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# CHILDREN'S TEETH, A COMMUNITY RESPONSIBILITY.

A Practical Plan for Organizing Protective and Remedial Measures.

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### Introduction.

For a number of years the United States Public Health Service has been engaged in studies and investigations of the physical status of school children, and as a result of these investigations it has repeatedly drawn attention to the overwhelming preponderance of dental defects over those of all other classes.

The bad effect of decaying teeth, of inflamed gums, and of suppurating areas in the oral cavity on the health and development of young children is obvious, and no effort should be spared to prevent the occurrence of such conditions.

The provision of dental facilities, both preventive and operative, for school children, is a measure which promises to yield the most fruitful results in conserving their health.

This article has been prepared as a result of the long-felt need of this form of health supervision, and in response to the numerous requests received for information pertaining to the establishment of school dental clinics.

Investigations made by the United States Public Health Service and other agencies show that among the classes of defects observed in school children that of dental defects is not only larger than any other, but larger than all the others combined.

The examination of approximately 2,500 rural school children by United States Public Health Service officers revealed 49.3 per cent of the children with two or more decayed teeth. It is of interest to know that the percentage of decayed teeth varied with the sexes and age groups, the highest being 45.5 per cent among the 8-year-old boys and 37.5 per cent in the 7-year-old girls. Among this same group of children 18.3 per cent of the boys and 10.5 per cent of the girls stated they had never used a toothbrush, and but 13.9 per cent of the boys and 40.9 per cent of the girls stated that they used the toothbrush daily.

(2763)

In a report of a recent and very extensive survey of the mouth conditions in the State by the North Carolina State Board of Health it is stated that 75 per cent of the children examined evidenced beginning decay of the teeth and less than 10 per cent of them had ever visited a dentist, and that 90 out of every 100 parents had never made any attempt to have the dental defects of their children corrected.

Statistics quoted relate largely to rural children. However, reports from several of the larger cities reveal a very high percentage of dental decay in the children attending school, ranging from 30 to 62.7 per cent, depending largely on the dental attention that had been given these children during the years previous to the examinations on which the statistical report was based.

In view of the lack of attention to the dental needs of the children of the land, it is not surprising that of 925,873 men who were found unfit for military duty by the first selective draft examinations, by reason of physical causes, the second highest of all causes of physical rejections was that of dental defects.

# Why Teeth Decay.

Dental decay is caused by the action of bacteria, or germs, which normally inhabit the mouth. These germs, acting in the presence of food débris and certain elements in the saliva, result in the formation of an acid which attacks the enamel covering the exposed parts of a tooth, after which the underlying softer parts become rapidly destroyed. Many other factors are actual and potential causes of dental decay and its progress, such as—

1. Low resistance of the teeth to decay because of developmental

defect (antenatal and postnatal).

2. Faulty diet (both of the mother during pregnancy and of the child).

3. Neglect of dental attention through ignorance of the parents.

- 4. The cost of dental attention, a serious consideration with families of low economic status.
- 5. Failure of the child to call attention to the condition of the teeth, either because it is too young or because of fear.

6. Lack of dental facilities, so common in rural sections.

# Effect of Dental Decay.

It is still very little realized by most people that the teeth play a very important part in determining general health. Careful scientific investigations of recent years, however, have shown that uncorrected dental defects in children may seriously injure the growth and development of the body and greatly lower the child's resist-

ance to communicable disease. From the standpoint of school progress carefully kept records have indicated toothache as one of the most frequent causes of absence from school and that neglected mouth conditions are responsible for a very high percentage of retardation in school work. In addition to these immediate results of dental neglect, the X-ray has pointed to diseased teeth as the starting point of many of the so-called degenerative diseases of later life the onset of which might have been delayed or prevented by proper dental attention during childhood.

## 1. GROWTH AND DEVELOPMENT.

A very high percentage of undernourished children show marked evidence of dental decay. The examination of a group of 270 of this class at present under the supervision of the Public Health Service revealed 33 per cent of them with from 1 to 4 cavities, 48 per cent with from 4 to 8, and this same group showed some with 9, 10, and 11 cavities.

Young children are notoriously capricious in the choice of food, and when to this tendency there is added imperfect mastication through faulty or painful teeth, the child often refrains from eating the foods best adapted to its needs, even when such foods are offered. In addition to this, the poison absorbed from rotting teeth may seriously affect the child's nutrition and vital resistance. A clean mouth, free from sepsis, is a prerequisite for the proper growth and development of children.

#### 2. RESISTANCE TO COMMUNICABLE DISEASES.

It is quite generally accepted that an individual falls victim to a communicable disease because of the size of the dose of the infecting agent, the virulence of the infecting organism, or an increased susceptibility which is due to lowered vital resistance. Of the many causes operating to lower resistance it is reasonable to suppose that the absorption of septic material from rotting teeth and diseased gums plays an important rôle. Conversely, it is also reasonable to suppose that a clean, healthy mouth will tend to increase the vital resistance of children and render them less susceptible to the communicable diseases. Converging evidence from many sources tends to show that bad teeth do exercise a harmful influence. In Bridgeport, Conn., where during the last five years special attention has been paid to the operation of dental clinics, reports by the city board of health indicate that there has been a very considerable reduction in the incidence of communicable diseases in that city during the period following the establishment of school dental clinics in the year 1914. During this period diphtheria showed a decrease from

26.6 per cent to 18.7 per cent, measles 20 per cent to 4.4 per cent, and scarlet fever from 14.1 per cent to 0.5 per cent.

The effect of the general application of dental measures, both preventive and operative, in the schools of Bridgeport in bringing about a reduction in the amount of communicable diseases may be questioned by reason of the fact that the incidence of the communicable diseases in the general population varies from year to year. However, the general inference of the decline in the percentage of communicable diseases in Bridgeport pari passu with the extension of dental work in the schools is strengthened by a report of the improvement in the percentage of communicable diseases following the employment of a dentist and systematic dental service in St. Vincent's Orphanage, Boston, Mass. The average number of children in this institution during the period of observation was 325. and the work was in progress from April, 1912, to November, 1913. A comparative record of the health conditions for several years immediately preceding the employment of a dentist and during the period of service is quoted as follows:

				Period.		Period.						
Discase.		May, 1912, to May, 1913.	Apr., 1911, to May, 1912.	Nov., 1910, to Apr., 1911.	1909 to 1910.	1908 to 1909.	1907 to 1908.					
Diphtheria Mumps Scarlet fever Pneumonia Measles Tonsillitis. Whooping cough Chicken pex Typhoid. Croup Tuberculosis, eye. Tuberculosis, iungs	0 0 6 0 0	00000000000	0 0 0 0 0 0 0	0 4 8 6 6 25 3 0 6 0 0 0 0 0 0	1 10 12 4 40 8 2 10 0	2 3 8 5 50 16 2 17 0	6 8 17 3 24 19 7 15 0 4					
Total	7	0	2	52	87	103	103					

[Mouth hygiene-Fones, p. 466.]

# 3. PRESERVATION OF FACIAL SYMMETRY.

The preservation of the pulp (commonly referred to as the "nerve") in the "baby teeth" is of the greatest importance. If this is not in normal condition the roots of the first set of teeth will fail to absorb, and many of the irregularities in the permanent teeth may be directly attributed to this cause. The loss of a temporary tooth before proper time also may result in the eruption of the permanent tooth to follow before thorough calcification has taken place, in which case it is more subject to decay. Very frequently little, if any, attention is paid to these temporary teeth, parents assuming that they will be replaced later by the permanent teeth

and, therefore, that attention to them is unnecessary. It is rare to find a child who has not had toothache at some time. Even dentists, as a rule, pay little attention to these teeth, because young children are difficult to work for. This is unfortunate because in reality more can be done for an individual by proper attention to the first set of teeth than by repairing the ravages of decay in the permanent set after they have taken their places in regular manner.

Among 7,059 children examined during a recent investigation of mouth conditions by the Public Health Service, 1,822, or 25.81 per cent, of them were found to have lost one or more of the six-year molars. Because this tooth is the first permanent tooth to appear, and erupting back of the last temporary tooth, it is frequently mistaken for a temporary tooth. This is nothing short of a calamity. Not only does the loss of this tooth mean the loss of masticating surface, but the tooth also determines to a considerable extent the relative positions of the other permanent teeth. Forming, in a manner, the keystone of the dental arch, with its loss this arch collapses to a greater or less degree, markedly modifying the facial symmetry of the developing child. It is important to remember that in young children the first permanent molar is the sixth tooth back counting from the center. Parents should be instructed to watch it carefully for beginning dental decay in order that steps may be taken in time for its preservation.

## 4. DEGENERATIVE DISEASES.

The child is father to the man in more ways than one. Not only is this true from the standpoint of the acquirement of habits of thought and action during the developmental period, but also from the physical standpoint. Reference has been made to the fact that the percentage of children in need of dental attention is highest among those of 7 and 8 years of age. The neglect of the teeth in early life usually means an infected mouth with abscesses at the roots of the teeth which, unless cared for, persist in later life. It readily may be seen that such abscesses may act as reservoirs of infectious material which may enter the blood stream and be carried to the remote parts of the body, frequently causing rheumatism, heart disease, kidney trouble, and other ailments which may materially shorten life. It has been said that one-fourth of all of the people who die annually in the United States have their life shortened from 5 to 10 years by these so-called degenerative diseases.

# Mouth Hygiene as a Branch of Preventive Medicine.

Nearly every country has awakened to the importance of mouth hygiene. In England to-day there is a movement of national magnitude well under way, which is a result of investigations conducted by a parliamentary committee. The conditions revealed by this investigation were so startling that remedial measures have been adopted with the object of benefiting all the people.

The latest governmental movement in this direction is in New Zealand. Here we find that there has been appointed a national bureau of mouth hygiene with a director and corps of assistant directors who will care for the mouths of all the school children at government expense.

In America we find that several of the States have State bureaus of mouth hygiene under the direction of their health departments. New York has established such a bureau. Among the later States to adopt the measure is Tennessee; and West Virginia has such movement well under way. Delaware will this year (1920) have a mobile clinic visiting the rural schools. Pennsylvania has a similar unit in operation under its child hygiene department, and Virginia will do a similar work in the immediate future. North Carolina has been engaged in this work for several years.

## THE DENTAL HYGIENIST.

In America a forward step has been taken in dental hygiene by the training of women specialists for purely preventive work. These "dental hygienists" limit their work to the cleaning and polishing of all surfaces of the teeth above the gum margins. Experience shows that this treatment is most helpful in securing that important condition, healthy gums, and besides, prevents much dental decay. In their specialty the dental hygienists often exceed the dental man in skill and have special qualifications for handling young children.

Recognizing the special adaptation of women to this work, and the virtue of the old adage that prevention is better than cure, some 12 States have already enacted legislation legalizing the practice of dental prophylaxis by women. Among the States that have legalized this work are Maine, Massachusetts, Connecticut, New Hampshire, New York, Michigan, Minnesota, Iowa, Oklahoma, Colorado, and Tennessee. In three other States this movement is assured in the immediate future.

# MOUTH HYGIENE.

Measures for conserving the teeth of children may be divided into two classes (1) Practical, preventive, and correctional work, by the establishment of school dental clinics, and (2) education methods.

# 1. PREVENTIVE AND CORRECTIONAL WORK.

School dental clinics may be regarded as a valuable economic asset, as shown by results secured in a number of communities. Mouth hygiene movements and the establishment of school clinics

become an investment yielding splendid returns, especially by reducing the amount of time lost in school attendance and the number of children who repeat grades. This in itself should be sufficient recommendation of this movement even to those who are not specially interested in the health aspects of this work. Not only can the children attending school be greatly benefited by this work, but its influence extends into the home from which the child comes and furnishes a partial solution of the problem of reaching the child of preschool age.

School dental clinics may be of two types: (A) Centralized clinics and (B) Itinerant clinics.

#### A. CENTRALIZED CLINICS.

A centralized school dental clinic conveniently located and properly manned will, as a rule, be productive of the best results. In the establishment of these clinics the children themselves should be encouraged to furnish some portion of equipment or part of the furniture and to decorate both the clinic and waiting room. The cooperation of the junior membership of the American Red Cross will be found to be of valuable assistance for this purpose. In other instances the manual training department of the school should be encouraged to provide some of the needed furnishings. By this means the children are stimulated to take an active interest in the work of the clinic.

The advantage of a centralized clinic, where the school population is sufficiently large to justify the expenditure, is that it reduces not only the overhead charge, but also the expenditures for equipment. The method of operation is very simple. An inspection of the children attending the various schools is made either by the school nurse, mouth hygienist, school physician, or dentist, preferably by the school dentist. Cards are issued to the children requiring dental attention, admitting them to the clinic on a specified day at a given hour. It will be found desirable to assign a particular day of the week for the children attending the respective schools.

Great care should be observed to keep a careful record of each case, for which purpose the acompanying form is reommended.

### B. ITINERANT SCHOOL DENTAL CLINICS.

The mouth hygiene needs of the smaller towns and less thickly settled rural communities can best be met by organizing itinerant school dental clinics. These should operate usually from the county seat or from one of the larger towns as a base and proceed to the outlying schools of the district where dental facilities are usually entirely absent. Preliminary to the visit of the clinic to a designated school, careful inspection should be made of the children and all

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*	3								#		
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them and mark with serial number and code letter (Example 1A.). Enter serial number and date of operation in column supersenting year or grade at time of operation. Example: 1-3/320 entered in column 3 would indicate that on March 8, 1930, while in the third grade, pulply had operation performed.

\*\*Reforming to the chart we find (1A) an amagem filling was injected. Record for eight grades can be kept on one card.

USPHS CODE:

L.—Abscess lanced R.—Calculus removed P.—Prophylaxis R. F.—Root filled
P. R.—Pulp removed
A. L.—Abscess lanced
C. R.—Calculus remov

A.—Amalgam C.—Coment S.—Synthetic G. P.—Gutta-percha X.—Extraction R. T.—Root treated -- Gutta-percha

TREASURY DEPARTMENT, C. S. Public Health Service, Child Hygiene, Form 5—Revised July, 1920.

COUNTY  RACE: W. C. OTHER SEX: M. F.  DATE OF BIRTH: YEAR , MONTH , DAY  Normal occlusion  Malocchiston  Malocchiston  Mality to marked  Ability to marked  Ability to marked  Color of gums, pink  (" " inght red  " " " dark red  " " " dark red  " " " dark red  " " " extensive  " extensive  " extensive  " extensive	Address 2d	3d 4th	8th	6th 7th	# H
Number of examination  Date of examination  Date of examination  Date of examination  Normal occlusion  Malocclusion, slight  " marked.  " marked.  Abl: Ity to masticate, good.  " in it in poor.  Tongrue, coated.  Color of gums, pink.  " in ight red.  "	1st 2d		5th		# H
Month Day Date of examination.  Normal occlusion  Malocclusion, slight  " marked  " " fair  " " fair  " " " fair  " " " fair  " " " ilght red  Color of gums, pink  " " " dark red  " " " dark red  " " " extensive  Stains, slight  " extensive  " extensive  " extensive					
Normal occlusion.  Malocclusion, slight.  " marked.  " in it fair.  " in it poor.  Tongue, coated.  Color of gums, pluk.  " in ight red.  " in dark red.  Calculus, slight.  " extensive.  " extensive.  " extensive.					
Malocclusion, slight  " marked  Ability to masticate, good  " " " fair  Tomrue, coated  Color of gums, pink  " " " dark red  Calculus, slight  " extensive  Stains, slight  " extensive					
Ability to masticate, good  """" fair  """" food of gums, pink  """" dark red  """" dark red  """" dark red  """" extensive  Stains, slight  "" extensive  "" extensive					
Ability to masticate, good  """" fair  """" fair  Tongue, coated  Color of gums, plak  """" alght red  """" and red  Calculus, slight  "" extensive  Stains, slight  "" extensive					
Tongue, coated  Tongue, coated  Color of gums, pink  " " " dark red  " " " dark red  Calculus, slight  " extensive  " extensive  " extensive  " extensive					
Tongue, coated					
Tongue, cented  Color of gums, pluk  " " " light red  " " " dark red  Calculus, slight  " extensive.  Stains, slight  " extensive.					
Color of g	of gums, plnk				
Calculus, cl. (c. (c. (c. (c. (c. (c. (c. (c. (c. (c	" " light red" " dark red" " " alight red" " " alight red" " " " " " " " " " " " " " " " " " "	-			
Calculus, d. Calculus, el. Stains, el.	u u dark red				
Calculus, sil	ılus, slight				
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Scanna, (**)					
**	13) 8:18:110	***************************************		1	
				7	
No of brush, daily	of brush, daily.				
	" " occasionally				
* * *	=				
C Has visited	visited dentist				
<u>'-</u>	Coavities and roots				
).					
	01 111111083		-		
No. of teetn crowned, of on bridges	of teeth crowned, of on Dildges				

CODE: Flot carlous areas on coart. Teeth missing—M. Roots remaining—K. Fishuluse—C. Carles, first examination. Example, Cl. (carles, first examination).

(Ion).

ORAL EXAMINATION OF SCHOOL CHILDREN

observed dental defects recorded, following which, permits should be given to the children entitling them to dental treatment at a designated place on a given day.

## EQUIPMENT.

Depending on the resources of the community and the amount of dental work which it is purposed to do in the schools, the equipment of a centralized school dental clinic may be as complete as desired, including X-ray equipment and laboratory facilities.

The following is recommended as the main equipment of a mobile school dental clinic:

I. Equipment of an itinerant school dental clinic for both operative and preventive work. -

Acid, trichloracetic	Article.	Quantity.	Forceps, rubber dam clamp, num-
Alloy, copper	Acid, trichloracetic	_bottle 1	ber 1
Alloy, true dental	Alloy, copper	_ounces 3	Forceps, rubber dam punch, per-
Blowers, chip, extra bulbs for, number   Series   Serie			fectednumber 1
Blowers, chip, extra bulbs for, number   16	Blowers, chip, No. 38	number 2	Forceps, tooth extracting, Nos. 150,
Bottles, medicine, i-ounce, ground-glass stopper			151number 2
Bottles, medicine, \( \) j-ounce, ground-glass stopper			
Sample   S			
Bowl, plasterdo   1   Brushes, tooth-polishinggross_   1   Brushes, No, 30 and No. 34, number   2   Ilurs for straight handplece, Nos. \$\frac{1}{2}\$, \$\frac{1}{2}\$, \$\frac{1}{3}\$, \$\frac{1}\$, \$\frac{1}{3}\$, \$\frac{1}{3}\$, \$\frac{1}{3}\$, \$\frac{1}{3}\$,			
Brushes, tooth-polishing			
Burnishers, No. 30 and No. 34, number			
Det			
Ligature, wire, Angles   box   1	bor	01, num-	· ·
Mandrels, No. 303dozen1			
Matrix retainer, Ivory'snumber 1			
Burs for contra-angle handpiece, Nos. ½, 2, 4, 6, 33½, 35, 39, 557, 558, 560, 568, 701 (½ dozen each)			
Nos. 1, 2, 4, 6, 331, 35, 39, 557, 558, 560, 568, 701 (1 dozen each)			
Mercury, holder			
Campho-phenol	NOS. 1, 2, 4, 6, 331,	30, 39,	
Mirrors, mouth, with L handle, number			
Decement			
Morter and pestlenumber 1			
Napkins, aseptic, dental_boxes_3   Oil stone, Arkansas_hone_1   1   Paper, bibulous_package_1   Paper, bibulous_			
Dil stone, Arkansas   Done   1   Paper, bibulous   Darkage   1   Piers, 4-inch, round-nose, flat, number   2   Pliers, 4-inch, round-nose, flat, number   2   Pluegers, Woodson   Darkage   Points, carborundum, mounted, box   Points, carborundum, mounted, box   Points, carborundum, mounted, box   Points, carborundum, mounted, box   Points, carborundum, sounted   Points, carborundum, so			
Chisels, Nos. 3, 85			
Pliers, 4-inch, round-nose, flat, number			
Der			
Pliers, dressing, Nos. 2, 17_number			
Pluggers, Woodson	ber		
Detail			
Cotton, rolls, assortednumber         3         box	Cotton, rolls 2, 3 (3 of each	ch), num-	
Points, orange woodboxes 6   Points, orange woodboxes 6   Porcelain, synthetic shade 6, number	ber	6	Points, carborundum, mounted,
Porcelain, synthetic shade 6, number	Cotton, rolls, assorted	number 3	box 1
Porcelain, synthetic shade 6, number	Composition, Modeling	_boxes 6	Points, orange woodboxes 6
Disks, assorted	Covers, aseptic paper	do 3	
Porcelain, synthetic shade 3, number			ber 1
Disks, assorted			
Engine belts        number         2         Pumice stone, powdered        pound         1           Engine, dental, all cord foot power, portable, with case        number         1         Scalers, McCall's, Nos. 10, 11,         1           Engine oil        bottle         1         1         1         2         Scalers, McCall's, Nos. 10, 11,         1         2         3         3         3         5         3         4         4         5         5         2         4         5         2         4         5         2         4         5         3			
Sandurac gumounce   1   Scalers, McCall's, Nos. 10, 11,   12   12   1   12   1   12   1   12   1   1			
Scalers, McCall's, Nos. 10, 11,			
Engine oilbottle 1			
Excavators, Nos. 37, 57, 58, 63, 64, 67, 68, 81, 83number_ 9 Scissors, gum curved on flat_pair_ 1 Shears, 9-ipchdo 1 Shears, small, plate (curved collar),			
67, 68, 81, 83number_ 9 Scissors, gum curved on flat_pair_ 1 Explerers, No. 5do 1 Shears, 9-ipchdo 1 Eugenolbottle_ 1 Shears, small, plate (curved collar),			
Explerers, No. 5do 1 Shears, 9-ipchdo 1 Shears, small, plate (curved collar),			Scissors, sum curved on flat_pair_ 1
Eugenolbottle_ 1   Shears, small, plate (curved collar),			Shears 9-inch
			Shears, small, plate (curved collar).
Private Paris Handan Paris Land			
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Slab, glass, mixing, No. 6_number_	1	Syringes, water, No. 21A, extra bulb	
Spatulas, Nos. 22, 24do	2	fornumber_	1
Spatulas, rubberdo	2	Trays, impression, assorted for chil-	
Sterilizer, smalldo	1	drennumber	4
Sticks, orange woodbundles	4	Wax, impression, yellowboxes	2
Stopping, gutta-perchaboxes	. 3	Wheels, corborundum, assorted, num-	
Strips, finishing, assorted_'do	2	ber	12
Syringes, waternumber	2		

In communities where the work will be confined to purely preventive work the following equipment will be found satisfactory:

# II. Equipment of a portable school dental clinic for preventive work only.

Article.	Quantity.	Porte polisherdo	1
Portable dental chair, with	case.	Wood pointsboxes	6
number		Dappen glassesnumber_	3
Portable dental cuspidor, with	case.	Water syringedo	1
number		Chip blowersdo	2
Portable dental engine, all cord,	foot	Pliers, dressingdo	2
power, with casenumb	er 1	Bibulous paperpackage	1
Engine oilbott	le 1	Absorbent cottonrolls	1
Engine beltnumb	er 2	Sterilizernumber	1
Handpiece, contra-angledo.	1	Aseptic dental napkinsboxes	3
Polishing brushesgro		Campho-phenolbottle	1
Scalers, pyorrheanumbe	er 4		1
Mouth mirrorsdo.	6		

#### THE COST OF EQUIPMENT.

The cost of the equipment for a centralized clinic will vary with the amount of work it is purposed to do. However, very complete dental outfits, including a satisfactory X-ray machine, may be purchased for from \$1,250 to \$1,500.

The equipment recommended for an itinerant dental clinic, exclusive of an automobile for transportation, should cost approximately \$250. Owing to the need of carrying this equipment in special cases designed for convenience of transportation it is not possible to purchase the complete outfit from any one dental manufacturing concern. However, persons interested in securing an outfit of this character should prepare proposals covering all the articles listed, which should be submitted to several dental manufacturing firms with the request that said firms bid on such articles as they are prepared to supply. In fact, it will be found that certain firms specialize in the manufacture of portable dental engines, others in dental cuspidors, and some others in portable dental chairs. The operative and prophylactic instruments may be purchased from any dental supply firm.

# THE SCOPE OF THE WORK WHICH MAY BE UNDERTAKEN.

The amount of dental work which should be undertaken in the schools may be considered from many different angles. In some countries, as in New Zealand, all necessary dental work is undertaken; in other places the corrective work is limited to the six-year

molars; while in still other communities nothing but preventive work is considered.

Ordinarily the work should be limited to prevention and to partial correction for children under a given age, preferably 12 years. This, of course, would include the much-needed attention to the important six-year molars. No operative work should be undertaken, however, without first securing the consent of the child's parent or guardian, because in a number of instances it will be found that the parents desire to have the necessary work done by a private dentist.

Each community will necessarily have to determine the amount of corrective work which will be undertaken, and upon this determination will depend the personnel required to operate the clinic and also the equipment to be purchased.

All emergency work should, of course, be undertaken; but in the matter of fillings, it should be limited to cement, synthetic porcelain, gutta-percha, or amalgam (silver).

#### FEES.

Owing to the great prevalence of dental decay in children and the very common neglect of this condition in very young children, and also because of the quite general lack of dental facilities in outlying districts, school dental service should be provided at community expense as a part of the school system. Furthermore, because in every community there are a number of children suffering from dental decay, whose parents are unable to pay a fee for this work, it is undesirable that a fee system should be arranged requiring a fee for the treatment of children whose parents can pay and free treatment in the case of necessitous children. Such system assumes the aspect of charity, which should be sedulously avoided. In all instances where special and expensive fillings are desired the parents should be required to pay for the material.

In different communities where fees are charged, these range from 10 cents to \$1.50 for each child. In clinics where this latter charge is made, the work is completed in all respects.

## PERSONNEL.

The plan of employing a part-time operator should not be generally encouraged, because with personal interest constantly in his mind the general work of the clinic must suffer.

If a community be too small to employ a whole-time operator, a possible solution is offered in joining with some other community, each using the clinic part of the time; in which case the clinic should be of portable type and furnished with facilities for transportation.

If the clinic be small and funds for maintenance limited, a dental hygienist should be employed in preference to a dentist, for the

reason that she will not only be able largely to prevent conditions which the operator would be called upon to relieve, but she would also be able, as a result of her examinations, to notify the parents of the children of their special dental needs before these have become serious.

In the larger centralized clinics, 1 dentist should be employed for each 2,000 school children, and dental hygienists in the proportion of 2 to 4 hygienists to 1 operator. If the corrective work is to be limited, the proportion of hygienists to operators should be increased probably to 12 hygienists to 1 operator, in which case the number of children to each operator can be greatly increased.

## II. EDUCATIONAL MEASURES.

Educational measures should be considered from the standpoint of the teacher, the child, the parent, and the school authorities and taxpayers.

TEACHERS.

Teachers should be given in normal school courses at least a working knowledge of mouth hygiene and of such measures as may be carried out by them without special equipment. They should be shown the value of mouth hygiene not only from the standpoint of the preservation of health, but from that of its effect on reducing absences from school and the number of children who repeat grades. In a record of causes of absences from school in the case of 1,000 school children in Valparaiso, Ind., it was found that absences amounted to a total of over 32 school years during 1 school year, and the highest percentage of causes of absences, as given by the pupils, was for toothache.

Many means are available for the instruction of teachers, such as lectures, moving picture films, and the use of instructive charts and pamphlets. Teachers should also be instructed, by practical demonstrations, in dental prophylaxis, the proper conduct of a tooth-brush drill, and the sanitary precautions which should be observed.

Special points for the consideration of the teacher.—1. Decay does not take place upon the cutting edges of the teeth or upon other surfaces which are kept polished by grinding and biting food. The reason for this is that the organisms which cause them to decay can not thrive upon polished surfaces; therefore, any surface of a tooth which can be kept polished will be free from decay.

2. Children will be unable to remove the green stains which have formed on their teeth with an ordinary toothbrush, and this should be carefully removed by a dentist or mouth hygienist and the surfaces carefully polished. The child will then be able to keep this stain from reappearing in the majority of instances.

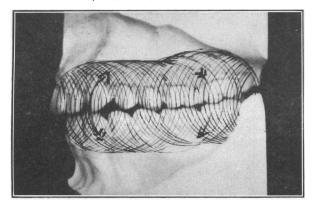
- 3. The most important tooth in the mouth is the six-year molar, which appears during the sixth year, and at that time is always number six counting from the front (naturally if a first tooth has been lost, the space should be counted as though the tooth were still in position). The six-year molar comes in directly back of the last baby tooth, and there are four of them, two in each jaw. If one or more of these are lost there will not be a normal development of the jaw.
- 4. Dental decay and other diseased mouth conditions may lessen the child's vitality and greatly reduce his capacity for school work. Particularly is this true in cases of abscesses and inflamed gums. The normal gums are a bright pink. When they appear red at the edges or bleed upon brushing some form of inflammation exists and the child is in need of dental attention.
- 5. A child with a bad mouth is a possible menace to the health of the other children.
- 6. A dollar or an hour spent in the cause of clean mouths will give great returns in health and school efficiency.

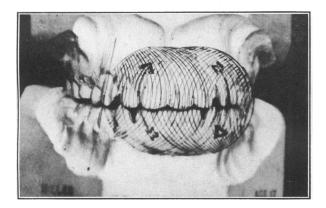
#### THE PUPIL.

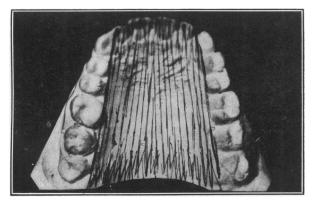
Many attractive ways have been devised for teaching mouth hygiene to school children. The charts and films recommended for use in the normal schools can be used for the purpose. First of all the children should be taught a proper method of making a mouth toilet. This should include the brushing of the teeth and care of the toothbrush. Little rhymes and stories will prove very useful, and many of these are to be had. Compositions prove a splendid feature and may be undertaken at intervals. Likewise, children should be encouraged to make posters illustrating some phase of mouth hygiene.

Method of brushing the teeth.—Smearing the nails with clay or vaseline and endeavoring to cleanse them with an old toothbrush will enable one to form an opinion as to the most effective method of brushing the teeth. Brushing across the nails will leave material along the sides of each nail; brushing up and down the nail will leave the area about the root of the nail uncleansed; but if the brush be used in a rotary manner, the bristles describing a small circle upon the nail, it will be found that all the material will be removed. This motion is to be recommended in brushing one's teeth upon the surface next to the lips and cheek. For the inner or tongue side the brush is used as one would use a hoe, the rotary motion being impracticable, but in using this motion the brush should not be pushed back, as this will tend to carry food débris and germs beneath the gum margins, which is the thing most to be avoided. The stroke

Public Health Reports, Vol. 35, No. 47, Nov. 19, 1920.







2776-1

begins up on the gum and moves in the direction of the main axis of the tooth toward the tip or masticating surface, as shown in the accompanying cuts.

For the masticating surface a pulling and pushing motion backward and forward is recommended.

If the gums bleed when the teeth are brushed, some abnormal condition exists and a competent dentist should at once be consulted. A healthy gum is not easily injured.

A thorough rinsing of the mouth should follow to remove such material as has been dislodged by the previous processes. A number of good tooth powders and tooth pastes are on the market, and their use is not objectionable though not absolutely necessary. A very effective mouth wash is ordinary lime water, which may be diluted in reasonable degree should the taste of the stronger solution be objectionable.<sup>1</sup>

Toothbrush drills.—The great advantage of the toothbrush drill does not lie in the actual brushing done at the time, but in the formation of the habit and the acceptance of this procedure by the child as a part of the daily routine.

This drill is carried out in various manners; the repetition of the several strokes with the brush 12 or 16 times is the usual procedure.

Toothbrush drills should be held out of doors whenever possible. If after wetting a brush with water the thumb is run over the bristles, it will be noted that a spray flies from the brush to some distance. Care should be exercised that this spray may not reach one's neighbors during these drills, creating a condition worse than that caused by promiscuous coughing and sneezing.

The details of a toothbrush drill must be worked out according to the facilities offered—whether there be running water available or not and whether this be a single bowl or a trough with various jets, as is provided in some schools.

<sup>1&</sup>quot; It has been found that lime water is the best solvent for the gluelike accumulations of food and mucus which collect on and between the teeth where the brush can not reach. It is so much more effective than the better tasting antiseptic (socalled) mouth washes that it should be used by everyone. It is simple to make and very inexpensive.

<sup>&</sup>quot;Buy 5 cents worth of unslaked lime at a paint store. Place a half cupful im a quart bottle and nearly fill with cold water. Shake thoroughly. After several hours, when settled, pour off as much water as possible down the sink without losing any of the lime in bottom of the bottle. This water is the washings of the lime and should not be used. Again fill the bottle with cold water, shake well, and allow to settle. This is the lime water and should be decanted into a 10 or 12 ounce bottle for use at the washbowl. The quart bottle can again be filled with cold water, shaken, and allowed to settle for future use. This operation may be repeated as long as there is any lime left in the bottle.

<sup>&</sup>quot;Use the wash without diluting. Thoroughly rinse until it foams in the mouth, then rinse the mouth with warm water.

<sup>&</sup>quot;Use after each meal.

Toothbrushes should not be kept in the schools, but should be brought from the home carefully wrapped, preferably in oiled paper.

Care of the toothbrush.—After using the brush it should be carefully rinsed and placed apart from others where it may become dried out. It should not be kept in water or any solution, but should be placed when possible where it may receive the direct sun rays for a time. Not only is sunlight nature's destroyer of germs, but the life of the brush will be materially lengthened by this means.

A small toothbrush with comparatively few bristles should be used. The larger sizes are inefficient, and if the brush be too closely bristled, the bristles will not reach the spaces between the teeth.

Use of the toothpick and dental floss.—The use of the toothpick is to be condemned. It is most desirable to preserve those portions of the gums which lie between the teeth, and the use of a toothpick is most injurious to this tissue.

In the improper use of the dental floss much damage is often done. If the floss be held tightly between the fingers and forced through between the teeth, a heavy blow is delivered directly upon this tissue, the floss usually following the neck of one tooth and separating the gum from the tooth at this point, with an eventual recession of the gum following. Floss should be drawn carefully and gently between the teeth with a pulling motion. Thus used, the point where the teeth are in contact with each other and which can not be thoroughly cleansed with the brush are successfully reached.

#### EDUCATION OF PARENTS AND GUARDIANS.

In order that the community may reap the maximum return from expenditures incurred in operating school dental clinics the work in the schools should be accompanied by follow-up work in the homes to impress upon the responsible heads of families the importance of mouth hygiene from the standpoint of the growth and development of their children and the necessity of securing dental attention for children of preschool age. If the cooperation of the parents is thus secured, many children will enter school in better physical condition and without the necessity of losing time from school by reason of unsound and aching teeth. In fact, without the active cooperation of the parents the greatest benefit will not accrue to children who receive attention in the school, because of the necessity of home supervision to insure that they carry out and put into practice the teachings received in the school.

Diet.—It must be remembered that the diet plays an important part in determining whether or not the child is to have sound teeth or teeth that are poorly resistant to decay. This even extends back to the period before the child is born. Expectant mothers should be

taught to include in their dietary foods rich in phosphorous and lime, such as most fresh fruits and the green vegetables.

Furthermore, the effect of the absence of certain accessory food factors in causing scurvy and rickets (conditions that are invariably associated with bad teeth) makes it highly important that the children of preschool age, and older children as well, be required to eat each day articles of food that are rich in antiscorbutic and antirachitic substances, such as fresh fruits, green vegetables, and butter, and encouraged to drink an abundance of milk. The too free consumption of sweets should be discouraged.

## SCHOOL AUTHORITIES AND TAXPAYERS.

Mouth hygiene is a business proposition. Regardless of one's means of getting a living, we are all in the business of educating our children. To manage this business we employ a superintendent, but in no other business, as is so often the case in this, would we allow our interests to cease with his employment.

The per capita cost of educating a child is obtained by dividing the total school budget by the number of children in attendance. If a child fails to make grade, the situation is exactly the same as though a manufacturer found that after passing through the plant an article was defective and unsalable. Furthermore, if it was found that a large proportion of the products of the plant were unmarketable, would not immediate steps be taken to remedy the condition? The establishment of school dental clinics and the teaching of mouth hygiene is one of the important remedial steps which should be taken in the school plants. A reduction in the percentage of retarded children not only means fewer school buildings and reduced overhead charge, but also makes possible the employment of better teachers. As a matter of dollars and cents, mouth hygiene offers splendid returns for each dollar expended in the better growth and development of the children and by assuring better physical types.

# THE PRESENT STATUS OF VENEREAL DISEASE CLINICS.

By JOHN W. HART, Regional Consultant, United States Public Health Service.

One of the most important accomplishments in the campaign against venereal diseases inaugurated in July, 1918, by the United States Public Health Service, in cooperation with the State boards of health, has been the creation of free venereal disease clinics throughout the United States. The number of these clinics operating under the joint auspices of the State boards of health and the Public Health Service has increased from 237 in 1919 to 427 in 1920. The

work of these clinics has been of notable value in rendering diseased persons noninfectious and thus decreasing the spread of both gonor-rhea and syphilis.

When either of these diseases has passed the initial stage, cure is a matter of long-continued treatment. For this reason the man who could pay for medical attention in the case of an acute disease often finds his finances utterly unable to defray the cost of a series of expensive treatments lasting for months or even years. It is, therefore, almost inevitable that he will stop treatment too soon and will continue to spread the disease. Dispensary service or service at nominal cost for those infected with venereal diseases is therefore especially important, since it is required not only by the indigent but by those receiving moderate salaries.

In February, 1919, the Public Health Service made a survey of cities in the United States with a population of 15,000 or more in order to determine just what was being done in each of these cities to control venereal diseases. Ratings made from the survey showed how the cities ranked in venereal disease control measures and not, as was sometimes mistakenly supposed, in venereal disease rate.

The survey was made by trained observers from the division of venereal diseases of the United States Public Health Service and took the form of a schedule of 180 questions. These were grouped under separate headings, according to the so-called American plan, of medical, educational, and legal measures. The questions under each heading were answered by the person best fitted to give the information desired. For example, all medical questions dealing with quarantine, reporting of physicians, and similar matters, were answered by city health officers, and questions relating to the treatment of infected persons, social-service work, laboratory diagnosis, etc., were answered by the clinician. It is with the last-named series of answers relating to the clinics that this article deals.

The cities to be surveyed were selected in accordance with the census estimate of 1917. This estimate showed a total of 444 cities with a population of over 15,000.

At the time of survey there were, as stated above, 427 clinics for the treatment of venereally diseased persons, but of this number only 359 were located in cities of more than 15,000 inhabitants. It should be remembered, therefore, that the following statistics do not include all the venereal disease clinics in the United States, but refer only to clinics located in cities of more than 15,000 inhabitants, according to the census estimate of 1917.

The questions covered the following points: Location of clinic, equipment, methods of sterilization, methods of case recording and history taking, personnel, methods of treatment, accessibility of laboratory facilities, days and hours open for treatment of patients,

daily average attendance, per capita cost, average monthly cost of operation, methods used in increasing attendance, and fee charged, if any.

Location.

The first point for consideration was the location of the clinic, which was considered advantageous according to its accessibility and the degree of privacy afforded the patient, since it was recognized that the majority of patients applying for treatment are extremely self-conscious and hesitate to be seen visiting a clinic of this type. In considering a standard for venereal disease clinics, to be described in detail later, it was decided that the ideal location for a clinic was in a building visited on business or for other reasons by various persons during the course of a day. It was evident that the patient approaching a clinic located in such a place would feel that he would not attract the attention he might in visiting a building used especially for housing a venereal-disease clinic. Good locations were therefore considered to be in office or municipal buildings, such buildings as a rule being centrally located and offering opportunity to conceal the nature of the visit. After office and municipal buildings and hospitals, miscellaneous other locations were considered. The last classification included clinics located in special clinic buildings, medical schools, etc. The location of these clinics is given as follows:

Location.	Num- ber.	of clinics surveyed.
Office building	. 59	16. 4
Municipal building	. 85	23. 7
Hospital	. 142	39. 5
Miscellaneous	. 73	20. 4

In classifying the clinics under "standard of clinics" all locations as given above were considered to be central unless annotation appeared on the survey to the contrary. It would appear from the schedules that practically 100 per cent of the venereal disease clinics are centrally located.

Equipment.

The equipment of each clinic was given the simple rating of "adequate" or "inadequate," as the case might be, the adequacy of equipment being determined by the following requirements:

Necessary appliances for the treatment of anterior and posterior urethritis, with their several complications. Appliances for the proper preparation and administration of arsphenamine or necarsphenamine. Apparatus for the sterilization of instruments, glassware, etc. A water still, and sufficient supply of the drugs used in the treatment of gonorrhea, syphilis, and chancroid, according to the requirements of the "Manual of Treatment" as issued by the

United States Public Health Service. Measured by this standard the following was shown:

		Per cent of clinics surveyed.
Adequately equipped	 300	83. 5
Inadequately equipped	 59	16. 5

In further considering the equipment of the various clinics it is interesting to note that 204 or 56.8 per cent of the clinics surveyed were equipped with live-steam sterilization, and only 14, or 3.9 per cent, were using chemical sterilization such as the various forms of formaldehyde cabinets used for the sterilization of catheters, cystoscopes, and other equipment of a like nature which might be damaged by boiling. However, it is to be noted that of those clinics not possessing live-steam sterilizers, such sterilization was available to fully 98 per cent through the courtesy of hospitals, laboratories, and offices of private physicians, so that autoclaved dressings were easily secured for such minor operations and dressings as might be made in the clinic.

#### Records.

The records of the clinic were considered under the headings history of patient and record of treatment. Such records were classed as complete or incomplete. A complete history was assumed to be one which gave the name, address, age, sex, color, marital condition, source of infection where possible, and the usual information on family history, past history, and present illness, date of exposure, period of incubation, treatments received prior to applying to clinic, and such other data as might be included under the heading of general information. Records of treatment were considered complete when they showed the patient's condition at the time treatment was commenced, and the date and type of treatment given, with notations of reactions, serological examinations, and other aids to control of treatment.

A compilation of the records kept in the 359 clinics shows:

	Num- ber.	Per cent of clinics surveyed.
Histories, complete	. 254	70. <b>7</b>
Histories, incomplete	. 105	29. 3
Records of treatment, complete		71.6
Records of treatment, incomplete		28. 4

#### Personnel.

Personnel of these clinics are supplied in various ways: By the city, State boards of health, private organizations, or, as in a great many instances, by the hospital in which the clinic is located. In the 359 clinics surveyed there were 397 clinicians, 398 female nurses, 90 male nurses, 201 female social workers, 27 male social workers, 124

female clerks, and 31 male clerks. Salaries were paid in 280 clinics, or 77.9 per cent of those surveyed, with a total monthly pay roll of \$61,295.77. In 106 clinics, or 29.5 per cent, fees were charged, such fees usually covering the cost of medicine, dressings, etc.

# Cost of Operation.

The actual cost of operation could be secured in only 202, or 56.2 per cent, of the clinics surveyed, because of the fact that a number of clinics were operated in conjunction with a general clinic, and in such cases the cost of operation was known only for the entire clinic, no separate venereal disease clinic account being kept. However, the total cost per month, including all overhead expense, for the 202 clinics enumerated was \$76,095.46, with an average per clinic of \$376.71. From the daily attendance and treatments given it was estimated that the average per capita cost of treatment was \$1.80. Fifty-five and two-tenths per cent of these clinics, however, were shown to have a per capita cost of \$1 or less. The following shows the per capita cost of treatment at the clinics (202) for which the data were secured:

Per capita cost of treatment.	Per cent of clinics.
\$0.50 and under	
\$0. 51 to \$1	33. 8
\$1. 01 to \$1.50.	
\$1.51 to \$2	
\$2.01 and over	20. 0

#### Standards for Clinics.

When the clinics had all been rated, it was decided to classify them by groups according as they measured up to certain standards.

In order to be classed under standard "A," a clinic must meet the following requirements:

# "A" standard for clinics.

Central location.

Adequate equipment.

Adequate means of sterilization.

Complete histories.

Complete record of treatments.

Convenient source of fresh distilled water, preferably a still in clinic.

One or more nurses.

A social worker.

A clerk or one of clinic personnel acting

as clerk.

Open five days or more per week.
Open four hours or more per day.
Night hours.
Good treatment.
Conveniently accessible laboratory.
No fees charged.
Properly advertised.
Follow-up system.
Per capita cost under \$1.
Daily average attendance, 25.

Four clinics were found to meet these conditions. A fifth clinic met these requirements except that its per capita cost could not be determined.

In order to be classed under standard "B," a clinic was required to meet the following requirements:

"B" standard for clinics.

Changes from standard "A.11

Central location.

Adequate equipment.

Adequate means of sterilization.

Complete histories.

Complete record of treatments.

Convenient source of fresh distilled water, preferably a still in clinic.

One or more nurses.

A social worker.

A clerk or one of clinic personnel acting as clerk.

Oren at least three days per week.

Open three hours per day.

Night hours.

Good treatment.

No fees charged.

Properly advertised.

Follow-up system.

Per capita cost \$1.25.

Daily average attendance 25.

Laboratory omitted.

Reduction of two days. Reduction of one hour.

Per capita cost increased \$0.25.

Seven clinics measured up to this classification.

In order to be classed under standard "C," a clinic was required to meet the following requirements:

"C" standard for clinics.

Changes from standard "B."

Central location.

Adequate equipment.

Adequate means of sterilization.

Complete histories.

Complete record of treatments.

Nurse

Open three days per week.

Open two hours a day.

Night hours.

Treatment good for one disease (gonor-

rhea or syphilis), fair for other.

No fees charged.

Per capita cost \$1.50.

Daily average attendance 15.

Social worker omitted.

Distilled water omitted.

Reduction o one hour.

Treatment good or fair.

Advertising and follow up omitted.

Per capita increased \$0.25.

Attendance decreased 10.

Fourteen clinics conformed to standard "C," and five others met the requirements except that the per capita cost could not be determined.

In order to be classed under standard "D," a clinic was required to meet the following requirements:

"D" standard for clinics.

Changes from standard "C."

Central location. Adequate sterilization.

Complete record of treatment.

Open three days per week. Open two hours per day.

Treatment good for one disease (gonor-

rhea or syphilis), fair for other.

Per capita cost \$2.

Daily average attendance 12.

Equipment omitted.

Histories omitted.

Night hours omitted.

Fees allowed.

Per capita increased \$0.50. Attendance decreased 3.

Fifty clinics conformed to standard "D" and 20 others conformed to this standard with the exception that the per capita cost could not be determined.

All other clinics not included in "A," "B," "C," and "D" were classed as "E" clinics.

The information relative to the clinics gained through the survey has been used to stimulate the clinics to do better work. State boards of health are constantly striving to raise the standard of work done at venereal disease clinics, and it is believed that many clinics now classified as "E" standard will have been brought to conform to the requirements of a higher standard and that in time highly efficient facilities for treatment will be secured throughout the United States for venereally infected persons.

# INDUSTRIAL MORBIDITY STATISTICS.

Report of the Committee on Industrial Morbidity Statistics, Section on Vital Statistics, American Public Health Association, 1920.1

The following report is of the Committee on Industrial Morbidity Statistics, Section on Vital Statistics, American Public Health Association, for the year ended September, 1920:

Your committee begs to submit as its report for this year a brief statement to the effect that the Statistical Office of the United States Public Health Service has, during the past year, undertaken the work of putting into operation the system of morbidity reports from industrial establishments which, in accordance with your instructions. the committee had developed and suggested in 1918 and 1919. Your committee has held no meetings during the past year, although its members individually have assisted the Public Health Service in various ways in this work. It has held itself in readiness to cooperate as a body whenever it was felt that sufficient trial of the proposed system of industrial morbidity reports had been made to war-

<sup>&</sup>lt;sup>1</sup> Presented at the annual meeting of the American Public Health Association held in San Francisco, September 13-17, 1920. Reports of the committee presented at the meetings in 1913 and 1919 are contained in Reprints Nos. 484 and 563, respectively, from Public Health Reports.

rant a consideration of such revisions and changes as might appear advisable and to assist in the further development of the plan.

As suggested in previous reports of this committee, the Public Health Service acts as the central collecting agency for current reports of morbidity from industrial establishments. This work has been made a part of the functions of the Statistical Office of the Public Health Service.

In a letter to the chairman of this committee from the statistician in charge of the Statistical Office, one point is mentioned which your committee feels that it should lay especial emphasis upon, namely, the fact that this work is seriously handicapped by the lack of sufficient appropriations. The collection of reports of disease prev lence, in sufficient detail to permit of statistical analysis from the points of view of race, sex, age, and occupation, for a definitely enumerated and observed group of persons, is fundamental to a dependable epidemiology. There is no large body of such material in the United States, and public health work has been, and still is, seriously handicapped by this lack. Particularly is this true in the field of industrial hygiene, where an accurate measure of the effects of occupation upon the health of the workers is badly needed. It is believed that the collection of a large body of facts relating to the incidence of disease among wage earners and a system of current reports of disease prevalence among a large number of wage earners will go far to supply this need. Such is the purpose of the work outlined by your committee, and, while excellent progress has been made, its development and usefulness are postponed in a large measure by insufficient appropriations to the Public Health Service. Your committee therefore feels that every effort should be made to urge the importance of this undertaking and the necessity for sufficiently large appropriations by Congress to the Public Health Service to permit of its proper development as a health measure of fundamental importance.

Louis I. Dublin, Chairman. Carl B. Auel. William A. Hathaway. B. S. Warren, Secretary.

# PRINCIPAL CAUSES OF DEATH IN UNITED STATES REGISTRATION AREA, 1919.1

# CENSUS BUREAU SUMMARIZES MORTALITY STATISTICS.

The Census Bureau's annual bulletin on mortality statistics for the death registration area in continental United States, which will be issued shortly, shows 1,096,436 deaths as having occurred in 1919.

<sup>&</sup>lt;sup>1</sup> Similar summaries for the years 1917 and 1918 were published in Public Health Reports for July 4, 1919, and Feb. 13, 1920, respectively.

This represents a rate of 12.9 per 1,000 population, and is the lowest rate recorded in any year since the establishment of the registration area. The rate for 1919 is in striking contrast with the unusually high rate for 1918, the year of the pandemic of influenza, which was 18 per 1,000. This is a drop of 5.1 per 1,000 population.

The death registration area in 1919 comprised 33 States, the District of Columbia, and 18 registration cities in nonregistration States, with a total estimated population of 85,147,822, or 81.1 per cent of the estimated population of the United States. The States of Delaware, Florida, and Mississippi were added to the area in 1919 and Nebraska in 1920, so that now the only States not in the area are Alabama, Arizona, Arkansas, Georgia, Idaho, Iowa, Nevada, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, West Virginia, and Wyoming. The Territory of Hawaii is part of the registration area, but the figures given in this summary relate only to the area in continental United States.

The following table shows, for the death registration area in continental United States in 1919, the total number of deaths and the death rate by certain leading causes, together with the percentage which each cause contributed to the total:

Cause of death.	Number of deaths.		Per cent of total.
All causes 1	1,096,436	1,287.7	100.0
Organic diseases of the heart Tuberculosis (all forms) Tuberculosis of the lungs ¹ Tuberculosis meningitis Other forms of tuberculosis Pneumonia (all forms) Influenza Acute nephritis and Bright's disease Cancer and other malignant tumors External causes (suicide excepted) Cerebral hemorrhage and softening Congenital debility and malformations Diarrhea and enteritis (under 2 years) Diabetes Diphtheria and croup Bronchitis Appendicitis and typhlitis Suicide Puerperal affections, other than puerperal septicemia Respiratory diseases, other than pneumonia and bronchitis Hernia and intestinal obstruction Typhold fever Cirrhosis of the liver Meningitis Measles Malaria Scarlet fever Erysipelas Smalloox	111, 579 106, 985 94, 772 5, 175 7, 038 105, 213 75, 005 68, 551 67, 684 66, 918 56, 714 56, 718 56, 718 56, 718 56, 718 56, 718 56, 718 56, 718 56, 718 56, 718 56, 718 56, 718 56, 718 56, 718 56, 718 56, 718 56, 718 56, 718 56, 718 56, 718 57, 980 4, 980 4, 714 3, 907 3, 296	131. 0 125. 6 111. 3 6. 1 8. 3 123. 6 98. 8 88. 1 79. 5 78. 6 66. 6 44. 2 14. 9 14. 7 12. 8 11. 4 11. 2 10. 4 9. 5 5 5 6. 5 8 8 11. 3 123. 6 14. 2 14. 9 14. 9 14. 9 14. 9 15. 5 16.	10.28 8.65 9.67 6.6.32 1.21 1.09 9.98 8.76 6.32 1.21 1.09 9.98 8.76 6.32 1.21 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.0
All other defined causes. Unknown and ill-defined causes.	172, 161	902. 2 18. 3	15.7 1.4

<sup>1</sup> Exchasive of stillbirths.

<sup>&</sup>lt;sup>2</sup> Includes acute miliary tuberculosis.

<sup>3</sup> Less than one-tenth of 1 per cent.

# DIVISION OF VENEREAL DISEASES, JULY, AUGUST, AND SEPTEMBER, 1920.

During the months of July, August, and September, 1920, 91,195 cases of venereal diseases were reported to the State boards of health. This is an increase over the preceding three months of 21,781, or about 31 per cent. It is not considered that this indicates an increase in the prevalence of venereal diseases, but is the result of better reporting on the part of physicians.

Venereal disease reports for July, August, and September, 1920—Number of cases reported by the State boards of health, number of admissions to the venereal disease clinics operating under joint control of the United States Public Health Service and State boards of health, and number of treatments of arsphenamine administered.

		Admissions to clinic.											
States.		Cases r	eported.	•	Total:	admis- ns.	Syp	hilis.	Gono	rrhea.	Chan	croid.	phena- mine treat- ments
	Total cases.	Syph- ilis.	Gonor rhea.	Chan- croid.		Fe- male.	Male.	Fe- male.	Male.	Fe- male.	Male.	Fe- male.	admin-
Alabama Arizena	1,442 90	577 20	776 65	89 5	1,690	876	846	516	769	341	75	19	6, 185 40
Arkansas	1.582	662	818	102	273	117	185	89	82	28	6		1,376
California	2,143	939	1,204	<u></u> .	388	227	228	146	149	80	11	1	2,114
Colorado Connecticut	1,067 611	380 305	630 306	57	375 167	169 56	117 67	97 37	212 98	69 19	46	3	986 1,155
Delaware	159	70	70	19	44	14	25	10	19	1 4			169
Florida	1,267	694	528	45	629	357	391	250	202	105	36	2	3,388
Georgia	2,079	853	1,128	98	581	174	225	143	282	25	74	6	3, 209
Idaho Illinois 1	5,084	33	35	163	757	312	226	168	509	143	22	····i	5,470
Indiana	1,402	1,694 613	3,227 763	26	848	241	331	129	488	liii	29	l î	4,039
Iowa	1,012	260	723	29	142	77	72	43	66	34	4		1,507
Kansas	742	278	455	9	210	243	102	71	106	172	2	<u>-</u> -	1,620
Kentucky Louisiana	4,278	2,169 974	2,010	99 389	566 806	311 260	225 303	200 162	316 405	106 93	25 98	5 5	3,117 2,375
Maine	2,833 525	106	1,470 410	309	44	27	29	19	15	8	30		411
Maryland	1,445	577	790	78	678	404	210	232	406	154	62	18	1,484
Massachu-	1							-			١.	1	
setts	2,901	703	2,198		1,166	674	551	378	611	296	14		5,942
Michigan Minnesota	5,206 3,085	1,716	3,427 1,783	63 60	925	416 93	339 51	310 50	574 65	105	12	1	2,880 2,061
Mississippi	2.173	1,242 922	1 137	114	356	174	153	98	165	76	38		1,720
Missouri	2,806	889	1,713	204	770	321	331	196	412	116	27	9	3,661
Montana	443	133	310		16	27	10	23	6	4			285
Nebraska	1,605	488	1,011	106	217	92	98	43	80	48	39	1	1,411
New Hamp- shire	227	77	145	5	41	18	16	8	25	10			452
New Jersey	873	447	406	20	292	99	113	82	178	17	1		883
New York 1	2,055	1,546	509	1	581	158	278	119	292	39	11		5,693
New Mexico	97	38	52	7	1		1				• • • • • •		18
North Caro-	2,304	608	1,568	128	135	42	48	33	64	9	23		968
lina North Dako-	2,304	000	1,300	120	100	42	10	- 33	V2	۳	20	•••••	200
ta	471	123	347	1	25	27	10	15	15	12			146
Ohio	3, 187	1,530	1,477	180	1,402	505	611	280	716	216	75	9	8,210
Oklahoma	2,064	943	1,019	102	745	274	375	151	318	115	52	8	4,964 227
Oregon Pennsyl-	538	145	385	8	38	19	13	8	25	11		• • • • • •	221
vania1	3,778	2,729	1,001	48	594	351	313	258	272	92	9	1	7,278
Rhode Island.	844	593	249	2	81	37	58	32	22	5	i		2,624
South Caro-	4 000							~~=	250			-	F 704
lina	4,863	2,537	2,057	209	1,529	512	754	297	658	195	117	20	5,784
South Dako-	280	44	220	16	23	15	12	8	10	7	1		52
Tennessee1	394	106	267	21	341	333	126	163	178	169	37	1	1,780
Texas		5,815	8,873	819	1,328	377	548	202	608	161	172	14	3, 344
Utah 1	217	46	170	1	19	8	7	4	12	4.	•••••		96 106
Vermont	211 1,824	84 770	127 997	57	847	3 353	3 388	2 211	4 423	1 137	36	5	3, 121
Washington	1,387	248	1,083	56	116	74	37	28	77	46	2		1,079
West Virgin-	· 1		1										•
ia	2,650	839	1,728	83	85	52	63	32	20	20	2		504
Wisconsin	1,118	144 115	952 189	22 14	192 14	108 11	74	51	199 11	57 4	9	••••	1, 208 11
Wyoming			109	19	14	- 11	3	5	11				
Total	1, 195	36, 824	50,808	3, 563	20, 200	9, 038	8,966	5, 399	10,074	3,507	1, 160	132	105, 173

<sup>&</sup>lt;sup>1</sup> Reports not complete.

# PUBLIC HEALTH ENGINEERING ABSTRACT.

Pasteurization of Milk—Report of the committee on milk supply, Sanitary Engineering Section, American Public Health Association.

(Published in pamphlet form by the American Public Health Association, Boston, August, 1920.)

In the summary the committee states that information collected throughout the United States and the Dominion of Canada shows that there are approximately 4,200 pasteurization plants in operation in these countries at the present time and that only a very limited number of them are controlled from a public health point of view. There is little uniformity in the definitions of milk pasteurization used by Federal, State, and municipal branches of government, which leads to much confusion as to the proper meaning of "pasteurized milk." There is also a very apparent lack of understanding on the part of the public regarding the actual meaning of pasteurization and the reason for its general application.

The results of scientific workers studying the effect of pasteurization on the composition of milk, indicate that there is little, if any, change in the chemical composition so far as can be determined by chemical analysis. A large amount of experimental work has been conducted on the undesirable effects of pasteurization on milk that is to be used for infant feeding. Some conflicting opinions have resulted from this work, but it is now generally recognized that any ill effects from the use of such milk for infant feeding can be easily remedied by the addition of certain common substances such as orange juice and potato water. The protection from communicable diseases that pasteurization affords older children and adults far overshadows any of the easily remedied ill effects associated with infant feeding.

The evidence presented on the various methods used for the pasteurization of milk indicates that the "holding" system is so much superior to any other that its universal application for the pasteurization of milk to be used for human consumption is justified. The process of pasteurization of milk should consist in subjecting the milk to a temperature not lower than 145° F. for not less than 30 minutes.

The mechanical features of pasteurization plants have not been given sufficient attention by many of the departments supervising the pasteurization of milk, and defects in pasteurizing apparatus are found in many plants now in operation. Defects which can be eliminated by proper design, construction, and operation of the plant may be found associated with nearly every part of the pasteurization apparatus. It is possible to construct a commercial pasteurization plant on a practical basis without inherently dangerous

defects. Such a plant when properly operated should produce a pasteurized milk which is safe for human consumption.

The analytical control of pasteurization plants is a subject that has been given considerable attention by health authorities, and many methods have been studied for the purpose of determining the efficiency of the plants and the various apparatus associated with the pasteurization of milk. The methods discussed in this report include the physical, chemical, physicochemical, and biological. The physical methods, involving the testing of sensitive instruments used to control the process, and biological tests to study the efficiency of plants and the quality of their effluents appear to be the best of those already devised and practically applied. It is clearly evident that the analytical control of pasteurization plants calls for the active cooperation of engineers and laboratory investigators before satisfactory interpretations can be made and efficient results accomplished.

State and municipal supervision of pasteurization should involve certain fundamentals for the protection of the public health. appears to be generally recognized at the present time that the branch of government to which this supervisory work should be assigned is the health department. This makes possible the correlation of this work with other health activities that are primarily directed towards the suppression of disease. The State should at least set minimum standards for the control of milk pasteurization. which may be supplemented by the municipalities to fit their particular needs. The supervising health department, organized for the control of milk pasteurization, should have available engineering, laboratory, and medical service. The approval of the health department should be required on the system and equipment of each plant producing pasteurized milk. A large part of the supervision should be concentrated on the construction, operation, and management of the plant and its equipment. The operators of such plants should have had proper training and be licensed by the health department. Milk should not be sold as "pasteurized" unless its production and sale are properly legalized and supervised by competent health authorities. Laws and ordinances governing pasteurized milk should be specific in every detail and should provide adequate penalities for offenders.

# DEATHS DURING WEEK ENDED NOV. 6, 1920.

[From the "Weekly Health Index," Nov. 9, 1920, issued by the Bureau of the Census, Department of Commerce.]

Deaths from all causes in certain large cities of the United States during the week ended Nov. 6, 1920, infant mortality (per cent), annual death rate, and comparison with corresponding week of preceding years.

	Population		ded Nov. 920.	Average		of deaths 1 year.
City.	Jan. 1, 1920, sub-			annual death	Week	
city.	ject to	Total	Death	rate per	ended	Previous year or
	revision.	deaths.	rate.1	1,000.2	Nov. 6, 1920.	years.2
Akron, Ohio	208, 435	39	9.8	37.9	15.4	311.
Albany, N. Y.	113,344	21	9.7	C 14.8 C 10.5	4.8	C 15.6 C 7.5
Atlanta, GaBaltimore, Md	200,616 733,826	61 168	15.9 11.9	C 10.5 A 14.5	13. 1 20. 2	A 17.8
Birmingham, Ala	178, 270	39	11.4	A 16.6	15.4	A 10.8
Boston, Mass	747,923	184	12.8	A 15.2	12.0	A 16.1
Bridgeport, Conn	143, 152 506, 775	25 116	9.1 11.9	A 13.9 C 10.9	36.0 18.1	A 18.4 C 14.3
Cambridge, Mass.	109, 456	27	12.9	A 14.1	29.6	A 19.3
Chicago, Ill	109, 456 2, 701, 705	518	10.0	A 12.1	17.4	A 16.2
Cincinnati, Ohio	401,247 798,836	103	13.4	C 14.0	5.8 24.1	C 10.3 C 19.5
Columbus, Ohio.	237,031	170 44	11.1 9.7	C 10.6 C 8.9	15.9	Ö 17.5
Dallas, Tex	158,976	42	13.8	A 11.8	19.0	A 9.0
Dayton, Ohio	153,830	27	9.2	C 13.4	14.8	C 20.5
Denver, Colo	256, 491	72 183	14.6 9.6	A 14.3	11.1 25.1	
Fall River, Mass	993,739 120,485	30	13.0	C 13.4	6.7	C 9.7
Grand Rapids, Mich	137,634 138,036	31	11.7	C 10.7	29.0	Č 10.7
Hartford, Conn	138,036	18	6.8		5.6	
Hartiord, Conn Indianapolis, Ind Jersey City, N. J. Kansas City, Kans. Kansas City, Mo.	314, 194 298, 079	62	10.3 11.4	C 10.4 C 12.8	16. 1 24, 6	C 14.5 C 12.3
Kansas City, Kans.	101,177	27	13.9		7.4	
Kansas City, Mo	324,410	72	11.6	C 14.2	12.5	C 17.2
	576,673 234,801	181 59	16.4 13.1	A 12.4 C 10.0	9. 4 8. 5	A 7.0 C 11.1
Louisville, KyLowell, Mass	112,479	34	15.8	A 15.2	26.5	A 20.8
Memphis, Tenn	162,351	63	20.2	C 21.9	12.7	C 11.1
Milwautee, Wir	457,147	82	9.4 11.4	A 11.5 C 11.6	20.7 12.0	A 18.5 C 6.0 C 12.9 C 14.7
Nachvilla Tann	380,582 118,342	83 31	13.7	C 11.6 C 13.7	19.4	C 6.0 C 12.9
Nashville, Tenn	414, 216 121, 217	66	8.3	C 12.9	13.6	Č 14.7
New Bedford, Mass	121, 217	33	14.2	A 15.2	27.3	A 25.0 C 14.6
New Haven, Conn	162,519	33 124	10.6 16,7	C 13.3 A 21.9	9.1 17.7	
New Orleans, La	387, 219 5, 620, 048	1,114	10.3	C 9.7	14.1	A 10,3 C 15.0
Norfolk, Va	115,777 216,361 191,601	26 37	11.7		23.1	
Oakland, Calif	216,361	37 34	8.9 9.3	A 10.4	13.5 11.8	A 12.0 C 9.8
Norfolk, Va. Oakland, Calif. Omaha, Nebr. Philadelphia, Pa.	1,823,158	409	11.7	C 11.3	14.9	19.8
Pittsburgh, Pa	588, 193	142	12.6	C 11.2	14.8	C 24.5
	258,288	50	10.1	C 10.4	12.0	C 11.8
Pichmond Va	237,595 171,667	51 44	11.2 13.4	C 10.3   C 13.2	27.5 22.7	C 19.1 C 20.9
Portiand, Oreg. Providence, R. I. Richmond, Va. Rochester, N. Y. St. Louis, Mo.	295, 750	74	13.0	C 11.8	20.3	C 19.7
St. Louis, Mo	772,897	179	12.1	C 11.6	8.4	C 6.4
PR. Palli, Milliannessessessessessessessesses	234,680	51 23	11.3 10.2	C 9.4 A 10.3	13.7 30.4	C 7.1
Salt Lake City, Utah San Francisco, Calif	118,110 506,676	130	13.4	C 13.2	3.1	C 6.3
Scattle Wash	315.652	37	6.1	7.5	8.1	A 8.5
Springfield, Mass. Syracuse, N. Y.	104, <b>20</b> 4 129, 338	22 33	11.0	C 10.0	9.1	C 10.0
Syracuse N Y	129,338	15	13.3	C 9.2	12.1 20.0	C 16.7
Tolodo Onio	243, 164	95	20.4	A 15.3	3.2	Å 12.2
Trenton, N. J. Washington, D. C.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	119, 289 437, 571	20	8.7	A 16.7	25.0	A 22.6
Washington, D. C.,,	437,571	97 20	11.6	A 15.8 C 15.8	11.3	A 11.3
Worcester, Mass	110, 168 179, 754	41	9.5 11.9	C 15.8 C 10.3	9.8	C 11.4
Yonkers, N.Y	100, 176	23	12.0	A 12.1	21.7	A 24.0
Youngstown, Ohio	132,358	27	10.6		29.6	

Summary of information received by telegraph from industrial insurance companies for week ended Nov. 6, 1920.

Policies in force	45, 061, 204
Number of death claims	6, 592
Death claims per 1.000 policies in force, annual rate	7.6

Annual rates per 1,000 population.
 "A" indicates data for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates data for the corresponding week of the year 1919.
 Data are based on statistics of 1915, 1916, and 1917.

# PREVALENCE OF DISEASE.

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

# UNITED STATES.

# CURRENT STATE SUMMARIES.

# Telegraphic Reports for Week Ended Nov. 13, 1920.

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

ALABAMA. Ca		CONNECTICUT—continued. Ca	
Diphtheria	38		ises.
Hookworm		German measles	
		Influenza	
Pellagra	1	I.ethargic encephalitis	1
Poliomyelitis		Measles:	
Scarlet fever	17	Putnam (city)	
Smallpox	2	Thompson	10
Tuberculosis	9	Scattering	17
Typhoid fever	13	Mumps	30
ARKANSAS.		Pneumonia (lobar)	8
Chicken pox.	15	Poliomyelitis	1
Diphtheria	73	Scarlet fever:	
Hookworm	1	New Haven	24
Influenza	47	Scattering	70
Malaria		Tetanus.	1
Measles.	35	Tuberculosis (all forms)	35
	4	Typhoid fever	8
Pellagra	-	Whooping cough	95
Scarlet fever	41	whooping cough	90
Smallpox	5	DELAWARE.	
Trachoma	3	Chicken pox	5
Tuberculosis	33	Diphtheria	6
Typhoid fever	31	Measles.	1
Whooping cough	9		_
CALIFORNIA.		Pneumonia	1
	_	Scarlet fever	12 2
Cerebrospinal meningitis	5	Tuberculosis	_
Influenza	10	Typhoid fever	1
Lethargic encephalitis—Palo Alto	1	Whooping cough	6
Poliomyelitis—Los Angeles	1	FLORIDA.	
Smallpox:		Diphtheria	41
Escondido	24	Influenza.	11
Woodland	10		
Scattering	62	Malaria	80
Typhoid fever	9	Ophthalmia neonatorum	1
		Pneumonia	33
CONNECTICUT,		Scarlet fever	7
Chicken pox	26	Smallpox	2
Diphtheria:		Typhoid fever	15
Cheshire	12	GEORGIA.	
Hartford	21		_
New Britain	19	Chicken pox	8
New Haven	13	Conjunctivitis (acute infectious)	1
Scattering	64	Diphtheria	57
	(27	92)	-

GEORGIA—continued. Cases. KANS.	
Cases.	9 0
	Cases.
Dengue	1
Dysentery (bacillary) 1   Chicken pox	
Hookworm 17 Diphtheria	
To Business	
Taffuenza	
Malaria	
Measles	79
Mumps 1 Mumps	
Pneumonia	
Scarlet fever	
Septic sore throat 4 Tuberculosis	
Smallpox 19 Typhoid fever	
Tuberculosis (all forms)	
Typhoid fever	.NA.
Whooping cough 9 Diphtheria	
ILLINOIS. Influenza	
Cerebrospinal meningitis: Poliomyelitis	1
Chicago 10 Scarlet fever	
Coal City 1 Smallpox	n
	10
Little York 1 MAINI	₹.
Warren County—Spring Grove Township 1	
Will County—Plainfield Township 1   Cerebrospinal meningitis	
Diphtheria: Chicken pox	8
Dipheneria.	
Chicago	
Lawrence County—Perty Township 10 1	
Scattering 114 Measles	
Influenza. 9 Mumps	1
Pneumonio	4
Deliantualities	
Figure Descrit	1
Umcago	
Scattering 4 Troy.	
Poliomyelitis: Scarlet fever	
1 Smallnor	
	5
District Dis	
Chiego Tuberculosis	
Chicago 2 Tuberculosis	
Chicago	
Chicago	71 7 40
Chicago	71 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Chicago	71 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Chicago	71 7 7 40 ND.1 33
Chicago	71 7 7 40 ND.1 33 110
Chicago 2 Cicere 1 Dewitt County—Barnett Township 1 Reddick 1 Rock Island 1 Villa Grove 1 Searlet fever: Diphtheria Dysentery. Chicago 157  Tuberculosis 1 Typhoid fever Whosping cough 1  MARYLA: Chicken pox Diphtheria Dysentery.	71 7 7 40 ND.1 33 110 2
Chicago   2   Tuberculosis   Typhoid fever   Typhoid fever   Typhoid fever   Whooping cough   Chicken pox   Chic	71 7 40 ND.1 33 110 2 2 24
Tuberculosis   Tuberculosis   Tuberculosis   Tuberculosis   Typhoid fever	71 7 7 40 ND.1 23 110 2 24 7 2
Chicago   2   Tuberculosis   Typhoid fever   Typhoid fever   Typhoid fever   Whooping cough   Chicken pox   Chic	71 7 7 40 ND.1 23 110 2 24 7 2
Chicago   2   Cicere   1	71 7 7 40 ND.1 33 110 2 24 5 2 16
Chicago   2   Cicere   1   Tuberculosis   Typhoid-fever   Typhoid-fever   Whosping cough   MARYLAN	71 7 40 ND.1 33 110 2 2 24 24 16 2 2
Chicago   2   Cicere   1   Tuberculosis   Typhoid-fever   Typhoid-fever   Whosping cough   MARYLAN	71 7 40 ND.1 33 110 2 2 24 16 2 50
Chicago   Cicere   Chicago   Cicere   Chicago   Cicere	71 7 7 40 ND.1 33 110 2 24 24 16 2 50 2
Chicago   2   Cicere   1	71 7 7 40 ND.1 33 110 2 24 42 16 25 30 24 41
Chicago   Cicere   Chicago   Cicere   Chicago   Cicere	71 7 7 40 ND.1 33 110 2 24 42 16 25 30 24 41
Chicago   2   Cicere   1   Tuberculosis   Typhoid-fever   Typhoid-fever   Typhoid-fever   Whooping cough   MARYLAI   Reddick   1   MARYLAI   Chicken pox   Diphtheria   Dysentery   Diphtheria   Dysentery   Influenza   Malaria   Marylai	71 7 7 40 ND.1 33 110 2 24 16 2 50 2 41
Chicago   2   Cicere   1   Tuberculosis   Typhoid-fever   Ty	71 7 7 40 ND.1 33 110 2 24 24 16 2 50 2 41 11 1
Chicago   2   Cicere   1   Tuberculosis   Typhoid fever   Typhoid fever   Typhoid fever   1   Tuberculosis   Typhoid fever   Tuberculosis	71 7 7 7 40 ND.1 33 110 2 24 24 16 2 50 2 41 1 36 36
Chicago   2   Cicere   1	71 7 7 7 40 ND.1 33 110 2 24 24 16 2 50 2 41 1 36 36
Chicago   2   Cicere   1	71 7 7 40 ND.1 33 110 2 24 52 16 22 41 1 36 21 53
Chicago   2   Cicere   1	71 7 7 40 ND.1 33 110 2 24 52 16 22 41 1 36 21 53
Chicago   2   Cicere   1	71 7 7 40 ND.1 33 110 2 24 16 25 36 41 1 1 36 21 53 ETTS.=
Chicago   2   Cicere   1   Tuberculosis   Typhoid fever   Ty	71 7 7 40 ND.1 33 110 2 24 24 16 2 50 2 41 1 36 21 53 ETTS.=
Chicago	71 7 7 7 40 ND.1 33 110 2 24 24 16 2 2 30 41 1 1 36 36 53 ETTS.= 3 173
Chicago	71 7 7 7 40 ND.1 33 110 2 24 72 16 20 16 30 31 31 31 31 31 31 31 31 31 31 31 31 31
Chicago	71 7 7 7 40 ND.1 33 110 2 24 7 24 16 25 30 41 1 1 36 37 53 ETTS.= 3 173
Chicago   2   Cicere   1   1   Tuberculosis   Typhoid fever	71 7 7 40 ND.1 33 110 2 24 16 25 30 41 1 1 36 41 36 21 31 36 31 37 37 38 38 38 39 31 31 31 31 32 31 33 33 34 34 35 36 37 37 37 38 38 39 30 30 31 31 31 31 32 32 33 34 34 34 35 36 37 37 38 38 38 39 30 30 31 31 31 31 31 31 31 31 31 31 31 31 31
Chicago   2   Cicere   1   1	71 7 7 40 ND.1 33 110 2 24 16 25 30 41 1 1 36 41 36 21 31 36 31 37 37 38 38 38 39 31 31 31 31 32 31 33 33 34 34 35 36 37 37 37 38 38 39 30 30 31 31 31 31 32 32 33 34 34 34 35 36 37 37 38 38 38 39 30 30 31 31 31 31 31 31 31 31 31 31 31 31 31
Chicago	71 72 74 77 40 ND.1 33 110 2 24 24 16 25 30 21 36 31 36 31 37 38 ETTS.= 3 173 1194
Chicago	71 7 7 7 7 40 ND.1 33 110 2 24 24 16 2 50 2 41 1 1 36 37 53 ETTS.** 3 173 114 1194 7 140
Chicago	71 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Chicago	71 7 7 7 40 ND.1 33 110 2 24 7 24 16 25 30 41 1 1 36 37 37 38 ETTS.= 37 173 173 174 144 17 277

MASSACHUSETTS—continued.	ases.	NEW YORK.	
Pellagra	. 1	(Exclusive of New York City.)	_
Pneumonia (lobar)			
Poliomyelitis		1 = 4	25
Scarlet fever		Measles67	
Tetanus		Pnoumonia 12	26
Trachoma		Poliomyelitis:	
Tuberculosis (all forms)		Veteran Town	1
Typhoid fever	. 15		1
Whooping cough	. 76	North Hempstead Town Scarlet fever	1
MINNESOTA.		Smallpox	e e
Poliomyelitis	. 6	Typhoid fever 4	6
Smallpox		Whooping cough	
MISSISSIPPI.			
	70	NORTH CAROLINA.	
Diphtheria		Chicken pox. 2	
Smallpox		Diphtheria 16	5
Typhoid fever	. 8		2
		Measles	-
MONTANA.		Scarlet fever	
Diphtheria	. 7	Septic sore throat	5
Scarlet fever		Typhoid fever 19	
Smallpox	26	Whooping cough 160	
Typhoid fever	. 5	•	
NEBRASKA.		оню.	
<b>a.</b>		Smallpox—Unusually prevalent in Johnstown	
Cerebro spinal meningitis—Center		and in Licking County.	
Chicken pox	13	Typhoid fever—Salem—Epidemic.	
Omaha	23	SOUTH DAKOTA.	
Scattering.	25	Chicken pox	
Measles.		Diphtheria	ı
Aucasics	6		_
Scarlet fever:	6	Measles	
Scarlet fever: Indianola	٠ 9	Measles. 11 Poliomyelitis. 1	!
Scarlet fever: Indianola Scattering	· 9 21	Measles.         11           Poliomyelitis.         1           Scarlet fever.         39	
Scarlet fever: Indianola Scattering Smallpex.	· 9 21 40	Measles. 11 Poliomyelitis. 1	! •
Scarlet fever: Indianola Scattering. Smallpex. Typhoid fever.	· 9 21 40 1	Measles         11           Poliomyelitis         1           Scarlet fever         39           Smallpox         15           Whooping cough         6	! •
Scarlet fever: Indianola Scattering Smallpex.	· 9 21 40 1	Measles.         11           Poliomyelitis.         1           Scarlet fever.         39           Smallpox.         15           Whooping cough.         6           TEXAS.	
Scarlet fever: Indianola Scattering. Smallpex. Typhoid fever.	· 9 21 40 1	Measles.         11           Poliomyelitis.         1           Scarlet fever.         39           Smallpox.         15           Whooping cough.         6           TEXAS.         Diphtheria.         326	)
Scarlet fever: Indianola Scattering Smallpex Typhoid fever Whooping cough NEW JERSEY.	· 9 21 40 1	Measles.         11           Poliomyelitis.         1           Scarlet fever.         39           Smallpox         15           Whooping cough         6           TEXAS.           Diphtheria         326           Influenza         37	
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Diphtheria—Unusual prevalence in several	· 9 21 40 1	Measles.         11           Poliomyelitis.         1           Scarlet fever.         39           Smallpox.         15           Whooping cough.         6           TEXAS.         Diphtheria.         326	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY. Diphtheria—Unusual prevalence in several localities.	9 21 40 1 7	Measles.         11           Poliomyelitis.         1           Scarlet fever.         39           Smallpox.         15           Whooping cough         6           TEXAS.           Diphtheria         326           Influenza.         37           Pneumonia.         18           Scarlet fever.         37           Smallpox.         21	; ;
Scarlet fever: Indianola Scattering Smallpex Typhoid fever Whooping cough  NEW JERSEY.  Diphtheria—Unusual prevalence in several localities. Influenza.	· 9 21 40 1 7	Measles.         11           Poliomyelitis.         1           Scarlet fever.         39           Smallpox.         15           Whooping cough.         6           TEXAS.           Diphtheria.         326           Influenza.         37           Pneumonia.         18           Scarlet fever.         37           Smallpox.         21           Tuberculosis.         33	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Diphtheria—Unusual prevalence in several localities.	9 21 40 1 7	Measles.         11           Poliomyelitis.         1           Scarlet fever.         39           Smallpox.         15           Whooping cough         6           TEXAS.           Diphtheria         326           Influenza.         37           Pneumonia.         18           Scarlet fever.         37           Smallpox.         21	; ;
Scarlet fever: Indianola Scattering Smallpex Typhoid fever Whooping cough  NEW JERSEY.  Diphtheria—Unusual prevalence in several localities. Influenza.	· 9 21 40 1 7	Measles.         11           Poliomyelitis.         1           Scarlet fever.         39           Smallpox.         15           Whooping cough         6           TEXAS.           Diphtheria         326           Influenza.         37           Pneumonia.         18           Scarlet fever.         37           Smallpox.         21           Tuberculosis.         33	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Piphtheria—Unusual prevalence in several localities. Influenza. Pneumonia.  NEW MEXICO.	· 9 21 40 1 7	Measles.         11           Poliomyelitis         1           Scarlet fever.         39           Smallpox.         15           Whooping cough.         6           TEXAS.           Diphtheria.         326           Influenza.         37           Pneumonia.         18           Scarlet fever.         37           Smallpox.         21           Tuberculosis.         33           Typhoid fever.         37	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Diphtheria—Unusual prevalence in several localities. Influenza. Pneumonia.  NEW MEXICO.  Chicken pox.	· 9 21 40 1 7	Measles.       11         Poliomyelitis.       1         Scarlet fever.       39         Smallpox       15         Whooping cough       6         TEXAS.         Diphtheria       326         Influenza.       37         Pneumonia       18         Scarlet fever.       37         Smallpox.       21         Tuberculosis.       33         Typhoid fever.       37         VERMONT.         Chicken pox.       41         Diphtheria.       4	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Diphtheria.—Unusual prevalence in several localities. Influenza. Pneumonia.  NEW MEXICO.  Chicken pox. Diphtheria:	10 74 11	Measles.       11         Poliomyelitis.       1         Scarlet fever.       39         Smallpox       15         Whooping cough       6         TEXAS.         Diphtheria       326         Influenza.       37         Pneumonia.       18         Scarlet fever.       37         Smallpox.       21         Tuberculosis.       33         Typhoid fever.       37         VERMONT.         Chicken pox       41         Diphtheria.       4         Measles.       22	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Piphtheria—Unusual prevalence in several localities. Influenza. Pneumonia.  NEW MEXICO.  Chicken pox. Diphtheria: Ancho.	10 74 11 10	Measles.	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Diphtheria.—Unusual prevalence in several localities. Influenza. Pneumonia.  NEW MEXICO.  Chicken pox. Diphtheria:	10 74 11	Measles.	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Piphtheria—Unusual prevalence in several localities. Influenza. Pneumonia.  NEW MEXICO.  Chicken pox. Diphtheria: Ancho. Scattering.	10 74 11 10 11	Measles.	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Piphtheria—Unusual prevalence in several localities. Influenza. Pneumonia.  NEW MEXICO.  Chicken pox. Diphtheria: Ancho. Scattering. Influenza.	10 74 11 10 11 2	Measles.	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Piphtheria—Unusual prevalence in several localities. Influenza. Pneumonia.  NEW MEXICO.  Chicken pox. Diphtheria: Ancho. Scattering. Influenza. Measles. Measles. Mumps. Paratyphoid fever.	10 74 11 10 11 2 8 5 1 1	Measles.         11           Poliomyelitis.         1           Scarlet fever.         39           Smallpox.         15           Whooping cough.         6           TEXAS.           Diphtheria.         326           Influenza.         37           Pneumonia.         18           Scarlet fever.         37           Smallpox.         21           Tuberculosis.         33           Typhoid fever.         37           VERMONT.           Chicken pox         41           Diphtheria.         4           Measles.         22           Mumps.         5           Pneumonia.         4           Scarlet fever         17           Smallpox.         1           Typhoid fever         5	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Diphtheria—Unusual prevalence in several localities. Influenza. Pneumonia.  NEW MEXICO.  Chicken pox. Diphtheria: Ancho. Scattering. Influenza. Measles. Measles. Mumps. Paratyphoid fever. Pneumonia.	10 74 11 10 11 2 8 5 5 1 7 7	Measles.       11         Poliomyelitis.       1         Scarlet fever.       39         Smallpox       15         Whooping cough       6         TEXAS.         Diphtheria       326         Influenza.       37         Pneumonia       18         Scarlet fever.       37         Smallpox       21         Tuberculosis.       33         Typhoid fever.       37         VERMONT.         Chicken pox       41         Diphtheria.       4         Measles.       22         Mumps.       5         Pneumonia.       4         Scarlet fever.       17         Smallpox       1         Typhoid fever.       5         Whooping cough       58	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Piphtheria—Unusual prevalence in several localities. Influenza. Pneumonia.  NEW MEXICO.  Chicken pox. Diphtheria: Ancho. Scattering. Influenza. Measles. Mumps. Paratyphoid fever. Pneumonia. Scarlet fever.	10 74 11 10 11 2 8 5 1 7 7 7	Measles.	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Diphtheria—Unusual prevalence in several localities. Influenza. Pneumonia.  NEW MEXICO.  Chicken pox. Diphtheria: Ancho. Scattering. Influenza. Measles. Mumps. Paratyphoid fever. Pneumonia. Scarlet fever. Smallpox.	10 74 11 10 11 2 8 5 1 7 7 7 3	Measles.	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Diphtheria—Unusual prevalence in several localities. Influenza. Pneumonia.  NEW MEXICO.  Chicken pox. Diphtheria: Ancho. Scattering. Influenza. Measles. Mumps. Paratyphoid fever. Pneumonia. Scarlet fever. Smallpox. Trachoma.	10 74 11 10 11 2 8 5 1 7 7 3 3 2	Measles.	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Diphtheria—Unusual prevalence in several localities. Influenza. Pneumonia.  NEW MEXICO.  Chicken pox. Diphtheria: Ancho. Scattering. Influenza. Measles. Mumps. Paratyphoid fever. Pneumonia. Scarlet fever. Smallpox. Trachoma. Tuberculosis.	10 74 11 10 11 2 8 5 1 1 7 7 3 3 2 43	Measles.	; ;
Scarlet fever: Indianola. Scattering. Smallpex. Typhoid fever. Whooping cough.  NEW JERSEY.  Diphtheria—Unusual prevalence in several localities. Influenza. Pneumonia.  NEW MEXICO.  Chicken pox. Diphtheria: Ancho. Scattering. Influenza. Measles. Mumps. Paratyphoid fever. Pneumonia. Scarlet fever. Smallpox. Trachoma.	10 74 11 10 11 2 8 5 1 7 7 3 3 2	Measles.	; ;

No.			
WASHINGTON—Continued.		wisconsin—continued.	
Case		Milwaukee-Continued.	ases.
Mumps	3	Measles.	
	57	Scarlet fever	
	78		
Tuberculosis	1	Smallpox	
• •	23	Tuberculosis	
Whooping cough	2	Whooping cough	. 14
WEST VIRGINIA.		Scattering:	_
Diphtheria:		Cerebrospinal meningitis	
<del>-</del>	11	Chicken pox	
	14	Diphtheria	
	31	German measles	
Measles	7	Influenza	
	28	Mcasles	
Smallpox	8	Poliomyelitis	. 3
Typhoid fever	7	Scarlet fever	
Typhota teva	•	Smallpox	
WISCONSIN.		Tuberculosis:	. 9
Milwaukee:	- 1	Typhoid fever	. 7
• • • • • • • • • • • • • • • • • • • •	11	Whooping cough	. 80
Diphtheria	62		
Kentucky Report for	We	eek Ended Nov. 6, 1920.	
Case	S f	· Cs	ses.
Cerebrospinal meningitis—Muhlenberg County.	1	Pneumonia	
	15	Scarlet fever:	
Diphtheria:	-	Jefferson County	12
•	ιo	Owen County	
	11	Scattering.	_
	9	Smallpox.	12
	32	Tonsillitis.	4
	8		13
	8	Trachoma—Pike County Tuberculosis:	13
	3		
	2	Jefferson County	17 5
	- 11	Scattering	_
	6	Typhoid fever	
Mumps	3	Whooping cough	19

## SUMMARY OF CASES REPORTED MONTHLY BY STATES.

Tables showing by counties the reported cases of cerebrospinal meningitis, influenza, malaria, pellagra; poliomyelitis, smallpox, and typhoid fever are published under the names of these diseases. (See name of these and other diseases in the table of contents.)

The following summary of monthly State reports includes only those which were received during the current week. These reports appear each week as received.

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
1920.  Colorado (September) Connecticut (October) Florida (October) Massachusetts (October) Nebraska (October) New Mexico (September) New Mexico (October) Vermont (October) Wisconsin (October)	11 3	148 378 103 745 184 45 116 30 455	15 58 41 1 8 9 5	2 348 7 8 3	29 166 3 714 34 12 8 47 305	20 2	3 5 190 5 1 20	46 242 22 543 124 13 31 76 467	83 11 102 9 9 30 298	103 58 43 127 34 64 53 14

## ACTINOMYCOSIS.

# New Mexico-September, 1920.

During September, 1920, one case of actinomycosis was reported in New Mexico.

## ANTHRAX.

# -Maine and Massachusetts.

During October, 1920, two cases of anthrax were reported in Massachusetts. During the week ended October 30, 1920, one case was reported at Lewiston, Me.

# CEREBROSPINAL MENINGITIS.

# Colorado—September, 1920.

During September, 1920, one case of cerebrospinal meningitis was reported at Pueblo, Colo.

# City Reports for Week Ended Oct. 30, 1920.

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

. <u>_</u> .	Aver-	1	920		Aver-		920	
Place.	age cases.	Cases.	Deaths.	Place.	age cases.	Cases.	Deaths.	
California: Los Angeles. Connecticut: New Haven. Illinois: Chicago. Jacksonville. Kansas: Hutchinson Topeka. Maine: Bangor Massachusetts: Fail River. Salem. Michigan: Detroit. Ironwood. Missouri:	(1) 0 2 (1) 0 (1) 0	2 2 2 2 1 1 1 2	1 1	Nebraska: Omaha. New Jersey: Plainfield. New York: New York. North Carolina: Charlotte. Ohio: Cleveland. Zanesville. Oregon: Portland West Virginia: Huntington. Wisconsin: Superior.	(1) (1) 3 0 1 0	1 1 4 1 3	1 1 2 1 2 1 1 1	
Kansas City	(ı)	1						

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

## DIPHTHERIA.

See Telegraphic weekly reports from States, p. 2792; Monthly summaries by States, p. 2795; and Weekly reports from cities, p. 2806.

#### DENGUE.

## Savannah, Ga.-Week Ended Oct. 30, 1920.

During the week ended October 30, 1920, 19 cases of dengue were reported at Savannah, Ga.

### INFLUENZA.

# New Mexico-September, 1920.

During September, 1920, two cases of influenza were reported in Colfax County, three in Taos County, and three in Valencia County, N. Mex.

City Reports for Week Ended Oct. 30, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama: Mobile	1	1	Massachusetts—Continued. Cambridge. Lynn. Saugus Michigan:		
Fresno	3 1	i	Minnesota:  Minnesota:  Minnesota:  St. Paul		
Connecticut: Bridgeport New BritainGeorgia:	3 4		Missouri: St. Louis New Jersey: Kearny.	1	
AtlantaBrunswickRome	5 4 1		Newark	4 1	
Chicago	24 1	3	Jamestown	28 1	
Salina Kentucky: Louisville.	1		Cincinnati Cleveland Mansfield	1 2 1	
PaducahLouisiana: Louisiana: Baton Rougedaryland: Baltimore	. 1		Pennsylvania: Philadelphia South Carolina: Greenville	1 1	
Baltimore	8 3		Texas: DallasEl Paso	7	•••••

#### LEPROSY.

## Colorado, Florida, New Jersey, and Texas.

During September a case of leprosy was reported in Lincoln County, Colo., in the person of V. K., female, aged 25, the disease being diagnosed clinically September 25 as tubercular leprosy. The patient, who has lived at the present address for the past five years and previously in Oklahoma and Texas, is now under the supervision of the Lincoln County health officer.

During October a case of leprosy was reported at Key West, Fla., in the person of L. R., female, white, aged 38.

During the week ended October 30, 1920, one case of leprosy was reported at West Orange, N. J., and one death was reported at Galveston, Tex.

#### LETHARGIC ENCEPHALITIS.

#### Connecticut, Florida, and Nebraska.

During October, 1920, one case of lethargic encephalitis was reported in Connecticut, one in Florida, and one in Nebraska.

#### MALARIA.

#### New Mexico-September, 1920.

During September, 1920, six cases of malaria were reported in Rio Arriba County, one was reported in Santa Fe County, and one in Taos County, N. Mex.

#### City Reports for Week Ended Oct. 30, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama: Fort Smith Arkansas: Little Rock Caifornia: Los Angeles Redlands Sacramento Georgia: Atlanta Brunswick Rome Savannah Illinois: Danville Iowa: Keokuk Kansas: Cofferville	1 5 1 1 1 1 1 4 1		Louisiana: Alexandria Baton Rouge Massachusetts: Lowell New Jersey: Newark Oregon: Portland Pennsylvania: Philadelphia Tennessee: Memphis Texas: Dallas Virginia: Norfolk Richmond	1	

#### MALTA FEVER.

#### New Mexico and Texas.

Several cases of Malta fever were reported under date of November 6, 1920, in San Angelo, Tex. During October one case was reported in New Mexico.

#### MEASLES.

See Telegraphic weekly reports from States, p. 2792; Monthly summaries by States, p. 2795; and Weekly reports from cities, p. 2806.

#### PELLAGRA.

#### New Mexico-September, 1920.

During September, 1920, one case of pellagra was reported at Bernalillo, Sandoval County, N. Mex.

## City Reports for Week Ended Oct. 30, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama: Anniston Birmingham Montgomery Georgia: Atlanta	1	2 3	Missouri: Springfield South Carolina: Charleston Texas: Austin		1 1 1

# PLAGUE. Human Cases of Plague Reported.

Place.	Period covered.	Cases.	Deaths.	Remarks.
Florida: Pensacola	1920. May 31 to Aug. 31 Sept. 1 to Nov. 13	10 0	4 0	
Louisiana: New Orleans	1919. Oct. 22 to Dec. 31	12	4	
Texas:	1920.  Jan. 1 to Apr. 30  May 1 to Aug. 31  Sept. 1 to Nov. 13	0 7 0	0 3 0	·
Beaamont	June 19 to Aug. 20	14 0 16	5 0 10	
Port Arthur	Oct. 21 to Nov. 13	0 1 1	0 1 1	From Galveston.

## Plague-infected Rodents.

·Place.	Feriod covered.	Rodents found plague infected.
Florida: Pensacola	1920. June 28 to Sept. 19. Sept. 20 to Nov. 13.	31 0
Louisiana: - New Orleans	1919. November and December	308
•	1920. January to October Nov. 1-13.	266 0
Texas: Beaumont	July 1 to Oct. 25	123
Galveston	Oct. 26 to Nov. 13.  June 21 to Oct. 29. Oct. 30 to Nov. 8. Nov. 9.	0 60 0 1
Port Arthur	Nov. 10-13. Oct. 25.	0 1

## PNEUMONIA (ALL FORMS).

## City Reports for Week Ended Oct. 30, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama: Anniston Birmingham Mobile. Arkansas: North Little Rock California: Long Beach Los Angeles Oakland Pasadena Sacramento San Diego San Francisco Santa Barbara Santa Cruz Stockton	1 4 15 1 3 11	3 1 2 6 3 1 2 1 7 7	Colorado:     Denver.     Groeley.     Pueblo. Connecticut:     Bridgeport.     Hartford     New Britain.     New Haven.     Norwich. Delaware:     Wilmington. District of Columbia:     Washington. Georgia:     Atlanta. Savannah.	2 1 1	8 8 1 1 1 1 1 1 1 1 7 7 3 3

## PNEUMONIA (ALL/FORMS)—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Illinois:			Nebraska:		
Alton	1		Omaha		4
Aurora			New Hampshire:	1	
Bloomington	113	1 21	New Jersey:		] 1
ChicagoEast St. Louis	113	1 21	Bloomfield	1	
Elein		2 3	Elizabeth		9
ElginFreeportJacksonville		ĺ	Jersey City		1
Jacksonville		1	Kearny	. 1	
Kewanee		. 1	Montclair		
La Salle	1	1	Morristown	1	1
Mattoon	1		Newark	42	5
Oak Park	1	2	Passaic		
PeoriaRockford		2	Paterson		
Springfield	3		Trenton	2	1 1
ndiana:	•	1	West New York	ĩ	
Elwood		1	New York:		• • • • • • • • • • • • • • • • • • • •
ElwoodFort Wayne		1	Albany	1	l
Gary		2	Buffalo	16	4
Indianapolis		. 7	Elmira	1	
La Fayette	• • • • • • • • •	2 2	Geneva		1
Gary Indianapolis. La Fayette Richmond Terre Haute	• • • • • • • • • • • • • • • • • • • •	1 2	Glens Falls	1	1
wa:	•••••	1 1	Ithaca	1 1	1
Burlington	1	1	Lackawanna	10	i
Council Bluffs		î	Middletown	10	
ansas:		_	Mount Vernon	4	
Kansas City	4		New York	160	90
Parsons	1		Niagara Falls North Tonawanda	3	1
Wichita	1		North Tonawanda	1	
Centucky:	_		Olean		·····i
Louisville	1	1	Rochester	8	4
ouisiana:	2	1	Saratoga Springs	2	1
Baton Rouge	- 4	10	Schenectady	2 4	1 3
aine:		10	Syracuse	2	
Portland	1	1	North Carolina	-	
arvland:	_	-	Charlotte		2
Baltimore	29	10	Durham		1
Cumber and	3		Greenshoro	1	1
assachusetts:			Wilmington		1
Amesbury		,1	Ohio:		
Boston Brookline	13 1	15 1	Alliance		2
Cambridge	2	2	Canton	2	······2
Everett	ĩ		Chillicothe.		ĩ
Everett	4	1	Cincinnati	4	î
Haverhill		1	Cleveland	15	19
Leominster	1		Columbus		4
Lowell	2	2	DaytonLorain	. 2	
Lynn	1	1	Lorain		1
Medford	2 1	1	Middletown		1
Methuen New Bedford		•••••••••••••••••••••••••••••••••••••••	Newark	;-	. 3
Newburyport	i		New Philadelphia Piqua	1 1	
Newton.	2		Toledo	i	3
Waltham	3		Oklahoma:	*	
Watertown	1	1	Oklahoma City		1
Winchester		1	Oregon:		-
Woburn		1 !	Oregon: Portland		4
Worcester	4	5	Pennsylvania: Philadelphia		
ichigan:			Philadelphia	76	47
Detroit Flint	34	19	Rhode Island:	i	•
Grand Rapids	2	1	Pawtucket		2
Ironwood.	í	- 1	Providence		1
Pontiac		·····i	Charleston	ł	1
innesota:	••••••	*	Spartanburg	····i	i
Duluth		2	South Dakota	* 1	•
Hibbing		1	Sicux Falls	1	1
Minneapolis	2	5	Tonnessee	- 1	•
GA Dansi		2	Memphis		4
St. Paul		li			
	. 1				_
	3	6	Dallas	5	1
	3	2	Fort Worth	5	4
St. Fautissouri: Kansas City St. Joseph Springfield ontana; Butte	3		Dallas. Fort Worth. Galveston. Houston. Waco.	5	

### PNEUMONIA (ALL FORMS)—Continued.

#### City Reports for Week Ended Oct. 30, 1920—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Utah: Salt Lake City Virginia: Lynchburg Noffolk Richmond	2	3 2 1	West Virginia: Wheeling. Wisconsin: Beloit. Green Bay. Janesville. Milwaukee.		3 1 2 1 9

#### POLIOMYELITIS (INFANTILE PARALYSIS).

#### Colorado-September, 1920.

During September, 1920, one case of poliomyelitis was reported in Adams County, and two cases were reported at Pueblo, Pueblo County, Colo.

#### City Reports for Week Ended Oct. 30, 1920.

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

Av a		1920		Tillean	Aver- age	1920	
Place. age oases.	Cases.	Deatils.	Place.	age cases.	Cases.	Deaths.	
California: Los Angeles Illinois: Chicago Elgin Evanston Jacksonville Iowa: Cedar Rapids Massachusetts: Boston Brookline Cambridge Haverhill Lynn Medford Melrose Newton Springfield Waitham	0 0 (*) (*) (*) (*)	2 5 1 1 1 1 10 1 1 2 2 3 3 1 1 1	3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Michigan: Detroit. Flint. Minnesota: Minneapolis. Missouri: Kansas City. St. Louis. New Jersey: Jersey City. New York. New York. Ohio: Cleveland. Pennsylvania: Johnstown. Philadelphia.	(¹) 2 (¹) (¹) (°) (°) (°) (°) (°) (°) (°) (°) (°) (°	4 1 2 1 1 1 9 1	1

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

#### RABIES IN ANIMALS.

#### Bloomington, Ind.—Week Ended Oct. 30, 1920.

During the week ended October 30, 1920, one case of rabies in animals was reported at Bloomington, Ind.

#### - ROCKY MOUNTAIN SPOTTED OR TICK FEVER.

#### New Mexico-September, 1920.

During September, 1920, one case of Rocky Mountain spotted or tick fever was reported in Colfax County, N. Mex.

<sup>2</sup> Excluding 1916 and 1917, epidemic years.

<sup>3</sup> Excluding 1916, average less than 1.

Excluding 1916, an epidemic year.

#### SCARLET FEVER.

See Telegraphic weekly reports from States, p. 2792; Monthly summaries by States, p. 2795; and Weekly reports from cities, p. 2806.

#### SMALLPOX.

### Colorado and New Mexico Reports for September, 1920-Vaccination Histories.

			. Vac	Vaccination history of cases.				
Place.	New cases reported.	Deaths.	Vacci- nated within 7 years preceding attack.	Last vac- cinated more than 7 years preceding attack.	Never success- fully vac-	History not obtained or uncer- tain.		
Colorado:					·	l		
Adams County	1					1		
Alamosa County	4				3			
Denver	27		1		25	1		
Eagle County	2		2					
. El Paso County	2				1	1		
Fremont County	7		6		1			
Grand County					8			
Kit Carson County					3			
Las Animas County						1		
Lincoln County						1		
Montezuma County	1				1	<u>-</u>		
Prowers County	8					8		
Pueblo	8				4	4		
San Juan County	2				2			
San Miguel County	6	• • • • • • • • •			6			
weld County	1				1			
Montrose County	1				1			
Total	83		10		56	17		
No-Marian								
New Mexico:				ı				
Colfax County	1				1	••••••		
Guadalupe County			• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	i		
Otero County				·····i	1	4		
Descript County	1			1	·····i	• • • • • • • • • •		
Roosevelt County	1				1			
Total	9			1	3	5		

## City Reports for Week Ended Oct. 30, 1920.

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

Place. ag	Aver-			71	Aver-	1920	
	age cases.	Cases.	Deaths.	Place.	age cases.	Cases.	Deaths.
Alabama: Anniston. Birmingham California: Alameda Fresno Los Angeles. Oakland San Francisco. San Jose Santa Cruz Stockton. District of Columbia: Washington. Georgia: Atlanta	(1) 0 0 0 1 1 0 0 0 (1)	1 1 1 1 2 5 17 3 1 1 1		Idaho: Boise Illinois: Bloomington Chicago East St. Louis E vanston Granite City Rockford Rock Island Indiana: Gary Hammond Indianapolis Laporte Marion	0	4 3 7 3 1 1 2 6 1 1 3 10	1

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

## SMALLPOX—Continued.

## City Reports for Week Ended Oct. 30, 1920—Continued.

Place.	Aver-	1	920	Place.	Aver-	19	920
Trace,	age cases.	Cases.	Deaths.	r race.	age cases.	Cases.	Deaths
Indiana—Continued.				North Carolina—Contd.			
Mishawka	0	5		Wilmington	0	1	i .
New Castle		2		Winston-Salem	ĭŏ	i	
South Bend	ŏ	10		North Dakota:	, ,	•	1
lowa:				Fargo	0	8	1
Cedar Rapids	0	1	}	Grand Forks	"	i	
Clinton	ŏ	î		Ohio:		-	
Des Moines	ŏ	6		Akron	2	9	1
Dubuque	ĭ	10		Canton	ő	18	
Sioux City		6		Cincinnati	ĭ	3	
Kansas:		·		Columbus	(1)	4	
Kansas City	3	1	}	Dayton	3	2	
Salina	9	i		Essteria		í	
Wichita	3	5		Fostoria		11	
Louisiana:	١١٥	3		Lima	(1)		
	0	1	[ ]	Middletown	0	1	
Baton Rouge	2	5		Newark	0	1	
New Orleans	2	Ð	1	Portsmouth	0	.1	
		1		Tiffin		23	
Lewiston			• • • • • • •	Oregon:	_ 1	_	1
Waterville		1	••••••	Portland	3	7	[
lichigan:				South Carolina:			
Battle Creck	0	30		_ Columbia	0	1	
Detroit	2 2	16	• • • • • • •	Tennessee:	i		
Flint		1		Nashville	0	2	
Pontiac	(1)			Texas:	. 1		
Sault Ste. Marie	0	5		Dallas	2	1	
linnesota:		_	' !	Utah:	i		•
Duluth	(1)	5		Salt Lake City	1	15	
Minneapolis	4	46		Rutland	0	13	
St. Paul	3	10		Virginia:	3	- 1	
Winona	0	14	••••••	Norfolk	(1)	1	
	7	!	i	Washington:	ŧ		
Kansas City		1	• • • • • •	Seattle	6	7	
St. Joseph	3	2		Spokane	9	5	
Iontana:		!		Tacoma	1 (	5	
Butte	3	1	• • • • • • • • • • • • • • • • • • • •	Wisconsin:	ŧ		
	. 1	2	• • • • • • • • • • • • • • • • • • • •	Green Bay	1	5	
Missoula	(1)	6		Janesville	0	2	
ebraska:	ا ۽	ا ,	il	Kenosha	0	1	
Omaha	5	4		Madison	0	3	
evada:	اہ		ii ii	Marinette	(1)	1	
Reno.	0	2	:	Milwaukee	``3	12	••••••
orth Carolina:			- 1	Shebovgan		1	
Charlotte	0	1 .				- 1	<b></b>

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

#### TETANUS.

## City Reports for Week Ended Oct. 30, 1920.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Illinois:     Chicago.     East St. Louis.     Freeport. Kansas:     Topeka Louisiana:     New Orleans. Massachusetts:     Chicopee.     Springfield.		1 1 1 1	Michigán: Detroit New York: Hudson. New York Syracuse Texas: Beaumont Dallas. Galveston. Houston.	1	1 1 1

#### TUBERCULOSIS.

See Telegraphic weekly reports from States, p. 2792, and Weekly reports from cities, p. 2806.

TYPHOID FEVER.

## Colorado and New Mexico Reports for September, 1920.

Place.	New cases reported.	Place.	New cases reported.
Colorado: Archuleta County. Boulder County. Denver. Fremont County. Garfield County. Huerfano County. Kit Carson County. Larimer County. Las Animas County. Prowers County. Prowers County. Total.  New Mexico: Bernalillo County. Chaves County.	1 9 40 10 11 1 1 2 2 1 25 9	New Mexico—Continued: Colfax County. Curry County. Dona Ana County Eddy County. Rio Arriba County Roosevelt County Sandoval County San Juan County San Miguel County Santa Fe County Sierra County Taos County Union County. Valencia County.	15

#### City Reports for Week Ended Oct. 30, 1920.

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

Place.	Aver-	1	920	Place.	Aver-	19	20
riace.	age cases.	Cases.	Deaths.	Prace.	age cases.	Cases.	Deaths.
Alabama: Birmingham Tuscaloosa Arkansas: Fort Smith Little Rock California: Long Beach Los Angeles Oakland Riverside Sacramento San Diego. San Francisco San Jose	(1) 7 (2) 1 (1) 3 (1) 4 (1) 4 (1)	2 1 1 2 1 6 2 1 3 1 2		I llinois—Cont inued.  Kewanee. Quincy. Rock Island. East Chicago. Indiana: Fikhart Evansville. Indianapolis Kokomo. Logansport Mishawaka Kansas: Fort Scott. Hutchinson	(1) 1 4 2 0	1 2 1 2 1 1 2 1 1	1 1
Colorado: Denver	3	1		Kansas City Kentucky: Louisville	2	1 2	
Hartford  New Haven  Delaware:  Wilmington	2 4 4	1 3 4		Louisiana:- New Orleans Maine: Lewiston	7	2 5	
District of Columbia: WashingtonGeorgia: Rome	7	8		Portland  Maryland: Baltimore Cumberland.	16 (1)	6 2	i
Idaho: Beise Blinois: Centralia. Chicago Danville. F Igin Jacksonville.	0 12 1 (¹) 0	3 1 10 4 1	2	Massachusetts:  Boston Brockton Chelsea Fall River Lawrence Lowell Lynn	6 2 (1) 4 1 2 (1)	5 1 2 6 1 2	

<sup>&</sup>lt;sup>1</sup> Average less than 1.

## TYPHOID FEVER—Continued.

Place.	Aver- age		1920	Place.	Aver-	19	920
Tiace.	cases.	Cases.	Deaths.	Time.	age cases.	Cases.	Deaths
Massachuesettes-Contd.				Ohio-Continued.			
Pittsfield	(1)	2		Piqua	0	2	
Salem	0	1		Tiffin		1	
Somerville	. 1	4		Toledo	2	6	2
Waltham Michigan:	(1)	1		Oregon:		1	
Detroit	11	6	1	Eugene Portland	0 2	i	
Holland	11	ĭ		Pennsylvania:	, ~		
Minnesota:	•	•		Altoona	0	2	l
Duluth	1	2		Braddock	(1)	1	
Hibbing	0		1	Chester	0	1	
Mankato	0	1		Erie	1	1	
Minneapolis	3	4		Johnstown	1	2	
St. Paul	1	3		Philadelphia	34	5 2	1 2
Missouri: Joplin	3	1		Pittsburgh Reading	4 2	ĺí	
Kansas City	2	1	····i	Seranton	ő	l i	
St. Joseph	2	3.	•	Uniontown	ŏ	2	
Montana:	•	0.		Wilkinsburg	(1)	ī	
Missoula	0	1		Williamsport	(1) (1)	6	
Nebraska:	-	_		York	· · · 4	3	
Omaha	1	4		Rhode Island:			
Vevada:	_	_		Providence	3	2	1
Reno	0	1		South Carolina:	2	1	
lew Hampshire:	ا م	1		Charleston	2	- 1	
lew Jersey:	0	- 1		Greenville	-	i	
Gloucester	1	1		Tennessee:		•	• • • • • • •
Hoboken	(1)	= :		Memphis	4	3	
Newark	`´2	1		Nashville	4	5	2
Orange	(1)			Texas:		_	
Paterson	1	1		Dallas	4	1	<b></b>
lew York:	ا م			GalvestonUtah:	2	1	• •
Albany Buffalo	0	2	······à	Salt Lake City	11	2	
Lackawanna	ŏ	····i'	- 1	Vermont:		-	
New York	42	27	2	Rutland	(1)	1	
Niagara Falls	(1)	2		Virginia:			
Rochester	1	1		Lynchburg	(1)	2	· • • • • • •
Syracuse	(1)	1		Norfolk	2	1	<b></b>
Troy	(1)		1	Petersburg	1	1 4	· · · · · · · •
Yonkers	2	1		Richmond	4	2	<b>-</b>
Durham	1	, ,		Seattle	1	3	
Greensboro	ô	- 1	2	West Virginia:	- 1	٠,	<b></b>
Wilmington	(1)	2		Morgantown	0		1
hio:		_		Wisconsin:	- 1		
Cincinnati	(1)	1		Appleton	0	1	<b>-</b>
Cleveland	5	3	2	Green Bay	0	2	<u>.</u>
Columbus	2	2	· · · · · · ·	Janesville	0	;-	1
Lorain	(1)	2	·····	Kenosha Milwaukee	(1)	1	• • • • • • •
Middletown Newark	(1)	2	·····	Racine	(1)	2	• • • • • • •
TACM SILK	(1)	- 4		reacme	(7)		• • • • • • •

<sup>&</sup>lt;sup>1</sup>Average less than 1.

#### TYPHUS FEVER.

## Florida-October, 1920.

During October, 1920, one case of typhus fever was reported in Florida.

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS. City Reports for Week Ended Oct. 30, 1920.

	Popula- tion as of July 1, 1917	Total deaths	1	theria.	Mea	sles.		rlet ver.		ber- osis.
City.	(estimated by U. S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams, Mass	14,406 93,604 28,433	27 4	13 5		18 6		13 2		4	
Albuquerque, N. Mex	106, 632 14, 509 16, 232 19, 581	6 6 6	3 7		3 1		1		10 10	3
Alliance, Ohio	19,581 -23,783 59,712 10,200 10,631	3 6 1	5		4		······································		1	
Ann Arbor, Mich Anniston, Ala Arlington, Mass Asbury Park, N. J Ashtabula, Ohio	15,041 14,326 13,073 14,629	10 3 3	2 4 1	1			2		1	
Ashtabula, Ohio Atlanta, Ga Atlantic City, N. J Attleboro, Mass	22,008 196,144 5,515 19,776	59 10 3	20 3 1		3 1		5		8 2	1 2
ASIGNOIS, ONIO Atlantia, Ga. Atlantic City, N. J Attleboro, Mass Auburn, Me. Aurora, Ill Austin, Tex. Baltimore, Md Bangor, Me Barberton, Obio	16,607 34,795 35,612 594,637	15 4 157	1 1 41	<u>2</u>	9	1	15		1 30	1 2 21
Bangor, Me Barberton, Ohio Baton Rouge, La Battle Creek, Mich	26, 958 14, 187 17, 544 30, 159	2 6	1 2 19	1			1 3 5		2 1	i
Bator Rouge, La. Battle Creek, Mich Bayonne, N. J Beacon, N. Y Beatrice, Nebr Beaumont, Tex	72, 204 11, 674 10, 437 28, 851	2 2 12	1	:::::: 1			2		3 1	8
Beaver Falls, Pa.  Bellingham, Wash Beloit, Wis. Benton Harbor, Mich.	13,749 34,362 18,547 11,099	10 3	3 1		6 1		1 1 3	1	1	1
Benton Harbor, Mich Berkeley, Calif Berlin, N. H Bethlehem, Pa Beverly, Mass Billings, Mont Birmingham, Ale	60, 427 13, 892 14, 353 22, 128	10 3	5		3 1		6 1		1	i
Birmings, Mont Birmingham, Ala Bloomfield, N. J Bloomington, Ill	15, 123 189, 716 19, 013 27, 462	10 45 1	5	1	5		3 5 4 2		8 1 1	4
Bluefield, W. Va. Boise, Idaho Boston, Mass	11,661 16,123 35,951 767,813	3 7 193	10 1 50	6 7	9		3 5 1 28		39	9
Braddock, Fa. Bradford, Pa. Brazil, Ind. Bridgeport, Conn.	22,060 1 14,544 10,472 124,724	2 34	3 7 1		3 3 8		7		5 4	i
Beverly, Mass. Billings, Mont. Birmingham, Ala Bloomfield, N. J. Bloomington, Ill. Bloomington, Ind. Bloomington, Ind. Bluefield, W. Va. Boise, Idaho. Boston, Mass. Braddord, Pa. Braddord, Pa. Braddord, Pa. Brazil, Ind. Bridseport, Conn. Bristol, Conn. Bristol, Conn. Brockton, Mass. Brookline, Mass. Brunaswick, Ga. Burlington, V. Burlington, V. Burlington, Vt. Butler, Pa. Butte, Mont. Caus bridge, Mass.	16, 318 69, 152 33, 526 10, 984 475, 781	3 13 9 4 137	1 122		48		3 1 10	1	3 1 33	<u>2</u> 
Burlington, Iowa Burlington, Vt Butler, Pa Butter, Pa Butter, Pa	25, 144 21, 802 28, 677 44, 057	7	1 1 5		i		10		1	
Cadillac, Mich Cars bridge, Mass.	10, 158 114, 293	15 5 27	2		91		2		3 10	•••••

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

. 4	Popula- tion as of July 1, 1917	Total deaths	Diph	theria.	Mea	sles.	Sca	arlet ver.		ber- osis.
City.	(estimated by U. S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Canton, Ill	13,674	6		<b> </b> .		<b> </b>	ļ <u>.</u> .		ļ	
Canton, Ohio. Carbondale, Pa. Carlisle, Pa.	62, 566 19, 597	13	8		3	ļ	8		3	
Carlisle, Pa	10,795	l			ĭ		i			
Carnegie, Pa	11,963		7 5				1 3			
Centralia III	38, 033 11, 838		1							
Carlisle, Pa. Carnegie, Pa. Carnegie, Pa. Cedar Rapidis, Iowa Centralia, Ill. Charleston, S. C. Charleston, W. Va Charlotte, N. C. Chelsea, Mass Chester, Pa. Cheyenne, Wyo. Chicago Heights, Ill. Chicago, Ill. Chicopee, Mass. Chillicothe, Ohio. Cincinnati, Ohio. Cleve'and, Ohio. Coatesville, Pa.	61,041	28							2	4
Charleston, W. Va	31,060 40,759	10	6 7		1 5		1			····· <sub>2</sub>
Chelsea, Mass	46, 405	16	2		5		1		2 2	
Chester, Pa	41, 857 1 11, 320		8		1		3		1	
Chevenne, Wyo	111,320 22,863	1 3					7			
Chicago, Ill.	2,547,201	498	280	18	53		127	2	262	33
Chicopee, Mass.	29,950	9 3	7	1			3 9	· · · • • · ·	3	·
Cincinnati. Ohio	15,625 414,248	87	18	2			9	2	14	10
Cleveland, Ohio	692, 259	160	44	3	4		56	2	12	10
Contestyille, Pa. Coffeyville, Kans. Cohoes, N. Y. Columbia, S. C. Columbus, Ohio. Concord, N. II.	14,998 18,331	2	5		<b>-</b>				4	
Cohoes, N. Y.	18,331 25,292 35,165		1		66		1		1	
Columbia, S. C.	35, 165 220, 135	70	5 29		i		1 2		4	3
Concord. N. H	22 858	5	1		1					3
Connellsville, Pa	15, 876 10, 789 11, 887		2				2			
Corpus Christi, Tex	10,789	6	2 1 1							
Connellsville, Pa. Corpus Christi, Tex. Coshocton, Ohio. Council Bluffs, Iowa.	31,838	7	î				4			
Cranston, R. I.	26,773	3 9								
Dallas Tex	26,686 129,738	26	1 25		3		2		8	3
Danville, III	129,738 32,969	8					2		2	
Danville, Va	20, 183 128, 939	27	6 10				1 7		····· <sub>2</sub> ·	
Dedham, Mass	10,618	2					1			
Penver, Colo.	268, 439 104, 052	72	19	2	62		29			12
Cranston, R. I Cumberland, Md. Dallas, Tex Danville, III Danville, Va Davton, Ohio Dedham, Mass Denver, Colo Des Moines, Iowa Detroit, Mich Dubois, Pa	619,648	166	30 107	5	1 12		80	4	29	9
Dubois, Pa.	14, 994		2							
Dubois, Pa Dubuque, Iowa Duluth, Minn	40,096 97,077	21	6	····· <sub>2</sub>	····i		3		·····2	
Durham, N. C.	26, 160	9	6				3			2
Durham, N. C. East Cleveland, Ohio.	13, 864		9						1	·
Eastnampton, Mass	10, 656 30, 854		3				····i	•••••	····i	•••••
East Providence, R. I. East St. Louis, Ill.	18,485 77,312		1							
East St. Louis, Ill	77,312 18,887	15	5				3 1		1	•••••
East St. Louis, III. Eau Claire, Wis. Elgin, Ill. Elizabeth, N. J. Elkhart, Ind. Elmira, N. Y. El Paso, Tex.	28,562	7							4	····i
Elizabeth, N. J	88,830	15	5		1		2 3	1	2	•••••
Elmira N. Y	22, 273 38, 272	4 13	1 2		1		1			1
El Paso, Tex	69, 149	40	10	1			3			15
El Paso, Tex El wood, Ind Englewood, N. J. Erie, Pa. Eugene, Oreg. Eureka, Cal.	111,028	6 2	• • • • • • •							•••••
Erie. Pa.	12,603 76,592		40		2		30			
Eugene, Oreg	14 357 1	1	1		6					
Evenston III	15,142 29,304	1 8	1 4				3	• • • • • •	2	
Eureka, Cal Evanston, III.  Evansville, Ind Everett, Mass. Everett, Wash. Fairmount, W. Va. Fall River, Mass. Fargo, N. Dak Farrell, Pa. Findlay, Ohio. Flint, Mich.	76.981 l	18	9				3			
Everett, Mass	40, 160 37, 205 16, 111	7	1				1	٠٠٠.٨٠	1 3	· · · · · · ·
Fairmount, W. Va	16,111				5				3	· · · · · · ·
Fall River, Mass	129,828 17,872	31	17	2	21	1	6		6	
Fargo, N. Dak	17,872 10,190	3	•••••	•••••	•••••		4 7	2		
Findlay, Ohio	1 14, 858	3			:::::	::::::			···i	
Flint, Mich	1 14,858 57,386	17	9	1	· 1	•••••	16			1
Ford Dodge, Iowa	21,486 21,039	2	2							•••••
1 VIV 120450, 10 ma	2,000 }	- 1			• • • • • • • • •	• • • • • • • •				•••••

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

	Popula- tion as of July 1, 1917	Total deaths	-	ıtheria	Ме	asles.		rlet ver.		ber- osis.
City.	(estimated by U. S. Census Bureau).	from all causes.		Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Fort Scott, Kans	10,564	5	11	<b> </b>		.				
	10,564 29,390		· ····;	.	-	.	4			·····
Fort Wayne, Ind	78,014 109,597	22 28	3 5		. 2	.	1 5			4
Fostoria. Ohio	10,959	20	8				7			
Framingham, Mass	14,149	5	1	1		.	J			
Fort Wayne, Ind. Fort Worth, Tex. Fostoria, Ohio Framingham, Mass. Frankfort, Ind	10, 103 19, 844	1 1			-		1			-,
Fremont Ohio	11,034	11							i	
Freeport, Ohio Fresno, Cal. Galesburg, III. Galveston, Tex. Gardner, Mass.	36,314	8	9						2	
Galesburg, Ill	24,629	6			•		. 4	ı	<u>-</u> -	····- <u>-</u>
Jaiveston, Tex	42,650 17,534	16 2	1	1	•		····i		2 4	2
(12) Y. IIIU	56,000	10	4	1	i 1		4		<del>.</del>	2
Comorro N V	13,915	] 3								ļ <del>-</del>
Glens Falls, N. Y. Gloucester City, N. J. Grand Forks, N. Dak Grand Rapids, Mich	17,160	6	····i		i		<sub>2</sub>	• • • • • •	2	
Frand Forks, N. Dak	11,375 16,342		20		1		2		2	
Frand Rapids, Mich	16,342 152,861	31	30	3			8		3	
	1 13,948	4 5	_ 1		.		4		1	<b>-</b>
reely, Colo	11,942	5	· · · · i					•••••		
Greely, Colo	30,017 12,251	8 5	l		3		2			
reensboro, N. C	20, 171	9					1			
reensburg, Pa	15,881		2		3		2	•••••		• • • • •
Proposich Conn	18,574 19,594	2	22				i		•••••	
Greensboro, N. C. Greensburg, Pa Greenville, S. C. Greenwich, Conn. Greenw	17,412	4	6				1		1	· · · · · ·
Iannibal, Mo	22,399	3	4				5			• • • • • •
darrisburg, Pa	17, 412 22, 399 73, 276 17, 345		16 2~	J	1		1			<b>-</b>
Hannibal, Mo Harrisburg, Pa Harrison, N. J Hartiord, Conn Haverhili, Mass Hazleton, Pa Hibbing, Minn	112,831	37	14	i			4		7	· · · · · ·
Iaverbill, Mass	49.180	17	7	1	2		2		1	1
Hazleton, Pa	28,981		1 2		¦		6			• • • • • •
Hibbing, Milli. Hoboken, N. J.  Holland, Mich. Holyoke, Mass. Hot Springs, Ark. Houston, Tex. Hudson, N. Y. Huntington Ind	17,550 78,324	15	3				i		5	· · · · · · ·
Jolland, Mich	13,459	. 1	3 2				1		ĭ	
Iolyoke, Mass	66,503	8	1 2				1			1
lot Springs, Ark	17, 690 116, 878 12, 898 10, 982	6 42	5				2			····i
Judson, N. Y	12,898	4								
Huntington, Indluntington, W. Valutchinson, Kans	10,982	4							1	ij
luntington, W. Va	47,686	23	1 10				····i	• • • • • •		4
ndependence. Mo	21,461 11,964	2			2				اا	
ndianapolis, Ind	283,622 14,079	81	7	1	10		7		3	4
ronton, Ohio	14,079	5	. 2				2 3	•••••]		2
lutchinson, Kans ndependence, Mo ndianapolis, Ind ronton, Ohio romwood, Mich ryington, N. J. shpeming, Mich thaca, N. Y	15,095 16,710	2	3		. 1		4			· · · · · ·
shpeming, Mich	1 12, 448	1	2							
haca, N. Y	10.017	10		•••••					1 2	· · · · · ;
acksonville, III amestown, N. Y anesville, Wis	15,506 37,431	8 10	4	• • • • • • •	• • • • • •	•••••		•••••	2	2
anesville. Wis.	14,411 1	5					3 2 2			ĩ
ersey City, N. Johnstown, N. Y	312,557		22		1		2		11	<b>.</b>
ohnstown, N. Y	10,678	•••••	11	i	3		3	•••••	1	•••••
oplin, Mo	33,400 50,408 102,096	15	4				2		····i	····i
Tomas a Citiza Trans	102,096		15		i		9 .		2	
ansas City, Mo. carny, N. J. cenn, N. H. cenosha, Wis. ceokuk, Jowa	305, 816 24, 325	85	15	1	6 2		9 .		···i·	6
Ceene, N. H.	24,325 10 725	5	. 2		Z		1.		4	
enosha, Wis	10,725 32,833		3 2							
eokuk, Iowa	1 14,008						2 .		1	<b>.</b>
Kewanee, Ill	13,607 59,112	4	1 9	····i			9 .		4	
Cokomo, Ind	21,929	5					.		1	ī
		1								_
ackawanna, N. Ya Fayette, Ind	16,219 21,481 14,930	3 10	2		10		1 :		1 .	

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

_	Popula- tion as of July 1, 1917	Total deaths	1	theria.	Mea	sles.		rlet er.		ber- osis.
City.	(estimated by U. S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Lancaster, Ohio	16,086	3		.	1	ļ			1	   <b></b>
Lancaster, Pa Laporte, Ind La Salle, Ill	51, 437	3	14	i			1			<b>-</b>
La Saile, Ill	13,572 12,332	i		.		1	l i	1	2	
	13,477	1				<b></b> .	¦		3	
Lawrence, Mass	102,923	26	4		2		2		5	1
Leavenworth, Kans	1 19,363 21,365	3 1	1				3		11	
Lawrence, Kans. Lawrence, Mass. Leavenworth, Kans. Leominster, Mass. Lewiston, Me. Lexington, Ky. Little Rock, Ark.	28,061	7	6		9		3 2			
Lexington, Ky	41,997	10	2				2		1	1
Lima, Ohio	37, 145 58, 716	5	1 5		9		1		7	· · · · · ·
Little Rock, Ark Lockport, N. Y Logansport, Ind	20,028	4	1		ĭ				3	l
Logansport, Ind	21,338		<b></b>				1		1	
TOTE DESCIT, COMME	29,163	15	4	1			·····2		1	1
	38, 266 535, 485	144	65	i	26	····i			51	19
Lorair, Onio Los Angeles, Calif Louisville, Ky	240, 808	48	17	l î			9 7		6	3
Lowell, Mass	114,366	48 30	10		53	1	9		5	3
Lynchburg, Va. Lynn, Mass	33,497	8 12	2	····i	1 1		·····2		2	
Mc Veenort Pa	104,534 48,299	1Z	3	1			î		2	
McKeesport, Pa	20,795		3				2			
#18(11SOH, W1S	01 015	6	2				2		2	<b></b>
Mahanoy City, Pa	17,709 52,243	8	5	····i		• • • • • •	1 2	• • • • • •	2	
Manchester Conn	15,859	î	ļ	ļ <sup>*</sup>						-
Manchester, N. H	79,607	25	32	1					5	2
Mankato, Minn	1 10, 365	4 7			•••••	• • • • •	1 5	····i		i
Mansheld, Unio	23,031 1 14,610		i							1
Mahanoy City, Pa. Malden, Mass. Manchester, Conn. Manchester, N. H. Mankato, Minn. Mansfield, Ohio. Marinette, Wis. Marion, Ind. Marine Ohio.	19,923	3	4				3			1
Marion, Ohio	21, 129						1			
Marquette, Mich	12,555 12,984	2	1 3							
	10, 135	2	4						i	
Mattoon, Ill	12,764		ī							
Meadville, Pa	13,968	• • • • • • • • • • • • • • • • • • • •					1 5		i	<b>-</b>
Matton, Ill. Meadville, Pa. Medford, Mass Memphis, Tenn Meriden, Conn Meriden, Moss	26, 681 17, 724	9	1				3			· · · -
Memphis, Tenn	151,877	43	41	i	i		4		7	3
Meriden, Conn	29, 431	••••••	4				1			i
Methuen, Mass. Middletown, N. Y. Middletown, Ohio. Milwaukee, Wis.	14,320 15,890	4	2		*****		1		····i	1
Middletown Ohio	16.384	5	····i						3	
Milwaukee, Wis	16,384 445,008	86	€O	5	9		16	1	22	6
MINICADOIS, MINICALARIA	373, 448	€5	25			]	17		15	3
Mishawaka, Ind	17,083 19,075	3	····i	····i			2		···i	· · · · · ·
Mobile, Ala	59, 201	16	3				1			i
Mobile, Ala	23,070	····i	2		2	]	7 5			•••••
	10,346 27,087	2	····i		3	•••••	3			• • • • • •
Montgomery, Ala	44,639	14	4		ĭ		1			····i
Morgantown, W. Va	14,444	3	1				3		1	· · · · · ·
Montclair, N. J. Montgomery, Ala. Morgantown, W. Va. Morristown, N. J. Moundsville, W. Va.	13, 410 11, 515	3	•••••			•••••		•••••		•••••
Mount Carmel, Pa	20, 709		4							· · · · · · ·
Mount Vernon, Ill	10,043	6	11							•••••
Muncie, Ind	25, €53	12	10	1			5	1		1
Muscatine, Iowa Nanticoke, Pa	17, 713 23, 811	5	10		6		····i		i	1
Nanticoke, Pa	23,811 27,541	8					6			
	118, 136	46	15	;-1			6	····i	3	4
Newark, N. J	418, 789 30, 317	78	24	1	7		21	1	36	8
New Bedford, Mass	121,622	78 29 29	10	i			1	::::::	6	8 3 2 2
Nasarvine, Lean. Newark, N. J. Newark, Ohio. New Bedford, Mass New Britain, Conn. New Brunswick, N. J.	55, 385	10	12	ī	2		5	]	8	2
New Brunswick, N. J.	25,855		3			••••••]	1		1	· · · · · •
Newburgh, N. Y	29,893	14	11			1	2	1	1 }	· · · · · •

Population Apr. 15, 1910.

	Popula- tion as of July 1, 1917	Total deaths	1 -	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.
Newburyport, Mass	15, 291	6								
New buryport, Mass New Castle, Ind	14 144	1			2		2 9			•••••
New Castle, Pa	41,915 159 975	25	92		2		24		4	
New Castle, Pa. New Haven, Conn. New London, Conn New Orleans. La. New Philadelphia, Ohio. Newport, R. I. Newton, Mass. New York, N. Y. Niagara Falls, N. Y. Norfolk, Va. Norristown, Pa. North Adams, M iss. Northampton, Mass.	41, 915 152, 275 21, 199 377, 010 10, 133	4	22 2				2 2		ļ <del>.</del>	
New Orleans, La	377,010	114	5		12		2		15	· 10
New Philadelphia, Ohio	10, 133 30, 585	8	. 2				4	¦		
Newton. Mass.	44.343	8	i		ii		3		i	
New York, N. Y	5,757,492	1,082	288	14	43	1	92	4	318	93
Niagara Falls, N. Y	5,757,492 38,466 91,148	7	13				10		1 3	5
Norristown. Pa.	31, 9.9		5		<u>*</u> .					
North Adams, M 188	122,019	4	1			• • • • • •			1	
Northampton, Mass	20,006 11,248	9	5				• • • • • •		1 2	
North Braddock, Pa	15, (84		3				· · · i			
North Little Rock, Ark	15.515	3 2	l			• • • • • •	3		1	1
North Tonawanda, N. Y	14,060	2	6		1	• • • • • •		• • • • • •		
Norwich Conn	27, 332 21, 923	6 7	1							
North Adams, M iss. North Anthropton, Mass. North Attleboro, Mass. North Braddock, Pa. North Little Rock, Ark. North Tonawanda, N. Y. Norwalk, Conn. Norwich, Conn. Norwood, Ohio. Oakland, Calif. Oak Park, Ill	23.249	3					1			
Oakland, Calif	206, 405 27, 816	46 4	8				1		5 1	2
Oak Park, Ill	20, 162		18		21	,			1	•••••
Oklahoma City, Okla	97, 588 (	25	17	3						i
Old Forge, Pa	15, 479		2		17				1	;
Omaha Nehr	15, 479 16, 927 177, 777	5 35	1 12	····i	3		6		• • • • • •	4
Orange, Conn	14,393	7	2	i			6 2		i	·i
Oshkosh, Wis	35,549	5					5			•••••
Parkershurg W. Va	25, 178 21, 059	6	4	• • • • • • •		• • • • • • •		• • • • • •	•••••	•••••
Oak Fark, III Oil City, Pa. Oklahoma City, Okla Oblahoma City, Okla Oid Forge, Pa. Olean, N. Y. Omaha, Nebr Orange, Conn Oshkosh, Wis Paducah, Ky Parkersburg, W. Va. Parsadena, Calif	21,059 15,952		11		1 1		3			
Pasadena, Calif	49,620	12	1		1		;-		1	1
Passaic, N. J	74,478 140,512	8 2	10	1			4		1	• • • • • •
Parsons, Kans Pasadena, Calif Passaic, N. J Paterson, Mass Peekskill, N. Y Pekin, III Peoria, III Peoria, III Petersburg, Va Phillapsburg, N. J Phoenix ville, Pa Piqua, Ohio Pittsburgh, Pa Pittslield, Mass Plainfield, M. J Plymonth, Mass	60,666	18	4							· · · · · · ·
Peabody, Mass	60,666 18,785 19,034	3							1	•••••
Pekskill, N. Y	19, (34 10, 973	3	3 1							•••••
Peoria, Ill.	72 184 1	22	10	i	1		10			i
Petersburg, Va	25,817 1,735,514 15,879	. 7	8				1		2	- 1
filladelphia, Pa	1,735,514	413 3	99	5	3	1	123	3	57	33
hoenixville, Pa			2				5			•••••
Piqua, Ohio	14, 275	3							ا نق	1
Pittsburgh, Pa	900, 19D ).	3	66 1	-:	14		67		20	• • • • • •
Plainfield, N. J.	39,678 24,330	7					2			····i
Plymouth, Mass	- 14,001				-				1	•••••
ontiac, Mich	18,006 16,727	3	6	• • • • • •			6		····i	•••••
ort Huron, Mich.	1 18, 863	6					2		2	····· <u>2</u>
ortland, Me	1 18,863 64,720 308,399	26	1		3 .		1			•••••
Portsmouth N. H.	308,399	56	6	1	4		10		5	2
ortsmouth, Ohio	11,730 29,356	8	6				ĩ l			····i
Pottstown, Pa	16.987 [.						2			
Pottsville, Pa	22,717 30,786		8		·····¦·		• • • • •   •	-	···i	• • • • • •
Plymouth, Mass Ontiac, Mich Out Chester, N. Y Out Huron, Mich Outland, Me Outland, Oreg. Outsmouth, N. H Outsmouth, Nich Outstown, Pa Outsville, Pa Oughkeepsie, N. Y Ouville, Colo	30,786 259,895	61	12		ii .		2	ı i		
ueblo, Colo	56,084	10	. 6	i	2		3 .			2
luincy, Ill	36,832	7	;;-	•••••	• • • • • •   •			-		••••••
Tovidence, K. I.  Queblo, Colo  Quincy, Ill.  Quincy, Mass.  Racine, Wis	39,022 47,465	10 7	11 42	3			8		2	
lahway, N. J.	10,361	3	2		::::::		1 .			
Rahway, N. J.	20, 274	12	5	1	14 .		4 .			
Teaming, I a	111,607		7		····;· ·		3		····· ·	····i
Reading, Pa Redlands, Calif	111,607 14,573	5	7		2 .		3			••••

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

	Popula- tion as of July 1, 1917	Total deaths	Diph	theria.	Mea	sles.		rlet er.		ber- osis.
City.	(estimated by U.S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Redwing, Minn	10, 158	<b></b>					1			
Rano Nev	15.514			.					1	
Richmond, Ind Richmond, Va Riverside, Calif Roanoke, Va	25,080 158,702	11	55	2			7		19	4
Riverside, Calif.	20,496	34 7		ļ						i
Roanoke, Va	20,496 46,282	13	8				2			1
Rochester, N. Y. Rockford, Ill.	264,714 56,739	- 78 - 16	83 1	4	5		13	1	11	·····i
Rock Island, Ill	29,452	4	î						i	
Rockford, Ill. Rock Island, Ill. Rocky Mount, N. C. Rome, Ga. Rome, N. Y Rutland, Vt. Sacramento, Calif.	12,673	1					l <u>-</u> -			:.
Rome N V	15,607 24,259	• • • • • • • •	1		10		1		1	
Rutland, Vt.	15,038	3					î			
Sacramento, Calif	68,984	23	2 1	1			5		1	2
St. Cloud, Minn. St. Joseph, Mo. St. Louis, Mo. St. Paul, Minn.	12,013 86,498	25	4		• • • • • • •	•••••	·····2	• • • • • •		3
St. Louis, Mo	768,630	175	154	6	4		13		24	10
St. Paul, Minn	768,630 252,465	32	10	1			6		5	3
Salem Mass	49,346 12,470	16 2	1 4			•••••	·····2		• • • • • •	1
Salina, Kans. Salt Lake City, Utah.	121,623	29	3	i	25		ĩ i			
San Bernardino, Calif	17,616	9	3						1	2
San Bernardino, Calif. San Diego, Calif. Sandusky, Ohio. Sanford, Me.	56,412 20,226	28 2	3				4		5	·····i
Sanford, Me.	11,217	î	····i							
Dan Francisco, Cani	471,023	100	26	1	3		8		18	10
San Jose, Calif	39,810 15,360		1	• • • • • •			3		2	• • • • • •
Santa Barbara, Calif Santa Cruz, Calif Saratoga Springs, N. Y	15, 150 [	3	2	i						····i
Saratoga Springs, N. Y	13,839	3			1				1	
Saugus, Mass Sault Ste. Marie, Mich.	10. 210 14, 130	2 2		• • • • • •			1 8			· · ·
Savannah, Ga	69,250	33	7						i	3
Savannah, Ga	69,250 103,774 149,541	11	7	1	4		4		6	2
Scranton, Pa. Seattle, Wash	149,541 366,445	• • • • • •	9 17		2		12 6		•••••	• • • • •
Shamokin, Pa	21,274		2				3			
	19,156		1				12			
Sheboygan, Wis. Shenandoah, Pa. Sioux City, Iowa. Sloux Falls, S. Dak. Somerville, Mass.	28,907 29,753	1	1					]		• • • • • •
Sioux City, Iowa.	58,568 16,887		4	···i			2 2			
Sloux Falls, S. Dak	16,887		3				1		<u>-</u> -	
South Bend, Ind.	88,618   70,967	16	1 7	2			2		7 2	• • • • •
Southbridge, Mass	14,465	2		<u>î.</u> ]						
Spartanburg, S. C.	21,985	7	5	• • • • •				• • • • • •		• • • • •
Southbridge, Mass. Spartanburg, S. C. Spokane, Wash Springfield, III. Springfield, Mass. Springfield, Mass.	21,985 157,656 62,623	ii	1		10		13	• • • • • •	::	
Springfield, Mass	108,668	22	6	1			13	2	4	i
Springfield, Mo	41,169	10 10	• • • • •			• • • • •			33	;
Steubenville, Ohio	52,296 28,259	6					8		33	
Stillwater, Minn Stockton, Calif Sunbury, Pa	1 10, 198	2								
Stockton, Calif	36,209 16,661	13	3 12				1	· • • • •   ·	• • • • • •	1
Superior, Wis	47,167	6	2				3			· • • • • •
Syracuse, N. Y	158,559	39	12		4 .		11		41	3
Tacoma, Wash	117,446 .		13	• • • • • •	1 .	•••••	٠			• • • • •
Superior, Wis. Syracuse, N. Y. Tacoma, Wash. Terre Haute, Ind. Tiffin, Ohio.	67, 361 12, 962	20 5	13				8			
Tolego, Unio	202,010	57	60	3			12	i	7	8
Topeka, Kans	49,538	15	2	•••••	28 .		10		1	• • • • •
Traverse City, Mich. Trenton, N. J. Troy, N. Y. Tueson, Ariz.	14,090 113,974	39	5				1		2	3
Troy, N. Y.	113,974 78,094 17,324	17	ĭ		1 .		3		5	1
Tueson, Ariz. Tuscaloosa, Ala.	17,324   10,824	11 .	4	.	-	•••••				7
Uniontown, Pa	21,600 ].		2				····i			
Vallejo, Calif	13,803	4	1				4			•••••
Vancouver, Wash	13,805  .				} .		7 [			• • • • •

## City Reports for Week Ended Oct. 30, 1920—Continued.

	Popula- tion as of July 1, 1917	Total deaths	Diph	theria.	Mea	sles.		rlet er.		ber- osis.
City.	(estimated by U.S. Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Waro, Tex Wakefield, Mass Walla Walla, Wash Waltham, Mass Washington, D. C. Washington, P. C. Washington, P. Watertown, Mass Watertown, Mass Waterville, Me. Waterville, Me. Waterville, Me. Westerville, Me. Westerville, Me. Westerville, Me. Westerville, Me. Waterville, Me. West New York, N. J. West Orange, N. J. West Hoboken, N. J. West Hoboken, N. J. West Torange, N. J. Wheeling, W. Va. White Plains, N. Y. Wilkins, Wass Wilkinsburg, Pa. Wilkinsburg, Pa. Wilkinsburg, Pa. Wilkinsburg, Pa. Wilkinsburg, Pa. Wilkinsborg, Pa. Wilkinsbor	34, 015 12, 947 26, 067 31, 011 269, 282 22, 076 15, 188 30, 404 12, 903 15, 622 19, 666 13, 403 11, 769 44, 388 19, 613 13, 964 43, 657 23, 331 73, 597 78, 334 23, 899 30, 400 16, 812 18, 583 83, 196 16, 076 166, 106 162, 770 81, 320	7 100 4 3 4 3 3 4 13 8 17 222 10 4 3 3 3 8 17	1 2 2 3 2 2 17 4 4 4 4 4 15 5 1	1	1 1 1 3 13		1 2 1 17 17 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 28 3 3 3 3 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 1 1 1 1 2 2

Population Apr. 15, 1910.

## FOREIGN AND INSULAR.

#### CANADA.

#### Poliomyelitis (Infantile Paralysis)—Winnipeg.

During the five-week period ended October 25, 1920, 26 cases of poliomyelitis (infantile paralysis) were notified at Winnipeg, Canada.

#### CHINA.

#### Influenza-Hongkong.

During the week ended September 18, 1920, 10 deaths from influenza were reported at Hongkong, China.

#### HAITI.

### Smallpox.

Information dated November 6, 1920, shows the occurrence of about 35 cases of smallpox in Haiti. One case was reported at Jacmel.

#### INDO-CHINA.

## Cholera—Plague—Smallpox—April-May, 1920.

During April and May, 1920, cholera, plague, and smallpox were reported in Indo-China as follows:

Cholera.—In the Provinces of Anam, Cochin-China, and Tonkin, April, 1920—cases, 204, fatalities, 99; May, 1920—cases, 328, fatalities, 184; May, 1919—cases, 618, fatalities, 513.

Plague.—In the Provinces of Anam, Cambodia, Cochin-China, and Kwang-Chow-Wan, April, 1920—cases, 69, fatalities, 63; May, 1920—cases, 87, fatalities, 75; May, 1919—cases, 130, fatalities, 115.

Smallpox.—Provinces of Anam, Cambodia, Cochin-China, and Ton-kin, April, 1920—cases, 302, fatalities, 25; May, 1920—cases, 428, fatalities, 61; May, 1919—cases, 224, fatalities, 62.

## Influenza—April-May, 1920.

Influenza was reported in the Provinces of Anam, Cambodia, Cochin-China, and Tonkin, with 1,018 cases and 149 fatalities in April, 1920; 612 cases with 55 fatalities in May, 1920; and in May, 1919, with one case.

#### JAMAICA.

#### Infectious Disease Reported Present.<sup>2</sup>

During the week ended October 16, 1920, 529 cases of alastrim, or Kaffir pox, were reported present in the island of Jamaica.

#### JAPAN.

#### Mortality Rate-1908-1917.

The following table gives the mortality rates in Japan for the years 1908 to 1917, inclusive:

Year.	Death rate per 1,000.	Year.	Death rate per 1,000.
1908. 1909. 1910. 1911.	20. 9 21. 9 21. 1 20. 3 19. 9	1913. 1914. 1915. , , , , , , , , , , , , , , , , , , ,	19. 4 20. 5 20. 1 21. 5 21. 4

## Proportional Mortality, 1916.

The following table shows the proportion of deaths from certain causes to each 1,000 deaths from all causes in Japan during the year 1916:

Disease.	Proportion.	Disease.	Propertion.
Typhoid fever	7.1 .2 .1 4.9 3.5 3.7 6.3	Tubercular meningitis  Leprosy. Cancer. Beriteri. Meningitis. Pneumonia Other respiratory diseases. Diarrhea and enteritis. Nephrites and Bright's disease.	1. 2 32. 3 13. 9 <b>80.</b> 2

## Morbidity and Mortality-Kobe-January-August, 1920.

During the period from January to August, 1920, inclusive, 11,124 deaths from all causes were reported at Kobe, Japan. (Population, about 650,000.) The cases of and deaths from certain diseases were distributed by cause as follows:

Disease.	Cases.	Deaths.	Remarks.
Cerebrospinal meningitis. Cholera. Diphtheria Dysentery. Meningitis Paratyphoid fever Pneumonia. Smallpox. Typhoid fever	390 96 194 49	14 286 5 47 520 2 2,768 7 28	For 3 months only.

<sup>&</sup>lt;sup>2</sup> Public Health Reports, Sept. 3, 1920, p. 2132; Sept. 24, 1920, p. 2298; Oct. 15, 1920, p. 2491; Oct. 29, 1920, p. 2603.

#### Morbidity and Mortality-Osaka-January-July, 1920.

During the period January to July, 1920, inclusive, morbidity and mortality were reported at Osaka, Japan, as follows:

Disease.	Cases.	Deaths.	Remarks.
Cerebrospinal meningitis Cholera Diphtheria Dysentery Scarlet fever Smallpox Typhoid fever Typhoid fever	176 217 335 123 45 300 405 74	70 92 88 14 14 76 79 6	For 2 months only.

Population, 1,226,600.

#### Influenza-October, 1918-January, 1919.

During the 100-day period from October 23, 1918, to January 31, 1919, more than 3,000,000 cases of influenza with 60,000 fatalities occurred in the three principal cities and 24 provinces in Japan.

#### Leprosy-Mortality-1916.

During the year 1916, the latest year for which statistics of leprosy are available, 422 deaths from the disease were reported in the consular district of Kobe and 1,375 for all Japan.

#### Tuberculosis-1917.

Tuberculosis of the lungs has been stated to be increasing in Japan. In the prefectures of Okayama and Fukushima the department of education is stated to have found that 6 per cent of the teachers in the elementary schools in 1917 were affected with tuberculosis, the number of cases amounting to 9,000 out of the total of approximately 150,000 teachers.

## Average Age at Time of Death-1886-1913.

The following table of the average age at time of death in Japan shows a decrease of seven years of life during the period 1886-1913:

Year.	Males.	Females.	Year.	Males.	Females.
1886	38. 13	38. 91	1901	32. 79	33. 99
1887	37. 26	<b>3</b> 8. 41	1902	32.65	33. 70
1988	35. 91	37.45	1903	33. 42	34. 35
1889	35.09	36.08	1904	34. 23	35. 36
1890	36. 39	37. 17	1905	33. 56	34. 62
1891	36, 46	37. 75	1903.	32. 11	34. 55
1892	34. 13	35. 69	1907	33. 15	34.09
1893	33. 11	34. 39	1908	31. 46	32, 33
1894	33, 98	35, 42	1909	31. 39	32.07
1895	34.77	35. 87	1910	30. 99	31. 36
1893	33, 87	34, 93	1911	31. 12	31.62
1897	32. 39	33, 65	1912	31.60	32, 17
898	32. 10	33, 28	1913	31. 54	31. 74
1899	33. 28	34, 49			
900	33. 84	34. 93			

A portion of the decrease shown above may be attributed to the increase in number of deaths of children under 1 year of age. In 1907, 24 per cent of all deaths has been stated to have occurred under the age of 1 year. In 10 years (1907 to 1916) the rate has been stated to have increased to 25.8 per cent.

#### MEXICO.

#### Plague-Cerritos.

According to information, dated November 1, 1920, 15 cases of plague have been reported at Cerritos, State of San Luis Potosi, Mexico. The disease was reported present in neighboring localities.

#### VIRGIN ISLANDS.

### Contagious Diseases-September, 1920.

The occurrence of contagious diseases in the Virgin Islands during the month of September, 1920, has been reported as follows:

	Cases.	Remarks.
In St. Thomas and St. John: Chancroid. Chicken pox. Gonorrhea. Malaria. Syphilis. Tuberculosis.  Uncinariasis. St. Croix: Chancroid. Dysentery Filariasis. Gonorrhea. Pellagra Trachoma. Tuberculosis.	1 12 1 5 3 1 3 6 12 12	Imported; subtertian.

# CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER. Reports Received During Week Ended Nov. 19, 1920.1

#### CHOLERA.

India:	Place.	Date.	Cases.	Deaths.	Remarks.
Japan:  Kobe	Madras	. Sept. 26-Oct. 2	1		Apr. 1-20, 1920: Cases, 204; deaths, 99. May 1-31. 1920: Cases.
	Kobe		1	1	328; deaths, 184.

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

## Reports Received During Week Ended Nov. 19, 1920—Continued.

#### PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Azores: St. Michaels	Nov. 10-16	25	8	Total to Nov. 16: Cases, 110;
Brazil:	1404. 10-10		١ ،	deaths, 38.
Bahia	Sept. 12-18	2		
Ceylon:	ļ -	1		
Colombo	Sept. 5-Oct. 2	17	11	Jan. 1-Sept. 16, 1920 Cases, 415;
Egypt Cities—	· · · · · · · · · · · · · · · · · · ·			deaths, 242.
Alexandria	Sept. 18-19	2	l	4000115, 2722
Provinces—	l -	_		
Assiout	Sept. 13	1	1	
Girgeh	Sept. 22	1	1	Pneumonic.
Greece: Saloniki	Sept. 27-Oct. 3	1		At Kavala, Sept. 27-Oct. 3: 1
India:	Sept. 21-001. 3	•		Case.
Karachi	Sept. 12-18	2	2	-
Madras Presidency		858	563	
Indo-China				April1-30, 1920: Cases, 69; deaths, 63. May 1-31, 1920: Cases, 87; deaths, 75.
Mexico:				•
San Luis Potosi, State— Cerritos	Nov. 1	15	1	Present in neighboring localities.
Peru:	NUV. 1	10		resent in neignboring rocanties.
Callao	Aug. 1-31	1		
Trujillo	Sept. 5-Oct. 25	5	3	•
Stra <u>i</u> ts Settlements:				•
Singapore	May 16-22	2	3	

#### SMALLPOX.

<del></del>	1 •	1	1	1
Brazil:		1		į
Bahia	Sept. 5-11	. 2	1	. <del>[</del>
Santos	July 25-Aug. 15		. 8	
Canada:	val, 20 11ag. 1011.	1	1	}
New Brunswick—	i	1	l	j
Counties—	1	1	1	
	I	1	1	Oct. 1-31, 1920: Cascs, 1.
Bonaventure and				Oct. 1-51, 1920. Cascs, 1.
Gaspe.	i	l	1	1
Ontario—	1		1	
Hamilton				İ
Kingston	Oct. 18-30		l	
Montreal	Oct .24-30	1	[	}
Ottawa	Oct . 31-Nov . 6	23	l	
Sault Ste. Marie	Oct. 24-30	1		`
Toronto	Oct. 31-Nov. 6			
Saskatchewan-	000.02 1.0	1		
Regina	Oct.24-30	2	l	
	001.21-30	_		
Ceylon:	Game F Oat 9	<b>2</b> 6	2	·
Colombo	Sept.5-Oct.2	_ 20	2	
China:				D
Chungking	Sept. 19-Oct. 2			Present.
Foochow	Sept. 26-Oct. 2			Do.
Harbin	Sept. 27-Oct. 3	1		
Mukden	Oct 3-9			Do.
Nanking	Sept. 26-Oct. 9			Do.
Colombia:	2020120			
Santa Marta	Oct. 3-9			Do.
Cuba:	000.0-3	• • • • • • • •	•••••	
Antilla	Oct. 18-23	1		
	Oct. 15-23	1		
Egypt:	T-1 00 00	1		
Cairo	July 23-29	1		37 0 1000: A
Haiti				Nov. 6, 1920: Approximately 35
Jacmel (vicinity)	Nov. 6	1		cases.
India:				·
Madras	Sept. 26-Oct. 2	2	2	
Indo-China				Apr. 1-30, 1920: Cases, 2;
11140-CHINA				Apr. 1-30, 1920: Cases, 2; deaths, 25. May 1-31, 1921:
				Cases, 428; deaths, 61.
Italv:				
Italy:	Sept. 27-Oct. 3	1		•
Messina				
Turin	Sept. 6-12	1		,

## Reports Received During Week Ended Nov. 19, 1920—Continued.

#### SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	. Re	marks.		
Java: West Java				Sept. 10-16,	1020-	Cases,	
		1		deaths, 3.	1940.	Cases,	٥,
Batavia Mexico:	Sept. 10-16	4	1	1			
San Luis Potosi New Zealand:	Oct. 24-30		1	1			
Dunedin	Aug. 24-Sept. 20	8		1			
Portugal: Lisbon Straits Settlements:	Sept. 19-Oct. 16		6				
Singapore	May 16-22	1		ĺ			
Tunis:	Sept. 27-Oct. 17		2				
Turkey: Constantinople	Oct. 10-16	1					
	TYPHUS	FEVE	₹.				_
Bermuda:							-
Hamilton	Oct. 18-23	2					
Coquimbo	Oct. 1-7		1				
China: Antung	Sept. 6-19	18	3				
Egypt: Cairo	July 23-29	14	10				
Greece: Saloniki	Sept. 13-Oct. 10	5	3				
Italy: Trieste	Sept. 19-25	. 1	2				
Japan: Nagasaki.	- I		2				
Turkey:	Oct. 4-10	1	•••••				
Constantinople	Sept. 19-Oct. 2	••••••	4				_
	YELLOW	FEVE	₹.				_
Mexico:		i					-
Vera Cruz Yucatan (State):	Nov. 8-14	12	12				
Merida	Nov. 5	1		From Hunuen	na.		

## Reports Received from June 26 to Nov. 12, 1920.

#### CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil: Rio de Janeiro China: Amoy Antung Canton. Changsha Chungking Do. Dairen Foochow Hankow Harlin. Hongkong.	June 27-July 3  June 20-Aug. 14 Aug. 9-15. July 1-Aug. 31. Aug. 22-Sept. 18 May 16-24. June 6-Sept. 11. Sept. 29 July 11-24. July 4-17.  Aug. S-14.	1	1 12 1 4 50 1,319 •5,322 1	Aug. 15-21: Present.  Sept. 18: Present.  Present.  Year 1919: Cases, 603. On Eastern Chinese R. R. line. At other stations, same line, 190 cases.

## Reports Received from June 26 to Nov. 12, 1920—Continued.

#### CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
China—Continued. Nanking Shanghai	Sept. 12-25 Aug. 2-29		4 6	Several cases reported at Nan- king University, Aug. 30. Re- ported prevalent among Chi- nese, Aug. 30.
Chosen (Korea).  Chemulpo.  Chianampo  Fusan  Gensan.  Moltre	Aug. 1-Oct. 7. Aug. 1-26. Aug. 1-Oct. 7. Aug. 27-Sept. 2. Aug. 1-Sept. 30.	684 1	21 23 493	Sept. 8, 1920. Cases, 13,000; deaths, 5,000 (estimated). Aug. 1-Oct. 7, 1920: Cases, 24,435; deaths, 12,549.
Mokpo Seoul Galicia: Buczacz	Aug. 1-Oct. 7 Oct. 18	1,032	781	Present.
Greece: PatrasZante	July 26-Aug. 1 Aug. 2-8			Present in surrounding country. Present.
India Bombay Do Calcutta Do	May 2-June 26 June 27-Sept. 11 May 2-June 24 July 18-Sept. 18	85 103 439 175	36 66 423 168	Apr. 11-May 22, 1920: Deaths, 7,549. May 30-June 26, 1920: Deaths, 3,710. June 27-July 10, 1920: Deaths, 1,711.
Madras Do Rangoon	May 2-June 26 July 11-Sept. 25 June 27-Sept. 18	20 11 22	13 1 16	July 1-31, 1929: Cases, 18; deaths 16.
Indo-China Saigon Do	Apr. 26-June 13 July 26-Sept. 5	130 9	1 94 5	Jan 1-31, 1920: Cases, 40; deaths, 24. Feb. 1-29, 1920: Cases, 25; deaths, 15. Mar. 1-31, 1920: Cases, 52; deaths, 30.
Japan: Kobe Do Nagasaki.	June 14-27 June 28-Sept. 23 June 21-27	36 408 7	24 223	Kobe, June 6-13, 34 cases. Moji June 6-12, 10 cases. Kocpi June 6-12, 1 case. Hiroshime, June 6-12, 6 cases.
DoOsakaTaiwan Island	June 28-July 18 June 8 May 22-June 20 July 11-Sept. 20	34 60 1,193	33 440	June 6-12, 6 cases. Present.
Java: West Java— Batavia	Apr. 30-June 3 June 25-Aug. 12	6 3	2	June 4–17; Present.
Philippine Islands	May 9-June 26 June 27-Sept. 25	5 5	1	May 9-June 26, 1920: Cases, 16; deaths, 12. June 27-July 17, 1920: Cases, 63; deaths, 31. July 25-31: Cases, 57; deaths, 48.
AlbayBatangasBoholCagayan	May 9-15 June 27-July 3 do May 9-June 26	2 1 1 11	1 1 19	
Do	June 27-Aug. 21 Sept. 5-11 June 27-July 17 July 11-31	41 1 3 13	14 1 14	
Laguna	July 4-10 July 11-17 July 25-31 July 4-Aug. 7	8 4 49 7	2 42 5	
Poland: Warsaw	Oct. 28	1	1	Case occurred in employee on river boat plying between Warsaw and Danzig.
Russia	Oct. 18			Reported prevalent in southern Russia, June 4, 1920. Present.
Simferopol	Sept. 28	40	•	JanJune, 1920: Cases, 1,262; deaths, 584. South Russia, Government of Tauride. Province of Lithuania. Oct. 18:
Siam: Bangkok	Apr. 25-June 26	542	343	Present.
Do	June 26-Sept. 4	61 24	26 23	

#### Reports Received from June 26 to Nov. 12, 1920—Continued.

## CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Sumatra: Medan	Aug. 20-Sept. 3	1	1	On local steamship. From Singapore.
Turkey: Amassia	Jan. 3 Dec. 31 DecJan	1 1 1 1 16	1 6	Do. Do. Do.
RodostoSmyrna. On vessel: S. S. KeketticutSteamship.	Dec. 22	1 3 1 1	2	European Turkey. Asiatic Turkey. U. S. S.: At Shanghai. At Medan, Island of Sumatra.
	PLA	GUE.		From Singapore.
	<u> </u>		· · · · · ·	1
Algeria: Algiers	,			Sept. 1-30, 1929: Cases, 3; deaths, 1.
Azores: St. Michaels	Oct. 4-23	35 •	12	Oct. 4, 1920: 5 suspect cases isolated vicinity of Ponta Delgada. Oct. 1-31, 1920: Cases, 76; deaths, 27.
Ponta Delgada Brazil:	Oct. 1-26	2		76; deaths, 27.
Bahia Do	Apr. 25-May 22 June 27-Oct. 28	10 10	10 5	
Pernambuco	May 3-9 June 28-Aug. 15 June 27-Aug. 21	32	1 16 2	
Porto Alegre British East Africa Kisumu	Apr. 25-June 26	14	12 5	Apr. 1-30, 1920: Cases, 22; deaths 9. Present.
Do	Júly 11-Sept. 4 Apr. 25-June 26 June 27-Aug. 28 Apr. 25-June 10	10 104 113 14	39 72 8	resent.
Ceylon: Colombo Do Chile.	May 25–June 12 June 27–Sept. 18	7 19	2 21	Mar. 1-May 31, 1920; Cases, 15;
÷		_		Mar. 1-May 31, 1920: Cases, 15; deaths, 2. Plague reported in Departments of Tacna and Tarata.
Antolagasta	May 17-June 20 July 5-( c :. 9 Mar. 1-May 31	5 3 8	1	Mar. 1-May 31, 1923: Cases, 7; deaths, 1.
China: Amoy	June 20-Sept. 18 Apr. 4-June 26	90	8 70	
Do Ecuador: Guayaquil	June 27-Aug. 21 Aug. 16-Sept. 30	26 9	· 23	
EgyptCities—		10	7	Jan. 1-Sept. 30, 1920: Cases, 420; deaths, 245.
Alexandria Port Said Suez	June 18-Aug. 12 Aug. 2-Sept. 26 May 13-June 8 July 3-Aug. 4	3 12 4	6 3	3 cases pneumonic.
Do Provinces— Assignt	May 15-June 5	7	4	
Do Beni-Souef Fayoum Garbieh	July 2-14 July 7-10 June 5	6 2 1	i	
Do	do July 1-Sept. 28 May 18	1 19 1	14	
Keneh Mariut Do	July 1-Sept. 28 May 18 May 18-June 8 July 3-9	19 1 2	22 2 1	Septicemic.
Minieh Do Fiume	May 15 July 13 Sept. 21	1 4	2	

## Reports Received from June 26 to Nov. 12, 1920—Continued.

#### PLAGUE-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Great Britain: Liverpool	June 20-26	1	1	
Greece:	Aug. 19-Oct. 14	3	2	
Chios	Oct. 14	1 2		1
Kavalla	July 5-Aug. 21	1 3		
Nauplia Piræus	Aug. 21	12	i	Approximately 20 cases Sept. 9
Saloniki	June 29-Sept . 20 Sept. 25-Oct . 8	3		, n.
ZanteIndia				Do. Apr. 18-June 26, 1920: Cases
Bombay	Apr. 18-June 26	170 55	135 45	Apr. 18-June 26, 1920; Cases, 12,476; deaths, 9,961. June 27-
Calcutta	June 27-Sept. 11 May 2-June 12	26	19	Sept. 18, 1920: Cases, 27,396; deaths, 20,840.
Karachi	May 9-Sept. 25	76 6,501	69 4,730	
Rangoon	Apr. 25-June 26	120		
Indo-China	June 27-Aug. 21	233	193	Jan. 1-31, 1920: Cases, 42: deaths,
Saigon	May 10-June 13	9	2	40. Feb. 1-29, 1920: Cases, 41;
De	July 26-Aug. 15	5	4	40. Feb. 1-29, 1920: Cases, 41; deaths, 36. Mar. 1-31, 1920: Cases, 79; deaths, 70.
Italy:		_	_	Cases, 19, deaths, 10.
Catania	June 22-July 3	. 3	2	
East Java				Apr. 23-May 5, 1920: Cases, 7;
West Java— Batavia	July 22-Sept. 9	15	15	Apr. 23-May 5, 1920: Cases, 7; deaths, 7. Apr. 15-June 16, 1920: Cases, 8; deaths, 8. Aug.
	valy 22 coperation		100	5-25, 1920: Cases, 4; deaths, 4.
Mesopotamia:				Surabaya Residency.
Bagdad	June 1-30	6	. 3	
Mexico: Tampico	July 23-Sept. 27	4	3	
Vera Cruz	June 14-20	11	1	May 29-July 14, 1920: Cases, 49,
Γο	July 18-24	2	2	deaths, 29. Corrected state- ment: From outbreak in May
				to July 20, 1920—cases, 58;
Peru				deaths, 36. Mar. 1-31, 1929: Cases, 46; deaths,
Callao Do	Mar. 1-31	6 9	3	29. Apr. 1-30, 1920; Cases, 36; deaths, 13. In coastal depart-
Lima (city)	Mar. 1-31	5	3	ments.
Do	Apr. 1-30 Mar. 1-31	4	4	
Do	Apr. 1-30	1		·
Mollendo Paita	Mar. 1-31do	13 5	9 2	
Do	Apr. 1-30	5 2		
Salaverry	Mar. 1-31	4	3	
San Pedro Trujillo—Salaverry	do	6	1	
Do	May 31-June 29 Aug. 30-Sept. 5	1	2 11	
Russia:		_		Paramatana t
Batum Siam:	Sept. 28	••••••	•••••	Prevalent.
Bangkok	Apr. 25-June 5 June 28-Aug. 28	8	5	
Straits Settlements:	_	6	3	
SingaporeDo	Apr. 25-June 19	14	13	
Syria:	July 11-Aug. 7	3	5	
Beirut Turkey:	June 30	• • • • • • • • • • • • • • • • • • • •	••••••	Present.
Constantinople	July 25-Aug. 21	7	6	
Uruguay: Montevideo	June 1-30	1	1	
	VILLE A-UV	- 1	*	

#### Reports Received from June 26 to Nov. 12, 1920—Continued.

#### SMALLPOX.

♪ lgeria: Departments—			1	
		l	,	
	Wor 11 Aug 21	51	1	City of Algions Apr 1 20 1000.
Algiers Constantine	May 11-Aug. 31	18	J	City of Algiers, Apr. 1-30, 1920: 1 case. July 1-Aug. 31, 1920:
Cran	June 1-Aug. 31 May 11-Aug. 31	168	]	Cases, 4; deaths, 2.
Austria	May 11-21ug. 01	100		May 30-June 26, 1920: Cases, 27.
Vienna	May 30-June 26	1		June 27-July 10, 1920: Cases, 22.
Azores:		_		1
Ponta Delgada	July 17-Aug. 20	7		
St. Michaels	Aug. 21-27	1		From Madeira.
Bolivar:			_	<b> </b>
La Paz	May 2-June 30	10	8	1
Do	July 1-Aug. 31	11	5	
Brazil:	1 - 07 7 00			
Bahia	Apr. 25-June 26	5	5 2	
Do Pernambuco	June 27-Aug. 21	20 114	3	
Do	Mar. 29- June 27 June 30-Sept. 19	210	3	
Rio de Janeiro	Apr. 11-June 26	431	6	•
Do	June 27-Aug. 21	45	ğ	
Santos	Mar. 21-28.	ĩ	1	
Sao Paulo	June 21-27		1	
Do	June 27-Aug. 8		2	
British East Africa			1	Mar. 1-31, 1920: Cases, 107. Apr 1-30, 1920: Cases, 69. Reported
Mombasa	May 2-22	2	1	1-30, 1920: Cases, 69. Reported
Do	July 11–17	3		by native inspectors.
Nairobi	May 23-June 26	11	1	
Do	Aug. 1-21	5		
Bulgaria:		_	j	· ·
Sofia	July 11-17	1		
Canada:				
Alberta—	Tune 2 0	1		
Calgary	June 3-9	6		
Do British Columbia—	July 4-Oct. 9	U		
Vancouver	May 16-Aug. 28	4		
Manitoba—	May 10-Aug. 20	7		
Winnipeg	May 29-June 5	3		
Do	Aug. 8-21	2		
New Brunswick—	g			· ·
Bonaventura and Gaspe	Aug. 1-31	1		
Counties.				
Carleton County	Sept. 19-25	1		
Gloueester County	May 31-June 26	5		
Do	Sept. 19-Oct. 9	3		
Queens County	July 4-Aug. 21	7		Cont 96 Oat 9 1090: Casas 1
Restigouche County	Tule 1 21	•••••		Sept. 26-Oct. 2, 1920: Cases, 1.
Campbellton Nova Scotia—	July 1-31	7		
Halifax	do	2		
Sydney	May 31-June 26	2		
Ontario—				
Cornwall	June 25-30	2		
Fort William and Port	July 11-Oct. 2	4		
Arthur.			1	
Hamilton	June 13-Oct. 30	9		
Kingston	May 31-June 19	4		
North Bay	June 23-2	1		•
Do	July 11-Oct. 23	8		
Ottawa	June 6-26	32		
Do	June 27-Oct. 30	106	•••••••	
Presentt	Apr. 18-July 31	33	1	
PrescottDo	July 11-17 Aug. 1-14	1		Present at Cardinal and Brock-
Toronto.	June 6-19	13		ville.
Do	June 26-Sept. 25	26		
Windsor	Aug. 22-Sept. 23	5		
Prince Edward Island—		١ ،		
Charlotte Town	Aug. 12-Oct. 13	2		
Quebec—		- 1	1	
Montreal	June 13-19	1		
Do	July 4-Aug. 7 June 27-Oct. 2	4		
Quebec	June 27-Oct. 2	9 1		

## Reports Received from June 26 to Nov. 12, 1920—Continued.

#### SMALLPOX-Continued.

SMADEL VA—Continued,					
Place.	Date.	Cases.	Deaths.	Remarks.	
Canada—Continued.					
Saskatchewan-			1		
Moose Jaw	June 26-30	6 3			
Do Regina	July 25-Sept. 25 June 2-30.	ĭ			
Do	Oct. 3-23	8			
Saskatoon Ceylon:	Sept. 5-Oct. 23	8		• •	
Colombo	May 9-June 5 Aug. 29-Sept. 18	2 9	3		
Chile: Antofagasta	May 17-23			1 case in interior.	
China: Amoy	May 2-Sept. 18 May 9-June 13	4 3	15		
Antung Do	June 21-27	ľ	3		
ChungkingDo	May 2_Tune 0	<del>-</del>		Present.	
Do	July 11-Sept. 11 May 9-29. July 26-Sept. 25			Do.	
Foochow. Do	Inly 26-Sept 25	• • • • • • • • • • • • • • • • • • • •	•••••	Do. Do.	
Hankow	June 20–26	2			
Harbin		•••••		Year, 1919: Cases, 79. On Eastern Chinese R. R. line. At	
Hongkong	Apr. 4-June 26	19 2	\ 15 2	ern Chinese R. R. line. At	
Mukden	June 27-July 17 July 19-Aug. 21 May 9-June 5	2	2	other stations, 109 cases. Present.	
Nanking	May 9-June 5			Do.	
Do	July 4-Sept. 25	•••••	•••••	Do.	
Tientsin	May 25-31 June 16-29	2	•••••		
Tsinanfu	May 9-15	ī			
On (TT)				1	
Choren (Korea):- Chemulpo	Mar. 1-June 30	69	40	•	
Do.	July 1-31	18	8		
Fusan	July 1-31 Mar. 1-June 30 July 1-31	24	6		
Do Seoul	Mar. 1-June 30	358	1 86		
Do.	July 1-31	15	6		
Colombia:					
BarranquillaSanta Marta	May 13-July 3 May 31-Oct. 16	•••••		Epidemic. Present.	
Antilla	Aug. 24-Sept. 13	2			
Habana	July 4	1		From steamship Frank Hennis, from Jamaica. Arrived Santi- ago June 30, 1920.	
	•			from Jamaica. Arrived Santi-	
Matanzas	Aug. 15-21	1	1	In vicinity, at Aguacate, Aug. 1-7, 1920: Cases, 12.	
Cyprus				1-7, 1920: Cases, 12. August, 1919: Cases, 242; deaths, 54.	
zechoslovakia:		l	1	<b>02.</b> ,	
Moravia	Feb. 1-2	68			
Danzig	June 20-July 17	9	2		
Alexandria	May 14-June 29	53	19		
Do	Tuno 25_Sont 30 1	13	4		
CairoDo	Apr. 2-June 24	62	23		
Port Said.	Apr. 2-June 24 July 2-Aug. 5 Apr. 2-June 24 July 2-15	22	8		
Do	July 2-15	2	i		
rance: Brest		1			
Cette.	May 15-31	. 1	····i		
Nice	June 24–30		î l		
Paris	May 1-10	3 .		71	
ermany				Feb. 22-June 12, 1920: Cases, 720. July 11-24, 1920: Cases, 26; deaths, 6. Additional cases, June 13-July 10, 1920, 24; deaths, 2.	
ireat Britain:		ŀ	1	www.	
Edinburgh	Aug. 29-Sept. 4	. 7	1		
Glasgow	May 25-June 26	136 171	22 48		
Liverpool	Aug. 29-Sept. 4 May 25-June 26 July 4-Oct. 16 July 18-Sept. 11	111 Z	40		
London	June 13-July 19l	14 .			
Manchester	Aug. 22-28	5 <sup>1</sup> .			

#### Reports Received from June 26 to Nov. 12, 1920—Continued.

#### SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:	N. 01 Y 07			
Saloniki	May 31-June 27 July 25-Aug. 15	: 1		
Haiti:	July 20-Aug. 15	1 .	1	
Port au Prince	Sept. 22	. 5	i	
India		-		. Apr. 11-May 22, 1920: Deaths, 7,743. May 30-June 26, 1920: Deaths, 3,864. May 9-15, 1920: Cases, 26; deaths,
<b>.</b>		Į	1	Deaths 3.884
Bombay	Apr. 26-June 26	. 103	45	May 9-15, 1920: Cases, 26; deaths,
<u> </u>	-	i	١.,	11.
Do Calcutta	June 27-Sept. 4	. 49 101		
Do	July 18-Sept. 18	9		
Do Karachi	May 2-June 12 July 18-Sept. 18 May 9-June 26 June 27-July 10	. 15		
Do	June 27-July 10	27	15	-
Madras Do	May 9-June 26	43	15	
Rangoon	June 27-Oct. 4 Apr. 25-June 26	35	14	July 1-31, 1920: Cases, 22; deaths,
Do	Aug. 8–21	. 5	2	4.
ndo-ChinaSaigon	May 10-June 13	12	3	Jan . 1-31, 1920: Cases,410; deaths,
Do	Aug. 3-Sept. 5		ľ	deaths, 119. Mar. 1-31, 1920:
		ŀ		101. Feb.1-29,1920: Cases, 625; deaths, 119. Mar. 1-31, 1920: Cases, 782; deaths, 114.
taly: Catania	July 12-Oct. 3	91	1	City and Province Sont 12-98
Catama	July 12-Oct. 3	1 31		City and Province, Sept. 13-26, 69 cases in district.
Genoa	May 17-23	12		In Province.
Do	June 14-27	20		
Do Messina	June 28-July 4 May 10-June 27	3 7	1	Province, May 10-June 27: Cases
2000		1	1	168; deaths, 27.
Do	June 28-Sept. 26	13	3	Province: Cases, 35; deaths, 3.
Milan	Mar. 1-May 31	3 7	5 3	
Palermo	May 11-Sept. 30	261	66	
Milan Naples Palermo Trieste	Sept. 25-Oct. 2	16	5	
Turin	May 23-June 20 May 11-Sept. 30 Sept. 25-Oct. 2 June 28-July 4	1		
amaica: Kingston				Previous report, "July 22-pres-
	•••••••	1	1	ent," was erroneous.
apan:	) f 0 T 00	٠.		
Kote	May 9-June 27 June 28-July 18	10	5 2	
Do Taiwan Island	May 1-June 20	40	11	
Do	June 21-July 20 Apr. 21-May 10	14	8	
Tokyoava:	Apr. 21-May 10	5	4	
West Java				Apr. 16-June 24, 1920: Cases, 56; deaths, 10. June 25-Sept. 9, 1920: Cases, 75; deaths, 17. Feb. 1-June 23, 1920: Cases, 2,519;
West JavaBatavia	Apr. 16-June 17	94	26	deaths, 10. June 25-Sept. 9,
Dougo-Slavia	July 9-Sept. 9	2	1	1920: Cases, 75; deaths, 17.
ugo-siavia		• • • • • • • • • • • • • • • • • • • •	•••••	deaths, 561.
ladeira:				
Funchal	June 20–26	•••••••••••••••••••••••••••••••••••••••	2	Cont 12 10 1 com
Do	July 18–24 May 1-June 30	•••••	3	Sept. 12-18, 1 case.
lesopotamia:	•	••••		
Bagdad	July 1-31	1		
exico: Ciudad Juarez	Aug 2-8	1		
Guadalajara	May 1-31	î		
Do	May 1-31 July 1-31	3		
Laredo	July 30	2	•••••••	
MazatlanSalina Cruz	May 19–25 June 1–30	5	1 3	
Do	Aug. 1-31	ĭ	1	
San Luis Potosi	May 31-June 6 !	••••••	.1	
Do Tampico	June 28-Oct. 16 July 1-31	••••••	11 5	
	-u.y 1-01	••••••	"	
ewfoundland:	~ l	1		
ewfoundland: Broad Cove	Sept. 4-10			
Broad CoveLadle Cove	Sept. 11-17	6		Deported at 2 other localities
Broad CoveLadle CoveSt. Johns	Sept. 11-17 June 5-11	3		Reported at 2 other localities. July 3-16: Present at 4 localities.
Broad CoveLadle CoveSt. Johns	Sept. 11-17			Reported at 2 other localities. July 3-16: Present at 4 localities.

#### Reports Received from June 26 to Nov. 12, 1920—Continued.

#### SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Poland				Jan. 1-31, 1920; Cases, 1,895;
Minsk District Porto Rico:	Jan. 1-31	1,052	228	Jan. 1-31, 1920: Cases, 1,895; deaths, 301.
CaguasPortugal:	Aug. 9-15	1		• ,
Lisbon Do	May 16-June 28 June 27-Oet. 9		8 20	
Portuguese East Africa: Inhambane	Sept. 12-18	1	1	
Lourenco Marques Russia:	do	2		June 1-Aug. 31, 1920: Deaths, 1.
Riga. Vladivostok.	Aug. 1-Sept. 23 Jan. 1-June 30	252	78	May, 1920: Cases, 5. June, 1920: Cases, 7.
Spain: Do	July 1-31	2		,
Barcelona	May 19-June 12 June 18-Sept. 29		4 20	i
Corunna Malaga	July 16-Oct. 2		2	Aug. 1-31, 1920: Deaths, 3.
Orense, Province	Sept. 6	15	3	Present.
DoVigo	July 4-Oct. 2 May 31-June 26	îĭ	3	
Do Sweden:	July 18-Oct. 2		10	
Stockholm Switzerland:	Sept. 19-25	2		
GenevaSyria:	May 9-15	7		
Aleppo	Aug. 29-Sept. 4	•		In city and in Armenian orphanage.
funis: Tunis	May 25-June 27	6	5	<b>450.</b>
Do Furkey:	June 28-Oct. 10	38	12	
Constantinople	May 16-June 19 June 20-Aug. 28	7 12	· • • • • • • • • • • • • • • • • • • •	
Do Jnion of South Africa: Johannesburg	May 1-31	23		,
Do On vessel:	July 1-31	15		
S. S. Henry R. Mallory	Oct. 2	1		At Habana from Spanish port. Vessel left Vigo, Spain, Sept. 19.
,	TYPHUS	FEVER		
lgeria:	ĺ			
Departments—	May 11-Ang. 31	44		
Constantine Oran	May 11-Aug. 31 May 21-Aug. 31 May 11-Aug. 31	20 352		
ustria	Feb. 15-June 26	65		Feb. 15-June 26, 1920: Cases, 67.
elgium:	Sept. 11-Oct. 9	9	1	
olivia:	May 2-June 30	1	17	
La Paz Do	July 1-31		12	
Ceara	Apr. 25–June 12 July 11–24		4 2	<i>e</i>
uigaria:	June 20–25	2	-1	
hile				Mar. 1-June 30, 1920: Cases 1,338, deaths, 244.
AntofagastaCaleta Coloso	July 5-11	.	2	Present.
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Mar. 8-June 28	31	39	
Concepcion	Tuna 20_Qant 20 !	,		
Do	June 29-Sept. 20 Aug. 8-15 Mar. 1-June 30	1 470	13	Sept. 10: Cases, 186,

## Reports Received from June 26 to Nov. 12, 1920—Continued.

#### TYPHUS FEVER-Continued.

Place.	Date.	Cases.	Deaths	Remarks.
China:	-	1		
Antung	July 12-Oct. 3	. 33	1	Report week ended July 31, 1920, not received.
Eastern Chinese Railway Harbin	Aug. 9-Sept. 28	5		At stations on line
				On Eastern Chinese Railroad line. Year 1919: Cases, 301. At other stations on line, 789
Chosen (Korea):				cases.
ChemulpoSeoul	June 1-30 Mar. 1-Apr. 30	3 4		
CzechoslovakiaLeipnik	Feb. 22-28	·····i		. Feb. 1-28, 1920: Ceses, 88; deaths, 7. Quarantine station.
Danzig. Do.	June 20–26 July 25–31	1	·····i	. Feb. 27-Mar. 27, 1920; Cases, 16.
Egypt: Alexandria	May 7-June 24	338	86	
Do	June 25-Oct. 7 Apr. 2-June 24	141 867	62 370	
Do	July 9-22	58	41	
Port Said	Apr. 9-June 24	112	53	. Feb. 22-Mar. 27, 1920; Cases, 22;
				Among troops, 4; among persons from Poland, 8. Mar. 28- June 28, 1920: Cases 96. July 11-24, 1920: Cases, 2. Addi- tional cases, June 18-July 10, 16.
Great Britain: Dublin	May 23-June 19	3	1	,
Do Dundee.	May 23-June 19 Oct. 16-22 July 4-10	23 1		·
Glasgow. Queenstown.	May 30-June 5 Aug. 1-7.	i	i	
Greece: Athens.	June 27-July 21	•	5	
Drama Patras	July 12-18 June 29-July 4	1		·
Piræus. Saloniki.	June 29-July 5		1	
D0	Apr. 12-27 June 28-Sept. 12	384 128	42 54	
Guatemala: Guatemala City	Aug. 9-15		1	
Hungary. Budapest	Jan. 10-May 23	27		Jan. 19-May 30, 1920: Cases, 54.
Italy: Catania	July 10–17 May 16–22	3		
Trieste	May 16–22 June 13–Sept. 21	159	13	
Japan:	Aug. 17-23	7	20	
NagasakiDo.	May 25-June 27 Sept. 13-19	2	1	
Jugo-Slavia	Sept. 13-13	1	• • • • • • • • • • • • • • • • • • • •	Feb. 1-June 23, 1920: Cases, 691;
ava:		1		deaths, 92.
East Java— Surabaya	June 10–16	1		
West Java— Batavia	May 28-June 30	5	1	•
Mesopotamia: Bagdad	Aug. 1-31	1		•
Mexico: Chihuahua	May 31-June 6		1	
Nogales	Aug. 9-14. June 8-July 8.	2		Propert
Do	July 2-Aug. 15		2	Present. Sept. 19: Present.
Warsaw.				Jan. 1-Mar. 31, 1920: Cases, 87,910; deaths, 19,733.
erbia.		•••••		Jan. 1-Feb. 29, 1920: Cases, 911; deaths, 117.
		•••••	••••••	Mar. 14-Apr. 10, 1920: Cases, 181; deaths, 23.
Portugal: Oporto	Apr. 4-June 24	15	6	
Do	Aug. 1-Oct. 2	5 I.		

## Reports Received from June 26 to Nov. 12, 1920—Continued.

## TYPHUS FEVER—Continued.

			<del>,</del>	
Place.	Date.	Cases.	Deaths.	Remarks.
Russia: Riga Simferopol	June 25-Sept. 23			JanJune, 1920: Cases, 3,955;
Vilna	Sept. 28	35		deaths, 500.
Vladivostok	May 1-21. July 1-Aug. 31	22		Jan. 1-Apr. 30, 1920: Cases, 1,264;
Do	July 1-Aug. 31	36	4	deaths, 144.
Spain: Barcelona	July 9-15 June 1-30		1 1	
Geneva	June 28-July 4	1	1	<b>f</b>
Tunis: Tunis	May 24-June 27	36	18	
Do	July 6-Aug. 31	1	1	1
Turkey: Constantinople Do	May 16-June 12 June 19-Oct. 9	. 27 21		
Venezuela: Maracaibo	July 21-27		1	
	YELLOW	FEVE	R.	,
Brazil:				
BahiaColombia:	May 23-June 19			
Buenaventura	June 3	1	1	Ost 05 1000; Downst
GuatemalaLos Amates	Aug. 5-Sept. 1	10	3	Oct. 25, 1920: Present. Aug. 17: Present at several local- ities.
QuiriguaVirginia	Aug. 9-15 Sept. 10	1		Present. Station on railway from Puerto Barrios to Guatemala City, 45 miles from Puerto Barrios.
Mexico: Culiacan	Oct. 16.			Present.
EmpalmeGuaymas	Oct. 12do	1	1	Previously reported, 2 deaths;
Mazatlan	Oct. 13	1	1	later information shows 1 death.
Progreso	July 30	4	2	July 30-Aug. 18, 1920: Cases, 5;
Puerto Mexico	Aug. 24–27.	• 1	1	deaths, 3. Case arrived Aug. 23 on s. s. Mel- chor Ocampo from Progreso. Previously reported P. H. R.,
San BlasTampico	Sept. 13 Sept. 17	1		Sept. 10, 1920.
Do	Sept. 17 Sept. 21-Nov. 4	3	2	
Tuxpam	Sept. 1		2	Aug. 26-Sept. 1, 1920: Cases, 5;
Vera Cruz	June 22. July 19-Oct. 31	76	2 61	Aug. 28-Sept. 1, 1920: Cases, 5; deaths, 5; Oct. 21-27, 1920: Cases, 27. Aug. 28-Oct. 27,
Do Yucatan State— Campeche	Oct. 13	1	1	1920: Cases 112; deaths, 59. In sailor from s. s. Yumuri. The vessel left Vera Cruz Oct. 1 for Campeche and New Orleans.
Hocoba	Sent 8	8		vessel left Vera Cruz Oct. 1 for Campeche and New Orleans. In interior.
Hunucma Sotuta	Sept. 8 Sept. 8-Oct. 11 Sept. 8	2 1	1 1	Do. Do.
Peru			•••••	Mar. 1-31, 1929: Cases, 228; Apr.
Calles	Am 1 20	1		1-20, 1920: Cases, 64. At quarantine station. From
Callao. Catacaos. Do.	Apr. 1-30 Mar. 1-31 Apr. 1-30	14 2		s. s. Huallaga.
La Huaca	Apr. 1-30 Mar. 1-31	9		
Do	Apr. 1-30	5		
Morropon	Apr. 1-30do Mar. 1-31	37		e**
Munuella	M8r. 1-31	12 81	••••••	
Paita	do	14	••••••	•
Do Piura	Mar. 1-31	i		
Do	Apr. 1-30 Mar. 1-31 Apr. 1-30	4 1		

## Reports Received from June 26 to Nov. 12, 1929—Continued.

#### YELLOW FEVER-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Peru-Continued. Balitral. Sullana De	. Mar. 1-31do	2 9		
Salvador	June 20-26. Aug. 1-21. May 22-June 24	1 6 49	1 2 17	Sept. 12-18, 1920: 1 case; Aug. 22- Oct. 11;1920: Cases, 3; deaths, 1. Fatal cases were in Europeans.
On vessels: S. S. Haraldshaug	. Sept. 28	1		At Pensacola, Fla. From Puerto Barries, Tampico, and Vera Cruz.
S. S. Soestdijk S. S. 4 umuri	. Sept. 11 Oct. 13.,	1	1	At Quarantine, La. At Campeche. Vessel left Vara Cruz Oct. 1, 1920.