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# STATE SANITATION.1

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State sanitation is so rapidly becoming a feature of our American Government, and the zest for health measures is becoming so great, that a consideration of certain fundamental principles by this conference of sanitary engineers should be not only appropriate but profitable. I therefore take the liberty of calling attention to some of the governmental principles which, though generally accepted, are often overlooked, and of expressing my personal opinion on certain matters of administration about which different views are held by different classes of people and in different parts of the country. What I have written is taken largely from a course of lectures on municipal engineering administration which I have given for several years at Harvard University.

# Health and Comfort of the People.

By State sanitation is meant the efforts which State governments exert to prevent insanitary or uncleanly conditions of human environment which tend to impair the health or which are prejudicial to the comfort of the people. It is important, in the first place, to link these two terms together—the health and comfort of the people—for sanitation is concerned with them both. The two words are bound together in laws and legal decisions, as well as in common parlance. Nuisances are infringements against comfort as well as against health. Health, in its broadest sense, is something more than the absence of disease; it has a positive side. We measure health inversely in terms of sickness and death; we are beginning to attempt to measure health in terms of physical efficiency, capacity to work, and ability to enjoy life. The latter belong on the front side of the shield; sickness and death are for the back side. Both sides of the shield should be guarded.

Comfort has to do with the senses. Human discomfort is hard to measure, especially as people differ as to their sense reactions under

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different environments. These sense reactions are an important part of life; and the courts are sound when they decide that insanitary conditions are "prejudicial to health," even though the sense reaction may be merely that of a disagreeable odor. Bad odors from faulty plumbing or from badly ventilated rooms, bad odors in water supplies, bad odors from industrial plants, excessive noise, smoke in the atmosphere, oil deposits along the banks of streams and shores, and many other sense-offending conditions may be public nuisances and are properly included within the legal scope of "health and comfort of the people." I believe that sanitary engineers, who by their training are inclined to think in mathematical terms and have a penchant for measuring sanitation in terms of death rates, need particularly to be reminded of this aspect of sanitation.

# Police Power and Public Benefit.

The police power is one of the inherent powers of government, that of protecting the people from dangers from within. Under it the Government may coerce the individual, take away his liberty, his property, and even his life, if necessary, in order to safeguard the safety, health, or morals of the people. Since the time of Magna Charta the English-speaking race has been preserved from tyrannous oppression, from undue exercise of the police power, by what is called "due process of law."

In the United States the police power originates in the State. It is exercised directly by the legislature, as representing the people. It may be delegated to some State department or official, to some city or city department, or to the National Government. Fundamentally, however, authority to act under the police power must be traced back to the State government.

Another function of government is that of doing for the people those things which the Government can do better, more cheaply, or more expeditiously than the people can do for themselves. These are acts for the public benefit, acts of public service, acts for the common good. They are paid for under the taxing power of government, another of its well-established functions. In recent years this idea of government has been greatly extended. Carried to the limit, it becomes paternalism or socialism. Many think it has been carried too far even in matters of health and comfort, and I am in sympathy with this view.

These two ideas of force and service represent the masculine and feminine elements of government. The best government results from a proper combination of the two. State boards of health, or departments of health as they are coming to be called, are concerned with both of these parts of government—health service and police power in behalf of health.

### Functions of State Health Departments.

State boards of health perform several functions. One of these is quasi-legislative in character, carried on under authority delegated by the legislature. A State board of health may be authorized to prepare a sanitary code, plumbing regulations, rules for the protection of water supplies, rules for reporting diseases dangerous to the public health, and the like. This is done because in technical matters and in special fields where expert knowledge is needed, the legislature, composed of persons of varied attainments elected by the people, is less competent to enact such detailed legislation than a body of men selected for the special work at hand. For the best results, this delegated authority should be given to a body of men rather than to an individual. A health commissioner acting alone should not be allowed to perform functions which are legislative in character. Legislatures do well, however, to delegate authority for the preparation of rules and regulations which are essentially technical and scientific to competent boards rather than attempt to legislate directly.

A State board of health may act in a semi-judicial capacity. This authority is seen in the matter of nuisances. The board may sit as a court, hold hearings, take testimony, and render decisions. Sometimes it sits as a court of appeal. In matters of this kind a board is better than an individual, as the decisions must often be based on facts and common judgment rather than on technicalities of science or law; that is, the board is a sort of judge and jury combined.

Of course there is much work of an executive character to be done by a State department of health. Some of this is incidental to the exercise of the police power—such as laboratory work, engineering, or inspection in connection with the oversight of water supplies, stream pollution, sewage disposal, nuisances, food sanitation, sophistication of food and drugs, statistical records of sickness and death.

In addition to these regulative functions much other work of quite a different character is done; vaccines and antitoxins are made and distributed; bacteriological diagnoses of certain diseases are made; nursing services are supervised; educational activities of various sorts are carried on. These works, done chiefly for the public benefit, are largely responsible for the increasing appropriations made to State departments of health. Further expansions of efforts of this nature are being considered in some States, such as maternity benefits, dental clinics, public health nursing, and the like. In my judgment the wisdom of extending these activities is open to grave doubt. It is not at all certain that a State department of health is the organization best fitted to conduct popular education in health matters. It is certainly not the best organization to manage State hospitals and insti-

tutions. It is doubtful whether any form of activity which involves the operation of public utilities should be conducted by a State department of health. The attempt to combine the exercise of police power and the conduct of utilities for the public benefit involves administrative problems of serious character. In my opinion welfare work and public health work should be kept apart. Welfare work is done under the taxing power of government. Taxation for this purpose should be definite. If people want it or need it, let them appropriate money for it, knowing for what the money is to be spent. Let it not be confused in the public mind with money appropriated for the ordinary and well-understood police-power functions of health departments. In my opinion the time is coming when appropriations for all governmental purposes must be greatly decreased and, when that time comes, it will be important to discriminate between those governmental functions which prevent injury and those which are for the public benefit. If it comes to a choice, the latter should be sacrificed first.

There is another very important function of a State department of health which needs consideration, and that is its advisory power. This is a semi-judicial matter. Often the remedy for difficulties between contending parties is advice, not legal action. In all sorts of sanitary matters, in problems of water purification and sewage treatment, in matters of nuisances from offensive trades, a letter of advice from a State department of health which has established its reputation for fairness is often as effective as a legal order. In no way can State departments of health do more to improve sanitation than by improving the quality of their advice. Better advice and less drastic police action is, I believe, good policy; for more offenses against sanitation are due to ignorance of what to do than to willful disregard of law.

Akin to giving advice in particular matters is the setting up of standards of sanitation, of methods of procedure in all sorts of public health activities. Any such standard should be carefully worked out, chiefly with reference to local conditions applicable within the State, but also with due regard to interstate and national relations. Standard rules and regulations are useful in two ways: they promote unity, and thus simplify administration; and they tend to raise the level of administration in communities hitherto backward up to that of the standard. Standards also carry with them two dangerous tendencies: they are liable to stifle progress by making people content with the standard, and they tend to destroy local initiative and self-confidence by causing cities and towns to fall back on the State. Standards tend to destroy initiative in those who make as well as in those who follow them. I believe that the standard methods of water analysis of the American Public Health Association have been highly serviceable in

raising the level of water analysis in many laboratories; but I am also convinced that they have had a bad effect on the teaching of this branch of science, students and even instructors unconsciously getting the idea that the facile use of the standard methods represents the summum bonum of the art. In such a matter as plumbing regulations, uniformity throughout the State is desirable in the interest of convenience and economy; yet some municipalities prefer to make, as well as to enforce, their regulations, and it is difficult to decide whether in this matter uniformity is more important than local initia-The special plumbing board appointed by the State Health Commissioner of Massachusetts is attempting to solve the problem by making certain minimum requirements state-wide and compulsory, and by setting up in addition standard detailed rules which shall be optional for each city or town to adopt or modify. This seems to be a logical plan, as it means using the police power on a state-wide basis to prevent injury to health, and using only the advisory power in matters which relate chiefly to public benefit.

There is still another function of a State department of health which interlocks with all of the others, namely, that of inquiry, of investigation, of survey. Facts must be obtained as a basis of legislative action, judicial action, or advice, and the collection and preservation of these facts is of great importance not only to the department but to the community. The best method of preservation is by publication in annual reports. Interest in popular education in health matters has tended to turn the official reports of health departments into agents of propaganda. This is a mistake. Statistics make dry reading, but these records of facts should nevertheless form the backbone of annual reports. They are absolutely esseential as a measure of progress. It is poor economy to eliminate them, because if not published they become unavailable in later years—and perhaps lost—thereby making new and expensive compilation necessary. Decisions as to what should appear in annual reports should not be left to officials who view the matter from the standpoint of printing and who have no expert knowledge of the value of the data presented for publication.

# Engineering Department.

The great shift of population from rural to urban conditions which has taken place in recent years has made the problems of public water supply and sewerage greater than ever before. The protection of water supplies against infection and the safeguarding of streams, lakes, and harbors against pollution involve engineering problems of a high order. These problems usually extend beyond municipal boundaries, and the State is the proper authority to cope with them. This is acknowledged by everybody, although it must

not be forgotten that there are also interstate water pollution problems which must some day be taken up by the National Government or by river district commissions which override State lines.

A great question of administration arises in connection with these engineering matters. Ought they to be consigned to the State department of health, to the State engineer's department, if there is one, or to the water-supply commission, if there is one? Inland waters are used for public water supplies, drainage, power, recreation, fishing, and, in some instances, for irrigation and navigation. Conservation of all inland waters is of vital importance, and all of these uses must be given due consideration. It seems to me that the highest use of inland waters and the one which needs greatest consideration is that of public water supply. Drainage and waterpower stand next, sometimes one, sometimes the other. The control of inland waters for water supply and drainage is an exercise of the police power in the interest of public health, and it seems to me that the control should be vested in that branch of the State government in which the police power is clearly recognized as a major function, namely, the State department of health. Water-supply commissions and State engineering departments are organized primarily to bring about public benefits, not to prevent damage being done. If the police power is exercised by them at all, it concerns safety rather than health. There is room, perhaps, for water-supply commissions in some States to appraise the water resources and to look after the uses of inland waters from the standpoint of public benefit; but to State departments of health should be given the oversight and care of the inland waters from the sanitary point of view, and this control should be recognized as paramount to all others. Hence, State boards of health need engineering departments. Most State boards of health have such departments to-day.

Besides water-supply and sewerage problems, there are other engineering matters which arise in connection with public health administration, such as problems of land drainage, of nuisances from trade waste, refuse disposal, plumbing, ventilation, rat-proofing of buildings, besides many minor engineering problems of rural sanitation. New York State has recently shifted its engineering department from the department of health to the State engineer's department. This is a regrettable action, as it takes away from the department charged with protecting the public health its strong right arm and reduces the engineering work involved in the sanitary protection of the waters to a subsidiary place in a department interested primarily in doing things for the public benefit and not acting under the police power. I hope that no other State will follow this unfortunate lapse from sound governmental principles which New York has made.

The supervision of water supplies and sewage-disposal works calls for chemical and biological as well as engineering work. These three sciences should be closely allied. Laboratory work is also required for other departments than that of engineering. The question arises, therefore, should the water and sewage laboratory be a part of the engineering department, or should all of the laboratory work be combined in a general laboratory in the interest of a unified equipment and of economical operation?

My experience in both the laboratory and administrative side has convinced me that there is little if anything, to be gained by consolidating laboratories in one department, although the physical concentration of the laboratories in one place may be a convenience and a slight economy. It is not often realized how widely and in what vital respects laboratories differ from each other. To be sure, gas and electricity and test tubes and balances are used in them all, but the work done in a laboratory of water analysis is as different from that done in a food and drug laboratory or a bacteriological diagnosis laboratory as the work of the electrical engineer is different from that of the sanitary engineer. The modern sanitary engineer, however, is trained to use the microscope and the balance as well as the transit and the level. To be of the greatest use to the sanitary engineering department the laboratory of water analysis should be a part of this department and separate in its personnel from all other laboratories. One reason for this is that more and more the importance of having water analysis conducted as field work rather than laboratory work is being appreciated. In the future the laboratories of sanitary engineering departments may be very largely headquarters for field parties who do their principal work in the field in connection with inspections. The laboratory as a tool should be always ready, quickly responsive, and the results should be available as soon as the analyses are completed. There should be no circumlocution in reporting, and the record files should be so kept as to be accessible at all times.

As to organization, my preference is for an engineering department in a State board of health, which has as its head a sanitary engineer who reports to the chief executive and who has under him an assistant engineer, a chemist, and a biologist, with such assistants for each as may be necessary. In a small department the chemical and biological work may be done by one man. In a large department one man specially trained in chemistry and another specially trained in biology are needed; but each should know the whole range of ordinary water analyses, chemical and biological, and each should be competent to act as director of the laboratory, this matter being governed by seniority. The special attainments in chemistry and biology are needed because of the unusual problems which are con-

tinually coming up for solution and in order that research may be carried on in the best way. While different forms of organization are to be expected in States which differ in size, condition, and tradition, one principle should always govern, and that is that the sanitary engineering department should have the engineering, chemical, and biological talent closely interlocked.

Permits, Approvals, Orders, Advice, and Recommendations.

The object of the sanitary engineering department is to conduct such investigations and provide such information that the State board (or department) of health may act as may be necessary to maintain and improve the cleanliness of the environment of the people. The two subjects which loom largest in the work are public water supplies and sewerage systems, with their accompanying problems of stream pollution, sewage treatment, and water purification. It is right and proper that State departments should supervise these matters; but in considering what action should be taken the two ideas of police power and public benefit must be kept clearly in mind.

In employing the police power, practice has developed several methods which demand comment. One method is that of permit. The State law may prescribe that no sewer may be built to discharge into a stream unless a permit has been received from the State department of health. This implies that there must be a subsequent inspection to make sure that the rule has been complied with. The object of the law is to prevent an injury. In plumbing, the system of permit and inspection is very common. The method is applied especially to matters in which the proscription is definite or of a routine character. It requires little special ability to carry out this method, as the rules are usually definite and infractions obvious.

Another method is that of approval. The State law may say that before works for a public water supply are constructed, the plans must be approved by the State department of health. This action demands an investigation of the particular circumstances which exist. Approval is more than permission: it implies that the plan proposed will accomplish what is intended; that it is reasonably satisfactory. Those who exercise this power of approval should realize, however, that it is an act done under the police power, and that the object of police power is to prevent public injury, not to confer a benefit. While in common usage the word "approval" carries with it the idea of commendation, legally used in connection with the police power it does not commend. The approval of a plan really means that the plan is not disapproved; that it contains no serious fault; that it "gets by." The plan may not be the best plan; yet if it will reasonably serve its purpose of preventing a public injury to

health, safety, morals, or the like, it may not be disapproved under the police power of the State. Approval may also carry with it the idea of necessity. For example, in Massachusetts the taking of land to protect a public water supply must be approved by the State department of public health, the idea being that the taking should not be made unless it is necessary for the protection of the public health. There may be other special cases of approval committed to the State department of health by the legislature, but what I am emphasizing here is the fundamental idea. In geometry we learned that certain procedures were "necessary and sufficient" to prove a given theorem. Those who have to approve sanitary engineering works would do well to keep these two words in mind.

Legal approval does not necessarily carry with it the idea of general commendation, and it is somewhat unfortunate that popular usage tends to make people read this idea into the word. The owner of some proprietary device, which has been approved for a special situation, likes to advertise his device by saying, "It has received the approval of the State board of health," and the public gets the idea that the board has given the device general commendation. For this reason, letters of approval should be written with great care and with reference to possible misuse. In my opinion it is perfectly consistent for a State department of health to give approval to one plan and then proceed to advise a better one, or to reply to the applicant that approval to the plan will be given on a second request, but will be withheld pending the consideration of another suggested plan, which is deemed a better one.

We have next to consider the question of "orders" of the board of health. Here we recognize action under the police power in a drastic form. The State board of health orders that a certain thing be done in the interest of the public health. A city may be ordered to install a water purification plant or a sewage treatment works, or a manufacturer may be ordered to install devices for preventing the spread of nauseous fumes. It is necessary to be very careful in these matters not to exceed authority, not to be unjust, and not to be unduly arbitrary. It is sometimes difficult to discriminate between what is merely desirable and what is necessary. It must be remembered that the police power is not intended to bring to pass what is desirable it is confined to what is necessary to prevent injury. Orders must be given with reference to the ability of their being carried out. There have been instances where a State board of health has ordered a municipality to install sewage treatment works, to do which would have involved borrowing money beyond the legal debt limit. an order is inconsistent with good government, to say the least, and is sure to raise legal complications.

Orders should be directed against the injurious result, placing the responsibility for the remedy upon the person or city causing the public injury. An order to cease committing a nuisance may be properly accompanied by advice as to how to stop the nuisance, but the latter must be regarded as advice only and there must be no implication that following the advice will relieve the wrongdoer of responsibility.

For example, it is a desirable thing for a city house to have a connection with the sewer in the street; but (unless there has been legislation to the contrary) the local board of health can not compel the house owner to make this sewer connection unless his method of disposing of the house sewage is in some way prejudicial to the public health, safety, morals, or the like. The responsibility is on the individual to abate the nuisance.

In the same way the treatment of the sewage of a city may be desirable on general sanitary principles, but (in the absence of definite legislation) the State can not compel the city to put in a disposal plant unless the existing method of disposal is doing, or is reasonably certain to do, a public injury. Even then the State should not attempt to order in detail the method of treatment, although it may order the nuisance to cease, and advise as to the best method.

In emergencies, of course, boards of health have, and ought to have, summary powers. They may have to act without legislation in the interest of preserving the health of the people. Such powers should be limited, however, to emergencies and should not be stretched too far. It is better that a community endure temporary injury than that the principles of good government be overruled.

With these conceptions of approval of plans and orders for abating nuisances, we see the important part which advice can and should play in sanitary administration. The benefits of advice depend upon the reputation which departments of health have for giving sound advice. Letters of advice should be brief, clear, and definite. They should be sent as soon as possible after the necessary information has been secured. This virtue of promptness has been sadly neglected in many States. Unless advice is backed up by reputation, it is likely not to be followed. This means that the sanitary engineer of a State should be competent, experienced, and trustworthy, a man of good judgment and abreast of the times in sanitary science. means that his department must be well equipped to gather and preserve the necessary facts, and equipped to conduct such investigations and carry on such experimental work a may be required to give proper advice. As a result of my experience as a practicing engineer, as a public-health administrator, and as a historian of the Massachusetts State Board of Health, I am convinced that the advisory functions of a State department of health carry with them more power for bettering sanitary conditions than the more drastic actions covered by permits, approvals, and orders, although without the latter the advisory powers would lack force.

A recommendation is crystallized advice. It usually relates definitely to some policy or line of action. Unlike approval, a recommendation carries with it the idea of commendation.

I believe that there is a mistaken tendency in some States, and especially among some of the younger and less experienced officials, to exert too much authority, to try to accomplish results too quickly, to force communities to do things for benefit rather than to avoid injury, and to emphasize sanitation at the expense of other things just as important. Sanitation is not the summum bonum of life; it is a means to that end. If sanitation is forced much beyond the willingness of the community to support it, reaction is almost certain to follow. On the other hand, State health officials should avoid the opposite extreme very well illustrated by one of Hambone's Philosophical Meditations: "Parson tells me ah ort to be patient; but when ah tries to be patient, ah goes to sleep." State sanitary engineers must not sleep at their post—and I would like to add that I know of no class of men less likely to sleep at their post than engineers.

# The Sanitary Engineer.

Finally we come to the sanitary engineer himself. Originally, and in its narrower sense, this term was applied to engineers who had to do with sewers and drains. Plumbers still style themselves sanitary engineers and have a national association of that name. But the field has expanded and now includes not only sewers, but sewage treatment, water purification, and the like. It embraces other cleansing operations such as street cleaning and refuse disposal. sanitary engineer of to-day must have a knowledge of biology and chemistry as well as hydraulics and the art of building; he must be familiar with laboratory procedures; he must understand the relation between sanitary works and the public health and between the cost of works and sanitary value. It has been suggested that such a man should be called a public health engineer. This is certainly an appropriate title for engineers in a public health department; nevertheless, it is merely a translation of sanitary engineer, and it does not seem to be worth while to multiply names and titles without adequate reason. In fact I sometimes think it would be just as well if sanitary engineers were known merely as civil engineers, or even as engineers, just as public health officers are known as doctors. Personally I should regard the title of "Engineer Smith" as equal in honor, dignity, and importance to that of "Doctor Smith," assuming of course that the title "Engineer" represents an engineering degree, membership in a national professional society, or some other adequate standard of attainment.

From my experience, I believe that in a State health department the work of the sanitary engineer is of importance equal to that of the doctor of medicine. I can say this with perfect frankness, because no one has been more earnest than I have been in teaching biology to engineers, in securing cooperation between engineers and doctors in public health work, and in establishing schools of public health in which hygiene, preventive medicine, engineering, statistics, and administration shall be properly blended. In health department organizations engineers and physicians should be given equal standing, equal salaries, and equal ratings as to seniority, bearing in mind certain differences between administrative and executive work. The United States Government, through its Public Health Service and the Medical Departments of the Army and Navy, would do well to set an example in this matter. The lack of recognition of equality is one of the reasons why some of our best young engineers hesitate to enter the Public Health Service to-day.

I believe that the executive positions in health departments should be under the civil service (perhaps I ought to say under a reformed civil service), and that there should be provision for retirement on pension at a certain age or after so many years of service. In consideration of this feature, the salaries paid should be somewhat lower than these paid for work of similar grade in private practice. Just as business men make more money but take greater risks, so engineers in private practice should make larger incomes while subjecting themselves more to the ups and downs of business conditions.

The great bugbear of public positions to-day is political interference. This is steadily causing a depreciation in the character of engineering service in cities and States alike. Civil service has not been an unqualified success. It has tended to keep out the unfit, but it has not increased the excellence of the service. It has made it difficult to get rid of men who are lazy, of mediocre ability, or of unpleasing personality, and pleasing personality is a quality very essential to team work in a public department. Reform in civil service is highly essential, if our health departments are to be placed on a high plane. There is another angle to the matter. If it is not right for legislators to interfere with the personnel of the executive departments, it is equally bad for the latter to interfere with legislative matters. Unfortunately, there are too many examples of this practice.

More than all else it is important that engineers pay greater attention to their own ability. The young graduate of an engineering school is a fledgling; he can fly a little, but not far or well. He

needs practice; he needs contact with engineering problems; he needs much study. The engineer must study throughout his life. Self-made engineers, like the engineers of the past, developed habits of study which never left them. College graduates too often think that their studies are over when they are graduated. When an engineer retires for age he may cease studying, but not until then. William Mulholland, the self-made engineer who built the great Los Angeles Aqueduct, told me recently that he takes fifteen magazines and reads them. Sanitary engineers must read much, because their field is wide and embraces many sciences.

In States where appropriations are limited, the attempt to get proper men for the position of sanitary engineer is met in various ways. One way is to employ an engineer on half time, allowing him to engage in private practice. This I believe to be a thoroughly iniquitous arrangement, unless the engineer conscientiously refuses to do any private work whatsoever within the limits of the State. Even then the arrangement is not altogether satisfactory, because it is difficult for the engineer to be on hand at the right time. Another method is to employ an engineer on half time, letting him combine State work with teaching. This is less objectionable, but not altogether satisfactory. A full-time sanitary engineer is as much needed as a full-time health officer. The job is big enough for a whole man and for the best man obtainable. In my opinion, it is better to obtain a lower priced full-time man than a higher priced half-time man. The appointee then has a definite piece of work for which he is personally responsible. This responsibility tends to make him do his best; whereas if he is carrying on two jobs at the same time, there is danger that he may slight both of them, unless he is a man of exceptional ability and force of character.

Even if a sanitary engineer gives what is practically his whole time to a State department of health, he should not allow himself to engage in private practice within the State, for sooner or later he is sure to find himself in a situation which will seriously compromise his reputation. He may, however, accept occasional consulting engagements outside of the State without overstepping the limits of professional etiquette. Professional ethics among engineers is something to be cultivated and guarded with jealous care. Licensing of engineers by the State or the setting up of any artificial standards will never accomplish for the profession what the engineers can do for themselves if they will.

There seems to be one solution of this problem which nowadays is seldom tried, namely, to reinforce the official sanitary engineer with a consulting engineer who is either regularly retained or called upon for advice in particular cases. The Massachusetts State Board of Health had this practice at one time, and some of our most eminent engineers, chemists, and biologists have served the State in a con-

sulting capacity. This practice, in my opinion, should be renewed and extended. It would have several advantages. In the first place, it would greatly strengthen the reputation of the State department of health and give its letters of advice greater weight. It would make it possible for the smaller States to have as good advice as the larger States. In case of controversies, it would strengthen the State in its contentions. It would tend to soften one of the sharp corners which result from laws requiring plans to be approved. the present time it so happens that many of the engineers engaged in private practice are older and more competent than the State engineer who must pass upon the plans submitted. The less experienced State engineer may, however, understand local conditions better than the designing engineer who has made the plans. Under these conditions, refusal to approve the plans creates a situation disagreeable to both parties. If, however, the State department of health had a consulting engineer, doubtful plans could be approved or disapproved with better grace and a greater feeling of security that the proper result had been reached.

There is also a present-day tendency for engineers in high positions to do too much work by proxy. Accustomed to assistants, they have stenographers to write their letters and young engineers to make their computations. Many of our modern methods, thought to be so efficient, are not so, because they are turning our chief engineers into routine executives and are confusing administrative and executive work. Our chief engineers and consulting engineers ought to do more personal engineering work and leave more of the routine work to others. Engineers who cease to make personal studies run downhill rapidly.

Engineers who enter the public service under present conditions do so at a personal sacrifice. I believe that public service ought to involve personal sacrifice. Young men entering the service should understand this clearly. The sacrifice is recognized in times of war: it should be recognized in times of peace. Public service means doing for others. It is only by the recognition of this principle that our health departments will be filled with the right kind of men-men who are not there for gain, for large salaries, or easy work. Personally I know of no better way for a young man to serve his day and generation than to become an engineer, learn how to employ the great forces of nature for the use and convenience of man, and then enter the public service and spend his life for the public good. It does not mean wealth; it means hard work and many conflicts with the powers of evil. It may not always mean public recognition and honor: but it does mean much personal satisfaction and many pleasures by the way.

# PREVENTION OF ANTHRAX AMONG INDUSTRIAL WORKERS.

ABSTRACT OF THE MEMORANDUM ON THE DISINFECTING STATION ESTABLISHED IN GREAT ERITAIN FOR DISINFECTION OF WOOL AND MAIR: (FEBRUARY, 1921).

Because of a continued increase in the number of cases of anthrax in Great Britain, notwithstanding regulations introduced for the protection of operatives in factories, warehouses, etc., the Home Office appointed a committee to inquire into the question of anthrax in industries using wool and hair. In presenting its report in 1918, the committee recommended compulsory disinfection of raw material instead of the regulation of factory processes. A trial disinfecting station was erected, and operations were to have begun in the spring of 1921.

### METHOD WORKED OUT EXPERIMENTALLY.

The memorandum deals with the process of disinfection worked out experimentally and the establishment and equipment of the trial station as recommended by the committee. The process of disinfection is fully described in volume 1 of the report referred to above.

Experimental investigation demonstrated the impracticability of disinfection in bales, except by methods which caused damage to the material; it also showed that anthrax spores are so well protected by nature that disinfection is untrustworthy, whatever the method adopted, unless this protection is removed.

The principle of the method of disinfection which was worked out, was to render the spores more susceptible to disinfecting agents by exposure of the material to an alkaline solution of soap at 102° F. (39° C.) for 30 minutes, in three stages of 10 minutes each, then disinfect with a 2 to  $2\frac{1}{2}$  per cent solution of formaldehyde at the same temperature for 20 minutes in 2 stages of 10 minutes each. The material is then dried, cooled, and rebaled.

### THE TRIAL STATION.

Liverpool was selected as the site for the trial disinfecting station because the bulk of imported wool and hair arrives in Great Britain at that port and the water supply is very suitable for washing wool.

The plan and general arrangement of the trial disinfecting station made provision for—

- 1. Warehousing the materials on arrival.
- 2. Disinfection.
- 3. Rebaling.
- 4. Recovery of grease from the soapy effluent.

The station is driven by a steam-electric plant, and the exhaust steam from the engines is used for heating the liquids in the disinfecting machines and the air for the drying chamber.

The main building is about 340 feet long and 30 feet wide. The ground floor has the office, engine and generators, boilers, baling

press, grease-recovery room, and wool warehouse. The first floor contains the disinfecting and rebaling machinery, with storage space for disinfected material. The third story has the storage bins, part of the rebaling plant, and laboratories. All materials to be disinfected are handled before disinfection, as far as possible, mechanically. The feeding mechanism is inclosed and provided with an exhaust fan to prevent dust.

There are 5 baths, each 33 feet long and 4 feet wide, and fitted with squeezing rollers and mechanism which causes the material to pass through the liquids at proper speed. The first 3 are used for the preliminary treatment and incidentally for washing the material. These baths are specially built wool-washing machines. The last 2 baths, used for disinfection, are specially built carbonizing machines, and are air-tight to prevent the escape of formaldehyde gas. All 5 baths are arranged so that their contained solution may be maintained at the same strength. This solution in the first three baths is heated by direct admission of steam; in the last two by steam coils.

From the disinfecting machines the material passes into an ordinary wool-drying machine (specially designed to prevent the escape of formaldehyde vapors). The air for drying is raised to 220° F., although the wool itself never reaches a temperature higher than 160° F. The time in the drying machines is 15-20 minutes.

From the drying machine the wool is conveyed to the cooling machine, cooled in a current of cold air, and rebaled immediately.

The bales produced weigh about 300 pounds (the original weight of the bale is not given), and are given the same marks borne by the original bales.

GREASE RECOVERY.

The thin sludge from the first-process machines is automatically removed at short intervals and run through a machine to remove the wool fibers. The liquid then passes into a tank on the floor below, where the sand is separated. From this tank the liquid flows into tanks in which it is acidified with sulphuric acid, thus causing separation of the grease, which settles out. The grease sludge is transferred to cylinders raised to a temperature of 212° F., and then forced by air from an air compressor into a steam-heated filter press.

Machinery is provided to sterilize, wash, and dry clothes worn by workmen, and bale coverings taken from original bales.

The total cost of the equipment contained in the power plant, raw wool warehouse, disinfecting plant, wool-baling and delivery plant, grease-recovery plant, and miscellaneous equipment and services was £36.889.1 The total building cost was £66.000.

<sup>&</sup>lt;sup>1</sup>The American equivalents for Euglish money are not given because of the varying exchange rate.

To provide against the possibility of infection to workmen they are provided with overalls, which are to be washed and sterilized in the station. Shower baths and lavatories are provided, as is also a mess room.

The capacity of the station is 1,000 pounds of clean, disinfected material per hour. The estimated cost of disinfection per pound of output is 2.75196 pence.

The memorandum contains an appendix giving the Anthrax Prevention Act of 1919, which provides for the prohibition of the importation of goods infected with anthrax, by orders in council, and gives the Secretary of State authority to provide for the disinfection of infected goods.

# PUBLIC HEALTH INSTITUTES.

PRELIMINARY ANNOUNCEMENT REGARDING INSTITUTES TO BE HELD DURING 1922 UNDER THE AUSPICES OF STATE BOARDS OF HEALTH AND THE UNITED STATES PUBLIC HEALTH SERVICE.

### THE AIM OF THE INSTITUTES.

In the fall of 1920 there was held in Washington an "Institute on Venereal Disease Control and Social Hygiene." More than 600 persons from all sections of the country attended the short intensive courses which were provided in the sociological, legal, psychological, and educational, as well as the medical aspects of this problem. Only within comparatively recent times has much attention been devoted to the venereal diseases; now extremely rapid developments are taking place. On that account the opportunity to come into personal contact with the leaders throughout the entire field was much appreciated and gave new impetus and direction to work then under way.

Rapid progress in the field of public health has not, however, been confined to the control of the venereal diseases. In child hygiene, industrial hygiene, the control of general communicable diseases, nutritional diseases, sanitary engineering, and other fields similar developments are occurring. From the treatment of disease, humanity has turned to its prevention, and every day discloses new needs, new opportunities.

With such a rapid advance the educational facilities for the training of workers have not kept pace. The result is that many persons who are employed in one capacity or another in public health work keenly feel the need for information concerning the results of the most recent scientific research and experience and for training in special subjects whose relation to their specific problem has only recently been understood. They desire to come into personal contact with those who are recognized as authorities in public health work.

Public health to-day is not merely the interest of sanitarians and bacteriologists. As the field has extended, the number of groups of those interested in various phases of the work has grown, and public health workers can make their work thoroughly effective only if their training in medical subjects is supplemented by a knowledge of statistics, sociology, psychology, and education.

It is for the purpose of meeting these various needs that the public health institutes have been organized. As one-week schools they have many obvious limitations. They will, however, bring health officers, private practitioners, nurses, educators, heads of institutions, social workers, and others concerned into closer touch with the newer aspects of public health work. They will show the importance of such thorough training as is now available at the best schools of public health and stimulate attendance at these schools. They will provide a valuable opportunity for public health workers to meet leading specialists in the various fields. Thus they will make public health work in the various communities more effective and the continued progress of the public health movement more sure.

# Schedule of institutes.

Place.	Date.	Director.
New Orleans Columbia Dallas Dallas Birmingham Memphis Louisville Indianapolis Pittsburgh Jacksonville Detroit Chicago Minneapolis Atlanta Portland Kansas City Spokane Newark Albany Denver Washington Hartford	Jan. 9-13 Jan. 9-14 Jan. 16-21 Jan. 16-21 Jan. 23-28 Jan. 30-Feb. 4. Feb. 13-18. Feb. 20-25. Feb. 27-Mar. 4. Mar. 6-11. Mar. 13-18. Mar. 20-25. Mar. 27-Apr. 1. Apr. 10-15. Apr. 10-15. Apr. 17-22. Apr. 17-22. Apr. 17-22. Apr. 17-22. Apr. 24-29. May 1-6.	Dr. Oscar Dowling, State board of health, New Orleans, La. Dr. J. A. Hayne, State board of health, Columbia, S. C. Dr. Manton M. Carrick, State board of health, Austin, Tex. W. C. Blasingame, State board of health, Mongomery, Ala. Dr. J. J. Durrett, city board of health, Momphis, Tenn. Dr. A. T. McCormack, State board of health, Louisville, Ky. Dr. W. F. King, State board of health, Indianapolis, Ind. Dr S. R. Haythorn, University of Pittsburgh, Pittsburgh, Pa. Dr. George A. Dame, State board of health, Jacksonville, Fla. Dr. R. M. Olin, State board of health, Lansing, Mich. Dr. I. D. Rawlings, State department of health, Springfield, Ill. Dr. A. J. Chesley, State board of health, St. Paul, Minn. Dr. T. F. Abercrombie, State board of health, Portland, Oreg. Dr. S. J. Crumbine, State board of health, Topeka, Kans. Dr. Paul A. Turner, State board of health, Portland, Oreg. Dr. A. Clark Hunt, State dopartment of health, Trenton, N. J. Dr. Joseph S. Lawrence, State department of health, Albany, N. Y. Dr. R. L. Drinkwater, State board of health, Benver, Colo. Dr. C. C. Pierce, United States Public Health Service, Washington, D. C. Dr. J. T. Black, State department of health, Hartford, Conn.

For further information, address the directors of the various institutes or the United States Public Health Service, No. 16 Seventh Street SW., Washington, D. C.

# DEATHS DURING WEEK ENDED NOV. 12, 1921.

Summary of information received by telegraph from industrial insurance companies for week ended Nov. 12, 1921, and corresponding week, 1920. (From the Weekly Health Index, Nov. 15, 1921, issued by the Bureau of the Census, Department of Commerce.)

	Week ended Nov. 12, 1921.	Corresponding week, 1920.
Policies in force	47, 635, 423	45, 061, 204
Number of death claims	6, 493	6, 592
Death claims per 1,000 policies in force	7.1	7.6

Deaths from all causes in certain large cities of the United States during the week ended Nov. 18, 1921, infant mortality, annual death rate, and comparison with corresponding week of preceding years. (From the Weekly Health Index, Nov. 15, 1921, issued by the Bureau of the Census, Department of Commerce.)

	Totimotod		ended 2, 1921.	Average	Death 1	Infant mor- tality	
City.	Estimated population July 1, 1921.	Total deaths.	Death rate.1	annual death rate per 1,000.2	Week ended Nov. 12, 1921.	Previous year or years.2	rate, week ende 1 Nov. 12, 1921.3
Akron, Ohio. Albany, N. Y Atlanta, Ga. Baltimore, Md. Birmingham, Ala. Boston, Mass. Bridgeport, Conn. Buffalo, N. Y Cambridge, Mass. Camden, N. J. Chicago, Ill. Columbus, Ohio Dallas, Tex Dayton, Ohio. Dallas, Tex Dayton, Ohio. Denver, Colo Detroit, Mich. Fall River, Mass Fort Worth, Tex Grand Rapids, Mich. Houston, Tex Indianapolis, Ind Jersey City, N. J. Kansas City, Mo. Los Angeles, Calif Louisville, Ky. Lowell, Mass Memphis, Tenn Milwankeo, Wis. Minneapolis, Minn Nashville, Tenn New Bedford, Mass. New Haven, Conn New Orleans, La. New York, N. Y Newark, N. J Norfolk, Va Oakland, Calif Omaha, Nebr Paterson, N. J Philadelphia, Pa Pittsburgh, Pa Portland, Oreg Providence, R. I Richmond, Va Rochester, N. Y St. Louis, Mo. St. Paul, Minn Salt Lake City, Utah San Francisco, Calif Seattle, Wash Spokane, Wash Spokane, Wash Spokane, Wash Spracuse, N. Y Toledo, Ohio. Trenton, N. J Washington, D. C Wilmington, D. C Wilmington, D. C Wilmington, D. C	141, 127 141, 197 114, 340 325, 632 302, 788 336, 157 611, 921 236, 083 113, 757	26 36 47 176 482 183 114 27 214 27 103 173 103 173 103 173 103 173 103 173 103 173 103 173 103 173 103 173 103 173 103 173 103 173 173 174 175 175 175 175 175 175 175 175 175 175	5.3 16.8 11.2 11.2 12.5 11.4 12.5 11.3 12.5 12.5 13.6 13.6 13.6 13.6 13.6 13.6 13.6 13.6	47.8 6 6 1.6 5 2 6 1.6 6	3 2 5 2 1 4 2 4 2 2 16 5 5 5 8 6 2 3 8 6 4 4 3 3 2 3 3 3 6 6 2 2 6 10 9 19 7 7 4 4 3 3 1 3 6 6 4 7 7 1 4 2 1 4 4 7 7 1 4 3 1 3 3 6 1 1 1 1 1 1 7 5 2 8 5 5 2 2 2 1 3 5 2 0 3 1 2	CC 1 1 1 3 1 5 4 6 6 1 6 7 7 8 8 8 8 7 7 8 17 10 6 8 8 8 16 7 7 8 17 10 6 1 16 7 9 1 16 1 16 1 16 1 16 1 16 1 1	29 45 59 25 62 62 62 62 93 66 45 66 45 66 47 69 90 81 81 81 102 23 92 48 93 77 15 81 17 81 17 81 17 81 18 11 10 12 12 13 14 14 15 16 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18

<sup>1</sup> Annual rate per 1,000 population.
2 "A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1920.
3 Deaths under I year per 1,000 births—an annual rate based on deaths under I year for the week and estimated births for 1920. Cities left blank are not in the registration area for births.
4 Data based on statistics of 1915, 1916, and 1917.

# PREVALENCE OF DISEASE.

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

# UNITED STATES.

### CURRENT STATE SUMMARIES.

# Telegraphic Reports for Week Ended Nov. 19, 1921.

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

ALABAMA.	ses.	cclorado.	
Cerebrospinal meningitis	1	(Exclusive of Denver.)	
Chicken pox.			_
Diphtheria		Cerebrospinal meningitis	1
Malaria		Chicken pox	7 61
Pellagra	-	Diphtheria	
Pneumonia	_	Mcasles	1 2
Scarlet fever		Mumps	2
Tuberculosis	20	Pneumonia	_
Typhoid fever		Scarlet fever.	30
Lyphola icvol	,	Smallpox	47
ABKANSAS.		Tuberculosis	20
Chicken pox	10	Typhoid fever	17
Diphtheria	36	DELAWARE.	
Hookworm disease	1	Anthrax—Wilmington	1
Influenza		Chicken pox.	4
Malaria		Diphtheria.	2
Measles	3	Malaria.	ĩ
Pellagra	6	Poliomyelitis—Milton	ī
Scarlet fever	24	Scarlet fever:	•
Smallpox	5	Wilmington	18
Trachoma	3	Scattering	5
Tuberculosis	5	Tuberculosis	2
Typhoid fever	23	Typhoid fever.	4
· CALIFORNIA.		••	•
Cerebrospinal meningitis:		FLORIDA.	42
Los Angeles	2	Diphtheria	42 8
Santa Clara County	1		4
Diphtheria	-	Malaria	_
Influenza	13	Pneumonia	5
Lethargic encephalitis—San Francisco	1.5	,	1
Measles	14	Smallpox	12
<b>—</b>	14	Typhoid fever	12
Poliomyelitis:	1	GEORGIA.	
San Francisco	1	Chicken pox	16
Taft	1	Dengue	1
Scarlet fever	-	Diphtheria	-
	101	Dysentery (ametic)	1
Smallpox: Bakersfield	14	Dysentery (bacillary)	2
	31	Hookworm disease	35
Scattering	6	Influenza.	
Typhoid fever	(00		

GEORGIA—continued.	<b>-</b>	KANSAS—continued.	
MalariaCa	ses. 18		ases.
Mumps	4	Pneumonia	. 17
Pneumonia	13	Scarlet fever.	. ა ვიუ
Scarlet fever.	33	Septic sore throat	. 301
Septic sore throat	1	Smallpox	. 36
Smallpox	10	Tuberculosis	43
Tuberculosis (pulmonary)	14	Typhoid fever	. 13
Typhoid fever	16	Whooping cough	. 28
Whooring cough	3	Louisiana.	
ILLINOIS.		Diphtheria	. 19
Cerebrospinal meningitis:		Influenza	. 5
Chicago	2	Scarlet fever	9
Peoria	1	Smallpox	. 12
Diphtheria:		Typhoid fever	. 14
Blue Island	32	MAINE.	
Carbondale	8	Cerebrospinal meningitis	
Chicago	12	Chicken pox	
Decatur	15	Diphtheria	28
East St. Louis.	18	Pneumonia	3
Evanston	8	Poliomyelitis	1
Freeport	11	Scarlet fever	25
Mattoon	17	Septic sore throat	7
Olney	9	Smallpox	
Rockford	12	Tuberculosis.	8
Scattering		Typhoid fever	2
Influenza.  Lefhargic encephalitis—Chicago	14	MARYLAND,1	
Pneumonia.		Cerebrospinal meningitis	1
Poliomyelitis:		Chickenpox	55
Chicago	1	Conjunctivitis	1
Galesburg:	1	Diphtheria	104
Scarlet fever:	j	Dysentery	
Chicago 1		Malaria	18 3
East St. Louis		Measles.	60
Marion	10	Mumps	15
Scattering	- 1	Ophthalmia neonatorum	5
	18	Paratyphoid fever	2
	32	Pneumonia (all forms)	59
Whooping cough	29	Poliomyelitis	5
INDIANA.	į	Scarlet fever	69
Diphtheria 2	58	Septic sore throat	3
	99	Typhoid fever	67 35
Smallpox	6	Whooping cough	15
Typhoid fever	17	MASSACHUSETTS.	
IOWA.	1		
Cerebrospinal meningitis—Burlington	2	Cerebrospinal meningitis	3
	66	Conjunctivitis (suppurative)	12
Poliomyelitis:	~	Diphtheria	
Chapin	1	German measles.	7
Muscatine	1	Influenza	6
Scarlet fever 1	17	Measles	
Smallpox	22	Mumps	62
KANSAS.		Ophthalmia neonatorum	18 .
	83	Pneumonia (lobar)	106 3
Diphtheria4		Scarlet fever	
Influenza	2	Septic sore throat	5
	8	Smallpox	1
	26	Tetenus	1
Ophthalmia neonatorum	3 1	Trachoma	2

<sup>&</sup>lt;sup>1</sup> Week ended Friday.

MASSACHUSETTS—continued.	ses.	NEBRASKA—continued.	3 <b>0</b> S.
			365. 1
Trichinosis	1	Tuberculosis	
Tuberculosis (all forms)	188	Typhoid fever	3
Typhoid fever	11	Whooping cough	1
Whooping cough	72	NEW JERSEY.	
MINNESOTA.		Anthrax	1
EIMMESOIA.		Cerebrospinal meningitis.	_
Cerebrospinal meningitis	1		
Chicken pox	24	Chicken pox	
Diphtheria:		Diphtheria	
Minneapolis	57	Influenza	8
Scattering	110	Leprcsy	
Influenza	1	Measles	
Measles		Pneumonia	94
Poliom velitis.	4	Poliomyelitis	3
		Scarlet fever	171
Scarlet fever	49	Smallpox	1
Smallpox		Typhoid fever	18
Tuberculosis		Whooping cough.	
Typhoid fever	12		
MISSISSIPPI.		NEW MEXICO.	
Diphtheria	69	Chicken pox	3
Scarlet fever	16	Conjunctivitis	1
Smallpox	2	Diphtheria	20
Typhoid fever	9	Dysentery	
	•	Influenza.	
MISSOURI.		Malaria	
Chicken pox	40	1 5°	
Diphtheria	<b>36</b> 8	Measles	
Epidemic sore throat	26	Mumps	
Influenza	4	Paratyphoid fever	
Measles	1	Pneumonia	
Poliomyelitis	2	Scarlet fever	7
Scarlet fever	146	Trachoma	1 28
Smallpox	81	Tuberculosis	11
Tetanus	1	Typhoid fever	
Tuberculosis	40	Whooping cough	18
Typhoid fever	33	NEW YORK.	
Whooping cough	25	MBW 10111.	
		(Exclusive of New York City.)	
MONTANA.		Cerebrospinal meningitis	2
Cerebrospinal meningitis—Walkerville	2	Diphtheria	352
Diphtheria	23	Influenza	
Scarlet fever	8	Lethargic encephalitis	2
Smallpox	23	Measles	47
	j	Pneumonia	
NEBRASKA.1	11	Poliomyelitis	7
Chicken pox	11	Scarlet fever	312
Diphtheria:		Typhoid fever	
Omaha	38	Whooping cough	
Scotts Bluff	28	,, <u></u>	
Scattering	26	NORTH CAROLINA.	
German measles	1	0 - 1 i 1 i i - i -	2
Influenza	2	Cerebrospinal meningitis	
Measles	11	Chicken pox	
Mumps	2	Diphtheria	
Poliomyelitis—Dixon County	1	German measles	
Scarlet fever	32	Measles	3
Septic sore throat	5	Poliomyelitis	2
Small pox:		Scarlet fever	
Adams County	11	Septic sore throat	
Bluehill	14	Smallpox	
Keith County	9	Typhoid fever	
Scattering	14	Whooping cough	54

<sup>&</sup>lt;sup>1</sup> The report of 13 cases of diphtheria at Lincoln for the week ended Oct. 15 (Public Health Reports, Oct. 24, 1921, p. 2833) was an error; no cases of diphtheria occurred at Lincoln during that period. The 13 cases reported for Lincoln occurred at Chadron.

		WASHINGTON—continued.	
. Ca	ses.		ses.
Cerebrospinal meningitis	1	Policmyelitis—Continued.	_
Chicken pox	14	Lewis County	
Diphtheria:		Pierce County	
Portland	22	Tacoma	1
		Walla Walla County	
Scattering		Scarlet fever:	
Influenza		1	12
Measles	3	Spokane	
Mumps	6	Scattering	31
Poliomyelitis:		Smallpox:	
•	1	Tacoma	16
Eugene		Walla Walla	13
Grants Pass	1	Scattering	
Portland	1	Tuberculosis	
Scarlet fever	14		
Smallpox:		Typhoid fever	
Portland	12	Whooping cough	. 10
Scattering		WEST VIRGINIA.	
Tuberculosis	1	Diphtheria:	
Typhoid fever	2	Clarksburg	13
Whooping cough	8	Huntington	12
SOUTH DAKOTA.		Kcyser	8
Chicken pox	2	Scattering	37
	32	Scarlet fever	18
Diphtheria		Typhoid fever	4
Pneumonia	5		
Poliomyelitis	1	WISCONSIN.	
Scarlet fever	58	Milwaukee:	
Smallpox	6	Chicken pox	65
•	3	Diphtheria	7.0
Typhoid fever	u		1
TEXAS.		Measles	
Chicken pox	7	Pneumonia	11
Diphtheria	62	Scarlet fever	17
Influenza.	8	Smallpox	1
	-	Tuberculosis	19
Pellagra	6	Typhoid fever	1
Scarlet fever	21		
VERMONT.		Whooping cough	20
Chicken pox	58	Scattering:	
		Cerebrospinal meningitis	1
	6	Chicken pox	77
Diphtheria	_	Chicken pox	
Measles	3		127
	3 8	Diphtheria	
Measles		Diphtheria	127 1
Measles	8 2	Diphtheria Influc::za. Lethargic encophalitis—	1
Measles.  Mumps.  Pneumonia.  Scarlet fever.	8 2 31	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton	1
Measles	8 2	Diphtheria Influc::za. Lethargic encophalitis—	1
Measles.  Mumps.  Pneumonia.  Scarlet fever.	8 2 31	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton	1
Measles.  Mumps. Pneumonia. Scarlet fever. Whooping cough  WASHINGTON.	8 2 31 8	Diphtheria Influenza Lethargie encephalitis— Rock County—Clinton Measles Pneumonia	1 1 11
Measles	8 2 31 8	Diphtheria Influenza. Lethargic encephalitis— Rock County—Clinton Measles. Pneumonia. Poliomyelitis.	1 11 2 3
Measles	8 2 31 8 69 35	Diphtheria Influenza. Lethargic encephalitis— Rock County—Clinton Measles. Pneumonia. Poliomychtis. Scarlet fever.	1 11 2 3 144
Measles.  Mumps. Pneumonia Scarlet fever. Whooping cough  WASHINGTON. Chicken pox. Diphtheria Measles.	8 2 31 8 69 35 4	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomyelutis Scarlet fever Smallpox	1 11 2 3 144 33
Measles.  Mumps. Pneumonia Scarlet fever. Whooping cough  WASHINGTON. Chicken pox. Diphtheria Measles. Mumps.	8 2 31 8 69 35	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomyehtis Scarlet fever Smallpox Trachoma	1 11 2 3 144 33 3
Measles.  Mumps. Pneumonia Scarlet fever. Whooping cough  WASHINGTON. Chicken pox. Diphtheria Measles.	8 2 31 8 69 35 4	Diphtheria Influenza Lethargie encophalitis— Rock County—Clinton Measles Pneumonia Poliomyelitis Scarlet fever Smallnox Trachoma Tuberculosis	1 11 2 3 144 33
Measles	8 2 31 8 69 35 4	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomyehtis Scarlet fever Smallpox Trachoma	1 11 2 3 144 33 3
Measles Mumps. Pneumonia Scarlet fever Whooping cough  WASHINGTON. Chicken pox Diphtheria Measles Mumps. Poliomyelitis: Chelan County	8 2 31 8 69 35 4 15	Diphtheria Influenza Lethargie encephalitis— Rock County—Clinton Measles Pneumonia Poliomyehtis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever	1 11 2 3 144 33 3 45
Measles	8 2 31 8 69 35 4 15	Diphtheria Influenza Lethargie encophalitis— Rock County—Clinton Measles Pneumonia Poliomyelitis Scarlet fever Smallnox Trachoma Tuberculosis	1 11 2 3 144 33 3 45 13
Measles.  Mumps. Pneumonia Scarlet fever. Whooping cough  WASHINGTON. Chicken pox. Diphtheria Measles. Mumps. Poliomyelitis: Chelan County King County	8 2 31 8 69 35 4 15	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomyeltis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever Whooping cough	1 11 2 3 144 33 3 45 13
Measles.  Mumps. Pneumonia Scarlet fever. Whooping cough  WASHINGTON. Chicken pox. Diphtheria Measles. Mumps. Poliomyelitis: Chelan County King County	8 2 31 8 69 35 4 15	Diphtheria Influenza Lethargie encephalitis— Rock County—Clinton Measles Pneumonia Poliomyehtis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever	1 11 2 3 144 33 3 45 13
Measles	8 2 31 8 69 35 4 15	Diphtheria Influenza Lethargie encephalitis— Rock County—Clinton Measles Pneumonia Poliomyehtis Scarlet fever Smallnox Trachoma Tuberculosis Typhoid fever Whooping cough	1 11 2 3 144 33 3 45 13
Measles	8 2 31 8 69 35 4 15	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomyelitis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever Whooping cough  Ek Ended Nov. 12, 1921.  CONNECTICUT—continued.	1 11 2 3 144 33 3 45 13 75
Measles. Mumps. Pneumonia Scarlet fever. Whooping cough  WASHINGTON. Chicken pox. Diphtheria Measles. Mumps. Poliomyelitis: Chelan County King County  Delayed Reports for CONNECTICUT. Ca	8 2 31 8 69 35 4 15 1 1 Week	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomyeltis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever Whooping cough  Ek Ended Nov. 12, 1921.  CONNECTICUT—continued.	1 11 2 3 144 33 3 45 13 75
Measles	8 2 31 8 69 35 4 15 1 1 West	Diphtheria Influenza Lethargie encephalitis— Rock County—Clinton Measles Pneumonia Poliomyehtis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever Whooping cough ek Ended Nov. 12, 1921.  CONNECTICUT—continued. Measles: Cas	1 11 2 3 144 33 3 45 13 75
Measles. Mumps. Pneumonia Scarlet fever. Whooping cough  WASHINGTON. Chicken pox. Diphtheria Measles. Mumps. Poliomyelitis: Chelan County King County  Delayed Reports for CONNECTICUT. Ca	8 2 31 8 69 35 4 15 1 1 West	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomychtis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever Whooping cough  connecticut—continued.  Measles: Coventry	1 11 2 3 144 33 3 45 13 75
Measles	8 2 31 8 69 35 4 15 1 1 West	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomyehtis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever Whooping cough  ek Ended Nov. 12, 1921.  CONNECTICUT—continued.  Measles: Coventry Willimantic	1 11 2 3 144 33 3 45 13 75
Measles.  Mumps. Pneumonia Scarlet fever. Whooping cough  WASHINGTON. Chicken pox. Diphtheria. Measles. Mumps. Poliomyelitis: Chelan County King County  Delayed Reports for CONNECTICUT. Ca. Cerebrospinal meningitis. Chicken pox. Diphtheria:	8 2 31 8 69 35 4 15 1 1 1 Week ses. 1 25	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomyeltis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever Whooping cough  connecticut—continued.  Measles: Coventry Willimantic Scattering	1 11 2 3 144 33 3 45 13 75
Measles. Mumps. Pneumonia Scarlet fever. Whooping cough  WASHINGTON. Chicken pox. Diphtheria Measles. Mumps. Poliomyelitis: Chelan County King County  Connecticut. Ca Cerebrospinal meningitis Chicken pox. Diphtheria: Bridgeport.	8 2 31 8 69 35 4 15 1 1 1 Week sess. 1 25 11	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomyelutis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever Whooping cough  connecticut—continued.  Measles: Coventry Willimantic Scattering Mumps.	1 11 2 3 144 33 3 45 13 75
Measles	8 2 31 8 69 35 4 15 1 1 1 West 25 11 12	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomychtis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever Whooping cough  connecticut—continued.  Measles: Coventry Willimantic Scattering Mumps. Ophthalmia neonatorum	1 11 2 3 144 33 3 45 13 75
Measles Mumps. Pneumonia. Scarlet fever Whooping cough  WASHINGTON. Chicken pox Diphtheria Measles Mumps Poliomyelitis: Chelan County King County  Belayed Reports for CONNECTICUT. Ca. Cerebrospinal meningitis. Chicken pox Diphtheria: Bridgeport Hartford. New Haven	8 2 31 8 69 35 4 15 1 1 1 1 West sees. 1 25 11 12 13	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomyehtis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever Whooping cough  ek Ended Nov. 12, 1921.  CONNECTICUT—continued.  Measles: Coventry Willimantic Scattering Mumps Ophthalmia neonatorum Pneumonia (lobar)	1 11 2 3 144 33 3 45 13 75
Measles	8 2 31 8 69 35 4 15 1 1 1 West 25 11 12	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomychtis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever Whooping cough  connecticut—continued.  Measles: Coventry Willimantic Scattering Mumps. Ophthalmia neonatorum	1 11 2 3 144 33 3 45 13 75
Measles Mumps. Pneumonia. Scarlet fever Whooping cough  WASHINGTON. Chicken pox Diphtheria Measles Mumps Poliomyelitis: Chelan County King County  Belayed Reports for CONNECTICUT. Ca. Cerebrospinal meningitis. Chicken pox Diphtheria: Bridgeport Hartford. New Haven	8 2 31 8 69 35 4 15 1 1 1 1 West sees. 1 25 11 12 13	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomyeltis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever Whooping cough  connecticut—continued.  Measles: Coventry Willimantic Scattering Mumps. Ophthalmia neonatorum Pneumonia (lobar) Poliomyelitis Scarlet fever:	1 11 2 3 144 33 3 45 13 75
Measles	8 2 31 8 69 35 4 15 1 1 2 25 11 12 13 36	Diphtheria Influenza Lethargic encophalitis— Rock County—Clinton Measles Pneumonia Poliomyeltis Scarlet fever Smallpox Trachoma Tuberculosis Typhoid fever Whooping cough  connecticut—continued  Measles: Coventry Willimantic Scattering Mumps Ophthalmia neonatorum Pneumonia (lobar) Poliomyelitis	1 11 2 3 144 33 3 45 13 75

CONNECTICUT—continued.		KENTUCKY—centinued.	ases.
Tuberculosis (all forms)	21	Diphtheria—Continued.	
Typhoid fever	7	Knox County	
Whooping cough	21	Taylor County	. 9
DISTRICT OF COLUMBIA.	:	Scattering	. 72
Chicken pox	20	Innuenza	. ZZ
Diphtheria.		Malaria	. 1
•	20	Measles—Jefferson County	. 18
Influenza	4	Ophthalmia neonatorum	. 1
Measles	-	Paratyphoid fever	. 1
Scarlet fever	25	Pellagra	. 1
Tuberculosis	42	Pneumonia	
Typhoid fever	2	Scarlet fever	. 49
Whooping cough	.7.	Septic sore throat	
KENTUCKY.		Smallpox	
Cerebrospinal meningitis—Scott County	• 1	Tonsillitis	. 1
Chicken pox	7	Trachoma	. 8
Conjunctivitis	1	Tuberculesis:	
Diphtheria:		Jefferson County	. 10
Daviess County	50	Scattering	. 4
Jefferson County	72	Typhcid fever	. 24

# SUMMARY OF CASES REPORTED MONTHLY BY STATES.

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

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
Connecticut (October) Idaho (October) Louisiana (October) Maryland (October) Michigan (October) New Mexico (September) New Mexico (October) Rhode Island (October) West Virginia (October) Wisconsin (October)	4 2 1 3  1 1 2 8	361 10 125 367 1,567 96 131 74 1,163	35 52 3 9 28 22	1 102 75 12 6	109 1 4 57 71 1 1 4 33 50	15 1 1 1	13 19 1 55 79 5 3	182 62 65 267 908 15 26 41 418 758	10 4 58 1 50 72	49 11 86 185 277 63 74 9 294 87

# RECIPROCAL NOTIFICATION.

# Massachusetts-October, 1921.

Cases of communicable diseases referred during October, 1921, to other State health departments by Department of Health of the State of Massachusetts.

Disease and locality of notification.	Referred to health authority of—	Why referred.
Typhoid fever: Brookline	State health department, Albany, N. Y. State health department, Augusta, Me.	Patient visited at Whitehall, N. Y., prior to onset of disease.  Patient was visiting at Biddeford, Me., prior to onset of disease.

### SMALLPOX EPIDEMIC

. . . . . . .

### Kansas City, Mo.1

An epidemic of smallpox of virulent type is stated to have begun in Kansas City, Mo., September 1, 1921, from which date to November 22, a total of 231 cases with 75 deaths was reported. During the week ended November 19, there were reported 59 cases with 22 deaths.

# CITY REPORTS FOR WEEK ENDED NOV. 5, 1921.

### ANTHRAX.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Pennsylvania: Philadelphia		1	Tonnessee: Nashville	1	••••

#### CEREBROSPINAL MENINGITIS.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre-	Week ended Nov. 5, 1921.		City.	Median for pre-			
	vious years.	Cases.	Deaths.	•	vious years.	Cases.	Deaths.	
Alabama: Birmingham. Arizonia: Tucson California: Los Angeles. Oakland. San Diego. Georgia: Atlanta. Illinois: Alton. Chicago. Indiana: Indianapolis Kansas: Kansas City. Maryland: Baltimore. Massachusetts: Boston Chicopee.	0 0 0 0 0 0 0 3 0	1 1 1 3 1 1 1	1 1 1 1 1 2 1 1 2 1	Massachusetts—Contd. Lynn New Bedford. Michigan: Detroit. Missouri: Cape Girardeau. Independence. Kansas City. New York: New York: Nisgara Falls. Saratoga Springs. Ohio: Youngstown. Utah: Salt Lake City. Wisconsin: Milwaukee.	0	1 1 2 7	2 1 1 	

### DIPHTHERIA.

See p. 2909; also Telegraphic weekly reports from States, p. 2898, and Monthly summaries by States, p. 2902.

INFLUENZA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama: Montgomery Arkansas: Little Rock California: San Diego San Francisco Colorado: Denver	1 1 3	1	District of Columbia: Washington Florida: Tampa Georgia: Atlanta Savannah Illinois: Chicago	1 4 3	1 1 3

<sup>1</sup> See Public Health Reports, Nov. 18, 1921, p. 2849.

INFLUENZA—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Kansas: Wichita. Kentucky: Lexington. Louisiana: New Orleans. Maryland: Baltimore. Cumberland. Massachusetts: Boston. Lynn. Saugus. Michigan: Detroit. Grand Rapids. Hamtramek. Minnesota: Minnesota: Minneapolis. New Jersey: Bloomfield Jersey City Kearny. Montclair. Newark.	1 1 6 8 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 6 3 3 7	1 4	New York: Albany. Buffalo New York. North Carolina: Greensboro. Ohio: Cleveland. Pennsylvania: Philadelphia. Rhode Island: Frovidence. South Dakota: Sioux Falls. Tennessce: Memphis. Virginia: Danville. Roanoko. West Virginia: Huntington. Wisconsin: Kenosha.	1 1 2 3 3	1
Paterson	I I.em	HARGIC E	ncephalitis.		<u> </u>
Colifornia	LEI	HABGIC E	INCEPHALITIS.		
California: Sacramento	1				
		MAL	ARIA.		
Alabama: Tuscaloosa Arkansas: Ft. Smith. Little Rock. California: Sacramento. Florida: Tampa. Georgia: Atlanta. Augusta. Illinois: Chicago. Kansas: Lawrence.	1 5 4 1 5	1	Louisiana: New Orleans Maryland: Baltimore. Michigan: Ann Arbor. New Jersey: East Grange. Jersey City. Oregon: Partland Tennessee: Memphis. Texas: Dallas Houston.	1 1 1 1 1	1 1 1
		MEA! weekly re	sles. Sports from States, p. 289	8, and	Monthly
summaries by States, p. 2	2902.	PELLA	AGRA.	•	
Alabama: Birmingham Mobile California: Los Angeles. Sacramento. Louisiana: New Orleans.	1 1 1	1 1 1	Massachusetts: Boston Ohio: East Cleveland Texas: Waco	1	1
	PNE	UMONIA	(ALL FORMS).		
Alabama:   Firmingham	1	7 4	California: Alameda Bakersfield Los Angeles Oakland Riverside.	29 2	1 1 2 1 1

# PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California—Continued.		4.1	Massachusetts—Continued.		
Sacramento		1	Lowell		
San DiegoSan Francisco	.2	1	Lynn. Ma!den	2	1
San Francisco Stockton	11 3	4	Ma:den	1	·····
Colorado:	°		Melrose.	3	
Denver		7	Methuen	li	1
Connectiont:		1	Methuen New Bedford	ļ	
Bridgeport		4	Newton		
Fairfield		1	Norwood		:
Greenwich		1	Quincy	2	
Meriden		2	Saugus Somerville	·····2	
. New London	·····i·	. *	Springfield	î	
Delaware:	· •		Winthrop	l î	
Wilmington		2	Winthrop Worcester		1
Wilmington District of Columbia:		1	Michigan:		
Washington		14	Detroit	36	2
Jeorgia:	1	l _	Flint		_
Atlanta		7	Grand Rapids	8	1
Savannah		2	Grand Rapids Hamtramck Jackson	4	
daho: Pocatello	l	3	Kalamazoo	. 4	1
llinois:	l		Pontiac	1	
Aurora	l	4	Port Huron	Ž	
Blue Island		1	Port Huron	1	
Chicago	143	30	Minnesota:	1	ł
Chicago		. 2	Duluth Minncapolis St. Paul		
Cicero	2		Minneapolis		
Danville	, z	i	Missouri:		· '
Decatur East St. Louis Elgin Galesburg Jacksonville Kewanee	• • • • • • • • • •	2	Independence	ļ	ŀ
East St. Louis		í	Konsos City		1
Colechuro		2	Kansas City St. Joseph Springfield		1 -
Jacksonville		1 1 2	Springfield		
Kewanee	3	2	Montana:		!
Mattoon. Oak Park		2	Butte		:
Oak Park	1		Butte		
Peoria		2	Nebraska:		
ROCK ISIAHU		1	Omaha Nevada:	• • • • • • • • • •	10
ndiana:		2	Reno	1	
Corv		2	New Jersey:	-	
Hammond		i	Belleville	2	
Indianapolis		13	Bloomfield	2	
Kokomo		1	Clifton	1	
La Fayette		i	East Orange	5	
Logansport		1	ElizabethGarfield	·····i	;
Marion		2 2	Gloveoster City	1	• • • • • • • • •
Torre Houte	• • • • • • • • • • • • • • • • • • • •	1	Gloucester City	2	
ndiana:     Fort Wayne     Gary     Hammond     Indianapolis     Kokomo.     La Fayette     Logansport     Marion     Muncie     Terre Haute Kansas:	• • • • • • • • • • • • • • • • • • • •	1 1	Harrison	ĩ	
		l l	Hoboken		
Kansas City Topeka		i	Jersey City	9	
			Kearny	4	
Covington		4			
Lexington		2 2	Nowark Passaic Trenton West Hoboken West New York West Orange	w	
Louisville	5	2	Trenton		;
Monroe		1	West Hoboken		
MonroeNew Orleans		7	West New York		
laine:			West Orange		
Auburn		2	New Mexico:		
Bangor	1		Albuquerque	• • • • • • • • • • • • • • • • • • • •	1
Biddeford		1	New York: Albany	16	
(aryland:		. 19	Busalo	19	
Baltimore	εο 2	13	Cohoes	i l	
lassachusetts:	2		Elmira		1
Beverly	3	1	Geneva		2
Beverly	24	15	Hornell	9	1
Cambridge		6	Jamestown		1
K'tropott i	4		Lackawanna	1	
Fall RiverGreenfield	2	1	Jamestown Lackawanna Middletown Mount Vernon	1 1	<b>.</b>
Greenfield	• • • • • • • • • • • • • • • • • • • •	1	Mount Vernon	1	· · · · · · · · · · · · · · · · · · ·
Haverhill Holyoke	. 2		Newburgh New York Peekskill	227	117
HAIVAFA	2		NUW IUIR	241	*11

# PNEUMONIA (ALL FORMS)-Continued.

City.	Cases.	Deaths.	City. C	ases.	Deaths.
New York—Continued. Ponghkeepsie Rochester Rome Schenectady Schenectady Syracuse Troy Watervliet White Plains Yonkers North Carolina: Charlotte. Salisbury Winston-Salem. Ohio: Akron Akron Akron Canton Cincinnati Cleveland Cleveland Columbus Dayton Hamilton Lakewood Lims Porsmouth Toledo Youngstown Zanesville	13 4 3 5 5	1 1 1 7	Pennsylvania: Philadelphia. Rhode Island: Providence. South Carolina: Charleston. Tennessee: Memphis. Nashville. Texas: Beaumont. Dallas. Houston. Virginia: Norfolk. Petersburg. Portsmouth. Richmond. Roanoke. West Virginia: Huntington. Parkersburg. Wheeling. Wheeling. Wisconsin: Jamesville. Oshkosh. Racine.	2	1 2 2 2 2 2 2 2 2 2 2 2 2 4 1 1

# POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre-	r pre-		City.	Median for pre-	Week ended Nov. 5, 1921.	
	years.	vious	vious years.	Cases.	Deaths.		
California: San Bernardino San Francisco. Connecticut: Bridgeport. New Haven. Illinois: Alton Chicago. Kansas: Topeka. Maryland: Baltimore. Massachusetts: Amesbury. Boston. Braintree. Chelsea. Norwood. Michigan: Detroit Minnesota: St. Paul.	0 0 2 0 0	1 3 1 1 1 4 2 5 5 1 1 1 1 1 1 1 1	1	Missouri: Kansas City New Jersey: Ellizabeth Jersey City New York: Albany Buffalo New York Rochester Ohio: Cleveland Oregon: Portland Utah: Salt Lake City Vermont: Burlington Washington: Aberdeen Seattle Spokane Tacoma		1 1 1 1 1 1 1 1 1 1 1 2 2 2 1 1 1	6

### RABIES IN ANIMALS.

City.	Cases.
California: Los Angeles Virginia:	1
Virginia: Petersburg	1
RABIES IN MAN.	

City.	Cases.	Deaths.
Kentucky: Louisville.	1	1

### SCARLET FEVER.

See p. 2909; also Telegraphic weekly reports from States, p. 2898, and Monthly summaries by States, p. 2902.

### SMALLPOX.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre-		k ended 5, 1921.	City.	Median for pre-	'Week ended Nov. 5, 1921.	
	vious years.	Cases.	Deaths.		vious years.	Cases.	Deaths
Alabama: Mobile	0	1		Montana: Great Falls Nevada:	0	3	
Los Angeles	1	11 5		Reno New York:	0	1	
Oakland	ő	3		New York	0	1	
Colorado: Denver	5	3		North Dakota: Grand Forks	3	1	
Idaho:		•		Ohio:	_	_	
PocatelloIllinois:	0	1		Cincinnati	0	1 2	
Chicago	1	1		Dayton Fremont	ô	6	
Quincy	0	5		Oklahoma:			
Indiana: Gary	0	4	Ì	Oklahoma City Oregon:	0	1	
Iowa:	•			Portland.	2	3	
Council Bluffs	0	1		Utah:	3	10	
Des Moines Mason City	1	2	•••••	Salt Lake City Washington:	3	10	• • • • • • •
Muscatine	Ò	4		Aberdeen	0	1	
Sioux City	2	2		Bellingham	0	2	
Waterloo		4	·····	Seattle. Spokane	0 5	18	• • • • • • • • • • • • • • • • • • • •
Hutchinson	. 0	6	l	Tacoma	Ŏ.	12	
Kansas City	0	5		Vancouver	c	3	
Maine. Waterville	1	1		West Virginia: Bluefield.	0	2	
Michigan:	-	_		Wisconsin:		-	••••••
Detroit	2	3		Appleton	0	1	• • • • • • • • • • • • • • • • • • • •
Minnesota: Minneapolis	4	3		мапиоwос	U	4	•••••
St. Paul	3	7			1		
Missouri:							
Independence Kansas City	0	38	9				

### TETANUS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California: Los Angeles San Francisco Kansas: Pittsburg. Louisiana: New Orleans New York: New York Ohio: Cleveland	1 1 2 1	1	Pennsylvania: Philadelphia. Texas: Dallas Virginia: Danville Petersburg Richmond West Virginia: Wheeling.	1 1 1	1 1 1 1

### TUBERCULOSIS.

See p. 2909; also Telegraphic weekly reports from States, p. 2898.

### TYPHOID FEVER.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1920, inclusive. In instances in which data for the full six years are incomplete, the median is that for the number of years for which information is available.

City.	for pre-	Median Nov. 5, 1 for pre-		Week ended Nov. 5, 1921. City.		Week ended Nov. 5, 1921.	
•	vious years.	Cases.	Deaths.		vious years.	Cases.	Deaths.
A labama:				Kansas—Continued.		,	
Birmingham	3	1	l	Lawrence	0	2	
Mobile		2.		Topeka	1	1	
Arkansas:	1			Kentucky:			1
Fort Smith	3	1		Covington	1	1	1
California:				Lexington Louisville	0 1	1	l
Los Angeles	5		1	Louisville	2	3	2
Sacramento	1	1		Louisiana:	_		•
San Bernardino	0		1	Monroe	0		1
San Diego	0		1	New Orleans	3	2	2
San Francisco		2		Maine:			l .
Santa Cruz	1	1		Portland	1	1	
Colorado:			l i	Maryland:	1		_ ا
Denver	0	3		Baltimore	16	4	2
Pueblo	2	1		Cumberland	0	1	1
Trinidad	0	1		Massachusetts:		_	1
Connecticut:			1 1	Arlington	0	2	
Bridgeport		1		Boston	3	3	• • • • • • •
Greenwich	0	1		Cambridge	1		
New Haven	2	1		Lawrence	0	1	
Delaware:				Lynn	0	1	
Wilmington	1	2		Watertown	ő	. 1	
Georgia:				Worcester	יי	•••••	
Atlanta	0	1		Michigan:	8	9	
Idaho:	ا ما			Detroit	î	í	
Pocatello	0	1		Flint	ō	i	
Illinois:	1	2		Jackson	ŏl	i	
Aurora	0	í	•••••	Kalamazoo		2	
Champaign Chicago	10	าเ๋		Morganetto	ŏ	ĩ	
Danville	10	2		Marquette Minneapolis	. 3	î	
Decatur	ŏ	. î		Minnesota:	١	•	•••••
La Salle	ŏ	î		St. Paul.	1	4	1
Indiana:	· •	•		Virginia	ōl	ī.	
Bloomington	0	1		Missouri:	- 1		
Hammond	ŏ	ī		Kansas City	` 1	1	2
Huntington		2		St. Louis	1Ō	- 3	
Kokomo		ĩ		Montana:	- 1		
Richmond		2		Great Falls	. 0	- 2	
South Bend	Ō	ī		New Hampshire:	- 1		
Kansas:	ا ا	•	· · · · · · ·	Portsmouth	0	1	
Coffeyville	1	1	l	New Jersey:			
Fort Scott		3		East Orange	0	1	
Hutchinson	ŏ	ĭ		Jersey City	1	1	
Kansas City	Ŏ	ī		1			

# TYPHOID FEVER—Continued.

City.	Median for pre- vious		ended 5, 1921.	City.	Median for pre- vious	Week ended Nov. 5, 1921.	
	years.	Cases.	Deaths.		years.	Cases.	Deaths
New York:				Pennsylvania—Contd.			
Albany	3	2		New Castle	0	2	l
Buffalo	i i	1 2	1	Philadelphia	1 12	6	1
Lockport	Ī	1 7		Pittsburgh	2	i	
New York	31	18	2	Scranton		1	
Peekskill	0	l ĭ.	_	York	ĺŏ	ī	
Rochester	l ĭ	l i		Tonnessoo	1	_	
Syracuse	ō	3		Nashville	1 4	2	
Watertown		3		Texas:		_	
North Carolina:	, ,			El Paso	3	4	
			1	Utah:		-	<b>-</b>
Salisbury			1	Salt Lake City	2	3	Ι,
Ohio:		3	1	Vermont:		9	,
Akron	1	3		Vermont: Rutland			l
Ashtabula		1			0	1	
Barberton	0	1		Virginia: Alexandria			1.
Canton	0	1	1	Alexandria	. 0		
Cleveland	4	7		Danville	0	1	
Cleveland Heights		3	l	Petersburg.	0	2	
Columbus	1	2	: 1	Portsmouth		. 5	
Columbus. East Cleveland	l ō	1		Richmond	3.	. 1	
Middletown	0	1		Washington:			l
Portsmouth.	Ŏ	ī		Seattle	l o	2	
Sandusky		2		Tacoma	0	1	
Toledo	ž	9	2	West Virginia:	-	-	
Youngstown		2	2 2	Fairmont	0	1	1
Pennsylvania:	ا " ا	~	_	Parkersburg	Ŏ	2	
Canonsburg		9		Wisconsin:		-	
Connellsville		í		Appleton	0	11	
Tomichana	ň	+		Kenosha	ŏ	11	
Harrisburg	ויי	i	[	Milwaukee	ĭ	2	
Jeannette		Ţ			1 1	2	
Johnstown	0	1		Sheboygan	1	1	

# YELLOW FEVER.

City.	Cases.	Deaths.
California: Los Angeles	1	1

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City.	Popula- tion Janu-			Diphtheria.		Measles.		Scarlet fever.		ber- osis.
	ary !, 1920, subject to		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:	150.050		7	١.					6	3
Birmingham	178, 270	47	3	1			4 3		١٠	•
Gadsden	14,737 60,151	16	٥				1 4			3
Mobile	43,464	18	6				-		i	ĭ
Montgomery Tuscaloosa	11,996	10	6			• • • • • • • • • • • • • • • • • • • •	1		i	-
Arizona:	11,000		•				•	••••	-	••••
Tucson	20, 292	6	l <u></u>	l					l	1
Arkansas:	,	1								
Fort Smith	28, 811	18	2	l					1	
Hot Springs	11,695	2	1				2			
Little Rock	64, 997		4	1			2			
California:	1 11		Ι.							
Alameda	28, 806	3	1					• • • • • •		:
Bakersfield	18,638	11	2		1			• • • • • •	1	2
Eureka	12,923	4	2		• • • • • •			• • • • • •	;-	••••••
Long Beach	55,593	. 6	2	····	• • • • • • •	• • • • • •		• • • • • •	38	16
Los Angeles	576, 673	159	104	, 1	6		25		20	10

•	Popula- tion Janu-	Total deaths	Diph	theria.	Mea	sles.	Sc. fe	arlet ver.	Tub culo	iber- losis.
City.	ary 1, 1920, subject to correction.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
California—Continued.				1 .	l			1		
Oakland Passadena	216, 361 45, 354	57	23 10	1	<b> </b>		10	•••••	8	3 2
Kichmond	45, 354 16, 843	0	4							
Riverside	10 341	· 7	10	i		<b> </b> -	2		2	2 1 1 5
Sacramento San Bernardino	65, 857 18, 721 74, 683	19	10			•••••			· · · · ·	] 1
San Diego	74,683	30	4	i			2		6	5
San Francisco.	508, 410 15, 485	139	60				.5	}	22	16
Santa Ana Santa Barbara	19, 441	6	2							a
Santa Cruz	19,441 10,917	2	-1							
StocktonVallejo	40, 296 21, 107	10 2	20	2			22			·
Colorado:	21,107	1 1					1 *	i	1	i
Denver	256, 369	74	14	2	1		9			10
PuebloTrinidad	42, 908 10, 906	·····	10	1	• • • • • •	• • • • • •	3			
Connecticut:	10, 500		ľ		• • • • • • • • • • • • • • • • • • • •	•••••				
Bridgeport,	143,538	30	15	1			7		2	1
Bristol	20,620	1 3	;-			• • • • • •				
Fairfield	11,238 11,475 22,123	2			i		i		i	
Greenwich	22, 123		<b> </b>		1	•••••	1		···· <u>·</u>	
Meriden	29, 842 10, 193	2	4			• • • • • •	2	·····	3	1
New Haven	162,519	38	7			•••••	6		6	2
New London Norwalk Norwich	25,688	8	1						1	
Norwich	27, 700 29, 685	5 4		·····			····i			1
Stonington	27,700 29,685 10,236	i								
Delaware:			٠.				4	İ	l	١ .
Wilmington District of Columbia:	110, 168	21	4		•••••	• • • • • •	_	• • • • • • • • • • • • • • • • • • • •		2
WashingtonFlorida:	437, 571	116	49	4		•••••	10	•••••	29	5
Tampa	51, 252	6	4				• • • • •		2	2
Georgia: Atlanta	200,616	51	16	3	!		8			2
Augusta. Brunswick. La Grange.	52, 548 14, 413 17, 038	•••••	2			•••••	3			
La Grange	17, 038	3 1	·····2							
MaconRome	52 005 1	. 8	4				1			
Rome	13, 252 83, 252 10, 783	35	3 2			•••••	3 6			
Valdosta	10, 783	35	z				2			
Idaho:			_							
Pocatella	15,001	3	7		1		• • • • • • •		• • • • • •	•••••
Alton	24, 682	7					1		4	
Aurora	36, 397 28, 725	16	12 8	1	ì	•••••	2		5 2	·····i
BloomingtonBlue Island	11, 424	·····2	12	i						
Centralia.	11, 424 12, 491 2, 701, 705	9				;.				
Chicago Chicago Heights. Cicero. Danville	2, 701, 705 19, 653	553 2	293	15	17	1	112	3	224	34
Cicero.	44, 995	8	14		···i		5			···i
Danville	33, 750	11	3				4		2	2 2
Decatur. East St. LouisElgin.	43, 818 66, 743	7 12	19	-	· • • • •   •	•••••	6			z
Elgin	27, 454 37, 215	4	5				ī			
Evenston	37, 215	4	7	-	;- -		5		¦	•••••
Galesburg	19, 669 23, 834	3	5	•••••	1 .		6			····i
Freeport	23, 834 15, 713	8	i'							····- <del>-</del>
Kewanee	16, 023 13, 059		3	•••••	1		2	•••••	1	•••••
Matter	13, 552	6	13						····2	i
MBILOUII	22, 232	- 1	3		i .		i			
La Salle	39, 830	• • • • • • • •			- 1-					
Pekin	39, 830 12, 083		4				1 3			·····i
Oak Park Pekin Peoria. Quincy Rock Island	39, 833 12, 083 73, 121 35, 978	21 11 12					1 3 4		3	1 1 1

	Popula- tion Janu-	Total deaths	Diph	theria.	Mea	asles.		rlet er.		ber- osis.
City.	ary 1, 1920, subject to correction.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Indiana:			1						İ	
Bloomington	11, 595 24, 277	2	1					ļ		1
Elkhart	24, 277 86, 549	20	1 14				2			••••
Fort WayneFrankfort	11 585	1 22	2							
· Garv	55, 378 36, 004	22	9 5				6			
Hammond Huntington	14,000	4	8				5			
Indianapolis	314, 194	73	68	1	21		11		8	9
Kokomo	30, 067 22, 486	73 3 7 4 6	1 5						1	1
La Fayette	21,626	4	1	l	::::::		i			l
мапош	23, 747	6	3				; .			····;
Mishawaka	15, 195 36, 624	5 10	5 2	····i	<u>.</u> .		1		2	1 2
Muncie	20,705	3 7	l				1		<b> </b>	
South Bend.	l 70.983	7	2			• • • • • •	4		4	
Terre Haute	66, 083	18	34	1			. *		١ .	
Burlington	24, 057	5	1							
BurlingtonCedar Rapids	45, 566 36, 162	4	3 10				1			
Council Bluffs	56,727		1				4			
Des Moines	126, 468		22				16			
Dubuque	39, 141		6				8 2			
Marshalltown Mason City Muscatine	15, 731 20, 065	5	····i		i		4			
Muscatine	l 16.068	4					1			
Ottumwa	23,003 71,227		33	····i			4 8			
Waterloo	36, 230		4				5			
Kansas:				l	l	l		1	1	
AtchisonCoffey ville	12, 630 13, 452	3	3 2				i		l <del>.</del> .	
Fort Scott	10, 693	3	111				2			
Hutchinson	23, 298 101, 177		16 3 <del>0</del>	1		• • • • • • •	1 7	•••••	2	•••••
Laurence	12.456	2	3	i			7 3			
Leavenworth	16, 912	<u>-</u> -	8				1			
Parsons	16,028 18,052	5 5	10							
Sauna	18,052 15,085	5 7	2						<u>.</u>	
Topeka	50, 022 72, 128	19	49 45	1	1	• • • • • •	3 32		2	
· Wichita Kentucky:	12, 120	1	30		• • • • • • • • • • • • • • • • • • • •	•••••			•••••	
Covington	57, 121	18	4		1		6	·····	····i	2 2
LexingtonLouisville	41,534 234 801	18 47	6 49	•••••	5		4		ıi	4
Owensboro	234, 891 17, 424 24, 735		28				- 1		1	ļ
Paducah	24,735		4				2			
Monroe	12,675 387,219	4	<b> </b>							<u></u>
New Orleans	387, 219	130	15		2		4	• • • • • • •	23	17
Maine: Auburn	16,985	8	1				4			1
Bangor	25,978 14,731	l	Ī				1		2	
Bath	14,731	3					•••••		• • • • • •	
BiddefordLewiston	18,008 31,791 69,272	7	i						3	
Portland	69.272	12	19	1			11		• • • • • •	2
Waterville	13, 351			•••••					• • • • • •	• • • • •
Maryland: Baltimore	733, 826 29, 837	185	35	2	8		33		13	12
Cumberland	29,837	8	5		• • • • • •		11		•••••	1
Massachusetts: Adams.	12,967	2	<b> </b>	<u>   </u>			8			
Amesbury	10,026	5 1	ļ				•••••			· · · · · •
Arlington	18,065		·····	•••••	1		• • • • • •		•••••	i
Belmont	12, 967 10, 026 18, 665 19, 731 10, 749	4	4	i						
Beverly	22, 561 748, 060	5	70	$ \cdots_{\mathbf{i}} $			2 59	$ \cdots_{\mathbf{i}'} $	57	18
Boston	748,060	176	70	. 1	48	·'	28	. 1	31	19

	Popula- tion Janu-	Total deaths	Diph	theria.	Me	asles.		arlet ver.	Tu	iber- losis.
City.	ary 1, 192), subject to correction.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases	Deaths.
Massachusetts-Continued.	1	İ						l		
Braintree	10, 580	1 7 31	ļ <u>.</u> .	ļ	<b></b>	ļ				
Brookline	37, 748 109, 694	7	5				2 7		·····	····-
Cambridge Chelsea Chicopee Clinton	43, 184	8	1	l	i		4		2	l
Chicopee	43, 184 36, 214	3	10				4			
Clinton	12,979 11,108	. 6	4		•••••					••••••
Dedham	10, 792 11, 261	3	Ī <del>.</del>					i		
DedhamEasthampton	11,261	<u>-</u> -	1.		1					
Everett	40, 120 120, 485	7 28	····i			•••••	3	·····	8	2
Fall RiverFramingham	17,033	2	i,						1	1
GardnerGreenfield	16, 971 15, 462	4 2	····i				1		2	2
Haverhill	53, 884	าเ	4				i			
Holyoke	60.203 I	16	2	i	1				4	i
LewrenceLeominster	94, 270 19, 744	23	5	1	2			•••••	3	1 1 2 2 1
Lowell	112, 479	4 28	4				····i		1 4	2
Lvnn	99,148	28 20 10	9	1	i				4	2
MaldenMedford	49, 103 39, 038	10 9	8		14		1 1	·	;-	1
Melrose	18 204	6	3		14				i	
Methuen	15, 189	4								i
Natick New Bedford	15, 189 10, 907 121, 217 15, 618	25	9	····i		• • • • • •	4	• • • • • •	2	3
Newburyport	15, 618	4			•••••	•••••		•••••		_
Newton		9	12						i	i
North Adams	22, 282 21, 951	3 11	17			•••••		•••••		
North Adams Northampton Norwood	12,627	7							i	•••••
	41,751	11	4				2			
Plymouth	13,045	2 5	····i		5		••••2	•••••	•••••	
PlymouthQuincy Salem.	47, 876 42, 529		1				2		2	
	10.874	2	2 7				1			•••••
Somerville Southbridge Springfield	93,091	31 6	1		2		7	1	3	•••••
Springfield	14, 245 129, 563	19	8				6		i	ï
Taunton	37, 137 13, 025	6 5 0 4 3 3 2 1	4 2				1		• • • • • •	• • • • • •
Wakefield Watertown	21, 457	8	2		····i'					•••••
Webster	21, 457 13, 258	4								
West Springfield	13,443	3	···· <sub>2</sub> ·						• • • • • •	1
Westfield	18,604 15,057	2								•••••
Winthrop	15, 455 16, £74	ī			i					•••••
Woburn	16, 574 179, 754	3 41	5	····i			8			
Michigan:	· · · · · · · · · · · · · · · · · · ·	24	ျ	- 1			- 1	7	•	-
Ann Arbor	19,516 12,233	16	2	1			1		1	•••••
Benton Harbor Detroit	993 739	189	94	9	39		58	····2	38	16
Flint	993,739 91,599 137,634 48,615	16	21	2			20			e
Grand Rapids	137,634	25 6	12	2			2			•••••
Holiand	12,166	1 1	6 2				3			•••••
Tronwood	15, 739	2					1 .			i
Jackson Kalamazoo	48,374 48,858	8	6 16	···i	•	• • • • • •	14			····i
Marquette	19 718 1	2 6 20 2 5 9			i		9		1	1
Pontiac	34,273	5	2		Ĩ.		2		1	2
Port HuronSault Ste. Marie	34,273 25,944 12,696	9	2		····· ·	·····	1			
Minnesota:		1					*			•••••
Austin	10, 118 98, 917 15, 089 380, 582 13, 722	2					إ.			1
Hibbing	95,917 15.099	14	11	1	1		2			
Minneapolis	380, 582	63 11	64	2	2		53		32	6
Rochester St. Paul	13,722	11 50	18	••••• •	····i	·····	24		12	•••••
Winona	234,595 19,143	4	2		i		8	i		•••••

	Popula- tion Janu- ary 1, 1920,	Total deaths Diphtheria. Measles. Scarlet fever.		Cases.	Cuber- ulosis.					
City.	subject to	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	1 1 344 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Deaths.
Missouri:	10.050	_					١.			
Cape Girardeau	10,252 11,686	7	6				1 1		i	1
Independence. Joplin Kansas City. St. Joseph.	29,855 324,410 77,939	l	. 3	1			. 1			
Kansas City	324,410 77 020	107	61 14	3	2		12 13		1	6
St. Louis	772,897	43 174	84	6	i		14		34	6 2 13
Springfield	772, 897 39, 631	11		. 1	ļ		ļ			1
Montana: Billings	15, 100	2	l	1	l	l	l	1	1	
Butte	41.611	13	i	1					i	
Great Falls	24, 121 12, 668	13 7 7	4				2		2	1
Missoula	12,008	. 7								
Nebraska: Lincoln	54,934	. 8	4	<b> </b>			1	l	1	
Omaha	54,934 191,601	51	47	1	3		2			1
Nevada:	12,016	. 5		İ			1		1	
Reno New Hampshire:						•••••	1 -			•••••
Rorlin	16, 104 22, 167 13, 029	. 3 9			1					
Concord	22,167	9					3			
Keene	11 213 1	2		1						
Nashna	28,379 13,569	2 5	1	ļ				ļ		
Portsmouth	13,569	• • • • • • • •	4	1	1		1			· · · · · •
New Jersey: Asbury Park	12,400	3	l				1		l	l
Atlantic City	50,682	8								
Atlantic CityBayonneBelleville	76,754		2				3		2	
Bloomfield	15,660 22,019	<u>2</u>	·····2		···ii		2			
Clifton.	26, 470 50, 710	1	4				1			
CliftonEast OrangeElizabeth	50,710	7	· · · <u>: :</u> ·				1			
Englewood	95,682 11,627	i	15		6		10		2	1 1
(fartield	19, 381	î	i							
Gioncester City	12, 162 17, 667		7					,		
Harrison	15, 721	2	. 1	•••••	1		•••••	• • • • • •		
Hoboken	68, 166	13	2		i		4			i
Irvington Jersey City. Kearny	25, 480		.1			• • • • •	2	• • • • • • •	;;.	
Jersey City	297, 864 26, 724	5	19	• • • • • •	6	•••••	4		19	•••••
	28 X10 I	8					···i		1	
Morristown	12, 548	6					3		1	1
Morristown New Brunswick Newark Orange Passaic	12, 548 32, 779 414, 216 33, 268	6 75	1 14	• • • • • •	13	• • • • • •	29		16	6
Orange.	33, 268	9	'n				6			1
Passaic	03. 824	8	1 2				3			2
Paterson Perth Amboy Phillipsburg	135, 866 41, 707	8	6		1 2	• • • • • •	····i	;-	9	•••••
Phillipsburg.	16, 923	3	5 2	····i						••••••
Plainneid	16, 923 27, 700	3 7 5 1	3				2			
RahwaySummitTrenton	11,042	5	4							•••••
Trenton	10, 174 119, 289		9		i		2		3	3
West Hoboken	119, 289 40, 068	4	ĭ				2		1	
West New York	29, 926	5 2		• • • • •			····i·		1	• • • • • •
West Orange New Mexico:	15, 573	2		•••••			- 1		••••••	•••••
Albuquerque	15, 157	9	2	1		]			4	. 2
Now York		ļ	11				2	l		
Auburn	36. 192	8	2				1			····i
Albany	113, 244 36, 192 506, 775 22, 987	123	33	5	1		26	3	17	8
Conces	22, 987	7 11	3	····i	2		····i	•••••	····i	• • • • • •
Elmira	45, 305 14, 648									
Glens Falls	16, 628	5								•••••
Hornell	15, 025	2	[-ړ		.		••••• •	•••••	1	•••••
IthacaJamestown	17, 004 28, 917 17, 918	3 5 2 6 7 5	6 7		····i·		····i			i
Leckawanna	17, 918	5	3 !		٠, ، ،		-i		···i	

	Popula- tion Janu-	Total deaths	Diph	theria.	Me	sles.	Sea	riet er.	Tub culos  \$\frac{3}{8} \frac{3}{8} \frac{3}{8} \frac{1}{8}	ber- osis.
City.	ary 1, 1920, subject to correction.	from all causes.	Cases.	Deaths.	Cases.	Desths.	Cases.	Desths.		Desths.
New York—Continued.										
Little Falls	13, 029 21, 308	2	2		····i	•••••	1			
LockportMiddletown	18, 420		1		î		2			
Middletown Mount Vernon Newburgh	18, 420 42, 726	9	2			<b></b>			1	·····
New York	30, 366 5, 621, 151	1, 181	203	17	68	2	146	9	1269	1 99
Niagara Falls	au. 700	10	3	1		<b> </b> -	10			
North Tonawanda Ogdensburg	15, 482 14, 609	9	5			l	····	•••••		····-
Olean	20, 506	2	5				i			
Peekskill	15, 868	3	1						2	
Port Chester	16, 573 35, 000	2 12	1 2	····i	1	•••••	6			
Rochester.	295, 750	74	28	ī			3		14	2
Rome	26, 341	6	. 1							
Schenectedy	13, 181 88, 723	3 17	3	i			7	i	2	
Saratoga Springs Schenectady Syracuse	13, 181 88, 723 171, 717	43	52	2	4		21			1
Troy	72.013	19 9	2				1		4	i
Watertown	31, 285 16, 073 21, 031	4								
Watervliet White Plains	21, 031	1 6					1		1	
Yonkers North Carolina:	100, 226	22	5	1	4		8			
Charlotte	46, 338	18					4		2	3
Durham	46, 338 21, 719	1	6				1			
Greensboro	19, 861 24, 418	4 6	2				····i			·····i
RaleighRocky Mount	24, 418 12, 742 13, 884	6	ļ <u>.</u>							ī
Salisbury Winston-Salem	13, 884	.8								1
Winston-Salem North Dakota:	48, 395	18	٥				6	1	3	1
Fargo	21,961	0	<u>.</u> -				1			· · · · · ·
Grand ForksOhio:	14,010		2			•••••				<b>-</b>
Akron	208, 435 22, 082	34	24 1		1		25			•••••
Barberton	18,811	6	2						i	i
Bucvrus	10, 425 87, 091	1	<u></u>				4			······
Ca ton. Chillicoth	87,091 15 831	27 3	21	3			4			
	15,831 401,247	104	41	2	12		9	1	12	7
Cleveland Heights	796, 836 15, 236		63		14		· 61			• • • • • •
Columbus.	237.031	59	42	ı ï			11		4	3
	10,847 152,559 27,292 17,021		1							<b>-</b>
Dayton East Cleveland Findlay	152,559 27,292	23 0	4		1		4			• • • • • •
Findlay	17,021	3							1	
Fremont	12,468	1	1 9				2 3			· · · · •
Ironton.	39,675 14,007	7 2								· · · · · •
Kenmore	12,683		2				···· <u>·</u> ·			· · · · · •
LakewoodLan:aster	41,732 14,706	6 7	2 3				7			····i
Lima	41,306	6	23		i					
Lorain	37,290		5 2	1			4		1	• • • • •
Mansfield	27, 824 27, 891	1	10				5			
Marion. Middletown. Newark Niles. Norwcod.	23, 594	1	6	i			1			
Newark	26, 718 13, 080	12 1	19	1			8	1	•••••	1
Norwcod.	24,966	4								
Piqua.	15,044	2		ļ <sub>e</sub> .			;-		1	1
Piqua. Portsmouth. Sandusky. Springfield.	33, 011 22, 897	10	9	. 2	1		1 2		····i	1
~#UUUNDJ	60,840	16	52	ï	i		5		1	
Springfield									2	
Steilben ville	28,508	6			•••••				- 1	a
Springfield Steubenville Toledo Youngstown	28,508 243,109 132,358 29,569	6 71 32 10	65 7 <b>2</b>	4			4 12 3		2	6

Pulmonary tuberculosis only.

### CITY REPORTS FOR WEEK ENDED NOV. 5, 1921—Continued. DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS-Continued.

	Popula- tion Janu-	Total deaths	Diph	theria	. Me	asles.	Sca	arlet ver.	Tu	ber- osis.
City.	tion Janu- ary 1, 1920, subject to correction.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Oklahoma: Oklahoma City	91,258	18	11	2			. 6			. 1
Tulsa	72,075		16				4			<u>-</u>
Oregon: Portland	258, 288	51	42	1	2	ļ	13		4	5
Pennsylvania: Allentown	73,502 60,331 12,730 12,181		14		ļ		1	<b> </b>	7	
Altoons	60,331		5 4		.					·
Ambridge. Berwick	12,730		2							
Bethiehem	1 50,358		5			:::::	2			
Braddock	20,879		1				3		1	
Butler	23,778 10,632		····i				8			
Canonsburg Carbondale	18 640		i							
Carlisle	10, 916		1							
Chester	58.030		1				····- <u>:</u>			
Donora	13,804 14,131		9 1		1		1			• • • • • • •
Dubois.	13.681		i							
Duquesne	19,011		6				14			
EastonErie	33, 813 93, 372		1 5						2 2	
Farrell	15,586		1		30		3		_	
Harrisburg	75.917		1							
Hazleton	32,277 10,627		1		1		1			
Jeannette Johnstown	67,327		2 11		4					
Lancaster	53, 150		15				4			
Lebanon	24,643		2 3				2 3		4	
McKeesportMcKee's Rocks	45,975		3   8		4		3		2	•••••
Meadville	16,713 14,568						9		•••••	•••••
Mount Carmel	17,409		1 2 2 1 1 2 2 1							
Nanticoke	22,614		2							•••••
New Castle	44,938 11,987	•••••	1	• • • • • •		• • • • • •	18 1		1	• • • • •
New Kensington Norristown	32,319 14,928		î,				1			
North Braddock	14,928		2				1			
Oil CityOld Forge	21,274 12,237 10,236 1,823,158	• • • • • • • • • • • • • • • • • • • •	2				2		····i	• • • • • •
Olyphant	10, 236		î							
OlyphantPhiladelphia	1,823,158	415	64	6	3		121		64	39
Pittsburgh	588, 193 18, 497	•••••	20		3	•••••	12		21	• • • • •
Plymouth	16, 500		1 2							
Pottstown	16,500 17,431		1				18			
Pottsville	21,876		1 17	•••••	1 2		····i		···io	• • • • •
Scranton	107,784 137,783		5						6	
Shamokin	137,783 21,204		5 1				2 7			
Sharon Shenandoah	21,747		1		2		7			• • • • •
Steelton	24,726 13,428		1 1						····i	• • • • • •
Sunbury	13,428 15,721		4 2		i					
Uniontown	15.692 1		2 4							• • • • •
Warren Washington Wilkes-Barre	14, 256 21, 480	•••••	4				1 2 3		····i	•••••
Wilkes-Barre	21,480 73,833		10 i				3		3	• • • • • •
WILLIAMSDOTT	36.198.1		3 5				4	.		• • • • •
Woodlawn York	12,495 47,512	••••••	5	•••••	····i		1 2	• • • • • •   •		• • • • •
Rhode Island:					-		-			
Cranston	29,407	4	1					-		• • • • •
Cumberland (town) Newport	10,077 30,255	6	1 5	•••••			8			·····j
Pawtucket	30, 255 64, 248	4	2				2 1			
Providence	237, 595	66	6		2		2			7
South Carolina: Charleston	67,957	18	5	ł			6		1	2
Columbia	37,524		12				8			<del>.</del>
South Dakota: Sioux Falls	- 1	4	1		1	- 1	3	- 1		
OIVIA FRUS	25, 176	<b>4</b> )	1 (		1	•••••	<b>3</b>  .		•••••	•••••

# CITY REPORTS FOR WEEK ENDED NOV. 5, 1921—Continued. DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

	Popula- tion Janu-	Total deaths	Diph	theria.	Me	asles.		riet er.		ber- osis.
City.	ary 1, 1920, fro subject to a	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths	Cases.	Deaths.
Tennessee: Knoxville Memphis	77,818 162,351 118,342	67 40	3 18 12	. 1	1		 5 2		2 1	2 4 1
Texas: Beaumont	40,422	7	15				l			1
Corpus Christi	10,522 158,976 77,543	53 28	1 8 11	2			5 8		i	i
Fort WorthGalveston	106, 482 44, 255	8	2 3	2		•••••	4		i	<del>-</del>
Houston	138, 076 38, 500	30 11	6	1				•••••		12
Salt Lake City Vermont:	118, 110	33	5	2	1		15			1 1
BurlingtonRutlandVirginia:	22, 779 14, 954	6 2	7		····i		2 1	•••••	•••••	1
Alexandria Danville	18, 060 21, 539 29, 956	4 6 5	2 7	····i	17			•••••	1	
Lynchburg Norfolk Petersburg	115,777	10	14 2				1		2 2	2
Portsmouth	31, 002 54, 387 171, 667 50, 842	18 49 14	7 16 16		ï		15 4	•••••	1 4 1	2 3 1
Washington: Aberdeen	15, 337 315, 652		2 5				<u>2</u>		8	····•
Seattle	104, 437 96, 965	••••••	6 5		i		11 1		3	
Vancouver	12, 637 15, 503 18, 539	••••••	4		·····i		1			· · · · · · ·
West Virginia: Bluefield	15, 282	4	6 7				2 3			i
Charleston Fairmont Huntington	39, 608 17, 851 50, 177	6 1 22	1 13	1 2			2		•••••	2
Martinsburg Moundsville Parkersburg	12, 515 10, 669 20, 050	4 5	1 1 7				6 1			
Wheeling Wisconsin:	54, 322	20	8	2	1		3	1		•••••
AppletonBeloitEau Claire	19, 561 21, 284 20, 880	4	1				2		1	····••
Fond du Lac	23, 427 31, 017 18, 293	3 5	2 6	····i			···i			
Kenosha La Crosse	40, 472 30, 363	1 2	12				4		1 15	
Madison Milwaukee Oshkosh	38, 378 457, 147 33, 162	······································	3 44 5		3	:	31 1		13	i
RacineSheboyganStevens Point	58, 593 30, 955 11, 371	9	10 7 9	1			20			
Superior	39, 624 18, 661	6					10		3	
Wyoming: Cheyenne	13, 829	3					1			····•

### FOREIGN AND INSULAR.

#### YELLOW FEVER ON VESSEL.

Steamship "Saramacca"-New Orleans - From Belize, British Honduras.

A fatal case of yellow fever was reported November 12, 1921, at New Orleans, La., on the steamship *Saramacca*, arriving from Belize, British Honduras.<sup>1</sup>

#### BRITISH HONDURAS.

#### Yellow Fever-Stann Creek.

Under date of November 21, 1921, one case of yellow fever was reported at Stann Creek, British Honduras, 30 miles from Belize. Patient left Belize November 12 and was taken ill in Stann Creek November 13.

#### CUBA.

#### Beriberi.

During the period October 11-20, 1921, four cases of beriberi were reported in Cuba. Of these cases, two occurred among military stationed at Habana and two in Sagua la Grande, Santa Clara Province.

#### Status of Smallpox.

On October 20, 1921, 307 cases of smallpox were reported remaining in Cuba. The cases were distributed by Provinces as follows: Camaguey, 158 cases; Habana, 4; Oriente, 137; Santa Clara, 8. There were reported during the 10-day period ended October 20, 1921, 10 deaths from smallpox.

#### Communicable Diseases - Provinces.

Communicable diseases have been reported in Cuba as follows:

#### Provinces.

		New cases reported, Oct. 11-20, 1921.							
Province.	Chicken pox.	Diphthoria.	Infantile tetanus.	Malaria.	Mensles.	Paratyphoid fever.	Poliomyelitis (infantile paralysis).	Smallpox.	Typhoid fever.
Camaguey	3 1 6	1 4 2	2	10 33 1 7 147 1	1 2	5 3 2	1	70 1 126	10 4 7 35 8
Total	10	8	3	199	3	13	3	198	64

<sup>&</sup>lt;sup>1</sup> For occurrence of yellow fever at Belize, British Honduras, see Public Health Reports, Aug. 26, 1921, p. 2084; Sept. 23, 1921, p. 2337; and Oct. 7, 1921, p. 2507.

#### JAMAICA.

#### Infectious Disease (Alastrim or Kaffir Pox).

The occurrence of new cases of alastrim or Kaffir pox in the island of Jamaica has been reported as follows: Week ended October 1, 1921, 48 cases; week ended October 8, 1921, 42 cases; week ended October 15, 1921, 137 cases; week ended October 22, 1921, 23 cases.

#### EPIDEMIC DURING 1920 AND 1921.

The occurrence of alastrim or Kaffir pox in the island of Jamaica was stated to have begun in April, 1920, and to have been seriously epidemic in form during nearly a year. In August, 1920, information was received of the prevalence of a disease resembling smallpox, later reported under the name of alastrim or Kaffir pox, with about 500 cases and three fatalities. From the beginning of the outbreak to November 27, 1920, about 5,000 cases were reported. From November 28 to January 1, 1921, 1,136 cases were reported, and during the period January 2 to April 30, 1921, 5,283 cases.

Information dated October 29, 1921, indicates that the prevalence of alastrim is steadily declining. The following figures are given for the period May 1 to October 22, 1921:

		r of cases orted.		Number of cases reported.		
Period.	Entire island.	Kingston and vicinity.	Period.	Entire island.	Kingston and vicinity.	
May 1-28	952 461	9	Aug. 28-Sept. 24 Sept. 25-Oct. 22	189 150	1	
June 28-July 30 July 31-Aug. 27	761 384	1	Total	2,897	11	

#### Quarantine Regulations -1921.5

Under date of November 1, 1921, the quarantine board of Jamaica issued a revised set of regulations governing vessels arriving at Jamaican ports. The regulations pertain to the rat guarding of all vessels while in port and to special rules applying to those vessels which have cleared from countries infected with plague, yellow fever, influenza, and smallpox.

#### Typhoid Fever-Kingston and Vicinity.

The occurrence of typhoid fever in Kingston and vicinity, Island of Jamaica, has been reported as follows: Week ended October 1, 1921,

<sup>6</sup> Public Health Reports, Apr. 1, 1921, p. 692.

<sup>&</sup>lt;sup>1</sup>Pub ic Health Reports, Nov. 11, 1921, p. 2810.

<sup>&</sup>lt;sup>1</sup> Public Health Reports, Dec. 31, 1920, p. 3193.

<sup>&</sup>lt;sup>2</sup> Public Health Reports, Jan. 7, 1921, p. 27; Jan. 14, 1921, p. 62; Jan. 28, 1921, p. 151.

<sup>&</sup>lt;sup>4</sup> Public Health Reports, Apr. 29, 1921, p. 964, and June 3, 1921, p. 1298.

Present: also rodent plague. Jan. 1-Oct. 20, 1921: Cases, 312; deaths, 134.

Kingston, 8 cases, in surrounding country 31 cases; week ended October 8, 1921, Kingston, 4 cases, surrounding country 40 cases; week ended October 15, 1921, Kingston, 2 cases, surrounding country 27 cases; week ended October 22, 1921, Kingston, 6 cases, surrounding country 30 cases.

#### MEXICO.

#### Plague-Infected Rodents-Tampico.

During the period November 6 to 12, 1921, four plague-infected rodents were reported found at Tampico, Mexico, making a total from January 1, 1921, of 298 plague-infected rodents found.

#### POLAND.

#### Typhus Fever-June 18-July 16, 1921.

During the period from June 18 to July 16, 1921, 1,500 cases of typhus fever with 96 deaths were reported in Poland.

#### RHODES.

#### Plague.2

During the period from September 29 to October 8, 1921, the occurrence of four new cases of plague was reported in the island of Rhodes.

# CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER. Reports Received During Week Ended Nov. 25, 1921.3

#### CHOLERA.

			<del></del>	· .
Place.	Date.	Cases.	Deaths.	Remarks.
China: Shanghai India Bombay	Oct. 10–16 Sept. 18–24	3	1	Chinese. Aug. 14-20, 1921: Deaths, 19,033
Rangoon Java:	Sept. 25-Oct. 1	1	1	
West Java— Lebak	Sept. 9–22	12	7	
Philippine Islands: Manila	Sept. 25-Oct. 8	10	3	
	PLA	GUE.		
Azores: St. Michael Island				Oct. 2-22, 1921: Cases, 25; deaths
Ribeira Grande	Oct. 2-8	. 5	2	<ol> <li>13.</li> <li>Occurring in vicinity of Ponts</li> <li>Delgada, at Relva, Ribeira</li> <li>Grande, and Santo Antonio.</li> </ol>

Colombo.. China:

Amoy..... Egypt..... Sept. 25-Oct. 1.

<sup>&</sup>lt;sup>1</sup> Public Health Reports, Nov. 11, 1921, p. 2810.

Public Health Reports, Nov. 11, 1921, p. 2811.

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

### Reports Received During Week Ended Nov. 25, 1921—Continued.

#### PLAGUE—Continued.

	PLAGUE-	-Conti	iuea.	
Place.	Date.	Cases.	Deaths.	Remarks.
Egypt—Continued.				
Cities— Alexandria Suez	Oct. 18-20 Oct. 18-19	4 2	1 1	
India: Bombay Madras Presidency	Sept. 18-24	9	5	·
Rangoon	Oct. 2-8 Sept. 25-Oct. 1	154 35	106 21	,
Indo-China: Saigon Italy:	Sept. 18-Oct. 1	7	5	Including surrounding country.
Naples Mexico:	Sept. 10-20	3		
Tampico	Nov. 6-12	ļ	<b></b>	4 plague-infected rodents found; total from Jan. 1, 1921, 298.
Rhodes (Island) Syria:	Sept. 29-Oct. 8		<b> </b>	
Beirut	Sept. 5-Oct. 8	7	·····	<u> </u>
	SMAL	LPOX.	₹°	
Brazil:				
Sao Paulo Canada:	Sept. 12-25	3		_
Manitoba— Winnipeg New Brunswick—	Oct. 23-29	2	ļ <u>.</u>	
St. Stephen Ontario—	Oct. 30-Nov. 5	2	ļ	
Ottawa Toronto	Oct. 30-Nov. 12 Oct. 30-Nov. 5	6 1		
Chile: Talcahuano	Sept. 1–30	2	1	
China: Amoy Chungking	Oct. 2–8 Sept. 25–Oct. 8		1	Oct. 9-15: Present. Present.
Nanking Cuba:	Oct. 9-15			Do.
Antilla Nuevitas	Oct. 30-Nov. 5 Oct. 31-Nov. 6	2 2		
Dominican Republic: San Pedro de Macoris	Oct. 23-29	4 12		•
Santo Domingo India	Oct. 14-19 Sept. 18-24	3	3	Aug. 14-20, 1921: Deaths, 56.
Bombay	Oct. 2-8	ğ	4	
Saigon	Sept. 18-24	1	1	
West Java— Batavia	Sept. 6-22	2 43	3 10	
Buitenzorge Krawang Tangerang	dododo	2		
Soekaboemi	Sept. 9-15	ĭ		Sant 00 Oct 00 1001; Sanc 0:
Panama				Sept. 20-Oct. 30, 1921: Cases, 3; 1 from Taboga Island, 2 from interior of Fanama; total from Jan. 1 to Oct. 30, 1921, 201
Poland				cases. June 19-July 16, 1921: Cases, 334; deaths, 38: statistics for Brest- Litovsk, Minsk, and Vilna not included.
Spain: Huelva	Aug. 1-31	<b>.</b>	1	
Tunis:	Oct. 15-21		1	

## Reports Received During Week Ended Nov. 25, 1921—Continued. TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Chile:	Sept. 1-30	1	1	
China:	1 -		1 1	
Antung Egypt:	Oct. 12-23	1		
Cairo Mexico:	Aug. 20-26	2	2	
San Luis Potosi Poland	Oct. 30-Nov. 5			Present. June 18-July 16, 1921; Cases
Syria: Beirut	Sept. 5-Oct. 8	1		June 18-July 16, 1921: Cases 1,500: deaths, 96; statistics for Brest-Litovsk, Minsk, and Vilna not included.
Union of South Africa:  Cape Province  Natal	Sept. 25-Oct. 1 do			Outbreaks. Do.
	YELLOW	FEVE	R.	
British Honduras: Stann Creek	Nov. 13	1		30 miles from Belize.
S. S. Saramacca	Nov. 12	1	1	At New Orleans, La., from Belize, British Honduras.

## Reports Received from July 2 to Nov. 18, 1921. CHOLERA.

#### Date. Cases. Deaths. Remarks. Place. China: July 3-Sept. 10.... Aug. 22-28..... 15 Cases: Chinese, 34; foreign, 3. Deaths, Chinese, 5; foreign, 3. Cases: Chinese, 23; foreign, 44. 37 Aug. 1-Oct. 2..... Aug. 14-20..... 67 10 Shanghai.... Swatow..... 1 Germany: East Prussia— Königsberg..... Oct. 10..... 3 1 Mar. 6-June 25, 1921: Deaths, 75,281. July 3-30, 1921: Deaths, 46,999. Aug. 31-Sept. 13, 1921: Deaths, 46,051. iö May 1-June 18.... June 26-Sept. 17... Bombay..... 11 Do..... 77 48 May 8-June 25.... 521 158 Calcutta..... 597 June 23-Sept. 24... July 10-Oct. 1.... Do..... Karachi.... 150 134 2 6 17 May 15-June 25... Madras..... June 26-Aug. 27... Apr. 24-June 25... June 23-Sept. 10... 13 Rangoon......Do..... 18 14 Jan. 1-31, 1921: Cases, 80: deaths, 15. May 29-June 12, 1921: Cases, 251; deaths, 202. Indo-China..... City— Cholon..... June 6-12..... May 9-June 12.... July 4-Sept. 17.... 65 105 44 96 Saigon..... Disseminated in neighboring Do..... Provinces. In January, 1920: No cases. January, 1920: Cases, 27; deaths, Province-Anam......Cambodia..... Jan. 1-31..... .....do...... 8 2 January, 1920: Cases, 13; deaths, 18 Cochin-China.....do.....do. January, 1920: No cases. Tonkin. .....do..... 12 Philippine Islands: May 22-June 25... July 3-Sept. 17.... Manila..... 33 2 Do..... Province-Batangas..... June 12-18...... 2 7 1 3 2

### Reports Received from July 2 to Nov. 18, 1921—Continued.

#### CHOLERA—Continued.

		1	•	
Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands—Contd.				
Province—Contd.		1	1	
Laguna	. June 19-25	. 1	1	
Do	July 3-9 June 12-18	.] 1	1	
Mindoro	. June 12-18	. 1	1	
Pampanga	. June 5-11	. 1	1	
Tarlac	. June 19-25	1 3	1 1	i e
Union Poland	. June 28-Aug. 13	,	1 1	Apr. 24-June 18, 1921; Cases,
1 VIBIIU	1			deaths, 1.
Baranowicze	. Aug. 18		l	Present.
Bialystok	.  July 25			Do.
_ Pinsk	. do			Do.
Russia	· ····			Jan. 1-Aug. 10, 1921: Case
Districts— Astrakan	Ton 1 Aug 10	E 199	l	78,011. City of Moscow, case
Black Sea	Jan. 1-Aug. 10 dodo	5, 132 3, 152		289. From Jan. 1 to July 13, 192
Kazan	Jan. 1-July 13	434		1,718 cases reported in Kuba
Kharkow	do	257		Territory.
Kursk	Ten 1_Ang 10	1 927		100.000,
Moscow	Jan. 1-July 13 Jan. 1-Aug. 10 Jan. 1-July 13 Jan. 1-Aug. 10	296		City, 192 cases.
Orel	. Jan. 1-Aug. 10	1,968		,
Rjasan	Jan. 1-July 13	129		
Samara	Jan. 1-Aug. 10	5, 315 7, 201 1, 160		
Saratow	.   QO	7,201		
Simbirsk	00	1,160		
Tambow	do	2,561 3,028		· ·
Ufa	do	5, 196		
Voronezh	do	3,621		
Petrograd	July 6	6,021		
Republics—	1	•		
Basikir	Jan. 1-Aug. 10	1,038		
KirghizTartar	do	5.687		
Tartar	do	1, 178 233		
Tchuvash	do			
Rostov-on-Don	June 1	747		Present on Orenburg-Tashken
	·			line, and at Cheljabinsk, Perm Petropavlosk, Ufa, and ir Smolensk and Vitebsk dis tricts during period under re port.
SiberiaTerritories—	do	1, 264		Far Eastern Republic.
Azerbeidjan	Jan. 1-Aug. 10	614		
Don	do	2,006		•
TurkestanUkraine	do	5, 583		
Ukraine	do			Very prevalent; reports incom
iam:	1			
MAIII.				plete.
Rangkok	Ane 94-Tune 11	10		piece.
Bangkok	Apr. 24-June 11	19	4 2	piete.
Bangkok	Apr. 24-June 11 June 26-Sept. 3	19 6	4 2	piete.
traits Settlements:	1			piete.
Bangkok. Do. traits Settlements: Singapore.	Apr. 24-June 11 June 26-Sept. 3 June 12-18	6	Ž	piete.
traits Settlements:	1	6	Ž	piece.
Singapore	June 12-18	6	Ž	piece.
straits settlements: Singapore	June 12-18	6 1 GUE.	Ž	piece.
Singapore	June 12-18	6 1 GUE.	1	
lgeria: Algiers	PLAC  Aug. 1-Oct. 10 May 31-July 3 May 31-Aug. 24	6 1 GUE.	1	Native district about 140 kilo
lgeria: Algiers. Aumale district Douar Megnine. Oran.	June 12-18	6 1 GUE.	1 22	
lgeria: Algiers. Aumale district. Douar Megnine. Oran. Sia Minor:	PLAC  Aug. 1-Oct. 10  May 31-July 3  May 31-Aug. 24  Sept. 20-30	GUE.  2 71 185 1	1 2 1 2 2 22 97	Native district about 140 kilo meters from Algiers.
lgeria: Algiers. Aumale district Douar Megnine. Oran. Smyrna.	PLAC  Aug. 1-Oct. 10 May 31-July 3 May 31-Aug. 24 Sept. 20-30 June 19-25	GUE.  2 71 185 1	1 2 1 2 2 22 97	Native district about 140 kilo
lgeria: Algiers. Aumale district Douar Megnine. Oran. sia Minor: Smyrna. Do.	PLAC  Aug. 1-Oct. 10  May 31-July 3  May 31-Aug. 24  Sept. 20-30	GUE.  2 71 185 1	1 2 1 2 2 22 97	Native district about 140 kilo meters from Algiers.
lgeria: Algiers	PLAC  Aug. 1-Oct. 10 May 31-July 3 May 31-Aug. 24 Sept. 20-30 June 19-25	GUE.  2 71 185 1	1 2 1 2 2 22 97	Native district about 140 kilo meters from Algiers.
lgeria: Algiers. Aumale district Douar Megnine. Oran. sia Minor: Smyrna Do. ustralia: New South Wales—	Aug. 1-Oct. 10 May 31-July 3 May 31-Aug. 24 Sept. 20-30 June 19-25 July 3-Sept. 3	GUE.  2 71 185 1	1 2 1 2 2 22 97	Native district about 140 kilo meters from Algiers. In suburbs.
lgeria: Algiers	PLAC  Aug. 1-Oct. 10 May 31-July 3 May 31-Aug. 24 Sept. 20-30 June 19-25	GUE.  2 71 185 1	1 2 1 2 2 22 97	Native district about 140 kilo meters from Algiers. In suburbs.
lgeria: Algiers. Aumale district Douar Megnine. Oran. sia Minor: Smyrna Do. ustralia: New South Wales—	Aug. 1-Oct. 10 May 31-July 3 May 31-Aug. 24 Sept. 20-30 June 19-25 July 3-Sept. 3	GUE.  2 71 185 1	1 2 1 2 2 22 97	Native district about 140 kilo meters from Algiers.  In suburbs.  Dead plague-infected rats found on wharves: 1 rat from vesse
lgeria: Algiers. Algiers. Aumale district. Douar Megnine. Oran. Sia Minor: Smyrna. Doustralia: New South Walcs— Sydney.	Aug. 1-Oct. 10 May 31-July 3 May 31-Aug. 24 Sept. 20-30 July 3-Sept. 3 Sept. 11-Oct. 8	GUE.  2 71 185 1	1 2 1 2 2 22 97	Native district about 140 kilo meters from Algiers.  In suburbs.  Dead plague-infected rats found on wharves: 1 rat from vesse from Brisbane.
algeria: Algiers. Algiers. Aumale district Douar Megnine. Oran. Sia Minor: Smyrna Do. ustralia: New South Wales— Sydney.  Queensland.	Aug. 1-Oct. 10  May 31-July 3 May 31-Aug. 24 Sept. 20-30  June 19-25 July 3-Sept. 3  Sept. 11-Oct. 8  Sept. 17-24	GUE.  2 71 185 1	2 1 1 22 97 1	Native district about 140 kilometers from Algiers.  In suburbs.  Dead plague-infected rats found on wharves: 1 rat from vessel from Brisbane. Plague rats found, 28.
lgeria: Algiers. Aumale district Douar Megnine. Oran	Aug. 1-Oct. 10 May 31-July 3 May 31-Aug. 24 Sept. 20-30 July 3-Sept. 3 Sept. 11-Oct. 8 Sept. 17-24 Aug. 23	GUE.  2 71 185 1	2 1 1 22 97 1	Native district about 140 kilometers from Algiers.  In suburbs.  Dead plague-infected rats found on wharves: 1 rat from vessel from Brisbane. Plague rats found, 28.
Algeria: Algiers Algiers Aumale district Douar Megnine Oran Isia Minor: Smyrna Do ustralia: New South Wales— Sydney Queensland	Aug. 1-Oct. 10 May 31-July 3 May 31-Aug. 24 Sept. 20-30 June 19-25 July 3-Sept. 3 Sept. 11-Oct. 8 Sept. 17-24 Aug. 23 Sept. 20	GUE.  2 71 185 1	2 1 1 22 97 1	Native district about 140 kilo meters from Algiers.  In suburbs.  Dead plague-infected rats found on wharves: 1 rat from vessel from Brisbane.

### Reports Received from July 2 to Nov. 18, 1921—Continued.

#### PLAGUE—Continued.

Braylia	Place.	Date.	Cases.	Deaths.	Remarks.
Horta   Sept. 4-10	Azores:				
St. Michael Island-   Aug. 6-12.   1   1   1   1   1   1   1   1   1	Fayal Island—		١.	l	·
Capelas		Sept. 4-10	1		1
Ribetra Grande	St. Michael Island—	Ang 6-19	١,	1	
Barail:	Ribeira Grande				10 miles from port of Ponts
Babla	Brazii:			1	Deigada.
Do.		May 15-June 18	3	3	
Maranhao	Do	July 31-Oct. 1	4	3	
Pernambuco	Maranbao	June 28		1	
Villa Nova   Sept. 11-Oct. 1   plague reported epidemic ding August, 1921, with deaths. Sept. 1-30: Epidem   Epidemic.	Pernambuco	Aug. 22-88	1	1	Tassitta 000 miles mest of Dabie
British East Africa:   Kenya Colony—   Apr. 24-May 21   June 26-Sept. 24.   Present	Pindobassu				plague reported epidemic dur- ing August, 1921, with 60 deaths Sept 1-30. Epidemic
Apr. 24-May 21	Villa Nova	Sept. 11-Oct. 1	l		Epidemic.
Risumu   Apr. 24-May 21	Dinish East Allica.	200			
Do.   Juine 26-Sept. 24   133   101   101   102   102   103   101   103   101   103   101   103   101   103   101   103   101   103   101   103   103   101   103   10	Kisumu	Apr. 24-May 21		.	
Do.   July 1-31.   41   30   27.00   30   30   30   30   30   30   30	Do	June 26-Sept. 24		.	
Do.   July 1-31	Uganda	Mar. 1-June 30	133	101	2,709 deaths during same pe
St. Vincent		July 1-31	41	30	Reports of inspectors, deaths, 230; reports of chiefs, deaths, 1,482.
Colombo	St. Vincent	Aug. 12-18	6	3	
Do.   June 28-Aug. 27.   5   5   7   cases rodent plague.	Celembe	Mary 9 Tuna 11			· ·
Chilet		Tune 26-Aug 27			7 cases rodent plague.
China: Amoy		vunc 20-rug. 21	· -	"	Cuses reache pragae.
Amoy	Iquique	Sept. 17	1		
Foochow		May 15-June 25	7	2	-
Foochow		July 3-Sept. 10			Sept. 11-24: Present.
Do.   June 26-Aug. 20.   38   27   Manchuria—   Harbin   May 3-22.   46	Foochow	May 15-21			Present.
Manchuria— Harbin       May 3-22       46         Ecuador: Oo       May 1-June 15       10       1         Do       July 16-Sept. 30       9       4         Bo       July 16-Sept. 30       9       4         Bo       July 16-Sept. 30       9       4         Bo       July 1-Oct. 11       48       12         Port Said       June 16-27       4       2         Do       July 1-Sept. 30       18       7         Suez       May 20-June 30       9       5         Do       July 10-Oct. 11       6       5         Province— Assiout       May 24-June 16       9       7         Do       July 10-Oct. 11       6       5         Province— Assiout       May 24-June 16       9       7         Do       July 10-Oct. 11       6       5         Province— Assiout       May 24-June 16       9       7         Do       July 10-Oct. 11       6       5         Girgeni- Boni-Souef 	Hongkong	Apr. 24-June 25		59	May 1-7, 1921: Plague rats found.
Harbin	Do	June 26-Aug. 20	38	27	
Guayaquil	Harbin	May 3-22	46		
Egypt.  City— Alexandria.  May 21–June 24. 10 3, 1921; 133.  Do. July 1-Oct. 11. 48 12  Port Said.  June 16-27. 4 2  Do. July 1-Sept. 30. 18 7  Suez.  May 20–June 30. 9 5  Do. July 1-Oct. 11. 6 5  Province—  Assiout.  May 24–June 16. 9 7  Do. July 30. 1 1  Beni-Souef.  July 10. 1 1  Gharbieh.  June 2-25. 7 7  Do. July 9-Sept. 1 9  Girgeh.  July 6-13. 5 4  Minneh.  May 23–June 10. 2 1  Minneh.  May 23–June 10. 2 1  Minneh.  Do.  July 13–Aug. 18 7  Greece:  Pircus.  Sept. 23. 3  Hawaii:  Honokaa.  Kalopa.  July 15–19. 1 1  India.  Bombay.  May 1–June 25. 287  Do.  July 20–Sept. 17. 69 50  Calcutta.  May 8-June 18. 11  Do.  July 20–Sept. 17. 69 50  Calcutta.  May 8-June 18. 11  Do.  July 21–Aug. 6 23 21  Central Provinces.  Aug. 14–20. 27 16  May 8-June 25. 18	Guayaquil	May 1-June 15			
City— Alexandria.    May 21-June 24.   10   3   3	Do	July 16-Sept. 30	9	4	Plague rats found: Aug. 1-Sept.
Alexandria May 21-June 24. 10 3 12   Do. July 1-Oct. 11. 48 12   Do. July 1-Sept. 30. 18 7   Sue7. May 20-June 30. 0 5 5   Do. July 1-Oct. 11. 6 5   Province— Assiout May 24-June 16. 9 7   Do. July 30. 1   Beni-Souef July 30. 1   Gharbieh June 2-25. 7   Do. July 9-Sept. 1 9   Girgeh July 6-13. 5 4   Minieh May 23-June 10. 2 1   Do. July 13-Aug. 18 7 3   Greece: Pircus. Sept. 23. 3   Hawaii: Honokaa.   Kalopa. July 15-19. 1 1   Daauhau. May 1-June 25. 287   Do. June 20-Sept. 17. 69 50   Calcutta May 8-June 18. 11 11   Do. July 20-Sept. 17. 69 50   Calcutta May 8-June 18. 11 11   Do. July 21-Aug. 6. 23   Central Provinces Aug. 14-20. 27 16   Karachi May 8-June 25. 18 14	Egypt				Jan. 1-Oct. 13, 1921: Cases, 308;
Port Said	City_	Mars 01 Trans 04		ا ما	deaths, 132.
Port Said June 16-27 4 2 2 14 2 2 14 2 2 14 2 2 14 2 2 2 2 2	Alexandria	May 21-June 24			
Sue 7.   May 20-June 30.   9   5   5   Province —   Assiout   May 24-June 16.   9   7     7	Port Said	July 1-00t. 11	40	12	
Suez.   May 20-June 30   5   5	Do	July 1-Sept. 30		1 5	
Do.   July 1-Oct. 11   6   5	Suez	May 20-June 30		5	
Province	Do	July 1-Oct. 11		5	
Gharbieh	Province—			_	
Gharbieh	Assiout	May 24-June 16		7	
Gharbieh	D0	July 30			
Do.	Charbish	July 10			
Girgeh. July 6-13. May 28-June 10. 2 1 1 Do. July 13-Aug. 18. 7 3 Greece: Pirreus. Sept. 23. 3 Hawaii: Honokaa. July 15-19. 1 1 Paauhau. May 12. 1 India. May 1-June 25. 287 204 Bombay May 1-June 25. 287 204 Do. June 26-Sept. 17. 69 50 Calcutta May 8-June 18. 11 11 Do. July 24-Aug. 6. 23 21 Central Provinces Aug. 14-20. 27 16 Karachi May 8-June 28. 18 14	Do.	July 0_Sept 1		[]	
Greece:		July 6-13			
Greece:	Minish	May 28-June 10	9		
Greece:	Do	July 13-Aug. 18	7		
Pircus. Sept. 23. 3		,	•		
Kalops	Pirœus	Sept. 23	3		
Kalops	Honokaa				Plague rat found Sept. 8, 1921.
India	Kalopa	July 15-19		1	
Do. June 26-Sept. 17. 69 50 1921: Cases, 3,570; deatns, 2,575  Calcutta. May 8-June 18. 11 11  Do. July 21-Ang. 6. 23 21  Central Provinces Aug. 14-20. 27 16  Karachi May 8-June 25 18 14	Paauhau	May 21	1		May 1 June 25 1021 Cares 2 002
Do. June 26-Sept. 17. 69 50 1921: Cases, 3,570; deatns, 2,575  Calcutta. May 8-June 18. 11 11  Do. July 21-Aug. 6. 23 21  Central Provinces Aug. 14-20. 27 16  Karachi May 8-June 25 18 14	Bombay.	May 1-June 25	287	201	deaths, 1,621. June 26-Sept. 3,
Calcutta	Do	June 26-Sept. 17	69	50	1921: Cases, 3,570; deaths, 2,572.
Central Provinces Aug. 14–20	Calcutta	May 8-June 18	11	11	
Central Provinces Aug. 14-20	Do	July 21-Aug. 6	23		
May 8-June 25 18 14 Do June 26-Oct. 1 5 5 5	Central Provinces	Aug. 14-20			
Modern Ann 90 97	Aaracni	may 8-June 25			
	Madras	Ang 20-001. 1	î	i	

### Reports Received from July 2 to Nov. 18. 1921—Continued.

### . PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
India—Continued.  Madras Presidency Do Rangoon Do	June 26-Oct. 1	112 1, 252 162 501	72 803 142 444	Jan. 1-31, 1921: Cases, 57; deaths,
SaigonDo	May 23-June 12 July 10-Aug. 27	4 16	1 11	51. Isolated cases in vicinity of Saigon. Sept. 11-24: Plague rats found, 4.
Italy: Catania Naples Java:	Oct. 24 Sept. 4-Oct. 7	1 2		Workers in mill; plague-infected rat found on premises.
East Java— Surabaya Madagascar:	July 10-Sept. 17	14	12	
Tananarive Mauritius: Port Louis	June 20-July 24 Aug. 24	49	46	Present.
Mesopotamia: BagdadDo	Apr. 1-May 31 July 1-31	32 1	35 1	
Mexico: Ciudad Victoria Progreso	June 7	1		In State of Tamaulipas: Case confirmed June 20, 1921. ·Plague rat reported found Sept.
Tampico	June 11–30 July 1–Aug. 21	36 21	8	10, 1921. Infected rodents found July 1- Nov. 5, 1921, 183. Total, Jan. 1 to Nov. 5, 1921, 294.
Morocco: Spanish Zone				Reported present in epidemic
Peru				Mar. 1-Apr. 30, 1921: Cases, 119; deaths, 64. June 1-30, 1921: Cases, 14; deaths, 10. July 1-15, 1921: Cases, 9; deaths 3. Sept. 1-30, 1921: Cases, 45; deaths, 22.
Department— Ancachs Arequipa Do	Apr. 1-30 Mar. 1-Apr. 30 July 1-15	4 5 2	1 3	At Huarmey. At Mollendo. Do.
Cajamarca	Mar. 1-June 30 July 1-Sept. 30	16 6	1 3	Present. At Bambamarca, Cajamarca, and other localities. At Callao. Do.
Lambayeque	Mar. 1-Apr. 30 Sept. 1-30 Mar. 1-June 15 Sept. 1-30 Mar. 1-June 30	31 31 43	15 23	At Chiclayo. Do. In 5 localities. At San Pedro. At Lima City: Cases, 28; deaths,
Do Do	July 1-Sept. 15 Sept. 1-30	. 4 16	3 4	18. At Lima City. At Huacho: Cases, 9; deaths, 1. Lima City: Cases, 2; deaths, 1. Country: Cases, 5; deaths, 2. In 4 localities. Deaths coursed at Sachura
Piura	Mar. 1-June 15 Sept. 1-15 Sept. 1-30	31 19 23	29 15 17	In 4 localities. Deaths occurred at Sechura. At Sechura.
Poland				In border province, Aug. 9, 1921: Cases, 8. Total plague-infected rats found
Caguas	Aug. 7-20	4	2	from beginning of outbreak to July 9, 1921, 90. Sept. 4-24, 1921: Two plague-in-
Fajardo	July 17-23	,	1	fected rats found. Aug. 28-Sept. 3, 1921: One plague- infected rat found.
Manati	July 3-9.	1		Suburb coextensive with Santurce.

#### Reports Received from July 2 to Nov. 18, 1921—Continued.

#### PLAGUE-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Porto Rico—Continued. San Juan				Plague rat on steamship Ss Luis, in San Juan Harb Sept. 9, 1921.
Portugal: Lisbon Portuguese West Africa:	July 29-Sept. 3	7		•
Angola— Loanda	Apr. 24-June 18	16		
Do Rhodes (Island)	July 17-23 Sept. 20-24	3	1	1 fatal case reported late in Agust, 1921.
Russia: Siberia— Vladivostok Do	. Apr. 1-June 30 July 1-31		252 4	First case occurred Apr. 10, 192
Senegal: Dakar Do	. May 1-June 30	54	47	
Siam: Bangkok	. Apr. 24-June 18	7	93	
DoStraits Settlements: Singapore	July 24-Sept. 3 May 8-June 18	16 5	12 5	
Do Syria: Alexandretta	June 26-Sept. 24	6	6	
Beirut Do	July 10-Aug. 6 May 31-June 30 July 1-Sept. 4	18 2 17	4	
Turkey: Constantinople Union of South Africa	July 10-Oct. 15	6	4	January-Ápril. 1921: Case
On vessels				January-April, 1921: Case (white), 6: deaths, 4: Cases (m tive), 13: deaths, 6. Occurrin in the Orange Free State. Plague rats reported, Sept. 2: 1921, on vessels from Brisband
Steamship Kishenev	. May 2	1	••••	Austrana, at Sydney and other ports. At Chefoo, China. Plague deat en route. Vessel sent to qua entine Kentucky Island where
Steamship Oreland				to May 6 a total of 16 death was reported. (Public Healt Reports, July 1, 1921, p. 1534 At Genos, Italy, June 12, 1921 from La Plata, Argentins Two fatal cases plague in crev
Steamship Ralph Moller	June 8	4	1	en route. At Chefoo, China, from Vladivos tok, Siberia. Three fatal case en route. One case with fate termination removed at Vlad.
Steamship San Luis	Sept. 9			vostok. In harbor, San Juan, Porto Rico Sept. 9, 1921: 1 plague rat.
Steamship Tenyo Maru				Sept. 9, 1921: 1 plague rat. En route between Nagasaki and Kobe, Japan, June 28, 1921: fatal case.
	SMAL	LPOX.		
Algeria:	Way 1-Tuna 20			
AlgiersOran Oran Sia Minor:	May 1-June 30 Sept. 1-10	3		
SmyrnaDoustralia: Victoria—	May 22-28	1 2		On the steamship Nicholas. District.
Geelong Do	May 5–16	2 2		Mild.
Melbourne Do	Apr. 9-23	4	1 1	Mild epidemic. Slight epidemic reported.

### Reports Received from July 2 to Nov. 18, 1921—Continued.

#### SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Bolivia:				
La Paz	Apr. 1-30	5	4	1
Brazil: Bahia	Sept. 25-Oct. 1	2	i .	į.
Pernambuco	Mar. 28-May 22	28		1
Rio de Janeiro	May 8-June 18	l ii	2	
Do	June 26-Oct. 1	117	27	
Sao Paulo	May 23-June 26	7	2	į
Do	June 27-Sept. 4	13	2	
British Past Airica:			ŧ	
Kenya Colony—	May 8-14	12	4	Ordern Tradio
Zanzibar Do	Aug. 1-31	14	1 6	Origin, India. Districts and towns.
Bulgaria:			1	Districts and towns.
Sona	May 15-31	6	l	
Canada:	•	1		
Alberta		_		
Calgary	May 26-June 18	3	Į	`
British Columbia-	Mam 00 Tuma 05	8	1	
Vancouver	May 28-June 25	ه		ł
Manitoba— Winnipeg	do	6	1	
Do	June 26-Oct. 15	13	1	l '
New Brunswick-	*unc 20 000. 20		-	
Charlotte County	July 10-Oct. 15	11	l	·
Madawaska County	Aug. 7-Oct. 15	3		1
Restigouche County	June 19-25 Oct. 23-29	1		<b>i</b>
St. Stephen	Oct. 23-29	1		l
Westmoreland County.	June 26-July 2	2		
Nova Scotia—	June 5-18	2	1	
Sydney	June 26-July 2	4		
Do Ontario—	June 20-July 2		ł	
Fort William and Port	Aug. 7-27	2		
Arthur.	_	_		
Do	Oct. 16-22	2		<b>i</b>
Hamilton	June 12-18	3		-
Do	July 3-9	1		44.01
Kingston	June 5-11	1 2		At 2 localities in vicinity, 2 cases.
London Montreal	June 5-25 June 12-18	í		
Do	July 17-Oct. 29	6		
North Bay	June 11-25	3		
Do	June 26-July 9	2		
Ottawa	June 12-25	21		
_ Do	June 26-Aug. 13	35		
Toronto.	Aug. 28-Sept. 24	3		
Saskatchewan— Moose Jaw	Cont 4 Oct 15			
Saskatoon.	Sept. 4-Oct. 15 Sept. 26-Oct. 17	3 12		
Chile:	Dept. 20-Oct. 11	16		·
Anto agasta	May 16-June 19	228	106	
Arica	May 31	2		'
Concepcion	Sept. 5-19	3		Reported present in Chillan and
	-		i	Mulchen.
Mejillones	May 30-June 5	••••••		Present; also at interior nitrate
Vaiparaiso	June 26-Oct. 21	•••••	49	plants.
China: Amoy	May 8-June 4		4	June 5-25: Present.
Do	June 26-Sept. 3	••••••	2	Sept. 11-Oct. 1: Present.
Antung	May 16-June 26	12	2	Sopii II Coli II I I Goliu
Canton.	Apr. 1-30			Present.
Chungking	Apr. 1–30 May 1–June 25	••••••		Do.
Do	June 26-Sept. 17 May 8-June 25 June 26-Oct. 8	• • • • • • • •		Do.
Foochow	May 8-June 25	•••••		Do.
Do	June 28-Oct. 8 May 15-21	•••••••		Do.
Hankow Do	July 10-16	4	-1	
Hongkong.	Apr. 24-June 25	99	84	
Do	July 24-Aug. 20	3	î	
Manchuria—		•	• •	
Dairen	May 9-June 26	44	5	
Do	June 27-Aug. 14 May 16-June 13	8	3	
Harbin	May 16-June 13	5		
Do	June 27-July 10	2		

### Reports Received from July 2 to Nov. 18, 1921—Continued.

. SMALLPOX—Continued.

Preston   Santiago   June 1-30   28   2   1   1   20   20   1   1   20   20	Remarks.	Deaths.	Cases.	Date.	Place.
Manchuria					China—Continued.
Mulkden		ı	1		Manchuria—Continued.
Nanking				May 22-June 11	Mukden
Do.   June 20-26.   June 20-38.   June 25-31   Ju				July 3-Aug. 20	Do
Shanghai					Nanking
Do.   May 3-Sept. 17   S   Mission hospital.			1	hine 20-96	Changhai
Tiestain		1	5	July 3-Sept. 17	Do
Do.   June 22-Aug. 20   9   1   1   1   1   1   1   1   1   1	Mission hospital.	l	31	May 8-June 25	Tiendain
Tainghau	1	.1	y	June 25-Aug. 20	Bo
Do.   July 20-31.   1   3   3   3   3   3   4   5   3   3   4   5   3   3   5   5   5   5   5   5   5	i i	1		May 9-June 12	Tsingtau
Chemulpo	·•		1	July 25-31	Do
Figsan	.		.,	Mars 1 Toma 20	Chesen (Korea):
Gensan			112		Cnemuipo
Secularia					Concer
Colombia:   Santa Marta.   June 5-25.   Present.   Do.   June 26-Aug. 27   Do.   Do.   June 26-Sept. 3.   3   1   1   2   2   2   2   2   2   2   2					Ream
Santa Marta.   June 25-25.   Present.			•		Colombia:
Do.   June 26-Aug. 27   Do.   Do.   June 28-Dot. 15.   71   Do.   June 29-Oct. 15.   71   Do.   June 28-Oct. 25.   15   Do.   July 4-Sept. 25.   15   Do.   July 4-Sept. 25.   15   Do.   July 4-Sept. 25.   15   Do.   July 4-Oct. 21.   48   29   Do.   July 4-Oct. 21.   48   20   Do.   July 4-Oct. 21.   48   20   Do.   July 4-Oct. 21.   48   20   Do.   July 4-Oct. 21.   48   20   Do.   July 4-Oct. 21.   48   20   Do.   July 4-Oct. 22.   54   70   Do.   July 4-Oct. 22.   56   Do.   July 4-Oct. 22.   56   Do.   July 4-Oct. 23.   24   Do.   Ju				June 5-25	Santa Marta
Antilla. June 2-25. 7 Do. June 20-Oct. 15. 71 Cleanhagos June 28-Sept. 3. 3 Matanass. June 12-18. 1 Do. July 3-31. 4 Nuevitas. July 4-Sept 25. 15 Preston. Oct. 2-15. 4 Santiago June 13-0ct. 31. 60 Do. July 1-Oct. 32. 54  Santo Dominican Republic. 1 La Bassona. Aug. 19-Oct. 22. 54  Santo Dominican Republic. 2 La Bassona. Aug. 19-Oct. 22. 54  Santo Dominican Republic. 3  Santo Dominican Republic. 4 La Bassona. Aug. 19-Oct. 22. 54  Santo Dominican Republic. 5  La Bassona. Aug. 19-Oct. 22. 54  Santo Dominican Republic. 6  Santo Dominican Republic. 7  La Bassona. Aug. 19-Oct. 22. 54  Santo Dominican Republic. 7  Santo Dominican Republic. 1  La Bassona. Aug. 19-Oct. 22. 54  To. Santo Dominican Republic. 1  Santo Dominican Republic. 1  La Bassona. Aug. 19-Oct. 22. 54  Santo Dominican Republic. 1  Santo Dominican Republic. 1  Santo Dominican Republic. 1  Santo Dominican Republic. 1  La Bassona. Aug. 19-Oct. 22. 54  To. July 1-Oct. 13. 22  Santo Dominican Republic. 1  Santo Dominican Republic. 1  Santo Dominican Republic. 1  La Bassona. Aug. 19-Oct. 22. 54  To. July 1-Oct. 13. 22  In eastern Provinces, 1921, 2,000 cases, estim Cases numerous. On sugar estatas in sam inse, about 490 cases, 25. Retimated 500 case District of Macoris, 500 cases numerous. On sugar estatas in sam inse, about 490 cases, 25. Retimated 500 case District of Macoris, 500 cases, cetim Cases numerous. On sugar estatas in sam inse, about 490 cases, 25. Retimated 500 case District of Macoris, 500 cases, cetim Cases numerous. On sugar estatas in sam inse, about 490 cases, cetim Cases numerous. On sugar estatas in sam inse, about 490 cases, cetim Cases numerous. On sugar estatas in sam inse, about 490 cases, cetim Cases numerous. On sugar estatas in sam inse, about 490 cases, cetim Cases numerous. On sugar estatas in sam inse, about 490 cases, cetim Cases numerous. On sugar estatas in sam inse, about 490 cases, cetim Cases numerous. On sugar estatas in sam inse,	. Do.			June 26-Aug. 27	. Do
Do	1	i i	_		
Matanasa	•		7	June 5-25	
Matanasa	•1	[·····		June 20-UCL 13	Ciambianas
Do.   July 4-Sept 25.   15   2   2   6   of those reported for the sequence of the sequence	, - T			Tune 12_18	Meteres
Nuevitas				11117 331	
Do.	. 6 of those reported found in			July 4-Sept 25	Naevitas
Do.	vicinity.		4	Oct. 2-15	Preston
Do.				June 1-30	Santiago
Dominican Republic   Aug. 25   1921; 2,000 cases, estimated 500 case   State Provinces; 1   1921; 2,000 cases, estimated 500 case   Statemated 500 case	·	1	60	July 1-Oct. 31	Do
Aug. 25					Dominican Republic
Santo Domingo	Coses numerous		i	A OF	·
Santo Domingo   Sept. 1-Oct. 13   22	On sugar estates in same Prov	7		Aug. 20	Ad. Marione
Sento Domingo   Sept. 1-Oct. 13   22	District of Macoris, 50 of which		, J.		
Ecuador:   Aug. 1-15	In surrounding country		90	Some 1 Oat 13	Santa Daminas
Rioy Alfaro	. La Surrounding Country.		. 22	peht. 1-oct. 19	Renador:
Egypt:   Mar. 19-Apr. 29.   2   1   Apr. 2-May 20.   10	.]	<b></b>	1	Ang. 1-15	Eloy Alfaro
Egypt: Oxiro   Mar. 19-Apr. 29.   2   1			31	May 1-June 30	Guavaquil
Egypt:   Mar. 19-Apr. 29.   2   1   Apr. 2-May 20.   10	. }	1	32	July 1-Oct. 15	Do
France: Brest	i				Egypt:
France: Brest	•	1		Mar. 19-Apr. 29	Cairo
May 22-June 4.   18	1	• • • • • • • • • • • •		Apr. 2-May 20	Port Said
Rrest	1	• • • • • • • • • • • • • • • • • • • •	- 1	may 1-15	Finance
Cherbourg			18	May 22-June 4	
Rouen	Varioloid.			Ang. 1-31	
Rouen		1	2	July 22-31	
Apr. 24-May 28, 1921: Cases, 57; deaths			2	May 1-29	
Great Britain:         May 29-June 4.         1         Stated Aug. 17 to be and to have begun months previous to cases reported.           Quaenatown         July 3-9.         1         months previous to cases reported.           Greece:         Saloniki         June 6-12.         1         months previous to cases reported.           Baloniki         June 19-25.         24         2         2         2           Do.         June 26-Oct. 22.         226         20         Present.         Mar. 20-May 21, 1921:           India         May 1-June 25.         84         50         3,232. June 5-25, 1921:           Bambay         May 2-June 25.         84         50         988. July 3-9, 1821: Dea           Calentita         May 2-June 25.         8         8         8         8	. Apr. 24-May 28, 1921: Cases, 12				Germany
Great Britain:         May 29-June 4.         1         Stated Aug. 17 to be and to have begun months previous to cases reported.           Quaenatown         July 3-9.         1         months previous to cases reported.           Greece:         Saloniki         June 6-12.         1         months previous to cases reported.           Baloniki         June 19-25.         24         2         2         2           Do.         June 26-Oct. 22.         226         20         Present.         Mar. 20-May 21, 1921:           India         May 1-June 25.         84         50         3,232. June 5-25, 1921:           Bambay         May 2-June 25.         84         50         988. July 3-9, 1821: Dea           Calentita         May 2-June 25.         8         8         8         8	Additional, Apr. 17-May /				
Nottingham	1921: Cases, 51; deams, 1.				Caset Baltains
Queenstown   Jaily 3-9   1   and to have begin months previous to cases reported.	1			May 20_Tune 4	Viest officen:
Queenstown   Jany 3-9   1	Stated Aug. 17 to be epidemic			Inly 2. Sent 24	
Greece:   Saloniki.   June 6-12.   1   Haiti:   Cape Mattien.   June 19-25.   24   2   20     20	and to have begun about			Inly 3-9.	Openstown
Greece:   Saloniki.   June 6-12.   1   Haiti:   Cape Mattien.   June 19-25.   24   2   20     20	months previous to date; 5			June 26-July 2	Southempton
Saloniki	cases reported.			•	
Haiti: Cape Maltien. Do. Jame 19-25 24 2 Do. Jame 20-Oct. 22. 226 20  Pert au Prince. Bambay May 1-June 25. 84 50 Do. June 26-Sept. 3. 61 42 Calentta. May 8-June 25. 8 8 5 July 24-30, 1921; 118 de	1	ا ـ ا			
Cape Mattien.         Jame 19-25.         24         2         2           Do.         June 26-Oct. 22.         226         20         Present.           Pert au Prince         Tept. 11-Oct. 29.         Mar 20-May 21, 1921:           India         May 1-June 25.         84         50         3,232. June 5-25, 1921:           Do.         June 26-Sept. 3.         61         42         958. July 3-9, 1921: Des           Calentia         May 8-June 25.         8         8         8         8		1 1	• • • • • • • • • • • • • • • • • • • •	June 6-12	
Total   Present   Presen	.1 .	اء		Y-ma 10.04	
India				Terris 26_Cort 22	Cape martien
India	Precent	""	220	#Mand: 11Ort 20	Bort on Prince
Do June 26-Sept. 3 61 42 958. July 3-9, 1921: Des Calerrita. May 8-June 25 8 8 July 24-30, 1921, 118 de	Mar. 20-May 21, 1921: Deaths				India
Do June 26-Sept. 3 61 42 958. July 3-9, 1921: Des Calerrita. May 8-June 25 8 8 July 24-30, 1921, 118 de	3,232. June 5-25, 1921: Deaths		84	May 1-June 25	Resnitav
Calcutta May 8-June 25 8 8 July 24-30, 1921, 118 de	1 958. July 3-9. 1921: Destus. 393	42	61	June 26-Sept. 3	Do
The Terror 96 Start 10   0   7	July 24-30, 1921, 118 deaths.	8	8	May 8-June 25	Calcutta.
1/0	.1	.71	9	June 26-Sept. 10	_ Do
Karachi May 29-June 25 25   17	.1	17		May 29-June 25	X-aracni
Do	· I	2	8	June 20-July 30	D0

### Reports Received from July 2 to Nov. 18, 1921—Continued.

### SMALLPOX—Continued.

Place. Date, C	Cases.	Deaths.	Remarks.
India—Continued.			
Madras May 8-June 25	33 74	i fi	
Do June 26-Oct. 1	74	4	
Rangoon	20	3	
Do July 10-Aug. 13	4	1	Tom 1 91:1001: The best 100: Bookho
Indo-China	•••••	• • • • • • • • • • • • • • • • • • • •	Jan. 1-31, 1921: Cases, 102; deaths,
City— Saigon May 9-15	2	1	15.
Saigon May 9-15	í	i	
Province-	•	•	
Anam Jan. 1-31	35	1	January 1990 Cases 16 deaths 3.
Cambodiado	21	3	January, 1920: Cases, 16; deaths, 3. January, 1920: Cases, 139; deaths,
		1 -	54.
Cochin Chinado	19	12	January, 1920: Cases, 8; deaths, 1.
Tonkindo	27		January, 1920: Cases, 224; deaths,
			43.
Italy:	•		**************************************
Catania			Province: June 6-20, 1921:
	1		Cases, 5.
Do July 18-Aug. 14	• • • • • • •		In province: Cases, 7.
Do July 18-Aug. 14	11		1
Do	2		
Messina May 23-June 26	2	ĩ	1 · · · · · · · · · · · · · · ·
Do	1		In Province: July 4-17, 1921:
Palermo May 18-June 21	7	1	Cases, 9.
Milan Apr. 1–30	2		
Do June 29-July 19	3	, , , , , , - ,	. '
Japan: Kobe		4	
Kobe May 24-Jame 26 Nagasaki	3		•
Nagasaki. May 23-Jime 26 Taiwan Island. July 1-10	1	î	
Java:	-	• • • • • • • • • •	,
East Java—			
Surabaya June 19-25	2		- S
Do	10	·····i	31. 1. 1.1
West Java-			
Bandoeng May 27-June 3	1		
Do. July 8-21			
Betevia May 6-June 23	17	15	34
Betevia May 6-June 23 July 1-Sept. 1 July 1-Sept. 1 May 6-June 23 July 1-Sept. 1 May 6-June 23 May 6-June 24 May 6	106	. 40	
Buitenzorg Apr. 29-June 23	16	• • • • • • • • •	
Do July 22-Aug. 4	2	1	
Garoet May 6-12	1		1.
Do. July 8-Aug. 4	4		
Apr. 29-June 30   Apr. 29-June 30   July 22-Aug. 4	33	5	
Do July 22-Aug. 4	14	1	
Lebak	12	2	
randegiang June 3-30	2	1	
Do July 8-14	1		Man 14 Man 40 10014 Come 2244
Jugoslavia	••••	• • • • • • • • • • • •	Mar. 14-May 13, 1921: Cases, 334; deaths, 83. June 27-July 10, 1921: Cases, 111; deaths, 27.
1	1		1991. Conce 111: deaths 27
Mesopotamia:	- 1		1921. Cases, 111, deputs, 21.
Bagdad Apr. 1-May 31	3	1	
Do	20	4	
Mexico:	~		•
Chihuahua May 23-June 27 Oct. 3-16		3.	
Do. Oct. 3-16.		4	
Guadalajara,June 1-30	3		
Do July 1-Sept. 30	13	. 3	
Mexico City May 15-June 25	246		Including municipalities in Fed-
	i		eral District.
Do	247		<b>Do.</b> 11 1.14 ft.
San Luis Potosi July 17-Qct, 15		3	.nG
TampicoJuly 11-29	1 .		a transfer for me
Torreon Sept. 1-39	2 ].		
Vers Cruz June 13-19		1	
Do		3	
Newfoundland:		i	
Titton Aug. 20-26	8 ].		Jam 1 Gamt 10 1001: Cares ONE
Canal Zone	2	•	Jan. 1-Sept. 19, 1921: Cases, 205,
Colon	111		of which 33 were nonresidents.
Do Aug. 30	***		From the interior.
Panama Feb. 1-June 30	54		Sept. 4-19; 1 frem interior.
DoJuly 1-Sept. 19	41		CORA- 1 Val - Walte transferor.

### Reports Received from July 2 to Nov. 18, 1921—Continued.

SMALLPOX-Continued.

	Place.	Date.	Cases.	Deaths.	Remarks.
Polar					Mar. 1-Apr. 30, 1921: Cases, 1,117
.D	District—	1	i _	1	deaths, 142. Apr. 24-May 21, 1921: Cases, 677; deaths, 148. May 22-June 18, 1921: Cases, 4041-4041-4041-4041-4041-4041-4041-4041
	Bialystok	Mar. 1-Apr. 30	3 56		1921: Cases, 677; deaths, 148
	Cracovia	. go	180	_6	May 22-June 18, 1921: Cases
	T concl	. do	52	26 16	404; deaths, 74.
	Kielce Leopol Lodz Lublin Posen Silesia Stanislawow Tarnopol	do	72	9	
•	Faihlin	do	397	30	
	Posen	do	26	1 2	
	Silesia	do	10	l	In Teschen.
	Stanislawow	do	30	5	
	Tarnopol	do	156	31	ĺ
• • •	Warsaw City	do		4	·
	Warsaw City	do	90	13	•
Portu	igal:	Man 15 Towns 05	Į.	1	
ند	lsbon		l	34	•
	Do	Tune 10 of	46	5	
U	porto	Sept. 11-Oct. 15	2		
Doet 11	Do guese East Africa:	. Sept. 11-Oct. 13	1 -		
OR CU	ourenco Marques	May 8-28	8	1	
ب	Do			4	•
Rums		Tany to population		1 -	-
	istrict—	1	ĺ	1	
	Hotin	Apr. 1-80	40	9	
	Orthei	Mar. 1-31	2		
Rússi					
,P₁	rovince—	l		1	
	Esthonia	Apr. 1-June 30	11		
	Do	July 1-Sept. 30	55		
	Latvia	July 1-Sept. 30 Apr. 1-May 31	41 12		
	Do	July 1-31	12		
	Siberia— Vladi vostok	June 1-30	1		
erbia		June 1-30			Mar. 24-May 21: Cases, 205;
	elgrade	Aug. 7-20	2	i	deaths, 41.
eneg	aj.	11ug. / 20	-	-	debillo, ili
1)	akar	May 1-31	1	1	
pain				- 1	
- Ro	arcelona	May 12-June 22		13	
	Do	July 7-Sept. 28		10	·
H	Douelva	July 7-Sept. 28 July 1-31. June 1-30		2	-
M	adrid	June 1-30	2		
	Do	Aug. 1-31	l <b></b>	1	
M	alaga	May 1-June 30		57	•
_	Do	July 1-Aug. 31 May 9-15. May 22-28.		57	
Te	arragonaalencia	May 9-15	·····i	1	
V	Biencia	Tube 2 Asses 20			
	Dos Settlements:	July 2-Aug. 20	. 9	2	
u aiu	ngapore	Tune 12_19	1	1	
OH	Do	June 12–18 July 10–Sept. 24	15	4	
witze	erland:	oury 10 bept. 24	20	•	
Re	neal .	Sept. 11-Oct. 1	5		
Zu	richDo	May 28-June 11 July 3-Sept. 2	10		
	Do	July 3-Sept. 2	4		
Al	eppo	Apr. 9-16			Present.
Ве	eppotrut	Apr. 9-16 May 10-30	1	1	
	Do	Aug. 8-14	1	1	
unis:		M			
10	ınis	May 30-June 17 July 2-Oct. 14	2	3	
	Do	July 2-Oct. 14	15	11	
urke	y: netentinenie	June 12-25			
-00	nstantinople	June 12-25	5 12	·····i	and the second s
nior	of South Africa	- and st-Oct. 10	12	*	January-April, 1921; Cases
TION.	V. NV4VII 23115VB	*	••••••		January-April, 1921: Cases (white), 18: deaths, 1. Cases (native), 192; deaths, 5. May 1-31, 1921: Cases, 65; deaths, 3, all nations 1 www.1-20, 1921:
					(native), 192; deaths, 5. May
				1	1-31, 1921: Cases, 65; deaths. 3.
				i	all natives. June 1-30, 1921:
	l			. [	Cases, 64, of which 1 white.
11.	. With the		i	. ]	July 1-31, 1921: Natives-
				.	Cases, 129; deaths, 2. White-
			ı	1	1 case. Aug. 28-Sept. 3, out-
		1	- 1		all natives. June 1-30, 1921: Cases, 64, of which 1 white. July 1-31, 1921: Natives. Cases, 129: deaths, 2. White—1 case. Aug. 28-Sept. 3, outbreaks in Cape Province, Crance Free State and Trans.
-				ł	Orange Free State, and Trans- vaal. Aug. 1-31, 1921: Cases,

### Reports Received from July 2 to Nov. 18, 1921—Continued.

#### SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Union of South Africa—Con.				
Cape Province	Apr. 24-June 25	L	l	Fresh outbreaks.
Do	July 1-Aug. 27	118		Aug. 27-Sept. 27: Outbreaks,
Natal	Apr. 24-June 25			Aug. 27-Sept. 27: Outbreaks, Fresh outbreaks.
Do	July 1-Aug. 27	1		Sept. 4-10: Outbreaks.
Durban	Aug. 7-27	3		Stated to have been imported.
Orange Free State	May 29-June 25			Outbreaks.
Do	Aug. 21-Sept. 17			Present.
Southern Rhodesia	July 14-Aug. 31	52	19	
Transvaal	May 22-June 18			Do.
. Do	July 1-31	11		Aug. 27-Sept. 17: Outbreaks.
Johannesburg	July 1-31do	2		
Do	Sept. 1-10	362	11	District.
n vessels:	Lopus Lautenses			
Steamship Craster Hall			·	Arrived Mobile, Ala., Oct.
Stamping States and and			·	1991, from Buenos Aires, R. de Janeiro, and Barbado One case in crew removed a Barbados, Sept. 28, 1921.
Steamship Montoro	Aug. 31	1		At Batavia, Java, from Sings pore, Aug. 27. Vessel pro- ceeded from Batavia to Pot Darwin and Townsville.
Steamship Niagara	June 1	1		At Sydney, Australia, from Var couver via Fiji and New Zer land.

#### TYPHUS FEVER.

Algera:  Algiers. Do. Do. July 1-Oct. 10. Oran. May 22-Juse 30. July 1-Sept. 10.  Asia Minor: Smyrus. June 12-18. Do. Aug. 28-Oct. 8. Bolivia: Le Paz. Lo Do. July 1-June 30. July 1-June 30. Brazil: Bahis. Do. July 1-June 30. Do. Aug. 7-13. Do. Aug. 7-13. Do. Aug. 7-13. Canary Islands: Teneriffe. Aug. 14-Sept. 10. Chile: Concepcion. Do. July 12-Oct. 3. Do. July 12-Oct. 3. Toncriffe. Aug. 14-Sept. 17. China: Antung. May 22-June 11. Antung. May 22-June 11. May 22-June 11. May 22-June 11. May 22-June 11. May 22-June 11. May 30-June 5. July 4-In. May 22-June 11. May 30-June 5. July 25-Aug. 29, 1921: In-hospit: July	4 /				
Algiers	Algeria:			-	
Do		May 1_Time 20	100	95	
Oran.         May 22-June 30.         35.         28.           Do.         July 1-Sept. 10.         15.           Asia Minor:         June 12-18.         1           Do.         Aug. 28-Oct. 8.         2           Bolivia:         Le Paz.         Apr. 1-June 30.         50         51           Brazil:         July 1-31.         19.         3           Bahia.         June 19-25.         1         1           Do.         Aug. 7-13.         1         1           Do.         Aug. 7-13.         1         1           Canary Islands:         Teneriffe.         Aug. 14-Sept. 10.         2           Chile:         Apr. 12-June 20.         8         7           Chile:         Apr. 12-June 20.         8         7           Los Angeles.         July 28-Aug. 8.         July 25-Aug. 29, 1921: In hospit: 30 cases; in city, estimated, 1 cases; in city, estimated, 1 cases; in city, estimated, 1 cases.           Chine:         Antung.         Mar. 27-May 28.         4           Chine:         Antung.         May 20-June 5.         1           Do.         June 27-Oct. 9.         13         From report of Japanese Sett ment and Danish Missis among Chinese.           Harbin.         May 2-3une				4	1
Do.   July 1-Sept. 10   15   13   13   15   13   15   15   15	0				
Asia Minor: Smyrna Do. Aug. 23-Oct. 8.  Bolivia: La Paz. Do. July 1-31. Do. July 1-31. Do. Aug. 7-13. Do. Aug. 12-June 20. Bi' Go. 30. Cases; in city, esthmated, 1 cases; in ci				23	į.
Smyrna		aury 1-sept. 10	1 15	13	
Do					
Bolivia:					In district.
La Paz.	Do	Aug. 28-Oct. 8	2	[	[
Brazil: Bahia	Bolivia:	_	i		ļ
Brazil:	La Paz	Apr. 1-June 30	50	51	
Brazil:	Do	July 1-31	10	3	
Bahia	Brasil.	ualy 1 01		•	
Do.   Aug. 7-13   1   1   1   1   1   1   1   1   1		Bung 10_95	1 ,		
Porto Alegre. June 19-25 3 Canary Islands: Teneriffe. Aug. 14-Sept. 10. 2 Chile: Concepcion. July 12-Oct. 3 17 Los Angeles. July 25-Aug. 8 Valparaiso. Mar. 27-May 28 4 Do. June 28-Sept. 17 China: Antung. May 20-June 5 1 Do. June 27-Oct. 9 13 Manchuria- Harkow. May 22-June 11 3 Manchuria- Harbin. May 22-June 11 3 Manchuria- Harbin. May 23-29 1 Do. July 4-10. 1 Chosen (Kores): Chemulpo. June 1-30 2 Fusan. May 1-31 1 Gensan May 1-31 1 Gensan May 1-31 1 Gensan May 1-31 1 Gensan May 1-31 1 Gensan May 1-31 1 Gensan May 1-31 1 Caba:	Daula				
Do					
Canary Islands:         Tenerifie.         Aug. 14-Sept. 10.         2           Chile:         Concepcion.         Apr. 12-June 20.         8           Do.         July 12-Oct. 3.         17           Los Angeles.         July 28-Aug. 8.         7           Valparaiso.         Mar. 27-May 28.         4           Do.         June 28-Sept. 17.         4           China:         May 30-June 5.         1           Antung.         May 20-June 5.         1           Do.         June 27-Oct. 9.         13           Hankow.         May 22-June 11.         3           Manchuria-         Hay 22-June 11.         3           Manchuria-         Hay 1-30.         1           Chosen (Kores):         May 1-31.         1           Chosen (Kores):         May 1-31.         1           Gensan         May 1-31.         1           Gensan         May 1-31.         1           Caba:			[ <del></del> -		
Teneriffe	Do	Aug. 7-13	ļ	1	·
Chile:	Canary Islands:		l		
Apr. 12-Jume 20   8   July 25-Aug. 29, 1921: In hospit Do.   July 12-Oct. 3   17   30 cases; in city, estimated, 1   Cal. 263.   Prevalent.		Aug. 14-Sept. 10		2	
Do.   July 12-Oct. 3   17   30 cases; in city, estimated, 1   17   28-Aug. 8	Chile:	•	1		
Do.   July 12-Oct. 3   17   30 cases; fn city, estimated, 1   17   28-Aug. 8   28-28   18   28-28   28   28   28   28   28   28	Concencion	Apr. 12-June 20	1	Ŕſ	July 25-Aug. 29, 1921: In hospital
Los Angeles. July 28-Aug. 8. Ca.263.  Valparaiso. Mar. 27-May 28. 4 Do. June 28-Sept. 17. 4  China:  Antung. May 20-June 5. 1 June 27-Oct. 9. 13  Hankow May 22-June 11. 3  Manchuria— Harbin. May 23-29. 1 Do. July 4-10. 1  Chosen (Kores):  Chemulpo June 1-30. 2 Fusab. May 1-31. 1 Gensan May 1-31. 1					
Los Angeles. July 26-Aug. 8. Valparaiso. Mar. 27-May 28. 4 China: May 20-June 5. 1 Do. June 27-Oct. 9. 13. Prom report of Japanese Sett ment and Danish Missis among Chinese.  Hankow May 22-June 11. 3 May 29-June 11. 3 May 29-June 11. 3 May 29-June 11. 3 Do. July 4-10. 1 Chosen (Kores): Chemulpo June 1-30. 2 Fusab. May 1-31. 1 Gensan May 1-31. 1 Gensan May 1-31. 1 Caba:	20			~	
Valparaiso         Mar. 27-May 28         4           Do         June 28-Sept. 17         4           China:         May 20-June 5         1         From report of Japanese Sett ment and Danish Missis among Chinese.           Hankow         May 22-June 11         3         ment and Danish Missis among Chinese.           Harbin         May 22-June 11         3         ment and Danish Missis among Chinese.           Chosen (Korea):         July 4-10         1         1           Chosen (Korea):         June 1-30         2         1           Fusan         May 1-31         1         1           Gensan         May 1-31         1         1           Caba:         May 1-31         1         1	Ton America	Poster 96 Anna 0			
Do.   June 28-Sept. 17   4     Antung   May 20-June 5   1     From report of Japanese Sett   Do.   June 27-Oct. 9   13     ment and Danish Missis   Manchuria-   Harbin   May 22-June 11   3     Manchuria-   Harbin   May 28-29   1     Do.   Jule 4-10   1     Chosen (Korea):   Chemulpo   June 1-30   2     Fusab   May 1-31   1     Gensan   May 1-June 30   4     May 1-June 30   4     May 1-June 30   4     Caba:   May 1-31   1     Caba:     May 1-31   1					Flevalent.
China: Anung	vaiparaiso	mar. 21-May 20			
Antung May 20-June 5 1 From report of Japanese Sett Do June 27-Oct. 9. 13 ment and Danish Missi among Chinese.  Hankow May 22-June 11 3 among Chinese.  Harbin May 23-29. 1 Do July 4-10. 1 Chosen (Kores):  Chemulpo July 4-10. 2 Fusab. May 1-31. 1 Gensan May 1-31. 1 Gensan May 1-31. 1 Gensan May 1-31. 1 Chosen (Kores):  Caba:	Do	June 20-Sept. I7			
Do.   June 27-Oct. 9   13   ment and Danish Missis					
Hankow May 22-June 11 3 among Chinese.    Manchuria					From report of Japanese Settle
Hankow May 22-June 11 3 May 23-29 1 Do. July 4-10 1 Coba:  Chosen (Korea): Chemulpo June 1-30 2 Fusah May 1-31 1 Gensan May 1-31 1 Coba:  Choa:  Choa:  May 1-31 1 1 Coba:  May 1-31 1 1 Coba:	Do	June 27-Oct. 9	13	L	
Manchuria—				·	among Chinese.
Manchuria	Hankow	May 22-June 11	3	l	100
Harbin. May 23-29. 1 Do. Do. Do. Do. Do. Do. Do. Do. Do. Do.	Manchuria-		-		
Do.   July 4-10.   1		May 92_90	•		
Chosen (Korea): Chemulpo June 1-30 2 Fusab. May 1-31 1 Gensan May 1-June 30 4 Ray 1-31 1 Cuba:		heler 4 10			•
Chemushoo		July 1-10	•		. A The Control of th
Fusah May 1-31 1 Gensan May 1-June 30 4 Seoul May 1-31 1		T 1 00			
Gensan   May 1-June 30				• • • • • • • • • • • • • • • • • • • •	,
Seoul May 1-31 1			1 1		a.
Cuba:			4		5.647.544
		May 1-31	1		
Metanese Oct 4-10	Cuba:	•			37
	Matanzas	Oct. 4-10	1		4 1
Czechoslovakta:			-		
Prague June 5-28 5 2		Bune 5-26	g.	9	

#### Reports Received from July 2 to Nov. 18, 1921—Continued.

#### TYPHUS FEVER-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Egypt: Alexandria			_	
Alexandria	. May 21-June 23	21	8	-
Do	June 24-Oct. 14 Mar. 19-June 24	49 235	20 162	
Cairo	Trans 24 Aug 10	77	102	i .
Do Port Said	. June 24-Aug. 19		2	
Finland	Apr. 2-May 13 May 1-15	5	1 -	
Germany		ľ		Apr. 24-June 4, 1921: Cases, 7.
Hamburg	May 27-June 4	i		1101.11 0410 1, 1011. 0400, 1.
Great Britain:		]		
Dublin	May 29-June 4	1	1	
Do	Oct. 9-15	1		·
Greece:	1			
Saloniki	May 23-June 26	21	6	
Do	June 27-Aug. 14	1	2	)
Gustemala:	1	i		
Guátemala City	July 1-Sept. 30	·····	2	Tom 1 Tul- 12 1001, Cons. 71
Hungary		·····	· · · · · · · · · · · · · · · · · · ·	Jan. 1-July 13, 1921: Cases, 71
	1	1	1	occurring in 4 counties.
taly:	A 90 Camt 4	2	l	In 9 localities
italy: Messina (Province) apan:	Aug. 29-Sept. 4	2	<b> </b>	In 2 localities.
apan: Nagasaki	May 23-June 5	7	2	
Nagasaki	may 25-June 5	<b>'</b>	_	Ton 20-May 14 1021 Cases 286
Belgrade	May 1-14	6		Jan. 30-May 14, 1921: Cases, 286 deaths, 40; June 27-July 10 1921: Cases, 23; deaths, 7.
Zagreb	June 19-25	1 3		1921: Cases, 23: deaths, 7.
Do	July 10-Sept. 3	37	4	1021. Cubbb, 20, County, 11
Mesopotamia:	July 10 Soption	٠.		
Bagdad	May 1-81	1	3	
Do	Aug. 1-31	l ī		
Mexico:	1 -	_		
Mexico City	May 15-June 25 June 26-Oct. 8	102	l	Including municipalities in Fed-
Do	June 26-Oct. 8	200		eral District.
Saltillo	Oct. 2-8	f	1	
San Luis Potosi	July 31-Aug. 6			Present.
Morocco:				
Spanish Zone				Reported present in epidemic
	1			form Sept. 29, 1921.
Poland	<b></b>		• • • • • • • • • • • • • • • • • • • •	Mar. 1-Apr. 30, 1921: Cases,
District—	3fon 1 Amm 20	853	45	form Sept. 29, 1921.  Mar. 1-Apr. 30, 1921: Cases, 11,439; deaths, 1,131. Apr. 24-May 21, 1921: Cases, 5,460; deaths, 489. May 22-June 18,
Bialystok	mar. 1-Apr. 30	603	45 90	doethe 490 May 22_1110 19
Kialca	do	848	62	1921: Cases, 3,300; deaths, 299.
		2,508	277	2022. 02000, 0,000, 2000
Lodz	do	521	53	
Lublin	do	1, 446	83	
Posen	do	77	5	
Silesia	do	26		In Teschen.
Leopol. Lodz. Lublin. Posen. Silesia. Stanislawow. Tarnopol. Warsaw.	do	1,557	232	
Tarnopol	do	1,855	194	
Warsaw	do	972	61	
	do	223	29	
Portugal:	1			
Oporto	July 12-Aug. 20	2		
Rumania:	<b>;</b>			
District—	4 4.00			
Hotin	Apr. 1-30	107	10	
Kishinev	Apr. 1-June 39	89	•••••	District
Do	July 1-31	11 148		District.
Orhei	Mar. 1-May 30	140		
Province—			i	
Esthonia	Apr. 1-June 30	113		
Do	July 1-Sept. 30	79		
Latvia	Apr. 1-June 30 July 1-31	599		
Do	July 1-31	52		
Libeu	Sept. 8-15	2		·
Siberia—	l -	1	. 1	
Vladivostok	Mar. 1-June 30	5	3	
Do	July 1-Aug. 31	22	3	38-a 04 38-a 09 1001- Fare 80-
erbia				Mar. 24-May 21, 1921: Cases, 70;
	1		- 1	deaths, 7.
baln:		ſ	_	
34 - 4-14				
Madrid	May 1-June 30 July 1-Sept. 30	••••••	3	

#### Reports Received from July 2 to Nov. 18, 1921—Continued.

#### TYPHUS FEVER-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Syria:				
Beirut Tunis:	May 20-June 10	1	1	
Tunis. Tunis	June 11-17	<b></b>	.  3	• •
Do	July 30-Sept. 9		.  2	i i
Turkey: Constantinople	May 22-June 18	111	İ	**
	June 26-Oct. 15	54	2	
Do Union of South Africa				January - April, 1921: Case (white), 34; deaths, 2. Case (native), 3,376; deaths, 43 June 1-30, 1921: Cases, 73 deaths, 66. July 1-31, 192 Natives—cases, 868; deaths, 12 White—cases, 15; deaths, Orange Free State and Nata Cases, 25; deaths, 19. Au 1-31, 1921: Cases, 850; death 83 (white cases, 17; deaths, and colored cases, 835; death 79).
		١.	1	(native), 32; deaths, 2. Case (native), 3.376; deaths, 43
		١	1	June 1-30, 1921: Cases, 73
		1		deaths, 66. July 1-31, 192
			ŀ	White—cases, 15: deaths, 12
			1	Orange Free State and Nata
	Į	,	1	Cases, 25; deaths, 10. Au
				83 (white cases, 17; deaths,
	ł		I	and colored cases, 833; deaths
Cape Province	' '		1	and colored cases, sas; destai 79).  Apr. 24-June 25, 1921: Outbreaks.  May 1-31, 1921: Cases, 542 deaths, 51. July 1-31, 1921 Cases, 883; déaths, 123. Aug 28-Sept. 17: Outbreaks.  At native cantonment in vicin
Cape Province			1	May 1-31, 1921; Cases, 542
	ł	l	1 :	deaths, 51. July 1-31, 1921
	· ·	l		Cases, 883; deaths, 123. Aug
Capetown	May 13-19	10	- 3	At native cantonment in vicin
East London	May 13-19 May 22-June 18	1	1	ity.
Do Port Elizabeth	Aug. 21–27 Aug. 7–20	1 7		1 mm 2 d
Natal	July 10-Aug. 27	l		Outbreaks.
Orange Free State				l Ame M_Mow 98 1091-/huthrooks
Do Transvaal—	July 10-Sept. 17			Outbreaks.
Johannesburg	Sept. 4-10		l	Outbreaks in surrounding coun
•				try.
Venezuela: Maracaibo	June 21-27	- '	1	
On vessel:		•••••	•	
Steamship Norden	Aug. 18	1		At Marcus Hock Quarantine Pa., from Tampico, Mexico via Nuevitas, Cuba.
	AETTOA	FEVE	R.	
kritish Honduras:	AETTOA	FEVE	R.	
Belize	YELLOW Aug. 22-Oct. 1	PEVE	R.	
Belize	Aug. 22-Oct. 1	17	6	State of Vera Crus
Belize	Aug. 22-Oct. 1		6	State of Vera Cruz.
Belize	Aug. 22-Oct. 1 June 1-30 July 19 July 17-23	17 10 4 1	6 1 1	Do.
Belize	Aug. 22-Oct. 1  June 1-30  July 19  July 17-23  do	17 10 4	6	Do. Do.
Belize	Aug. 22-Oct. 1 June 1-30 July 19 July 17-23	17 10 4 1	6 1 1	Do. Do.
Belize	Aug. 22-Oct. 1  June 1-30  July 19  July 17-23  do	17 10 4 1	6 1 1	Do. Do. Present. Sept. 25-Oct. 2, 1921, deaths, 40. Oct. 2, deaths, 5. June 1-Sept. 30. 1921: Cases. 19
Belize.  dexico: Alamo. Do. Barra de Penn Casamaloapam El Dorado. Manzanillo.	Aug. 22-Oct. 1 June 1-30 July 19 July 17-23 do Oct. 7	17 10 4 1 3	6 1 1	Do. Do. Present. Sept. 25-Oct. 2, 1921, deaths, 40. Oct. 2, deaths, 5. June 1-Sept. 30. 1921: Cases. 19
Belize.  dexico: Alamo. Do. Barra de Penn Casamaloapam. El Dorado.  Manzanillo. Do.	Aug. 22-Oct. 1 June 1-30 July 19 July 17-23 Oct. 7 Oct. 9-15	17 10 4 1	6 1 1	Do. Do. Present. Sept. 25-Oct. 2, 1921 deaths, 40. Oct. 2, deaths, 5. June 1-Sept. 30, 1921: Cases, 19 deaths, 10. Oct. 7: Present. Present.
Belize. lexieo: Alamo. Do. Barra de Penn Casamaloapam El Dorado. Manzanillo. Do. Mazatlan. Playa Obispo.	Aug. 22-Oct. 1 June 1-30 July 19 July 17-23 do Oct. 9-15 do Aug. 23	17 10 4 1 3	6 1 1 1	Do. Do. Present. Sept. 25-Oct. 2, 1921 deaths, 40. Oct. 2, deaths, 5. June 1-Sept. 30, 1921: Cases, 19 deaths, 10. Oct. 7: Present. Present.
Belize.	Aug. 22-Oct. 1	17 10 4 1 3 1	6 1 1	Do. Do. Present. Sept. 25-Oct. 2, 1921 deaths, 40. Oct. 2, deaths, 5. June 1-Sept. 30, 1921: Cases, 19 deaths, 10. Oct. 7: Present. Present. Territory of Quintana Roo.
Belize. fexico: Alamo. Do. Barra de Penn Casamaloapam El Dorado. Manzanillo.  Do. Maxatian. Playa Obispo.	Aug. 22-Oct. 1 June 1-30 July 19 July 17-23 do Oct. 9-15 do Aug. 23	17 10 4 1 3	6 1 1 1	Do. Do. Present. Sept. 25-Oct. 2, 1921 deaths, 40. Oct. 2, deaths, 5. June 1-Sept. 30, 1921: Cases, 19 deaths, 10. Oct. 7: Present. Present. Territory of Quintana Roo.
Belize.  dexico: Alamo. Do. Barra de Penn Casamaloapam. El Dorado.  Manzanillo.  Do. Mazatlan. Playa Obispo. Tampico. Tierra Blanca.	Aug. 22-Oct. 1	17 10 4 1 3 1	6 1 1 1	Do. Do. Present. Sept. 25-Oct. 2, 1921 deaths, 40. Oct. 2, deaths, 5. June 1-Sept. 30, 1921: Cases, 19 deaths, 10. Oct. 7: Present. Present. Present. Territory of Quintana Roo. State of Tamaulipas. Case arrived at Vera Cruz on steamship Monterey from Progress. Maxico.
Belize.  fexico: Alamo. Do. Barra de Penn Casamaloapam El Dorado.  Manzanillo.  Do. Mazatian. Playa Obispo. Tampico. Tierra Blanca.	Aug. 22-Oct. 1  June 1-30 July 19 July 17-23 do Oct. 7 Oct. 9-15 do Aug. 22 July 11-17 Sept. 19	17 10 4 1 3 3	6	Do. Do. Present. Sept. 25-Oct. 2, 1921 deaths, 40. Oct. 2, deaths, 5. June 1-Sept. 30, 1921: Cases, 19 deaths, 10. Oct. 7: Present. Present. Territory of Quintana Roo. State of Tamaulipas. Case arrived at Vera Cruz on steemship Monterey from Progreso, Mexico. Present.
Belize.  fexico: Alamo. Do. Barra de Penn Casamaloapam. El Dorado. Manzanillo.  Do. Maxatlan. Playa Obispo. Tampico. Tierra Blanca.  Tiacotalpan. Tuxpam.	Aug. 22-Oct. 1  June 1-30 July 19 July 19 July 17-23 do Oct. 7  Oct. 9-15 Aug. 23 July 11-17. Sept. 19  Sept. 25 July 25-Oct. 14	17 10 4 1 3 1	6 1 1 1	Do. Do. Present. Sept. 25-Oct. 2, 1921 deaths, 40. Oct. 2, deaths, 5. June 1-Sept. 30, 1921: Cases, 19 deaths, 10. Oct. 7: Present. Present. Territory of Quintana Roo. State of Tamaulipas. Case arrived at Vera Cruz or steamship Monterey from Pro greso, Mexico. Present. State of Vera Cruz. Oct. 15
Belize. fexico: Alamo Do. Barra de Penn Casamaloapam El Dorado. Manzanillo. Do. Mazatlan. Playa Obispo. Tampico. Tierra Blanca.  Tlacotalpan. Tuxpam.	Aug. 22-Oct. 1  June 1-30 July 19 July 19 July 17-23 do Oct. 7  Oct. 9-15 Aug. 23 July 11-17. Sept. 19  Sept. 25 July 25-Oct. 14	17 10 4 1 3 3 1	1 1 2	Do. Do. Present. Sept. 25-Oct. 2, 1921 deaths, 40. Oct. 2, deaths, 5. June 1-Sept. 30, 1921: Cases, 19 deaths, 10. Oct. 7: Present. Present. Territory of Quintana Roo. State of Tamaulipas. Case arrived at Vera Cruz on steamship Monterey from Progreso, Mexico. Present. State of Vera Cruz. Oct. 15. Several cases present in vicinity. Do.
Belize. fexico: Alamo Do. Barra de Penn Casamaloapam El Dorado. Manzanillo. Do. Mazatlan. Playa Obispo. Tampico. Tierra Blanca.  Tlacotalpan. Tuxpam.	Aug. 22-Oct. 1  June 1-30 July 19 July 19 July 17-23 do Oct. 7  Oct. 9-15 Aug. 23 July 11-17. Sept. 19  Sept. 25 July 25-Oct. 14	17 10 4 1 3 1	2	Do. Do. Present. Sept. 25-Oct. 2, 1921 deaths, 40. Oct. 2, deaths, 5. June 1-Sept. 30, 1921: Cases, 19 deaths, 10. Oct. 7: Present. Present. Territory of Quintana Roo. State of Tamaulipas. Case arrived at Vera Cruz on steamship Monterey from Pro- greso, Mexico. Present. State of Vera Cruz. Oct. 15. Several cases present in vicinity. Do. Do.
Belize.  fexico: Alamo. Do. Barra de Penn. Casamaloapam. El Dorado. Manzanillo.  Do. Maxatlan. Playa Obispo. Tampico. Tierra Blanca.  Tiacotalpan. Tuxpam.  Vera Cruz. Do. Zapotal.	Aug. 22-Oct. 1  June 1-30 July 19 July 17-23 do Oct. 7 Oct. 9-15 do Aug. 22 July 11-17 Sept. 19	17 10 4 1 3 3 1	1 1 2	Do. Do. Present. Sept. 25-Oct. 2, 1921, deaths, 40. Oct. 2, deaths, 5. June 1-Sept. 30, 1921: Cases, 19, deaths, 10. Oct. 7: Present. Present. Territory of Quintana Roo. State of Tamaulipas. Case arrived at Vera Cruz on steamship Monterey from Progreso, Mexico. Present. State of Vera Cruz. Oct. 15: Several cases present in vicinity. Do. Do. Do.
Mexico: Alamo Do. Barra de Penn Casamaloapam El Dorado  Manzanillo  Do. Mazzatlan Playa Obispo Tampico Tierra Blanca  Tlacotalpan Tuxpam	Aug. 22-Oct. 1  June 1-30 July 19 July 19 July 17-23 do Oct. 7  Oct. 9-15 Aug. 23 July 11-17. Sept. 19  Sept. 25 July 25-Oct. 14	17 10 4 1 3 1	2	Do. Do. Present. Sept. 25-Oct. 2, 1921 deaths, 40. Oct. 2, deaths, 5. June 1-Sept. 30, 1921: Cases, 19 deaths, 10. Oct. 7: Present. Present. Territory of Quintana Roo. State of Tamaulipas. Case arrived at Vera Cruz on steamship Monterey from Pro- greso, Mexico. Present. State of Vera Cruz. Oct. 15: Several cases present in vicinity. Do. Do.

### Reports Received from July 2 to Nov. 18, 1921—Continued.

#### YELLOW FEVER-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Peru—Continued.				
Department-		i	1	4
Callao-		l		
Callao	Apr. 1-30	1	ļ	At quarantine station. From Chiclayo.
Lambayeque-		_		Cinciayo.
Chiclayo	Mar. 1-June 15		18	İ
Chongollape	Mar. 1-Apr. 30	12	3	İ
Ferrenafe	Mar. 1-31		1	1
Javanca	Apr. 1-30	5	2	
Lambaveque	Mar. 1-Apr. 30	20	7	
Monsefu	Mar. 1-June 15		l ģ	
Motupe	Mar. 1-Apr. 30		12	
Olmos	Apr. 1-30		4	
Pacora	June 1-15	ī	1 1	
Pomalca		5	i	
Villa Eten	Mar. 1-Apr. 30	7	i	
7 ma E 6 cm	Apr. 1-30	í		
Zana Libertad—	Apr. 1-30			
	T 1 10			0- 6
Casa Grande		1		On farm.
Guadalupe	Apr. 1-30	2		· · · · · · · · · · · · · · · · · · ·
Monteseco	July 16-31	1		
Pacanga	June 1-30	2	2	
Pacasmayo	July 1-15	1		
Paijan		13	7	
Do	July 1-15	1		
Pueblo Nuevo	Apř. 1-30	1	1	
Trujillo	Apr. 1-June 15	2	2	Country.
On vessels:	•			
Barge J. S. McGaughy	Oct. 6	1		At quarantine station, Pensa- cola, Fla., from Tampico, Men- ico, Sept. 30.
Steamship Lurline	Aug. 13-27	2	1	At Mazatlan, Mexico, from Maz- zanillo, Mexico (Public Health
Steamship Monterey	Sept. 18	. 1		Reports, Sept. 16, 1921, p. 2292). At Vera Cruz from Progress. Mexico, Sept. 15, 1921. Patient
Steamship Washington	Aug. 29	1		went to Tierra Blanca. At Mazatlan, Mexico.