1 1 2	1	1 2							•••
	2 1	2.		1		2 1	2		1						···
i	1		i			1		1							
)	1	1				1	1							-	

Table D.—Number of cases of chancroid reported to Indiana State Health Department among white persons during the period Jan. 1, 1918, to Mar. 1, 1920, by single years of age, and by sex and marital condition.

	Total.							Male.				Female.				
Age by single years.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition, unknown.	Total.	Single.	Married.	Widowed: sepa- rated, divorced.	Marital condition, unknown.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition,	
Total	337	250	67	9	11	314	23	8 56		11	23	12	11	l	ļ	
Age not stated All known ages Under 1	339		•		1 10	i	1	3 2 5 54	1	10	1	i	1	) )		
1										<b> </b> ::::						
2								.					<b> </b>			
3 4								-						i::::		
5		ļ !				l							l	ļ		
6				• • • •												
8						l::::::		• ; • • • • • •		1						
9																
10							ļ			ļ					ļ	
11 12	• • • • • •			• • • •	• • • • •					,,						
13																
14				• • • •						• • • •						
15 16			•••••	••••			¦				9	2		• • • • •	• • • •	
17	2 7	5	i		· · i					i	2 1		i	I		
18 19	16 18	15	1!		····i	14 13				····i	2 5	1	1 1		• • • •	
20		15 24	اج	1		28	:		••••••	1	1	3	1		• • • •	
21	29 26 27 17	24	1		1 1	26				1					• • • •	
22	27	20	5		2	26				2	1	1				
23 24	22	15 19	2	···i		16 22			·····i		1	1			• • • •	
25	13	12	1	- 1		12	1	1 -:	•			••••	1		• • • •	
26	19	15	4.			18	15	3			î		ī			
27 28	10	9 7	1.5			9 12		1 5			1	1			• • • •	
29	12 11	9	1	···i		9			i		2	i	i		• • • •	
30	16	11	3	2		15	10	3	2		1	1				
31	7	4	3			7	4	3			]					
32	7 7 8	7	2,	1		6 7 7	4 7	1	1		1;	•••••	1	••••	••••	
31	8	4	4		::::	7	4				i		1		• • • •	
35		1			1			1		1						
33	2 10	4	5		1	9	3			1	1	1			••••	
37	5 7 3	3°.	اوا	1	1	5	3 5		1	1				• • • •	••••	
9	3	i,	2			2 9 5 7 3	i								<b>.</b>	
ю	4	3	1.			4	3	1		!						
1	2 6	1	1			2 6	1	1							••••	
3	6	2	3	••••	1	6 1	2	3		1		•••••			· · · •	
4	i	1				i	i								<b>.</b>	
i5													!		<b>.</b>	
6	1		1			1		1			! .					
17 18	2	1	1			2	1							····¦·	• • • •	
9	i	i.				1	i								· • • •	
0	1		1.			1		1								
1	2		2			2		2							••••	
3	2	1	1			2	1	1	•••••	-	••••• •		•••••	-	•••	
4	i	1				1	1								••••	
5												]		1		
6								!	ایِ						•••	
7	3		1		····].	3		1	2	-				• • • •	•••	
8																

Table D.—Number of cases of chancroid reported to Indiana State Health Department among white persons during the period Jan. 1, 1918, to Mar. 1, 1920, by single years of age, and by sex and marital condition—Continued.

		т	otal.					Male.				Fo	male.		
Age by single years.	Total.	Single.	Married.	Widowed, .sepa- rated, divorced.	Marital condition, unknown.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition, unknown.	Total.	Single.	Married.	Widowed, sepa- rated, divorced.	Marital condition, unknown.
60	1	1				i	1								
73															

# DEATHS DURING WEEK ENDED DEC. 11, 1920.

[From the "Weekly Health Index," Dec. 14, 1920, issued by the Bureau of the Census, Department of Commerce.]

Deaths from all causes in certain large cities of the United States during the week ended Dec. 11, 1920, infant mortality (per cent), annual death rate, and comparison with corresponding week of preceding years.

	Popula- tion	Week en . 11, 1	ded Dec. 1920.	Average annual		of deaths 1 year.
City.	Jan. 1, 1920, sub- ject to revision.	Total deaths.	Death rate.1	death rate per 1,000.2	Week ended Dec. 11, 1920.	Previous year or years.2
Akron, Ohio. Albany, N. Y Atlanta, Ga Baltimore, Md Birmingham, Ala Boston, Mass Bridgeport, Conn Buffalo, N. Y Cambridge, Mass Chicago, Ill Cincinnati, Ohio Cleveland, Ohio. Cleveland, Ohio. Cleveland, Ohio Dayton, Ohio Denver, Colo. Detroit, Mich Fall River, Mass Grand Rapids, Mich Hartford, Conn Houston, Tex Indianapolis, Ind Jersey City, N. J Kansas City, Kans Los Angeles, Calif Louisville, Ky Lowell, Mass. Milwaukee, Wis Minnearolis, Minn Nashville, Tenn Newark, N. J New Bedford, Mass New Heart, Conn New Orleans, La. New York, N. Y Norfolk, Va Oakland, Calif Omaha, Nebr Philadelphia, Pa Pittsburgh, Pa Portland, Oreg. Providence, R. I Richmond, Va Rochester, N. Y St. Louis, Mo St. Paul, Minn Salt Lake City, Utah San Francisco, Calif Seattle, Wash Springfield, Mass Syracuse, N. Y Toledo, Ohio. Trenton, N. J	208, 435 113, 344 200, 616 733, 826 178, 270 747, 923 143, 152 506, 775 109, 456 2, 701, 705 401, 247 796, 836 137, 631 153, 830 256, 491 993, 739 127, 455 137, 634 138, 936 138, 276 314, 194 289, 079 101, 177 576, 673 234, 891 112, 479 457, 147 162, 519 457, 147 162, 519 457, 147 162, 519 457, 147 162, 519 17, 163 18, 342 414, 216 119, 601 11, 823, 158 118, 216 387, 529 118, 216 387, 529 118, 216 387, 529 118, 216 387, 529 118, 216 387, 529 118, 119 5, 620, 043 115, 750 772, 897 234, 830 118, 110 506, 676 231, 632 129, 533 171, 647 243, 164 119, 289 137, 677 119, 289 124, 164 119, 289 137, 677 143, 164 119, 289 143, 577 171, 647 143, 164 119, 289 147, 577 171, 647 143, 164 119, 289 147, 577 171, 647 143, 164 119, 289 147, 577 171, 647 143, 164 119, 289 147, 577 147, 647 143, 164 119, 289 147, 577 147, 647 143, 164 149, 289 147, 577 147, 647 148, 164 149, 289 147, 577 148, 164 149, 289 147, 577 149, 348 149,	300 299 777 2100 466 197 355 348 118 1189 753 36 748 222 157 46 222 169 536 25 140 46 25 448 149 149 149 149 149 149 149 149 149 149	7.5 13.3 20.0 14.9 13.5 13.7 12.7 14.4 18.6 11.8 15.3 16.5 11.2 10.2 15.6 12.3 11.3 14.2 10.2 11.3 14.2 10.2 11.3 14.2 10.2 11.6 10.2 11.6 11.6 11.6 11.6 11.6 11.6 11.6 11	3 11.9 C 17.6 A 16.5 A 16.5 A 16.5 A 15.1 C 12.3 A 15.1 A 13.0 C 16.3 C 11.4 C 11.7 C 12.2 C 12.4 C 14.2 C 14.2 C 14.2 C 14.2 C 15.6 A 15.5 A 15.1 C 12.2 C 12.4 C 12.2 C 12.4 C 12.2 C 12.4 C 12.2 C 12.3 C 15.6 C	23. 3  7. 8 17. 1 10. 9 14. 2 20. 0 17. 1 23. 1 14. 7 18. 8 11. 4 8. 0 12. 1 13. 8 22. 1 11. 1 14. 3 2. 9 14. 3 2. 9 15. 7 17. 1 18. 7 18. 7 19. 5 18. 2 18. 7 19. 5 19. 7 19. 6 19. 8 19. 7 19. 6 19. 8 19. 7 19. 6 19. 8 19. 7 19. 6 19. 8 19. 7 19. 6 19. 8 19. 7 19. 6 19. 8 19. 7 19. 6 19. 8 19. 7 19. 6 19. 8 19. 7 19. 10. 5 19. 6	C 14.8 C 14.0 C 14.0 C 14.0 C 14.0 C 14.0 C 14.0 C 14.0 C 14.0 C 14.0 C 15.1 C 11.8 C 15.1 C 11.8 C 15.1 C 15.2 C 16.4 C 17.3 C 16.4 C 17.3 C 16.4 C 17.3 C 16.4 C 17.3 C 16.4 C
Trenton, N. J. Washington, D. C. Wilmington, Del. Worcester, Mass. Yonkers, N. Y. Youngstown, Ohio	437, 571 110, 168 179, 754 100, 176 132, 358	134 28 53 24 27	16.0 13.3 15.4 12.5 10.6	A 14.9 C 12.0 C 17.0 A 12.1	14.9 14.3 15.1 12.5 11.1	A 10.6 C 20.7 A 24.3

Summary of information received by telegraph from industrial insurance companies for week ended Dec. 11, 1920.

Policies in force	45, 447, 417
Number of death claims	
Death claims per 1,000 policies in force, annual rate	9.7

<sup>&</sup>lt;sup>1</sup> Annual rates per 1,000 population.

<sup>2</sup> "A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1919.

<sup>3</sup> Data are based on statistics of 1915, 1916, and 1917.

# 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 Dec. 18, 1920.

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

ALABAMA.	1	CONNECTICUT.	
	ses.		ses.
Cerebrospinal meningitis	1	Cerebrospinal meningitis	. 1
Chicken pox	17	Chicken pox	35
Diphtheria	15	Conjunctivitis (infectious)	. 1
Hookworm	44	Diphtheria:	
Measles	9	Bristol	
Ophthalmia neonatorum	1	Hartland	16
Scarlet fever.	10	New Haven	
Smallpox	co	Norwalk	
Tuberculosis	12	Orange	
Typhoid fever	20	Scattering German measles	
Whooping cough	5	Influenza.	
		Malaria.	
ARKANSAS.		Measles:	
Cerebrospinal meningitis	1	Ansonia.	10
Chicken pox	20	New Britain	
Diphtheria	29	Scattering	
Influenza	24	Mumps	
Malaria	30	Pneumonia (Iobar)	
Measles	39	Scarlet fever:	
Pellagra	9	Bridgeport	. 17
Scarlet fever.	17	Meriden (city)	10
Smallpox	4	New Haven	
Trachoma	2	Waterbury	
Tuberculosis	15	Scattering	
Typhoid fever.	4	Tetanus	
1) photo tever	•	Trachoma. Tuberculosis (all forms)	
California.		Typhoid fever	
Cerebrospinal meningitis:		Whooping cough	
Fullerton	1	whooping coagnitions	100
San Francisco	4	DELAWARE.	
Influenza	15	Chicken pox	5
Smallpox:	10	Diphtheria	
Alameda County	11	Influenza	
· · · · · · · · · · · · · · · · · · ·	8	Mumps	
Monterey Oxnard	7	Measles	
Sacramento.	8	Pneumonia	
San Francisco	29	Scarlet fever	
	28	Tuberculosis	
Scattering	7	Typhoid fever	
Typhoid fever		Whooping cough	24
19810°203	(31	09)	

FLORIDA. Cases.	IOWA.
	Cerebrospinal meningitis: Cases.
Diphtherla 11 Infuenza 21	Dayton 1
Malaria 43	Burlington 1
Pneumonia. 13	Diphtheria
Poliomyelitis. 1	In luenza. 5
Scarlet fever. 10	Scarlet fever. 86
Smallpox	Smallpox:
Typhoid fever	Dubuque
**	Hiteman 14
GEORGIA.	Ottumwa
Chicken pox	Scattering. 92
Diphtheria24	KANSAS.
Dysentery (bacillary) 4	
Hookworm	Chicken pox
In duenza	Diphtheria
	Corman measles. 2
Measles 15 Mumps 8	Induerra
Pneumonia	Mumps4
Scarlet fever. 22	Pneumonia
Septic sore throat	Poliomyelitis. 1
Smallpox	Scarlet fever. 196
Tetanus 1	Smallpox81
Trachoma	Tuberculosis
Tuberculosis (pulmonary)	Typhoid fever
Typhoid fever	Whooping cough
Whooping cough	LOUISIANA.
ILLINOIS.	1
Diphtheria:	Diphtheria 16
Chicago	Scarlet fever
Fast St. Louis	Smallpox
Evanston 15	Typhoid fever
Scattering	MAINE.
Influen7a	Chicken pox 52
Lethargic encephalitis—Aurora 1	Diphtheria14
Pneumonia	German measles
Poliomyelitis:	Influenza 4
Clinton 1	Measles
New Holland 1	Mumps
Streator 1	Pneumonia
Villa Grove 1	Poliomyelitis—Waterville 1
Scarlet fever:	Scarlet fever
Berwyn8	Septic sore throat
Chicago 149	Smallpox6
Springfield         56           Scattering         145	Tuberculosis 6
Smallpox:	Typhoid fever
Chicago	Whooping cough
East St. I ouis	MARYLAND.1
Jackson County—Sandridge Township! 13	Cerebrospinal meningitis 1
Madison	Chicken pox 92
Olney 9	Diphtheria101
Rockford	Influenza
Virginia	Measles 74
Scattering71	Mumps4
Typhoid fever	Ophthalmia neonatorum
INDIANA.	Pneumonia (allforms)
Diphtheria	zop.
Scarlet fever	Tuberculosis
Typhoid fever 22	Vincent's angina
(Epidemic Anderson.)	Whooping cough
(=Leneutin rimanicom)	and Friday

MASSACHUSETTS.	NEW MEXICO-continued.
Cases.	Cases
Cerebrospinal meningitis 4	Scarlet fever
Chicken pox 234	Smallpox
Conjunctivitis (suppurative) 7	Tuberculosis
Diphtheria 213	Typhoid fever
German measles	Whooping cough.
Influenza 32	1 - 5
Measles. 407	NEW YORK.
	(T) 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Mumps	(Exclusive of New York City.)
Ophthalmia neonatorum	Cerebrospinal meningitis—Schenectady
Pneumonia (lobar)	Diphthonia
Poliomyelitis 3	Diphtheria 424
Scarlet fever	Influenza
Smallpox 10	Measles
Trachoma	Pneumonia 229
Tuberculosis (allforms) 208	Poliomyelitis—Syracuse 1
	Scarlet fever
Typhoid fever	Smallpox
Whooping cough	
MINNESOTA	Tetanus
MINNESOTA.	Typhoid fever. 27
Smallpox	Whooping cough
3/17/2/2/2/2009	NORTH CAROLINA.
MISSISSIPPI.	1
Diphtheria	Chicken pox
Searlet fever	Diphtheria 82
Smallpox	German measles 3
Typhoid fever	Measles
2,7,2000.0000.0000.0000.0000.0000.0000.0	Poliomyelitis. 1
MONTANA.	l
Diphtheria 4	
T	Septic sore throat
	Smallpox
Scarlet fever 6	Trachoma 1
Smallpox	Typhoid fever
Typhoid fever 1	Whooping cough
ACCEPTANCE OF A	ł
NEBRASKA.	SOUTH DAKOTA.
Chicken pox	Actinomycosis 1
Diphtheria	Chicken pox 6
Measles	Diphtheria
Scarlet fever:	Influenza 6
Gage County 9	Measles
Scattering 45	Pneumonia
Smallpox:	
	Scarlet fever
Antelope County	Smallpox
Omaha	Tuberculosis
Scattering 43	Typhoid fever 1
Tuberculosis 1	
Typhoid fever 3	TEXAS.
Whooping cough	Chicken pox
ł	Diphtheria54
NEW JERSEY.	Influenza
Cerebrospinal meningitis 1	Measles 12
Chicken pox	Searlet fever
Diphtheria	Smallpox
Influenza. 28	Trachoma
1	
Measles	
Pneumonia175	Typhus fever—Galveston 1
Scarlet fever 185	VERMONT.
Trichinosis 3	Chicken pox
Typhoid fever 12	
Whooping cough	Diphtheria
	Influenza 6
NEW MEXICO.	Measles
Chicken pox 10	Mumps
Diphtheria25	Pneumonia 7
Meastes	Scarlet fever
Mumps. 23	Smallpox
Pneumonia 10	Typhoid fever
Puerperal septicemia 3	Whoming cough 70

VIRGINIA.		WISCONSIN.	
Ca	ses.	Milwaukce: Ca	ses.
Smallpox—Bedford County	4	Chicken pox	52
		Diphtheria	73
WEST VIRGINIA.		Influenza	
		Measies	
Cerebrospinal meningitis—Charleston	1	Scarlet fever	
Diphtheria:		Smallpox	8
Wheeling	9	Tuberculosis	
Scattering	25	Whooping cough	18
Measles:		Scattering:	
Charleston	15	Cerebrospinal meningitis	1 123
Morgantown	18	Chicken pox	
Scattering	6	German measles.	103
Scarlet fever:		Influenza	31
Wheeling	8	Moasles.	48
Scattering	15	Poliomyelitis.	1
Smallpox:		Scarlet fever.	_
Clarksburg	8	Smallpox	
Sistersville	17	· Tuberculosis	13
Scattering	3	Typhoid fever	7
Typhoid fever	5	Whooping cough	179
District of Columbia and Kentucky Reports for Week Ended Dec. 11, 1920.			
	<b>J</b> 10.	eports id: Week Ended Dec. 11, 1020.	
DISTRICT OF COLUMBIA.	<b>y 1</b> 0.	Measles: Cas	ses.
DISTRICT OF COLUMBIA.	ses.		ses. 16
DISTRICT OF COLUMBIA.		Measles: Cas	
district of columbia.	ses.	Measles: Cas Harlan County	16
DISTRICT OF COLUMBIA.  Ca Chicken pox	ses. 40	Measles: Car Harlan County Scattering	16 4
DISTRICT OF COLUMBIA.  Ca Chicken pox  Diphtheria	ses. 40 24	Measles: Ca: Harlan County Scattering Mumps	16 4 2
Chicken pox	ses. 40 24 25	Measles: Ca: Harlan County	16 4 2
Ca Chicken pox Diphtheria Influenza Measles.	ses. 40 24 25 7	Measles: Cas Harlan County Scattering Mumps Pneumonia Scarlet fever:	16 4 2 37
DISTRICT OF COLUMBIA.  Ca Chicken pox. Diphtheria Influenza. Measles Scarlet fever.	ses. 40 24 25 7 28	Measles: Ca: Harlan County. Scattering. Mumps. Pneumonia. Scarlet fever: Campbell County.	16 4 2 37
DISTRICT OF COLUMBIA.  Ca Chicken pox	ses. 40 24 25 7 28 1	Measles: Car Harlan County Scattering Mumps Pneumonia Scarlet fever: Campbell County Jefferson County	16 4 2 37 12 12
DISTRICT OF COLUMBIA.  Ca Chicken pox. Diphtheria. Influenza. Measles. Scarlet fever. Smallpox. Tuberculosis.	ses. 40 24 25 7 28 1 22	Measles: Car Harlan County Scattering Mumps Pneumonia Scarlet fever: Campbell County Jefferson County Scattering	16 4 2 37 12 12 19
DISTRICT OF COLUMBIA,  Ca Chicken pox.  Diphtheria.  Influenza.  Measles.  Scarlet fever  Smallpox.  Tuberculosis.  Typhoid fever	ses. 40 24 25 7 28 1 22	Measles: Cas Harlan County Scattering Mumps Pneumonia Scarlet fever: Campbell County Jefferson County Scattering Septic sore throat Smallpox: Bell County	16 4 2 37 12 12 19
DISTRICT OF COLUMBIA,  Ca Chicken pox.  Diphtheria.  Influenza.  Measles.  Scarlet fever  Smallpox.  Tuberculosis.  Typhoid fever  Whooping cough.	ses. 40 24 25 7 28 1 22	Measles: Car Harlan County Scattering Mumps Pneumonia Scarlet fever: Campbell County Jefferson County Scattering Septic sore throat Smallpox: Bell County Carlisle County	16 4 2 37 12 12 19 4
DISTRICT OF COLUMBIA,  Ca Chicken pox.  Diphtheria.  Influenza.  Measles.  Scarlet fever  Smallpox.  Tuberculosis.  Typhoid fever	ses. 40 24 25 7 28 1 22 10	Measles: Cas Harlan County Scattering Mumps Pneumonia Scarlet fever: Campbell County Jefferson County Scattering Septic sore throat Smallpox: Bell County	16 4 2 37 12 12 19 4
DISTRICT OF COLUMBIA,  Ca Chicken pox.  Diphtheria.  Influenza.  Measles.  Scarlet fever  Smallpox.  Tuberculosis.  Typhoid fever  Whooping cough.	ses. 40 24 25 7 28 1 22	Measles: Car Harlan County Scattering Mumps Pneumonia Scarlet fever: Campbell County Jefferson County Scattering Septic sore throat Smallpox: Bell County Carlisle County	16 4 2 37 12 12 19 4 10
DISTRICT OF COLUMBIA.  Ca Chicken pox. Diphtheria. Diphtheria. Influenza. Measles. Scarlet fever. Smallpox. Tuberculosis. Typhoid fever Whooping cough	ses. 40 24 25 7 28 1 22 10	Measles: Cas Harlan County Scattering Mumps Pneumonia Scarlet fever: Campbell County Jefferson County Scattering Septic sore throat Smallpox: Bell County Carlisle County Daviess County	16 4 2 37 12 12 19 4 10 14 14
DISTRICT OF COLUMBIA,  Ca Chicken pox.  Diphtheria.  Influenza.  Measles.  Scarlet fever.  Smallpox.  Tuberculosis.  Typhoid fever.  Whooping cough.  KENTUCKY.  Cerebrospinal meningitis:	24 25 7 28 1 22 10	Measles: Cac Harlan County Scattering Mumps Pneumonia Scarlet fever: Campbell County Jefferson County Scattering Septic sore throat Smallpox: Bell County Carlisle County Daviess County Pike County Scattering Tonsilitis	16 4 2 37 12 12 19 4 10 14 14 10
DISTRICT OF COLUMBIA,  Ca Chicken pox.  Diphtheria.  Influenza.  Measles.  Scarlet fever  Smallpox.  Tuberculosis.  Typhoid fever  Whooping cough.  KENTUCKY.  Cerebrospinal meningitis:  Grant County.	ses. 40 24 25 7 28 1 22 10 10	Measles: Carlan County. Scattering. Mumps. Pneumonia. Scarlet fever: Campbell County Jefferson County. Scattering. Septic sore throat. Smallpox: Bell County. Carlisle County. Daviess County. Pike County. Scattering.	16 4 2 37 12 12 19 4 10 14 14 10 18
DISTRICT OF COLUMBIA.  Ca Chicken pox	ses. 40 24 25 7 28 1 22 10 10	Measles: Cas Harlan County Scattering Mumps Pneumonia Scarlet fever: Campbell County Jefferson County Scattering Septic sore throat Smallpox: Bell County Carlisle County Daviess County Pike County Scattering Tonsilitis Trachoma Tuberculosis:	16 4 2 37 12 19 4 10 14 14 10 18 5
Ca Chicken pox	24 25 7 28 1 22 10 10	Measles: Cas Harlan County Scattering Mumps Pneumonia Scarlet fever: Campbell County Jefferson County Scattering Septic sore throat Smallpox: Bell County Carlisle County Pike County Scattering Tonsilitis. Trachoma Tuberculosis: Jefferson County	16 4 2 37 12 19 4 10 14 14 10 18 5
Cachicken pox	24 25 7 28 1 22 10 10 10 1 1 38	Measles: Car Harlan County Scattering Mumps Pneumonia Scarlet fever: Campbell County Jefferson County Scattering Septic sore throat Smallpox: Bell County Carlisle County Daviess County Pike County Scattering Tonsilitis. Trachoma Tuberculosis: Jefferson County Scattering Scattering Toscilitis Jefferson County Scattering	16 4 2 37 12 19 4 10 14 11 10 18 5 3
Ca Chicken pox. Ca Chicken pox. Diphtheria Influenza Measles. Scarlet fever Smallpox. Tuberculosis Typhoid fever Whooping cough KENTUCKY.  Cerebrospinal meningitis: Grant County Rowan County Chicken pox Diphtheria: Jefferson County	24 25 7 28 1 22 10 10	Measles: Cas Harlan County Scattering Mumps Pneumonia Scarlet fever: Campbell County Jefferson County Scattering Septic sore throat Smallpox: Bell County Carlisle County Pike County Scattering Tonsilitis. Trachoma Tuberculosis: Jefferson County	16 4 2 37 12 19 4 10 14 11 10 18 5 3

#### SUMMARY OF CASES REPORTED MONTHLY BY STATES.

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

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
1920.  Arizona (November) Arkansas (October) Connecticut (November) Louislana (November) Michigan (November) Montana (October) Nebraska (November) West Virginia (November)	5 7	7 248 549 118 1,574 31 155 378	62 68 45 45 116	1,073 114	12 95 373 171 183 687 23 219	31 20	9 1 15 10 2 4	14 114 408 57 1, 229 112 162 229	5 18 86 366 59 194 110	166 41 44 223 34 11 79

#### ANTHRAX.

#### Georgia, Nebraska, New York, and West Virginia.

During November, 1920, one case of anthrax was reported in West Virginia. During the week ended December 4, 1920, there were reported one case and one death at Savannah, Ga., one case and one death at Omaha, Nebr., and one case at New o, N. Y.

#### CEREBROSPINAL MENINGITIS.

#### City Reports for Week Ended Dec. 4, 1920.

The column headed "Average cases" gives the average number of cases reported during the corresponding weeks of the years 1915 to 1919, inclusive. In instances in which the information is not available for the full five years, the average includes from one to four years.

	Aver-				Aver-	1920	
Place.	age cases.	Cases.	Deaths.	Place.	age cases.	Cases.	Deaths.
Alabama: Montgomery Arkansas: I ittle Rock Connecticut:	ł	2	1	Missouri: Kansas City St. Louis New York: Glens Falls	(1)	1 3	1 1
Meriden District of Columbia: Washington Illincis: Chicago	0	1 1 5	1	New York Ohio: Akron. Cleveland Pronsylvania:	4 (¹)	5 1 1	5
Indiana: Evansville Massachusetts: Arlington Boston	0	1	1 1 1	PhiladelphiaSharonRhode Island: Pawtucket	(¹)	2 1	2
Boston. Lynn New Bedford. Michigan: Detreit.	0	1 1	2 1	South Carolina: Columbia Texas: Galveston	0	2 1	1
Detroit	(¹)	2. 2	1	Utah: Salt Lake City Wisconsin: Milwaukee	0 1	1	· · · · · · · · · · · · · · · · · · ·

<sup>1</sup> Average less than 1.

INFLUENZA.

City Reports for Week Ended Dec. 4, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alahama:			Minnesota:		
Anniston	1 1	l	Minneapolis	2	1
Firmingham	l	2	Missouri:	-	•
Montgomery			Kansas City	6	2
California:	1		St. I ouis	š	ī
Alameda	3		New Jersey:	•	•
I os Angeles	5 2		Garfield	1	
Oakland	2	2	Jersey City	$\bar{2}$	
San Francisco	8	3	Newark	3	
Colorado:	· -		Trenton	4	•••••••••••••••••••••••••••••••••••••••
Denver		1	New Mexico:	-	••••••••••••••••••
Connecticut:		-	Albuquerque	1	
Hartford	3	1	New York:	-	••••••
New Britain	4		Albany	2	
District of Columbia:	Ī		Buffalo	ī	
Washington	4	1 1	Jamestown	4	-
Georgia:	_	- 1	New York	5Î	8
Atlanta	5		Ohio:	0.	Ū
Illinois:	Ū		Cincinnati	1	
Chicago	22	3	Cleveland	3	
East St. Louis.	2	١	Fremont	i l	-
I a Salle	5		Springfield	1	· · · · · · · · · · · · · · · ·
Indiana:	Ū		Oklahoma:	- 1	· · · · · · · · · · · · · · · · · · ·
East Chicago		1	Oklahoma City	1	
Terro Haute.		i	Pennsylvania:	- 1	· · · · · · · · •
lowa:		- i	Philadelphia	2	
Council Bluffs	1	ŀ	South Dakota:	- 1	
Kansas:	*		Sioux Falls.	1	
Coffevville	2	1	Texas:	- 1	•
Wichita.	ĩ	- 1	Dallas	4	
Kentucky:	*		Utah:	9	
Louisville	1	i	Salt Lake City	1	•
Maryland:	1		Virginia:		1
Baltimore	8	!	Roanoke	1	
Cumberland	4		West Virginia:	1	· · · · · · · · •
Massachusetts:	4		Fairmont	2	
	2		Wisconsin:	2	· · · · · · · · •
Poston Waltham	6	1		. 1	
				1	• • • • • • • •
Worcester	1		Green Pay		· · · · · · · · · · · · · · · · · · ·
Michigan:		. 1	Mil vaul ce	1	· · · · · · · · •
Detroit	4	1	Oshkosh	1	· · · · · · · • •
Flint	1		Wausau	2	

#### LETHARGIC ENCEPHALITIS.

### California, Connecticut, and New Jersey.

During November, 1920, one case of lethargic encephalitis was reported in Connecticut. During the week ended December 4, 1920, two cases were reported at San Francisco, Calif., and one case was reported at Jersey City, N. J.

MALARIA.

City Reports for Week Eaded Dec. 4, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama: Birmingham. Mobile. Arkansas: Little Rock. California: San Francisco. Georgia: Atlanta. Savannah.	2 1 4 1	1 1	Indiana: Evansville Louisiana: Monroe New Orleans South Carolina: Charleston Texas: Dallas	1	1 1 1 1 2

### PELLAGRA.

### City Reports for Week Ended Dec. 4, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama:     Montgomery. Georgia:     Brunswick Louisiana:     New Orleans. North Carolina:     Winston-Salem.	1	2 1 1	South Carolina: Charleston. Texas: Dallas. Virginia: Richmond.	2	1

### PLAGUE.

### Human Cases of Plague Reported.

Place.	Period covered.	Cascs.	Deaths.	Remarks.
Florida: Pensacola	1920. May 31 to Aug. 31. Sept. 1 to Dec. 18.	10 0	4 0	
Louisiana: New Orleans	1919. Oct. 22 to Dec. 31	12	4	
_	1920, Jan. 1 to Apr. 30 May 1 to Aug. 31 Sept. 1 to Dec. 18	0 7 0	0 3 0	
Texas: Beaumont	June 19 to Aug. 20	14 0	5	
Galveston	Aug. 21 to Dec. 18. June 8 to Nov. 14. Nov. 15 to Dec. 18.	17 0	11 0	
Port Arthur		ĭ	ï	From Galveston.

### Plague-Infected Rodents.

Place.	Period covered.	Rodents found plague infected.
Florida: Pensacola	1920. June 28 to Sept. 19 Sept. 20 to Dec. 18	31 0
Louisiana: New Orleans	1919. November and December	308
	1920. January to November Dec. 1 to 11 Dec. 12 to 20	269 4 1
Texas: Beaumont	July 1 to Oct. 25	123
Galveston	Oct. 26 to Dec. 18	0 67
Port Arthur	Dec. 5 to 18 Oct. 25	1

# PNEUMONIA (ALL FORMS).

### City Reports for Week Ended Dec. 4, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama:			Kentucky:		
Anniston	1		Covington		1
Birmingnam		2	Lexington. Louisville	••••••	1 8
Montgomery	i	3	Louisiana:	•	l °
Amzona:	3	1	New Orleans		12
Tuscon		1	Maine:		_
Arkansas:	2	İ	Auburn Bangor		1
Little Rock	-	i	Biddeford		1
California:	1	1	Biddeford Portland Sanford Waterville.		l ī
Alameda	1	1	Sanford	4	2
Eureka		1	Maryland:	1	
Fresno	2	1 1	Baltimore	41	15
Long Beach Los Angeles Oakland	40	15	Baltimore. Cumberland	î	l
Oakland		6	Massachusetts:	_	
Riverside		6 1 2	Arlington	1	23
Sacramento		4	Boston	33 2	ľ
Sar. Francisco	12	1 4	Brookline Cambridge	5	i
Santa Cruz	1	1	Cheisea	1	1
Colorado:		_	Clinton	2 1	
Colorado Springs Denver		1 13	Dedham		i
Connecticut:	• • • • • • • • • • • • • • • • • • • •	19	Everett	5	5
Bridgeport	1	5	Gardner	4	1
BristolGreenwich	3	1	Gardner Haverhill. Holvoke.	3	2 3
Greenwich	1 4	7	Lawrence.	3	
Hartford Manchester	1	•	Leominster.	ĭ	1
Meriden	$ar{2}$	1	Lowell	3	8
New Britain	1	4	Lynn	1	1
New Haven		11 1	Medford New Bedford	·····i	1
Waterbury	5	6	Newburyport		ĩ
District of Columbia:	_		Newton	6	1 8 1 1 2 1 3 1 1 2 2 2
Washington		9	North Attleboro	1	
Georgia:		9	Peabody Pittsfield	i	• •
Atlanta Savannah		ğ	Quincy		$ar{2}$
Illinois:			Salem	2	2
Chicago	201	46	Somerville	1	1
Decatur East St. Louis. Elgin Galesburg Jacksonville	2	1 2 3 2	Springfield	2	·····i
Elgin.	ī	3	Springfield	2	
Galesburg		2	Waltham	1 4	3 5
Kankakee	• • • • • • • • • • • • • • • • • • • •	4 1	Worcester	*	ð
La Salle	2		Ann Arbor	1	3
Oak Park	2	1	Ann ArborBenton Harbor	1	1
Peoria		6	Detreit	53	27
Rockford	1 3	1	Grand Rapids	6	2
Rock Island		1 2	Ironwood. Ishpeming. Marquette. Pontiac.	6	····i
Indiana:	1		Marquette	3	
Brazil		1	Pontiac	1 3	· · · · · · · · · · · · ·
East Chicago		4	Port Huron	il	····i
Elwood		1	Minnesota:	- 1	
Evansville		7	Duluth	1	2
Fort Wayne		2	Hibbing Minneapolis		1 10
Hammond		2	St. Paul		9
Indianapolis.		10	Miccouri.	1	•
East Chicago Elkhart Elwood Evansville Fort Wayne Gary Hanmond Indianapolis Kelomo		1 1 7 2 2 2 3 10 2 1	Cape Girardeau. Jefferson City Kansas City St. Joseph	1	1
Marion		1	Jefferson City		1 13
Richmond		1	St Joseph	9	3
Marim Mishawaka Richmond Terre Haute		2 5	Montana:		
lowa:	3	1	Butte	•••••	2
Burlington	1	1	Great Falls	1	••••••
Kansas:	•••••	1	Nebraska: Lincoln	3	1
Fort Scott		1	Omaha		6
Kansas City Parsons	9		New Hampshire:		_
					1
Parsons Topeka	2 2	······································	Concord		

# PNEUMONIA (ALL FORMS)—Continued. City Reports for Week Ended Dec. 4, 1920—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
New Jersev:			Ohio-Continued.		
Atlantic City	2	1	Canton		4
Bayonne	3		Cincinnati		11
Bloomfield	2		Cle cland		8
Elizabeth		.  1	Columi us		4
Englewood	1		Dayton	2	
Garfield	1		Hamilton		2
Gloucester	1		Lima		2
Hackensack	4		Mansfield		1
Harrison	1		Ne cark		3
Hoboken	1	3			1 1
Jersey City	8 2		Tiffin		6
Kearny		i	ToledoYoungstown		1 4
Montelair		1 1	Zanes, ille		i
Morristown		15	Oklahoma:		
Newark		13	Oklahoma City	l	4
Orange	5	2	Tulsa.	2	•
Paterson		_	Oregon:	-	
Perth Amboy		4	Portland	İ	3
Plainfield		3	Pennsyl ania:		"
Trenton	12	2	Philadelphia	112	67
West Hoboken	1 1	_	Rhode Island:		
West New York			Pawtucket		2
West Orange	l î		Pro idence		5
New York:	_	1	South Carolina:		
Albany	11	1	Charleston		3
Buffalo	28	11	South Dakota:		
Elmira	i	1	Sioux Falls		1
Glens Falls	3		Tennessee:		
Ithaca	!. <b></b>	1	Memphis		7
Jamestown	2		Nashville		2
Lockport	1		Texas:	_	_
Mount Vernon	10	2	Beaumont	1	3
New York	356	151	Dallas	8	5
Niagara Falls		3	El Paso		5
Olean		1	Galveston		1
Peckskill		1	Utah:		2
Poughkeepsie	2		Salt Lake City		Z
Rochester	11	1	Virginia:	1	5
Rome	3	·····	Richmond	3	э
Saratoca Springs		i	Roanoke	3	
Schenectady			West Vircinia:		1
Syracuse	6 7	3 2	Charleston Wheeling		2
Troy	4	2	Wisconsin:		_
Yonkers	4	2	Beloit	1	
North Carolina:	4	2	Green Bay		2
Charlotte	ł	3	Janes ille		ĩ
Greensboro		i	Kenosha		î
Winston-Salem		i	Milwaukee	14	11
Ohio:		1 1	Superior.		î
Akron	2		Wausau	1	ī
D.B. Ull	_		Trausau	•	•

#### POLIOMYELITIS (INFANTILE PARALYSIS).

#### City Reports for Week Ended Dec. 4, 1920.

The column headed "Average cases" gives the average number of cases reported during the corresponding weeks of the years 1915 to 1919, inclusive. In instances in which the information is not available for the full five years, the average includes from one to four years.

Place. ag	Aver-	1	920	Place.	Average cases.	1920	
	age cases.	Cases.	Deaths.	riace.		Cases.	Deaths.
Massachusetts: Boston. Mcdford. Quincy. Somerville. Michigan: Detroit. New Jersey: Kearny.	(1) (2) (3) (4)	1 1 1 1	1	New York: New York. Ohio: Cleveland Rhode Island: Providence.	(1) 0	3 1 1	1

<sup>1</sup> Average less than 1.

<sup>2</sup> Excluding 1916, an epidemic year.

#### RABIES IN ANIMALS.

#### Rome, Ga.-Week Ended Dec. 4, 1920.

During the week ended December 4, 1920, one case of rabies in animals was reported at Rome, Ga.

#### SMALLPOX.

#### City Reports for Week Ended Dec. 4, 1920.

The column headed "Average cases" gives the average number of cases reported during the corresponding weeks of the years 1915 to 1919, inclusive. In instances in which the information is not available for the full five years, the average includes from one to four years.

711	Aver-		920	Place.	Aver-	1920	
Place.	cases.	Cases.	Deaths.	T Esec.	age cases.	Cases.	Deaths.
Alabama:				Minnesota:	4		
Birmingham	(1)	1		Duluth	(1)	5 9	
Mobile	0	2 3		Mankato Minncapolis	10	83	••••••
Montgomery California:	U	ľ		St. Cloud	7	1	• • • • • • • • • • • • • • • • • • • •
Oakland	2	_3		St. Paul.	11	33	
Riverside	0	3		Winona	0	20	
Sacramento	0	16		Missouri:	•0	_	
San Francisco	(1)	17	i	Kansas City St. Joseph	18 3	8	<b>-</b>
Santa Cruz	U	• • • • • • • • • • • • • • • • • • • •		St. Louis.	ĭ	3	
Colorado Springs	0	1		Montana:	_		
Denver	10	4		Missoula	0	6	
Pueblo	0	1		Nebraska:			l
Georgia:	_	12	1	Lincoln Nevada:	4	2	
AtlantaIdaho:	2	12	•••••	Reno	0	3	
Boise	3	3	1	North Carolina:			•••••••
Illinois:	_	Ĭ		Charlotte	0	2	
Chicago East St. Louis	(1)	4		Durham	0	1	
East St. Louis	0	9		North Dakota:	0	1.1	ŀ
Evanston	0	i		Fargo Grand Forks		14 6	ļ
GalesburgGranite City	(¹) o	i		Ohio:	•••••	· ·	•••••
Oak Park	ŏ	î		Akron	.7	10	
Rockford	(1)	6		Ashtabula	0	2	
Springfield	1	1		Canton	(1)	4	· · · · · · · · ·
Indiana:		6	1 1	Chillicothe Cincinnati	(1)	1	• • • • • • •
BedfordElkhart	0	1		Cleveland	12	5	• • • • • • •
Hammond	0	2		Hamilton		8	
Huntington	ŏ	4		Lancaster	0	2	
Indianapolis	10	2		Lima	0	27	
Kokomo	5	9		Lorain	1	29 1	• • • • • • •
Marion	(¹) 0	15		Marion	(1)	2	
South Bend	3	36		Steubenville	(i)	1	
Terre Haute	Ŏ.	5		TiMn	``0	3	
Iowa:		_	1	Toledo	1	5	
Codar Rapids	(1)	1		Oklahoma: Tulsa	i	1	
Council Bluffs Davenport	13	5		Oregon:	••••••	-	· · · · · · · · · · · · · · · · · · ·
Des Moines	1	ĭ		Portland	17	9	
Dubuque	(1)	38		Salem	0	1	
Iowa City	``0	1		Pennsylvania:		_	
Marshalltown	7	.1	[	Butler	0	1	· · · · · · •
Sioux City	2	47		South Dakota: Sioux Falls	0	3	
Kansas: Kansas City	10	4		Tennessee:	V	3	• • • • • •
Leavenworth	(1)	i		Nashville	. 0	3	
Louisiana:		_		Texas:	.		
New Orleans	1	39	2	Dallas	2	1	• • • • • •
Michigan:	10	36		Waco Utah:	0	1	••••••
Detroit	10	36 6		Salt Lake City	2	23	
Deat II		i		Vermont:	- 1	-~	
Port Huron Sault Ste. Marie		3		V CI IIIOIIC.	0	4	

<sup>1</sup> Average less than 1.

#### SMALLPOX-Continued.

#### City Reports for Week Ended Dec. 4, 1920—Continued.

Place.	Aver-	1920		Place.	Aver-	1920	
	ace cases.	Cases.	Deaths.	Face.	age cases.	Cases.	Deaths.
Virginia: Lynchburg. Washington: Aberdeen Bellingham Everett Scattie Spokane Tacoma Walla Walla	0 0 5 (1) 7 25 (1) 8	1 5 2 1 25 40 12 5		West Virginia: Bluefield. Wisconsin: Appleton. Beloit. Eau Claire. Malison. Milwaukee. Sheboygan. Superior.	(1) 0 (1) (1) 2	1 2 1 1 5 12 16 1	

<sup>1</sup> Average less than 1.

#### TETANUS.

#### City Reports for Week Ended Dec. 4, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Georgia: Savannah. Kansas: Parsons. Kentucky: Louisville. Massachusetts: Springfield.	1	1	Missouri: St. Louis New York: New Yo'k North Carolina: Winston-Salem		_ 1

#### TYPHOID FEVER.

#### City Reports for Week Ended Dec. 4, 1920.

. The column headed "Average cases" gives the average number of cases reported during the corresponding weeks of the years 1915 to 1919, inclusive. In instances in which the information is not available for the full five years, the average includes from one to four years.

Place.	Aver-	1	920		Place. Average		920
I mee.	age cases.	Cases.	Deaths.	Fince.	cases.	Cases.	Death3.
Alabama: Birmingham Mobile Montgomery Arkansas: Fort Smith Hot Springs Little Rock California: Long Beach Los Angeles Oakland Sacramento Connecticut: Bridgeport New Haven Norwich Waterbury District of Columbia: Washington Georgia:	(1) (1) (1) (1) (1) (1) (1) (1) (2) (3) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	1 4 1 1 2 2 2 2 1 1 1 2 1 1 5	1	Illinois: Chicago Kankakee Kewanee Mattoon Rockford Indiana: Fast Chicago Elwood Evansville Fort Wayne Indianapolis Terre Haute Iowa: Kcokuk Muscatine Kansas: Kansas City Topeka Kentucky:	(1) (1) (1) (1) (1) (1)	7 1 1 1 1 2 1 1 2 1 1 2 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Atlanta Rome	(1) 0	1		Lexington Louisville	1 3	1	

<sup>1</sup> Average less than 1.

# TYPHOID FEVER—Continued. City Reports for Week Ended Dec. 4, 1920—Continued.

Place.	Aver-	1	920	Place.	Aver-	19	920
i iacc.	cases.	Cases.	Deaths.	T face.	age cases.	Cases.	Deaths.
Louisiana:				New York-Continued.			
New Orleans	3	2	1	Troy	(¹) <sub>2</sub>	·····i	1
Bangor	0	1		Ohio:	-	-	
Portland	1	4		Akron		1	
Maryland: Baltimore	10	1	1	Canton	(1)	1	·····
Cumberland	(¹)	4	1	Cleveland	(') 2	2	i
Massachusetts:	(-)	•	• • • • • • • • • • • • • • • • • • • •	Columbus			2
Adams	0	1		Mansfield	ļ	1	
Arlington	1	2		Newark		1	
AttleboroBoston	(¹) <sub>2</sub>	2 3		Tiffin	0		1
Brookline	ő	i		Oklahoma City	1	1	:
Chelsea	(1)	î		Tulsa	l	2	
New Bedford	`´2	2		Oregon:		_	
Michigan:			l	Portland	2	2	1
Detroit	3 0	4	•••••	Pennsylvania: Allentown	ത	1	
Port Huron	ŏ	i		Altoona	[ [3]	l i	• • • • • • • • • • • • • • • • • • • •
Minnesota:	•	•		Easton	0	î	
Duluth	2	1		Harrisburg	(1)	1	
Minneapolis	2	5		Johnstown	1	1	
St. Paul Missouri:	(1)	2		Lancaster	(¹) 9	1 8	
Joplin	0	1		Pittsburgh	. 2	î	1
Kansas City	ĭ	î	i	Washington	(1)	2	
St. Charles		ī	ī	Rhode Island:		_	
St. Louis	9	1		Providence	(1)	1	
Nebraska: Omaha	0	1	1	South Carolina: Charleston	1	1	1
New Hampshire:	٧	1	1	Columbia	Ô	2	• • • • • • •
Berlin	0		1	South Dakota:	Ū	-	••••••
Concord 1	1			Sioux Falls	0		1
New Jersey:		_		Tennessee:			
Jersey City	(1)	1	•••••	Memphis Nashville	(¹) 3	1	· · · · · · · · · · · · · · · · · · ·
Newark	ĭ		i	Texas:	٥	1	• • • • • • •
Trenton	(1)	1	ī	El Paso	(¹)		1
New Mexico:		_		Utah:			
Albuquerque New York:	0	1	•••••	Salt Lake City	1	2	1
Albany	4	2		Washington: Spokane	o	1	
Dunkirk	ō!	ĩ	i	Yakima	ŏ	î	
Jamestown	1	2		West Virginia:		_	
Middletown	0	1		Bluefield	2	2	
New York North Tonawanda	23	22	2	Charleston	2	1	••••••
Rochester	0	1 2		Wisconsin: Marinette	a l	1	
Rome	δl	î		Milwaukce	(1)	il	••••••
Schenectady	(1)	1		Racine	`´o	ī	••••••
Syracuse	1 1	2		Sheboygan		1 !	

<sup>!</sup> Average less than 1.

### City Reports for Week Ended Dec. 4, 1920.

	July 1, 1917 deaths		Diph	theria.	Mea	sles.		erlet vor.		ber- osis.
City.	(estimated by U.S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Casos.	Deaths.	Cases.	Deaths.
Adams, Mass	14, 406 93, 604	1	6		4 2		8		1 11	1
Akron, Ohr) Alameda, Calif. Albany, N. Y. Albuquerque, N. Mex. Alexandria, Ja. Alexandria, Va. Allentown, Pa. Alliance, Ohio. Alton, Ill. Altoona, Pa. Amesbury, Mass.	28,433	6	4	•••••	14		6		7	
Albuquerque, N. Mex	106,632 14,509	11	3		5		ļ <u>.</u>		6	8
Alexandria, La	14,509 16,232 17,959	4 3	····i							
Allentown, Pa	65, 109		16		44		5		1	
Alliance, Obio	19,581 23,783 59,712	2 4	1 2		•••••	••••	9			1
Altona, Pa	59,712		3				3			
Altoona, Pa. Amesbury, Mass. Anaconda, Mont. Ann Arbor, Mich. Appleton, Wis. Arlington, Mass. Asbury, Park N. I.	10.200 /	2	1		2	••••	4	•••••	····i	
Ann Arbor, Mich.	10,631 15,041	2 5	4						1	
Appleton, Wis	15,041 18,005					•••••	$\begin{array}{c c} 2 \\ 1 \end{array}$			
Arlington, Mass. Asbury Park, N. J. Asbtabula, Ohio. Atchison, Kans. Atlanta, Ga. Atlentic City, N. J. Attleboro, Mass. Auburn, Me. Baltimore, Md. Banger, Mo.	13,073 14,629	5 1				•••••				
Ashtabula, Ohio	22,008 16,785 196,144	6				•••••		,		
Atlanta. Ga.	196,144	70	6 8	2	4		6	····i		4
Atlantic City, N. J.	53,515	10	2 1		•••••	•••••			• • • • • •	<u>2</u>
Auburn, Me.	19,776 16,607	4			9				• • • • • •	2
Baltimore, Md	594,637	215	52	3	12	• • • • • •	20	•••••	33	16
Barberton, Ohio	26,958 14,187	i	1 1		4		2		1 1	
Bangor, Me. Barberton, Ohio Bayonne, N. J. Beacon, N. Y. Beatrice, Nebr.	72, 204		4	•••••	4		7		2	
Beatrice Nebr	11,674   10,437	$\frac{2}{2}$							•••••	•••••
Beaumont, Tex	28, 851	18			2					1
Beaver Falls, Pa Bedford, Ind	13.749	2			2		23 1		2 1	····i
Beatrice, Nebr Beaumont, Tex Beaver Fails, Pa. Bedford, Ind. Belleville, N. J. Bellingham, Wash Beloit, Wis. Benton Harbor, Mich. Berlin, N. H.	10,613 12,797		1							
Beluingnam, Wash	34,362 18,547	3	····i		•••••		4			
Benton Harbor, Mich	11,099	3					1			
Berlin, N. II Bethlehem, Pa.	13,892 14,353	5	6		6		14			•••••
Bethlehem, Pa. Beverly, Mass. Biddeford, Me. Billings, Mont. Birmingham, Ala. Bloomlield, N. J. Bloomlington, Ill. Bloomington, Ind. Bluefield, W. Va.	22,128	3			9				2	
Billings, Mont.	17,760   15,123	4	5		17		····i			
Birmingham, Ala	189,716	58	8				5		7	3
Bloomington, III	19,013   27,462	1 3	2		····i		1 2		2	•••••
Bloomington, Ind	27, 462 11, 661	ĭ			1		1			•••••
Bluefield, W. Va	35, 951	4	2		1	•••••	$\frac{1}{2}$		•••••	•••••
Boise, Idaho	767,813 22,000 14,514	207	51	7	22		19	2	61	18
Bradford, Pa	22,000 14.514	•••••	7		1 7		1 2	•••••		• • • • •
Brazil, Ind	10, 472	2								i
Bravil, Ind Bridgeport, Conn. Bristol, Conn. Brookline, Mass Brunswick, Ga Buffalo, N. Y Burlington, Iowa Burlington, Vt Butler, Pa Butte, Mont. Cadillac, Mich	124,724 16,318	39	12 3	2	3		19		9 2	4
Brookline, Mass	16,318 33,526 10,984	4	ĭ		1		2		2	
Brunswick, Ga	10,984 475,781	2 116	104	11	119	•••••	19		17	16
Burlington, Iowa	25, 144	1					1			
Burlington, Vt	21.8924	7	1 2	•••••	5		3	•••••	2	1
Butte, Mont.	28,677 44,057	17	!		46				14	4
Cadillac, Mich	10. 158 1	26	3	-	2	•••••	···ii	•••••	5	• • • • • •
Cadillac, Mich. Cambridge, Mass. Canton, Ohio.	114,293 62,556 11,146	8 !	8		2		11		4	• • • • • •
Cape Girardeau, Mo	11,146 19,597	5	1 2	••••• •	21	•••••	3	•••••		1
Corlicle Po	10, 795 l.		î							
Carnegie, Pa	11,963 38,033	••••••	····i	-			2 2			· · · · •
Carnegie, Pa Cedar Rapids, Iowa Centralia, III	11,838	10								
Chambersburg, Pa	12,475	27	4	••••• •	•••••		•••••	•••••		
Charleston, S. C. Charleston, W. Va. Charlotte, N. C.	61,041 31,060 40,759	7	6	1	19				:::::	3 1
Charlotte, N. C.	40,759	9 ]	6		32		ا			ī

	Popula- tion as of July 1, 1917	Total deaths	Diph	theria.	Mea	asles.		arlet ver.		iber- losis.
City.	(estimated by U. S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Chelsea, Mass	46, 405 41, 857 2, 547, 201	13	3 2	ļ	5	ļ	3	<b> </b>	4	2
Chelsea, Mass	2,547,201	587	299	21	119	6	177	3	221	41
Chicopee, Mass	1 20 0:21	7 2	3		····	····	1			1
Cincinnati, Ohio	414,248	111	26	3			2 26	····i	18	9
Cleveland, Ohio	15,625 414,248 692,259 1 13,075	2	54	7	22		89	4	12	17
Chicopee, Mass. Chillicothe, Ohio. Cincinnati, Ohio. Cleveland, Ohio. Clinton, Mass. Costesville, Pa. Coffeville, Kans.	14,998	2	3	1	58		16			
Coffeyville, Kans	18,331 38,965	5	ĭ	J			l			
Costesville, Pa Coffeyville, Kans Colorado Springs, Colo Columbia, S. C. Columbus, Ohio. Concord, N. H. Connellsville, Pa Corpus Christi, Tex. Council Bluffs, Iowa Covington, Ky Cranston, R. I. Crawfordsville, Ind Cumberland, Md Dallas, Tex Danvers, Mass Danville, Va	38,965 35,165	12	3	ļ	3	ļ	2		5	3
Columbus, Ohio.	220, 135	71	22	1	ı		7	i	4	5
Concord, N. H.	22,858	14	1 5	1	1		····		1	
Corpus Christi, Tex	15,876 10,789 31,838	3	3	1			1		•••••	· · · · · •
Council Bluffs, Iowa	31,838	10					5			
Covington, Ky	59, 623 26, 773	17 3	3	····i		• • • • • •	5 1		1	3
Crawfordsville, Ind.	11,443	1					2			•
Cumberland, Md.	23,686 129,738 10,037	6	3		;-	• • • • • •			1	1
Danyers Mass	10,037	44	22 6		1		2 1	•••••	6	<b>-</b>
Danville, Va. Davenport, Iowa. Dayton. Ohio. Decatur, Ill. Dedham. Mass.	20, 183						2			
Davenport, Iowa	49,618 128,939 41,483		2 20		2		2 5		٠٠٠٠ ۽ ٠	
Decatur. Ill	41, 483	35 9	18				3		5	
Dedham, Mass	10,618	2	2							
Denver, Colo	268, 439 104, 052	73	17 10	2 1	62 2	• • • • • •	4 2		•••••	16
Detroit, Mich	619,648	227	119	12	15	····i	79	5	33	23
Denver, Colo.  Des Moines, Iowa  Detroit, Mich  Dover, N. H  Du Bois, Pa.	619,648 13,276 14,994	3	•••••		1					
Dubuque, Iowa	40 096 I		1				3 2		1	•••••
Duluth, Minn	97,077 21,311 26,160	19	5		1		3	i	1	i
Dunkirk, N. Y	21,311	10	4 2		1		2 1	1	···· <sub>2</sub> ·	····· <u>2</u>
Dubuque, Iowa Dubuque, Iowa Duluth, Minn. Dunkirk, N. Y Durham, N. C. East Chicago, Ind.	30,286 [	15		i						î
Easthampton, mass	10,656	2	6	1				1	1	
East of Louis, Ill.	30, 854 77, 312	15	3 6				1 2	•••••	2	••••••
Eau Claire, Wis	18, 887 28, 562				2		4			<b>.</b>
Elgin, Ill	28, 562   88, 830	6 17	1 7		2	•••••	4		····2	
Elkhart. Ind	22, 273	3	i				14		z	1
Elgin, III.  Elizabeth, N. J.  Elkhart, Ind.  Elmira, N. Y.  El Paso, Tex.  Elwood, Ind.  Englewood, N. J.  Etie, Pa.  Eugene, Oreg.  Eureka, Calii.  Evansville, Ind.	38, 272	9	2							····
El Paso, Tex	C9, 149 1 11, 028	27	4	1	1		3		···i	6
Englewood, N. J	12,603	2					i			
Erie, Pa	76, 592   . 14, 357	4	59		11 2		23		5	•••••
Eureka, Calif.	15, 142	4					4			• • • • • •
Evanston, Ill	15, 142 29, 304	11	25							•••••
Everett Mass	76, 981 40, 160	18	10	···i			3	••••• •	3	1
Everett, Wash	37, 205				1					
Fairmont, W. Va	16,111  . 129,828	40	10			1	7		1	• • • • • •
Fargo, N. Dak	17,872	4			16				5	
Evansville, Ind Evarsville, Ind Everett, Mass Everett, Wash Fairmont, W. Va Fall River, Mass Fargo, N. Dak Farrell, Pa. Findlay, Ohio Flint, Mich Fond du Lac, Wis Fort Scott, Kans Fort Smith, Ark Fort Wayne, Ind Fostoria, Ohio Framingham, Mass Frankfort, Ind	110.1901		2				3 .			
Flint Mich	1 14, 858 57, 386	3	12		2		1	••••• •		·····i
Fond du Lac, Wis.	21,486	6	10	i.						
Fort Smith Ark	10,564	5	5		-					•••••
Fort Wayne, Ind	29,390 78,014	13	3				3 .			•••••
Fostoria, Ohio	10,959	13	4				4 .			•••••
r ramingnam, Mass	14,149 10,103	0 .		-				•••• •		••••
Frankfort, Ind	10,080	3 .								
Fre nont, Ohio	11,034	4].		1 .		1	1 i.		!-	

<sup>&</sup>lt;sup>1</sup> Population Apr. 15, 1910.

	Popula- tion as of July 1, 1917	Total deaths	1 -	theria.	Mea	ısles.		arlet .er.	Tu	ther- losis.
City.	by U.S. Census Bureau).	from all causes.		Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Doaths.
Fresno, Calif. Galesburg, III. Galveston, Tex. Gardner, Mass. Garfield, N. J. Gary, Ind. Geneva, N. Y.	36,314 24,629 42,650	6	5 4	ļ	ii		2	ļ		2
Galveston, Tex.	42,650	5 12	1		1					2
Gardner, Mass	17, 534 15, 109	3		·	·····		. 3		2	
Gary, Ind	. 56,000	11	8				1	i	<u>.</u>	i
Geneva, N. Y. Glens Falls, N. Y. Gloucester City, N. J. Grand Forks, N. Dak	13.915	3 9			2	•••••			11	
Gloucester City, N. J.	17, 160 11, 375 16, 342		2				1		2	
Grand Forks, N. Dak	16,342 152,861	0 27	23	····i			6		···ii	¦
Grand FORKS, N. Dak Grand Rapids, Mich Grante City, Ill. Great Falls, Mont. Green Bay, Wis. Greenfield, Mass. Greensboro, N. C. Greensburg, Pa Greenswich Conn.	15 890	2	1	ļ <u>.</u> .						
Great Falls, Mont	1 13, 948 30, 017 12, 251	3 7	3	i	41 1	•••••	1 2		·····	
Greenfield, Mass.	12, 251	6		l	1		5			
Greensboro, N. C	20, 171 13, 881	7	2		·····	•••••	• • • • • •			·····
Greenwich, Conn.  Hackensack, N. J.  Hamilton, 'hio.  Hammond, Ind.	19,594	4	6						2	
Hackensack, N. J	17,412	5 8	1 2 2	2		•••••	9		1	
Hammond, Ind	41,338 27,016	10		î			2			
Harrisburg, Pa	73, 276	• • • • • • •	12	····i			3		····i	<b>-</b>
Harrisburg, Pa. Harrison, N. J. Hartford, Conn. Haverhill, Mass. Hazleton, Pa. Hibbing, Minn.	17,345 112,851	50	11	2	····i		5 2		4	3
Haverhill, Mass	49, 180 28,581 17,550 78,324	10	6		2	•••••	2		2	
Hibbing, Minn	17,550	i	1 5		2	•••••				
Hoboken, N. J.	78, 324	15	Ž		3		1		1	i
Holyake Mass	13,459 66,503	3 18	····i		1		1 2		•••••	<b>-</b>
Holoken, N. J. Holland, Mich Holyoke, Mass. Hot Springs, Ark Huntington, Ind Huntington, W. Va. Hutbingson, K. Wa.	17,690	. 8	1				1			1
Huntington, Ind	10,982 47,686	.3 12	1		1	•••••	4		•••••	3
Hutchinson, Kans	21,461	· · · · · · · ·	5		i		2			
Independence, Mo	11,964 283,622	4 76	7	····i	5	•••••	21	:	12	7
Hutnington, W. Va. Hutchinson, Kans. Independence, Mo. Indianapolis, Ind. Iowa City, Iowa. Ironton, Chio. Irvington, N. J. Ishpeming, Mich. Irvington, N. J. Ishpeming, Mich. Ithaca, N. Y. Jacksonville, Ill. Jamestown, N. Y. Janesville, Wis. Jefferson City, Mo. Jersey City, N. J. Johnstown, Pa. Joplin, Mo. Kalamazoo, Mich. Kansas City, Kans. Kansas City, Kans. Kansas City, Mo. Keene, N. H. Keene, N. H. Keene, N. H. Keokuk, Iowa. Kewanee, Ill. Konywille, Tenn	11,626		i							ļ <u>.</u>
Ironton, Ohio	11,626 14,079 15,095	2 2			8	•••••	6		••••	2
Irvington, N. J.	16,710 {	·••	2		ĭ		4		1	
Ishpeming, Mich	1 12, 448 16, 017	5 7.	7	1		••••••	2		1	• • • • •
Jacksonville, Ill	15,506	10	i						1	
Jamestown, N. Y	15,506 37,431 14,411	16 3	16 2		1		1 2		4	•••••
Jefferson City, Mo.		4								·····ż
Jersey City, N. J.	312,557	• • • • • • •	34 7		2 5	•••••	9		13	•••••
Joplin, Mo	70, 437 33, 400						3			
Kalamazoo, Mich	50, 408 14, 270	18	6		6		27		•••••	•••••
Kansas City, Kans.	102,696 [.	4	1 24		1		9			
Kansas City, Mo	305 816 1	113	42	2	8		26 8	1	4	5 1
Keene, N. H.	24, 325 10, 725 32, 833 114, 008	3 1	10		1		8			
Kenosha, Wis	32, 833	5	1				1			• • • • •
Kewanee, Ill	13,607	2 11	5 1		4		5			····i
Knoxville, Tenn	59, 112		8				5		2	2 1
Knoxville, Tenn Kokomo, Ind. La Fayette, Ind. Lake Charles, La. Lancaster, Ohio. Lancaster, Pa. La Salla	21, 929 21, 481	4 3			•••••		···i			1
Lake Charles, La	14,930	4								•••••
Lancaster, Ohio	16,086 51,437	1	12	•••••	1 .		•••••	•••••		•••••
La Salle, Ill	12, 332	4								
La Salle, Ill Lawrence, Kans. Lawrence, Mass.	13, 477	3	4 3	•••••]	3		5	•••••	1 4	<u>ż</u>
Leavenworth, Kans	102, 923 1 19, 363	15 2 7 7	5				2		1	
Leavenworth, KansLeominster, MassLewiston, Me	21,365	7	3		1				2	1
Lewiston, Me	28,061	71	3	11	20		!	• • • • • • • • • • • • • • • • • • • •	5	

<sup>1</sup> Population Apr. 15, 1910.

		1	<del></del>		,		<del></del>			
	Popula- tion as of July 1, 1917	Total deaths	Diph	theria.	Mea	sles.		rlet ver.		ber- osis.
City.	(estimated by U. S. Census	from all causes.	38.	Deaths.	s.	Deaths.	s.	ths.	s,	ths.
	Bureau).		Cases.	Ã	Cases	Ð 0	Cases.	Deaths	Cases.	Deaths
Lexington, Ky Lima, Ohio Lincoln, Nebr Little Rock, Ark Lockport, N. Y Logansport, Ind. Long Beach, Calif Lorain, Ohio Los Angeles, Calif. Jouisyille, Ky.	41,997 37,145	17	2				1 3	ļ		3
Lincoln, Nebr	46, 957	12	1		1		5			
Little Rock, Ark	58,716 20,028	4	. 8		. 22		1		1 2	
Logansport, Ind	20,028 21,338	8	i				Î		1	
Long Beach, Calif	29, 163 38, 266	17	3 3				1		1 2	i
Los Angeles, Calif.	535, 485	104	70	4	74		ii ii		30	21
Louisville, Ky	240, 808	62	25 7 6	2	····		11 14		11	21 2 2 2 2 1
Lowell, Mass Lynchburg, Va	114,366 33,497	29 7	6		. 89		2 2 2		6 2 3	2
Lynn, Mass	33, 497 104, 534	25	10			i	2		3	ĺ
McKeesport, Pa	48, 299	·····	3 2	ļ		ļ	1	l	6 2	
Los Angeles, Calif. Louisville, Ky Lowell, Mass. Lynchburg, Va Lynn, Mass. MeKeesport, Pa Madison, Wis Mahanoy City, Pa Manchester, Conn Manchester, N. H Manitowec, Wis Mankato, Minn Mansfield, Ohio Marion, Ind	48, 299 31, 315 17, 709	1	3				1 3 1 2 3 1		Z	
Manchester, Conn	15.859	4	l		6		ĭ			
Manchester, N. H	79,607 13,931	12	14	2			2			1
Mankato, Minn	1 10, 365	4	1			l	ı		····i	
Mansfield, Ohio	25, 051	7 2	[				<u>.</u> .			
Marion, Ohio	19,923 24,129	2	3				5		·····2	
Marquette, Mich	12,555	5								
Marshalltown, Iowa	14,519 12,984	ļ	1				1			
Mason City, Iowa	14, 938	4	3			• • • • • •	4	•••••	••••	•••••
Meadville, Pa	14,938 13,968						29			
Medford, Mass	28 681	6	5		1	• • • • • •	ī	•••••		2
Mansfield, Ohio Marion, Ind. Marion, Ohio Marquette, Mich Marshalltown, Iowa. Martinsburg, W. Va. Mason City, Iowa Meadville, Pa. Medford, Mass Merlose, Mass Memphis, Tonn Meriden, Conn Methuen, Mass.	17,724 151,877 29,431 14,320	1 64	25		i				5	5
Meriden, Conn	29, 431	3	25 3	i	1		9		ž	
Methuen, Mass	14,320 15,890	2	1	····	8 67	• • • • •	1		• • • • •	
Middletown, Ohio	10,334	2 83	4 3				9 9 1 3			
Meriden, Conn.  Methuen, Mass  Middletown, N. Y.  Middletown, Ohio  Mitwaukee, Wis  Minneapolis, Minm  Mishawaka, Ind  Missoula, Most  Mobile, Ala	445.008	83 79	100	3	9 2		36 42	i	19	5
Mishawaka, Ind	373,448 17,083	4	25 1		Z	•••••	3	1	19	8
Missoula, Mont	19.075	4 17							1	2
Monmouth III	59, 201 10, 346	17 3	2	1	1	• • • • • •	2			
Mobile, Ala	10,346 23,070 13,698	U.			3					
Monroe, La	13,698	5	2						2	2
Montgomery, Ala	27,087 44,039	5 19	1 3	••	11		1 2	•••••		·····2
Morgantown, W. Va	14,444	19 3	3 1		14		2 1 2			
Monroe, La. Montolair, N. J. Montgomery, Ala Morgantown, W. Va. Morristown, N. J. Moundsville, W. Va. Mount Carmel, Pa. Mount Vernon, N. Y. Muncle Ind	13,410	5			····i		2	•••••		i
Mount Carmel, Pa	11,515 20,709 37,991		3		1				3	•••••
Mount Vernon, N. Y	37,991	8	8		1		<u>-</u> -		1	i
Muscatine, Iowa	25,653 17,713	8 8 7			• • • • • • •		5			i
Muskegon, Mich	27, 434 47, 173 23, 811 118, 136	6	8				8			<del>.</del>
Muskogee, Okla	47,173	• • • • • • • •	5 4	• • • • • •	···is		3	•••••	1	· · · · · ·
Nashville, Tenn	118,136	34	6		1		7		2	4
Newark, N. J.	418,789 30,317	101	39	5	11		30		29	10
Mount Vernon, N. Y  Muncie, Ind  Muscatine, Iowa  Muskegon, Mich  Muskogee, Okla  Nanticoke, Pa  Nashville, Tenn  Newark, N. J  Newark, N. J  Newark, Ohio  New Bedford, Mass  New Britain, Conn  Newburyport, Mass  New Castle, Pa  New Haven, Conn	121.622	32	9	3			30 1 2 5	•••••	3	6
New Britain, Conn	55, 385 15, 291	16	14		6		5			
New Castle Pa	15,291 41,915	5	;.	•••••	3		····;·	•••••		• • • • • •
New Haven, Conn.		53	3 24	::::::		:::::	3 22 2 9		8 5	····i
New London, Conn	21, 199	7				]	2		ا۔یز۔۔ا	
New Philadelphia, Ohio	10, 133	140	10		95		1	•••••	10	y
New Haven, Conn.  New London, Conn.  New Orleans, La.  New Philadelphia, Ohio.  Newport, R. I.  Newton, Mass.	21, 199 377,010 10, 133 30, 585 44, 345	4					3			····i
New York, N. Y.	44,345 5,737,492	1 280	373	30	70 55	····;·	6 214	9	2 261	² 100
ATON AUIA, IT, A	0,101,402	1,280	010 1	<b>30 I</b>	99 }	<b>#</b> /	214	וש	- 201	- 100

<sup>&</sup>lt;sup>1</sup> Population Apr. 15, 1910.

<sup>2</sup> Pulmonary tuberculosis only.

	Popula- tion as of July 1, 1917 deat		1	hheria.	Mea	sles.		rlet rer.		ber- osis.
City.	(estimated by U. S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Niagara Falls, N. Y	39, 466	18	5	3	2		22		1 2	
Norfolk, Va. Norristown, Pa. North Adams, Mass. North Attleboro, Mass. North Attleboro, Mass. North Braddock, Pa. North Little Rock, Ark. North Tonawanda, N. Y. Norwalk, Conn.	91,148 31,969		4 2		3		1 5		2	- 3
North Adams, Mass	1 22,019	7			5				2	i
Northampton, Mass	1 22,019 20,006 11,248	1	1							
North Braddock, Pa	15,684	8	5						; <b>-</b>	1
North Little Rock, Ark	15,515	3	1				2			1
North Tonawanda, N. Y	14,060	4	2 4							
Norwalk, Conn	27,332 21,923 23,269	4	3						1	
Norwood, Ohio	23, 269	3	<u>-</u> -				1		1	
Oak Park III	206, 405 27, 816	54 6	7		1		7 23	· • • • •	1	2
Oak Park, III. Ogdensburg, N. Y. Oil City, Pa.	16.845	4								
Oll City, Pa	20, 162 97, 588		9		41		2		1	
Oklahoma City, Okla Old Forge, Pa Olean, N. Y	15,479	23	22				····i	• • • • • •	•••••	2
Olean, N. Y	16,927	5								•••••
Orana, Nebr Orange, N. J Oshkosh, Wis Paducah, Ky Parkersburg, W. Va. Parsons, Kans	177,777 33,636	37	15	3	1		2			3
Oshkosh, Wis.	36,549	5 5	3 1						2 2	i
Paducah, Ky	25, 178		4				2			
Parkersburg, W. Va	21,059 15,952	9	3	•••••						• • • • •
Pasadena Calif	49,620	9	4 2 6				3	• • • • • • •	1	•••••
Passaic, N. J	74,478	16	6		11		9	1		
Paterson, N. J	140, 512	25	6 1	•••••			3		9	•••••
Peabody, Mass.	60,666 18,785 19,034	8	2							
Pasadena, Calif. Passaic, N. J. Paterson, N. J. Pawtucket, R. I. Peabody, Mass. Peekskill, N. Y.	19,034	4	2		3		1			•••••
Pekin, III. Peoria, III. Perih Amboy, N. J. Petersburg, Va. Philadelphia, Pa. Phillipsburg, N. J. Phomixville, Pa. Pittsburgh, Pa. Pittsfield, Mass. Plainfield, N. J. Plattsburg, N. Y. Plymouth, Mass. Pontiac, Mich.	10,973 72,184	21	7	····i			3 14		•••••	•••••
Perth Amboy, N. J	42.646	13	7		3		- 5			•••••
Petersburg, Va	25,817 1,735,514 15,879	15	5 95	;;	:		1		4	4
Phillipsburg, N. J.	15,879	497 3	95	16	11	1	148	3	116	43
Phoenixville, Pa	11,871		3				1			
Pittsburgh, Pa	586, 196 <b>39, 678</b>	8	49	•••••	27 38		73		13	• • • • •
Plainfield, N. J.	24.330	8	10	i	Ja.		5		3	····i
Plattsburg, N. Y	13, 111 14, 001	4			!					î
Pontiac Mich	18,006	0 17	2	•••••			25		3	·····i
Port Chester, N. Y	16, 727 1 18, 863	1	1							
Port Huron, Mich	1 18,863	7 16	1 4			····;· ·	2		• • • • • •	
Pontiac, Mich. Port Chester, N. Y. Port Huron, Mich. Portland, Me. Portland, Oreg.	64,729 303,399 16,987	49	6	···i	26	1	6		7	. 5
Pottstown, Pa	16,987		2		1				! .	
Poughkeensie N. Y	22.7171	10	5		• • • • •	· ¦ -		• • • • • • • •		•••••
Providence, R. I	30, 786 259, 895	56	16	i	40		9		1	1 3
Pueblo, Colo	56.084 /		8		2	1 .				3
Racine Wis	39,022 47,465 19,361	12 20	1 16	i	•••••		9	•••••	1	1
Rahway, N. J.	10,361	3	1					i	i	•••••
Reading, Pa	111,607	•••••••	6		1 .		8		6	
Portland, Oreg. Pottstown, Pa Pottsville, Pa Poughkeepsie, N. Y. Providence, R. I. Pueblo, Colo Quincy, Mass. Racine, Wis. Rahway, N. J. Reading, Pa. Red Wing, Minn Reno, Nev Richmond, Ind Richmond, Ind Richmond, Va Riverside, Calif Roanoke, Va Roenester, N. Y.	10, 158 15, 514	5	1						· • • • •   •	••••
Richmond, Ind	15,514 25,080 158,702	5			i i					•••••
Richmond, Va	158, 702 20, 496	65	23		1.		6 .		9	8
Roanoke, Va.	46, 282	10 17	9		17			· • • • • ¦ ·	i	
Rochester, N. Y.	264, 714	54	62	3	2		15	2	10	2
Rochester, N. Y	56,739 29,452	18		-	2	••••	3 .			ī
Rocky Mount, N. C	12,673	4			2					••••
Rome, Ga	15,607		4		1 .					••••
Rome, N. Y	24, 259 1.			!	18 1.	!	11.		1.	•••••

<sup>&</sup>lt;sup>1</sup> Population Apr. 15, 1910.

		· ·								
	Popula- tion as of July 1, 191	/   death:		ntheria	. Me	asles.	Sc. fe	arlet . er.		ıber- losis.
City.	by U. S. Census Bureau).	from all causes	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Rutland, Vt	15, 038 68, 984	7 24	9	····i	. 1				2	. 1
Saint Charles, Mo	10, 498	. 1 6	1	1			1 2			
Saint Joseph, Mo	86, 498	30	6		. 1		. 9			1 15 2 2
Saint Louis, Mo	768, 630 252, 465	189	184 40		4		37 16		16	15
Salem. Mass	252, 465 49, 346 21, 274	51 15	3				1	1	. 2	2
Saint Charles, Mo Saint Joseph, Mo Saint Joseph, Mo Saint Paul, Minn Salem, Mass Salem, Oreg Salina, Kans Sat Lake City, Utah San Angelo, Tex San Bernardino, Calif San Diego, Calif Sandusky, Ohio Sanford, Me San Francisco, Calif	21,274	1							ī	
Salina, Kans	12,470	29			148		4 2			3
San Angelo. Tex	121,623 110,321	10			140	1				
San Bernardino, Calif	17, 616 56, 412 20, 226	31							3	3 3
San Diego, Calif	56, 412	31	5		. 3				5	3
Sandusky, Onio	20, 226 11, 217	15							1	13
San Francisco, Calif	471 1723	127	25	5	3		12		24	1 13
Santa Barbara, Calif. Santa Cruz, Calif. Saratoga Springs, N. Y. Sault Ste. Marie, Mich.	15.360	4		.[!.						1
Santa Cruz, Calif	15, 150 13, 839 14, 130	8 3	4							
Sault Ste. Marie, Mich	13,539	4			1		3	1 · · · · i ·		
Savannah, Ga		40	5						2 5	3
Schenectady, N. Y	103,774	18	9		8		4		5	4
Scranton, Pa	149.041		10 32		1		8			
Savannah, Ga. Schenectady, N. Y. Scranton, Pa. Seattle, Wash Shamokin, Pa. Sharon, Pa.	366, 445 21, 274		2				i i		i	
Sharon, Pa	19, 150		3				7			
Sheboygan, Wis	23,907		1 1			• • • • •				
Sharon, Pa. Sheboygan, Wis. Sheboygan, Wis. Shenandoah, Pa. Sioux City, Iowa. Sioux Falls, S. Dak Somerville, Mass. South Bend, Ind.	29,753 58,568		1 1		i	• • • • • •	1 4	•••••	• • • • • • •	•••••
Sioux Falls, S. Dak	53, 568 16, 887	14	2				5 2			2
Somerville, Mass	88, 618 70, 967	29 7	9	1	1	• • • • • •	2	1	3	1
South Bend, Ind	70,967	2	7	1			5	• • • • • •		•••••
Spokane, Wash	14, 465 157, 656	1	13	1	4		i			
South Bend, Ind. Southbridge, Mass. Spokane, Wash. Springfield, Ill. Springfield, Mass. Springfield, Mos. Springfield, Mo. Striubenville, Ohio. Steubenville, Ohio. Stillwater, Minn. Sunbury, Pa. Superior, Wis. Syracuse, N. Y. Tacoma, Wash. Taunton, Mass.	62, 623 103, 668	22 35	13 2 5		11		56			2
Springfield, Mass	103,668	35 19	5	1	2	•••••	19	2	4	2 5 1
Springfield, Ohio	41, 169 52, 296 23, 259	15	i		4		4		i	i
Steubenville, Ohio	23, 259 1 10, 198 16 661	4	4		i					• • • • •
Stillwater, Minn	1 10, 198	2	····				2	i	• • • • • •	• • • • • •
Superior Wis	16, 661 47, 167	4	3	····i	2				····i	•••••
Syracuse, N. Y.	47, 167 153, 559 117, 446	42	10	2	9		48		7	4
Tacoma, Wash	117, 446		3		6		2			
Taunton, Mass	36, 610 67, 361	9 26	1 5	•••••	7	•••••	2 5 8		3	i
Tiffin, Ohio	12.962	4								î
Toledo, Ohio	202, 10 49,538 14,090	61	42	4	3		13 15		8	7
Topeka, Kans	49,538	18 3	3		165		15 3		2	•••••
Trenton, N. J.	113, 974	21	2		2		1.1		2	i
Tacoma, Wash Taunton, Mass Terre Haute, Ind. Tiffin, Ohio. Toledo, Ohio. Topeka, Kans. Traverse City, Mich. Trenton, N. J. Troy, N. Y. Tucson, Ariz. Tulsa, Okla Uniontown, Pa Vancouver, Wash Waco, Tex.	78, 94 17,324	28 15	<u>-</u> .		60	i	5		5	
Tucson, Ariz.	17,324	15	;;-		•••••					6
Tilisa, Okia	32,5∂7	•••••	11				3	•••••		• • • • • •
Vancouver. Wash	21,600 13,805		i				2			
Waco, Tex	34,015	7								•••••
Vancouver, Wash Waco, Tex Walla Walla, Wash Waltham, Mass Warren, Pa Washington, D. C. Washington, Pa. Waterbury, Conn. Watertown, N. Y Waterville, Me.	26,067	7	· 1 2				-	•••••	•••••	• • • • • •
Warren. Pa.	31, 011 15, 083		Z	•••••	7 2		····i			•••••
Washington, D. C.	369, 282	125	13 3	2	13		18		18	10
Washington, Pa	369, 282 22, 676 89, 201				42 .		1  .		ا-يـــــا	
Watertown N V	89, 201 30, 404	30	4	••••••	1 .		3 .	•••••	3 1	2
Waterville, Me.	12,903		3				. ا			· · · · · ·
Wausau, Wis	10 666	4 1								
Waterville, Me. Wausau, Wis. Webster, Mass. Westfield, Mass. West Hoboken, N. J.	13, 484 18, 769 44, 386	1			-		· - • •  -		2	••••••
West Hoboken, N. I	15, 709 44 38A	4		•••••			-			
** WW ALUDUADII, AT. #	37,000 1	* 1	1	• • • • • • • ,	• • • • • • • • •					•••••

<sup>&</sup>lt;sup>1</sup> Population Apr. 15, 1910.

	Popula- tion as of July 1, 1917	Total deaths	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
City. (estimater by U. S. Census	(estimated by U.S.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
West New York, N. J. West Orance, N. J. Wheeling, W. Va White Pleins, N. Y Wichita, Kans. Wilkes-Barre, Pa Wilkinsburg, Pa. Wilkinsport, Pa. Willimsport, Pa. Wilnington, Del. Winona, Minn Winston-Salem, N. C. Winthrop, Mass. Woburn, Mass. Woburn, Mass. Worcester, Mass. Yokima, Wash. Yonkers, N. Y York, Pa Youngstown, Ohio. Zanesville, Ohio.	13, 964 43, 657 23, 331 73, 597 78, 334 23, 899 34, 123 99, 118, 583 33, 136 13, 105- 166, 106 166, 106	3 1 10 22 30 20 1 6 45	5 1 16 2 17 18 2 8 6 1 1 1 1 2 7 4 7 4 2	1	2 54 1 1 1 2 1 3		1 15 20 4 12 3 8 8	1	4 1 1 8 8 7 3	3 3 3 3 3

<sup>&</sup>lt;sup>1</sup> Population Apr. 15, 1910.

### FOREIGN AND INSULAR.

#### CUBA.

#### Quarantine Against Arrivals from Mexico Modified.

Quarantine restrictions on account of plague, previously in force at ports in Cuba against vessels arriving from Mexico, were modified by order of the Cuban quarantine service December 8, 1920.

#### JAMAICA.

#### Infectious Disease Reported Present.1

Alastrim or Kaffir pox has been reported in the island of Jamaica as follows: Week ended November 13, 1920, 330 cases; week ended November 20, 1920, 294 cases.

#### POLAND.

#### Cholera-Sanitary Measures Against Spread.

Under date of October 23, 1920, sanitary measures were ordered to be enforced in eastern Poland to prevent importation of the cholera infection present on the eastern frontier to other portions of the country. A sanitary cordon with quarantine stations was ordered to be established and all persons entering Poland from the infected regions, with the exception of Government officials and persons engaged in urgent public business, were required to pass through this sanitary cordon. The persons exempted from these requirements were required to undergo five days' observation at their place of destination.

# CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER. Reports Received During Week Ended Dec. 24, 1920.2 CHOLERA.

Place.	· Date.	Cases.	Deaths.	Remarks.					
China: Hon kong Nanking Tientsin Tsinanfu Chosen (Korea)	Oct. 24-30 Oct. 3-9	 15 5	2 2	Several cases.  Nov. 12-18, 1920; Cases, 42					
Japan: Taiwan Island		100	72	deaths, 44.					

Public Health Reports, Sept. 3, 1920, p. 2132; Sept. 24, 1920, p. 2298; Oct. 15, 1920, p. 2491; Oct. 29, 1920, p. 2663; Nov. 19, 1920, p. 2814; Dec. 3, 1920, p. 2943; Dec. 10, 1920, p. 2994.
 From medical officers of the Public Health Service, American consuls, and other sources.

### Reports Received During Week Ended Dec. 24, 1920—Continued.

#### CHOLERA-Continued.

	02022	0020		
Place.	Date.	Cases.	Deaths.	Remarks.
Java: West Java				Oct. 8-14, 1920: Cases, 4; deaths,
Batavia. Poland.	Oct. 8-14.	1		Nov. 24, 1920: Cholera reported in Posen. Nov. 29: At War-
Siam: Bangkok	. Sept. 26-Oct. 9	5		saw, about 50 cases, estimated.
	PLAG	uœ.		<u> </u>
	1 2 2 2 2 2 3 3	<del></del>	1	
Azores: St. Michaels Brazil:	Nov. 20-26	9	2	
Bahia	Oet. 24-30do	1	1	
Kisumu Mombasa Nairobi	Oct. 17-30 Sept. 27-Oct. 30 Oct. 17-23	3 50 2	2 40 2	
Chile: Antofagasta	Oct. 25-Nov. 21	. 5	1	Nov. 15-21, 1920: Cases, 2; deaths, 1.
Egypt	N			Nov. 12-18, 1920: Cases, 447; deaths, 259.
Suez Provinces— Gharbieh	Nov. 12-16 Nov. 12	3	1	
India Bombay Rangoon	Oct. 17-23. Oct. 25-30.	1 4	1 2	Oct. 10-23, 1920: Cases, 5,109; deaths, 3,824.
	SMALLI	POX.		
Brazil:			<u> </u>	
Rio de Janeiro Sao Paulo	Aug. 29-Sept. 25 Sept. 6-Oct. 17	42	13 4	
New Brunswick— Counties—				
(lloucester Madawaska Northumberland	Oct. 10-Nov. 27 Nov. 28-Dec. 4 do	3 1 1		
Nova Scotia— Sydney Ontario—	Nov. 29-27	1		
Hamilton North Bay	Dec. 5-11 Nov. 7-23	3 6		In district, at Sturgeon's Falls, C. P. R. R., Dec. 8, about 50 cases. In other localities in
Toronto	Nov. 28- Dec. 11	9		cases. In other localities in district.
Colombo China:	Oct. 24-30	5		
A moy	Oct. 25-30 Oct. 18-Nov. 6		1	Oct. 1-31, 1920: Present. Present.
DairenFoochow	Oct. 26-Nov. 1 Oct. 17-Nov. 6 Oct. 24-30 Oct. 24-Nov. 13	1	1	Do. Do.
Nanking Tsinaniu Colombia:	Oct. 24-Nov. 13 Oct. 24-30	13		Do.
Santa MattaCuba:	Nov. 14-Dec. 4		••••••	D <b>0.</b>
Antilla Egypt:	Nov. 23-29	1		
CairoGreat Britain: Glasgow	Sept. 17-23 Nov. 14-27	6	1	
=				

# Reports Received During Week Ended Dec. 24, 1920—Continued.

#### SMALLPOX-Continued.

		SMALLY OA—Continued.					
Place.	Date.	Cases.	Deaths.	Remarks.			
Ecuador:		, ·					
Guayaquil		ļ		In late October and early No vember, 1920, 17 cases.			
India: Madras	Oct. 31-Nov. 6	5	4				
Java: West Java				Oct. 1-7, 1920: Cases, 12; dcaths			
Batavia Malta Portugal:	Oct. 1-7 Oct. 16-31	3 1		7.			
LisbonOporto	Oct. 31-Nov. 6 Nov. 14-20	·····i	7				
Portuguese East Africa: Lourenco Marques Russia:	Oct. 3-9	1		In interior of province, present.			
RigaVladivostok	Oct. 23-31 Sept. 1-30	1	1				
Spain: Corunna Valencia	Nov. 14-20do	3	1				
Sweden:			6				
Goteborg Syria:		3.5	0	700			
Aleppo Tunis:	Nov. 6-13		•••••	Present.			
Tunis Union of South Africa: East London	Nov. 15-21 Oct. 3-9	1					
Belgium:							
Ghent	Nov. 7-13		- <b>1</b>				
Concepcion	Oct. 20-26		11				
				** ***			
Antung Egypt:	Nov. 1-14	10	2	July 25-Aug. 1, 1920: Cases, 2.			
Antung Egypt: Alexandria Cairo.	Nov. 1-14 Nov. 12-18 Sept. 17-23	10		July 25-Aug. 1, 1920: Cases, 2.			
Antung Egypt: Alexandria Cairo Great Britain: Dublin Greece:	Nov. 12-18 Sept. 17-23 Nov. 14-27	10 4 9 3	2	July 25-Aug. 1, 1920: Cases, 2.			
Antung Egypt: Alexandria Cairo Great Britain: Dublin Greece: Saloniki	Nov. 12-18	10 4 9 3	<b>2</b> 8 8 2	July 25-Aug. 1, 1920: Cases, 2,			
Antung Egypt: Alexandria Cairo Great Britain: Dublin Greece: Saloniki (taly: Trieste Japan:	Nov. 12-18. Sept. 17-23. Nov. 14-27. Oct. 11-17. Nov. 7-13.	10 4 9 3 1	8 2 2	July 25-Aug. 1, 1920: Cases, 2.			
Antung Egypt: Alexandria Cairo Great Britain: Dublin Greece: Saloniki taly: Trieste Japan: Nagasaki lugo-Slavia	Nov. 12-18	10 4 9 3	<b>2</b> 8 8 2	June 13-26, 1920: €ases, 262.			
Antung Egypt: Alexandria Cairo Great Britain: Dublin Greece: Saloniki taly: Trieste apan: Nagasaki (ugo-Slavia Do Orotugal:	Nov. 12-18. Sept. 17-23. Nov. 14-27. Oct. 11-17. Nov. 7-13. Nov. 8-14.	10 4 9 3 1 17	2 8 2 2	June 13-26, 1920: €ases, 262.			
Antung Egypt: Alexandria Cairo Great Britain: Dublin Greece: Saloniki (taly: Trieste Japan: Nagasaki Jugo-Slavia Do Portugal: Oporto Cunis:	Nov. 12-18. Sept. 17-23.  Nov. 14-27. Oct. 11-17.  Nov. 7-13.  Nov. 8-14.  Nov. 14-20.	10 4 9 3 1 17 1	2 2 2 2	June 13-26, 1920: €ases, 262.			
Antung Egypt: Alexandria Cairo. Great Britain: Dublin Breece: Saloniki taly: Trieste apan: Nagasaki ugo-Slavia Do Portugal: Oporto Vanis: Tunis	Nov. 12-18. Sept. 17-23. Nov. 14-27. Oct. 11-17. Nov. 7-13. Nov. 8-14.	10 4 9 3 1 17	2 8 2 2	June 13-26, 1920: €ases, 262.			
Antung Egypt: Alexandria Cairo. Great Britain: Dublin Greece: Saloniki. Italy: Trieste Japan: Nagasaki Jugo-Slavia Do. Portugal: Oporto Funis: Tunis Curkey:	Nov. 12-18. Sept. 17-23	10 4 9 3 1 17 1 1 2 18 3	2 2 2 2	June 13-26, 1920: €ases, 262.			
Antung Egypt: Cairo. Cairo. Great Britain: Dublin Greece: Saloniki. (taly: Trieste Japan: Nagasaki lugo-Slavia Do. Portugal: Oporto Funis: Tunis. Furkey: Constantinople.	Nov. 12-18 Sept. 17-23 Nov. 14-27 Oct. 11-17 Nov. 7-13 Nov. 8-14 Nov. 14-20 June 25-July 25 Nov. 7-13	10 4 9 3 1 17 1 1 2 18 3	2 2 2 2	June 13-26, 1920: €ases, 262.			
Antung Egypt:	Nov. 12-18 Sept. 17-23 Nov. 14-27 Oct. 11-17 Nov. 7-13 Nov. 8-14 Nov. 14-20 June 25-July 25 Nov. 7-13	10 4 9 3 1 17 1 1 2 18 3	2 2 2 2				

# Reports Received from June 26 to Dec. 17, 1920. CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Rio de Janeiro China:	1	į	1	
AmoyAntung		2	12	
Canton	July 1-Ang. 31	5	4	
Chungking	Aug. 22-Oct. 16 May 16-24	138	51 1,319	Aug. 15-21: Present. Oct. 3-9: Present.
Changsha Chungking Do. Dairen	June 6-Sept. 11		5,322	Sept. 18: Present. Oct. 3-16:
Foochow	May 16-24.  June 6-Sept. 11  Sept. 29.  July 11-24.	4	1	Present and in vicinity. Present.
Hankow	July 4-17	12	5	1
Foochow Hankow Harbin Hongkong	Aug. 8-14	1	i	Year 1919: Cases, 603. On East- ern Chinese R. R. line. At other stations, same line, 190
Nanking	Sept. 12-25	ļ	4	eases. Several cases reported at Nan- king University, Aug. 30. Re- ported prevalent among Chi-
Ohanaha i	1	١.		nese, Aug. 30. Aug. 1-Oct. 7, 1920: Cases, 24,535
ShanghaiTientsin.	Aug. 2–29 Oct. 3–9	1 15	6	deaths, 12,549.
Tientsin Chosen (Korea) Chemulpo Chinampo Fusan	Aug 1-Oct 7	24	21	Nov. 5-11, 1920: Cases, 71; detaths, 43.
Chinampo	Aug. 1-26	34	23	devatus, 10.
Gensan	Aug. 1-Oct. 7 Aug. 1-26 Aug. 1-Oct. 28 Aug. 27-Sept. 2	684 1	517	
Gensan Mokpo Seoul	Aug. 1-Sept. 30 Aug. 1-Nov. 4	28 2,032	18 861	
Galicia: Buczacs Greece:	Oct. 18			Present.
PatrasZante	July 26-Aug. 1 Aug. 2-8			Present in surrounding country. Present.
India	May 2-June 26	85	36	Apr. 11-May 22, 1920: Deaths, 7,549. May 30-June 26, 1920: Deaths, 3,710. June 27-July 10, 1920: Deaths, 1,711. July 25- Aug. 7, 1920: Deaths, 2,687. Aug. 21-Sept. 11, 1920: Deaths,
Do. Calcutta. Do.	June 27-Oct. 9 May 2-June 24 July 18-Oct. 16	106 439	69 423	1920: Deaths, 1,711. July 25-
Do	July 18-Oct. 16	214 20	205 13	Aug. 7, 1920: Deaths, 2,687.
MadrasDo	May 2-June 26 July 11-Oct. 30 June 27-Oct. 16	16	3	7,893.
RanzoonIndo-China	June 27-Oct. 16	23	17	1920: Jan.—Cases, 40; deaths, 24.
Saigon	Apr. 26- June 13 July 26-Sept. 5	13	94	Feb.—Cases, 25; deaths, 15. Mar.—Cases, 52; deaths, 30.
Japan:	эшу 20-жрс. э	9	5	Feb.—Cases, 25; deaths, 15. Mar.—Cases, 52; deaths, 50. Apr.—Cases, 204; deaths, 99. May.—Cases, 328; deaths, 194. June Cases, 292; deaths, 201. Kobe, June 6-13, 34 cases. Moji, June 6-12, 10 cases. Kochi, June 6-12, 1 case. Hiroshima, June 6-12, 6 cases.
- Koha	June 14-27	36	24	Kobe, June 6-13, 34 cases. Moji,
Do Nagasaki Do	June 28-Oct. 17	409	223	June 6-12, 10 cases. Kochi,
Do	June 21-27 June 28-July 18	34	13	June 6-12, 6 cases.
Osaka Taiwan Island	June 8 May 22-June 30	88	38	Present.
Do	July 11-Oct. 31	1,943	912	
lava: West Java—		İ	-	
Batavia Do	Apr. 30-June 3 June 25-Aug. 12	6	2	June 4-17: Present.
Philippine Islands		3		May 9-June 26, 1920: Cases, 16;
Do	May 9-June 26 June 27-Oct. 23	5 7	1	May 9-June 26, 1920: Cases, 16; deaths, 12. June 27-July 17, 1920: Cases, 63; deaths, 31. July 25-31: Cases, 57; deaths, 48.
Provinces— Albay	May 9-15	2	1	July 25-31: Cases, 57; deaths, 48.
Batangas	June 27-July 3	1 .		
BoholCagayan	do May 9-June 26	11	1 19	
Do Cavite	Juna 27-Oct 2	.55	23	•1
Cavite	Sept. 5-11 June 27-July 17 July 11-Sept. 4	1 3	1	
Isahela	July 11-Sept. 4	25	26	
Laguna Masbate	July 4-10	8	·····i	
Misamis Nueva Viscaya	July 11-17	49	2 42	
Pangasinan	July 11-17 July 25-31 July 4-Aug. 7	7	5	
Tariac	Sept. 12-18	11	11	

### Reports Received from June 26 to Dec. 17, 1920—Continued.

#### CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Poland: Warsaw	Oct. 28	1	1	Case occurred in employee on river boat plying between Warsaw and Danzig.
Russia	Oct. 18 June 20			Reported prevalent in southern Russia, June 4, 1920. Present. Feported increasing. JanJune, 1920; Cases, 1,262;
Vilna			343	deaths, 584. South Russia, Government of Tauride. Oct. 18: Present.
Bankos Do Straits Settlements: Singapore Sumatra:	June 26-Sept. 25 July 18-Oct. 2		30 24	
Medan	Aug. 20-Sept. 3	1		On local steamship. From Sin- gapore.
Turkey: Amassia. Kaiseri. Karassi Mamuret-ul-Aziz. Panderma. Rodosto. Smyrna.	Dec. 24	1 1 1 16	1 6	Asiatic Turkey. Do. Do. Do. Furopean Turkey. Asiatic Turkey.
On vessel: S. S. Keketticut. Steamship (local)	Aug. 2	1 1	1	U. S.; At Shanghai. At Medan, island of Sumatra. From Singapore.

#### PLAGUE.

	1	1	1	
Algeria:			l	G 1 O-4 01 1000 Games 44
Algiers				Sept. 1-Oct. 31, 1920: Cases, 4; deaths, 1.
Azores:	]	1	l	ucatis, 1.
St. Michaels	Oct. 4-20	35	12	Oct. 4, 1920: 5 suspect cases iso-
Do	Nov. 10-15	25	8	lated virinity of Ponta Del-
		ļ	1	gada. Oct. 1-31, 1929: Cases,
	l <u></u>	_	l	76; deaths, 27. To Nov. 16:
Ponta Delgada	Oct. 1-26	2		Cases, 110; deaths, 38. Nov.
	1	l		6-19: Cases, 50; deaths, 14.
Brazil:	Apr. 25-May 22	10	10	
Bahia Do	June 27-Oct. 28	12	16	
Ceara	Sept. 5-25		4	
Pernambuco	May 3-9	1	í	
Do		32	16	
Porto Alegre	June 27-Aug. 21		2	
British East Africa				Apr. 1-30, 1920: Cases, 22; deaths,
Kisumu	Apr. 25-June 23			59.
Do	July 11-Sept. 4	10 104	5 39	Present.
Mombasa	Apr. 25-June 25 June 27-Aug. 28	113	72	
Do Nairobi	Apr. 25-June 10	113	'ŝ	
Cevion:	Apr. 20 June 10			
Colombo	May 25-June 12	7	2	
Do	June 27-Oct. 23	53	41	
Chile		ļ	. <b>.</b>	Mar. 1 May 31, 1920: Cases, 15;
				deaths, 2. Plague reported in
				Departments of Tacna and Tarata.
1-1-6	May 17-June 20	5		Mar. 1-May 31, 1920: Cases, 7;
Antofagasta Do	July 5-Nov. 7	6		deaths, 1.
Iquique	Mar. 1-May 31		i	deutine,
China:	220 120, 02	•	-	
Amoy	June 20-Sept. 18		8	
Hongkong	Apr. 4-June 23		70	
Ďo	June 27- Oct. 23	29	26	

### Reports Received from June 26 to Dec. 17, 1920—Continued.

PLAGUE-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Ecuador: Guayaquil	Aug. 16-Sept. 30	9	1	Oct. 16-31, 1920: Cases, 3; deaths,
Egypt	nag. 10 copt. co.			2. Jan. 1-Nov. 11, 1920: Cases, 444;
Cities— Alexandria	June 18-Oct. 9	13	7	deaths, 257.
Port Said	Aug. 2-Sept. 26 May 13-June 8 July 3-Nov. 6	12 12	6	3 cases pneumonic.
Do Provinces—		ł	3	
Assiout Do Beni-Souef	May 15-June 5 July 2-Sept. 13 July 7-10 June 5	7 7 2	1 1	
FayoumGharbieh	June 5do	ı		
Do Girgeh	July 1-Nov. 11 Sept. 22	24 1	19 1	Pneumonic.
Keneh Mariut	May 18. May 18-June 8 July 3-9.	1 19	22	
Do Minieh	May 15	1 2	2	Septicemic.
Do	July 13 Sept. 21	1	2	
Great Britain: 1 iverpool	June 20-26	1	1	
Athens	Aug. 19-Oct. 14	3 1	2	
Chios Dante Ka valla	July 22 July 5-Cet 3	2		
Nauplia Piraus. Saloniki	Aug. 21	2 12	1	Approximately 20 cases Sept. 9.
IndiaBombay		4 170	135	Apr. 18-June 26, 1920: Cases, 12,476; deaths, 9,961. June 27- Cct. 16, 1920: Cases, 40,846;
Do Calcutta	Apr. 18-June 26 June 27-Cct. 25 May 2-June 12	62 26	49 19	Cct. 16, 1920: Cases, 40,846; deaths, 28,391.
Karachi Madras Presidency.	May 9-Cet. 16 May 9-Cet. 30	82 9,544	74 6,759	2000-20, 21,21-1
Rangoon	May 9-Cet. 16 May 9-Cet. 30 Apr. 25-June 26 June 27-Oct. 16	120 264	231	
Indo-China	May 10-June 13	9 5	2 4	Jan. 1-31, 1920: Cases, 42; deaths, 40. Feb. 1-29, 1920: Cases, 41;
D0	July 26-Aug. 15	Ð	3	40. Feb. 1-29, 1920: Cases, 41; deaths, 36. Mar. 1-31, 1920: Cases, 79; deaths, 70. Apr. 1- 30, 1920: Cases, 69; deaths, 63.
				30, 1920: Cases, 69; deaths, 63. May 1-31, 1920: Cases, 87; deaths, 75. June 1-30, 1920: Casos, 72; deaths, 63.
Italy: Cetania	June 22-July 3	3	2	Cases, 72; deaths, 63.
Java: East Java				Apr. 23-May 5, 1920: Cases, 7;
Batavia	July 22-Sept. 23	16	16	Apr. 23-May 5, 1920: Cases, 7; deaths, 7. Apr. 15-June 16, 1920: Cases, 8; deaths, 8. Aug. 5-25, 1920: Cases, 4; deaths, 4. Surabaya Residency.
Bagdad	June 1-30 Eept. 1-30	6 1	3	Surabaya Residency.
Mexico:	- 1	31	17	State of San Luis Potosi. Pres-
Tampico Vera Cruz.	Cct. 20-Nov. 10 July 26-Sept. 27 June 14-20	11	3	State of San Luis Potosi. Present in vicinity. May 29-July 14, 1920: Cases, 49; deaths, 29. Corrected statement: From outbreak in May
Do	July 18-21	2	2	deaths, 29. Corrected statement: From outbreak in May
1	ļ	•		ment: From outbreak in May to July 20, 1920—cases, 58; deaths, 36. Nov. 8-14, 1920: Two plague-infected rodents found.
Peru				found. Mar. 1-31, 1920: Cases, 46; deaths,
Callao	Mar. 1-Apr. 30 Aug. 1-31	15	7	Mar. 1-31, 1920: Cases, 46; deaths, 29. Apr. 1-30, 1920: Cases, 36; deaths, 13. In coastal depart-
Do	Aug. 1-31	5 4 1	3 4	ments.
Mollendo	Mar. 1-31 Apr. 1-30 Mar. 1-31	1 13	1 9	
l'aita	do	5 2	2	

### Reports Received from June 26 to Dec. 17, 1920—Continued.

#### PLAGUE-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Peru-Continued.	:			
Salaverry	Mar. 1-31	4	3	l
Do	Apr. 1-30	1		
San Pedro	do	6	1	
Trujillo—Salaverry	May 31-June 29	3	2	
Do	Aug. 30-Oct. 25	7	14	
Russia:	_		İ	
Batum	Sept. 28			Prevalent.
Siam:	-			
Bangkok	Apr. 25-June 5	. 8	5	•
Ďo	June 28-Aug. 28	6	3	
Straits Settlements:				+1000
Singapore	Apr. 25-June 19	14	13	the state of
Do	July 11-Aug. 7	3	3	May 16-22, 1920: Cases, 2; deaths
Svria:			1	3.
Beirut	June 30			Present.
Turkey:				
Constantinople	July 25-Aug. 21	7	6	the season of
Uruguay:				
Montevideo	June 1-30	1	1	and the second s

#### SMALLPOX.

	1	1	1	
Algeria:	1			
Departments—	l	l	1	1
	May 11-Aug. 31	١	1	Cit 11-i 1 1 00 1000
Algiers		31		City of Algiers, Apr. 1-30, 1920,
Constantine	June 1-Aug. 31	18		1 case. July 1-Aug. 31, 1920.
Oran	May 11-Aug. 31	168		Cases, 4; deaths, 2.
Austria	[			May 30-June 26, 1920: Cases, 27.
Gratz	July 11-28	5	1	June 27-July 23, 1920: Cases, 35.
Vienna	May 30-June 26	1		, , , , , , , , , , , , , , , , , , , ,
Do	July 11-28	1		
Azores:	,		1	
Ponta Delegada	July 17-Aug. 20	7	1	
St. Michaels	Aug. 21-27	l i		From Madeira.
Bolivia:	Aug. at-ai			From Madena.
La Paz	May 2-June 30	10		
1.8 1.82		10	8	
Do	July 1-Sept. 30	18	8	
Brazil:			_	
Bahia	Apr. 25-June 26	5	5	and the second of the second o
Do	June 27-Oct. 23	22	2	
Pernambuco	Mar. 29-June 27	114	3	
Do	June 30-Oct. 17	269	5	
Rio de Janeiro	Apr. 11-June 26	431	6	
Do	June 27-Sept. 18	92	22	'
Santos.	Mar. 24-28	ĩ		
Do	July 25-Sept. 25		9	
Sao Paulo	June 21–27	,	i	
				•
Do	June 27-Aug. 8	• • • • • • • •	2	35. 1 01 1000 G 100 A
British East Africa		• • • • • • • •		Mar. 1-31, 1920: Cases, 107. Apr.
Mombasa	May 2-22		1	1-30, 1920: Cases. 69. Reported
Do	July 11-17	3	•••••	by native inspectors.
Nairobi	May 23-June 26		1	
Do	Aug. 1-21	5		
Bulgaria:	_		( (	
Šofia	July 11-17	1		
Canada:				
Alberta-			1	
Calgary	June 3-9	1		
Do	July 4-Oct. 9	6		
British Columbia—	July 4-001. 5	U		
Vancouver	May 16-Aug. 28	4		
Manitoba—	may 10-111g. 25	4		
Winripeg	36	_	i	
	May 29-June 5	3	• • • • • • • • •	
Do	Aug. 8-21	2		
New Brunswick—				
Bonaventure and Gaspe	Aug. 1-Oct. 31	2		
Counties.	_		i i	
Carleton County	Sept. 19-25	1		
Gloucester County	May 31-June 26	5		
Do	Sept. 19-Oct. 9	š		
Madawaska County	Oct. 31-Nov. 6	ĭ		
Queens County	July 4-Aug. 21	7		
Restigouche County	1	•	••••••	Sept. 26-Nov. 6, 1920: Cases, 4.
Campbellton	Toller 1 21	7		Dept. 20-107. 0, 1920. Cases, 4.
Campoenton	ania 1-01	4 1		

### Reports Received from June 26 to Dec. 17, 1920—Continued. SMALLPOX-Continued.

	7	7	T	<del></del>
Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
Nova Scotia—		1	1	i
Halifax	do	. 2		-]
Sydney				4
Ontario—	Nov. 7-20	.  3		•
Cornwall	June 25-30	.  2	1	
Fort William and Port Arthur.	July 11-Oct. 2			
Hamilton	June 13-Dec. 4	. 18		.
Kingston	May 31-June 19 Oct. 31-Nov. 27 Oct. 24-30	4		•
Ďo Montreal	Oct. 31-Nov. 27	18		•
North Ray		l i		
Do	July 11-Oct. 23	. 8		
Ottawa	June 6-26	32		.
Do	June 27-Dec. 4	307		•
Peterborough Prescott	Apr. 18-July 31 July 11-17			
Do		1		Present at Cardinal and Brock
Sault Ste. Marie	Oct. 24-30	i		ville.
Toronto	June 6-19	13		
Do	June 26-Nov. 27,	40		.[
Windsor Prince Edward Island—	Aug. 22-Sept. 11	i		
CharlottetownQuebec— Montreal	Aug. 12-Oct. 13	1		
Do	July 4-Aug. 7	1 4		
Quebec	June 13-19 July 4-Aug. 7 June 27-Dec. 4	12		
Saskatchewan—				
Moose Jaw	June 26-30	6		
Do	July 25-Sept. 25	3		i
Regina Do	June 2-30 Oct. 3-30	1 5		
Saskatoon	Sept. 5-Nov. 6	9		
Ceylon:	20pa. 0 21011 01111	•	1	1
Colombo	May 9-June 5	2		
Do	Aug. 29-Oct. 16	49	7	
Chile: Antofagasta	May 17 99		l .	l aces in interior
China:	May 17-23			1 case in interior.
Amoy	May 2-Oct. 23	4	21	
Antung	May 9-June 13	3	. 3	
Do	June 21-27	. 1		_****
Canton	Sept. 1-30 May 2-June 9			Present.
Do	July 11-Oct. 30	• • • • • • • • • • • • • • • • • • • •		Do. Do.
Dairen	Sept. 28-Oct. 4	1		20.
Foochow	May 9-29			. <b>Do.</b>
Do	May 9-29 July 26-Oct. 16	••••••		Do.
Hankow Harbin	June 20-26 Sept. 27-Oct. 31	2.		371010-C
Hongkong	Apr 4-Tune	2 19	15	Year 1919: Cases, 79. On Eastern Chinese R. R. line. At other
Do	Apr. 4-June June 27-July 17	2	10	stations, 109 cases.
Mukden	July 19-Oct. 9)	<i>.</i>		Present.
Nanking	May 9-June 5			Do.
Pogranitchnaya	July 4-Nov. 6			Do.
Tientsin	Oct. 25-31 May 25-31	3		On Eastern Chinese Railway.
Do.	June 16-29.	2 2		
Tsinanfu	May 9-15	ĩ		
Chosen (Korea):		-		
Chemulpo	Mar. 1-June 30	69	40	- 4
Do Fusan	July 1-31	18	8	, v
Do	July 1-31	24 1	6	
Seoul	Mar. 1-June 30	358	86	
Do	July 1-31	15	6	
Colombia:		- 1	į	
Barranquilla	May 13-July 3	• • • • • • • • •	•••••	Epidemic.
Cuba:	May 31-Nov. 13	• • • • • • • • •		Present.
Antilla	Aug. 24-Nov. 15	5		
	July 4	ĭ		From steamship Frank Hennis.
<u> </u>			1	From steamship Frank Hennis, from Jamaica. Arrived Santi-
Matanzas	Aug 15 91			ago June 30, 1920.
ualanas	Aug. 15-21	1	1	In vicinity, at Aguacate, Aug. 1-7, 1920: Cases, 12.
1	•			1-1, 1920. Cases, 12.

# Reports Received from June 26 to Dec. 17, 1920—Continued.

#### SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Cyprus				August, 1919: Cases, 242: deaths
Czechoslovakia		l		54. May 23-June 26, 1920: Cases, 345:
Moravia	Feb. 1-2	68		deaths, 30.
Oanzig	June 20-July 17	9	2	
Ecuador: Guayaquil	Oct. 1-31	6	1	
Egypt:			l	
Alexandria	May 14-June 29 June 25-Nov. 4	53 14	19	
Do Cairo	Apr. 2-June 24	62	23	
Do.	July 2-Aug. 19	5		
Port Said	July 2-Aug. 19 Apr. 2-June 24 July 2-15 May 15-31	22	8	*
rance	July 2-15	2	1	
Brest.	June 24-30		1	
CetteNice.	do		1	
Nice	June 1-30 May 1-10	3	1	
ParisRouen	Oct. 31-Nov. 6	1		
ermany				Feb. 22-June 12, 1920; Cases, 720
Berlin	July 26-Sept. 4	1		July 11-Sept. 4, 1920; Cases, 81;
		l		deaths, 6. Additional cases May 26-July 17, 1920, 66
reat Britain:	i	1		deaths, 2.
Edinburgh	Aug. 29-Sept. 4	7	1	1
Glasgow	May 25-June 26	136	22	
DoLiverpool	July 4-Nov. 13	184	51	
London	July 18-Sept. 11 June 13-July 19	14		
LondonManchester	Aug. 22-28	5		Oct. 24-30, 1920: Cases, 50. At
reece:	36 -01 7 07	4	1 1	Middletown, 6 miles distant.
Saloniki	May 31-June 27 July 25-Aug. 15	1 1	li	
aiti	July 20 1248. 20		l	Nov. 6, 1920: Approximately 35
		١.		Cases.
Jacmel Port au Prince	Nov. 6 Sept. 22–Nov. 7	1 50		In vicinity.
onduras:	Dept. 22 1101. 1			
San Pedro Sula	Sept. 5-11		1	4 11 Mr. 00 1000: Deaths
dia		•••••		Apr. 11-May 22, 1920: Deaths, 7,743. May 30-June 26, 1920: Deaths, 3,864. July 25-Aug. 7,
				1920: Deaths, 1,028. Aug. 15- Sept. 11, 1920: Deaths, 924. May 9-15, 1920: Cases, 26, deaths,
Damban	Apr. 26-June 26	103	45	May 9-15, 1920: Cases, 26, deaths.
Bombay Do	Trine 27-Oct 2	51	ii	11.
Calcutta	May 2-June 12 July 18-Sept. 18 May 9-June 26 June 27-July 10	101	93	
Do	July 18-Sept. 18	9	8 12	
KarachiDo	May 9-June 26	. 15	12	
Madras		27	15	
Do	June 27-Oct. 30 Apr. 25-June 26 Aug. 8-Oct. 9	53	22	The at toom Clause On deaths
Rangoon	Apr. 25-June 26	35 7	14	July 1-31, 1920; Cases, 22; deaths,
Ďodo-China	Aug. 8-Oct. 9			Jan. 1-31, 1920: Cases, 410; deaths,
Saigon	May 10-June 13	12	3	101. Feb. 1-29, 1920: Cases, 625;
Do	Aug. 3-Sept. 5	1	1	Jan. 1-31, 1920: Cases, 40, deaths, 101. Feb. 1-29, 1920: Cases, 625; deaths, 119. Mar. 1-31, 1920: Cases, 782; deaths, 114. Apr. 1-30, 1920: Cases, 312; deaths, 25. May 1-31, 1920: Cases, 428; deaths, 114. Apr. 1-30, 1920: Cases, 428; deaths, 1920: Ca
				1-30 1020: Cases, 312: deaths.
				25. May 1-31, 1920: Cases, 428;
				deaths, 61. June 1-30, 1920: Cases, 318; deaths, 220. Province, Sept. 18-Nov. 11, 34
aly:	T1 10 Oct 21	27		Cases, 318; deaths, 220.
Catania	July 12-Oct. 31	21		Cases.
Genoa	May 17-23	12		In Province.
Do	June 14-27	20	[	
Do	June 28-July 4 May 10-June 27	3 7	·····i	Province, May 10-June 27: Cases,
Messina	may 10-June 27	•	1	168 deaths 27
Do	June 28-Oct. 3	14	3	Province: Cases, 37; deaths, 3.
Milan Naples	Mar. 1-May 31	3	. 5	
Naples	May 23-June 20	7 8	3 21	
Palermo	May 23-June 20 Oct. 18-Nov. 7 May 11-Oct. 28	402	128	
Trieste	Sept. 25-Uct. 2	' 16	5	
Turin	June 28-Sept. 12	2	, ,	

### Reports Received from June 26 to Dec. 17, 1920—Continued.

#### SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Japan:	:		1	
Kobe	May 9-June 27 June 28-July 18	10	5 2	
DoTaiwan IslandDo	May 1-June 30	45	16	
Do	June 21-July 20	19	11	
Tokyo Java:	Apr. 21-May 10	5	4	
East Java—			1	
Surabaya	Sept. 5-11	1		Ama 10 Yama 04 1000 Garage 10:
West JavaBatavia	Apr.16-June17	94	26	Apr. 16-June 24, 1920: Cases, 56: deaths, 10. June 25-Sept. 30, 1920; Cases, 126, deaths, 32. Feb. 1-June 23, 1920: Cases, 2,519;
Do	Apr.16-June17 July 9-Sept. 30	15	7	1920; Cases, 120, deaths, 32.
Jugo-SlaviaLiberia:	• • • • • • • • • • • • • • • • • • • •			Feb. 1-June 23, 1920: Cases, 2,519; deaths, 561.
Monrovia	Nov. 30	34		Nov. 13, present; Nov. 30, epi-
Madeira:		1		demic.
Funchal Do	June 20-26 July 18-Nov. 6	i	2 5	***
Malta	May 1-June 30		3	
Manchuria: Mukden	May 2-8			
	may 2-0			
Bagdad	July 1-31	1		*
Mexico: Chihuahua	Nov. 8-28	1	4	
Ciudad Juarez	Aug. 2-8	1		•
Gua dalajara	May 1-31	1	·····i	
DoLaredo	July 1-Oct. 31 July 30	2		
Mazatlan	May 19-25	<u>-</u> -	1	
Salina Cruz Do	June 1-30 Aug. 1-31	5 1	3	
San Luis Potosi Do	May 21-June 6		1	
D <sub>0</sub>	June 28-Nov. 6	•••••	13 5	
Tampico Newfoundland:	July 1-31	•••••	9	•
Bread Cove	Sept. 4-10	1		
Ladle Cove St. Johns	Sept. 11–17 June 5–11	6.3	ļ	Reported at 2 other localities.
Shoal Harbor	July 10-16	7		July 3-16: Present at 4 localities.
New Zealaad:		15		
Dunedin	Aug. 10-Sept. 20	19		. 1
Teheran	June 6			Present.
Poland	Jan. 1-31	1,052	248	Jan. 1-31, 1920: Cases, 1,895; deaths, 301.
Porto Rico:				deaths, soi.
Caguas	Aug. 9-15	1		. •
Portugal: Lisbon	May 16-June 28		8	
Do	May 16-June 28 June 27-Oct. 30		33	1 × 1 1 1 1
Oporto Portuguese East Africa:	Oct. 31-Nov. 6	1	•••••	
Inhambane	Sept. 12-181	1		4.4.5
Lourenco Marques Russia:	Sept. 12-25	6	•••••	June 1-Aug. 31, 1920: Deaths, 1.
Riga	Aug. 1-Oct. 15	4		May, 1920: Cases, 5. June, 1920:
Vladivostok	Jan. 1-June 30	252	78	Cases, 7.
Do Sierra Leone:	July 1-31	. 2	••••••	
Baktau	Sept. 1-30	2		
FreetownSpain:	do	3	••••••	
Barcelona	May 19-June 12		4	
Do	June 18-Nov. 10		23	
CorunnaGijon	July 16-Oct. 2	•••••	2	July-Sept., 1920: Cases, 17.
Madrid	Oct. 1-31	2		,
MalagaOrense, Province	Sent 6	••••••	•••••	Aug. 1-Sept. 30, 1920: Deaths, 9.
Valencia	Sept. 6 May 23-June 26	15	3	Present.
Do	May 23-June 26 July 4-Nov. 13 May 31-June 26	13	3	
Vigo Do	May 31-June 26 July 18-Nov. 16	••••••	11	
Straits Settlements:	1	• • • • • • • •	**	•
Singapore	May 16-22	1	••••••	Received out of date.
Stockholm	Sept. 19-Oct. 9	4.1		
		-		

### Reports Received from June 26 to Dec. 17, 1920—Continued.

#### SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Switzerland:	May 9-15	7		
GenevaSyria:	1			To alter and to the second
AleppoTunis:	Aug. 29-Sept. 4			In city and in Armenian or- phanage.
Tunis Do	May 25-June 27 June 28-Nov. 14	6 43	5 25	
Turkey: Constantinople	May 16-June 19	7	]	
Do Union of South Africa:	June 20-Oct. 16	13		
East London	Sept. 19-25 May 1-31	1 23		
Johannesburg Do	July 1-Aug. 31	19		
On vessels: S. S. Bradford	Nov. 4	1		At Vancouver, From Talara,
		1		At Vancouver. From Talara, Peru, via ports in Chile, Moxico, and Peru. Left Talara
	:		t -	8 about 21 days previous to ar-
S. S. Henry R. Mallory	Oct. 2	. 1		rival at Vancouver. At Habana from Spanish port.
•				At Habana from Spanish port. Vessel left Vigo, Spain, Sept. 19.
	TYPHUS I	EVER.		
	<u> </u>			
Algeria: Departments—				
AlgiersConstantine	May 11-Aug. 31 May 21-Aug. 31	44 20		
Oran	May 11-Aug. 31	352		70.1 47.7
Austria Vienna	Feb. 15-June 26	65		Feb. 15-June 26, 1920: Cases, 67.
Belgium: Ghent	Sept. 11-Oct. 23	10	1	
Bermuda:	1 -			
Hamilton Bolivia:	Oct. 18-23	2	•••••	
La Paz Do	May 2-June 30 July 1-Sept. 30	7	17 21	
Brazil:		•		
Ceara Do	Apr. 25-June 12 July 11-24		4 2	
Bulgaria:	June 20-25	2		
Chile				Mar. 1-June 30, 1920: Cases,
Antofagasta	July 5-11			1,338; deaths, 244. Present.
Caleta Colosa	July 5-11 May 10-16 Mar. 8-June 28	31	2 39	
Do	June 29-Sept. 20 Aug. 8-Oct. 7 Mar. 1-June 30		13	Oct. 13: Cases, 34.
Coquimbo Santiago	Mar. 1-June 30	470	1 86	Sept. 10: Cases, 186.
Valparaiso	May 2-Oct. 23	•••••	32	
Antung	July 12-Oct. 24	73	11	Report week ended July 31, 1920, not received.
Eastern Chinese Railway	Aug. 9-Sept. 28	5		At stations on line.
Harbin Chosen (Korea):			•••••	On Eastern Chinese Railroad line. Year 1919: Cases, 301.
Chemulpo Seoul	June 1-30	3		At other stations on line, 789
Zechoslovakia	Mar. 1-Apr. 30	4	1	cases. Feb. 1-28, 1920: Cases, 88; deaths,
Leipnik	Feb. 22-28.	1		7. Quarantine station.
Danzig	June 20–26	1		Feb. 27-Mar. 27, 1920: Cases, 16.
Egypt: Alexandria		1	1	
AlexandriaDo	May 7-June 24 June 25-28	338 145	86 63	
Cairo	Apr. 2-June 24	867	370	
Port Said	July 9-Sept. 16 Apr. 9-June 24	156 112	96 53	
Do	Aug. 20-26	1		

### Reports Received from June 26 to Dec. 17, 1920—Continued.

#### TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
GermanyGreat Britain:				Feb. 22-Mar. 27, 1920: Cases, 23.
Belfast	Oct. 24-Nov. 6	4	. 2	Among troops, 4; among persons from Poland, 8. Mar. 28- June 26, 1920; Cases, 96. July 18-Sept. 28, 1920; Cases, 14.
Dublin	Oct. 24-Nov. 6 May 23-June 19 Oct. 16-Nov. 13	. 3		June 26, 1920: Cases, 96. July
Do	Oct. 16-Nov. 13	35		18-Sept. 28, 1920: Cases, 14.
Dundee	July 4-10 May 30-June 5	1		Additional cases, June 18-July 10, 1920, 16.
Glasgow	Aug. 1-7	1		10, 1920, 10.
Greece:	l -	1 -		
Athens	June 27-July 21	ļ	. 5	
Drama	July 12-18	1		
Patras Piræus	June 29-July 4		1	1
Saloniki.	June 29–July 5 Apr. 12–27 June 28–Oct. 10	384	42	1
Do	June 28-Oct. 10	133	57	Ì
Guatemala:	1	1		l de la companya de la companya de la companya de la companya de la companya de la companya de la companya de
Guatemala City	Aug. 9-15	ļ	1	
Hungary	Tom 10 Tom- 00	28		Jan. 19-May 30, 1920: Cases 54.
BudapestItaly:	Jan. 10-June 20	20		i
Catania	July 10-17	3	1	
Trieste	May 16-22	5		' '
D0	June 13-Nov. 6	283	18	1
Japan:		_ ا	i	1
Kobe.	Aug. 17-23 May 25-June 27	7 2		
Nagasaki Do	Sept. 13-Nov. 7	11	1 2	
Jugo-Slavia	Dept. 13-100. 1		-	Feb. 1-June 23, 1920: Cases, 691;
Java:				deaths, 92.
East Java—				
Surabaya	June 10-16	1		1
West Java—	35 00 T 00	5	١.	t
Batavia  Mesopotamia:	May 28-June 30	9	1	
Bagdad	Aug. 1-31	1		l
Mexico:		, -		
Chihuahua	May 31-June 6		1	
Nogales	Aug. 9-14	2		_ **.
San Luis Potosi Do	June 8-July 8	<u>2</u>	2	Present.
D0	July 2-Nov. 27	2	2	Sept. 19: Present. Nov. 14-20, 1920: Present.
Poland	t :	:		Jan. 1-Mar. 31, 1920; Cases, 87,910;
				deaths, 19,733.  Jan. 1-Feb. 29, 1920: Cases, 911:
Warsaw				Jan. 1-Feb. 29, 1920: Cases, 911:
Corbin				deaths, 117. Mar. 14-Apr. 10, 1920: Cases, 181:
Serbia Portugal:	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		Mar. 14-Apr. 10, 1920: Cases, 181: deaths, 23.
Oporto	Apr. 4-June 24	15	. 6	deaths, 20.
Do	Aug. 1-Nov. 6	10	2	
Russia: Riga				
Riga	June 25-Oct. 23	125	• • • • • • • • • •	
Simferopol	G-4 00	••••	• • • • • • • • • •	JanJune, 1920: Cases, 3,955: deaths, 500.
Vilna. Vladivostok	Sept. 28	22	2	Jan. 1-Apr. 30, 1920: Cases, 1, 264:
Do.	May 1-21 July 1-Aug. 31	36	4	deaths, 144.
Spain:		•	- 1	
Barcelona	July 9-15		1	
Madrid	June 1-30	• • • • • • • • • •	1	
Switzerland:	Turne OC Tulant			
Geneva Funis:	June 28-July 4	1		
Tunis	May 24-June 27	36	18	
Do	July 6-Aug. 31	ĭ	ĭ	
furkey:	į.	i	i	
Constantinople	May 16-June 12	27		
D0	June 19-Nov. 6	32	1	
Jnion of South Africa: Port Elizabeth	Sept. 27-Oct. 2	1	- 1	
Venezuela:	осре. 21-0се. 2	- 1	••••••	
Maracaibo	July 21-27		1	
On vessel:	1	1	- 1	
S. S. United States	Nov. 18	1	•••••	At Copenhagen, Denmark. Case found on clearance. Removed with contacts at Christiania, Norway. Vessel sailed Nov.
				19 for New York.

# Reports Received from June 26 to Dec. 17, 1920—Continued. YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Bahia	May 23-June 19	1		
Colombia:	1	1 -	1 .	
Buenaventura	June 3	1	1	
Guatemala			<u>-</u> -	Oct. 25, 1920: Present.
Los Amates	Aug. 5-Sept. 1	i i	3	Aug. 17: Present at severallocalities.
Quirigua	Aug. 9-15 Sept. 10			Present.
Virginia	Sept. 10	1		Station on railway from Puerto Barrios to Guatemala City, 45 miles from Puerto Barrios.
Mexico:		1	l	
Culiacan	Oct. 16			Present.
Empalme	Oct. 12	1	1	
Guaymas	do		1	Previously reported, 2 deaths:
Mazatlan	Oct. 13	1	1	laterinformation shows 1 death.
Progreso	July 30	1		
	1	l	2	July 30-Aug. 18, 1920: Cases, 5;   deaths, 3.
Puerto Mexico	Aug. 24-27		1	Case arrived Aug. 23, on S. S. Mel-
San Blas	Sept. 13	1		cher Ocampo from Progreso.
Tampico	Sept. 17	. 1		Previously reported P. H. R.,
_ Do	Sept. 21-Nov. 4	3	2	Sept. 10, 1920.
Tuxpam	Sept. 1		2	Aug. 26-Oct. 27, 1920: Cases, 112;
	l <b>.</b>	i .		deaths, 59.
Vera Cruz.	June 22	l <u></u> -	2	'
Do Yucatan State—	July 19-Nov. 28	105	82	
1 ilcatan State—	04.12		١ .	T
Campeche	Oct. 13	1	. 1	In sailor from S. S. Yumuri. The vesselleft Vera Cruz Oct. 1
Tracks	04-0		ł	for Campeche and New Orleans.
Hocoba Hunucama	Sept. 8 Sept. 8-Oct. 11	8		In interior.
Temol	Dept. 8-10.11	2	1	Do.
Izmal Merida	∩ct. 10–16 Nov. 5		1	From Humanna
Sotuta	Sept. 8	1	······	From Hunuema.
Peru	Dept. 0		1	In interior. Mar. 1-31, 1920: Cases, 228. Apr.
•				1-20, 1920: Cases, 64.
Callao	Apr. 1-30	. 1		At quarantine station. From
Catacaos	Mar. 1-31	14		S. S. Husilaga.
Do	Apr. 1-30	2		D. C. Humangu.
La Huacai	Mar. 1-31	. 9		·
Do	Apr. 1-30	5		
Morropon	do	87		
Munuella.	Mar. 1-31	12		
Paita	do	81		
Do	Anr 1_30	14		
Piura	Mar. 1-31	1		
Do	Apr. 1-30 Mar. 1-31	4		
Salitral	Mar. 1-31	2		
Sullana	do	9		
Do	Apr. 1-30	1		
Salvador				Sept. 12-19, 1920: 1 case, Aug. 22-
Armenia. San Salva Jor	June 20-26	1	1	Oct. 11, 1920: Cases, 3; deaths, 1.
San Salva lor	Aug. 1–21 May 22–June 24	6	2 17	Fatal cases were in Europeans.
Sonsonate	May 22-June 24	49	17	_
On vessels:				
S. S. Cura he	Nov. 16	1	1	At San Francisco, Calif. From Mexican ports, 6 days out from
O O Transland	a 00		· i	Mazatian.
S. S. Haraldsh.	Sept. 28	1	•••••	Mazatlan At Pensacola, Fla. From Puerto Barrios, Tampico, and Vera
S. S. Soestdijk	Sept. 11		!	Cruz.
S. S. Yumuri.	Oct. 13	1	1	At Composho Yessel lett Yess
~. ~. 4 (im(ii)	Oct. 10	1	1	At Quaromtine, La. At Campeche. Vessel left Vera Cruz Oct. 1, 1920.