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ENDEMIC TYPHUS FEVER

Susceptibility of Woodchucks, House Mice, Meadow Mice, and White-footed Mice

By R. E. DYER, *Surgeon, United States Public Health Service*

The role played by the rat in endemic typhus has been well established in the past few years, and the possibility of the existence of a reservoir of the disease in other rodents in nature must be considered. In view of this, it seemed advisable to determine what native wild rodents are susceptible to endemic typhus virus.

To date we have found that four species of wild rodents, namely, woodchucks, house mice, meadow mice, and white-footed mice, are susceptible. For these experiments the rodents were either trapped by ourselves or procured from the Bureau of Entomology, Department of Agriculture, through the courtesy of Dr. F. C. Bishopp and Mr. Carroll Smith. All the rodents used were trapped in regions where no cases of endemic typhus have been reported in man.

In determining the susceptibility of these animals, the individual rodents were inoculated with endemic typhus virus of the Wilmington strain. Testicular washings from guinea pigs were used as the source of virus in each instance. The virus was subsequently recovered from the wild rodents from 4 to 10 days after inoculation. In the case of the mice, these animals were killed and their spleens and brains utilized as sources of virus. The woodchucks were bled from the heart. Each strain of virus recovered from these rodents (mice and woodchucks) was studied in a sufficient number of guinea pigs and rabbits to determine its identity by the clinical reactions, the production of agglutinins for *B. proteus* X_{19}, the presence of typical brain lesions, and cross immunity with known typhus virus.

REACTION IN WOODCHUCKS

Two woodchucks (*Marmota monax monax*), approximately three-fourths grown, were inoculated with endemic typhus virus. One of these animals showed no febrile reaction subsequent to inoculation,

while the second developed a febrile reaction beginning 5 days after inoculation and continuing 6 days. Neither animal appeared sick at any time. Virus was recovered only from the woodchuck showing the febrile reaction.

REACTION IN MICE

Two house mice (*Mus musculus musculus*), 5 meadow mice (*Microtus pennsylvanicus pennsylvanicus*), and 2 white-footed mice (*Peromyscus leucopas noveboracensis*) were inoculated with endemic typhus virus. No temperatures were taken on these mice. The house mice showed no signs of illness, remaining lively until killed. All of the meadow mice showed loss of appetite, roughing of the fur and listlessness, beginning 2 days after inoculation. Four of these mice died on the fourth day after inoculation. The fifth was killed on the following day.

The white-footed mice showed some roughing of the fur, lack of appetite, and some sluggishness on the third day following inoculation. Both of these mice were killed for recovery of the virus, one on the fourth and the other on the sixth day after inoculation.

SUMMARY

Woodchucks, house mice, meadow mice, and white-footed mice were found susceptible to endemic typhus fever.

EFFECT OF INHALED MARBLE DUST AS OBSERVED IN VERMONT MARBLE FINISHERS

By WALDEMAR C. DREESSEN, *Passed Assistant Surgeon, United States Public Health Service*

The pulmonary fibrotic changes due to the inhalation of marble dust appear to be slight in comparison with those caused by stone dust containing a high percentage of silica in the form of quartz. This difference has been suggested statistically, clinically, and experimentally. The present paper briefly reviews the literature having a direct bearing on this subject, and presents certain observations on workers in an industrial plant in Vermont, where marble is finished for market.

BRIEF REVIEW OF THE LITERATURE

Mineral dusts composed of calcium have been pointed out by Hoffman (1) as being the least injurious of the inorganic mineral dusts. Although general mortality statistics distinguishing marble- and granite-cutters were not available, Hoffman (2), on the basis of various local observations stated that "the evidence [statistical] is conclusive that workers exposed to marble or limestone dust suffer

a decidedly lesser liability to pulmonary tuberculosis than those exposed to granite or sandstone dust, with a high silicotic content."

Bianchi (3) (Italy) examined 250 marble finishers, both clinically and radiographically, and supplemented his study with experimental dusting of rabbits. The lesions he saw in the roentgenograms of the workers were accentuated in proportion to the time of exposure, but did not lead to functional disturbance except in a few cases where inherent constitutional factors could not be ruled out. He was of the opinion that marble dust inhaled by such workers caused "anatomopathological lesions characterized by diffuse foci of peribronchitis and interstitial pneumonia."

On the basis of clinical and roentgenological examinations of 105 marble workers, a large proportion of whom were given sputum analyses, Turano (4) (Carrara, Italy) did not feel that the lime dust had a marked tendency to localize and accumulate in the pulmonary tissues, although in 28 percent he found definite arborescent markings which corresponded to what he had always regarded as the initial stage of pneumoconiosis. Five of the cases showed atypical tuberculosis.

Mazzitelli (5), in a statistical study of the causes of death of the population of Carrara, Italy, observed that the tuberculosis mortality figures were very low among marble workers in that community. He also injected dust suspensions of white marble, colored marbles, and marble and granite mixtures into the lungs of guinea pigs. His findings indicated that white marble, which was almost pure carbonate of lime, was apparently absorbed and eliminated from the lungs and therefore produced only slight reaction in the pulmonary tissues. The other dusts, however, induced more pronounced changes.

Loriga (6) commented on the interesting controversy regarding the pathology caused by marble dust in Italy when he discussed "Pneumonoconiosis in Italy" at the International Silicosis Conference at Johannesburg, South Africa, in 1930. This controversy mainly involved the question as to whether marble-dusted lungs were more susceptible to tuberculous infection.

Gardner and Dworski (7), in a series of experiments wherein guinea pigs were exposed to marble dust, concluded that "inhaled marble dust is soluble in the lung tissue; that the inhalation of the dust during the process of a preexisting tuberculosis will be followed by the calcification of a certain number of the pulmonary and tracheobronchial lymph node tubercles; that the insoluble siliceous matter found in the dust will produce a moderate degree of silicosis after prolonged exposure; that this silicosis will in turn render the pulmonary tissues in some unexplained manner more susceptible to infection with the tubercle bacillus; and that the tubercles produced by the low virulent

R–1 strain will, as a result of this silicosis, pursue a chronic course manifesting a definite delay in the resolution process."

Pancoast and Pendergrass (8) regard marble dust as not dangerous and the resultant fibrosis following its inhalation as never reaching the advanced stage seen in chests of persons who have inhaled rock dust with a high quartz content over a long period of time.

Rogers (9), who has been engaged in the care and treatment of the tuberculous in the marble- and granite-producing area of Vermont for 19 years, recently stated that it was his belief that the inhalation of marble dust did not predispose to tuberculosis.

In observing the reaction of peritoneal tissues to injected calcite dust, Miller and Sayers (10) noted that nodules, formed after the initial foreign-body reaction, progressively became smaller and eventually disappeared without scar formation. For the sake of description they termed this response as one of absorption.

NATURE OF MARBLE DUST

Most Vermont marble deposits occur in beds or layers, each of which has its own individuality in color and other characteristics. Because of these differences, individual beds, are, as a rule, quarried separately, but even so, marble is less complex than almost any other stone. It is almost pure carbonate of lime in the form of the mineral, calcite. The results of a chemical and mineralogical analysis of Vermont marble, made for the United States Public Health Service by Prof. Adolph Knopf of Yale University, are given in table 1.

TABLE 1.—*Chemical and mineralogical analysis of Vermont marble*

Constituent	Chemical analysis	Constituent	Mineralogical analysis
	Percent		*Percent*
Carbonates	99.174	Calcite ($CaCO_3$)	98
Manganese and aluminum oxides	.005	Dolomite	2
Insolubles	.630		
Organic matter	.080		
Total	99.889		100

Foreign varieties of marble have a somewhat different composition; in fact, verde antique, a so-called "marble" used frequently in interior finishing, is really a form of precious serpentine (11) (a magnesium silicate). No original data are at hand pertaining to the chemical and mineralogical analyses of the foreign varieties of marble and of verde antique.

In the description of the plant processes which follows, it will be observed that sand is used for abrasive purposes in certain operations. For this reason, two samples of settled dust were collected and examined for quartz content. One sample, taken in the vicinity of workers not using sand, showed no quartz; while a sample taken near the rub-

bing-bed operators disclosed a quartz content of 10 percent, and 90 percent carbonates.

A study of the particle size of the dust in the air of the plant (12) showed that only 12 percent of the measured particles were less than 1 micron; 70 percent were less than 2 microns; and none exceeded 6 microns. The median size of this dust was 1.5 microns.

BRIEF DESCRIPTION OF MARBLE QUARRYING AND FINISHING PROCESSES

Although this paper is concerned with the finishing mills, it is not out of place to give a brief description of the quarry methods in addition to the processes in the mill proper, because this antecedent operation in a way governs the manner in which the stone is finished. In quarrying marble, holes are drilled around block-shaped masses of the stone with electrically driven channeling machines, or Leyner drills, the blocks being wedged out by the use of pegs. Dynamiting is not resorted to, because it mars the stone. The quarried blocks are then taken to the sawing mills, where they are cut to size with large gang saws. When they have been sawed down to a workable size, they are ready to be taken to the finishing mills, of which there are three types (exterior, interior, and monumental).

Unless the block or slab has been cut to approximate size at the sawmill, the slabs are split or sawed with the diamond saw at the finishing mill. "Thin stock" is the term applied to marble of a thickness of ⅞ of an inch to 2 inches, depending on the way it is used in building. The stock comes to the shop in the form of full-sized slabs. These are first "coped" (i.e., edges trimmed) either by hand or on carborundum machines. When done by hand, this operation is accomplished partly by pneumatic tools and partly by hand pointing.

Interior marble which is more than 2 inches thick is known as "cubic." This is usually sawed to approximate size in the sawmill, but at times it is worked up from the slab by the use of the diamond saw, carborundum machine, or planer. In the carborundum machine the marble moves on a platform under revolving abrasive wheels, while in the planer it moves under stationary chisels. After the slabs or blocks have been shaped to approximate size in one of the ways here indicated, they are taken to the rubbing bed.

The rubbing bed is a large, horizontal iron plate which is propelled like a top at a rate of about 40 revolutions per minute. Water charged with sand flows from the center over the flat upper surface of the disk, and, as pieces of marble are held thereon in a fixed position, the abrasive action wears away the stone to the desired size. In this manner the pieces of marble are squared, and all scratches and scars are removed. While moldings may be cut with the carborundum machine, the planer is better adapted to exterior marble and is therefore used more frequently. Before going to the planer, however, the

marble is "set in" by the cutter, i.e., the mold is cut by hand about an inch at each end of the piece. Turned work is done on a lathe similar to the manner in which wood and metal are fashioned. If the column is fluted, this is accomplished on a planer or carborundum machine. After leaving the rubbing beds and planers, the marble is ready to have the surfaces finished, which is largely done by the polishers.

The polishing machine consists of a movable arm, at the end of which there is a rapidly revolving, horizontal, abrasive disk. The marble is placed on a "banker" under the disk. Various disks are used from a medium carborundum to a fine hone, depending on the degree of abrasive action desired. The final polish is attained by applying a felt-buffer with a polishing powder. Polishing machines are used almost exclusively for the faces of slabs. Although machines are designed for polishing edges, most of this work is done by hand. The process is the same, however, whether by hand or machine.

Pneumatic tools are used chiefly for carved work. For the finer details of this work it is sometimes necessary to resort to the older method of hammer and chisel. It should be borne in mind, however, that the copers also use the pneumatic tool. The final finish usually given to marble is "sand", "tooled", or "axed." The sand finish is obtained by rubbing wet sand on the marble by hand with a block of metal. Tooled and axed finishes are applied by the stone cutters.

OCCUPATIONAL DUST EXPOSURE

Twenty percent of the workers were examined in the present study. The basis of selection was to secure as large a percentage as possible in the groups with greater dust exposure and with longer periods of employment. Within these groups, however, the workers examined are believed to be representative of those in the plant studied. The classification by occupation of the total number of workers and of those examined, together with their respective dust exposures (13), is shown in table 2.

Of the total plant personnel (422), 142 (34 percent) used pneumatic tools. The cutters and carvers were exposed to an average of about 26 million particles per cubic foot of air, a concentration which would be likely to lead to disabling results were the dust high in quartz content.

Three cutters with previous exposure to siliceous dust have been omitted from the analysis.

There was little shifting from occupation to occupation in the group classified as cutters and carvers. Aside from the pneumatic-tool users, shifting of this character did occur, but was usually from occupation to occupation within the industry. Some of these persons used abrasives in their work, a point which is discussed elsewhere in the text.

TABLE 2.—*Occupational distribution of total number of workers and of those examined and their respective dust exposure*

Occupation	Total number in occupation	Examined		Dust count (millions of particles per cubic foot of air)			Number of dust samples
		Number	Percent of total	Average	Maximum	Minimum	
Cutters and carvers	113	38	34	25.9	56.0	9.4	9
Tracers, letterers, and copers	29	5	17	3.7	5.5	2.3	6
Polishers, rubbing-bedmen, and cranemen	114	23	20	2.3	4.6	.6	22
All others [1]	166	17	10				
Total	422	83	20				37

[1] Such as lathe turners, electric truck drivers, shop mechanics, clerks, janitors.

CLINICO-ROENTGENOGRAPHIC FINDINGS

Eighty marble finishers were X-rayed and given careful clinical examinations, with particular attention to the chest.[1]

No significant findings were encountered in the anatomical and physiological measurements or in the physical examinations of the chest.

The roentgenographic study offered the most tangible means of measuring *in vivo* pulmonary fibrotic changes. The 80 radiograms were interpreted independently of the clinical histories. In recording the changes observed in the X-rays, the designation "commencing generalized fibrosis"[2] signified a condition in which the markings simulated those seen in the first stage of pneumonoconiosis of the American classification, but were finer and less pronounced. Except for being less in degree, this fibrosis resembled that termed early pneumonoconiosis in the previously reported study of cement workers (14). It was characterized by a fine bilateral, linear, radiating fibrosis confined chiefly to the lower two thirds of the lung fields, and was frequently more pronounced in the lower right. The hilar shadows were moderately increased in size and density. The length of exposure to marble dust necessary to produce even this picture was found to be considerably longer than that required to produce like changes in the cement workers. The X-rays did not show disseminated nodular or conglomerate areas of radiopacity so frequently observed in the chest X-rays of individuals who have inhaled large quantities of dust with a high quartz content.

Still less marked fibrotic changes seen in the X-rays were termed "usual fibrosis" (of a type classified as "more fibrosis than usual" in

[1] Three records omitted because of previous exposure. Fourteen others were examined, but are omitted from the comparisons either because an X-ray was not obtained of the case, or because technically imperfect films did not permit an interpretation of the radiograms.

[2] Owing to the comparatively minor fibrotic changes observed in these X-rays, no prints are being reproduced herein. The reader is referred to other publications on dust by the Public Health Service which illustrate these radiographic changes. (See references 14 and 15.)

previous publications of this office (16)). While this degree of fibrosis may be due partly to dust, and in most cases its distribution was bilaterally symmetrical and directed toward the bases, it also bears some resemblance to that seen in cases of chronic bronchitis, asthma, and old healed infections.

X-ray findings are presented in summary in table 3. It is observed that 12 (15 percent of the 80 X-rayed) showed "commencing generalized fibrosis." Although this condition is to be regarded, on the average, as a result of dust exposure in this industry, it was minor in degree, was associated with no disability, and is to be regarded as essentially negative. It may also be mentioned that active pulmonary tuberculosis was not demonstrated clinically or radiographically in any of the workers examined.

Because of the small numbers and the fact that some of the workers who were not cutters were apparently exposed to dust with a possibly higher percentage of free silica than the cutters, no tabulation of the X-ray findings by occupation is presented. Taking the group of finishers as a whole, it is noted from table 3 that even the minor degree represented by commencing generalized fibrosis does not appear until after many years of exposure to the inhalation of marble dust of the quantity and nature found in this study. The percentage of X-rays classified as showing commencing generalized fibrosis was 3.1 for less than 20 years of exposure, 18.9 for 20 to 39 years of exposure, and 36.4 for 40 years and more.

The low concentrations of dust and its comparatively low quartz content probably explain the absence of more advanced pulmonary changes. It is felt that the relatively dust-free conditions in the plant were in a large measure due to modern housing of the machinery proper and the substitution of modern cutting machinery with wet methods for reducing the level of the dust concentration.

TABLE 3.—*X-ray interpretation in relation to period of employment*

Roentgenographic diagnosis	Number of persons by years of employment					Total number
	Less than 10 years	10–19 years	20–29 years	30–39 years	40 years and more	
Commencing generalized fibrosis		1	4	3	4	12
Usual fibrosis [1]	20	11	14	16	7	68
Total	20	12	18	19	11	80

[1] Includes normal chests.

SUMMARY AND CONCLUSION

The clinico-roentgenographic findings in 80 marble finishers from a typical plant in Vermont have been studied to determine the effects of inhaling marble dust. Observations of the dust content of the air at the breathing level and analyses of the dust have been recorded.

Although marble dust when inhaled in the concentrations here observed produces a mild bilateral, linear fibrosis in a certain number of cases (termed herein "commencing generalized fibrosis"), no serious lung changes were noted, and there was no disability due to the dust, even after many years of exposure. The findings of this study are therefore to be regarded as essentially negative.

ACKNOWLEDGMENT

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THE PELLAGRA-PREVENTIVE VALUE OF GREEN ONIONS, LETTUCE LEAVES, PORK SHOULDER, AND PEANUT MEAL

By G. A. WHEELER, *Surgeon*, and D. J. HUNT, *Passed Assistant Surgeon, United States Public Health Service*

The studies here reported were carried out at the Milledgeville State Hospital. As in experiments previously reported from this station (1, 2, 3, 4), the studies have been directed toward the determination of the pellagra-preventive value of various foodstuffs. The foods under test were used as supplements to a basic diet believed to be physiologically complete except for a deficiency of the pellagra-preventive factor. When used alone this basic diet leads to the production of pellagra within from 3 to 6 months. Any considerable prolongation of this period is regarded as being brought about by the pellagra-preventive action of the supplementary food. Each experimental feeding was continued for 1 year, unless the development of a sufficient number of cases of pellagra caused an earlier termination.

In order to insure a continuous supply of green onions and lettuce leaves, it was necessary to have the products canned, since the feeding tests extended over a period when the fresh vegetables were not available. The pellagra-preventive factor does not appear to be appreciably affected by the heat of the canning process.

GREEN ONIONS

Canned immature, green onions were used. The entire onion (including the top) was canned before appreciable development of the bulbous portion. The daily ration for each patient was 502 grams, including the can liquor. The approximate composition of the onion-supplemented diet is shown in table 1.

A group of 14 colored females was placed on this diet. Of this number, 2 developed pellagra during the eighth month, and 7 during the ninth month. The experiment was terminated after the ninth month.

Inasmuch as all of the group would have developed pellagra within about 6 months on the basic diet alone (5), the prolongation of the time of development of pellagra shows that the canned green onions have some slight protective value.

In a previous report (2) it was shown that mature onions have little or no protective value against pellagra. From the results obtained in the present experiment, it would seem that young green onions offer some slight additional protection to that afforded by the mature vegetable.

TABLE 1.—*Basic diet plus canned green onions*

[Total calories, 2,229]

Article of diet	Quantity	Nutrients		
		Protein	Fat	Carbohydrate
BASIC	*Grams*	*Grams*	*Grams*	*Grams*
Cornmeal	328	27.55	15.41	242.72
Cowpeas (California black-eyed)	42	8.98	.60	25.50
Wheat flour	21	2.40	.20	15.80
Baker's bread	56	5.20	.60	29.50
Lard	42		42.00	
Cod-liver oil	14		14.00	
Tomato juice	127			
Calcium carbonate	3			
Dilute hydrochloric acid (U.S.P.)	[1] 90			
Sirup iodide of iron	[1] 2			
SUPPLEMENTAL				
Onions (canned, green)	502	7.50	.50	27.10
Total nutrients		51.63	73.31	340.62

[1] Drops.

LETTUCE

The lettuce canned for this experiment consisted largely of the green leaves of the Cos or Romaine variety. The daily ration for each patient was 516 grams, including the can liquor, as a supplement to the basic diet as shown in table 2.

Of 14 colored females placed on this lettuce-supplemented diet, 2 developed pellagra during the eighth month, and 6 developed pellagra during the ninth month, after which the test was terminated.

Since pellagra would have occurred in the group prior to the sixth month on the basic diet alone, the canned lettuce slightly delayed the onset of the disease. It is therefore evident that the canned lettuce leaves offer some slight protective value.

TABLE 2.—*Basic diet plus canned green lettuce*

[Total calories, 2,201]

Article of diet	Quantity	Nutrients		
		Protein	Fat	Carbohydrate
BASIC	*Grams*	*Grams*	*Grams*	*Grams*
Cornmeal	328	27.55	15.41	242.72
Cowpeas (California black-eyed)	42	8.98	.60	25.50
Wheat flour	21	2.40	.20	15.80
Baker's bread	56	5.20	.60	29.50
Lard	42		42.00	
Cod-liver oil	14		14.00	
Tomato juice	127			
Calcium carbonate	3			
Dilute hydrochloric acid (U.S.P.)	[1] 90			
Sirup iodide of iron	[1] 2			
SUPPLEMENTAL				
Lettuce (canned, green)	516	7.70	2.0	16.50
Total nutrients		51.83	74.81	330.02

[1] Drops.

PORK SHOULDER

The pork shoulder used in this experiment was purchased on the open market and was the smoked product of a well-known brand. It was cooked in a steam cooker until done. The fat was then removed as completely as possible and the remainder was ground. The amount fed to each patient as a supplement to the basic diet was 200 grams of the lean cooked meat. This diet is shown in table 3.

Sixteen white females were used in this test. Of this number, 11 were under observation for a period of 1 year; 1 for 11 months. None of the 16 individuals developed pellagra.

Since pellagra would have developed on the basic diet alone within about 6 months, lean pork shoulder must be regarded as a good source of the pellagra-preventive factor.

TABLE 3.—*Basic diet plus pork shoulder*

[Total calories, 1,892]

Article of diet	Quantity	Nutrients		
		Protein	Fat	Carbohydrate
BASIC	*Grams*	*Grams*	*Grams*	*Grams*
Cornmeal	270	22.7	12.7	199.8
Cowpeas (California black-eyed)	42	8.98	.6	25.5
Wheat flour	21	2.4	.2	15.8
Lard	21		21.0	
Cod-liver oil	14		14.0	
Tomato juice	127			
Calcium carbonate	3			
Dilute hydrochloric acid (U.S.P.)	[1] 90			
Sirup iodide of iron	[1] 2			
SUPPLEMENTAL				
Pork shoulder	200	34.50	24.14	
Total nutrients		68.58	72.64	241.1

[1] Drops.

PEANUT MEAL

The peanut meal used in this test was a commercial peanut meal. It was cooked thoroughly in a steam cooker and fed as a supplement to the basic diet in the amount of 200 grams daily per patient. This diet is shown in table 4.

Sixteen white females were used in this test. Twelve of these were under observation throughout an entire year. None of them developed any signs of pellagra.

Since pellagra would have occurred on the basic diet alone within about 6 months, it is obvious that the peanut meal in the quantity used contained sufficient of the pellagra-preventive factor to protect this group over a period of 1 year.

In comparison with other substances tested, it must therefore be regarded as a good source of the pellagra-preventive factor.

This result is in agreement with the findings of Wheeler and Sebrell (6), who studied the preventive potency of peanut meal in blacktongue in dogs (canine pellagra).

TABLE 4.—*Basic diet plus peanut meal*

[Total calories, 2,336]

Article of diet	Quantity	Nutrients		
		Protein	Fat	Carbohydrate
BASIC	*Grams*	*Grams*	*Grams*	*Grams*
Cornmeal	270	22.7	12.7	199.8
Cowpeas (California black-eyed)	42	8.98	.6	25.5
Wheat flour	21	2.4	.2	15.8
Lard	21		21.0	
Cod-liver oil	14		14.0	
Tomato juice	127			
Calcium carbonate	3			
Dilute hydrochloric acid (U.S.P.)	[1] 90			
Sirup iodide of iron	[1] 2			
SUPPLEMENTAL				
Peanut meal (ground)	200	83.6	16.7	78.6
Total nutrients		117.68	65.2	319.7

[1] Drops.

CONCLUSIONS

1. Canned green onions contain the pellagra-preventive factor, but in small amount.
2. Canned lettuce leaves are poor in the pellagra-preventive factor.
3. Lean pork shoulder is a good source of the pellagra-preventive factor.
4. Peanut meal is a good source of the pellagra-preventive factor.

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(5) Walker, N. P., and Wheeler, G. A.: Influence on epilepsy of a diet low in the pellagra-preventive factor. Pub. Health Rep., vol. 46, pp. 851–860, April 10, 1931.
(6) Wheeler, G. A., and Sebrell, W. H.: The blacktongue-preventive value of 15 foodstuffs. Natl. Inst. Health Bull. 162, Sept. 1933.

COURT DECISION ON PUBLIC HEALTH

State held to possess power to fix selling price of milk.—(U.S. Supreme Court; *Nebbia* v. *People of State of New York*, 54 S. Ct. 505; decided Mar. 5, 1934.) By Laws 1933, chapter 158, the New York Legislature established a milk-control board which was empowered among other things to "fix minimum and maximum * * * retail prices to be charged by * * * stores to consumers for consumption off the premises where sold." Nine cents was fixed by the board as the price to be charged by a store for a quart of milk. A grocery store proprietor was convicted of violating the milk-control board's order because he sold 2 quarts of milk and a 5-cent loaf of bread for 18 cents. The conviction was affirmed by the New York Court of Appeals [1] and the case was carried to the United States Supreme Court.

The claim was made on behalf of the appellant that the statute and the board's order contravened the equal protection clause and due process clause of the 14th amendment to the Federal Constitution, and the Supreme Court said that the question for decision was whether the Constitution prohibited a State from so fixing the selling price of milk. The view was taken by the majority of the court that the appellant was denied neither the equal protection of the laws nor due process of law.

[1] See Public Health Reports for July 28, 1933, pp. 884–887.

In the course of the majority opinion the history of the legislation was reviewed and some of the conclusions of the legislative committee which had investigated the milk situation in the State prior to the enactment of the milk control law were recited as follows:

Milk is an essential item of diet. It cannot long be stored. It is an excellent medium for growth of bacteria. These facts necessitate safeguards in its production and handling for human consumption which greatly increase the cost of the business. Failure of producers to receive a reasonable return for their labor and investment over an extended period threaten a relaxation of vigilance against contamination.

DEATHS DURING WEEK ENDED JUNE 2, 1934

[From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce]

	Week ended June 2, 1934	Corresponding week, 1933
Data from 86 large cities of the United States:		
Total deaths	8,034	7,194
Deaths per 1,000 population, annual basis	11.2	10.0
Deaths under 1 year of age	584	491
Deaths under 1 year of age per 1,000 estimated live births	54	[1] 41
Deaths per 1,000 population, annual basis, first 22 weeks of year	12.3	11.7
Data from industrial insurance companies:		
Policies in force	67,823,174	67,920,937
Number of death claims	11,196	10,313
Death claims per 1,000 policies in force, annual rate	8.6	7.9
Death claims per 1,000 policies, first 22 weeks of year, annual rate	10.8	10.6

[1] Data for 81 cities.

PREVALENCE OF DISEASE

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

UNITED STATES

CURRENT WEEKLY STATE REPORTS

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

Reports for Weeks Ended June 9, 1934, and June 10, 1933

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended June 9, 1934, and June 10, 1933

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended June 9, 1934	Week ended June 10, 1933	Week ended June 9, 1934	Week ended June 10, 1933	Week ended June 9, 1934	Week ended June 10, 1933	Week ended June 9, 1934	Week ended June 10, 1933
New England States:								
Maine	------	2	------	3	28	2	0	1
New Hampshire	------	------	------	------	100	15	0	0
Vermont	1	------	------	------	65	63	0	0
Massachusetts	9	24	------	------	980	613	0	0
Rhode Island	------	5	------	------	32	3	0	0
Connecticut	4	2	1	1	260	191	2	0
Middle Atlantic States:								
New York	55	44	[1] 4	[1] 4	1,387	1,785	5	4
New Jersey	17	20	11	1	746	984	2	0
Pennsylvania	54	39	------	------	2,637	1,165	0	5
East North Central States:								
Ohio	19	22	4	------	925	417	1	1
Indiana	17	7	------	12	626	141	0	3
Illinois	39	19	8	19	2,414	545	4	8
Michigan	6	31	3	2	356	670	2	1
Wisconsin	1	5	23	16	2,095	153	2	2
West North Central States:								
Minnesota	3	6	3	2	167	190	0	1
Iowa [2]	7	6	------	------	263	66	0	1
Missouri	35	18	12	------	117	164	2	2
North Dakota	5	3	------	------	45	69	0	0
South Dakota	2	1	------	------	131	19	0	0
Nebraska	9	6	------	------	119	194	0	1
Kansas	9	11	1	------	454	171	0	0
South Atlantic States:								
Delaware	2	------	------	------	56	11	0	0
Maryland [2 3 4]	8	9	3	3	866	33	0	1
District of Columbia	6	1	2	1	21	22	1	1
Virginia [3]	9	9	------	------	955	224	0	0
West Virginia	11	3	15	3	143	110	1	[1]
North Carolina	13	12	14	10	969	419	2	0
South Carolina	3	7	100	98	119	278	0	0
Georgia [3]	1	4	------	------	121	352	0	1
Florida [3]	9	2	1	[1]	155	28	0	0

See footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended June 9, 1934, and June 10, 1933—Continued

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended June 9, 1934	Week ended June 10, 1933	Week ended June 9, 1934	Week ended June 10, 1933	Week ended June 9, 1934	Week ended June 10, 1933	Week ended June 9, 1934	Week ended June 10, 1933
East South Central States:								
Kentucky	11	1	5	9	293	32	0	1
Tennessee	6	3	11	15	250	48	3	2
Alabama [3]	8	12	7	3	238	34	1	2
Mississippi [3]	3	10					1	0
West South Central States:								
Arkansas	6	3	17	1	27	83	1	0
Louisiana	11	8	7	10	175	22	1	0
Oklahoma [5]	5	5	21	8	71	73	0	0
Texas [3]	46	45	142	144	875	550	0	4
Mountain States:								
Montana [4]	1	1	2	1	48	18	0	0
Idaho [4]				2	10	6	0	0
Wyoming [4]					111	9	0	0
Colorado	14	2			544	6	0	0
New Mexico	1	6			49	14	1	0
Arizona	2	1			7	77	0	0
Utah [3]	3	1			27	49	0	0
Pacific States:								
Washington		3	1		283		0	0
Oregon [4]	1	1	21	26	34	41	0	0
California	16	29	26	26	879	1,274	1	5
Total	488	449	465	421	21,273	11,433	33	48

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended June 9, 1934	Week ended June 10, 1933	Week ended June 9, 1934	Week ended June 10, 1933	Week ended June 9, 1934	Week ended June 10, 1933	Week ended June 9, 1934	Week ended June 10, 1933
New England States:								
Maine	0	0	16	10	0	0	8	4
New Hampshire	0	0	2	13	0	0	1	0
Vermont	0	0	16	6	0	0	0	0
Massachusetts	1	1	179	255	0	0	2	4
Rhode Island	0	0	8	24	0	0	1	0
Connecticut	0	0	31	62	0	0	0	1
Middle Atlantic States:								
New York	3	0	616	485	0	0	10	20
New Jersey	0	0	146	133	0	0	10	5
Pennsylvania	0	2	496	458	0	0	11	25
East North Central States.								
Ohio	0	1	416	448	1	0	7	9
Indiana	0	1	71	45	2	1	9	7
Illinois	2	1	415	288	0	7	8	10
Michigan	2	3	438	361	2	0	10	4
Wisconsin	0	0	217	86	15	16	3	1
West North Central States:								
Minnesota	0	1	66	42	4	0	0	0
Iowa [3]	0	0	39	15	1	14	0	4
Missouri	0	0	40	31	0	0	17	5
North Dakota	0	0	14	7	1	0	0	0
South Dakota	0	0	2	3	0	0	0	0
Nebraska	0	1	21	12	1	1	1	0
Kansas	0	0	20	26	1	0	7	5
South Atlantic States:								
Delaware	0	0	2	5	0	0	1	0
Maryland [3 4]	0	0	31	58	0	0	3	9
District of Columbia	0	0	7	8	0	0	0	1
Virginia [3]	0	0	14	27	1	0	8	9
West Virginia	0	0	64	18	0	2	10	4
North Carolina	0	0	11	28	0	1	1	12
South Carolina	0	0	2	6	0	0	9	30
Georgia [3]	4	0	1	4	1	0	24	36
Florida [3]	0	0	1	1	0	0	1	3

See footnote at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended June 9, 1934, and June 10, 1933—Continued

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended June 9, 1934	Week ended June 10, 1933	Week ended June 9, 1934	Week ended June 10, 1933	Week ended June 9, 1934	Week ended June 10, 1933	Week ended June 9, 1934	Week ended June 10, 1933
East South Central States:								
Kentucky	2	0	37	9	1	0	14	13
Tennessee	0	1	8	16	0	1	4	14
Alabama [2]	0	0	4	17	1	0	8	16
Mississippi [2]	2	1	5	4	0	0	6	8
West South Central States:								
Arkansas	0	0	2		0	8	3	9
Louisiana	0	0	8	5	0	0	11	20
Oklahoma [2]	0	0	6	7	1	3	4	12
Texas [3]	1	0	38	45	28	7	31	36
Mountain States:								
Montana [4]	0	0	6	17	0	0	1	0
Idaho [4]	0	0	6	3	0	1	0	0
Wyoming [4]	0	0	1	6	0	0	0	1
Colorado	2	0	10	23	5	6	2	1
New Mexico	0	0	4	1	0	0	3	2
Arizona	1	0	7	9	0	0	5	1
Utah [2]	0	0	4	6	0	0	0	0
Pacific States:								
Washington	0	1	30	27	4	13	3	2
Oregon [4]	1	0	22	19	0	16	0	3
California	273	2	181	125	7	17	15	7
Total	294	16	3,796	3,364	85	114	272	362

[1] New York City only.
[2] Week ended earlier than Saturday.
[3] Typhus fever, week ended June 9, 1934, 26 cases, as follows: Maryland, 3; Virginia, 1; Georgia, 5; Florida, 1; Alabama, 2; Texas, 14.
[4] Rocky Mountain spotted fever, week ended June 9, 1934, 15 cases, as follows: Maryland, 2; Montana, 1; Idaho, 3; Wyoming, 8; Oregon, 1.
[5] Exclusive of Oklahoma City and Tulsa.

SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of cases reported monthly by States is published weekly and covers only those States from which reports are received during the current week.

State	Meningococcus meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
February 1934										
Pennsylvania	12	246		2	7,509	3	3	2,946	0	47
March 1934										
Pennsylvania	18	253		1	14,732	2	1	3,856	0	34
April 1934										
California	12	179	150	7	3,908	5	36	871	26	28
Pennsylvania	15	241			20,537	2	4	3,327	0	49
May 1934										
Arkansas	5	25	40	202	196	78	3	21	14	18
Connecticut	4	8	3		638		1	265	0	3
Delaware		6			512		0	25	0	6
District of Columbia		48	6		314		0	59	0	4
Georgia	1	19	203	134	1,350	36	1	12		54
Maine		12	2		78		0	63	0	20
Nebraska	4	37			1,263		0	110	34	5
Vermont					248		0	70	0	19
Wyoming		2			494		0	48	18	1

February 1934

	Cases
Pennsylvania:	
Anthrax	3
Chicken pox	4,322
Dysentery	8
German measles	182
Lethargic encephalitis	8
Mumps	2,168
Ophthalmia neonatorum	9
Trachoma	1
Trichinosis	1
Tularaemia	1
Undulant fever	8
Whooping cough	2,160

March 1934

Pennsylvania:	
Chicken pox	4,544
Dysentery	2
German measles	413
Lead poisoning	1
Lethargic encephalitis	9
Mumps	3,230
Ophthalmia neonatorum	6
Psittacosis	7
Trachoma	1
Trichinosis	9
Undulant fever	4
Whooping cough	2,775

April 1934

Actinomycosis:	
Pennsylvania	1
Beriberi:	
California	1
Chicken pox:	
California	1,893
Pennsylvania	3,159
Dysentery:	
California (amoebic)	33
California (bacillary)	21
Pennsylvania	6
Food poisoning:	
California	36
German measles:	
California	753
Pennsylvania	593
Granuloma, coccidioidal:	
California	4
Leprosy:	
California	1
Lethargic encephalitis:	
California	2
Pennsylvania	5
Mumps:	
California	2,181
Pennsylvania	3,131
Ophthalmia neonatorum:	
Pennsylvania	12
Paratyphoid fever:	
California	3
Psittacosis:	
Pennsylvania	4
Rabies in animals:	
California	92
Rabies in man:	
California	1
Rocky Mountain spotted fever:	
California	2
Septic sore throat:	
California	8
Tetanus:	
California	7
Trachoma:	
California	20
Pennsylvania	2
Trichinosis:	
California	4
Pennsylvania	2
Tularaemia:	
California	2
Undulant fever:	
California	13
Pennsylvania	6
Whooping cough:	
California	1,904
Pennsylvania	2,528

May 1934

Anthrax:	
Georgia	1
Chicken pox:	
Arkansas	15
Connecticut	563
Delaware	65
District of Columbia	54
Georgia	127
Maine	126
Nebraska	235
Vermont	153
Wyoming	30
Conjunctivitis:	
Connecticut	9
Dysentery:	
Georgia (amoebic)	6
Georgia (bacillary)	39
German measles:	
Connecticut	32
Maine	120
Wyoming	17
Hookworm disease:	
Arkansas	4
Georgia	147
Lethargic encephalitis:	
Connecticut	2
District of Columbia	1
Georgia	1
Mumps:	
Arkansas	86
Connecticut	423
Delaware	62
Georgia	157
Maine	24
Nebraska	68
Vermont	29
Wyoming	5
Ophthalmia neonatorum:	
Arkansas	1
Paratyphoid fever:	
Connecticut	3
Rabies in animals:	
Connecticut	2
Maine	1
Rocky Mountain spotted fever:	
Wyoming	89
Septic sore throat:	
Connecticut	15
Georgia	22
Wyoming	1
Tetanus:	
Connecticut	2
Georgia	4
Trachoma:	
Arkansas	5
Connecticut	1
Trichinosis:	
Connecticut	1
Tularaemia:	
Arkansas	4
Georgia	7
Nebraska	1
Wyoming	1
Typhus fever:	
Georgia	20
Undulant fever:	
Connecticut	7
Delaware	1
Georgia	4
Maine	2
Nebraska	1
Vermont	1
Vincent's infection:	
Maine	2
Whooping cough:	
Arkansas	74
Connecticut	226
Delaware	50
District of Columbia	116
Georgia	555
Maine	369
Nebraska	134
Vermont	106
Wyoming	5

CASES OF VENEREAL DISEASES REPORTED FOR APRIL 1934

This statement is published monthly for the information of health officers in order to furnish current data as to the prevalence of the venereal diseases. The figures are taken from reports received from State health officers. They are preliminary and are, therefore, subject to correction. It is hoped that the publication of these reports will stimulate more complete reporting of these diseases.

State	Syphilis		Gonorrhea	
	Cases reported during month	Monthly case rates per 10,000 population	Cases reported during month	Monthly case rates per 10,000 population
Alabama	320	1.19	85	0.32
Arizona	22	.49	131	2.89
Arkansas	537	2.87	221	1.18
California [1]				
Colorado [2]				
Connecticut [3]	224	1.36	96	.58
Delaware	90	3.73	52	2.16

See footnotes at end of table.

Cases of venereal diseases reported for April 1934—Continued

State	Syphilis		Gonorrhea	
	Cases reported during month	Monthly case rates per 10,000 population	Cases reported during month	Monthly case rates per 10,000 population
District of Columbia	148	2.99	89	1.80
Florida	302	1.94	50	.32
Georgia	563	1.93	337	1.16
Idaho	0		0	
Illinois	1,894	2.42	1,293	1.65
Indiana	146	.44	130	.40
Iowa [2]	117	.47	131	.53
Kansas	129	.68	63	.33
Kentucky	192	.73	303	1.14
Louisiana	209	.97	136	.63
Maine	42	.52	49	.61
Maryland	663	3.99	263	1.58
Massachusetts	289	.90	431	1.00
Michigan	483	.96	344	.68
Minnesota	379	1.46	304	1.17
Mississippi	1,056	5.16	1,501	7.33
Missouri	623	1.70	300	.82
Montana [3]	52	.97	13	.24
Nebraska	43	.31	57	.41
Nevada [2]				
New Hampshire	14	.30	14	.30
New Jersey	691	1.65	219	.52
New Mexico	76	1.75	25	.58
New York	4,855	3.74	1,139	.88
North Carolina	987	3.01	280	.85
North Dakota	27	.39	40	.58
Ohio [3]	599	.88	229	.34
Oklahoma [3]	134	.64	101	.48
Oregon	19	.19	59	.60
Pennsylvania [1]				
Rhode Island	45	.64	47	.67
South Carolina [3]	403	2.31	502	2.87
South Dakota	2	.03	17	.24
Tennessee	1,180	4.43	431	1.62
Texas	153	.25	27	.04
Utah [3]				
Vermont	19	.53	18	.50
Virginia	357	1.46	233	.95
Washington	160	1.00	194	1.21
West Virginia [1]				
Wisconsin [4]	33	.11	157	.52
Wyoming [2]				
Total	18,377	1.74	10,111	.96

[1] Have been reporting regularly, but no report received for current month.
[2] Not reporting.
[3] Incomplete.
[4] Only cases of syphilis in the infectious stage are reported.

NOTE.—Surveys in which all medical sources have been contacted in representative communities throughout the United States have revealed that the monthly rate per 10,000 population is 6.6 for syphilis and 10.2 for gonorrhea.

WEEKLY REPORTS FROM CITIES

City reports for week ended June 2, 1934

[This table summarizes the reports received regularly from a selected list of 121 cities for the purpose of showing a cross section of the current urban incidence of the communicable diseases listed in the table. Weekly reports are received from about 700 cities, from which the data are tabulated and filed for reference.]

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Smallpox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Maine:											
Portland	0	------	0	0	5	3	0	0	1	10	30
New Hampshire:											
Concord	0	------	0	8	2	0	0	1	0	3	7
Manchester	------	------	------	------	------	------	------	------	------	------	------
Nashua	0	------	------	23	------	0	0	------	0	0	------
Vermont:											
Barre	0	------	0	0	0	0	0	0	0	0	------
Burlington	0	------	0	8	0	9	0	0	0	0	8
Massachusetts:											
Boston	6	------	1	142	18	44	0	11	0	39	223
Fall River	0	------	0	2	0	2	0	3	0	3	24
Springfield	0	------	0	4	0	5	0	1	0	5	27
Worcester	1	------	0	1	9	14	0	2	0	11	------
Rhode Island:											
Pawtucket	0	------	0	0	0	0	0	0	0	0	14
Providence	3	------	0	3	2	14	0	1	0	22	46
Connecticut:											
Bridgeport	0	------	0	0	3	8	0	2	0	0	32
Hartford	------	------	------	------	------	------	------	------	------	------	------
New Haven	0	------	0	0	1	1	0	0	0	9	48
New York:											
Buffalo	1	------	1	40	25	19	0	10	0	19	156
New York	32	3	2	389	136	237	0	84	6	111	1,416
Rochester	0	------	0	3	4	55	0	1	0	9	63
Syracuse	0	------	0	46	7	14	0	0	0	52	52
New Jersey:											
Camden	2	1	0	7	1	5	0	0	0	3	28
Newark	0	3	0	42	3	18	0	2	0	24	32
Trenton	0	------	0	23	2	14	0	3	0	0	37
Pennsylvania:											
Philadelphia	5	1	1	241	21	93	0	23	3	51	443
Pittsburgh	11	2	1	195	17	52	0	7	0	22	140
Reading	0	------	0	4	1	4	0	2	0	11	25
Ohio:											
Cincinnati	3	2	0	6	9	30	0	4	0	14	117
Cleveland	5	11	1	308	19	94	0	11	0	51	199
Columbus	1	2	2	8	8	55	0	6	0	17	95
Toledo	1	------	0	160	3	54	0	3	0	71	61
Indiana:											
Fort Wayne	2	------	------	10	------	12	0	------	1	0	------
Indianapolis	1	------	0	274	12	5	0	6	0	36	------
South Bend	0	------	0	14	2	8	0	1	0	0	13
Terre Haute	1	------	0	1	3	1	0	2	0	0	19
Illinois:											
Chicago	0	2	4	666	61	252	0	50	1	124	687
Cicero	------	------	------	------	------	------	------	------	------	------	5
Springfield	0	------	0	18	3	6	0	0	0	11	18
Michigan:											
Detroit	5	3	0	157	29	132	0	33	0	67	290
Flint	1	------	0	6	2	39	0	2	0	15	34
Grand Rapids	0	------	0	10	0	22	0	1	0	1	36
Wisconsin:											
Kenosha	0	------	1	1	0	5	0	2	0	3	12
Madison	0	------	0	53	2	3	0	3	0	11	27
Milwaukee	2	------	0	226	2	144	0	2	0	66	104
Racine	0	------	0	2	0	6	0	0	0	8	17
Superior	0	------	0	8	0	0	0	0	0	0	13
Minnesota:											
Duluth	0	------	0	0	1	1	0	1	1	0	15
Minneapolis	1	------	2	28	5	19	0	0	0	12	92
St. Paul	0	------	0	10	8	6	0	2	0	23	78
Iowa:											
Davenport	0	------	------	7	------	1	0	------	0	1	------
Des Moines	0	------	------	16	------	10	0	------	0	0	31
Sioux City	0	------	------	115	------	5	0	------	0	7	------
Waterloo	1	------	------	0	------	1	0	------	0	1	------

City reports for week ended June 2, 1934—Continued

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Smallpox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Missouri:											
Kansas City											
St. Joseph	3		0	3	9	0	0	1	0	1	60
St. Louis	14	1	0	6	15	14	0	8	2	61	240
North Dakota:											
Fargo	0		0	2	0	1	0	0	0	21	3
Grand Forks	1			0		6	0		0	5	
South Dakota:											
Aberdeen	0			30		9	0		0	19	
Sioux Falls	0			5		0	0		0	0	6
Nebraska:											
Omaha	1		0	41	10	8	2	2	0	9	65
Kansas:											
Topeka											
Wichita	0		0	25	2	5	0	0	0	15	22
Delaware:											
Wilmington	0		0	26	3	1	0	1	0	5	26
Maryland:											1
Baltimore	4	1	2	875	10	28	0	11	2	88	198
Cumberland	0		0	9	1	0	0	1	0	0	15
Frederick	0		0	1	0	1	0	0	0	0	2
District of Columbia:											
Washington	10		0	33	12	7	0	12	1	25	150
Virginia:											
Lynchburg	0		0	58	1	0	0	0	0	24	8
Norfolk	0		0	9	2	2	0	0	1	6	31
Richmond	1		2	159	2	2	0	3	0	0	55
Roanoke	1		0	4	1	1	0	2	0	10	18
West Virginia:											
Charleston	0		0	29	1	0	0	0	1	1	16
Huntington	0			0		0	0		0	0	
Wheeling	0		2	10	0	17	0	0	0	2	18
North Carolina:											
Raleigh	0		0	12	0	0	0	0	0	20	15
Wilmington	0		0	14	0	1	0	0	1	21	11
Winston-Salem	0		0	3	0	1	0	2	0	0	11
South Carolina:											
Charleston	0	1	0	3	1	0	0	0	1	1	17
Columbia	0		0	0	1	0	0	0	0	0	25
Greenville	0		0	0	1	0	0	0	0	4	11
Georgia:											
Atlanta	1	1	1	7	5	2	0	3	3	4	77
Brunswick	0		0	0	0	0	0	0	0	0	5
Savannah	0	1	0	21	1	0	0	3	2	1	41
Florida:											
Miami	2		0	97	1	0	0	1	0	13	27
Tampa	0	1	1	63	0	0	0	1	1	0	16
Kentucky:											
Ashland											
Lexington	1		0	50	3	1	0	3	0	5	21
Louisville	1	2	0	169	6	14	0	4	0	21	82
Tennessee:											
Memphis	2		1	18	6	2	0	7	0	22	69
Nashville	1		0	2	2	0	0	2	0	11	42
Alabama:											
Birmingham	1	1	0	25	4	3	0	2	0	3	57
Mobile	0		1	6	1	0	0	1	0	3	21
Montgomery	2			123		1	0		0	2	
Arkansas:											
Fort Smith	5			0		0	0		0	6	
Little Rock	0		0	1	6	2	0	1	0	2	7
Louisiana:											
New Orleans	10	1	2	52	9	4	0	9	5	3	140
Shreveport	0		0	3	3	0	0	1	0	3	33
Oklahoma:											
Oklahoma City	2	10	1	0	6	1	0	3	0	0	37
Tulsa	0			0		1	0		0	4	
Texas:											
Dallas	2	1	1		2	1	0	2	1	15	43
Fort Worth	1		0	4	1	3	0	1	0	4	22
Galveston	1		0	1	2	0	0	1	0	0	13
Houston	5		0	2	7	5	0	4	0	0	77
San Antonio	0		1	3	4	0	1	11	1	0	77

City reports for week ended June 2, 1934—Continued

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Smallpox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Montana:											
Billings	0	------	0	0	0	0	0	0	0	3	6
Great Falls	0	------	0	2	0	0	0	0	0	3	8
Helena	0	------	0	0	0	0	0	0	0	0	5
Missoula	0	------	0	0	1	1	0	0	1	0	10
Idaho:											
Boise	0	------	0	6	0	0	0	0	0	0	5
Colorado:											
Denver	2	31	0	576	2	8	0	2	0	37	63
Pueblo	0	------	0	36	2	5	0	0	0	5	7
New Mexico:											
Albuquerque	0	------	0	8	1	1	0	2	0	0	7
Utah:											
Salt Lake City	0	------	0	12	3	6	1	2	0	93	37
Nevada:											
Reno	0	------	0	1	3	0	0	0	0	0	4
Washington:											
Seattle	0	------	4	12	8	27	0	3	1	27	76
Spokane	0	------	0	------	1	4	0	0	2	18	33
Tacoma	0	------	0	93	0	1	0	1	0	12	26
Oregon:											
Portland	0	------	0	14	3	23	0	4	0	11	70
Salem	0	1	--------	2	-------	1	0	-------	0	1	--------
California:											
Los Angeles	13	18	1	15	6	23	0	27	0	32	278
Sacramento	0	------	0	3	0	1	0	3	0	1	32
San Francisco	0	2	0	277	4	12	0	4	0	7	132

State and city	Meningococcus meningitis		Poliomyelitis cases	State and city	Meningococcus meningitis		Poliomyelitis cases
	Cases	Deaths			Cases	Deaths	
New York:				Missouri:			
Buffalo	0	1	0	St. Joseph	0	1	0
New York	1	2	1	St. Louis	2	1	0
Syracuse	1	0	0	Georgia:			
New Jersey:				Savannah	0	0	1
Newark	0	1	0	Louisiana:			
Pennsylvania:				New Orleans	1	1	1
Philadelphia	1	1	0	Oklahoma:			
Pittsburgh	1	1	0	Oklahoma City	1	0	0
Ohio:				Idaho:			
Cleveland	1	0	0	Boise	0	0	1
Indiana:				Colorado:			
Indianapolis	0	1	0	Denver	0	1	0
Illinois:				Washington:			
Chicago	12	3	0	Spokane	0	0	2
Michigan:				California:			
Detroit	1	1	0	Los Angeles	0	0	110
Minnesota:				San Francisco	0	0	4
Duluth	0	1	0				

Lethargic encephalitis.—Cases: Little Rock, 1; San Francisco, 1.
Pellagra.—Cases: Baltimore, 2; Charleston, S.C., 5; Savannah, 4; Miami, 1; Louisville, 1; Birmingham, 2; Montgomery, 1.
Typhus fever.—San Antonio, 1 case.

FOREIGN AND INSULAR

CANADA

Provinces—Communicable diseases—2 weeks ended May 19, 1934.—During the 2 weeks ended May 19, 1934, cases of certain communicable diseases were reported by the Department of Pensions and National Health of Canada, for 7 provinces, as follows:

Disease	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario [1]	Saskatchewan	British Columbia	Total
Cerebrospinal meningitis				1			1	2
Chicken pox				129	176	50	67	422
Diphtheria		4		25	8	11	1	49
Dysentery				48				48
Erysipelas		3		12	5	4	2	26
Influenza		9		8	13	1	50	81
Measles		82	11	624	39	100	5	861
Mumps		2			144	71	74	291
Paratyphoid fever					1			1
Pneumonia		4			9	13	8	34
Poliomyelitis				2		1		3
Scarlet fever		21	2	113	161	15	146	458
Trachoma						3	6	9
Tuberculosis	8	4	14	122	69	38	49	304
Typhoid fever		1	2	32	4	5	1	45
Undulant fever							2	2
Whooping cough		28		167	185	42	34	456

[1] No report was received from Ontario for the week ended May 12, 1934.

NOTE.—Manitoba and Alberta did not report for the weeks ended May 12 and May 19, 1934.

Quebec Province—Communicable diseases—Two weeks ended June 2, 1934.—The Bureau of Health of the Province of Quebec, Canada, reports cases of certain communicable diseases for the 2 weeks ended June 2, 1934, as follows:

Disease	Cases	Disease	Cases
Cerebrospinal meningitis	4	Ophthalmia neonatorum	1
Chicken pox	171	Poliomyelitis	3
Diphtheria	25	Scarlet fever	125
Dysentery (amoebic)	1	Tuberculosis	79
Erysipelas	11	Typhoid fever	55
German measles	12	Undulant fever	2
Influenza	2	Whooping cough	236
Measles	591		

FRANCE

Vital statistics—Years 1932 and 1933.—During the years 1932 and 1933, births, deaths, marriages, and divorces were reported in France, as follows:

	1932	1933		1932	1933
Number of marriages	314,878	315,466	Stillbirths	27,537	26,025
Number of divorces	21,848	20,699	Number of deaths	660,882	661,082
Number of live births	722,246	682,680	Deaths under 1 year of age	55,177	51,015

NOTE.—The estimated population for France for the midyear 1932 is 41,840,000.

YUGOSLAVIA

Communicable diseases—April 1934.—During the month of April 1934 certain communicable diseases were reported in Yugoslavia, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Anthrax	26	6	Poliomyelitis	1	-------
Cerebrospinal meningitis	11	11	Scarlet fever	206	5
Diphtheria and croup	502	59	Sepsis	7	4
Dysentery	15	1	Tetanus	38	16
Erysipelas	151	9	Typhoid fever	89	9
Measles	967	21	Typhus fever	445	31
Paratyphoid fever	5	-------			

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

(NOTE.—A table giving current information of the world prevalence of quarantinable diseases appeared in the PUBLIC HEALTH REPORTS for May 25, 1934, pp. 636-648. A similar cumulative table will appear in the PUBLIC HEALTH REPORTS to be issued June 29, 1934, and thereafter, at least for the time being, in the issue published on the last Friday of each month.)

Cholera

Philippine Islands.—During the week ended June 9, 1934, no cholera was reported in the Philippine Islands.

Typhus Fever

Belgian Congo.—During the week ended May 19, 1934, 114 cases of typhus fever with 7 deaths were reported in the Territories of Ruanda-Urundi, Belgian Congo.