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PREVALENCE OF DISEASE

# PUBLIC HEALTH REPORTS

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## INFLUENZA PREVALENCE IN THE UNITED STATES

Reports for the week ended December 8, 1928 (see p. 3383), indicate that the prevalence of influenza was increasing in the Pacific and Mountain States generally, although the epidemiologist of the health department of Montana says that the disease appears to be decreasing in that State. In San Francisco, from which the first reports of epidemic prevalence were received, the number of cases has been decreasing since October 27. Kansas reported a sudden rise in the prevalence of influenza, with 13,596 cases for the week. Other States which reported considerable numbers of cases of the disease are North Dakota, 194; Nebraska, 364; South Carolina, 5,145; Georgia, 990; Tennessee, 222; Alabama, 214; and Oklahoma, 200 cases.

The reports are obviously incomplete. The State health officers of Ohio and Virginia say that unofficial reports show many cases.

The New England States had not reported any unusual prevalence of influenza when this issue of the Public Health Reports was sent to press, and the health officer of New York State on December 13 reported that there were no reports of epidemic influenza in that State.

The reports appear to indicate that the disease is comparatively mild in form.

The following table gives a comparison of the numbers of deaths from influenza and pneumonia (combined) in a group of cities during six weeks of the years 1928 and 1927. The 95 cities have an aggregate population of nearly 31,000,000 and are situated in all parts of the country.

During the first four weeks of the period covered, the 1927 figures were higher than those for 1928, but for the last two weeks the 1928 figures are considerably higher. However, when the large number of cases of influenza is considered, the number of deaths appears to be low when compared with such conditions as existed in 1918.

*Deaths from influenza and pneumonia in a group of cities of the United States, by weeks, October 21 to December 1, 1928, and October 23 to December 3, 1927*

| Week ended— | Number of cities included | 1928 | 1927 |
|---|---|---|---|
| Oct. 27, 1928; Oct. 29, 1927 | 95 | 572 | 573 |
| Nov. 3, 1928; Nov. 5, 1927 | 95 | 565 | 576 |
| Nov. 10, 1928; Nov. 12, 1927 | 95 | 614 | 654 |
| Nov. 17, 1928; Nov. 19, 1927 | 95 | 689 | 703 |
| Nov. 24, 1928; Nov. 26, 1927 | 93 | 809 | 611 |
| Dec. 1, 1928; Dec. 3, 1927 | 92 | 958 | 724 |

The death rate from all causes for the week ended December 8, 1928, in 65 cities is 13.3 per thousand population. (See p. 3381.) This rate is higher than the rate for the same cities in 1927, but it is not an unusually high rate for these cities in December.

## STATEMENT REGARDING INFLUENZA

The following is a popular statement regarding influenza which was recently issued by the Public Health Service:

It is well known that influenza exists to a greater or less extent at all times among all peoples in every country. The present epidemic is occurring at a season when a higher influenza sickness rate may be expected. From the studies conducted by the Public Health Service it has been shown that under ordinary conditions the increase in influenza is usually greater from November to March.

Since the germ causing the disease has not yet been satisfactorily demonstrated, it is necessary to depend upon symptoms to determine whether or not influenza is present. These symptoms vary in intensity; but when one suffers from headache, aching in body and limbs, cough, chill, some fever, and above all, a severe prostration, it is safe to say that that individual has influenza. The disease is sometimes called "grippe" when these symptoms are not so severe, to indicate a milder attack; but influenza and grippe are one and the same disease. It is interesting to note that the word "influenza" was first used by the Italians in 1743 to denote some "influence," as it was thought by them that this disease, heretofore known as "epidemic catarrh" was caused by an influence of unknown origin (probably the stars); while to the French "influenza" was known as "la grippe" from the word "agripper" (to attack).

We are prone to forget the serious aspects of influenza until suddenly and without warning it becomes epidemic. The sickness rate greatly increases and the symptoms become more severe as a rule. These outbreaks may be confined to certain communities or areas or they may become world wide. It is not possible to prophesy when epidemics will come, although in England some investigators have noted that the epidemics seem to be periodic in their occurrence unless the time when they are due happens to be in warm weather.

The largest world epidemic in recent years prior to the 1918–19 outbreak occurred in 1888. That epidemic, known as the "Russian flu," did not present catarrhal symptoms to any degree, but certain nervous disturbances predominated. In the 1918 epidemic, known as the "Spanish flu," however, the reverse was true. More patients showed catarrhal disturbances, while the nervous symptoms were not pronounced as was the case in the epidemic of 1888. In both epidem-

ics prostration was outstanding. There was also some difference in the age groups attacked. In 1918, 25 per cent more deaths occurred in ages from 15 to 35 than occurred in the 1888 epidemic, while the mortality rate among old people was much less in 1918 than in 1889.

In all large epidemics the ratio of deaths to the number of persons attacked is greater than it is in a period between epidemics; but it must be remembered that in itself influenza is rarely fatal. It is the pneumonia following which makes such an epidemic so serious and disastrous. During the influenza investigation carried on by the United States Public Health Service, reported deaths from influenza were carefully followed up in a group of large cities, and in practically no instance was it found that influenza had been fatal when not accompanied by complications. These studies all show that when epidemics do occur, the behavior of influenza changes from a comparatively mild ailment (sometimes called a bad cold) with recovery, to a serious devastating disease, with symptoms of great intensity which are changeable even in different epidemics.

It is recognized that influenza is a contagious disease, but there is still doubt as to just what germ is responsible for it. Ancient peoples were familiar with influenza as we probably know it to-day, and they reported great outbreaks of conditions, which, from their descriptions, must have been the influenza of to-day. Hippocrates, in 400 B. C., attributed it to changes in the wind, and from that time much epidemiological speculation has been advanced.

Alterations in the atmosphere, earthquakes, comets, volcanoes, great inundations, and various other natural phenomena have been suggested as a causative factor associated with influenza, as it was no doubt felt that something of that magnitude would necessarily have to be responsible for the widespread epidemics that are caused by this disease. One of the epidemiological puzzles connected with influenza is the reason for its sudden appearance in epidemic form after a period of quiescence and its lightning-like spread. It is believed to be caused by a germ; and so after a period when immunity and resistance die out in individuals and the virulence of the responsible organism increases to a certain degree, epidemics may result. Such phenomena occur in other diseases, notably smallpox, meningitis, and infantile paralysis.

As a contagious disease influenza is believed to be transmitted from person to person through the secretions of the nose and throat, just as infectious colds, pneumonia, and spinal meningitis are spread. This is done in many ways, such as promiscuous sneezing and spitting, the use of common towels, and the innumerable ways through hand to mouth and mouth to hand contact. It is no uncommon sight to observe children in toy shops, especially around Christmas time,

putting horns and whistles in their mouths and replacing them on the table for the next ones who do likewise. The common use of an "all-day sucker" by groups of children is equally dangerous.

Another way of transmission appears to be from dishes, glasses, and eating utensils that have not been properly sterilized. It is obvious that the complete sterilization of knives, forks, spoons, dishes, cups, and glasses in restaurants should be a common practice since great numbers of people, with all kinds of germs in their mouths, either place the same utensils in their mouths or have such intimate contact with them as to make them dangerous for use by others, without proper sterilization.

The prevention of influenza depends mainly on the individual and his observance of some of the practical laws of hygiene. The following habits might be cultivated to advantage, remembering that influenza is probably spread through secretions from the nose and throat of influenza patients finding their way to the nose and throats of healthy individuals:

1. Avoid needless crowding; walking to and from work, if practicable, is good exercise and keeps one from overcrowded street cars, busses, and similar conveyances.
2. Take advantage of as much open air and sunshine as you can.
3. Sleep with the windows open and be sure your homes are well ventilated.
4. Avoid people who are coughing, sneezing, or snuffling, and do not cough or sneeze yourself without using a handkerchief.
5. Wash your hands immediately before eating and do not put your fingers in your mouth or nose. By shaking hands or handling objects touched by others you may infect yourself by carrying your hand to your mouth or nose.
6. Do not use a napkin, towel, spoon, fork, knife, glass, dish, or cup which has been used by another person unless such articles have been either washed or sterilized. Avoid the common drinking cup.
7. Keep up your general health—first, by using inside and outside plenty of clean water; second, by eating clean, wholesome food; third, by sleeping at least 7 hours out of each 24; and fourth, by keeping the bowels regulated.
8. Keep away from houses where there are cases of influenza.
9. Avoid chilling.
10. Avoid overheated rooms.
11. In case the disease develops, go to bed immediately, and remain there until recovery. A physician should be called at once.

## REVIEW OF COURT DECISIONS PERTAINING TO MORBIDITY REPORTS

Questions concerning the validity and construction of, and the liability of physicians under, statutes, ordinances, and regulations requiring the reporting of cases of communicable diseases have been presented to the courts of several of the States. One of the earliest cases, and perhaps the leading one, on the subject of morbidity reports is that of State *v.* Wordin,[1] decided by the Connecticut Supreme Court of Errors on December 1, 1887. In that case a physician was charged with failure to report a case of diphtheria, in violation of an ordinance of the city of Bridgeport which required physicians to report cases of communicable diseases. There was a verdict of guilty and a judgment that he should pay a fine and costs. The defendant appealed, challenging the constitutionality of the ordinance. The supreme court of errors, in affirming the judgment of the lower court and holding the ordinance to be constitutional, said:

> In his concession that the ordinance would be valid in the ravages of pestilence, under presence of an overwhelming necessity to prevent public calamity, the defendant concedes the whole case. An ordinance of this character must be intensely practical; a proper regard for human life demands that a contagious, fatal disease shall be barred rather than driven out.
>
> The inequality of burden of which the defendant complains is only in seeming. Persons offering their services to the public as healers of disease and requiring pecuniary compensation therefor, thereby assert their ability to detect the presence of it when the great mass of the people can not. The people accede to the truth of their assertion, and in the matter of life surrender themselves to their keeping. Of course an ordinance in the interest of life must detect the presence of a fatal contagious disease at the earliest possible moment. Therefore with impartial action it compels that member of the community who is the first to have sight and knowledge of it, to give note of warning to others from whom its presence is hidden. It would be idle to require, indeed there would be danger in accepting, this service from those who can not see or do not know. The burden is made to rest upon every member of the only class which is in a condition to contribute anything to the accomplishment of the purpose of the ordinance.

The only other case in which the validity of morbidity regulations has been questioned is that of Smythe *v.* State,[2] decided by the Mississippi Supreme Court on February 7, 1921. The facts there were that a regulation of the Mississippi State Board of Health required physicians to report on the first of each month all cases of notifiable communicable diseases treated by them during the previous month. A physician was convicted in the lower court of violating this regulation. The State board of health had statutory authority to make reasonable rules and regulations, and the statutes provided a penalty for their violation. On appeal the physician contended that the regulation was unreasonable, but the supreme court said that there

[1] 56 Conn. 216; 14 A. 801.

[2] 124 Miss. 454; 86 So. 870.

was no merit in that contention, the purpose of the regulation being to enable the health authorities to take proper and prompt measures for the prevention of disease. The court, however, refused to sustain the conviction and discharged the physician because of the insufficiency of the evidence, saying that "The offense denounced by the statute is the violation of the regulations of the board of health knowingly, and this evidence wholly failed to show that the defendant had any knowledge of the existence of the rule or regulation, or that there had ever been any such publication thereof as to charge him with knowledge of it."

Another of the early decisions was one[3] rendered by the New York City Superior Court on December 30, 1886. It appeared there that a woman was removed from her home to a smallpox hospital by action of a sanitary inspector, and she brought an action for damages against her attending physicians because of such removal. One of the physicians had reported the case to the board of health as one of smallpox, and that was the occasion of the sanitary inspector examining the case. Regarding the making of the report by the physician, the court said:

* * * The statutes had made it their (the physicians') duty to report cases of contagious diseases. The performance of this duty was not part of the functions of a physician in his relation to a patient, but rather to the public. My opinion is that in order to give the public the protection due to it, according to the intention of the statute, any physician that forms, in fact, an opinion that a patient has a contagious disease, is bound to report the case, whether he has or has not used ordinary professional skill and knowledge. * * * Certainly if he really thinks the case to be one of smallpox, it is his duty to communicate his opinion to the public authorities who furnish skilled physicians peculiarly competent to pass upon the case. * * *

The Michigan Supreme Court in two different cases has construed statutory provisions relating to morbidity reporting. In the first case (People *v.* Brady,[4] decided March 4, 1892) an action was brought against the defendant, a practicing physician, to recover a penalty, provided by law, for his failure to report certain cases of diphtheria attended by him. A statute required physicians immediately to give notice to the health officer of cases of communicable diseases which they were called upon to visit. The defendant made no report, as required by the statute, of the diphtheria cases attended by him, but the evidence showed that, a week or 10 days after he had pronounced the cases to be diphtheria, he stated to the health officer that there was diphtheria in those particular families. The judgment of the lower court, which was against the defendant, was affirmed by the supreme court. Regarding the verbal statement to the health officer by the defendant, the supreme court stated that "this was not

[3] Brown *v.* Purdy, 54 N. Y. Super. 109; 8 N. Y. St. Reporter 143.
[4] 90 Mich. 459; 51 N. W. 537.

the notice required by the statute, which is to be in writing, giving the name, place of residence, and nature of the disease." The appellate court also approved a charge of the trial court that it was a question for the jury to determine whether the defendant failed to report within a reasonable time and that in cases like diphtheria, where the disease is virulent and rapid in its action, eight days was not a reasonable time, and stated that it thought the trial court "would have been justified in saying that no notice was given at all, as required by the statute."

In the second case (People *v.* Shurly, decided September 18, 1900,[5] and June 24, 1902[6]), the facts were that a statute required physicians to report cases of "smallpox, cholera, diphtheria, scarlet fever, or any other disease dangerous to the public health." In an action to recover a penalty for the violation of this law, the question involved was whether tuberculosis was covered by the provision. The supreme court ruled that tuberculosis was required to be reported by physicians, if it was in fact a disease which was dangerous to the public health, and stated that the question whether tuberculosis was a disease dangerous to the public health was for determination by the jury on evidence. At the second trial of the case the jury found that tuberculosis was a disease dangerous to the public health but was not to be classed with smallpox, scarlet fever, measles, cholera, and diphtheria. The supreme court held that the question whether tuberculosis was to be classed with such other diseases should not have been submitted to the jury, saying that "If the disease is contagious and dangerous to the public health, the *law* classifies it." The court also held that, if tuberculosis was dangerous to the public health, the statute generally prohibiting a physician from disclosing any information acquired while attending upon a patient, which information was necessary to enable the physician to prescribe for the patient, was no defense. Another point decided by the supreme court was that the trial court erred in permitting an inquiry as to whether tuberculosis patients would be likely to give their consent to having their cases reported, stating that "it would hardly be contended that the physician could excuse his noncompliance with the requirements of the statute by showing a dissent in the particular case or generally."

A Missouri case[7] decided February 10, 1902, by the Kansas City Court of Appeals involved the question as to whether a Christian Scientist was required to report cases of communicable diseases under a city ordinance. The defendant, a Christian Scientist, was charged with the violation of an ordinance of Kansas City which required every physician who prescribed for or treated any case of certain

[5] 124 Mich. 645; 83 N. W. 595.
[6] 131 Mich. 177; 91 N. W. 139.
[7] Kansas City *v.* Baird, 92 Mo. App. 204.

specified diseases or any disease of a pestilent or epidemic nature to immediately report the same on receiving knowledge that the person was afflicted with any such disease. The court of appeals decided that the defendant was not a physician, and also held that there was a failure to prove that she knew the case was one of the diseases mentioned in the ordinance. The court said:

* * * The ordinance is simply a necessary police regulation, under the terms of which it is, among other things, necessary to prove that a *physician* attended the sick person and that he *knew* the case was one of those diseases mentioned in the ordinance.

In this case there was an utter failure in both these requisites, and the judgment will therefore be reversed and defendant discharged.

The Court of Appeals of the District of Columbia in Johnson *v.* District of Columbia [8] had for construction an act of Congress which made it the duty of every registered practicing physician, or other person prescribing for the sick in the District of Columbia, to make report to the health officer immediately after such practitioner became aware of the existence of any case of scarlet fever or diphtheria in his charge, and which imposed a penalty in case of failure to report within 24 hours. A physician in attendance at a charitable dispensary examined a child brought there, and, being of the opinion that she had diphtheria, refused to treat her, and suggested to the mother that she take the child home, isolate her, and call in a physician. The dispensary physician made no report of the case of diphtheria to the health officer, and, having been charged with a violation of the act requiring reports, was convicted in the lower court. The court of appeals, however, reversed the judgment, taking the view that the child was not "in his charge." The court said:

We are of the opinion that this act was intended to apply to practicing physicians who, being called upon, undertake the treatment of persons suffering from diphtheria or scarlet fever, and does not include those engaged in a special service who decline to treat such a case because not in the line of that service.

Acting as the physician of the dispensary, it was necessarily the duty of the plaintiff in error to examine the person applying for treatment, in order to ascertain if she came within the established scope of its charity, and if so, then to prescribe a remedy. But such examination alone did not put the patient "in his charge." He was prohibited by the rules of the dispensary from taking charge, as its representative, of one found to have diphtheria, and in obedience to his duty he declined, upon ascertainment of the fact, either to treat or take charge of the sufferer.

Under the ordinary meaning of the language of the statute, the patient can not be declared to have been "in his charge," in violation of his obligation to the dispensary, and against his own will.

In Chicago *v.* Craig,[9] decided by the Illinois Appellate Court on August 12, 1912, it appeared that an ordinance of the city of Chicago required every physician who prescribed for or attended any

[8] 27 App. D. C. 259, decided Apr. 3, 1906. [9] 172 Ill. App. 126.

person having certain diseases, including smallpox, to make a report thereof in writing to the commissioner of health within 24 hours. A rule adopted by the commissioner of health required, in addition, that the physician report a case of smallpox at once to the department of health by telephone and by mail. A patient came to the office of the defendant, a physician, shortly after 10 o'clock in the evening. The defendant pronounced the patient to be afflicted with smallpox and attempted to communicate by telephone with the city health department and the chief of the bureau of contagious diseases, but failed to get any response. He then directed the patient to go home and stay there until the next morning and then to report to the chief of the bureau. At the same time he gave the patient a card to the health department physician. This card was presented by the patient to the department doctor at 2 o'clock the next afternoon. No other effort toward reporting the case was made by the defendant. In a suit instituted to recover a penalty for the violation of the ordinance and rule, judgment was entered against the defendant, and on appeal this judgment was affirmed, the court saying:

* * * It is no answer to a charge of failure to comply with the provisions of the ordinance and rule to say that plaintiff in error sent Mitchell to the health department or that the health department became aware of the facts upon investigation after Mitchell presented himself in pursuance to the directions of plaintiff in error, or that sending Mitchell to the health department was just as effective a way to notify the health department of the facts as the way provided by ordinance and rule. It was clearly within the province of the legislative department of the city government to enact in what way notice of such disease should be given to the health department, and, having done so, it is the duty of all persons coming within the provisions of such ordinance and rule to obey them * * *.

In the Vermont case of State *v.* Pierce,[10] decided by the State supreme court on October 13, 1913, the question raised on appeal was as to the admissibility of certain evidence. In that case a physician was convicted of violating a law which required an attending physician to report to the health officer known or suspected cases of communicable diseases dangerous to the public health. The physician had attended a child who died from diphtheria, as the evidence tended to show. In order to prove that the physician knew or suspected that the child's case was one of diphtheria, the State showed that other cases of the disease had existed in the village a short time previously and that the houses wherein the cases had existed had been quarantined with a placard bearing the word "diphtheria" in large letters. The evidence showed that the physician was in the village at the time and in such circumstances as to make it almost unbelievable that he had failed to observe the diphtheria placards. Evidence was also introduced of an autopsy on a prior case, at which

[10] 87 Vt. 144; 88 A. 740.

autopsy the defendant was present, and of positive laboratory reports on throat cultures taken from another earlier case by the defendant. On appeal, the conviction was affirmed by the supreme court, which held the admission of such evidence to be proper.

In Commonwealth *v.* Evans,[11] decided April 14, 1915, by the Pennsylvania Superior Court, the facts were that the defendant, a practicing physician, was convicted of failing to make report of a case of diphtheria which he treated, such report being required by a State law. On appeal the superior court stated as follows in its opinion:

> Two facts appear in the testimony. The case treated was diphtheria, and the doctor failed to report the case. The two elements essential to conviction were present. The defendant interposed the defense that he did not know the disease was present. Whether his explanation was credible was to be determined by the justice and the court, respectively, and both came to the conclusion that the defendant was guilty. We are satisfied that upon the merits the conviction of the defendant was just.

The court also stated, however, that it was not concerned as to the testimony in the case, but that its inquiry was limited to the regularity of the proceedings. This left only two matters for consideration—(1) a claim of the statute of limitations, and (2) a question of costs—on both of which the court ruled against the defendant, thus sustaining the conviction.

Both the supreme courts of Arkansas and Ohio have rendered decisions in which was involved the question of the liability of physicians to third persons for damages because of the failure of such physicians to report cases of communicable diseases as required by law or regulation. The Arkansas case [12] was an action brought against practicing physicians to recover damages for alleged negligence in connection with cases of typhoid fever attended by them, and one of the allegations in the complaint was that the defendants negligently failed to comply with a rule of the State board of health which required physicians to report cases of notifiable communicable diseases to the local health officer. But there was no allegation of specific acts or facts showing that the failure of defendants to report was the proximate cause of the injury to plaintiffs, and the supreme court held that violation of the rule was not actionable negligence creating civil liability unless it was the proximate cause of the injury to plaintiffs.

In the Ohio case [13] an action was brought by the defendant in error, a widow, against the plaintiff in error, a physician, to recover damages for the death of her husband, Stephen Stanko, alleged to have been caused by the physician's negligence. The death of one Alexander Thompson, a neighbor of Stanko, was caused by smallpox. The

[11] 59 Pa. Superior Ct. 607.
[12] Davis *v.* Rodman, 147 Ark. 385; 227 S. W. 612; 13 A. L. R. 1459; decided Feb. 14, 1921.
[13] Jones *v.* Stanko, 160 N. E. 456; decided Jan. 25, 1928.

plaintiff in error, Doctor Jones, was the sole attending physician. It was alleged, and the evidence tended to sustain the allegation, that Stanko inquired of Doctor Jones whether Thompson was suffering from a communicable disease, and that the reply was that he was not. Stanko waited upon Thompson prior to his death and also performed certain services with reference to his preparation for burial after death. Doctor Jones did not notify the health authorities of the existence of the disease, as required by statute. In the trial court a jury returned a verdict in favor of the physician. On appeal by the widow, the court of appeals reversed the trial court's judgment solely on the refusal to give certain requested instructions to the jury. The supreme court, on the physician's appeal thereto, affirmed the court of appeals' judgment. The statement of the law as contained in the instructions, which the supreme court held should have been given, was to the effect that, if the fact that the disease was smallpox would have been known to a physician possessing the requisite qualifications and applying his skill and judgment with ordinary care and diligence to the diagnosis, the statute made it the duty of Doctor Jones to report the disease to the local health officer, and that Doctor Jones was liable if his failure to report was the proximate cause of the death of Stanko.

The case of Moorehouse *v.* Hammond,[14] decided by the Utah Supreme Court on October 4, 1922, involved the question of the revocation of a physician's license because of alleged noncompliance with morbidity reporting requirements. The license of the plaintiff, a physician, was revoked by the defendant, the director of registration, pursuant to findings and recommendation made to the said director by a committee of physicians. The findings were that the plaintiff had been guilty of unprofessional conduct in willfully failing to report in writing to the health officer the existence of a case of infectious disease under his treatment on a certain date, and the revocation of his license was recommended. The town ordinance, which the plaintiff was charged with having violated, required written reports by physicians of cases of communicable diseases. It was shown that the plaintiff had pleaded guilty before a justice of the peace to a charge of violating the ordinance and that it had been adjudged that he pay a fine. The ordinance, however, did not denounce the omission or failure to report as unlawful nor impose any penalty or punishment for a failure to make a report, and the supreme court held that, in view of this, the ordinance was clearly unenforceable. It was contended, however, that although the conviction under the ordinance failed, the order of the defendant revoking the plaintiff's license should nevertheless be upheld for the reason that

[14] 60 Utah 593; 209 P. 883.

the plaintiff had failed to comply with a State law. One statute required physicians to report cases of communicable diseases to the local board of health, while another statute declared that willful violation of the law in regard to the reporting of communicable diseases constituted unprofessional conduct for which a physician's license could be revoked. The evidence was that the plaintiff had informed the quarantine officer of the town, who was also a member of the board of trustees, that the patient was afflicted with smallpox, whereupon the said officer put up a sign quarantining the patient's house. The court pointed out that the statute did not require a report in writing but merely required that a report be made, and held that the provisions of the statute had been substantially complied with. The court stated that the quarantine of the patient was the principal purpose of the statute requiring that a report of a case of communicable disease be made, and decided that, such purpose having been accomplished, the order revoking the plaintiff's license found no support in the law and could not be permitted to stand.

The matter of reporting suspected cases of communicable diseases was passed on in McGuire *v.* Amyx,[15] decided by the Missouri Supreme Court on September 16, 1927. In that case it appeared that the plaintiff, a 7-year-old girl, accompanied her mother to the office of the family physician, the purpose of the visit being the examination and treatment of the mother. The physician's attention was attracted to a "breaking out" on the child, and he concluded that she was afflicted with smallpox. Upon his report to the city health authorities the child and mother were taken in an ambulance to the dispensary where the chief diagnostician of the division of health of the city examined the child and, having diagnosed the case as smallpox, committed her to the quarantine hospital. At the hospital the child was confined in the smallpox ward with persons suffering from smallpox, and, after remaining there for several days, was discharged as cured. A few days after her discharge the child was taken ill, and, the sickness being diagnosed as smallpox, was again committed to the hospital, where she remained until again discharged as cured. An action for damages was brought against the family physician and the chief diagnostician, it being alleged that, at the time of the first commitment, the plaintiff was suffering from no disease but contracted smallpox while in the hospital the first time. The evidence for plaintiff tended to show that while in the hospital the first time she was not sick and spent the time playing in the yard and helping the nurses. There was a verdict and judgment in the trial court for the defendants, which judgment was affirmed by the supreme court. Concerning the reporting of suspected cases of communicable diseases, the appellate court had this to say:

[15] 297 S. W. 968.

* * * The public health is of the greatest concern to all. By law its keeping rests with the attending physicians, householders, and health officers. Public policy favors the discovery and confinement of persons afflicted with contagious diseases, and we think it is not only the privilege, but the duty, of any citizen acting in good faith and on reasonable grounds to report all suspected cases that examination may be made by experts and the public health thereby protected. We hold this may be done without being subjected to liability for damages. To hold otherwise would not only invite indifference at the expense of society, but the fear of liability would well-nigh destroy the efforts of officials to protect the public health. Any citizen may without malice and with probable cause bring about the arrest and prosecution of another without liability in damages. We think one who reports a suspected case of a contagious disease to the health officers in good faith and on reasonable grounds should have like protection. Respondent Amyx [the family physician] did not commit appellant to Koch's Hospital. She was committed by the proper city authority. Amyx's interest in making the report was that of a citizen interested in the public health and the health officers had a corresponding interest. The report of Amyx to the health department may be likened to communications classified as qualifiedly privileged in libel and slander cases. * * *

## PUBLIC HEALTH ENGINEERING ABSTRACTS

**Elementary Sanitary Engineering in India.**—Book by G. Bransby Williams, published by Thacker, Spink & Co., Calcutta. (Reviewed in *Indian Medical Gazette*, vol. 63, No. 5, May, 1928, p. 286.) (Abstract by H. N. Old.)

This manual is prepared largely for the courses of instruction given the sanitary inspectors in England and at Bombay through the Royal Sanitary Institute, and at Bengal by the Public Health Department. It provides the theoretical, and descriptive parts to supplement the practical and outdoor instruction. Map reading, drawing, surveying, building construction, drainage, sewage, and water works subjects are treated. About 30 plates of diagrams are included, which are said to illustrate well the text material.

This book, according to the reviewer (A. D. S.), serves the purpose of giving to the well qualified sanitary inspector the elements of sanitary engineering which he should have.

**Advancement in Mosquito Control in the United States and Canada.** Anon. *American Journal of Public Health* and the *Nation's Health*, vol. 18, No. 8, August, 1928, pp. 985–992. (Abstract by H. N. Old.)

This article is an abstract of the Report of the Committee on Mosquito Control presented before the Public Health Engineering Section of the American Public Health Association at annual meeting at Cincinnati, Ohio, October 19, 1927.

By the use of a questionnaire, the committee obtained information on mosquito control activities from 42 States and Provinces in North America and from the Territory of Alaska. A grouping of four classes is used and under each classification is given a summary of the activities of each State or Province. Some of the interesting features are as follows: Illinois—enactment of a law providing for creation of abatement districts in communities of population over 300 and for collection annually of 1 mill on each dollar of taxable property. Louisiana—as part of the postflood sanitation program screening of 600 homes of known malaria carriers is being carried out. Mississippi—with aid of the Red Cross and Public Health Service, approximately 3,400 homes were screened as part of

flood sanitation program. Alabama—prevention of new foci looking to time when old foci will be eliminated and malaria controlled. The permit system for impounding water is a primary tool of control, placing burden on property owner where it belongs. Railroad cooperation—the Cotton Belt, the Missouri Pacific, and the Rock Island systems extended malaria control activities in Texas, Louisiana, Arkansas, and Missouri, cooperating with the States and communities. South Carolina—lecture courses on mosquito and malaria control instituted in three universities in the State. New York—reduction of malaria from 476 cases in 1916 to an average of two cases for the past six years.

**A Note on Some Recent Attempts to Transmit Malaria Organisms Mechanically through Mosquito Biting.** Bruce Mayne. *Indian Journal of Medical Research*, vol. 15, No. 4, April, 1928, pp. 1067–1071. (Abstract by W. H. W. Komp.)

Noting the very short time required for the act of biting which produced natural infection from infected mosquitoes, the author made experiments to determine the possibility of mechanical carriage of malaria by mosquitoes. Several species were used, one of Aëdes and one of Anopheles. The mosquitoes were allowed to bite cases of malaria having numerous ring forms and moderate numbers of gametes in the blood, and then transferred to the noninfected subjects and allowed to engorge themselves completely. In this way the sexual phase of development in the mosquito was bridged over. In a series of 12 subjects exposed in this manner no case of malaria occurred. Malaria organisms were found, however, in the mouth parts of mosquitoes examined immediately after biting a case of tertian malaria.

**A Consideration of the Variability in the Nyssorhynchus Group of the Genus Anopheles.** Nelson C. Davis. *American Journal of Hygiene*, vol. 8, No. 4, July, 1928, pp. 539–563. (Abstract by H. A. Johnson.)

This is a technical discussion of the white bandings of the legs and palps of the Nyssorhynchus group found in Brazil and represented by *A. argyritarsis*, *A. tarsimaculatus*, *A. albitarsis*, *A. rondoni*, and several other closely related species.

As a result of the study a large variation in the markings of different specimens of the same species was observed which would account for the continual reporting of new species of the group. Excellent graphs are included graphically illustrating the variations observed within the species of the group.

The author states that the Nyssorhynchus group originated from a common stock and is represented in Brazil by two distinct lines of descent, *A. argyritarsis*, and *A. tarsimaculatus*, respectively. He states that there is not sufficient differentiation to establish other divisions of the group in Brazil and suggests that variations from these two divisions be considered as subspecies; at least until further study can be made.

The author concludes that while the white markings of this group are very valuable in differentiating the species, specimens must be chosen with great care.

**The Influence of Relative Humidity on the Presence of Parasites in the Insect Carrier and the Initial Seasonal Appearance of Malaria in a Selected Area in India.** Bruce Mayne. *Indian Journal of Medical Research*, vol. 15, No. 4, April, 1928, pp. 1073–1084. (Abstract by W. H. W. Komp.)

The author dissected 5,052 specimens of five species of Indian Anopheles during the period from the latter part of February to the latter part of September. These were caught in four native villages in which the splenic index was 42.6 and a blood parasite index was 62.5. A total of 3,385 specimens were dissected before the first infected mosquito, an *Anopheles culicifacies*, was found, on August 9. After that time four additional infected mosquitoes were found up to September 8. A table is given showing how closely the curve of relative humidity follows that of the curve of positive mosquito gut infections, as the

season of highest relative humidity occurred from early August to the second week of September.

An interesting observation is made that blood meals were digested by mosquitoes much more rapidly during the season of high relative humidity than during the dry months preceding them. It is suggested that the more rapid clearing of the alimentary tract may result in more numerous blood feeds and, consequently, greater chances of infection.

**Malaria and Its Transmitting Agents in the State of Sinaloa, Mexico.** Carlos C. Hoffman. *Boletin del Departamento de Salubridad Publica de Mexico*, No. 1, April, 1928, pp. 31–46. (Abstract by H. A. Johnson.)

These observations were made from September 17 to October 15, 1926. There are found in this region only two Anopheles of importance, *A. albimanus* and *A. pseudopunctipennis*. Of this last a subspecies, also, *A. pseudopunctipennis franciscanus*, is mentioned.

*A. pseudopunctipennis* is very widely distributed over the whole State and is especially prevalent in the drier regions (uplands). It is considered the species of most importance from a general malaria standpoint. Its breeding places are irrigation ditches, railroad right of ways, highway construction pits, and around camp sites (man-made conditions). The species prefers also ponds, lakes, side pools in rivers when these are reasonably pure and have green algæ or water lilies. Their flight in the drier regions seems to be rather extensive.

*A. albimanus* is found only in a narrow zone near the coast and extending north about one-half the length of the State. This area has an average relative humidity of 75 to 77 per cent. Brackish swamps, especially when floating vegetation is present, are ideal breeding places. Due to short duration of small ponds, hoof prints, etc., following rains very little breeding was observed in these.

The development of agriculture connected with sugar-cane raising, and the establishment of milling centers or centrals has made Anopheles and malaria widespread. Instances are cited to show the development of Anopheles and malaria coincident with introduction of irrigation and agriculture. It is quite probable that the activity of Anopheles as malaria transmitters does not entirely cease in winter. The centrals where large quantities of transient labor are brought in at milling time are the really serious foci of malaria, and it is not uncommon to find many totally disabled laborers during this season at such places. In the more recent industrial developments the malaria rate has not yet fully established itself, although Anopheles prevalence is high.

In view of the widespread breeding and shifting of labor the use of quinine, as well as antilarval work, is stressed and the excellent results being secured by the use of quinine among employees of the Southern Pacific Railroad of Mexico in the State are reviewed.

Extensive collection of mosquitoes in houses showed a constant ratio of seven female to three male Anopheles both in *albimanus* and *pseudopunctipennis* areas. Universal high counts of *Aëdes fasciata* due to container breeding were observed. Antilarval work around some of the centrals is under way.

**Glasgow Refuse Power Works.** Anon. *Surveyor*, vol. 73, No. 1893, May 4, 1928, pp. 477–479. (Abstract by Rudolph E. Thompson.)

An illustrated description of refuse power works recently constructed at cost of £600,000. The installation will operate 24 hours a day for 6 days each week and has capacity of 640 tons per day. The refuse is collected by a fleet of large capacity electric vehicles, weighed and discharged into hoppers with apparatus for feeding the material into revolving screens. Tins, etc., are removed by electric-magnetic separators, a detinning furnace and baling presses having been provided for handling this product. The tailings are pulverized, mixed with the

screenings and conveyed to bunkers on the adjoining incinerator building. The furnaces consist of eight units, each of five cells. The grates are of the latest type, designed for mechanical clinkering and recovery of the heat contained in the clinker. The whole cycle of charging and clinkering is controlled by hydraulic valves, the charging being effected with a hydraulic ram. From the combustion chambers the hot gases are conveyed direct to water-tube boilers, the steam being employed to drive two 5,000 k. w. turbo-alternators.

**Disposal of Rubbish.** M. C. Beatty. *Journal of the Royal Army Medical Corps*, vol. 51, No. 1, July, 1928, pp. 59–61. (Abstract by H. N. Old.)

The article is devoted primarily to a description of the system of collection, rather than ultimate disposal, of rubbish at Wiesbaden, Germany, which very effectively prevents the nuisances caused by the usual system of open rubbish cans and collection carts.

The system described consists of furnishing each house a covered metal bin of 110 liters capacity shaped somewhat like a milk churn. The collection facilities consist of four 80 horsepower motor rubbish wagons with 12 men (exclusive of drivers) to each two wagons. Six men are used to bring the bins to the street half an hour before the wagon arrives, four empty the bins, and two carry them back to the houses.

By rather intricate mechanical equipment, electrically operated, the bins are lifted to the tightly inclosed metal wagon bodies, placed on a hinged steel tail plate and by a worm gear arrangement drawn into the wagon inclosure, emptied and discharged with the bin lid still tightly closed. It is stated that during the whole operation no rubbish or even dust can escape into the street.

At Essex, where the system has been in use for some time, the cost has been worked out in detail and it is found that the emptying of one bin weekly costs 18.67 marks (about $4.40) per annum, and 5.22 marks (about $1.25) per cubic meter of rubbish handled per annum.

Many advantages of the system are given, such as rapid operation, absence of dust or dirt overspilling, large holding capacity, 10 to 15 cubic meters, etc.

In conclusion, it is stated that the general practice in Germany in the matter of ultimate disposal of rubbish is that of dumping in hollows or low areas at a distance from the town.

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## DEATHS DURING WEEK ENDED DECEMBER 8, 1928

*Summary of information received by telegraph from industrial insurance companies for the week ended December 8, 1928, and corresponding week of 1927. (From the Weekly Health Index, December 12, 1928, issued by the Bureau of the Census, Department of Commerce)*

| | Week ended Dec. 8, 1928 | Corresponding week, 1927 |
|---|---|---|
| Policies in force | 72, 009, 464 | 69, 603, 581 |
| Number of death claims | 14, 080 | 12, 217 |
| Death claims per 1,000 policies in force, annual rate | 10. 2 | 9. 2 |

*Deaths from all causes in certain large cities of the United States during the week ended December 8, 1928, infant mortality, annual death rate, and comparison with corresponding week of 1927. (From the Weekly Health Index, December 12, 1928, issued by the Bureau of the Census, Department of Commerce)*

| City | Week ended Dec. 8, 1928 | | Annual death rate per 1,000 corresponding week, 1927 | Deaths under 1 year | | Infant mortality rate, week ended Dec. 8, 1928 [2] |
|---|---|---|---|---|---|---|
| | Total deaths | Death rate [1] | | Week ended Dec. 8, 1928 | Corresponding week, 1927 | |
| Total (65 cities) | 7,537 | 13.3 | 11.9 | 721 | 624 | [3] 61 |
| Akron | 41 | | | 3 | 4 | 32 |
| Albany [4] | 49 | 21.3 | 20.5 | 4 | 1 | 83 |
| Atlanta | 93 | 19.1 | 15.3 | 8 | 4 | |
| White | 54 | | 11.3 | 5 | 3 | |
| Colored | 39 | (5) | 24.7 | 3 | 1 | |
| Baltimore [4] | 228 | 14.4 | 13.8 | 20 | 25 | 64 |
| White | 167 | | 12.1 | 12 | 14 | 48 |
| Colored | 61 | (5) | 23.4 | 8 | 11 | 124 |
| Birmingham | 66 | 15.5 | 15.3 | 12 | 8 | 102 |
| White | 27 | | 14.1 | 4 | 5 | 55 |
| Colored | 39 | (5) | 17.2 | 8 | 3 | 180 |
| Boston | 214 | 14.0 | 14.1 | 32 | 24 | 88 |
| Bridgeport | 26 | | | 3 | 5 | 50 |
| Buffalo | 154 | 14.5 | 11.6 | 11 | 17 | 48 |
| Cambridge | 19 | 7.9 | 8.4 | 1 | 1 | 18 |
| Camden | 33 | 12.7 | 10.2 | 5 | 6 | 80 |
| Canton | 26 | 11.6 | 11.5 | 5 | 4 | 117 |
| Chicago [4] | 841 | 13.9 | 11.4 | 76 | 54 | 65 |
| Cincinnati | 134 | | | 16 | 14 | 95 |
| Cleveland | 186 | 9.6 | 9.5 | 18 | 21 | 49 |
| Columbus | 87 | 15.2 | 13.1 | 4 | 8 | 37 |
| Dallas | 48 | 11.5 | 10.6 | 8 | 5 | |
| White | 37 | | 9.3 | 7 | 4 | |
| Colored | 11 | (5) | 19.0 | 1 | 1 | |
| Dayton | 41 | 11.6 | 11.5 | 7 | 2 | 111 |
| Denver | 127 | 22.6 | 16.0 | 17 | 10 | |
| Des Moines | 31 | 10.7 | 10.2 | 5 | 1 | 89 |
| Detroit | 302 | 11.5 | 9.7 | 54 | 30 | 84 |
| Duluth | 23 | 10.3 | 7.7 | 0 | 0 | 0 |
| El Paso | 33 | 14.6 | 11.0 | 4 | 2 | |
| Erie | 14 | | | 1 | 3 | 21 |
| Fall River [4] | 28 | 10.9 | 8.3 | 3 | 2 | 55 |
| Flint | 39 | 13.7 | 11.3 | 9 | 8 | 117 |
| Fort Worth | 43 | 13.2 | 11.8 | 3 | 2 | |
| White | 36 | | 11.2 | 2 | 2 | |
| Colored | 7 | (5) | 16.0 | 1 | 0 | |
| Grand Rapids | 42 | 13.4 | 12.2 | 8 | 4 | 116 |
| Houston | 64 | | | 9 | 11 | |
| White | 45 | | | 7 | 5 | |
| Colored | 19 | (5) | | 2 | 6 | |
| Indianapolis | 109 | 14.9 | 13.1 | 6 | 6 | 47 |
| White | 95 | | 13.1 | 6 | 6 | 54 |
| Colored | 14 | (5) | 12.8 | 0 | 0 | 0 |
| Jersey City | 61 | 9.8 | 10.1 | 6 | 4 | 47 |
| Kansas City, Kans | 40 | 17.7 | 14.6 | 3 | 3 | 67 |
| White | 30 | | 13.0 | 2 | 1 | 51 |
| Colored | 10 | (5) | 22.1 | 1 | 2 | 180 |
| Kansas City, Mo | 130 | 17.4 | 12.1 | 8 | 6 | 65 |
| Knoxville | 11 | 5.5 | 17.9 | 2 | 6 | 44 |
| White | 10 | | 18.6 | 2 | 6 | 49 |
| Colored | 1 | (5) | 12.8 | 0 | 0 | 0 |
| Los Angeles | 441 | | | 22 | 33 | 63 |
| Louisville | 91 | 14.4 | 11.4 | 5 | 1 | 41 |
| White | 63 | | 10.6 | 5 | 1 | 47 |
| Colored | 28 | (5) | 16.0 | 0 | 0 | 0 |
| Lowell | 24 | 11.4 | 8.0 | 3 | 4 | 65 |
| Lynn | 15 | 7.4 | 11.4 | 3 | 1 | 82 |
| Memphis | 93 | 25.6 | 20.4 | 11 | 7 | 130 |
| White | 53 | | 18.5 | 5 | 3 | 95 |
| Colored | 40 | (5) | 23.9 | 6 | 4 | 188 |
| Milwaukee | 94 | 9.0 | 10.3 | 13 | 14 | 58 |
| Minneapolis | 92 | 10.6 | 8.9 | 11 | 6 | 67 |
| Nashville | 64 | 24.0 | 18.9 | 4 | 3 | 67 |
| White | 42 | | 13.7 | 3 | 3 | 67 |
| Colored | 22 | (5) | 32.2 | 1 | 0 | 65 |
| New Bedford | 30 | 13.1 | 11.3 | 2 | 2 | 43 |

See footnotes at end of table.

*Deaths from all causes in certain large cities of the United States during the week ended December 8, 1928, infant mortality, annual death rate, and comparison with corresponding week of 1927*—Continued.

| City | Week ended Dec. 8, 1928 | | Annual death rate per 1,000 corresponding week, 1927 | Deaths under 1 year | | Infant mortality rate, week ended Dec. 8, 1928 |
|---|---|---|---|---|---|---|
| | Total deaths | Death rate | | Week ended Dec. 8, 1928 | Corresponding week, 1927 | |
| New Haven | 35 | 9.7 | 13.3 | 4 | 5 | 59 |
| New Orleans | 150 | 18.3 | 19.7 | 16 | 17 | 80 |
| White | 94 | | 16.4 | 12 | 7 | 89 |
| Colored | 56 | (5) | 28.8 | 4 | 10 | 61 |
| New York | 1,460 | 12.7 | 11.4 | 153 | 110 | 62 |
| Bronx Borough | 182 | 10.0 | 9.6 | 15 | 9 | 45 |
| Brooklyn Borough | 504 | 11.4 | 10.6 | 46 | 42 | 47 |
| Manhattan Borough | 579 | 17.3 | 14.7 | 73 | 47 | 87 |
| Queens Borough | 150 | 9.2 | 8.4 | 18 | 11 | 73 |
| Richmond Borough | 45 | 15.6 | 11.7 | 1 | 1 | 18 |
| Newark, N. J | 102 | 11.3 | 10.9 | 10 | 14 | 52 |
| Oklahoma City | 40 | | | 2 | 5 | |
| Omaha | 33 | 7.7 | 10.2 | 4 | 4 | 47 |
| Paterson | 52 | 18.8 | 9.4 | 2 | 3 | 35 |
| Philadelphia | 550 | 13.9 | 10.6 | 51 | 32 | 69 |
| Pittsburgh | 154 | 12.0 | 14.7 | 13 | 23 | 44 |
| Portland, Oreg | 68 | | | 3 | 7 | 33 |
| Providence | 65 | 11.9 | 11.5 | 6 | 5 | 52 |
| Richmond | 56 | 15.1 | 13.3 | 5 | 6 | 68 |
| White | 32 | | 10.7 | 2 | 1 | 42 |
| Colored | 24 | (5) | 19.7 | 3 | 5 | 117 |
| Rochester | 68 | 10.8 | 11.2 | 5 | 11 | 41 |
| St. Louis | 232 | 14.3 | 12.9 | 15 | 16 | 51 |
| St. Paul | 51 | | | 3 | 4 | 29 |
| Salt Lake City [4] | 67 | 25.4 | 14.2 | 2 | 6 | 32 |
| San Antonio | 52 | 12.5 | 15.0 | 3 | 15 | |
| San Diego | 64 | 28.0 | 20.8 | 4 | 2 | 77 |
| San Francisco | 160 | 14.3 | 14.4 | 3 | 8 | 19 |
| Schenectady | 27 | 15.1 | 14.0 | 0 | 5 | 0 |
| Seattle | 92 | 12.6 | 8.2 | 2 | 3 | 21 |
| Somerville | 18 | 9.2 | 13.3 | 2 | 1 | 56 |
| Springfield, Mass | 33 | 11.5 | 10.6 | 1 | 2 | 17 |
| Syracuse | 58 | 15.2 | 9.8 | 5 | 3 | 61 |
| Tacoma | 29 | 13.7 | 13.6 | 0 | 2 | 0 |
| Toledo | 80 | 13.4 | 14.2 | 1 | 10 | 10 |
| Trenton | 46 | 17.3 | 6.9 | 5 | 0 | 86 |
| Washington, D. C | 122 | 12.6 | 12.3 | 9 | 5 | 52 |
| White | 74 | | 10.3 | 3 | 5 | 25 |
| Colored | 48 | (5) | 18.0 | 6 | 0 | 111 |
| Waterbury | 13 | | | 3 | 6 | 76 |
| Wilmington, Del | 21 | 8.5 | 12.0 | 2 | 0 | 49 |
| Worcester | 48 | 12.7 | 15.2 | 3 | 9 | 36 |
| Yonkers | 22 | 9.5 | 7.9 | 3 | 1 | 67 |
| Youngstown | 34 | 10.2 | 7.4 | 1 | 4 | 13 |

[1] Annual rate per 1,000 population.
[2] Deaths under 1 year per 1,000 births. Cities left blank are not in the registration area for births.
[3] Data for 67 cities.
[4] Deaths for week ended Friday, Dec. 7, 1928.
[5] In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Louisville, 17; Memphis, 38; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 25.

# PREVALENCE OF DISEASE

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring*

## UNITED STATES

### CURRENT WEEKLY STATE REPORTS

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

**Reports for Weeks Ended December 8, 1928, and December 10, 1927**

*Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended December 8, 1928, and December 10, 1927*

| Division and State | Diphtheria | | Influenza | | Measles | | Meningococcus meningitis | |
|---|---|---|---|---|---|---|---|---|
| | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 |
| New England States: | | | | | | | | |
| Maine | 1 | 4 | 12 | 113 | 219 | 54 | 0 | 0 |
| New Hampshire | 1 | | 17 | | 34 | | 0 | |
| Vermont | | | | | 17 | | 0 | |
| Massachusetts | 116 | 131 | 15 | 1 | 637 | 540 | 2 | 0 |
| Rhode Island | 21 | 25 | 2 | | 28 | 10 | 0 | 0 |
| Connecticut | 30 | 37 | 4 | 9 | 87 | 47 | 0 | 0 |
| Middle Atlantic States: | | | | | | | | |
| New York | 255 | 376 | [1] 36 | [1] 25 | 766 | 289 | 32 | 4 |
| New Jersey | 165 | 184 | 22 | 8 | 87 | 89 | 4 | 1 |
| Pennsylvania | 148 | 299 | | | 438 | 670 | 6 | 4 |
| East North Central States: | | | | | | | | |
| Ohio | 100 | 98 | [2] 45 | 10 | 177 | 59 | 1 | 2 |
| Indiana | 38 | 62 | 87 | 29 | 75 | 50 | 0 | 0 |
| Illinois | 230 | 177 | 97 | 39 | 331 | 32 | 9 | 5 |
| Michigan | 85 | 112 | 6 | 4 | 149 | 328 | 8 | 4 |
| Wisconsin | 26 | 55 | 107 | 29 | 118 | 84 | 6 | 5 |
| West North Central States: | | | | | | | | |
| Minnesota | 18 | 28 | 4 | 1 | 53 | 5 | 2 | 4 |
| Iowa | 24 | 14 | | | | 12 | 0 | 1 |
| Missouri | 67 | 73 | 140 | 6 | 56 | 25 | 11 | 1 |
| North Dakota | 4 | | 194 | | 4 | 1 | 1 | 6 |
| South Dakota | 4 | 2 | | 2 | 2 | 21 | 0 | 1 |
| Nebraska | 24 | 21 | 364 | 11 | 9 | 10 | 0 | 0 |
| Kansas | 26 | 36 | 13,596 | 5 | 20 | 103 | 2 | 1 |
| South Atlantic States: | | | | | | | | |
| Delaware | 1 | 3 | | 1 | 5 | | 0 | 0 |
| Maryland [3] | 38 | 41 | 10 | 28 | 46 | 88 | 1 | 1 |
| District of Columbia | 24 | 20 | 3 | | | 4 | 0 | 0 |
| West Virginia | 34 | 28 | 57 | 26 | 41 | 30 | 0 | 1 |
| North Carolina | 129 | 80 | | | 8 | 1,158 | 0 | 2 |
| South Carolina | 58 | 35 | 5,145 | 629 | 4 | 335 | 0 | 0 |
| Georgia | 27 | 22 | 990 | 68 | 1 | 28 | 0 | 0 |
| Florida | 13 | 20 | 17 | 5 | 6 | 3 | 1 | 1 |

[1] New York City only.
[2] Unofficial reports indicate many cases of influenza.
[3] Week ended Friday.

*Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended December 8, 1928, and December 10, 1927*—Continued

| Division and State | Diphtheria | | Influenza | | Measles | | Meningococcus meningitis | |
|---|---|---|---|---|---|---|---|---|
| | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 |
| East South Central States: | | | | | | | | |
| Kentucky | 17 | 15 | 4 | | | 37 | 0 | 2 |
| Tennessee | 33 | 22 | 222 | 79 | 7 | 174 | 0 | 1 |
| Alabama | 81 | 78 | 214 | 67 | 17 | 44 | 1 | 1 |
| Mississippi | 54 | 39 | | | | | 2 | |
| West South Central States: | | | | | | | | |
| Arkansas | 13 | 20 | 95 | 73 | 5 | 22 | 4 | 0 |
| Louisiana | 34 | 35 | 36 | 13 | 91 | 26 | 2 | 0 |
| Oklahoma [4] | 106 | 100 | 200 | 80 | 3 | 62 | 2 | 2 |
| Texas | 77 | 144 | 38 | 67 | 4 | 34 | 2 | 0 |
| Mountain States: | | | | | | | | |
| Montana | 9 | 2 | [5] 4,580 | | 105 | 1 | 2 | 2 |
| Idaho | | | 7 | | 4 | | 2 | 3 |
| Wyoming | 5 | 1 | 68 | 1 | 2 | 10 | 1 | 0 |
| Colorado | 7 | 34 | 1,936 | | 3 | 11 | 7 | 3 |
| New Mexico | 10 | 6 | 170 | | | 13 | 0 | 0 |
| Arizona | 6 | 7 | 100 | | 1 | 9 | 1 | 0 |
| Utah [3] | 2 | 11 | 96 | 2 | 1 | | 5 | 1 |
| Pacific States: | | | | | | | | |
| Washington | 28 | 25 | 22 | | 36 | 166 | 3 | 3 |
| Oregon | 23 | 10 | [6] 1,466 | 14 | 55 | 8 | 4 | 0 |
| California | 92 | 120 | 10,296 | 21 | 21 | 53 | 8 | 4 |

| Division and State | Poliomyelitis | | Scarlet fever | | Smallpox | | Typhoid fever | |
|---|---|---|---|---|---|---|---|---|
| | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 |
| New England States: | | | | | | | | |
| Maine | 1 | 2 | 12 | 67 | 13 | 0 | 1 | 4 |
| New Hampshire | 0 | | 27 | | 0 | | 0 | |
| Vermont | 0 | | 14 | | 2 | | 0 | |
| Massachusetts | 4 | 24 | 232 | 266 | 0 | 0 | 1 | 6 |
| Rhode Island | 0 | 0 | 19 | 35 | 0 | 0 | 0 | 0 |
| Connecticut | 0 | 2 | 38 | 70 | 1 | 0 | 8 | 3 |
| Middle Atlantic States: | | | | | | | | |
| New York | 4 | 6 | 369 | 382 | 0 | 1 | 17 | 27 |
| New Jersey | 0 | 1 | 126 | 127 | 0 | 3 | 2 | 6 |
| Pennsylvania | 1 | 8 | 286 | 366 | 0 | 0 | 18 | 24 |
| East North Central States: | | | | | | | | |
| Ohio | 2 | 11 | 264 | 216 | 58 | 24 | 20 | 16 |
| Indiana | 0 | 4 | 126 | 114 | 44 | 94 | 6 | 3 |
| Illinois | 2 | 7 | 334 | 277 | 88 | 20 | 22 | 18 |
| Michigan | 0 | 6 | 285 | 210 | 21 | 29 | 4 | 9 |
| Wisconsin | 0 | 0 | 140 | 140 | 18 | 77 | 0 | 4 |
| West North Central States: | | | | | | | | |
| Minnesota | 2 | 2 | 142 | 123 | 19 | 0 | 3 | 6 |
| Iowa | 1 | 2 | 99 | 67 | 51 | 41 | 0 | 3 |
| Missouri | 0 | 0 | 74 | 86 | 16 | 26 | 7 | 11 |
| North Dakota | 0 | 0 | 21 | 48 | 1 | 1 | 4 | 2 |
| South Dakota | 2 | 1 | 16 | 31 | 40 | 21 | 1 | 3 |
| Nebraska | 1 | 5 | 64 | 65 | 37 | 56 | 5 | 1 |
| Kansas | 0 | 1 | 106 | 134 | 28 | 40 | 4 | 8 |
| South Atlantic States: | | | | | | | | |
| Delaware | 0 | 0 | 3 | 7 | 0 | 0 | 0 | 1 |
| Maryland [3] | 3 | 0 | 73 | 29 | 1 | 0 | 5 | 15 |
| District of Columbia | 0 | 0 | 12 | 31 | 0 | 0 | 0 | 0 |
| West Virginia | 0 | 8 | 54 | 60 | 13 | 16 | 2 | 23 |
| North Carolina | 2 | 2 | 102 | 73 | 2 | 42 | 2 | 3 |
| South Carolina | 5 | 1 | 27 | 20 | 0 | 4 | 12 | 27 |
| Georgia | 2 | 2 | 34 | 13 | 0 | 0 | 6 | 4 |
| Florida | 0 | 2 | 16 | 10 | 0 | 0 | 3 | 4 |

[3] Week ended Friday.
[4] Figures for 1928 are exclusive of Oklahoma City and Tulsa and for 1927 are exclusive of Tulsa.
[5] Includes many delayed reports. The State epidemiologist says that the number of cases of influenza appears to be decreasing.
[6] Includes 122 cases delayed reports.

*Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended December 8, 1928, and December 10, 1927*—Continued

| Division and State | Poliomyelitis | | Scarlet fever | | Smallpox | | Typhoid fever | |
|---|---|---|---|---|---|---|---|---|
| | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 | Week ended Dec. 8, 1928 | Week ended Dec. 10, 1927 |
| East South Central States: | | | | | | | | |
| Kentucky | 0 | 3 | 89 | 43 | 6 | 8 | 4 | 0 |
| Tennessee | 0 | 2 | 48 | 36 | 10 | 6 | 6 | 28 |
| Alabama | 0 | 1 | 73 | 23 | 1 | 1 | 6 | 8 |
| Mississippi | 0 | 0 | 28 | 17 | 0 | 0 | 5 | 2 |
| West South Central States: | | | | | | | | |
| Arkansas | 0 | 1 | 29 | 9 | 1 | 8 | 5 | 3 |
| Louisiana | 0 | 0 | 20 | 11 | 5 | 6 | 16 | 6 |
| Oklahoma [4] | 2 | 2 | 63 | 37 | 40 | 54 | 44 | 32 |
| Texas | 0 | 7 | 60 | 78 | 30 | 27 | 8 | 12 |
| Mountain States: | | | | | | | | |
| Montana | 1 | 0 | 15 | 12 | 13 | 16 | 2 | 0 |
| Idaho | 0 | 1 | 3 | 8 | 22 | 0 | 0 | 0 |
| Wyoming | 0 | 0 | 20 | 14 | 2 | 10 | 0 | 1 |
| Colorado | 0 | 4 | 27 | 112 | 3 | 10 | 2 | 3 |
| New Mexico | 0 | 1 | 12 | 13 | 0 | 0 | 2 | 9 |
| Arizona | 2 | 0 | 5 | 6 | 1 | 0 | 3 | 6 |
| Utah [3] | 1 | 2 | 10 | 20 | 2 | 54 | 0 | 0 |
| Pacific States: | | | | | | | | |
| Washington | 3 | 5 | 57 | 42 | 26 | 30 | 2 | 6 |
| Oregon | 1 | 13 | 44 | 22 | 51 | 51 | 3 | 4 |
| California | 0 | 27 | 180 | 162 | 21 | 2 | 4 | 9 |

[3] Week ended Friday.
[4] Figures for 1928 are exclusive of Oklahoma City and Tulsa, and for 1927 are exclusive of Tulsa.

## Report for Week Ended November 24, 1928

| IOWA | Cases |
|---|---|
| Diphtheria | 9 |
| Poliomyelitis | 1 |
| Scarlet fever | 106 |
| Smallpox | 46 |
| Typhoid fever | 1 |

## SUMMARY OF MONTHLY REPORTS FROM 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 | Meningococcus meningitis | Diphtheria | Influenza | Malaria | Measles | Pellagra | Poliomyelitis | Scarlet fever | Smallpox | Typhoid fever |
|---|---|---|---|---|---|---|---|---|---|---|
| *November, 1928* | | | | | | | | | | |
| Alabama | 4 | 538 | 496 | 566 | 74 | 27 | 6 | 212 | 17 | 80 |
| Arizona | 1 | 29 | 23 | ------- | 1 | ------- | 2 | 14 | 23 | 9 |
| Connecticut | 1 | 106 | 12 | ------- | 326 | ------- | 8 | 145 | 7 | 6 |
| District of Columbia | 0 | 219 | 5 | ------- | 10 | 1 | 4 | 57 | 0 | 5 |
| Nebraska | 3 | 125 | 31 | ------- | 12 | ------- | 1 | 229 | 70 | 7 |
| Porto Rico | 1 | 53 | 1,049 | 4,638 | 26 | 2 | ------- | 1 | 0 | 242 |

*November, 1928*

| | Cases |
|---|---|
| Chicken pox: | |
| Alabama | 71 |
| Arizona | 25 |
| Connecticut | 409 |
| District of Columbia | 62 |
| Nebraska | 151 |
| Conjunctivitis (infectious): | |
| Connecticut | 5 |
| Dengue: | |
| Alabama | 2 |
| Porto Rico | 5 |
| Filariasis: | |
| Porto Rico | 5 |
| Framboesia tropicale: | |
| Porto Rico | 2 |
| German measles: | |
| Connecticut | 25 |
| Nebraska | 2 |
| Lethargic encephalitis: | |
| Alabama | 2 |
| Connecticut | 2 |
| Mumps: | |
| Alabama | 16 |
| Arizona | 2 |
| Connecticut | 225 |
| Nebraska | 11 |
| Porto Rico | 36 |
| Ophthalmia neonatorum: | |
| Porto Rico | 8 |

*November, 1928*—Continued

| | Cases |
|---|---|
| Puerperal fever: | |
| Porto Rico | 16 |
| Rabies in animals: | |
| Connecticut | 3 |
| District of Columbia | 1 |
| Rabies in man: | |
| Alabama | 2 |
| Septic sore throat: | |
| Connecticut | 9 |
| Nebraska | 6 |
| Tetanus: | |
| Porto Rico | 29 |
| Porto Rico (infantile) | 47 |
| Trachoma: | |
| Arizona | 34 |
| Trichinosis: | |
| Connecticut | 2 |
| Typhus fever: | |
| Alabama | 4 |
| Connecticut | 1 |
| Undulant fever: | |
| Connecticut | 1 |
| Whooping cough: | |
| Alabama | 50 |
| Arizona | 2 |
| Connecticut | 161 |
| District of Columbia | 110 |
| Nebraska | 33 |
| Porto Rico | 101 |

## GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

The 98 cities reporting cases used in the following table are situated in all parts of the country and have an estimated aggregate population of more than 31,150,000. The estimated population of the 92 cities reporting deaths is more than 30,460,000. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

*Weeks ended December 1, 1928, and December 3, 1927*

| | 1928 | 1927 | Estimated expectancy |
|---|---|---|---|
| *Cases reported* | | | |
| Diphtheria: | | | |
| 44 States | 2,378 | 2,998 | |
| 98 cities | 898 | 1,367 | 1,298 |
| Measles: | | | |
| 43 States | 3,317 | 3,707 | |
| 98 cities | 687 | 1,113 | |
| Poliomyelitis: | | | |
| 44 States | 54 | 195 | |
| Scarlet fever: | | | |
| 44 States | 3,415 | 4,052 | |
| 98 cities | 1,023 | 1,075 | 1,133 |
| Smallpox: | | | |
| 44 States | 627 | 611 | |
| 98 cities | 38 | 100 | 41 |
| Typhoid fever: | | | |
| 44 States | 359 | 458 | |
| 98 cities | 39 | 56 | 71 |
| *Deaths reported* | | | |
| Influenza and pneumonia: | | | |
| 92 cities | 958 | 724 | |

## *City reports for week ended December 1, 1928*

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence the number of cases of the disease under consideration that may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding weeks of the preceding years. When the reports include several epidemics or when for other reasons the median is unsatisfactory, the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during non-epidemic years.

If the reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1919 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviation from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

| Division, State, and city | Population July 1, 1926, estimated | Chicken pox, cases reported | Diphtheria | | Influenza | | Measles, cases reported | Mumps, cases reported | Pneumonia, deaths reported |
|---|---|---|---|---|---|---|---|---|---|
| | | | Cases, estimated expectancy | Cases reported | Cases reported | Deaths reported | | | |
| **NEW ENGLAND** | | | | | | | | | |
| Maine: | | | | | | | | | |
| Portland | 76,400 | 4 | 2 | 1 | 0 | 0 | 21 | 1 | 2 |
| New Hampshire: | | | | | | | | | |
| Concord | [1] 22,546 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Vermont: | | | | | | | | | |
| Barre | [1] 10,008 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| Massachusetts: | | | | | | | | | |
| Boston | 787,000 | 80 | 54 | 18 | 4 | 2 | 6 | 3 | 17 |
| Fall River | 131,000 | 3 | 5 | 0 | 1 | 0 | 124 | 0 | 0 |
| Springfield | 145,000 | 14 | 5 | 20 | 0 | 0 | 91 | 1 | 3 |
| Worcester | 193,000 | 13 | 6 | 2 | 1 | 0 | 1 | 0 | 2 |
| Rhode Island: | | | | | | | | | |
| Pawtucket | 71,000 | 0 | 2 | 1 | 0 | 0 | 5 | 0 | 1 |
| Providence | 275,000 | 0 | 11 | 31 | 0 | 1 | 4 | 0 | 8 |
| Connecticut: | | | | | | | | | |
| Bridgeport | (2) | 1 | 10 | 5 | 1 | 1 | 7 | 1 | 0 |
| Hartford | 164,000 | | 8 | | | | | | |
| New Haven | 182,000 | 22 | 4 | 1 | 0 | 0 | 4 | 0 | 3 |
| **MIDDLE ATLANTIC** | | | | | | | | | |
| New York: | | | | | | | | | |
| Buffalo | 544,000 | 29 | 25 | 15 | | 0 | 2 | 0 | 14 |
| New York | 5,924,000 | 223 | 193 | 167 | 20 | 11 | 54 | 40 | 157 |
| Rochester | 321,000 | 11 | 11 | 2 | | 0 | 4 | 16 | 6 |
| Syracuse | 185,000 | 11 | 6 | 0 | | 0 | 6 | 0 | 7 |
| New Jersey: | | | | | | | | | |
| Camden | 131,000 | 9 | 7 | 6 | 0 | 0 | 2 | 20 | 4 |
| Newark | 459,000 | 42 | 16 | 31 | 4 | 0 | 2 | 29 | 14 |
| Trenton | 134,000 | 2 | 6 | 0 | 0 | 1 | 0 | 0 | 2 |
| Pennsylvania: | | | | | | | | | |
| Philadelphia | 2,008,000 | 125 | 86 | 38 | | 4 | 7 | 3 | 54 |
| Pittsburgh | 637,000 | 59 | 37 | 9 | | 4 | 4 | 3 | 30 |
| Reading | 114,000 | 13 | 5 | 1 | | 0 | 14 | 2 | 2 |
| **EAST NORTH CENTRAL** | | | | | | | | | |
| Ohio: | | | | | | | | | |
| Cincinnati | 411,000 | 13 | 19 | 7 | 0 | 2 | 3 | 0 | 14 |
| Cleveland | 960,000 | 165 | 61 | 16 | 10 | 1 | 49 | 8 | 14 |
| Columbus | 285,000 | 12 | 15 | 6 | 1 | 1 | 0 | 0 | 4 |
| Toledo | 295,000 | 144 | 15 | 5 | 2 | 2 | 1 | 2 | 8 |
| Indiana: | | | | | | | | | |
| Fort Wayne | 99,900 | 5 | 6 | 6 | 0 | 1 | 1 | 0 | 0 |
| Indianapolis | 367,000 | 143 | 15 | 5 | 0 | 0 | 2 | 0 | 14 |
| South Bend | 81,700 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| Terre Haute | 71,900 | 1 | 3 | 3 | 0 | 0 | 0 | 0 | 2 |
| Illinois: | | | | | | | | | |
| Chicago | 3,048,000 | 261 | 97 | 185 | 38 | 10 | 37 | 15 | 70 |
| Springfield | 64,700 | 1 | 2 | 0 | 2 | 2 | 0 | 0 | 1 |
| Michigan: | | | | | | | | | |
| Detroit | [1] 1,242,044 | 164 | 81 | 42 | 5 | 4 | 5 | 15 | 38 |
| Flint | 136,000 | 22 | 12 | 2 | 0 | 0 | 1 | 0 | 9 |
| Grand Rapids | 156,000 | 10 | 6 | 0 | 0 | 1 | 5 | 2 | 2 |

[1] Estimated, July 1, 1925.

[2] No estimate made.

*City reports for week ended December 1, 1928*—Continued

| Division, State, and city | Population July 1, 1926, estimated | Chicken pox, cases reported | Diphtheria | | Influenza | | Measles, cases reported | Mumps, cases reported | Pneumonia, deaths reported |
|---|---|---|---|---|---|---|---|---|---|
| | | | Cases, estimated expectancy | Cases reported | Cases reported | Deaths reported | | | |
| **EAST NORTH CENTRAL—continued** | | | | | | | | | |
| Wisconsin: | | | | | | | | | |
| Kenosha | 52,700 | 12 | 2 | 1 | 0 | 0 | 3 | 0 | 3 |
| Milwaukee | 517,000 | 139 | 31 | 6 | 0 | 0 | 94 | 2 | 8 |
| Racine | 69,400 | 2 | 3 | 4 | 0 | 0 | 2 | 0 | 2 |
| Superior | [1] 39,671 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| **WEST NORTH CENTRAL** | | | | | | | | | |
| Minnesota: | | | | | | | | | |
| Duluth | 113,000 | 7 | 1 | 0 | 0 | 0 | 0 | 17 | 1 |
| Minneapolis | 434,000 | 216 | 32 | 5 | 0 | 2 | 12 | 31 | 6 |
| St. Paul | 248,000 | 84 | 19 | 4 | 0 | 0 | 0 | 7 | 7 |
| Iowa: | | | | | | | | | |
| Davenport | [1] 52,469 | 10 | 1 | 0 | 0 | ------- | 0 | 0 | ------- |
| Des Moines | 146,000 | 0 | 6 | 1 | 0 | ------- | 0 | 0 | ------- |
| Sioux City | 78,000 | 12 | 3 | 0 | 0 | ------- | 1 | 9 | ------- |
| Waterloo | 36,900 | 10 | 0 | 5 | 0 | ------- | 0 | 34 | ------- |
| Missouri: | | | | | | | | | |
| Kansas City | 375,000 | 29 | 13 | 5 | 6 | 1 | 14 | 1 | 15 |
| St. Joseph | 78,400 | 3 | 2 | 1 | 0 | 0 | 1 | 0 | 5 |
| St. Louis | 830,000 | 41 | 52 | 51 | 1 | 0 | 1 | 2 | ------ |
| North Dakota: | | | | | | | | | |
| Fargo | [1] 26,403 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Grand Forks | [1] 14,811 | 1 | 1 | 0 | 0 | ------- | 0 | 0 | ------- |
| South Dakota: | | | | | | | | | |
| Aberdeen | [1] 15,036 | 1 | 0 | 0 | 0 | ------- | 1 | 0 | ------- |
| Sioux Falls | [1] 30,127 | 0 | 1 | 0 | 0 | ------- | 0 | 0 | ------- |
| Nebraska: | | | | | | | | | |
| Omaha | 216,000 | 2 | 7 | 13 | 0 | 0 | 0 | 0 | 7 |
| Kansas: | | | | | | | | | |
| Topeka | 56,500 | 33 | 3 | 0 | 0 | 3 | 5 | 0 | 1 |
| Wichita | 92,500 | 5 | 8 | 0 | 0 | 0 | 0 | 2 | 5 |
| **SOUTH ATLANTIC** | | | | | | | | | |
| Delaware: | | | | | | | | | |
| Wilmington | 124,000 | 0 | 3 | 2 | 0 | 0 | 22 | 0 | 0 |
| Maryland: | | | | | | | | | |
| Baltimore | 808,000 | 82 | 39 | 9 | 9 | 5 | 2 | 22 | 25 |
| Cumberland | [1] 33,741 | 3 | 2 | 0 | 0 | 0 | 1 | 0 | 0 |
| Frederick | [1] 12,035 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| District of Columbia: | | | | | | | | | |
| Washington | 528,000 | 33 | 24 | 16 | 4 | 0 | 1 | 0 | 8 |
| Virginia: | | | | | | | | | |
| Lynchburg | [2] 38,493 | 2 | 4 | 1 | 0 | 1 | 0 | 5 | 2 |
| Norfolk | 174,000 | 11 | 4 | 2 | 0 | 0 | 0 | 2 | 2 |
| Richmond | 189,000 | 1 | 17 | 13 | 0 | 0 | 1 | 0 | 8 |
| Roanoke | 61,900 | 8 | 5 | 1 | 0 | 0 | 0 | 0 | 1 |
| West Virginia: | | | | | | | | | |
| Charleston | 50,700 | 18 | 2 | 2 | 3 | 0 | 0 | 0 | 1 |
| Wheeling | [1] 56,208 | 3 | 4 | 1 | 0 | 0 | 9 | 23 | 3 |
| North Carolina: | | | | | | | | | |
| Raleigh | [1] 30,371 | 2 | 3 | 1 | 0 | 1 | 0 | 0 | 0 |
| Wilmington | 37,700 | 2 | 1 | 3 | 0 | 1 | 0 | 0 | 2 |
| Winston-Salem | 71,800 | 1 | 4 | 3 | 0 | 0 | 0 | 0 | 3 |
| South Carolina: | | | | | | | | | |
| Charleston | 74,100 | 0 | 2 | 5 | 49 | 1 | 0 | 0 | 1 |
| Columbia | 41,800 | 4 | 1 | 1 | 0 | 0 | 0 | 1 | 6 |
| Greenville | [1] 27,311 | ------- | 1 | ------- | ------- | ------- | ------- | ------- | ------- |
| Georgia: | | | | | | | | | |
| Atlanta | [3] | 2 | 7 | 5 | 117 | 2 | 0 | 0 | 10 |
| Brunswick | [1] 16,809 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Savannah | 94,900 | 1 | 3 | 3 | 12 | 3 | 0 | 0 | 4 |
| Florida: | | | | | | | | | |
| Miami | [3] 131,286 | 0 | 3 | 1 | 0 | 0 | 2 | 1 | 0 |
| St. Petersburg | [2] 49,629 | ------- | 0 | 2 | ------- | 0 | ------- | ------- | 0 |
| Tampa | 102,000 | 0 | 3 | 1 | 0 | 2 | 0 | 0 | 2 |

[1] Estimated, July 1, 1925. [2] No estimate made. [3] Special census.

*City reports for week ended December 1, 1928*—Continued

| Division, State, and city | Population July 1, 1926, estimated | Chicken pox, cases reported | Diphtheria | | Influenza | | Measles, cases reported | Mumps, cases reported | Pneumonia, deaths reported |
|---|---|---|---|---|---|---|---|---|---|
| | | | Cases, estimated expectancy | Cases reported | Cases reported | Deaths reported | | | |
| **EAST SOUTH CENTRAL** | | | | | | | | | |
| Kentucky: | | | | | | | | | |
| Covington | 58,500 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| Louisville | 311,000 | 1 | 10 | 3 | 0 | 0 | 0 | 0 | 7 |
| Tennessee: | | | | | | | | | |
| Memphis | 177,000 | 9 | 10 | 6 | 0 | 1 | 0 | 0 | 3 |
| Nashville | 137,000 | 2 | 5 | 6 | 0 | 1 | 0 | 0 | 5 |
| Alabama: | | | | | | | | | |
| Birmingham | 211,000 | 6 | 7 | 3 | 2 | 0 | 0 | 0 | 10 |
| Mobile | 66,800 | 0 | 2 | 4 | 0 | 2 | 0 | 0 | 4 |
| Montgomery | 47,000 | 1 | 2 | 6 | 0 | ------- | 0 | 0 | ------- |
| **WEST SOUTH CENTRAL** | | | | | | | | | |
| Arkansas: | | | | | | | | | |
| Fort Smith | [1] 31,643 | 19 | 2 | 1 | 0 | ------- | 0 | 0 | ------- |
| Little Rock | 75,900 | 4 | 3 | 0 | 0 | 0 | 0 | 3 | 0 |
| Louisiana: | | | | | | | | | |
| New Orleans | 419,000 | 1 | 12 | 13 | 9 | 9 | 1 | 0 | 12 |
| Shreveport | 59,500 | 3 | 2 | 3 | 0 | 0 | 2 | 0 | 3 |
| Oklahoma: | | | | | | | | | |
| Oklahoma City | [2] | 0 | 4 | 16 | 8 | 0 | 0 | 0 | 3 |
| Tulsa | 133,000 | 8 | 5 | 13 | 0 | ------- | 0 | 1 | ------- |
| Texas: | | | | | | | | | |
| Dallas | 203,000 | 1 | 17 | 20 | 2 | 1 | 1 | 0 | 4 |
| Fort Worth | 159,000 | 0 | 5 | 13 | 0 | 2 | 0 | 0 | 1 |
| Galveston | 49,100 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| Houston | [1] 164,954 | 0 | 8 | 11 | 0 | 0 | 0 | 0 | 4 |
| San Antonio | 205,000 | 0 | 5 | 6 | 0 | 3 | 0 | 0 | 10 |
| **MOUNTAIN** | | | | | | | | | |
| Montana: | | | | | | | | | |
| Billings | [1] 17,971 | 6 | 0 | 0 | 9 | 1 | 0 | 0 | 1 |
| Great Falls | [1] 29,883 | 20 | 1 | 0 | [4] 2,500 | 2 | 21 | 9 | 0 |
| Helena | [1] 12,037 | 0 | 0 | 1 | 0 | 1 | 4 | 0 | 1 |
| Missoula | [1] 12,668 | 0 | 0 | 0 | 60 | 2 | 0 | 0 | 2 |
| Idaho: | | | | | | | | | |
| Boise | [1] 23,042 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Colorado: | | | | | | | | | |
| Denver | 285,000 | ------- | 14 | ------- | ------- | ------- | ------- | ------- | ------- |
| Pueblo | 43,900 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| New Mexico: | | | | | | | | | |
| Albuquerque | [1] 21,000 | 0 | 1 | 1 | 37 | 0 | 0 | 0 | 2 |
| Utah: | | | | | | | | | |
| Salt Lake City | 133,000 | 74 | 5 | 2 | ------- | 14 | 0 | 12 | 5 |
| Nevada: | | | | | | | | | |
| Reno | [1] 12,665 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| **PACIFIC** | | | | | | | | | |
| Washington: | | | | | | | | | |
| Seattle | [2] | 46 | 7 | 4 | 0 | ------- | 1 | 2 | ------- |
| Spokane | 109,000 | 74 | 3 | 2 | 0 | ------- | 21 | 0 | ------- |
| Tacoma | 106,000 | 15 | 3 | 1 | 0 | 0 | 0 | 27 | 1 |
| Oregon: | | | | | | | | | |
| Portland | [1] 282,383 | 17 | 12 | 12 | 34 | 4 | 19 | 2 | 3 |
| California: | | | | | | | | | |
| Los Angeles | [2] | 34 | 51 | 16 | 3,465 | 55 | 4 | 9 | 57 |
| Sacramento | 73,400 | 2 | 3 | 0 | 124 | 9 | 0 | 14 | 10 |
| San Francisco | 567,000 | 26 | 19 | 5 | 214 | 7 | 2 | 3 | 3 |

[1] Estimated, July 1, 1925. [2] No estimate made. [4] Approximately.

*City reports for week ended December 1, 1928*—Continued

| Division, State, and city | Scarlet fever | | Smallpox | | | Tuberculosis, deaths reported | Typhoid fever | | | Whooping cough, cases reported | Deaths, all causes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cases, estimated expectancy | Cases reported | Cases, estimated expectancy | Cases reported | Deaths reported | | Cases, estimated expectancy | Cases reported | Deaths reported | | |
| **NEW ENGLAND** | | | | | | | | | | | |
| Maine: | | | | | | | | | | | |
| Portland | 2 | 6 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 20 |
| New Hampshire: | | | | | | | | | | | |
| Concord | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| Vermont: | | | | | | | | | | | |
| Barre | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Massachusetts: | | | | | | | | | | | |
| Boston | 64 | 35 | 0 | [1]2 | 0 | 11 | 2 | 0 | 0 | 29 | 208 |
| Fall River | 3 | 3 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 7 | 23 |
| Springfield | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 34 |
| Worcester | 12 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 58 |
| Rhode Island: | | | | | | | | | | | |
| Pawtucket | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 20 |
| Providence | 8 | 13 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 73 |
| Connecticut: | | | | | | | | | | | |
| Bridgeport | 8 | 2 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 28 |
| Hartford | 6 | | 0 | | | | 0 | | | | |
| New Haven | 7 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 45 |
| **MIDDLE ATLANTIC** | | | | | | | | | | | |
| New York: | | | | | | | | | | | |
| Buffalo | 23 | 27 | 0 | 0 | 0 | 7 | 2 | 0 | 1 | 47 | 138 |
| New York | 145 | 96 | 0 | 0 | 0 | 86 | 18 | 10 | 2 | 31 | 1,400 |
| Rochester | 10 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 32 | 78 |
| Syracuse | 12 | 6 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 25 | 46 |
| New Jersey: | | | | | | | | | | | |
| Camden | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 24 |
| Newark | 17 | 4 | 0 | 0 | 0 | 9 | 1 | 1 | 0 | 19 | 98 |
| Trenton | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 42 |
| Pennsylvania: | | | | | | | | | | | |
| Philadelphia | 78 | 39 | 0 | 0 | 0 | 25 | 4 | 2 | 0 | 72 | 448 |
| Pittsburgh | 38 | 30 | 0 | 0 | 0 | 7 | 1 | 0 | 2 | 16 | 186 |
| Reading | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 23 |
| **EAST NORTH CENTRAL** | | | | | | | | | | | |
| Ohio: | | | | | | | | | | | |
| Cincinnati | 16 | 23 | 0 | 0 | 0 | 8 | 1 | 1 | 0 | 2 | 136 |
| Cleveland | 34 | 16 | 0 | 0 | 0 | 8 | 2 | 0 | 0 | 31 | 191 |
| Columbus | 12 | 9 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 68 |
| Toledo | 15 | 12 | 0 | 0 | 0 | 6 | 1 | 2 | 0 | 32 | 80 |
| Indiana: | | | | | | | | | | | |
| Fort Wayne | 2 | 9 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 40 |
| Indianapolis | 14 | 15 | 4 | 6 | 0 | 3 | 1 | 0 | 0 | 1 | 119 |
| South Bend | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| Terre Haute | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| Illinois: | | | | | | | | | | | |
| Chicago | 114 | 109 | 0 | 17 | 0 | 42 | 4 | 4 | 0 | 33 | 683 |
| Springfield | 2 | 7 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 23 |
| Michigan: | | | | | | | | | | | |
| Detroit | 80 | 107 | 1 | 0 | 0 | 18 | 2 | 2 | 0 | 128 | 306 |
| Flint | 11 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | 29 |
| Grand Rapids | 10 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 10 | 32 |
| Wisconsin: | | | | | | | | | | | |
| Kenosha | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 13 |
| Milwaukee | 20 | 46 | 1 | 0 | | 6 | 1 | 0 | 0 | 67 | 105 |
| Racine | 5 | 4 | | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 13 |
| Superior | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| **WEST NORTH CENTRAL** | | | | | | | | | | | |
| Minnesota: | | | | | | | | | | | |
| Duluth | 8 | 8 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 27 |
| Minneapolis | 49 | 17 | 4 | 1 | 0 | 4 | 1 | 0 | 0 | 17 | 90 |
| St. Paul | 23 | 17 | 4 | 0 | 0 | 2 | 0 | 0 | 0 | 19 | 61 |
| Iowa: | | | | | | | | | | | |
| Davenport | 2 | 0 | 2 | 0 | | | 0 | 0 | | 0 | |
| Des Moines | 8 | 19 | 1 | 0 | | | 0 | 0 | | 0 | 41 |
| Sioux City | 4 | 1 | 0 | 0 | | | 0 | 2 | | 0 | |
| Waterloo | 4 | 16 | 0 | 2 | | | 0 | 0 | | 13 | |

[1] 1 case nonresident.

*City reports for week ended December 1, 1928*—Continued

| Division, State, and city | Scarlet fever | | Smallpox | | | Tuberculosis, deaths reported | Typhoid fever | | | Whooping cough, cases reported | Deaths, all causes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cases, estimated expectancy | Cases reported | Cases, estimated expectancy | Cases reported | Deaths reported | | Cases, estimated expectancy | Cases reported | Deaths reported | | |
| WEST NORTH CENTRAL—continued | | | | | | | | | | | |
| Missouri: | | | | | | | | | | | |
| Kansas City | 12 | 17 | 0 | 0 | 0 | 6 | 1 | 0 | 0 | 8 | 115 |
| St. Joseph | 3 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 29 |
| St. Louis | 36 | 19 | 0 | 1 | 0 | 6 | 3 | 0 | 0 | 19 | 217 |
| North Dakota: | | | | | | | | | | | |
| Fargo | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Grand Forks | 1 | 7 | 0 | 0 | ---- | ---- | 0 | 0 | ---- | 0 | ---- |
| South Dakota: | | | | | | | | | | | |
| Aberdeen | 2 | 0 | 0 | 0 | ---- | ---- | 0 | 0 | ---- | 0 | ---- |
| Sioux Falls | 2 | 0 | 0 | 0 | ---- | ---- | 0 | 0 | ---- | 0 | 5 |
| Nebraska: | | | | | | | | | | | |
| Omaha | 7 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | ---- |
| Kansas: | | | | | | | | | | | |
| Topeka | 2 | 5 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 5 | 22 |
| Wichita | 5 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 | 36 |
| SOUTH ATLANTIC | | | | | | | | | | | |
| Delaware: | | | | | | | | | | | |
| Wilmington | 4 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 3 | 18 |
| Maryland: | | | | | | | | | | | |
| Baltimore | 23 | 15 | 0 | 0 | 0 | 17 | 3 | 3 | 0 | 39 | 223 |
| Cumberland | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Frederick | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| District of Col.: | | | | | | | | | | | |
| Washington | 20 | 10 | 0 | 0 | 0 | 10 | 2 | 0 | 0 | 17 | 134 |
| Virginia: | | | | | | | | | | | |
| Lynchburg | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| Norfolk | 3 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | ---- |
| Richmond | 7 | 8 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 1 | 52 |
| Roanoke | 2 | 7 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 17 |
| West Virginia: | | | | | | | | | | | |
| Charleston | 2 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | 7 |
| Wheeling | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| North Carolina: | | | | | | | | | | | |
| Raleigh | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 9 |
| Wilmington | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| Winston-Salem | 2 | 3 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 7 | 10 |
| South Carolina: | | | | | | | | | | | |
| Charleston | 1 | 4 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 27 |
| Columbia | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 27 |
| Greenville | 0 | ---- | 0 | ---- | ---- | ---- | 0 | ---- | ---- | ---- | ---- |
| Georgia: | | | | | | | | | | | |
| Atlanta | 5 | 15 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 70 |
| Brunswick | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| Savannah | 1 | 4 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 2 | 51 |
| Florida: | | | | | | | | | | | |
| Miami | 1 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 26 |
| St. Petersburg | 0 | 1 | 0 | ---- | 0 | 0 | 0 | ---- | 0 | ---- | 10 |
| Tampa | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 |
| EAST SOUTH CENTRAL | | | | | | | | | | | |
| Kentucky: | | | | | | | | | | | |
| Covington | 3 | 5 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 21 |
| Louisville | 6 | 6 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 5 | 75 |
| Tennessee: | | | | | | | | | | | |
| Memphis | 6 | 3 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 55 |
| Nashville | 4 | 4 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 3 | 38 |
| Alabama: | | | | | | | | | | | |
| Birmingham | 4 | 8 | 1 | 0 | 0 | 3 | 1 | 0 | 0 | 4 | 73 |
| Mobile | 2 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 28 |
| Montgomery | 0 | 2 | 0 | 0 | ---- | ---- | 0 | 0 | ---- | 0 | ---- |
| WEST SOUTH CENTRAL | | | | | | | | | | | |
| Arkansas: | | | | | | | | | | | |
| Fort Smith | 2 | 0 | 0 | 0 | ---- | ---- | 0 | 1 | ---- | 0 | ---- |
| Little Rock | 2 | 9 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | ---- |
| Louisiana: | | | | | | | | | | | |
| New Orleans | 7 | 14 | 1 | 0 | 0 | 17 | 2 | 1 | 1 | 1 | 194 |
| Shreveport | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 36 |

*City reports for week ended December 1, 1928*—Continued

| Division, State, and city | Scarlet fever | | Smallpox | | | Tuberculosis, deaths reported | Typhoid fever | | | Whooping cough, cases reported | Deaths, all causes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cases, estimated expectancy | Cases reported | Cases, estimated expectancy | Cases reported | Deaths reported | | Cases, estimated expectancy | Cases reported | Deaths reported | | |
| **WEST SOUTH CENTRAL—contd.** | | | | | | | | | | | |
| Oklahoma: | | | | | | | | | | | |
| Oklahoma City | 2 | 7 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 25 |
| Tulsa | 3 | 8 | 1 | 2 | | | 0 | 0 | | 0 | |
| Texas: | | | | | | | | | | | |
| Dallas | 6 | 11 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 1 | 52 |
| Fort Worth | 1 | 9 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 25 |
| Galveston | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| Houston | 3 | 6 | 0 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 55 |
| San Antonio | 1 | 4 | 1 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 53 |
| **MOUNTAIN** | | | | | | | | | | | |
| Montana: | | | | | | | | | | | |
| Billings | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 9 |
| Great Falls | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 9 |
| Helena | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Missoula | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| Idaho: | | | | | | | | | | | |
| Boise | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| Colorado: | | | | | | | | | | | |
| Denver | 12 | | 0 | | | | 0 | | | | |
| Pueblo | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| New Mexico: | | | | | | | | | | | |
| Albuquerque | 1 | 1 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 17 |
| Utah: | | | | | | | | | | | |
| Salt Lake City | 2 | 1 | 2 | 4 | 0 | 3 | 1 | 0 | 0 | 1 | 60 |
| Nevada: | | | | | | | | | | | |
| Reno | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| **PACIFIC** | | | | | | | | | | | |
| Washington: | | | | | | | | | | | |
| Seattle | 9 | 6 | 2 | 0 | | | 1 | 0 | | 14 | |
| Spokane | 11 | 14 | 6 | 1 | | | 1 | 1 | | 0 | |
| Tacoma | 2 | 2 | 3 | 2 | 0 | 1 | 0 | 0 | 0 | 2 | 13 |
| Oregon: | | | | | | | | | | | |
| Portland | 8 | 8 | 6 | 26 | 0 | 1 | 1 | 1 | 0 | 0 | 51 |
| California: | | | | | | | | | | | |
| Los Angeles | 25 | 30 | 4 | 0 | 0 | 28 | 2 | 0 | 0 | 22 | 374 |
| Sacramento | 2 | 28 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 34 |
| San Francisco | 15 | 22 | 1 | 0 | 0 | 14 | 0 | 0 | 0 | 15 | 201 |

| Division, State, and city | Meningococcus meningitis | | Lethargic encephalitis | | Pellagra | | Poliomyelitis (infantile paralysis) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases, estimated expectancy | Cases | Deaths |
| **NEW ENGLAND** | | | | | | | | | |
| Massachusetts: | | | | | | | | | |
| Boston | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 |
| Springfield | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Worcester | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 |
| Rhode Island: | | | | | | | | | |
| Providence | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| **MIDDLE ATLANTIC** | | | | | | | | | |
| New York: | | | | | | | | | |
| New York | 18 | 10 | 2 | 1 | 0 | 0 | 3 | 0 | 1 |
| Rochester | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| New Jersey: | | | | | | | | | |
| Newark | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Pennsylvania: | | | | | | | | | |
| Philadelphia | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

*City reports for week ended December 1, 1928*—Continued

| Division, State, and city | Meningococcus meningitis | | Lethargic encephalitis | | Pellagra | | Poliomyelitis (infantile paralysis) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases, estimated expectancy | Cases | Deaths |
| **EAST NORTH CENTRAL** | | | | | | | | | |
| Ohio: | | | | | | | | | |
| Cincinnati | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Cleveland | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 |
| Toledo | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Illinois: | | | | | | | | | |
| Chicago | 8 | 3 | 0 | 1 | 1 | 1 | 1 | 0 | 0 |
| Springfield | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Michigan: | | | | | | | | | |
| Detroit | 6 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wisconsin: | | | | | | | | | |
| Milwaukee | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **WEST NORTH CENTRAL** | | | | | | | | | |
| Minnesota: | | | | | | | | | |
| Duluth | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Minneapolis | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Missouri: | | | | | | | | | |
| St. Louis | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| North Dakota: | | | | | | | | | |
| Fargo | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kansas: | | | | | | | | | |
| Topeka | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| **SOUTH ATLANTIC** | | | | | | | | | |
| Maryland: | | | | | | | | | |
| Baltimore | 1 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 0 |
| Virginia: | | | | | | | | | |
| Richmond | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| North Carolina: | | | | | | | | | |
| Wilmington | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| South Carolina: [1] | | | | | | | | | |
| Columbia | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Georgia: | | | | | | | | | |
| Atlanta | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Savannah [2] | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Florida: | | | | | | | | | |
| Miami | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| **EAST SOUTH CENTRAL** | | | | | | | | | |
| Tennessee: | | | | | | | | | |
| Memphis [3] | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Nashville | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Alabama: | | | | | | | | | |
| Birmingham | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Mobile | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| **WEST SOUTH CENTRAL** | | | | | | | | | |
| Louisiana: | | | | | | | | | |
| New Orleans | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 |
| Shreveport | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 0 |
| Texas: | | | | | | | | | |
| Fort Worth | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Houston | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| San Antonio | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| **MOUNTAIN** | | | | | | | | | |
| New Mexico: | | | | | | | | | |
| Albuquerque | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| **PACIFIC** | | | | | | | | | |
| Washington: | | | | | | | | | |
| Seattle | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spokane | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| California: | | | | | | | | | |
| Los Angeles | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| Sacramento | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| San Francisco | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |

[1] Dengue: 6 cases at Charleston, S. C.
[2] Typhus fever: 5 cases at Savannah, Ga.
[3] Rabies (in man): 1 case and 1 death at Memphis, Tenn.

The following table gives the rates per 100,000 population for 101 cities for the 5-week period ended December 1, 1928, compared with those for a like period ended December 3, 1927. The population figures used in computing the rates are approximate estimates as of July 1, 1928 and 1927, respectively, authoritative figures for many of the cities not being available. The 101 cities reporting cases had estimated aggregate populations of approximately 31,657,000 in 1928 and 31,050,000 in 1927. The 95 cities reporting deaths had nearly 30,961,000 estimated population in 1928 and nearly 30,370,000 in 1927. The number of cities included in each group and the estimated aggregate populations are shown in a separate table below.

*Summary of weekly reports from cities, October 27 to December 1, 1928—Annual rates per 100,000 population compared with rates for the corresponding period of 1927* [1]

DIPHTHERIA CASE RATES

| | Week ended— | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Nov. 3, 1928 | Nov. 5, 1927 | Nov. 10, 1928 | Nov. 12, 1927 | Nov. 17, 1928 | Nov. 19, 1927 | Nov. 24, 1928 | Nov. 26, 1927 | Dec. 1, 1928 | Dec. 3, 1927 |
| 101 cities | 140 | 213 | 152 | [2] 215 | 159 | 228 | [3] 165 | 203 | [4] 151 | 232 |
| New England | 90 | 114 | 122 | 160 | 159 | 163 | 140 | 170 | [5] 197 | 267 |
| Middle Atlantic | 110 | 225 | 109 | 204 | 134 | 233 | 137 | 212 | 131 | 251 |
| East North Central | 169 | 261 | 169 | 253 | 166 | 251 | 183 | 219 | 185 | 220 |
| West North Central | 144 | 194 | 210 | 160 | 197 | 152 | [6] 191 | 178 | 164 | 178 |
| South Atlantic | 226 | 184 | 242 | 189 | 207 | 216 | [7] 223 | 195 | [7] 122 | 224 |
| East South Central | 170 | 152 | 180 | 208 | 100 | 238 | 130 | 122 | 140 | 167 |
| West South Central | 220 | 318 | 272 | 294 | 240 | 343 | 268 | 302 | 220 | 269 |
| Mountain | 71 | 99 | 71 | 278 | 239 | 206 | [8] 152 | 170 | [9] 53 | 143 |
| Pacific | 64 | 141 | 79 | [2] 224 | 97 | 222 | 105 | 162 | 72 | 259 |

MEASLES CASE RATES

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 101 cities | 58 | 77 | 73 | [2] 96 | 94 | 124 | [3] 109 | 136 | [4] 115 | 189 |
| New England | 338 | 242 | 402 | 342 | 382 | 391 | 582 | 500 | [5] 654 | 539 |
| Middle Atlantic | 33 | 72 | 42 | 124 | 69 | 93 | 59 | 128 | 46 | 180 |
| East North Central | 39 | 29 | 57 | 27 | 86 | 54 | 105 | 60 | 132 | 121 |
| West North Central | 68 | 14 | 43 | 16 | 62 | 22 | [6] 104 | 24 | 66 | 24 |
| South Atlantic | 46 | 132 | 56 | 135 | 84 | 281 | [7] 60 | 200 | [7] 64 | 307 |
| East South Central | 10 | 233 | 5 | 76 | 15 | 147 | 5 | 162 | 0 | 20 |
| West South Central | 8 | 21 | 8 | 12 | 12 | 70 | 4 | 87 | 16 | 120 |
| Mountain | 80 | 9 | 177 | 18 | 203 | 72 | [8] 300 | 27 | [9] 441 | 27 |
| Pacific | 15 | 78 | 43 | [2] 76 | 51 | 212 | 15 | 175 | 72 | 227 |

SCARLET FEVER CASE RATES

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 101 cities | 125 | 148 | 164 | [2] 150 | 169 | 177 | [3] 176 | 158 | [4] 172 | 184 |
| New England | 131 | 200 | 175 | 205 | 193 | 249 | 211 | 181 | [5] 189 | 277 |
| Middle Atlantic | 69 | 110 | 95 | 110 | 108 | 152 | 109 | 122 | 102 | 155 |
| East North Central | 172 | 173 | 233 | 177 | 245 | 201 | 227 | 195 | 238 | 192 |
| West North Central | 197 | 164 | 253 | 186 | 224 | 232 | [6] 291 | 204 | 220 | 249 |
| South Atlantic | 116 | 159 | 142 | 182 | 105 | 155 | [7] 143 | 171 | [7] 138 | 173 |
| East South Central | 140 | 167 | 160 | 152 | 249 | 112 | 244 | 86 | 145 | 147 |
| West South Central | 136 | 149 | 176 | 103 | 196 | 103 | 144 | 165 | 184 | 141 |
| Mountain | 62 | 179 | 88 | 152 | 97 | 233 | [8] 104 | 179 | [9] 123 | 359 |
| Pacific | 148 | 141 | 169 | [2] 117 | 143 | 154 | 194 | 131 | 261 | 128 |

[1] The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1928, and 1927, respectively.
[2] Seattle, Wash., and Spokane, Wash., not included.
[3] Sioux City, Iowa, Greenville, S. C., and Salt Lake City, Utah, not included.
[4] Hartford Conn., Greenville, S. C., and Denver, Colo., not included.
[5] Hartford, Conn., not included.
[6] Sioux City, Iowa, not included.
[7] Greenville, S. C., not included.
[8] Salt Lake City, Utah, not included.
[9] Denver, Colo., not included.

*Summary of weekly reports from cities, October 27 to December 1, 1928—Annual rates per 100,000 population compared with rates for the corresponding period of 1927*—Continued

SMALLPOX CASE RATES

| | Week ended— | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Nov. 3, 1928 | Nov. 5, 1927 | Nov. 10, 1928 | Nov. 12, 1927 | Nov. 17, 1928 | Nov. 19, 1927 | Nov. 24, 1928 | Nov. 26, 1927 | Dec. 1, 1928 | Dec. 3, 1927 |
| 101 cities | 1 | 18 | 4 | [2] 16 | 3 | 19 | [3] 7 | 22 | [4] 6 | 17 |
| New England | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | [5] 5 | 0 |
| Middle Atlantic | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| East North Central | 0 | 6 | 7 | 4 | 4 | 6 | 21 | 1 | 12 | 10 |
| West North Central | 2 | 58 | 6 | 156 | 2 | 160 | [6] 2 | 202 | 8 | 115 |
| South Atlantic | 2 | 14 | 0 | 5 | 2 | 9 | [7] 0 | 2 | [7] 5 | 5 |
| East South Central | 5 | 0 | 0 | 0 | 5 | 5 | 15 | 0 | 0 | 10 |
| West South Central | 4 | 4 | 4 | 4 | 0 | 4 | 8 | 4 | 12 | 8 |
| Mountain | 0 | 36 | 9 | 27 | 88 | 27 | [8] 0 | 54 | [9] 71 | 45 |
| Pacific | 5 | 18 | 15 | [2] 3 | 3 | 29 | 18 | 44 | 8 | 39 |

TYPHOID FEVER CASE RATES

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 101 cities | 13 | 19 | 9 | [2] 15 | 10 | 15 | [3] 9 | 10 | [4] 7 | 9 |
| New England | 7 | 16 | 9 | 16 | 16 | 23 | 7 | 14 | [5] 5 | 7 |
| Middle Atlantic | 11 | 20 | 7 | 15 | 10 | 14 | 9 | 10 | 7 | 10 |
| East North Central | 5 | 7 | 5 | 9 | 6 | 7 | 5 | 6 | 5 | 5 |
| West North Central | 18 | 24 | 4 | 28 | 14 | 20 | [6] 16 | 14 | 8 | 12 |
| South Atlantic | 32 | 31 | 16 | 20 | 11 | 25 | [7] 11 | 9 | [7] 9 | 16 |
| East South Central | 35 | 35 | 30 | 5 | 10 | 15 | 25 | 15 | 5 | 15 |
| West South Central | 20 | 58 | 40 | 33 | 20 | 29 | 12 | 12 | 16 | 21 |
| Mountain | 18 | 36 | 27 | 9 | 18 | 18 | [8] 0 | 27 | [9] 18 | 9 |
| Pacific | 5 | 5 | 3 | [2] 7 | 5 | 13 | 13 | 5 | 3 | 5 |

INFLUENZA DEATH RATES [11]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 95 cities | 10 | 9 | 12 | 8 | 15 | 9 | [10] 16 | 10 | [4] 30 | 12 |
| New England | 2 | 5 | 5 | 2 | 9 | 5 | 9 | 2 | [5] 10 | 5 |
| Middle Atlantic | 5 | 8 | 12 | 9 | 9 | 7 | 15 | 10 | 10 | 11 |
| East North Central | 10 | 9 | 9 | 5 | 10 | 2 | 3 | 5 | 14 | 9 |
| West North Central | 8 | 10 | 2 | 2 | 6 | 10 | 6 | 6 | 12 | 4 |
| South Atlantic | 11 | 7 | 7 | 16 | 14 | 20 | [7] 12 | 13 | [7] 28 | 13 |
| East South Central | 21 | 16 | 26 | 16 | 16 | 21 | 21 | 48 | 21 | 48 |
| West South Central | 25 | 25 | 37 | 17 | 33 | 34 | 33 | 34 | 53 | 42 |
| Mountain | 18 | 18 | 27 | 18 | 53 | 36 | [8] 23 | 18 | [9] 353 | 27 |
| Pacific | 27 | 7 | 41 | 0 | 64 | 3 | 95 | 7 | 240 | 14 |

PNEUMONIA DEATH RATES [11]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 95 cities | 86 | 89 | 91 | 104 | 102 | 112 | [10] 122 | 95 | [4] 134 | 113 |
| New England | 90 | 63 | 80 | 95 | 57 | 102 | 106 | 60 | [5] 92 | 100 |
| Middle Atlantic | 83 | 87 | 105 | 113 | 124 | 119 | 128 | 97 | 141 | 123 |
| East North Central | 79 | 93 | 77 | 89 | 82 | 96 | 106 | 89 | 120 | 103 |
| West North Central | 71 | 62 | 65 | 75 | 73 | 81 | 69 | 87 | 100 | 70 |
| South Atlantic | 93 | 115 | 74 | 117 | 124 | 157 | [7] 161 | 144 | [7] 138 | 146 |
| East South Central | 131 | 117 | 146 | 144 | 162 | 154 | 131 | 133 | 162 | 207 |
| West South | 119 | 89 | 90 | 127 | 70 | 140 | 127 | 110 | 140 | 106 |
| Mountain | 97 | 117 | 97 | 143 | 115 | 99 | [8] 173 | 99 | [9] 159 | 54 |
| Pacific | 88 | 100 | 125 | 100 | 98 | 76 | 169 | 38 | 240 | 103 |

[2] Seattle, Wash., and Spokane, Wash., not included.
[3] Sioux City, Iowa, not included.
[4] Hartford, Conn., Greenville, S. C., and Denver, Colo., not included.
[5] Hartford, Conn., not included.
[7] Greenville, S. C., not included.
[8] Salt Lake City, Utah, not included.
[9] Denver, Colo., not included.
[10] Greenville, S. C., and Salt Lake City, Utah, not included.
[11] In the table showing death rates from influenza and pneumonia on p. 3338 of the Public Health Reports of Dec. 14, 1928, the column headings should read the same as the column headings on the preceding page. The rates given in the first column are for the week ended Oct. 27, 1928, and the rates in the last column are for the week ended Nov. 26, 1927.

*Number of cities included in summary of weekly reports, and aggregate population of cities of each group, approximated as of July 1, 1928 and 1927, respectively*

| Group of cities | Number of cities reporting cases | Number of cities reporting deaths | Aggregate population of cities reporting cases | | Aggregate population of cities reporting deaths | |
|---|---|---|---|---|---|---|
| | | | 1928 | 1927 | 1928 | 1927 |
| Total | 101 | 95 | 31,657,000 | 31,050,300 | 30,960,700 | 30,369,500 |
| New England | 12 | 12 | 2,274,400 | 2,242,700 | 2,274,400 | 2,242,700 |
| Middle Atlantic | 10 | 10* | 10,732,400 | 10,594,700 | 10,732,400 | 10,594,700 |
| East North Central | 16 | 16 | 7,991,400 | 7,820,700 | 7,991,400 | 7,820,700 |
| West North Central | 12 | 10 | 2,683,500 | 2,634,500 | 2,566,400 | 2,518,500 |
| South Atlantic | 21 | 21 | 2,981,900 | 2,890,700 | 2,981,900 | 2,890,700 |
| East South Central | 7 | 6 | 1,048,300 | 1,028,300 | 1,000,100 | 980,700 |
| West South Central | 8 | 7 | 1,307,600 | 1,260,700 | 1,274,100 | 1,227,800 |
| Mountain | 9 | 9 | 591,100 | 581,600 | 591,100 | 581,600 |
| Pacific | 6 | 4 | 2,046,400 | 1,996,400 | 1,548,900 | 1,512,100 |

# FOREIGN AND INSULAR

## THE FAR EAST

*Report for the week ended November 24, 1928.*—The following report for the week ended November 24, 1928, was transmitted by the eastern bureau of the health section of the secretariat of the League of Nations located at Singapore to the headquarters at Geneva.

No plague was reported. Cholera or smallpox was reported at the following ports:

CHOLERA

*India.*—Bombay, Calcutta, Madras, Negapatam, Rangoon.
*Siam.*—Bangkok.
*French India.*—Pondicherry.

SMALLPOX

*India.*—Bombay, Madras, Negapatam, Calcutta, Moulmein.
*French India.*—Pondicherry.
*Indo-China.*—Pnompenh.
*Siam.*—Bangkok.
*Dutch East Indies.*—Belawan Deli, Samarinda, Makassar.
*China.*—Hong Kong, Shanghai, Canton

## ANGOLA

*Communicable diseases—June-September, 1928.*—During the months of June, July, August, and September, 1928, communicable diseases were reported in Angola as follows:

| Disease | June | July | August | September |
|---|---|---|---|---|
| Ancylostomiasis | 39 | 109 | 33 | 156 |
| Beriberi | 20 | 3 | 9 | 6 |
| Bilharzia | 42 | 25 | 48 | 36 |
| Cerebrospinal meningitis | 2 | 6 | | |
| Chicken pox (including alastrim) | 35 | 43 | 71 | 47 |
| Dengue | 1 | | | |
| Diphtheria | 2 | 3 | 1 | 2 |
| Dysentery | 58 | 110 | 71 | 51 |
| Erysipelas | | 1 | 1 | |
| Influenza | 493 | 410 | 470 | 332 |
| Leprosy | 6 | 4 | 18 | 10 |
| Malaria | 1,196 | 1,024 | 726 | 690 |
| Malarial hemoglobinuria | 28 | 37 | 21 | 12 |
| Measles | 84 | 135 | 96 | 178 |
| Mumps | 26 | 15 | 31 | 14 |
| Pneumonia and broncho-pneumonia | 88 | 193 | 120 | 100 |
| Puerperal septicemia | 3 | 2 | 1 | 2 |
| Relapsing fever | 3 | 3 | 6 | 3 |
| Scabies | | | | 61 |
| Scurvy | | 2 | 3 | |
| Smallpox | 5 | 2 | | 4 |
| Tetanus | 2 | 1 | 8 | 5 |
| Tuberculosis | 41 | 37 | 35 | 42 |
| Trypanosomiasis | 249 | 567 | 679 | 390 |
| Typhoid and paratyphoid fever | 2 | 5 | 5 | 3 |
| Venereal diseases | 398 | 372 | 336 | 415 |
| Whooping cough | 9 | 26 | 43 | 30 |
| Yaws | 424 | 341 | 299 | 403 |

## CANADA

*Provinces—Communicable diseases—Two weeks ended December 1, 1928.*—The department of pensions and national health reports cases of certain communicable diseases from seven Provinces of Canada for the two weeks ended December 1, 1928, as follows:

WEEK ENDED NOVEMBER 24, 1928

| Disease | Nova Scotia | New Brunswick | Quebec | Ontario | Manitoba | Saskatchewan | Alberta | Total |
|---|---|---|---|---|---|---|---|---|
| Cerebrospinal fever | | | | 3 | 1 | | | 4 |
| Influenza | 14 | | | | | | | 14 |
| Lethargic encephalitis | | | | 1 | | | | 1 |
| Poliomyelitis | | | | 2 | 1 | | 2 | 5 |
| Smallpox | | | 25 | 4 | 16 | 11 | 7 | 63 |
| Typhoid fever | 2 | 11 | 23 | 20 | 1 | 1 | 2 | 60 |

WEEK ENDED DECEMBER 1, 1928

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Cerebrospinal fever | | | | 1 | | | 2 | 3 |
| Influenza | 24 | | | 9 | 1 | | | 34 |
| Lethargic encephalitis | | | | 1 | | | | 1 |
| Poliomyelitis | | | | 1 | 1 | | 2 | 4 |
| Smallpox | | | 25 | 4 | 5 | 12 | 1 | 47 |
| Typhoid fever | 1 | 3 | 7 | 49 | | 1 | 1 | 62 |

*Quebec Province—Communicable diseases—Week ended December 1, 1928.*—The Provincial Bureau of Health reports cases of certain communicable diseases for the week ended December 1, 1928, as follows:

| Disease | Cases | Disease | Cases |
|---|---|---|---|
| Chicken pox | 120 | Ophthalmia neonatorum | 2 |
| Diphtheria | 80 | Scarlet fever | 19 |
| German measles | 3 | Smallpox | 72 |
| Influenza | 22 | Tuberculosis | 47 |
| Measles | 3 | Typhoid fever | 49 |
| Mumps | 33 | Whooping cough | 12 |

## CUBA

*Habana—Communicable diseases—July-October, 1928.*—During the four months from July 1 to October 31, 1928, communicable diseases were reported in Habana, Cuba, as follows:

JULY

| Disease | New cases | Deaths | Disease | New cases | Deaths |
|---|---|---|---|---|---|
| Chicken pox | 10 | | Measles | 43 | 1 |
| Diphtheria | 12 | 2 | Scarlet fever | 7 | |
| Leprosy | 1 | | Typhoid fever | 29 | 6 |
| Malaria | 11 | | | | |

AUGUST

| Disease | New cases | Deaths | Disease | New cases | Deaths |
|---|---|---|---|---|---|
| Cerebrospinal meningitis | 1 | | Malaria | 27 | |
| Chicken pox | 3 | | Measles | 62 | 1 |
| Diphtheria | 8 | 3 | Scarlet fever | 4 | |
| Leprosy | 1 | | Typhoid fever | 26 | 8 |

SEPTEMBER

| | | | | | |
|---|---|---|---|---|---|
| Chicken pox | 1 | | Measles | 60 | |
| Diphtheria | 5 | 1 | Paratyphoid fever | 1 | 1 |
| Filariasis | 1 | | Scarlet fever | 1 | |
| Leprosy | | | Typhoid fever | 19 | 5 |
| Malaria | 43 | 2 | | | |

OCTOBER

| | | | | | |
|---|---|---|---|---|---|
| Chicken pox | 1 | | Measles | 87 | |
| Diphtheria | 7 | 1 | Poliomyelitis | 1 | |
| Filariasis | | | Scarlet fever | 7 | |
| Leprosy | | | Typhoid fever | 22 | 10 |
| Malaria | 101 | 2 | | | |

## CZECHOSLOVAKIA

*Communicable diseases—August, September, 1928.*—During the months of August and September, 1928, communicable diseases were reported in Czechoslovakia as follows:

| Disease | August | | September | |
|---|---|---|---|---|
| | Cases | Deaths | Cases | Deaths |
| Anthrax | 13 | | 33 | 4 |
| Cerebrospinal meningitis | 5 | 3 | 24 | 6 |
| Diphtheria | 970 | 83 | 622 | 46 |
| Dysentery | 117 | 5 | 89 | 4 |
| Malaria | 105 | | 135 | |
| Paratyphoid fever | 15 | 2 | 19 | |
| Puerperal fever | 24 | 19 | 43 | 11 |
| Rabies | | | 1 | 1 |
| Scarlet fever | 2,154 | 22 | 1,347 | 27 |
| Trachoma | 136 | | 183 | |
| Typhoid fever | 992 | 68 | 1,032 | 73 |

## INDIA

*Madras Presidency—Vital statistics, 1927—Comparative.*—The annual report of the Director of Public Health of the Madras Presidency gives the vital statistics for 1927, as compared with 1926, as follows:

*Madras Presidency, vital statistics, 1927 and 1926*

| Year | Births | Birth rate per 1,000 population | Deaths | Death rate per 1,000 population | Infant mortality rate per 1,000 births |
|---|---|---|---|---|---|
| 1927 | 1,495,747 | 36.5 | 997,742 | 24.3 | 175.4 |
| 1926 | 1,480,293 | 36.1 | 1,048,529 | 25.6 | 189.5 |

The following table classifies the total deaths registered in the Madras Presidency during the years 1927 and 1926:

| Cause | 1927 | 1926 | Cause | 1927 | 1926 |
|---|---|---|---|---|---|
| Cholera | 35,334 | 24,407 | Smallpox | 7,781 | 10,957 |
| Dysentery and diarrhea | 72,707 | 91,758 | Other causes | 476,191 | 495,717 |
| Fevers | 321,995 | 337,945 | | | |
| Plague | 2,457 | 2,143 | Total | 997,742 | 1,048,529 |
| Respiratory diseases | 81,277 | 85,602 | | | |

## NEW ZEALAND

*Notifiable diseases—June 26–October 15, 1928.*—The Department of Health of New Zealand reports cases of notifiable diseases in New Zealand from June 26 to October 15, 1928, as follows:

| Disease | June 26–July 23 | | July 24–Aug. 20 | | Aug. 21–Sept. 17 | | Sept. 18–Oct. 15 | |
|---|---|---|---|---|---|---|---|---|
| | Cases | Deaths | Cases | Deaths | Cases | Deaths | Cases | Deaths |
| Actinomycosis | | | | | | | 1 | |
| Cerebrospinal meningitis | 2 | | 1 | | 3 | 1 | 4 | |
| Diphtheria | 198 | 11 | 184 | 8 | 130 | 7 | 132 | 3 |
| Dysentery | 2 | | 1 | | | | | |
| Eclampsia | 9 | 1 | 4 | | 12 | 2 | 7 | |
| Erysipelas | 29 | | 48 | | 38 | 1 | 53 | |
| Food poisoning | 1 | | | | 1 | | | |
| Hydatids | 1 | | 3 | | 5 | 1 | 9 | |
| Influenza | 44 | 9 | 41 | 8 | 56 | 9 | 34 | 4 |
| Lead poisoning | | | 1 | | | | | |
| Leprosy | | | | | | | 1 | |
| Lethargic encephalitis | 6 | 2 | 2 | 2 | 4 | 2 | 1 | 1 |
| Ophthalmia neonatorum | 2 | | 2 | | 1 | | 3 | |
| Pneumonia | 120 | 22 | 158 | 32 | 177 | 31 | 103 | 19 |
| Poliomyelitis | 1 | | | | 4 | | | |
| Puerperal fever | 29 | 4 | 21 | 4 | 35 | 3 | 16 | 4 |
| Scarlet fever | 723 | 6 | 752 | 5 | 554 | 8 | 480 | 3 |
| Tetanus | 2 | | 5 | | | 3 | 3 | 1 |
| Trachoma | 1 | | | | 2 | | | |
| Tuberculosis | 118 | 39 | 135 | 47 | 132 | 50 | 147 | 59 |
| Typhoid fever | 21 | 3 | 14 | 3 | 21 | 2 | 18 | 1 |

## TRINIDAD

*Vital statistics—Port of Spain—January–June, 1928.*—The following statistics for the months of January to June, 1928, are taken from a report issued by the Public Health Department of Port of Spain:

| | January, 1928 | February, 1928 | March, 1928 | April, 1928 | May, 1928 | June, 1928 |
|---|---|---|---|---|---|---|
| Births | 159.00 | 139.00 | 160.00 | 157.00 | 153.00 | 158.00 |
| Birth rate per 1,000 population | 28.79 | 26.75 | 28.81 | 29.21 | 27.55 | 29.39 |
| Deaths | 141.00 | 108.00 | 118.00 | 118.00 | 145.00 | 127.00 |
| Death rate per 1,000 population | 25.53 | 20.79 | 21.24 | 21.95 | 26.11 | 23.44 |
| Infant mortality rate per 1,000 births | 157.02 | 143.16 | 81.25 | 146.49 | 130.72 | 145.57 |
| Deaths from certain infectious diseases: | | | | | | |
| Cancer and other malignant tumors | 6.00 | 2.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Dysentery | 7.00 | 1.00 | | | 2.00 | 1.00 |
| Influenza | | | | | 1.00 | 1.00 |
| Malaria | 1.00 | 2.00 | 1.00 | 9.00 | 9.00 | 7.00 |
| Pneumonia and broncho-pneumonia | 1.00 | 7.00 | 4.00 | 7.00 | 8.00 | 1.00 |
| Tuberculosis, pulmonary | 19.00 | 8.00 | 14.00 | 8.00 | 16.00 | 15.00 |
| Typhoid fever | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | |
| Syphilis | 5.00 | 2.00 | 2.00 | 3.00 | 3.00 | 1.00 |

Estimated population June 30, 1927, 65,573.

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

From medical officers of the Public Health Service, American consuls, health section of the League of Nations, and other sources. The reports contained in the following table must not be considered as complete or final as regards either the list of countries included or the figures for the particular countries for which reports are given:

### CHOLERA

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

| Place | | Mar. 11–Apr. 7, 1928 | Apr. 8–May 5, 1928 | May 6–June 2, 1928 | June 3–30, 1928 | July 1–28, 1928 | July 29–Aug. 25, 1928 | Aug. 26–Sept. 22, 1928 | Week ended— Sept. 29, 1928 | October, 1928 6 | 13 | 20 | 27 | November, 1928 3 | 10 | 17 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ceylon: Colombo | C | | | | | 1 | | | | | | | | | | | |
| | D | | | | | 1 | | | | | | | | | | | |
| China: | | | | | | | | | | | | | | | | | |
| Canton | C | 2 | | 1 | 2 | 8 | 4 | 1 | | | | | 1 | | | | |
| | D | 2 | | 1 | 2 | 8 | 2 | 1 | | | | | | | | | |
| Kwantung—Dairen | C | | | | | | | 3 | | | | | | | | | |
| | D | | | | | | | 1 | | | | | | | | | |
| Shanghai | C | | | | | | 3 | 2 | | | | | | | | | |
| | D | | | | | | | 3 | | 1 | 1 | 1 | | | | | |
| Swatow | C | | | | 3 | 7 | | | | | | | | | | | |
| Dutch East Indies: Java—Batavia | C | | | | | | 1 | | | | | | | | | | |
| India | C | 21,279 | 32,564 | 30,177 | 31,346 | 44,240 | 52,786 | 32,287 | 4,907 | 4,021 | | | | | | | |
| | D | 11,877 | 20,432 | 20,162 | 20,114 | 23,216 | 26,967 | 17,731 | 2,935 | 2,239 | | | | | | | |
| Bassein | D | 51 | 41 | 40 | 8 | | | | | | | | | | | | |
| Bombay | C | 3 | | 1 | | 6 | 9 | 6 | 9 | 4 | 1 | 1 | | | | | |
| | D | 3 | | | | 11 | 5 | 4 | 2 | 3 | 2 | | | 1 | | | |
| Calcutta | C | 664 | 446 | 552 | 462 | 206 | 93 | 68 | 21 | 12 | 8 | | 50 | | | | |
| | D | 442 | 428 | 410 | 323 | 133 | 51 | 40 | 12 | 9 | 6 | 12 | 25 | 35 | 42 | 38 | |
| Madras | C | 10 | 22 | 27 | 29 | 72 | 555 | 149 | 57 | | 23 | 17 | 69 | 45 | | | |
| | D | 4 | 18 | 16 | 21 | 31 | 271 | 88 | 27 | 25 | 12 | 9 | 31 | 32 | 21 | 6 | |
| Madras Presidency | C | 1,483 | | 1,314 | 878 | | | | | | | | | | | | |
| | D | 812 | | 675 | 460 | | | | | | | | | | | | |
| Moulmein | D | | | 1 | | | | | | | | | | | | | |
| Negapatam | C | | | | | | | 1 | | | | | | | | | |
| | D | | 2 | | 13 | | 3 | 7 | 1 | | | | | | | | |
| Rangoon | C | 22 | 23 | 7 | 14 | 1 | 13 | 2 | | | | | | | | | |
| | D | 16 | 15 | 5 | 9 | 1 | 8 | 2 | | 1 | | 1 | | | | | |
| Tuticorin | C | 10 | 110 | | | | 1 | 1 | | | | 1 | | | | | |
| | D | 9 | 71 | | | | | | | | | | | | 1 | | |
| Vizagapatam | D | | | | | 7 | 31 | 5 | | | | | | | | | |

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

### CHOLERA—Continued

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

| Place | | Mar. 11–Apr. 7, 1928 | Apr. 8–May 5, 1928 | May 6–June 2, 1928 | June 3–30, 1928 | July 1–28, 1928 | July 29–Aug. 25, 1928 | Aug. 26–Sept. 22, 1928 | Week ended— Sept. 29, 1928 | October, 1928 6 | 13 | 20 | 27 | November, 1928 3 | 10 | 17 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| India (French): | | | | | | | | | | | | | | | | | |
| Chandernagor | C | 7 | | | | 2 | 7 | 3 | | | | 16 | | 12 | 11 | | |
| | D | 6 | | | | 1 | 3 | 2 | | | | 7 | | 12 | 8 | | |
| Karikal | C | | 1 | | | | 30 | 41 | 4 | 4 | 1 | | | | 4 | | |
| | D | | 1 | | | | 21 | 26 | 3 | 4 | 1 | | | | 3 | | |
| Pondicherry Province | C | 1 | 8 | | | 3 | 114 | 132 | 18 | 3 | 5 | 5 | 4 | 1 | 1 | | |
| | D | 1 | 8 | | | 3 | 60 | 72 | 10 | 1 | 3 | 5 | 4 | 1 | | | |
| Indo-China (see also table below): | | | | | | | | | | | | | | | | | |
| Pnompenh | C | | | | | 5 | 2 | 3 | | | | | | | | 1 | |
| | D | | | | | 5 | 2 | 2 | | | | | | | | 1 | |
| Saigon | C | 96 | 116 | 15 | 6 | 2 | | 2 | | | | | | | | 1 | |
| | D | 59 | 76 | 9 | 1 | 1 | | 1 | | | | | | | | | |
| Tourane | C | | | | 1 | | | | | | | | | | | | |
| | D | | | | 1 | | | | | | | | | | | | |
| Japan: Osaka | C | | | | | | | | | 1 | | | | | | | |
| Kwangchow-Wan (see table below). | | | | | | | | | | | | | | | | | |
| Persian Gulf: | | | | | | | | | | | | | | | | | |
| Island of Henjam | C | | | | | 1 | | | | | | | | | | | |
| Jask | C | | | | | 1 | | | | | | | | | | | |
| Philippine Islands: | | | | | | | | | | | | | | | | | |
| Bulacan Province— | | | | | | | | | | | | | | | | | |
| Malolos | C | | | | | 1 | | | | | | | | | | | |
| Paombong | C | | | | | | 1 | | | | | | | | | | |
| Cagayan Province | C | | | | | 1 | | | | | | | | | | | |
| | D | | | | | | 1 | | | | | | | | | | |
| Ballesteros | C | | | | | 1 | 2 | | | | | | | | | | |
| | D | | | | | 1 | | | | | | | | | | | |
| Pamplona | C | | | | 1 | | | | | | | | | | | | |
| | D | | | | 1 | | | | | | | | | | | | |
| Sanchez-Mira | C | | | | 4 | | | | | | | | | | | | |
| | D | | | | 2 | | | | | | | | | | | | |
| Cebu (port) | C | | | | | 1 | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ilocos Norte Province | C | | | | | 1 | | | | | | | | | | | | |
| | D | | | | | 1 | | | | | | | | | | | | |
| Manila | C | | | | | 4 | 1 | | | | | | | | | | | |
| Pangasinan Province—Bayambang | C | | | | | 1 | | | | | | | | | | | | |
| | D | | | | | 1 | | | | | | | | | | | | |
| Surigao Province—Surigao | C | | | | | 1 | 3 | | | | | | | | | | | |
| | D | | | | | 1 | 2 | | | | | | | | | | | |
| Siam | C | 291 | 349 | 202 | 203 | 163 | 40 | 21 | 4 | 2 | 4 | 4 | 9 | | | | | |
| | D | 218 | 234 | 127 | 144 | 123 | 18 | 14 | 3 | | 3 | 4 | 8 | | | | | |
| Ayudhaya | C | | | | 2 | | 29 | 1 | | | 3 | 4 | 9 | 5 | 1 | | | |
| | D | | | | 1 | | 26 | 1 | | | 2 | 4 | 8 | 3 | 1 | | | |
| Bangkok | C | 60 | 74 | 50 | 7 | 9 | 4 | 5 | 1 | 2 | 1 | | | 1 | 2 | 2 | | |
| | D | 33 | 35 | 26 | 4 | 3 | | 1 | | | 1 | | | | 1 | 2 | | |
| Dhannapuri | C | | | | | | | 3 | | | | | | | | | | |
| | D | | | | | | | 3 | | | | | | | | | | |
| Smudsagara | C | | | | | | | | | | | | | 9 | 1 | 17 | 16 | |
| | D | | | | | | | | | | | | | 5 | 1 | 6 | 6 | |
| Trad | C | | | | 1 | | | | | | | | | | | | | |
| Straits Settlements: Singapore | C | 2 | 1 | | | | | | | | | | | | | | | |
| | D | 2 | 1 | | | | | | | | | | | | | | | |
| On vessel: | | | | | | | | | | | | | | | | | | |
| S. S. Glenapp, at Yokohama, from Shanghai | C | | | | | | | P | | | | | | | | | | |
| S. S. Hawaii Maru, at Singapore, from Saigon, French Indo-China | C | 11 | | | | | | | | | | | | | | | | |
| | D | 7 | | | | | | | | | | | | | | | | |
| S. S. Kambangan at Batavia from Jedda via Sabang and Palembang | C | | | | | | 1 | | | | | | | | | | | |
| S. S. Tairea at Penang from Madras via Negapatam | C | | | | | | P | | | | | | | | | | | |

| Place | | January-March, 1928 | April-June, 1928 | July, 1928 | | | August, 1928 | | | September, 1928 | | | October, 1928 | | | Nov. 1-10, 1928 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1-10 | 11-20 | 21-31 | 1-10 | 11-20 | 21-31 | 1-10 | 11-20 | 21-30 | 1-10 | 11-20 | 21-31 | |
| Indo-China (French) (see also table above): | | | | | | | | | | | | | | | | |
| Annam | C | 389 | 128 | 8 | 5 | 3 | | 4 | 7 | 2 | 2 | | 4 | 5 | 2 | |
| Cambodia | C | 312 | 418 | 92 | 25 | 38 | | 19 | 19 | 15 | | 1 | 6 | 19 | | |
| Cochin-China | C | 1,407 | 1,666 | 65 | 55 | 33 | | 13 | 15 | 15 | 9 | 4 | 6 | 26 | 20 | 27 |
| Tonkin | C | 1 | 43 | 5 | 1 | 1 | | 2 | | | | | | | | |
| Kwangchow-Wan | C | | 16 | | 1 | | | | 1 | | | | | | | |

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

### PLAGUE

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

| Place | | Apr. 8–May 5, 1928 | May 6–June 2, 1928 | June 3–30, 1928 | July 1–28, 1928 | July 29–Aug. 25, 1928 | Aug. 26–Sept. 22, 1928 | Week ended— Sept. 29, 1928 | October, 1928 | | | | November, 1928 | | | | December, 1928 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 6 | 13 | 20 | 27 | 3 | 10 | 17 | 24 | 1 | 8 |
| Algeria (see also table below): | | | | | | | | | | | | | | | | | | |
| Algiers | C | 1 | | | | | | | | | | | 2 | | | | | |
| Oran | C | | 1 | 2 | | | | | | 1 | | | | | | | | |
| Philippeville | C | | | | | | | | | 2 | | | | | | | | |
| Arabia: Aden | C | 224 | 7 | 1 | | | | | | | | | | | | | | |
| | D | 191 | 9 | 1 | | | | | | | | | | | | | | |
| Argentina: [1] | | | | | | | | | | | | | | | | | | |
| Avellaneda | C | | 1 | | | | | | | | | | | | | | | |
| | D | | 1 | | | | | | | | | | | | | | | |
| Buenos Aires [2] | C | | 6 | 1 | | | | | | | | | | | | | | |
| | D | | 3 | 2 | | | | | | | | | | | | | | |
| Catamarca Province: Recreo | C | | | | | | | | | | | | | P | | | | 9 |
| Cordoba Province | C | 5 | | | | | | | | | | | | | | | | |
| Canada Honda | C | | | | | | | | | | | | | 14 | | | | |
| El Mollar | C | | | | | | | | | | | | | | | | 5 | |
| Entre Rios | C | | | 5 | | | | | | | | | | | | | | |
| Loreto | C | | 3 | | | | | | | | | | | | | | | |
| Rosario | C | | 1 | | 1 | | | | | | | | | | | | | |
| Santa Fe | C | | | 9 | 1 | | | | | | | | | | | | | |
| Santiago del Estero | C | | | 10 | 1 | | | | 7 | | | | | | | | | |
| Suardi | C | | 2 | | | | | | | | | | | | | | | |
| Azores: St. Michaels Island | C | 5 | 1 | 1 | | | 2 | 1 | | | 2 | 2 | 1 | | | | | |
| | D | 2 | 1 | 1 | | | | | | | | 1 | | | | | | |
| Belgian Congo: | | | | | | | | | | | | | | | | | | |
| Djugu | C | | | | | | | | | | | 2 | | | | | | |
| Lenza | C | | | | | | | | | | | | | | | 1 | | |
| Bolivia: Valle Grande | C | | | | | P | | | | | | | | | | | | |
| Brazil: Bahia | C | 6 | 3 | | | | | | | | | | | | | | | |
| | D | 6 | 3 | | | | | | | | | | | | | | | |
| British East Africa (see also table below): | | | | | | | | | | | | | | | | | | |
| Mombasa | C | | | | | | 1 | 1 | 1 | | 1 | | | | | | | |
| | D | | | | | | 1 | 1 | 1 | | 1 | | | | | | | |
| Plague-infected rats | | | | | | | | | 1 | | 1 | | | | | | | |
| Tanganyika | C | | | | 6 | 1 | 8 | | | | | | | | | | | |
| | D | 10 | | | 29 | 1 | 8 | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Uganda | C | | 84 | 105 | | | 102 | 18 | 26 | 38 | 24 | | | | | | | |
| | D | | 70 | 85 | | | 64 | 17 | 16 | 33 | 20 | | | | | | | |
| Canary Islands: | | | | | | | | | | | | | | | | | | |
| Arrecife | C | | 1 | | | | | | | | | | | | | | | |
| | D | | 1 | | | | | | | | | | | | | | | |
| Lansarote Village | C | | 1 | | | | | | | | | | | | | | | |
| Las Palmas | C | | | | | | 2 | | | 1 | 1 | | | | | | | |
| | D | | | | | | 1 | | | | 1 | | | | | | | |
| Palma Island | C | | | | | 7 | | | | | | | | | | | | |
| | D | | | | | 3 | | | | | | | | | | | | |
| Teneriffe | C | | | | | | 5 | | | | 2 | | | | | | | 1 |
| | D | | | | | | 3 | | | | | | | | | | | |
| Laguna | C | | | | | | | | | | | 4 | | | | | | |
| Ceylon: | | | | | | | | | | | | | | | | | | |
| Colombo | C | 1 | 4 | 2 | | | 3 | | | | 2 | 1 | | | | | | |
| | D | 1 | 2 | 2 | | | 3 | | | | 1 | 1 | | | | | | |
| Jaffna | C | | | | | | | | | | 2 | | 1 | | | | | |
| | D | | | | | | | | | | 2 | | | | | | | |
| China: | | | | | | | | | | | | | | | | | | |
| Amoy | C | | 5 | | P | | | | | | | | | | | | | |
| Hong Kong | C | 2 | | 1 | 1 | | | | | | | | | | | | | |
| | D | | | 1 | | | | | | | | | | | | | | |
| Mongolia— | | | | | | | | | | | | | | | | | | |
| Chien Chia Tien | C | | | | | | P | P | | | | | | | | | | |
| Tungliao | C | | | | | | 220 | 57 | 53 | 70 | 13 | 11 | 6 | 2 | | | | |
| Urga | C | | | | | | P | | | | | | | | | | | |
| Shansi— | | | | | | | | | | | | | | | | | | |
| Fengchow | C | | | | | | | | | P | | | | | | | | |
| Dutch East Indies: | | | | | | | | | | | | | | | | | | |
| Celebes—Makassar | C | | | | | | | | | | 1 | | | | | | | |
| | D | | | | | | | | | | 1 | | | | | | | |
| Plague-infected rats | | | | | | | | 4 | | | | 2 | | | | | | |
| Java— | | | | | | | | | | | | | | | | | | |
| Batavia and West Java | C | 47 | 65 | 61 | 32 | 46 | 49 | 12 | 10 | | 7 | | | | | | | |
| | D | 47 | 65 | 61 | 32 | 46 | 49 | 12 | 10 | | 7 | | | | | | | |
| Plague-infected rats | | 7 | 9 | 4 | 2 | 2 | | | | | | | | | | | | |
| East Java and Madura | C | 4 | | | 1 | 2 | 1 | 2 | | 14 | | | | | | | | |
| | D | 4 | | | 1 | 2 | 1 | 2 | | 14 | | | | | | | | |
| Kedoe Residency | C | 4 | | | P | | | | | | | | | | | | | |
| Surabaya Residency | C | 1 | | | | | | 1 | | | | | | | | | | |
| | D | 1 | | | | | | 1 | | | | | | | | | | |
| Ecuador (see also table below): | | | | | | | | | | | | | | | | | | |
| Alausi | C | | 1 | | | | | | | | | | | | | | | |
| Egypt: | | | | | | | | | | | | | | | | | | |
| Alexandria | C | | 1 | | 2 | 1 | 2 | | | | | | | | | | | |
| | D | | 2 | | | | 1 | | | | | | | | | | | |
| Amrieh District | C | | | | | 26 | 11 | 1 | | | | | | | | | | |
| | D | | | | | | 5 | | P | 1 | | | | | | | | |

[1] During the period from Nov. 10 to Dec. 11, 1928, 13 cases of plague were reported at El Mollar, Tucuman Province, Argentina. During the same period 1 case of plague was reported at Chipion, and 1 at Ucacha, both in Cordoba Province, Argentina.

[2] 11 plague-infected rats were reported at Buenos Aires, Argentina, from July 1 to Oct. 25, 1928.

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

### PLAGUE—Continued

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

| Place | | Apr. 8–May 5, 1928 | May 6–June 2, 1928 | June 3–30, 1928 | July 1–28, 1928 | July 29–Aug. 25, 1928 | Aug. 26–Sept. 22, 1928 | Week ended— Sept. 29, 1928 | October, 1928 | | | | November, 1928 | | | | December, 1928 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 6 | 13 | 20 | 27 | 3 | 10 | 17 | 24 | 1 | 8 |
| Egypt—Continued. | | | | | | | | | | | | | | | | | | |
| Assiout Province | C | | | | 2 | 2 | 1 | | P | 1 | | | 1 | 1 | 1 | | | |
| | D | | | | 1 | | 1 | | | 1 | | | 1 | 1 | 1 | | | |
| Beheira Province | C | | | | | 2 | 5 | | | 1 | | | | | | | | |
| | D | | | | | | 2 | | | 1 | | | | | | | | |
| Beni-Suef | C | 12 | 79 | 25 | 25 | 6 | 16 | | | | | | | | | | 4 | |
| | D | 3 | 27 | 9 | 5 | 2 | 5 | | | | | | | | | | 1 | |
| Cairo | D | | | | | 1 | | | | | | | | | | | | |
| Dierout | C | | | | | | | | | | | | 1 | | | | | |
| | D | | | | | | | | | | | | 1 | | | | | |
| Girga | C | | | | | | 5 | | | | | | | | | 1 | | |
| | D | | | | | | 4 | | | | | | | | | 1 | | |
| Maghagha District | C | 1 | | | | | | | | | | | | | | | | |
| | D | 1 | | | | | | | | | | | | | | | | |
| Menoufieh Province | C | | 11 | | | | | | | | | 6 | 1 | | | | | |
| | D | | 2 | | | | | | | | | | | | | | | |
| Minieh Province | C | 48 | 76 | 76 | 13 | | | | | | | | | | | | | |
| | D | 9 | 17 | 24 | 3 | | | | | | | | | | | | | |
| Port Said | C | | | | 1 | 5 | | | | | | | | | | | | |
| | D | | | | | | 1 | | | | | | | | | | | |
| Sidi Barani | C | | | | 12 | 10 | | | | | | | | | | | | |
| | D | | | | 8 | 1 | | | | | | | | | | | | |
| Suez | C | 5 | 3 | | | 2 | | | | | | | | | | | | |
| | D | 13 | 1 | | | | | | | | | | | | | | | |
| Tanta | C | | 1 | | 2 | 2 | | | | | | 5 | | | | | | |
| | D | | 1 | | | | | | | | | | | | | | | |
| Greece: | | | | | | | | | | | | | | | | | | |
| Athens and Piræus | C | | | | | | 2 | 2 | 2 | 1 | | | 4 | 1 | | | | |
| Corfu | C | | | 15 | | 1 | 1 | | | | | | | | 1 | | | |
| | D | | | 3 | | | | | | | | | | | | | | |
| Patras | C | | | | 1 | 1 | 1 | | | | | | | | | | | |
| | D | | | | 1 | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Hawaii Territory: Hawaii:** | | | | | | | | | | | | | | | | | | |
| Hamakua District— | | | | | | | | | | | | | | | | | | |
| Hamakua—Plague-infected rats | | | 1 | | | 1 | | | | | | | | | | | | |
| Honokaa | D | | | | | | 2 | | | | | | | | | | | |
| Plague-infected rats | | | 1 | | | | 4 | | | | | | | | | | | |
| Kukuihaele | D | | | | | 1 | | | | | | | | | | | | |
| Plague-infected rats | | | | | 1 | | | | | | | | | | | | | |
| Kukaiau—Plague-infected rats | | | | | | 3 | | | | | | | | | | | | |
| Paauilo | D | | | | 1 | 1 | | | | | | | | | | | | |
| **India** | C | 18,518 | 3,272 | 367 | 587 | 1,936 | 3,354 | 1,258 | 1,443 | | | | | | | | | |
| | D | 17,074 | 3,183 | 345 | 340 | 1,037 | 1,573 | 595 | 711 | | | | | | | | | |
| **Bassein** | D | 13 | 8 | 14 | 3 | | 1 | | | | | | | 2 | | | | |
| **Bombay** | C | 43 | 39 | 14 | 1 | 8 | 7 | 1 | | | 4 | | | | | | | |
| | D | 69 | 38 | 8 | 1 | 6 | 6 | 1 | | | | 1 | 1 | | | | | |
| **Plague-infected rats** | | | | | | 7 | 20 | | | | 13 | | | 7 | | | | |
| **Calcutta** | D | | | | | 2 | 1 | | | | | | | | | | | |
| **Madras Presidency** | C | 21 | 12 | 54 | 123 | 217 | 317 | 88 | 48 | | | | | | | | | |
| | D | 12 | 6 | 25 | 51 | 105 | 147 | 42 | 26 | | | | | | | | | |
| **Rangoon** | C | 16 | 14 | 31 | 43 | 28 | 17 | | 2 | 4 | 1 | | | | | | | |
| | D | 14 | 15 | 28 | 39 | 26 | 15 | | 1 | 4 | | | 3 | | | | | |
| **Vizagapatam** | D | | | 1 | | | | | | | | | | | | | | |
| **Indo-China (see also table below):** | | | | | | | | | | | | | | | | | | |
| **Pnompenh** | C | | | | 4 | 1 | 6 | | | 1 | | | | 1 | | | | |
| | D | | | | 4 | 1 | 4 | | | 1 | | | | 1 | | | | |
| **Saigon** | C | | | 5 | | 1 | | | | | | | 1 | | | | | |
| | D | | | 1 | | 1 | | | | | | | | | | | | |
| **Plague-infected rats** | | | | 2 | | | | | | | | | | | | | | |
| **Iraq:** | | | | | | | | | | | | | | | | | | |
| **Baghdad** | C | 11 | 13 | 9 | 1 | | 4 | | | | | 2 | 1 | 1 | 5 | 3 | 2 | 4 |
| | D | 6 | 3 | 4 | | | 2 | | | | | 1 | 1 | | 3 | 2 | 1 | 2 |
| Plague-infected rats | | 4 | 3 | | | | | | | | | | | | | | | |
| **Dulaim Liwa** | C | 1 | | | | | | | | | | | | | | | | |
| **Kwangchow-Wan (see table below).** | | | | | | | | | | | | | | | | | | |
| **Madagascar (see also table below):** | | | | | | | | | | | | | | | | | | |
| **Tamatave** | C | | 1 | 20 | 3 | 8 | 9 | 7 | 3 | 1 | 2 | 3 | 3 | 1 | | | | |
| | D | | | 8 | 7 | | 4 | 6 | 3 | 1 | | | 2 | 1 | | | | |
| **Nigeria (see also table below):** | | | | | | | | | | | | | | | | | | |
| **Lagos** | C | 17 | 28 | 43 | 53 | 51 | 60 | 28 | 20 | 23 | 17 | 24 | 19 | 25 | | | | |
| | D | 18 | 28 | 42 | 52 | 52 | 59 | 28 | 20 | 23 | 17 | 21 | 18 | 24 | | | | |
| Plague-infected rats | | 8 | 55 | 57 | 23 | | 62 | 45 | 46 | | | 51 | 56 | | | | | |
| **Paraguay: Asuncion** | C | | | 5 | | | | | | | 3 | | | | | | | |
| | D | | | 2 | 2 | | | | | | | | | | | | | |
| **Peru (see table below).** | | | | | | | | | | | | | | | | | | |
| **Portugal: Lisbon** | C | | | 1 | | | | | | | | | | | | | | |
| **Senegal (see also table below):** | | | | | | | | | | | | | | | | | | |
| **Thies and vicinity** | C | | 72 | 52 | | | | | | | | | | | | | | |
| | D | | 40 | 40 | | | | | | | | | | | | | | |

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

### PLAGUE—Continued

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

| Place | | Apr. 8–May 5, 1928 | May 6–June 2, 1928 | June 3–30, 1928 | July 1–28, 1928 | July 29–Aug. 25, 1928 | Aug. 26–Sept. 22, 1928 | Week ended— Sept. 29, 1928 | October, 1928 | | | | November, 1928 | | | | December, 1928 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 6 | 13 | 20 | 27 | 3 | 10 | 17 | 24 | 1 | 8 |
| Siam | C | 27 | 15 | 6 | 10 | | | | | | | | | | | | | |
| | D | 13 | 11 | 7 | 8 | | | | | | | | | | | | | |
| Ayudhaya | C | | | 2 | 2 | | | | | | | | | | | | | |
| | D | | | 1 | 2 | | | | | | | | | | | | | |
| Bangkok | C | 4 | | | | | | | | | | | | | 1 | | | |
| | D | 2 | | | | | | | | | | | | | 1 | | | |
| Nagara | C | | 1 | 2 | | | | | | | | | | | | | | |
| Straits Settlements: Ipoh | C | | | | | | 2 | | | | | | | | | | | |
| | D | | | | | | 2 | | | | | | | | | | | |
| Syria (see table below). | | | | | | | | | | | | | | | | | | |
| Turkey: | | | | | | | | | | | | | | | | | | |
| Adalia | C | | | | 1 | | | | | 1 | | | | | 1 | | | |
| Constantinople | C | | | | | | | | | | 1 | | | | | | | |
| Union of South Africa: Orange Free State | C | | | | P | P | | | | | | | | | P | | | |
| Union of Socialist Soviet Republics: | | | | | | | | | | | | | | | | | | |
| Astrakhan— | | | | | | | | | | | | | | | | | | |
| Axary District | C | | | 3 | | | | | | | | | | | | | | |
| | D | | | 2 | | | | | | | | | | | | | | |
| Kirghiz District | D | | | | | | 54 | | | | | | | | | | | |
| Krasnoiarsk District | D | | | | | | 1 | | | | | | | | | | | |
| Chita District | C | | | | | | 1 | | | | | | | | | | | |
| Ural Government | C | | | | | | | | | | | | 7 | | | | | |
| | D | | | | | | | | | | | | 7 | | | | | |
| On vessel: | | | | | | | | | | | | | | | | | | |
| S. S. Tymeric, at Barbados, from New Orleans | C | | 1 | | | | | | | | | | | | | | | |
| S. S. Automedon, at Penang, Straits Settlements | C | | | | | | | | | | P | | | | | | | |

| Place | | January–March, 1928 | April–June, 1928 | July, 1928 | August, 1928 | September, 1928 | October, 1928 | November, 1928 |
|---|---|---|---|---|---|---|---|---|
| Algeria (see also table above): | | | | | | | | |
| Algiers | C | ------ | 1 | ------ | ------ | ------ | ------ | ------ |
| British East Africa (see also table above): | | | | | | | | |
| Kenya | C | 65 | 86 | 97 | 144 | 15 | 37 | 3 |
| | D | ------ | 5 | ------ | 34 | ------ | ------ | 2 |
| Uganda | C | ------ | ------ | 176 | 152 | 128 | ------ | ------ |
| | D | ------ | ------ | 151 | 141 | 98 | ------ | ------ |
| Ecuador: Guayaquil | C | 20 | 6 | ------ | ------ | 3 | 3 | ------ |
| | D | 8 | 2 | ------ | ------ | ------ | 2 | ------ |
| Plague-infected rats | | 75 | 5 | 7 | ------ | 27 | 21 | ------ |
| Indo-China (see table above) | C | 12 | 36 | 7 | 2 | 6 | 2 | ------ |
| Kwangchow-Wan | C | 18 | 27 | ------ | ------ | ------ | ------ | ------ |
| Madagascar (see also table above) | C | 940 | 199 | 45 | 65 | 59 | 88 | ------ |
| | D | 864 | 184 | 33 | 61 | 51 | 84 | ------ |
| Ambositra Province | C | 202 | 68 | 4 | 3 | ------ | ------ | ------ |
| | D | 191 | 35 | 4 | 3 | ------ | ------ | ------ |
| Antisirabe Province | C | 281 | 68 | 11 | ------ | 9 | ------ | ------ |
| | D | 279 | 67 | 11 | ------ | 9 | ------ | ------ |
| Itasy Province | C | 55 | 1 | ------ | ------ | ------ | ------ | ------ |
| | D | 49 | 1 | ------ | ------ | ------ | ------ | ------ |
| Majunga | C | ------ | ------ | ------ | 2 | ------ | ------ | ------ |
| | D | ------ | ------ | ------ | 2 | ------ | ------ | ------ |
| Moramanga Province | C | 56 | 4 | 2 | 11 | 3 | ------ | ------ |
| | D | 55 | 4 | 2 | 10 | 3 | ------ | ------ |
| Tamatave | C | ------ | 23 | 10 | 12 | 8 | ------ | ------ |
| | D | ------ | 14 | 9 | 7 | 5 | ------ | ------ |
| Tananarive Province | C | 348 | 78 | 24 | 51 | 39 | ------ | ------ |
| | D | 292 | 82 | 23 | 51 | 34 | ------ | ------ |
| Nigeria (see also table above) | C | 41 | 91 | 53 | ------ | ------ | ------ | ------ |
| | D | 41 | 89 | 53 | ------ | ------ | ------ | ------ |
| Peru | C | 93 | 25 | 5 | ------ | ------ | ------ | ------ |
| | D | 23 | 6 | 2 | ------ | ------ | ------ | ------ |
| Lima | C | 6 | 4 | ------ | ------ | ------ | ------ | ------ |
| | D | ------ | 2 | ------ | ------ | ------ | ------ | ------ |
| Senegal (see also table above) | C | 30 | 448 | 318 | 43 | 199 | ------ | ------ |
| | D | 17 | 246 | 164 | 32 | 127 | ------ | ------ |
| Baol | C | ------ | 13 | 17 | 63 | 73 | 39 | 18 |
| | D | ------ | 7 | 10 | 38 | 40 | 14 | 6 |
| Cayor | C | ------ | ------ | 40 | 46 | 20 | 17 | ------ |
| | D | ------ | ------ | 25 | 15 | 8 | 6 | ------ |
| Fatick | C | ------ | ------ | ------ | ------ | ------ | 35 | ------ |
| | D | ------ | ------ | ------ | ------ | ------ | 20 | ------ |
| Louga | C | ------ | ------ | ------ | ------ | ------ | 14 | ------ |
| | D | ------ | ------ | ------ | ------ | ------ | 5 | ------ |
| Rufisque | C | ------ | 46 | 18 | 2 | 1 | 49 | 6 |
| | D | ------ | 31 | 7 | ------ | 1 | 14 | 3 |
| Thies | C | ------ | 345 | 103 | 151 | 106 | 51 | 11 |
| | D | ------ | 237 | 64 | 119 | 78 | 29 | ------ |
| Tivaouane | C | ------ | 325 | 84 | 9 | ------ | ------ | ------ |
| | D | ------ | 175 | 70 | ------ | ------ | ------ | ------ |
| Syria: Beirut | C | ------ | 1 | 5 | ------ | ------ | 1 | 2 |

## PLAGUE RATS ON VESSELS

Steamship *Sicily* at Liverpool from Buenos Aires and Rosario, June 8, 1928, seven plague-infected rats.

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

### SMALLPOX

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

| Place | | Apr. 8–May 5, 1928 | May 6–June 2, 1928 | June 3–30, 1928 | July 1–28, 1928 | July 29–Aug. 25, 1928 | Aug. 26–Sept. 22, 1928 | Week ended— Sept. 29, 1928 | October, 1928 6 | 13 | 20 | 27 | November, 1928 3 | 10 | 17 | 24 | December, 1928 1 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Algeria | C | 12 | | | | | | | | | | | | | | | | |
| Algiers | C | 4 | 5 | 15 | 3 | 8 | 2 | | | 2 | 2 | | | 1 | 1 | | | |
| Oran | C | 17 | 5 | 4 | 8 | 5 | | | | 20 | 1 | | | | | | | |
| Angola (see table below). | | | | | | | | | | | | | | | | | | |
| Arabia: Aden | C | | | 11 | | 1 | 1 | | | | | | | | 1 | | | |
| | D | | | | | 1 | | | | | | | | | | | | |
| Brazil (see also table below): | | | | | | | | | | | | | | | | | | |
| Pernambuco (Recife) | D | | 1 | | | | | | | | | | | | | | | |
| Rio de Janeiro | C | | | | 1 | | | | | | | | | | | | | |
| British East Africa: Kenya—Mombasa | C | 1 | | | | | | 1 | | | | | | | | | | |
| British South Africa: | | | | | | | | | | | | | | | | | | |
| Northern Rhodesia | C | 628 | 195 | 15 | 48 | 310 | 382 | 145 | 4 | 22 | 24 | | | | | | | |
| | D | 51 | 17 | 1 | 5 | 23 | 22 | 4 | | 2 | | | | | | | | |
| Southern Rhodesia | C | 24 | 13 | 36 | 22 | 17 | 5 | | 3 | 5 | 1 | 1 | | | | | | |
| | D | 10 | | 4 | 4 | | | | | | | | | | | | | |
| Canada: | | | | | | | | | | | | | | | | | | |
| Alberta | C | 12 | 44 | 9 | 3 | 25 | 6 | | | | 4 | 1 | | | 3 | 7 | 1 | |
| Edmonton | C | 3 | | | 4 | | | | | | | | | | | | | |
| British Columbia—Vancouver | C | 24 | 11 | 4 | 11 | | 5 | 8 | 5 | 3 | | | 12 | 9 | 5 | | | |
| Manitoba | C | 7 | 4 | 10 | 4 | | | | | | 1 | | | 14 | | 16 | 5 | |
| Winnipeg and vicinity | C | | | | | | | | | | | | | | | 13 | 2 | 1 |
| New Brunswick | C | | 1 | 7 | | 5 | | | | | | | | | | | | |
| Ontario | C | 50 | 41 | 33 | 11 | 5 | 3 | | | 10 | 5 | 5 | | 4 | 3 | 4 | 4 | |
| Kingston | C | 3 | | | 2 | 1 | 1 | | | | | 1 | | | | | | |
| Ottawa | C | 4 | 6 | 1 | | 1 | 6 | | | | 2 | 2 | 1 | 2 | 1 | 1 | | |
| Sarnia | C | | | | | | | | | | | 1 | | | | | | |
| Toronto | C | 11 | 12 | 3 | 1 | | | | | | | | | | | | | |
| Quebec | C | 83 | 78 | 81 | 62 | 27 | 28 | 14 | 11 | 19 | 31 | 20 | 9 | 40 | 49 | 25 | 72 | |
| Montreal | C | 9 | 3 | 11 | 5 | 2 | 12 | | | | 4 | 7 | 1 | 2 | | | 1 | |
| Quebec | C | 23 | 47 | 52 | 44 | 12 | 13 | 2 | 3 | 4 | 3 | 3 | 1 | 3 | 5 | 3 | | |
| Sherbrooke | C | | | 4 | | | | | | | | | | | | | | |
| Saskatchewan | C | 52 | 28 | 16 | | 6 | 3 | | | 1 | | 6 | | | 4 | 11 | 12 | |
| Moose Jaw | C | 3 | 1 | | 1 | | 2 | | | | | | | | 2 | 1 | | |
| Regina | C | 8 | 1 | 1 | | | 1 | | | | | | | | | 2 | | |

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| China: | | | | | | | | | | | | | | | | | | | |
| Amoy | C | 9 | 3 | | | | P | | | P | | | | P | | | | | |
| Antung | C | 3 | | | | | | | | | | | | | | | | | |
| Canton | C | 2 | 2 | | | | | | | | | | | | | | 1 | | |
| Chefoo | C | | P | P | P | P | P | | | | | | P | | | | P | | |
| Foochow | C | P | P | P | P | P | | P | P | P | P | | | | | | | | |
| Hong Kong | C | 25 | 30 | 14 | 11 | 19 | 9 | 6 | 1 | 6 | 7 | 6 | 22 | 31 | 17 | 25 | | | |
| | D | 26 | 23 | 19 | 5 | 16 | 7 | 3 | 4 | 1 | 6 | | 6 | 9 | 8 | 17 | | | |
| Manchuria— | | | | | | | | | | | | | | | | | | | |
| Changchum | C | 4 | 6 | | 1 | | | | | | | | | | | | | | |
| Fushun | C | | | 6 | 1 | 2 | 1 | | | | | | 1 | | | | | | |
| | D | | | | 1 | | | | | | | | | | | | | | |
| Harbin | C | 10 | 27 | 31 | 11 | | 1 | | | | | | | | | | | | |
| Kwantung— | | | | | | | | | | | | | | | | | | | |
| Dairen | C | 16 | 35 | 48 | 21 | 3 | 2 | 1 | | | 1 | | 1 | | | | | | |
| | D | | | 20 | 12 | 3 | | 1 | | | | | | | | | | | |
| Port Arthur | C | | | | 1 | 1 | | | | | | | | | | | | | |
| | D | | | | | 1 | | | | | | | | | | | | | |
| Mukden | C | 4 | 3 | 6 | | | 2 | | | 1 | | | | | | | | | |
| | D | | | 1 | | | | | | | | | | | | | | | |
| Pensihu | C | | | 1 | | | | | | | | | | | | | | | |
| | D | | | 1 | | | | | | | | | | | | | | | |
| South Manchuria Railway Zone | C | | | 5 | | | | | | | | | | | | | | | |
| Shanghai— | | | | | | | | | | | | | | | | | | | |
| Foreigners only | C | 3 | 11 | 7 | 2 | 2 | 2 | | | 1 | 2 | 1 | 1 | | | | | | |
| Including natives | D | 9 | 19 | 11 | 10 | 2 | | | | 4 | 2 | 3 | | 6 | 11 | 6 | | | |
| Tientsin | C | 17 | 9 | 14 | 1 | | 1 | | | 4 | | | | | | | | | |
| Chosen (see table below). | | | | | | | | | | | | | | | | | | | |
| Curaçao (alastrim) | C | | | | 2 | | | | | | | | | | | | | | |
| Dominican Republic: Santo Domingo | C | 1 | | | | | | | | | | | | | | | | | |
| Dutch East Indies: | | | | | | | | | | | | | | | | | | | |
| Balikpapan | C | | | | 7 | | | | | | | | | | | | | | |
| | D | | | | 2 | | | | | | | | | | | | | | |
| Belawan Deli | C | | | 11 | 4 | 9 | 10 | | 8 | | 1 | 1 | 2 | 1 | 1 | 2 | | | |
| | D | | | 3 | 1 | 3 | 2 | | 3 | | | 1 | 1 | | | 1 | | | |
| Borneo— | | | | | | | | | | | | | | | | | | | |
| Pontianak | C | | | | | 5 | 4 | 1 | | 1 | | | 1 | | | | | | |
| | D | | | | | 2 | | 1 | | | | | | | | | | | |
| Samarinda | C | | | | | | | 3 | | | | | 8 | | 8 | 15 | | | |
| | D | | | | | | | | | | | | 2 | | | 3 | | | |
| Java— | | | | | | | | | | | | | | | | | | | |
| Batavia and West Java | C | 1 | 2 | | 2 | 6 | 1 | 2 | 2 | 1 | 1 | | 1 | | | | | | |
| | D | | | | | | | 1 | | | 1 | | | | | | | | |
| East Java and Madura | C | 2 | | 2 | 3 | 6 | 5 | 2 | 2 | | | | | | | | | | |
| | D | 2 | | | 3 | 1 | 6 | | | | | | | | | | | | |
| Surabaya | C | | | | | 6 | 4 | | 1 | | 1 | 1 | | | | | | | |
| | D | | | | | 1 | | | | | | | | | | | | | |
| Sumatra— | | | | | | | | | | | | | | | | | | | |
| Medan | C | 2 | 10 | 4 | 5 | 9 | 7 | 5 | 8 | | 1 | 1 | | | | | | | |
| | D | 3 | 5 | | 2 | 3 | | 1 | 3 | | | 1 | | | | | | | |
| Palembang | C | | | | 1 | | | | | | | | | | | | | | |

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

### SMALLPOX—Continued

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

| Place | | Apr. 8–May 5, 1928 | May 6–June 2, 1928 | June 3–30, 1928 | July 1–28, 1928 | July 29–Aug. 25, 1928 | Aug. 26–Sept. 22, 1928 | Week ended— Sept. 29, 1928 | October, 1928 6 | 13 | 20 | 27 | November, 1928 3 | 10 | 17 | 24 | December, 1928 1 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ecuador (see table below). | | | | | | | | | | | | | | | | | | |
| Egypt | C | 12 | 1 | | | | | | | | | | | | | | | |
| | D | 7 | 1 | | | | | | | | | | | | | | | |
| Beheira Province | C | | | | 1 | | | | | | | | | | | | | |
| France (see table below). | | | | | | | | | | | | | | | | | | |
| Gold Coast (see table below). | | | | | | | | | | | | | | | | | | |
| Great Britain: | | | | | | | | | | | | | | | | | | |
| England and Wales | C | 1,344 | 1,199 | 1,146 | 681 | 492 | 430 | 94 | 130 | 162 | 128 | 148 | 122 | 149 | 162 | | | |
| Birmingham | C | 1 | | 2 | 1 | | 1 | | | | | | | | | | | |
| Bradford | C | 14 | 17 | 10 | 2 | | 1 | | | | 1 | | | | | | | |
| Bristol | C | 17 | 10 | 2 | | 2 | | | | | | | | | | | | |
| Cardiff | C | 3 | 2 | | | | | | | | | | | | | | | |
| Castleford | C | 69 | 24 | 18 | 14 | 10 | 5 | 4 | 1 | 1 | 2 | | 5 | 1 | | | | |
| Hull | C | | | 1 | 24 | 15 | 13 | 2 | 3 | 1 | 1 | 1 | | 1 | 1 | 1 | | |
| Leeds | C | 1 | | 8 | 1 | 1 | 6 | | | | | 1 | | | | | | |
| London | C | 42 | 25 | 96 | 19 | 9 | 8 | 4 | 5 | | 3 | 4 | 4 | 4 | 9 | | | |
| Manchester | C | 8 | 5 | 1 | | | 3 | 1 | | | | | | | | | | |
| Newcastle-on-Tyne | C | 4 | 12 | 6 | 28 | 2 | | | 1 | | | | | 1 | | | | |
| Nottingham | C | 17 | 20 | 3 | 6 | 10 | 15 | 1 | 1 | 2 | 1 | 1 | | | | | | |
| Plymouth | C | | | | | 6 | 3 | 2 | | | | | | 6 | | | | |
| Sheffield | C | 14 | 4 | 2 | 2 | 1 | 4 | | | | | | | 8 | 1 | | | |
| Stoke-on-Trent | C | 32 | 24 | 14 | 5 | 8 | | | | | | | | | | | | |
| Weymouth | C | | | | 1 | | | | | | | | | | | | | |
| Scotland— | | | | | | | | | | | | | | | | | | |
| Arbroath | C | | | | | 4 | 3 | | | | | | | | | | | |
| Dundee | C | | | | | | 1 | | | | 3 | | 1 | 1 | | | | |
| Greece (see table below). | | | | | | | | | | | | | | | | | | |
| Hedjaz | C | | 6 | 14 | 18 | 1 | | | | | | | | | | | | |
| | D | | 2 | 1 | 6 | 1 | | | | | | | | | | | | |
| India | C | 30,436 | 21,489 | 13,497 | 9,981 | 6,218 | 4,553 | 830 | 708 | | | | | | | | | |
| | D | 6,672 | 5,046 | 3,700 | 2,758 | 1,733 | 1,116 | 243 | 157 | | | | | | | | | |
| Bassein | C | 1 | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bombay | C | 200 | 136 | 71 | 67 | 28 | 14 | 7 | 2 | 12 | 3 | 5 | 2 | 1 | 1 | | | |
| | D | 118 | 78 | 46 | 33 | 21 | 11 | 7 | | 4 | 1 | 2 | 2 | | 1 | | | |
| Calcutta | C | 171 | 130 | 61 | 52 | 22 | 13 | | 4 | | 3 | | 1 | 1 | | | | |
| | D | 130 | 101 | 50 | 35 | 17 | 17 | | 3 | | 1 | | 1 | 1 | | | | |
| Karachi | C | 2 | 3 | | 3 | | | | | | 1 | | | | | | | |
| | D | 1 | 1 | | 2 | | | | | | | | | | | | | |
| Madras | C | 169 | 59 | 85 | 39 | 43 | 90 | 13 | 21 | 18 | 25 | 31 | 9 | 11 | 20 | | | |
| | D | 38 | 18 | 10 | 18 | 10 | 21 | 6 | 5 | 7 | 5 | 5 | 8 | 3 | 6 | | | |
| Moulmein | C | | | 1 | 9 | 9 | 4 | | | 2 | | | | | | | | |
| | D | | | 1 | 6 | 4 | 1 | | | | | | | | | | | |
| Negapatam | C | 7 | 8 | 19 | 26 | 35 | 46 | 19 | 2 | 7 | 23 | 7 | 13 | 12 | 6 | | | |
| | D | 3 | 1 | 7 | 4 | 9 | 10 | 4 | 1 | 1 | 5 | 2 | 3 | 1 | 2 | | | |
| Rangoon | C | 167 | 36 | 30 | 7 | 2 | | | | | | | | 1 | | | | |
| | D | 79 | 13 | 6 | 4 | 1 | | | | | | | | | | | | |
| Tuticorin | C | | 3 | | | | | 1 | | 2 | | | | | | | | |
| Vizagapatam | C | 2 | 3 | 8 | 3 | 1 | 14 | | | 1 | | | | | | | | |
| | D | | 1 | 3 | 3 | 1 | 3 | | | | | | | | | | | |
| India (French): | | | | | | | | | | | | | | | | | | |
| Chandernagor | C | 5 | | | 1 | 2 | 9 | | | 2 | 2 | | 3 | | | | | |
| | D | 1 | | | 1 | 1 | 2 | | | 2 | 2 | | 3 | | | | | |
| Pondicherry Province | C | 36 | 32 | 13 | 12 | 62 | 92 | 23 | 26 | 30 | 32 | 34 | 23 | 12 | | | | |
| | D | 36 | 23 | 13 | 12 | 45 | 87 | 17 | 18 | 18 | 20 | 27 | 17 | 11 | | 3 | | |
| Indo-China (see also table below): | | | | | | | | | | | | | | | | | | |
| Pnompenh | C | | | | | 2 | 19 | 4 | 8 | 6 | 10 | 12 | | 12 | 6 | 5 | | |
| | D | | | | | 2 | 15 | 1 | 5 | 2 | 2 | 2 | | 1 | 2 | 4 | | |
| Saigon | C | | | | | | 1 | 1 | 1 | | 1 | 2 | | | | | | |
| | D | | | | | | | | | | | 2 | | | | | | |
| Iraq: | | | | | | | | | | | | | | | | | | |
| Baghdad | C | 5 | 16 | 16 | 24 | 7 | 34 | 9 | 9 | 8 | 12 | 10 | 7 | 9 | 14 | 14 | 9 | 17 |
| | D | 3 | 6 | 10 | 15 | 2 | 17 | 3 | 3 | 3 | 3 | 8 | 1 | 4 | 10 | 9 | 18 | 13 |
| Basra | C | 4 | 3 | 2 | 6 | 4 | 1 | 6 | 1 | 9 | 7 | 3 | 9 | 9 | 14 | 13 | 12 | 5 |
| | D | 2 | 3 | 2 | 2 | 2 | 1 | 2 | | | 7 | 4 | 7 | 8 | 14 | 11 | 8 | 4 |
| Mossoul | C | | | | | | | | | | | | | 22 | 31 | 44 | 74 | |
| | D | | | | | | | | | | | | | 6 | 17 | 19 | 42 | |
| Italy | C | | 1 | 6 | | | | | | | | | | | | | | |
| Palermo | C | 10 | 6 | 10 | 4 | 6 | | | | | | 2 | | | | | | |
| Ivory Coast (see table below). | | | | | | | | | | | | | | | | | | |
| Jamaica (outside Kingston) (alastrim) | C | 4 | 2 | 3 | 1 | 1 | 3 | 2 | | | | | | | | | | |
| Japan: | | | | | | | | | | | | | | | | | | |
| Kobe | C | | 11 | | | | | | | | | | | | | | | |
| Nagoya | C | 6 | 2 | | 1 | | | | | | | | | | | | | |
| Osaka | C | | | 4 | | | | | | | | | | | | | | |
| Tokyo City | C | 8 | 2 | | | | | | | | | | | | | | | |
| | D | 1 | | | | | | | | | | | | | | | | |
| Tokyo Prefecture (outside city) | C | 1 | 1 | | | | | | | | | | | | | | | |
| | D | 2 | | | | | | | | | | | | | | | | |
| Yokohama | C | 2 | 3 | | | | | | | | | | | | | | | |
| | D | | 1 | | | | | | | | | | | | | | | |
| Latvia (see table below). | | | | | | | | | | | | | | | | | | |
| Malta: Valetta | C | | | | | | | | 1 | | | | | | | | | |

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

### SMALLPOX—Continued

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

| Place | | Apr. 8–May 5, 1928 | May 6–June 2, 1928 | June 3–30, 1928 | July 1–28, 1928 | July 29–Aug. 25, 1928 | Aug. 26–Sept. 22, 1928 | Week ended— Sept. 29, 1928 | October, 1928 6 | 13 | 20 | 27 | November, 1928 3 | 10 | 17 | 24 | December, 1928 1 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mexico (see also table below): | | | | | | | | | | | | | | | | | | |
| Acapulco | C | | 2 | | | | | | | | | | | | | | | |
| | D | | 2 | | | | | | | | | | | | | | | |
| Jalisco (State) | C | P | | 21 | 1 | | | | | | | | | | | | | |
| Guadalajara | D | 12 | 13 | 10 | 9 | 7 | 3 | | | | 1 | | | | | 1 | | |
| Mazatlan | D | | 3 | 2 | | 3 | | | | | | | | | | | | |
| Mexico City and surrounding territory | C | 1 | 2 | | 3 | 2 | 1 | | 1 | | | | | | 5 | | | |
| | D | | | 1 | | 1 | 1 | | | | | | | | | | | |
| Reynosa | C | | | | 1 | | | | | | | | | | | | | |
| Saltillo | D | | 2 | 2 | | | | | | | | 1 | | | | | | |
| San Luis Potosi | D | | | | | | 1 | | 2 | | | | 1 | | | | | |
| Tampico | C | | | | | | | | | | | | | 1 | | | | |
| Torreon | D | | | | | | | | 1 | | | | | | | | | |
| Morocco (see table below). | | | | | | | | | | | | | | | | | | |
| Nigeria (see also table below): | | | | | | | | | | | | | | | | | | |
| Lagos | C | | | 1 | | | | | | | | | | | | | | |
| Southern Provinces | C | | | 51 | | | | | | | | | | | | | | |
| | D | | | 12 | | | | | | | | | | | | | | |
| Persia (see table below). | | | | | | | | | | | | | | | | | | |
| Poland | C | 9 | 1 | 3 | 2 | | | | | | 1 | | | | | | | |
| | D | 1 | | | | | | | | | | | | | | | | |
| Portugal (see also table below): | | | | | | | | | | | | | | | | | | |
| Lisbon | C | 6 | 7 | 7 | 8 | 1 | | | | | | | | | | | | |
| | D | | | | 1 | 1 | | | | | | | | | | | | |
| Oporto | C | 1 | | | | | | | | | | | | | | | | |
| Senegal (see also table below): | | | | | | | | | | | | | | | | | | |
| Dakar | C | 16 | 29 | 8 | | | | | | | | | | | | | | |
| | D | 8 | 7 | | | | | | | | | | | | | | | |
| Siam | C | 10 | 8 | 3 | 1 | 3 | 1 | | | | 3 | | | | | | | |
| | D | 3 | 1 | 1 | | 2 | | | | | | | | | | | | |
| Bangkok | C | 1 | | | | | | | | | | | | | | 1 | | |
| | D | | 1 | | | | | | | | | | | | | | | |
| Straits Settlements: Singapore | C | 3 | | 1 | | | 1 | 1 | 1 | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sudan (Anglo-Egyptian) | C | 160 | 168 | 206 | 144 | 252 | 152 | 30 | 19 | 38 | 2 | 37 | 14 | 4 | 24 | 58 | 14 | 148 |
| | D | 32 | 20 | 37 | 35 | 34 | 34 | 6 | 6 | 7 | ------ | 5 | 7 | 1 | ------ | 7 | 13 | 9 |
| Sudan (French) (see table below). | | | | | | | | | | | | | | | | | | |
| Syria (see table below). | | | | | | | | | | | | | | | | | | |
| Taiwan: Keelung | C | ------ | ------ | 1 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| Tunisia: Tunis | C | 6 | 3 | 2 | 8 | 5 | 1 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| Union of South Africa: | | | | | | | | | | | | | | | | | | |
| Cape Province | C | ------ | ------ | ------ | ------ | P | P | P | P | ------ | P | P | ------ | ------ | ------ | ------ | ------ | ------ |
| Natal | C | ------ | ------ | 1 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| Orange Free State | C | ------ | P | P | P | ------ | ------ | P | P | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| Transvaal | C | P | P | P | ------ | P | P | P | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| Union of Socialist Soviet Republics (see table below). | | | | | | | | | | | | | | | | | | |
| Upper Volta | C | 9 | ------ | ------ | ------ | 50 | P | ------ | ------ | 10 | ------ | 5 | ------ | ------ | ------ | ------ | ------ | ------ |
| | D | ------ | ------ | ------ | ------ | 8 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| Venezuela: Maracaibo | D | ------ | ------ | ------ | ------ | 1 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| On vessel: | | | | | | | | | | | | | | | | | | |
| S. S. Ballarat, en route to Cape Town, South Africa | C | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | 1 | ------ | ------ | ------ | ------ | ------ | ------ |
| S. S. Kashgar at Kobe, from Shanghai | C | P | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| S. S. Ronna at Penang, from Negapatam | C | ------ | P | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| S. S. Theseus, from Jeddah to Penang | C | ------ | ------ | ------ | 1 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| S. S. Tilleboct at Hong Kong, from Shanghai | C | P | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| S. S. Victoria at Nome, Alaska | C | ------ | ------ | 8 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |

| Place | | January–March, 1928 | April–June, 1928 | July, 1928 | | | August, 1928 | | | September, 1928 | | | October, 1928 | | | Nov. 1–10, 1928 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1–10 | 11–20 | 21–31 | 1–10 | 11–20 | 21–31 | 1–10 | 11–20 | 21–30 | 1–10 | 11–20 | 21–31 | |
| Indo-China (see also table above) | C | 426 | 197 | 8 | 3 | 15 | 44 | 21 | 6 | 27 | 29 | 17 | 38 | 19 | 43 | 55 |
| Ivory Coast | C | ------ | 7 | ------ | 4 | 5 | ------ | ------ | ------ | 2 | ------ | ------ | ------ | 1 | ------ | ------ |
| | D | ------ | ------ | ------ | ------ | 2 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| Senegal (see also table above) | C | ------ | 110 | ------ | ------ | ------ | ------ | ------ | ------ | 4 | ------ | ------ | 2 | ------ | ------ | ------ |
| | D | ------ | 16 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| Dakar | C | ------ | 43 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| | D | ------ | 15 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| Sudan (French) | C | 15 | 54 | ------ | 17 | ------ | ------ | ------ | 55 | ------ | ------ | P | P | ------ | ------ | ------ |
| | D | ------ | 6 | ------ | ------ | ------ | ------ | ------ | 33 | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| Syria: | | | | | | | | | | | | | | | | |
| Aleppo | C | 1 | 3 | ------ | ------ | ------ | ------ | 4 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| Beirut | C | 75 | 26 | 4 | 1 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | 1 | ------ | 1 |
| | D | 2 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| Damascus | C | 14 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |

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

### SMALLPOX—Continued

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

| Place | | January–March, 1928 | April–June, 1928 | July, 1928 | August, 1928 | September, 1928 | October, 1928 |
|---|---|---|---|---|---|---|---|
| Angola | C | 47 | 8 | 2 | | | |
| Congo | C | 36 | | | | | |
| Cuanza-Norte | C | 1 | | | | | |
| Cuanza-Sul | C | 10 | | | | | |
| Loanda | C | | | 1 | | | |
| Brazil (see also table above): | | | | | | | |
| Porto Alegre | C | 1 | | | 2 | 1 | |
| Chosen | C | 48 | 221 | | | | |
| | D | 16 | 65 | | | | |
| Seoul | C | 1 | | | | | |
| Ecuador: Guayaquil | C | 35 | 61 | 35 | 38 | 22 | 6 |
| | D | 1 | | | | 1 | 3 |
| France | C | 34 | 31 | 10 | 6 | 3 | 3 |
| Gold Coast | C | 4 | | | | | |
| Greece | C | 36 | 54 | 9 | 3 | 6 | 6 |
| | D | 4 | 3 | 1 | | | 1 |
| Latvia | C | 1 | 1 | 1 | | | |
| Mexico (see also table above) | D | 1,064 | 958 | | | | |
| Morocco | C | 132 | 54 | 55 | 1 | 4 | 5 |
| Nigeria (see also table above) | C | 592 | 739 | 1,059 | | | |
| | D | 84 | 156 | 169 | | | |
| Persia | D | 7 | | | | | |
| Portugal (see also table above) | C | 258 | 172 | 82 | | 24 | 27 |
| | D | 30 | 12 | 10 | | 2 | 3 |
| Union of Socialist Soviet Republics: | | | | | | | |
| Railways, etc | C | 59 | | | | | |
| Other territories in Europe | C | 1,717 | | | | | |
| Transcaucasus, Siberia, and Central Asia | C | 25 | | | | | |
| Ukraine | C | 27 | | | | | |

### TYPHUS FEVER

| Place | | Apr. 8–May 5, 1928 | May 6–June 2, 1928 | June 3–30, 1928 | July 1–28, 1928 | July 29–Aug. 25, 1928 | Aug. 26–Sept. 22, 1928 | Week ended— Sept. 29, 1928 | October, 1928: 6 | 13 | 20 | 27 | November, 1928: 3 | 10 | 17 | 24 | Dec. 1, 1928 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Algeria: | | | | | | | | | | | | | | | | | |
| Algiers | C | 4 | 13 | 32 | 3 | 10 | 2 | | | 1 | | 1 | 1 | 1 | 1 | | |
| | D | 2 | | 6 | | | | | | | | | | | | | |
| Oran | C | 11 | 4 | 7 | 16 | 4 | 2 | | | 1 | | | | | 2 | | |
| | D | 1 | | 1 | | | | | | | | | | | | | |
| Bulgaria | C | 26 | | 16 | P | 8 | 6 | 5 | 1 | 1 | 1 | 1 | 2 | | 1 | | |
| | D | | | 2 | | 2 | | | | | | 1 | | | | | |
| Sofia | C | 1 | 20 | 14 | 1 | | 3 | | | | | | | | | | |
| | D | | | 6 | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chile: | | | | | | | | | | | | | | | | | | |
| Iquique | C | | | | 1 | | | | | | | | | | | | | |
| | D | | | | 1 | | | | | | | | | | | | | |
| Talcahuano | D | | | | | | | | | | | | | | | | | |
| Valparaiso | C | | | 3 | 2 | | | | | | | | | | | | | |
| | D | | | 1 | | | | | | | | | | | | | | |
| China: | | | | | | | | | | | | | | | | | | |
| Manchuria— | | | | | | | | | | | | | | | | | | |
| Harbin | C | 2 | 16 | 23 | | | | | | | | | | | | | | |
| Kwantung | C | 17 | 293 | 539 | 431 | 60 | 3 | 2 | | | | | | | 1 | | | |
| South Manchuria Railway Zone | C | | | 10 | 6 | | | | | | | | | | | | | |
| Tientsin | C | | 2 | 2 | | 1 | | | | | | | | | | | | |
| Chosen (see table below). | | | | | | | | | | | | | | | | | | |
| Czechoslovakia (see table below). | | | | | | | | | | | | | | | | | | |
| Egypt | C | 3 | 11 | 7 | | | | | | | | | | | | | | |
| | D | 1 | 2 | 3 | | | | | | | | | | | | | | |
| Alexandria | C | | | | 1 | 2 | 2 | | | | | | | | | | | |
| | D | | | | | 1 | 1 | | | | | | | | | | | |
| Assiout Province | C | | | 2 | 2 | 2 | | | 1 | | | | | | | | | |
| Assouan Province | C | | | 2 | | 1 | | | | | | | | | | | | |
| | D | | | | | 1 | | | | | | | | | | | | |
| Beheira Province | C | 32 | 43 | 7 | 2 | | | | | 2 | | | | | | | | |
| | D | 7 | 7 | 2 | | | | | | 1 | | | | | | | | |
| Cairo | C | 4 | | | 1 | 1 | 1 | | | | | | | | | | | |
| | D | 4 | | | 1 | 1 | 1 | | | | | | | | | | | |
| Dakalieh | C | | | 1 | 1 | | | | | | | | | | | | | |
| Gharbieh Province | C | 14 | 5 | 4 | 1 | | | | | | | | | | | | | |
| | D | 5 | | 3 | | | | | | | | | | | | | | |
| Keneh Province | C | 38 | | 1 | | | | | | | | | | | | | | |
| | D | 7 | | 1 | | | | | | | | | | | | | | |
| Menoufieh Province | C | 28 | 9 | 5 | | | 1 | | | | | | | | | | | |
| | D | 3 | 3 | 2 | | | 1 | | | | | | | | | | | |
| Port Said | C | | | | 2 | 8 | 1 | 1 | | | | 1 | | | | | | |
| Suez | C | | 1 | | 4 | 4 | 6 | 1 | 3 | | | | | | | | | |
| | D | | 1 | | | | | | | | | | | | | | | |
| Great Britain: London County | C | | | 2 | | | | | | | | | | | | | | |
| Greece: Piræus | C | | | 1 | | | | | | | | | | | | | | |
| Hungary: Budapest | D | | | 2 | 2 | | | | | | | | | | | | | |
| Ireland: | | | | | | | | | | | | | | | | | | |
| Belfast | C | | 2 | 1 | | | | | | | | | | | | | | |
| | D | | | 1 | | | | | | | | | | | | | | |
| Irish Free State | C | 1 | 4 | | | | | | | | | | | | | | | |
| Clare County—Scariff | C | | | | | | | | | | | | | | 1 | | | |
| Cork County | C | 1 | | | | | | | | | | | | | | | | |
| Dublin | C | | | | | | 5 | | | | | | | | | | | |
| Galway County—Oughterard | C | | | | 10 | | | | | | | | | | | | | |
| Kerry County— | | | | | | | | | | | | | | | | | | |
| Cahirciveen | C | | | | | 1 | | | | | | | | | | | | |
| Tralee | C | | | | | | 1 | 7 | | | | | | | | | | |

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

### TYPHUS FEVER—Continued

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

| Place | | Apr. 8–May 5, 1928 | May 6–June 2, 1928 | June 3–30, 1928 | July 1–28, 1928 | July 29–Aug. 25, 1928 | Aug. 26–Sept. 22, 1928 | Week ended— Sept. 29, 1928 | October, 1928: 6 | 13 | 20 | 27 | November, 1928: 3 | 10 | 17 | 24 | Dec. 1, 1928 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Japan (see also table below): | | | | | | | | | | | | | | | | | |
| Hiogo | C | | | 1 | | | | | | | | | | | | | |
| Miyagi | C | | | | | | | 2 | | | | | | | | | |
| Yamagata | C | | 2 | 2 | 2 | | | | | | | | | | | | |
| Latvia (see table below). | | | | | | | | | | | | | | | | | |
| Lithuania (see table below). | | | | | | | | | | | | | | | | | |
| Mexico (see also table below): | | | | | | | | | | | | | | | | | |
| Aguascalientes | D | | | | | | | | | | | | | | | 1 | |
| Durango | D | | | | 1 | | | | | | | | | | | | |
| Guadalajara | D | | 1 | | 4 | | | | | | | | | | | | |
| Mexico City, including municipalities in Federal District | C | 8 | 19 | 14 | 10 | 10 | 15 | 2 | 3 | 2 | 2 | 6 | 2 | 2 | | | |
| | D | 1 | 2 | | 3 | 3 | 1 | | | 1 | | 1 | | 1 | | | |
| Morocco | C | 591 | 280 | 214 | 153 | 44 | 3 | | 1 | | | | 1 | | | | |
| Palestine | C | 6 | 4 | 8 | 9 | 14 | 10 | 4 | 5 | 1 | 1 | 2 | 1 | | 3 | 4 | 4 |
| Peru (see table below). | | | | | | | | | | | | | | | | | |
| Poland | C | 144 | 226 | 134 | 96 | 55 | 65 | 12 | 8 | 4 | 7 | 13 | 21 | 27 | | | |
| | D | 12 | 17 | 6 | 5 | | | 2 | 2 | | | 2 | 2 | 1 | | | |
| Portugal: Oporto | C | | | | 1 | | 1 | | | | | | | | | | |
| Rumania | C | 142 | 99 | 80 | 33 | 16 | 12 | 2 | 2 | | 7 | 6 | | 2 | | | |
| | D | 12 | 8 | 11 | 1 | 1 | 3 | | | | | | | | | | |
| Syria: Aleppo | C | | | 2 | | 1 | | | | | | | | | | | |
| Tunisia | C | 19 | 7 | 7 | | 1 | 7 | | | | | | 4 | | | | |
| Menzel | C | | | | | | | | | | 1 | 1 | | | | | |
| Sfax | C | | | | | | | 11 | | | | | | | | | |
| Union of South Africa: | | | | | | | | | | | | | | | | | |
| Cape Province | C | P | P | P | P | P | P | P | P | P | P | P | | | | | |
| East London | C | | | | | | | | 1 | | | | | | | | |
| Natal | C | P | 3 | P | P | | 1 | P | | | P | P | | | | | |
| Orange Free State | C | P | P | P | P | | | | | | | | | | | | |
| Transvaal | C | | 1 | | P | P | | | | | | | | | | | |
| Union of Socialist Soviet Republics (see table below). | | | | | | | | | | | | | | | | | |
| Yugoslavia (see table below). | | | | | | | | | | | | | | | | | |

| Place | | January–March, 1928 | April–June, 1928 | July, 1928 | August, 1928 | September, 1928 | October, 1928 | November, 1928 |
|---|---|---|---|---|---|---|---|---|
| Chosen | C | 896 | 633 | 5 | ------ | ------ | ------ | ------ |
| | D | 88 | 75 | 2 | ------ | ------ | ------ | ------ |
| Chemulpo | C | 2 | 2 | ------ | ------ | ------ | ------ | ------ |
| Gensan | C | 1 | ------ | ------ | ------ | ------ | ------ | ------ |
| | D | 1 | ------ | ------ | ------ | ------ | ------ | ------ |
| Seoul | C | 10 | 46 | 5 | 1 | 2 | ------ | ------ |
| | D | 1 | 6 | 2 | ------ | 1 | ------ | ------ |
| Czechoslovakia | C | 25 | ------ | ------ | ------ | ------ | ------ | ------ |
| Greece: Athens | C | 4 | 33 | 6 | ------ | ------ | 1 | 4 |
| | D | ------ | 5 | 1 | ------ | ------ | ------ | ------ |
| Japan | C | ------ | 21 | ------ | ------ | ------ | ------ | ------ |
| Latvia | C | 27 | 7 | ------ | ------ | ------ | ------ | ------ |
| Lithuania | C | 223 | 162 | 12 | 15 | ------ | ------ | ------ |
| | D | 22 | 7 | 4 | 2 | ------ | ------ | ------ |

| Place | | January–March, 1928 | April–June, 1928 | July, 1928 | August, 1928 | September, 1928 | October, 1928 | November, 1928 |
|---|---|---|---|---|---|---|---|---|
| Mexico (see also table above) | D | 46 | ------ | ------ | ------ | ------ | ------ | ------ |
| Peru: | | | | | | | | |
| Arequipa | D | 2 | 1 | 1 | ------ | ------ | ------ | ------ |
| La Oroya | C | P | ------ | ------ | ------ | ------ | ------ | ------ |
| Turkey | C | 17 | 15 | 6 | 4 | 6 | 1 | ------ |
| | D | 1 | 2 | ------ | 2 | ------ | ------ | ------ |
| Union of Socialist Soviet Republics: | | | | | | | | |
| Railways, etc | C | 199 | ------ | ------ | ------ | ------ | ------ | ------ |
| Transcaucasus, Siberia, and Central Asia | C | 17 | ------ | ------ | ------ | ------ | ------ | ------ |
| Ukraine | C | 1,476 | ------ | ------ | ------ | ------ | ------ | ------ |
| Other territories in Europe | C | 5,167 | ------ | ------ | ------ | ------ | ------ | ------ |
| Yugoslavia | C | 34 | 45 | 12 | ------ | 6 | 1 | ------ |
| | D | 3 | 5 | 3 | ------ | ------ | ------ | ------ |

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

### YELLOW FEVER

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

| Place | | Apr. 8–May 5, 1928 | May 6–June 2, 1928 | June 3–30, 1928 | July 1–28, 1928 | July 29–Aug. 25, 1928 | Aug. 26–Sept. 22, 1928 | Week ended— Sept. 29, 1928 | October, 1928 6 | 13 | 20 | 27 | November, 1928 3 | 10 | 17 | 24 | Dec. 1, 1928 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Belgian Congo: Matadi | C | 2 | 2 | | | | | | | | | | | | | | |
| Brazil: | | | | | | | | | | | | | | | | | |
| Aracaju | D | | 2 | | | | | | | | | | | | | | |
| Bahia | C | | | 4 | | | 1 | | | | | 1 | | | | | |
| | D | | | | | 1 | 2 | | | | | | | | | | |
| Pernambuco (Recife) | C | | | 1 | | | | | | | | | | | | | |
| Rio de Janeiro | C | | 2 | 48 | 40 | 14 | 9 | 3 | 3 | | | 1 | 1 | | | 1 | |
| | D | | 2 | 22 | 26 | 4 | 8 | 2 | 2 | | | 1 | | | | 1 | |
| Sao Felix | C | | | P | | | | | | | | | | | | | |
| Dahomey: | | | | | | | | | | | | | | | | | |
| Grand Popo | C | | | 3 | | | | | | | | | | | | | |
| | D | | | 2 | | | | | | | | | | | | | |
| Ouidah Military Camp | C | | | | | | | | | | | | | | 1 | | 1 |
| | D | | | | | | | | | | | | | | 1 | | |
| Gambia: Bathurst | C | | | | | | | | | | | | 2 | | 2 | | |
| | D | | | | | | | | | | | | | 1 | | | |
| Gold Coast | C | | 2 | | | | | | | | | | | | | | |
| Ivory Coast | C | | | 1 | | | | | | | | | | | | | |
| | D | | | 1 | | | | | | | | | | | | | |
| Abidjan | C | | | 1 | | | | | | | | | | | | | |
| Ferkes-Sedougou | D | | | | 1 | 1 | | | | | | | | | | | |
| On vessel: S. S. Bernini, at Santos, Brazil | C | | | | | | | | | 4 | | | | | | | |
| | D | | | | | | | | | 1 | | | | | | | |

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