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### VACCINATION TECHNIQUE AND CERTIFICATION.

An Experiment in Making Vaccination an Insurance Against Delay as Well as a Protection Against Disease.

By S. B. GRUBBS, Surgeon, United States Public Health Service.

Although vaccination against smallpox has been employed constantly by all civilized nations for 125 years, and has substituted an insignificant annoyance for one of mankind's greatest scourges, the manner of using vaccination and the technique followed vary greatly.

When we see the wide differences in methods that exist in different countries, we naturally attribute them to ignorance or lack of interest; but this is not always the case, as circumstances may vary so greatly that what is most expedient in one place may not serve in another.

At the New York Quarantine Station a method has been in use for nearly two years which seems successful; and it is here submitted in the hope that it may be of use to others, either in whole or in part. At quarantine we want to disturb commerce and annoy passengers as little as possible. We want, however, to stop smallpox at the water front, as, in this country, passengers and crews once released pass from the control of the Federal quarantine officers. We want also to vaccinate so that there will be no bad after effects, and we want to make vaccination a thing to be desired and not something to be avoided.

The procedure we wish to describe recognizes and makes use of the local reaction that follows vaccination. This is a well-known phenomenon observed at least in part by Jenner and studied extensively by Pirquet. With standard technique and proper virus, it is possible with this reaction to read the degree of immunity to smallpox possessed by the individual vaccinated. Since 1913 Force has advocated the use of this reaction, and much of our procedure is the result of his teaching. It was adapted to maritime quarantine by the writer first at the Panama Canal and later at New York.

The local disturbance or reaction following vaccination may appear within a few hours or not for several days. In general terms, the time of its appearance measures the person's resistance to smallpox; i. e., the earlier the reaction the greater the immunity; the later the reaction, the less the immunity. The early reactions are, as a rule,

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slight, and the later reactions are more severe. Thus, persons previously unvaccinated will usually show no disturbance for three days or even longer, but the reaction will then go to a successful take. For purposes of record, three degrees of reaction are recognized; namely, immune reaction, vaccinoid, and successful vaccination; and further subdivisions, especially of the immune reaction, may be recorded, if desired, by a system of plus marks. No hard and fast line can be drawn, however, although we usually say that an immune reaction must appear before 48 hours.

As soon as we know that a person is immune to smallpox, we should be willing to release him entirely, knowing that he can not contract the disease and, hence, is not a danger to the community. As many who travel by sea are already immune as a result of previous vaccinations, this procedure reduces the period of their detention, if exposed, from 14 days to 2 days or less, and emphasizes the value of vaccination as a time-saving expedient. The old method of vaccinating exposed persons and holding them 14 days or until the vaccination "took," placed a premium upon nonvaccination, since a nonimmune person might get a "take" and be released in a few days. An immune person, on the other hand, who could have no successful vaccination was at a disadvantage and has often been detained 14 days, or prohibited from traveling, although he had protected himself and could be of no danger to the community.

It is much better to encourage vaccination by using it, not only to produce immunity but also to measure it, if present, and then to give to those who submit, certificates that mean something and that will insure the owners against delay from smallpox quarantine, regardless of exposure to the disease. Over a thousand certificates, based upon local reactions, have been issued at the New York Quarantine Station, mostly to sailors and travelers. These certificates are in the form of cards which can be carried in the pocket and, in addition to specifying the reaction obtained and, hence, the individual's immunity, they indentify the bearer by description and by his signature. They are based upon a vaccination technique that is strictly uniform, the results of which are certified to by two medical officers, one of whom must be on the laboratory staff of the station. This last requirement is made because the laboratory has immediate charge of all vaccine and supervises and instructs the other officers in vaccination procedure. These certificates represent careful work and present evidence both of immunity and identity. Therefore, it is hoped that they will be honored by authorities generally, not only in the United States but in other countries, especially after they become better known. If they are generally accepted, those who travel by sea will seek vaccination and will value our certificates largely on account of the time they save.

We have but two methods of vaccination, and we require that one or the other be followed in every detail. Each of these methods has been used hundreds of times, and one or the other fills all of our requirements. Either is quickly done, causes little pain, gives slight chance of infection, affords a reasonable amount of immunity, and the reaction following can be easily read, especially when compared with the control that is always required.

Instructions issued to the medical officers of this station and now in force for more than a year are quoted below. The first three paragraphs of these instructions describe the two methods of vaccination. The fourth, fifth, and twelfth paragraphs tell how vaccination cards may be issued. The sixth to eleventh paragraphs describe the various reactions and set forth how they shall be read and recorded. The last three paragraphs refer to quarantine regulations and explain the procedure to be carried out with smallpox contacts of unknown immunity who may be in the incubation period of the disease. We are confident that whenever such contacts show an immune reaction within 48 hours (at least two plus) they will not contract the disease and, therefore, may be released. If the reaction occurs after 48 hours, however, it shows the immunity is not complete and that smallpox may develop, probably in a mild form but dangerous to others. These persons must be held 10 days after vaccination. Full 14 days are not required, as, at the end of 10 days, after vaccination giving a reaction, there will be sufficient immunity from the vaccination just done to prevent the development of smallpox.

Note 1: For our purposes the needle method is preferred, but Force and Leake consider the drill method better adapted for the accurate reading of immune reactions using calipers when necessary to measure the areola. It is always possible at quarantine to discard doubtful reactions and revaccinate.

NOTE 2: Certificate given should be intelligible to the bearer; hence "successful vaccination" is used in the popular sense. An immune reaction or vaccinoid is, of course, successful to effect release from quarantine.

Note 3: Strictly speaking, a vaccinoid is a reaction with its maximum after 48 to 72 hours, but before the ninth day. Some of the cases certified as "immune reaction" may therefore go on to an accelerated reaction or vaccinoid, with maximum as late as the eighth day; but these cases for quarantine purposes may be regarded as immune, since the virus used is potent and would cause adequate reimmunization if the original immunity had dropped somewhat below the point where the maximum of the reaction would be shown in 48 hours.

#### PROCEDURE FOR VACCINATION AGAINST SMALLPOX.

Method of performing vaccination.—The skin of the upper arm, in the region of the depression formed by the insertion of the deltoid muscle, should be thoroughly cleansed with acetone or nondenatured alcohol on gauze or cotton and allowed to dry. The underside of the arm is grasped with the vaccinator's left hand in order to stretch the skin, and three single, parallel scratches are made with the point of a sterile needle. These scratches should be three-fourths of an inch long and 1 inch apart. The scratch should penetrate the epidermis but not draw blood.

Virus of known potency and unexpired date will be used. Push an unbroken capillary tube of such vaccine through the neck of the small rubber bulb provided in the vaccination outfit until about half of the capillary tube appears beyond the bulb. Break the tip, which has been pushed through, and withdraw the bulb until the broken end lies in the neck of the bulb. With sterile gauze break the other tip of the capillary tube and drop the contents on the two outside scratches, leaving the middle scratch as a control. With a sterile toothpick gently, but thoroughly, rub the vaccine into the two outside abrasions and taking a fresh toothpick manipulate the middle scratch in a similar manner, but without vaccine. Allow to dry in the air at least five minutes, but do not expose to sunlight. Apply no dressing.

The drill method of vaccination is also approved. This is as follows: The epidermis is perforated by a small drill with a sharp cutting edge 2 mm. in width. The drill is made of carbon steel, and the tip can be sterilized without affecting the temper of the cutting edge. The skin is tightly drawn, and the drill, which is held between the thumb and second finger with the first finger resting on its end, is pressed against it perpendicularly. A single rotary turn is then made, without altering the pressure, exposing a circle of derma but causing no bleeding. Three abrasions should be made, 1 inch apart. The virus is dropped on two of the abraded spots and rubbed in with a sterilized toothpick as in the needle method. [See Note 1.]

At the time of vaccination, certain entries shall be made on the vaccination cards in duplicate. A record of manufacturer and laboratory number of vaccine shall also be kept. The following form shall be used for card certificates [see Note 2]:

SERIAL NO.						
U. S. PUBLIC HEALTH SERVICE.						
NEW YORK QUARANTINE STATION, ROSEBANK, STATEN ISLAND, N. Y.						
CERTIFICATE OF VACCINATION AGAINST SMALLPOX.						
Name Sex.	•					
AGE DATE OF VACCINATION						
HEIGHT DATE OF REACTION.	.					
RESULT: VACCINOID. SUCCESSFUL VACCINATION.						
Signed						

The cards must be completely filled out, including the signature of the vaccinated person, at the time the reaction is read. All entries must be made in ink; indelible pencil shall not be used. In case the vaccinated person can not write his name, but one card shall be made out, to be kept at the station for the purpose of record, and a

notation made on the card that the person can not sign his name. Ordinarily, cards will not be made out except for persons who have been vaccinated by medical officers on duty at this station who have been carefully instructed in the station procedure of performing vaccinations. However, special arrangements may be made, from time to time, to accept the results of vaccinations performed by physicians off the station, and to issue cards in accordance with the results observed by ourselves, provided the station technique has been used in every particular.

The procedure for recording the results of vaccination shall be as follows: In order that cards may be issued, vaccination shall be observed within 48 hours after being made. Preferably, examine at the end of 12, 24, 36, and 48 hours. If this is not possible, try to see patient after about 24 hours and again in 48 hours. If no evidence of reaction to vaccination be observed at the end of 48 hours in a person who has been exposed to smallpox, revaccinate every 24 hours for 3 consecutive days, using new virus and observing the person daily for 10 days from the first vaccination. After failure to produce a reaction in a person showing a good vaccination scar, observe every two hours after third vaccination, if possible. Readings, in all cases, must be made by two medical officers on duty at this station, one of whom shall be attached to the laboratory. These officers must agree if the card is to be issued and the card must bear the initials of both officers prior to the signature by the medical officer in charge. The results shall be recorded according to whether the reaction falls into one of the following classes:

- 1. Immune reaction.
- 2. Vaccinoid.
- 3. Successful vaccination.
- 1. Immune reaction.—Where the immunity of an individual is high, either from a previous vaccination or from an attack of smallpox, a subsequent attempt at vaccination usually results in a prompt sharp reaction which reaches its maximum in a out 48 hours and may entirely disappear within 4 days. There is redness and swelling along the lines of incision which has received the vaccine as compared with the control. Vesicles rarely occur. The reactions may be divided into four grades, as indicated by "+," "++," "+++," and "++++."
- "+" Reaction—One in which there is slightly more swelling and redness in the vaccination scratch than in the control.
  - "++!" Reaction—A definite reaction as compared with control.
  - "+++" Reaction—Marked reaction as compared with control.
  - "++++" Reaction—Very well marked reaction as compared with control.

Reactions which do not make their first appearance within 48 hours will not be classed as immune reactions for the purpose of releasing persons from quarantine detention or for other purposes [see Note 3], nor will a "+" reaction be accepted either for release or issue of certificate. Reactions must be definite. In recording immune reactions, record the grade of reaction on one card only, issuing the duplicate which shall not indicate the grade of reaction.

- 2. Vaccinoid (accelerated and modified vaccination).—Appears after 48 hours. The papule occurs after two but frequently before five days have elapsed. The reaction is less severe and takes less time to run its course than a typical take. Vesicles frequent; pustules not always present.
- 3. Successful vaccination.—(Typical Jennerian vaccinia).—No reaction shown for three to five days. Vesiculation from fifth to seventh day with areola present; purulent, with well-marked areola about the eighth day.

Persons showing immune reactions (plus 2, 3, or 4), vaccinoid, or successful vaccination may be issued cards. In indicating on card whether reactions be immune, vaccinoid, or successful vaccination, completely obliterate with ink the two terms which do not apply.

Issue of vaccination cards.—The cards are now ready for entry in the record book, and they receive a serial number as entered. Record in book serial number, name, age, height, date vaccinated, date of reaction, variety of reaction, initials of observers, and remarks, giving manufacturer and laboratory number of virus used. The cards are now sealed with the official seal of the service in such way as to include the vaccinated person's signature and are signed by the medical officer in charge. The duplicate is then sent to the person concerned and the original filed alphabetically. The card shall be issued only if all information is complete in every respect. If the card is incomplete, as, for example, if the reaction has been observed by only one medical officer, place one card in file but do not issue the other. Passengers will not be issued cards except on request.

Smallpox contacts.—Paragraph 110 (B) of the quarantine regulations is as follows:

"All persons who, in the opinion of the quarantine officer, have been exposed to the infection shall be vaccinated, unless protected by a previous attack of smallpox, and detained in quarantine until the vaccination is protective against said exposure, or, if they refuse vaccination, detained in quarantine for 14 days after last exposure to the infection."

If smallpox has occurred during the voyage, contacts may be released when a satisfactory immune reaction (appearing within 48 hours) has been noted. If the reaction is a vaccinoid or successful vaccination (appearing after 48 hours), immunity will be considered established and the danger of smallpox obviated 10 days after the above-mentioned vaccination or fourteen days from the last possible exposure to smallpox.

If the exposure to smallpox was before sailing, and it is certain that no cases have occurred en route, contacts may be released as soon as a satisfactory immune reaction has been noted. In case a vaccinoid or successful vaccination develops, the suspect must be held to complete 14 days from date of sailing.

#### CONCLUSION.

- 1. By making use of the reactions that follow vaccination, it is possible to eliminate much of the delay now considered necessary to prevent the spread of smallpox.
- 2. In order to encourage vaccination, these reactions should be observed and records should be furnished the individual as a proof of his immunity.
- 3. A person certified as immune to smallpox should not be detained by any smallpox quarantine.

## EFFECTIVE PUBLICITY IN RURAL HEALTH WORK.

An essential factor in the success of any public health or welfare program that involves educating the people, stimulating their interest, and enlisting their cooperation and support, is the proper presentation of the work in a manner that is easily understood and that, at the same time, compels attention. The use of the catechism or interview seems to inject into statements of fact and general information a personal element that renders such forms more effectual in securing and holding the attention of most people than the straight

narrative form. The article printed below <sup>1</sup> is reproduced here as a sample of newspaper publicity of the kind that is found exceedingly helpful in rural health work.

The work in Preston County, W. Va., here described is being carried on as a cooperative project in which the State board of health of West Virginia, the county health authorities, and the United States Public Health Service are participating. Dr. H. S. Mustard is field agent of the Public Health Service and health officer of Preston County.

#### BETTER HEALTH FOR PRESTON SCHOOL CHILDREN.

"Tell us something of your school work," we asked the health officer. "What are you doing in that line; what are your plans, and what spirit are you meeting on the part of parents?"

"All right. Let's go into the office," said Doctor Mustard.

We went in. It's on the second floor of the Herring Building, in Kingwood. We entered what appeared to be a business office, and a busy business office at that. It was just after 9 in the morning, and the health nurse was apparently getting ready to start on her rounds, rounds that we happen to know are frequently not completed until most of us have finished our 6 o'clock dinners.

"Miss Pugh," said the doctor, "get out some of our stuff on school work." Turning to us, he added: "Miss Pugh is the real brain of our work with school children. Come on into this room."

The second room we entered was totally unlike the first. It, too, was equipped for business, but business of a different sort. It bore the stamp of the medical world. On one side was a glistening white operating table; nearby an equally white enamelled instrument table. Toward the north windows was a laboratory desk, extending the width of the room, and upon it a microscope, chemical bottles, and the greatest imaginable array of what the doctor said were "stains for germs." Then, too, there was a "germ incubator," and sterilizers of various sorts.

"While we are waiting, would you like to see some diphtheria germs?" asked Doctor Mustard. Then he added with a smile: "They are guaranteed dead, but even if not dead, they couldn't fly."

So we peeked through the microscope, and asked the doctor for guidance. He took our place, shifted a few wheels which he said were "adjustments," and called us back. "Now look right in the center of the light space. See two dumb-bells, without enlarged ends, lying side by side? The deep coloring in each end gives the dumb-bell appearance. Those are diphtheria germs. A person who has had diphtheria is not turned loose on the public until discharges coming from his nose or throat fail to show those germs under the microscope."

"Seems simple enough," we conceded. "Makes it an exact science as to when they are safe to come out of quarantine, doesn't it?"

"You are right. And yet, to most people, if the recently diphtheria-stricken child appears well, it's conclusive proof that he is no longer a source of danger to others. Only about two weeks ago we had a diphtheria case that continued to show germs. The mother felt that it was all bosh, and that we were deriving some peculiar pleasure from keeping him in quarantine; and with this belief, she did not keep her other children away from him. Last week a second child in this family developed diphtheria, and a few days ago the third child took the disease. In spite of this, that mother probably feels that it was not the continuously germ-laden first case that gave

<sup>• 1</sup> From the Preston County Journal, June 14, 1923.

it to the others, but attributes it to clothes, or an ill wind, or 'something.' Here's Miss Pugh with the school stuff. I'll leave her to answer your questions; I must talk sanitary toilets to those men in the other room."

Miss Pugh came in with what the doctor called her "school stuff;" and she didn't

wait for us to ask questions.

"Here," she said, "is the individual record for each child examined. So far we have some thirty-four hundred records like this, and will have one for each school child in the county by the end of the year. The record shows height, weight, vision, hearing, tonsils, teeth, chest, skin, bones, joints, and so forth. It gives to us, at any time, a mental picture of each child examined."

"What use do you make of the record?2" we asked.

"First," said the nurse, "we notify the parents of any defects found, and urge that they take the child to the family doctor, dentist, or specialist. In as many cases as possible I make a personal visit. But this is not enough. Parents are just people subject to the habit of procrastination, as are most human beings, and so we enlist the interest of the children."

"And how," we inquired, "do you do that?"

"Every man, woman, and child is interested in his or her weight, and many weigh on the slighest provocation. Weight, and especially the rate of gain in weight, is often a pretty good index of the health of a child, and it's a test that anyone can make, and make repeatedly. Each child examined is given a weight tag—pink for the normals, blue for the underweights. These cards not only state what the weight is, but what it should be for the age and height. On the back of the card are printed instructions on right living and how to bring the weight up to normal."

"Do the children take to this; do they show any interest in it?"

"Very much. But we don't stop there." She unfolded a chart. "This," she went on, "is a classroom record, to be placed in the schools next fall term. It contains the name of every child in the class. Opposite the name, and under the columns referring to weight, height, vision, teeth, and so forth, the child gets a red star for everything in which he is normal."

"Suppose he has a defect, say, in his teeth. How do you indicate that?" This school stuff was becoming interesting, and we wanted to know.

"In a way, we do not indicate it," said Miss Pugh; "we simply leave it blank. We don't want to do anything to cause the child embarrassment by this posted record. So rather than give a demerit for a defect, we give merits in the form of a red star for normal things; the child with the defect simply does not qualify for the red-star merit."

We felt that this was a good idea, and evidence that these health folks knew something about children. Then another thought struck us.

"Now, Miss Pugh, suppose a child had defective teeth and had the defects corrected; how would you give an indication of that on your chart; how would you show it so that he would obtain credit for a sound, clean, healthy mouth?"

"By giving him a blue star, under teeth, and opposite his name—where we had previously left a blank space. The blue star is really a greater credit than the red, because, while the red star indicates that things are normal, the blue star shows that something has been made good through effort. Any child with a complete line of stars, red or blue, becomes a 'Gold Star Specimen.'"

We became more interested; we became a little astonished at the far-reaching simplicity of the thing; and we became a little proud of Preston's school health possibilities. We wanted the whold story, so we asked:

"Anything else you do to insure physical corrections in these children?"

"There is a great deal more," answered Miss Pugh. And then she added, "We want you to get this straight. Neither Doctor Mustard nor I would give a rap for these records and charts if they didn't produce results. The examination and record are

only means to an end, the end of this phase of health work being the highest attainable degree of health for the greatest number of school children in Preston County. Clinics will be organized in various parts of the county, so that these defects, especially bad tonsils and adenoids, can be treated in the county by a specialist. That scheme is a cooperative one, the parents of the children treated forming a fund to pay some specialist in whom they have confidence."

"What about teeth defects?" A short time ago we had a talk with Doctor Mustard about "six-year molars."

"That," said Miss Pugh, bundling up her things and putting on her hat, "that is a hard question. We are shooing as many children as possible to the dentists; but that doesn't solve the problem. What we need is a dentist as a part of the health department; a dentist with a traveling equipment, who can visit every school, and, with parents' consent, fix up the school children right on the spot. That's what we need, and I only hope and pray that next year such a thing will be a reality in Preston County."

Everybody seemed busy, so we left the health department and went back to our newspaper office, thinking. It would be a great thing to have a school dentist; there's no denying that. And the untold good he could do! It would cost a little, but, on the other hand, it has and will cost lots more not to have one!

#### SHIP-BORNE PLAGUE DURING 1922.

The following is a summary of plague infection on vessels as reported to the United States Public Health Service during the year 1922 (also December, 1921), and published in Public Health Reports.

Although these reports are probably not complete, they record a sufficient amount of ship-borne plague to emphasize the necessity for constant vigilance on the part of quarantine officers, the application of effective measures for the discovery and destruction of plague-infected rats on vessels, and the exercise of special precautions with vessels coming from or having visited plague-infected districts.

#### AUSTRALIA.

Thursday Island quarantine.—On December 31, 1921, the steamship Tango Maru arrived at Thursday Island quarantine, Queensland, from Kobe via Nagasaki, Hongkong, Manila, and Zamboanga, with a case of plague on board in the person of a third-class passenger who had boarded the vessel at Hongkong December 20, 1921, and reported sick December 22. The Tango Maru left Kobe December 13, 1921.

The steamship *Helcion* from Singapore, Straits Settlements, direct, arrived at Thursday Island quarantine December 1, 1922, with a case (Chinese fireman) of plague on board.

The steamship Southgate, which left Calcutta May 2 and Rangoon May 9, 1922, arrived at Thursday Island quarantine May 30, 1922, with a case of plague on board. The vessel was stated to be badly rat-infested.

#### BRAZIL.

Para.—On February 3, 1922, one case of pneumonic plague was reported removed from the steamship *Polycarp* at Para, Brazil. The vessel was from Ceara, Brazil, via Manaos, Maranham, and Para, destined for New York.

#### CUBA.

Habana.—One case of plague was reported November 11, 1922, on the steamship Barcelona, which arrived at Habana November 10 from Barcelona, Spain, October 13, via Alicante, Spain, October 17, and Las Palmas, Canary Islands, October 24. The patient was stated to have come from the Canary Islands.

#### ENGLAND.

Liverpool.—Information dated February 21, 1922, reported the finding of 27 plague-infected rats and 1 plague-infected mouse on board the steamship Warwickshire at Liverpool, England. The vessel left Rangoon January 5, 1922, calling at ports as follows: Colombo, Ceylon, January 9; Suez and Port Said, Egypt, January 23; Marseille, France, January 29; Port of London, February 6, and Liverpool, February 12, 1922.

A plague-infected rat was reported found on the steamship *Elpenor* at Liverpool, April 29, 1922, and a plague-infected mouse was found on the same vessel during the week ended May 6, 1922. The vessel left New York December 17, 1921, arrived at Yokohama, January 25, 1922, from which port it proceeded to Kobe, Japan, arriving February 2; to Shanghai, arriving February 24; to Saigon, arriving March 1; to Singapore March 13, arriving at Genoa April 9; at Marseille April 12; and at Liverpool, April 22.

Four plague-infected rats from the steamship Ardeola were reported found at Liverpool in the latter part of June, 1922. The vessel arrived at Liverpool June 26, 1922, from the Canary Islands, having sailed from Las Palmas:

Port of London.—Steamship Warwickshire, Port of London, February 6, 1922. Twenty-seven plague-infected rats and 1 plague-infected mouse were reported found on the vessel after it had been fumigated at Liverpool, where it arrived from the Port of London, February 12, 1922.

The steamship City of Genoa arrived from Bombay, via Dunkirk and Hull, in April, having touched at Suez, Port Said, Gibraltar, and Plymouth. Eight cases of plague, three of which were fatal, occurred on board during the voyage. The first case occurred on March 7. The patient died and was buried at sea. The second case occurred on March 11, and was landed in Suez. The third and fourth cases

occurred on March 12 and were landed at Port Said. The fifth and sixth cases occurred on March 16 between Port Said and Gibraltar. Both died, and presumably were buried at sea. The seventh and eighth cases occurred on April 8, after the vessel had arrived at Plymouth on March 25. These cases were landed at Dunkirk on April 11. The vessel's quarters were disinfected at Suez and Port Said and the holds at Dunkirk. A complete and thorough fumigation, when the ship was empty, was carried out at Hull. Seventy-three rats were reported found dead at Hull after fumigation. Twenty-four dead rats were found during the discharge of cargo at Hull, previous to fumigation, and 23 were trapped alive.

The steamship Porthia left Rosario, Argentina, on October 24 and arrived in the Thames on November 25, with a cargo of grain in bag and bulk and a personnel of 33 men. A death had occurred November 21. which had been reported as enteric fever. Inquiry showed that the patient, taken ill on November 15, was in delirium almost from the first. A swelling on the right side of the neck appeared on the 18th and extended to the left side. Death took place without other signs on the 21st of November. Further investigation revealed the fact that dead rats had been removed from the top of the cargo in holds 1 and 4 on November 23, and that dead rats had been thrown out from the bunkers and elsewhere since leaving Rosario. Two ship's cats had been taken ill previous to the illness of the victim. One of these presented a swelling in the neck, which subsided; the other a swelling under the axilla. Both cats were thrown overhoard. It was estimated that 50 dead rats had been found in the stokehold, bunkers, and hatches during the voyage. The total number of rats found during discharge of cargo and previous to fumigation was 92. The rats found during the discharge of the cargo were reported to be too badly putrified for satisfactory bacteriological examination. The vessel was fumigated at Gravesend, and subsequently at London.

#### EGYPT.

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

Suez and Port Said.—Steamship City of Genoa, noted above.

#### FRANCE.

#### GERMANY.

Hamburg.—The finding of plague-infected rats on the steamship Legie, from Buenos Aires, Argentina, was reported at Hamburg, Germany, July 29, 1922.

#### ITALY.

Messina.—Under date of July 19, 1922, cases of plague were reported on a Greek vessel that arrived at Messina, Italy. The vessel was not allowed to enter.

#### PHILIPPINE ISLANDS.

Manila.—A case of plague with fatal termination, occurring in a Chinese member of the crew of the steamship Taisang, from Amoy, China, was reported at Manila, P. I., June 1, 1922. The patient was taken acutely ill 36 hours after landing, June 1, at Manila. The vessel left Amoy direct for Manila, and was two and one-half days en route.

## CALIFORNIA LOCAL HEALTH DISTRICT LAW HELD VALID BY SUPERIOR COURT.

The California law (ch. 571, act approved May 21, 1917) providing for the voluntary formation of local health districts, and under which the San Joaquin County health district was organized, has been held valid by the superior court of San Joaquin County. The decision holds that the county board of supervisors could levy and collect a special tax, as provided in the law, for the maintenance of the health district, but that the health district being a separate entity (even though, as in this instance, its boundaries may happen to be coextensive with those of the county), no funds raised by the county for strictly county purposes, including health work, could be expended for the benefit of the health district.

#### DEATH RATES IN A GROUP OF INSURED PERSONS.

COMPARISON OF DEATH RATES FOR PRINCIPAL CAUSES OF DEATH, JUNE AND JULY, 1923, AND JULY AND YEAR, 1922.

The accompanying table is taken from the Statistical Bulletin of the Metropolitan Life Insurance Company for August, 1923. It presents the mortality experience of the industrial insurance department of the company for the months of June and July, 1923, and for July and year, 1922. The rates for July, 1923, are based on a strength of over 14,000,000 insured persons.

Although the rate for July shows a seasonal decline from that for June, it remained slightly higher than the July rates for 1921 and 1922.

Death rates (annual basis) for principal causes per 100,000 lives exposed, June and July. 1923, and July and year, 1922.

	Death r	ate per 100,	,000 lives e	xposed.
Cause of death.	July, 1923.	June, 1923.	July, 1922.1	Year 1922.1
Total, all causes	795.8	880.1	755.7	882.9
Typhoid fever.  Measles. Scarlet fever. Whooping cough Diphtheria. Influenza. Tuberculosis (all forms) Tuberculosis of respiratory system Cancer Diabetes mellitus Cerebral hemorrhage. Organic diseases of heart Pneumonia (all forms) Other respiratory diseases Diarrhea and enteritis Bright's disease (chronic nephritis). Puerperal state. Suicides. Homicides Other external causes (excluding suicides and homicides) Traumatism by automobile All other causes.	7.1 2.1 4.8 7.9 4.5 107.8 96.6 69.0 11.6 51.0 113.0 33.3 9.8 17.6 7.1 6.9	4. 2 14. 5 4. 2 4. 1 9. 1 11. 9 121. 3 110. 5 71. 0 15. 2 56. 1 126. 5 55. 3 12. 5 10. 1 71. 5 17. 7 8. 8 6. 4 63. 4 196. 1	6.8 3.3 2.1 10.4 3.9 105.2 94.9 61.0 (1) 48.9 99.8 29.3 10.7 14.0 55.8 68.7 14.1 198.8	5.7 4.3 4.9 2.6 18.0 21.7 114.2 103.6 72.0 126.7 73.7 10.8 70.3 19.0 7.5 6.3 19.3 19.3 19.3 19.3 19.3 19.3 19.3 19

<sup>&</sup>lt;sup>1</sup> Provisional figures for 1922 given out previously have been revised on the basis of final tabulations of data on the lives exposed to risk.
2 Not available.

## DEATHS DURING WEEK ENDED SEPTEMBER 8, 1923.

Summary of information received by telegraph from industrial insurance companies for week ended September 8, 1928, and corresponding week of 1922. (From the Weekly Health Index, September 11, 1923, issued by the Bureau of the Census, Department of Commerce.)

,	Week ended Sept. 8, 1923.	Corresponding week, 1922.
Policies in force	53, 927, 062	<b>49</b> , 933, 345
Number of death claims	7, 733	6, 662
Death claims per 1,000 policies in force, annual rate	7. 5	7. 0

Deaths from all causes in certain large cities of the United States during the week ended September 8, 1923, infan! mortalily, annual death rate, and comparison with corresponding week of 1922. (From the Weekly Health Index, September 11, 1923, issued by the Bureau of the Census, Department of Commerce.)

		ended 3, 1923.	Annual death rate per	Deatl	Infant mor- tality	
City.	Total deaths.	Death rate.1	1,000, corre- sponding week, 1922.	Week ended Sept. 8, 1923.	Corresponding week, 1922.	rate, week ended Sept. 8, 1923.2
Total	5, 852	10.6	10. 4	950	868	
Akron, Ohio. Albany, N. Y. <sup>3</sup> . Atlanta, Ga Baltimore, Md. <sup>3</sup> . Birmingham, Ala	34 74 211	5. 0 15. 1 17. 3 14. 2 16. 5	6. 0 14. 8 15. 6 12. 0 18. 8	6 4 5 34 10	11 3 11 35 9	71 88 100

Annual rate per 1,000 population.
 Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1922. Cities left blank are not in the registration area for births.
 Deaths for week ended Friday, Sept. 7, 1923.

Deaths from all causes in certain large cities of the United States during the week ended September 8, 1923, infant mortality, annual death rate, and comparison with corresponding week of 1922. (From the Weekly Health Index, September 11, 1923, issued by the Bureau of the Census, Department of Commerce)—Continued.

	Week Sept.	ended 8, 1923.	Annual death rate per	Deaths under 1 year.		Infant mor- tality	
City.	Total deaths.	Death rate.	1,000, corre- sponding week, 1922.	Week ended Sent. 8, 1923.	Corre- sponding week, 1922	rate, week ended Sept. 8, 1923.	
Boston, Mass Bridgeport, Conn Buffalo, N. Y	138	9.3	11.3	19	33	54 41	
Bridgeport, Conn	28 112	10. 2 10. 9	7. 6 13. 6	3 22	6 35	92	
Cambridge, Mass. Camden, N. J.* Chicago, Ill.* Cincinnati, Ohio. Cleveland, Ohio. Columbus, Ohio.	24	11.2	8.5	5	4	89	
Camden, N. J. <sup>3</sup>	30 510	12. 6 9. 2	16.3 10.1	9 94	6 92	149	
Cincinnati, Ohio.	111	14.2	12.6	16	15	84 105	
Cleveland, Ohic3	169	9.9	9.2	33	32	. 90	
Columbus, Ohio	74 24	14.8 7.1	13. 2 12. 4	12 2	9	125	
Dayton Ohio.	31	9.8	10.6	5	3	82	
Denver, Colo	65	12.5	10.9	11	11		
Columbus, Ohio.  Dallas, Tex Dayton, Ohio.  Denver, Colo. Des Moines, Iowa Detroit Mich	26 224	9.6 11.7	8.4	2 63	31	126	
Des Moines, Iowa Detroit, Mich Duluth, Minn Erie, Pa Fall River, Mass. Filt Mich	9	4.4		1		23 41	
Erie, Pa	21	9.7	6.2	2	1	41	
Fall River, Mass. 3	30 28	12. 9 12. 4	15. 5	11 5	11	156 99	
Filint, Mich. Fort Worth, Tex. Grand Rapids, Mich. Houston, Tex. Indianapolis, Ind Jersey City, N. J.	19	6. 9	10.0	4	4		
Grand Rapids, Mich	25 35	9.3	8.0	3	. 3	47	
Houston, Tex	35 74	11.8 11.3	10. 1 11. 8	3 15	3 7	115	
Jersey City, N. J.	49	8.3	11.8	12	13	80	
Kansas City, Kans	23	10.4	12.8	2 :3	.2	46	
Los Angeles, Calif	173 85	13. 5 17. 2	11. 4 13. 0	10	15 6	86 108	
Lowell Mass.	29	13. 1	12.8	6	5	104	
Jersey City, N. J. Kansas City, Kans Los Angeles, Calif. Louisville, Ky Lowell, Mass. Lynn, Mass	16	8.1	·····	3		79	
Lynn, Mass Memphis. Tenn Milwaukee, Wis. Minneapolis, Minn Nashville, Tenn. New Bedford, Mass New Haven, Conn New Orleans, La. New York, N. Y Bronx Borough Brooklyn Borough Manhattan Borough Queens Borough Richmond Borough Newark, N. J	37 91	11.3 9.8	17. 7 9. 4	5 16	5 18	79	
Minneapolis, Minn	81	10.3	9.1	7 3	10	38	
Nashville, Tenn.3	40	17.2	13 0	3	9	*****	
New Bedford, Mass	28 35	11.2 10.6	7 8   12 9	5 3	6 4	78 <b>39</b>	
New Orleans. La.	124	16.0	16 0	13	19		
New York, N. Y	1,049	9.2	8.9	180 20	156	72 70 73 73 59 91 42 71	
Bronx Borough	133 354	8.3 8.6	6 4 8 6	69	5 61	70	
Manhattan Borough	453	10.4	9.9	75	72	73	
Queens Borough	73	7.6	8.2	11	13	59	
Namer N I	31 85	12.7 10.1	15.9 7.6	5 9	12	42	
Norfolk, Va	25	8.2	10. 1	4	2 2	71	
Oakland, Calif	39	8.5	9.2 9 1	9	. 3	51 97	
Peterson N I	46 17	11.7 6.4	7 5	4	. 3	64	
Philadelphia, Pa	385	10.4	10 3	60	57	78	
Pittsburgh, Pa	16°) 51	13.6 9.7	10 0 10 1	24 2	18	64 78 83 20 82	
Providence, R. I	53	11.4	12.3	10	12	82	
Richmond, Va	48	13.8	11.7	7	10	86 32	
Rochester, N. Y	56 153	9. 2 9. 9	6 2 11 2	4 15	5 14	32	
St. Paul. Minn	46	9.9	10.7	8	7	74	
Salt Lake City, Utah 3	25	10.3	5 9	4	ō	65	
San Antonio, Tex	50 123	14. 1 11. 9	11. 1 13. 7	11	13	60	
Seattle, Wash	49	8. 1 7. 5	79	6	3	53	
Spokane, Wash	15	7. 5 10. 1	15. 5 4. 5	1 4	3	22 57	
Springneld, Mass	28 15	7.7	4.5	2	1	50	
Toledo, Ohio.	41	8.5	13. 2	10	7	101	
Trenton, N. J	24	9.8 12.6	11.7	5	7	85 106	
Ulica, N. Y	25 105	12.6	12.0	21	14	120	
Wilmington, Del.	16	7.1	11.3	2	6	41	
Queens Borough Richmond Borough Newark, N. J Norlolk, Va. Oakland, Calif. Omaha, Nebr Paterson, N. J Philadelphia, Pa. Pittsburgh, Pa. Portland, Oreg. Providence, R. I Richmond, Va. Rochester, N. Y St. Louis, Mo St. Paul, Minn Salt Lake City, Utah 3 San Antonio, Tex San Francisco, Calif. Seattle, Wash Spokane, Wash Springfield, Mass. Tacoma, Wash Toledo, Ohie Trenton, N. J Utica, N. Y Washington, D. C. Wilmington, Del. Worcester, Mass. Yonkers, N. Y	45 15	12. 2 7. 3	11. 1 5. 9	5	5 3	57 108	
YORKERS, IN. Y			6.7		91		
Yonkers, N. Y Youngstown, Ohio	40	15.8	0.4	12	4	163	

Deaths for week ended Friday, Sept. 7, 1923.

## 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.

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

## Reports for Week Ended September 15, 1923.

ALABAMA.	Cases.	CALIFORNIA.	7
Cerebrospinal meningitis	1	Anthrax—Napa	Cases.
Chicken pox.	_	Cerebrospinal meningitis—San Diego	1
Dengue	-	Diphtheria	1
Diphtheria	_	Influenza	91
Dysentery	13	Lethargic encephalitis:	2
Influenza	15	Onterio	
Malaria	205	Ontario	1
Measles	<i>7</i> 6	San Francisco	1
	10	Measles	109
PellagraPneumonia.	9	Poliomyelitis:	
	10	Long Beach	1
Scarlet fever	10	Los Angeles County	2
Smallpox	10	Ontario	1
Tuberculosis.	65	Pomona.	1
Typhoid fever	45	San Diego	1
Whooping cough	40	Searlet fever.	48
ARIZONA.		Smallpox	8
Diphtheria	1	Typhoid fever	17
Scarlet fever	1	COLORADO.	
Scarlet fever. Tuberculosis	1 86	COLORADO.	
Tuberculosis	_	COLORADO. (Exclusive of Denver.)	
Tuberculosis. Typhoid fever.	86		7
Tuberculosis	86 1	(Exclusive of Denver.)	7 10
Tuberculosis. Typhoid fever.  ARKANSAS. Chicken pox.	86 1 5	(Exclusive of Denver.) Diphtheria	•
Tuberculosis. Typhoid fever.  ARKANSAS. Chicken pox. Dengue.	86 1 5 6	(Exclusive of Denver.) Diphtheria	10
Tuberculosis. Typhoid fever.  ARKANSAS. Chicken pox. Dengue. Diphtheria.	86 1 5 6	(Exclusive of Denver.) Diphtheria Measles	10 7
Tuberculosis. Typhoid fever.  ARKANSAS, Chicken pox. Dengue. Diphtheria. Influenza.	86 1 5 6 15 9	(Exclusive of Denver.)  Diphtheria	10 7 2
Tuberculosis. Typhoid fever.  ARKANSAS. Chicken pox. Dengue. Diphtheria. Influenza. Malaria	86 1 5 6 15 9 187	(Exclusive of Denver.)  Diphtheria	10 7 2 1
Tuberculosis. Typhoid fever.  ARKANSAS. Chicken pox. Dengue. Diphtheria. Influenza. Malaria. Measles.	86 1 5 6 15 9 187 24	(Exclusive of Denver.)  Diphtheria	10 7 2 1 4
Tuberculosis. Typhoid fever.  ARKANSAS. Chicken pox. Dengue. Diphtheria. Influenza. Malaria. Measles. Paratyphoid fever.	86 1 5 6 15 9 187 24 1	(Exclusive of Denver.)  Diphtheria	10 7 2 1 4 56
Tuberculosis. Typhoid fever.  ARKANSAS. Chicken pox. Dengue. Diphtheria. Influenza. Malaria. Measles. Paratyphoid fever Pellagra.	86 1 5 6 15 9 187 24 1	(Exclusive of Denver.)  Diphtheria	10 7 2 1 4 56 16
Tuberculosis. Typhoid fever.  ARKANSAS. Chicken pox. Dengue. Diphtheria Influenza. Malaria Measles. Paratyphoid fever Pellagra Poliomyelitis.	86 1 5 6 15 9 187 24 1 7	(Exclusive of Denver.)  Diphtheria	10 7 2 1 4 56 16 3
Tuberculosis. Typhoid fever.  ARKANSAS. Chicken pox. Dengue. Diphtheria. Influenza. Malaria. Measles. Paratyphoid fever Pellagra. Poliomyelitis. Scarlet fever.	5 6 15 9 187 24 1 7 1 5	(Exclusive of Denver.)  Diphtheria	10 7 2 1 4 56 16 3
Tuberculosis. Typhoid fever.  ARKANSAS. Chicken pox. Dengue. Diphtheria. Influenza. Malaria. Measles. Paratyphoid fever Pellagra Poliomyelitis. Scarlet fever. Trachoma	5 6 15 9 187 24 1 7 1 5 1	(Exclusive of Denver.)  Diphtheria	10 7 2 1 4 56 16 3
Tuberculosis. Typhoid fever.  ARKANSAS. Chicken pox. Dengue. Diphtheria. Influenza. Malaria. Measles. Paratyphoid fever. Pellagra Poliomyelitis. Scarlet fever. Trachoma Tuberculosis.	86 1 5 6 15 9 187 24 1 7 1 5 1 13	(Exclusive of Denver.)  Diphtheria	10 7 2 1 4 56 16 3
Tuberculosis. Typhoid fever.  ARKANSAS. Chicken pox. Dengue. Diphtheria. Influenza. Malaria Measles. Paratyphoid fever Pellagra. Poliomyelitis. Scarlet fever. Trachoma. Tuberculosis. Typhoid fever.	86 1 5 6 15 9 187 24 1 7 1 5 1 13 35	(Exclusive of Denver.)  Diphtheria	10 7 2 1 4 56 16 3
Tuberculosis. Typhoid fever.  ARKANSAS. Chicken pox. Dengue. Diphtheria. Influenza. Malaria. Measles. Paratyphoid fever. Pellagra Poliomyelitis. Scarlet fever. Trachoma Tuberculosis.	86 1 5 6 15 9 187 24 1 7 1 5 1 13	(Exclusive of Denver.)  Diphtheria	10 7 2 1 4 56 16 3

CONNECTICUT—continued.		INDIANA.	
	Cases.		ases.
Lethargic encephalitis	. 1	Diphtheria	58
Malaria	. 3	Influenza	15
Measles	. 5		16
Mumps	. 7	Poliomyelitis—Lake County	1
Pneumonia (lobar)	. 2	Rabies in animals—Marion County	1
Poliomyelitis	. 3	Scarlet fever	35
Scarlet fever	. 18		14
Tetanus	, 1	Tuberculosis	12
Tuberculosis (all forms)	. 29	Typhoid fever	35
Typhoid fever		IOWA.	
Whooping cough	. 33		
DELAWARE.		Diphtheria	21
Diphtheria	. 1	Poliomyelitis.	11
Malaria	. 1	Scarlet fever	13
Measles	. 1	Smallpox	4
Tuberculosis	. 7	Typhoid fever	3
Typhoid fever	. 1	Kansas.	
FLORIDA.			
Diphtheria	15	Cerebrospinal meningitis	1
Malaria	22	Chicken pox	5
Poliomyelitis		Diphtheria	49
Typhoid fever		Dysentery (bacillary)	1
GEORGIA.		German measles	1
Diphtheria	35	Influenza	1
Dysentery (amebic)	1	Malaria	1
Hookworm disease	18	Measles	18
Influenza.	2	Mumps	14
Malaria.	66	Pneumonia	3
Measles.	25	Poliomyelitis	16
Mumps	3	Scarlet fever	42
Paratyphoid fever	7	Smallpox	5
	1	Tuberculosis	39
PellagraPneumonia		Typhoid fever	40
	13 12	Whooping cough	35
Scarlet fever			•
Smallpox	1	LOUISIANA.	
Tuberculosis (pulmonary)	11	Cerebrospinal meningitis	2
Typhoid fever	21	Dengue	40
Typhus fever	2	Diphtheria	17
Whooping cough	1	Leprosy	2
ILLINOIS.		Malaria.	9
Cerebrospinal meningitis—Chicago	1	Measles	4
Diphtheria:		Poliomyelitis	1
Cook County	73	Smallpox	i
Rock Island County	9	Tuberculosis	25
Scattering	42	Typhoid fever	26
Influenza	8	Whooping cough	3
Lethargic encephalitis—Chicago	1		o
Pneumonia	102	MAINE.	
Poliomyelitis:		Chicken pox	1
Adams County	2	Diphtheria	4
Champaign County	1	German measles	1
Cook County	4	Mumps	2
Hancock County	1	Pneumonia	1
McHenry County	i	Scarlet fever	12
Scarlet fever:	- 1	Tuberculosis	5
Cook County	93	Typhoid fever	1
Scattering	33	Whooping cough	15
Zmallnov	57		-
Smallpox	1	MARYLAND.1	_
Typhoid fever:		Chicken pox	7
Cook County	12	Diphtheria	<b>3</b> 0
Madison County	9	Dysentery	9
Peoria County	14	Impetigo contagiosa	2
Scattering	72	Influenza	1
Whooping cough	106	Malaria	8
	•		

<sup>1</sup> Week ended Friday.

MARYLAND—continued.	Cases	MISSOURI—continued.	Cases.
Measles	. 18		. ż
Mumps	, 1		. 1
Ophthalmia neonatorum	. 1	Poliomyelitis	. 1
Paratyphoid fever	. 1	Scarlet fever	. 57
Pneumonia (all forms)	. 19	Smallpox	. 27
Poliomyelitis			. 1
Scarlet fever	20		. 6
Septic sore throat	1	Tuberculosis	33
Smallpox		Typhoid fever	. 28
Tuberculosis	62		62
Typhoid fever	44	MONTANA.	
Whooping cough	36		
MASSACHUSETTS.		Poliomyelitis—Great Falls	1
Anthrax	1	Rocky Mountain spotted fever:	,
Cerebrospinal meningitis	2	Hamilton	1
Chicken pox.	33	Missoula.	1
Conjunctivitis (suppurative)	13	Scarlet fever	7.
Diphtheria	127	Smallpox.	16
German measles	3	Typhoid fever	3
Hookworm dispase	1	NEW JERSEY.	
Influenza	3	Cerebrospinal meningitis	. 2
Lethargic encephalitis	ა 2	Chicken pox	10
Measles	_	Diphtheria	€O
Mumps	42	Dysentery	. 1
Onbtholmic reconstance	35	Influenza	11
Ophthalmia neonatorum	23	Malaria	1
Pneumonia (lobar)	18	Measlcs	18
Poliomyelitis	11	Pneumonia	24
Tetanus	73	Poliomyelitis	9
	1	Scarlet fever.	27
Trachoma	2	Trachoma	2
Trichinesis (all forms)	1	Typhoid fever	28
Tuberculosis (all forms)	143	Whooping cough	55
Typhoid fever	28	1	00
Whooping cough	110	Conjunctivitis	6
MICHIGAN.		Diphtheria	19
Diphtheria	116	Measles	1
Measles	35	Mumps	1
Pneumonia	31	Pneumonia	3
Scarlet fever	104	Tuberculosis	31
Smallpox	20	Typhoid fever	19
Tuberculosis	40	Whooping cough	7
Typhoid fever	29	NEW YORK.	•
Whooping cough	68		
MINNESOTA.		(Exclusive of New York City.)	
Chicken pox	10	Cerebrospinal meningitis	2
Diphtheria	101	Diphtheria	106
Measles	42	Lethargic encephalitis	1
Pneumonia	3	Influenza	4
Poliomyelitis	4	Measles	119
Scarlet fever	105	Pneumonia	45
Smallpox	5	Poliomyelitis	18
Tuberculosis	67	Scarlet fever	78
Typhoid fever	12	Smallpox	1
Whooping cough	10	Typhoid fever	56
MISSISSIPPI.		Whooping cough	164
Diphtheria	22	NORTH CAROLINA.	
Scarlet fever	33	Chicken pox	9
Typhoid fever	5	Diphtheria	178
	27	German measles	6
MISSOURI.		Measles	79
Chicken pox	7	Scarlet fever	71
Diphtheria	87	Septic sore throat	3
Epidemic sore throat	5	Smallpox	15
Influenza	1	Typhoid fever	<b>52</b>
Measles	20	Whooping cough	218

OREGON. Cases.   VIRGINIA.	Cases.
Chicken pox	
Diphtheria Prince Edward County	1
Measics Poliomyelitis	
Mumps 2 Stafford County	1
1 neumonia.	•••
Scarlet fever: Washington.	1
Portland 9 Chicken pox	3
Scattering 2 Diphtheria	
Smallpox 3 Measles.	
Tuberculosis 12 Mumps	
Typhoid fever	
5 Champox	
SOUTH DAKOTA. Tuberculosis	
Cerebrospinal meningitis 1 Typhoid fever	
Chicken pox 3 Whooping cough	23
Diphtheria 6 WEST VIRGINIA.	
Measies 5 Diphtheria	12
Pollomyelitis Searlet fever	
Scallet level Typhoid favor	
smanpox4	17.5
Tuberculosis. 1 wisconsin.	1
Whooping cough 7 Milwaukce:	•
TEXAS. Chicken pox	
Dengue	13
Diphtheria	
Dysentery	
Paratyphoid fever 7 Poliomyelitis	
Scarlet fever	
Smallpox. 2 Tuberculosis.	
Trachoma 5 Whooping cough	30
Tuberculosis. 29 Scattering: Typhoid fever. 24 Cerebrospinal meningitis.	1
Typhoid fever 24 Cerebrospinal meningitis. Chicken pox.	
75	
Chicken pox4 Measics	
Measles 33 Pneumonia.	
Mumps4 Poliomyelitis	
Poliomyelitis	
Scarlet fever 10 Smallpox	
Smallpox 4 Tuberculosis	22
Typhoid fever 1 Typhoid fever	8
Whooping cough 45 Whooping cough	76
Th	
Reports for Week Ended September 8, 1923.	
DISTRICT OF COLUMBIA. Cases.   NORTH DAKOTA.	Cases.
Diphtheria 2 Chicken pox.	
Influenza	
Measles	
Poliomyelitis	
Smallpox         1         Smallpox           Tuberculosis         21         Trachoma	
Typhoid fever 8 Tuberculosis	
Whooping cough 9 Typhoid fever	
Whening cough	
NEBRASKA. Whooping cough.	
Diphtheria. 17 WYOMING.	
Influenza. 7 Measles	1
Measles 1 Mumps	
Poliomyelitis—Wymore 1 Pneumonia	
Scarlet fever	
Smallpox 1 Tuberculosis	2
Smallpox         1         Tuberculosis           Typhoid fever         3         Typhoid fever	2 5
Smallpox 1 Tuberculosis	2 5

#### 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.	Cerebrospi n.s.l meningitis.	Diphtheria.	Influenzs.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
July, 1923.  Nebraska		28 1 41	32	1	35 95 63		3 1 2	33 7 27	3	24 9 7
Arkansas	3 5 3 10	21 43 419 83 268	31 29 1 15	1,324 139 3 1 8	118 69 357 14 110	54 16	4 2 7 39 43	10 4 363 39 84	5 1 51 5	162 64 106 6 96

#### RECIPROCAL NOTIFICATION, JULY, 1923.

Cases of communicable diseases referred during July, 1923, to other State health departments by departments of health of certain States.

Referred by-	Diph- theria.	Dysen- tery (bacil- lary).	Encepha- litis.	Scarlet fever.	Small- pox.	Tuber- culosis.	Typhoid fever.
Connecticut		1		3		1 8	2
Illinois Massachusetts Minnesota	2		1			4	3
New Jersey New YorkOhio	2			1 1	1		1 3
· · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • • •	•••••		•			• • • • • • • • •

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923.

#### ANTHRAX.

• .	City.	Cases.	Deaths.
California: Stockton		1	

#### CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

#### CEREBROSPINAL MENINGITIS.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre-	ore- Scpt. 1, 1525.		City.	Median for pre- vious	Week ended Sept. 1, 1923.	
•	years.	Cases.	Deaths.		years.	Cases.	Deaths.
Alabama: TuscaloosaCalifornia:	0	1		Montana: Great Falls Missoula	0	i	1
Bakersfield	0	1	i 1	New Jersey: Bayonne Hackensack	0	1 1	
Freeport Kewanee Quincy Indiana:	0	1	i	New YorkOhio: Barberton	0	3	1
Mishawaka  Massachusetts: Braintree New Bedford		······i	1	Cleveland	0	1	
Michigan: Ann Arbor. Detroit Kalamazoo.	0	1 1 1	1 i	Kenosha	0	1	. 1

#### DIPHTHERIA.

See p. 2226; also Current State summaries, p. 2215, and Monthly summaries by States, p. 2219.

#### INFLUENZA.

City.	Week ended Sept.2, 1922.	Week ended Sept.1, 1923.	Deaths, week ended Sept. 1, 1923.	City.	Week ended	Week	Deaths, week ended
Alabamat	ended ended Sept.2, Sept.1		1 1	City.	Sept. 2, 1922.	Sept.1, 1923.	ended Sept.1,
Montgomery Dalifornia: Los Angeles Oakland Connecticut: Fairfield Fforida: Tampa Illinois: Danville Rockford Indiana: Indianapolis Maryland: Baltimore Cumberland Massachusetts: Boston Saugus	1 1	1 1 1 2 2 3	1 1	New Jersey: Newark. Orange. Passic. New York: Middletown. New York. Rome. Ohio: Akron. Cincinnati. Cleveland. Columbus. Pennsylvania: Philadelphia. Pittsburgh. Rhode Island: Providence. Virginia: Richmond.	1 4	3 1 7	3 1 1

#### LEPROSY.

City.	Cases.	Deaths.
California: Los Angeles	1	

### CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

#### LETHARGIC ENCEPHALITIS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California:	3	1	Wisconsin: Milwaukce	1	
Now Jorsey	_			-	
East Orange	2	2			
		MAL	ARIA.		
Alabama:			Kansas:		
Birmingham	4		Topeka	2	
Montgomery	i		Baltimore	1	
Arkaneas:			Massachusetts: Boston		
Little Rock	4		Boston	1	
California:	1		Flint	1	
Los Angeles	3		Morr Torgory	•	••••••
Connecticut:			Newark	1	
New Britain	1	• • • • • • • • • • • • • • • • • • • •	New York: New York	1	
Florida: Tampa	2		Ohio	1	
Conreia	-		Cleveland	1	
Atlanta	1		Tennessee:		, , , , , , , , , , , , , , , , , , , ,
AugustaBrunswick		2	Memphis	20	
Macon	7	• • • • • • • • • • • • • • • • • • • •	Texas: Dallas	1	
Illinois:	•	•••••	Houston		·····i
Chicago	1				_
Iowa:	-				
Sioux City	1				

#### MEASLES.

See p. 2226; also Current State summaries, p. 2215, and Monthly summaries by States, p. 2219.

#### PELLAGRA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama: Birmingham Georgia: Atlanta North Carolina: Winston-Salem		1 3 1	South Carolina: Charleston Columbia Texas: Ft. Worth Houston	1	2 2 1 1

#### PNEUMONIA (ALL FORMS).

				1	1
Alabama:			District of Columbia:		
Birmingham	8	4	Washington	.	6
Mobile	]	2	Georgia:		
Montgomery		1	Atlanta		5
Arkansas:	Ì		Augusta		2
Little Rock	1		Savannah		3
California:		1	Illinois:	i	i
Long Beach		1	Aurora		1
Los Angeles		14	Chicago		27
Oakland	3	2	Cicero		1
Sacramento		2	Decatur	.'	1
San Bernardino		1	East St. Louis		4
San Diego		2	Jacksonville		1
San Francisco		4	Oak Park	1	
Santa Barbara		3	Indiana:		
Stockton		1	East Chicago		4
Colorado:		l l	Fort Wayne		2
Denver		1	Frankfort		1
Connecticut:			Gary		4
New Britain	2	1	Hammond		1
New Haven		3	Indianapolis		
New London		1	La Fayette		1
Waterbury		3	Terre Haute		1

### CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1928-Continued.

#### PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Kansas:			New Jersey—Continued.		
Kansas City	8	l	Passaic		1 ,
Wichita.		i	Plainfield		1 1
Kentucky:			Trenten.		1 1
Covington		1	New York:		1 -
Louisville		3	Albany		I
Louisiana:		•	Amsterdam	ľ	
New Orleans	6	1	Buffalo	و ا	
Maina:	U		Cohoes		l i
Portland		1 1	Glens Falls		1 1
Marvland:	• • • • • • • • • • • • • • • • • • • •	1			,
Baltimore	18	11	Ithaca	1 2	·····
baiumore	10		Lackawanna	2	1
Cumberland	· • • • • • • • • • • • • • • • • • • •	] 1	New York.	84	64
Massachusetts:		i _	Newburgh		1
Boston		7	Niagara Falls. North Tonawanda	2	
Cambridge	1		North Tonawanda		1
Chelsea	1		Rochester	7	3
Chicopee		1	Saratoga Springs		1
Clinton		1	Syracuse		3
Fall River		2	Troy. Watertown.	4	2
TT 1./11		1	Watertown		1 1
Halwoko		i	Yonkers.	1	l
New Bedford		3	North Carolina:	-:	
Newton		, ,	Winston-Salem.		2
Dittefield	•	i	Ohio:		-
Colem	•••••	l i	Akron	4	
Southbridge		i	Cincippeti	*	Ω
			Cincinnati	********	6
Woburn		1	Cleveland	10	
Worcester	• • • • • • • • • • • •	2	Columbus		2
Michigan:	_		DaytonFindlay	10	
Ann Arbor	2	1	Findlay		1
Ann ArborBenton Harbor	. <b></b>	1	Mansfield	1,	
Detroit .	33	15	Springfield		2
FlintGrand RapidsHighland Park	1		Toledo		· 2
Grand Rapids		1	Youngstown		1
Highland Park		1	Oregon:		
Jackson		1	Oregon: Portland		3
Kalamazoo		1	Pennsvivania:		_
Pontiac	1		Philadelphia Pittsburgh	33	14
finnesota:	-	•••••	Pittshurgh		15
Minneapolis		2	Rhode Island:		
St. Paul		4	Providence		- 2
fissouri:	•••••	*	South Carolina:		2
Kansas City		5	Charleston	1	1
St Iosoph	• • • • • • • • • • •	2	Columbia		2
St. Joseph		Z			4
			Tennessee:	1	
Helena		1	Memphis Nashville.		. 6
Missoula	2	. 1	_ Nashville		2
Nebraska:		**.	Texas:	Ī	
Omaha		8	Beaumont		1
New Hampshire:			Galveston		- 1
New Hampshire: Manchester	l	1	San Antonio		: 4
Nashua.		2	Utah:		
lew Jersey:		- 1	Salt Lake City		1
Atlantic City		1	Virginia:		-
Camden		3	Norfolk	i	2
East Orange.		•			-
Harrison.	il	•••••	Wisconsin: Milwaukee	2	
	- 1	3	Dooing	- 2	••••••
Hoboken			Racine	• • • • • • • • • • • • •	
Newark Orange	21	3	Sheboygan		1

### CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

#### POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

C ty.	Median for pre-			City.	Median for pre-	Week ended Sept. 1, 1923.	
	vious years.	Cases.	Deaths.		vious years.	Cases.	Deaths
California: Bakorsfield. Connecticut: Greenwich Meriden. New Haven. Waterbury. Illinois: Chicago. Indiana: Indianapolis: Kansas: Topeka: Louisiana: New Orleans Massachusetts: Boston. Fall River Haverhill Hojvoke Medford Michigan: Detroit. Detroit.	0 0 0 0 0 0 0 0	1 1 1 1 1 1 9 1 4 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Nebraska: Omaha. New Hampshire: Dover New Jersey: Atlantic City Bayonne Clifton Hoboken Newark Orange West Hoboken New York: New York: New York: New Yorks Pennsylvania: Pittsburgh Vermont: Burlington Virginia: Richmond Wisconsin:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 1 1 2 1 1 1 37 1 1 1 1	2 2
St. Paul	0	1	1	Milwaukee	0	1	••••••

#### RABIES IN ANIMALS.

City.	Cases.	City.	Cases.
California: Lo3 Angeles. Kentucky: Louisville. Massachusetts: Arlington.	10 2 3	New Mexico: Albuquerque Tennessee: Memphis. Texas: Dallas.	1 1 3

#### SCARLET FEVER.

See p. 2226; also Current State summaries, p. 2215, and Monthly summaries by States, p. 2219.

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

#### SMALLPOX.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre-	pre-		City.	Median for pre-	Week ended Sept. 1, 1923.	
	vious years.	Cases.	Deaths.		years.	Cases.	Deaths.
Alabama: Mobile	0	3		Missouri: St. Louis Montana:	0	1	
Long Beach	0	2		Missoula	0	1	
Los Angeles	1	2		New York:		_	
Pasadena	0	1		Niagara Falls	0	1	
District of Columbia: Washington Georgia:	0	3		North Carolina: Winston-Salem Oregon:	0	1	
Atlanta	1	2		Portland	1	7	
Minois:	_			Tennessee:			
Springfield	0	1		Knoxville	0	1	
Indiana:				Virginia:	_	_	
Gary	0	1		Roanoke	0	1	
Huntington	0	1		Washington:			
Michigan:			1	Aberdeen	0	1	
Detroit	1	6		Spokane	0	1	
Grand Rapids	0	8		Walla Walla	1	1	
Holland	0	1		Wisconsin		7	l
Minnesota:	۱ ،	١.	Į.	Superior	0	7	
Duluth	0	1					ĺ
St. Paul	1	2					

#### TETANUS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California: Los Angeles Illinois: Chicago. Michigan: Detroit Montana: Great Falls New Jersey: Union New York: Elmira New York.		1	North Carolina: Raleigh. Ohio: Findlay. Salem. Tennessec: Memphis. Texas: Fort Worth.	1	1

#### TUBERCULOSIS.

See p. 2226; also Current State summaries, p. 2215.

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923-Continued.

#### TYPHOID FEVER.

The column headed "Redian for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre- vious		ended 1, 1923.	City.	Median for pre- vious		ended 1, 1923.
•	years.	Cases.	Deaths.		years.	Cases.	Deaths.
Alabama:				Michigan:			
Birmingham	9	8	1	Detroit	8		2
Dothan	<b></b>	1		H MAR	8	2	
Mobile	1	1 2		Grand Rapids	1	1	
Montgomery Arkansas:	1	-		Kalamazoo Muskegon	1 0	2	1
Little Rock	1 1	3	l	Minnesota:		•	
California:	1	1		Minneapolis	3	. 4	1
Los Angeles	4	4	1	St. Paul	1	5	
San Bernardine	. 0		1	Missouri:	0	. 1	ŀ
San Diego Colorado:	0	1	••••	JoplinSt. Louis	10	10	
Denver	4	6	1	New Hampshire:	10	10	
Trinidad	i	Ĭ		Dover	0	2	
Connecticut:		l	l	H DEBECHERSHELL	Ó		1
Milford	0	1 1		New Jersey:			1
New Haven District of Columbia:	5	7		Englewood	0	2	••••••
Washington	8	4	1	Newark	Õ	i	i
Florida:	ľ	•	•	Trenton.	2	2	î
Tampa	2		1	New Mexico:	_		_
Georgia:				Albuquerque	. 0	1	l
Atlanta	. 3	1	- 3	New York:	_	l -	
Augusta	2	1		Albany	1	2	<b>.</b>
Macon	2	i	•••••	Bullato	6	3	
Rome Savannah	2	î		Elmira	0		1
Illinois:	_	-		Hudson New York	0 <b>64</b>	1 51	
Chicago	9	10	1	Newburgh	0	1	·
Decatur	0	1		Newburgh. Niagara Falls	ŏ	î	
East St. Louis Jacksonville	0	7 5	2		1	. 4	
Kewanee	3	3	i	Schenectady Syracuse. Watertown	0	2	
Peoria	ŏ	3	ī	Syracuse	4	3	
Springfield	0	1		Yonkers	ŏ	i	
ndiana:				North Carolina:		•	
Fort Wayne	0	14	1	Durham	4	2	
Indianapolis Mishawaka	6	1	1	Raleigh	. ā		i
owa:	١	•		Winston-Salem	2	4	
Ottumwa	0	1		Ohio:			}
Kansas:				Akron	2	2	
Coffeyville	1	1		Bellaire	2	4	1
Kansas City Parsons	1 0	2	••••••	Cincinnati	. 8	6	
Topeka.	3	i		Cleveland East Cleveland	ŏ	ĭ	
Wichita	2	2		Kenmore	0	1	
Centucky:	_		l	Mansfield	1	1	
Covington	0	2		New Philadelphia	0	1	·····i
Louisville	6	3		Norwood Toledo	. 7	2	i
ouisiana:	•	- 1		Youngstown	2	ĩ	î
New Orleans	3	3		Youngstown Zanesville	ō	2	
faine:	- 1			Oklahoma:	1		
Bangor	0	1		Tulsa	2	9	
Portland	3	4		Oregon:	1	l	
faryland: Baltimore	17	7		Portland	1	2	
Frederick	"	2		Pennsylvania:	ı		
(assachusetts:				Altoona	0	1	
Boston.	6	3		Bethlehem	1	2	<b>-</b>
Everett	0	1		Braddock	0	1	••••••
Fall River	5	2		BristoiButler	8	3	•••••••
Haverhill	0	1		Harrisburg.	2	2	
Medferd New Bedford	0	1	••••••	Harrisburg Philadelphia	24	10	
Newburyport	ŏ	i		Pittsburgh	6	4	••••••
Newburyport North Adams	ŏ	i		Uniontown	0	1	<del>.</del>
Quincy	0	2		South Carolina:	i	!	
Salem	0			Charleston	4		
Somerville	0	1 }	1	Columbia	2	1	

## CITY REPORTS FOR WEEK ENDED SEPTEMBER 1, 1923—Continued.

#### TYPHOID FEVER—Continued.

City.	Median for pre-		ended 1, 1923.	City.	Median for pre-		ended 1, 1923.
· · · · · · · · · · · · · · · · · · ·	vious years.	Cases.	Deaths.	<b>0,</b>	vious years.	Cases.	Deaths
Tennessee:     Memphis     Nashville.  Texas:     Dallas     Ft. Worth Houston Utah:     Provo Salt Lake City Virginia:     Lynchburg Norfolk Portsmouth Richmond	3 1 1	. 22 1 3 2 2 2 1 2 1 2	1 1 1 	Washington: Everett Seattle Tacoma Vancouver Walla Walla Yakima West Virginia: Bluefield Charleston Huntington Martinsburg Wisconsin: Milwaukee Wausau West Allis	0 3 0 0 1 0 1 2 0 1	7 3 3 1 1 1 1 1 2 1 3 3 2 2 2 1	1

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

	Popula-	Total deaths	Diph	theria.	Mea	sles.		rlet /er.		ber- osis.
City.	tion Jan. 1, 1920.	from all causes.	Cases.	Deaths.	Cases.	Desths.	Cases.	Deaths.	Cases.	Deaths.
Alabama: Birmingham Dothan Mobile Montgomery Tuscaloosa California: Alameda Bakersfield Eureka Glendale Long Beach Los Angeles Oakland Pasadona Richmond Riverside Sacramento San Bernardino San Diego San Fra cisco Santa Ana Santa Barbara Santa Cruz Stockton Vallejo Colorado:	178, 806 10, 034 60, 777 43, 464 11, 996 28, 638 12, 923 13, 536 55, 593 576, 673 216, 261 45, 354 16, 843 19, 341 65, 908 18, 721 74, 683 506, 676 15, 485 19, 441 10, 917 40, 296 21, 107	51 13 18 18 6 9 9 2 6 6 20 179 33 3 3 13 12 20 134 4 6 6 3 8	1 1 6 5 29 13 2 1 1 2 1	1 2	11 3 108	1	3 1 3 8 1	1	1 51 51 2 2 18	3 3 20 1 1 10 1
Colorado: Denver Greeley Pueblo. Trinidad Connecticut: Bridgeport. Danbury (town) Fairfield (town). Greenwich (town). Hartford Manchester (town) Meriden (city) Millord (town). New Britain New Haven New London Waterbury District of Columbia: Washington.	256, 491 10, 958 43, 050 10, 906 143, 555 22, 325 11, 475 22, 123 138, 036 18, 370 29, 867 10, 193 59, 316 162, 537 25, 638 91, 715	67 6 4 1 19 6 1 1 2 2 24 1 12 24 8 14 108	29 10 1 2 3 3 1 4	1	1 1 1 1 1 2 2		1 1 3 3 1 1 1 4		3 2 1	3 1 1 1 2 3

	Popula-	Total deaths	1 -	htheria	Ме	asles.		arlet ver.		ber- losis.
City.	tion Jan. 1, 1920.	from all causes.		Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Florida:										
St. Petersburg	14, 237 51, 608	5 19		-	·	.			2	1
TampaGeorgia:	31,000	19		1					-	1
Albany	11,555		· · · · · <del>,</del>		.	·····2			. 1	ļ <u>.</u>
AtlantaAugusta	200, 616 52, 548	63 18	l'	1	i		4		5	5
Macon	52, 548 52, 995 13, 252								4	ļ <u>.</u>
Rome. Savannah	13, 252 83, 252	17			. 3					3
Idaho:	co, 2.a.	"		1				ļ		l °
Boise	21,393	6	ļ <b>.</b>		. 1					
Illinois: Aurora	36, 397	7	1	1	9	1 1		1	1	
Bloomington	28, 725	3	Ī	1			1	1		
Centralia. Chicago.	12, 491 2, 701, 705	7	51			i	45.			
Cicero	44, 995	506 3	31	3	14	1	15	1	184	33
Decatur	43, 818	7	2		<b> </b>		2			2
East St. Louis	66, 767 27, 454	17	3	J					2	1
Evansten	<b>87</b> , 234	4	i						2	
Forest Park	10, 768		2							
Freeport Galesburg	19,669 23,834	5 8					3			
Jackson ville	15, 713	11								
Kewanee	16, 026	6								
Oak ParkPekin	39, 858 12, 086	10					2			• • • • • •
Peoria	76, 121	24	1				8	i		
Quincy	35, 978	14	;-				;.			1
Rockford	85, 177 65, 651	1 15	1		1		1			•••••
Springfield	59, 183	16							1	····i
ndians: Anderson	29, 767	5		1			1			
Bioomington.	11, 595	4					····i			
Crawfordsville	10, 139	3								
East Chicago.	35, 967 10, 790	11		1						
Fort Wayne	86, 549	19	3				····i			
Frankfort	11,585	5			1					
Gary	55,378 36,004	12 11	1			•••••		•••••		1
Huntington	14,000	7	i				1			<u>.</u>
Indianapolis	314, 194	92	2		2		1		4	7
La Fayette.	30, 037 22, 486	6		1					2	· · · · · ·
Logansport	21,626	5								
Michigan City	19,457 15,195	11	• • • • • •	i			····i			<b></b>
Muncie	36, 524	9								
Newcastle	14, 458	2	2							
South Bend Terre Haute	70, 983 66, 083	15 17	2 2				2	1		2
owa:			-				- 1			• • • • •
Burlington. Cedar Rapids.	24, 057 45, 566	6	i	···· <sub>i</sub> ·;						· · · · · ·
Dubuque	39, 141			ì			1			
Iowa City	11, 267		1				1			
Muscatine Sioux City	16, 068 71, 227	5	3		1 4		••••		1	· · · · · ·
Waterloo.	36, 230		2				i			
Cansas:	ł						- 1			
Coffeyville	13, 452 10, 693	2								•••••
Hutchinson	23, 298 .				1		i .			
Kansas CityLeavenworth	101, 177 ].		2 2		4		9 .		5 .	· · · · · ·
Topeka	16, 912 50, 022	5 16	2		1 5		i		1 .	
Wichita	72, 217	25	4				i		î i	i
Centucky: Covington	57, 121	8	- 1	.	1				1	~
Henderson	12, 169	4							] .	
Louisville	234, 891	70	1		1 ].	٠ا	1  .		17	3

	Popula-	Total deaths	Diph	theria.	Mes	ısles.		rlet ver.		ber- osis.
City.	tion Jan. 1, 1920.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Louisiana: New Orleans	387, 219	131	11				1		21	14
Maine: Auburn	16, 985	5		l			l	l	1	l
Bath	14, 731	2								
Biddeford Lewiston	18,008 31,791 69,272	5 7	2		1 2				2	
Portland	69, 272	11	ļ <u>-</u> .		J			ļ	ļ <u>.</u> .	i
Portland. Sanford (town) Waterville	10, 691 13, 351	1			10	·····		[		
Maryland:	,				l					
BaltimoreCumberland	733, 826 29, 837	169 7	19		26 1	1	16		44	22
Frederick	11,066	3					<u> </u>		l	
Massachusetts: Amesbury (town)	10, 036	2	1	1				l		
Arlington (town)	18, 665	4								l····i
Attleboro	19, 731	2								
Belmont (town) Beverly	10, 749 22, 561	1 3	····i			• • • • • •	····i			
Boston	748, 060	178	59	5	11	1	10		32	10
Braintree (town) Brookline	10, 580 37, 748	1 5				•••••	•••••	•••••	•••••	
Cambridge	37, 748 109, 694	19	2	1	3				1	
Chelsea	43, 184 36, 214	12 5			1	•••••	i		1	1
Clinton	12,919	2	i							
Danvers	11, 108	<u>2</u>	1	····i		• • • • • •	•••••			
Everett	10, 792 40, 120	7	····i		2				i	
Fall RiverFramingham	120, 485	28	4 1	1		•••••	•••••	•••••	4	2
Gardner	17,033 16,971	5 2					•••••	•••••	····i	• • • • •
Greenfield	15, 462	1								
Haverhill Holyoke	53, 884 60, 203	11 13	1 1		3		1	•••••	1 2	•••••
Lawrence	94, 270	14			i				2 3	2
Leominster Lynn	19,744 99,148	18	····i			•••••	• • • • • •	•••••	···i	····i
Malden	49, 103	9					····i		3	i
MedfordMelrose	39,038 18,204	5 2	2		····i	•••••	•••••	•••••	2 2	·······
Methuen New Bedford	15, 189	3	····i							i
New Bedford	121, 217	28 1	6				1		1	5 1
Newburyport Newton North Adams	15,618 46,054	2	····i						····i	
North Adams	22, 282 41, 763	4				•••••				1
PittsfieldPlymouth	13,045	12 2	3				1		2	2
Quincy	47,876	12	2						i	•••••
SalemSomerville	42, 529 93, 091	1 16	9				5 4		····i	•••••
SouthbridgeSpringfield	14, 245	3	2							••••••
Taunton	129,614 37,137	24 11		• • • • • •	-	•••••	•••••	•••••	4	2 1
Wakefield	13, 025	2							i	····•
Waltham Watertown	30, 915 21, 457	8.	3	•••••	-		····i	•••••	····i	· · · • •
Westfield	18,604	1 2 2			:		1		1	• • • • •
Weymouth	15, 057 15, 455	2 2		-	• • • • •   •			····-		• • • • •
Woburn	16 574	2								
Worcester	179, 754		5				7		9	2
Michigan: Alpena	11, 101			1						
Ann Arbor	19,516	16	```i` .		i ].		2			
Battle Creek Benton Harbor	11, 101 19, 516 36, 164 12, 233 993, 678 91, 599	1 2	1	1 .			2			•••••
Detroit	993, 678	210	33	3	8 .		17		69	19
FlintGrand Rapids	91, 599 137, 634	26 27	6 2		3 .		- 1		19 .	<u>ż</u>
Hamtramck	48,010	· 6	5 .	:::::].			13 3 3		4	1
Highland Park	46, 499 12, 183	12	1 2	-			3 .			•••••
Jackson	48,374	ii	í l	-	-		٠ ا ـ			····i

<u>.</u>	Popula-	Total deaths	1 -	theria.	Mea	sles.		arlet ver.		ber- losis.
City.	tion Jan. 1, 1920.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Michigan—Continued.  Kalamazoo	48, 487	14	2	1			. 3		1	2
Muskegon	48, 487 36, 570 34, 273	9	·				1			·
Pontiac Port Huron	25,944	14 7	2		····i		3	<b>!</b>		. 2
Soult Ste. Marie	12,096	2	1	J	l		1	1		
Minnesota:	1 1	١					1	1	1	
Duluth	98,917 15,089	14	3		2		6			
Minneapolis.	380, 582	65	12	i			18		20	i
Rochester	13,722	17	l	ļ					1	ī
St. Cloud		<u></u> -	·				1			
St, Paul Virginia	234,698 14,022	57	13	1	1		12		. 6	4
Winena	19,143	4	1	1			1 1	1		1
Missouri:	1	1 -	1		1		1	1	1	1
Independence	11,686		1	ļ				<b></b> -	·	
Kansas City St. Joseph	324, 410 77, 939	70 23	10	1	ļ <b>-</b>	1	6		. 3	1
St. Louis.	772, 897	179	15	i	····i		13	1	25	12
Springfield	39,631	14			<u>.</u>		ļ			
Montana:	11 660	2	1		1	1	l	1	i	1
Ansconds. Billings	11,668 15,100	6		•••••	• • • • • •					
Great Falls.	24, 121	8	4	i				]	3	
Helena.	12,037	1								
Missoula Nebraska:	12,668	10			1					] <b>-</b>
Lincoln	54,948	6						1	1	1
Omaha	191,601	38	6	i	i		2	1	1	
Nevada:	1		ł	1 1					1	
Reno	12,016	5	<b>-</b>							
Concord	22 167	6	1	1 1			2	1 :	١.	
Dover	13,029	ĭ	1							
Keene	22, 167 13, 029 11, 210 78, 384	1	<u>.</u> .		21					
Manchester Nashua	78,384	18 10	2							1
New Jersey:	28,379	10				•••••			]	
Asbury Park	12,400	4	l							
Atlantic City	50,707	11	2							1
Bayonne Bloomfield	76, 754 22, 019	i	1			• • • • • •	;-		2	· · · · · •
Camden.	116,309	18			i	•••••	1			2
Clifton	<b>26,47</b> 0	ŏ	i							
East Orange	50,710	11							2	
Englewood. Garfield.	11,627 19,381	3	·····ż		•••••				····i	<b>-</b>
Hackensack.	17, 667	3								
Harrison	15, 721								1	
Hoboken	68, 166	13					:			· · · · · ;
Kearny Morristown	26, 724 12, 548	5 5	1		• • • • • • •		1			1
Newark	414, 524	84	3		9		3		10	7
Orange	414, 524 33, 268	7	1						1	1
Passaic Paterson	63,841	6	6 5				2		3	
Phillipsburg	135, 875 16, 923	10	3				- 1		3	
Plainfield	27,700	7			i					
Summit	10, 174	1								
Trenton Union (town)	119, 289 20, 651	38	7			• • • • • •	2		2	4
West Hoboken.	40,074	2							1	
West New York	29, 926	5							î	
West Orange	15, 573	3		-						
ew Mexico: Albuquerque	15 157	8	2	1	1	-	1		2	e
ew York:	15, 157	٥١	-	1	1		1		2	5
Albany	113, 344	<b></b> l	9	1.			,		6	<b>.</b>
Amsterdam	33, 524	4	1	; . ] .			<u>.</u> . .	]	.3	•
BuffaloCohoes	22 987	111	3	1	3	•••••	1	• • • • • •	19	5
Elmira	113, 344 33, 524 506, 775 22, 987 45, 393	15			9		2			
Geneva	14,648	3		] .	1		1			

	Popula-	Total deaths	1 -	ntheria	Me	sles.		arlet ver.		ber-
City.	tion Jan. 1, 1920.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New York-Continued.		1				ł		l		ŀ
Glens Falls	16,638	5		.					·	·
Hornell	15, 025 11, 745	. 4							2	
Ithaca	17,004	3							. 1	1
LackawannaLockport	17, 918 21, 308	5	1		6		1		1	
Middletown	18, 420 42, 726 5, 620, 048		i		<u>.</u>				i	
Mount VernonNew York	42,726 5 620 048	1,089	60	4	37		17		1 179	1 1 1 1 1 1 1 1 1 1 1
Newburgh	30, 366 50, 760	1,005		.						- 50
Niagara Falls North Tonawanda	50, 760	15 2		.					1	1
Olean	15, 482 20, 506	5		: ::::::		 	3	 		1
Peekskill	15,868	3	1				i			
PlattsburgRochester	10, 909 295, 750	2 59	7	····i			·····			2
Rome	26,341	11	ļ		6					ļ <b>.</b>
Saratoga Springs	13, 181	5	1				ļ			
Schenectady	88, 723 171, 717	19 43	4	1	3	1	8		3	1
Troy	72, 013	23	1		5				2	
WatertownYonkers.	31, 285 100, 176	11 6	5		····i		1 2		1	
North Carolina:	100, 170	۱ °	3	.1	1		2	••••		ļ <b>-</b>
Durham	21,719	1	2		1				2	
Raleigh	24, 418 12, 742	10 2	1			• • • • •	1	• • • • • •		2
Rocky Mount Salisbury	13, 884	3								
Wilmington	33, 372	7	2				2			
Winston-Salem North Dakota:	48, 395	18	1		12		1		• • • • • •	
Fargo	21,961	7	<b></b>							1
Grand Forks	14,010						3			
Akron	208, 435	31	3				7			
Alliance	21,603	1								
Barberton	18,811 15,061	5 3	1			• • • • • •			•••••	. 2
Bucyrus	10, 425	3					2			
Cambridge	13, 104	3								
Canton Chillicothe	87,091 15,831	18 3	1			• • • • • •	1	• • • • • • •		
Cincinnati	401, 247	101	14	i	9		5		21	6
Cleveland	796, 841	162	23	3	8		13		23	. 18
Cleveland Heights	15, 236 237, 031	67	5		1		1 3		7	5
Dayton. East Cleveland.	152,559 27,292 11,237	37	7				7		1	
East Cleveland	27, 292	4	1				1	• • • • • •	1	1
East Youngstown Findlay.	17,021	9							•••••	
FindlayFremont	12,468	3						!		
Hamilton. Lancaster.	39,675 14,706	7 5	• • • • • •						1	1
Lima	41.326	8	····2							
Mansfield	27,824	6								
Martins Ferry	11,634 23,594	3 4	····i							
Niles.	13,030	3	î		•••••					i
Norwood	24,966	4								•••••
Piqua. Salem.	15,014 10,305	3 4	•••••		• • • • • • •					
Sandusky	10,305 22,897	11								· · · · · ·
SpringfieldSteubenville		8 3 2	····i		1		2			· · · · •
Tiffin	28, 508 14, 375 243, 161 132, 358						$\mathbf{i}$			
Toledo	243, 161	60	8	3 2	4		5		6	3
YoungstownZanesville.	132,358 29,569	39 12	64	2	21	1	14	1		4
Okłahoma:	1									• • • • • •
Tulsa	72,075		3							· · · · •
Oregon: Portland	258, 288	59	3	1	2		2		8	1
. D. 1	,,		٠.	- '					٠,	-

<sup>&</sup>lt;sup>1</sup> Pulmonary only.

	Popula-	Total deaths	Dipl	theria	Ме	asles.	Sc. fe	arlet ver.	Tu	ber- osis.
City.	tion Jan. 1, 1920.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Pennsylvania:										
Allentown	73,502		. 1						. 1	
Altoona	60,331			• ••••			2		. 1	<b>-</b>
BerwickBethlehem.	12, 181 50, 358		3				1		2	
Braddock	20,879						1		l î	•
Carbondale	18,640		2				1		ļ <u>.</u>	
Carrick	10,504						1			
Charleroi	11,516 58,030		1				3			
Chester	14, 131							1	1	
Duquesne	19,011		i	1	1				l	
Erie	93,372			.	<b>}</b>				7	
Harrisburg.	75,917		1 2			···			2	
Johnstown	10,627 67,327	• • • • • • • •	1			1	1		2	
Lancaster	53, 150				i		2			
McKeos Rocks	16,713			J		· · · · · ·	2			
McKeesport	46,781								1	
Monessen	18, 179 17, 460		2						····i	<b>-</b>
Naw Castle	17,4 <b>69</b> 44,938			1			2			
North Braddock	14.928		1							
OffCity	21,274						1			
Philadelphia	1.823.779	368 131	32 28	2 2	7		18	····i	43	32 8
PittsburghPlymouth	588, 343 16, 500	191	2		′ ′		13			•
Sharon	21,747						1			
Uniontown	15,692	·····					2			
Wilkinsburg	24,403		1				2			
Williamsport	36, 198 12, 495		1 1		3				• • • • • •	•••••
York.	47,512		i						i	
Rhode Island:									_	
Newport	30, 255	4	8							•••••
Pawtucket	64, 218 237, 595	12 61	1 8	1	·····2		3		• • • • • •	5
South Carolina:	ı	01			-		١			J
Charleston	67, 957	23					1			
Columbia	37,524	18			5			• • • • • •	3	1
Greenville	23, 127	6	•••••	• • • • • • •			• • • • • • •		• • • • • •	1
Sioux Falls	25, 202	7								<b>-</b>
Tennessee:	•	1								
Chattanooga	57, 895 77, 818		5							•••••
Knox ville	162, 351	60	1 2		2 2		3		3 6	3
Nashville	118, 342	41	1		2		2		4	3
Texas:	1	- 1					-		- 1	
Amarillo	15, 494	5	1							i
Beaumont	40, 422 10, 522	7 3	• • • • • • • •							1
Dallas	158, 976	36	2						4	·····2
Fort Worth	106, 482 44, 255	26	2		1				1	1
Galveston	44, 255	11	ا-ي						• • • • •	
Houston	138, 276 10, 050	27 24	2				3		• • • • • •	3 14
San Angelo	161,379	36	4		2		1			iô
W &CO	38, 500	3								
Utah:	10 202		1		- 1		- 1	İ		
Provo	10, 303 118, 110	22	2		2		2			····i
Vermont:	110,110		-		- 1		- 1			•
Burlington	22, 779	10								<b></b>
Virginia:	10 000	اما	l	1	-		- 1	l	- 4	
Alexandria	18,060 30,070	6	•••••		2				····i	· · · · · ·
Norfolk	115, 777 ].		2	i	2				2	2
Petersburg	31,012	13	2		ī		2			ī
Portsmouth	54, 387	17 ].			ا-ن		1		4	6
Richmond	171,667 50,842	37	5		2		3		•	0
200m/m/	00,012	0 1	0 1			1	± 1.			

Washington: Bellingham Seattle Spokane Tacoma. Yakima. West Virginia: Bluefield. Charleston Clarksburg. Fairmont Huntington. Parkersburg Wheeling. Wisconsin: Appleton. Ashland. Beloit. Eau Claire	25, 585 315, 312 104, 437 96, 965 18, 539 15, 282 39, 608 27, 889 17, 881 50, 177 20, 050	from all causes.	1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Deaths.	Cases.	Deaths.	Cases.	Deaths.	18	Deaths.
Bellingham Seattle Spokane Tacoma Yakima West Virginia: Bluefield Charleston Clarksburg Fairmont Huntington Parkersburg Wheeling Wisconsin: Appleton Ashland Beloit Eau Claire	315, 312 104, 437 96, 965 18, 539 15, 282 39, 608 27, 869 17, 851 50, 177	4 19	1 2 1		2		2 8 2			· · · · · · · · · · · · · · · · · · ·
Bellingham Seattle Spokane Tacoma Yakima West Virginia: Bluefield Charleston Clarksburg Fairmont Huntington Parkersburg Wheeling Wisconsin: Appleton Ashland Beloit Eau Claire	315, 312 104, 437 96, 965 18, 539 15, 282 39, 608 27, 869 17, 851 50, 177	4 19	1 2 1		2		2 8 2			1
Seattle Spokane Tacoma Yakima. West Virginia: Bluefield Charleston Clarksburg Fairmont Huntington Parkersburg Wheeling Wisconsin: Appleton Ashland Beloit Eau Claire	315, 312 104, 437 96, 965 18, 539 15, 282 39, 608 27, 869 17, 851 50, 177	4 19	1 2 1		2		2 8 2			1
Spokane Tacoma Yakima. West Virginia: Bluefield. Charleston Clarksburg. Fairmont Huntington. Parkersburg. Wheeling. Wisconsin: Appleton. Ashland. Beloit. Eau Claire	104, 437 96, 965 18, 539 15, 282 39, 608 27, 869 17, 851 50, 177	4 19	1 2		2		2 8 2			i
Tacoma Yakima West Virginia: Bluefield Charleston Clarksburg Fairmont Huntington Parkersburg Wheeling Wisconsin: Appleton Ashland Beloit Eau Claire	96, 965 18, 539 15, 282 39, 608 27, 869 17, 851 50, 177	4 19	2 1				8 2		·····i	i
Yakima. West Virginia: Bluefield. Charleston Clarksburg Fairmont Huntington Parkersburg Wheeling Wisconsin: Appleton Ashland Beloit. Eau Claire	18,539 15,282 39,608 27,869 17,851 50,177	4 19	2 1				2		1	i
West Virginia: Bluefield. Charleston Clarksburg. Fairmont. Huntington. Parkersburg. Wheeling. Wisconsin: Appleton. Ashland. Beloit. Eau Claire	15, 292 39, 608 27, 869 17, 851 50, 177	4 19	i						<b>.</b>	i
Bluefield Charleston Clarksburg Fairmont Huntington Parkersburg Wheeling Wisconsin: Appleton Ashland Beloit Eau Claire	39,608 27,869 17,851 50,177	4 19	<del>.</del> .		2				i	i
Charleston Clarksburg Fairmont Huntington Parkersburg Wheeling Wisconsin: Appleton Ashland Beloit. Eau Claire	39,608 27,869 17,851 50,177	4 19	<del>.</del> .		2 				ĭ	····i
Clarksburg Fairmout Huntington Parkersburg Wheeling Wisconsin: Appleton Ashland Beloit Eau Claire	27, 869 17, 851 50, 177	19	<del>.</del> .		2				1	1
Fairmont. Huntington. Parkersburg. Wheeling. Wisconsin: Appleton. Ashland Beloit. Eau Claire	17, 851 50, 177	19	i		•••••		1			•
Huntington. Parkersburg. Wheeling. Wisconsin: Appleton. Ashland. Beloit. Eau Claire	50, 177		1							•••••
Parkersburg			1 1							
Wheeling	20 050					1	1			
Wisconsin: Appleton Ashland Beloit Eau Claire		5								
Wisconsin: Appleton Ashland Beloit Eau Claire	<b>56, 208</b>	15		ll			4	1	1	1
Aŝĥland Beloit Eau Claire	•	l								i
Aŝĥland Beloit Eau Claire	19, 561	2			1					
BeloitEau Claire	11,334						1			
Eau Claire	21, 284	6	1							
Dou Olulio	20, 906				····i		i			•••••
Fond du Lac	23, 427	4	•••••		- 1		- 1			•••••
Green Bay	31,017	-	3				3	•••••••		•••••
Janesville	18, 293	2	۰	•••••			2	•••••	•••••	•••••
Kenosha	40, 472	5	····i		····i	•••••	í		5	•••••
Madison	38, 378	6	*	•••••	- 1		- 1	•••••	î	•••••
Madison		יס				•••••	•••••	• • • • • •	1	1
Manitowoc	17, 563		••••						1	•••••
Marinette	13,610		2		•••••					•••••
Milwaukee	457, 147		17	2	2		7	1	20	7
Oshkosh	33, 162	8			1		1			1
Racine	58, 593	15					1		3	• • • • •
Sheboygan	30, 955	8	2				2			
Stevens Point	11,371						1			
Superior	39,671	7					1 .			
Wansau	18,661		1				ī			
West Allis	13,745						ī l			

### FOREIGN AND INSULAR.

#### BRAZIL.

#### Yellow Fever-Bahia.

A death from yellow fever was reported at Bahia, Brazil, during the week ended August 4, 1923.

#### CHILE.

#### Influenza Epidemic-Typhus Fever-Valparaiso.

Under date of August 21, 1923, epidemic influenza was reported still prevalent at Valparaiso.<sup>1</sup>

During the week ended August 18, 82 cases of typhus fever were reported present in Valparaiso, with 17 deaths.

Unofficial estimates received under date of August 14, 1923, show approximately 60 cases of smallpox present at Valparaiso, Chile, on that date, and 200 cases of typhus fever in Valparaiso and vicinity.

## Mortality-Concepcion-July, 1923.

During the month of July, 1923, 402 deaths (including 26 still births); of which 121 were in children under 1 year of age, were reported at Concepcion, Chile. Certain causes of death were stated as follows: Cancer, 5 deaths; croup, 4; influenza, 78; meningitis, 2; pneumonia, 109; bronchopneumonia, 24; smallpox, 1; tuberculosis, 22; typhoid fever, 1. (Population, officially estimated, 64,512.)

#### CUBA.

#### Communicable Diseases.

Communicable diseases have been reported in Cuba as follows:

#### Habana.

	August 2	1-31, 1923.	Remaining
	New cases.	Deaths.	treatment Aug. 31, 1923.
Chicken pox.			2
Diphtheria. Leprosy.	1		1 -1 14
Malaria.	45		241
Measles. Paratyphoid fever.	2		0 3
Scarlet lever Typhoid lever	18	1	. 1 2 3 3 3
		_	••

<sup>1</sup> From abroad, 1.

<sup>2</sup> From the interior, 22.

<sup>3</sup> From the interior, 15.

<sup>&</sup>lt;sup>1</sup> Public Health Reports, Sept. 7, 1923, p. 2165, and Sept. 14, 1923, p. 2188.

#### Provinces.

			New ca	ses reporte	d July 11-	20, 1923.		
Disease.	Chicken pox.	Diph- theria.	Infantile paralysis.		Measles.	Para- typhoid fever.	Scarlet fever.	Typhoid fever.
Camaguey Habana Matanzas	2 1	1 6		42 59	4	14	1	19 27 18
Oriente. Pinar del Rio Santa Clara	12 1	3	· 1	56 7 2		3 2		35 9 12
Total	16	10	1	166	. 4	19	1	120

#### ECUADOR.

#### Plague -- August 1-15, 1923.

During the period from August 1 to 15, 1923, plague was reported in Ecuador as follows: *Guamote*, country district, 9 cases with 2 deaths; *Santa Ana* (Manabi), 4 cases.

#### Plague-Infected Rats-Guayaquil.

During the same period, out of 4,150 rats examined at Guayaquil, 8 rats were found plague infected.

#### GREAT BRITAIN.

Births and Deaths-England and Wales-April to J ne, 192'.

The following table has been prepared from figures given in Quarterly Return No. 298, issued by the Registrar General of England and Wales.<sup>1</sup>

The figures are provisional and subject to correction. The rates were calculated on an annual basis. The entire population was included in the computations for England and Wales, but civilians only in those for groups of towns.

Births registered during the quarter numbered 196,831, which was 3,719 less than for the second quarter of the year 1922. The deaths numbered 114,040, being 6,275 fewer than in the corresponding quarter of 1922.

Birth and death rates, England and Wales, April to June, inclusive, 1923.

	England and Wales.	county boroughs and great towns.	157 smaller towns.
Birth rates per 1,000 population	20.7	21. 4	20. 5
Death rates per 1,000 population:	10.0		
All causes	12.0	11.9	11. 1
Typhoid fever	.01	.01	.01
Measles.	. 20	.21	. 33
Scarlet fever	. 03	.04	. 03
Whooping cough	. 14	. 17	. 12
Diphtheria	. 07	.09	.06
Influenza.	. 40	.42	. 36
Death rates per 1,000 births:		i	
Death rates per 1,000 births: Diarrhea and enteritis (under 2 years)	5.1	6.5	3.8
Total deaths under 1 year	66	69	65

Populations (estimated): England and Wales, 38,158,000; 105 county boroughs and great towns, 19,170,420; 157 smaller towns (20,000-50,000), 4,931,620.

<sup>&</sup>lt;sup>1</sup> A table giving similar data for the four quarters of 1922 and the first quarter of 1923 will be found on page 1407 of Public Health Reports, vol. 38, No. 25, issued June 22, 1923.

#### Smallpox-13 Weeks Ended June 30, 1923.

During the 13 weeks ended June 30, 1923, 707 cases of smallpox were notified in England and Wales, including 249 cases in the county borough of Gloucester.

## Cases of Communicable Diseases Reported During the 13 Weeks Ended June 30, 1923, England and Wales.

Diphtheria	9,277	Puerperal fever
Ophthaimia neonatorum	1,710	Scarlet fever
Pneumonia	14,313	Typhoid fever

#### Case of Disease Declared not Typhus - Bootle.1

According to information dated September 1, 1923, the case reported August 4, 1923, at Bootle, vicinity of Liverpool, England, to be typhus fever, has been officially declared not to be typhus.

#### HAWAII.

#### Plague-Infected Rodent-Hamakua.

A plague-infected rodent was reported found August 16, 1923, at Kapulena, Hamakua, Hawaii.

#### JAMAICA.

#### Smallpox (Alastrim).

During the two weeks ended August 18, 1923, 55 new cases of smallpox (reported as alastrim) were reported in the island of Jamaica. Of these, 6 cases were notified in the Parish of Kingston.

### Typhoid Fever-Kingston and Vicinity.

During the week ended August 11, 1923, 12 cases of typhoid fever were reported at Kingston, Jamaica, and during the two weeks ended August 18, 1923, 25 cases were reported for the country in vicinity of Kingston.

#### LATVIA.

#### Communicable Diseases-June, 1923.

During the month of June, 1923, communicable diseases were reported in the Republic of Latvia as follows:

Disease.	Cases.	Remarks.
Cerebrospinal meningitis	. 55	
Malaria Measics Scarlet fover	7 35	
Typhoid fever Typhus fever Whooping cough	79	Paratyphus, 1 case.

<sup>1</sup> Public Health Reports, Aug. 24, 1923, p. 1934.

#### Dysentery-Leprosy-Rabies.

During the same period, eight cases of dysentery, eight cases of leprosy, and one case of rabies were reported in the Republic of Latvia.

#### MADAGASCAR.

### Plague - Tananarive Province.

During the period June 16 to 30, 1923, a death from septicemic plague was reported in Tananarive Province, Madagascar.

#### POLAND.

### Communicable Diseases—May 27-June 16, 1923.

During the period May 27 to June 16, 1923, communicable diseases were notified in Poland as follows:

May 27-June 2, 1923.

Disease.	Cases.	Deaths.	Districts showing greatest number of deaths.
Cerebrospinal meningitis . Diphtheria . Measles . Scarlet fever . Smallpox . Tuberculosis . Typhoid fever . Typhus fever . Typhus fever . Typhus fever , recurrent . Wheoping cough .	75 14 199 487 129 177 226	8 2 2 20 5 5 207 10 13	Lodz. Bialystok, Volhynia. Warsaw. Kielee. Lwow. Kielee. Krakow. Warsaw.
June 3–9, 1923.			

Cerebrospinal meningitis	10 63	7 3	Silesia. Warsaw.	
Measles	27			
Scarlet fever	288 378	29 10	Tarnopol. Pomeránia.	
Tuberculosis	123	226	Lwow.	
Typhoid fever	187	17	Lwow.	
Typhus. fever. Typhus fever, recurrent.	31	18	Wilno.	
Whooping cough	63	9	Bialystok.	
·				

#### June 10-16, 1923.

Cerebrospinal meningitis Diphtheria Measles Measles Scarlet fever Smallpox Tuberculosis Typhoid fever Typhus fever Typhus fever Typhus fever, recurrent Whooping cough	13 74 509 240 5 135 168 165 15	10 8 9 21 1 259 14 15	Kielce: Lodz. Stanislawow. Lodz: Tarnopol. Lwow. Kielce. Lwow. Lodz; Lwow. Lublin. Lwow; Tarnopol.
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#### Dysentery-Rabies.

During the period under report, 102 cases of dysentery with 23 deaths and 2 deaths from rabies were reported in Poland.

#### SIAM.

#### Smallpox - Bangkok.

Smallpox was reported prevalent at Bangkok, Siam, September 8, 1923.

#### UNION OF SOUTH AFRICA.

#### Smallpox-Typhus Fever-June, 1923.

During the month of June, 1923, smallpox and typhus fever were reported, in the Union of South Africa as follows: Smallpox—33 cases occurring among the colored population. Typhus fever—9 cases with 1 death occurring among the white population and 128 cases with 26 deaths occurring among the colored population. For distribution of occurrence according to locality, see page 2239.

#### URUGUAY.

#### Influenza - Montevideo - July, 1923.

Epidemic influenza was reported in Montevideo, Uruguay, during the month of July, 1923. The type of the disease was stated to be mild, and only a few deaths from the disease were reported.

#### Revaccination Made Obligatory.

According to information dated July 19, 1923, the Senate of Uruguay confirmed on July 3, 1923, the obligatory revaccination bill which requires obligatory revaccination every 10 years. The bill was stated to be an extension of the obligatory vaccination law previously in force.

#### VIRGIN ISLANDS.

#### Disease Prevalence.

Disease prevalence has been reported in the Virgin Islands of the United States as follows:

June, 1923.

Island and disease.	Cases:	Remarks.	Island and disease.	Cases.	Remarks.
St. Thomas and St. John: Chancroid Chicken pox. Dengue Gonorrhea. Mumps. Syphilis Tuberculosis. Uncinariasis.	1 8 6 5 1 2 4	1 imported. 2 acute pulmonary. Necator americanus.	St. Croix: Chicken pox. Dyseutery.  Filariasis Fish peisoning. Gonococcus infection. Schistosemiasis. Trachema Uncinariasis.	2 4 10 3 2 3 15	Entamebic, 3, unclassified, 1, Bancrofti.  Necator americanus.

## July, 1923.

Island and disease.	Cases.	Remarks.	Island and disease.	Cases:	Remarks.
St. Thomas and St. John: Chancroid Dengue. Fish poisoning. German measles. Genoeccus infection. Pellagra Sprue. Syphilis Tetanus. Tuberculosis.	2 7 14 1 3 1 1 5	Imported.  3 imported; 2 primary, 2 secondary. 2 chronic pulmonary; 1 acute pneumonia.	St. Croix: Chancroid Chicken pox Dysantery Fish poisoning Filariasis Gonococcus infection  Syphilis Trachoma	1 3 1 2 4 5	Entamebic. Bancrofti. Secondary.

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

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

## Reports Received During Week Ended September 21, 1923.1

#### CHOLERA.

Place.	Date:	Cases.	Deaths.	Remarks.
India: Rangoon. Indo-China: Saigon. Do. Siam: Bangkok.	July 15-21 June 24-30 July 1-28 July 8-21	1 1 13 3	1 · 1 12 2	Including 100 square kilometers of surrounding country. Do.

#### PLAGUE.

Algeria:	Aug. 11-20	2	1	Actual dates of occurrence, Aug. 16 and Aug. 17, 1923,
China: Hongkong	July 22-28	4	10	9
Ecuador:	1 -			
Guamote	Aug. 1-15	9	2	Country district.
Guayaquil			- • · · · • • · · · ·	Aug. 1-15, 1923: 8 plague rats
Santa Ana (Manabi)	Aug. 1-15	4		104114
Hawaii:				Dlama infected medent found
Hamakua				Plague-infected rodent found, Aug. 16, at Kapulena, Ha-
India:				makua.
Karachi	July 29-Aug. 4	1	1	
Karachi. Madras Presidency	do	375	191	•
RangoonIndo-China:	July 15-21	40	40	
Saigon	June 24-30	5	5	Including 100 kilometers of sur-
ŭ ,			_	rounding country.
Do	July 1-7	1	1	Do.
Madagascar: Province—				
Tananarive	June 16-30	1	1	Septicemic.
Siam:	T 1 0 01			_
Bangkok	July 8-21	2	1	
1				

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources.

## Reports Received During Week Ended September 21, 1923—Continued. SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
		<u> </u>		
Azores: St. Michael Island	July 15-21	7		Mild.
Brazil: Pernambuco	July 22-28	8	1	
Canada:		1 "	1 -	
British Columbia— Victoria	Aug. 19-25	1	<b></b>	
Chile: Concepcion		1		July 1-31, 1923: 1 death.
Valparaiso				Aug. 14, 1923: 60 cases reported
China: Amoy		i		Present.
Chungking	July 29-Aug. 4 July 22-Aug. 4 July 22-28			Endemic.
Hongkong	July 22-28	6	8	
Harbin	July 9–22	2		
Hungary: Budapest	July 22-Aug. 4	22		
India: Karachi	July 29-Aug. 4	4	1	
Madras	do	5		
Rangoon	July 15–21	3	1	
Saigon	June 24-30	6	3	Including 100 square kilometers
Do	July 1-28	31	18	in surrounding country. Do.
Jamaica	Aug. 6–18.	6		Aug. 6–18, 1923: Cases, 55. Parish of Kingston.
Java:		١		
East Java— Soerabaya	July 15-21	19	. 2	
Mexico:	-			
Mexico City Poland	July 22-Aug. 4	21		May 27-June 16, 1923: Cases, 870
Portugal: Lisbon	Aug. 12-18	2		deaths, 16.
Oporto	do	5	3	
Siam: Bangkok	July 8-21	42	23	Sept. 8, 1923: Reported preva-
Spain:	·		1	lent.
Barcelona Switzerland:	July 26-Aug. 1		•	
Basel Turkey:	Aug. 12-18	3	••••••	
Constantinople	Aug. 1-7	1		Tumo 1 20, 1002- Conce 00 /
Union of South Africa	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	June 1-30, 1923: Cases, 33 (colored).
Cape Province Orange Free State	July 15-21			Outbreaks. Do.
Transvaal	do			Do.
	TYPHUS		<u> </u>	
		<u>_</u>		
Algeria: Algiers	Aug. 11-20	1		
Chile:	-		,	
ConcepcionValparaiso	Aug. 7-13 Aug. 12-18		1 17	82 cases stated to be present.
Latvia				June 1-30, 1923: Cases, 45; para-
Mexico: Mexico City	July 22-Aug. 4	19		typhus, 1 case. Including municipalities in Fed-
Palestine: Jaffa	July 31-Aug. 6	1		eral district.
Poland				May 27-June 16, 1923: Cases, 614;
Furkey:				leaths, 46. Recurrent typhus, cases, 63.
ConstantinopleUnion of South Africa	July 25-Aug. 4	1		June 1-30, 1923: Cases, 137;
omon or south Airica				deaths, 27 (white, 9 cases, 1
	1	ļ	1	death; colored, 128 cases, 26 deaths).
Cape Province	July 15-21			Outbreaks.
Orange Free State	do	••••••	••••••	Do.
······································	YELLOW	FEVE	R.	
	I	ī		
Brazil: Bahia	July 29-Aug. 4		1	
	,o			

## Reports Received from June 30 to September 14, 1923.1

#### CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Shanghai	. Aug. 28	.	-	. Reported moderately prevalent
India Bombay	June 3-30	34	23	. Apr. 15-June 30, 1923: Case 19,470; deaths, 14,608.
Do	Inly 1_21	0		15,470, deadlis, 14,008.
Calcutta	. May 6-June 30	371	300	· i
Do	. July 8–28	. 68		· <b>1</b>
Madras Do	. June 3-30	2		-
Rangoon	. May 13-June 30	18		1
Ďo		1 4		
Indo-China				. Oct. 1-31, 1922: Cases, 92; death
City—	35 00 T 0			1 53. Preceding month: Case
Saigon Province—	. May 20-June 9	11	10	24; deaths, 14. October, 192. Cases, 100; deaths, 61.
Annam	Oct. 1-31	68	39	Preceding month: Cases,
		1	""	Preceding month: Cases, 2 deaths, 1.
Cambodge		2	1	Preceding month: Cases, 3.
Cochin-China	. do	21	13	Preceding month: Cases, 19
Donkin	do .	١,	İ	deaths, 13.
Tonkin Iraq (Mesopotamia):	do	1		Preceding month: No cases.
Bassorah	Aug. 21	<b></b>		Present. Port declared infecte
			1	since Aug. 6, 1923.
Philippine Islands:			ł	1
City—	Tumo 10 10	١.		D-42: 4
Manila Province—	June 10-16	2	1	Death in foreign case from Ching kang, China.
Bulacan	May 17-23	1		kang, china.
Capiz	May 27-June 2	î	1	į
Cebu	Apr. 8-21	1	1	
Cotobato	Apr. 8-14	1	1	
Laguna	May 6-June 9 Mar. 25-31	2 1	1 1	
Pangasinan	June 24-30	2	2	
Russia (Soviet)		<del>.</del> .		Jan. 1-May 15, 1923: Cases, 10.
iam:				,,,,,,,,
Bangkok. Do.	May 13-June 30	10	11	
D0	July 1–7	1	•••••	
		ATTE		
	PLA	GUE.	-	
lgorio:	PLA	SUE.		
lgeria: St. Eugène.			2	Locality 5 miles north of Algiers
St. Eugène	Aug. 1-20	2	2	Locality 5 miles north of Algiers.
St. Eugènetustralia: Sydney			2	Locality 5 miles north of Algiers
St. Eugène	Aug. 1–20	2	1	
St. Eugène	Aug. 1-20	2		Locality 5 miles north of Algiers  In one locality.
St. Eugènestralia: ustralia: Sydney	Aug. 1–20	2	1	In one locality.
St. Eugène	Aug. 1–20	2	1	In one locality.
St. Eugène	Aug. 1–20	2 1 12	5	Locality 5 miles north of Algiers.  In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19,
St. Eugène ustralia: Sydney zores: St. Michael Island razil: Porto Alegre ritish East Africa: Kenya— Kisumu	Aug. 1-20	2 1 12	1 5	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19,
St. Eugène	Aug. 1-20	2 1 12 2 3	1 3	In one locality.
St. Eugène	Aug. 1-20	2 1 12	1 5	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19,
St. Eugène	Aug. 1-20	2 1 12 2 3	1 3	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19,
St. Eugène.  ustralia: Sydney zores: St. Michael Island. razil: Porto Alegre ritish East Africa: Kenya— Kisumu. Tanganyika. Uganda Las Palmas vylon:	June 10–16	2 1 12 2 3 7	1 5 1 3 5	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19,  Territory.
St. Eugène ustralia: Sydney zores: St. Michael Island razil: Porto Alegre ritish East Africa: Kenya— Kisumu Tanganyika. Uganda anary Islands: Las Palmas eylon: Colombo	June 10-16	2 1 12 2 2 3 7 1 18	1 5 1 3 5	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19.  Territory.  Plague rats, 38.
St. Eugène.  ustralia: Sydney zores: St. Michael Island. razil: Porto Alegre ritish East Africa: Kenya— Kisumu. Tanganyika Uganda anary Islands: Las Palmas eyion: Colombo Do	June 10–16	2 1 12 2 3 7	1 5 1 3 5	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19,  Territory.
St. Eugène.  ustralia: Sydney zores: St. Michael Island.  razil: Porto Alegre ritish East Africa: Kenya— Kisumu. Tanganyika. Uganda.  anary Islands: Las Palmas eylon: Colombo Do. bina:	June 10-16 May 6-26	2 1 12 2 2 3 7 1 18	1 5 1 3 5	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19.  Territory.  Plague rats, 38.
St. Eugène.  ustralia: Sydney zores: St. Michael Island. razil: Porto Alegre ritish East Africa: Kenya— Kisumu. Tanganyika Uganda anary Islands: Las Palmas eyion: Colombo Do	June 30	2 1 12 2 2 3 7 1 18	1 5 1 3 5	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19.  Territory.  Plague rats, 38.
St. Eugène ustralia: Sydney zores: St. Michael Island razil: Porto Alegre ritish East Africa: Kenya— Kisumu Tanganyika. Uganda anary Islands: Las Palmas zylon: Colombo Do. ina: Amoy Do. Foochow	June 10-16	2 1 12 2 3 7 1 18 21	1 5  1 3 5  19 19 19	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19.  Territory.  Plague rats, 38.  Plague rats, 14.
St. Eugène ustralia: Sydney zores: St. Michael Island razil: Porto Alegre ritish East Africa: Kenya— Kisumu. Tanganyika. Uganda anary Islands: Las Palmas Lylon: Colombo Do Do Do Sina: Amoy Do Foochow Do	June 10-16	2 1 12 2 3 7 1 18 21	1 5 	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19.  Territory.  Plague rats, 38.  Plague rats, 14.
St. Eugèneustralia: Sydney .zores: St. Michael Islandstrali: Porto Alegreritish East Africa: Kenya— Kisumu. Tanganyika. Ugandaanary Islands: Las Palmaseylon: Colombo Dobina: Amoy Jo. Foochow Do. Hongkong	June 10-16 May 6-26	2 1 12 2 3 7 1 18 21	1 5 	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19.  Territory.  Plague rats, 38.  Plague rats, 14.
St. Eugèneustralia: Sydney .zores: St. Michael Islandrazil: Porto Alegreritish East Africa: Kenya— Kisumu Tanganyika. Uganda anary Islands: Las Palmas .eylon: Colombo Do bina: Amoy Do Foochow Do Hongkong Do Hongkong Do	June 10-16	2 1 12 2 3 7 1 18 21	1 5 	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19.  Territory.  Plague rats, 38.  Plague rats, 14.
St. Eugène  ustralia: Sydney zores: St. Michael Island irazil: Porto Alegre ritish East Africa: Kenya— Kisumu. Tanganyika. Uganda anary Islands: Las Palmas eylon: Colombo Do bina: Amoy Do Foochow Do Hongkong Do Manchuria—	June 10-16	2 1 12 2 3 7 1 18 21	1 5 1 3 5 19 19 10 6	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19,  Territory.  Plague rats, 38.  Plague rats, 14.  Present.  Reported as epidemic.
St. Eugèneustralia: Sydney .zores: St. Michael Islandrazil: Porto Alegreritish East Africa: Kenya— Kisumu Tanganyika. Uganda anary Islands: Las Palmas .eylon: Colombo Do bina: Amoy Do Foochow Do Hongkong Do Hongkong Do	June 10-16 May 6-26	2 1 12 2 3 7 1 18 21	1 5 1 3 5 19 19 10 6	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19.  Territory.  Plague rats, 38. Plague rats, 14.  Present. Reported as epidemic.  Station on Eastern Chinesa Rail-
St. Eugène ustralia: Sydney zores: St. Michael Island razil: Porto Alegre ritish East Africa: Kenya— Kisumu. Tanganyika. Uganda anary Islands: Las Palmas sylon: Colombo Do bina: Amoy Uo Fochow Do Hongkong Do Manchuria—	June 10-16	2 1 12 2 3 7 1 18 21	1 5 3 5 5 19 19 10 6 40 18 1	In one locality.  Jan. 1-Mar. 31, 1923. Deaths, 19.  Territory.  Plague rats, 38. Plague rats, 14.  Present. Reported as epidemic.

<sup>&</sup>lt;sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources.

### Reports Received from June 30 to September 14, 1923—Continued.

#### PLAGUE-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Ecuador: GuayaquilDo	.  July 1-15	2 3	2 3	May 16-June 30, 1923: Rats examined, 13,800; found infected,
	July 10-31	1 °	,	examined, 9,300, found in-
Egypt				Jan. 1-June 21, 1923: Cases, 1,051; deaths, 548. May 1-29: Cases, 345. Jan. 1-June 24, 1928; Cases, 1,099. Jan. 1-Aug. 2, 1923: Cases, 1,279; deaths, 630. July 23-29, 1923: Cases, 47. May 1-29, 1923: Cases, 47.
City— Alexandria	Jan. 7-June 24		15	May 1-29, 1923: Cases, 47. May 1-29, 1923: Cases, 14.
Do Port Said Do	Jan. 7-June 24	. 1 24	12	May 1-29, 1923: Cases, 13.
Suez Do	Mar. 2-June 15	12	7	May 1-29, 1923: Cases, 3.
Drowings		i		Deaths not reported.
Assiout.  Benisouef. Fayoum	do	7		Do Do.
				Do.
Geizeh Girgeh Keneh	do	123		Do. Do.
Keneh	do	22		Do.
Menoufieh Minieh	lu9	34 46		Do. Do.
Iawaii:		100		1 20.
Hamakua				Plague-infected rats: Pohakea,
Honokaa				May 23, 1923, 1 rat; vicinity of Pacific Sugar Co. mill, June 2, 1 rat; Aug. 2, 1 rat at Hamakua Mill Co. plantation. July 20, 1923: One plague rat; July 30, 2 plague rats: Honokaa Sugar Co. mill and Honokaa
ndia				village. Apr. 29-June 23, 1923; Cases
Bombay	Apr. 29-June 30	503	411	5,783; deaths, 4,481.
ndia	July 1-21 May 6-June 9	11 13	10 13	
Exalaciii	May 13-June 30	110	85	Plague rats, 5.
Do	May 13-June 30 July 1-28 May 13-June 30 July 1-28	40 251	36 141	
Do	July 1-28	166	103	
Rangoon	May o-June 30	260	229	
Do ndo-China	July 1-28	102	81	Oct. 1-31, 1922: Cases, 93; deaths, 89. Preceding month: 70 cases; 63 deaths.
Province— Annam	Oot 1 21	,,	14	
Cambodge Cochin China	do	15 75 3	14 75	Preceding month, 15 deaths. Preceding month, 51 deaths. Preceding month, 4 cases, 2 deaths.
aq (Mesopotamia): Bagdad	May 1-June 30	335	224	
Provingo				May 1-June 30, 1923: Deaths, 912.
Djokjakarta. Kedoe. Pekalongan. Samarang. Soerabaya. Soerakarta.	June 1-30do		135	
Pekalongan	do		48	
Samarang	do		143	
Soerakarta	do		109	May 16, 1923: Epidemic in 5 districts.
adagascarProvince—				Apr. 1-June 15, 1923: Cases, 74; deaths, 71. Bubonic, pneu-
Tananarive	Apr. 1-June 15	56 20	53 20	monic, septicemic.
auritius Island Port Louis		20 1	201	

## Reports Received from June 30 to September 14, 1923—Continued.

#### PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Mexico: Tampico				Apr. 15-21, 1923: 1 plague ra Aug. 8, 1923: At Dona Cecelia, suburb of Tampico, 1 plagu infected rat found. From Ja 1 to Aug. 8, 1923, plague-in fected rats found. 5.
Palestine:	Toma 10 Tul- 10	10	١.	
Jaffa Peru	June 19–July 16	10	1	Bubonic and septicemic.  May 1-June 30, 1923: Cases, 11
Locality— Ayabaca	May 16-June 30	15	13	deaths, 68. July 1-31, 192. Cases, 23; deaths, 12.
Do	July 1–31	4	2	0.500, 20, 400012, 12.
Callao		5	3	
Do Canete		1 3	1 2	1
Do		6	3	•
Cerro Azul	May 1-31	3	1	
Chiclayo	May 1-June 30	9	2	I
Do Cutervo		5 2	3	
Huancabamba	May 1-June 30	34	25	
Huacho	July 1–31	1		
Huaral	. June 1-30	2 3	2	
Do Lima (city)		17	1 8	
Do	July 1-31	2	î	
Lima (country)	. May 1-31	7	4	
Do	. July 1-31	1	1	
Mollendo		1 11	1 3	
Salaverry		2	3	
Russia		<u>-</u>		Jan. 1-May 15, 1923: Few cases in
				Far East regions.
Senegal: Dakar	Trolog 1 21	4	4	Reported to have come from por
Dakar	. July 1-31	*	*	of Rufisque, Senegal.
Rufisque	. Aug. 6			Present.
Siam:				
Bangkok	. Apr. 29-June 30	31 3	30	
DoSiberia	. July 1-7	3	3	Sporadic cases of plague reporte
				yearly in localities vicinity of stations Matsievskaya and Bor zia, Transbaikal Railway.
Haramhor	. May 6	1	1	Village in zone of endemic tara bagan (marmot) plague, Trans
Station No. 83	}			baikal region. Station on Transbaikal Railway
Complete 110. Co				Marmot plague during recen years.
Soktu				Do.
Straits Settlements:				<del></del>
Singapore	. May 6-June 30	6	8	
Syria: Beirut	Mars 10 June 20	3	1	
Do	. May 12-June 20 July 1-10	2		
20		- 1		

#### SMALLPOX.

Algeria: Algiers Do	May 1-31	2	
Arnhia:			1
Aden	July 8-Aug. 11	7	Ī
La Paz	Apr. 1-June 30	2	3

## Reports Received from June 30 to September 14, 1923—Continued.

#### SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Pernambuco		5		
Do	May 12 June 22	8 25	3	•
Rio de Janeiro Do	July 15- Aug. 4	8		
Rio Grande do Sul				Jan. 1-Mar. 31, 1923: Present with
British East Africa:			1	some mortality.
Kenya—	May 20 26	1	1	From yeared from Bombers
Mombasa Tanganyika	May 20-26 Apr. 29-June 9	3		From vessel from Bombay. Territory.
Uganda— Entebe	Apr. 1-30	4		
Canada:	_	l	1	
Alberta— Calgary	May 27-June 2	1	ł	Infection from Deer Lodge, Mont.
British Columbia—	1	1 *		intection from Deer Lodge, Mont.
Vancouver	May 27-June 30	33	1	
Do	.  July 1-14	5	1	
Victoria	Aug. 5-11	1		
Manitoba— Winnireg	June 3-30	1		
Do		ī		
New Brun wick—	T.1 . T		1	
Kent County	July 1-7	1		June 1-30, 1923: Cases, 13. July
OntarioLondon	July 15-21	1		1-Aug. 31, 1923: Cases, 23.
Toronto	June 24-30	3		1 3
Do	July 15-21	1		
Quebec— Quebec	June 10-16	1	1	Varioloid.
Saskatchewan—	June 10-10	•		Variotsid.
Moose Jaw	July 8-14	1		
Regina	June 24-30	3		
Ceylon: Colombo	May 6-June 2	23	1	
Chile:	may o-June 2	20	•	
Concepcion	May 22-June 11		3	June 1-30, 1923: Cases, 2.
Valparaiso	May 7-June 23	6	121	June 10-16, 1923: 29 cases report-
Do	July 1-28	12	10	ed from 2 districts. July 30: 25 cases in lazaretto. Aug.
20				6: 20 cases.
China:				T 40 07 4000 TO .
Amoy	May 13-June 23	• • • • • • • •	3	June 19-25, 1923. Present.
DoAntung	July 1–28. May 14–20.	i		Present.
Chungking.	May 13-June 30	• • • • • • • • • • • • • • • • • • •		Present and endemic.
Do	July 1-21			Do.
Foochow.	May 13-July 28 Apr. 29-June 30		82	Do.
HongkongDo	July 1-21	98 31	82 34	
Manchuria—	1 -	01	0.	
Dairen	May 21-27 May 7-June 24 July 1-7	1		
Harbin	May 7-June 24	5 1		
Do Mukden	May 13-20.	1		
Nanking	May 13-June 23			Present.
Do	June 24-Aug. 4			Do.
Shanghai	May 21-June 3 July 2-Aug. 5	4		Foreign.
Do Chosen (Korea):	July 2-Aug. 5	1	3	Case, foreign; deaths, Chinese.
Chemulpo	May 1-31	1		
Fusan	May 1-June 30	4		
Gensan	May 1-31	1		
Seouluba:	May 1-June 30	42	13	
Antilla	July 8-14.		2	From Preston.
zechoslovakia				JanMar., 1923: Cases, 15; April-
Province—	T 1 36. 2:		.	June, 1923: Cases, 16; deaths, 4.
Bohemia	Jan. 1-Mar. 31	15	4	
Ecuador: Alausi	July 16-31	3		
Guayaquil	May 16-31	1		
Egypt:	· · · · · · · · · · · · · · · · · · ·			
Cairo	Mar. 12-May 6	17	4.1	

## Reports Received from June 30 to September 14, 1923—Continued.

#### SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Esthonia.	June 1-30	4		Mar 1 15 1000 1 and
FinlandGreat Britain: Birmingham	June 18–30	3		May 1-15, 1923: 1 case.
Bristol	June 28	6		Present.
Gloucester	June 28 July 12	19		123 cases reported in hospital; present in rural districts. July 15, 1923: Present. Aug. 9, 1923:
Nottingham	June 3–9	1		33 cases in isolation hospital; two weeks previously about 250 cases present in hospital. May 1-31, 1923: Cases, 211.
Greece:	July 8-21	2		
AthensPatrasSaloniki.	May 1-31	53 2	19 2	
Do	June 25-July 8 July 22-Aug. 4	2	3	Present in epidemic form. (Re-
• •				ported as alastrim.) Aug. 17, 1923: Stated to be officially de- clared present.
Basse Terre Pointe à Pitre	Aug. 17do			Present. Estimated from 2,000 to 3,000 cases.
HungaryIndia	July 15-21	6		Apr. 15-June 30, 1923; Cases,
Bombay	Apr. 22-June 30 July 1-21	298 40	141 22	8,112; deaths, 2,933.
Calcutta Do	May 13-June 9 July 1-14	12 10	9 10	
KarachiDo.	May 13-June 30 July 1-21	24 7	8 1	
Madras Do	May 13-June 23 July 8-28	91 14	16 7	
Rangoon	May 6-June 30 July 1-28	125 25	67 10	
Indo-China: Saigon	May 20-June 23	28	20	Including 100 surrounding square kilometers.
Iraq (Mesopotamia); Bagdad Italy:	Apr. 1-June 30	32	11	
TurinDo.	May 28-June 3 July 2-15	1 2		
Jamaica. Kingston Do	May 27-June 30 July 1-Aug. 4	39 27		May 27-June 30, 1923: Cases, 226. July 1-Aug. 4, 1923: Cases, 139. (Reported as alastrim).
Japan: Kobe Do Java:	May 28-June 10 July 2-8	2 1		,
East Java— Soerabaya West Java—	Apr. 22–June 30	187	22	
Batavia Do	May 5-June 8 June 30-July 20	17	3 1	Province.
Latvia				Apr. 1-May 31, 1923: Cases, &
Aguascalientes Chihuahua Guadalajara	July 8-14 June 11-24 July 22-Aug. 25	7	1 8	June 1-30, 1923: Cases, 15; deaths,
Mexico CityDo.	May 19-June 30 July 1-21	164 84		Including municipalities in Federal district.
Palestine: Jaffa Persia:	June 5-11	1		
Tabriz Teheran	Apr. 1-June 30 Feb. 22-June 14		2 30	District.
Poland				Apr. 29-May 26, 1923: Cases, 965; deaths, 25.

### Reports Received from June 30 to September 14, 1923—Continued.

#### SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Portugal:				
Lisbon	May 20-June 30	. 35	3	
Do	July 1-Aug. 11		1 2	1
Oporto	June 10-30	. 6	3	1
Do	July 9-Aug. 11		1 12	
Portuguese West Africa:		ł	l	į.
Angola—	1		1	I
Loanda	Apr. 1-21		. 2	
Rhodesia (British Africa):		1	ł	
Northern Rhodesia	May 8-14		1 8	
Southern Rhodesia	May 3-16	. 4	2	
Siam:		1	1	1
Bangkok	Apr. 29-June 30	90	53	1
Do	July 1-7	.] 9	4	1
Sierra Leone:	36	١.	į.	ì
Kaballa	May 1-15	1		
Pujehun	May 16-31	1		In Sembehun district.
Spain:	Mary 21 Turns C	i		1
Barcelona	May 31-June 6		1 5	1
Do	June 28-July 10		2	
Seville	July 19-25	· · · · · · · · · · · · · · · · · · ·	1 2	1
Do	May 15-June 30 July 1-Aug. 18	36	4	
witzerland:	July 1-Aug. 10	30	4	
Basel	May 27-June 30	4	1	
Do	July 8-14	i		į
Berne.	May 29-June 30	11		
Do	July 1-28	io		1
Lucerne	May 1-June 7	36		1
Do	July 1-31	14		1
Zurich	July 1-31 May 20-June 23	10		
Do	July 15-21	-6		
Syria:	Valy 10 11111111111	1		
Aleppo	do	6	l	
Damascus	May 15-June 11	7		
Cunis:				İ
Bizerta	June 10-29	1	<b> </b>	
Tunis	June 11-17	1		
Do	June 26-July 1	1		
furkey:		1		
Constantinople	May 13-June 26		45	
Do	June 27-July 24		10	
Inion of South Africa				May 1-31, 1923: Cases, 33; death
			ł	1 (colored).
Cape Province				May 1-31, 1923: Cases, 32 (co
_	7.5 A 7 AA	ŀ	Į.	ored).
Do	May 6-June 30			Outbreaks.
Do	July 1-14	<u>-</u> -		Do.
East London	July 8-14	1		0.41
Natal	July 8-14			Outbreaks.
Orange Free State	. Apr. 29-June 30			Do.
Transvaal	July 1-14			Do.
ugoslavia.				May 1-31, 1923; 1 case.
Province—				July 1-7, 1923: Cases, 8; deaths,
Bosnia-Herzegovina	July 1-7	1		
	do	4	1	
	do	2	i	
Belgrade	June 10-16	1	i	
			î	
Do	July 8-14			
DoZagreb	July 8-14	1		
DoZagreb Wolwodina	June 24-30			
Zagreb		1 1		
Zagreb	June 24-30 July 1-7	ī		At Mombasa, British East Africa
Zagreb	June 24-30			At Mombasa, British East Africa
Zagreb	June 24-30 July 1-7	ī		Vessel arrived from Bomba
Zagreb	June 24-30 July 1-7 May 20-26	ī		Vessel arrived from Bomba Mar. 25, 1923.
Zagreb	June 24-30 July 1-7	1		Vessel arrived from Bomba Mar. 25, 1923. Two cases in quarantine (re
Zagreb	June 24-30 July 1-7 May 20-26	1		Vessel arrived from Bomba Mar. 25, 1923.

### Reports Received from June 30 to September 14, 1923—Continued.

#### TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:	W- 1 T 00			
AlgiersArgentina:	May 1-June 30	1	1 -	
Rosario	May 25-31	1	. 3	
La Paz Bulgaria:	June 1–30	4	1	
Sofia Do	Apr. 22-June 23 July 15-Aug. 11	11 15		Paratyphus, 2 cases, 2 deaths.
Chile: Concepcion Talcahuano	May 22-June 18 May 13-19	i	. 3	
Valparaiso Do	May 7-June 23 July 1-Aug. 4		26 26	June 11, 1923: 34 cases in Salvador Hospital. July 30: 45 cases in
China:		1	1	hospital. Aug. 6: 58 cases.
Antung	May 28-June 24	12		
Do Hankow Manchuria—	July 16–22 May 19–25	1		
Harbin Mukden	May 6-13 May 14-20	1 2		
Czechoslovakia				JanMar., 1923: Cases, 191 deaths, 6. Apr. 1-June 30, 1923: Cases, 132; deaths, 4.
Bohemia. Moravia. Russinia. Silesia.	Apr. 1-June 30	8		1923: Cases. 132; deaths, 4.
Russinia	do	98	1	Paratyphoid A, 1; paratyphoid B, 20.
Silesia	do	1	1	_,
Slovakia Esthonia		23	2	June 1-30, 1923: Recurrent ty- phus, 1 case; paratyphus, 2
Farmt				cases.
Egypt: Alexandria	May 14-June 24	7	5 3	
Do Cairo	June 25-July 29 Apr. 12-May 6	5 20	3 10	
France: Marseille	Mar. 1-May 31		3	
Germany:	May 27-June 2		1	
Hamburg	May 20–26	3		
Do	July 29-Aug. 4	1		Case developed July 28, 1923, at Emigration Hall, Hamburg.
Königsberg StettinGreat Britain:	May 13–June 2 May 27–June 9	2 1	1.	
Bootle 1	Aug. 4	1		Vicinity of Liverpool. May 1-31, 1923: Cases, 876.
Athens	May 1-31 July 22-31	150	5 1	
Patras	Apr. 24-June 15		30	•
Piræus Do	May 1-June 30 July 1-10	356 3	11	
Saloniki	Apr. 30-June 24	56	16	Apr. 30-May 27, 1923: Recurrent typhus: Cases,3; deaths, 3.
DoGuatemala:	July 9-15	1		
Guatemala City Hungary	Apr. 1-June 30		5	Jan. 1-May 19, 1923: Cases, 318; deaths, 36. In 11 counties.
Budapest. (raq (Mesopotamia): Bagdad.	Jan. 1-June 2 Apr. 1-June 30	48 3	12	deaths, 30. In 11 counties.
apan:	July 2-8.	1		
Nagasaki	July 2–8	1		Apr. 1-May 31, 1923: Cases, 186. Paratyphus, 4 cases.
Mexico: Mexico City	May 20-June 30	75		Including municipalities in Fed-
Do	July 1-21	27		eral District.
GuadalajaraSan Luis Potosi	June 1-30 July 29-Aug. 4	1	·····i	Do.
Do	July 1-31	i		

<sup>&</sup>lt;sup>1</sup>Officially declared not typhus fever, according to information dated September 1, 1923.

### Reports Received from June 30 to September 14, 1923—Continued.

#### TYPHUS FEVER-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Palestine:				
Jaffa	May 22-28 June 26-July 9	2		Delensing fewer 1 cose
Do Jerusalem	May 22-28	i		Relapsing fever, 1 case.
Persia:	•	_		
Tabriz	Apr. 1-14 Feb. 22-June 14	2		
Teheran Poland	Feb. 22-June 14			Mar 4 Apr 7 1022: Cases 2 252
Forand				Mar. 4-Apr. 7, 1923: Cases, 2,253 deaths, 172. Recurrent typhus Coses, 333, deaths, 6. Apr. 29 May 26, 1923: Cases, 1,305 deaths, 11. Recurrent typhus Cases, 239; deaths, 2.
Portugal:				, , , , , , , , , , , , , , , , , , , ,
Oporto	June 10-16			
DoRumania:	July 1-21	3		
Kishineff	May 1-June 30	41	ļ	
Russia	inay i dune comme			Jan. 1-Apr. 30, 1923; Cases
European Russia and au- tonomous republics.	Jan. 1-Apr. 30	93,999		Jan. 1-Apr. 30, 1923: Cases 106,854. (Corresponding period 1922: Cases, 847,516.) Feb. 1- 28, 1923: Cases, 17,577. Recur rent, Jan. 1-Feb. 28, 1923 Cases, 43,540.
Siberia, Caucasus, and Cen-	do	9,921		28, 1923: Cases, 17,577. Recur
tral Asia. Waterways and railways	do	2.934		Cases, 43.540.
Spain:		. 1		04200, 10,0101
Barcelona	June 21-27 May 1-31		1	
MadridSyria:	May 1-31		1	
Aleppo	May 20-June 16	4	2	
Do	May 20-June 16 July 15-21 May 1-10	3	1	July 8-14, 1923: Present.
Beirut	May 1-10	1		
Tunis: Tunis	May 28-June 24	3	2	
Do.	July 9-15	i	ĩ	
Turkev:	· · · · · · · · · · · · · · · · · · ·	- 1		
Constantinople	May 13-June 26		19	
Union of South Africa	Julie 21-July 3	• • • • • • • •	- 1	May 1-31, 1923: Cases, 102; deaths,
				21 (colored). White-Cases, 6.
Cape Province	1			Total, 108 cases, 21 deaths.
Cape Province	••••••	• • • • • •		May 1-31, 1923: Cases, 49 (colored) white, 5.
Do	Apr. 29-June 30			Outbreaks.
Do Do Natal	July 1-7			Do.
Natal				May 1-31, 1923: One case (col-
Orange Free State		İ		ored). May 1-31, 1923: Cases, 45 (col.
			1	ored).
Do	May 6-June 16			Outbreaks.
Transvaal	May June 20	ا ـ ز		May 1-31, 1923: Cases, 7.
Yugoslavia	may -June 30	4	4	July 1-7, 1923: Cases, 4.
Province—		- 1		
Bosnia-Herzegovina Croatia—	July 1-7	4		
Zagreb	May 27-June 2	1		•
	YELLOW	FEVE	R.	
	i	-	1	
Brazil:		25	6	
Dobio				
Bahia	May 13-June 30	9	2	
Bahia	July 1-28	9		Present.