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CURRENT PREVALENCE OF COMMUNICABLE DISEASES IN THE UNITED STATES¹

September 10–October 7, 1933

The prevalence of certain important communicable diseases, as indicated by weekly telegraphic reports from State health departments to the United States Public Health Service, is summarized in this report. The underlying statistical data are published weekly in the Public Health Reports, under the section entitled "Prevalence of Disease."

Poliomyelitis.—For the country as a whole, the number of cases of poliomyelitis dropped from 1,412 for the 4 weeks ended September 7 to 1,271 for the current 4-week period, but still remained considerably in excess of that for the corresponding period last year and more than twice the number reported for this period in 1929. For the corresponding 4 weeks in 1931 and 1930, both epidemic years, the numbers of cases were 4,122 and 2,236, respectively.

In the New England and Middle Atlantic States, where the disease has been most prevalent, the number of cases dropped from 954 for the preceding 4-week period to 682 for the current period. Massachusetts, New York, and Pennsylvania all reported appreciable decreases. In New Jersey the number of cases equaled that for the preceding 4 weeks. In Maine and Connecticut, however, an increase of 25 percent in the number of cases was reported. One other area, the East North Central, reported a 25 percent decrease. All other areas reported increases, and in some the incidence was slightly higher than might be expected at this time.

In the East North Central States the number of cases (223) was 2.4 times that for the corresponding period last year; in the West North Central group the number (175) was 3.2 times that of last year, while in the Mountain region the 17 cases reported for the current period was three times the number reported last year, and the 62 cases reported from the Pacific area was twice that of last year. Maryland

¹ From the Office of Statistical Investigations, U.S. Public Health Service. The numbers of States included for the various diseases are as follows: Typhoid fever, 48; poliomyelitis, 48; meningococcus meningitis, 48; smallpox, 48; measles, 47; diphtheria, 48; scarlet fever, 48; influenza, 38 States and New York City. The District of Columbia is counted as a State in these reports. These summaries include only the 8 important communicable diseases for which the Public Health Service receives regular weekly reports from the State health officers.

and West Virginia, with 14 and 22 cases, respectively, seem responsible for a 25 percent increase in the South Atlantic area. The South Central area reported only a normal seasonal incidence.

Meningococcus meningitis.—The number of cases of meningococcus meningitis (130) reported for the current 4-week period was approximately the same as that reported for the preceding 4 weeks. As compared with recent years the incidence for the country as a whole was the lowest for this period in the 5 years for which data are available. The disease was considerably less prevalent than in recent years in the New England, Middle Atlantic, North Central, Mountain, and Pacific areas, while in the South Atlantic States the number of cases (26) was the highest reported for this period in recent years. In the South Central areas the incidence closely approximated that of the preceding 4 years.

Smallpox.—For the first time during the current year the incidence of smallpox for a 4-week period reached the level of the corresponding period last year. The number of cases reported for the 4 weeks ended October 7 was 131, as compared with 130, 335, and 576 for the same period in 1932, 1931, and 1930, respectively. The appearance of the disease in several States in the West North Central area and a rather high incidence in Texas and California seemed mostly responsible for the upturn at this time. In the 3 preceding years the incidence during this period was the lowest recorded for the year, the rise not appearing until the next 4-week period.

Influenza.—The number of cases of influenza reported for the current period was 2,023, as compared with 2,593, 1,683, and 1,302 for the corresponding period in the years 1932, 1931, and 1930, respectively. Only the normal seasonal incidence was reported from the various geographic areas. The decrease from last year's figure was mostly due to the lower incidence during the current period in the South Atlantic, West South Central, and Mountain areas, where the disease was unusually prevalent at this time last year.

Typhoid fever.—The reported incidence of typhoid fever was the lowest for this period in recent years. For the 4 weeks ended October 7 the number of cases was 3,093, as against 3,553, 4,167, and 3,812 for the corresponding weeks in the years 1932, 1931, and 1930, respectively. This favorable situation existed in practically all sections of the country.

Diphtheria.—Reports indicated only a normal seasonal increase of diphtheria during the current 4-week period. Compared with recent years the rate of increase was very favorable, slightly below that of 1932 and 1931, but a little higher than in 1930. For the 4 weeks ended October 7 there were 4,830 cases reported, as compared with 5,695, 6,267, and 3,962 for the corresponding period in the years 1932, 1931, and 1930, respectively. Only one geographic area, the South

Atlantic, reported an increase over last year's figure for the same period.

Measles.—The number of cases of measles (2,026) reported for the current 4-week period closely approximated the average for the corresponding period in the 4 preceding years. All areas except the East North Central reported the lowest incidence for the current year during this 4-week period. In the East North Central area the lowest level for the year apparently was reached during the preceding 4-week period.

Scarlet fever.—There were reported 8,107 cases of scarlet fever, an increase of approximately 3,700 over the preceding 4-week period, to which all regions contributed. As compared with previous years, the incidence closely approximated that for the corresponding period last year (8,293 cases) but was considerably in excess of the incidence in the years 1931, 1930, and 1929, in which years the numbers of cases totaled 6,428, 5,220, and 6,198, respectively. The situation in practically all geographic areas was similar to that described for the whole reporting area.

Mortality, all causes.—Deaths from all causes in large cities, as reported by the Bureau of the Census, for the current 4-week period averaged 9.8 per thousand inhabitants (annual basis), as compared with 9.5, 10.2, and 10.4 for the corresponding periods in the years 1932, 1931, and 1930, respectively. During each of the four preceding 4-week periods the death rate was approximately equal to that of the corresponding periods in 1932. Aside from periods when influenza was epidemic, the death rate has rather steadily decreased since 1929. It is impossible to say at present whether the past few months mark a change in this trend or only a temporary slackening in the decrease. The rate is still well below rates for the corresponding periods in 1931 and 1930, both of which years had a low mortality.

INVESTIGATION OF MITOGENETIC RADIATION BY MEANS OF A PHOTOELECTRIC COUNTER TUBE

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Since A. Gurwitsch (1), in 1923, announced his theory of mitogenetic radiation, an ever increasing number of papers have been published yearly in various journals (2). Most of these papers deal with the biological side of this problem, presenting more or less successfully experimental proof of the existence of such radiation, while only a few report completely negative results (3). This problem has also been attacked from the physical side. Thus, two investigators, Rajewsky (4), and Frank and Rodionow (5), report positive findings

of this radiation by physical means, while others, Schreiber and Friedrich (6), and Locher (7), with a similar experimental arrangement, could not detect any trace of it at all.

The present paper deals with the physical side of the problem.

According to Gurwitsch's theory, the division of a cell is accompanied by the emission of radiation, which in turn will stimulate the division of other cells by which it is absorbed. When yeast is used as a biological test-object for the radiation, the increase in the number of budding cells in comparison with a control gives a measure of the effect. A rough estimate of the intensity of the radiation can be made as follows: The diameter of a yeast cell is approximately 6 microns. Thus, we have, the cells being packed closely together, approximately 30,000 cells per mm^2 . The number of budding cells in normal yeast is, according to Gurwitsch, about 10 percent of the total number. Half an hour's experiment with a mitogenetic inductor may give an increase in the number of budding cells of 50 percent. This would mean for our example 1,500 budding cells. Assuming that each radiation quantum that falls upon the yeast is absorbed and furnishes the stimulus for the division of one cell, we have as intensity of the mitogenetic radiation in our example 1,500 quanta per mm^2 per 30 minutes, or approximately 80 quanta per cm^2 per second. But it is highly improbable that each quantum absorbed by any portion of a cell should give rise to a cell division. Assuming an "efficiency" of $\frac{1}{10}$ for this process (and this fraction is probably still too high; e.g. the "efficiency" of the photoelectric process is about $\frac{1}{1000}$), we obtain as a possible intensity of the mitogenetic radiation a value of at least 1,000 quanta per cm^2 per second. We have neglected here the possible influence of secondary mitogenetic radiation within the irradiated specimen; this must be small, according to the data available for yeast which has not been irradiated. According to an estimate by Frank and Rodionow, the intensity of the mitogenetic radiation lies between 100 and 1,000 quanta per cm^2 per second (8).

Two physical methods are available to measure such small intensities. First, the photographic plate, and second, the photoelectric cell. To get a just perceptible blackening of a sensitive photographic emulsion with a radiation intensity of about 100 quanta per cm^2 per second, a time of exposure of about 200 hours would be necessary. A photoelectric cell of medium sensitivity will have an efficiency of $\frac{1}{1000}$ approximately for the wave-length of its maximum sensitivity, i.e. for 1,000 impinging light quanta 1 photoelectron will be liberated. With a photoelectric cell of the customary type connected into a circuit with a battery and an electrometer or galvanometer, such small currents cannot be measured. However, they can be measured by combining a photoelectric cell with a Geiger counter

tube. A Geiger counter tube consists of a fine wire axial in a metallic cylinder under a gas pressure of about 5 cm of mercury. By applying a negative potential of, say, 1,500 volts to the metallic cylinder and grounding the wire over a high resistance, an electron liberated from the walls of the tube by any kind of radiation will travel toward the wire, producing on its way ions by impact, which results in a relatively strong current impulse through the high resistance to ground. This current impulse can be recorded either by a string electrometer or by a suitable amplifier with recording device. To make such a counter tube sensitive to light, one has only to cover the walls of the tube with a photoelectric metal and to provide a window for the light. This method was first used in testing for mitogenetic radiation by Rajewsky (4); the other authors (5), (6), (7), previously mentioned used arrangements of a similar kind.

A counter tube with a window was also used in the experiments described here. In order to obtain highest sensitivity and constant working conditions over a long period of time, the counter tubes used consisted of a thin-walled quartz tube (wall thickness approximately 1 mm, length 10 cm, diameter 2 cm) of high transparency for ultraviolet light. The transparency of the tube was tested with a quartz spectrograph and it was found that absorption in the quartz was negligible down to 2,200 Å units, the limit of the spectrograph. An area of 6 to 7 cm² of the wall was flattened out to serve as window. The wire consisted of tantalum, 0.2 mm diameter, and was held by 2 thick copper wires which were held in place by 2 quartz capillaries on the ends of the tube. These copper leads were sealed vacuum-tight to the glass by silver chloride cement. The tube was exhausted by a mercury diffusion pump with liquid air trap and baked several times at approximately 1,200° C. Then spectroscopically pure cadmium was distilled in, the wire and window were heated to remove any cadmium deposit, and pure argon was filled in to a pressure of 4 to 5 cm of Hg. Counter tubes prepared this way do not show any change in sensitivity with time.

Cadmium, although not a very sensitive photoelectric metal, was nevertheless chosen, because its maximum sensitivity lies at shorter wave lengths than 2,300 Å units in a region to which, according to Gurwitsch (9), the mitogenetic spectrum belongs. A further advantage is that visible stray light of longer wave lengths will not affect the counter tube, since the threshold sensitivity of a cadmium counter tube was found to lie between 3,400 and 3,600 Å units. Counter tubes with zinc as photoelectric metal were also made. They were similar to the cadmium tubes, both in sensitivity and in threshold value.

The counter tubes were connected in a circuit with an amplifier operating a mechanical counter and a string electrometer in connec-

tion with a photographic recorder. In this way two sets of records could be obtained for every experiment. The accompanying diagram gives the experimental arrangement and data of the photoelectric hook-up.

As the counter tube described above is sensitive not only to ultraviolet radiation but also to radiation coming from radioactive substances in the ground, air, and walls of the building as well as to cosmic radiation, every counter tube will give a residual effect, i.e., the apparatus will record a certain number of counts per minute due to electrons liberated by these radiations, the number of which depends upon the cross-sectional area of the tube and its sensitivity. This "background" radiation has to be taken into account in every experiment with another source of radiation. It is desirable to cut it down as much as possible, especially if we wish to measure extremely small amounts of another radiation which will produce only a few additional counts in a given time. For this reason, the counter was enclosed in a lead box so that it was surrounded on all sides by 10 cm of lead. Although this cuts out only the softer components of the background radiation, nevertheless the shield effected a reduction of approximately 50 percent in the number of counts.

Experiments with a biological object as a possible source of radiation were carried out in the following way: First the effect of the background radiation was measured by counting the number of counts during a certain time, usually 30 minutes. Then the biological object was placed upon the window and the number of counts measured during the same time, and finally the test for the background radiation was repeated after removing the biological material. It seemed inadvisable to extend the time of the biological measurement much beyond 30 minutes, as it was difficult to keep the tissue active for a longer period of time under the prevailing conditions. However, numerous checks of the tissues used, both before and after the experiments, showed that the tissues remained alive and healthy during 30-minute exposures.

The number of counts produced by the counter tube was, on an average, approximately 20 per minute, i.e., in half an hour about 600 counts were recorded. As the liberation of an electron by radiation from the wall of the counter tube is governed by statistical laws, the observed number of counts of 600 as measured, or the radiation intensity, is subject to the statistical error given by $\sqrt{600}$, or ± 24.5 counts. If we add to the background radiation another radiation from a very weak source we can detect this radiation only if it records, together with the background radiation, a number of counts in the same time which is larger than the number produced by the background radiation alone plus its statistical error. We shall arbitrarily assume that a number of counts which exceeds by twice the statistical

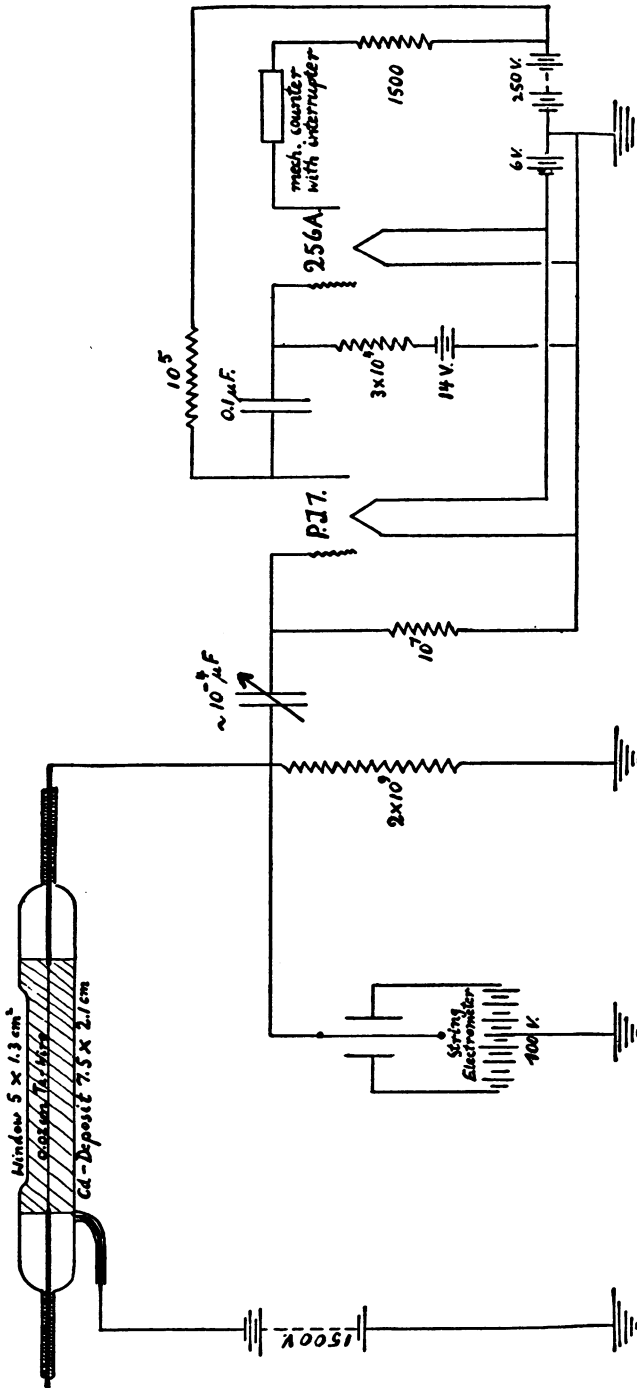


Diagram of the photoelectric hook-up.

error of the number of counts produced by the background radiation in the same time is an indication of the presence of another radiation and will call this the "minimum effect." Even then only a series of observations all of which show an effect of the same order of magnitude will give us definite proof of the existence of an additional radiation. These considerations show the importance of cutting down the background radiation and extending the time of an experiment, as both factors will increase the sensitivity of the arrangement.

From the minimum effect of 50 additional counts (twice the statistical error) in 30 minutes, it is possible to calculate the theoretical number of light quanta which one should be able to detect. Fifty counts in 30 minutes correspond to 0.03 counts per second. The photoelectric efficiency being of the order of magnitude of 1:1000, 0.03 counts per second will be produced by 30 quanta per second passing through the window. The area of the window being approximately 6 cm², we obtain a theoretical number of 5 light quanta per cm² per second which we should be able to detect. This is far below the theoretical minimum intensity of the mitogenetic radiation.

The experimental calibration of the counter tubes was carried out in the following way: By means of a Bausch and Lomb quartz monochromator, the intensity of the Hg line $\lambda = 2536 \text{ \AA}$ units was measured with a Coblentz vacuum thermopile calibrated in absolute units against a standard lamp. Then the intensity of the line was decreased to $1:9 \times 10^9$ of its value by putting between the mercury burner and the front slit of the monochromator an absorption vessel containing a solution of K₂Cr₂O₇. The extinction coefficient of K₂Cr₂O₇ was carefully determined with the thermopile by using a series of more dilute solutions. In addition, checks of the validity of Beer's law were made, although it could be assumed that Beer's law was valid for the concentration of 8 grams in 10 liters of water used to produce the above intensity reduction of $1:9 \times 10^9$. It was found that the law was valid within the experimental error. By removing the thermopile and placing the counter tube behind the exit slit and cutting down the intensity of the beam with the K₂Cr₂O₇ filter, the number of counts in a given time produced by this radiation could be measured, and from these data the minimum effect could be determined as above. For the mercury line $\lambda = 2536 \text{ \AA}$ units, 50 additional counts in 30 minutes were produced by an intensity of 10 to 15 quanta per cm² per second falling upon the window of the counter tube. Although it is difficult to make even an estimate of the probable error of this value, since the errors of so many single measurements contribute to the final error, it can be said at least that the order of magnitude is correct. As the line 2536 Å units lies on the ascending part of the curve for the photoelectric sensitivity of cadmium, the number of

quanta required to produce the minimum effect for the shorter wave lengths in the region of the mitogenetic radiation must be still smaller.

The biological material tested for mitogenetic radiation consisted mainly of onion-base pulp and tips of onion roots. Mouse sarcoma 180, mouse embryo tissue, and tetanized frog muscle, all alleged to be excellent radiators, were likewise tested. The results of some of the experiments are given in table 1.

TABLE 1.—Results of some of the tests

Biological material	Time in minutes	Number of counts			Effect
		Control	With biological object	Control	
Onion-base pulp.....	30	529 ± 23.0	523 ± 23.0	534 ± 23.0	None.
Do.....	30	562 23.6	562 23.6	516 22.7	None.
Do.....	30	552 23.5	534 23	497 22.3	None.
Mouse-embryo.....	30	543 23.3	552 23.5	515 22.7	None.
Do.....	30	646 25.4	611 24.7	617 24.8	None.
Onion-base pulp.....	30	535 23.1	521 22.8	527 22.9	None.
Mouse-embryo.....	30	507 22.5	517 22.7	543 23.3	None.
Onion root.....	40	643 25.8	643 25.3	641 25.3	None.
Do.....	40	981 31.8	977 31.2	898 29.9	None.
Do.....	40	1,112 33.3	1,092 33.0	1,159 34.0	None.
Frog muscle (tetanized).....	30	656 25.6	673 25.9	669 25.8	None.
Mouse sarcoma.....	40	504 22.4	521 22.8	624 24.9	None.
Do.....	40	597 24.4	582 24.1	625 25.0	None.

The data given in table 1 show that no mitogenetic radiation could be detected. When the experiments were started, positive effects were found at first. In all cases, however, it could be shown that these were due to a static effect of the biological material upon the field in the counter tube, e.g., it was possible to produce a positive effect with such inert substances as distilled water. Whenever tube and window were properly shielded against static influences, no positive effect could be observed.

Thus, in these experiments, no physical proof for the existence of the mitogenetic radiation could be found, although the experimental arrangement was of such sensitivity that it should have been possible to detect still weaker intensities. The discrepancy between these experiments and those of the investigators who confirmed the existence of mitogenetic radiation by means of a photoelectric counter tube may perhaps be explained by the static effects mentioned above.

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- (9) Ibid., p. 34.

COURT DECISION RELATING TO PUBLIC HEALTH

Clerk of courts, who is local registrar of vital statistics, held entitled to fees under vital statistics act in addition to his regular salary.—(South Dakota Supreme Court; *Minnehaha County v. Foster*, 249 N.W. 688; decided July 18, 1933.) Prior to 1919, the vital statistics law expressly provided that the fees payable thereunder to the clerks of courts or local registrars should be retained by the clerks in addition to their regular salaries. In 1919 a statute was enacted which related to the salaries of county officers, including the clerk of courts, and which provided therein "That the salaries hereinbefore provided shall be full compensation for all services rendered by such county officials under any and all laws of this State, and that all fees and per diem collected under the laws of this State by any such county officials shall be paid by such county officials to the county treasurer of their respective counties." Following the passage of this law, the supreme court in 1920 rendered a decision that the clerks of courts were not entitled to retain the vital statistics fees. This decision was followed by a 1920 law which gave the clerks of courts the right to retain the said fees as their own. In 1931 the legislature enacted a comprehensive vital statistics law which expressly repealed the 1920 law above mentioned and which did not contain any express provision to the effect that the clerks of courts should be entitled to receive the vital statistics fees in addition to their salaries. Among the provisions of the 1931 law were the following:

[Sec. 4.] The clerk of courts shall be entitled to a fee of 10 cents for each abstract of marriage, divorce, and naturalization record transmitted by him. Such fees to be paid out of the general fund of the county as herein provided.

[Sec. 19.] Each local registrar [who is the clerk of courts] shall be paid the sum of 25 cents for each birth certificate and each death certificate properly and completely made out and registered with him and correctly recorded and promptly returned by him to the State director of vital statistics as required by this act. * * * All amounts payable to a local registrar under the provisions of this section shall be paid by the treasurer of the county in which the registration district is located, upon certification by the State director of vital statistics.

In an action wherein a county sought to recover from the defendant clerk of courts and local registrar of vital statistics the fees collected under the 1931 law, the Supreme Court stated that it was of the opinion that, by inserting the above-quoted provisions in the 1931

law, the legislature clearly evidenced an intention that the clerk should be paid the fees in addition to his regular salary. The court closed its opinion with the following:

The situation which confronted the court in the Risty case was, therefore, that the legislature had enacted the said chapter 148, laws 1919, at a time when the clerks of courts were being paid these fees in addition to their regular salaries. The situation which now confronts the court is that the legislature, at a time 12 years after the enactment of chapter 148, laws 1919, has enacted a law which provides that the county treasurer (the same official to whom the 1919 law says the fees collected by a county officer shall be paid) shall pay to the clerk of courts the fees provided under the provisions of the 1931 law. It does not seem reasonable to conclude that the legislature intended to provide by the 1931 law that the county treasurer should pay these fees to the clerk of courts in order that the clerk of courts might, under the provisions of the 1919 law, repay these fees to the county treasurer. We, therefore, conclude that, when the legislature again provided in 1931 that these fees should be paid to the clerk of courts by the county treasurer, it was the intent of the legislature that these fees should be retained by the clerk.

DEATHS DURING WEEK ENDED OCT. 7, 1933

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

	Week ended Oct. 7, 1933	Correspond- ing week 1932
Data from 85 large cities of the United States:		
Total deaths.....	6,978	6,847
Deaths per 1,000 population, annual basis.....	9.8	9.8
Deaths under 1 year of age.....	558	575
Deaths under 1 year of age per 1,000 estimated live births (81 cities).....	49	48
Deaths per 1,000 population, annual basis, first 40 weeks of year.....	10.9	11.1
Data from industrial insurance companies:		
Policies in force.....	67,628,120	70,292,218
Number of death claims.....	11,218	11,013
Death claims per 1,000 policies in force, annual rate.....	8.6	8.2
Death claims per 1,000 policies, first 40 weeks of year, annual rate.....	9.8	9.6

PREVALENCE OF DISEASE

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

UNITED STATES

CURRENT 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 October 14, 1933, and October 15, 1932

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Oct. 14, 1933, and Oct. 15, 1932

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932
New England States:								
Maine.....	2	3			2		0	0
New Hampshire.....	1					3	0	0
Vermont.....		2				1	0	0
Massachusetts.....	21	19		1	67	32	0	1
Rhode Island.....		3			1		0	0
Connecticut.....	3	2	2	2	4	4	0	0
Middle Atlantic States:								
New York.....	55	31	13	12	43	85	1	2
New Jersey.....	15	22	7	12	15	69	1	2
Pennsylvania.....	43	85			35	97	2	4
East North Central States:								
Ohio.....	78	101	80	66	12	31	1	1
Indiana.....	73	78	45	10	4	2	2	2
Illinois.....	44	113	4	9	13	15	3	3
Michigan.....	33	21	4	23	11	48	0	0
Wisconsin.....	2	15	29	19	25	54	0	0
West North Central States:								
Minnesota.....	19	16	1		1	60	0	1
Iowa.....	11	25			4	1	0	1
Missouri.....	111	91	2	5	4	5	1	1
North Dakota.....	13				4	16	0	0
South Dakota.....	2	3	2		4		0	0
Nebraska.....	3	30		6	3	2	0	1
Kansas.....	20	46		4	3	5	0	3
South Atlantic States:								
Delaware.....		4			1	2	0	1
Maryland.....	27	27	6	3	2	2	2	0
District of Columbia.....	7	6		1	1		0	0
Virginia.....	122	75			15	11	1	0
West Virginia.....	115	42	18	16	1	4	1	0
North Carolina.....	171	94	10	9	19	11	0	1
South Carolina.....	43	33	244	317	51	17	0	0
Georgia.....	66	76		52	49	24	0	1
Florida.....	9	28		1	1	1	0	0
East South Central States:								
Kentucky.....	131	88				48	1	0
Tennessee.....	118	110	30	41	36		1	1
Alabama.....	61	89	13	4	6		1	1
Mississippi.....	55	49					3	0

See footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Oct. 14, 1933, and Oct. 15, 1932—Continued

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932
West South Central States:								
Arkansas.....	20	46	2	32	7	1	0	0
Louisiana.....	30	43	2	11	4	1	0	0
Oklahoma ¹	63	120	22	27	10	1	0	0
Texas ¹	202	147	188	36	4	3	3	0
Mountain States:								
Montana.....	1	—	—	1	1	64	0	1
Idaho.....	1	8	1	—	—	—	0	0
Wyoming.....	1	—	—	1	—	1	0	0
Colorado.....	3	9	—	—	—	7	0	0
New Mexico.....	4	3	—	6	11	1	0	0
Arizona.....	3	3	6	—	6	—	0	0
Utah ¹	4	4	2	1	13	2	0	1
Pacific States:								
Washington.....	7	9	—	57	18	3	1	0
Oregon.....	1	1	16	37	8	12	0	0
California.....	33	49	34	123	106	12	2	3
Total	1,842	1,869	753	945	623	761	28	35

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932
New England States:								
Maine.....	3	5	5	11	0	0	4	3
New Hampshire.....	1	0	6	20	0	0	0	1
Vermont.....	7	1	17	6	0	0	0	0
Massachusetts.....	8	0	113	132	0	0	3	3
Rhode Island.....	0	0	11	9	0	0	1	1
Connecticut.....	2	1	39	27	0	0	2	2
Middle Atlantic States:								
New York.....	40	13	164	196	0	0	19	40
New Jersey.....	18	12	74	62	0	0	7	10
Pennsylvania.....	18	48	252	209	0	0	51	34
East North Central States:								
Ohio.....	26	2	425	329	0	8	48	36
Indiana.....	2	1	125	72	0	1	13	20
Illinois.....	12	5	189	215	0	1	23	42
Michigan.....	8	4	148	189	0	0	13	19
Wisconsin.....	2	1	39	41	4	0	1	4
West North Central States:								
Minnesota.....	19	4	59	37	3	0	3	5
Iowa ¹	3	5	42	42	1	1	3	12
Missouri.....	0	0	95	108	0	0	3	13
North Dakota.....	8	0	17	4	0	1	2	3
South Dakota.....	2	0	16	8	0	0	2	2
Nebraska.....	0	3	15	40	0	2	0	0
Kansas.....	2	0	108	72	0	1	10	3
South Atlantic States:								
Delaware.....	0	1	8	3	0	0	3	3
Maryland.....	1	2	49	63	0	0	19	27
District of Columbia.....	0	2	14	13	0	0	4	0
Virginia ¹	3	3	114	69	0	0	29	33
West Virginia.....	1	0	79	53	0	0	30	35
North Carolina ¹	1	1	126	103	0	0	11	8
South Carolina ¹	0	1	9	13	0	0	19	21
Georgia ¹	0	0	21	15	0	0	15	24
Florida.....	0	0	0	10	0	0	5	6
East South Central States:								
Kentucky.....	1	2	165	82	0	1	26	38
Tennessee.....	3	1	125	69	0	0	27	20
Alabama ¹	0	2	49	59	0	0	11	21
Mississippi.....	0	2	40	41	0	0	11	10

See footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Oct. 14, 1933, and Oct. 15, 1932—Continued

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932	Week ended Oct. 14, 1933	Week ended Oct. 15, 1932
West South Central States:								
Arkansas.....	0	0	7	30	0	0	6	17
Louisiana.....	0	0	14	12	0	0	13	24
Oklahoma ¹	1	0	35	44	0	1	33	29
Texas ²	0	8	29	49	4	4	8	16
Mountain States:								
Montana.....	0	0	10	7	0	4	1	7
Idaho.....	0	0	0	0	1	0	0	5
Wyoming.....	1	0	3	8	0	0	0	1
Colorado.....	2	0	22	21	0	0	10	5
New Mexico.....	0	0	17	15	0	0	12	10
Arizona.....	0	2	6	12	0	0	3	0
Utah ³	0	0	7	6	0	0	2	0
Pacific States:								
Washington.....	4	14	25	24	2	1	2	4
Oregon.....	0	1	26	24	1	1	2	2
California.....	4	3	154	90	5	2	11	6
	203	150	3, 113	2, 764	21	29	521	625

¹ New York City only.
² Week ended earlier than Saturday.
³ Rocky Mountain spotted fever, week ended Oct. 14, 1933: Maryland, 1 case.
⁴ Typhus fever, week ended Oct. 14, 1933, 47 cases, as follows: Virginia, 1; North Carolina, 1; South Carolina, 1; Georgia, 17; Alabama, 24; Texas, 3.
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
<i>August 1933</i>										
Colorado.....	1	13			15		1	32	3	37
<i>September 1933</i>										
Colorado.....	2	12			27		1	39	4	63
Florida.....		30	2	234	4	7	1	8	0	7
Georgia.....	4	216	104	1, 108	89	17	2	65	1	146
Indiana.....	7	123	142	5	7		10	285	1	76
Iowa.....		51			5		13	125	0	34
Maine.....		1	9		7		24	22	0	20
Michigan.....	5	58	10	16	65		24	372	1	92
Nebraska.....	2	16			7		7	56	0	9
New Hampshire.....							7	29	0	1
New York.....	7	141		16	214		469	451	0	177
North Carolina.....	4	383	116		109	38	8	298	0	76
Ohio.....	3	155	122	17	40		128	729	0	228
Tennessee.....	2	285	64	1, 297	36	21	25	265	1	252
West Virginia.....	6	274	72		70	1	28	355	2	253
Wyoming.....			3		12		4	13	0	3

August 1933		September 1933—Continued		September 1933—Continued	
Colorado:	Cases	Lethargic encephalitis—	Cases	Septic sore throat—Contd.	Cases
Chicken pox	17	Continued.		Tennessee	22
Impetigo contagiosa	1	Iowa	24	Wyoming	5
Mumps	10	Maine	2	Tetanus:	
Paratyphoid fever	2	Michigan	64	Maine	1
Undulant fever	1	Nebraska	28	Michigan	3
Vincent's angina	2	New York	24	New York	3
Whooping cough	89	Ohio	35	Ohio	9
		Tennessee	5	Tennessee	4
		West Virginia	2	Trachoma:	
September 1933		Mumps:		Georgia	4
Chicken pox:		Colorado	23	Michigan	1
Colorado	26	Florida	3	North Carolina	2
Florida	1	Georgia	13	Ohio	3
Georgia	5	Indiana	7	Tennessee	30
Indiana	50	Iowa	8	Trichinosis:	
Iowa	13	Maine	20	New York	17
Maine	39	Michigan	43	Tularaemia:	
Michigan	106	Nebraska	10	Georgia	2
Nebraska	18	Ohio	27	Ohio	1
New York	176	Tennessee	22	Tennessee	2
North Carolina	20	West Virginia	2	Wyoming	2
Ohio	140	Wyoming	3	Typhus fever:	
Tennessee	17	Ophthalmia neonatorum:		Florida	11
West Virginia	19	New York	4	Georgia	96
Wyoming	1	North Carolina	1	North Carolina	3
Conjunctivitis:		Ohio	62	Ohio	1
Georgia	4	Tennessee	5	Undulant fever:	
Diarrhea and enteritis:		Paratyphoid fever:		Georgia	18
Ohio (under 2 years)	56	Colorado	1	Iowa	10
Dysentery:		Georgia	2	Michigan	12
Florida	8	Indiana	3	Nebraska	1
Georgia (amebic)	7	Michigan	5	New York	31
Georgia (bacillary)	10	New York	13	North Carolina	1
Michigan	2	North Carolina	2	Ohio	14
New York	83	Ohio	5	Tennessee	4
Ohio	4	Tennessee	6	Vincent's angina:	
Tennessee	37	Puerperal septicemia:		Colorado	3
West Virginia	20	Colorado	1	Iowa	2
Food poisoning:		Ohio	5	Maine	11
Ohio	6	Tennessee	2	Michigan	20
German measles:		Rabies in animals:		New York	50
Iowa	3	Indiana	81	Tennessee	7
Maine	11	Maine	6	Wyoming	1
New York	34	Rocky Mountain spotted		Whooping cough:	
North Carolina	6	fever:		Colorado	95
Ohio	7	Georgia	2	Florida	14
Tennessee	4	Iowa	1	Georgia	95
Hookworm disease:		North Carolina	5	Indiana	84
Georgia	163	Wyoming	1	Iowa	78
Impetigo contagiosa:		Scabies:		Maine	137
Colorado	32	Tennessee	8	Michigan	716
Iowa	9	Screw worm infection:		Nebraska	167
Tennessee	38	Georgia	1	New York	1,323
Lead poisoning:		Septic sore throat:		North Carolina	345
Ohio	15	Georgia	27	Ohio	500
Lethargic encephalitis:		Michigan	15	Tennessee	167
Colorado	5	New York	40	West Virginia	194
Georgia	8	North Carolina	18	Wyoming	8
Indiana	4	Ohio	103		

WEEKLY REPORTS FROM CITIES

City reports for week ended Oct. 7, 1933

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Small-pox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Maine:											
Portland	0		0	0	1	1	0	0	0	3	18
New Hampshire:											
Concord	0		0	0	0	2	0	0	0	0	7
Manchester	0		0	0	1	0	0	0	0	0	15
Nashua	1		0	0	0	12	0	0	0	0	
Vermont:											
Barre	0		0	0	0	0	0	0	0	0	2
Burlington	0		0	0	0	3	0	0	0	0	9
Massachusetts:											
Boston	7		0	5	3	27	0	6	1	24	161
Fall River	3		0	0	0	2	0	3	0	5	27
Springfield	0		0	0	0	1	0	1	0	1	29
Worcester	0		0	15	0	6	0	1	0	13	38

City reports for week ended Oct. 7, 1933—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								
Rhode Island:											
Pawtucket	0		0	0	1	0	0	0	0	0	11
Providence	2		0	1	2	6	0	4	1	38	54
Connecticut:											
Bridgeport	0		0	1	3	2	0	2	0	0	35
Hartford	0		0	0	1	3	0	0	1	0	32
New Haven	0		0	0	0	1	0	1	1	1	26
New York:											
Buffalo	3		0	0	11	11	0	5	0	15	
New York	21	10	5	13	91	40	0	84	23	115	1,278
Rochester	0		0	0	4	1	0	0	2	9	36
Syracuse	0		0	0	0	1	0	0	0	10	44
New Jersey:											
Camden	0		0	0	4	2	0	2	1	0	30
Newark	1	3	0	3	5	1	0	3	1	34	87
Trenton	0		0	1	0	0	0	2	0	3	31
Pennsylvania:											
Philadelphia	3	3	2	2	22	31	0	23	3	16	393
Pittsburgh	2		3	1	9	15	0	5	1	17	124
Reading	1		0	1	0	0	0	1	0	10	26
Ohio:											
Cincinnati	5	1	1	2	3	9	0	5	0	12	125
Cleveland	4	35	0	0	4	32	0	10	2	34	147
Columbus	3		0	0	7	18	0	5	0	0	92
Toledo	1		0	0	4	12	0	1	1	0	61
Indiana:											
Fort Wayne	9		0	0	2	1	0	0	2	0	20
Indianapolis	2		0	0	10	7	0	3	1	2	
South Bend	0		1	0	0	12	0	1	0	1	14
Terre Haute	0		0	1	1	1	0	1	0	0	27
Illinois:											
Chicago	1	3	2	0	19	58	0	36	5	76	632
Springfield	0		0	0	1	2	0	0	0	0	19
Michigan:											
Detroit	18	4	1	6	10	39	0	16	1	57	210
Flint	4		0	1	1	18	0	2	0	1	25
Grand Rapids	1		0	0	1	4	0	1	1	3	27
Wisconsin:											
Kenosha	0		0	0	0	1	0	0	0	2	10
Madison	0		0	0	0	0	0	0	0	9	13
Milwaukee	1	1	1	3	1	5	0	0	0	53	90
Racine	0		0	0	0	1	0	0	0	3	18
Superior	0		0	0	0	0	0	0	0	1	11
Minnesota:											
Duluth	0		0	0	1	2	0	1	0	0	18
Minneapolis	2	1	0	1	1	16	0	2	0	19	75
St. Paul	0		0	0	2	5	0	3	2	4	50
Iowa:											
Des Moines	2		0	0	0	15	1	0	0	0	29
Sioux City	1		0	1	0	2	0	0	0	0	
Waterloo	1		0	0	0	0	0	0	0	0	
Missouri:											
Kansas City	2		0	0	5	13	0	6	0	0	79
St. Joseph	1		0	0	3	2	0	0	0	0	22
St. Louis	18	2	1	0	2	6	0	7	5	14	186
North Dakota:											
Fargo	0		0	0	1	0	0	0	0	0	5
Grand Forks	0		0	0	0	0	0	0	0	1	
South Dakota:											
Aberdeen	0		0	0	0	0	0	0	0	0	
Nebraska:											
Omaha	4		0	1	8	2	0	0	0	3	44
Kansas:											
Topeka	0		0	1	0	2	0	0	0	5	6
Wichita	2		0	1	1	4	0	0	0	11	15
Delaware:											
Wilmington	0		0	0	5	0	0	0	0	1	22
Maryland:											
Baltimore	1	5	0	1	12	7	0	6	4	43	169
Cumberland	3		0	0	0	3	0	0	0	0	14
Frederick	0		0	0	0	2	0	0	0	0	4
Dist. of Columbia:											
Washington	5		0	1	10	5	0	9	2	5	134
Virginia:											
Lynchburg	5		0	1	0	6	0	1	0	1	9
Richmond	8		0	0	0	7	0	3	1	0	48
Roanoke	3		0	0	0	8	0	1	2	4	11

City reports for week ended Oct. 7, 1933—Continued

State and city	Diph- theria cases	Influenza		Mea- sles cases	Pneu- monia deaths	Scar- let fever cases	Small- pox cases	Tuber- culosis deaths	Ty- phoid fever cases	Whoop- ing cough cases	Deaths, all causes
		Cases	Deaths								
West Virginia:											
Charleston											
Huntington	5		0	0	0	0	0	0	0	0	
Wheeling	0		0	0	1	2	0	0	2	1	16
North Carolina:											
Raleigh	0		0	0	1	3	0	0	0	1	7
Wilmington	0		0	0	0	0	0	1	1	0	11
Winston-Salem	12		0	0	1	3	0	0	1	0	16
South Carolina:											
Charleston	1	14	1	0	2	0	0	0	0	0	31
Columbia	0		0	0	0	0	0	0	0	0	4
Greenville	0		0	0	1	2	0	0	0	2	8
Georgia:											
Atlanta	9	1	0	0	0	2	0	4	0	4	48
Brunswick	0		0	0	0	0	0	0	0	0	3
Savannah	1	13	1	0	0	1	0	4	0	5	29
Florida:											
Miami	1		0	0	1	0	0	1	0	0	21
Tampa	1		0	0	0	0	0	3	0	0	29
Kentucky:											
Ashland	1		0	0	0	3	0	0	3	4	
Lexington	4		0	0	2	2	0	2	1	0	15
Louisville	10	2	0	0	3	9	0	0	3	0	67
Tennessee:											
Memphis	7		0	0	1	4	0	3	3	2	61
Nashville	5		0	0	1	8	0	2	4	2	31
Alabama:											
Birmingham	9		1	0	5	8	0	3	1	0	76
Mobile	2		0	0	1	0	0	1	0	0	17
Montgomery	3			0		2	0		1	2	
Arkansas:											
Fort Smith	2			0		0	0		0	0	
Little Rock	1		0	1	2	0	0	0	0	0	3
Louisiana:											
New Orleans	11	2	1	0	11	3	0	11	0	0	124
Shreveport	6		0	0	2	2	0	3	1	0	46
Texas:											
Dallas	14		0	0	1	5	0	3	2		37
Fort Worth	2		0	0	2	1	0	2	3	0	23
Galveston	0		0	0	0	0	0	0	1	0	13
Houston	12		0	0	3	1	0	2	0	0	65
San Antonio	1		2	0	4	1	0	6	4	0	49
Montana:											
Billings	0		0	0	0	1	0	0	0	0	17
Great Falls	0		0	0	0	0	0	0	0	2	10
Helena	0		0	0	0	0	0	0	0	0	3
Missoula	0		0	0	0	0	0	0	0	0	2
Idaho:											
Boise	0		0	0	0	1	0	0	0	0	6
Colorado:											
Denver	2	19	0	1	2	5	0	5	0	15	67
Pueblo	0		0	0	0	0	0	0	1	2	5
New Mexico:											
Albuquerque	0		0	1	0	1	0	4	4	0	17
Utah:											
Salt Lake City	1		0	3	1	2	0	0	2	0	26
Nevada:											
Reno	0		0	0	1	0	0	0	0	0	6
Washington:											
Seattle	0			0		4	0		1	6	
Spokane	0		0	4	3	1	0	0	0	0	28
Tacoma	0		0	0	0	5	0	0	0	0	18
Oregon:											
Portland	0		0	0	3	13	0	3	4	0	71
Salem	0	1	0	0	0	0	0	0	0	0	
California:											
Los Angeles	7	20	0	2	11	31	2	14	2	40	296
Sacramento	0		0	0	0	2	0	1	0	1	19
San Francisco	0	2	3	2	7	10	0	11	2	19	138

City reports for week ended Oct. 7, 1933—Continued

State and city	Meningococcus meningitis		Polio- mye- litis cases	State and city	Meningococcus meningitis		Polio- mye- litis cases
	Cases	Deaths			Cases	Deaths	
Maine:				Minnesota:			
Portland.....	0	0	1	Duluth.....	0	0	2
Vermont:				Minneapolis.....	0	0	7
Burlington.....	0	0	1	St. Paul.....	0	0	8
Massachusetts:				Missouri:			
Boston.....	0	0	4	St. Joseph.....	0	0	1
Worcester.....	0	0	3	St. Louis.....	0	0	2
Rhode Island:				North Dakota:			
Providence.....	0	0	2	Fargo.....	0	0	2
Connecticut:				Maryland:			
New Haven.....	0	0	1	Baltimore.....	0	0	1
New York:				District of Columbia:			
Buffalo.....	0	0	2	Washington.....	0	0	2
New York.....	1	0	16	Tennessee:			
Rochester.....	1	0	2	Memphis.....	1	1	0
Syracuse.....	0	0	5	Colorado:			
New Jersey:				Denver.....	1	1	0
Newark.....	0	0	1	Washington:			
Ohio:				Seattle.....	0	0	1
Cleveland.....	0	0	2	Tacoma.....	0	0	1
Indiana:				Oregon:			
Fort Wayne.....	0	0	1	Portland.....	0	0	3
Indianapolis.....	2	0	0	California:			
Illinois:				Los Angeles.....	0	0	2
Chicago.....	2	2	6				
Michigan:							
Detroit.....	0	0	2				

Lethargic encephalitis.—Cases: Worcester, Mass., 1; New Haven, 1; New York, 1; Trenton, 1; Cleveland, 1; Chicago, 4; Detroit, 1; Minneapolis, 1; Sioux City, Iowa, 1; Kansas City, Mo., 7; St. Joseph, Mo., 5; St. Louis, 4; Omaha, 2; Topeka, 2; Atlanta, 1; Louisville, 17; Houston, Tex., 1.

Pellagra.—Cases: Philadelphia, 1; Charleston, S. C., 1; Savannah, 1; Memphis, 1; Birmingham, 1; Mobile, 1.

Typhus fever.—Cases: Charleston, S. C., 2; Atlanta, 1; Savannah, 8; Mobile, 1; Dallas, Tex., 1; Galveston, 1.

Rabies in man.—Deaths: Houston, Tex., 1.

FOREIGN AND INSULAR

CANADA

Quebec Province—Communicable diseases—Two weeks ended October 7, 1933.—The Bureau of Health of the Province of Quebec, Canada, reports cases of certain communicable diseases for the 2 weeks ended October 7, 1933, as follows:

Disease	Cases	Disease	Cases
Chicken pox.....	48	Poliomyelitis.....	10
Diphtheria.....	39	Scarlet fever.....	107
Erysipelas.....	4	Tuberculosis.....	94
German measles.....	2	Typhoid fever.....	115
Influenza.....	1	Undulant fever.....	1
Measles.....	66	Whooping cough.....	166
Ophthalmia neonatorum.....	1		

CUBA

Habana—Communicable diseases—Four weeks ended October 7, 1933.—During the 4 weeks ended October 7, 1933, certain communicable diseases were reported in Habana, Cuba, as follows:

Disease	Cases	Deaths
Diphtheria.....	2	1
Malaria.....	12	4
Tuberculosis.....	11	4
Typhoid fever.....	13	8

Provinces—Communicable diseases—Five weeks ended September 2, 1933.—During the 5 weeks ended September 2, 1933, cases of certain communicable diseases were reported in the Provinces of Cuba, as follows:

Disease	Pinar del Río	Habana	Matanzas	Santa Clara	Cama-guey	Oriente	Total
Cerebrospinal meningitis.....				1			1
Chicken pox.....			1	5	4		10
Diphtheria.....	1	2		3		3	9
Malaria.....	31	3	34	43	8	28	147
Measles.....		1		6	2	1	10
Scarlet fever.....			1	4			5
Tuberculosis.....	18	73	35	55	38	58	277
Typhoid fever.....	10	16	23	35	61	22	167

JUGOSLAVIA

Communicable diseases—August 1933.—During the month of August 1933, certain communicable diseases were reported in Jugoslavia, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Anthrax.....	131	10	Poliomyelitis.....	3	1
Cerebrospinal meningitis.....	6	3	Scarlet fever.....	240	14
Diphtheria and croup.....	490	56	Sepsis.....	12	6
Dysentery.....	390	32	Tetanus.....	55	28
Erysipelas.....	158	11	Typhoid fever.....	405	38
Measles.....	88	5	Typhus fever.....	33	2
Paratyphoid fever.....	19	2			

Pampanga Province.....	C	1	.....	.....	.....	.....	.....	.....	.....	.....
Rizal Province.....	D	1	.....	.....	.....	.....	.....	.....	.....	.....
Samar Province *.....	C	29	67	.....	.....	.....	.....	.....	.....	.....
.....	D	23	50	.....	.....	.....	.....	.....	.....	.....
Siam:										
Bangkok.....	C	1	.....	.....	.....	.....	.....	.....	.....	.....
Provinces.....	D	13	1	.....	.....	.....	.....	.....	.....	.....
.....	D	6	14	.....	.....	.....	.....	.....	.....	.....
On vessels:										
S.S. Dunana at Madras.....	D	1	.....	.....	.....	.....	.....	.....	.....	.....
S.S. Lauterfels at Calcutta.....	C	1	.....	.....	.....	.....	.....	.....	.....	.....
S.S. Mathura at Calcutta.....	C	1	.....	.....	.....	.....	.....	.....	.....	.....

1 For the week ended Oct. 14, 1933, cholera was reported in the Philippine Islands as follows: Bohol Province, Inbaga, 28 cases, 12 deaths; Cebu Province, Argao, 3 cases, 3 deaths; Cebu city, 6 cases, 3 deaths; Dimanbug, 2 cases, 1 death; Opon, 2 cases, 2 deaths; Toledo, 3 cases.
 * For the period Sept. 10-25, 1933, 32 cases of cholera with 20 deaths were reported in Samar Province, Philippine Islands.
 † Month of March 1933.

Place	March 1933			April 1933			May 1933			June 1933			July 1933			August 1933		
	1-10	11-20	21-31	1-10	11-20	21-30	1-10	11-20	21-31	1-10	11-20	21-30	1-10	11-20	21-31	1-10	11-20	21-31
Indo-China (French) (see also table above):
Cambodia *.....
Cochin-China †.....
.....
.....

* Reports incomplete.

Minya.....	C					4	1				1				
Genoa.....	C														
Luxor.....	D														
France: Marseille.....	C														
France: Marseille.....	C														
France: Marseille.....	D														
Plague-infected rats															
Hawaii Territory: Hawaii Island—Hamakua—Plague-infected rats															
India.....	C														
Basselin.....	D	5,409	3,227	2,319	1,411	240	502	870	1,129	1,072	933	2,030			1
Basselin.....	D	3,498	2,042	1,407	1,231	355	267	531	724	709	571	618	1,208		
Basselin.....	C	12	13	3	3	1	2	3	2	3	1	4	2		
Plague-infected rats	C														
Bombay.....	C	15	10	3	2	1									2
Plague-infected rats	C														
Madras Presidency	C	121	103	34	10	3	1	1	1	2	2	1	1	2	
Madras Presidency	C														
Madras Presidency	D		14	8	6										
Rangoon.....	C			1	1										
Plague-infected rats	C	1					3								2
Indo-China (see also table below):															
Phnom-Penh.....	D	1	3	0	3	1			1		1	1	2		
Saloon and Cholou	C		4	2	2	1	1			2					
Plague-infected rats	C														
Iraq:															
Baghdad.....	C			3	2	3	4	1	1	1				1	1
Basra.....	C					3									
Madagascar. (See table below.)	C														
Morocco.....	C	33	28	2		5	2	1							
Peru. (See table below.)	C														
Senegal. (See table below.)	C														
Siam:															
Bangkok.....	C			2											
Provinces.....	C	11				2									
South-West Africa. ¹	C														
Straits Settlements: Singapore.....	C														
Syria: Beirut.....	C							2							
Union of South Africa: Orange Free State.....	C				1										
United States: California:															
San Benito County—Plague-infected ground squirrels.....	C										7	1			
Whittier.....	D														
On vessel: S.S. Kingsborough at port in Argentina.....	C	1													

¹ Including plague in the United States and its possessions.
² For the month of July 1933, 7 cases of plague with 3 deaths were reported in El Mollar, Salta Province, Argentina.
³ A report dated September 26, 1933, stated that 300 deaths from bubonic plague had occurred since August 1933, in the villages near Nungun, Hunghsin Station, and Palyintala Manchuria, China.
⁴ Imported.
⁵ 77 cases of plague with 6 deaths were reported in Ovamboland, South-West Africa, from Jan. 1 to June 30, 1933. Antiplague measures have been taken.

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

SMALLPOX—Continued

[C indicates cases; D, deaths; P, present]

Place	Mar. 5- Apr. 1, 1933	Apr. 2- Apr. 1, 20, 1933	Apr. 20- May 27, June 24, 1933	Week ended—													
				July 1933				August 1933				September 1933					
				8	15	22	29	5	12	19	26	2	9	16	23	30	
				1	8	15	22	29	5	12	19	26	2	9	16	23	30
France. (See table below.)																	
Great Britain:																	
England and Wales.....	71	98	91	71				7	10	5	9	8	4	2	6	4	4
London.....	62	75	70	51				2	0	0	4	7	8	3	5	3	3
London and Great Towns.....	66	85	82	66				3	0	0	5	0	8	3	5	3	3
Greece (see also table below): Salonika.....			18					2	2								
Guatemala. (See table below.)																	
Honduras.....	2			3													
Puerto Castilla.....	14	1	7														
Tequiguapa.....	2																
Tehuacalpa.....	2																
India.....	34,938	40,370	33,876	23,631	3,550	3,320	2,832	2,633	2,314	1,953	1,709	1,774					
Bombay.....	8,391	10,298	9,708	7,068	1,019	957	901	768	611	538	440	373	2	4	1	4	7
Bussell.....	13	14	17	11	2	1	4	4	3	3	3	4					
Bombay.....	1,175	510	212	58	14	8	5	2	5	7	3	3	3	1	3	1	1
Calcutta.....	1,717	290	148	68	10	4	5	2	4	4	2	2	2	1	1	1	1
Chittagong.....	1,520	921	342	134	20	13	6	7	13	4	0	2	6	4	2	2	2
Cochin.....	1,053	745	289	107	16	10	3	7	13	3	4	1	2	4	2	1	1
Karachi.....			1														
Madras.....	4	5	1	2	1		2		1								
Moulmein.....	115	130	82	19	3	4	3	2	2	1	3	1	2	1	2		
Negapatam.....	666	496	231	144	61	39	71	72	45	37	79	62	63	33	32	36	
Rangoon.....				12													
Tuticorin.....	4	6	7	3	3	4	1	2	5	2	4	3	12	2	2	3	
Vizagapatam.....	11	15	17	6	2	1	1	1	1	2	2	4	1	1	3		
India (French):																	
Cauernagor.....	5			5													
Karikal.....	5			5													
Pondichery.....	129	46	31	33	29	46	31	33	46	42	88						
	18	21	13	21	18	21	13	21	18	23	18						

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

[C indicates cases; D, deaths; P, present]

Place	Week ended—													
	July 1933			August 1933			September 1933			August 1933				
	1	8	15	22	29	5	12	19	26	2	9	16	23	30
On vessels—Continued	Mar. 5- Apr. 1, 1933	Apr. 2- May 27, 1933	Apr. 30- May 28- June 24, 1933											
S.S. Rajputana at Aden.....			1											
S.S. Baron Incheupe at Hong Kong.....			1											
S.S. Fernmoor at Vancouver.....		P												
S.S. Erga at Rangoon from Calcutta.....			4											
S.S. Aracan at Newport.....		1												
S.S. Chan Macquarie at Suaz.....					1									
S.S. Sikh at Madras.....									1					
S.S. Lichtfels at Suaz from Calcutta.....														1

Place	August 1933													
	May 1933			June 1933			July 1933			August 1933				
	1-10	11-20	21-31	1-10	11-20	21-30	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20
Dahomey.....					1									
Indo-China (see also table above).....	370	107	189	2	9	2	2	1	1	1	1	2	1	6
	130	31	50	58	49	60	43	60	83	54	74	31	20	38
				21	14	10	10	16	36	24	31	6	6	15

Place	August 1933														
	April 1933			May 1933			June 1933			July 1933			August 1933		
	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	
Bollvia.....															
Chosen.....	21	21	28	12	10										
	30	4	34	3											
Ecuador.....	7	2	14												
France.....	15	1	1												
Greece.....	23	15	21												
	4	6													

Place	August 1933																		
	March 1933			April 1933			May 1933			June 1933			July 1933			August 1933			
	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31	
Dahomey.....																			
Indo-China (see also table above).....	370	107	189	2	9	2	2	1	1	1	1	2	1	6	1	1	1	1	1
	130	31	50	58	49	60	43	60	83	54	74	31	20	38	1	1	1	1	1
				21	14	10	10	16	36	24	31	6	6	15					

Place	August 1933																		
	March 1933			April 1933			May 1933			June 1933			July 1933			August 1933			
	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31	
Bollvia.....																			
Chosen.....	21	21	28	12	10														
	30	4	34	3															
Ecuador.....	7	2	14																
France.....	15	1	1																
Greece.....	23	15	21																
	4	6																	

1 Imported.

YELLOW FEVER

O indicates cases; D, deaths; P, present

Place	Week ended—													
	July 1933				August 1933				September 1933					
	1	8	15	22	29	5	12	19	26	2	9	16	23	30
Brazil:														
Ceara State:														
Lavras.....				1	1									
Limoeiro.....				1										
St. Mathews.....				1										
Pernambuco State:														
Granito.....					2									
Novo Exu ¹					2									
Salgueiro.....				1										
French West Africa: Niger Territory.....				1										
Gold Coast.....										2	1			2
Ivory Coast:										2				
Bouafile.....											1			
Gagnoa.....											1			
Senegal:														
Bakel.....														
Dagana.....				1									2	
Podor.....				1										
St. Louis.....											1			

¹ 2 cases of yellow fever with 2 deaths were reported in Novo Exu, Pernambuco State, Brazil, during the month of June 1933.

² Suspected.

³ Imported.

X