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EXTRA-CANTONMENT ZONE SANITATION.

CAMP SHELBY, NEAR HATTIESBURG, MISS.1

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The United States Public Health service has, by a cooperative agreement with existing state and local health authorities, assumed charge of sanitation and the control of communicable diseases within the zone around Camp Shelby near Hattiesburg, Miss. In carrying out this arrangement an officer of the United States Public Health Service has been made the legally authorized agent of the State board of health of the State of Mississippi, and, by executive action of this board, has been delegated all legal authority possessed by the State board of health under existing laws of the State of Mississippi. For administrative purposes he has been given the title of Director of Health, Civil Sanitary District.

Area Comprising Extra-Cantonment Zone.

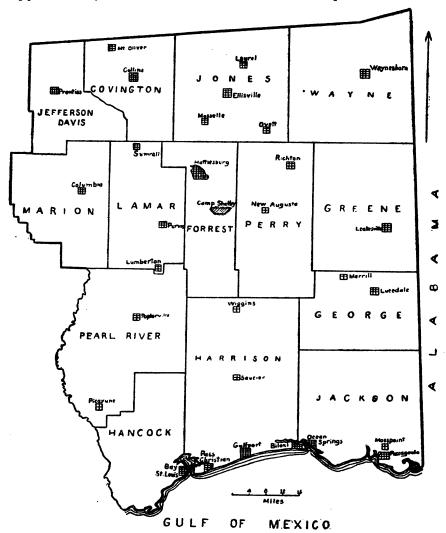
No definite limitations can be arbitrarily made for an extra-canton-While for administrative purposes it is desirable to have ment zone. the boundaries of such a zone coincide with those of the several civil jurisdictions comprising the area, such boundary lines can not be strictly adhered to where sanitary control measures must be prosecuted in order to render an area safe for troops. The extra-cantonment zone around Camp Shelby has been considered, for the purposes of public health administration, as comprising that area which, because of means of communication, transportation, origin of food stuffs, or any other factor, has a bearing either directly or indirectly upon the state of the health and bodily welfare of the troops. area tentatively set aside for this purpose comprises the 14 southernmost counties of Mississippi; that is, those counties south of Jasper county, east of Pike county, west of the Alabama State line, and north of the Gulf. The estimated population of this zone is 239,000. administrative purposes this area is divided into three zones, termed zones No. 1, No. 2 and No. 3.

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¹In cooperation with the Army and the respective State and local authorities the United States Public Health Service has undertaken the sanitary control of the civil zones around 26 of the Army mobilization camps and cantonments. The zone around Camp Shelby is one of these.

Zone No. 1.- This is an area surrounding the camp site and not less than one mile wide at any point. On the north of the camp this zone is 11 miles wide, and includes the city of Hattiesburg.

Zone No. 2.—An area surrounding the above described area, approximately a distance of 20 miles from the camp.



The area around Camp Shelby under special health administration.

Zone No. 3.—The area of the counties enumerated above not included in zones 1 and 2.

In zone No. 3 activities are limited to (1) the sanitary regulation of the production and shipment into zone No. 1 of all food products; (2) the prompt receipt of all information regarding the prevalence of disease, and (3) the close cooperation with the health officers, of the respective civil jurisdictions involved, in all pertinent health

matters. An exception was made in the case of Harrison County, on the Gulf Coast, where there are many frequented resorts. Between these resorts and Hattiesburg there is much communication by travel and the shipment of food products (mainly sea food). The importance of safeguarding the health of soldiers visiting these localities was strongly represented to the Harrison County board of supervisors, who agreed to appoint a trained whole-time officer and in other ways to provide means for the protection of the public health. There had long existed in the county a public sentiment in favor of such a provision.

Activities in zone No. 2 are the same as those carried on in zone No. 3 except that closer attention is given to this area. This is especially true as regards the observation and control of communicable diseases. The area is intended to include all surrounding small towns, railroad stations, lumber-mill settlements, and farming centers within one day's usual foot or vehicle travel. While funds and personnel have not as yet permitted active prosecution of sanitary measures in these localities, sanitary surveys are made of them, and their condition, so far as it relates to the health of the troops, is communicated to the military authorities in order that they may possess information relative to the environs of the camp.

In zone No. 1 every branch of public health activity is being prosecuted. In the following discussion the activities referred to relate to this zone, and particularly to Hattiesburg, in which 98 per cent of the population of the zone resides.

The Sanitary Problems Existing at the Time the Public Health Service Took Charge.

1. Malaria.—The following extracts are quoted from a report of Sanitary Engineer J. A. Le Prince, of the United States Public Health Service, on the malaria situation in the area:

Malaria prevails in the area in which Hattiesburg and Camp Shelby are situated. Anopheles are easily found, and conditions at present are favorable to the spread of this disease. The situation is serious. * * * The topography of the zone is such as to offer abundant opportunity for the breeding of mosquitoes. * * *

In streams, roadside ditches, and pools examined, larvæ of Anopheles were abundant. A. quadrimaculatus is the species most commonly found. * * *

The serious nature of this sanitary problem can be understood by a study of the morbidity reports for Forrest County for the years 1914-1916.

Malaria.	Tota number of cases.	Case rate per annum per 1,000 popu- lation.	Estimated population.
1914	1, 705	81.901	22,000
	2, 108	101.851	22,000
	2, 049	99.049	22,000

Disposition of human excreta.—Sanitary sewerage facilities were in use by about 28 per cent of the population of Hattiesburg, and were available to an additional 6 per cent. The remainder of the population, or about 66 per cent, were supplied with outside surface privies, many in a grossly insanitary condition. In the surrounding rural districts, surface privies and to some extent pit closets were in use.

Milk problems.—There were but 2 or 3 so-called dairies within this area. Milk, however, was sold or disposed of by a large number of the people. Within the city of Hattiesburg alone there were 635 cows being milked. Many households in the city kept a cow each which supplied the needs of the households. Surplus milk was disposed of to neighbors and friends. Nevertheless, Hattiesburg had in the past never completely supplied its own requirements and milk had been shipped into the town from surrounding districts, at times even from so distant a point as Illinois. The milk problem, therefore, was two-fold, first, the acquisition of a safe supply, and, second, the acquisition of an adequate supply.

Meat.—There were in the town three distributing stations of large packers and interstate shippers of meat. They supplied at this time, about 30 per cent of the meat consumed in the area. Seventy per cent of the meat sold was slaughtered and disposed of without regulation or restriction of any kind.

Places of business handling foodstuffs.—Many restaurants, eating houses, soda fountains, fruit stands, meat markets, cafés, and similar places of business were being conducted in the insanitary manner usual in the absence of official regulation. Among the insanitary conditions most frequently met were the lack of screens, inadequate or unsuitable facilities for the cleansing of utensils, improper disposition of garbage and waste, inadequate or insufficient storage facilities for foodstuffs, and general uncleanliness.

Manufacture of ice cream and other milk products.—There existed two ice cream manufactories and one creamery, while a number of persons carried on similar activities on a small scale. In the ice cream plants neither sterilization of cans or utensils nor pasteurization or refrigeration of milk was carried on, and there was no protection from flies or other means of contamination. The one creamery in town was under the supervision of a man well informed in this line of business, and conscientious in the performance of his duties. Due to lack of cooperation, however, he was unable to conduct the creamery in the manner he desired.

Soft drink bottling.—There existed two bottling works in which soft drinks were manufactured and distributed. As conducted, these places were a sanitary menace.

Garbage disposition.—The garbage and refuse disposal of the population of this city had been in the past attempted by a civilian sani-

tary inspector, supplied with one horse-drawn vehicle and two negro laborers.

Water supply.—The water supply of the city is derived from driven wells, of a depth of about 400 feet. This source supplied approximately 47 per cent of the population, and was available to an additional 3 per cent. Of the remaining half of the population, about 12 per cent obtained water from 3 or 4 flowing artesian wells, and 38 per cent from shallow dug wells.

Health organization.—There existed at this time a very recently appointed part-time health officer, who served both Forrest County and the city of Hattiesburg, at a salary of \$1,500 per annum. There was in addition a sanitary inspector, at a salary of \$85 per month. In addition, the duties of one of the three commissioners included public health and sanitation, and upkeep of streets.

Reporting diseases.—Though an admirable percentage of the registered physicians reported the cases of communicable diseases occurring in their practices, the reports were made only once a month. Reporting at such infrequent intervals was of course of little service in the local control of the communicable diseases.

Special sanitary problems.—The sudden and large increase in population in a sparsely settled area and small town, coincident with the establishment of a cantonment, brings about a number of important public health problems, in addition to those previously existing. Among these are: The establishment of civilian labor camps, the strain placed on public utilities, and scarcity of labor and materials. The construction of a cantonment requires the immediate employment of a large number of civilian laborers. It is necessary that they live in close proximity to the camp site, which is usually a number of miles from the nearest town.

These laborers, each with a span of mules or a team of horses, came from the surrounding country. All walks of life were represented. They encamped in the unsettled area adjoining the cantonment.

The encampment, on such an unprepared site, of from 10,000 to 20,000 persons of this character, with as many animals, presented a sanitary problem of major importance. The problems of the disposition of human excreta; safe water supply; disposition of manure, garbage, and refuse; the proper drainage and general camp sanitation; the early recognition and reporting of the communicable diseases; and the taking of necessary precautions to prevent their spread require a constant and large amount of work. The sudden and comparatively great increase in population in Hattiesburg (almost 100 per cent) placed so great a strain upon public utilities, such as gas, water, electricity; the sewerage, garbage, and refuse collection system; streets; public buildings, toilets, etc., that existing facilities proved entirely inadequate to meet these unusual demands.

Established restaurants, hotels, eating places, barber shops, and all such places of business were suddenly submerged by a volume of business for which they were unprepared and which they were not equipped to handle. During this time they were unable to maintain the required sanitary conditions and methods. This was particularly noticeable at public eating places and barber shops and at railroad stations.

Enlargement of the premises and installation of facilities and improvements to meet sanitary requirements and at the same time to take care of the increased volume of business, called for much additional labor, equipment, and material. These could not be had readily. Particularly scarce at this time was skilled labor, such as carpenters, plumbers, and other artisans. Machinery and apparatus were difficult to obtain or have shipped. Coal, lumber, and finished wood were scarce and costly.

In addition to the problems above enumerated the establishment of a camp is followed by a large floating population who establish many places of amusement and dispose of food to soldiers. Small sandwich stands spring up here and there over the entire area; soft drinks, ice cream, fruit, and other foodstuffs are sold promiscuously. Not being of a permanent nature, no provisions for sewerage connections or permanent screening, adequate washing or cleansing facilities, water supply, or other necessities for the maintenance of sanitary conditions, are provided for. The handling of these mushroom growths presents a problem which requires a great deal of time and is the source of much petty trouble.

Another problem of considerable importance met with in this work was the lack of a general public sentiment in favor of better public health conditions and the absence of knowledge on the part of the community as to the necessity for the acquisition and maintenance of a rigid control and for the adoption of measures for the prevention of the spread of communicable diseases. course, as in other localities, the more educated and cultured residents of this area appreciated the need for sanitary improvements. the bulk of the population did not. Difficulty was experienced at times in assuring some that the rigid enforcement of the rules and regulations pertaining to public health were in fact not only necessary under existing conditions, but aimed toward the permanent good of the community. Such a state of the public mind was illustrated when there occurred an unusual prevalence of measles. The lack of information regarding the means by which communicable diseases are spread was demonstrated by the common plea, in attempting to evade quarantine, that the character of the case reported was mild. The lax methods of the past in the reporting of

diseases were made evident by the fact that approximately only 50 per cent (estimated) of the cases occurring were reported.

The lax quarantine methods of the past were demonstrated by the almost universal attempt to evade requirements of the existing laws. There seemed to be a general impression that these laws, having never in the past been enforced, it was not necessary to enforce them at the present time. Another factor having a direct bearing upon the matter in point is the economic condition of the community. Owing to the disintegration of the lumber industry in this particular area the economic conditions of Hattiesburg and its immediate environs were not good. The expense involved in meeting sanitary requirements, owing to the scarcity and cost of labor and material, was at times high. This made difficult the acquisition and maintenance of sanitary requirements.

Present Organization.

The present organization consists of a commissioned officer of the Federal Public Health Service, in charge, having for executive purposes the title of Director of Health, Civil Sanitary District; two additional commissioned medical officers of the United States Public Health Service; a part-time city and county health officer; and one Red Cross unit composed of 3 sanitary inspectors, 1 bacteriologist, 1 laboratory attendant, 3 public health nurses, a business manager, and 1 clerk. There are in addition 1 chief sanitary inspector of the United States Public Health Service; 2 sanitary inspectors; and a number of laborers and miscellaneous employees. For administration purposes the activities are divided into divisions,

Funds Available.

The city of Hattiesburg, through its commissioners, agreed to bear the expenses actually incurred in making the sanitary conditions of the city of Hattiesburg and its immediate environs safe for troops. Forrest County, through the board of supervisors, appropriated \$7,000 for the prosecution of sanitary measures in the county, exclusive of Hattiesburg; the American Red Cross, through the Bureau of Sanitary Service, appropriated \$10,000, to be expended under the direction of the officer in charge, for the salaries and expenses of the personnel of the Red Cross unit and the care of the indigent sick of importance from a public-health standpoint, and for the purchase of nonexpendable materials and equipment.

The United States Public Health Service has allotted an initial sum in addition to the salaries and expenses of the officers stationed here.

House to House Inspection.

Immediately upon assuming charge, a house to house canvass was made by a corps of inspectors, who filled in a questionnaire card. These cards give all pertinent data regarding sanitary and health conditions of the premises. They are filed by wards, sections, streets, and numbers. From the original cards a separate index system is carried on, in which water supply, sewage disposal, and other items of information are recorded. This is filed in such a manner as to be available for prompt reference.

The data are available at this office, and are of immense value in the control of communicable diseases and the prosecution of necessary sanitary measures.

System of Morbidity Reporting.

A basic requirement for the control of communicable diseases is the possession by the health authorities of information as to when, where, and under what conditions communicable diseases occur. Toward this end the cooperation of the practicing physicians was enlisted. In addition, the State board of health issued an executive order requiring all physicians to report to this office. The county health officers of each of the 13 counties within the extra-cantonment zone report to this office by mail, telephone, or telegraph, depending upon the importance of the matter, the occurrence of the more important communicable diseases, or any event relating to the public health of the area.

Every registered and licensed physician within zone 1, and the greater part of zone 2, i. e., all of Forrest County, makes a daily report to this office of the occurrence of the following diseases: Chicken pox, anthrax, Asiatic cholera, dengue, diphtheria, dysentery, (a) amebic, (b) bacillary, filariasis, German measles, gonococcus infection, hookworm disease, measles, malaria, meningitis, mumps, paratyphoid fever, plague, pneumonia, poliomyelitis, smallpox, scarlet fever, septic sore throat, syphilis, trachoma, trichinosis, tuberculosis, typhoid fever, typhus fever, whooping cough, and yellow fever. Card forms are furnished for the purpose.

Upon receipt of the reports by this office they are turned over to a clerical force, whose duty it is to classify and record same and present the accumulated data and information to the officer in charge, in the form of report, by means of spot maps, charts, plats, curves, and other graphic or clerical methods. The cards are also given over to a medical officer who makes epidemiological investigations of communicable diseases. Proper precautions are then taken to prevent spread of these diseases.

A daily morbidity report of the entire area is issued from this office, copies being sent to the Surgeon General, United States Public

Health Service, to the State and local health officers, and to the division sanitary officer of Camp Shelby. In addition, daily morbidity and mortality reports are received from the division sanitary officer of Camp Shelby.

Mosquito Eradication Measures.

The mosquito-breeding areas were, for the purpose of instituting measures of eradication, tentatively divided into two parts; first, those in and within flight range of Hattiesburg, and, second, those in and within flight range of Camp Shelby proper.

The problems presenting themselves within the camp itself were handled by the Army.

The breeding areas in Hattiesburg and within flight range of Hattiesburg were dealt with by the United States Public Health Service, while those within flight range of Camp Shelby were dealt with cooperatively by the Army and the United States Public Health Service, utilizing separate workmen and funds but coordinating the work so as to procure the best results in the most rapid and economical manner.

In the ditching work the usual procedure and the approved type of ditching, according to the special problems presenting themselves, were carried out. Oiling operations were carried on, using a truck on which was mounted a 200-gallon tank for the general distribution of oil, and by trained negroes supplied with knapsack sprayers. Drips were also employed where necessary.

The major portion of the work—that of channeling and cleaning of ditches, cutting of new ditches, and drainage of breeding areas—has been completed. Over 60 miles of ditches have been dug and channeled and more than 50 ponds or swamp areas of various sizes drained. Water courses breeding Anopheles have been cleaned. Three weeks before the first killing frost, Entomologist C. W. Metz was unable to find Anopheles larvæ within this area. In carrying out this work there have been expended 3,418 man days and 2,603 gallons of oil have been used.

Though the mosquito season is over, eradication measures are now being prosecuted to the extent of channeling and rechanneling certain large drainage ditches, the cutting of brush, and the removal of obstacles from water courses, preparatory to the more detailed and careful measures which will be instituted in the early spring after the winter rains. There are at present employed in this work 20 men and 2 foremen, operating under the supervision of Asst. Surg. L. Williams, jr.

The antimosquito measures have in the past been directed primarily against A. quadrimaculatus. As the eradication of natural breeding places neared completion, this species was found breeding

in artificial containers. To prevent the breeding of this species and to accomplish the eradication of Culex and other species, measures were directed toward the abolishment of artificial breeding places. The ordinance appended was passed by the city authorities and has proved satisfactory.

Section 1. It shall be unlawful to have, keep, maintain, cause or permit, within the incorporated limits of Hattiesburg, Miss., any collection of standing or flowing water in which mosquitoes breed or are likely to breed, unless such collection of water is treated so as to effectively prevent such breeding.

- SEC. 2. The collections of water considered by section 1 of this ordinance shall be held to be those contained in ditches, ponds, pools, excavations, holes, depressions, open cesspools, privy vaults, fountains, cisterns, tanks, shallow wells, barrels, troughs (except horse troughs in frequent use), urns, cans, boxes, bottles, tubs, buckets, defective house roof gutters, tanks of flush closets, or other similar water containers.
- SEC. 3. The method of treatment of any collections of water that are specified in section 2, directed toward the prevention of breeding of mosquitoes shall be approved by the health officer and may be any one of the following:
- (a) Screening with wire netting of at least 16 meshes to the inch each way or any other material which will effectually prevent the ingress or egress of mosquitoes.
- (b) Complete emptying every seven days of unscreened containers, together with their thorough drying or cleaning.
- (c) Using a larvicide approved and applied under the direction of the health officer.
- (d) Covering completely the surface of the water with kerosene, petroleum, or paraffin oil once every seven days.
- (e) Cleaning and keeping sufficiently free of vegetable growth and other obstructions, and stocking with mosquito-destroying fish; absence of half-grown mosquito larvæ to be evidence of compliance with the measure.
 - (f) Filling or draining to the satisfaction of the health officer.
- (g) Proper disposal of tin cans, tin boxes, broken or empty bottles, and similar articles likely to hold water and tin cans and tin boxes must have a hole punctured in the bottom.
- SEC. 4. The natural presence of mosquito larvæ in standing or running water shall be evidence that mosquitoes are breeding there, and failure to prevent such breeding within three days after notice by the health officer shall be deemed a violation of this ordinance.
- Sec. 5. Should the person or persons responsible for conditions giving rise to the breeding of mosquitoes fail or refuse to take necessary measures to prevent the same within three days after due notice has been given to them, the health officer is hereby authorized to do so, and all necessary costs incurred by him for this purpose shall be a charge against the property owner or other person offending as the case may be.
- SEC. 6. The health officer shall enforce the provisions of this ordinance, and for this purpose the health officer, person or persons acting under his authority may at all reasonable times enter in and upon any premises within his jurisdiction; and any person or persons charged with any of the duties imposed by this ordinance failing within the time designated by this ordinance or within the time stated in the notice of the health officer, as the case may be, to perform such duties, or to carry out the necessary measures to the satisfaction of the health officer, shall be deemed guilty of violation of this ordinance, and for each day after the expiration of this time that said person fails to comply with this ordinance shall be deemed guilty of a separate violation of this ordinance.

SEC. 7. The person held under this ordinance to be responsible for the correction of conditions on premises giving rise to or likely to give rise to breeding of mosquitoes, shall be the owner, and in his absence the agent of owner of said premises; provided, any tenant, causing or permitting said conditions without the consent of the owner or agent shall be held responsible. Where a trespasser or other person is known to cause or to have caused said conditions without the consent of owner, agent, or tenant, then such person will be held responsible.

SEC. 8. Any person who shall violate any provision of this ordinance shall on each conviction be subject to a fine of not more than \$25, or be imprisoned for not more than 10 days, or both, in the discretion of the court. All acts or parts of acts in conflict with this ordinance are hereby repealed.

SEC. 9. The public interest requiring it, this ordinance shall take effect and be in force from and after its passage and approval.

Passed and approved the 1st day of September, 1917.

Disposal of Human Excreta.

Starting on September 5, and as rapidly thereafter as the clerical force permitted, notices were issued to property owners to install a sanitary can in surface privies on their premises. The installation of these sanitary cans has proceeded satisfactorily. About 0.1 per cent of the privies yet remain in an insanitary condition.

A scavenger system of 3 trucks and 2 wagons has been placed in operation. The trucks carry clean empty cans which are substituted for those removed. When loaded the trucks haul to the disposal plant.

The construction of a disposal plant was found necessary to meet the requirements for disposition of the contents of the sanitary cans. A large hopper was set upright in a block of cement approximately 6 feet square, hollowed out to fit the hopper. The hopper is the same height as a wagon bed, and is fitted with a coarse screen. The whole equipment is suitably housed and connected with the sewer system of the town and suitably located. Continuous water flow through the hopper, sprays for the washing of the cans, and hose connections for the proper flushing down of the premises were installed. The contents of the cans are dumped directly into the sewer through the hopper after having been taken from the truck and placed on the platform.

On September 3 the city of Hattiesburg issued bonds, and from the money thus obtained appropriated \$7,500 for the extension of the sewer system. By this extension about 2 per cent additional of the population will be supplied with sewer connections.

The toilet facilities provided by the local railroad depots were found to be entirely inadequate to meet the demands of the sudden and large increase in the population and traveling public. There were no other public toilet facilities in the city. Through cooperation with the railroad companies it has been possible to provide adequate toilet facilities at most of the railroad stations.

One public convenience station for each of the sexes has been established in Hattiesburg, and sanitary drinking fountains have been placed on various street corners within the city.

Sanitary Regulation of Production and Distribution of Milk.

All persons disposing of milk, in any quantity, whether sold, bartered, or given away, have been classified as dairymen and regulated according to existing laws or special sanitary requirements deemed necessary because of the present unusual conditions in the area.

Every such person is required to file in this office an application for license to dispose of milk or milk products. On these applications, data such as the number of cows, amount of milk disposed of, and other pertinent information are given. As rapidly as the personnel permits the places are inspected by a milk-market expert or a graduate veterinarian assigned to dairy and milk inspection, and the blank forms are filled in.

If in the opinion of the inspector sanitary conditions of the dairy permit the production and distribution of milk in a safe manner, such distribution is allowed to proceed. Directions and suggestions for sanitary changes and improvements are given at this time. All places of business disposing of milk in large quantities to homes or in quantities to the public eating houses, soda fountains, etc., are subjected to frequent and careful inspection. Samples of milk for bacterial examination and determination of butter fat and adulterations are made at frequent intervals. Bacteria counts are generally made 10 times a month. Milk entering Camp Shelby is examined bacteriologically each day. The milk sold in the zone at present is of good quality, running high in butter fat and low in bacterial counts. Much of it is equal to the standard of certified milk sold in urban communities. An endeavor has been made to divert much of the milk produced in the surrounding areas and previously shipped to New Orleans to the local creamery, where under proper regulations it is now being pasteurized and bottled and sold under very satisfactory conditions. By education and persuasion, by the employment of farm demonstration agents and milk-market experts and by other activities the milk supply in this zone has been successfully increased. notwithstanding the rigid sanitary control. There has been a marked and universal improvement in the sanitary condition under which milk is produced in this area.

Regulation of Slaughtering and Sale of Meat.

The meat sold from the stations of interstate shippers in this area is, of course, subject to Federal inspection at the time of shipment. An inspection of this meat, however, is made to detect

putrefaction. It is a regrettable fact that much meat has had to be condemned and thereby lost, at a time when the conservation of this product is urgent, because of improper refrigeration systems which have caused the meat to become unfit for human consumption. All meat, as well as other perishable food products, is inspected before being shipped to Camp Shelby. An attempt has been made to inspect all locally butchered meat, but the difficulties presenting themselves have to some extent been insurmountable. The farmers and other people slaughter when and where they desire, bring the meat to the city and sell it, frequently without the knowledge of this office. Arrangements are now being made whereby it is hoped that these undesirable conditions will be removed. These arrangements consist of the construction and operation of a municipallyowned abattoir where animals may be slaughtered and meat refrigerated and distributed at actual cost to the butchers. As soon as the abattoir is completed, laws will be passed prohibiting the sale of meat not bearing the stamp of a meat inspector, and all meat killed at farms must pass through the abattoir accompanied by the necessary viscera, to aid the meat inspector in determining the state of health of the animal so slaughtered.

The abattoir and pen will be situated on a 20-acre plat near a railroad and within the city limits, and will be built and conducted in conformity with the rules and regulations of the Bureau of Animal Industry at a cost approximately of \$15,000.

Hotels, Restaurants, Cafés, Etc.

All places of business disposing of foodstuffs of any kind to the public are subjected to a daily inspection by a sanitary inspector of this office. A score card on which are enumerated the various sanitary requirements, each requirement being awarded a certain numerical value, is used, and a weekly average is thus arrived at, based on a daily score. Proper clerical methods are in force for the recording of the data. Pertinent facts are brought to the attention of the officer in charge. When a place of business presents a general average below 75 it is closed until the necessary sanitary requirements are met.

Soda fountains are as a rule inspected twice daily. Running hot and cold water, or whirling brush sprays, are required to provide adequate washing and cleansing facilities for utensils. Milk is handled only by milk pumps.

Ice Cream and Milk Food Products.

The manufacture of ice cream in one place of business was discontinued and a new building constructed. Alterations of the other factory in compliance with requirements have been made. The requirements consist in the main of impervious flooring, permanent

and adequate screening; steam sterilization of utensils, washing and toilet facilities for employees, and pasteurization of all milk used. Daily bacterial counts are made of the products of these factories. Milk food products are manufactured at the local creamery under daily inspection and rigid sanitary regulations. Proceeding as rapidly as personnel and equipment permit, all employees of such places of business where foodstuffs are handled will be examined for typhoid carriers, and be required to possess a clean bill of health from a recognized physician.

Hucksters and Stands Prohibited.

In the extra-cantonment zone of Camp Shelby (Zone No. 1) there has been absolute prohibition of the sale of all foodstuffs in any manner or in any form to the public from carts, wagons, stands, or other temporary or improvised arrangements. All places of business must in this area be suitably housed, properly equipped, and all necessary arrangements and appurtenances for the acquisition and maintenance of sanitary conditions must be supplied.

Garbage, Waste, Refuse.

There have been about two carloads of garbage cans sold in the city since August 17. Residents are encouraged to make proper disposition of garbage and refuse, and a system of garbage collection has been instituted, the efficiency of which is rapidly improving. There are employed for this purpose 3 trucks and 3 wagons, with 9 employees.

Many of the residents in this community dispose of waste food products to chickens, hogs, and other animals. Municipal disposal at present is made at a crematory which was previously in disuse and in need of repairs and alterations.

Street Police Work.

A street washer, with a force pump operated by a gasoline engine, has been purchased, with which all paved streets are washed. A "White wing" system has been inaugurated.

Water Supply.

As rapidly as the personnel and equipment permit, the water supplies other than the city supply, which has shown no contamination, are being examined bacteriologically for pollution.

Vaccinations.

It was the desire to take advantage of the opportunities presenting themselves for the immunization of as many of the population as possible against typhoid fever and smallpox. To this end the 2163 December 21, 1917

United States Public Health Service offered these facilities free of charge to the public.

Medical Examination of School Children.

With a view to both the control of communicable diseases and the establishment of a very desirable and necessary public-health activity, a system of medical examination of school children has been inaugurated under the immediate direction of Acting Assist. Surg. C. E. Gibbs. In the institution and prosecution of this work the procedure followed by the United States Public Health Service in school hygiene in other localities has been followed.

Laws and Regulations Pertaining to Public Health.

No ordinance or regulation is legal in the State of Mississippi which is in conflict with existing State laws pertaining to public health.

In this work, therefore, existing State laws have been followed. The city of Hattiesburg has no ordinances of importance pertaining to public health. The city has the commission form of government, and can not under the particular form of commission granted try or have jurisdiction over violators of the State sanitary laws. Such cases must be tried before a justice of the peace.

An attempt has been made in this area to obtain sanitary requirements under existing State sanitary laws. It appears better, under local conditions, to operate under existing laws, even though defective, until after an adequate time has elapsed to allow peculiar local conditions to adjust themselves and an opportunity has presented itself for careful thought and conservative passage of such laws. Work has been prosecuted with the idea of enforcing existing laws even though they be defective, and obtaining desired conditions by appeal to civic pride and patriotism and by other means, rather than by the passage of numerous new laws, to which there might possibly be objection, with lack of cooperation, and of which there certainly would be much ignorance.

The desirability of taking advantage of the present situation in placing upon the statutes desirable laws pertaining to public health has not been overlooked, and will at the proper time be attended to.

Public Health Nursing.

As stated above, American Red Cross nurses have been assigned to public health work. The homes of the indigent sick are visited with a view to determining the quantity and kind of material aid which should be rendered. In this work a questionnaire is filled in and specific recommendations are made by the nurse to the officer in charge as to the steps that in her opinion should be taken.

These cases are cared for either with the American Red Cross funds allotted to this unit for this purpose, or in a cooperative manner, with the local chapter of the Red Cross and the Kings Daughters, churches, and civic organizations. The uninformed are instructed as to the ways and means of prevention of the spread of disease; rigid bedside sanitation is instituted and carried out in the home. The care and feeding of infants is given attention and professional services are rendered. This service was particularly needed in this area and has proved a very valuable adjunct to the work of rendering the area safe for troops.

Public Health Laboratory.

There has been established a small, though completely equipped laboratory, in which various activities connected with public health administration are carried on. Particular attention is given to bacteriological examinations of milk, ice cream, water, and all food products. Examinations are made for carriers; diagnoses are cleared up, and the early recognition of infectious diseases is facilitated.

Control of Venereal Diseases.

In cooperation with the Army and the American Red Cross, measures are being inaugurated for the establishment of control measures as regards the venereal diseases. It is proposed to establish one or more dispensaries where early treatment will be given to infected persons. In connection with the work of the dispensary it is intended to provide for the hospitalization or other proper treatment of carriers. The cooperation of local practitioners will be obtained in the work. Salvarsan and other remedies will be distributed to physicians free of cost. Bacteriological and serological examinations will be made.

Permanency of Results.

It is intended that the result of this work will not only be to render the zone safe for troops and the civil population during the time when unusual conditions prevail, but to leave a system of adequate health conservation in the zone after the present military necessity for such work shall have disappeared; and to leave here a sentiment for better public health administration and to demonstrate its advantages in such a manner as to create a public sentiment which will make available the necessary funds and personnel for the maintenance of sanitary conditions. It is hoped to leave here a skeleton health organization adequate to meet the conditions at ordinary times and as many material acquisitions appertaining to public health activities as possible.

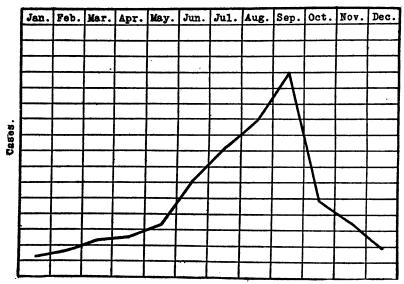
MALARIA IN ALABAMA.

PREVALENCE AND GEOGRAPHIC DISTRIBUTION-1915 AND 1916.

The study of the prevalence and geographic distribution of malarial fevers in the State of Alabama, through the circularization of the practicing physicians, was begun in 1912. Previous reports on this subject have been published in the Public Health Reports of October 25, 1913, and May 1, 1914, and issued as reprints Nos. 108 and 186.

During 1915 and 1916 the physicians were circularized every three months, reply postal cards being used for the purpose.

Of the cards sent to the physicians about 12 per cent were returned. The number of cards sent out, the number of schedules returned, and the counties represented at each circularization are shown in Table No. 1.



Relative prevalence of malaria in Alabama, by months, as indicated by the number of cases reported.

It is to be borne in mind that the number of cases reported by the physicians does not show the number of cases that actually occurred, for an average of only about 12 per cent of the physicians returned the schedules. While there must have been many more cases of malaria in the State, the reports of the physicians on which this study is based are sufficient to show whether malaria was present or absent in the several counties, and reasonably accurately the relative intensity of the infection in the counties.

The cases reported throughout the State by months are shown in Table No. 2. The relative numbers of cases reported by months are shown in the chart.

The number of cases reported from the several counties of the State are given by race and year in Table No. 3.

The map on page 2167 shows the relative prevalence of the disease in the several counties of the State, the heavier shaded counties being those in which the infection was heaviest, the unshaded counties those in which the infection was lightest, as indicated by the numbers of cases reported. The relative intensity of infection was determined by ascertaining the number of cases reported in each county during the two years—1915 and 1916—per 1,000 population. The population used was that of the 1910 census, it being impracticable to use current estimates for the purpose.

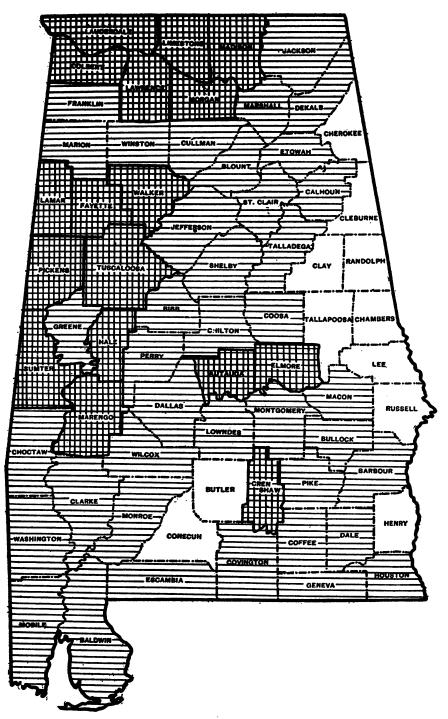
Three cases of hemoglobinuric fever were reported from Marengo County during the fourth quarter of 1916.

				٠.	2	
Period.	Inquiry cards sent to physi- cians.	Replies received.	Percentage of replies.	Counties represented in replies.	Counties not heard from.	Cases of malaria reported.
1915. January to March. April to June. July to September. October to December.	7, 050 2, 350 2, 350 2, 350	926 307 257 294	13. 13 13. 06 10. 94 12. 51	67 65 63 62	2 4 5	1,170 1,810 4,535 1,929
1916. January to March April to June July to September. October to December.	2,350 2,350 2,350 2,350	254 279 261 256	10.81 11.87 11.11 10.89	62 64 64 63	5334	659 2,39 3 6,2 61 1, 695

Table 1.—Results of circularization of practicing physicians.

Table 2.—Cases of malaria reported by months.

Year.	Jan.	Feb.	Mar.	Apr.	Мау.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1915	302	402	466	427	493	890	1, 190	1,406	1, 939	870	679	380
1916	140	181	338	483	654	1,256	1, 640	2,024	2, 597	866	547	282



Relative prevalence of malaria in Alabama, by counties in proportion to the population, as indicated by the number of cases reported.

TABLE 3.—Cases reported by counties, by years, and by color.

	Cale	endar year	1915.	Cale	Calendar year 1916.		
County.	White.	Colored.	Com- bined.	White.	Colored.	Com- bined.	
Autauga	77	70	147	62	107	169	
BaldwinBarbour	65 48	12 60	77 108	42 47	18 26	60 73	
Bibb	64	41	105	59	52	111	
BlountBullock	13 48	115	16 163	47	7	54	
Butler	• • • • • • • • •	2	2	8	7	15	
Calhoun	100 26	36 1	136 27	31	15	40	
Cherokee.	23	10	27 33	34	1	35	
Chilton	142 13	82 34	224 47	30	31	61	
Clarke.	119	106	225	47 61	57 90	104 151	
Clay	. 9	3	12	16	1	17	
Coffee	1 31	7	38	5 74	4	5 78	
Colbert	37	32	69	136	100	236	
Conecuh	7 9	6	13 14	7 14	8	236 11 22 15	
Covington	138	79	217	13	2	15	
Crenshaw Cullman	220 18	253	473 18	324 42	378	702	
Dale	66	47	113	24	5	42 29	
Dallas. Dekalb	102 46	68 52	170 98	65 26	102	29 167	
Elmore	172	166	338	124	147	28 271	
Escambia	97 81	36 71	133	33 51	22 7	55 58	
Fayette	599	86	152 685	635	64	58 699	
FranklinGeneva	51	8	59	128	5	133	
Greene.	141 27	30 82	171 109	119 21	10 44	129 65	
Hale	100	218	318	87	113	65 200	
Henry	140	13	153	11 219	10 31	21 250	
Jackson	174	51	225	113	31	144	
Jefferson. Lamar	192 69	126	318 94	333 135	197 92	530 227	
Landerdale	88	25 27	115	152	55	207	
Lawrence	350 17	73	423 25	505 27	57	562 27	
Limestone	58	30	88	189	126	315	
Lowndes. Macon.	59 10	102 29	161 39	1 49	140	7 1 8 9	
Madison.	99	6	105	299	345	644	
Marion.	135 50	104	239	157 40	416	57 3	
Marshall	16 .		54 16	46	41	47 50	
Mobile	201	315	516	159	123	282	
Montgomery	57 112	81 219	138 331	79 39	82 101	161 140	
Moreon	68	13	81	429	211	640	
Perry. Pickens	64	18 62	22 126	19 119	27 131	46 25 0	
Pike. Randolph.	118	85	203	82	59	141	
Russell.	6 .	7	6 15	12 5 .	3	15 5	
St. Clair	33	28	61	29	4	5 33 62	
ShelbySumter	176 138	42 189	218 327	59 130	212	62 34 2	
Talladega	134	44	178	132	44	176	
TallapoosaTuscaloosa	13 177	122	17 299	207	2 164	371	
Walker	140	28	168	292	75	367	
Washington	14 27	8 56	22 83	97 37	47 90	144 127	
	41	90 (O 0	01	3U (
Winston	58 .		58	59	6	65	

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.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED DEC. 18.

Camp Dodge, Iowa.—Smallpox—Des Moines 44, Valley Junction 3, Bloomfield Township 3. Scarlet fever—Des Moines 4. Diphtheria—Des Moines 3. Measles—Des Moines 3.

Camp Gordon, Ga.—In Atlanta, diphtheria 3, gonococcus infection 35, measles 17, syphilis 14, scarlet fever 7, tuberculosis 9, cerebrospinal meningitis 1. In Fulton County, typhoid fever 1.

Camp Greene, N. C.—Measles 7, mumps 1, diphtheria 1, scarlet fever 1, whooping cough 1, tuberculosis 1, chicken pox 1, gonorrhea 14, syphilis 29, chancroids 6; all in Charlotte Township.

Camp Hancock, Ga.—Richmond County, extra-camp cases, measles, Augusta 7, Blythe 9, Davisons Crossing 1, Hoods Chapel 8, and German measles, Augusta 7.

Fort Leavenworth, Kans.—Smallpox, city 2, county 1. German measles, city 7, county 1. Diphtheria, city 5. Chicken pox, city 4. Scarlet fever, county 4.

Camp Lee, Va.—German measles, Petersburg 9. Chicken pox, Petersburg 2. Diphtheria, Petersburg 3. Tuberculosis, Petersburg 2. Pneumonia, Petersburg 6. Typhoid fever, Hopewell 1. Pneumonia, Hopewell 1.

Camp McClellan, Ala.—Anniston, smallpox 3, chicken pox 1. Precinct 4, smallpox 8.

Camp Sevier, S. C.—Four measles, Butler, rural; 4 measles, Chick Springs, rural; 1 measles, Mills Mill.

Camp Shelby, Miss.—Chicken pox 2, diphtheria 1, German measles 8, measles 28, malaria 1, meningitis 2, mumps 1.

Camp Sheridan, Ala.—Measles 20, German measles 17, scarlet fever 1, diphtheria 2, smallpox 6, tuberculosis 4, chancroid 2, gonorrhea 1, typhoid 2; Cloverdale, German measles 1; town of Chisholm, none; rural district in 5-mile zone, none; Capitol Heights, none.

Camp Sherman, Ohio.—Diphtheria—Chillicothe, 1; measles—Chillicothe, 12; Frankfort, 1; smallpox—Chillicothe 1; Jefferson township, 1; Springfield Township, 1; typhoid fever—Chillicothe, 2; tuberculosis—Chillicothe, 1.

Camp Zachary Taylor, Ky.—Jefferson County—measles, 1; mumps, 2; typhoid fever, 1; Louisville city—chickenpox, 8; diphtheria, 6; mumps, 1; scarlet fever, 9; tuberculosis, 17; typhoid fever, 1.

Tidewater Health District, Va.—Newport News—diphtheria, 1; measles, 5; typhoid 6; pneumonia, 2; syphilis, 1; Hampton—measles, 2; chickenpox, 1; Phoebus—typhoid, 1.

Camp Wadsworth, S. C.—Spartanburg city—German measles, 12; measles, 2; chickenpox, 2; whooping cough, 1; diphtheria, 1; malaria, 2.

Camp Wheeler, Ga.—Extra-cantonment zone, Camp Wheeler—typhoid fever in Macon, 2; typhoid fever in Bibb County, 2; diphtheria in Macon, 2; measles in Macon, 68; measles in East Macon, 2; chickenpox in Macon, 12; tuberculosis in Macon, 2; mumps in Macon, 2.

CURRENT STATE SUMMARIES.

Arkansas.

From Collaborating Epidemiologist Garrison, telegram dated December 17, 1917:

For week ending 15th have to report 7 cases smallpox Dermott, 11 Jefferson County, 2 Cleveland County; 3 scarlet fever Helena; 29 measles Thornton.

California.

From the California State Board of Health, telegram dated December 18, 1917:

Week ending December 15: Three cases epidemic cerebrospinal meningitis, 1 each Fresno County, Los Angeles, and San Diego; 2 cases smallpox, 1 each Solano County and Oakland; 8 cases hookworm, Amador County. Prevalence of diphtheria diminished throughout State except in San Francisco and Los Angeles. General increase noted in chicken pox, measles, and mumps. Twenty-three cases typhoid reported.

Reported by mail for the preceding week (ending Dec. 8):

Cerebrospinal meningitis	4	Pneumonia	89
Chicken pox	153	Poliomyelitis	5
Diphtheria	62	Scarlet fever	77
Erysipelas	9	Smallpox	3
German measles	53	Syphilis	73
Gonorrhea		Trachoma	6
Malaria	5	Tuberculosis	102
Measles		Typhoid fever	30
Mumps		Whooping cough	64

Connecticut.

From Collaborating Epidemiologist Black, telegram dated December 17, 1917:

Smallpox 1 Bridgeport reported 11th, poliomyelitis 1 Plymouth, diphtheria unusually prevalent New London, Derby.

Kansas.

From Collaborating Epidemiologist Crumbine, telegram dated December 17, 1917:

Epidemic meningitis Canton 1, meningitis carriers Manhattan 10, typhoid Eldorado 6.

Massachusetts.

From Collaborating Epidemiologist Kelley, telegram dated December 18, 1917:

Foxboro 7 additional (total December, 15) unusual prevalence diphtheria Ashby 4 typhoid fever North Brookfield 5 smallpox Malden 1 Boston (total Boston December, 3) measles Camp Devens 30 additional and 23 German measles additional.

Minnesota.

From Collaborating Epidemiologist Bracken, telegram dated December 17, 1917:

Smallpox Kittson County, Kennedy village, 1; Polk County, Sanderville township, 3. Four cases poliomyelitis and 3 cases cerebrospinal meningitis reported since December 10.

Nebraska.

From the State Board of Health of Nebraska, telegram dated December 17, 1917:

Smallpox at Ericson. Gordon. Pender. Leigh. Eustis. Belgrade. Lincoln, Broken Bow. Scarlet fever at Lyons. Ericson. Culbertson. Antioch, Shelton, Cairo, Wahoo, Lincoln. Measles at Lincoln. Diphtheria at Lincoln.

Washington.

From Collaborating Epidemiologist Tuttle, telegrams dated December 17 and 18, 1917:

Six cases scarlet fever Leavenworth, one poliomyelitis Port Angeles. Five cases cerebrospinal meningitis Port Angeles, Clallam County.

CEREBROSPINAL MENINGITIS.

State Reports for November, 1917.

Place.	New cases reported.	Place.	New cases reported.
Maryland: Baltimore. West Virginia: Kanawha County— Charleston.	7 	West Virginia—Continued. Ohio County— Wheeling	1 2

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlanta, Ga Baltimore, Md Boston, Mass Brock ton, Mass Buffalo, N. Y Cairo, Ill Chicago, Ill Cincinnati, Ohio Cleveland, Ohio Dayton, Ohio Detroit, Mich Elizabeth, N. J	2 1 2 4 1 1	1 4	Galesburg, Ill. Los Angeles, Cal. Lowell, Mass. Maluen, Mass. Milwauree, Wis. New Britain, Conn. New York, N. Y. Philadelphia, Pa. Pittsburgh, Pa. St. Louis, Mo Worcester, Mass.	1 2 1 6 4 1 2	1

DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2177.

ERYSIPELAS.

City Reports for Week Ended Dec. 1, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alameda, Cal. Atlanta, Ga. Boston, Mass. Bridgeport, Conn. Buffalo, N. Y. Cambridge, Mass. Chicago, Ill. Cincinnati, Ohio. Cleveland, Ohio. Coffeyville, Kans. Dayton, Ohio. Detroit, Mich. Fall Kiver, Mass. Harrisburg, Pa. Jersey City, N. J. Lorain, Ohio. Los Angeles, Cal. Lowell, Mass.	1 3 1 1 1 2 10 2 3 2	1	Milwaukee, Wis Newark, N. J. New Bedford, Mass. New Orleans, La New York, N. Y Omaha, Nebr Pittsburgh, Pa Portland, Me Providence, R. I. Rochester, N. Y Rutland, Vt Sacramento, Cal St. Joseph, Mo St. Louis, Mo St. Paul, Minn Toledo, Ohio Troy, N. Y Washington, Pa	1 5 1 1 1 1 7 2 1	

LEPROSY.

South Carolina—Bennettsville.

On December 15, 1917, a case of leprosy in the person of J. P. N., was reported at Bennettsville, S. C.

City Report for Week Ended Dec. 1, 1917.

During the week ended December 1, 1917, 1 case of leprosy was reported at Galveston, Tex.

MALARIA.

Maryland Report for November, 1917.

Place.	New cases reported.
Maryland: Anne Arundel County— Curtis Bay	1
Total	2

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala	3 1	i	Jersey City, N. J Memphis, Tenn	1	i

MEASLES.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2177.

PELLAGRA.

Maryland Report for November, 1917.

·Place.	New cases reported.
Maryland: Quoen Annes County- Ruthsburg. Centreville. Total	1 1 2

City Reports for Week Ended Dec. 1, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlanta, Ga. Austin, Tex. Birmingham, Ala. Charleston, S. C. Chicago, Ill. Memphis, Tenn.		$\begin{bmatrix} 1\\2\\2 \end{bmatrix}$	Nashville, Tenn. New Orleans, La. Norfolk, Va. Rıchmond, Va. Washington, D. C. Winston-Salem, N. C.	1	1

PNEUMONIA.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md Bert-elev, Cal Beston, Mass Brock ton, Mass Brock ton, Mass Brock ton, Mass Chelsea, Mass Chelsea, Mass Chicago, Ill Cleveland, Ohio. Clinton, Mass Detroit, Mich Everett, Mass Filt River, Mass Filthburg, Mass Filthburg, Mass Firchburg, Mass Firchburg, Mass Firchburg, Mass Firchburg, Mass Firchburg, Mass Crand Rapids, Mich Harrisburg, Pa Haverhill, Mass Jackson, Mich Kalamazoo, Mich Kalamazoo, Mich Kansas City, Mo Lancaster, Pa Lorain, Ohio Las Angeles, Cal Lowell, Mass Lynn, Mass	1 29 1 3 3 1 1 1 20 2 1 1 2 2 3 3 1 1 1 2 2 2 1 2 2 3 3 1 1 1 2 2 3 3 3 1 1 1 2 2 3 3 3 1 1 1 2 2 3 3 3 1 1 1 2 2 3 3 3 1 1 1 2 2 3 3 3 1 1 1 2 3 3 3 3	23 25 26 29 22 20 1 3 1 2 2 1 1 1 1 1 1	Malden, Mass Manchester, N. H Montclair, N. J Nashville, Tenn Newark, N. J New Bedford, Mass New Castle, Pa Newbort, Ky Newton, Mass Philadelphia, Pa Pontiac, Mich Quincy, Mass Reading, Pa Rochester, N. Y Sacramento, Cal San Diego, Cal San Diego, Cal Sandusky, Ohio San Francisco, Cal Schenectady, N. Y Somerville, Mass Springfield, Mass Springfield, Mass Stockton, Cal Wichita, Kans Wilkinsburg, Pa	1 46 7 2	4 1 2 9 2 2 1 69 35 1 1 3 2 2 2 2

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for October and November, 1917.

Place.	New cases reported.	Plaće.	New cases reported.
Oregon (Oct. 1-31): Marion County Multnomah County Portland Total Vermont (Nov. 1 30): Franklin County St. Albans	1 1 5 7 	West Virginia (Nov. 1-30): Grant County. Greenbrier County. Hampshire County. Kanawha County. Marshall County. Monongalia County.	1

City Reports for Week Ended Dec. 1, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Berkeley, Cal	3 1 2	1	New York, N. Y. Omaha, Nebr. Rochester, N. Y. Sioux City, Iowa	2 1 1 1	

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2177.

SMALLPOX.

Maine-Eastport.

On December 14, 1917, 20 cases of smallpox were reported at Eastport, Me.

Maryland.

On December 10, 1917, 4 cases of smallpox were notified at Westernport, Allegany County, Md., and during the period from December 13 to 17, 9 cases were notified at Cumberland, Allegany County, Md.

SMALLPOX—Continued.

State Reports for November, 1917.

			Vaccination history of cases.						
Place.	Number of new cases re- ported during month.	Deaths.	Number vaccinated within 7 years pre- ceding attack.	Number last vacci- nated more than 7 years preceding attack.		Vaccination history not obtained or uncertain.			
Maryland: Baltimore.					•				
Allegany County—	1	·····	•••••		1	· · · · · · · · · · · · · · · · · · ·			
Cumberland	11				11				
Calos	1	 	•••••	• • • • • • • • • • • • • • • • • • • •	1				
Lonaconing Anne Arundel County—	1		•••••	• • • • • • • • • • • • • • • • • • • •	1				
Camp Meade	1				1				
Garrett County—	_				_				
Grantsville, R. D Avilton, R. D	2 2				2	· · · · · · · · · · · · · · · · · · ·			
Aviiton, 1t. D									
Total	19		•••••		19	-			
Massachusetts: Su_olk County—									
Boston	1				1	•••••			

Miscellaneous State Reports.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Oregon (Oct. 1-31): Multnomah County— Portland. West Virrina (Nov. 1-30): Cabell County— Huntington. Fayette County Jefferson County Kanawha County.	1 13 2 65		West Virginia—Con. Kanawha County—Con. Charleston. McDowell County Ohio County. Raleigh County Tyler County. Wirt County. Wood County. Total.	2	

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio. Alton, Ill. Baltimore, Md. Boston, Mass Buffalo, N. Y Butte, Mont Canton, Ohio. Chicago, Ill. Cleveland, Ohio. Columbus, Ohio. Cumberland, Md. Dayton, Ohio. Denver, Colo. Detroit, Mich. Evansville, Ind. Flint, Mich. Fort Wayne, Ind. Galesburg, Ill. Grand Rapids, Mich Harrisburg, Pa. Indianapolis, Ind Kansas City, Kans Kansas City, Kans Kansas City, Kans Kansas City, Moo. Knoxville, Tenn	9 1 1 5 29 2 2 2 2 13 1 6 13 7 1 1 1 4 1 7 4 1 7		La Crosse, Wis. Memphis, Tenn Milwaukee, Wis Minneapolis, Minn New Orleans, La Newport, Ky Oklahoma City, Okla Omaha, Nebe. Pittsburgh, Pa Portland, Oreg Quincy, Ill St. Louis, Mo. St. Paul, Minn Salt Lake City, Utah San Francisco, Cal Sloux City, Iowa Springfield, Ill Springfield, Ohio Superior, Wis Tacoma, Wash Toledo, Ohio Washington, D. C Wichita, Kans	6 2 2 1 1 1 1 1 1 1 7 6 2 2 5 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

TETANUS.

City Reports for Week Ended Dec. 1, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Clinton, Mass	1	1 1	San Francisco, Cal. Spring eld, Ohio Workester, Mass	1 1 1	i

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2177.

TYPHOID FEVER.

State Reports for October and November, 1917.

Place.	New cases reported.	Place.	New cases reported.
Maryland (Nov. 1-30): Baltimore. Allegany County. Anne Arundel County Baltimore County. Caroline County. Caroline County. Charles County. Cecil County. Dorchester County. Frederick County. Garrett County. Harford County. Howard County. Montgomery County. Prince Georges County. Somerset County. St. Marys County. Talbot County. Washington County. Washington County.	2 10 2 2 2 13 7 6 5 5 1 1 3 8 8 1 5	Vermont (Nov. 1-30): Bennington County. Fran: lin (ounty. Orange County. Rutland County. Total. West Virginia (Nov. 1-30): Barbour County. Berkeley County. Broke County. Broke County. Broke County. Underlike (ounty. Fayetts County. Greenbrier County. Hardy County. Kanawha County. Lincoln County. McDowell County. Marion County.	4 1 1 1 1 1 1 1 1 4 4 1 1 9 9 2 1 1
Wicomico County Total Oregon (Oct. 1-31): Baker County. Douglas County. Grant County Harney County Hood River County Jackson County Linn County Malheur County. Multnomah County— Portland Polk County. Umatilla County Union County Wasco County Yamhill County Total	168 3 1 1 3 3 3 1 5	Mercer County Mingo County Monongalia County Morgan County Ohio County Elm Grove Wheeling Pendleton County Richie County Roane County Summers County Tucker County Tucker County Total	2 5 6 12

TYPHOID FEVER—Continued.

City Reports for Week Ended Dec. 1, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Albany, N. Y	8		New Orleans, La	1	
Ann Arbor, Mich	1		New York, N. Y	13	1 4
Atlanta, Ga	2	1		1	
Aus in, Tex	1		Oklahoma Ćity, Okla	2	
Ba.timore, Md	10	1	Philadelphia, Pa	10	
Birm ingham, Ala	4	1	Pittsburgh, Pa		
Boston, Mass	2		Pittsfield, Mass	1	
Brock ton, Mass	1		Pontiac, Mich	2	1 1
Buffalo, N. Y	4	1	Portland, Me	2	
Cairo, Ill	1		Portland, Oreg.	2	l
Camden, N. J	3		Quincy, Ill	1	
Charleston, S. C	2		Richmond, va	2	
Chicago, Ill	7	4	Rochester, N. Y		[1
Cleveland, Ohio	4	1	Rockford, Ill	1	<i>-</i>
Columbus, Ohio		1	Rock Island, In		
Cumberland, Md	1				
Detroit, Mich	6		St. Louis, Mo	4	
Duluth, Minn.	1	1 1		1	
East Orange, N. J Elizabeth, N. J	1		San Francisco, Cal		
Elizabeth, N. J	5		San Jose, Cal		
Fall River, Mass	11		Somerville, Mass	2	1
Flint, Mich	1	1	South Bethlehem, Pa	1	
Galesburg, Ill	2		Springfield, Ill		
Grand Rapids, Mich	1		Springfield, Mass	1 2	
Haverhill, Mass	1		Springfield, Ohio	2	
Indianapólis, Ind	1	i	Stockton, Cal	1	
Kansas City, Mo	3	1	Terre Haute, Ind	2	
Kokomo, Ind	1		Toledo, Ohio	3	
Lexington, Ky	2		Toledo, Ohio	2	1
Los Angeles, Cal Lynchburg, Va	1		I [OV, N. I]
Lynchburg, Va	1		Washington, D C	4	1
Lynn, Mass			Washington, Pa Watertown, N. Y	1	
Malden, Mass	1 1	i	watertown, N. Y	6	• • • • • • • • • • • •
Memphis, Tenn	1	1	Wheeling, W. Va	3	2
Minneapolis, Minn	3		Wichita, Kans	5 1	
Mobile. Ala	1	1		1	2
Nashville, Tenn	3		Winston-Salem, N. C		
Newark, N. J	1	1	Worcester, Mass		2
New Bedford, Mass	2		l		

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for October and November, 1917.

State.	Cas	es repo	orted.		Cases reported.			
	Diph- theris.	Mea- sles.	Scarlet fever.	State.	Diph- theria.	Mea- sles.	Scarlet fever.	
Maryland (Nov. 1-30) Oregon (Oct. 1-31)	228 22	290	165 36	Vermont (Nov. 1-30) West Virginia (Nov. 1-30)	26 173	23 54	42 105	

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

	Popula- tion as of July 1, 1916	Total deaths	Diph	theria.	Mea	sles.		arlet ver.		ber- osis.
City.	(estimated by U. S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:	E00 cos		91	1	10					
Baltimore, Md Boston, Mass	589, 621 756, 476	204 216	31 111	1 4	16 68	1 3	28	i	18 80	27 32
Chicago, Ill	2,497,722	601	248	19	45	2	101	4	373	62
Cleveland, Ohio	674,073		34	4	4		12		29	31
Detroit, Mich	571, 784	173	111	8	19		59	2	29	12
Los Angeles, Cal. New York, N. Y. Philadelphia, Pa. Pittsburgh, Pa.	503,812	161	13		3		16		33	14
Philadelphia Pa	5,002,841 1,709,518	1,445 497	247 81	24 8	297 12	1	132 57	3	290 92	142
Pittshurgh, Pa	579,090	213	45	3	21	il	ii	i	16	53 17
St. Lo is, Mo	757,309	197	45 85	3	15		48		32	21
St. Loris, Mo	·					i				
onts:				_				_		ł
Buffalo, N. Y	468, 558	144	29	1	10			1	31	17
Toron (ity N I	410, 476 305, 345	128 85	16 23	····i	31	5	16 7	•••••	18 6	14 7
Milwaukee, Wis	436,535	98	14	î	40	٠,١	28		13	6
Minneapolis, Minn Newark, N. J	363,454		16		9		8			
Newark, N. J	409, 894	110	16	2	25		19		25	7
New Orleans, La	371.747	119	5	1	12		2 7		21	14
San Francisco, (al	463,516	138	17	1	27 7			1	8	9
Seattle, Wash	348, 039 363, 980	115	5 29	2	61	2	30	····i	7 21	4 6
From 200,000 to 300,000 inhabit-	300,000	110	20	- 1	01	-	30	- 1	21	U
ants:			1		- 1	ı				
Columbus, Ohio	214,878	51	11].		19		8	4
Denver, Colo	260,800	63	6		5		9			13
Indianapolis, Ind	271,709 297,847		46 14		2 8		23		19	•••••
Portland Oreg	295, 463	73 62	3		3		12 3		1 6	10 3
Providence, R. I	254,960	73	17	i	4	i	5			3
Indianapolis, Ind Kansas i ity, Mo Portland, Oreg. Provi ience, R. I. Rochester, Y. Y.	256, 417	68	7	2	18		19	1	11	2 8
Ot. 1 & 1, MILLI	247, 232	68	9	1	1 .		5		8	8
From 100,000 to 200,000 inhabit-	1		- 1	!			- 1	j	I	
Albany, N. Y	104, 199	•		1	3 .	1		ı	10	
Atlanta Ga	190,558		3	i	17		8		10	6
Atlanta, Ga	181,762	81	3 .		5				8	š
Bridgenort, Conn	121,579	27	14		7		3 .		6	4
Cambridge, Mass	112,981		6 .		6 .				11	6
Camden, N. J	103, 233	····	8 .		26 .				4	····· <u>ż</u>
Fall River, Mass	127, 224 128, 366	53 31	13	1	$\begin{bmatrix} 3 \\ 2 \end{bmatrix}$.		3 1		2 12	4
Grand Rapids, Mich	128, 291	34	7	2	4		4		6	i
Lawrence, Mass	100,500	21	3 .				2		4	
Lowell Mass	113, 245	23 30	11 .				4 .		6	3
Lynn, Mass	102, 425		2 .		2 .		2		3	1
Lynn, Mass Momphis, Tenn Nashville, Tenn	102, 425 148, 995 117, 057	39	16 .		33 .		7		11	4
New Redford Mass	118, 158	33 25	1 2	i	13 . 15 .		5 .		4	2
New Bedford, Mass New Haven, Conn Oakland, Cal Omaha, Nebr Reading, Pa	149,685	20	3	il	5		2		6	2 2 2
Oakland, Cal	198,604	48	4	î	ĭ į		2 -		7	2
Omaha, Vebr	165,470	40	4 .	!	3 .		6 .		1	4
Reading, Pa	109,381	33	8	1	1 .		5 .			• • • • •
Richmond, Va	156,687 117,399	49 29	21 .	:-	2 .		4.		2	3
Springfield, Mass	105, 942	39	4	1	35 . 1 .		12 . 15 .		9	1 2
Springfield, Mass. Syracuse, V. Y. Tacoma, Wash. Toledo, Ohio.	155, 624	55	17	2	10	···i	19		7	$\bar{3}$
Tacoma, Wash	112,770		15 .				2			
Toledo, Ohio	191,554	70	20	4	7 .		5 .			9
Trenton, N. J	111,593	43	15	2	• • • • • •		3 .		2	4
Worcester, Mass	163,314	52	9	3	4	1	9 .		5	6
ants:	I		- 1		- 1	- 1		i	ı	
Akron, Ohio	85,625		9				1 .		4 .	
Bayonne, N. J.	69, 893		4 .				1 .		1 .	••••
Berkeley, Cal. Binghamton, N. Y	57,653	7	1 .		6		4 .		1 .	
Binghamton, N. Y	52 072	26	6		2		5 .		2	2
Brockton, Mass	67, 449	.8	4 -	• • • • • • •				• • • • • •	• •	••••;
Canton, Onio. Charleston, S. C. Covington, Ky. Duluth, Minn.	67, 449 60, 852 60, 734 57, 143	19 33	5	···i	''i'.		4 -		•••••	1 3 5 2
	Uti, 104	.,,,	"	- 1	*			••••		<u> </u>
Covington, Ky	57, 143	26	4	!		1	1 .		2 2	5

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

City Reports for Week Ended Dec. 1, 1917—Continued.

	Popula-		Din	ht horio	l vo		Sc	arlet	Tı	ıber-
City.	tion as of July 1, 1916 (estimated	Total deaths from	1 -	htheria	. Me	asles.		ver.		losis.
	by U. S. Census Bureau).	all causes	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 50,000 to 100,000 inhabitants—Continued.										
Elizabeth, N. J.	86,690	17	10		. 12	ļ	. 10	l	. 3	4
	76,078	16	8		•		. 6		.	3
Fort Wayne, Ind	54,772 76,183	19 17	8 5 7	2			16		3 4	1 2
Flint, Mich Fort Wayne, Ind Harrisburg, Pa Hoboken, N. J Johnstown, Pa	72,015 77,214 68,529 99,437	19	5	1			3			.
Hoboken, N. J	77,214	18 19	1 5	i	14 2		1		4	1
Kansas City, Kans	99, 437	19	. 4	1	. 3		4		4	i
Kansas City, Kans. Lancaster, Pa. Malden, Mass. Manchester, N. H. Mobile, Ala.	50.803		5		. 1		ĺ			
Maiden, Mass	51, 155 78, 283	16	6	3	5 3		1		····	
Mobile. Ala	58, 221	23 13	i	3			1 1		1	1 1 1 5
rew pineam. Comm	53, 794	-ğ	3				1		7	î
Norfolk, Va	89,612 92,943		3 9 5		8		2		-	5
Oklahoma City, Okla. Passaic, N. J.	71,744	17 11	li		i		1		4	1
r ortiand, me	63,867	17	Ī		117	1	2			
Rockford, Ill	55, 185 66, 895	13			i	•••••	1			2
Saginaw, Mich	55,642	27 8	4		1		5 4		6	1
St. Joseph, Mo	85, 236	10	20				i		1	
Savennah Ge	53,330 68,805	25 36	9 4	•••••	2 3				2	4
Schenectady, N. Y	99,519	24	4		2			1	4 5	5 1
Sioux City, Iowa	99,519 57,078		7				2			1
Somerville, Mass	87,039 68,946	21 17	7 2		24 1	• • • • • •	10		2	i
Sacramento, Cal Saginaw, Mich St. Joseph, Mo San Diego, Cal Savannah, Ga Schenectady, N. Y Sioux City, Iowa Somerville, Mass South Bend, Ind Springfield, Ill. Springfield, Ohio Terre Haute, Ind Troy, N. Y Wichita, Kans Wilkes-Barre, Pa	61, 120	20	3		1	•••••	ı			3
Springfield, Ohio	51,550 I	16	1		i		4			2
Troy N V	66,083 77,916	17	3		;-	•••••	1			3 2 2 3
Wichita, Kans	70, 722		li	i	1 1		4 3		2 1	3
Wilkes-Barre, Pa. Wilmington, Del.	76,776 1	23	l		7		3		2	1
York, Pa	94, 265 51, 656	30	3 8	2			3 2		;-	2
York, Pa. From 25,000 to 50,000 inhabit-	01,000	• • • • • • • • • • • • • • • • • • • •	ľ			•••••	ء ا		1	• • • • •
	~~ ~~	_	_	1						_
Alameda, Cal	27, 732 37, 385	5 8	8		1 2		1		1	1
Austin, Tex	34,814].		i							
Bellingham, Wash	32,985	1				!				
Butler, Pa	32,730 27,632	4 6	2		1		4	•••••		·····i
Butte, Mont	43,425						6			
Chiconge Mass	46, 192	9	2 2 3 2 3		15		6		1	1
Cumberland, Md	29,319 . 26,074	5	2	i	1	•••••			•••••	1 1
Danville, Ill	32, 261	11	3	<u>-</u>	<u>-</u> -					·····
Brookine, Mass. Butter, Pa. Butte, Mont. Chelsea, Mass. Chicopee, Mass. Cumberland, Md Danville, Ill. Davenport, Iowa. Dubuque, Iowa	48,811 . 39,873 .		3			•••••	1 1			•••••
Dubuque, Iowa East Chicago, Ind East Orange, N. J.	28,743	ii	3		6					
East Orange, N. J.	42, 458				98 .		2 3		3 2	1
Everett, Mass Everett, Wash	39,233	5 8 6			20		3		2	2
Fitchburg, Mass	35,486 41,781	10	i							····· <u>2</u>
Galveston, Tex	41,863 29,353	8	4		4 .		2			•••••
Hagerstown, Md	29,353 25,679	8	2				1 4	-	•••••	• • • • •
Haverhill, Mass	48, 477	8	4	1	2		i		···i	
Jackson, Mich.	35 363	9	2 3 19				19		3	
Jackson, Mich Kalamazoo, Mich Kenosha, Wis. Kingston, N. Y Knoxville, Tenn La Crosse, Wis. Lexington, Ky Lima, Ohio	48,886 31,576 26,771	9 16 7 5	10	····i	30 .		9	•••••	4	1
Kingston, N. Y	26,771	5 l						····		• • • • • •
Anoxville, Tenn	38,0/0 [.		3 2		i .		14		3	
Lexington, Ky	31,677 41,097	20	2		5	•••••	1 3 3	•••••	4	••••••
Lima, Ohio. Long Beach, Cal.	35,384	91	···i		i.		3			i
Lorsin, Ohio	27,587	10					1 .			
Lorain, Ohio Lynchburg, Va. Madison, Wis	32,940	10 1 4	2	1					3	·····i
madison, Wis	41,097 35,384 27,587 36,964 32,940 30,699		····i				i i			····•

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

City Reports for Week Ended Dec. 1, 1917—Continued.

	Popula- tion as of July 1, 1916	Total deaths	Diph	theria.	Mea	ısles.		arlet ver.		ber- osis.
City.	(estimated by U. S. Census Bureau).	from all causes.	Cases.	Deaths	Cases.	Deaths.	Cases.	Deaths.	Cases.	Doaths.
From 25,000 to 50,000 inhabitants—Continued. Nodford, Mass. Nontclair, N. J. Nashua, N. H. New Castle, Pa. Newport, R. I. Newton, Mass. Niagara Falls, N. Y. Norristown, Pa. Ogden, Utah. Orange, N. J. Pasadena, Cal. Perth Amboy, N. J. Pittsfield, Mass. Portsmouth, Va. Quincy, Ill. Quincy, Ill. Quincy, Mass. Facire, Wis. Roanoke, Va. Fook Island, Ill. San Jose, Cal. Steubenville, Ohio. Storkton, Cal. Superior, V. is. Taunton, Mass. Watertown, N. Y. West Hoboken, N. J. Winston-Salem, N. C. Zanesville, Ohio. Zanesville, Ohio.	26, 234 26, 318 27, 327 41, 133 30, 108 43, 715 37, 353 31, 401 31, 404 46, 450 41, 185 38, 629 39, 651 38, 629 38, 136 46, 486 43, 224 22, 926 33, 35, 353 36, 486 46, 486 47, 224 27, 445 35, 353 46, 226	7 7 3 6 6 3 8 12 13 13 18 12 13 8 4 4 7 7	3 6 2 3 1 3 2 8 1 1	1	2 2 2 1 2 2 4 2		1 1 1 1 1 2 3 3 1	1	3 2 1 1 2	1 1 2 3 3 1 3 2
FIGHT 10,000 to 20,000 HHBBDH-1	36, 223 29, 794 43, 139 43, 377 33, 809 31, 155 30, 863	19 1 . 5 12 13 12	2 3 1 1	1	2 1		3 1 1 1 5 1		3 13 1 3 7 1	2 1
Alton, Ill. Ann Arbor, Mich. Berlin, N. H. Braddock, Pa. Cairo, Ill. Clinton, Mass.	22, 874 15, 010 13, 599 21, 685 15, 794 13, 075 17, 548	13 12 2 2 8 7	1 8 .3		4		1		2	3 2
ants: Alton, Ill Ann Arbor, Mich Berlin, N. H. Braddock, Pa. Cairo, Ill Clinton, Wass Coffeyville, Kans. Concord, N. H Galesburg, Ill Kearny, N. J. Kckomo, Ind Leavenworth, Kans. Long Branch, N. J. Marinette, Wis. Melrose, Mass.	17,548 22,669 24,276 23,539 20,939 119,373 15,395 14,610 17,445 13,284	13 10 7 2 2 2 7	2		1 18 18 2		1 2 10			
Morristown, N. J. Nantiroke, Pa. Newburyport, Mass. New London, Conn. North Adams, Mass. Northampton, Mass. Plainfield, N. J.	17, 445 13, 284 23, 126 15, 243 20, 985 122, 019 19, 926 23, 805 17, 524	6 2 6 4 7 13	1 2 1 1 3	1	1		2		5	
Pontiac, Mich Portsmouth, N. H Rocky Mount, N. C Rutland, Vt Sandusky, Ohio Saratoga Springs, N. Y South Bethlehem, Pa Steelton, Pa Washington, Pa	17, 524 11, 666 12, 067 14, 831 20, 193 13, 821 24, 204 15, 548 21, 618	6 3 4 5 8	3		1		1		2	1
Wilkinsburg, Pa	23, 228	6	1		i ;			<u> </u>		•••••

¹ Population Apr. 15, 1910: no estimate made.

FOREIGN.

CHINA.

Examination of Rats-Hongkong.

During the five weeks ended October 27, 1917, 10,925 rats were examined at Hongkong. No plague infection was found. The last plague-infected rat at Hongkong was reported found during the week ended September 22, 1917.

CUBA.

Communicable Diseases-Habana.

Communicable diseases have been notified at Habana as follows:

	Nov. 11-	20, 1917.	Remain- ing under				ing under treatment	
Diseases.	New cases.	Deaths.	treatment Nov. 20, 1917.	Diseases.				
DiphtheriaLeprosyMalariaMeasles	2 1 26 1		3 10 52 1	Paratyphoid fever Smallpox Typhoid fever	* 20		3 21 84	

¹ From the interior.

MEXICO.

Cerebrospinal Meningitis-Vera Cruz.

Cerebrospinal meningitis was reported prevalent at Vera Cruz, Mexico, November 26, 1917.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER. Reports Received During the Week Ended Dec. 21, 1917. CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India: Bombay	Sept. 23–30 Sept. 2–15. Sept. 30–Oct. 13	4 5	4 11 5	Oet. 28-Nov. 3, 1917: Cases, 172;
Bohol. Capiz Iloilo. Mindanao. Negros Occidental. Negros Oriental Straits Settlements: Singapore	Oct. 28-Nov. 3dododododododo.	15 5 29 14 95 14	15 3 20 13 65 12	deaths, 128.

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

² From the interior, 6 cases.

From Coruna, Spain.

Reports Received During the Week Ended Dec. 21, 1917—Continued.

PLAGUE.

	PLA	GUE.		
Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:	Oct. 14-20	2	1	
India				Sept. 23-Oct. 6, 1917: Cases
Bombay	Sept. 23-Oct. 6 Sept. 30-Oct. 13	21	18	21,375; deaths, 16,240.
Madras	Sept. 30-Oct. 6	5	5	
Madras Presidency	do	1,925	1,409	i
RangoonStraits Settlements:	Sept. 9-Oct. 6	118	109	1
Singapore	Sept. 23-Oct. 6	2	2	
	SMAL	LPOX.		
A32			i	
Algeria: Al ziers	Oct. 1-30	1		i
Brazil:		_		ł
Bahia	Oct. 21-Nov. 3	2		1
Canada: Ontario—				
Sarnia	Dec. 2-8	1		
China:	04 15 01			D4
AmoyAntung	Oct. 15-21 Oct. 29-Nov. 4	3	•••••	Present.
Chung ing	Oct. 14-27. Oct. 28-Nov. 3 Oct. 29-Nov. 4			Do.
Mukden Shanghai	Oct. 28-Nov. 3			Do.
Tientsin	Nov. 4-10	1 5	5	Cases among foreign population;
Egypt:	NOV. 1-10	9	•••••	deaths, Chinese.
Cairo	May 21-June 3	4	1	
India: Bombay	Sept. 23-Oct. 6			
Calcutta	Sept. 2-8	3	3 1	
Madras	Sept. 30-Oct. 6	3	ī	
Rangoon	do	1		
Milan	Sept. 10-16	3		
Philippire Islands:	i	- 1		
ManilaRussia:	Oct. 28-Nov. 3	2		Varioloid.
Moscow	Aug. 12-25		4	
Petrograd	Aug. 14-25	11		
Spain:	1	1	1	
Coruna	Sept. 30-Nov. 3 Oct. 1-31	5	3	
Straits Settlements:	1		- 1	
Singapore	Sept. 16-Oct. 13	7	1	
	TYPHUS	FEVER		
China:	1	Ī	· I	
Antung	Oct. 29-Nov. 4	11	4	
Tientsin	Nov. 4-10	1		
Egypt: Cairo	May 21-June 3	68	29	
Port Said	May 28-June 3	ĩ	ï	
Japan:	- 1	٠,١	اء	
Nagasaki Russia:	Nov. 5-11	1	2	
Moscow	Aug. 5-18.	. l	7	
Petrograd	Aug. 14-25	3 .		
Spain: Madrid	Oct. 1-31.	- 1	1	
			*	

Reports Received from June 30 to Dec. 14, 1917. CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
		 	-	
India: Bassein	Apr. 1-May 5		. 8	
Bombay	Apr. 1-May 5 June 24-30	i 1	l i	
Bombay Do	. July 8-Sept. 22	.1 20	11	Į.
Calcutta	. Apr. 29-June 30		. 347	
1)0		7	57	1
Karachi	Sept. 9-29. Apr. 22-June 30. July 1-Sept. 29.	5	5 4	
Do	July 1-Sept. 29	112	68	
Do	. May o-June 50		2	1
Do	. JUIV 29-Ang. 25		2 2 3	
Moulmein		·	1 1	
Pakokku	May 27-June 30		Î	l
Pegu. Do. Promo	May 27-June 30 July 1-7. July 29-Aug. 11 Apr. 21-June 30		5 7	
	July 29-Aug. 11		1	i e
Rangoon	Apr. 21-June 30	31	17	
Do	July 8-Sept. 8	10	8	June 3-23, 1917: Cases, 5;
Indo-China:		1		deaths, 3.
Provinces			l	Feb. 1-June 30, 1917: Casas 1 272.
Anam	Feb. 1-June 30	230	191	Feb. 1-June 30, 1917: Cases, 1,273; deaths, 805. July 1-31, 1917: Cases, 522; deaths, 314.
Do	July 1-31	86	47	Cases, 522; deaths, 314.
Cambodia	Feb. 1-June 30	79	51	·
Do Cochin-China	July 1-31	74 878	53 543	•
Do	July 1-31	359	214	
Laos	Feb. 1-June 30 July 1-31. June 1-30	1		
Tonkin	ren. I-June 30	36	21	
Do	July 1-31 Apr. 23-May 27 July 2-Sept. 30	3		
Saigon	July 2-Sent 30	163 49	108 33	
Japan	outy 2 bept. so		l	JanJuly, 1917: Cases, 391, oc-
DoJapanTokyo	Sept. 12	2		curring in 16 Provinces and districts. Sept. 12, 1917: Cases, 252. In 5 Provinces and districts
			ł	tricts. Sept. 12, 1917: Cases,
Java: East Java	Ane 2 Q	1		tricts.
Do	Apr. 2-8	3	3	tricis.
Mid Java	July 16-Oct. 2	ž	ž	
West Java Batavia	l			Apr. 13-July 5, 1917: Cases, 71; deaths, 31, July 6-Oct. 11, 1917: Cases, 601; deaths, 343.
Batavia	Apr. 13-July 5	7	2	deaths, 31, July 6-Oct. 11,
Do Persia:	July 6-Oct. 11	78	23	1917: Cases, 601; deaths, 343.
Mazanderan Province—				
Amir Kela	Feb. 3	1		
Barfourouche	Jan. 15-17	4		
Do	July 28	,4	1	
Demavend Hamze Kela	July 29. Jan. 17.	11 1	6	
Machidessar	Jan. 31	3		
Sabzevar	Aug. 20-29	19	14	_
Sari	July 25-Aug. 5	179	98	
Tabriz		••••••	• • • • • • • • • • • • • • • • • • •	Aug. 4, 1917: In village of Ozoundeh, vicinity of Tabriz, about 7 cases daily.
		i		obout 7 cases daily
Philippine Islands:				about 7 cases daily.
Manila Do	June 17-23	1 !		
Do	Aug. 5-25	4		Sept. 2-8, 1917: 1 case. Not pre-
Provinces		i i	- 1	viously reported
Provinces	T-41 :: 15 00	•••••		May 20-June 30, 1917: Cases. 795;
Agusan	July 15-28	12 113	2 76	May 20-June 30, 1917: Cases. 795; deaths, 506. July 1-Oct. 27, 1917: Cases, 4,398; deaths, 2,638.
Do	May 30-June 30 July 2-Sept. 1	73	43	2011. Oasts, 1,000, deaths, 2,005.
Ambos Camarines	June 3-9	2	ĭ	
Do	July 22-Aug. 11	26	15	
Antique	Sept. 16-Oct. 27	123	65	
Bataan	July 8-14 June 17-23	11	1	
Batangas Bohol	May 20-June 30	368	251	
DoCapiz	July 1-Oct. 27	427	327	
Capiz	June 3-30	62	40	
Do	June 3-30. July 1-Oct. 6. June 2-30.	66	46	
Cebu	June 2-30	231	150	
Do Iloilo	July 1-Oct. 27	681 143	374 8 3	
		.50	OF 1	

Reports Received from June 30 to Dec. 14, 1917—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands—Continued. Provinces—Continued. Leyte Do Misamis Mindanao. Negros Occidental Negros Oriental Rizal Do Romblon Samar Sorsogon Do Surigao Tayabas Do Zamboanga	June 10-30 July 1-Sept. 15 July 8-Aug. 4 July 20-Oct. 20 Sept. 30-Oct. 27 July 1-Oct. 27 July 1-Oct. 27 July 1-7 July 22-28 July 15-Sept. 22 June 3-30 July 1-Aug. 25 July 29-Aug. 25 July 29-Aug. 25 July 29-Aug. 25 July 1-Sept. 29 July 15-Sept. 29 July 15-21	14 819 237 618 148 521 1 1 1 133 196 274 16 7	5 5512 117 348 83 313 313 10 7 14 16	

PLAGUE.

	7		- 	i -	1
Arabia:			ľ		1
Aden	May 3-July	4		43	Apr. 8-May 14, 1917: Cases, 69; deaths, 51.
Bahrein Islands		• • • • • • • •		·	In Persian Gulf. Present Apr. 3
Brazil:			ľ	•	1 2017.
Bahia			12	8	
Do Pernambuco		. 15	6	2	ł
Ceylon:	July 10-Set	11.30	"	1 *	
Colombo	Apr. 8-June	e 23	41	33	
Do	July 6-Sept	. 22	: 5	8	l
China:	A 03 35-		·	ł	
Amoy Do	Apr. 23-Ma July 1-7		6	ļ	Present and in vicinity.
Hongkong	May 13-Jun		20	13	Present Aug. 10.
Do			4	3	
Kwangtung Province—	· -				
Ta-pu district	June 2				Present.
Ecuador:	Feb. 1-28				•
Estancia ViejaGuayaquil	reb. 1-28	• • • • • • •	1		
Do	Mar. 1-Apr.	30	56 42	29 22	
Do	July 1-Aug.	31	4		
Milagro	Mar. 1-31		1		
Do			. 1	1	
Nobol. Sa.itre	Feb. 1-28 do				
Do	Mar. 1-3	•••••	1	·····i	
Taura	Feb. 1-28		3	2	
Egypt				-	Jan. 1-Oct. 18, 1917: Cases, 727;
Alexandria	June 21-27		6	4	deaths, 397.
Do Port Said Government	July 31-Oct		7	2	,
Port Said Government	Apr. 30- May June 25.	ر 19	4	3	
Do	July 28-29		1 1	1	
Provinces—	July 27 23		- 1	-	
Fayoum	May 11-Jun	e 26	14	7	
Galioubeh	June 28		1		
Girgeh				1	
Do	May 12-Jun July 23-Sept	e 28	4	3	
Siout	May 12		9 3	·····i	
Sucz Government	Apr. 30-Jun	02	93	9	•
Suez	May 12-June	28	38	23	
Do Great Britain:	Oct. 14-20		1	1	
Gravesend	A 12 04	į.			The same 25 45
London	Aug. 13-24 May 3-8		3	1	From s. s. Matiana.
			- 4	•••••	2 in hospital at port. From s. s. Sardinia from Australia and
ı		ı	!	ı	oriental ports.

Reports Received from June 30 to Dec. 14, 1917—Continued.

PLAGUE-Continued.

Blam: Bangkok	Place.	Date.	Cases.	Deaths.	Remarks.
Calentials	India				Apr. 15-June 30, 1917; Cases.
Calentials		. Apr. 1-June 30	.	54	43,992; deaths, 30,197. July 1-
Calentials	Do	. July 1-Sept. 16	·	27	Sept. 22, 1917: Cases, 71,636;
Calentials	Bombay	. Apr. 22-June 30	486		deaths, 53,000.
Hemsada	Calmitta	Anr 29-Tune 2	3/9		
Hemsada	Do	July 15-21			j
Do	Henzada			35	į
Do	Do	. Aug. 12-Sept. 15			Ì
All	Karachi	. Apr. 22-June 30	468		
All	Madrae Presidency	Apr 22-Tune 30	201	250	
All	Do	July 1-Sept. 29	3,565		
Do. July 23-Sept. 15. 34 34 35 36 37 37 37 37 37 37 37	Mandalay	.i A.Dr. 8∽May 12		9	
Do.	Do	July 29-Sept. 15		34	
Rangoon	Do.	July 1-Sent 1			i
Rangoon	Mvingvan	Apr. 1-7		ĭ	
Rangoon	Pegu	May 27-June 2			!
Tolungoo	Do	July 29-Sept. 15			T
Toungoo. July 28-Sept. 1	Kangoon	Apr. 15-June 30	183		
Indo-China:	Toungoo	Apr. 8-14	307	122	J 00.
Indo-China:	Do	July 29-Sept. 1		12	
Cambodia. Feb. 1-June 30. 132 115	Indo-China:	1	1		73.3 1 7 00 101F. G 700
Cambodia. Feb. 1-June 30. 132 115	Provinces	Fob 1 Tyme 20	929	121	dooths 401 Tuly 1-21 1017:
Do. Cochin-China Feb. 1-June 30 219 133 Do. July 1-31 43 24 24 24 25 Tonkin May 1-June 30 34 23 25 Do. July 1-31 3 2 2 2 2 2 2 2 2 3 2 2	Do	July 1-31	13	131	Cases, 69: deaths, 45.
Do. Cochin-China Feb. 1-June 30 219 133 Do. July 1-31 43 24 24 24 25 Tonkin May 1-June 30 34 23 25 Do. July 1-31 3 2 2 2 2 2 2 2 2 3 2 2	Cambodia	Feb. 1-June 30	132	115	
Rwang-Chow-Wan. May 1-June 30. 24 23 25 26 26 27 26 27 26 27 26 27 26 27 26 27 26 27 27	Do	July 1-31	10		
Rwang-Chow-Wan. May 1-June 30. 24 23 25 26 26 27 26 27 26 27 26 27 26 27 26 27 26 27 27	Cocnin-Unina	reb. 1-June 30	219	133	
Saigon	Kwang-Chow-Wan	May 1-June 30		23	
Saigon	Tonkin	Feb. 1-June 30	113	89	
Do	Do	July 1-31	3	2	
Japan: Alchi Ken	Salgon	Sent 9-Oct 7			
Alchi Ken		Bept o committee	l. "	ľ	
Java: East Java	Aichi Ken				
East Java	Miye Ken	do	3		
Samarang Residency Apr. 23-May 20 3 3 3 3 3 3 3 3 3					Anr 2-May 20 1017: Cases 20:
Samarang Residency Apr. 23-May 20 3 3 3 3 3 3 3 3 3	Djocjakarta Residency.	Apr. 23-May 6	i	1	deaths, 29. July 30-Aug. 26.
Persia:	Kediri Residency	1 1/10		1	1917: Cases, 4; deaths, 4.
Persia:	Samarang Residency	Apr. 23-May 20			
Persia:	Do	July 8-28			
Mohammera	Surakarta Residency	do			
Departments		Mary 1			Present
Ancacns. July 1-31. 3 At Casma. Arequipa May 16-July 31. 10 At Mollendo. Callso		May 1			May 13-31, 1917: Cases, 15. June
Ancacns. July 1-31. 3 At Casma. Arequipa May 16-July 31. 10 At Mollendo. Callso	Departments—				1-July 31, 1917: Cases, 36.
Callao do 5 At Callao Lambayeque do 3 At Chiclayo Libertad May 16-21 7 At Salaverry, San Pedro, and Trujillo. July 1-31, 1917: At Trujillo. Lima do 20 Trujillo. At Lima. July 1-31, 1917: Lima, city and country. Senegal sept. 30 sept. 30 sept. 30 Bangkok Apr. 22-June 30 13 12 Do July 3-Sept. 15 21 19 Straits Settlements: Singapore July 1-Sept. 22 11 8 Turkey in Asia: Trebizond Dec. 8 Present. Union of South Africa: Cape of Good Hope State—Cradock Aug. 23 Do. Do. At Summerhill Farm. Glengrey district Aug. 13 Do. At Summerhill Farm. Orange Free State. May 28 1 1 Winburg district May 28 1 1 Winburg district May 28 1 22, 1917: Coses, 26; deaths, 17.	Ancachs	July 1-31		· · · · · · · · · · · · · · · · · · ·	At Casma.
Lambayeque	Celleo	May 16-July 31			At Moliendo.
Libertad	Lambaveque				
Limado	Libertad	May 16-21	7		At Salaverry, San Pedro, and
Lima	•				Truillo. July 1-31, 1917: At
Sept. 30	Lima	do	- 20		At lime July 1-21 1017: Lime
Sengal Sept. 30	Dima	u0	20		city and country.
Bangkok	Senegal	Sept. 30			Present in interior.
Singapore	Siam:	A 00 T 00			
Singapore	Do Dangkok	Inly 2_Sent 15			
Singapore	Straits Settlements:	July 0-Dept. 10		- 13	
Furkey in Asia: Dec. 8. Present. Trebizond	Singapore	June 3-16	2		
Trebizond		July 1-Sept. 22	11	8	
Junion of South Africa: Cape of Good Hope State	Turkey in Asia:	Dec 8			Present
Cape of Good Hope State		200.0	••••••	• • • • • • • • • • • • • • • • • • • •	a reacht.
Cradock	Cape of Good Hope State—		1		
Terkā district	Cradock	Aug. 23		••••••	
Queenstown June 6 1 Orange Free State Apr. 16-22, 1917: 1 case. Apr. 9- Winburg district May 28 1 Apr. 16-22, 1917: Coses, 26; deaths, 17.		Aug. 13	•••••	•••••••	
Orange Free State Apr. 16-22, 1917: 1 case. Apr. 9- Winburg district May 28. 1 22, 1917: Coses, 26; deaths, 17. At sea: 1 2 2 2 2 2 2 3 4 3 4	Queenstown	June 6			At Summerom Farm.
At sea:	Orange Free State				Apr. 16-22, 1917: 1 case. Apr. 9-
	Winburg district	Мау 28		1	22, 1917: Cases, 26; deaths, 17.
o Dirioux to Port of Distant.		July 14-18	ا م	e l	En route for port of London
					23 Save for port of Donaton.

Reports Received from June 30 to Dec. 14, 1917—Continued.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Australia: New South Wales Abermain Brewarrina Cessnock Coonabarabran Quambone Warren district Queensland Thursday Island Quarantine Station.	Oct. 12-25	2 6 4 13 2 56		Apr. 27-July 5, 1917: Cases, 68, July 12-Sept. 25, 1917: Cases, 10, Near Newcastle. From s. s. St. Albans from Kobe via Hongkong. Vessel proceeded to Townsville, Bris-
Brazil: Bahia Do Rio de Janeiro Do	May 6-June 30 July 22-Oct. 13 do July 1-Sept. 29	4 6 126 620	2 31 · 132	bane, and Sydney, in quaran- tine.
Canada: Manitoba— Winnipeg Do New Brunswick	June 10-16 Aug. 19-Sept. 1 Nov. 10	1 5 21		Chiefly in Carleton and York Counties. One case notified in Northumberland County.
Nova Scotia— Halifax Port Hawkesbury Ontario— Ottawa Sarnia	June 18-July 7 June 17-30 July 30-Aug. 5 Nov. 11-17	3 1 1		Present in district.
Sarnia Windsor Ceylon: Colombo China: Amoy	Sept. 30-Nov. 3 May 6-12 Apr. 29-May 26	1		Present and in vicinity.
Do	Apr. 29-May 26 July 1-Sept. 22 May 21-June 24 Aug. 6-Oct. 21 May 27-June 2 Aug. 11-17 May 6-June 23	4 2 5	7	Do. Present.
Do	July 1-Oct. 29 May 13-June 30 July 8-28 June 21-30 Apr. 23-May 6	30 6 2 7	4 1	Present and in vicinity. July 1-7, 1917: Present. On Chinese Eastern Ry.
HongkongDoManchuria StationMukdenDo	May 6-June 16 Aug. 5-18 Apr. 23-29 May 27-June 2 July 8-Oct. 27	8 1 1	7	Do. Present. Do.
Shanghai Do Tsitshar Station	May 21-July 1 July 2-Oct. 28 Apr. 16-22	13 5	32 21	Cases, foreign; deaths among natives. Cases among foreign population; deaths among Chinese. On Chinese Eastern Ry.
Tsingtao	May 22-July 7 July 30-Aug. 11 May 1-31	35 4 1	7	At another station on railway; 1 case.
Habana Ecuador: Guayaquil	Nov. 1	1 8		From s. s. Alfonso XIII, from ports in Spain.
Egypt: Alexandria	July 1-Aûg. 31 Apr. 30-July 1 July 2-29 Feb. 12-Apr. 8	39 30 80	9 4 1	

Reports Received from June 30 to Dec. 14, 1917—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
France: Nantes	July 30-Aug. 5	. 1		
Paris	. May 6-12	.] ī]
GermanyBerlin		• • • • • • •		. Mar. 18-Apr. 28, 1917: Cases, 715;
Berlin	Mar. 18-Apr. 28	. 106		. in cities and 32 States and dis-
Bremen		. 16		. tricts.
Charlottenberg	do	. 18 50		-1
HamburgLeipzig	dodo	20		1
Lübeck	do	. 2]
Lübeck	do	10]
Stuttgart	do	. 1		•
Greece:	T1- 07 00	i	1	Ì
AthensIndia:	. July 25-30		. 23	1
Bombay	Apr 22-Tune 30	186	75	
Do	July 1-Sept. 22	72	35	
Calcutta	Apr. 29-May 26		12	
Do	Apr. 22-June 30 July 1—Sept. 22 Apr. 29-May 26 July 29-Aug. 25		2	1
Karachi			8 2	1
Do	July 8-Sept. 1 Apr. 22-June 30	5	2	
Do	Apr. 22-June 30	80 19	48 23	
Rangoon	July 1-Sept. 29 Apr. 15-June 30	33	5	
Do	July 1-Sept. 1	ıï		June 3-23, 1917: Cases, 18; deaths,
200000000000000000000000000000000000000				5.
Indo-China:		i	l	
Provinces			•••••	Feb. 1-June 30, 1917: Cases, 617;
Anam	Feb. 1-June 30	1,630	237	Feb. 1-June 30, 1917: Cases, 617; deaths, 535. July 1-31, 1917; Cases, 525; deaths, 132.
Do	July 1-31 Feb. 1-June 30	353 136	59 26	Cases, 525; deaths, 132.
Cambodia Do	July 1-31	28	23	1
Cochin-China	i Feb. 1-Juno 30	1,267	377	1
Do	July 1-31	130	49	į
Kwang-Chow-Wan	July 1-31	4		
Laos. Do	Apr. 1-30	5	1	1
Do	July 1-31	10	1 20	
Tonkin	Feb. 1-June 30 July 1-31	274 4	30	
Saigon	Apr. 27-June 10	199	63	
Do Saigon Do	July 2-Oct. 21	141	66	!
Italy:	· ·			
Turin	May 21-June 24	32	12	
Do	July 12-Sept. 30	12	3	
Kingston	Sept. 9-15	1		
Japan				JanJuly, 1917: Cases, 4,974; in
Kobe Nagasaki	May 27-July 22	65	16	37 Provinces and districts.
Nagasaki	May 28-June 3	1		
Osa' a	May 16-July 5	177	55	
Yokkaichi	May 28-June 3 May 16-July 5 July 25-31 May 27-July 1	1	•••••••••••••••••••••••••••••••••••••••	
YokohamaJava:	may 21-July 1	1	1	
East Java	Apr. 2-July 1	38	2	
Do	July 2-Aug. 29	21		
Mid-Java	Apr. 1-July 1	88	7	
Do	Apr. 2-July 1 July 2-Aug. 29 Apr. 1-July 1 July 2-Oct. 2	100		
West Java		•••••		Apr. 13-July 5, 1917: Cases, 239; deaths, 44. July 6-Oct. 11, 1917: Cases, 273; deaths, 80.
Batavia	Apr. 13-Sept. 20	32	6	deaths, 44. July 6-Oct. 11,
Mexico:				1917: Cases, 273; deaths, 80.
Coatepec	Jan. 1-June 30	ŀ	116	
Do	Aug. 1-14.		1	Jan. 1-Aug. 14, 1916: 118 deaths.
Jalapa	July 1–13		1	
Ma atlan	July 11-Aug. 7		9	
Mexico City	June 3-30	162		
Do Monterey	Aug. 5-Nov. 10	191	•••••	
Orizaba	June 18-24	•••••	24 23	
Do.	July 1-23		4	
Vera Cruz.	July 1-Sept. 15	6	1 2	
Netherlands:		۱	1	
AmsterdamPhilippine Islands:	Aug. 13-18	1	1	
Manila	May 13-June 9	6		Varioloid.
	July 8-Oct. 20	8		Do.
·				

Reports Received from June 30 to Dec. 14, 1917—Continued.

SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Portugal:				
Lisbon	May 13-June 30	14		Ì
Do	July 8-Nov. 3	10		1
Portuguese East Africa:		1		
Lourenço Marques	Mar. 1-June 30		5	
Do	July 1-31		7	
Archangel	May 1-June 28	56		1
Do	July 2-Aug. 28	6	7	
Moscow	July 2-15	6		İ
Petrograd	Feb. 18-June 30			1
Do	July 2-29	58		İ
Riga		7		Jan. 1-Mar. 31, 1917: Cases, 9.
Vladivostok	Mar. 15-24	23	7	1
Siam:	1	١	į.	
Bangkok	June 9-30	16		l .
Do	July 11-17	3	5	
Spain:	36a- 1 Toma 10	!		
Madrid	May 1-June 19 Apr. 1-June 30	•••••	. 4	
Do	July 1-31		44 19	
Seville	May 1-June 30	•••••	11	
Do	Sept. 1-30	•••••	16	
Valencia	June 3-23.	5		
Do	July 1-Sept. 15			
Straits Settlements:	cary I hepot zottet			
Penang	Mar. 18-June 23	6	3	
Singapore	June 24-30	i		
Do	Sept. 16-22	1		
Sweden:				
Malmo	Apr. 22-28	1		
Stockholm	May 20-June 23	2	1	
l'unicia:		ا م		
Tunis Furkey in Asia:	June 2-8	2	• • • • • • • • • • • • • • • • • • • •	
Trebi cond	Fob 05 Apr 12		15	
Jnion of South Africa:	Feb. 25-Apr. 13	••••••	19	
Johannesburg	Mar. 12-24	4		
Do.	July 1-Sept. 30	24		
Jruguay:	ouly I sept. so			
Montevideo	May 1-31	2		
enezuela:	- I	- 1		
Maracaibo	June 18-July 8		8	
Do	July 9-23		1	
on vessels:			f	<u>_</u> .*
S. S. Alfonso XIII	Nov. 1	1	••••••	At Habana, From ports i Spain for Mexican ports.
	TYPHUS	FEVER	<u> </u>	
longia		1	<u>_</u>	
Algeria: Algiers	June 1-30	6	3	
Do	July 1-Aug. 31	î	il	
rgentina:	vuij I-Aug. 01	*	- 1	
Buenos Aires	And 12-18			

Algeria: Algiers. Do. Argentina: Buenos Aires. Austria-Hungary: Austria	June 1-30	6 1	3 1	Oct. 22-Dec. 17, 1916; Cases, 2.371.
Bohemia. Galicia. Lower Austria. Moravia. Silesia. Styria. Upper Austria. Bosnia-Herzegovina.	Oct. 22-Dec. 17dododododododo	634 809 47 617 16 243 5		Dec. 24, 1916-Feb. 24, 1917: Cases, 2,553. Dec. 22, 1916-Feb. 24, 1917; Cases,
Hungary Budapest Eisenburg Brazil: Rio de Janeiro Canary Islands: Santa Cruz de Teneriffe	Feb. 19-May 27 Apr. 23-June 17 July 29-Aug. 11 Sept. 23-29	. 10 . 278 2	46	110. Feb. 19-June 17, 1917: Cases, 1,787.

Reports Received from June 30 to Dec. 14, 1917—Continued... TYPHUS FEVER—Continued.

Place.	Date.	Cases	. Deaths	. Remarks.
China:		1		
Antung	June 23-July 1	.] :	3	
Do	July 9-Oct. 28	. 2	1	1
HankowDo	June 9–15 July 8–14	1. 1		r -
Tientsin	. June 17-23	.]	i	
Tsingtao	May 30-July 7	- 9	1	
Do	Aug. 5-Oct. 20	- '	3	•
Egypt: Alexandria	Aug. 30-July 1	. 1,648	3 478	.1
Do	July 17-Oct. 14	. 447	7 123	1 1
Cairo	Jan. 22-Apr. 8	. 188		;
Port Said Great Britain:	Mar. 19–25	- 1	·	1
Cork	June 17-23	.	. 1	. 1
Glasgow	Sept. 30-Oct. 6	. 1	·	.
Greece: Saloniki	. May 23-June 30	1	. 32	.1
Do	July 1-Oct. 13		67	
Japan:			1 "	l
Hakodate	. July 22-28	. 1		.
Nagasaki Do	June 11-24 July 9-Nov. 4	4		•
Java:	July 9-110V. 4	51	3	ł
East Java	. . <u>.</u>		.	May 6-July 1, 1917: Cases, 6,
Surabaya	. June 25-July 29	. 4		July 9-Aug. 29, 1917: Cases, 7.
Mid-Java Samarang	. May 5-June 10	14	······· <u>à</u>	May 6-July 1, 1917: Cases, 6. July 9-Aug. 29, 1917: Cases, 7. Apr. 1-June 24, 1917: Cases, 38; deaths, 5. July 9-Oct. 2, 1917: Cases, 16: deaths, 2.
Do	July 2-8.	5		Cases, 16: deaths, 2
West Java				-: ADI. 10-JUIV D. 1917: URSES. 1479
Bata ia Do	. Apr. 13-July 5 July 6-Oct. 4	70 96		deaths, 6. July 6-Oct. 2,
Mexico:	July 0-001. 4	90	10	1917: Cases, 151; deaths, 17.
Aguascalientes	. July 10-Oct. 28	1	. 2	
Coatepec	. Aug. 1-14		. 1	
Durango, State	Oct. 29		-	Prevalent on ranches in vicinity of El Rio.
Jalapa	. Apr. 1-June 30		. 5	of 151 Kio.
Jalapa	Triler 1 21		3	į.
Mexico City Do.	June 3-30	431		
Orizaba	June 3-30. July 8-Nov. 10. Jan. 1-June 30. July 1-31.	1,099	6	1
Do	July 1-31		i	
Netherlands:	1		•	
Rotterdam Do	June 9-23 July 15-Sept. 1	3 11	2	
Norway:	July 10-50pt. 1	- 11		1
Bergen.	July 8-28	7		1
Portuguese East Africa: Lourenço Marques	Mar. 1-31		i .	
Russia:	1 1	1		
Archangel	May 1-June 28 July 2-Aug. 28	11	2	
Moscow	July 2-Aug. 28	16	5	
Petrograd	July 2-15 Feb. 18-June 30	10 141	3	
νο	July 2-29	33		
Poland Lodz.	1	• • • • • • • •		Apr. 23-June 3, 1917: Coses, 2,814;
Do.	Apr. 23-June 3 June 17-July 14	120	16	deaths, 187. June 17-July 14, 1917: Cases, 2,328; deaths, 211.
Wars iw	Apr. 23-June 3	108 1,644	16 95	1917: Cases, 2,328; deaths, 211.
_ 100	June 17-July 14	1,495	131	
Riga Do	May 31–June 16 July 22–28.	8		Jan. 1-31, 1917: 1 case.
Vladivostok	Mar. 29-May 21	5 5	••••	May 1-31, 1917: Cases, 4.
Spain:	1	- 1	•••••	
Almeria	May 1-31do		5	
Switzerland:	ao	• • • • • • •	2	
Basel	June 17-23	1		
DoZurich	July 8-Oct. 27	11	1	
Zurich Frinidad	July 26-Nov. 3	3		
l'unisia:	June 4-9	2	• • • • • • • • • • • • • • • • • • • •	
Tunis	June 30-July 6		1	
Inion of South Africa: Cape of Good Hope State	· '''		-	
	•••••••••••••••••••••••••••••••••••••••	•••••	• • • • • • • • • • • • • • • • • • • •	Aug. 25, 1917: Present in 16 dis-
East London	Sept. 10			tricts. Present.

Reports Received from June 30 to Dec. 14, 1917—Continued.

YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Ecuador: Babahoyo. Do. Chobo Guayaquil Do. Do. Milagro Do. Maranjito Mexico: Campeche, State— Campeche Yucaton, State— Merida Peto. Do. Do.	do	2 1 18 34 24 1	1 1 1 1 7 18 10 1 2	In person recently arrived from
Venezuela: Coro	Oct. 27-Nov. 8	1		Present Sept. 5. From the last part of July to Nov. 7, 1917: Cases, 10.