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USE OF SECONDHAND MATERIAL IN MATTRESSES.

THE ILLINOIS SUPREME COURT DECIDES THAT A LAW PROHIBITING THE USE OF SECONDHAND MATERIAL IN MATTRESSES, BED COMFORTERS, AND QUILTS IS VOID.

The Legislature of Illinois last year passed a law prohibiting the use of secondhand material in mattresses, bed comforters, and quilts which were manufactured for sale, and requiring that when these articles were remade or renovated for the use of the owners they must be sterilized.

The Illinois Supreme Court decided that the prohibition of the use of secondhand material for this purpose was not necessary for the protection of the public health, as the desired result could be obtained by sterilization, and the court declared this part of the law to be unconstitutional. The court, however, said that the provision of the law which required the sterilization of all mattresses, bed comforters, and quilts when remade or renovated for the use of the owners was reasonable and proper.

The opinion is published in this issue of the PUBLIC HEALTH REPORTS, page 1019.

STATISTICS OF DISABILITY.

A COMPILATION OF SOME OF THE DATA AVAILABLE IN THE UNITED STATES.

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In the discussion of health insurance measures for the United States, one of the first questions which has arisen is the extent of disability for which provision will have to be made. Health agencies, national, State, and local, have many records of contagious and infectious diseases, but only for a few diseases and in limited areas are the records sufficiently complete to afford a definite conclusion as to the extent of disability. Exception, of course, should be made of the disability records of the United States Army and Navy. Data as to disability due to other causes than contagious and infectious diseases have been almost completely lacking. In the registration area mortality records may be fairly complete, but estimates of disability based on

death rates are extremely unreliable. Until health departments are able to make more complete collections of morbidity statistics, all of the available data collected by other agencies should be utilized, even though these data in most instances are only approximately accurate.

Recent sickness surveys have added materially to the information as to the prevalence of disability. It is not generally recognized by health agencies, however, that a great deal of valuable data exists in the records of labor unions which provide for payments of sick benefits and in their reports on unemployment and its causes. The data afforded by these surveys, union reports, and the like, are not exact in many instances and are not complete in many of the details which are important for all of the purposes of health departments, but they are of value as a basis for making general estimates of the minimum prevalence of disability, especially in view of the lack of uniform and complete morbidity statistics.

Some of these data are collected here to illustrate their character and extent. The disability rates for the United States Army (enlisted men in American troops in the United States) are presented for purposes of comparison.

Methods of Stating Disability.

Disability ¹ rates are usually stated as follows:

1. Number of persons per 1,000 of the group or population under consideration disabled per year.
2. Average length of disability per disabled person.
3. Average number of days of disability per year per person included in the group or population under consideration.
4. Number of persons per 1,000 of the group or population under consideration disabled per day.

Each of these methods of stating disability has its specific use or uses, according to the purpose for which disability is measured. All of them are employed in the annual reports of the Surgeon General of the United States Army and they are illustrated in the 1915 report, for example, for the calendar year 1914.² Thus for enlisted men in American troops in the United States the number of disabled persons (admitted to sick report) per 1,000 of mean strength was 629.84 during the year 1914. For disability due to disease the rate was 498.83, and for injury the rate was 131.01. The average length of disability per disabled person (days treated each case) was 13.54 days. The average number of days of disability per year per person (days treated each soldier) was 8.53. The average daily number of

¹ These methods are used to state disability due to various causes, such as sickness, accidents, and the like, as well as for all causes.

² See Report of the Surgeon General of the United States Army, 1915, p. 29.

disabled persons per 1,000 of mean strength (constantly non-effective rate) was 23.37. These rates are employed in stating disability for various groups of persons in the Army according to locality and to occupation.

Suggestive Disability Records and Surveys.

In the following paragraphs are summarized the statistics of unemployment on account of disability for representative unions in the States of New York and Massachusetts for a series of years, statistics of leave with pay granted on account of disability to civil service employees of the Federal Government in the executive departments at Washington for 1914, statistics of unemployment on account of disability among over a million wage earners in selected cities in the United States, statistics of sickness involving incapacity to work among the industrial population of Rochester, N. Y., and disability statistics for the enlisted men in American troops of the United States Army stationed in the United States. The methods of stating disability, referred to above, have been employed as far as possible in presenting these data.

Disability statistics for representative unions.—In two States—New York and Massachusetts—reports are regularly published on unemployment among members of representative local unions, which include statistics of unemployment on account of “disability.” No age or sex classifications are afforded by these data. The membership of these unions includes both male and female wage earners, but the large majority of them are males. The methods employed in obtaining these statistics in both States are essentially the same. Reports are made by the secretary of each of the selected local unions giving the total membership, the total idle, and the number idle on account of disability, lack of work, strikes, etc., for the day for which the report is made. The reports include, therefore, only conditions existing on that day. By “disability” in the reports in both States is meant disability on account of sickness, old age, and accident. The New York reports are made for the last day of each month and the Massachusetts reports are made for the last day of each quarter. The unemployment reports are regarded as fairly accurate by the statisticians of the New York Department of Labor and the Massachusetts Bureau of Labor.¹ There is reason to believe that in the majority of instances the reports on idleness due to disability are probably even more accurate than the data relating to other causes of unemployment, since a considerable proportion of the unions have sick benefit funds and keep records of members who

¹ See the results of a study of unemployment statistics made by Frank B. Sargent, *Statistics of unemployment and the work of employment offices*, Bulletin of the U. S. Bureau of Labor No. 169, pp. 20 and 21.

are receiving benefits. It should be noted, however, that in the case of large unions where no such funds or records exist the chances for accuracy are smaller, and that in those unions where sick benefit records may be used as the basis for reports on unemployment due to disability the usual exclusion of the first seven days of illness may reduce the number of members reported as disabled.

The following table gives the percentages of idleness due to disability in representative unions in the State of New York at the end of each month for 11 years, from 1904 to 1914, and the average percentage for each month:¹

Percentage of members of representative unions in New York State unemployed on account of disability on the last day of each month, 1904-1914.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1904.....	1.3	1.3	1.6	1.2	1.1	1.2	1.1	1.0	0.9	1.1	1.3	1.4
1905.....	1.4	1.2	1.2	1.2	1.0	1.1	1.1	1.1	1.0	1.3	1.2	1.2
1906.....	1.4	1.3	1.3	1.2	1.1	1.1	1.0	1.0	1.3	1.2	1.2	1.4
1907.....	1.8	.7	1.4	1.2	1.3	1.2	1.2	1.3	1.2	1.3	1.5	1.5
1908.....	1.4	1.3	1.3	1.4	1.4	1.4	1.4	1.3	1.4	1.4	1.4	1.4
1909.....	1.5	1.4	1.3	1.5	1.4	1.4	1.3	1.2	1.1	1.3	1.2	1.4
1910.....	1.6	1.4	1.3	1.4	1.3	1.4	1.2	1.2	1.0	1.1	1.1	1.1
1911.....	1.3	1.4	1.0	.5	1.4	1.4	1.0	1.1	1.0	1.2	1.2	1.1
1912.....	1.3	1.3	1.3	1.2	1.1	1.3	1.0	1.0	.9	1.2	1.1	1.1
1913.....	1.0	1.0	1.0	.8	.8	.9	1.0	1.1	1.1	1.1	1.0	1.0
1914.....	1.2	1.2	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	.9	1.0
Average.....	1.38	1.23	1.25	1.24	1.18	1.23	1.12	1.12	1.08	1.20	1.19	1.24

These statistics show an average daily disability rate of 1.2 (1.205) per cent, or 12.05 per 1,000 for the 132 days for which reports were made during the 11-year period. Assuming that the same rate would have been found on any day in the 11-year period, there is indicated an average of 4.40 days unemployed on account of disability per person per year. A closer examination of the detailed statistics, however, suggests the probability that this rate does not accurately indicate the extent of disability and that the rate should be higher. The statistics of disability for certain large unions included in the table, notably those in the clothing and textile industries, appeared so manifestly incomplete that a more accurate rate would be indicated by omitting them from consideration. Thus if those which are obviously incomplete (clothing and textile industries and in the group of trades listed under "theaters and music") are excluded, the percentage of the remaining ninety-odd thousand members idle on account of disability in 1914 would be 1.62, as against 1.1 for the entire mem-

¹ New York Department of Labor Bulletin No. 69, *Idleness of organized wage earners in 1914*, prepared by the Bureau of Statistics and Information, p. 6. During this 11-year period for which the above statistics are given, the number of unions reporting has varied from 176 to 232, and their membership from 84,359 to 140,426, a steady increase in number and membership being indicated. "In compiling the list of representative unions," states the bulletin referred to, "the aim has been to preserve, as far as possible, the same proportionate representation of different industries and industrial centers, particularly of the former, in the selected group as appears in the membership of all trade unions in the State." (*Ibid.*, p. 4.)

bership of all of the representative unions.¹ One probable reason for the inadequacy of the disability statistics for the two groups of unions omitted is the fact that relatively few of them provide sick-benefits, and hence are handicapped by the absence of sick benefit records.²

The following table presents similar percentages of idleness due to disability in unions reporting to the Massachusetts Bureau of Statistics at the end of each quarter for seven years, from 1908 to 1914:³

Percentage of members of unions in Massachusetts unemployed on account of disability on the last day of each quarter, 1908-1914.

Year.	Mar. 31.	June 30.	Sept. 30.	Dec. 31.
1908.....	0.7	1.2	1.2	1.2
1909.....	1.3	1.2	1.1	1.2
1910.....	1.4	1.2	1.3	1.2
1911.....	1.4	1.2	1.2	1.3
1912.....	1.3	1.3	1.2	1.2
1913.....	1.4	1.2	1.2	1.4
1914.....	1.6	1.2	1.5	1.5

These statistics show an average daily disability rate of 1.25 per cent, or 12.50 per 1,000 for the 28 days for which reports were made during the seven-year period. Assuming that the same rate would have been found on every day in the seven years, there is indicated an average of 4.56 days unemployed on account of disability per person per year.

Disability statistics for Government employees.—The records of leave with pay granted on account of disability to civil-service employees of the Federal Government in the executive departments at Washington are of interest in this connection.⁴ These employees are employed on an annual basis. Statistics for over 16,000 employees in the different departments showed that during the year 1914 they lost an average of 5.84 days per person on account of disability. Of

¹ The 1914 reports from the 29 local unions in the clothing and textile industries, with a membership varying from 45,563 to 61,370, showed only from 15 to 77 members disabled on the last day of any month, or a maximum of 0.01 per cent, while the two theatrical and musicians' unions, with a membership of between 1,106 and 1,277, reported no disabled members for any of the dates for which reports were made, *Ibid.*, pp. 18-19, 25, and 27.

² Boot and shoe workers' unions are included under clothing and textiles in the New York reports, but the membership of the boot and shoe workers' unions included in the New York statistics was approximately only 1,000 during 1914. The boot and shoe workers' unions have benefit funds, but the other trades included in this group—garments, collars, laundry, hats, caps, gloves, and textiles—have not developed sick-benefit funds to as great an extent. Particularly is this true of garment workers' unions, whose members constituted about four-fifths of the total membership of this group and averaged about 2,000 members to a local union.

³ Report of the Statistics of Labor, Massachusetts, 1915, Part IX, p. 39. During the seven-year period for which the above statistics are given the number of unions reporting data on unemployment and included in the State reports has varied from 256 to 1,095 and their total membership from 66,968 to 183,202, a steady increase being indicated in the number of unions reporting and in the membership included in the data. (*Ibid.*, p. 38.) Some idea of the sex distribution of the membership is afforded by the fact that at the close of 1914 the total membership of all local unions in Massachusetts was 234,266, of which nearly 88 per cent were males. (*Ibid.*, p. 52.)

⁴ Public Health Bulletin No. 76: Health Insurance—Its Relation to the Public Health, United States Public Health Service, March, 1916, p. 30.

these 16,000 or more employees, over 12,000 were males and over 4,000 were females. The male employees lost an average of 4.82 days per person and the female employees an average of 8.90 days per person during the year. This is equivalent to a daily disability rate of 13.20 per 1,000 for males and 24.38 per 1,000 for females, or a daily disability rate of 16 per 1,000 for both males and females.

It should be noted that these statistics are based on official records of the total number of days of "sick leave" granted during the year to the employees, the "sick leave" including only such leave granted without interruption in pay. Cases where disability lasted longer than the period allowed for "sick leave" with pay are not included in these records, and to that extent the statistics do not represent the total time lost from work on account of disability. It is not believed that cases of this character are sufficiently numerous to affect greatly the rate.¹ The average age of these employees is not known, but the 1910 census age classification of Government clerks living in the District of Columbia indicated that the proportion over 44 years of age, especially in the case of females,² was greater than that usually prevailing among industrial workers. It is also a well-known fact that there are in the Government service in Washington many old or physically defective persons.

Disability statistics shown by unemployment and community sickness surveys.—In connection with the foregoing statistics of disability from the records of unions and Government employees the results of the unemployment and sickness surveys conducted by the Metropolitan Life Insurance Co. may be reviewed.³ These surveys were censuses of certain groups of persons regarded as "industrial" or wage earning in various localities.

The unemployment survey was made in conjunction with the United States Bureau of Labor statistics during 1915 in a number of selected cities and covered over a million wage earners, including both males and females. It showed that "over 1 per cent (1.2) of all the wage earners were unemployed on account of illness,"⁴ or 12 per 1,000. Assuming that the same rate would have been found on every day in the year, there is thus indicated an average of 4.38 days lost on account of illness per wage earner during the year. Until the results of this survey are published in greater detail it will be impossible to judge of the representativeness of these data beyond the fact that the information obtained was for a single day for each person. Thus seasonal variations, for example, may tend to qualify them unless the surveys were made at all seasons and the

¹ In those departments where records were obtainable for leave without pay for all causes the average did not exceed 1.2 days per male employee during the year 1914.

² Thirteenth Census of the United States, 1910. Vol. IV, p. 447.

³ Public Health Reports, U. S. Public Health Service, Feb. 25, 1916, pp. 423-438.

⁴ *Ibid.*, p. 423.

population surveyed was fairly equally distributed according to season. The distribution of population according to locality may also have a qualifying influence, since the rate was found to vary from city to city, the maximum (2.4) being in Duluth and the minimum (0.8) being in Milwaukee.¹ The large number of persons included in the survey, however, renders the data an important contribution to the subject of the extent of sickness.

The community sickness survey made in Rochester by the same company found a rate for sickness involving incapacity for work of 23.2 per 1,000 for males and 25.7 per 1,000 for females for the ages 15 years and over,² or a rate of 24.53 for both males and females of the same age period. The data were for a single day for each person included, the survey having been made during one week in September, 1915.

The representativeness of these data is subject to at least two qualifications from the standpoint of comparableness with other data cited here. One is the fact that the survey was made in September, a time of the year in which the sickness rate usually appears to be slightly lower than during the rest of the year.³ The other qualification is more important. The Rochester survey apparently included invalids as well as those temporarily incapacitated for work; 26.8 per cent of the persons of all ages who were found to be sick and unable to work had been sick three years or more, and 46.2 per cent had been sick one year or more.⁴ Since disabled persons of this class are probably excluded from the foregoing data for members of unions receiving sick benefits and are excluded for Government employees, it is obviously proper to exclude them from consideration here in order to afford as great a degree of comparableness as possible. This can be done only approximately by deducting 46.2 per cent from the rate of 24.52, leaving a rate of 13.20 per 1,000 for those whose disability was less than one year in duration. Assuming that this rate for a single day is representative of average conditions, it is indicated that the average person in the industrial population of Rochester loses 4.82 days per year on account of disability of less than a year's duration. This, as suggested above, is probably a minimum.

Disability statistics for the United States Army.—The "noneffective" rates for enlisted men in American troops in the United States, as given by the reports of the Surgeon General of the United States Army, afford data which are extremely interesting for purposes of comparison. In 1913 the noneffective rate was 22.94 per 1,000 and in 1914 it was 23.37 per 1,000.⁵ For disease alone the noneffective

¹ Public Health Reports, U. S. Public Health Service, Feb. 25, 1916.

² *Ibid.*, p. 428.

³ See "Seasonal variations in disability rates" in this paper.

⁴ Public Health Reports, U. S. Public Health Service, *supra cit.*, p. 431.

⁵ Report of the Surgeon General, U. S. Army, 1915, p. 29.

rate in 1913 was 18.61 per 1,000¹ and in 1914 it was 18.84 per 1,000.² Expressed in terms of average days lost per annum per soldier ("days treated each soldier" for disease or injury), the Army reports show 8.37 for 1913 and 8.53 for 1914.³ The average days lost on account of sickness per annum per soldier ("days treated each soldier" for disease only) are indicated as 6.79 in 1913 and 6.88 in 1914. The rates per 1,000 of the mean strength of American troops (enlisted men) in the United States admitted to sick report in 1913 and 1914 for disease and injury were as follows:³

	1913	1914
Disease.....	487.94	498.83
Injury.....	131.96	131.01
Total.....	619.90	629.84

The average length of disability per disabled soldier ("days treated each case" for disease and injury) was 13.51 days in 1913 and 13.54 in 1914.³

These rates are more accurate than those quoted for unions since they are based on the records for every day in the year for all cases of disability. The union statistics are obtained through reports from union secretaries which are probably based in only some instances on disability certificates signed by physicians. The New York statistics are based on the disability records for only 12 days (the last day in each month) in the year and the Massachusetts statistics are based on the disability rates for only four days (the last day in each quarter) in the year. For the same reasons the Army rates are more accurate than the data on unemployment due to illness in selected cities and on the extent of sickness among the industrial population of Rochester since these data were for a single day. As contrasted with the statistics of New York and Massachusetts unions, the Army rates are for males alone.

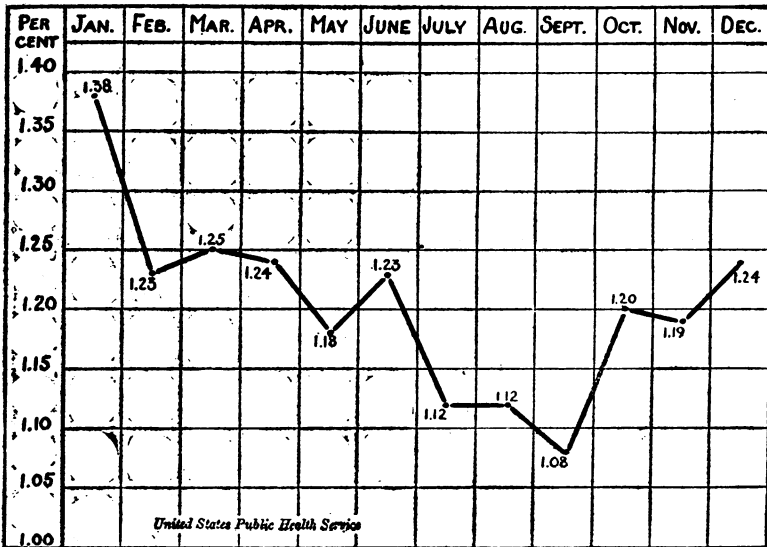
It will be noted that the Army disability rate is considerably in excess of the rates reported for industrial workers, although certain important considerations would indicate that they should be lower rather than higher than the rates for industrial workers. Since the Army is composed entirely of males, its disability rates are not influenced by the female sick rate which is, as a rule, higher than the male rate. The Army is a carefully selected group of men with an average age probably much less than that of industrial workers. Furthermore, many soldiers are discharged for disability, so that few weak or sickly persons are included, whereas in the industrial population this class remains on the pay rolls as long as possible. On the

¹ Report of the Surgeon General, U. S. Army, 1914, p. 80. ² *Ibid.*, 1915, p. 80. ³ *Ibid.*, 1915, p. 29.

other hand the economic incentive which often forces the industrial worker to continue at work while sick or to return to work before complete recovery is absent in the case of the soldier who receives full pay while disabled. After giving due consideration to the absence of this incentive, it is difficult to explain the markedly higher Army disability rate as compared with that indicated for industrial workers even when allowance is made for the deficiencies in the reports made for industrial workers. It is apparently more difficult to explain the higher disability rate of the Army as compared with that of Government employees who receive full pay while sick but who are not selected on the basis of physical efficiency.

Seasonal Variations of Disability Rates.

The monthly statistics of disability afforded by the records of the United States Army and by the reports of representative unions in New York State indicate seasonal variations.



Monthly variations in percentage of members of representative unions in New York State unemployed because of disability on the last day of the month; average for 1904-1914.

The New York statistics are available for a series of 11 years, from 1904 to 1914. The tabulation on page 992 shows the percentages of members idle because of disability at the end of each month and the average monthly percentages for the 11-year period.¹ The monthly percentages when so averaged for the 11-year period may be taken to indicate in an approximate manner the average seasonal variation in disability which is graphically shown in the accompanying chart.

The "total sick admissions" (for disease and injury) per 1,000 mean strength of enlisted men in American troops in the United

¹ See "Disability Statistics for Representative Unions" in this paper, p. 991.

States show the same general seasonal variations. The following tabulation gives this for 1912, 1913, and 1914 and the average for the three-year period, by months:¹

Movement of sick, by months (enlisted men in American troops at home); total sick admissions per 1,000 of mean strength, 1912-1914.

Month.	1912	1913	1914	Average.
January.....	72.39	63.52	58.46	64.79
February.....	70.58	53.99	58.09	60.88
March.....	76.60	58.47	66.09	67.05
April.....	67.60	49.72	55.20	57.50
May.....	62.88	50.56	52.56	55.33
June.....	57.93	50.43	53.28	53.88
July.....	56.57	51.85	50.29	52.90
August.....	56.67	47.64	48.92	51.07
September.....	53.14	43.92	46.93	47.99
October.....	54.95	52.22	47.13	51.43
November.....	53.10	47.66	44.26	48.34
December.....	59.12	50.12	49.00	52.74

Of interest in this connection are the monthly statistics of sick benefits paid to members of one of the international unions. The monthly reports of the Amalgamated Society of Carpenters and Joiners show the membership entitled to benefits when sick and the number of members who receive such benefits.² The following tabulation shows the monthly rate per 1,000 members receiving sick benefits for the years 1913 and 1914 and the average monthly rate for the two-year period for the society's membership in the United States:³

Members of the Amalgamated Society of Carpenters and Joiners in the United States receiving sick benefits: Monthly rate per 1,000 entitled to sick benefits when sick, 1913 and 1914.

Month.	1913	1914	Average.
January.....	23.9	16.1	20.0
February.....	24.9	18.3	21.6
March.....	23.5	22.0	22.7
April.....	23.3	19.3	21.3
May.....	17.1	20.1	18.6
June.....	18.6	19.7	19.1
July.....	17.2	17.2	17.2
August.....	17.9	19.7	18.8
September.....	18.3	19.3	18.8
October.....	14.5	20.2	17.3
November.....	16.1	19.1	17.6
December.....	17.2	21.6	19.4

Although the membership of this union in the United States was only about 2,000, the above statistics tend to indicate somewhat the same general seasonal variations of disability rates. The records

¹ Reports of the Surgeon General of the United States Army for 1913 (p. 288), 1914 (p. 290), and 1915 (p. 300).

² According to the regulations of the society, members are not entitled to receive benefits for sickness of less than four days' duration, and disability from all causes is included except old age, invalidism, drunkenness, disorderly or improper conduct, use of firearms, dangerous or competitive games, and exposure to "unnecessary risk."

³ Computed from the reports of local unions in the United States district published monthly in the Monthly Reports of the Amalgamated Society of Carpenters and Joiners, January, 1913, to December, 1914.

of this union afford a fair illustration of the kind of data available in the records of a large number of unions in this country.

While the foregoing disability data appear to point to an approximate disability rate for wage-earning persons, they should not be so used nor comparisons made without giving due weight to their qualifications and limitations, a number of which have been noted in their presentation.

PLAGUE-PREVENTION WORK.

CALIFORNIA.

The following report of plague-prevention work in California for the week ended April 1, 1916, was received from Surg. Boggess, of the United States Public Health Service, in charge of the work:

SAN FRANCISCO, CAL.		SAN FRANCISCO, CAL.—Continued.			
RAT PROOFING.		OPERATIONS ON THE WATER FRONT—continued.			
New buildings:		Traps set on wharves and water front.....			58
Inspections of work under construction.....	177	Traps set on vessels.....			66
Basements concreted (square feet, 16,750).....	18	Vessels trapped on.....			13
Floors concreted (square feet, 25,250)....	12	Poisons placed within Panama-Pacific International Exposition grounds (pieces) ..	53,000		
Yards, passageways, etc. (square feet, 9,406).....	46	Bait used on water front and vessels, bacon (pounds).....			6
Total area of concrete laid (square feet).....	51,406	RATS COLLECTED AND EXAMINED FOR PLAGUE.			
Class A, B, and C (fire proof) buildings:		Collected.....			410
Inspections made.....	116	Examined.....			331
Roof and basement ventilators, etc., screened.....	1,895	Found infected.....			None.
Wire screening used (square feet).....	2,820	RATS IDENTIFIED.			
Openings around pipes, etc., closed with cement.....	550	Mus norvegicus.....			201
Sidewalk lens lights replaced.....	840	Mus rattus.....			93
Old buildings:		Mus alexandrinus.....			74
Inspections made.....	327	Mus musculus.....			42
Wooden floors removed.....	37	SQUIRRELS COLLECTED AND EXAMINED FOR PLAGUE.			
Yards and passageways, planking removed.....	7				
New foundation walls installed (cubic feet).....	5,215				
Concrete floors installed (square feet, 22,674).....	27				
Basements concreted (square feet, 13,750).....	13	County.	Collected.	Examined.	Found infected.
Yards and passageways, etc., concreted (square feet, 14,702).....	44	Monterey.....	399	399	None.
Total area concrete laid (square feet)....	51,126	Contra Costa.....	351	351	Do.
Floors rat proofed with wire cloth (square feet, 2,975).....	3	Alameda.....	64	64	Do.
Buildings razed.....	15	Santa Clara.....	23	23	Do.
New garbage cans stamped approved.....	250	Stanislaus.....	12	12	Do.
Nuisances abated.....	254	San Benito.....	7	7	Do.
OPERATIONS ON THE WATER FRONT.		Total.....	856	856	Do.
Vessels inspected for rat guards.....	22	RANCHES INSPECTED AND HUNTED OVER.			
Reinspections made on vessels.....	24	Monterey County.....			48
New rat guards procured.....	20	Contra Costa County.....			51
Rat guards repaired.....	15	Alameda County.....			23
Rats trapped on wharves and water front..	16	Stanislaus County.....			4
Rats trapped on vessels.....	49	San Benito County.....			1
		Santa Clara County.....			1
		Total.....			128
		One rabbit from Monterey County examined and found to be infected with <i>B. tularensis</i> .			

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. 21, 1909	Oct. 17, 1909 ²	July 12, 1915	287 squirrels; 1 wood rat.
Contra Costa.....	July 13, 1915	(1)	Mar. 1, 1916	1,598 squirrels.
Fresno.....	(1)	(1)	Oct. 27, 1911	1 squirrel.
Merced.....	(1)	(1)	July 12, 1911	5 squirrels.
Monterey.....	(1)	(1)	Mar. 14, 1916	20 squirrels.
San Benito.....	June 4, 1913	(1)	Aug. 14, 1915	50 squirrels.
San Joaquin.....	Sept. 18, 1911	(1)	Aug. 26, 1911	18 squirrels.
San Luis Obispo.....	(1)	(1)	Jan. 29, 1910	1 squirrel.
Santa Clara.....	Aug. 31, 1910	(1)	July 23, 1913	25 squirrels.
Santa Cruz.....	(1)	(1)	May 17, 1910	3 squirrels.
Stanislaus.....	(1)	(1)	June 2, 1911	13 squirrels.

¹ None.

² Wood rat.

The work is being carried on in the following-named counties: Alameda, Contra Costa, San Francisco, Stanislaus, San Benito, Monterey, Lassen, and Modoc.

HAWAII—PLAGUE PREVENTION.

The following reports of plague-prevention work in Hawaii were received from Surg. Trotter, of the United States Public Health Service:

Honolulu.

WEEK ENDED MAR. 25, 1916.

Total rats and mongoose taken.....	357	Classification of rats killed by sulphur dioxide:	
Rats trapped.....	353	Mus alexandrinus.....	1
Mongoose trapped.....	3	Average number of traps set daily.....	9.4
Rats killed by sulphur dioxide.....	1	Cost per rat destroyed, 21 cents.	
Examined microscopically.....	287	Last case rat plague, Aiea, 9 miles from Honolulu,	
Showing plague infection.....	None.	Apr. 12, 1910.	
Classification of rats trapped:		Last case human plague, Honolulu, July 12, 1910.	
Mus alexandrinus.....	171	Last case rat plague, Paauhau, Hawaii, Jan. 18, 1916.	
Mus musculus.....	122	Last case human plague, Paauhau Plantation,	
Mus norvegicus.....	35	Hawaii, Dec. 16, 1915.	
Mus rattus.....	25		

Hilo.

WEEK ENDED MAR. 18, 1916.

Rats and mongoose taken.....	2,655	Classification of rats trapped and found dead—	
Rats trapped.....	2,631	Continued.	
Mongoose taken.....	24	Mus rattus.....	\$12
Rats and mongoose examined macroscopically.....	2,655	Mus musculus.....	1,157
Rats and mongoose plague infected.....	None.	Last case of rat plague, Paauhau Sugar Co., Jan. 18, 1916.	
Classification of rats trapped and found dead:		Last case of human plague, Paauhau Sugar Co.,	
Mus norvegicus.....	364	Dec. 16, 1915.	
Mus alexandrinus.....	298		

PORTO RICO—PLAGUE PREVENTION.

The following table shows the number of rats and mice examined in Porto Rico for plague infection during the two weeks ended April 7, 1916. No plague infection was found.

Place.	Rats.	Mice.
San Juan.....	115	17
Puerto de Tierra.....	72	1
Santurce.....	195	4

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.

City Reports for Week Ended Apr. 1, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	1	.....	Newark, N. J.....	2	.....
Boston, Mass.....	1	1	New Bedford, Mass.....	.....	1
Bridgeport, Conn.....	2	1	New Orleans, La.....	1	1
Chicago, Ill.....	1	3	New York, N. Y.....	10	5
Cincinnati, Ohio.....	2	.....	Philadelphia, Pa.....	4	2
Cleveland, Ohio.....	1	1	Providence, R. I.....	.....	1
Detroit, Mich.....	.....	.....	Salt Lake City, Utah.....	1	.....
Jersey City, N. J.....	1	1	San Diego, Cal.....	1	1
Johnstown, Pa.....	1	.....	Toledo, Ohio.....	1	1
Lowell, Mass.....	1	.....	Wheeling, W. Va.....	.....	1
Milwaukee, Wis.....	1	.....	Wilmington, Del.....	1	1

DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1005.

ERYSIPELAS.

City Reports for Week Ended Apr. 1, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	3	.....	Milwaukee, Wis.....	8	.....
Ann Arbor, Mich.....	1	.....	Montclair, N. J.....	1	.....
Atlanta, Ga.....	.....	1	Newark, N. J.....	3	.....
Baltimore, Md.....	.....	1	New Castle, Pa.....	1	.....
Binghamton, N. Y.....	3	.....	New York, N. Y.....	.....	13
Boston, Mass.....	.....	3	Norristown, Pa.....	2	.....
Bridgeport, Conn.....	5	1	Omaha, Neb.....	4	.....
Brockton, Mass.....	1	.....	Passaic, N. J.....	1	.....
Buffalo, N. Y.....	7	.....	Philadelphia, Pa.....	21	15
Chicago, Ill.....	61	4	Pittsburgh, Pa.....	13	1
Cleveland, Ohio.....	7	.....	Providence, R. I.....	.....	1
Clinton, Mass.....	.....	.....	Racine, Wis.....	2	.....
Colleyville, Kans.....	1	.....	Reading, Pa.....	1	1
Detroit, Mich.....	12	3	St. Louis, Mo.....	9	.....
Hartford, Conn.....	2	.....	St. Paul, Minn.....	3	1
Kalamazoo, Mich.....	1	.....	San Francisco, Cal.....	1	1
Kansas City, Mo.....	.....	3	Schenectady, N. Y.....	1	1
Lancaster, Pa.....	1	.....	Springfield, Ill.....	1	.....
Little Rock, Ark.....	1	.....	Taunton, Mass.....	.....	1
Los Angeles, Cal.....	4	.....	York, Pa.....	1	.....
Madison, Wis.....	1	.....		

MALARIA.

City Reports for Week Ended Apr. 1, 1916.

During the week ended April 1, 1916, malaria was reported by cities as follows: Boston, Mass., 1 case; New Orleans, La., 3 cases.

MEASLES.

Pennsylvania—Philadelphia.

Senior Surg. Irwin reported that during the 14 days ended April 17, 1916, 1,016 cases of measles were notified in Philadelphia, Pa.

South Carolina—Charleston.

Surg. Pettus reported that during the period from March 25 to April 8, 1916, 28 cases of measles, with 1 death, were notified in Charleston, S. C.

Washington—Seattle.

Surg. Lloyd reported that during the week ended April 1, 1916, 241 cases of measles were notified in Seattle, Wash., making a total of 593 cases, with 1 death, reported since the beginning of the outbreak February 15, 1916.

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1005.

PELLAGRA.

City Reports for Week Ended Apr. 1, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlanta, Ga.....		1	Memphis, Tenn.....		2
Birmingham, Ala.....	2	2	Mobile, Ala.....	4	
Charleston, S. C.....	1	1	New Orleans, La.....	1	
Chicago, Ill.....	1	1	Washington, D. C.....	1	1

PNEUMONIA.

City Reports for Week Ended Apr. 1, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	1	5	Lorain, Ohio.....	1	
Allentown, Pa.....	2		Los Angeles, Cal.....	4	2
Ann Arbor, Mich.....	3	3	Manchester, N. H.....	8	8
Auburn, N. Y.....	2		Muscatine, Iowa.....	2	
Binghamton, N. Y.....	8	5	Newark, N. J.....	47	11
Birmingham, Ala.....	7	7	New Castle, Pa.....	1	
Braddock, Pa.....	1		Newport, Ky.....	1	1
Chicago, Ill.....	262	89	Norfolk, Va.....	3	3
Cleveland, Ohio.....	57	28	Pasadena, Cal.....	1	
Coffeyville, Kans.....	1		Philadelphia, Pa.....	101	50
Columbus, Ohio.....	1	2	Pittsburgh, Pa.....	21	31
Detroit, Mich.....	10	26	Reading, Pa.....	4	3
Duluth, Minn.....	1	1	Sacramento, Cal.....	3	
Galesburg, Ill.....	1	1	Saginaw, Mich.....	1	1
Gardner, Mass.....	1	1	San Francisco, Cal.....	6	5
Grand Rapids, Mich.....	3	1	Schenectady, N. Y.....	4	2
Kalamazoo, Mich.....	3	1	Stenton, Pa.....	1	1
Kansas City, Kans.....	1		Steubenville, Ohio.....	1	
Kansas City, Mo.....	16	15	Stockton, Cal.....	4	1
Lancaster, Pa.....	4		Wichita, Kans.....	4	
Lincoln, Neb.....	1	1	Wilkes-Barre, Pa.....	3	

POLIOMYELITIS (INFANTILE PARALYSIS).**City Reports for Week Ended Apr. 1, 1916.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....	1	2	Newark, N. J.....	1	.....
Chicago, Ill.....	1	.....	New Orleans, La.....	1	.....
Cleveland, Ohio.....	1	.....	New York, N. Y.....	1	.....
Gardner, Mass.....	1	.....		

RABIES.**Idaho—Rabies in Animals.**

The State Board of Health of Idaho reported by telegraph April 17, 1916, that 2 cases of rabies in animals had been reported in Ada County, and 1 case in Franklin County, Idaho.

ROCKY MOUNTAIN SPOTTED FEVER.**Washington—Dayton.**

Collaborating Epidemiologist Tuttle reported by telegraph April 14, 1916, that one case of Rocky Mountain spotted fever had been notified in Dayton, Columbia County, Wash.

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1005.

SMALLPOX.**Maryland—Salisbury.**

Collaborating Epidemiologist Fulton reported by telegraph April 12, 1916, that 12 cases of smallpox had been notified at Salisbury, Wicomico County, Md.

Minnesota.

Collaborating Epidemiologist Bracken reported by telegraph that during the week ended April 15, 1916, 4 new foci of smallpox infection were reported in Minnesota, cases of the disease having been notified as follows: Chippewa County, Maynard, 1; Mower County, Austin, 1; Morrison County, Randall, 12; Yellow Medicine County, Minnesota Falls Township, 1.

Wyoming—Sublet.

Dr. W. A. Wyman, secretary of the State Board of Health of Wyoming, reported by telegraph April 18, 1916, that 10 cases of smallpox had been notified at Sublet, Lincoln County, Wyo.

SMALLPOX—Continued.

City Reports for Week Ended Apr. 1, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Butte, Mont.....	1	.....	Lincoln, Nebr.....	4	.....
Chicago, Ill.....	2	.....	Los Angeles, Cal.....	1	.....
Coffeyville, Kans.....	1	.....	Nashville, Tenn.....	1	.....
Danville, Ill.....	1	.....	New Orleans, La.....	6	.....
Davenport, Iowa.....	26	.....	Oklahoma City, Okla.....	6	.....
Detroit, Mich.....	3	1	Portsmouth, Va.....	1	.....
El Paso, Tex.....	2	1	Rock Island, Ill.....	5	.....
Evansville, Ind.....	9	.....	St. Paul, Minn.....	6	.....
Fitchburg, Mass.....	1	.....	Springfield, Ill.....	5	.....
Galesburg, Ill.....	2	.....	Tacoma, Wash.....	1	.....
Galveston, Tex.....	1	.....	Tampa, Fla.....	1	.....
Kansas City, Kans.....	5	.....	Toledo, Ohio.....	6	.....
Kansas City, Mo.....	5	.....	Wichita, Kans.....	4	.....

TETANUS.

City Reports for Week Ended Apr. 1, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Charleston, S. C.....	1	St. Louis, Mo.....	1	1
Chicago, Ill.....	1	Woburn, Mass.....	.....	1
Los Angeles, Cal.....	1	.....	.....	.....

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1005.

TYPHOID FEVER.

City Reports for Week Ended Apr. 1, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Allentown, Pa.....	2	.....	Milwaukee, Wis.....	18	7
Ann Arbor, Mich.....	7	.....	Nashville, Tenn.....	2	1
Atlanta, Ga.....	2	.....	Newark, N. J.....	2	1
Atlantic City, N. J.....	1	.....	New Castle, Pa.....	2	.....
Baltimore, Md.....	7	.....	New Haven, Conn.....	.....	1
Bayonne, N. J.....	.....	1	New Orleans, La.....	5	.....
Boston, Mass.....	4	.....	Newton, Mass.....	1	.....
Bridgeport, Conn.....	1	1	New York, N. Y.....	20	.....
Buffalo, N. Y.....	5	.....	North Adams, Mass.....	1	.....
Camden, N. J.....	1	.....	Oakland, Cal.....	1	.....
Charleston, S. C.....	1	.....	Philadelphia, Pa.....	6	2
Chicago, Ill.....	1	.....	Pittsburgh, Pa.....	3	.....
Cincinnati, Ohio.....	17	3	Portland, Oreg.....	1	.....
Cleveland, Ohio.....	2	1	Portsmouth, Va.....	.....	1
Concord, N. H.....	1	.....	Providence, R. I.....	1	.....
Covington, Ky.....	1	.....	Saginaw, Mich.....	2	2
Detroit, Mich.....	4	1	St. Louis, Mo.....	4	1
Dubuque, Iowa.....	2	.....	St. Paul, Minn.....	1	.....
El Paso, Tex.....	.....	1	Salt Lake City, Utah.....	1	.....
Erie, Pa.....	2	.....	San Francisco, Cal.....	3	.....
Evansville, Ind.....	1	.....	Schenectady, N. Y.....	1	.....
Galveston, Tex.....	1	.....	Stockton, Cal.....	1	.....
Grand Rapids, Mich.....	7	1	Syracuse, N. Y.....	3	.....
Harrisburg, Pa.....	1	.....	Tampa, Fla.....	1	1
Jersey City, N. J.....	1	.....	Toledo, Ohio.....	2	1
Kansas City, Mo.....	.....	1	Trenton, N. J.....	1	.....
Lancaster, Pa.....	1	.....	Washington, D. C.....	6	.....
Lincoln, Neb.....	1	.....	Wheeling, W. Va.....	1	.....
Los Angeles, Cal.....	1	.....	Williamsport, Pa.....	4	.....
Lowell, Mass.....	1	.....	Wilmington, Del.....	1	1
Lynn, Mass.....	1	.....	Zanesville, Ohio.....	.....	1
Memphis, Tenn.....	2	1	.....	.....	.....

TYPHUS FEVER.

New Mexico—Santa Rita.

Senior Surg. Pierce reported that on April 11, 1916, 3 new cases of typhus fever, all in one family, were found in Santa Rita, N. Mex.

Texas—El Paso and Hurley.

Senior Surg. Pierce reported that on April 9, 1916, 4 new cases of typhus fever, all being in members of one family, were found in El Paso, Tex., making a total of 34 cases of the disease reported in El Paso since the beginning of the present outbreak. Dr. Pierce also reported that one case of typhus fever had been found at Hurley, Tex., in the person of a Mexican girl who went to that place from El Paso about April 1, 1916.

City Report for Week Ended Apr. 1, 1916.

During the week ended April 1, 1916, 2 cases of typhus fever were reported at El Paso, Tex.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City Reports for Week Ended Apr. 1, 1916.

City.	Population as of July 1, 1915. (Estimated by United States 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	244	15	3	268	3	51	2	18	23
Boston, Mass.	745,139	245	45	5	167	5	70	3	44	19
Chicago, Ill.	2,447,045	736	78	15	326	4	280	3	310	73
Cleveland, Ohio.	656,975	231	29	4	204	3	38	2	38	18
Detroit, Mich.	554,717	266	41	5	181	9	43	.....	21	22
New York, N. Y.	5,468,190	1,649	312	34	939	27	234	5	385	180
Philadelphia, Pa.	1,683,664	571	76	8	443	1	76	.....	102	71
Pittsburgh, Pa.	571,984	219	16	2	287	3	13	.....	25	18
St. Louis, Mo.	745,988	213	45	3	190	1	47	1	50	16
From 300,000 to 500,000 inhabitants:										
Buffalo, N. Y.	461,335	156	15	2	90	1	10	.....	37	13
Cincinnati, Ohio	406,706	137	18	.....	324	2	8	.....	29	18
Jersey City, N. J.	300,133	90	6	.....	81	.....	24	.....	32	8
Los Angeles, Cal.	465,367	102	18	1	40	.....	7	.....	68	18
Milwaukee, Wis.	428,062	134	14	1	260	8	40	1	15	10
Newark, N. J.	399,000	128	9	1	628	6	38	.....	61	22
New Orleans, La.	366,484	146	18	.....	3	.....	2	.....	32	22
San Francisco, Cal.	¹ 416,912	140	45	6	5	.....	50	1	.....	11
Washington, D. C.	358,679	.....	8	1	110	.....	14	.....	35	18
From 200,000 to 300,000 inhabitants:										
Columbus, Ohio	209,722	69	3	.....	32	.....	7	.....	5	3
Kansas City, Mo.	289,879	.....	10	3	207	6	63	5	.....	4
Portland, Oreg.	272,833	45	2	.....	16	.....	9	.....	9	5
Providence, R. I.	250,025	115	12	5	72	4	27	1	.....	12
St. Paul, Minn.	241,999	65	1	.....	93	.....	3	1	16	8
From 100,000 to 200,000 inhabitants:										
Atlanta, Ga.	184,873	65	2	.....	.....	.....	2	.....	.....	14
Birmingham, Ala.	174,108	50	.....	.....	1	.....	.....	.....	19	11
Bridgeport, Conn.	118,434	52	2	1	1	.....	3	.....	6	9

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

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

City Reports for Week Ended Apr. 1, 1916—Continued.

City.	Population as of July 1, 1915. (Estimated by United States Census Bureau.)	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 100,000 to 200,000 inhabitants—Continued.										
Cambridge, Mass.	111,669	35	5		10		9		2	7
Camden, N. J.	104,549		5				5		5	
Fall River, Mass.	126,904		1	1	9		3		10	3
Grand Rapids, Mich.	125,759	44	1		41		19		4	1
Hartford, Conn.	108,969	49	10	1	173	3	1		9	1
Lowell, Mass.	112,124	29	4		7				5	3
Lynn, Mass.	100,316	25	2		49		14	1	5	2
Memphis, Tenn.	146,113				11		1		9	7
Nashville, Tenn.	115,978	37					1		4	3
New Bedford, Mass.	114,694	41			1		1		2	2
New Haven, Conn.	147,095		4	1	3		6		4	3
Oakland, Cal.	190,803		5	1			6		7	3
Omaha, Nebr.	135,455		5		2		35			5
Reading, Pa.	105,094	43	1		33		12			
Richmond, Va.	154,674	73	3		394	1	2		10	5
Salt Lake City, Utah.	113,567	32	12		2		3			3
Springfield, Mass.	103,216	33		1	60		10		1	5
Syracuse, N. Y.	152,534	52	5		2		1			4
Tacoma, Wash.	108,094		1		1					
Toledo, Ohio.	187,810	88	7	1	416	12	13		33	8
Trenton, N. J.	109,212	45	8		2		6		2	1
Worcester, Mass.	160,523	53	8		33		8		10	4
From 50,000 to 100,000 inhabitants:										
Akron, Ohio.	82,958	38	11		46	1	15		1	1
Allentown, Pa.	61,901	23	4		19		1		1	
Atlantic City, N. J.	55,806	8	2		2		1		12	
Bayonne, N. J.	67,582	10	3		15		3		6	1
Berkeley, Cal.	54,879	9	1		1		2			
Binghamton, N. Y.	53,082	26	5	1	8		1		3	
Brockton, Mass.	65,746	22	4		22	2	7		2	
Canton, Ohio.	59,139	11	1		5	1	4			1
Charleston, S. C.	60,427	26	1		13		1			3
Chattanooga, Tenn.	58,576	17	1				6		1	4
Covington, Ky.	56,520	14			53				1	1
Duluth, Minn.	91,913	15			136	3	15		2	2
El Paso, Tex.	51,936	50	4		11		5			8
Erie, Pa.	73,798	44	6		173		1		13	
Evansville, Ind.	72,125	22	1		2		1		3	
Fort Wayne, Ind.	74,352	19	2		185					2
Harrisburg, Pa.	70,754	25		1	365	2			14	1
Hoboken, N. J.	76,104	21	3	1	30		11		7	2
Johnstown, Pa.	66,565	35	1		40		2			1
Kansas City, Kans.	96,854		3		63		6		3	
Lancaster, Pa.	50,269		5		25		2			
Lawrence, Mass.	98,197	37	5		20		4		5	5
Little Rock, Ark.	55,158	28			1					
Malden, Mass.	50,067	13	3				6		1	
Manchester, N. H.	76,959	29	1		96				1	4
Mobile, Ala.	56,536	24	1		1				6	1
New Britain, Conn.	52,203		2		63				6	3
Norfolk, Va.	88,076				22	1			3	3
Oklahoma, Okla.	88,158	13			4		4			
Passaic, N. J.	69,010	25	1		21		4			
Pawtucket, R. I.	58,156	20	2		3		5		4	
Rockford, Ill.	53,761				35		3			
Sacramento, Cal.	64,806	12							6	3
Saginaw, Mich.	54,815	15	1		115	1	1			
San Diego, Cal.	51,115	24	1		101		1	1	1	1
Schenectady, N. Y.	95,265	22			15		2	2	7	2
Somerville, Mass.	85,460	31		1	2		3	3	3	4
South Bend, Ind.	67,030	11			101		3			
Springfield, Ill.	59,468		4	1	22			1		2
Wichita, Kans.	67,847				7				4	
Wilkes-Barre, Pa.	75,218	20	2		8		2		7	2
Wilmington, Del.	93,161		1		192		6			
York, Pa.	50,543		3		22	2	6		2	

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

City Reports for Week Ended Apr. 1, 1916—Continued.

City.	Population as of July 1, 1915. (Estimated by United States 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:										
Alameda, Cal.	27,031	4							1	2
Auburn, N. Y.	36,947	9	1		16			2	2	1
Brookline, Mass.	31,934	11			6		1			
Butler, Pa.	26,587	4			15					
Butte, Mont.	42,918	21	1		101			2		4
Chelsea, Mass.	32,452	12			5		3	1	1	2
Chicopee, Mass.	28,688	10					1	3	1	1
Cumberland, Md.	25,564	6	1		79	2				
Danville, Ill.	31,544	14	1		168		3		2	2
Davenport, Iowa.	47,127						14			
Dubuque, Iowa.	39,650		2				3			4
East Orange, N. J.	41,155	7	1		23		3		2	
Elgin, Ill.	27,844	13			1					3
Everett, Mass.	38,307	8	2		2		2		5	1
Everett, Wash.	33,767	4			1		2		1	2
Fitchburgh, Mass.	41,144	8	2		18		1			
Galveston, Tex.	41,076	11								1
Green Bay, Wis.	28,689		1				1			
Haverhill, Mass.	47,774	18	3		5		3		3	2
Kalamazoo, Mich.	47,364	13	1		1				4	2
Kenosha, Wis.	30,319				2	1			2	
La Crosse, Wis.	31,522		1				1			4
Lexington, Ky.	39,703	8			4				3	3
Lincoln, Nebr.	46,028	19	1		3		5			
Lorain, Ohio.	35,662	28			23		3		1	
Lynchburg, Va.	32,385	9			94				4	1
Madison, Wis.	30,084				2					1
Medford, Mass.	25,737	8					1		1	1
Montclair, N. J.	25,550	3			37		1		3	
New Castle, Pa.	40,351		2		6					
Newport, Ky.	31,722	13								
Newport, R. I.	29,631	8	6	1	23		1			
Newton, Mass.	43,085	9			14				2	
Niagara Falls, N. Y.	36,240	15			107		3		2	
Norristown, Pa.	30,833	11	1		81					
Ogden, Utah.	30,466	5								
Orange, N. J.	32,524	20	4	2	91	1			3	1
Pasadena, Cal.	43,859								6	1
Perth Amboy, N. J.	39,725		2		1					
Pittsfield, Mass.	37,580		3		1		1		3	4
Portsmouth, Va.	38,610	15	2							2
Racine, Wis.	45,507	17	1		40		10	1	2	1
Roanoke, Va.	41,929	16	2		7					4
Rock Island, Ill.	27,961								2	
San Jose, Cal.	37,994	9	1							1
Steubenville, Ohio.	26,631	17	1		36					2
Stockton, Cal.	34,508	8	1						2	
Superior, Wis.	45,285	7	3		1		1			1
Taunton, Mass.	35,957	18			2				2	4
Waltham, Mass.	30,129	8					3	1		1
West Hoboken, N. J.	41,893	3	1		1		2		7	
Wheeling, W. Va.	43,097	15	2		119				1	1
Williamsport, Pa.	33,495	12	1		2				3	
Zanesville, Ohio.	30,406				21					2
From 10,000 to 25,000 inhabitants:										
Ann Arbor, Mich.	14,979	9					2		6	
Beaver Falls, Pa.	13,316				3		1			
Braddock, Pa.	21,310				1					
Cairo, Ill.	15,593	4								1
Clinton, Mass.	13,075	1			1					
Coffeyville, Kans.	16,765				2				2	
Concord, N. H.	22,480	8			8					
Galesburg, Ill.	23,923	7			2					
Gardner, Mass.	16,746	3	1	1						
Harrison, N. J.	16,555				4				1	
Kearny, N. J.	22,753	9			8					1
Kokomo, Ind.	20,312	12							1	2
Long Branch, N. J.	15,057	8	1		1					
Marquette Wis.	14,610									1

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

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

City Reports for Week Ended Apr. 1, 1916—Continued.

City.	Population as of July 1, 1915. (Estimated by United States Census Bureau.)	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 10,000 to 25,000 inhabitants—Continued.										
Melrose, Mass.....	17,166	3					1			
Morristown, N. J.....	13,158	6			19					
Muscatine, Iowa.....	17,287	8							2	
Nanticoke, Pa.....	22,441	7								
Newburyport, Mass.....	15,195	5	1							1
New London, Conn.....	20,771	11	2				1			
North Adams, Mass.....	¹ 22,019	6			1		1			
Northampton, Mass.....	19,846	7			3		6			1
Plainfield, N. J.....	23,280				12	1				
Rutland, Vt.....	14,624	6								1
Saratoga Springs, N. Y.....	12,842	6			1					1
Steelton, Pa.....	15,337	7			22					1
Wilkinsburg, Pa.....	22,361	4			23		1			1
Woburn, Mass.....	15,862	5								

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

FOREIGN.

CHINA.

Examination of Rats—Hongkong.

During the week ended February 19, 1916, 2,055 rats were examined at Hongkong. No plague infection was found.

The last plague-infected rat at Hongkong was found during the week ended February 5, 1916.

Examination of Rats—Plague Rat Found—Shanghai.

During the two weeks ended March 18, 1916, 666 rats were examined at Shanghai. One plague-infected rat was found during the week ended March 18, 1916.

CUBA.

Communicable Diseases—Habana.

Communicable diseases were notified at Habana during the period from March 21 to 31, 1916, as follows:

Disease.	New cases.	Deaths.	Remaining under treatment Mar. 31, 1916.
Cerebrospinal meningitis	2	1	2
Diphtheria	5	—	5
Leprosy	—	1	244
Malaria	—	—	12
Measles	12	—	4
Paratyphoid fever	1	1	2
Scarlet fever	4	—	5
Typhoid fever	11	3	21
Varicella	9	—	7

¹ From interior of Republic.

Measures Against Importation of Typhus.

Measures against arrivals from Mexican ports were directed, March 22, 1916, to be put in force at ports in Cuba as follows:

Forecastle passengers and passengers of any other class, if necessary, arriving at Cuban ports from ports in Mexico, shall be subjected to a general antiseptic bath at one of the State establishments.

Soiled clothing, both as contents of baggage and in use, shall be subject to such insecticidal treatment as may be judged advisable.

GREECE.

Cholera—Island of Corfu.

Cholera was reported present on the island of Corfu, March 11, 1916. According to information dated March 19, 1916, arrivals from Corfu have been declared subject to 5 days' quarantine at Patras, Greece.

ITALY.

Examination of Emigrants from Infected Localities—Naples.

According to information dated March 15, 1916, in consequence of the reported presence of cholera among Serbian troops on the island of Corfu, Greece, emigrants arriving from Corfu bound for ports in the United States will be subjected at Naples to the measures, including fecal examinations, prescribed by the United States quarantine regulations.

JAPAN.

Typhus Fever—Tokyo.

During the period from February 27 to March 17, 1916, 110 cases of typhus fever were notified at Tokyo, making a total from January 1, 1916, of 155 cases.

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

Reports Received During Week Ended Apr. 21, 1916.¹

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:				
Corfu.....	Mar. 11.....			Present.
India:				
Bassein.....	Feb. 6-12.....		9	
Calcutta.....	Feb. 13-19.....		9	
Tavoy.....	Jan. 30-Feb. 5.....		2	
Philippine Islands:				
Manila.....	Feb. 27-Mar. 4.....	3		
Siam:				
Bangkok.....	Feb. 13-19.....	1	1	

PLAGUE.

China:				
Hongkong.....	Feb. 20-26.....	2	2	
Egypt:				Jan. 1-Mar. 9, 1916: Cases, 133;
Assiout province.....	Mar. 3-9.....	25	9	deaths, 71.
Fayoum province.....	Mar. 7-9.....	6	3	2 septicemic.
Girgeh province.....	Mar. 4.....	1	1	1 septicemic.
Gizeh province.....	Mar. 5.....	1		
Minieh province.....	Mar. 8.....	2		
India:				
Bassein.....	Feb. 6-12.....		11	
Henzada.....	Jan. 30-Feb. 5.....		25	
Mandalay.....	Feb. 6-12.....		174	
Myingyan.....	Jan. 30-Feb. 5.....		6	
Pegu.....	Feb. 6-12.....		9	
Prome.....	do.....		4	
Java:				
Surabaya.....	Jan. 8-14.....	6	5	

¹ 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 Apr. 21, 1916—Continued.****SMALLPOX.**

Place.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Austria—				
Trieste.....	Feb. 20-26.....	2		
China:				
Chungking.....	Feb. 27-Mar. 4.....			Present.
Foochow.....	do.....			Do.
Harbin.....	Feb. 7-13.....	4		
Hongkong.....	Feb. 20-Mar. 5.....	32	27	
Nanking.....	Mar. 5-11.....			Do.
Tientsin.....	Feb. 27-Mar. 18.....	19	10	
India:				
Calcutta.....	Feb. 13-19.....		2	
Japan:				
Yokohama.....	Feb. 28-Mar. 19.....	7	2	
Java:				
Batavia.....	Jan. 23-29.....	2	2	Jan. 7-29, 1916: Cases, 67; deaths, 16.
Mexico:				
Frontera.....	Mar. 14-25.....		13	9 of these confluent.
Guadalajara.....	Mar. 26-Apr. 1.....	20	7	
Mazatlan.....	Mar. 22-28.....		6	
Monterey.....	Mar. 27-Apr. 2.....	6		
Vera Cruz.....	Mar. 20-26.....	4	2	
Spain:				
Valencia.....	Mar. 5-11.....	11		
Turkey in Asia:				
Beirut.....	Feb. 6-12.....	6	3	

TYPHUS FEVER.

China:				
Antung.....	Mar. 13-19.....	1		
Japan:				
Tokyo.....	Feb. 27-Mar. 17.....	110		Jan. 1-Mar. 17, 1916: Cases, 155.
Java:				
Batavia.....	Jan. 23-29.....	12	1	
Samarang.....	Jan. 7-13.....	6	1	
Mexico:				
Guadalajara.....	Mar. 26-Apr. 1.....	16	4	
Vera Cruz.....	Mar. 20-26.....		1	
Turkey in Asia:				
Beirut.....	Feb. 6-12.....	6	3	

Reports Received from Jan. 1 to Apr. 14, 1916.**CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary.....				Total, Oct. 25, 1915-Jan. 2, 1916: Cases, 412; deaths, 165.
Austria.....	Nov. 7-Dec. 18.....	209	66	
Do.....	Jan. 1-Feb. 12.....	144	49	
Bosnia-Herzegovina.....	Dec. 23-Jan. 3.....	8	6	
Do.....	Jan. 9-Feb. 12.....	12	6	
Croatia-Slavonia.....	Oct. 18-Dec. 20.....	247	105	
Do.....	Jan. 3-31.....	138	126	
Hungary.....	Oct. 18-Jan. 2.....	339	197	Nov. 18-Dec. 10, 1915: Cases, 675; deaths, 276. In a prison camp.
Do.....	Jan. 10-16.....	2	2	
Borneo:				
Putatan.....	Oct. 17-23.....	2		
India:				
Bassein.....	Nov. 28-Jan. 1.....		29	
Do.....	Jan. 2-Feb. 5.....		8	
Bombay.....	Jan. 16-22.....	1		
Calcutta.....	Oct. 31-Jan. 1.....		139	
Do.....	Jan. 2-Feb. 12.....		80	
Henzada.....	Oct. 7-Nov. 27.....		3	
Madras.....	Nov. 7-Dec. 4.....	5		
Do.....	Jan. 2-Feb. 19.....		19	
Madras Presidency.....	Nov. 26.....		12	

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—
Continued.**Reports Received from Jan. 1 to Apr. 14, 1916—Continued.****CHOLERA—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
India—Continued.				
Mandalay.....	Oct 24—Dec. 18.....		46	
Mergul.....	Oct. 23—Jan. 1.....		12	
Do.....	Jan. 2—15.....		21	
Myingyan.....	Oct. 19—Dec. 25.....		15	
Pakkoku.....	Oct. 10—Nov. 6.....		45	
Pegu.....	Jan. 16—Feb. 5.....		3	
Prome.....	Nov. 14—Jan. 1.....		106	
Rangoon.....	Oct. 31—Jan. 1.....	88	69	
Do.....	Jan. 2—Feb. 19.....	52	37	
Tavoy.....	Dec. 5—Jan. 1.....		18	
Do.....	Jan. 2—15.....		9	
Toungoo.....	Oct. 7—Dec. 11.....		47	
Yenangyaung.....	Nov. 2.....	1	1	American.
Indo-China.....				Sept. 1—30, 1915: Cases, 813; deaths, 549.
	1915.			
Anam Province.....	Sept. 1—30.....	127	92	
Cambodia Province.....	do.....	1	1	
Cochin China Province.....	do.....	15	8	
Saigon.....	Oct. 25—Nov. 28.....	4	3	
Do.....	Jan. 9—23.....	3	1	
Tonkin Province.....	Sept. 1—30.....	670	448	
Java:				
Batavia.....	Oct. 26—Dec. 27.....	55	36	Oct. 15—Nov. 15, 1915: Cases, 69; deaths, 48. Nov. 12—Dec. 6, 1915: Cases, 17; deaths, 10.
Do.....	Jan. 11—17.....	2	1	
Brebes.....	Oct. 15—Dec. 9.....	10	10	
Cheribon.....	Dec. 28—Jan. 3.....	1		Vicinity of Batavia.
Persia:				
Enzeli.....	Nov. 6—12.....		10	Nov. 22, 1915: Still present.
Do.....	Feb. 6.....			Present.
Essaleme.....	Nov. 28.....		7	
Gazian.....	Nov. 6—12.....		4	
Karkhan-Roud.....	Nov. 28.....		38	And in vicinity.
Kazvin.....	Nov. 27.....		10	
Resht.....	Nov. 24.....			And vicinity: Present.
Do.....	Feb. 6.....			Present.
Philippine Islands:				
Manila.....	Dec. 26—Jan. 1.....	1	1	
Do.....	Jan. 2—Feb. 26.....	22	12	
Russia:				
Moscow.....	Nov. 14—27.....	4	1	
Siam:				
Bangkok.....	Jan. 9—Feb. 5.....	1	2	
Turkey in Asia:				
Trebizond.....	Dec. 2—4.....	15	10	Dec. 1—31, 1915: Present.
Do.....	Jan. 8.....			Present.

PLAGUE.

Brazil:				
Bahia.....	Nov. 21—Feb. 19...	18	11	
Ceylon:				
Colombo.....	Oct. 24—Dec. 25.....	37	31	
Do.....	Jan. 2—Feb. 19.....	29	28	
China:				
Hongkong.....	Nov. 7—Jan. 1.....	4	4	
Do.....	Jan. 2—8.....	1	1	
Ecuador:				
Guayaquil.....	Nov. 1—30.....	1	1	
Egypt:				
Alexandria.....	Dec. 23—31.....	2		Jan. 1—Dec. 31, 1915: Cases, 285; deaths, 120. Jan. 1—Mar. 2, 1916: Cases, 68; deaths, 43.
Assiout Province.....	Dec. 17—31.....	4	2	
Do.....	Jan. 2—Feb. 24.....	18	7	
Fayoum Province.....	Jan. 23—Feb. 17.....	4	6	
Garbieh Province.....	Dec. 6—28.....	6	4	
Do.....	Jan. 10—Feb. 13.....	2	1	
Girgeh Province.....	Feb. 18.....	1	1	
Gizeh Province.....	Dec. 27.....	1	1	
Keneh Province.....	Feb. 15—22.....	4	3	
Minieh Province.....	Nov. 27—Dec. 31.....	13	9	
Do.....	Jan. 1—Feb. 26.....	28	19	
Port Said.....	Aug. 13—Nov. 1.....	3	2	
Suez.....	Jan. 10.....	1		On s. s. Syria from Bombay.

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

Reports Received from Jan. 1 to Apr. 14, 1916—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:				
Athens.....	Dec. 8-20.....	.....	1	
Piræus.....	Jan. 29.....	7	5	
Syra Island.....	Jan. 16.....	16	10	
India.....				
Akyab.....	Jan. 16-29.....	.....	1	Oct. 31, 1915-Jan. 1, 1916: Cases, 40,533; deaths, 34,225. Jan. 2-Feb. 19, 1916: Cases, 44,907; deaths, 35,229.
Bassein.....	Dec. 26-Jan. 1.....	.....	3	
Do.....	Jan. 2-Feb. 5.....	.....	26	
Bombay.....	Nov. 9-Jan. 1.....	53	51	
Do.....	Jan. 2-Feb. 26.....	192	152	
Calcutta.....	Nov. 21-27.....	.....	1	Jan. 2-8: Present.
Do.....	Jan. 2-15.....	.....	1	
Henzada.....	Dec. 26-Jan. 1.....	.....	1	
Do.....	Jan. 2-29.....	.....	45	
Karachi.....	Nov. 7-20.....	.....	2	
Madras.....	Jan. 2-8.....	.....	1	
Madras Presidency.....	Oct. 16-Nov. 5.....	.....	118	Madras Presidency, Aug. 1, 1898, to June 30, 1915: Cases, 141,356; deaths, 109,095.
Do.....	Nov. 12-Jan. 1.....	1,839	1,288	
Do.....	Jan. 9-Feb. 19.....	3,408	2,375	
Mandalay.....	Oct. 24-Jan. 1.....	.....	266	
Do.....	Jan. 2-Feb. 5.....	.....	827	
Pegu.....	Jan. 9-Feb. 5.....	.....	12	
Prome.....	do.....	.....	13	
Rangoon.....	Oct. 1-Dec. 18.....	68	66	
Do.....	Jan. 2-Feb. 19.....	294	271	
Toungoo.....	Jan. 16-Feb. 5.....	.....	4	
Indo-China.....				Sept. 1-30, 1915: Cases, 72; deaths, 65.
	1915.			
Anam, Province.....	Sept. 1-30.....	9	5	
Cambodia, Province.....	do.....	20	19	
Cochin China, Province.....	do.....	2	.....
Saigon.....	Oct. 25-Dec. 5.....	8	5	
Do.....	Jan. 3-Feb. 27.....	41	18	
Tonkin, Province.....	Sept. 1-30.....	41	41	
Java.....				
Kediri residency.....	Oct. 22-Dec. 30.....	527	507	Nov. 19-Dec. 30, 1915: Cases, 1,689; deaths, 1,638. Year 1915: Cases, 4,884; deaths, 4,482; among Chinese and natives.
Madioen residency.....	Oct. 22-Nov. 11.....	1	1	
Paseroean residency.....	Oct. 22-Dec. 30.....	49	50	
Surabaya residency.....	do.....	24	24	
Surabaya.....	Nov. 5-Dec. 30.....	12	12	
Do.....	Jan. 1-14.....	11	11	
Surakarta residency.....	Oct. 22-Dec. 16.....	1,085	1,056	
Mauritius.....	Oct. 1-Dec. 30.....	8	.....
Peru.....				
Ancachs department.....	Jan. 1 - Dec. 31, 1915.....	8	6	Jan. 1-Dec. 31, 1915: Cases, 455; deaths, 240. In addition, 18 cases, cause of disease unknown.
Arequipa department.....	do.....	23	15	
Callao department.....	do.....	39	13	
Lambayeque department.....	do.....	102	38	
Libertad department.....	do.....	123	63	
Lima department.....	do.....	104	63	
Piura department.....	do.....	52	33	
Tumbez Province, Piura.....	do.....	4	9	
Russia:				
Siberia—				
Transbaikal Province.....	October, 1914.....	16	13	
Straits Settlements:				
Penang.....	Nov. 23-Dec. 4.....	1	1	
Singapore.....	Oct. 31-Dec. 18.....	5	2	
Siam:				
Bangkok.....	Nov. 14-20.....	.....	1	
Do.....	Jan. 2-Feb. 12.....	52	69	
Union of South Africa:				
Orange Free State.....	Jan. 23-Feb. 20.....	32	20	In Hoopstad, Winsburg, and Senekal districts.
At sea.....	Dec. 29, 1915-Jan. 10, 1916.....	4	.....	On s. s. Syria from Bombay. Three cases left at Aden; 1 arrived Jan. 10, at Suez.

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

Reports Received from Jan. 1 to Apr. 14, 1916—Continued.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers.....	Dec. 1-31.....	1		
Australia:				
New South Wales.....				Nov. 19-Dec. 30, 1915: Cases, 62. Jan. 7-Feb. 24, 1916: Cases, 27. Suburb of Sydney.
Auburn.....	Jan. 21-Feb. 4.....	2		
Bega district.....	Dec. 10-16.....	1		
Bulahdelah district.....	Jan. 3-6.....	1		
Chatswood district.....	Feb. 4-10.....	1		Do.
Cundletown.....	Dec. 24-30.....	3		
Do.....	Jan. 7-13.....	2		
Forster district.....	Jan. 21-27.....	1		
Gloucester district.....	Dec. 10-16.....	1		
Kempsey.....	Jan. 7-13.....	1		On s. s. Yulgilbar from Sydney. Case returned to Sydney.
Newcastle district.....				Nov. 19-Dec. 30, 1915: Cases, 53. Jan. 7-Feb. 24, 1916: Cases, 16.
Wallsend.....	Jan. 3-6.....	1		
Rooty Hill district.....	Dec. 10-16.....	1		
Singleton district.....	Feb. 4-24.....	2		
Sydney.....	Dec. 3-10.....	10		
Do.....	Jan. 3-6.....	1		
Taree district.....	Jan. 7-13.....	2		
Wyong district.....	Jan. 3-6.....	1		
Austria-Hungary:				
Austria.....				Nov. 7-Dec. 4, 1915: Cases, 3,600. Jan. 16-22, 1916: Cases, 2,979.
Prague.....	Jan. 9-15.....	1		
Vienna.....	Dec. 10-Jan. 1.....	24	3	
Do.....	Jan. 2-Feb. 26.....	57	10	
Hungary—				
Budapest.....	Nov. 21-Dec. 31.....	373		In addition, Jan. 1-8, 3 among troops.
Do.....	Jan. 1-Feb. 26.....	73	2	
Brazil:				
Rio de Janeiro.....	Nov. 14-Jan. 1.....	147	31	
Do.....	Jan. 2-Feb. 12.....	42	13	
British East Africa:				
Mombasa.....	Dec. 1-31.....	2	2	
Canada:				
Alberta—				
Calgary.....	Mar. 5-25.....	2		
Manitoba—				
Winnipeg.....	Feb. 19-26.....	1		
Ontario—				
Fort William and Port Arthur.....	Dec. 19-25.....	1		
Do.....	Jan. 16-22.....	2		
Niagara Falls.....	Mar. 19-25.....	1		
Quebec—				
Montreal.....	Dec. 19-25.....	1		
Do.....	Jan. 16-Mar. 18.....	4		
Canary Islands:				
Grand Canary.....	Nov. 23.....			Epidemic. Present.
Aruacas.....	Dec. 5-18.....			
Las Palmas.....	Jan. 3-9.....		1	
Ceylon:				
Colombo.....	Oct. 24-Nov. 13.....	6	2	
Do.....	Jan. 30-Feb. 5.....	1		
China:				
Antung.....	Jan. 3-Mar. 5.....	2		
Foochow.....	Nov. 21-27.....			Do.
Do.....	Jan. 2-22.....			Do.
Harbin.....	Nov. 15-Dec. 26.....	12		
Do.....	Jan. 3-9.....	1		
Hongkong.....	Jan. 23-Feb. 5.....	2	2	
Tientsin.....	Nov. 21-27.....		2	
Nanking.....	Nov. 7-Dec. 18.....			Do.
Do.....	Jan. 16-29.....			Do.
Shanghai.....	Feb. 13-26.....	2		
Colombia:				
Sincé.....	Jan. 23.....	9		50 miles from Cartagena.
Cuba:				
Guantanamo.....	Jan. 16.....	1		U. S. naval station. Case, mild varioid from U. S. S. Loui- siana.
Do.....	Jan. 28-Feb. 8.....	1		U. S. naval station. Case, con- fluent form.

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

Reports Received from Jan. 1 to Apr. 14, 1916—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Egypt:				
Alexandria.....	Dec. 21-27.....	3		
Cairo.....	Sept. 3-Dec. 31.....	9	1	
Port Said.....	Dec. 10-16.....	1		
France:				
Marseille.....	Feb. 1-29.....		1	
Paris.....	Dec. 5-11.....	1		
Germany.....				Jan. 2-8, 1916: Cases, 2.
Bavaria—				
Munich.....	Dec. 19-25.....	1		
Berlin.....	Feb. 20-26.....	1		
Breslau.....	Dec. 12-18.....	1	1	
Bromberg, Govt. district.....	Jan. 2.....	1		
Düsseldorf.....	Dec. 5-11.....	1		
Gumbinnen, Govt. district.....	Jan. 2-8.....	1		
Hamburg.....	Dec. 26-Jan. 1.....	1		
Lüneburg, Govt. district.....	Feb. 13-19.....	1		
Oppeln, Govt. district.....	Nov. 21-Dec. 25.....	14		Of these, 8 in one institution.
Do.....	Jan. 2-8.....	1		
Saxony.....	Nov. 21-Dec. 25.....	1		
Great Britain:				
Bristol.....	Jan. 30-Feb. 5.....	1		On s. s. from Bombay.
Cardiff.....	Jan. 30-Mar. 11.....	25	1	
Manchester.....	Feb. 20-26.....	1		
Greece:				
Piræus.....	Jan. 31.....			Present in virulent form.
Guatemala:				
Guatemala City.....	Jan. 9-Mar. 19.....			Present.
India:				
Bassein.....	Jan. 30-Feb. 5.....		1	
Bombay.....	Nov. 7-Jan. 1.....	103	67	
Do.....	Jan. 2-Feb. 26.....	477	230	
Calcutta.....	Nov. 7-Jan. 1.....		3	
Do.....	Jan. 9-Feb. 5.....		8	
Karachi.....	Jan. 30-Feb. 22.....	2		
Madras.....	Nov. 7-Jan. 1.....	46	20	
Do.....	Jan. 2-Feb. 19.....	292	88	
Rangoon.....	Oct. 31-Dec. 11.....	14	7	
Do.....	Jan. 2-Feb. 5.....	164	36	
Toungoo.....	Dec. 5-11.....		1	
Italy:				
Turin.....	Nov. 22-Dec. 5.....	6		
Japan:				
Yokohama.....	Jan. 17-Feb. 27.....	5		
Java.....				Oct. 15-Dec. 30, 1915: Cases, 558; deaths, 118. Jan. 1-17, 1916: Cases, 38; deaths, 9.
Batavia.....	Nov. 1-Jan. 17.....	44	18	
Samarang.....	Nov. 12-22.....	2		
Malta.....	Dec. 1-31.....	1		
Manchuria:				
Harbin.....	Nov. 15-28.....	5		See China.
Mexico:				
Aguascalientes.....	Dec. 13-Mar. 26.....		206	
Chihuahua.....	Jan. 3-9.....	1	1	
Frontera.....	Nov. 21-Dec. 25.....	86	24	Dec. 26-31, 1915: Present.
Do.....	Jan. 1-Feb. 10.....			Present. Estimated number cases, 70.
Guadalajara.....	Dec. 5-25.....	21	7	
Do.....	Jan. 2-Mar. 25.....	80	18	
Hermosillo.....	Dec. 12-Mar. 4.....	141	29	Feb. 13, from 50 to 100 (estimated) cases present within radius of 50 miles of city.
Juarez.....	Feb. 11-Mar. 19.....	13		Including 53 cases brought, Feb. 9-15, from Sonora.
Mazatlan.....	Jan. 26-Mar. 21.....	65	26	Feb. 29, 2 cases on train from Mexico City to El Paso.
Mexico City.....				
Monterey.....	Dec. 13-19.....	5	3	
Do.....	Jan. 3-Mar. 1.....	15		
Naco.....	Feb. 15.....	2		
Nogales.....	Feb. 7-Mar. 4.....	27	3	
Piedras Negras.....	Jan. 10-Apr. 3.....	20	5	
Progreso.....	Dec. 5-18.....	2		
Salina Cruz.....	Jan. 1-15.....	1	1	
Tampico.....	Dec. 7-31.....		21	Jan. 14: Epidemic; estimated cases, 100.
Do.....	Jan. 1-Mar. 10.....		89	
Vera Cruz.....	Dec. 13-Jan. 1.....	34	29	
Do.....	Jan. 3-Mar. 19.....	91	79	
Netherlands:				
Amsterdam.....	Jan. 15-Mar. 11.....	18	3	

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

Reports Received from Jan. 1 to Apr. 14, 1916—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Persia:				
Teheran	Nov. 25-Dec. 10.....		140	
Portugal:				
Lisbon	Dec. 5-26.....	4		
Do.....	Feb. 13-Mar. 11.....	7		
Russia:				
Petrograd.....	Oct. 24-Dec. 25.....	125	37	
Do.....	Jan. 2-Feb. 5.....	148	58	
Riga.....	Nov. 14-Jan. 1.....	6		Aug. 1-31, 1915: Cases, 10; deaths, 1.
Siberia—				
Vladivostok.....	Dec. 29-Jan. 4.....	10	3	
Siam:				
Bangkok.....	Nov. 28-Dec. 4.....		1	
Spain:				
Cadiz.....	Dec. 1-31.....		1	
Madrid.....	Nov. 1-Dec. 31.....		41	
Do.....	Jan. 1-Feb. 29.....		68	
Seville.....	Dec. 1-31.....		7	
Do.....	Jan. 1-31.....		6	
Tarragona.....	Feb. 13-19.....		1	
Valencia.....	Nov. 21-Jan. 1.....	141	10	
Do.....	Jan. 2-Mar. 4.....	59	3	
Straits Settlements:				
Penang.....	Dec. 26-Jan. 1.....	2	1	
Do.....	Jan. 2-29.....	11	4	
Singapore.....	Nov. 28-Jan. 1.....	3		
Do.....	Jan. 16-Feb. 12.....	9	2	
Switzerland:				
Basel.....	Nov. 29-Dec. 25.....	43		
Do.....	Jan. 30-Mar. 4.....	38		Jan. 16-22, 1916: Cases, 13, received out of date.
Turkey in Asia:				
Beirut.....	Oct. 10-Dec. 25.....	75	31	
Do.....	Jan. 9-22.....	12	4	
Union of South Africa:				
Johannesburg.....	Oct. 17-23.....	2		
Uruguay:				
Montevideo.....	Oct. 1-31.....	1		
Venezuela:				
Tachira, State.....	Mar. 12.....			Present.

TYPHUS FEVER.

Argentina:				
Rosario.....	Oct. 1-31.....		1	
Do.....	Jan. 1-31.....		1	
Austria-Hungary:				
Austria.....				Nov. 14-Dec. 1, 1915: Cases, 490.
Trieste.....	Feb. 6-12.....	6		Jan. 9-15, 1916: Cases, 235.
Vienna.....	Jan. 23-29.....	12	2	
Hungary.....				Jan. 24-Feb. 6, 1916: Cases, 50; deaths, 4.
Budapest.....	Dec. 12-31.....	3	1	
Do.....	Jan. 1-Feb. 26.....	14		
China:				
Antung.....	Nov. 22-Dec. 5.....	2		
Cuba:				
Habana.....	Feb. 1-10.....	2	1	Imported from Mexico.
Egypt:				
Alexandria.....	Nov. 12-Dec. 31.....	5	2	
Do.....	Jan. 1-Feb. 18.....	14	8	
Cairo.....	Aug. 13-Dec. 31.....	73	40	
Port Said.....	Nov. 19-Dec. 31.....	1	2	
Germany:				
Aix la Chapelle.....	Jan. 9-29.....		2	Feb. 6-19, 1916: Cases, 69; deaths, 16; prisoners. Feb. 20-Mar. 4, 1916: Cases, 43; death, 1.
Berlin.....	Nov. 21-Jan. 1.....		7	
Do.....	Jan. 30-Feb. 26.....		4	
Bremen.....	Nov. 28-Dec. 4.....	1	1	
Do.....	Jan. 23-Feb. 26.....	1	3	
Bromberg, Govt. district.....	Feb. 20-26.....	1		
Dortmund.....	Dec. 12-18.....	1	1	
Erfurt.....	Dec. 19-25.....		1	
Do.....	Jan. 2-Mar. 4.....		4	
Frankfort on Main.....	Feb. 5-11.....	1		

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

Reports Received from Jan. 1 to Apr. 14, 1916—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Germany—Continued.				
Hanover.....	Nov. 21-Dec. 25...	2	2	
Do.....	Jan. 9-22.....	2	2	
Königsberg.....	Nov. 28-Jan. 1.....	10	.....
Do.....	Jan. 1-Mar. 4.....	17	4	
Lübeck.....	Nov. 7-Dec. 31.....	3	2	
Do.....	Jan. 1-8.....	1	.....
Marburg.....	Feb. 20-26.....	1	1	
Merseburg, Govt. district.....	Dec. 26-Jan. 1.....	1	.....
Oppeln, Govt. district.....	Jan. 23-29.....	1	1	
Saxe-Coburg-Gotha.....	Dec. 5-18.....	3	.....
Do.....	Jan. 9-15.....	1	.....
Saxony.....	Feb. 20-26.....	37	1	
Stettin, Govt. district.....	Dec. 5-25.....	.....	6	
Do.....	Jan. 9-26.....	1	2	
Great Britain:				
Dundee.....	Dec. 12-18.....	3	.....
Glasgow.....	Feb. 11-Mar. 1.....	9	.....
Liverpool.....	Dec. 5-18.....	3	2	
Do.....	Mar. 5-11.....	1	1	
Manchester.....	Jan. 23-29.....	5	1	
Greece:				
Saloniki.....	Oct. 24-Feb. 6.....	.....	206	Dec. 10: Present among troops.
Yehije-Vardar.....	Dec. 10.....	.....	.....	Present among troops.
Italy:				
Palermo.....	Dec. 13-19.....	3	.....
Do.....	Jan. 3-9.....	3	.....
Japan:				
Tokyo.....	Jan. 11-20.....	2	.....
Java:				
Batavia.....	Oct. 26-Jan. 17.....	40	17	Oct. 15-Dec. 30, 1915: Cases, 42; deaths, 28. Jan. 3-10, 1916: Cases, 13; deaths, 2.
Samarang.....	Oct. 22-Dec. 7.....	7	1	
Do.....	Jan. 1-7.....	1	1	
Mexico:				
AguaCalientes.....	Dec. 13-Jan. 2.....	.....	12	
Do.....	Jan. 10-Mar. 26.....	.....	48	
Guadalajara.....	Dec. 25-31.....	6	2	
Do.....	Feb. 6-Mar. 25.....	102	25	
Hermosillo.....	Feb. 4-22.....	3	3	
Juarez.....	To Mar. 19.....	5	.....
Mexico City.....	Dec. 23.....	.....	.....	Prevalent.
Do.....	Jan. 12.....	.....	1	Jan. 1-31, 1916: Cases, 2,001; deaths, 488.
Monterey.....	Jan. 3-9.....	1	.....
Oaxaca.....	Dec. 9.....	.....	1	American.
Piedras Negras.....	Mar. 5-18.....	2	.....
Queretaro.....	Dec. 16.....	.....	.....	Prevalent. Estimated number cases, 500.
Salina Cruz.....	Dec. 16-21.....	1	.....	In person from Mexico City.
Do.....	Feb. 1-15.....	1	.....
Tampico.....	Dec. 1-31.....	.....	1	
Do.....	Jan. 11-20.....	.....	1	
Vera Cruz.....	Feb. 7-27.....	.....	2	
Russia:				
Moscow.....	Dec. 7-27.....	28	5	Nov. 28-Dec. 11, 1915: Cases, 22.
Do.....	Jan. 2-Feb. 19.....	557	62	
Petrograd.....	Oct. 24-Dec. 25.....	34	6	
Do.....	Jan. 2-Feb. 5.....	24	8	
Riga.....	Nov. 14-20.....	12	.....
Vladivostok.....	Oct. 8-Nov. 13.....	21	6	
Spain:				
Madrid.....	Nov. 1-30.....	.....	1	
Do.....	Feb. 1-29.....	.....	1	
Sweden:				
Stockholm.....	Dec. 26-Jan. 1.....	1	.....
Do.....	Feb. 6-26.....	5	.....
Switzerland:				
Zurich.....	Dec. 26-Jan. 1.....	1	.....
Turkey in Asia:				
Aleppo.....	Oct. 26-Nov. 1.....	.....	.....	Estimated deaths, 200 daily.
Beirut.....	Nov. 21-27.....	7	3	
Do.....	Jan. 23-29.....	5	3	
Mersina.....	Nov. 21-27.....	3	.....

YELLOW FEVER.

Ecuador:				
Guayaquil.....	Nov. 1-30.....	1	1	

SANITARY LEGISLATION.

COURT DECISIONS.

ILLINOIS SUPREME COURT.

Law Prohibiting the Use of Secondhand Material in Mattresses, Bed Comforters, and Quilts Held to be Unconstitutional—Sterilization May be Required.

PEOPLE V. WEINER, 110 N. E. Rep., 870. (Dec. 22, 1915.)

The power of the legislature to protect society from disease or epidemics is very broad, but the legislature can not arbitrarily and unnecessarily destroy property, or any substantial interest therein, under the guise of a health regulation.

A provision in an Illinois law which prohibited absolutely the use of secondhand material in making mattresses, bed comforters, or quilts for sale was declared unconstitutional on the ground that such prohibition was not necessary to protect health, which, the evidence indicated, could be safeguarded by sterilization.

A law requiring that mattresses, comforters, or quilts remade or renovated for the use of the owners must be sterilized does not violate any constitutional provision and is a proper exercise of the police power.

CARTER, J.: This is a prosecution commenced on information in the municipal court of Chicago against Oscar Weiner, plaintiff in error, charging him with violating an act passed at the last session of the legislature regulating the making, remaking, and renovating of mattresses, quilts, or bed comforters, and regulating the sale thereof. Jury was waived, and, the cause having been submitted to the court, plaintiff in error was found guilty as charged in the information, and a fine of \$25 imposed. The constitutionality of said act being involved, this writ of error was sued out directly to this court. The act in question (Laws 1915, p. 375), which went into force July 1, 1915, is as follows:

SECTION 1. *Be it enacted by the people of the State of Illinois, represented in the general assembly, That no person shall use, either in whole or in part, in the making of any mattress (mattress), quilt, or bed comforter, any secondhand cotton, cotton-felt, hair, wool, shoddy, excelsior or kapoc(k), or any other soft material which has been made secondhand by use about the person; nor shall any person sell, or offer or expose for sale, or be in the possession of with intent to sell or deliver, any mattress (mattress), quilt, or bed comforter in which has been used, in the making, either in whole or in part, any secondhand cotton, cotton-felt, hair, wool, shoddy, excelsior or kapoc(k), or any other soft material which has been made secondhand by previous use in or about the person.*

SEC. 2. No person shall sell, or offer or expose for sale, or be in the possession of with intent to sell or deliver, any mattress (mattress), quilt, or bed comforter which has not plainly written or printed thereon upon a cloth or permanent tag, securely fastened to the outside covering thereof, a statement in English language setting forth the kind of material used for filling and the proportion of each kind of material, if more than one kind of material is used, together with the name of the manufacturer or vendor.

SEC. 3. Nothing herein shall prohibit any person from remaking or renovating, or employing others to remake or renovate for him, any mattress (mattress), quilt, or bed comforter for his own use, but all material used for filling in the remaking or renovating of any mattress (mattress), quilt, or bed comforter, together with the cover thereof, shall be first sterilized and all such remade or renovated mattresses (mattresses); quilts, or bed comforters shall have plainly written or printed thereon upon a cloth or permanent tag, securely fastened to the outside covering thereof, a statement in English language, setting forth that the same has been renovated or remade, and that the contents and cover have been sterilized, together with the name and address of the person by whom such sterilizing and remaking or renovating was performed.

SEC. 4. Any person who shall violate any of the provisions of this act shall be guilty of a misdemeanor and upon conviction thereof shall be fined for each offense in the sum of not less than \$25 nor more than \$100.

On the trial of the case it was proved that plaintiff in error was a dealer in new and secondhand furniture in the city of Chicago; that on July 22, 1915, he offered for sale at his store to one Isidore Schuman a secondhand felt mattress, the felt of which had been previously used, said mattress having no tag setting forth the information required by the foregoing statute.

The uncontroverted testimony in the case was to the effect that sterilized secondhand material or a sterilized secondhand mattress would be safer for use than a new mattress not sterilized; that even hospital bedding used by patients having contagious or infectious diseases is not destroyed, but is sterilized, except that in straw or excelsior mattresses the cover is sterilized and refilled with new material, because the cost of new straw or excelsior is cheaper than the cost of sterilizing the old; that sleeping upon a used mattress or being covered by a comforter or quilt which has been used is not dangerous to health per se. The proof was that the chance of coming in contact with infected bed clothing is always present in traveling and stopping at hotels, and a new mattress, if not sterilized, is liable to carry contagion: that any renovation short of sterilization fails to render a mattress or bedding free from the possibility of communicating infectious or contagious disease if the germs are present; that a bed comforter or mattress used by a normally healthy person would not be injurious if used by another person nor be injurious to the public health; that it was the practice of hospitals and the public institutions to sterilize bedding, which rendered it safe for further use.

Counsel for plaintiff in error contended below, and contend here, that said act is unconstitutional, violating both the State and the Federal Constitutions, as denying to the one punished thereunder due process of law. If the act can be sustained at all, it must be under the police power of the State.

The power of the legislature to pass laws for the preservation of good order or to promote public welfare and safety, or to prevent fraud, deceit, cheating, and imposition, has always been recognized in this State. (*People v. Freeman*, 242 Ill. 373, 90 N. E. 366, 17 Ann. Cas. 1098; *People v. Schenck*, 257 Ill. 384, 100 N. E. 994, 44 L. R. A. (N. S.) 46, Ann. Cas. 1914A, 1129.) The police power was in the State prior to the adoption of the constitution, and remained with the State in the formation of the original Constitution of the United States, and has not been taken away by any of the amendments adopted since the formation of that Constitution. (*Slaughterhouse Cases*, 16 Wall. 36, 21 L. Ed. 394.) A rightful exercise of the police power is not a violation of the fourteenth amendment, even though property interests are affected. (*Powell v. Pennsylvania*, 127 U. S. 678, 8 Sup. Ct. 992, 1257, 32 L. Ed. 253; *Booth v. Illinois*, 184 U. S. 425, 22 Sup. Ct. 425, 46 L. Ed. 623; *Hammond Packing Co. v. Montana*, 233 U. S. 331, 34 Sup. Ct. 596, 58 L. Ed. 985.) The police power has been defined as that inherent and plenary power in the State which enables it to prohibit all things hurtful to the comfort, safety, and welfare of society. (*Town of Lake View v. Rose Hill Cemetery Co.*, 70 Ill. 191, 22 Am. Rep. 71.) This power is very broad and far-reaching; yet it is not without its restrictions. While the courts will not pass upon the wisdom of an act concerning the exercise of the police power, they will pass upon the question whether such act has a substantial relation to the police power. (*Mugler v. Kansas*, 123 U. S. 623, 8 Sup. Ct. 273, 31 L. Ed. 205; *Chicago, Burlington & Quincy Railway Co. v. Illinois*, 200 U. S. 561, 26 Sup. Ct. 341, 50 L. Ed. 596, 4 Ann. Cas. 1175; *Booth v. Illinois*, supra; *Sanitary District v. Chicago & Alton Railroad Co.*, 267 Ill. 252, 108 N. E. 312; *People v. Steele*, 231 Ill. 340, 83 N. E. 236, 14 L. R. A. (N. S.) 361, 12 Am. St. Rep. 321; *City of Chicago v. Netcher*, 183 Ill. 104, 55 N. E. 707, 48 L. R. A. 261, 75 Am. St. Rep. 93; *Eden v. People*, 161 Ill. 296, 43 N. E. 1108, 32 L. R. A. 659, 52 Am. St. Rep. 365.) It must have some relation and be adapted to the ends sought to be accomplished. Rights of property will not be permitted to be invaded under the guise of police regulations. (*Bailey v. People*, 190 Ill. 28, 60 N. E. 98, 54 L. R. A. 838, 83 Am. St. Rep. 116.) The court must be able to see, in order to hold that a statute or ordinance comes within the police power, that it tends in some de-

gree toward the prevention of offenses or the preservation of the public health, morals, safety, or welfare. It must be apparent that some such end is the one actually intended, and that there is some connection between the provisions of the law and such purpose. If it is manifest that the statute or ordinance has no such object, but, under the guise of a police regulation, is an invasion of the property rights of the individual, it is the duty of the court to declare it void. (City of Chicago v. Netcher, supra.)

The evidence shows conclusively that the business of making mattresses out of secondhand material and remaking old mattresses and bedclothes is not injurious per se to the public health. Indeed, the legislature recognizes this in the act itself, for it permits the remaking or renovating of any mattress, quilt, or bed comforter for one's own use, provided the materials used shall have been first sterilized. This right, however, is denied to the manufacturer and dealer when the article of bedding is for sale. Obviously, if by any process a renovated mattress can be rendered safe for the use of the person remaking it, it can also be made safe for sale. Under the Federal and State Constitutions the individual may pursue, without let or hindrance, all such callings or pursuits as are innocent in themselves and not injurious to the public. These are fundamental rights of every person living under this Government, and the legislature by its enactments can not interfere with such rights. *Frorer v. People*, 141 Ill. 171, 31 N. E. 395, 16 L. R. A. 492; *Ramsey v. People*, 142 Ill. 380, 32 N. E. 364, 17 L. R. A. 853; *City of Chicago v. Netcher*, supra. The evidence shows that secondhand bedding does not necessarily convey infectious or contagious diseases, and that a lawful business of selling or dealing in such may be carried on without danger to the public health. The test of reasonableness required in a statute based on the police power as to whether it is in violation of the Constitution is whether in its attempted regulation it makes efficient constitutional guaranties and conserves rights or is destructive of inherent rights. *Mehlos v. Milwaukee*, 156 Wis. 591, 146 N. W. 882, 51 L. R. A. (N. S.) 1009, Ann. Cas. 1915C, 1102. It is the nature of the previous use, condition, or exposure in respect to contagious or infectious diseases which makes the use of secondhand material dangerous in the manufacture of mattresses, comforters, and quilts, and not the mere fact of the previous use of such material by other persons. *Town of Greensboro v. Ehrenreich*, 80 Ala. 579, 2 South. 725, 60 Am. St. Rep. 130. It is eminently proper to require that material be free from germs of contagion and infection before being used in mattresses, comforters, or quilts, whether the material be secondhand or new, but the possible danger to health or safety does not justify the absolute prohibition of a useful industry or practice where the danger can be dealt with by regulation. *Freund on Police Power*, § 62. See, also, *People v. Ringe*, 197 N. Y. 143, 90 N. E. 451, 27 L. R. A. (N. S.) 528, 18 Ann. Cas. 474; *Marymont v. Nevada State Banking Board*, 33 Nev. 333, 111 Pac. 295, 32 L. R. A. (N. S.) 477, Ann. Cas. 1914A, 162.

The act does not attempt to prohibit the use of secondhand mattresses, but does prevent their ever again being used in the manufacture of other mattresses which are to be sold. To prohibit absolutely the use of such material in the manufacture of mattresses for sale when not inherently dangerous and when it may be rendered safe by reasonable regulation is an invasion of personal and property rights within the meaning of the Federal and State constitutions. By this act the State has deprived the citizen of the lawful use of his property in a manner not injurious or dangerous to others. It is argued by the State that laws similar to this have been passed in other jurisdictions in this country, but, so far as we are advised, the highest courts of those various States have not passed on the constitutionality of any of those acts. Indeed, the wording in most of those statutes is so very different from the wording of this statute that any ruling as to them would be of very little assistance in this case. A city ordinance very similar in some respects to this statute was held unconstitutional by the Supreme Court of Alabama in *Town of Greensboro v. Ehrenreich* (supra).

The argument of counsel for the State that this act should be upheld in order to prevent fraud or deceit in the sale of goods is without merit. The provision in section 3 of the act requiring that material used in remaking mattresses, quilts, and comforters for the person's own use must be sterilized does not violate any constitutional prohibition, and is a proper exercise of the police power. That same requirement could be made in an act with reference to the manufacture and sale of mattresses. Regulations to prevent fraud and deceit in such manufacture and sale could be very readily provided, so as to protect the public, without prohibiting the use of secondhand material if properly renovated and sterilized. The power of the legislature to protect society from disease or epidemic is very broad, but the legislature can not arbitrarily destroy property, or any substantial interest therein, under the guise of a health regulation or for the ostensible purpose of preventing fraud or deceit.

Counsel for plaintiff in error further argue that there is a discrimination between the manufacturers and dealers in pillows and manufacturers and dealers in mattresses, comforters, and quilts, especially after they have been used, as there is no provision made as to pillows; that so far as this act is concerned, material made secondhand in the same way as the material in mattresses may again be made into pillows and sold without any regulation whatever. Under the decisions of this State this is class legislation. (*People v. Schenck* (supra); *Josma v. Western Steel Car. Co.*, 249 Ill. 508, 94 N. E. 945; *Manowsky v. Stephan*, 233 Ill. 409, 84 N. E. 365; *Horwich v. Walker-Gordon Laboratory Co.*, 205 Ill. 497, 68 N. E. 938, 98 Am. St. Rep. 254; *Lippman v. People*, 175 Ill. 101, 51 N. E. 872; 1 *Lewis' Sutherland on Stat. Const.* (2d ed.) sec. 203.) The provisions of sections 1 and 2 of the act are arbitrary and unreasonable, and must be held unconstitutional and void.

The judgment of the municipal court of Chicago is therefore reversed.

TENNESSEE SUPREME COURT.

Injurious Substances in Foodstuffs—Manufacturer Not Liable Unless He Has Been Negligent.

CRIGGER V. COCA-COLA BOTTLING Co., 179 S. W. Rep., 155. (Oct. 1, 1915.)

A person who manufactures or puts on the market foodstuffs in packages which are sold by dealers is not liable for injury caused by foreign substances in the foodstuffs unless he has been guilty of some negligent act or omission in the performance of his duty to protect the public.

Plaintiff purchased from a dealer a bottle of Coca-Cola. He was made ill by taking into his mouth and partially swallowing the body of a decomposed mouse which was in the bottle with the beverage. The evidence showed that extraordinary care was taken in bottling the beverage, and that the mouse might have been introduced into the bottle after it left the bottling works. The jury found that the bottling company had not been negligent, and the court held that the company was not liable.

FANCHER, J.: The plaintiff drank a bottle of Coca-Cola, a beverage sold generally on the market as wholesome and harmless. In doing so he took into his mouth and partially swallowed a decomposed mouse, which caused him to become very sick, and he sues for damages. The defendant does not make the beverage but buys it in barrels from the manufacturer and bottles it.

The bottle in question was sold by defendant to a local dealer and by him sold to plaintiff.

The question presented is whether a bottling company engaged in bottling Coca-Cola, a beverage made by another, warrants to the ultimate consumer that its bottle contains no injurious, harmful, or deleterious substance, or is the bottling company liable only for negligence, or the omission to use proper care in the work.

The proof shows that the method used at the bottling plant is fully equal to the best. The empty bottle is passed through vats of strong caustic solution and then rinsed under pressure with water as hot as the bottle will stand, then inspected by the use of a strong electric light, then brushed out with a rapidly revolving brush and again

rinsed; the bottle is again inspected over a brilliant electric light, and then filled with Coca-Cola, using a fine strainer, when it is capped, and finally inspected.

The trial judge charged the jury on the theory that if the defendant was free from negligence in the bottling of the beverage there was no liability. The jury found in favor of the defendant, and judgment was accordingly entered. The court of civil appeals affirmed on the ground that the declaration averred negligence and the jury had found against plaintiff on that question.

The case is briefed here in support of the petition for certiorari, and by the defendant, as to whether there is an implied warranty on the part of the Coca-Cola Bottling Co., which results in favor of the ultimate consumer, regardless of any question of negligence. The declaration, liberally treated, will admit the question, and the case must be determined upon that standard.

In the case recently determined by this court of *Boyd v. Coca-Cola Bottling Works* (177 S. W. 80) [Public Health Reports, Oct. 15, 1916, p. 3095], opinion by Mr. Justice Green, the defendant was held liable to the ultimate consumer for injuries from drinking a bottle of coca-cola in which was contained a cigar stub. The bottle in that case was bought from an intermediate dealer, to whom the defendant manufacturer had sold it, and it was held that want of contract or privity between defendant and the person injured constituted no defense. It was determined in that case that beverages fall within the class of articles, such as foods and medicines, where a liability may exist upon the ground that one placing upon the market such products in sealed bottles assumes a duty to the general public of exercising care to see that nothing unwholesome or injurious is contained in the bottle. For a negligent breach of this duty the defendant was liable.

In the present case we are to inquire a step further. Does this duty exist regardless of negligence, and is it in the nature of an implied warranty? Some of the cases seem to so hold. The case of *Jackson Coca-Cola Bottling Co. v. Chapman* (Miss.) 64 South. 791, 7 Neg. and Com. Cas. Ann. 112, note, seems to go to this extent, citing *Watson v. Augusta Brewing Co.* (124 Ga. 121, 52 S. E. 152, 1 L. R. A. (N. S.) 1180, 110 Am. St. Rep. 157).

In the *Augusta Brewing Co.* case the Supreme Court of Georgia stated the rule to be:

When a manufacturer makes, bottles, and sells * * * a beverage represented to be refreshing and harmless, he is under a legal duty to see to it that in the process of bottling no foreign substance shall be mixed with the beverage which, if taken into the human stomach, will be injurious.

It does not appear that the direct question was at issue in that case as to a warranty, regardless of negligence. Most of the cases on the question show some negligence or omission of duty or care, and are based upon that idea.

There are many authorities holding an implied warranty to exist, as between seller and buyer of articles to be used for a specific purpose, that such articles are proper and suitable for the use to which they are to be applied. But we see no reason or principle upon which a warranty might run with an article for consumption like a warranty of title running with land. We think the real ground of liability of the seller to an ultimate consumer is, more properly speaking, a duty one owes to the public not to put out articles to be sold upon the markets for use, injurious in their nature, of which the general public have not means of inspection to protect themselves. This duty has been applied to manufacturers of drugs, foods, beverages, poisons, and other things inherently dangerous.

One of the leading cases on the subject is *Thomas v. Winchester* (6 N. Y. (2 Selden) 397, 57 Am. Dec. 455). That case is referred to in many more recent opinions. A manufacturing druggist was held liable for negligently putting up, labeling, and selling as and for the extract of dandelion, a simple and harmless medicine, a jar of the extract of belladonna, which is a deadly poison, whereby the plaintiff was injured, on the ground of a breach of a public duty, and that this was the result whether the injured

person is an immediate customer of defendant or not. Negligence was the basis of liability in that case, as it was in most cases of this nature.

See notes 57 Am. Dec. (Extra Ann.) 568; *Salmon v. Libby*, 219 Ill. 421, 76 N. E. 573; *Tomlinson v. Armour*, 75 N. J. L. 748, 70 Atl. 314, 19 L. R. A. (N. S.) 923 (negligence in preparation of canned meat); note to *McQuaid v. Ross* (Wis.) 22 L. R. A. 195; *Bishop v. Weber*, 139 Mass. 411, 1 N. E. 154, 52 Am. Rep. 715 (negligence in furnishing unwholesome meat); *Huset v. J. I. Case Threshing Mach. Co.*, 120 Fed. 865, 57 C. C. A. 237, 61 L. R. A. 303; *Wellington v. Downer Kerosene Oil Co.*, 104 Mass. 64 (negligence by manufacturer in selling dangerous article he knew to be an explosive); *Van Bracklin v. Fonda*, 12 Johns (N. Y.) 468, 7 Am. Dec. 339 (negligence in sale of unwholesome provisions, but holding that vendor is bound to know that they are sound and wholesome); *Craft v. Parker* (Mich.) 21 L. R. A. 139, note; *Brown v. Marshall*, 47 Mich. 576, 11 N. W. 392, 41 Am. Rep. 728 (opinion by Cooley, J., holding that a high degree of care is required of a druggist, but that actual negligence can not be dispensed with as a necessary element in liability when mistake has occurred); *Fleet v. Hollenkemp*, 13 B. Mon. (Ky.) 219, 56 Am. Dec. 563 (holding caveat venditor should apply to a druggist in seeing that his drugs are what they are pretended to be, and that he can not escape liability on a pretext that it was an accidental or innocent mistake); *Blood Balm Co. v. Cooper*, 83 Ga. 457, 10 S. E. 118, 5 L. R. A. 612, 20 Am. St. Rep. 324 (liability to ultimate consumer for wrong of proprietor of medicine in the prescription and direction as to dose); *Weiser v. Holzman*, 33 Wash. 87, 73 Pac. 797, 99 Am. St. Rep. 932 (liability without regard to privity of contract for knowingly selling and delivering to another, who is injured thereby, an article intrinsically dangerous, without notice to purchaser of intrinsic danger); *Peters v. Jackson*, 50 W. Va. 644, 41 S. E. 190, 57 L. R. A. 428, 88 Am. St. Rep. 909 (druggist liable from incompetency or negligence in selling to one person wrong poisonous medicine, whereby third person is injured); *Farrell v. Manhattan Market Co.*, 198 Mass. 271, 84 N. E. 481, 15 L. R. A. (N. S.) 884, 126 Am. St. Rep. 436, 15 Ann. Cas. 1076 (reviewing established English cases that hold there is no implied condition or warranty that a food is fit to be eaten, unless sold by a dealer and the food is selected by him, and concluding that this is the true rule); *Crocker v. Baltimore Dairy Lunch Co.*, 214 Mass. 177, 100 N. E. 1078, Ann. Cas. 1914B, 884 (that finding for plaintiff for injuries from what might be ptomaine poisoning is not warranted without any evidence that the defendant was negligent in purchasing its food supplies).

From a careful consideration of the subject, and after mature thought, we are of opinion as follows:

1. That one who prepares and puts on the market, in bottles or sealed packages, foods, drugs, beverages, medicines, or articles inherently dangerous owes a high duty to the public, in the care and preparation of such commodities, and that a liability will exist regardless of privity of contract to any one injured for a failure to properly safeguard and perform that duty.

2. This liability is based on an omission of duty or an act of negligence, and the way should be left open for the innocent to escape. However exacting the duty or high the degree of care to furnish pure foods, beverages, and medicines, we believe with Judge Cooley, as expressed in *Brown v. Marshall* (supra), that negligence is a necessary element in the right of action, and the better authorities have not gone so far as to dispense with actual negligence as a prerequisite to the liability. In fact, there is no logical basis of liability for personal injury without some negligent act or omission.

In the present case, the mouse may have gotten into the bottle by some unavoidable accident, but proper inspection should have disclosed the fact, and if in the light of the finding by the jury it were fairly inferable that the mouse was bottled up at the bottling company plant, we would consider it our duty to reverse the case, be-

cause of the high duty resting on the defendant. But the jury was told to inquire whether the mouse was in the bottle when it left the hands of this company, and, if so, whether its presence there was due to the negligence of the company. The court suggested to the jury the theory of the defendant that there was opportunity for malevolent persons to open this bottle and put the mouse into it before or after it left the factory, and they should use their common sense as men in deciding the issue. In view of the extraordinary care shown to exist at the bottling plant and the verdict of the jury, it may be that this thing occurred without the fault of the defendant. There are sufficient inferences that may be drawn from the facts to sustain the finding.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

INDIANA.¹

Communicable Diseases—Notification of Cases—Quarantine—Placarding—Disinfection—Common Carriers—Schools—Rabies. (Reg. Bd. of H., July 2, 1915.)

RULE 6. Infectious diseases.—Blanks for infectious disease statistics supplied by the State board of health are: Report of infectious disease blanks to all health officers; quarterly return blanks sent to county health commissioners. Infectious disease record books shall be purchased by local boards of health.

All cases of infectious and contagious diseases which are listed in rule 10 shall be immediately reported on the official blank to the health officer having jurisdiction by the physician, if any be in attendance; otherwise by the householder or attendant. The health officer receiving said report shall immediately enter the same in his infectious disease record book, and in person or by deputy establish quarantine, as directed in rule 11. All city and town health officers shall preserve the original infectious disease certificates they may receive and send the same to their county health commissioner by the 2d of each month for the month preceding, and said county health commissioner shall use the same for making up his special report, as commanded in rule 1.

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RULE 10. The infectious and contagious diseases which shall be immediately reported to the health officer having jurisdiction, and which shall be quarantined, are hereby declared to be: Yellow fever, smallpox, cholera, diphtheria, membranous croup, scarlet fever, measles, epidemic poliomyelitis, cerebrospinal fever, typhus fever, bubonic plague, leprosy, pulmonary consumption, typhoid fever, chicken-pox, whooping cough, trachoma, pellagra, syphilis, and gonorrhoea.

Provided, Pulmonary consumption, typhoid fever, pellagra, syphilis, and gonorrhoea shall not be quarantined, as they are to be reported for record and statistical purposes only, and chicken-pox, whooping cough, measles, contagious ophthalmia, and trachoma shall be carded to warn the public, absolute quarantine not being required: *And provided further,* When a case of trachoma is under approved treatment, as it would not then be transferable, said case shall not then be carded, and shall not be excluded from school.

RULE 11. Quarantine.—Health officers, upon learning in any way of the existence of any disease listed in rule 10, within their respective areas, shall immediately, in person or by deputy, quarantine the infected house, rooms, or premises, so as effectually to isolate the case, or cases, and the family, if necessary, in such manner and for such time, as may be necessary to prevent transmission of the disease; and whenever a quarantine is established a placard shall be posted in a conspicuous position, giving the name of the disease in letters not less than 2 inches long, and also having upon the card the following notice: "All persons are forbidden to enter or leave these prem-

¹ Extraneous matter, which can not properly be considered part of the regulations, and rules intended to prevent fraud upon the public in the sale of foodstuffs, have been omitted in publishing these regulations.

ises without special permit from the health officer having jurisdiction, and all persons are forbidden to remove or mutilate this card, or to in any way interfere with the quarantine without orders from said health officers."

Quarantine cards shall be purchased by local health authorities from their funds and shall be as ordered in rule 11.

Violation of quarantine.—Whoever violates a quarantine, either by entering or leaving the quarantine area, or demolishes or tears away the ropes or other marks whereby the boundaries of a quarantine are defined, and whoever tears down, obscures, destroys, mutilates, or defaces a quarantine placard, or who breaks a quarantine in any way whatsoever, except as provided in rule 13, shall suffer the penalty prescribed in section 3 of chapter 83 of the acts of 1903, to wit: A fine of \$10 to \$50, to which may be added imprisonment in the county jail not exceeding six months.

RULE 12. When visiting patients known to be sick with smallpox, scarlet fever, or diphtheria, health officers, nurses, undertakers, and attending physicians shall take reasonable precautions against carrying infection.

RULE 13. *Observing quarantine.*—No person other than licensed physicians, undertakers, or nurses, in the discharge of their duties may enter or leave any house or building infected with any communicable disease listed in rule 10, without first procuring permission from the health officer having jurisdiction, and obeying absolutely his directions as to all sanitary precautions which he orders.

RULE 14. *Travel forbidden.*—Any person who is, or who has been recently affected with any communicable disease listed in rule 10 (excepting those in which absolute quarantine is not required), shall not be permitted to travel in railway or trolley cars or appear upon the public streets or highways, or to appear in any public place or gathering, or to travel in any public vehicle or vessel, until a certificate is issued by the attending physician to the health officer within whose jurisdiction the case occurs, stating that all danger from infection or contagion by reason of such disease is passed, and such certificate is approved and indorsed by said health officer, and written permission is given to the person.

RULE 15. *Physician not in attendance.*—Whenever a health officer shall know or suspect or be informed of the existence of any communicable disease dangerous to the public health, and no licensed physician is in attendance, or should said physician while in attendance fail or refuse to immediately report such case to the health officer, it shall be the duty of said health officer, or deputy, to examine such case or cases of alleged communicable disease dangerous to the public health, and act as required by the rules governing such cases of communicable disease.

RULE 16. *Smallpox quarantine.*—In all cases where there has been an exposure or a suspected exposure to smallpox of any person or persons, it shall be the duty of the health officer under whose jurisdiction said person or persons may be temporarily or permanently residing, to quarantine for 14 days or keep under observation such person or persons as may be exposed or suspected of having been exposed to smallpox, and to advise vaccination or revaccination of all who may have been exposed. It shall be the imperative duty of the health officer to enforce this rule, and in case of refusal or neglect by said health officer to comply with the requirements of this rule or other rules, it shall be the duty of the secretary of the State board of health to assume charge, and either in person or by deputy, enforce the foregoing rules. All vaccinations shall be made with nonhumanized virus, the only exception being that, during an epidemic of smallpox, should a sufficient quantity of bovine virus not be obtainable, humanized virus may then be used when sanctioned by the board of health under whose jurisdiction said epidemic may occur. If in the judgment of the health officer, it is deemed safe for an exposed person to be at liberty after vaccination and after disinfection in body and apparel, the said exposed person shall be given a certificate of health and not be placed in quarantine. If the said exposed person changes his or

her location, the health officer having jurisdiction shall inform the health officer at the new location.

RULE 17. Disinfection.—The room and, if necessary, the entire house in which there has been a case of any contagious disease listed in rule 10, shall be immediately disinfected following the recovery of the sick or the removal of the remains, * * * . [The regulations give in detail several methods of fumigation and cleansing and give advice concerning their use.] Schoolbooks or books from a circulating library shall not be removed from any house during the prevalence of any contagious disease dangerous to the public health, and if such books have been in such house during the prevalence of said diseases, they shall be destroyed by the owner or library authorities or be properly disinfected before returned to schools or put in circulation.

RULE 18. Railways, steamboats, and all common carriers.—No common carrier or any person shall knowingly bring into the State of Indiana any person sick or suspected of being sick with Asiatic cholera, smallpox, yellow fever, typhus fever, diphtheria, membranous croup, scarlet fever, bubonic plague, leprosy, or other communicable disease dangerous to the public health.

RULE 19. When any railway car, steamboat, vessel, or other conveyance, coming from a place or locality declared by the State board of health, or other health authority having jurisdiction, as being infected with cholera, smallpox, typhus fever, bubonic plague, leprosy, scarlet fever, measles, diphtheria, membranous croup, yellow fever, cerebrospinal fever, or having on board any person or persons affected with any of the above-named diseases, enters any port or place in the State of Indiana, such railway car, steamboat, vessel, or other conveyance and the crew, officers, passengers, baggage, merchandise, and freight shall be subject to such inspection, disinfection, and control as may be ordered by the State board of health.

RULE 20. If any person is found on any railway car, steamboat, or other conveyance, who is sick, or reasonably supposed to be sick, with cholera, smallpox, typhus fever, bubonic plague, leprosy, yellow fever, cerebrospinal fever, diphtheria, membranous croup, or scarlet fever or measles, he or she shall be immediately removed by the health authorities within whose jurisdiction such person is found and isolated and properly cared for until the termination of the disease, and the necessary expense of such isolation and care (if the person so removed is unable to pay the same) shall be a valid claim against and be refunded by the owners, agents, or assigns of the railway car, vessel, or other conveyance from which such person or persons were removed.

RULE 21. In case of smallpox, all persons reasonably suspected of having been exposed thereto, shall be removed from such railway car, steamboat, vessel or other conveyance and disinfected in person and apparel, and held in quarantine until such time as the State health commissioner or health officer having jurisdiction shall deem it safe to the public. In case of typhus fever, all persons reasonably suspected of having been exposed thereto, shall be removed and isolated for 21 days from the last exposure. The clothing of persons so removed and all baggage, luggage, freight or merchandise found on any railway, steamboat, vessel or other conveyance, on which there is any person sick with cholera, smallpox, typhoid fever, cerebrospinal fever, bubonic plague, scarlet fever, measles, or diphtheria and reasonably suspected of having been infected, shall be at once disinfected or destroyed, and such railway car, steamboat, vessel or other conveyance shall also be disinfected, according to the rules governing disinfection.

RULE 22. When deemed necessary by the State board of health, to prevent the spread of cholera and after 10 days notice, each and every railway car, traction car, steamboat, vessel, in or coming into the State of Indiana, and used for the transportation of passengers, shall be provided with means satisfactory to said board of health for disinfecting the excreta of passengers and crew.

RULE 23. It shall be the duty of any conductor of any railway or traction car, and the master of any steamboat or vessel, to notify immediately by telegram or telephone,

the secretary of the State board of health at Indianapolis, of any case or suspected case of cholera, smallpox, yellow fever, cerebrospinal fever, diphtheria, scarlet fever, measles, bubonic plague or typhus fever occurring on board such train or electric car, boat or vessel, within the limits of the State of Indiana.

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RULE 25. Penalties.—Any person or persons, or any board of health, or health officer, or corporation violating, failing or refusing to comply with either or any of the foregoing rules, will be subject to the penalties provided in the health statutes, wherein these rules are authorized, and shall be prosecuted for such violation or neglect according to the law.

RULE 26. Appeal.—In case any person feels aggrieved at any act or decision of a health officer, appeal may be made to the State board of health in session or to its secretary, but pending such appeal the act or decision of said health officer shall stand.

RULE 27. Quarantine.—The infectious and contagious diseases which shall be immediately reported to the health officer having jurisdiction and which shall be quarantined are hereby declared to be: (See rule 10) Yellow fever, smallpox, cholera, diphtheria, membranous croup, scarlet fever, measles, typhus fever, bubonic plague, leprosy, cerebrospinal fever, epidemic poliomyelitis, pulmonary consumption, typhoid fever, chicken-pox, whooping cough, trachoma, contagious ophthalmia (pinkeye), syphilis and gonorrhoea. *Provided*, Pulmonary consumption, typhoid fever, syphilis and gonorrhoea shall not be quarantined, but are to be reported for record and statistical purposes only. Chicken-pox, whooping cough, measles, contagious ophthalmia and trachoma shall be carded to warn the public, absolute quarantine not being required. *And provided further*, That when a case of trachoma is under approved treatment, as it would not then be transferable, said case shall not then be carded and shall not be excluded from school. When quarantine has been established as provided by law the quarantine card or flag shall remain in place until after the patient has been removed from such house or has recovered and is no longer capable of communicating the disease, and the house and contents thereof have been properly disinfected by order of the health officer having jurisdiction.

RULE 28. Duty of attendants.—Every physician attending a person affected with any quarantinable disease shall use every precaution to prevent communicating the disease to others. * * *

RULE 29. Period of quarantine and exclusion from school.—The minimum period of isolation, quarantine, and exclusion from school in contagious diseases recommended by the State board of health, shall be as follows:

Smallpox.—For the patient, quarantine for not less than 21 days and after the beginning of the disease and until all crusts and scales have fallen off or been removed, and the disinfection of patient, clothing, and premises. For exposed persons, quarantine for 14 days from date of last exposure unless successfully vaccinated or protected by a previous attack of the disease, and person and clothing having been disinfected: *Provided*, That persons who have not been previously vaccinated and who shall submit to vaccination may be released from quarantine after disinfection of person and clothing when it has been shown that such vaccination is successful. Exclusion from school for 7 days following the removal of quarantine.

Scarlet fever.—For the patient and children in the family with the patient, quarantine for not less than 21 days after the beginning of the disease. Exclusion of the patient and children associated with the patient from school for 10 days after removal of quarantine. Other children of the family may, at the discretion of the health officer having jurisdiction, be disinfected and removed to another house and shall there be isolated and excluded from school for a period of 10 days and then released, provided they remain free from the disease. For adults living in the family with or exposed to the patient: While the house remains quarantined, unless said adults submit to

thorough disinfection of the body and clothing and do not come in contact with the patient.

Diphtheria.—For the patient, quarantine until the secretions from the nose and throat are free from the diphtheria infection as shown by bacteriological examination of such secretions. For children associated with or in the family with the patient, quarantine until death or recovery of the patient and disinfection of person, clothing, and premises: *Provided*, That other children of the family who shall receive an immunizing dose of antitoxin of not less than 1,000 units, may be released from quarantine at the discretion of the health officer having jurisdiction, after disinfection of person and clothing. The patient shall be excluded from school until a medical certificate that the nose and throat are free from infection, based upon bacteriological examination, is furnished. Children associated with or in the family with the patient shall be excluded from school for seven days after release from quarantine unless a medical certificate of having received an immunizing dose of not less than 1,000 units of antitoxin is furnished. Adult members of the family may be relieved from quarantine at the discretion of the health officer having jurisdiction, on the condition that they be disinfecting in person and apparel and remain away during the quarantine period.

Cerebrospinal fever.—For the patient, isolation from the rest of the family and quarantine for not less than 14 days after the first appearance of the disease until death or recovery of the patient and disinfection of the premises. Persons living in a house where the disease is present shall not mingle with the general public until the disease has terminated and the premises have been thoroughly disinfected. And children from said house shall be excluded from school during the quarantine period.

Measles.—For the patient, isolation and quarantine for not less than 14 days and until peeling or desquamation has ceased. Patient shall not be permitted to attend school for five days after quarantine has been removed. For other members of the family quarantine is not required, but children in the household must not attend school or other public gatherings or mingle with other children unless satisfactory proof shall be furnished to the health officer having jurisdiction of their having had the disease, in which event the said health officer may, at his discretion, permit the said children to attend school and other public gatherings.

Whooping cough.—For the patient, isolation and quarantine for not less than five weeks from the beginning of the disease and until the "whoop" has entirely ceased. For other members of the family quarantine is not required, but children of the same household must not attend school or other public gatherings or mingle with other children unless satisfactory proof shall be furnished of their having had the disease, in which event the health officer having jurisdiction, at his discretion, may permit attendance at school.

Chicken-pox.—For the patient, quarantine for not less than 14 days from the beginning of the disease and until all scales and crusts have disappeared. Children living in houses where the disease exists are to be excluded from school two weeks unless satisfactory proof of their having had the disease is furnished.

Epidemic poliomyelitis.—For the patient, isolation and quarantine for not less than 28 days from the beginning of the disease. For other members of the family, at the discretion of the health officer having jurisdiction: *Provided*, That the wage earners may be allowed to attend to their work by observing the precautions ordered by the health officer. Other children in the family shall not be permitted to attend school or public gatherings or to mingle with other children for a period of 14 days after the beginning of quarantine.

Trachoma.—Cases of trachoma shall be excluded from school until the patient is placed under approved treatment, and such cases shall be readmitted to school only upon certificate from the health officer having jurisdiction that the cases are under approved treatment.

Contagious ophthalmia.—Cases of contagious ophthalmia shall be excluded from school until recovery is complete and shall be readmitted to school only upon certificate of the health officer having jurisdiction.

RULE 30. Disinfection of schoolroom.—When it is known that a person has attended school while suffering from any of the following named diseases, measles, scarlet fever, (scarlatina), diphtheria (membranous croup), smallpox, cerebrospinal fever, epidemic poliomyelitis, cholera, or bubonic plague, the local health officer shall cause the school-room occupied by such person to be thoroughly disinfected according to the rules of the State board of health before being used again for school purposes.

RULE 31. Exclusion from school.—When a case of contagious disease is reported it shall be the duty of the health officer having jurisdiction to ascertain the school attended by any child or children from the infected premises and to serve notice upon those in charge of such school requiring that all persons from such infected premises be excluded from the school until a medical certificate with a written permit from the health officer is presented.

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RULE 32. Notice to health officers.—When a person affected with any of the quarantinable diseases has recovered and is no longer able to communicate the disease to others, or has died, the attending physician shall notify the health officer, and as soon thereafter as the health officer deems it advisable the house in which such person has been ill and the contents thereof shall be thoroughly disinfected by the health officer or his deputy, and the quarantine released.

RULE 33. Food and food products.—The sale or use of milk or dairy or food products from the premises where one of the quarantinable diseases exists or where typhoid fever is present is strictly forbidden unless the milk, dairy, or food products are handled, cans and pails washed, and stock cared for by persons entirely segregated from the affected person and family, and then only upon permission of the health officer having jurisdiction.

No milk bottles shall be taken from premises on which a quarantinable disease exists until after the quarantine has been raised and said bottles have been thoroughly cleansed and disinfected by order of the health officer. Milk tickets and bread tickets shall not be taken away from such premises while the premises are under quarantine. Cats and dogs and other domestic animals belonging to premises under quarantine shall be kept out of the house and from contact with patient. Should these precautions not be observed strictly, it shall be the duty of the health officer to cause such domestic animals to be destroyed.

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RULE 35. Sick school children to be sent home.—Teachers, school trustees, school officials, and health officers having jurisdiction, shall not permit attendance in any private, parochial, or public school of any pupil affected with a severe cough, a severe cold, itch, lice, or other vermin or any contagious skin disease, or who is filthy in body or clothing or odorous therefrom, or who has any of the following dangerous infectious diseases, to wit: Diphtheria, smallpox, scarlet fever, measles, whooping cough, chicken-pox, consumption, acute epidemic poliomyelitis, trachoma, contagious ophthalmia (pink eye). And teachers shall without delay send home any pupil who is obviously sick, even if the ailment is unknown, and said teacher shall inform the parents or guardian of said pupil, and also the local health officer as speedily as possible, and said health officer shall examine into the case and take such action as is reasonable and necessary for the protection of the school and to prevent the spread of infection.

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RULE 48. It shall be the duty of the attending physician to immediately report each and every case of epidemic poliomyelitis to the health officer having jurisdiction, giving the name, age, and place of residence of the patient. Cases occurring

without incorporated cities or towns shall be immediately reported to the county health commissioner. Cases occurring within incorporated cities and towns shall be immediately reported to the health officer of such incorporated cities and towns.

RULE 49. It shall be the duty of county health commissioners and all city and town health officers, whenever a case of epidemic poliomyelitis shall come to their notice, to immediately quarantine the same according to the law and the rules, and immediately report the same to the State board of health at Indianapolis.

RULE 50. Preventive treatment for rabies.—Any person applying to the State board of health for free treatment for the prevention of hydrophobia shall be required to furnish a certificate from the health officer in whose jurisdiction the said person received the bite or injury from a dog, or other animal, which certificate shall state the facts relative to the bite or injury and the reasons why such preventive treatment is deemed necessary. The certificate shall further state that in the opinion of the health officer granting such certificate, the applicant has no visible or known means with which to pay for the Pasteur preventive treatment.

RULE 51. Any person applying to the State board of health for free treatment for the prevention of hydrophobia, shall be required also to furnish a certificate from the trustee of the township in which such said person resides, which certificate shall state that said person was a resident of that township at the time the bite or injury was received and that such person has no visible means with which to pay for or procure the Pasteur preventive treatment.

RULE 52. Whenever in the opinion of the secretary of the State board of health a person applying for treatment as provided above has complied with the rules of the State board of health, in regard to such treatment, the secretary of the State board of health shall cause such person to be given the Pasteur treatment at such place and in such manner as in the opinion of the secretary may be necessary and at the least expense compatible with approved treatment. The secretary of the State board of health shall authorize the payment of all necessary expenses connected with the enforcement of the hydrophobia law.

County and Local Health Officers—Duties of—Appointment of Deputies—Stationery. (Reg. Bd. of H., July 2, 1915.)

RULE 1. County health commissioners, city, and town health officers shall familiarize themselves with the State health law, the vital statistics law, the quarantine law, the pure food and drug law, and all laws they are to enforce. They shall also familiarize themselves with all the rules of the State board of health for the enforcement of said laws. * * * In June of each year they shall make a sanitary inspection of their respective jurisdictions, making a full record thereof in their regular record books, with which all must be supplied. A copy of the report of said sanitary inspection shall be sent to the State board of health by July 15 following.

County health commissioners shall make a special monthly health report to the State board of health by the 8th of each month for the month preceding, and said report shall give the number of cases reported of typhoid fever, scarlet fever, smallpox, epidemic poliomyelitis, diphtheria, and membranous croup, measles, cerebrospinal fever, tuberculosis, whooping cough, trachoma, contagious ophthalmia (pink eye), syphilis, and gonorrhoea; also information concerning epidemics, closing of schools, nuisances abolished, and all obtainable sanitary information. They shall also make quarterly reports of marriages and contagious diseases on the blanks furnished by the State board. All books of record and documents pertaining to the office shall be kept at the county seat, as other county records are kept.

Appointing deputies.—County health commissioners may appoint deputies in their counties * * *. The pay of deputies will be whatever county health commissioners and county auditors will allow.

County health commissioners shall make such reports to the State board of health as may be required by said board and shall answer all letters of inquiry of said board.

* * * * *

RULE 7. Record books, stationery, quarantine cards, etc.—All necessary printing, such as letter heads, envelopes, circulars, quarantine cards, etc., shall be paid for by county health commissioners, city and town boards of health from their special health appropriations; and said county health commissioners and boards of health shall also purchase, as needed, official record books as follows: Death records, birth records, infectious disease records, and county health commissioners shall add marriage records. City boards of health, in cities having less than 2,000 population, and all town boards of health, shall purchase combination record books, which contain separate divisions for recording births, deaths, and infectious diseases.

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RULE 24. Retiring health officers.—Retiring health officers shall keep possession of the books of their offices for 10 days after expiration of their terms, in order to make up reports for the last month of their incumbency, and, after said 10 days, the said books, including book of instructions and all blank forms, shall be delivered to the new incumbent, who shall immediately bring them up to date. Boards of health shall withhold the last month's pay of retiring health officers until all books are properly turned over and all reports properly made.

State Bacteriological Laboratory—Examinations of Specimens. (Reg. Bd. of H., July 2, 1915.)

RULE 1. Health officers shall acquaint themselves thoroughly with the work of the State laboratory of bacteriology and with the prescribed methods of preparing the various kinds of specimens for examination at said laboratory.

RULE 2. Health officers shall keep on hand for distribution among the physicians in their localities a complete supply of approved mailing outfits for the collection of specimens to be sent to the State laboratory of bacteriology for examination.

RULE 3. Examinations of diphtheria cultures, sputum, blood for malaria and typhoid fever, and pus for gonococci shall not be made unless the specimens are collected in special outfits furnished free of cost by the State board of health, and not then, unless the directions for collecting are strictly followed and the information blanks are completely filled out.

RULE 4. Heads of dogs and other animals to be examined for rabies shall not be accepted unless packed in ice in a water-tight container, on which are plainly written the name and address of the sender. Information concerning the animal shall be sent by mail and not inclosed within or attached to the container in which the head is sent.

RULE 5. Examinations of pathological specimens, such as curettings, pieces of tumors, pathological fluids, etc., shall not be made except in the case of indigent patients who are unable to pay for such examinations, and not then unless the specimen is preserved in twice its volume of a 5 per cent solution of formalin (1 part commercial formalin to 19 parts water).

RULE 6. The charges for transportation of all packages sent to the State laboratory of bacteriology shall be prepaid in full, otherwise they shall not be accepted.

RULE 7. All reports of examinations shall be sent by mail, but, if requested, results will be telephoned or telegraphed at the expense of those making the request.

RULE 8. No analyses or examinations shall be made which are not related to or of importance to the public health.

Schools—Sanitary Regulation. (Reg. Bd. of H., July 2, 1915.)

RULE 34. Overcrowding in schools forbidden.—School authorities shall not crowd pupils into schoolrooms in excess of one pupil for each 225 cubic feet of space, and it shall be the duty of all health officers having jurisdiction, to dismiss forthwith any

school or schoolroom [sic] in which 225 cubic feet of air space is not supplied to each pupil. School authorities shall without delay make provisions for pupils in accordance with the requirements herein set forth.

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RULE 36. *Ventilation.*—Ventilation must be carefully attended to in all schoolrooms, and it shall be the duty of teachers to flood the schoolrooms with fresh air by opening windows and doors at recess and at noon time and at other times whenever the air becomes close or foul. The pupils shall be given gymnastic exercises during the time windows are open with the school in session, in cold weather.

RULE 37. *Adjustable seats and desks.*—When adjustable seats and desks are used, such seats and desks shall be carefully adjusted to the pupils using them and this adjustment changed once or twice in the school year as required, to allow for the growth of the pupil. Especial care in seating is to be given to crippled children. Those suffering with hip or knee diseases where the joints are immovable, shall be given a seat with the desk placed 8 or 10 inches farther away than ordinary to permit a greater range of motion. If one of the lower limbs be shortened, a proper foot-rest shall be supplied for the shortened member. Cases of curvature of the spine should have a pad upon which to rest the back.

RULE 38. *The common towel.*—The use of common towels in schools is condemned and such use is prohibited. Each pupil must have an individual towel, or sanitary paper towels shall be provided.

RULE 39. *Common drinking cup.*—The use of a common drinking cup in schools is condemned and such use is prohibited. Each pupil must have an individual drinking cup or sanitary bubble fountain shall be provided.

RULE 40. *Pencils.*—The common use of pencils is condemned and prohibited on account of the danger of transmitting disease from one pupil to another by the interchange of pencils. When a pencil is furnished a pupil it shall be the property of that pupil to be kept by him and not to be taken up and given out again by the teacher.

RULE 41. *Care of floors.*—All floors, except hardwood and tile, must be oiled to prevent dust nuisance. Before oiling, the floor must be thoroughly scrubbed and dried. The oil must then be lightly and evenly applied to the floor following the grain of the wood. This scrubbing and oiling of floors shall be repeated in the holiday vacation and in schools having a nine or ten months' term, this work shall be repeated again in the spring vacation.

RULE 42. *Sweeping and dusting.*—Dry sweeping and dusting is condemned and prohibited. Before sweeping, light sprinkling of the floor with water or the use of dampened or oiled sawdust is recommended. Feather duster shall not be used. Such dusting merely causes the dust to float in the air of the room, to be breathed by the pupils or to settle down to be again dislodged by subsequent dusting. In dusting, an oiled cloth shall be used to gather the dust. Dusting or sweeping either in corridors, stairways, or classrooms, is prohibited at any time while the school is in session.

RULE 43. *Obstruction to doors and stairways.*—No outside doorway or entrance to school buildings shall be fastened shut at any time while school is in session. It is recommended that all doors opening to the outside be fitted with automatic opening devices. Brooms, stepladders, tools, etc., shall not be allowed to stand in corridors, stairways, or behind doors at any time.

RULE 44. *Heating stoves.*—Whenever stoves are used for heating, they shall be surrounded by screens to protect the pupils who must sit near the store. Such screens shall be constructed of two sheets of metal with an air space or layer of asbestos between the metal sheets.

RULE 45. *Care of basements.*—Basements shall be kept clean at all times, not by the use of lime, ashes, or disinfectants, but by being kept free from all filth, dirt, or accumulations of any kind.

RULE 46. Blackboards and erasers.—Blackboards and erasers shall not be cleaned at any time when school is in session, nor shall such cleaning be done by pupils at any time. Janitors shall see that accumulated chalk dust is thoroughly removed every day and erasers shall be cleaned outside the school building.

Milk and Milk Products—Production, Care, and Sale. (Reg. Bd. of H., July 2, 1915.)

RULE 4. PARAGRAPH 1. No building shall be used for stabling cows for dairy purposes which is not properly constructed, well lighted, well ventilated, and provided with a suitable solid floor of plank, cement, or other impervious material that can be readily cleaned, and laid with proper grades and channels to carry off all drainage.

PAR. 2. No water-closet, privy, cesspool, urinal, inhabited room, or workshop shall be located within any building or room for stabling cows, or for the storage of milk or milk products; nor shall any fowl, hog, horse, sheep, goat, or other animal be kept in any room used for milking or for storing milk or milk products.

PAR. 3. All rooms and stables in which cows are milked shall be thoroughly clean and in good repair, and shall be painted or whitewashed once each year.

PAR. 4. All manure shall be removed daily from the room or stable in which cows are milked, and shall not be stored where odor from the same will be noticeable at the stable or milk room.

PAR. 5. All persons keeping cows for the production of milk for sale shall cause each cow to be kept clean and groomed.

PAR. 6. Every person using any premises for keeping cows shall cause the yard or pasture in connection therewith to be provided with a proper receptacle for drinking for such cows, and none but fresh, clean, pure water shall be stored in such receptacle.

PAR. 7. Any inclosure in which cows are kept shall be graded and drained so as to keep the surface reasonably dry and to prevent the accumulation of water therein, and no garbage, urine, fecal matter, or similar substances shall be placed or allowed to remain in such inclosure, and no open drain shall be allowed to run through it.

PAR. 8. All milk shall be removed, as soon as drawn, from the stable to the milk room. The milk room shall be separate from the stable in which the cows are kept and shall not be used as a living or sleeping room, but shall serve for the handling and keeping of milk and cream exclusively. It shall be sanitary in construction, properly screened, supplied with proper ventilation, light, and pure water, and suitable facilities for straining, cooling, and storing milk or milk products, and for washing and sterilizing all utensils and apparatus in which milk is removed, stored, and delivered.

PAR. 9. All utensils used for the reception, storage, or delivering of milk or cream shall be made of glass, stoneware, glazed metal, or tinplate free from rust and of sanitary construction.

PAR. 10. All cans, pails, strainers, coolers, dippers, separators, bottles, churns, butter works, and other dairy utensils shall be cleansed from all remnants of milk and scalded with boiling water or live steam after each use.

PAR. 11. All milk shall be strained through clean 80-mesh wire strainers, or properly sterilized cloth, and shall be cooled to 60° F. or below within one hour after it is drawn from the cow. It shall be kept at 60° F., or below, until it leaves the farm, and if retailed to the consumer until delivered. Warm milk shall not be mixed with cold, but shall be kept in separate vessels until properly cooled.

PAR. 12. All milk or cream cans delivered to creameries or dealers in cities shall be covered with tight-fitting lids, and when conveyed in open wagons shall be covered with clean canvas while being so conveyed.

PAR. 13. No person, firm, association, or corporation buying, storing, or receiving milk for the purpose of selling the same for consumption as such, or for manufacturing it into butter, cheese, ice cream, condensed milk, or other human food, shall keep

the same in utensils, cans, vessels, or rooms that are unclean, or have unsanitary surroundings or drainage, or under conditions favorable to unhealthfulness or disease, and milk to be sold for consumption as such, within one hour after receiving the same shall be cooled to a temperature not higher than 60° F., and shall be kept at such temperature until delivered.

PAR. 14. Every person engaged in the production, storage, transportation, sale, delivering, or distribution of milk, immediately on the occurrence of any case or cases of infectious disease, either in himself or his family or amongst his employes or their immediate associates, or within the building or premises where milk is stored, sold, or distributed, shall notify the secretary of the board of health of the town or city where such milk is sold.

PAR. 15. No person having an infectious disease or having recently been in contact with a person having an infectious disease, shall milk or handle cows, measures, or other vessels used for milk or milk products intended for sale until all danger of communicating such disease to other persons shall have passed, as determined by the secretary of the local board of health.

PAR. 16. No vessels which have been handled by persons suffering from infectious diseases shall be used to hold or convey milk until they have been thoroughly sterilized.

PAR. 17. No bottle, can, or receptacle used for the reception or storage of milk shall be removed from a private house, apartment, or tenement wherein a person has an infectious disease until such bottle, can, or receptacle shall have been properly sterilized under the direction of the secretary of the local board of health.

* * * * *

RULE 17. *Bad cream.*—Milk or cream shall not be sold which is decomposed, putrid, or rotten, or which is produced by sick or diseased cows or by cows kept at a dairy which is unclean and in violation of the rules of the State board of health regulating the sanitation of dairies and the sale of milk and cream, or by cows kept at a dairy which has been condemned by an agent or inspector of the State board of health or by a county, city, or town health officer, during such period of condemnation.

RULE 18. *Cream, butter, cheese, and other milk products.*—Butter, cheese, and other milk products shall not be manufactured for sale from milk produced at a dairy which has been condemned by an agent or inspector of the State board of health or by a county, city, or town health officer, during such period of condemnation.

Foodstuffs—Sale and Protection. (Reg. Bd. of H., July 2, 1915.)

RULE 7. *Bleached flour.*—The sale of flour bleached with the oxides of nitrogen, chlorine, or otherwise artificially bleached is in violation of the law and such bleached flour shall not be sold unless the barrel, bag, sack, or other receptacle has on its head or side as a part of the principal label the words "Bleached flour" in plain black gothic letters at least 1 inch in height.

RULE 8. *Sidewalk display of foodstuffs.*—Fruits, vegetables, and other food products shall not be displayed or stored on the sidewalk or outside the place of business unless they are securely covered by cases of glass, wood, or metal or inclosed in tight boxes, bags, or barrels, and all such cases or containers shall be raised at least 2 feet above the sidewalk. The practice heretofore followed of covering small fruits with screens or nettings is not sufficient compliance with this rule. This rule shall not, however, apply to fruits and vegetables which have to be skinned or peeled before use and which are stored in tight barrels, boxes, or crates.

RULE 9. *Unprotected foodstuffs.*—Prepared foodstuffs, such as bakers' goods, confectionery, shelled nuts, etc., dried fruits, such as dates, figs, peaches, prunes, apricots, etc.; cereal products, such as tapioca, breakfast foods, noodles, etc.; pickled products, such as pickles, chili sauce, chow-chow, etc.; fruit products, such as apple butter;

jellies, jams, etc.; meat products, such as dried, salted, or smoked fish, veal loaf, pickled pigs' feet, mincemeat, chipped beef, boiled ham, or other foods prepared for eating or subject to attack of worms or flies, and all fresh meats, whether in large or small cuts, chopped meats, sausage, liver, hearts, and all other edible meats, shall not be displayed for sale unless protected from flies, dust, dirt, and all other foreign or injurious contamination by suitable coverings of glass, wood, or metal.

Acid Drinks and Foodstuffs—Manufacture or Storage of, in Zinc Lined or Galvanized Metal Containers Prohibited. (Reg. Bd. of H., July 2, 1915.)

RULE 6. Whereas it is known that citric, tartaric, and other fruit and vegetable acids will dissolve zinc, forming citrates, tartrates, and other salts of zinc which are injurious to health; therefore,

Zinc lined or galvanized metal containers shall not be used in the manufacture and for the storage of acid drinks and other acid food products.

Meat and Meat Products—Sale and Protection. (Reg. Bd. of H., July 2, 1915.)

RULE 21. Meat and meat products which are piled on unprotected counters and meat blocks are not properly protected, and the display of meats intended for sale as now practiced by butchers and dealers in meat is in violation of law.

In order that the sale of meats may be conducted under sanitary conditions and in conformity with the laws of the State, butchers and dealers in meat are hereby instructed that carcasses and parts of carcasses dressed for sale for food, fresh-meat products of every description, such as Hamburg steak, sausage, etc., poultry and game, fish and fish products, etc., must at all times be kept in a refrigerator, cold-storage room or ice box or, if displayed for sale, properly protected by glass, wood, or metal cases.

Dealers shall be permitted to keep on the meat block only such parts of carcasses as may be necessary to the expeditious conduct of their business. This rule shall not apply to hams and bacons wrapped in paper, burlap, or other impervious material or to the lard which is kept covered in containers. Whole carcasses of hogs, sheep, or veal and quarters of beef, hams, bacon, smoked shoulders, and other smoked-meat products prepared in skins may be hung outside the refrigerator or cold-storage room only when protected from flies, dust, dirt, and all other foreign or injurious contamination by clean, white curtains of cloth or other suitable material.

Cold Storage—Regulation of. (Reg. Bd. of H., July 2, 1915.)

RULE 16. PARAGRAPH 1. For the purpose of the enforcement of this act [ch. 71, acts 1911] it is held that a cold-storage or refrigerating warehouse is an establishment employing refrigerating machinery or ice for the purpose of refrigeration in which foods are stored for 30 days or more at a temperature of 40° F. or below. The words "for temporary protection only" as used in section 1 of the act shall be construed to mean the holding of food products for not more than 30 days.

PAR. 2. Foods placed in cold-storage or refrigerating warehouses which maintain rooms for temporary protection only, as defined in rule 1, shall not be required to be marked, stamped, or tagged. Such storage rooms shall keep a full and complete record of the entry and withdrawal of all food products stored therein for temporary protection only.

PAR. 3. Hotels, restaurants, and all other places of business employing refrigerating machinery or ice for the purpose of refrigeration, whether for public or private use, are hereby classed as cold-storage or refrigerating warehouses except in such instances where the products stored therein are held for less than 30 days.

PAR. 4. Foods held at low temperature during the process of manufacture, as is the case with lager beer, and meat products being cured in pickle or dry salt, shall not be considered to be in storage as defined by this act and need not be stamped.

PAR. 5. All marking, stamping, or tagging shall be plainly legible and shall show the day, month, and year of the date of entrance and removal, in letters and figures not less than three-eighths of an inch in height and of a style known as 36-point gothic No. 8. The letters or figures shall be in black or purple ink, and if the foods are tagged the tag shall be securely fastened on the package by tacks, nails, strings, or glue in such fashion that it can not be detached.

PAR. 6. All foods on hand at the end of nine months, as described in section 2 of the act, shall be reported to the State board of health and inspected and passed as suitable for food and in accord with the provisions of the pure-food law, chapter 104, acts 1907, and the sanitary food law, chapter 163, acts 1909, before being withdrawn. Such inspection shall be made by the inspectors of the State board of health or by other persons designated by the State food and drug commissioner to make such inspection.

Free-Lunch Places—Sanitary Regulation. (Reg. Bd. of H., July 2, 1915.)

RULE 22. All paragraphs of the pure-food law, acts 1907, chapter 104, of the sanitary food law, acts 1909, chapter 163, and all rules of the State board of health governing the sanitary conditions at food distributing establishments and requiring the protection of food exposed for sale are hereby declared in force and effect in all so-called free-lunch places or other places where food is given away or distributed to patrons without charge.

All food shall be protected from flies, dust, dirt, and all other foreign or injurious contamination by suitable coverings of glass, wood, or metal. All dishes and utensils shall be thoroughly cleaned by washing with soap in hot water after each service. Individual forks, knives, and spoons shall be supplied each patron.

Soda Fountains—Sanitary Regulation. (Reg. Bd. of H., July 2, 1915.)

RULE 23. *Requiring individual drinking and service cups.*—The use of common cups or glasses at lemonade and other liquid beverage stands is hereby declared unsanitary and dangerous to health and is forbidden unless adequate provision is made for washing and sterilizing such cups or glasses after each service.

All dealers in beverages who are not provided with running water, with soap, in which to wash and sterilize glasses and serving dishes are hereby instructed to use individual cups of paper or other material which, after once using, are to be destroyed.

RULE 24. *Operation of soda fountains.*—In order that the sale of ice cream, sodas, and soda fountain sundries may be conducted under sanitary conditions and in conformity with the laws of the State, the operators of ice cream parlors and soda fountains are hereby instructed that all such goods shall be dispensed only in sterile containers. To this end it is ordered that all soda fountains and ice cream parlors be provided with facilities for washing dippers, glasses, spoons, and serving dishes and operated under the following conditions:

1. An adequate supply of pure water.
2. All dishes and utensils shall be washed by rinsing in cold water, then by thoroughly washing in water with soap or suitable cleansing powder, then by rinsing in clean cold water.
3. Where it is not possible to provide hot water or running cold water the use of paper cups and linings will be allowed.
4. Refrigerators at soda fountains shall be kept clean by washing with hot water and soap or washing powder.

5. Employees in ice cream parlors and soda fountains shall be cleanly in person and dress, free from infectious and contagious disease, and trained in the conduct of their work.

6. The use of straws is forbidden except when such straws are kept protected from dust and dirt in suitable containers.

7. As soon as empty, ice cream, milk, and cream cans shall be rinsed in cold water.

Births, Deaths, and Marriages—Registration of. (Reg. Bd. of H., July 2, 1915.)

RULE 2. Registration areas.—The registration areas shall be: County area, which is the area outside of the corporation of cities and towns; the city area and town area, which are, respectively, the areas within the corporation of cities and towns.

County health commissioners shall collect and record the vital statistics from the respective county areas, and city and town health officers for their respective city and town areas.

RULE 3. Deaths.—Blanks for death statistics supplied by the State board of health are: Death certificates, death certificates (coroners'), burial permits, no birth or death cards, official envelopes, monthly statement cards. Death record books shall be purchased by local boards of health. The physician in attendance at a death, or the householder, if no physician is in attendance, shall immediately make out a death certificate and personally deliver said death certificate, or instruct that it be delivered, to the health officer or deputy having jurisdiction, who, upon receipt of the same, provided said certificate is completely filled out, is written in ink or indelible pencil, and is otherwise acceptable, shall make out a burial permit, for which no fee shall be charged. Said burial permit is valid in all parts of the State. When no physician is present at a death, and the householder can not be found, and it is not a coroner's case, the health officer shall make out the death certificate and sign it. All health officers shall immediately copy into their death record books all death certificates they receive which belong to their jurisdictions, and, carefully preserving said certificates, shall send them to the State board of health, in the official envelopes, on the 4th of each month, for the month preceding; and there shall always be inclosed with the said certificates a monthly statement card, filled out according to the blanks on said card. In the event any health officer has no deaths to report for his jurisdiction, in any month, then he shall send to the State board a "No birth or death card," to show the matter of reporting has not been overlooked. If a health officer receives a certificate of death which does not belong to his jurisdiction, he shall, after issuing a burial permit thereon, immediately send said certificate to the officer of the jurisdiction to which it does belong. When a death occurs outside of the State, and the remains are brought into the State for interment, the burial permit shall be based upon the transportation permit, and no record of said death is required.

RULE 4. Births.—Blanks for birth statistics supplied by the State board of health are birth certificates, supplemental report of births, "No birth or death cards," official envelopes. Birth record books shall be purchased by local boards of health.

All births shall be reported within 36 hours after occurrence, upon official birth blanks, by the physician or midwife in attendance, if any, otherwise by the householder; all births for the county areas being directly reported to the county health commissioner and all births for city and town areas to their respective officers. Health officers shall immediately record births in the birth record books, and on the 4th day of each month all original birth certificates in the hands of health officers shall be sent to the State board of health. A child born dead at seven months' gestation or over shall be reported and recorded both as a birth and a death, and a burial permit is required as in the case of a regular death.

In the event the child born is illegitimate, the physician or midwife in attendance shall give as name of the father such name as is supplied by the mother or her friends,

but he shall not in any degree be responsible for the same. An illegitimate child takes the name of the mother.

Supplemental birth report.—If a certificate of birth of a living child is presented without statement of the given or Christian name, then the local health officer shall deliver to the attending physician or midwife or to the mother or father a blank "Supplemental report of birth," which shall be filled out by the person receiving same with the full name of the child, including the given or Christian name and surname, as soon as said child shall be named, and said mother or father shall forthwith send or deliver the properly filled out blank to the health officer of the area in which the birth occurred. The original certificate of birth shall not be considered to be complete until such statement of given or Christian name shall be filed or the blank returned with the statement, "Died unnamed."

RULE 5. *Marriages.*—Blanks for marriage statistics supplied by the State board of health are marriage returns, which are sent direct to county clerk from the State board; quarterly return blanks supplied only to county health commissioners by State board. Marriage record books shall be purchased by local boards of health.

All ministers and other persons authorized to perform marriages shall report on official blanks each marriage they may perform to the clerk of the county wherein the marriage license was issued within three days after the marriage, and the said clerk shall report said marriages to the county health commissioner on or before the 4th day of each month for the month preceding, and the county health commissioner shall record each marriage in the official marriage record book. The county health commissioner shall also, each quarter, fill out the marriage blanks he receives from the State board of health and then send said blanks to the State board within 10 days after the end of each quarter.

Burial—Funerals—Transportation of Dead Bodies—Communicable Diseases.
(Reg. Bd. of H., July 2, 1915.)

Blank burial permits are supplied by the State board of health.

RULE 8. Human remains, exceeding seven months' gestation, shall not be buried without a permit issued by a health officer or deputy, and no permit shall be issued unless the health officer or deputy has in hand a certificate of death properly filled out in ink or indelible pencil. In all cases of death from cholera, bubonic plague, leprosy, typhus fever, yellow fever, smallpox, diphtheria, membranous croup, scarlet fever, and cerebrospinal fever the funeral shall be strictly private and the burial shall be made according to the rules of the State board of health. No public or church funeral shall be held or any person permitted to enter the house containing the remains, except the relatives of the deceased, the minister, the undertaker and his (their) assistants, unless by permission of the health officer.

RULE 9. Buried human remains shall not be disinterred or removed without permission from the State board of health, and blank applications for disinterment and removal may be had at any time upon application to said State board.

Disinterment.—When disinterment and reinterment is to be made in the same cemetery, no permit is required. Bodies which have lain over one week in a vault are to be regarded as buried, and must not be removed, buried, or otherwise disposed of without a permit: *Provided*, That bodies in a receiving vault when prepared by a licensed embalmer shall not be regarded as disinterred bodies until after the expiration of 30 days. If remains are deposited in a vault and subsequently removed for burial in the same cemetery, no permit is required.

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RULE 53. A transit permit and transit label issued by the proper health authorities shall be required for each dead body transported by common carrier.

The transit permit shall state the name, sex, color, and age of the deceased, the cause and date of death, the initial and terminal points, the date and route of ship-

ment, a statement as to the method of preparation of the body, the date of issuance, the signature of the undertaker, the signature and the official title of the officer issuing the permit. The transit label shall state the place and date of death, the name of the deceased, the name of the escort or consignee, the initial and terminal points, the date of issuance, the signature and official title of the officer issuing the permit, and shall be attached to the outside case.

RULE 54. The transportation of bodies dead of smallpox, plague, Asiatic cholera, typhus fever, diphtheria (membranous croup, diphtheritic sore throat), scarlet fever (scarlet rash, scarlatina), shall be permitted only under the following conditions:

The body shall be thoroughly embalmed with an approved disinfectant fluid, all orifices shall be closed with absorbent cotton, the body shall be washed with the disinfectant fluid, enveloped in a sheet saturated with the same, and placed at once in the coffin or casket, which shall be immediately closed, and the coffin or casket or the outside case containing the same shall be metal or metal lined and hermetically and permanently sealed.

RULE 55. The transportation of bodies dead of any disease other than those mentioned in rule 54 shall be permitted under the following conditions:

(a) When the destination can be reached within 24 hours after death, the coffin or casket shall be incased in a strong outer box made of good sound lumber not less than seven-eighths of an inch thick; all joints must be tongued and grooved, top and bottom put on with cleats or crosspieces, and all put securely together.

(b) When the destination can not be reached within 24 hours after death, the body shall be thoroughly embalmed and a coffin or casket placed in an outside case constructed as provided in paragraph (a).

RULE 56. No disinterred body dead from any disease or causes shall be transported by common carrier unless approved by the health authorities having jurisdiction at the place of disinterment, and transit permit and transit label shall be required as provided in rule 53. The disinterment and transportation of bodies dead of diseases mentioned in rule 54 shall not be allowed except by special permission of the health authorities at both place of disinterment and the point of destination.

All disinterred remains shall be inclosed in metal or metal-lined boxes and hermetically sealed: *Providing*, That bodies in a receiving vault when prepared by a licensed embalmer shall not be regarded as disinterred bodies until after the expiration of 30 days.

RULE 57. The outside case may be omitted in all instances when the coffin or casket is transported in hearse or undertakers' wagon.

RULE 58. Every outside case shall bear at least four handles, and when over 5 feet 6 inches in length shall bear six handles.

RULE 59. An approved disinfectant fluid shall contain not less than 5 per cent of formaldehyde gas. The term "embalming" as employed in these rules shall require the injection by licensed embalmers of not less than 10 per cent of the body weight, injected arterially in addition to cavity injection, and 12 hours shall elapse between the time of embalming and the shipment of the body.

Hogs—Feeding of, with Uncooked Slaughterhouse Offal or Uncooked Flesh of Dead Animals Prohibited. (Reg. Bd. of H., July 2, 1915.)

RULE 5. Whereas it is known that hogs fed upon raw slaughterhouse offal or upon dead animals frequently acquire tuberculosis, trichinosis, and other parasitic diseases, thus making their flesh dangerous as food: therefore,

Hogs shall not be fed any uncooked slaughterhouse offal or the uncooked flesh of dead animals.

MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

COLUMBIA, S. C.

Communicable Diseases—School Attendance of Children from Infected Households Who have Previously had Disease. (Reg. Bd. of H., Oct. 19, 1915.)

That other children in a family, in which a case of measles, German measles, mumps, whooping cough, or chicken-pox exists, be allowed to attend school, provided they have previously had the disease in question and can furnish evidence to that effect satisfactory to the health officer.

Diphtheria—Making of Cultures from Possible Carriers. (Reg. Bd. of H., Oct. 19, 1915.)

1. That cultures shall be made from the secretions of the nose and throat of all other members of the family who have been in contact with the one suffering with diphtheria, in the event effective isolation of the patient is carried out, and that no one be allowed to go and come from the quarantined house unless said culture from the secretion of the nose and throat is negative for diphtheria bacilli.

2. That upon the termination of the case, the school children of the family shall not be allowed to return to school until one culture from the secretion of the nose and throat is negative for diphtheria bacilli.

3. The health officer is enjoined to see that this regulation is carried out.

Slaughterhouses—Sanitary Regulation. (Reg. Bd. of H., Sept. 28, 1915.)

1. That all pens or houses in which all cattle or swine are slaughtered for sale or offered for sale in the city of Columbia shall have suitable cement floors, so graded as to effect efficient drainage.

2. An area of sufficient size upon which offal is deposited shall be properly cemented and graded in the manner prescribed by the health officer.

3. A room properly screened against the entrance of flies shall be set aside for the care of dressed meats retained at the slaughterhouse.

4. Slaughterhouses or pens and all parts thereof shall be maintained and kept at all times in a clean and sanitary condition.

Restaurants—Sanitary Regulation—Permit Required. (Ord. Dec. 14, 1915.)

The word "restaurant" as used in this ordinance shall be held to include all hotels and eating houses of every description.

SECTION 1. That any person, firm, or corporation desiring to conduct or operate a restaurant shall make application to the health officer for a permit. Said application shall be made on a printed form to be furnished by the board of health, and shall set forth the name or names of the applicant or applicants and the location of the building to be used as a restaurant. Upon the filing of any such application for a permit the

place therein described shall be inspected by the health officer or a sanitary inspector, and if found in a sanitary condition and suitable for the purpose for which it is to be used, the health officer shall register said applicant in a proper record to be kept for the purpose and issue to him a permit. Such permit shall not be transferable, and should it be desired to move the restaurant from the original location the consent of the board of health must be obtained. All permits granted pursuant to this ordinance may at any time be revoked by the board of health for the persistent, repeated, or willful violation of any law or ordinance governing the operation of restaurants.

SEC. 2. That the health officer and sanitary inspectors shall at all times have the right to enter into and upon and inspect any and all restaurants whenever it shall be deemed necessary for the preservation of the health and prevention and suppression of disease.

SEC. 3. That no one suffering from a communicable disease shall be employed in or about any part of a restaurant or its kitchen, or handle any foodstuffs or products used therein. That a typhoid fever carrier, nor one who has recently suffered from typhoid fever, shall be permitted [sic] to work in a restaurant unless he shall furnish a certificate from the health officer showing that he no longer harbors the typhoid bacillus.

SEC. 4. That the owners of all restaurants shall, in conducting the same, comply with and conform to the following rules and regulations, to wit:

(a) Kitchen floor must be smooth and constructed of wood (tongued and grooved), cement, or tile. Dining-room floor must be of like construction and may be covered with linoleum.

(b) All restaurants must be provided with metal garbage cans, having a tight-fitting lid. No garbage or filth shall be allowed to stand or accumulate about the premises for a longer period than 24 hours.

(c) Milk and butter shall be kept in a separate compartment of the ice box and not in contact with other articles of food.

(d) Ice box and refrigerator must be kept in a thoroughly clean and sanitary condition.

(e) All kitchen and dining-room floors shall be thoroughly washed as often as may be necessary.

(f) All knives, forks, spoons, dishes, and other tableware shall be sterilized with steam or boiling water each time after they are used.

(g) All kitchens and dining rooms shall be thoroughly screened and be protected from dust and flies, and when necessary food exposed for sale must be protected from flies by glass or other cases.

(h) All furniture, counters, cellars, closets, and surrounding premises must be kept and maintained in a good sanitary condition.

(i) Every room used for the manufacture, storage, or sale of food products shall be light, dry, and airy; its walls and floors shall be so constructed as to exclude rats and other vermin, and shall be at all times free from moisture and kept in good repair. Its floors shall have a smooth surface constructed of wood, cement, or tile laid in cement, save that when the floor is more than 4 feet below the level of the street, or adjacent ground, it shall never be constructed of wood.

(j) No water-closet, earth closet, privy, or ash pit shall communicate directly with any bake room or kitchen.

(k) That any person violating any of the provisions of this ordinance shall, on conviction thereof before the recorder's court of the city of Columbia, be punished by a fine of not less than \$1 nor more than \$50, or by imprisonment of not less than 1 day nor more than 30 days, and each day's failure or neglect to comply shall be held or deemed to be a separate and distinct offense and punishable accordingly.

SEC. 6. That the provisions of this ordinance shall become effective from and after January 1, 1916.

Privies—Required to be Made Fly Proof. (Reg. Bd. of H., Sept. 10, 1915.)

1. That the health officer be authorized to require all owners of surface closets to use cans and to make said surface closets fly proof.
2. That the Stevens fly-proof privy pail will be hereby adopted, but one may use a different style pail, provided same meets the approval of the health officer.

Board of Health—Secretary—Duties of. (Reg. Bd. of H., Sept. 28, 1915.)

In order to afford clerical assistance in the work of the health officer, be it

Resolved, That the secretary of the board of health be assigned to duty in the office of the health officer during regular working hours. Be it further

Resolved, That the duties of the secretary shall not only embrace the keeping of the minutes of the board of health meetings but also work pertaining to the health office, to wit: Receiving and recording reports of communicable diseases; receiving reports of nuisances; and the preparation of proper record card to facilitate the investigation by inspectors; receiving reports of the inspectors of the health department; and keeping the proper reports and files.

He shall also perform any special investigation or work of an emergency character that may be designated by the health officer.

Soda Fountains—Running Hot Water Required to be Used. (Reg. Bd. of H., Aug. 9, 1915.)

1. That all owners of soda fountains in Columbia be required to install running hot water at said fountains.
2. That the health officer and sanitary inspectors be authorized to require the use of said running hot water in cleaning fountains, sirup receptacles, glasses, dishes, spoons, and all other utensils.
3. That the use of a soda fountain not equipped with running hot water, or failure to use said hot water, shall be considered by the board of health a nuisance.

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