PUBLIC HEALTH REPORTS

VOL. 31 OCTOBER 6, 1916 No. 40

DISEASE AND WORKMEN'S COMPENSATION.

AN EMPLOYEE WHO SUFFERS FROM LEAD POISONING IS NOT ENTITLED TO COMPENSATION UNDER THE CONNECTICUT LAW.

The Supreme Court of Errors of Connecticut has decided that the Connecticut workmen's compensation law does not provide for payments to an employee who suffers from an occupational disease.

An employee of the American Steel & Wire Co. was incapacitated for a short time by lead poisoning contracted in the course of his employment. The court decided that he was not entitled to compensation.

The opinions of Mr. Justice Beach, in delivering the decision of the court, and of Mr. Justice Wheeler, dissenting, are interesting discussions of the question presented to the court. They are published on pages 2797 to 2810 of this issue of the PUBLIC HEALTH REPORTS.

ROCKY MOUNTAIN SPOTTED FEVER IN CALIFORNIA.

In May, 1916, Dr. Frank L. Kelly, assistant epidemiologist of the bureau of communicable diseases of the California State Board of Health, made an investigation in Modoc and Lassen Counties, Cal., to determine the prevalence and geographic distribution of Rocky Mountain spotted fever in those counties.

His report, which was made to the director of the bureau of communicable diseases of the California State Board of Health, shows that he had reports of 38 cases, 6 in Modoc County and 32 in Lassen County. The following table, the figures of which are taken from his report, shows the number of cases and the mortality by years:

Year.	Modoc County.		Lassen County.		Year.	Modoc County.		Lassen County.	
	Cases.	Deaths.	Cases.	Deaths.		Cases.	Deaths.	Cases.	Deaths.
1903	1				1913			2	
1904	1	1			1914			2	
1908			1	1	1915			11	2
1909	1		2		1916 [1]	2		8	
1911			3	1					
1912	1		3	1	Total	6	1	32	5

[1] The figures for 1916 are not complete.

His conclusions are as follows:

1. Rocky Mountain spotted fever has existed in California for a much longer period and to a far greater extent than has hitherto been supposed.

2. There are probably five main infected areas, one in Modoc County and four in Lassen.

3. The disease is not as severe in California as in Montana, nor as light as in Idaho.

4. The infection probably entered California through Nevada rather than Oregon.

ARSENIC IN "CHEMICALLY PURE" ZINC.

By CHESTER N. MYERS, Organic Chemist, Division of Pharmacology, Hygienic Laboratory, United States Public Health Service.

In a study, by means of the Marsh test, of the arsenic content of various body fluids after the injection of salvarsan and arsenobenzol, it became necessary to secure a new supply of metallic zinc, the old supply, which had been proven to be arsenic-free, having been exhausted. Eight samples, which purported to be chemically pure, were examined. These all contained arsenic, though the statements on the labels indicated freedom from this element, the following designations being used: "As, Nil"; "As, none." Even after specifications were submitted requiring arsenic-free zinc, samples of impure zinc were received. The analyses which were being made dealt with amounts of arsenic varying from 1 to 7 parts per million; whereas in 10-gram samples of zinc, marked as previously indicated, amounts varying from 10 to 100 parts of metallic arsenic (1 to 10 parts per million of zinc) were found. The statements on the label of each of these samples indicated that the zinc had been analyzed and found to be free of arsenic. The control tests were carried out with 40 grams of zinc and four times the amount of sulphuric acid used in testing the zinc samples. In no case was any trace of arsenic observed. However, this is no indication that there was no arsenic present in this control sample. It does mean, however, that arsenic was not present in amounts as large as one part per million in 40 grams of zinc, since the procedure employed was capable of detecting amounts as small as this.

During the past two years, conditions have forced the manufacturers of chemicals to meet extraordinary demands. Those who use their products, either in the manufacture or the analysis of foodstuffs, should see to it that those chemicals and reagents are not contaminated; of this fact the label is not always sufficient or final evidence.

While in medicolegal examinations it is customary to control all procedures most rigidly, and doubtless chemists doing this kind

of work always take proper precautions in regard to the purity of their reagents, this note is intended to call the attention of analysts in food, drug, and public-health laboratories to the necessity, when arsenic is being sought, for examining all chemicals for themselves, irrespective of the fact that they are using "analyzed" chemicals.

AMERICAN PHARMACEUTICAL ASSOCIATION.

MEETING HELD AT ATLANTIC CITY, N. J., SEPTEMBER 5–9, 1916.

By MARTIN I. WILBERT, Technical Assistant, Hygienic Laboratory, United States Public Health Service.

In addition to the meeting of the association itself, and the several sections into which the association is divided for its scientific work, a number of committees of the association met and transacted business of interest to pharmacy generally. On the whole, this meeting presented ample evidence of a growing appreciation of the importance of pharmacy as a factor in the safeguarding of public health and the fact that this appreciation is being emphasized in a variety of ways.

The first general session of the association was held on Tuesday morning, September 5, at which time the president of the association, Mr. William C. Alpers, of Cleveland, presented his address. He was followed by Dr. Solomon Solis Cohen, of Philadelphia, who voiced the appreciation, by medical practitioners generally, of the work of the American Pharmaceutical Association in developing the National Formulary as a book of standards for the less well-known drugs and preparations. Among the more interesting matters discussed in the several section meetings was "The sale and use of narcotics," by Dr. H. C. Wood, jr., of Philadelphia. Dr. Wood expressed the opinion that the Harrison antinarcotic law had reduced the sale of narcotics by fully 50 per cent. He also expressed the belief that the solution of the problem of narcotism lies in educating the general public to the danger of habit-forming drugs, and, in addition to this, strict adherence by physicians and druggists to the policy of using and selling narcotics only in cases where nothing else will suffice.

In the section on scientific papers Prof. John Uri Lloyd, of Cincinnati, presented a practical demonstration of the applicability of fuller's earth, as an adsorbing medium for separating alkaloids and other active constituents from solution. The new editions of the Pharmacopœia and of National Formulary were discussed from various points of view, and by a number of contributors, all of whom expressed their disappointment at the delay in the publication of these two books.

Many of the committee reports presented at this meeting were of more than usual interest. The committee on proprietary medicines presented a report in which the general acceptation of the report presented by the commission on proprietary medicines a year ago was reviewed at some length and in which it was pointed out that the 10 declarations adopted in 1915 have been indorsed by the National Wholesale Druggists Association, and also by the Proprietary Association of America. The latter association has even gone so far as to virtually embody all of the requirements outlined in the declarations offered a year ago, in the by-laws of the Proprietary Association, as a requirement for membership, and has appointed a special committee which is now at work comparing the preparations made by members of the Proprietary Association with the declarations as outlined by the commission on proprietary medicines of the American Pharmaceutical Association. The commission this year presented a supplementary report which embodies a general discussion of the question regarding publicity of formulas, but the members of the commission are, as yet, not agreed among themselves as to whether such a requirement should be indorsed at the present time.

The commission did, however, present two additional declarations that were subsequently approved by the council, the section on education and legislation, and later by the association itself in general meeting. These two declarations are as follows:

(1) *A legitimate field for certain proprietary remedies.*—There is a legitimate field for ready-made or package remedies intended for the domestic treatment of common ailments, provided they are appropriate for use in the particular affections for which they are recommended, and are not deceptively labeled or advertised, or otherwise improperly exploited.

(2) *Traditional right of the pharmacist to deal in such remedies.*—It is the professional right of the pharmacist, sanctioned by custom and tradition, to keep such remedies in stock, whether manufactured by himself or by others, and to supply them to the general public on demand. In meeting the demand of the public for ready-made or package medicines, the pharmacist should carefully refrain from usurping the function of the physician, especially in regard to diagnosis.

The committee on national formulary had several meetings during which corrections to the National Formulary were discussed, a list of corrections was proposed, and a report to the association outlined. In the course of discussion it developed that up to the present time only one possibly objectionable error in stating quantities had been discovered, and this was not a serious one. Several minor corrections in nomenclature were made and it was decided to send the list of corrections to the pharmaceutical journals. In regard to the further work of the committee on national formulary, it was recommended that the present committee be continued until 1919, at

which time it is to present to the parent association the material for a supplement to the National Formulary and also an outline for the general principles to be used for the guidance of the committee in the next revision. The committee on standards, which committee was intrusted with the preparation of Part II of the National Formulary, also held a meeting and prepared a report for presentation to the council. This report was later accepted and the committee was continued with instructions to report perfected monographs to the association at a later date.

The committee on recipe book had a protracted meeting at which a plan of procedure was proposed and adopted. This plan was subsequently outlined to the association through the section on practical pharmacy and dispensing and was unanimously indorsed.

A very large number of suggestive papers, of interest from a public health point of view, were presented and discussed. Several at least of these papers contain suggestions that are deserving of immediate inquiry and in the event that these suggestions are found to be based on fact, adequate warning should be given to desist from practices that are now very widespread.

Probably the more important of these suggestions was contained in a paper by R. F. McDonald, of New York, the paper being entitled: "A medical comparison of castor oil and mineral oil." Dr. McDonald stated, in effect, that a long series of experiments on animals had convinced him the mineral oil was far from being the innocuous substance that it is supposed to be. He reiterated what has already been known, that in no case can all of the mineral oil ingested be recovered in the feces, and he concludes from this and from other observations that he has made that the mineral oil ingested is to some extent adsorbed, that this adsorbed mineral oil may, and he believes does, act as an irritant, that it produces gastrointestinal disturbances, and that it may cause tissue proliferation simulating cancer.

E. V. Howell and E. V. Keyser presented a report on hexamethylenamine, in which they expressed the opinion that hexamethylenamine is not a uniformly safe drug to use, that it has many and varied deleterious actions, and that the only safe use for it is as a fuel or a substitute for solid alcohol for heating water or sterilizing material that may be sterilized by means of an open flame. This latter use of hexamethylenamine appears to be novel and offers economic possibilities in that it or a similar combination of ethyl alcohol may possibly be developed as a practical substitute for solidified alcohol. A demonstration of the flame produced by hexamethylenamine showed that a 5-grain tablet would burn readily for about seven minutes, generating a rather high degree of heat.

Some additional papers of current interest presented at this meeting are: "Drug-plant culture," by W. W. Stockberger; "The development and use of diagnostic reagents," by F. W. Steward; "A safe bichloride tablet," by L. S. Levy; and "The physiological standardization of cannabis," by W. A. Pearson. In connection with this paper, it was pointed out that dogs of the same breed and approximately the same size and weight varied considerably in their susceptibility to cannabis, and that the official biological test for cannabis was not as satisfactory as one might wish. Bearing on this same question of physiological standardization, Dr. George W. Rhodes presented a paper on "Crystalline strophanthin and the variability of ouabain." In this paper the author asserted that the physiological properties of ouabain are far from uniform and suggested that an acceptable standard for ouabain be perfected. F. B. Kilmer, of New Brunswick, N. J., presented a paper on the alkaloids of amarylis "Belladonna" and asserted that the chief alkaloid of this plant of the lily family appears to be closely related to, if not identical with, hydrastine.

In the section on education and legislation the work of the volunteer conference for drafting a modern pharmacy law was discussed at some length, and the proposed draft was submitted with some corrections that were recently offered. In this same section a paper by John E. Leverty discussed "The publication of drug content in all ready-made medicines" and severely criticised several of the papers that have recently appeared in the Public Health Reports.

The report of the publication committee of the American Pharmaceutical Association called attention to the fact that the United States Public Health Service had been authorized to prepare "A Digest of the Pharmacopœia and the National Formulary." A number of the members present expressed themselves as being pleased that this work is to be done and inquired as to when this digest would be ready for distribution.

The suggestion first made in Public Health Reports, 1914, volume 29, page 3102, and reviewed in the same journal, 1916, volume 31, page 513, to provide for the systematic reporting of sales of alcohol in prohibition and local-option territory was discussed by a number of the members present. The opposition to the proposition on the part of some, no less than the indorsement of it on the part of others, would serve to indicate that the proposition is not alone practical and timely, but that, developed as it might be, it would go far to establish the practive of pharmacy in America on a professional plane equal to, if not above, that in any other country of the world.

The next meeting of the association is to be held in Indianapolis in 1917, the exact date to be determined by the council.

THE PHYSICAL CARE OF RURAL SCHOOL CHILDREN.[1]

By TALIAFERRO CLARK, Surgeon, United States Public Health Serivice.

An officer connected with the recruiting station of the United States Marine Corps, New York City, has been quoted in a recent publication [2] to the effect that only 316 of 11,012 applicants for enlistment in this branch of the public service were up to the required physical standard. Furthermore, it has been noted by observers in other countries that, in the case of volunteers for military service, rejections because of physical unfitness were in direct relation to the number of years spent in the school. Although it is not claimed that these observations hold true for all sections of the country, they do serve to draw attention to the fact that large numbers of individuals in the country have not attained the highest individual efficiency, and that the schools might be responsible in a measure for such lack of development. This is all the more evident when it is recalled that the greatest number of rejections for enlistment on account of physical defects were due to abnormalities of physical development, defective vision and hearing, heart disease, faulty teeth, and postural defects. These defects are in a large measure preventable, or at least controllable, depending upon their prompt recognition during childhood, the period in which so many of them have their origin. It is for this reason that the health supervision of school children is so necessary.

Intensive studies of rural school conditions conducted by the Public Health Service have revealed a special need of health supervision of rural school children because: (1) They constitute 60.7 per cent of the total school enrollment of the country; (2) they are largely denied the medical attention of specialists such as may be had in hospitals and clinics in cities; (3) they can not be protected en masse by health laws as is the case in urban communities; and (4) they are more unduly affected by endemic diseases which diminish vital resistance and exercise an injurious influence on physical and mental development, such as malaria, hookworm, and pellagra.

The needs indicated for the physical care of rural school children are quite plain. The first of these is to increase vital resistance through measures designed to promote physical development. A large proportion of the hampering physical defects observed in later life had their origin in childhood, at a period when their early recognition gives greatest hope of correction. Before these conditions can be recognized and corrected, however, it must be known how the child grows, what are the laws governing physical development, what

[1] Read before the Section on Children, National Conference of Charities and Correction, Indianapolis, Ind., May 15, 1916.

[2] Physical Preparedness. George J. Fisher, M. D.

are the physical averages of the sexes for the different age periods, and how these averages are modified by racial and environmental influences in different communities. Finally, the school itself should be made a place in which the healthy child may grow in a normal manner, and where the best development of the weakened child may be secured. In this connection we have recently compiled the physical averages obtained during an intensive survey by the Public Health Service of all the rural school children of Porter County, Ind. It was found that the relative physical development of boys and girls varied at different age periods. The greatest annual increase in height of the boys was between 9 and 10 years of age, 2.5 inches; between 14 and 15 years of age, 2.7 inches; and between 15 and 16 years of age, 2.5 inches. In the case of girls it was between 9 and 10 years of age, 2.7 inches; and between 12 and 13 years of age, 2.6 inches.

The greatest annual increase in weight of boys occurred between 15 and 16 years of age, 14.8 pounds, and in girls between 14 and 15 years of age, 10.7 pounds.

A marked decline in the rate of growth was shown by the physical measurements of girls at the 14 and 15 year age periods, which about corresponded to the time of the full establishment of the menstrual functions.

Variations in the growth of the child call for great expenditures of physical and mental energy at certain age periods. Great care must be exercised in the school at this time to maintain correct postures, provide suitable exercises and adapt the curriculum to the special needs of the child in order to secure the best physical development.

Compared with the records of children in most urban centers,[1] the boys of this county were below the average height at the 6 to 7, 7 to 8, 8 to 9, 11 to 13, 13 to 14, 15 to 16, and 16 to 17 year age periods. The girls were under mean height at the 12 to 13, 15 to 16, and 16 to 17 year age periods. The deficiency ranged from 0.7 to 2.3 per cent among boys and from 0.2 to 2.8 per cent among girls. The weight of boys was below the average at the 7 to 8, 9 to 10, 10 to 12, and 14 to 15 year age periods, and that of the girls at the 7 to 8, 12 to 13, 13 to 14, and 15 to 16 year age periods. The deficiency in weight varied from 0.2 to 5.9 per cent in boys and 0.6 to 8.9 per cent in girls.

The important consideration in connection with the under physical development observed in the rural school population of this county was to determine the cause. Malaria and hookworm are not present in this community; pellagra is unknown, and there is but a limited prevalence of tuberculosis and typhoid fever. These diseases, therefore, are eliminated as causative factors. On the other hand, our

[1] A Manual of the Diseases of Infants and Children. John Ruhräh, M. D.

observations tend to show that the habitual diet of these children was largely responsible. For example, the breakfast of 40 per cent of them was composed almost exclusively of carbohydrates, and but 60 per cent had a mixed diet of carbohydrates and proteids. Furthermore, 57 per cent used coffee, only 15 per cent drank milk, and 1.16 per cent did not habitually eat breakfast. The need is plain, therefore, for the general establishment of domestic-science classes in the schools and the teaching of food values and food preparation. The services of cooperative agencies could also be profitably employed for the purpose of extending this instruction to the home.

Furthermore, no suitable facilities for play were provided and no systematic physical exercises were practiced at any of the rural schools of the county. The beneficial influences of these on health and physical development are now matters of common experience. Their absence may account in part for the subnormal physical development of a number of these children.

Ranking in importance with measures intended to increase vital resistance through maintenance of the normal physical development of a school child, are those directed to the discovery and correction of physical defects. The relative frequency of physical defects among rural, as compared to urban, school children, according to our observation and the percentages given by Cornell,[1] are as follows:

	Rural.	Urban.
	Per cent.	*Per cent.*
Adenoids	11.5	12 to 24
Defective hearing	12.1	5
Defective teeth:		
6 to 14 years of age	68.5 to 31.2	.....
15 to 18 years of age	20.2 to 16.1	.....
Primary grades	.....	50 to 75
Grammar grades	.....	10 to 30
Diseased tonsils	15.4	6 to 12
Refractive errors requiring glasses	6.7	28

Physical defects among rural school children are potentially of more serious consequences than those among children in cities. This is due to the limited medical facilities in most rural districts and in part to poorly constructed and equipped school buildings. Many examples illustrative of this observation have come under our personal notice. Witness the case of a small child between 6 and 7 years of age who, figuratively speaking, was standing on the edge of a threatening volcano, so far as life was concerned, by reason of a neglected inflammation of the middle ear. The otoscope revealed a slit in a very congested ear drum through which pus was oozing in great quantity. Neglect of this condition leads to deafness and not infrequently to death. The parents of this child were unaware of its

[1] Health and Medical Inspection of School Children. Walter S. Cornell.

dangerous condition. Cases like this and many similar cases occurring in rural schools remain unrecognized through the lack of medical supervision until too late to prevent destructive changes.

The faulty illumination so frequently observed in rural schools is largely responsible for much of the impaired vision encountered. Recent measurement of the desk illumination of an eight-room school on a cloudy day showed that the illumination of more than half of the desks in a number of the classrooms was less than one-third of that demanded by the lowest minimum standard. The effect of such faulty illumination is to promote eyestrain and to increase nearsightedness. The illumination of these classrooms could have been doubled by the proper tinting of reflecting surfaces; but the school authorities were without competent advice in this important detail of school construction. The need of such advice is largely responsible for many of the undesirable features of rural school life.

Furthermore, a number of rural school children were badly in need of glasses and had never been refracted. The rural school child can not step around the corner to an eye clinic and secure the free services of a specialist. These children are frequently found wearing glasses entirely unsuited to them, as was a girl with one eye hyperopic and the other myopic, who was wearing a farsighted lens in front of the nearsighted eye.

The rural school child is greatly in need of instruction in the care of the teeth and in need of adequate dental service. This is shown by the fact that 49.3 per cent of the children had defective teeth, 21.1 per cent had two or more missing teeth, and only 16.9 per cent had dental attention. Furthermore, 14.4 per cent of these children never used a toothbrush, 58.2 per cent used one occasionally, and only 27.4 per cent used one daily. It is now well recognized that defective teeth are responsible for a number of the bodily ills which materially reduce physical efficiency. Due attention to the care of the teeth in childhood will prevent their early decay in later life. Our investigations have revealed the highest percentage of children with defective teeth among boys from the fifth to the eleventh year of age, and among girls from the fifth to the tenth year of age. The neglect thus evidenced is accounted for by the ignorance of so many parents of the necessity of preserving the deciduous teeth as long as possible.

We have collected data relative to the occurrence of communicable diseases among rural children while attending school. The compilation of this material has not yet been completed. Sufficient evidence has been adduced, however, to indicate that the school is a factor in the spread of these diseases in rural communities, due largely to the fact that the children of different families are rarely in intimate

contact except in school. An undue prevalence of these affections is measureably responsible for an increase in the number of children with impairment of the organs of special sense. The control of communicable diseases in rural communities is urgently demanded, not only in the interests of the general health, but also because they endanger vision and hearing.

The investigations of the Public Health Service show certain problems of rural school life which require special consideration. For example: What is the remedy for the conditions just enumerated? How can the physical efficiency be increased? How can hampering physical defects be avoided? How is the control of communicable diseases to be brought about? How is improvement in rural school construction to be secured? The answer is (1) by abolishing school districts and establishing a county unit of school administration; (2) by establishing an efficient system of health supervision of school children; (3) by consolidating rural schools.

Of these, measures for the health supervision of school children are of prime importance for educational purposes and the protection of health. Unfortunately, only a small part of the rural school population of the country enjoys the benefits of such supervision. For example, in States where the laws are mandatory for the medical inspection of rural schools only 39.8 per cent of the total school enrollment is in rural districts; where they are permissive, 60 per cent; and where inspection laws do not apply, 61.4 per cent.

There are several reasons for this state of affairs—(1) the lack of a proper appreciation of such measures in rural communities; (2) the scarcity of persons in rural districts who are properly qualified for this service; (3) the financial inability of a number of rural communities to maintain an independent medical inspection service.

The interest of rural communities in this matter can best be secured through intensive school surveys. The value of this procedure lies in the fact that, by calling attention to unsuspected physical defects in their children and school conditions requiring attention, the necessity of some form of health supervision is brought home to parents. We have had practical experience of the educational value of such investigations through reports of an increased number of children seeking relief following surveys of this character.

The medical inspection of schools in rural districts is accompanied by a serious handicap, due to the impossibility, under existing conditions, of securing the services of a person properly qualified for this position. The appointment of a local practitioner is, as a rule, barren of results. He is unable to devote his whole time to this work, while the jealousy and quiet opposition of other local practitioners frequently render his efforts nugatory.

The requirements of a medical inspector are: (1) He should devote his whole time to this service and not engage in private practice or other calling that would interfere with proper discharge of the duties of this position; (2) he should be skilled in medical diagnosis, able to refract children for glasses when necessary, and qualified to advise with and assist the family physician when it is so desired; (3) he should have a thorough understanding of the principles of hygiene and the ability to apply them to school purposes.

The restricted financial resources of most rural communities preclude the offering of a salary commensurate with the attainments of a desirable school inspector. This difficulty can be overcome, in great measure, by combining the duties of the school physician with those of the district and the county or local health officer, with a salary equivalent to the combined salaries of the two positions. By so doing it will be possible for these communities to secure the full-time services of a trained sanitarian for health work of which school inspection forms a part. The health of the school children is essentially a part of the larger problem of the health of the community as a whole.

The possibility of rural school consolidation for the protection of the health of the children is an important consideration in the adoption of this measure. The sanitary requirements of school constructions can more readily be secured in the larger buildings of this type and the child thereby placed in a more healthy school environment. Furthermore, the concentration of a larger number of children in one building offers greater opportunity and facility for health supervision than are afforded by one-room schools.

Lastly, no system of health supervision will be effective without the cooperation of the parents. This can be secured through the employment of tactful school nurses to do follow-up work. The practical application of the principles of sanitation by an efficient nurse in time of sickness will do much toward educating parents regarding measures for safeguarding the health of their children. In addition, the cooperation of social workers and the formation of civic leagues and of home and school improvement associations among rural school children tend to a better understanding of good citizenship and of the obligations of the individual to the community, which in time should bring about improved social conditions and an increased efficiency of the individual.

PLAGUE-PREVENTION WORK.

CALIFORNIA.

The following reports of plague-prevention work in California were received from Senior Surg. Pierce, of the United States Public Health Service, in charge of the work:

WEEK ENDED SEPT. 2, 1916.

FEDERAL AND COUNTY INSPECTION SERVICE.

[For the enforcement of the law of June 7, 1913.]

Counties.	Number inspections.	Number reinspections.	Acres inspected.	Acres reinspected.	Acres treated.		Holes treated.
					Waste balls.	Grain.	
Alameda	.....	111	.....	29,455	.....	2,908	.....
Contra Costa	1	68	160	21,192	.....	5,202	.....
Stanislaus	258	82	27,330	22,970	669	11,272	1,705
San Benito	37	56	9,830	27,033	.....	25,921	.....
Santa Cruz	.....	32	.....	5,742	.....	3,508	.....
Merced	38	14	18,024	3,220	.....	1,370	.....
Monterey	32	5	38,979	1,965	50	10,445	300
Santa Clara	30	7	12,041	2,320	.....	2,536	.....
San Mateo	14	.....	1,645	.....	.....	.....	.....
Total	410	375	108,009	113,897	719	63,162	2,005

RATS COLLECTED AND EXAMINED FOR PLAGUE.

Cities.	Collected.	Examined.	Infected.
Oakland	23	23	None.
Richmond	24	24	None.
Pittsburg	74	74	None.
Total	121	121	

RECORD OF PLAGUE INFECTION.

Places in California.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number found infected since May, 1907.
Cities:				
San Francisco	Jan. 30, 1908	Oct. 23, 1908	(1)	398 rats.
Oakland	Aug. 9, 1911	Dec. 1, 1908	(1)	126 rats.
Berkeley	Aug. 28, 1907	(1)	(1)	(1)
Los Angeles	Aug. 11, 1908	(1)	Aug. 21, 1908	1 squirrel.
Counties:				
Alameda (exclusive of Oakland and Berkeley).	Sept. 24, 1909	[2] Oct. 17, 1909	June 23, 1916	293 squirrels, 1 wood rat.
Contra Costa	July 13, 1915	(1)	June 28, 1916	1,629 squirrels.
Fresno	(1)	(1)	Oct. 27, 1911	1 squirrel.
Merced	(1)	(1)	May 12, 1916	7 squirrels.
Monterey	(1)	(1)	May 27, 1916	38 squirrels.
San Benito	June 4, 1913	(1)	July 1, 1916	72 squirrels.
San Joaquin	Sept. 18, 1911	(1)	Aug. 26, 1911	18 squirrels.
Santa Clara	Aug. 31, 1910	(1)	June 21, 1916	32 squirrels.
San Luis Obispo	(1)	(1)	Jan. 29, 1910	1 squirrel.
Santa Cruz	(1)	(1)	May 30, 1916	5 squirrels.
Stanislaus	(1)	(1)	June 2, 1911	18 squirrels.
San Mateo	(1)	(1)	June 21, 1916	1 squirrel.

[1] None. [2] Wood rat.

The work is being carried on in the following-named counties: Alameda, Contra Costa, Stanislaus, San Benito, Santa Cruz, Monterey, Merced, Santa Clara, and San Mateo.

OPERATIONS ON THE WATER FRONT.	
Number of vessels inspected for rat guards	18
Number of reinspections made on vessels	2
Rats trapped on wharves and water front	75
Rats trapped on vessels	16
Number of traps set on wharves and water front	192
Number of traps set on vessels	71
Number of vessels trapped on	17
Poisons placed on water front (pieces)	3,600

OPERATIONS ON THE WATER FRONT—con.	
Bait used on water front and vessels, bacon (pounds)	6
Amount of bread used in poisoning water front (loaves)	12
Number of pounds of poison used on water front	4
Poisons placed within Panama-Pacific International Exposition grounds (pieces)	36,000

The following is a record of municipal work performed under the supervision of the United States Public Health Service:

COOPERATIVE MUNICIPAL WORK.	
Number of premises inspected	605
Number of nuisances abated	126
Number of rats trapped	91
Number of rats sent to laboratory	91
Number of rats examined	85
Number of poisons placed	46,500
Number of garbage cans stamped approved	535
Rats identified:	
Mus norvegicus	44
Mus rattus	17
Mus alexandrinus	30

WORK DONE ON OLD BUILDINGS.	
Wooden floors removed	24
Number yards and passageways, planking removed	1
Cubic feet new foundation walls installed	3,315
Concrete floors installed (square feet, 3,705)	8
Number of basements concreted, (square feet, 7,875)	10
Yards, passageways, etc., concreted (square feet, 2,115)	9
Total area concrete laid (square feet)	13,695
Number floors rat-proofed with wire cloth, square feet, 400	1
Buildings razed	10

WEEK ENDED SEPT. 9, 1916.

FEDERAL AND COUNTY INSPECTION SERVICE.

[For the enforcement of the law of June 7, 1913.]

Counties.	Number inspections.	Number reinspections.	Acres inspected.	Acres reinspected.	Acres treated.			Holes treated.
					Pumps.	Waste balls.	Grain.	
Alameda		76		21,896			3,579	
Contra Costa	3	62	2,380	21,910			7,247	
Stanislaus	64	49	10,397	17,923	500	552	5,293	1,000
Santa Cruz	7	28	5,660	5,994			2,000	
Merced	19	24	8,676	4,400			3,290	
Monterey	27	20	24,359	59,117			15,863	
Santa Clara	36	4	11,823	960			1,670	
San Benito	27	31	35,149	15,805			24,086	
San Mateo	9		2,196					
Total	192	294	100,640	148,005	500	552	63,028	1,000

RATS COLLECTED AND EXAMINED FOR PLAGUE.

Cities.	Collected.	Examined.	Infected.
Oakland	28	28	None.
Richmond	9	9	None.
Antioch	62	62	None.
Total	99	99	

RECORD OF PLAGUE INFECTION.

Places in California.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number rodents found infected since May, 1907.
Cities:				
San Francisco	Jan. 30, 1908	Oct. 23, 1908	(1)	398 rats.
Oakland	Aug. 9, 1911	Dec. 1, 1908	(1)	126 rats.
Berkeley	Aug. 28, 1907	(1)	(1)	(1)
Los Angeles	Aug. 11, 1908	(1)	Aug. 21, 1908	1 squirrel.
Counties:				
Alameda (exclusive of Oakland and Berkeley).	Sept. 24, 1909	Oct. 17, 1909[2]	June 23, 1916	293 squirrels, 1 wood rat.
Contra Costa	July 13, 1915	(1)	June 28, 1916	1,629 squirrels.
Fresno	(1)	(1)	Oct. 27, 1911	1 squirrel.
Merced	(1)	(1)	May 12, 1916	7 squirrels.
Monterey	(1)	(1)	May 27, 1916	38 squirrels.
San Benito	June 4, 1913	(1)	July 1, 1916	72 squirrels.
San Joaquin	Sept. 18, 1911	(1)	Aug. 26, 1911	18 squirrels.
Santa Clara	Aug. 31, 1910	(1)	June 21, 1916	32 squirrels.
San Luis Obispo	(1)	(1)	Jan. 29, 1910	1 squirrel.
Santa Cruz	(1)	(1)	May 30, 1916	5 squirrels.
Stanislaus	(1)	(1)	June 2, 1911	18 squirrels.
San Mateo	(1)	(1)	June 21, 1916	1 squirrel.

[1] None. [2] Wood rat.

The work is being carried on in the following-named counties: Alameda, Contra Costa, Stanislaus, Monterey, San Benito, Santa Cruz, Merced, Santa Clara, and San Mateo.

OPERATIONS ON THE WATER FRONT.

Number of vessels inspected for rat guards	22
Number of reinspections made on vessels	5
Number of new rat guards procured	1
Number of defective rat guards repaired	1
Rats trapped on wharves and water front	39
Rats trapped on vessels	19
Number of traps set on wharves and water front	252
Number of traps set on vessels	66
Number of vessels trapped on	18

OPERATIONS ON THE WATER FRONT—con.

Poisons place on water front (pieces)	3,600
Bait used on water front and vessels, bacon (pounds)	5
Amount of bread used in poisoning water front (loaves)	12
Number of pounds of poison used on water front	4
Poisons placed within Panama-Pacific International Exposition grounds (pieces)	30,000

The following is a record of municipal work performed under the supervision of the United States Public Health Service:

COOPERATIVE MUNICIPAL WORK.

Number of premises inspected	569
Number of nuisances abated	74
Number of rats trapped	58
Number of rats sent to laboratory	58
Number of rats examined	58
Number of poisons placed	38,100
Number of garbage cans stamped approved	421
Rats identified:	
Mus norvegicus	26
Mus rattus	14
Mus alexandrinus	18

WORK DONE ON OLD BUILDINGS.

Wooden floors removed	14
Cubic feet new foundation walls installed	2,465
Concrete floors installed (square feet, 4,525)	6
Number of basements concreted (square feet, 2,545)	4
Yards and passageways, etc., concreted (square feet, 2,555)	6
Total area concrete laid (square feet)	9,625
Number floors rat-proofed with wire cloth (square feet, 1,250)	2
Buildings razed	5

LOUISIANA—NEW ORLEANS—PLAGUE ERADICATION.

The following report of plague-eradication work at New Orleans for the week ended September 16, 1916, was received from Passed Asst. Surg. Simpson, of the United States Public Health Service, in charge of the work:

OUTGOING QUARANTINE.

Number of vessels fumigated with sulphur	9
Number of vessels fumigated with cyanide gas	16
Pounds of sulphur used	650
Pounds of cyanide used in cyanide-gas fumigation	774
Pints of sulphuric acid used in cyanide-gas fumigation	1,149
Clean bills of health issued	38
Foul bills of health issued	1

FIELD OPERATIONS.

Number of rodents trapped	8,717
Number of premises inspected	7,260
Notices served	433
Number of garbage cans installed	19

BUILDINGS RAT PROOFED.

By elevation	154
By marginal concrete wall	163
By concrete floor and wall	139
By minor repairs	364
Total buildings rat proofed	820
Square yards of concrete laid	3,464
Number of premises, planking and shed flooring removed	93
Number of buildings demolished	217
Total buildings rat proofed to date (abated)	126,443

LABORATORY OPERATIONS.

Rodents received by species:	
Mus rattus	119
Mus norvegicus	738
Mus alexandrinus	92
Mus musculus	7,303
Wood rats	73
Musk rats	2
Putrid	134

LABORATORY OPERATIONS—continued.

Total rodents received at laboratory	8,461
Rodents examined	1,380
Number of rats suspected of plague	[1] 25
Plague rats confirmed	3

PLAGUE RATS.

Case No. 332:
- Address, 133 Camp Street.
- Captured, Aug. 15, 1916.
- Diagnosis confirmed, Sept. 10, 1916.
- Treatment of premises: Intensive trapping. Immediate repair of defects.

Case No. 333:
- Address, 1035 Baronne Street.
- Captured, Aug. 23, 1916.
- Diagnosis confirmed, Sept. 10, 1916.
- Treatment of premises: Immediate rat proofing of laundry and grocery store. Intensive trapping.

Case No. 334:
- Address: Marigny and Frenchmen Streets.
- Captured, Aug. 28, 1916.
- Diagnosis confirmed, Sept. 15, 1916.
- Treatment of premises: Rat proofing initiated.

PLAGUE STATUS TO SEPT. 16, 1916.

Last case of human plague, Sept. 8, 1915.	
Last case of rodent plague, Aug. 28, 1916.	
Total number of rodents captured to Sept. 16	843,196
Total number of rodents examined to Sept. 16	382,009
Total cases of rodent plague to Sept. 16, by species:	
Mus musculus	6
Mus rattus	20
Mus alexandrinus	16
Mus norvegicus	292
Total rodent cases to Sept. 16, 1916	334

WASHINGTON—SEATTLE—PLAGUE ERADICATION.

The following report of plague-eradication work at Seattle for the week ended September 9, 1916, was received from Surg. Lloyd, of the United States Public Health Service, in charge of the work:

RAT PROOFING.

New buildings inspected	16
New buildings reinspected	30
Basements concreted, new buildings (square feet, 10,250)	7
Floors concreted, new buildings (square feet, 17,175)	12

RAT PROOFING—continued.

Yards, etc., concreted, new structures (square feet, 750)	3
Sidewalks concreted (square feet)	7,280
Total concrete laid, new structures (square feet)	35,755
New buildings elevated	2

[1] Indicates the number of rodents the tissues of which were inoculated into guinea pigs. Most of these showed on necropsy only evidence of recent inflammatory process; practically none presented gross lesions characteristic of plague infection.

RAT PROOFING—continued.

New premises rat proofed, concrete	19
Old buildings inspected	3
Premises, rat proofed, concrete, old buildings	3
Floors concreted, old buildings (square feet, 9,750)	3
Wooden floors removed, old buildings	3
Buildings razed	1

LABORATORY AND RODENT OPERATIONS.

Dead rodents received	10
Rodents trapped and killed	245
Rodents recovered after fumigation	10
Total	265
Rodents examined for plague infection	172
Rodents proved plague infected	None.
Poison distributed, pounds	16
Bodies examined for plague infection	None.

CLASSIFICATION OF RODENTS.

Mus rattus	22
Mus alexandrinus	48
Mus norvegicus	138
Mus musculus	57

WATER FRONT.

Vessels inspected and histories recorded	17
Vessels fumigated	2
Sulphur used (pounds)	3,200
New rat guards installed	9
Defective rat guards repaired	15

WATER FRONT—continued.

Fumigation certificates issued	2
Port sanitary statements issued	37

The usual day and night patrol was maintained to enforce rat guarding and fending.

MISCELLANEOUS WORK.

Letters sent in re rat complaints	4
Restaurant permits viséed	7

RODENTS EXAMINED IN EVERETT.

Mus norvegicus trapped	63
Mus musculus trapped	1
Total	64
Rodents examined for plague infection	53
Rodents proved plague infected	None.

RAT-PROOFING OPERATIONS IN EVERETT.

New buildings inspected	3
New buildings reinspected	8
New buildings, concrete foundations	2
New buildings elevated 18 inches	1
New buildings, basements concreted (square feet, 4,800)	5
New buildings, yards concreted (square feet, 160)	1
Total concrete laid, new buildings (square feet)	4,960

RODENTS EXAMINED IN TACOMA.

Mus norvegicus trapped	46
Mus alexandrinus trapped	2
Total	48
Rodents examined for plague infection	48
Rodents proved plague infected	None.

HAWAII—HONOLULU—PLAGUE PREVENTION.

The following report of plague-prevention work at Honolulu for the week ended September 9, 1916, was received from Surg. Trotter, of the United States Public Health Service:

Total rats and mongoose taken	306
Rats trapped	304
Mongoose trapped	2
Examined microscopically	247
Examined macroscopically	59
Showing plague infection	None.
Classification of rats trapped:	
Mus alexandrinus	135
Mus musculus	112
Classification of rats trapped—Continued.	
Mus norvegicus	48
Mus rattus	9
Average number of traps set daily	984
Cost per rat destroyed	25 cents.

Last case rat plague, Aiea, 9 miles from Honolulu, Apr. 12, 1910.

Last case human plague, Honolulu, July 12, 1910.

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.

CEREBROSPINAL MENINGITIS.

State Reports for August, 1916.

Place.	New cases reported.	Place.	New cases reported.
California:		Connecticut—Continued.	
Contra Costa County—		Litchfield County—	
Richmond	1	Torrington	1
Los Angeles County—		Total	6
Los Angeles	2		
Orange County	1	Hawaii:	
San Joaquin County—		Oahu—	
Stockton	4	Ewa District	1
Santa Barbara County—		Honolulu	1
Santa Barbara	1	Total	2
Total	9		
		Washington:	
Connecticut:		Lewis County	1
Fairfield County—		Stevens County	1
Bridgeport	3	Total	2
Greenwich	2		

City Reports for Week Ended Sept. 16, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Boston, Mass	1	1	Newton, Mass		2
Bridgeport, Conn	1	1	New York, N. Y		2
Cleveland, Ohio	1	1	Philadelphia, Pa	5	5
Detroit, Mich	1		Pittsburgh, Pa	1	1
Everett, Mass	1		Providence, R. I		1
Jersey City, N. J		1	Sacramento, Cal		1
Lynn, Mass		2	St. Paul, Minn		1
Newark, N. J	1		San Francisco, Cal	1	1
New Bedford, Mass		2	Worcester, Mass	1	

DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2782.

ERYSIPELAS.

City Reports for Week Ended Sept. 16, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Austin, Tex	1		Nashville, Tenn		1
Buffalo, N. Y	1		Newark, N. J	4	
Chicago, Ill	3	1	New York, N. Y		1
Cleveland, Ohio	3		Omaha, Nebr	1	
Cumberland, Md	1		Philadelphia, Pa	4	
Detroit, Mich	2		Pittsburgh, Pa	1	
Lancaster, Pa	1		Rochester, N. Y	1	
Long Beach, Cal	1		St. Louis, Mo	1	
Los Angeles, Cal	2	1	San Francisco, Cal		1
Lowell, Mass		1			

LEPROSY.

Hawaii Report for August, 1916.

During the month of August, 1916, one case of leprosy was reported in Wailuku District, Maui, Hawaii.

MALARIA.

State Reports for August, 1916.

Place.	New cases reported.
Arkansas:	
Bradley County	9
Carroll County	3
Dallas County	22
Faulkner County	15
Garland County	5
Greene County	15
Hemstead County	41
Hot Spring County	30
Izard County	26
Johnson County	5
Lafayette County	33
Mississippi County	28
Monroe County	5
Ouachita County	73
Perry County	6
Phillips County	141
Polk County	4
Pope County	33
Pulaski County	4
Saline County	208
Sevier County	200
Sharp County	6
St. Francis County	70
Stone County	2
Union County	101
Washington County	24
White County	8
Total	1,117
California:	
Alemeda County—	
Berkeley	5
Butte County—	
Chico	25
Colusa County	10
Colusa	3
Contra Costa County—	
Martinez	1
Fresno County	6
Clovis	4
Firebaugh	8
California—Continued.	
Glenn County—	
Orland	4
Kern County	1
Kings County—	
Hanford	1
Lemoore	8
Los Angeles County—	
Long Beach	1
Los Angeles	1
Merced County—	
Merced	3
Orange County	1
Anaheim	1
Placer County	3
Rocklin	6
Sacramento County—	
Sacramento	5
San Bernardino County—	
San Bernardino	1
San Francisco County	3
San Joaquin County—	
Stockton	3
Siskiyou County	4
Yreka	2
Solano County	2
Vacaville	2
Stanislaus County	1
Oakdale	6
Turlock	1
Tehama County	2
Tulare County	5
Visalia	10
Toulumne County	1
Yolo County	11
Winters	2
Woodland	5
Total	161

City Reports for Week Ended Sept. 16, 1916.

Place.	Cases.	Deaths.
Berkeley, Cal.	3	
Birmingham, Ala.	2	
Boston, Mass.	2	
Cambridge, Mass.	1	
Charleston, S. C.		1
Cleveland, Ohio	1	
Haverhill, Mass.	1	
Newark, N. J.	3	
New Orleans, La.	17	
New York, N. Y.		1
Richmond, Va.	8	
Sacramento, Cal.		1
Stockton, Cal.	1	
Topeka, Kans.	1	
Trenton, N. J.	1	

MEASLES.

Washington—Seattle.

Surg. Lloyd reported that during the two weeks ended September 23, 1916, 9 cases of measles were notified in Seattle, Wash., making a total of 5,407 cases with 9 deaths since February 15, 1916.

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 2782.

PELLAGRA.

State Reports for August, 1916.

Place.	New cases reported.	Place.	New cases reported.
Arkansas:		Arkansas—Continued.	
Bradley County	2	Stone County	2
Drew County	11	Union County	7
Greene County	2	White County	2
Hempstead County	2	Woodruff County	2
Ouachita County	1		
Phillips County	11	Total	57
Polk County	1		
Pope County	4	California:	
Pulaski County	1	Los Angeles County—	
Saline County	8	Long Beach	1
Sevier County	1		

City Reports for Week Ended Sept. 16, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Columbia, S. C.		1	Mobile, Ala.		2
Lexington, Ky.		1	Nashville, Tenn.	1	2

PLAGUE.

Louisiana—Plague Rats Found.

Passed Asst. Surg. Simpson reported that rats captured in Louisiana have been proved positive for plague infection as follows: A rat captured August 21, 1916, at the corner of Florida Walk and Music Street, New Orleans, La., was proved positive September 18. A rat captured September 2, 1916, at 924 Teche Street, Algiers, La., was proved positive September 25.

PNEUMONIA.

City Reports for Week Ended Sept. 16, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Canton, Ohio	1		Pittsburgh, Pa	8	12
Chicago, Ill.	61	25	Reading, Pa.	1	1
Cleveland, Ohio	6	10	Rochester, N. Y.	3	
Detroit, Mich.	2	7	San Francisco, Cal.	9	6
Los Angeles, Cal.	3	4	Schenectady, N. Y.	1	1
Newark, N. J.	11	3	Steelton, Pa.	1	1
New Castle, Pa.	2		Toledo, Ohio	1	4
Philadelphia, Pa.	27	15			

POLIOMYELITIS (INFANTILE PARALYSIS).

Cases Reported by States.

The following tabular statement shows the numbers of cases of poliomyelitis reported to the United States Public Health Service by State health authorities during the periods shown:

		Total cases reported.
Alabama:		
July 1 to 31	[1]77	
Aug. 1 to 31	[1]62	
Sept. 1 to 25	12	
		151
Arizona:		
July 1 to 31	2	
Aug. 1 to 31	2	
Sept. 1 to 25	2	
		6
Arkansas:		
July 1 to 31	5	
Aug. 1 to 31	1	
Sept. 1 to 25	0	
		6
California:		
July 1 to 31	12	
Aug. 1 to 31	18	
Sept. 1 to 30	13	
		43
Colorado:		
July 1 to 31	1	
Aug. 1 to 31	2	
Sept. 1 to 30	4	
		7
Connecticut:		
July 1 to 31	165	
Aug. 1 to 31	367	
Sept. 1 to 30	241	
		773
Delaware:		
July 1 to 31	1	
Aug. 1 to 31	[1]11	
Sept. 1 to 30	36	
		48
District of Columbia:		
July 1 to 31	8	
Aug. 1 to 31	18	
Sept. 1 to 30	6	
		32
Florida:		
July 1 to 31	4	
Aug. 1 to 31	3	
Sept. 1 to 25	1	
		8
Georgia	[2]	
Idaho:		
Aug. 1 to 31	4	
Sept. 1 to 30	3	
		7
Illinois:		
July 1 to 31	76	
Aug. 1 to 31	339	
Sept. 1 to 30	257	
		672
Indiana:		
July 1 to 31	27	
Aug. 1 to 31	38	
Sept. 1 to 30	65	
		130
Iowa:		
July 1 to 31	30	
Aug. 1 to 31	82	
Sept. 1 to 30	70	
		182
Kansas:		
July 1 to 31	14	
Aug. 1 to 31	27	
Sept. 1 to 30	21	
		62
Kentucky:		
July 1 to 31	15	
Aug. 1 to 31	19	
Sept. 1 to 28	1	
		35
Louisiana:		
July 1 to 31	19	
Aug. 1 to 31	6	
Sept. 1 to 30	6	
		31
Maine:		
July 1 to 31	0	
Aug. 1 to 31	26	
Sept. 1 to 30	46	
		72
Maryland:		
July 1 to 31	10	
Aug. 1 to 31	64	
Sept. 1 to Oct. 4	113	
		187
Massachusetts:		
July 1 to 31	107	
Aug. 1 to 31	253	
Sept. 1 to 30	627	
Oct. 1 to 4	106	
		1,093
Michigan:		
July 1 to 31	51	
Aug. 1 to 31	163	
Sept. 1 to 25	117	
		331
Minnesota:		
July 1 to 31	142	
Aug. 1 to 31	373	
Sept. 1 to 30	203	
		718
Mississippi:		
July 1 to 31	57	
Aug. 1 to 31	31	
Sept. 1 to 30	3	
		91
Missouri:		
July 1 to 31	4	
Aug. 1 to 31	3	
Sept. 1 to 25	4	
		11
Montana:		
July 1 to 31	11	
Aug. 1 to 31	28	
Sept. 1 to 25	15	
		54
Nebraska:		
July 1 to 31	1	
Aug. 1 to 31	7	
Sept. 1 to 28	6	
		14
Nevada:		
July 1 to Sept. 24		0
New Hampshire:		
July 1 to 31	7	
Aug. 1 to 31	[1]16	
Sept. 1 to 30	29	
		52

[1] Corrected figures. Later report than figures previously published.
[2] Disease present, but the number of cases is not known.
[3] Not including cases on Crow Reservation.

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

Cases Reported by States—Continued.

		Total cases reported.
New Jersey:		
July 1 to 31	640	
Aug. 1 to 31	2,114	
Sept. 1 to 30	911	
Oct. 1 to 4	104	
		3,769
New Mexico:		
July 1 to Sept. 25		0
New York (exclusive of New York City):		
July 1 to 31	430	
Aug. 1 to 31	1,700	
Sept. 1 to 26	1,053	
		3,183
North Carolina		([1])
North Dakota:		
July 1 to 31		
Aug. 1 to 31	[2] 2	
Sept. 1 to 25	6	
		8
Ohio:		
July 1 to 31	94	
Aug. 1 to 31	168	
Sept. 1 to 25	47	
		309
Oklahoma:		
July 1 to 31	12	
Aug. 1 to 31	10	
Sept. 1 to 25	2	
		24
Oregon:		
Sept. 1 to 30		3
Pennsylvania:		
July 1 to 31	107	
Aug. 1 to 31	711	
Sept. 1 to 30	743	
		1,561
Rhode Island:		
July 1 to 31	26	
Aug. 1 to 31	57	
Sept. 1 to 30	70	
		153
South Carolina:		
July 1 to 31	20	
Aug. 1 to 31	58	
Sept. 1 to 30	25	
		103
South Dakota:		
July 1 to 31	5	
Aug. 1 to 31	19	
Sept. 1 to 25	14	
		38
Tennessee:		
July 1 to 31	18	
Aug. 1 to 31	21	
Sept. 1 to 25	0	
		39
Texas:		
July 1 to 31	22	
Aug. 1 to 31	25	
Sept. 1 to 30	16	
		63
Utah:		
Aug. 1 to 31		5
Vermont:		
July 1 to 31	1	
Aug. 1 to 31	8	
Sept. 1 to 30	23	
		32
Virginia:		
July 1 to 31	24	
Aug. 1 to 26	14	
Sept. 1 to 30	45	
		83
Washington:		
July 1 to 31	5	
Aug. 1 to 31	2	
Sept. 1 to 30	10	
		17
West Virginia:		
July 1 to 31	5	
Aug. 1 to 31	10	
Sept. 1 to 30	16	
		31
Wisconsin:		
July 1 to 31	20	
Aug. 1 to 31	173	
Sept. 1 to 25	128	
		321
Wyoming:		
July 1 to 31	0	
Aug. 1 to 31	1	
Sept. 1 to 25	3	
		4

[1] Disease present, but the number of cases is not known.
[2] Corrected figures. Later report than figures previously published.

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

City Reports—July 1 to September 30, 1916.

The following table shows the number of cases of poliomyelitis reported to the United States Public Health Service by the health departments of cities which reported five or more cases in any one week during July, August, and September, 1916:

City.	Cases reported for week ended—											
	July 8.	July 15.	July 22.	July 29.	Aug 5.	Aug. 12.	Aug. 19.	Aug. 26.	Sept. 2.	Sept. 9.	Sept. 16.	Sept. 23.	Sept. 30.
Atlantic City, N. J.	.....	.....	.....	.....	.....	7	2	5	5	.....	2	2	.....
Baltimore, Md.	1	.....	2	1	1	5	4	9	16	12	13	10	29
Bayonne, N. J.	.....	1	.....	1	4	12	14	4	1	5	1	.....	.....
Birmingham, Ala.	1	.....	1	3	6	1	.....	2	.....	.....	.....	.....	.....
Boston, Mass.	1	.....	3	4	4	8	4	8	13	22	38	55	.....
Bridgeport, Conn.	.....	.....	4	5	6	6	.....	3	3	.....	7	2	2
Cambridge, Mass.	.....	.....	.....	.....	1	.....	2	2	1	2	5	4	.....
Camden, N. J.	.....	.....	.....	2	5	11	13	6	9	5	7	2	1
Chicago, Ill.	2	4	10	13	15	23	25	22	24	25	21	20	13
Cincinnati, Ohio.	.....	1	1	1	2	2	4	5	2	3	6	3	4
Cleveland, Ohio.	4	4	2	1	1	.....	1	2	5	2	3	1	1
Detroit, Mich.	.....	2	1	3	4	1	.....	6	1	4	3	3	11
East Orange, N. J.	.....	.....	1	3	7	2	8	10	6	10	3	2	2
Flint, Mich.	.....	.....	.....	4	1	3	3	8	.....	4	.....	4	2
Grand Rapids, Mich.	.....	1	2	.....	1	.....	3	1	1	2	1	6	1
Harrison, N. J.	.....	1	1	.....	.....	10	10	6	.....	.....	.....	.....	.....
Hartford, Conn.	.....	2	1	3	3	.....	.....	4	6	7	5	5	4
Haverhill, Mass.	1	.....	.....	.....	.....	.....	1	5	.....	1	.....	1	2
Indianapolis, Ind.	.....	1	1	.....	2	.....	.....	.....	.....	5	4	2	4
Jersey City, N. J.	4	5	8	17	27	22	27	16	22	9	6	8	11
Kearny, N. J.	.....	1	.....	3	6	7	4	5	.....	.....	3	.....	.....
Long Branch, N. J.	.....	.....	.....	1	1	1	1	2	8	.....	4	1	1
Manchester, N. H.	.....	.....	.....	.....	1	.....	.....	.....	3	5	1	5	.....
Minneapolis, Minn.	.....	.....	.....	.....	8	8	12	14	12	4	5	.....	3
Montclair, N. J.	.....	.....	1	1	.....	4	5	2	1	.....	.....	.....	.....
Newark, N. J.	14	65	.....	137	247	260	230	150	89	45	38	.....	.....
Newburyport, Mass.	.....	.....	.....	.....	.....	.....	.....	1	2	5	1	7	2
New York, N. Y.	535	933	741	912	1,117	1,151	865	707	441	352	252	156	142
North Adams, Mass.	.....	.....	4	.....	1	.....	.....	5	2	2	1	4	1
Northampton, Mass.	.....	.....	.....	.....	1	.....	5	2	1	1	.....	1	.....
Orange, N. J.	.....	3	2	10	15	9	8	10	15	4	1	2	.....
Perth Amboy, N. J.	1	3	2	4	5	4	2	3	1	3	2	.....	.....
Philadelphia, Pa.	2	.....	9	16	31	86	106	132	120	125	85	70	47
Pittsburgh, Pa.	1	1	1	3	1	5	1	3	5	5	2	1	1
Pittsfield, Mass.	.....	1	1	.....	.....	1	2	7	2	10	8	6	4
Plainfield, N. J.	.....	.....	2	3	.....	2	6	10	1	6	4	2	3
Providence, R. I.	1	2	1	3	3	4	3	2	10	7	10	17	9
St. Louis, Mo.	1	1	.....	2	.....	.....	.....	5	2	.....	.....	.....	.....
St. Paul, Minn.	1	.....	.....	5	13	6	9	6	8	7	2	3	.....
Somerville, Mass.	.....	.....	.....	1	.....	.....	6	1	2	1	7	1	.....
Springfield, Mass.	.....	.....	.....	2	2	2	.....	5	5	9	12	8	9
Syracuse, N. Y.	.....	.....	.....	.....	9	3	23	34	33	49	29	20	12
Toledo, Ohio.	2	9	8	11	11	16	10	10	7	11	1	2	3
Trenton, N. J.	.....	2	1	1	.....	4	7	11	7	11	14	23	34
Washington, D. C.	.....	2	3	2	2	3	5	7	2	4	.....	1	.....
West Hoboken, N. J.	3	1	3	3	5	9	3	7	.....	.....	.....	.....	.....
Wilmington, Del.	.....	.....	.....	.....	.....	.....	.....	3	3	3	2	3	8

New York City.

Surg. Lavinder reported that cases of poliomyelitis had been notified in New York City as follows: September 27, 26 cases; September 28, 26 cases; September 29, 26 cases; September 30, 19 cases; October 1, 16 cases; October 2, 10 cases; October 3, 12 cases. Approximate corrected totals to October 3, 9,063 cases; 2,308 deaths.

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

State Reports for August, 1916.

Place.	New cases reported.
Arkansas:	
White County	1
California:	
Alameda County—	
Livermore	1
Oakland	2
Butte County—	
Chico	1
Los Angeles County—	
Los Angeles	4
Monrovia	1
Riverside County	1
Riverside	2
San Francisco	3
San Joaquin County—	
Stockton	1
Sonoma County—	
Santa Rosa	1
Tehama County	1
Total	18
Connecticut:	
Fairfield County—	
Bethel	1
Bridgeport City	34
Danbury City	1
Darien	3
Fairfield	6
Greenwich	23
Huntington	1
Shelton City	1
New Canaan	9
New Fairfield	1
Newtown	1
Norwalk City	5
Ridgefield	1
Stamford	1
Stamford City	33
Stratford	4
Trumbull	1
Hartford County—	
Avon	2
Berlin	2
Canton	2
East Granby	1
East Hartford	1
Enfield	1
Farmington	1
Glastonbury	2
Granby	1
Hartford City	13
New Britain City	3
Plainville	1
Simsbury	2
Southington	3
South Windsor	1
Suffield	5
West Hartford	2
Wethersfield	1
Windsor	7
Windsor Locks	6
Litchfield County—	
Litchfield	1
Morris	7
North Canaan	1
Salisbury	3
Sharon	1
Torrington Borough	1
Warren	1
Washington	1
Watertown	3
Winchester	1
Middlesex County—	
Chester	2
Clinton	2
East Hampton	5
Middlefield	1
Middletown	1
Middletown City	1
Saybrook	1
Westbrook	2

Place.	New cases reported.
Connecticut—Continued.	
New Haven County—	
Ansonia City	10
Branford	1
Derby City	5
East Haven	8
Hamden	6
Madison	1
Meriden	4
Meriden City	7
Milford	6
Naugatuck	2
New Haven City	36
North Haven	2
Orange	12
Oxford	1
Wallingford	3
Waterbury City	4
New London County—	
Bozrah	2
Colchester	12
Colchester Borough	2
Lebanon	3
Montville	1
Norwich	1
Norwich City	2
Salem	3
Stonington	3
Waterford	1
Tolland County—	
Ellington	1
Hebron	1
Windham County—	
Brooklyn	1
Killingly	1
Thompson	1
Windham	1
Willimantic City	3
Woodstock	2
Total	367
Iowa:	
Adair County	1
Appanoose County	1
Benton County	2
Blackhawk County	1
Boone County	1
Bremer County	1
Buchanan County	4
Calhoun County	1
Cass County	3
Cerro Gordo County	9
Clinton County	3
Dallas County	1
Fayette County	2
Hancock County	6
Hardin County	6
Jasper County	2
Jefferson County	2
Keokuk County	1
Kossuth County	2
Linn County	2
Monroe County	2
Muscatine County	1
Palo Alto County	1
Plymouth County	2
Pocahontas County	4
Polk County	2
Poweshiek County	3
Scott County	1
Story County	1
Tama County	1
Taylor County	1
Van Buren County	1
Wapello County	1
Warren County	1
Washington County	4
Wayne County	1
Webster County	2
Worth County	2
Total	82

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

City Reports for Week Ended Sept. 16, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlantic City, N. J.	2		Morristown, N. J.	1	
Auburn, N. Y.	1	1	Newark, N. J.	38	7
Baltimore, Md.	13	4	Newburyport, Mass.	1	
Bayonne, N. J.	1		New Orleans, La.	1	
Boston, Mass.	38	11	New York, N. Y.	252	83
Bridgeport, Conn.	7		Norristown, Pa.	4	
Brookline, Mass.	2	1	North Adams, Mass.	1	
Buffalo, N. Y.	2	2	Orange, N. J.	1	
Cambridge, Mass.	5		Perth Amboy, N. J.	2	1
Camden, N. J.	7		Philadelphia, Pa.	85	25
Chicago, Ill.	21	6	Pittsburgh, Pa.	2	1
Chicopee, Mass.	2		Pittsfield, Mass.	8	3
Cincinnati, Ohio.	6		Plainfield, N. J.	4	1
Cleveland, Ohio.	3		Portland, Me.	1	
Columbus, Ohio.	1		Portland, Oreg.	1	
Detroit, Mich.	3	1	Portsmouth, N. H.	1	
Duluth, Minn.	1		Providence, R. I.	10	
East Orange, N. J.	3		Quincy, Mass.	4	
Everett, Mass.	4		Racine, Wis.	1	
Fort Worth, Tex.	2		Reading, Pa.	1	
Galesburg, Ill.	1		Richmond, Va.	3	
Grand Rapids, Mich.	1		St. Paul, Minn.	2	1
Hartford, Conn.	5	1	San Francisco, Cal.	1	
Indianapolis, Ind.	4		Schenectady, N. Y.	1	
Jersey City, N. J.	6	2	Somerville, Mass.	7	2
Johnstown, Pa.	4		South Bend, Ind.	1	
Kearny, N. J.	3	1	Springfield, Mass.	12	6
Long Branch, N. J.	4		Stockton, Cal.	2	
Los Angeles, Cal.	1	1	Syracuse, N. Y.	29	4
Lowell, Mass.	2		Toledo, Ohio.	1	1
Lynchburg, Va.	2	1	Trenton, N. J.	14	4
Lynn, Mass.	2	1	Troy, N. Y.	3	
Malden, Mass.	2	1	Waltham, Mass.	2	
Manchester, N. H.	1	1	Wilmington, Del.	2	1
Medford, Mass.	2		Wilmington, N. C.	1	
Minneapolis, Minn.	5		Worcester, Mass.	3	

RABIES IN ANIMALS.

City Report for Week Ended Sept. 16, 1916.

During the week ended September 16, 1916, four cases of rabies in animals were reported at Buffalo, N. Y.

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2782.

SMALLPOX.

California.

The secretary of the State Board of Health of California reported by telegraph October 2, that since September 5, 12 cases of smallpox in Mexicans had been reported from four railroad camps in California.

Minnesota.

Collaborating Epidemiologist Bracken reported that during the week ended September 30, 1916, two new foci of smallpox infection were reported in Minnesota, one case having been notified in Glyndon, Clay County, and two cases in Moundsview Township, Ramsey County, Minn.

SMALLPOX—Continued.

California Report for August, 1916.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within seven years preceding attack.	Number last vaccinated more than seven years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
California:						
Fresno County	3				2	1
Kern County—						
Bakersfield	1					1
Los Angeles County	2				2	
Los Angeles	1				1	
San Francisco	1					1
Tulare County—						
Porterville	4				4	
Total	12				9	3

Miscellaneous State Reports.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Arkansas (Aug. 1-31):			Washington (Aug. 1-31):		
Counties—			Clarke County	7	
Calhoun	30		King County—		
Hempstead	10		Seattle	2	
Hot Spring	5		Kittitas County	2	
Woodruff	3		Klickitat County	10	
Total	48		Lincoln County	8	
Iowa (Aug. 1-31):			Pend Oreille County	6	
Counties—			Snohomish County—		
Scott	2		Everett	1	
Tama	4		Spokane County	1	
Webster	2		Spokane	3	
Total	8		Whitman County	3	
			Total	43	

City Reports for Week Ended Sept. 16, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Butte, Mont	1		Omaha, Nebr	3	
Cleveland, Ohio	1		St. Joseph, Mo	1	
Detroit, Mich	1		St. Paul, Minn	1	
Grand Rapids, Mich	1		Sioux City, Iowa	1	
Lincoln, Nebr	1		Washington, D. C	2	
New Orleans, La	6				

TETANUS.

City Reports for Week Ended Sept. 16, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Chicago, Ill		2	Los Angeles, Cal	1	1
Elgin, Ill		1	Norfolk, Va	1	1
Evansville, Ind	1		Philadelphia, Pa	2	2
Lancaster, Pa	1		St. Louis, Mo	1	1
Lexington, Ky		1	St. Paul, Minn		1

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2782.

TYPHOID FEVER.

State Reports for August, 1916.

Place.	New cases reported.
Arkansas:	
Bradley County	2
Calhoun County	4
Carroll County	4
Dallas County	2
Drew County	4
Faulkner County	1
Garland County	3
Greene County	4
Hempstead County	9
Hot Spring County	12
Izard County	7
Johnson County	7
Lawrence County	1
Mississippi County	12
Monroe County	1
Ouachita County	2
Perry County	2
Phillips County	5
Polk County	1
Pope County	4
Pulaski County	15
Saline County	9
Sharp County	1
St. Francis County	6
Stone County	3
Union County	2
Washington County	36
White County	45
Woodruff County	2
Total	206
California:	
Alameda County	1
Alameda	1
Berkeley	2
Hayward	1
Oakland	13
Amador County—	
Sutter Creek	1
Butte County	1
Chico	5
Colusa County	2
Contra Costa County	1
Martinez	2
Pinole	1
Pittsburg	1
Richmond	1
El Dorado County—	
Placerville	1
Fresno County	6
Firebaugh	2
Glenn County	1
Imperial County	1
El Centro	1
Holtville	1
Imperial	1
Inyo County	2
Kern County	5
Bakersfield	3
Maricopa	2
Taft	1
Kings County—	
Hanford	1
Los Angeles County	5
Burbank	1
Huntington Park	1
Long Beach	3
Los Angeles	20
Marin County—	
San Rafael	1
Mendocino County—	
Willits	1
California—Continued.	
Monterey County—	
Salinas	1
Orange County	6
Anaheim	1
Newport Beach	1
Sacramento County	1
Sacramento	7
San Bernardino County	1
San Bernardino	1
San Diego County	2
San Francisco	23
San Luis Obispo County	3
Paso Robles	1
San Mateo County—	
San Bruno	1
Santa Barbara County	1
Santa Barbara	3
Santa Clara County	3
San Jose	2
Santa Cruz County—	
Santa Cruz	1
Siskiyou County—	
Dunsmuir	1
Sonoma County	2
Santa Rosa	3
Stanislaus County	2
Tehama County	1
Tulare County	1
Yolo County—	
Woodland	1
Total	163
Connecticut:	
Fairfield—	
Bridgeport	6
Danbury	1
Fairfield	2
Norwalk	2
Shelton	1
Hartford—	
Bristol (city and town)	1
East Hartford	1
Enfield	1
Hartford	15
Manchester	3
New Britain	2
Simsbury	1
Windsor Locks	2
Litchfield—	
Morris	1
Plymouth	2
Thomaston	2
Middlesex—	
East Hampton	2
New Haven—	
Ansonia	1
Derby	1
Hamden	1
Meriden	1
Naugatuck	2
New Haven	13
Orange (West Haven)	3
Oxford	1
Waterbury	16
New London—	
Groton (town)	2
Lebanon	1
New London	5
Norwich (city)	1
Windham—	
Willimantic	3
Total	96

TYPHOID FEVER—Continued.

State Reports for August, 1916—Continued.

Place.	New cases reported.
Hawaii:	
Hawaii—	
Hamakua District	1
North Kona District	4
Puna District	1
Oahu—	
Honolulu	3
Total	9
Washington:	
Benton County	1
Clallam County	2
Columbia County	1
Cowlitz County	1
Ferry County	1
Franklin County	1
Grant County	2
Grays Harbor County	5
King County—	
Seattle	10
Washington—Continued.	
Lewis County	2
Lincoln County	11
Okanogan County	1
Pierce County—	
Tacoma	3
Skagit County	18
Skamania County	1
Snohomish County	2
Everett City	2
Spokane County—	
Spokane	8
Stevens County	3
Wahkiakum County	1
Walla Walla County	5
Whitman County	1
Yakima County	16
Total	98

City Reports for Week Ended Sept. 16, 1916.

Place.	Cases.	Deaths.
Ann Arbor, Mich	11	
Atlantic City, N. J	4	1
Austin, Tex	1	1
Baltimore, Md	48	3
Berkeley, Cal	1	
Birmingham, Ala	11	1
Boston, Mass	12	
Bridgeport, Conn	4	1
Brookline, Mass	1	
Buffalo, N. Y	10	3
Butler, Pa	2	
Butte, Mont	2	
Cambridge, Mass	1	
Camden, N. J	2	
Canton, Ohio	3	
Charleston, S. C	5	2
Chelsea, Mass	5	
Chicago, Ill	27	1
Cincinnati, Ohio	4	
Cleveland, Ohio	16	3
Columbia, S. C	2	1
Columbus, Ohio	6	
Covington, Ky	2	1
Cumberland, Md	5	1
Danville, Ill	5	
Detroit, Mich	20	4
Duluth, Minn	3	
East Orange, N. J	1	
Elgin, Ill	26	2
El Paso, Tex	2	1
Evansville, Ind	12	
Everett, Mass	2	
Fall River, Mass	10	1
Fort Worth, Tex	4	1
Galesburg, Ill	2	
Galveston, Tex	2	
Grand Rapids, Mich	1	1
Hagerstown, Md	7	
Harrisburg, Pa	13	2
Hartford, Conn	2	
Indianapolis, Ind	28	
Jersey City, N. J	2	
Johnstown, Pa	2	
Kenosha, Wis	1	
La Crosse, Wis	1	
Lawrence, Mass	3	
Lexington, Ky	1	
Lincoln, Nebr	4	1
Little Rock, Ark	1	
Lorain, Ohio	1	
Los Angeles, Cal	3	
Lowell, Mass	2	2
Lynchburg, Va	3	1
Lynn, Mass	13	1
Malden, Mass	1	
Marinette, Wis	1	
Medford, Mass	2	
Milwaukee, Wis	4	1
Minneapolis, Minn	4	
Mobile, Ala	1	
Morristown, N. J	1	1
Nashville, Tenn	9	
Newark, N. J	9	1
New Bedford, Mass	1	1
New Britain, Conn	2	
Newburyport, Mass	1	
New Castle, Pa	3	
New Orleans, La	8	2
Newton, Mass	3	1
New York, N. Y	61	9
Norfolk, Va	1	1
Norristown, Pa	1	1
North Adams, Mass	1	
Northampton, Mass	1	
Omaha, Nebr	1	
Passaic, N. J	1	
Philadelphia, Pa	34	1
Pittsburgh, Pa	10	2
Portland, Me	6	
Portland, Oreg	3	
Portsmouth, Va	3	
Providence, R. I	7	
Reading, Pa	2	
Richmond, Va	6	1
Roanoke, Va	2	
Rochester, N. Y	2	2
Rockford, Ill	1	
Rutland, Vt	1	
Sacramento, Cal		1
St. Joseph, Mo	1	
St. Louis, Mo	23	1
St. Paul, Minn	3	
Salt Lake City, Utah	2	1
San Francisco, Cal	5	2
San Jose, Cal	5	
Seattle, Wash	2	

TYPHOID FEVER—Continued.

City Reports for Week Ended Sept. 16, 1916—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
South Bend, Ind	1		Washington, D. C	15	3
Springfield, Ill	2		Wheeling, W. Va	2	1
Springfield, Ohio	2		Wichita, Kans	8	
Steelton, Pa	2		Wilkes-Barre, Pa		1
Stockton, Cal	3	1	Wilkinsburg, Pa	1	
Syracuse, N. Y	1	1	Williamsport, Pa	1	
Taunton, Mass	1		Wilmington, Del	5	
Toledo, Ohio	8	2	Worcester, Mass	6	
Topeka, Kans	3	1	York, Pa	2	
Troy, N. Y	5				

TYPHUS FEVER.

California.

The State health officer of California reported that a case of typhus fever was notified September 23, in Los Angeles, Cal., and that 3 cases of typhus fever were reported September 28 at Coron, Riverside County, Cal. On September 30, he reported that a case of typhus fever existed near Saugus, Cal., in a Mexican child 4 years old, who left Juarez, Mexico, September 19, arrived in California on the 21st, and was taken ill September 25.

Texas—El Paso, Laredo.

Acting Asst. Surg. Tappan reported September 23, 1916, that since July 1, 1916, 9 cases of typhus fever had been notified in El Paso, Tex.

Acting Asst. Surg. Hamilton reported October 2 that a case of typhus fever had been notified in Medina County, west of San Antonio, Tex.

City Reports for Week Ended September 16, 1916.

During the week ended September 16, 1916 a fatal case of typhus fever was reported at El Paso, Tex.; one case was reported at Los Angeles, Cal.; and one case was reported at New York, N. Y.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for August, 1916.

Place.	Cases reported.			Place.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
Arkansas	32		14	Hawaii	12	20	
California	194	104	172	Iowa	12		17
Connecticut	72	139	35	Washington	13	327	37

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

City Reports for Week Ended Sept. 16, 1916.

City.	Population as of July 1, 1915 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md	584,605	160	11	.....	2	.....	9	.....	39	20
Boston, Mass	745,139	216	29	1	20	2	11	.....	55	22
Chicago, Ill	2,447,045	620	118	10	15	2	64	1	226	65
Cleveland, Ohio	656,975	205	32	1	.....	.....	16	.....	49	10
Detroit, Mich	554,717	204	50	2	2	.....	7	.....	31	15
New York, N. Y	5,468,190	1,284	90	13	36	3	15	5	509	140
Philadelphia, Pa	1,683,664	456	30	3	5	.....	14	.....	131	48
Pittsburgh, Pa	571,984	178	30	5	10	4	8	.....	34	10
St. Louis, Mo	745,988	160	34	.....	3	.....	11	.....	44	7
From 300,000 to 500,000 inhabitants:										
Buffalo, N. Y	461,335	170	6	1	2	1	11	.....	25	16
Cincinnati, Ohio	406,706	95	32	2	.....	.....	7	.....	22	13
Jersey City, N. J	300,133	75	4	.....	.....	.....	1	.....	26	8
Los Angeles, Cal	465,367	.....	2	1	5	.....	3	.....	36	12
Milwaukee, Wis	428,062	82	6	2	2	.....	17	1	16	3
Minneapolis, Minn	353,460	.....	12	.....	1	.....	1	.....	.....	.....
Newark, N. J	399,000	92	7	2	1	.....	5	.....	31	12
New Orleans, La	366,484	117	13	.....	13	1	.....	.....	32	19
San Francisco, Cal	[1] 416,912	163	18	2	4	.....	9	.....	28	11
Seattle, Wash	300,834	42	.....	.....	1	.....	1	.....	5	2
Washington, D. C	358,679	111	9	.....	5	.....	7	.....	16	8
From 200,000 to 300,000 inhabitants:										
Columbus, Ohio	209,722	70	10	.....	2	.....	4	.....	9	5
Indianapolis, Ind	265,578	.....	17	.....	2	.....	2	.....	24	.....
Portland, Oreg	272,833	34	.....	.....	.....	.....	2	.....	4	8
Providence, R. I	250,025	67	13	1	.....	.....	3	.....	.....	8
Rochester, N. Y	250,747	64	.....	1	.....	.....	.....	.....	14	5
St. Paul, Minn	241,999	54	7	.....	.....	.....	1	.....	3	6
From 100,000 to 200,000 inhabitants:										
Birmingham, Ala	174,108	29	5	1	.....	.....	5	.....	4	5
Bridgeport, Conn	118,434	36	4	.....	.....	.....	.....	.....	2	1
Cambridge, Mass	111,669	23	5	.....	5	.....	.....	.....	6	.....
Camden, N. J	104,349	.....	2	.....	.....	.....	.....	.....	5	.....
Fall River, Mass	126,904	44	3	1	3	.....	.....	.....	10	4
Grand Rapids, Mich	125,759	30	3	.....	2	.....	1	.....	11	1
Hartford, Conn	108,969	33	8	.....	.....	.....	1	.....	5	2
Lowell, Mass	112,124	44	2	1	5	.....	1	.....	6	3
Lynn, Mass	100,316	19	1	.....	.....	.....	.....	.....	4	2
Nashville, Tenn	115,978	37	.....	.....	5	.....	2	.....	4	1
New Bedford, Mass	114,694	38	1	.....	2	.....	2	.....	5	3
New Haven, Conn	147,095	.....	4	.....	.....	.....	.....	.....	5	.....
Oakland, Cal	190,803	.....	2	.....	3	.....	2	.....	6	2
Omaha, Nebr	135,455	53	7	.....	.....	.....	4	.....	.....	3
Reading, Pa	105,094	26	.....	.....	.....	.....	1	.....	3	1
Richmond, Va	154,674	53	3	.....	.....	.....	1	.....	12	9
Salt Lake City, Utah	113,567	22	1	.....	19	.....	9	.....	.....	1
Springfield, Mass	107,218	40	.....	.....	.....	.....	3	.....	5	2
Syracuse, N. Y	152,534	47	6	3	2	.....	1	.....	10	4
Tacoma, Wash	108,094	14	1	.....	5	.....	.....	.....	10	.....
Toledo, Ohio	187,840	70	3	.....	2	.....	4	.....	21	3
Trenton, N. J	109,212	34	3	.....	.....	.....	1	.....	6	3
Worcester, Mass	160,523	43	2	1	.....	.....	2	.....	9	4
From 50,000 to 100,000 inhabitants:										
Atlantic City, N. J	55,866	.....	3	.....	.....	.....	.....	.....	2	.....
Bayonne, N. J	67,582	.....	1	.....	1	.....	1	.....	3	.....
Berkeley, Cal	54,879	.....	.....	.....	1	.....	.....	.....	1	.....
Binghamton, N. Y	53,082	22	2	.....	.....	.....	2	.....	1	.....
Brockton, Mass	65,746	11	.....	.....	.....	.....	.....	.....	3	.....
Canton, Ohio	59,139	8	2	.....	.....	.....	.....	.....	1	.....
Charleston, S. C	60,427	32	.....	.....	.....	.....	.....	.....	.....	2
Covington, Ky	56,520	6	1	.....	.....	.....	.....	.....	.....	2
Duluth, Minn	91,013	.....	2	.....	2	.....	.....	.....	3	.....
El Paso, Tex	51,936	24	2	.....	1	.....	1	.....	.....	3
Evansville, Ind	72,125	15	1	.....	.....	.....	.....	.....	.....	.....
Fort Worth, Tex	99,528	15	.....	.....	.....	.....	1	.....	1	1
Harrisburg, Pa	70,754	14	1	.....	.....	.....	.....	.....	8	.....
Hoboken, N. J	76,104	12	1	.....	.....	.....	.....	.....	3	1
Johnstown, Pa	66,585	28	.....	.....	.....	.....	2	.....	3	.....

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

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

City Reports for Week Ended Sept. 16, 1916—Continued.

City.	Population as of July 1, 1915 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 50,000 to 100,000 inhabitants—Continued.										
Lancaster, Pa.	50,269	.....	1	.....	.....	.....	.....	.....	.....	.....
Lawrence, Mass.	98,197	28	3	.....	.....	.....	.....	.....	3	4
Little Rock, Ark.	55,158	18	3	.....	.....	.....	.....	.....	.....	.....
Malden, Mass.	50,067	10	3	.....	.....	.....	2	.....	4	.....
Manchester, N. H.	76,959	32	.....	1	.....	.....	3	.....	1	1
Mobile, Ala.	56,536	21	.....	.....	.....	.....	.....	.....	1	2
Norfolk, Va.	88,076	18	1	.....	.....	.....	1	.....	3	3
Passaic, N. J.	69,010	.....	1	.....	.....	.....	.....	.....	2	3
Portland, Me.	63,014	24	6	.....	.....	.....	1	.....	.....	2
Rockford, Ill.	53,761	14	.....	.....	.....	.....	.....	.....	.....	1
Sacramento, Cal.	64,806	24	2	1	.....	.....	.....	.....	3	4
Saginaw, Mich.	54,815	15	1	.....	.....	.....	1	.....	.....	1
St. Joseph, Mo.	83,974	17	2	.....	.....	.....	.....	.....	.....	1
San Diego, Cal.	51,115	20	3	.....	1	.....	1	.....	.....	7
Schenectady, N. Y.	95,265	21	2	.....	2	.....	1	.....	5	1
Somerville, Mass.	85,460	25	6	.....	.....	.....	.....	.....	3	3
South Bend, Ind.	67,030	17	4	.....	1	.....	3	.....	.....	2
Springfield, Ill.	59,468	19	5	1	.....	.....	3	.....	.....	1
Springfield, Ohio.	50,804	14	1	.....	.....	.....	.....	.....	4	2
Troy, N. Y.	77,738	.....	.....	.....	.....	.....	.....	.....	6	2
Wichita, Kans.	67,847	.....	10	.....	.....	.....	1	.....	1	.....
Wilkes-Barre, Pa.	75,218	16	.....	.....	.....	.....	1	.....	2	1
Wilmington, Del.	93,161	32	1	.....	.....	.....	3	.....	.....	.....
From 25,000 to 50,000 inhabitants:										
Alameda, Cal.	27,031	3	.....	.....	.....	.....	.....	.....	.....	.....
Auburn, N. Y.	36,947	14	.....	.....	.....	.....	.....	.....	.....	.....
Austin, Tex.	34,016	5	2	.....	.....	.....	1	.....	.....	.....
Brookline, Mass.	31,934	7	1	.....	.....	.....	.....	.....	1	2
Butler, Pa.	26,587	9	.....	.....	.....	.....	.....	.....	.....	.....
Butte, Mont.	42,918	32	2	.....	.....	.....	.....	.....	.....	2
Chelsea, Mass.	[1]32,452	6	.....	.....	.....	.....	.....	.....	1	.....
Chicopee, Mass.	28,688	9	3	2	.....	.....	.....	.....	2	.....
Columbia, S. C.	34,058	14	2	.....	.....	.....	1	.....	.....	.....
Cumberland, Md.	25,564	8	2	1	2	.....	2	.....	1	.....
Danville, Ill.	31,554	7	1	.....	.....	.....	1	.....	1	1
Dubuque, Iowa.	39,650	.....	.....	.....	.....	.....	.....	.....	2	2
East Orange, N. J.	41,155	6	.....	.....	1	.....	.....	.....	2	.....
Elgin, Ill.	27,844	11	.....	.....	.....	.....	1	3	.....	.....
Everett, Mass.	38,307	.....	1	.....	.....	.....	1	.....	2	.....
Everett, Wash.	33,767	5	.....	.....	.....	.....	.....	.....	.....	.....
Fitchburg, Mass.	41,144	13	8	1	2	.....	.....	.....	3	1
Galveston, Tex.	41,076	14	1	.....	.....	.....	1	.....	.....	3
Hagerstown, Md.	25,233	.....	8	.....	2	.....	5	.....	.....	.....
Haverhill, Mass.	47,774	.....	.....	.....	.....	.....	3	.....	3	1
Kalamazoo, Mich.	47,364	13	.....	.....	.....	.....	.....	.....	3	1
Kenosha, Wis.	30,319	6	6	2	.....	.....	.....	.....	.....	.....
La Crosse, Wis.	31,522	7	3	.....	.....	.....	2	.....	.....	.....
Lexington, Ky.	39,703	13	10	.....	.....	.....	6	.....	.....	2
Lincoln, Nebr.	46,028	13	.....	.....	.....	.....	.....	.....	.....	.....
Long Beach, Cal.	26,012	7	.....	.....	.....	.....	.....	.....	.....	.....
Lorain, Ohio.	35,662	.....	.....	.....	.....	.....	4	1	.....	.....
Lynchburg, Va.	32,385	15	.....	.....	.....	.....	2	1	1	2
Medford, Mass.	25,737	4	2	.....	.....	.....	1	.....	.....	.....
New Castle, Pa.	40,351	.....	.....	.....	.....	.....	1	.....	.....	.....
Newport, Ky.	31,722	8	1	.....	.....	.....	.....	.....	1	1
Newport, R. I.	29,631	10	1	.....	.....	.....	.....	.....	.....	1
Newton, Mass.	43,085	9	2	.....	.....	.....	.....	.....	1	1
Niagara Falls, N. Y.	36,240	12	4	.....	1	.....	.....	.....	3	1
Norristown, Pa.	30,833	7	.....	.....	.....	.....	.....	.....	.....	.....
Ogden, Utah.	30,466	4	1	.....	.....	.....	.....	.....	.....	.....
Orange, N. J.	32,524	7	.....	.....	.....	.....	.....	.....	1	1
Pasadena, Cal.	43,859	7	.....	.....	.....	.....	.....	.....	2	.....
Perth Amboy, N. J.	39,725	1	1	.....	.....	.....	.....	.....	.....	.....
Pittsfield, Mass.	37,580	17	1	.....	.....	.....	2	.....	.....	2
Portsmouth, Va.	38,610	11	1	.....	.....	.....	1	.....	.....	1
Quincy, Ill.	36,764	13	1	.....	.....	.....	.....	.....	.....	1
Quincy, Mass.	37,251	14	.....	.....	.....	.....	4	.....	2	.....
Racine, Wis.	45,507	13	.....	.....	.....	.....	.....	.....	.....	.....
Roanoke, Va.	41,929	11	6	.....	.....	.....	.....	.....	2	1
San Jose, Cal.	37,994	13	10	1	.....	.....	.....	.....	.....	.....

[1] Population Apr. 15, 1910; no estimate made.

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

City Reports for Week Ended September 16, 1916—Continued.

City.	Population as of July 1, 1915 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabitants—Continued.										
Steubenville, Ohio	26,631	7	3							
Stockton, Cal	34,508	7	1	1			1		1	
Superior, Wis	45,285	9	1		2					1
Taunton, Mass	35,957	12	1						2	3
Topeka, Kans	47,914	18			1					
Waltham, Mass	30,129	7							1	
Watertown, N. Y	29,384	9								2
West Hoboken, N. J	41,893	4								
Wheeling, W. Va	43,097	14					1			2
Williamsport, Pa	33,495		2							
Wilmington, N. C	28,264	9								1
Zanesville, Ohio	30,406	11								1
From 10,000 to 25,000 inhabitants:										
Ann Arbor, Mich	14,979	9							1	1
Braddock, Pa	21,310	14	1							
Cairo, Ill	15,593	9	2							
Clinton, Mass	[1] 13,075	1			1				1	
Coffeyville, Kans	16,765		1				1		1	
Concord, N. H	22,480	4								
Galesburg, Ill	23,923	2								
Kearny, N. J	22,753	8								
Kokomo, Ind	20,312	5	1						1	
Long Branch, N. J	15,057	1								
Melrose, Mass	17,166	2								1
Morristown, N. J	13,158	7						1		
Nanticoke, Pa	22,441	6								
Newburyport, Mass	15,195	2								
New London, Conn	20,771	13								1
North Adams, Mass	[1] 22,019	9								1
Northampton, Mass	19,846	5								
Plainfield, N. J	23,280	4							1	
Rutland, Vt	14,624	7	2		2		3			1
Sandusky, Ohio	20,160		1		3		1		1	
Saratoga Springs, N. Y	12,842	2	1						1	
Steelton, Pa	15,337	10							2	
Wilkinsburg, Pa	22,361	4	1		1		1			
Woburn, Mass	15,862	2								

[1] Population Apr. 15, 1910; no estimate made.

FOREIGN.

CHINA.

Examination of Rats—Hongkong.

During the week ended August 5, 1916, 1,936 rats were examined at Hongkong. No plague infection was found.

The last plague-infected rat at Hongkong was reported found during the week ended July 22, 1916.

Examination of Rats—Shanghai.

During the week ended August 19, 1916, 318 rats were examined at Shanghai. No plague infection was found.

The last plague-infected rat at Shanghai was reported found during the week ended May 6, 1916.

ECUADOR.

Further Relative to Plague at Ambato.

During the month of May, 1916, an epidemic outbreak of plague was reported in the interior of Ecuador, at the town of Ambato.[1] Later reports received show that from May 28 to June 30, 1916, 42 cases of plague were notified at Ambato. Of these, 2 cases were of the pneumonic form. In 60 per cent of the bubonic cases the buboes were inguinal, in 30 per cent axillary, and in 10 per cent cervical.

Ambato is an industrial town situated in the mountain region of Ecuador and having a population of 130,000.

GREAT BRITAIN.

Examination of Rats—Liverpool.

During the four weeks ended August 26, 1916, 495 rats were examined at Liverpool. No plague infection was found.

Further Relative to Poliomyelitis at Aberdeen.

Referring to a previous report [2] of an outbreak of poliomyelitis at Aberdeen, in which a total of 39 cases was given for the period June 1 to July 3, 1916, a further report received shows the occurrence of 26 additional cases during the month of July, 1916. The majority of the cases occurred in children under 3 years of age.

[1] Public Health Reports, July 21, 1916, p. 1943. [2] Public Health Reports, Aug. 25, 1916, p. 2290.

Plague—Hull.

Two cases of plague have been notified at Hull, England, the first occurring August 19, 1916,[1] the second August 20, 1916. Both cases occurred in persons employed as chippers and scrapers on the Egyptian steamship *Keneh*, which was undergoing repairs at Hull. The *Keneh* had carried a cargo from Alexandria, Egypt, to Dundee, Scotland, and after unloading had proceeded to Hull for repairs, arriving July 18, 1916. The vessel had been in dry dock for a month previous to the occurrence of the first case of plague. Only one member of the crew, an engineer, had remained on board in dock. Rats and fleas were found present on the vessel, but no plague infection among them has been found.

Plague—Liverpool.

Three cases of plague were reported at Liverpool, England, September 22, 1916. The cases occurred in residents of the stable warehouse district, 1 mile distant from the water front, and were all in persons of the same family.

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

Reports Received During Week Ended Oct. 6, 1916.[2]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Akyab	July 2-8		1	
Bombay	Aug. 6-19	35	24	
Calcutta	July 23-Aug. 12		28	
Henzada	July 16-22		1	
Mandalay	July 23-29		1	
Pakokku	July 2-8		1	
Rangoon	July 23-29	1	1	
Indo-China				Mar. 1-31, 1916: Cases, 686; deaths, 338.
Provinces—				
Anam	Mar. 1-31	458	286	
Cochin-China	do	4	3	
Tonkin	do	224	49	
Saigon	July 31-Aug. 5	10	5	
Korea				Sept. 23, 1916: In southern and central Korea, 108 cases.
Siam:				
Bangkok	July 16-29	4	4	
Turkey in Asia				Total from outbreak May, 1916, to July 20, 1916: Cases, 6,902; deaths, 3,633.
Adana	June 26-July 9	21	14	
Bagdad	July 5	1	1	
Beyrouth	July 14-19	39	17	
Jaffa	July 1-14	18	19	

PLAGUE.

Egypt				Jan. 1-Aug. 31, 1916: Cases, 1,690; deaths, 823.
Alexandria	Aug. 9-24	4	2	
Great Britain:				
Hull	Aug. 20	1		Case occurring Aug. 19 ended fatally Aug. 22.
Liverpool	Sept. 22	3		
Greece:				
Island of Chios—				
Mitylene	Sept. 29			Present.
Volo	do			Slight epidemic.

[1] Public Health Reports, Sept. 29, 1916, p. 2715.
[2] From medical officers of the Public Health Service American consuls, and other sources.

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

Reports Received During Week Ended Oct. 6, 1916—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
India				July 30-Aug. 12, 1916: Cases, 3,288; deaths, 2,367.
Bassein	July 9-29		41	
Bombay	Aug. 6-12	4	4	
Henzada	July 9-22		4	
Madras Presidency	Aug. 6-19	274	195	
Moulmein	July 9-29		48	
Pegu	July 9-15		1	
Prome	July 9-29		33	
Rangoon	July 16-Aug. 12	114	107	
Toungoo	July 9-29		9	
Indo-China				Mar. 1-31, 1916: Cases, 85; deaths, 38.
Provinces—				
Anam	Mar. 1-31	52	31	
Cochin-China	do	33	7	
Saigon	July 31-Aug. 12	6	2	
Siam:				
Bangkok	July 9-29	20	16	
Straits Settlements:				
Singapore	July 30-Aug. 5	1	1	

SMALLPOX.

Australia:				
New South Wales				Aug. 4-17, 1916: Cases, 6.
Lake Macquarie	Aug. 4-17	2		
Narrabri	do	3		
Swansea	do	1		
Austria-Hungary:				
Austria—				
Prague	Aug. 13-19	2	1	
Brazil:				
Bahia	Aug. 19-26	1	1	
British East Africa:				
Mombasa	July 1-31		1	
China:				
Chungking	July 30-Aug. 21			Present.
Dairen	Aug. 19-26		1	
Foochow	July 30-Aug. 5			Do.
Harbin	July 4-Aug. 6		2	
Nanking	Aug. 13-19			Do.
Egypt:				
Cairo	Apr. 30-May 6	31	4	
Port Said	do		1	
India:				
Bombay	Aug. 6-19	9	5	
Calcutta	July 30-Aug. 5		1	
Karachi	Aug. 6-12	1		
Madras	Aug. 6-19	22	11	
Rangoon	July 16-29	6	1	
Indo-China				Mar. 1-31, 1916: Cases, 265; deaths, 11.
Provinces—				
Anam	Mar. 1-31	44	5	
Cambodia	do	1		
Cochin-China	do	13	2	
Tonkin	do	207	4	
Saigon	Aug. 7-13	3	3	
Japan:				
Kobe	Aug. 28-Sept. 3	2	1	
Java				West Java—June 30-July 6, 1916: Cases, 19; deaths, 2.
Batavia	June 30-July 6	1	1	
Straits Settlements:				
Singapore	July 30-Aug. 5	1		
Venezuela:				
Maracaibo	Sept. 2-8		2	

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

Reports Received During Week Ended Oct. 6, 1916—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Hungary—				
Budapest	Aug. 6-12	1		
Belgium—				
Liege	Aug. 12-19		1	
China:				
Antung	Aug. 21-27	1		
Egypt:				
Alexandria	Aug. 13-26	11	11	
Cairo	Apr. 30-May 6	95	37	
Port Said	do	5	3	
Germany:				
Aix la Chapelle	Aug. 6-12		1	
Barmen	Aug. 13-19		1	
Berlin	do		1	
Hanover	July 23-29	1		
Konigsberg	Aug. 19-26	2		
Great Britain:				
Belfast	Aug. 27-Sept. 9	1	1	
Greece:				
Saloniki	July 25-Aug. 14		29	
Mexico:				
Chihuahua	Sept. 20			Estimated number of cases, 100.
Juarez	Sept. 20	6		
Switzerland:				
Zurich	Aug. 27-Sept. 2	1		
Turkey in Asia:				
Trebizond	Aug. 6-12	3	1	

Reports Received from July 1 to Sept. 29, 1916.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary				Mar. 12-May 6, 1916: Cases, 425; deaths, 155.
Austria	Mar. 26-Apr. 8	2		
Do	July 9-15	1		
Bosnia-Herzegovina	Mar. 12-May 20	398	147	
Hungary	Mar. 20-Apr. 2	2		
Ceylon:				
Colombo	June 25-July 1	1	1	May 7-20, 1916: Cases, 43; deaths, 5, from s. s. Hong Kheng from Halfong; total to June 1: Cases, 61; deaths, 37. May 28-June 10, 1916: Cases, 19, from the port.
China:				
Dairen	Aug. 6-12	1		On s. s. Taihei Maru from Hongkong and Chefoo.
Hongkong	Aug. 19			Present.
Egypt:				
Suez	May 18-20	5	2	From s. s. Pei-ho from Bombay.
Tor, quarantine station	May 22-June 3	112	42	Do.
Greece:				
Moschopolis	July 25-31	15	8	
India:				
Akyab	June 11-17		1	
Bassein	Apr. 23-June 10		3	
Bombay	May 14-July 1	21	9	
Do	July 2-Aug. 5	73	46	
Calcutta	May 7-July 1		259	
Do	July 2-22		31	
Henzada	Apr. 23-June 17		6	
Madras	June 25-July 1	1	1	
Do	July 2-22	5	3	
Pegu	June 4-10		1	
Rangoon	May 24-July 1	12	8	

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

Reports Received from July 1 to Sept. 29, 1916—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China				Dec. 1–31, 1915: Cases, 510; deaths, 395. Jan. 1–Feb. 29, 1916: Cases, 1,332; deaths, 762.
Provinces—				
Anam	Dec. 1–31	493	388	
Do	Jan. 1–Feb. 29	1,295	738	
Cambodia	do	11	10	
Cochin-China	do	6	1	
Tonkin	Dec. 1–31	17	7	
Do	Jan. 1–Feb. 20	20	13	
Saigon	May 1–July 2	162	74	
Do	July 3–16	35	23	
Japan:				
Kobe	Aug. 30	46		
Nagasaki	Aug. 8–18	262	107	
Osaka	Aug. 30	353		
Yokohama	Aug. 15	6	5	55 cases, with 9 deaths in quarantine, from s. s. Hawaii Maru from Hongkong via ports.
Suburbs of city	Aug. 14–20	8	4	To date: Cases, 6; deaths, 5.
Java				East Java, Apr. 8–June 30, 1916: Cases, 50; deaths, 35. Mid-Java, June 3–30, 1916: 30 cases, 26 deaths. West Java, Apr. 3–June 29, 1916: Cases, 661; deaths 409. July 7–13: Cases, 91; deaths, 61.
Batavia	Apr. 13–June 29		89	
Do	July 7–13	16	12	
Malang	Apr. 8–14	2	2	
Malang and Djombang	Apr. 28–May 5	2	2	
Surabaya residency	May 6–19	5	2	Including Malang, 2 cases, and Sidoardjo and Malang, 3 cases, with 2 deaths.
Korea:				
Chemulpo	Sept. 18	2		
Fusan	Sept. 2	1		
Persia:				
Asterabad	June 10			Present, with 4 or 5 deaths daily.
Enzeli	July 1–31	7	4	
Foumen	May 9	3	2	Previously erroneously included in cases at Recht.
Ghazian	June 13	2	1	
Kazvin	July 1–31	22	15	
Mohammerah	June 12			Present.
Recht	July 1–31	19	2	
Teheran	Sept. 1			Do.
Urumiah	July 1–31	25		
Philippine Islands:				
Manila	May 14–July 1	36	25	Not previously reported: Cases, 8; deaths, 1.
Do	Aug. 6–12	37	14	
Provinces				July 16–Aug. 12, 1916: Cases, 1,161; deaths, 627.
Albay	July 2–Aug. 12	135	64	
Bataan	do	4	2	
Batangas	July 30–Aug. 12	14	7	
Bulacan	June 18–July 1	17	4	
Do	July 2–Aug. 12	527	245	
Cagayan	June 25–July 1	2	1	
Do	July 2–8	2		
Camarines	June 18–July 1	69	32	
Do	July 2–Aug. 12	709	447	
Cavite	June 11–July 1	14	11	
Do	July 2–Aug. 5	21	16	
Laguna	May 21–July 1	31	20	
Do	July 2–Aug. 12	93	64	
Mindanao	July 16–Aug. 5	19	11	
Misamis	July 16–Aug. 12	123	70	
Pampanga	July 9–Aug. 5	61	52	
Do	Aug. 6–12	11	11	
Rizal	May 21–July 1	11	9	
Do	July 2–Aug. 12	108	63	
Romblon	June 18–July 1	68	39	
Do	July 9–Aug. 12	16	13	
Tayabas	June 10–24	11	8	
Do	Aug. 6–12	1	1	
Siam:				
Bangkok	May 15–27	22	21	
Straits Settlements:				
Singapore	May 27–June 24	8	3	
Turkey in Europe:				
Constantinople	May 19–July 6	118	63	Present among soldiers June 14.

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

Reports Received from July 1 to Sept. 29, 1916—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Turkey in Asia:				
Adana	July 16–July 3	85	46	
Aleppo	June 15–25	47	16	
Bagdad	June 15–27	77	17	
Damascus	June 16–July 3	77	50	
Jaffa	June 17–July 26	148	57	
Smyrna	June 15–28	22	13	Epidemic. Estimated number cases daily, 50.
At sea:				
Steamship Hong-Kheng	Apr. 27–May 9	17	14	En route from Haifong, Indo-China, to Colombo.
Steamship Pei-ho	Apr. 19–30	1	1	From Saigon, Indo-China, for Colombo.
Do	May 5–17	8	8	From Colombo for Suez.

PLAGUE.

Ceylon:				
Colombo	Apr. 30–July 1	49	46	
Do	July 2–22	28	25	
Chile:				
Mejillones	May 28–June 3	1		
Antofagasta	June 4–July 22	2		
China:				
Amoy	July 16–Aug. 5			Present.
Hongkong	May 28–June 30	7	7	
Do	July 23–Aug. 5	2	2	
Ecuador:				
Ambato	May 1–31			Epidemic.
Bahia	do			Country district, vicinity of Bahia.
Daule	June 1–30	4	2	
Guayaquil	May 1–June 30	10	3	
Manta	May 1–31			Country district, vicinity of Manta.
Egypt				Jan. 1–Aug. 10, 1916: Cases, 1,687; deaths, 823. Jan. 1–June 29, 1916: Cases, 1,634; deaths, 792.
Alexandria	May 26–Aug. 6	40	25	
Cairo	July 10	1		Imported.
Port Said	May 28–June 28	8	5	
Do	July 20–Aug. 3	5	4	
Provinces—				
Assiout	May 27–June 29	9	8	
Beni-Souef	May 26–June 25	34	15	
Do	July 1–10	2	1	
Fayoum	May 26–June 30	112	45	
Do	July 1–Aug. 3	9	2	
Galioubeh	June 7	1		
Girgeh	June 9–21	3	1	
Do	July 7–10	7	7	
Menoufieh	June 12–30	9	4	
Do	July 1–31	5	3	
Minieh	May 29–June 30	37	14	
Do	July 3–10	5	2	
Great Britain:				
Bristol	Aug. 18–31	3		
Hull	Aug. 31	1		
India				May 7–July 29, 1916: Cases, 8,830; deaths, 6,443.[1]
Bassein	Apr. 23–July 1		201	
Bombay	May 14–July 1	290	264	
Do	July 2–Aug. 5	82	72	
Calcutta	May 7–July 1		14	
Henzada	Apr. 23–July 1		14	
Karachi	May 14–July 1	72	61	
Do	July 2–15	1	3	
Madras Presidency	May 14–June 24	139	94	
Do	July 9–Aug. 5	328	210	
Mandalay	May 14–June 3		1	
Moulmein	Apr. 23–June 10		37	
Do	July 2–8		21	

[1] Reports for week ended May 20 and 27, 1916, not received.

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

Reports Received from July 1 to Sept. 29, 1916—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
India—Continued.				
Pegu	June 11-July 1		2	
Prome	Apr. 23-May 20		1	
Do	July 2-8		6	
Rangoon	Apr. 23-July 1	467	440	Apr. 16-22, 1916: Cases, 54; deaths, 52.
Do	July 2-15	73	65	
Toungoo	June 25-July 1		2	
Indo-China				Dec. 1-31, 1915: Cases, 90; deaths, 70. Jan. 1-Feb. 29, 1916: Cases, 205; deaths, 153.
Provinces—				
Anam	Dec. 1-31	36	20	
Do	Jan. 1-Feb. 29	79	62	
Cambodia	Dec. 1-31	27	36	
Do	Jan. 1-Feb. 29	77	71	
Cochin China	Dec. 1-31	4	1	
Do	Jan. 1-Feb. 29	49	20	
Tonkin	Dec. 1-31	23	23	
Saigon	May 15-July 2	55	30	
Do	July 24-30	1	1	
Java:				
Residences—				
Kediri	Apr. 9-May 19	18	18	
Pasoeroean	Apr. 9-June 30	13	12	
Surabaya	do	28	25	
Surakarta	do	15	24	
Japan:				
Taiwan—				
Tamsui	July 15-22	2	2	17 miles from capital city.
Mauritius	Apr. 15-June 21	6	8	
Persia:				
Recht	May 2-19	20	14	
Siam:				
Bangkok	Apr. 30-July 1	66	59	
Do	July 2-8	9	7	
Straits Settlements:				
Singapore	Apr. 30-July 1	5	1	
Do	July 2-29		3	
Union of South Africa:				
Orange Free State	Jan. 23-Mar. 26	36	23	Remaining under treatment Mar. 26, 6 cases.

SMALLPOX.

Australia:				
New South Wales—				
Angledool	July 21-Aug. 3	1		
Guildford	June 9-22	2		
Narrabri	May 26-June 7	8		
Do	July 7-Aug. 3	16		
Sydney	June 23-30	1		
Do	July 1-Aug. 3	4		
Tamworth	June 9-22	1		
Do	July 7-20	1		
Walgett	July 21-Aug. 3	6		
Austria-Hungary:				
Austria				Feb. 13-May 20, 1916: Cases, 2,175.
Galicia, Province	Apr. 23-May 20	464		
Prague	July 2-29	2		
Vienna	May 27-July 1	4	1	
Do	July 9-Aug. 5	3		
Hungary—				
Budapest	May 21-July 1	38	15	
Do	July 2-8		1	
Brazil:				
Bahia	July 2-Aug. 19	7	7	
Para	July 2-8		4	
Rio de Janeiro	Apr. 9-June 17	94	18	
Santos	May 8-14		1	
British East Africa:				
Mombasa	Apr. 24-May 31	4	2	

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

Reports Received from July 1 to Sept. 29, 1916—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Canada:				
Ontario—				
Fort William and Port Arthur	July 9–15	1		
Niagara Falls	July 2–8	1		
Toronto	June 25–July 29	3		
Ceylon:				
Colombo	May 7–June 3	4		
China:				
Antung	May 22–June 18	2	1	
Chungking	May 7–June 24			
Do	July 2–22			Present.
Dairen	May 21–July 1	2	1	Do.
Do	July 16–Aug. 12	3	1	
Foochow	May 7–27			Do.
Do	July 2–22			Do.
Harbin	May 2–June 18	3	1	
Do	July 9–16	1		
Hongkong	May 7–June 24	68	50	
Do	July 2–Aug. 5	7	6	
Nanking	June 11–17			Do.
Tientsin	May 14–July 1	45	11	
Do	July 2–29	3	1	
Egypt:				
Alexandria	May 28–June 17	4	2	
Cairo	Jan. 22–Apr. 29	75	25	
Port Said	Mar. 12–Apr. 15	4	3	
France:				
Paris	May 14–July 1	9		
Do	July 2–8	1		
Germany:				
Breslau	May 21–27	1		
Hamburg	June 11–17	1		
Königsberg	July 2–8	3		
Great Britain:				
Cardiff	June 4–17	1	1	
London	do	1		
Southampton	July 31–Aug. 5	1		
Greece:				
Athens	Apr. 1–June 13	178	37	
Do	July 9–23			Present. Estimated occurrence, 10 cases weekly.
India:				
Bassein	May 7–June 10		2	
Bombay	May 14–July 1	153	79	
Do	July 2–Aug. 5	32	22	
Calcutta	May 7–June 3		3	
Do	July 2–8		1	
Madras	May 14–July 1	139	42	
Do	July 2–Aug. 5	59	32	
Rangoon	Apr. 23–July 1	260	135	
Do	July 2–15	4	4	
Indo-China				Dec. 1–31, 1915: Cases, 74; deaths, 14. Jan. 1–Feb. 29, 1916: Cases, 134; deaths, 16.
Provinces—				
Anam	Dec. 1–31	48		
Do	Jan. 1–Feb. 29	24		
Cambodia	Dec. 1–31	19	13	
Do	Jan. 1–Feb. 29	37	14	
Cochin China	Dec. 1–31	1	1	
Do	Feb. 1–29	10		
Tonkin	Dec. 1–31	6		
Do	Jan. 1–Feb. 29	63	2	
Saigon	July 24–30	1	1	
Japan:				
Kobe	May 29–June 25	24	4	
Do	July 24–30	9	1	
Nagasaki	June 26–July 2	1	1	
Java				East Java, Apr. 8–June 30: Cases, 88, deaths, 11. Mid-Java, Apr. 1–June 30, 1916: Cases, 233, deaths, 47. West Java, Apr. 13–June 29, 1916: Cases, 278; deaths, 59. July 7–13: Cases, 85; deaths, 15.
Batavia	Apr. 13–June 29	31	9	
Do	July 7–13	5	3	
Samarang	May 13–19	2	2	
Surabaya	May 9–June 16	2	1	
Malta	Apr. 1–30	7	1	

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

Reports Received from July 1 to Sept. 29, 1916—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Mexico:				
Aguascalientes	June 12-July 2		33	
Do	July 3-Sept. 10		33	
Frontera	May 28-June 10	4	1	
Guadalajara	June 11-17	35	9	
Mazatlan	May 31-June 6		4	
Tenosique	June 14			175 miles south of Frontera: Epidemic among troops.
Vera Cruz	June 4-July 2		9	
Do	July 3-Sept. 3		4	
Netherlands:				
Amsterdam	May 28-June 3	1		
Philippine Islands:				
Manila	do	1		
Do	July 1-8	3		
Porto Rico				June 19-25, 1916: Cases, 33.
Aguas Buenas	June 19-25	5		
Arecibo	do	2		
Do	Aug. 7-13	1		
Bayamon	June 19-July 2	2		
Naranjito	June 26-July 2	4		
Rio Piedras	do	1		
San Juan	do	24		
Toa Alta	do	12		
Portugal:				
Lisbon	May 21-July 1	15		
Do	July 9-Aug. 26	9		
Russia:				
Moscow	Apr. 30-July 1	222	59	
Do	July 2-15	23	127	
Riga	Apr. 6-12	1		
Do	July 1-22	2		Apr. 1-30, 1916: 1 case.
Petrograd	Apr. 23-July 1	162	35	
Do	July 2-30	32	9	
Siam:				
Bangkok	May 24-30	2		
Spain:				
Cadiz	July 1-31		1	
Madrid	May 1-31		13	June 1-30, 1916: Cases, 10.
Do	July 1-31		17	
Malaga	May 1-31		7	
Seville	June 1-30		3	
Valencia	May 24-July 1	12	4	
Do	July 8-Aug. 19	7		
Straits Settlements:				
Penang	May 14-20	3		
Singapore	Apr. 30-July 1	5	3	
Do	July 16-29	1	2	
Switzerland:				
Basel	May 13-July 1	29		
Do	July 2-15	9		
Union of South Africa:				
Durban	June 1-30	1		
Johannesburg	May 28-June 3	1		
At sea:				
Steamship Katuna				Case of smallpox landed at Colombo, Ceylon, May 12, 1916. Vessel arrived May 27 at Fremantle, Australia, was ordered to quarantine, and proceeded to Melbourne direct for disinfection.

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

Reports Received from July 1 to Sept. 29, 1916—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Austria				Feb. 13-May 20, 1916: Cases, 2,407.
Galicia, province	Apr. 22-May 20	1,311		
Vienna	July 2-15	3		
Hungary				Feb. 21-Mar. 5, 1916: Cases, 35; deaths, 7.
Budapest	May 21-June 24	14	2	
Do	July 2-29	2		
Canada:				
New Brunswick—				
St. John	July 29	4		
Canary Islands:				
Santa Cruz de Tenerife	July 31-Aug. 5		1	
China:				
Antung	June 19-25	1	1	
Do	July 22-Aug. 13	2		
Harbin	May 2-8	1		
Do	July 3-16	1		
Tientsin	May 14-20		1	
Egypt:				
Alexandria	May 21-July 1	235	93	
Do	July 2-Aug. 12	132	55	
Cairo	Jan. 8-Apr. 29	392	186	
Port Said	Mar. 18-Apr. 29	18	9	
Germany:				
Aix la Chapelle	July 2-8		1	
Berlin	June 18-24		1	
Do	July 16-Aug. 12		7	
Bremen	do	6		
Breslau	Aug. 15-21	3		
Chemnitz	May 28-June 3		1	
Frankfort on Main	June 11-17		1	
Hanover	May 7-27	4	1	
Do	July 1-22	2		
Königsberg	June 4-10	1		
Do	July 9-Aug. 19	11		
Leipzig	June 4-10		1	
Stettin	July 16-Aug. 19		3	
Great Britain:				
Belfast	July 16-Aug. 26	11	3	
Glasgow	July 9-Aug. 12	8	6	
Greece:				
Saloniki	May 1-July 2		61	
Do	July 3-9		12	
Italy:				
Palermo	June 29-July 5	1	1	
Japan:				
Hakodate	July 16-22	2		
Tokyo	May 22-July 25	114		Jan. 1-July 25, 1916: Cases, 468.
Java				East Java, Apr. 8-June 30, 1916: Cases, 24; deaths, 9. Mid-Java, June 30, 1916: Cases, 76; deaths, 18. West Java, Apr. 13-June 29, 1916: Cases, 118; deaths, 18. July 7-13: Cases, 9; deaths, 2.
Batavia	Apr. 13-June 29	46	13	
Do	July 7-13		1	
Samarang	Apr. 1-June 30	20	8	
Surabaya	Apr. 8-May 12	6	6	
Mexico:				
Aguascalientes	June 12-July 2		32	
Do	July 3-Sept. 10		139	
Chihuahua	Sept. 7	40		
Durango	Sept. 1			Present.
Juarez	Sept. 7	12		
Guadalajara	June 11-17	4	1	
Vera Cruz	June 4-9		2	
Do	July 24-Aug. 6		7	
Zacatecas, State				Sept. 7: Prevalent.
Netherlands:				
Rotterdam	July 30-Aug. 5		1	
Norway:				
Bergen	do		1	
Russia:				
Moscow	Apr. 30-July 1	909	52	
Do	July 9-15	19	3	
Petrograd	Apr. 23-July 1	59	13	
Do	July 3-30	12	2	

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

Reports Received from July 1 to Sept. 29, 1916—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Sweden:				
Stockholm	June 21-27	1		
Do	July 9-29	5		
Switzerland:				
Basel	July 24-Aug. 13	5		
Geneva	May 21-27	1		
Zurich	July 23-Aug. 12	4		
Turkey in Asia:				
Adana	May 13-June 25			Present.
Do	July 2-8			Do.
Bagdad	June 27			Do.
Haifa	Apr. 21-June 11	35	13	
Jaffa	Apr. 23-June 25		47	Mar. 19-Apr. 1, 1916: Present.
Mersina	May 7-June 25	9		Apr. 2-8, 1916: Cases, 3. May 6-26: Many cases.
Do	July 2-8			Do.
Tarsus	May 13-27			Present.
Do	July 2-8			Do.

YELLOW FEVER.

Ecuador:				
Babahoyo	June 1-30	2		
Guayquil	May 1-June 30	76	51	
Milagro	June 1-30	1	1	
Mexico:				
Merida	July 1-Sept. 9	21	5	
Progreso	Aug. 13-Sept. 2	2	1	

SANITARY LEGISLATION.

COURT DECISIONS.

CONNECTICUT SUPREME COURT OF ERRORS.

Occupational Diseases—Not Included in the Terms of the Connecticut Workmen's Compensation Law.

MILLER *v.* AMERICAN STEEL & WIRE CO. (Apr. 19, 1916.)

The claimant was incapacitated for a short time by lead poisoning contracted in the course of his employment. The court decided that he was not entitled to compensation, as it was not the intention of the Connecticut Legislature to include occupational diseases within the terms of the workmen's compensation law.

[97 Atlantic Reporter, 345.]

Proceedings under the workmen's compensation act by Lewis Miller to claim compensation for personal injuries, opposed by the American Steel & Wire Co., the employer. Compensation was awarded, the award confirmed by the superior court, judgment entered accordingly, and the employer appeals. Error found, judgment set aside, and cause remanded for rendition of judgment vacating the award.

It appears from the finding of the commissioner that the claimant on or about March 26, 1915, and for some time prior thereto, had been in the employ of the respondent at New Haven, and about said date received, at New Haven, an injury arising out of and in the course of his employment, which injury consisted in lead poisoning contracted by working in and about a room in which were molten lead, fumes arising from molten lead, and small particles of lead and its compounds on the floor and throughout said room. In consequence of this injury the claimant was totally incapacitated for a short time and was awarded $7.14.

BEACH, J. (after stating the facts as above): An examination of the finding in the light of the commissioner's memorandum of decision convinces us that, for the purposes of this appeal, we must assume that the claimant's incapacity resulted from a gradual process of lead poisoning arising out of the claimant's employment; that it can not be traced to any fortuitous or unexpected event which can be located in point of time and place, and that it is not the result of a lesion produced by external violence or internal strain. The record therefore does not present the question whether our workmen's compensation act gives compensation for death or incapacity resulting from disease caused by accidental injury. It presents the very different question whether our compensation system includes occupational diseases as well as industrial accidents. More specifically, the question is whether the words "personal injury arising out of and in the course of his employment" in our act were intended by the general assembly to cover disease arising out of and in the course of the employment. There is no reference whatever to disease in our act, and, although the case nominally turns upon the proper construction of the single word "injury," the real issue is whether the important subject-matter of industrial diseases shall be introduced by judicial construction into a statute which does not mention the subject or contain any provisions for dealing with the problems peculiar to that subject.

It is to be regretted that the appellee was not represented by counsel in this court, and that we are compelled to pass upon a question of such importance without the benefit of full argument upon both sides.

We have said in Powers *v.* Bond Hotel Co., 89 Conn., 143, 148, 93 Atl. 245, that our act was undoubtedly passed with full knowledge of other similar acts of common purpose; and we have thus recognized the fact that these workmen's compensation acts have arisen out of an industrial condition common to all manufacturing communities, and in a broad sense were intended to remedy a mischief common to all. It is therefore of some, though not of controlling, importance to observe what has been the course of legislation in other States and countries with respect to including occupational disease in workmen's compensation acts. From an examination of the abstracts of 40 foreign workmen's compensation acts contained in the bulletin of the United States Department of Labor issued in 1914 it appears that 27 of them are on their face limited to injuries accidentally sustained, 9 use the word "injury" without qualification, and 4 expressly mention both injury and disease. Out of the 27 countries whose compensation acts are limited to injuries accidentally sustained, it is noted that 4 have separate acts providing for workmen's sickness insurance. In this country, according to a Digest of Workmen's Compensation Laws published by the Workmen's Compensation Publicity Bureau of New York City, in 1915, such acts are in force in 31 States and 2 Territories, and there is also an act of Congress covering employees of the United States Government. Of these acts 20 are expressly limited to accidental injuries, 14 use the term "personal injuries" without qualification, but of these 4 expressly exclude disease except as it results from injury. None of them expressly include disease. Evidently the general course of legislation abroad and in this country has been to deal with industrial accidents as a subject separate and distinct from occupational disease. Of the 10 acts in this country which do not on their face exclude occupational disease, 2 have been authoritatively construed to exclude it. (Industrial Commission *v.* Brown, 92 Ohio, —, 110 N. E., 744; Adams *v.* Acme Works, 182 Mich. 157, 148 N. W., 485, L. R. A. 1916A, 283, Pub. Health Rep., Reprint No. 342, p. 82.)

The California act has received a similar administrative construction. (Decisions Industrial Accident Board of California, vol. 1, No. 5, p. 11.)

On the other hand, the Massachusetts act has been construed to include occupational diseases. (Hurle's case, 217 Mass., 223; 104 N. E., 336. [Pub. Health Rep., Reprint No. 342, p. 74]; Johnson's case, 217 Mass., 388; 104 N. E., 735 [Pub. Health Rep., Reprint No. 342, p. 73].)

The act of Congress has been similarly construed by the Solicitor of the Department of Commerce reversing a former ruling on that subject. (In re Jule, Op. Sol. D. of L. p. 261.)

Thus, among what may be called the doubtful States, the preponderance of opinion, so far as any has yet been expressed, seems to be against importing occupational diseases into workmen's compensation acts by the process of judicial construction.

Turning now to the history of our own act: The first affirmative action taken by the general assembly was the passage of a resolution in 1911 providing for the appointment of a commission "to investigate and report to the next session of the general assembly upon the legality, advisability, and practicability of establishing a State insurance department or other form of State insurance as a means of providing compensation for workmen and others injured through accident occurring in industrial occupations." The commission appointed pursuant to this resolution presented its report, entitled "The Report of Connecticut State Commission on Compensation for Industrial Accident to the General Assembly of 1913," and the bill recommended by the commission was limited to compensation for "personal injuries from any accident arising out of and in the course of his employment." Several other bills, including one representing the views of the association of manufacturers and another the views of

the State Federation of Labor, were presented to the general assembly. None of them made any reference to occupational disease, and in the course of many days of committee hearings reported and filed with the State librarian we find no reference to occupational disease, and none appears in the bill as finally adopted or in the amendments of 1915.

It follows that, if we construe the act as covering compensation for death or incapacity arising from occupational disease, we shall introduce into it a most important subject, which, so far as we can ascertain from the public documents, was not considered by the legislature in this connection. In fact, the economic importance of the inclusion of disease in an act which contains no special provisions on the subject can hardly be estimated.

In the absence of any definition of occupational disease, the act would include all diseases arising out of and in the course of the employment, and the word "injury," if it includes the contraction of disease, includes also the aggravation of disease. So construed, our act might almost be said to give compensation for the common fate of all who work because they must. The result would be to increase very greatly the cost of compensation insurance, and might either discourage the acceptance of the act by employers, or make it difficult for any but the young and strong to obtain employment. It may be added that in Germany, and, so far as we know, in other countries, where a comprehensive scheme of workmen's sickness insurance is in force, the workman is required to contribute toward the cost of the insurance. We ought not to import into the act by construction a subject matter carrying such possible consequences unless convinced that the general assembly, notwithstanding its omission to refer to the subject, actually intended to include it. It seems more reasonable to suppose that in framing an elective system of compensation for the employer and the employee to accept or reject the general assembly should attempt to state the essential conditions of the bargain in terms, so that the parties could understand the consequences of their election. And when we find in such a statute and in the legislative proceedings leading to its adoption no mention of so important a subject as industrial sickness insurance, the reasonable inference is that the general assembly probably did not intend to include the cost of such insurance in the proposition which it submitted to employers for their acceptance. This seems still more probable because it appears from chapter 14, Public Acts, 1913, entitled "An act concerning reports of occupational diseases," that the general assembly had the subject of occupational disease under consideration at the very time when the workmen's compensation act was pending before it; and the action which it took in respect of that subject was to require physicians to report cases, not to the compensation commissioner of the district, but to the commissioner of the bureau of labor statistics. This would indicate that the general assembly intended to deal separately and at some future time with the subject of occupational disease.

There are, moreover, certain matters of important detail which one would naturally expect to find in a compensation act dealing with occupational disease, and which are not found in our act. In the first place, the causal relation between disease and employment can not as a rule be satisfactorily established except by expert testimony, which is likely to be beyond the reach of the claimant. In this connection the following extract from the decision of the commissioner is pertinent:

As pointed out by Dr. W. Gilman Thompson in the pioneer work in this country on occupational diseases, published only within the last few months, "occupational diseases are not new diseases from the ultimate pathological standpoint" (p. xxiv). He illustrates this by noting that the arteriosclerosis or chronic nephritis produced by lead poisoning does not differ from that condition when induced by alcoholism or other toxic causes, and he further instances the case of bone necrosis from phosphorus poisoning, which he states does not differ from necrosis of other origin. * * * As said by Prof. Thompson again, it may be "claimed that the workman is a victim of chronic lead poisoning; but are his arteriosclerosis and nephritis due exclusively to lead poisoning, or are alcohol, syphilis, or gout the underlying causes? Is his neuritis due to arsenic or alcohol? * * * Was he tuberculous before he undertook work in the pottery, or did his work contribute to the disease? * * * Are his chronic bronchitis, anemia, and malnu-

trition due to chronic gas poisoning acquired as a garment presser, or are they due to defective hygiene at home, poor food, lack of exercise, and the strain and anxieties of poverty? Such are the types of questions which arise in connection with occupational diseases." (Thompson, pp. 48, 49.)

If the general assembly intended to include occupational diseases in the act, some way would doubtless have been provided in which a claimant could get the expert evidence necessary to prove that the disease arose out of the employment.

There are other difficulties which this act does not pretend to meet. Take the case of death or incapacity resulting from an occupational disease gradually acquired while at work for different employers. Should the last employer bear the whole burden? Again, suppose an employer, or his insurer, undertakes to protect himself by having his workmen inspected at stated intervals and by discharging those who seem likely to become incapacitated from disease. Would not some provision have been made to prevent the industry from thus escaping the burden of the disease which it creates? Indeed, the principle of holding an employer for the consequences of disease caused by the employment does not fit very well into our compensation act, for it is inconsistent with the unrestricted right to terminate the obligation by discharge, and it is also inconsistent with the unrestricted right of the employer to revoke his acceptance of the compensation act at any time, and in respect of any employee, as provided in section 3 of part B. It seems very unlikely that the general assembly, if it intended to include compensation for industrial disease in the act, should have passed over these matters in silence, and should have constructed the act on the theory that adherence to the compensation scheme was a contract between the employer and each individual employee, which either party could terminate at will.

The points to which attention has been called were well understood by students of the subject, for in 1906 the English act was amended so as to include for the first time "industrial diseases." Section 8, subsection 1, of the amended act includes provisions for determining what are "industrial diseases," for the impartial expert determination of the cause of the disease by certifying surgeons appointed for that purpose, for the equitable distribution of the award among several employers in cases of progressive diseases and shifting employment, and for recoveries within a limited time after discharge or suspension from employment when the death or incapacity arose from such employment. As this English act was doubtless before the committee of the general assembly, the omission of all of its provisions which were specially adapted to deal with the subject of occupational disease is of great importance as affecting the question of probable legislative intent.

On the other hand, it may be said that the omission of the words "by accident," which in the English act qualify the words "personal injury," is also of great weight; and the Massachusetts court so considered it in construing their own act, saying that the term "personal injury" was an inclusive term, and that the omission of the qualifying words "by accident" was intended to enlarge the meaning of the term injury. (Hurle's case, supra.) That was a fair argument as applied to the Massachusetts act (Acts 1911, ch. 751), for the corresponding sections of the English act and the Massachusetts act are similar in form except for the omitted words, the Massachusetts act (sec. 1, pt. 2), reading as follows:

If an employee * * * receives a personal injury arising out of and in the course of his employment, he shall be paid compensation, etc.

The words "personal injury" are here coupled directly with the grant of compensation without any qualification, direct or indirect. But that is not so in our act (Acts 1913, ch. 138), of which section 1, Part B, reads thus:

When any persons in the mutual relation of employer and employee shall have accepted Part B of this act, the employer shall not be liable to any action for damages on account of a personal injury * * * arising out of and in the course of his employment, or on account of death resulting from an injury so sustained, but the employer shall pay compensation for such injury in accordance with the scale hereinafter provided, etc.

This language was not changed by the amendment of 1915 (Acts 1915, ch. 288). Obviously the word "injury" is not left without qualification in our act. Compensation is given for "such injury," and the reference is to injuries in respect of which the employer is exempted from actions for damages because of the mutual acceptance of Part B of the act. The only other place in the act where the phrase "personal injury arising out of or in the course of his employment" is found is in Part A of the act, dealing with the employer's liability at law, and the context there is as follows:

Defenses abolished.—In an action to recover damages for a personal injury sustained by an employee arising out of and in the course of his employment, or for death resulting from injuries so sustained, it shall not be a defense, etc.

It can not make any substantial difference in the construction of the term "injury" as used in that context whether the words "by accident" are inserted or omitted. This is the crucial point in the literal interpretation of our act. The injury to be compensated for is not defined except by the words "such injury," meaning, as the context says, a personal injury arising out of and in the course of the employment in respect of which the employer is exempted from actions for damages in case of the mutual acceptance by employer and employee of Part B, and in respect of which he is to be deprived of his so-called common-law defenses unless he does accept Part B. The point is not merely a verbal one. The act is in form elective. In Part A it takes away the employer's common-law defenses, and in Part B it offers him a compensation scheme whose disadvantages are more or less nicely balanced against the alternative of facing common-law actions for damages with a crippled defense. It was quite to be expected that the compensation scheme should cover the same ground as the common-law action for damages, and the language of the act was, we think, plainly intended to accomplish that result.

Since the common-law action for damages, which was founded on the master's negligence, never attempted to cover the typical case of an occupational disease caused by continued exposure to the ordinary and known risks of the employment, the inference is plain that the alternative compensation scheme was not intended to cover such diseases. As already pointed out, the act, because of its entire omission to refer to the subject, must include all diseases arising out of and in the course of the employment, or none. And, if it was not intended to cover the typical occupational disease, it was clearly not intended to cover any except such as are the direct result or natural consequence of an accidental injury.

Finally, and notwithstanding the discussion on that point contained in Hurle's case (supra), the term "personal injury," as used in common speech, especially in connection with actions for damages, is more often intended to exclude disease than to include it. It is evidently not used in this act in the legal sense which would include a libel or seduction of a minor daughter, but in the popular sense of a bodily injury sustained while in the course of the employment; and in section 20 the phrase "reports of accidents" is used as synonymous with "reports of injuries."

Other language of the act also lends countenance to the view that the injuries contemplated by the act were those resulting from a definite occurrence which could be located in point of time and place. Section 7, as amended (acts 1915, ch. 288), provides that "any employee who has sustained an injury in the course of his employment shall forthwith notify his employer." Dependency is to be determined as of the time of the injury and not as of the time of the resulting incapacity. The average weekly wage is to be calculated with reference to the "twenty-six calendar weeks immediately preceding that during which he was injured." Compensation for fatal injuries is given only when death results within two years "from date of injury." The notice required by section 21, as amended in 1915, must be given within one year from the date of the injury, and state "in simple language the date, place, and nature of the injury." These are some of the statutory conditions upon which the compensation or its amount is made to depend, and they are not workable on the

assumption that the word "injury" was intended to include disease, because it is notorious that the typical occupational disease is not an injury which can be said to have been "sustained" at a given date. If for the purpose of escaping this difficulty it is attempted to substitute the date of the incapacity for the date of the injury, it will be necessary to repeal and reconstruct a considerable portion of the act.

It may be said that in point of logic occupational disease is as proper a subject for compensation as industrial accident. Upon that point we express no opinion, except such as we have already intimated. It is certain, however, that the opinions of to-day on that subject are more advanced than those of 1913, and that occupational disease was generally recognized, and by the same general assembly specifically recognized, as a subject presenting its own separate problem. The workmen's compensation act was our first legislative experiment in substituting collective justice, regardless of fault, for justice between individuals based upon compensation for legal wrong; and it may be doubted whether the general assembly of 1913 could have been pushed to the point of including occupational diseases in that experiment. That, however, is not the question before us. We have only to determine whether the general assembly, notwithstanding its failure to expressly include the important subject of occupational diseases in the act, intended to include it under the words "personal injury arising out of and in the course of the employment," and for the reasons indicated we infer that it did not so intend.

There is error, the judgment is set aside, and the cause remanded to the superior court for the rendition of a judgment vacating the award of the compensation commissioner. The other judges concurred, except—

WHEELER, J. (dissenting): The personal injury for which an employee may recover compensation under our act is "one arising in the course of and out of his employment." Whether the injury is such a one is a question of fact for the decision of the compensation commissioner. The court may review his conclusions only when the subordinate facts are legally inconsistent with the conclusion. (Powers *v.* Hotel Bond Co., 89 Conn., 143, 93 Atl., 245.) In this case the claimant had worked in a room in which fumes from molten lead arose, and on the floor and throughout the room were particles of lead, and, as a consequence, he contracted lead poisoning, which may have developed three days after his employment had begun. The conclusion that this disease arose in the course of and out of the employment is uncontested.

The appeal assigns error in the ruling of the commissioner in awarding compensation for the injury suffered, viz, the disease of lead poisoning. The employer company admits that disease consequent upon accident may fall within the act. It denies that a disease, not the accompaniment or result of an accident, can under our act be the subject of compensation. In short, it maintains that occupational diseases are not compensable under the act. The decision of this question depends upon the construction of certain terms of our act. And we have decided that its provisions should receive a liberal construction. (Powers *v.* Hotel Bond Co., 89 Conn., 143, 93 Atl., 245.) This method of construction accords with the legislative intent, for an eminent authority has pointed out that our act includes within its protection a greater number of employees than any act adopted by any State, with the single exception of New Jersey, and this number he has estimated at 90 per cent of all our employees.

There are two great divisions of industrial hazard—injuries through accident and injuries through disease. Certain diseases result from certain kinds of industrial occupation, and hence has arisen the term "occupational disease"—that is, disease arising from the nature, circumstances, or conditions of one's employment. One of our large life insurance companies has printed and now distributes a pamphlet for the prevention of disease, in which it says:

A great many more men die of industrial tuberculosis than are killed in mine fires and boiler explosions, with railroad collisions thrown in.

Scientific men have apparently accepted this statement. Among occupational diseases lead poisoning is always prevalent in industries where lead is used. Authorities concur that it is the most prevalent of the industrial poisons, although its prevention in large part is a comparatively simple task where employer and employee work together for this common end. The compensation principle was originally confined to injuries caused by accident. The cost of the injury to the employee through accident was placed upon the same basis as the injury to machinery and plant. Each was to be figured in as a part of the overhead charge. The compensation law made the cost in life and limb, as well as the injury to machinery or plant, a charge upon the industry rather than upon the sufferer through accident, or the sufferer's family. Our act was passed in 1913, many years after the first compensation act originated in Germany. The same reasons—economic and humanitarian and to do better social and individual justice—impelled its passage with us as with the countries of Europe and the several States of the Union and the Federal Government, which had already enacted such a law. No sound reason and no sound public policy has been or can be suggested which would protect the victims of accident from modern industrialism and leave unprotected the victims of disease. And when courts and commissions have decided that disease was not within a compensation act under consideration not infrequently the admission has been made that it ought to be there. And we heard the same admission in the most excellent oral argument of the respondent's counsel and read it in their brief. It is true incapacity resulting from an occupational disease should be compensated as freely and fully as an injury to the person resulting from physical violence when both arise in the course of and out of their employment. But our concern is not with the wisdom or economic justice of our statute (ch. 138, P. A. 1913, as amended by chs. 287, 288, P. A. 1915), but with its meaning.

My brethren say the real issue in this case is whether we shall introduce the subject matter of industrial disease into our act by judicial construction when the act does not specifically mention this subject. The act does not mention industrial accidents; yet the court by judicial construction ascertains that the term "personal injury" includes only injuries arising through accident, while I by judicial construction find the same term to include all injuries, whether arising from accident or disease. Therefore our immediate question is: Does the term "personal injury" include an occupational disease? Most compensation acts existent when our act was passed provided for recovery for personal injury caused by accident or injury by accident or accidental injury—a few for personal injury or injury. In determining whether occupational disease was within the terms of their act some courts and commissioners have advanced certain arguments general to a discussion of this question under most acts which it may be well to take up at the inception of our discussion.

The Ohio commission and counsel for this respondent express the fear shared by our own court that if "personal injury" is construed to include disease, the door will be open to claims for compensation for every disease incurred in the course of the employment. This may have been so under the Ohio act, which did not provide that the personal injury should arise out of the employment. It is not a just criticism of our act, for that expressly limits recovery to "personal injury sustained by an employee arising out of and in the course of his employment." No industry under our act can be charged with the duty of compensating any injury which does not result to its employee in the course of the employment and does not originate in it. We are unable to see the force of the statement that fraudulent claims of disease will flourish, and that the last employer must suffer for the industrial injuries occurring under other employers. The limitations of our act confine payments by any industry for that part of the injuries arising in that industry, and the course of justice in our courts in coping with all manner of fraudulent claims strips the suggestions of our inability to deal with such of all merit. The Ohio court anticipated, as does this

respondent, a serious injustice, in that the insurance premiums have been based upon the theory of accident and not disease as well as accident; and our own court fears that this construction of "injury" would impose a heavy burden of insurance upon the employer. There is no finding of this in our record, and we should not take judicial notice of facts of this character. If it were a fact found, the apparent hardship would not affect the construction of these words, since everyone is presumed to know the law, and hence no legal hardship can arise from compelling its observance. Moreover, industry would soon adapt itself to a condition it had not anticipated, and the consumer would ultimately pay the increased cost, if any; but it would seem that the apprehension of the court of disaster to the employer or the insurer is somewhat unnecessary if the Massachusetts Industrial Accident Board is a safe guide. In its first annual report of 1914 of industrial injuries it found that out of 29,737 nonfatal cases one-tenth of 1 per cent were occupational diseases.

Our court says that certain provisions of the act show that the injuries contemplated by the act were those resulting from a definite occurrence, and that these provisions are not workable if injury includes disease, since the date of an occupational disease can not be determined. None of the provisions referred to contemplate that the injuries of the act result from definite occurrences; all do contemplate a time when the injury occurs. This is one of the reasons advanced by the Ohio court, and it has been a common criticism by the advocates of a restricted compensation act. One is afflicted with a disease when there is such an alteration of the state of his body or any of its organs as to prevent or disturb the performance of any of the vital functions of his body. (Webster's New International Dictionary.)

There is no practical difficulty in fixing the date of an occupational disease. They all have marked characteristics. In the daily round of duty the trial judge and the jury are constantly meeting and overcoming the same difficulties. If the proof shows good health prior to the employment, the existence of the disease, the date when first noticed, and its probable beginning with reference to this, no other known cause than the occupation, and that a probable cause, it may be found whether the disease did arise in and out of the employment. Every just case is susceptible of such proof, and the conclusion to be drawn from proof of this character is not so uncertain as to be untrustworthy.

The term "personal injury," as found in the statute, is used to indicate "the object of the hurt, rather than the subject of the legal injuria." It does not here designate the act or omission which harms or damages another, but the harm or damage done to the person. (Carstesen *v.* Town of Stratford et al., 67 Conn., 428, 437, 35 Atl. 276.) An injury to the person may logically and legally include disease, whether occupational or otherwise. This accords with all the definitions of the lexicographers. And this has been conceded by practically all the jurists and commissioners who have considered or defined the term. Although the opinion states the contrary, I share the view of the Massachusetts court and of jurists who have expressed an opinion upon this point that this construction harmonizes with the ordinary use of language.

General Statutes, No. 1, directs that—

> In the construction of all statutes of this State, words and phrases shall be construed according to the commonly approved usage of the language.

A law which provides compensation for the victims of industrial disease, as well as those of industrial accident, is infinitely more humane than one which limits its beneficence to the victims of accident. Every reason for protecting the one class of injured applies equally to the other. Limiting personal injury to those arising from direct bodily violence limits the term to injuries of accidental origin. It practically adds to this term "caused by accident" or "resulting from accident" or "accidental," or words of similar import. Doubtless the legislature might have used this term with this meaning, and it might be possible to find from the other portions of an act that this use was so intended. The Michigan act (Pub. Acts 1912, No. 10) is an in-

stance where an inspection of other terms of the act shows clearly that "personal injury" was intended to refer only to accidental injury or injury caused by accident. There must then be read into our act words signifying either that the injury was accidental or caused by accident if we are to exclude disease or occupational disease.

Let us examine our act with a view to ascertaining whether the intent of the act was to speak contrary to the humane and natural construction. The general assembly might have expressly included disease, but why should it, if it used a general term which naturally included it? Or it might have added to the term "personal injury," "accidental" or "caused by accident." And why should it not, if it intended to restrict the natural meaning of this term? When our statute was passed, 12 States and the United States had passed workmen's compensation acts. In eight States and in England the term "personal injury" or "injury" was qualified by "caused by accident," "by accident," "accidental," or equivalent phrase. In the Massachusetts, Michigan, and Ohio and the Federal statutes "personal injury" or "injury" was used without qualification. In Washington "injury" or "injured" was by definition limited to fortuitous events as distinguished from the contraction of disease. The British act had made use of the term with the qualification "caused by accident." The British court had defined "accident" as an unlooked-for mishap or an untoward event not expected or designated; hence it was held that it must have occurred at a particular date, and so a personal injury of this character was plainly distinguishable from a disease of gradual growth whose exact beginning might be unknown and uncertain. (Fenton *v.* Thorley (Ltd.), 1903 A. C. 443, 5 W. C. C., 1; Steel *v.* Cammell, 1905 2 K. B., 323, 7 B. W. C. C., 482.)

A disease not attributable to accident by means of a definite event was held in England not to be within the term "personal injury." (Erke *v.* Hart Dyke, 1910 2 K. B., 677.) And in Trim Joint District School *v.* Kelly, 1914 A. C., 667, Lord Chancellor Haldane held that injury by accident meant nothing more than accidental, and that accident included any injury which was not expected or designed by the workman himself. Judicial expression in America upon this term followed the English authority, and our general assembly had before it both the English and the American interpretation of those terms. In 1906, as a consequence of the decision of Steel *v.* Cammell, the English act was amended so that certain named diseases and others which might from time to time be included by the secretary should be entitled to compensation as if the disease was a personal injury by accident. (6 Edw. VII, c. 58, cl. VIII.)

In the Federal statute of 1908 compensation was awarded "to the employee injured." In Massachusetts, Ohio, and Michigan it was awarded for "personal injury." But in Michigan other parts of the act were later held by its supreme court (Adams *v.* Acme Works, 182 Mich., 157, 148 N. W., 485, L. R. A. 1916A, 283 [Pub. Health Rep., Reprint No. 342, p. 82]) to clearly indicate that personal injury was confined to those of accidental origin. But at the passage of our act the Michigan industrial board had ruled that personal injury included injuries by disease, the Ohio board had denied a recovery for an occupational disease, while the Massachusetts committee of arbitration had ruled in the Johnson case that an injury from lead poisoning was compensable under their act, and this ruling was affirmed by the supreme court. (217 Mass., 388, 104 N. E., 735 [Pub. Health Rep., Reprint No. 342, p. 73].) None of the courts of last resort of these States and none of the Federal courts had passed upon the immediate question.

Our compensation act was preceded by much investigation and study by our general assembly and by commissioners authorized by it. Both the general assembly and the commissions had had before them prior to the enactment of the act of 1913 the legislation in England and some of the countries of continental Europe and of our States and the Federal Congress, and they knew the interpretation which had been put upon these acts. With this history of compensation legislation before it it seems

a reasonable and unescapable conclusion that the general assembly would have coupled with the term "personal injuries" something to indicate that these were confined to those of accidental origin had it so intended. It knew the course of English decision, and the controversy there over the attempt to include in its act occupational diseases, and the amendment of their act induced by the decision denying the right of recovery for an occupational disease. It knew the settled construction given these terms of common use in the several compensation statutes limiting recovery to injuries of accidental origin. And yet it chose to use the term "personal injury" without qualification, when it also knew that the use of this term would naturally invite a construction including within it disease. And it did this when it knew that claim had been made and sustained that "personal injury," as used in a similar statute, did include disease. With this knowledge the general assembly made no distinction, at least in words, between industrial injuries from accident and those from disease, and even excluded from the title and body of the act the words "accident" and "accidental." Their action is pregnant with significance and tends strongly to indicate that the general assembly did not intend to limit injuries to those of accidental origin. Agitation of this general subject began as early as 1907. A committee was authorized by our general assembly to investigate and recommend legislation to regulate the liability of employers for accidents to employees. It reported and was continued with power, and in 1909 reported in favor of an employers' liability bill in part and against a compensation bill. In 1911 the senate passed a compensation bill, which the house rejected, and the senate also passed a substitute bill, which the house rejected. Each of these bills in terms confined the subject of compensation to personal injuries from accident arising in the course of and out of the employment. Later on in the session a commission was authorized to investigate State insurance as a means of providing compensation for workmen and others injured through accidents occurring in industrial occupation.

The commission reported in 1913, recommending a compulsory compensation act applying to certain named hazardous employments and providing for compensation to any workman who shall have received personal injury from any accident arising out of and in the course of his employment in any such trade or occupation. The commission attached a proposed bill which in its title and terms was limited to compensation for injuries from accident. This bill was introduced in the senate, and failed of passage. Up to this time every report made to the governor or general assembly and every bill introduced in the general assembly had related to injuries from accident. The limitation to injuries from accident—a term recognized and defined in the law of compensation—was a sufficient exclusion of the sufferers by disease from the benefits of the act. A substitute for the commission bill was passed by the senate and house in May, 1913. The act is a voluntary instead of a compulsory act, and not confined to hazardous occupations. It is in essentials and from a radically different act from the commission bill. It does not follow in its entirety any one of the three bills then before the general assembly. It was framed by the committee, and it borrowed very largely from the Massachusetts act, and it left out "by accident," in all probability for the same reasons that induced Massachusetts to leave this out. Neither in the title nor in the body of the act (ch. 138, P. A. 1913) is the word "accident" or "accidental" used. The recovery is for personal injuries, or injuries. Why was this marked change made in this act? Does it not exhibit a clear intent not to limit personal injuries to those caused by or arising from accident? In one place in the act we find the word "accident" used; in the heading of section 20 appears "Reports of accidents." The failure to eliminate accidents and substitute injuries was, we think, very clearly an oversight. This is shown by the practical construction placed upon it by the compensation commissioners. In Bulletin 5, issued under their direction, this heading is omitted. And it is shown by the action taken in reference to the title of this act. The title of the printed act differs from the

title of the original act as passed and on file in the secretary's office, and this difference is conclusive of the legislative intent. The title of the original act appears as follows:

An act concerning compensation for injuries by industrial accidents to workmen injured in the course of their employment.

The words "for injuries by industrial accidents" have a line drawn through them and in their place are the words "to workmen injured in the course of their employment." Throughout this act there is no word or expression which in slightest degree points to the use of the words "personal injuries" in any narrow or restricted sense. Indeed, we find certain injuries specified as deemed to cause total incapacity and others as deemed to cause partial incapacity and entitled to a named compensation. Confessedly, some of these named injuries may be caused by disease as well as accident, and the act makes no attempt to exclude them from its provisions. Since the passage of our act the Massachusetts court has construed the term "personal injuries" as found in its act. In the body of their act are found several references to accident and accidental. Despite these, the court decided that the words did include disease in a case where the injury from the inhalation of poisonous gases resulted in a workman's blindness. (Hurle's case, 217 Mass., 223; 104 N. E., 336; L. R. A., 1916A, 279; Ann. Cas., 1915C, 919 [Pub. Health Rep., Reprint No. 342, p. 74].) Following this case, the court held lead poisoning within the term "personal injury." (Johnson's case, 217 Mass., 388; 104 N. E., 735 [Pub. Health Rep., Reprint No. 342, p. 73].) The Massachusetts court has definitely decided that occupational diseases are included within this term of their act. These decisions were subsequent to our act of 1913. The Federal act of 1908 (act Apr. 22, 1908, ch. 149; 35 Stat., 65; U. S. Comp. St., 1913, secs. 8657–8665) provided compensation "if the employee is injured in the course of such employment." Other sections of the act refer to accident.

The Federal advisers first construed the act to include injury from disease. Later they advised that the injuries to be compensated were those arising from accident. (Re Sheeran, Op. Sol. Dept. C. and L., p. 169; Re Schroeder, Op. Sol. Dept. C. and L., p. 172.) The last case was one of lead poisoning. These last rulings prevailed when our act was adopted. Afterwards these opinions were, as we understand, overruled in several cases, beginning with In re Jule (Op. of Dept. of L., p. 261). This interpretation of the Federal statute prevailed when the amendments of 1915 were made to our act.

In Michigan, as we have pointed out, the term "personal injury" was by other terms of the act limited by necessary implication to those caused by accident; and after the passage of our act it was so held in Adams *v.* Acme White Lead Co. (182 Mich., 157; 148 N. W., 485; L. R. A. 1916A, 283 [Pub. Health Rep., Reprint No. 342, p. 82]), a lead-poisoning case, reversing the decision of the Michigan compensation board had prior to our act. In Ohio the industrial board had denied the claim of a recovery for disease. In this condition of the authorities it is highly improbable that the general assembly made use of the term "personal injury" with the intention of limiting it to injury caused by accident, without connecting this term either expressly or by necessary implication with the word "accident" or "accidental."

The general assembly enacted chapter 14, Public Acts 1913, that physicians should report all occupational diseases to the labor commissioner. The act was a preventive one. The report was required to be made to the official having the supervision of our manufacturers, with the plain purpose of taking in season preventive measures to check these forms of disease. The subject of occupational disease was also before the general assembly in our proposed constitutional amendment and in house bill 94, which provided that the term "'personal injury by accident' shall in no case be construed to include occupational disease in any form," etc.

The court, we believe, is in error in assuming that neither judiciary committee nor general assembly considered this subject. The judiciary committee and the

general assembly made use of the term "personal injury" with full knowledge that the term had been construed to include occupational disease and that others had felt that it was necessary to define the term "personal injury," or to exclude from it occupational disease, if such was the intent. The court says it can not make any substantial difference in the construction of the term "injury," as used in our act, whether or not it is qualified by the words "by accident," since the injuries compensated for by the act are those "in respect of which the employer is exempted from actions for damages because of the mutual acceptance of Part B of the act." And the opinion concludes this part of its discussion by the assertion that—

> It was quite to be expected that the compensation scheme should cover the same ground as the common-law action for damages, and the language of the act was, we think, plainly intended to accomplish that result..

We prefer to think this to be an inadvertence in the court's argument, for it is in direct variance with our recent decisions and ignores or misconceives the underlying principle of our compensation act, and indeed of all compensation acts.

> Fault is the foundation of the tort action; compensation for the injury, regardless of the fault, of the compensation acts. (Powers *v.* Hotel Bond Co., 89 Conn., 143, 146, 93 Atl., 245, 247.)
> In principle it is the payment of the employer's share of a common loss in a common undertaking.

The injuries compensated for by the act are not only those for which an action lay under the common law, but all injuries "arising in the course of and out of the employment" of the injured.

Nine States in 1913 and 1914 passed compensation acts which limited the injuries compensated to those arising from accident or accidental. Two other States in their acts expressly excluded disease from the personal injuries to be compensated. In 1915 our act was amended in a number of important particulars, borrowing in part from the English and largely from the Massachusetts act, and presumably with the knowledge of the construction of these provisions by the English and Massachusetts courts and with, as we must presume, the knowledge of the action taken by other States, the array of States limiting injury or personal injury to those from accident, and two of the States expressly excluding disease as a subject of recovery, with the condition of the authorities in States which had made use of this term as in our act, uncoupled with accident, and especially with the Massachusetts decisions. The Massachusetts court in Hurle's case and Johnson's case had decided in 1914 that personal injury did include occupational disease. With all this knowledge our general assembly did not add to or vary this term or attempt to. In this course we find strong reason for our belief that the general assembly intended that personal injury should not be limited to injuries from accident and did not intend to exclude disease. We shall not stop to consider the course of legislation in other jurisdictions since the adoption of the amendments of 1915, for they will not aid us in ascertaining what the general assembly intended by the act of 1913 or by its amendments of 1915.

We have referred, with a single exception, to the principal arguments advanced by the Michigan court and the Ohio court and industrial commissions in support of their view, omitting argument based upon the history of their acts and the interpretation based upon consideration of their entire act. That exception is the assertion of the Michigan court (Adams *v.* Acme White Lead, etc., Works, 182 Mich., 161, 148 N. W., 485, L. R. A. 1916A, 283 [Pub. Health Rep., Reprint No. 342, p. 82]) and the Ohio commission that under the common law no recovery can be had for loss from an occupational disease. The Ohio commission conceded that had recovery for occupational diseases existed at the date of their act the term "personal injury" might be construed to include disease. Recovery for injury suffered prior to our act was based on fault. Assuming the negligent causing of disease to an employee without his concurring fault, our common law gives a remedy, and in this our law does not differ from the common law of other jurisdictions.

In the case of O'Keefe *v.* National Folding Box & Paper Co. (66 Conn., 38, 45; 33 Atl., 587) an attempt was made by the plaintiff to recover for an injury resulting from the vaporization of poison from the paper he was handling entering his system. Clearly this was an occupational disease. We held that the complaint was defective in its statement of the cause of action, but we recognized the existence of such a cause of action when properly stated, as is shown on page 45 of 66 Connecticut (33 Atl., 587). The instances where this precise point has been determined are comparatively infrequent, and this is probably due to the fact that the employee's recovery was barred by his assumption of the risk. We know of no case holding with the Michigan case that injury through disease due to fault to which the sufferer has not materially contributed is remediless under the common law. Examples of a contrary holding are Hurle's case (217 Mass., supra, and cases cited; Thompson *v.* United Laboratories Co., 221 Mass., 276; 108 N. E., 1042; Corcoran *v.* Wanamaker, 185 Pa., 496; Pinkley *v.* C. & E. I. R. Co., 246 Ill., 370; 92 N. E., 896; 35 L. R. A. [N. S.], 679; Canfield *v.* Iowa Dairy Separator [Iowa], 154 N. W., 434; Scott *v.* Simons, 54 N. H., 426; Cesar *v.* Karutz, 60 N. Y., 229; 19 Am. Rep., 164; Alston *v.* Grant, 3 El., and Bl., 128). In this connection the court say:

> Since the common-law action for damages, which was founded on the master's negligence, never attempted to cover the typical case of an occupational disease caused by continued exposure to the ordinary and known risks of the employment, the inference is plain that the alternative compensation scheme was not intended to cover such diseases.

Again, I prefer to think this is an inadvertence in the argument, for it assumes that the compensation act was a substitute for the common-law action for damage suffered through a master's negligence. And the contrary is elementary in the consideration of a compensation act. And this court has so decided. (Bayon *v.* Beckley, 89 Conn., 156; 93 Atl., 139; Powers *v.* Hotel Bond Co., 89 Conn., 143; 93 Atl., 245; Kennerson, Admr., *v.* Thames Towboat Co., 89 Conn., 367; 94 Atl., 372; L. R. A. 1916A, 436.)

There is no case except the Ohio case (Industrial Commission *v.* Brown, 92 Ohio, —, 110 N. E., 744) which holds that the term "personal injury" in a compensation statute, when disassociated from "accident" or "accidental," does not include injuries from disease as well as accident. And it is apparent that this decision was reached by finding the legislative intent in the history of the act, past and future, and in contemporaneous construction by those charged with its execution. It is worth noting that the denial of recovery by the industrial commission was reversed by the trial court, and that decision sustained by the appellate court, and that decision reversed in 92 Ohio.

It is said the requirements of our statute exclude disease, since the employer is required to keep a record of the injuries sustained and such report as the commission require of such as result in incapacity of one day or more to the commission, and must furnish medical aid as soon as he has knowledge of the injury. These provisions, it is said, can not be followed in the case of injury from disease, unless the employer keeps watch over workmen reported sick. The shop gossip will make this care a negligible quantity. Then, too, every employer has access to the reports made by physicians of all occupational diseases to the labor commissioner under chapter 14, Public Acts 1913. But, if we assume all that the respondent claims, is it not reasonable to think the general assembly intended this very thing? Small employers of labor have always practiced this; and one of the developments of recent years has been the growing conviction of the large employers of labor of the intimate relation between the extent of their production and the health of their employees. And this assumption of duty has come about, not alone from economic but also from humanitarian motives. And it has been accelerated by the pressure of public opinion; and now one-third of the States have enacted laws for the better protection, prevention, and care of occupational diseases.

No duty will rest upon employer or employee at least until the existence of the disease can be known by the exercise of reasonable diligence. We find nothing impractical in these provisions of our act. If the respondent's suggestion be correct, that the existence of an occupational disease is a scientific question ill adapted to judicial determination, it is fortunate that our act leaves the decision of this fact to a specially constituted administrative tribunal. If its suggestion be correct that these cases will be poorly presented because so often of inconsiderable pecuniary moment the act is wisely framed in imposing the duty of investigation upon the commissioner, well met in this case, as the respondent points out, in the "careful and able memorandum" of the commissioner.

The opinion supports its argument by its assumption that proof of disease will be difficult and beyond the reach of a claimant. Hence, it assumes the general assembly never intended to give the employee this remedy, else it would have provided a way of helping him prove it. When the general assembly finds the worker incapable of handling a remedy of admittedly far-reaching beneficence to him, it will be time enough then for it to consider helping him find a way.

The opinion argues that our general assembly never intended to include disease in personal injury, otherwise it would have required the employee to help pay the increased cost of meeting this burden. The purpose of our compensation act was to help lift the burden from the worker and place it upon production. Our act is not inconsistent. It does not seek to give with one hand and take away with the other.

The opinion argues that the inclusion of disease as a personal injury will discourage the acceptance of the act by the employer, and if he accepts it he will use his unrestricted right of discharge and of revocation of his acceptance to turn out the old and those liable to disease and keep only the young and strong. I have too high an opinion of the Connecticut employer of labor to believe this. Similar forebodings were heard in the discussion preceding our act, but time has stilled them all. The act generally is approved of by the employers of the State. Argument such as this does not help us to find out the true meaning of "personal injury," and if such argument should become converted into fact, relief to the worker would come through amendment of the act, even to the substitution of a compulsory act for our elective one.

I conclude the term "personal injury," as used in our compensation act, means any harm or damage to the health of an employee, however caused, whether by accident, disease, or otherwise, which arises in the course of and out of his employment and incapacitates him in whole or in part for such employment.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

LOUISIANA.

Communicable Diseases—Schools—Teachers and Janitors Required to be Free from Disease—Pupils' Vaccination Certificates. (Reg. Bd. of H., Apr. 11, 1916.)

Paragraph *g* of section 122 of chapter 6 of the Sanitary Code of Louisiana has been repealed and reenacted to read as follows:

SEC. 122 (*g*). No person suffering from any communicable disease shall be employed as teacher or janitor in any public school in this State. At the opening of each annual term teachers must furnish a health certificate from a registered physician of Louisiana, addressed to the prish superintendent of schools, certifying that they are not suffering from tuberculosis or other communicable disease. In any parish in which smallpox has been declared by the State or parish board of health to be prevalent and in which the vaccination of school children has been recommended by a majority of the parish board of health, no person shall attend nor be entered as a pupil of any public school without furnishing to the principal of said school a satisfactory vaccination certificate as hereinafter defined. To be satisfactory, a vaccination certificate must state date of last vaccination, must be signed by a registered physician of Louisiana, and must state either that the pupil has been successfully vaccinated within five years prior to date of certificate or that the pupil has been twice vaccinated unsuccessfully within one year prior to date of certificate. No certificate of successful vaccination shall be satisfactory after five years from date of vaccination. No certificate of unsuccessful vaccination shall be satisfactory after one year from date of vaccination.

Smallpox—Vaccination of Pupils—Enforcement. (Reg. Bd. of H., Apr. 11, 1916.)

Sections 67 and 69 of chapter 3 of the Sanitary Code of Louisiana have been repealed and reenacted to read as follows:

SEC. 67. Whenever smallpox prevails in any parish of the State, and the majority of the board of health of said parish has recommended vaccination of school children, all pupils attending public schools in said parish shall be vaccinated.

SEC. 69. All public school authorities shall rigidly enforce vaccination of all pupils attending the public schools in every parish in which smallpox has been declared prevalent by the State or parish board of health and vaccination of school children recommended by a majority of the parish board of health.

Water Supplies—Use Prohibited When Unfit for Human Consumption—Standard of Purity. (Reg. Bd. of H., Apr. 11, 1916.)

Section 285 of chapter 13 of the Sanitary Code of Louisiana has been amended by adding the following paragraphs:

285 (*a*). When water supply of any village, town, city, railroad station, public or office building, water tank or water plant, or any source of supply for human

consumption is examined by the State board of health and found unfit for human consumption the public shall be notified by the posting on source of condemned supply a warning metal sign (not less than 6 by 12 inches) with red background and white letters that may be read at 120 feet.

285 (*b*). The standard of purity shall be the same as that required by the United States Public Health Service and promulgated by the Treasury Department.

285 (*c*). It shall be unlawful for any person to remove, cover up, take down, or otherwise destroy the sign or other notice placed by any board of health, health officer, or duly authorized representative of said board, warning the public "Do not drink this water."

Garbage, Refuse, and Dead Animals—Care and Disposal. (Reg. Bd. of H., Apr. 11, 1916.)

The following section has been inserted after section 477 of chapter 21 of the Sanitary Code of Louisiana:

SEC. 477–A. (*a*) No house refuse, offal, garbage, dead animal, decaying vegetable matter, or organic wastes of any kind shall be thrown upon any street or road.

(*b*) No garbage dump or place of deposit shall be maintained at any point in the State unless provision be made for prompt destruction of material deposited. Destruction shall be by incineration or other effective means to prevent the breeding of flies, harboring of rats, or the creating of a nuisance.

(*c*) No such refuse, putrescible, decaying animal or vegetable matter shall be kept in any house, cellar, outhouse, or on premises for more than 48 hours in any incorporated or unincorporated village, town, or city or built-up community.

(*d*) No person shall throw or deposit any garbage, offal, night soil, dead carcasses of animals, or filth into or where same would drain into any public or private well, cistern, or other water supply.

(*e*) All receptacles for temporary storage for handling of garbage, etc., shall be water-tight and be provided with suitable tight-fitting covers, which shall be kept properly adjusted to the receptacles so that flies or insects, rats, or other animals may not have access to contents.

(*f*) All garbage or refuse containers shall be emptied at least once every 48 hours, and containers cleaned and aired before being replaced for service.

(*g*) No garbage or waste destruction plant shall be built, nor any place of disposal maintained, unless approved by the local or State board of health.

NEW JERSEY.

Poliomyelitis—Prevention—Entrance of Children into State. (Reg. Dept. of H., Aug. 8, 1916, as Amended Aug. 22, 1916.)

CHAP. 2. REGULATION 1. (*a*) No child under 16 years of age shall enter the State of New Jersey from any other State, Territory, or country unless such child is accompanied by a certificate issued by a competent health authority, stating that (1) said child has not resided in a dwelling or other building in which a case of infantile paralysis is known to have existed within a period of two weeks preceding the date of such certificate, and stating that said child is not known to have been exposed to infection; or that (2) such child has recovered from infantile paralysis and has been regularly discharged by the health authorities of the district in which it was under quarantine; or that (3) said child, having been exposed to infantile paralysis, has been kept under

observation by the health authorities of the municipality in which it resides for at least two weeks after exposure, and has been regularly discharged by said health authorities.

(*b*) Said certificate shall show the date and hour upon which it was issued, and shall be signed by the health authority by whom issued and shall set forth the full name, age, sex, color, nationality, and the last place of residence of the child to whom it refers. Such certificate shall also be signed by the person making application therefor.

(*c*) No certificate shall be accepted by any local health authority in this State that has been issued longer than 24 hours in excess of the actual time necessary to travel from the place at which it was issued to the place where it is presented: *Provided, however,* That in the case of persons under 16 years of age who are employed in municipalities other than those in which they reside certificates issued in accordance with the provisions of regulation 1 of this chapter shall be accepted for continuous use to and from such municipalities if countersigned at least every seven days by the health authority issuing the same.

REG. 2. No common carrier shall bring into the State of New Jersey, except for continuous transportation through the State, any child under 16 years of age unless said child shall be accompanied by a certificate as provided for in regulation 1 of this chapter: *Provided, however,* In case such a child coming from any point without the State of New Jersey shall be found upon a train without a certificate as provided for in regulation 1 of this code it shall be the duty of the common carrier by whom such child is being transported to send a telegram to the State department of health within three hours from the time such child leaves the train in this State, stating the name, age, sex, color, and the name of the parent or guardian of such child, together with the name of the place at which such child entrained and the name of the place and street address to which such child is alleged to have gone.

REG. 3. It shall be the duty of every child under 16 years of age, or of the parent or guardian of such child, immediately upon its arrival in any municipality in this State, to forthwith present to the local board of health, or a duly authorized officer thereof, a certificate as provided for in regulation 1 of this chapter.

REG. 4. No child under 16 years of age shall pass from one municipality to another in this State, unless said child is accompanied by a certificate issued by the local board of health of the municipality in which it last resided, which certificate shall contain the information required by regulation 1 of this chapter.

REG. 5. Any child under 16 years of age, not accompanied by a certificate as provided for in regulation 1 of this chapter, who shall enter any municipality of this State, shall be placed under observation or quarantine, at the discretion of the local board of health of the municipality in which said child is found, for a period of two weeks, dating from the day of its arrival in the municipality.

REG. 6. It shall be the duty of the health officer or other executive officer of every local board of health to investigate every case of infantile paralysis reported in the municipality over which such officer has jurisdiction, for the purpose of obtaining the information necessary to fill out a case history blank, which blank shall be furnished, upon request, by the State department of health; and such blank, properly filled out, shall be promptly forwarded by such officer to the director of health of the State of New Jersey.

REG. 7. Chapter 2 of this code shall take effect on August 15, 1916.

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