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RESTAURANT SANITATION PROGRAM OF THE UNITED STATES PUBLIC HEALTH SERVICE[1]

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Five years have passed since my discussion of the United States Public Health Service restaurant sanitation program at the annual meeting of this association at Tulsa, Okla. (*1*). That was, I believe, the first or, at least, one of the earliest discussions on the subject of eating-establishment sanitation to appear on your programs. It is, perhaps, significant that the present paper on this subject is presented at the very meeting of this association at which consideration is to be given to the question of extending membership to food sanitarians as well as milk sanitarians.

During these 5 years, the public health problems associated with World War II have come and gone, and the restaurant sanitation program of the Public Health Service has grown from lusty infancy to vigorous maturity. The need for control of eating-establishment sanitation has been recognized as never before by State and local health authorities, by industry, and by the public. Many communities, spurred by the public clamor for cleaner food service, have inaugurated or intensified this activity.

In these endeavors, the Public Health Service acts solely in an advisory and stimulative capacity. It leaves actual enforcement to State and local health authorities, for it has no legal jurisdiction in the control of sanitary conditions except on interstate carriers, and even in this field it enlists the cooperation of State health authorities wherever possible. Its program is, therefore, designed to assist State and local regulatory agencies and other Federal agencies which have the necessary legal authority. Its aim, in brief, is to promote the

[1] Presented at the annual meeting of the International Association of Milk Sanitarians at Atlantic City, N. J., October 25, 1946.

Published concurrently in the Journal of Milk Technology.

establishment of effective, well-balanced milk and food sanitation programs in each State, to stimulate the adoption of effective State and local control legislation, and to encourage strict and uniform enforcement through appropriate legal and educational measures.

To implement these aims the Public Health Service compiles annual reports of disease outbreaks resulting from water, milk and milk products, and other foods, prepares model ordinances, undertakes and supports research on food sanitation, furnishes technical and administrative advice and interpretations of recommended standards, trains State and local sanitarians through personal contacts and regional seminars, prepares technical and educational materials for the training of sanitarians and food handlers, conducts demonstration schools for food handlers, makes surveys of State or local conditions upon request, allots funds to the States for the support of public health activities through title VI of the Social Security Act, and consults with equipment manufacturers and food-industry representatives on the design and construction of food utensils and equipment. During the war period, Public Health Service personnel were assigned to State health departments for food-sanitation duty in the more important military and war industry areas, and mobile laboratory units assisted State and local departments in areas lacking laboratory facilities.

IMPORTANCE OF FOOD-ESTABLISHMENT SANITATION

The public health control of food establishments is necessary from a number of viewpoints. To the general public which patronizes these establishments, the need is largely esthetic—it demands food service under conditions not repugnant to its sensibilities. To the restaurant industry, the meaning is principally economic—satisfied customers and avoidance of damage suits. To health officials, the problem is one of preventing food-borne disease.

Since 1923, the Public Health Service has compiled annual reports of milk-borne outbreaks of disease submitted by State health departments, and since 1938 these compilations have been extended to include outbreaks traced to water and to other foods. During the 7-year period from 1938 to 1944 there was reported an annual average of 44 outbreaks from water, 41 from milk, and 212 from other foods (table 1). In other words, outbreaks traced to other foods have been nearly three times as numerous as those from water and milk combined. Another significant feature is the trend: Whereas outbreaks attributed to water declined during the war years, and those

TABLE 1.—*Summary of disease outbreaks from water, milk, and other foods, 1938–44*

Year	Water			Milk and milk products			Other foods			Undetermined			Total		
	Outbreaks	Cases	Deaths	Outbreaks	Cases	Deaths	Outbreaks	Cases	Deaths	Outbreaks	Cases	Deaths	Outbreaks	Cases	Deaths
1938	48	[1] 31,693	17	42	1,685	27	70	2,247	25	8	882	3	168	36,507	72
1939	43	2,254	3	41	2,509	7	146	3,770	12	17	1,203	6	247	9,736	28
1940	43	[2] 44,184	9	43	1,678	10	218	5,588	30	18	1,088	1	322	52,538	50
1941	60	12,039	24	37	1,049	4	223	6,070	53	20	1,876	24	340	21,034	105
1942	53	13,271	9	45	2,142	2	245	11,420	101	37	1,878	10	380	28,711	122
1943	26	5,712	15	40	1,590	7	285	13,938	33	38	2,525	1	389	23,765	56
1944	32	2,686	1	41	1,449	20	298	14,558	45	22	1,683	1	393	20,376	67
1938–44	305	111,839	78	289	12,102	77	1,485	57,591	299	160	11,135	46	2,239	192,667	500

[1] Including a water-borne outbreak of gastroenteritis with 29,250 cases.
[2] Including a water-borne outbreak of gastroenteritis with an estimated 35,000 cases.

from milk showed no significant change, a steady increase occurred in outbreaks and cases traced to other foods. There is no doubt that the reported outbreaks and cases represent only a fraction of those actually occurring. These figures offer an obvious challenge to health officers and sanitarians to control the cause of food-borne disease. Protection of water and milk supplies deserves continued effort, but food sanitation obviously demands increased emphasis.

Of the diseases involved in food-borne outbreaks, food poisoning and gastroenteritis are by far the most common. Thus, of 298 food-borne outbreaks reported for 1944, the diseases involved were: botulism, 9; chemical food poisoning, 8; dysentery, 7; food poisoning, 157; gastroenteritis, 94; trichinosis, 7; typhoid fever, 10; others, 6. Practically all of these diseases are controllable through appropriate sanitary measures, including refrigeration.

An analysis of the reports of disease outbreaks would yield some very interesting information on the organism involved, the kind of food, and the method of contamination, but for the purposes of the present discussion an examination of the type of establishment involved may be of particular interest. This information is available for 264 of the 298 food-borne outbreaks reported for 1944, and shows the following distribution: public restaurants, 49 outbreaks; schools and colleges, 38; food shops, 31; hospitals and institutions, 29; industrial cafeterias, 19; labor camps, 16; railroad train, 1; private homes, 50; private parties, 14; picnics, 9; and church suppers, 8. The last four types of establishments, involved in 81 outbreaks, are of a private character, but the remaining 183 (70 percent of the total) are public or semipublic food places which should be subject to control by health authorities.

RECOMMENDED RESTAURANT ORDINANCE

In the paper previously mentioned (*1*), I outlined the development of the Ordinance and Code Regulating Eating and Drinking Establishments recommended by the United States Public Health Service, and discussed some of the problems involved in drafting an ordinance that would be generally applicable.

It was pointed out that the Public Health Service Sanitation Advisory Board debated the advisability of including a provision for health examinations but concluded that the conflicting opinions of health officers on the value of routine examinations of food handlers did not warrant such a requirement. Instead, the responsibility for prohibiting persons with communicable disease or in the carrier stage from handling food was placed upon the management; broad powers of control when infection is suspected were conferred on the health officer; and education of employees in food-handling sanitation was recommended.

The question of enforcement methods was settled by offering two different forms of the ordinance, one a grading type which permits enforcement by degrading or permit revocation or both, the other a nongrading minimum-requirements type enforceable by permit revocation only. In the grading type, the competitive effect of grading on public patronage tends to improve conditions in eating establishments, thereby aiding in enforcement. The provisions of the several sections of the recommended ordinance were also briefly outlined. It is unnecessary, therefore, to discuss these subjects further at this time.

The editions of 1935, 1938, and 1940 were mimeographed, but the current edition of the ordinance and code was printed in 1943 as Public Health Bulletin No. 280. It is the culmination of 9 years' effort, representing five different drafts. It embodies the best information on restaurant sanitation available in 1943, but like other codes recommended by the Public Health Service, it is subject to change as improvements are developed through research and experience. Suggestions for improvement are invited and given careful consideration by the Sanitation Advisory Board before new editions are prepared. Many proposals submitted by health officers, sanitarians, and members of the industry are now being studied.

Among the principal proposals under consideration is the broadening of the scope of the ordinance to include not only eating and drinking establishments but also all other types of food establishments. At its annual meeting in Washington in April of this year, the Conference of State and Territorial Health Officers approved the report of its Committee on Interstate and Foreign Quarantine, which

recommended that an investigation be made of the desirability of such a move. To quote from the Committee's report: "A number of State and local health departments have suggested that the Public Health Service Ordinance and Code Regulating Eating and Drinking Establishments be expanded to incorporate provisions applicable to other types of food-handling and food-processing plants, including bakeries, confectioneries, manufacturers, groceries, meat markets, slaughter houses, etc. Meat-packing plants shipping interstate are inspected by the U. S. Department of Agriculture, and interstate shipments of other food products are under the supervision of the U. S. Food and Drug Administration; but meat and food not entering interstate shipment receive only such supervision as the States and local communities may provide." Although the basic principles of sanitation of the restaurant ordinance are generally applicable to all food establishments, a careful study will be required to determine what additional provisions, particularly applicable to each type, are needed. It may be some time, therefore, before the scope of the ordinance can be widened.

Other revisions of the ordinance will undoubtedly result from research studies being conducted by official and unofficial agencies, including the Water and Sanitation Investigations Station of the Public Health Service at Cincinnati, the National Sanitation Foundation, the American Public Health Association, and laboratories that will soon be receiving research grants for sanitation studies awarded by the Public Health Service upon the recommendation of the National Advisory Health Council. To date, the Cincinnati station has investigated detergents (*2*), has developed a method for determining their over-all efficiencies (*3*), and is now engaged in a basic study of the bactericidal efficiency of quaternary ammonium compounds. The National Sanitation Foundation, supported by enlightened segments of industry, has made grants for studies on dishwashing machines, cold sterilization by chemicals, and other projects concerned with food sanitation. It has aided the Subcommittee on Food Utensil Sanitation of the American Public Health Association in studies to improve the swab test for determining residual bacteria on food utensils. To those of us who for years have needed facilities to furnish the answers to the many unsolved problems of sanitation, this ever increasing tempo of research bears promise of a new era.

The ordinance is recommended for voluntary adoption by States, counties, health districts, and municipalities in order to encourage a greater uniformity and a higher level of excellence in the sanitary control of eating and drinking establishments. The ordinance itself is only a few pages in length. The accompanying interpretative code gives the public health reason for each item, as well as details

of satisfactory compliance. By unifying the interpretation of the ordinance, the code serves to minimize enforcement misunderstandings. Paralleling the ordinance are inspection forms for field use and office-ledger record forms for posting inspection and laboratory results. Both forms are available for quantity purchase from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

No better indication of the need for sanitary control of eating places could be desired than the rapid pace at which the model ordinance has been adopted throughout the United States. This ordinance or one based thereon is now in effect, State-wide, in 15 States and the District of Columbia, as well as in 176 counties and 373 municipalities located in 37 States and Territories, with a population coverage of over 40,000,000. It has been adopted as State regulations in 25 of these States. Operating under the ordinance are 30 cities of over 100,000 population. A complete list of adoptions is available from the Public Health Service.

The grading type of ordinance is in effect in 7 States, 71 counties, and 175 municipalities; the nongrading type in 18 States, 101 counties, and 163 municipalities. The type of ordinance is not reported for 4 counties and 35 municipalities. Apparently, a nongrading ordinance or regulation is somewhat more popular than a grading type.

The editions of the Public Health Service ordinance which have been adopted are as follows: 1935, 5 cities; 1938, 6 States, 65 counties, 100 cities; 1940, 13 States, 101 counties, 144 cities; 1943, 6 States, 7 counties, 84 cities; edition unknown, 3 counties, 40 cities.

ASSISTANCE TO STATE AND LOCAL PROGRAMS

Although adequate ordinances are essential, the mere adoption of an ordinance does not guarantee proper enforcement. Much depends on the activity and intelligence of the enforcing agency and on the qualifications of its inspectors. To promote effective enforcement by State and local health authorities, the Public Health Service operates through the Milk and Food Section of the Sanitary Engineering Division in Washington, the eight district offices in the field, and the Water and Sanitation Investigations Station in Cincinnati, which does research. Each district office has on its staff two or three specialists in milk and food sanitation under the administrative direction of the district directors and under the technical supervision of the Milk and Food Section. These specialists are men of various professional backgrounds in the field of public health, including veterinarians, dairy graduates, bacteriologists, chemists, and sanitary engineers.

To assist the States in the improvement of restaurant sanitation, the Public Health Service engages in the following activities:

1. It promotes the organization of an adequate restaurant sanitation program in the State health departments, and the employment of trained sanitarians qualified to exercise leadership and offer guidance to local inspectors. Of material assistance is the allotment of funds to the States for the support of public health activities, appropriated by Congress under the authorization of title VI of the Social Security Act. According to reports received up to June 1944, legal jurisdiction over restaurant sanitation was vested in the health department in 35 States, in the agricultural or some other department in 8 States, and in both health and agricultural departments in 5 States. But even in the States where the health department does not have legal control, it invariably renders advisory service to local health agencies. Within the State health department, restaurant sanitation is a function of the engineering or sanitation division in 28 States, of the food and drug division in 7 States, of some other division in 5 States, and of the engineering, together with some other division, in 5 States.

2. Upon request, interpretations of the ordinance and code provisions and advice on technical and administrative problems are made available through correspondence with the Milk and Food Section and with the district offices, and through field consultation with the latter.

3. It trains new personnel upon request of the State health departments. This is accomplished largely by the district specialists working with State sanitarians to demonstrate proper methods of inspection, sampling, grading, rating of communities, record keeping, and administration.

4. It provides in-service training for State and local sanitarians through restaurant sanitation seminars conducted periodically in collaboration with the States on a State or regional basis. During 1945, 13 restaurant sanitation seminars were held throughout the country, with an attendance of 564 State and local sanitarians. One of the usual features of these seminars is the presentation of a course of instruction to food handlers so that sanitarians may be in a position to inaugurate such courses in their own communities.

5. Evaluations are made of State and local programs by the district specialists, upon invitation. States are assisted in making restaurant sanitation ratings of individual communities by the Public Health Service rating procedure. These ratings represent the weighted percentage compliance with the restaurant sanitation standards, and are of value in measuring results and stimulating improvement. Of the 147 communities for which reports were received

during the past few years, 29 were rated below 40 percent, 92 were between 40 and 60 percent, and 26 were above 60 percent. Some of the low ratings represented conditions prior to the inauguration of a local restaurant sanitation program. Supplies of rating forms are furnished to States upon request.

6. The cooperation of the industry is solicited in support of State and local restaurant sanitation programs and in the manufacture of food equipment and utensils of sanitary design and construction. One of the outstanding features of the past 2 years has been the restaurant industry's awakened interest in sanitation through its National, State, and local associations.[2] Adequate local control programs are approved by the most enlightened members of the industry. Manufacturers of dishwashing machines, realizing the need for improvements, are supporting basic research in this field. Although the food-equipment industry is many years behind the milk-equipment industry in the production of easily cleanable equipment, there are indications of a desire for improvement as soon as better materials are again available to the industry for new designs. A particular source of complaint has been the difficulty in cleaning cracks and crevices of chef whips and similar items. It should be clearly understood that it is the established policy of the Public Health Service to issue no approval of any patented or proprietary article or device. However, opportunity is afforded manufacturers to consult with this office on methods of compliance with recommended standards; and confidential opinions concerning local acceptance of specific materials and equipment are furnished health officers upon request.

7. Factual and technical assistance is given to writers in the preparation of articles on the need for restaurant sanitation for popular magazines.

8. During the war years, mobile trailer laboratories assigned to the district offices assisted State and local health departments in the bacteriological examination of milk supplies and restaurant utensils. The need for improvement in the sanitation of utensils is emphasized by the results obtained, during 1945, from 5,684 establishments located in 213 communities. Of over 56,000 utensils sampled, only 26 percent complied with the bacterial standard of not more than 100 organisms per utensil surface examined. Of the four types of utensils routinely examined, spoons made the best showing and cups the worst, with water and beer glasses intermediate. With the war emergency over, the mobile laboratories were discontinued in June of this year.

9. During the war period, reserve officers of the Public Health Service were assigned to State health departments for duty in impor-

[2] The National Restaurant Association recently announced the appointment of a Sanitation Committee which is planning an expanded program of cooperation with health authorities and education of employers and employees.

tant military and war-industry areas lacking adequate local health services. Among those so assigned were milk and food sanitarians. As this program was made possible through emergency funds appropriated by Congress, it, too, was discontinued in June of this year.

10. For the past three years, the Public Health Service has devoted major attention to the portion of its restaurant sanitation program concerned with the education of food handlers.

EDUCATION OF FOOD HANDLERS

Until recently, local control programs relied primarily on legal penalties, such as fines, revocation of license, or degrading, for correction of insanitary conditions. Today it is generally recognized that education of food handlers is an effective method of obtaining compliance with sanitary standards. Sanitarians have discovered that most food handlers will improve their methods and acquire sanitary habits with proper instruction, and that legal procedures may be reserved for the recalcitrant minority. The sanitarian who employs the educational rather than the legalistic approach is the one who achieves the most permanent results. The reasons should be obvious: the policeman attitude tends to create resentment and opposition rather than cooperation, and to overemphasize equipment and structural standards at the expense of methods.

Employees of food establishments should have some knowledge of food-borne disease and modes of transmission, should be thoroughly acquainted with food-handling and food-utensil sanitation, should understand the danger of working when ill or with discharging or presumably infected sores or wounds, and the importance of being meticulous about personal hygiene, particularly cleanliness of hands and finger nails.

To stimulate the development of food-handler training courses by States and cities, the Public Health Service through its district staffs inaugurated a series of demonstration schools late in 1942. Up to July 1946, 123 schools were conducted in cooperation with State and local health departments, local restaurant associations, and other civic groups, with a total attendance of 64,000 employees of food establishments. In addition, 19 schools were held for 9,700 employees of railroad and airline dining cars and commissaries; 19 schools for 1,800 food handlers on Indian reservations; 14 for 1,900 cafeteria employees at industrial plants; 11 for 813 dietitians and food handlers at hospitals; and 9 for 1,600 food handlers at military installations. Most of these courses have consisted of three 1½-hour classes or two 2-hour classes, repeated as often as was necessary to accommodate the attendance.

Largely as a result of the impetus from these demonstrations, organized food-handler schools are at present being conducted by 30 State and Territorial health departments and by at least 96 cities and counties. In some cities, a certificate of completion of a food handlers' training course is a prerequisite for employment in food establishments.

To be successful, such schools must be carefully planned, organized, and conducted. A manual for use in organizing and conducting classes for food-establishment employees, entitled "Guide to Safe Food Service" (*4*), has recently been published by the Public Health Service and is available from the Government Printing Office at 15 cents per copy. Lectures must be supported by suitable demonstrations and visual-aid materials such as booklets, posters, slides, sound slide films, and sound movies. Among the materials on restaurant sanitation developed by the Public Health Service are the following:

(1) A mimeographed outline of six lectures for food handlers' training courses.

(2) 175 lantern slides with descriptions of each, for use at food-handler schools. The use of these has been discontinued as they have been replaced by the following.

(3) A series of four sound slide films, entitled "Our Health in Your Hands," constituting a visual outline of the material that should be presented at a restaurant employees' training course. The subtitles of the four films are: (a) Germs Take Pot Luck; (b) Service With a Smile; (c) In Hot Water; (d) Safe Food for Good Health. The four films with recordings are available from Castle Films, Inc., 30 Rockefeller Plaza, New York 20, N. Y., for 10 dollars, less 10-percent discount to nonprofit institutions.

(4) A pocket-size manual of instructions for food handlers, entitled "From Hand to Mouth." Because of its simple language, its humorous illustrations, and its emphasis on the importance of the food handler's job, this booklet has achieved wide popularity. It is available from the Government Printing Office as Community Health Series No. 3, at 10 cents per single copy or 6 cents in lots of 100 or more.

(5) A series of six posters in four colors, size 10″ by 14″, entitled "For Our Patrons Health," intended for display in restaurant kitchens and wash rooms. Subtitles are: (a) Wash Your Hands Often; (b) Use a Fork—Don't Be a Butterfinger; (c) Keep These Cold; (d) Keep These Under Cover; (e) Handle With Care; and (f) Wash Every Piece Carefully. A discussion of the public health aspects of these posters appears in "Sanitary Measures Hold Restaurant Customers" (*5*). The posters are purchasable from the Government Printing Office, at 25 cents per set.

(6) An article on dishwashing for the guidance of sanitarians and the industry entitled "Methods of Sanitizing Eating and Drinking Utensils" (*6*).

(7) A list of films on milk and food sanitation.

(8) A list of references on restaurant sanitation.

Free sample copies of the posters and publications listed above are available from the Public Health Service.

Sanitarians interested in organizing food-handler schools in their communities may apply to their State health department and to the district office of the Public Health Service for assistance.

FEDERAL AGENCIES AND INTERSTATE CARRIERS

To complete the picture of Public Health Service activities in the field of food-establishment sanitation requires at least a brief mention of the advisory service to other Federal agencies and of the control of interstate carriers.

At the request of certain Federal agencies, and under formal agreements with them, the Public Health Service renders advisory and consultant field services on all aspects of sanitation at their various installations. Among these installations are the penal and correctional institutions of the Bureau of Prisons, the numerous parks of the National Park Service, the schools and institutions on Indian reservations under the Office of Indian Affairs, the resorts and camps of the Forest Service, and the blister-rust camps of the Bureau of Entomology and Plant Quarantine. The staffs of the district offices make periodic inspections of such phases of environmental sanitation as water supply, sewage disposal, garbage disposal, dairies and pasteurization plants, insect and rodent control, as well as eating facilities. Recommendations for improvements are discussed with resident supervisors and are included in written reports to the appropriate agencies. In addition, courses of instruction are given for the food handlers at these institutions. A similar service has recently been inaugurated for the hospitals of the Public Health Service. Furthermore, sanitary-engineer and sanitarian officers are assigned to full-time duty with other Federal agencies including UNRRA, FPHA, FHA, Veterans' Emergency Housing Program, Pan American Sanitary Bureau, Office of Labor of the Production and Marketing Administration, and Bureau of Prisons.

Finally, a few words concerning the only food-sanitation activity with which the Public Health Service is legally charged—the supervision of interstate carriers. This program is authorized by the Public Health Service Act, Public Law 410 (July 1, 1944), and the Interstate Quarantine Regulations which are now undergoing revision

in accordance with this act. Its purpose is to protect the health of interstate travelers and prevent the spread of disease from one State to another. Periodic inspections are made of sources of water, milk, shellfish, and other food served on vehicles of railways, airlines, and vessel companies engaged in interstate traffic, as well as methods of food handling in dining cars, coaches, galleys, and at commissaries. Sources are either approved, provisionally approved for a limited period pending correction of substandard conditions, or prohibited. Many courses of instruction have been organized for food handlers employed by the carriers. Supervision of this activity is divided among the Land and Air Carrier Section, the Vessel Sanitation Section, and the Milk and Food Section of the Sanitary Engineering Division at Washington, and the district offices in the field. Owing to its limited staff, however, the Public Health Service could not begin to do justice to this program without the active cooperation of the several State health departments.

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SICKNESS ABSENTEEISM AMONG INDUSTRIAL WORKERS, SECOND AND THIRD QUARTERS OF 1946 [1]

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An analysis is herewith presented of the morbidity experience of 200,000 male workers during the second and third quarters of 1946. The basic data representing disabilities of more than 1 week are derived from periodic reports from industrial sick benefit associations, company relief departments, and group insurance plans.

[1] From Industrial Hygiene Division, Bureau of State Services. The report for first quarter appeared in PUBLIC HEALTH REPORTS, **61**: 1664–1666 (Nov. 15, 1946).

SECOND QUARTER, 1946

Table 1 gives average annual frequency rates for disabilities beginning in the second quarters of 1946 and 1945 according to specific

TABLE 1.—*Average annual number of absences per 1,000 males on account of sickness and nonindustrial injuries disabling for eight consecutive calendar days or longer, by cause, experience of MALE employees in various industries, second quarter of 1946 compared with second quarter of 1945, and first half of 1946 compared with first halves of the years 1941 to 1945, inclusive* [1]

Cause (numbers in parentheses are disease title numbers from International List of Causes of Death, 1939)	Annual number of absences per 1,000 males				
	Second quarter		First half		
	1946	1945	1946	1945	1941–45
Sickness and nonindustrial injuries	100.3	138.0	127.5	154.8	135.6
Nonindustrial injuries (169–195)	11.8	12.1	12.3	14.2	11.9
Sickness	88.5	125.9	115.2	140.6	123.7
Respiratory diseases	27.0	46.8	48.7	60.6	62.3
Tuberculosis of respiratory system (13)	.5	.6	.7	.7	.8
Influenza, grippe (33)	7.1	15.2	21.3	21.4	26.9
Bronchitis, acute and chronic (106)	4.4	8.2	6.5	11.0	9.6
Pneumonia, all forms (107–109)	2.9	5.3	4.8	6.5	8.0
Diseases of pharynx and tonsils (115b, 115c)	4.8	6.9	4.9	7.1	6.9
Other respiratory diseases (104, 105, 110–114)	7.3	10.6	10.5	13.9	10.1
Digestive diseases	15.8	21.2	16.7	21.1	17.1
Diseases of stomach except cancer (117, 118)	4.4	7.4	4.8	7.6	5.4
Diarrhea and enteritis (120)	1.9	2.7	2.0	2.6	1.9
Appendicitis (121)	3.6	4.5	3.4	4.3	4.7
Hernia (122a)	2.8	2.9	3.1	2.8	2.0
Other digestive diseases (115a, 115d, 116, 122b–129)	3.1	3.7	3.4	3.8	3.1
Nonrespiratory-nondigestive diseases	42.5	51.7	46.1	52.9	40.2
Infectious and parasitic diseases (1–12, 14–24, 26–29, 31, 32, 34–44) [2]	3.8	3.3	3.7	3.4	3.0
Rheumatism, acute and chronic (58, 59)	4.8	7.5	5.2	7.4	5.3
Neurasthenia and the like (part of 84d)	2.3	3.0	2.1	2.7	1.6
Neuralgia, neuritis, sciatica (87b)	2.8	3.8	3.0	3.9	2.8
Other diseases of nervous system (80–85, 87, except part of 84d and 87b)	1.7	2.0	1.9	2.3	1.6
Diseases of heart and arteries, and nephritis (90–99, 102, 130–132)	7.5	8.7	8.0	8.9	6.1
Other diseases of genitourinary system (133–138)	2.7	3.3	3.1	3.4	2.9
Diseases of skin (151–153)	3.3	3.7	3.6	3.7	3.0
Diseases of organs of movement except diseases of joints (156b)	3.0	3.9	3.5	4.1	3.5
All other diseases (45–57, 60–79, 88, 89, 100, 101, 103, 154, 155, 156a, 157, 162)	10.6	12.5	12.0	13.1	10.4
Ill-defined and unknown causes (200)	3.2	6.2	3.7	6.0	4.1
Average number of males	198,218	220,740	196,325	223,511	1,221,666

[1] Industrial injuries and venereal diseases are not included.
[2] Exclusive of influenza and grippe, respiratory tuberculosis, and venereal diseases.

cause. It will be observed that notable decreases are recorded in the 1946 frequencies for all causes and each broad cause group, the rate for all sickness and nonindustrial injuries being more than 25 percent below the corresponding rate for 1945. Among the broad cause groups, the respiratory diseases reveal the most marked drop in frequency, over 40 percent, while decreases of 25 and 18 percent, respectively, occur in the frequency of digestive, and nonrespiratory-nondigestive diseases.

Average annual frequency rates by cause are shown in table 2 for disabilities beginning in the third quarters of 1946 and 1945. An examination of the table reveals that the relatively low frequencies observed in the second quarter of 1946 continue into the third quarter of the year, each cause of disability shown in table 2 occurring less frequently in the third quarter of 1946 than in the corresponding quarter of 1945.

TABLE 2.—*Average annual number of absences per 1,000 males on account of sickness and nonindustrial injuries disabling for eight consecutive calendar days or longer, by cause, experience of MALE employees in various industries, third quarter of 1946 compared with third quarter of 1945, and first 9 months of 1946 compared with first 9 months of the years 1941 to 1945, inclusive* [1]

Cause (numbers in parentheses are disease title numbers from International List of Causes of Death, 1939)	Annual number of absences per 1,000 males				
	Third quarter		First nine months		
	1946	1945	1946	1945	1941–45
Sickness and nonindustrial injuries	91.0	120.1	115.5	143.5	125.1
Nonindustrial injuries (169–195)	11.9	12.3	12.2	13.6	12.2
Sickness	79.1	107.8	103.3	129.9	112.9
Respiratory diseases	22.1	29.7	39.8	50.6	50.8
Tuberculosis of respiratory system (13)	.7	.8	.7	.7	.8
Influenza, grippe (33)	5.5	8.5	16.0	17.2	20.5
Bronchitis, acute and chronic (106)	3.7	5.4	5.6	9.2	8.1
Pneumonia, all forms (107–109)	2.0	2.9	3.8	5.4	6.2
Diseases of pharynx and tonsils (115b, 115c)	3.4	4.2	4.4	6.1	6.2
Other respiratory diseases (104, 105, 110–114)	6.8	7.9	9.3	12.0	9.0
Digestive diseases	14.5	21.2	16.0	21.1	17.8
Diseases of stomach except cancer (117, 118)	4.7	8.4	4.8	7.8	5.7
Diarrhea and enteritis (120)	2.1	2.8	2.0	2.7	2.2
Appendicitis (121)	2.6	3.3	3.1	4.0	4.7
Hernia (122a)	2.1	2.8	2.8	2.8	2.0
Other digestive diseases (115a, 115d, 116, 122b–129)	3.0	3.9	3.3	3.8	3.2
Nonrespiratory-nondigestive diseases	38.8	51.1	43.8	52.3	40.1
Infectious and parasitic diseases (1–12, 14–24, 26–29, 31, 32, 34–44) [2]	2.3	2.5	3.2	3.1	2.7
Rheumatism, acute and chronic (58, 59)	4.2	6.4	4.9	7.1	5.1
Neurasthenia and the like (part of 84d)	2.0	3.0	2.1	2.8	1.7
Neuralgia, neuritis, sciatica (87b)	3.0	4.1	3.0	4.0	2.8
Other diseases of nervous system (80–85, 87, except part of 84d, and 87b)	2.1	2.4	2.0	2.3	1.6
Diseases of heart and arteries, and nephritis (90–99, 102, 130–132)	5.1	8.0	7.1	8.6	5.9
Other diseases of genitourinary system (133–138)	3.0	4.2	3.1	3.7	3.0
Diseases of skin (151–153)	3.8	4.0	3.6	3.8	3.3
Diseases of organs of movement except diseases of joints (156b)	3.2	3.4	3.4	3.8	3.4
All other diseases (45–57, 60–79, 88, 89, 100, 101, 103, 154, 155, 156a, 157, 162)	10.1	13.1	11.4	13.1	10.6
Ill-defined and unknown causes (200)	3.7	5.8	3.7	5.9	4.2
Average number of males	194,607	209,427	195,752	218,816	1,222,320

[1] Industrial injuries and venereal diseases are not included.
[2] Exclusive of influenza and grippe, respiratory tuberculosis, and venereal diseases.

SECOND AND THIRD QUARTERS, 1937–46

An investigation of the behavior of second- and third-quarter frequencies for all causes and four broad cause groups over the 10 years, 1937–46, is made possible by means of figure 1 presenting

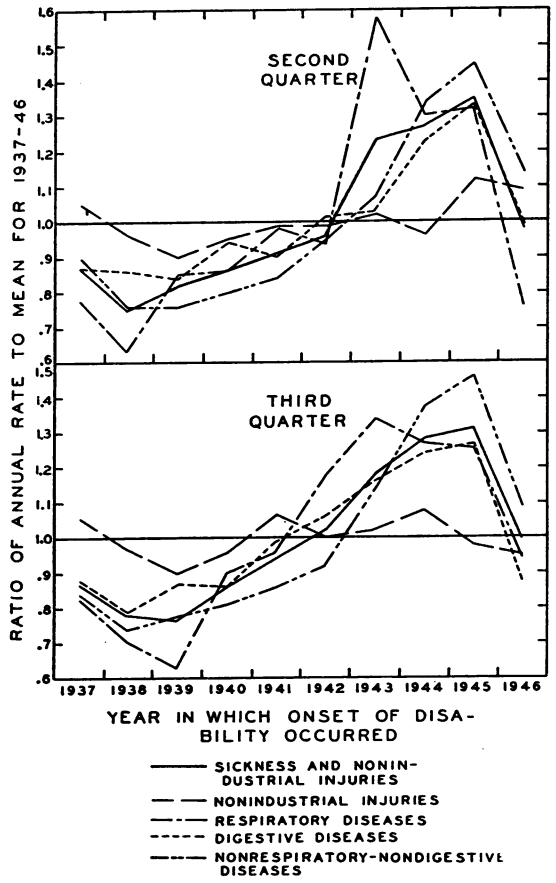

FIGURE 1.—Ratio of average annual number of absences per 1,000 males on account of sickness and nonindustrial injuries disabling for eight consecutive calendar days or longer to mean rate for 1937–46, by broad cause group, variation of second- and third-quarter ratios with time, experience of MALE employees in various industries, 1937 to 1946, inclusive.

graphically the ratios of the average annual frequency rates to the corresponding mean rate for the 10-year period. These ratios are useful in determining the percentage by which a particular rate exceeds or falls short of its 10-year mean. Thus, in the second quarter of 1946, the ratio of the average annual number of absences per 1,000 males on account of respiratory diseases to the mean respiratory rate for the 10 second quarters is 0.76, or, in other words, the 1946 respiratory rate is 24 percent below the mean rate for the 10-year period. The 1946 second-quarter ratio for nonrespiratory-nondigestive diseases, on the other hand, is 1.14 indicating an excess of 14 percent

in the 1946 rate when compared with the mean nonrespiratory-nondigestive rate for the 10 second quarters.

The mean rates for the 10-year period entering the determination of the ratios are shown in the following table:

Broad cause group:	*Average annual number of absences per 1,000 males, 1937–46 (mean)*	
	Second quarter	*Third quarter*
Sickness and nonindustrial injuries	102. 2	91. 7
Nonindustrial injuries	10. 8	12. 5
Respiratory diseases	35. 4	23. 5
Digestive diseases	16. 0	16. 7
Nonrespiratory-nondigestive diseases	40. 0	39. 0

An examination of figure 1 reveals a number of notable relationships which may be briefly summarized as follows:

(1) The behavior over the 10-year period of second- and third-quarter ratios for a particular cause group and for all causes is remarkably similar in the two quarters.

(2) In each quarter, variation in the ratios for nonindustrial injuries appears to be due principally to chance fluctuations, while variation in the ratios for all causes and the broad sickness groups seems to reflect the operation of factors other than chance.

(3) Peak ratios for the respiratory diseases are recorded for the second and third quarters of 1943, the second-quarter rate for that year being over 50 percent above the corresponding mean rate for 1937–46, and representing the highest ratio yielded in the second quarter for any of the cause groups.

(4) For all causes, digestive diseases, and nonrespiratory-nondigestive diseases, peak ratios were reached in 1945, the third-quarter rate for nonrespiratory-nondigestive diseases in that year being over 45 percent above the corresponding 10-year mean, and representing the highest ratio yielded in the third quarter for any of the cause groups.

CHANGES IN STATE AND TERRITORIAL HEALTH AUTHORITIES

Change No. 5 to Directory of State and Territorial Health Authorities (Supplement No. 180 to Public Health Reports—1945 Revision)

The following changes and additions have been received since compilation of Change No. 4.[1] Notice of further changes should be addressed to the Records and Reports Unit, Bureau of States Services, United States Public Health Service, Washington 25, D. C.

[1] Change No. 1 appeared in PUBLIC HEALTH REPORTS, 61: 1386–1387 (Sept. 20, 1946); Change No. 2, 61: 1544–1547 (Oct. 25, 1946); Change No. 3, 61: 1701–1703 (Nov. 22, 1946); Change No. 4, 61: 1883–1885 (Dec. 27, 1946).

ALABAMA STATE DEPT. OF HEALTH

Delete: **B. F. Austin, M. D., M. P. H.,** State Health Officer
Insert: **D. G. Gill, M. D., D. P. H.,** State Health Officer

KENTUCKY STATE DEPT. OF HEALTH

Miscellaneous activities:
Add:
Medical and related services—
W. B. Atkinson, M. D., acting director
Division of Medical and Related Services.

MINNESOTA STATE BOARD OF HEALTH

Sanitation activities:
General sanitation—
Insert: **Herbert M. Bosch, M. P. H.,** director
Division of Sanitation.

MISSOURI STATE BOARD OF HEALTH

Dental services:
Insert: **Cyril Friend, D. D. S., M. P. H.,** acting director
Public Health Dentistry
Section of Preventive Medicine.
Nutrition:
Delete: **Mary Reeves,** junior nutritionist
Division of Child Hygiene
Insert: **L. M. Garner, M. D., M. P. H.,** director
Section of Preventive Medicine
Sanitation activities:
Food sanitation—
Insert: **Bruce Ford,** intermediate sanitarian
Milk sanitation—
Delete: **Warren Loften,** director
Insert: **Charles E. Carl,** principal public health engineer
Food and Drug
Section of Environmental Sanitation.
Venereal disease control:
Insert: **C. W. Meinershagen, M. D.,** director
Venereal Disease Control Services
Section of Preventive Medicine.
Vital records:
Delete: **Madge Kennedy**
Insert: **Elwood Musselman,** director
Section of Statistics.

MONTANA STATE DEPT. OF PUBLIC HEALTH

Dental services:
Insert: **Francis I. Livingston, D. D. S., M. P. H.,** director
Division of Dental Hygiene.

NEW JERSEY STATE DEPT. OF HEALTH

Administration, general:
Delete: **Edmund R. Outcalt,** chief Bureau of Administration
Insert: **Charles M. Callahan,** chief Division of Personnel, Administration, Records, and Accounts.
Personnel administration:
Delete: **Charles M. Callahan**
Insert: **Mary F. Bourbon,** administrative assistant.
Add:
Cancer services:
Raymond D. Brokow, M. D., chief
Division of Cancer Control.
School health services:
Julius Levy, M. D., consultant
Division of Maternal and Child Health.
Venereal disease control:
Delete: **Daniel Bergsma, M. D.,** chief.

PENNSYLVANIA STATE DEPT. OF HEALTH

Delete: **Harry W. Weest, M. D.,** Secretary of Health
Insert: **Norris W. Vaux, M. D.,** Secretary of Health

TEXAS STATE DEPT. OF HEALTH

Administration, general:
Accounting and financing, and Personnel administration—
Delete: **P. A. Kerby,** business officer
Insert: **Ed Riedel,** business officer.
Communicable disease control, general:
Delete: **J. V. Irons, Sc. D.,** director
Insert: **W. S. Brumage, M. D.,** director
Division of Epidemiology.
Laboratory services:
Delete: **S. W. Bohls, M. D.,** director
Insert: **J. V. Irons, Sc. D.,** director
Bureau of Laboratories.
Sanitation activities:
Food sanitation, and Milk sanitation—
Delete: **T. H. Johnson,** acting director
Insert: **Joe F. Lakey,** director
Division of Food and Drug.
Venereal disease control:
Delete: **T. E. Dodd, M. D., M. P. H.,** director
Insert: **R. S. Lloyd, M. D.,** director
Division of Venereal Disease.

VIRGINIA DEPT. OF HEALTH

Crippled children's services:
Delete: **G. W. Comstock, M. D.,** acting director
Insert: **Samuel C. Ingraham II, M. D.,** director
Bureau of Crippled Children

Add:
Cancer services:
George R. Carpenter, M. D., director
Bureau of Cancer Control.

Tuberculosis control:
Field services—
Delete: **G. W. Comstock, M. D.,** acting director
Insert: **S. C. Ingraham II, M. D.,** director
Bureau of Tuberculosis Out-Patient Service.

Vital records:
Delete: **Walter A. Plecker, M. D.,** director
Bureau of Vital Statistics.

WASHINGTON STATE DEPT. OF HEALTH

Dental services:
Delete: **Francis I. Livingston, D. D. S., M. P. H.,** head
Dental Hygiene Section.

PUBLICATION OF LISTS OF SANITARY RATINGS OF INTERSTATE MILK SHIPPERS

The following circular letter, addressed to all State milk control authorities, is reprinted for the information of health officers in areas experiencing milk shortages.

Upon the recommendation of the Conference of State and Territorial Health Officers, the United States Public Health Service is undertaking to issue periodically a list of interstate milk shippers and of supplies available for interstate shipment. These lists are intended to acquaint areas experiencing milk shortages with available sources and their sanitary ratings. Health officers of cities actually experiencing shortages will be in position to authorize the receipt by local milk plants of supplies from listed sources with the highest sanitary ratings. Application by shippers for listing as well as acceptance of listed supplies by any city will be entirely optional. Lists will be published quarterly, or oftener if necessary, beginning March 1, 1947, and will show sources of raw milk for pasteurization, pasteurized milk, and later cream and possibly other fluid milk products.

In order that health authorities of receiving areas may feel justified in accepting shipments from beyond their milk sheds without sending their own inspectors to the producing areas, the plan provides for the rating by the State of origin of sources which apply for listing, and for spot checks by the Public Health Service of the State's inspection, laboratory, and rating procedures to insure uniformity and to protect receiving areas against laxity. Ratings will be made and computed in accordance with the Public Health Service rating procedure which has been employed for years by many of the States. The rating figure indicates the weighted percentage compliance with the grade A standards of the Milk Ordinance and Code recommended by the Public Health Service. Receiving areas operating under the PHS milk ordinance may, in accordance with Section 11, accept as grade A the outside sources rating 90 percent or more, provided that the bacterial counts and the temperatures of the milk upon receipt are satisfactory. A proposed revision of the rating procedure to assign greater weight than the present 15 percent to bacterial quality and to provide for partial credits for higher counts will be considered at the next meeting of the PHS Sanitation Advisory Board.

No source will be retained on the list when its rating becomes more than 12 months old. Each State rating will be based on data obtained within the preceding 6 months, including an inspection of, and four samples from, each producing farm and each receiving station and plant included in the survey. Before rating a source, the State sanitarian will obtain a list of all producing farms actually contributing to the supply to be shipped. If the number is less than

25, all should be inspected; if 25 or more, a sufficient number should be selected at random for inspection to reduce the probable error for each item of sanitation to less than 5 percent (see table, p. 3, Reprint 1970 from Public Health Reports), in which case the probable error of the entire rating will be less than 1 percent. Thus, at least 25 producers must be inspected out of 50, 32 out of 100, 38 out of 200, 42 out of 500, and 44 out of 1,000. A truly random selection should be made, as by picking names out of a hat or by dividing the area into districts and selecting one or two roads in each district. Although inspections by local authorities may not be used for rating purposes, the State may accept reports from local official laboratories that have been approved by the State laboratory director as complying substantially with APHA Standard Methods and as checking within 10 percent on results obtained at least twice a year on split samples.

A rating report of each source for which listing is desired should be computed and submitted by the State to the appropriate District Office of the Public Health Service. For each source all producers inspected should be listed, with their violations, on page 3 of milk rating form 9421, and the receiving station and the pasteurization plant, if any, on page 4. The rating forms may be obtained without cost from the Public Health Service. The inspection forms, from which the field data are transferred to the rating form, are purchasable from the Government Printing Office in Washington at 35 cents per 100 for the producer form 8976–D and 40 cents per 100 for the plant form 8978–C. For each source the following additional data should be submitted: name and location of source, kind and volume of supply available at different seasons, total number of producers, number inspected, date of inspection, inspector's name, date inspector was last spot checked by PHS, last four counts (or reduction times) and delivery temperatures for each producer and the last four counts (or reduction times) of the mixed milk (if mixed), name and location of laboratory, date of last check by State (if a local laboratory), and date of last laboratory spot check by PHS.

To inaugurate the program, the State health or other supervisory agency which is in position to participate should circularize milk plants and receiving stations in the State with a view to receiving applications for ratings from sources which ship or desire to ship interstate. The State agency should assign a competent milk sanitarian to the rating activity. Detailed information and guidance concerning standards and rating procedures may be obtained from the PHS District Office.

Upon receipt of rating reports from the State, the PHS District Office will check all data and computations for completeness and accuracy. If satisfied from previous spot checks that the State sanitarian's inspection and rating methods and the laboratory's procedures are satisfactory, the District Office will forward to the Milk and Food Section in Washington all pertinent data for listing. The District Office will spot check annually the rating methods of each State sanitarian assigned to this activity, to determine agreement within five points, and will request the PHS Cincinnati Station to spot check annually the laboratories whose results are used by the State for the rating of sources, to determine substantial compliance with APHA Standard Methods.

Any suggestions you may have for improving this program will be given careful consideration.

THOMAS PARRAN
Surgeon General

INCIDENCE OF COMMUNICABLE DISEASES IN THE UNITED STATES

December 29, 1946—January 25, 1947

The accompanying table summarizes the incidence of nine important communicable diseases, based on weekly telegraphic reports from State health departments. The reports from each State for each week are published in PUBLIC HEALTH REPORTS under the section "Incidence of Disease." The table gives the number of cases of these diseases for the 4 weeks ended January 25, 1947, the number reported for the corresponding period in 1946, and the median number for the years 1942–46.

DISEASES ABOVE MEDIAN INCIDENCE

Poliomyelitis.—The number of cases of poliomyelitis dropped from 688 during the preceding 4-week period to 315 during the 4 weeks ended January 25. The current incidence was, however, relatively high, the number of cases being 1.6 times the 1946 figure for this period and 2.6 times the 1942–46 median. Seven of the geographic sections reported a higher incidence than in 1946, and 2 reported approximately the same number of cases as in 1946. All sections reported an excess over the 5-year median expectancy. In 1943 and 1944 the incidence of this disease reached peaks of approximately 12,000 and 19,000 cases, respectively. In 1945 the cases dropped to 14,000, but during 1946 a peak of 25,000 cases was reached, which was the highest number of cases on record since the great epidemic of 1916 when 29,000 cases were reported. It is significant that the current incidence represents a 60-percent increase over the 1946 incidence for these first 4 weeks of the year.

Whooping cough.—The number of cases (9,500) of whooping cough reported for the current 4 weeks was relatively high—about 35 percent above the 1946 figure and 5 percent above the 1942–46 median for the corresponding period. Increases over the normal expectancy occurred in 4 of the geographic sections, but in the other 5 sections the numbers of cases were below the 1942–46 median figures. For the entire country the current incidence was the highest for this period since 1943 when approximately 16,000 cases were reported.

DISEASES BELOW MEDIAN INCIDENCE

Diphtheria.—For the 4 weeks ended January 25 there were 1,277 cases of diphtheria reported, as compared with 1,724 during the corresponding 4-week period in 1946 and a 5-year (1942–46) median of 1,384 cases. The New England, Middle Atlantic, and East South Central sections reported excesses over the normal median expectancy, but in the other sections the incidence either approximated the median

or fell considerably below it. For the country as a whole the current incidence was the lowest for this period since 1944 when 1,059 cases were reported for the corresponding 4 weeks.

Influenza.—The number of reported cases (16,910) of influenza was about 15 percent of the 1946 incidence during these same weeks, but it was slightly below the 1942–46 median. Within the median period 1942–46 there were 2 influenza epidemics, one in 1943–44 and the other the 1945–46 epidemic when the reported cases for the 4 weeks corresponding to the current 4 weeks totaled approximately 261,000 and 116,000, respectively. The current incidence compares with the incidence during the more normal influenza season of 1944–45. In each section of the country the current incidence was below that of 1946, and in each section, except the Mountain, the number of cases was lower than the median expectancy.

Measles.—The number of cases of measles rose from 9,900 during the preceding 4 weeks to 14,716 during the 4 weeks ended January 25. The current incidence was less than 75 percent of the incidence for the corresponding period in 1946 and about 40 percent of the preceding 5-year median. The New England and South Atlantic sections reported a relatively high incidence, but in all other sections the incidence was considerably below the normal seasonal expectancy.

Meningococcus meningitis.—The number of cases (341) of meningococcus meningitis reported for the current period was less than 40 percent of the 1942–46 median. Although the number of cases of this disease had been gradually declining after a period of unusually high rates, the incidence has not yet dropped to the average in nonepidemic years (approximately 220 cases). In each section of the country the number of cases was less than 50 percent of the preceding 5-year median.

Scarlet fever.—The incidence of scarlet fever was also relatively low, the number of cases (9,525) reported being less than 90 percent of the 1945 incidence and less than 70 percent of the 1942–46 median. For the country as a whole the current incidence was the lowest in the 18 years of record for this period. In each section of the country the number of cases reported was less than the preceding 5-year median expectancy.

Smallpox.—For the current 4-week period there were 17 cases of smallpox reported, as compared with 29 for the corresponding weeks in 1946 and a 1942–46 median of 49 cases. Nine of the total cases were reported from the East North Central section, the figure being slightly above the 5-year median expectancy (7 cases); the remaining cases were widely distributed over the other sections of the country.

Typhoid and paratyphoid fever.—The incidence of these diseases continued at a relatively low level. The 165 cases reported for the

current 4-week period was only slightly below the 1945 incidence, but it was less than 80 percent of the 1942–46 median. The number of cases was higher than the preceding 5-year median in the New England, and East South Central sections; about normal in the West North Central, Mountain and Pacific sections; and below the normal seasonal incidence in the Middle Atlantic, South Atlantic, and West South Central sections. For the entire country the current incidence was the lowest in the 18 years of record for this period of the year.

MORTALITY, ALL CAUSES

For the 4 weeks ended January 25 there were 40,765 deaths from all causes reported to the Bureau of the Census by 93 large cities. The median number of deaths reported for the same weeks in 1944–46 was 44,057. For each week of the current 4-week period the number of deaths was less than the preceding 3-year median; for the 4 weeks ended January 25 the number of deaths was about 7 percent less than the 3-year median for the corresponding weeks.

Number of reported cases of 9 communicable diseases in the United States during the 4-week period Dec. 29, 1946–Jan. 25, 1947, the number for the corresponding period in 1946, and the median number of cases reported for the corresponding period, 1942–46

Division	Current period	1946	5-year median	Current period	1946	5-year median	Current period	1946	5-year median
	Diphtheria			Influenza [1]			Measles [2]		
United States	1,277	1,724	1,384	16,910	116,267	17,421	14,756	20,285	36,101
New England	95	46	37	73	986	147	3,834	1,087	2,720
Middle Atlantic	185	156	152	86	571	187	4,435	4,731	7,049
East North Central	168	292	168	223	3,264	571	2,054	3,906	3,786
West North Central	93	127	117	399	6,341	404	228	1,786	2,033
South Atlantic	229	373	263	5,530	25,930	6,163	2,099	1,498	1,498
East South Central	149	143	129	438	11,164	1,900	186	1,112	1,059
West South Central	180	345	342	8,804	54,673	9,774	425	1,168	1,168
Mountain	57	66	66	1,248	10,851	1,181	1,000	1,265	2,149
Pacific	121	176	158	109	2,487	738	495	3,732	3,732
	Meningococcus meningitis			Poliomyelitis			Scarlet fever		
United States	340	907	953	315	200	119	9,525	10,849	14,150
New England	22	40	43	13	7	7	1,020	1,060	1,660
Middle Atlantic	61	192	205	27	29	21	2,228	2,337	3,052
East North Central	50	174	165	67	29	21	2,953	2,652	4,059
West North Central	35	56	79	37	13	9	813	1,060	1,557
South Atlantic	52	130	131	30	14	12	781	1,014	1,378
East South Central	43	91	91	18	12	10	365	453	693
West South Central	34	88	88	29	31	24	211	576	484
Mountain	11	25	25	20	13	10	445	526	929
Pacific	32	111	111	74	52	32	709	1,171	1,171
	Smallpox			Typhoid and paratyphoid fever			Whooping cough [2]		
United States	17	29	49	165	169	211	9,500	7,115	8,985
New England	0	0	0	18	6	7	1,127	1,092	1,298
Middle Atlantic	0	0	0	28	18	33	2,328	2,029	2,029
East North Central	9	3	7	19	24	24	2,499	1,268	1,529
West North Central	2	3	7	10	9	9	272	224	444
South Atlantic	1	1	3	16	38	39	1,098	951	1,457
East South Central	2	4	6	20	14	14	369	227	346
West South Central	2	5	6	27	35	36	1,136	535	655
Mountain	1	11	9	14	12	12	174	267	356
Pacific	0	2	2	13	13	14	497	532	970

[1] Mississippi and New York excluded; New York City included. [2] Mississippi excluded.

INCIDENCE 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

REPORTS FROM STATES FOR WEEK ENDED FEBRUARY 1, 1947

Summary

The incidence of influenza declined during the current week. Of the total of 3,432 cases reported, as compared with 4,388 last week, 2,582, or 75 percent of the total, occurred in the 3 States (Texas, South Carolina, and Virginia) previously reporting approximately the same proportion of the incidence this year. Only 8 other States reported more than 32 cases. These 11 States reported as follows (last week's figures in parentheses): *Increases*—Vermont 38 (15), North Dakota 43 (1, next earlier week 34), South Carolina 633 (595), Alabama 149 (107), Colorado 48 (44), Arizona 156 (149); *decreases*—Virginia 430 (490), West Virginia 39 (93), Arkansas 53 (78), Oklahoma 83 (134), Texas 1,519 (2,280). The total for the year to date is 20,342, as compared with 130,522 for the same period last year and a 5-year (1942–46) median of 22,592.

Of the 58 cases of poliomyelitis reported for the week (last week 59), more than recorded for a corresponding week since 1928, New York and California reported 8 each (last week 5 and 18, respectively), and Michigan and Florida 4 each (last week 3 each). The total for the first 5 weeks of the year is 373, as compared with 248 for the same period last year and a 5-year median of 164.

A total of 77 cases of undulant fever was reported, as compared with 92 last week and an average of 85 for the past 4 weeks. The total to date is 419, as compared with 321 and 354, respectively, for the same periods of last year and 1945.

Below the respective corresponding medians, both for the current week and for the first 5 weeks of the year, are the figures for diphtheria, infectious encephalitis, measles, meningococcus meningitis, scarlet fever, smallpox, and typhoid and paratyphoid fever. The figures for whooping cough, both current and cumulative, are slightly above the medians. The current total for typhus fever is 69 (last week 47, median 50). The cumulative figure is 219, as compared with a 5-year median of 296.

Deaths recorded for the week in 93 large cities of the United States totaled 9,602, as compared with 9,958 last week, 10,100 and 10,069, respectively, for the corresponding weeks of 1946 and 1945, and a 3-year (1944–46) median of 10,069. The cumulative total is 50,367, as compared with 54,256 for the corresponding period last year.

Telegraphic morbidity reports from State health officers for the week ended Feb. 1, 1947, and comparison with corresponding week of 1946 and 5-year median

In these tables a zero indicates a definite report, while leaders imply that, although none was reported, cases may have occurred.

Division and State	Diphtheria			Influenza			Measles			Meningitis, meningococcus		
	Week ended—		Median 1942–46	Week ended—		Median 1942–46	Week ended—		Median 1942–46	Week ended—		Median 1942–46
	Feb. 1, 1947	Feb. 2, 1946		Feb. 1, 1947	Feb. 2, 1946		Feb. 1, 1947	Feb. 2, 1946		Feb. 1, 1947	Feb. 2, 1946	
NEW ENGLAND												
Maine	0	0	0	2	-------	-------	174	29	29	1	0	0
New Hampshire	0	0	0	-------	3	-------	8	15	-------	0	0	0
Vermont	0	0	0	38	32	2	223	3	4	1	0	0
Massachusetts	13	3	3	-------	-------	-------	457	203	351	2	6	6
Rhode Island	0	0	0	-------	-------	-------	125	-------	20	0	0	0
Connecticut	0	2	1	1	15	8	226	60	155	0	2	2
MIDDLE ATLANTIC												
New York	30	21	16	[1] 9	[1] 12	[1] 12	151	745	745	10	17	25
New Jersey	2	6	2	6	19	19	120	156	165	7	6	7
Pennsylvania	13	19	11	2	4	2	598	1,047	1,553	8	19	18
EAST NORTH CENTRAL												
Ohio	29	33	13	1	40	14	395	69	136	3	9	11
Indiana	9	23	12	5	103	35	20	140	140	1	4	4
Illinois	5	6	10	2	8	14	25	668	371	0	13	13
Michigan [2]	11	12	8	-------	11	15	68	787	166	0	10	5
Wisconsin	2	2	0	32	214	84	107	63	241	0	3	3
WEST NORTH CENTRAL												
Minnesota	9	22	5	-------	2	2	50	12	21	2	7	4
Iowa	3	1	3	-------	-------	-------	9	32	75	1	2	1
Missouri	7	6	6	3	8	8	4	230	147	1	5	11
North Dakota	1	2	2	43	21	21	3	-------	7	0	0	0
South Dakota	2	2	1	-------	-------	-------	8	100	100	1	3	1
Nebraska	2	1	1	-------	1	6	-------	36	29	0	0	2
Kansas	4	6	6	7	35	14	7	399	278	0	1	1
SOUTH ATLANTIC												
Delaware	0	1	0	-------	-------	-------	1	12	12	0	1	0
Maryland [2]	6	15	6	2	20	20	13	73	73	2	6	6
District of Columbia	1	0	0	-------	3	2	26	11	18	0	1	2
Virginia	8	13	13	430	1,307	660	164	215	201	4	5	7
West Virginia	2	5	5	39	749	92	125	61	61	1	4	3
North Carolina	5	13	12	-------	-------	35	236	96	96	2	15	10
South Carolina	5	5	5	633	1,767	871	57	65	65	0	0	5
Georgia	4	3	2	28	98	117	112	37	40	3	0	2
Florida	9	8	6	10	8	8	9	32	32	1	3	3
EAST SOUTH CENTRAL												
Kentucky	13	9	7	12	213	10	3	329	115	2	7	7
Tennessee	11	15	6	23	178	127	13	126	114	0	9	6
Alabama	8	6	10	149	727	482	9	36	36	1	5	5
Mississippi [2]	2	2	3	-------	-------	-------	-------	-------	-------	1	7	7
WEST SOUTH CENTRAL												
Arkansas	10	7	8	53	438	426	81	37	91	0	2	3
Louisiana	9	3	3	9	1,317	24	38	4	21	4	4	3
Oklahoma	3	7	6	83	280	231	7	49	49	1	1	1
Texas	23	43	43	1,519	4,652	2,259	80	347	347	6	10	13
MOUNTAIN												
Montana	0	1	1	21	147	31	230	15	163	1	0	0
Idaho	2	1	1	17	54	2	5	132	8	0	0	0
Wyoming	0	4	0	3	-------	19	2	4	38	0	0	1
Colorado	3	6	6	48	126	93	34	100	220	1	0	0
New Mexico	3	1	2	6	1	2	29	5	7	0	1	0
Arizona	6	5	3	156	170	170	63	8	12	0	0	1
Utah [2]	0	0	0	12	999	6	8	95	35	0	0	1
Nevada	0	0	0	-------	-------	1	-------	7	7	0	0	0
PACIFIC												
Washington	2	10	3	-------	-------	3	23	308	149	2	3	5
Oregon	3	5	5	16	70	32	30	58	75	0	3	3
California	22	37	35	12	403	175	85	941	766	10	17	17
Total	302	392	323	3,432	14,255	5,667	4,261	7,997	13,444	80	211	219
5 weeks	1,579	2,116	1,723	20,342	130,522	22,592	19,056	28,282	49,545	424	1,120	1,172
Seasonal low week [3]	(27th) July 5–11			(30th) July 26–Aug. 1			(35th) Aug. 30–Sept. 5			(37th) Sept. 13–19		
Total since low	9,145	13,760	10,712	53,317	492,770	58,454	41,943	54,406	87,558	[4] 1,396	2,624	2,802

[1] New York City only.
[2] Period ended earlier than Saturday.
[3] Dates between which the approximate low week ends. The specific date will vary from year to year.
[4] Correction: Meningitis, Arkansas, week ended October 26, 1946, 4 cases (instead of 3).

Telegraphic morbidity reports from State health officers for the week ended Feb. 1, 1947, and comparison with corresponding week of 1946 and 5-year median—Con.

Division and State	Poliomyelitis			Scarlet fever			Smallpox			Typhoid and paratyphoid fever [5]		
	Week ended—		Median 1942–46	Week ended—		Median 1942–46	Week ended—		Median 1942–46	Week ended—		Median 1942–46
	Feb. 1, 1947	Feb. 2, 1946		Feb. 1, 1947	Feb. 2, 1946		Feb. 1, 1947	Feb. 2, 1946		Feb. 1, 1947	Feb. 2, 1946	
NEW ENGLAND												
Maine	1	0	0	40	38	38	0	0	0	0	0	0
New Hampshire	0	0	0	1	12	12	0	0	0	0	0	0
Vermont	2	0	0	10	12	12	0	0	0	0	0	0
Massachusetts	1	0	0	122	189	372	0	0	0	5	1	1
Rhode Island	0	0	0	14	14	16	0	0	0	0	0	0
Connecticut	0	0	0	71	33	85	0	0	0	0	1	0
MIDDLE ATLANTIC												
New York	8	2	2	343	375	445	0	0	0	4	3	3
New Jersey	1	0	0	132	129	130	0	0	0	0	1	1
Pennsylvania	1	0	1	187	296	309	0	0	0	2	1	4
EAST NORTH CENTRAL												
Ohio	1	2	0	402	329	329	2	0	0	2	2	2
Indiana	1	0	0	74	114	158	2	0	1	0	0	0
Illinois	3	2	1	158	145	260	0	1	1	1	1	2
Michigan [3]	4	0	0	148	133	174	0	0	0	0	2	2
Wisconsin	2	0	0	87	148	183	0	0	0	1	0	0
WEST NORTH CENTRAL												
Minnesota	0	0	1	42	49	92	0	0	0	0	0	0
Iowa	0	1	0	57	41	63	0	0	0	1	0	0
Missouri	3	1	1	43	92	110	0	0	0	0	1	1
North Dakota	0	0	0	10	11	30	0	0	0	0	0	0
South Dakota	0	0	0	1	23	23	0	0	0	0	0	0
Nebraska	1	0	0	31	45	45	1	0	1	0	1	0
Kansas	0	1	0	63	65	90	0	0	0	0	0	0
SOUTH ATLANTIC												
Delaware	0	0	0	15	5	8	0	0	0	0	0	0
Maryland [3]	2	0	0	23	59	90	0	0	0	0	1	1
District of Columbia	1	0	0	4	14	21	0	0	0	0	0	0
Virginia	1	0	0	27	94	50	0	0	0	1	0	1
West Virginia	1	0	0	38	24	54	0	0	0	0	0	0
North Carolina	1	2	1	26	65	65	0	0	0	1	3	1
South Carolina	0	0	0	14	17	9	0	0	0	1	2	1
Georgia	0	0	0	20	8	17	0	0	0	2	4	4
Florida	4	7	3	5	10	13	0	0	0	3	0	0
EAST SOUTH CENTRAL												
Kentucky	0	0	0	61	38	84	0	0	1	2	1	0
Tennessee	1	1	1	36	29	40	1	0	0	1	0	1
Alabama	1	0	0	13	13	13	0	0	1	0	0	1
Mississippi [2]	1	1	1	7	22	12	0	0	0	0	1	3
WEST SOUTH CENTRAL												
Arkansas	1	1	0	7	5	6	0	0	0	3	0	1
Louisiana	0	2	0	16	17	14	0	0	0	4	0	3
Oklahoma	1	0	0	4	28	25	0	0	0	5	0	0
Texas	2	2	2	39	86	86	0	4	2	2	1	3
MOUNTAIN												
Montana	0	3	0	10	7	14	0	1	0	0	0	0
Idaho	0	0	0	13	6	18	0	0	0	2	0	0
Wyoming	0	0	0	5	2	14	0	0	0	0	0	0
Colorado	1	0	0	40	26	52	0	0	0	0	0	0
New Mexico	0	0	0	9	15	5	0	0	0	0	2	1
Arizona	1	0	0	8	12	12	0	0	0	4	0	0
Utah [3]	0	0	0	21	50	66	0	0	0	0	0	0
Nevada	0	0	0	1	0	2	0	0	0	0	0	0
PACIFIC												
Washington	2	4	0	53	19	28	0	0	0	1	1	1
Oregon	0	0	0	27	21	21	0	0	0	4	0	0
California	8	6	5	127	231	231	0	0	0	1	6	5
Total	58	38	29	2,705	3,216	4,037	6	6	13	53	36	77
5 weeks	[6] 373	248	164	12,393	14,155	18,187	23	35	62	219	205	285
Seasonal low week [3]	(11th) Mar. 15–21			(32nd) Aug. 9–15			(35th) Aug. 30–Sept. 5			(11th) Mar. 15–21		
Total since low	[6] 25,146	13,585	12,240	39,079	52,726	57,141	77	111	179	3,747	4,456	5,345

[2] Period ended earlier than Saturday.
[3] Dates between which the approximate low week ends. The specific date will vary from year to year.
[4] Including paratyphoid fever reported separately, as follows: Massachusetts 3 (salmonella infection); Georgia 1; Arkansas 2; Arizona 1.
[6] Corrections: Poliomyelitis, week ended January 4, Indiana 5 cases (instead of 4), Arkansas 0 (instead of 1); Maryland 1 September case deducted from total for 1946 and cumulative since low.

Telegraphic morbidity reports from State health officers for the week ended Feb. 1, 1947, and comparison with corresponding week of 1946 and 5-year median—Con.

Division and State	Whooping cough			Week ended Feb. 1, 1947							
	Week ended—		Median 1942–46	Dysentery			Encephalitis, infectious	Rocky Mt. spotted fever	Tularemia	Typhus fever, endemic	Undulant fever
	Feb. 1, 1947	Feb. 2, 1946		Amebic	Bacillary	Unspecified					
NEW ENGLAND											
Maine	8	18	22	-----	-----	-----	-----	-----	-----	-----	-----
New Hampshire	2	2	2	-----	-----	-----	-----	-----	-----	-----	1
Vermont	15	15	29	-----	-----	-----	-----	-----	-----	-----	-----
Massachusetts	237	98	150	-----	1	-----	-----	-----	-----	-----	1
Rhode Island	11	19	24	-----	-----	-----	-----	-----	-----	-----	-----
Connecticut	60	43	53	-----	-----	-----	-----	-----	-----	-----	6
MIDDLE ATLANTIC											
New York	178	256	256	8	-----	-----	1	-----	-----	-----	3
New Jersey	186	133	133	1	-----	-----	-----	-----	-----	-----	1
Pennsylvania	232	153	219	3	-----	-----	-----	-----	-----	-----	1
EAST NORTH CENTRAL											
Ohio	142	124	139	1	-----	-----	-----	-----	1	-----	5
Indiana	29	16	29	-----	-----	-----	1	-----	1	-----	2
Illinois	111	65	75	5	-----	-----	-----	-----	8	-----	11
Michigan [2]	200	102	102	1	-----	-----	-----	-----	-----	-----	1
Wisconsin	159	67	134	1	-----	-----	1	-----	1	-----	3
WEST NORTH CENTRAL											
Minnesota	21	9	43	3	-----	-----	-----	-----	-----	-----	1
Iowa	25	4	30	-----	-----	-----	-----	-----	-----	-----	10
Missouri	25	7	15	-----	-----	-----	-----	-----	1	-----	1
North Dakota	-----	-----	7	-----	-----	-----	-----	-----	-----	-----	-----
South Dakota	1	1	1	-----	-----	-----	-----	-----	-----	-----	-----
Nebraska	7	5	5	2	-----	-----	-----	-----	-----	-----	-----
Kansas	14	31	41	-----	-----	-----	1	-----	1	-----	3
SOUTH ATLANTIC											
Delaware	•16	7	3	-----	-----	-----	-----	-----	-----	-----	-----
Maryland [2]	•71	25	43	-----	-----	1	-----	-----	-----	2	2
District of Columbia	3	2	6	-----	-----	-----	-----	-----	-----	-----	-----
Virginia	79	52	65	1	-----	46	-----	-----	2	-----	2
West Virginia	15	12	43	-----	-----	-----	-----	-----	-----	-----	-----
North Carolina	35	35	151	-----	-----	-----	-----	-----	2	4	-----
South Carolina	45	51	57	1	7	-----	-----	-----	1	2	1
Georgia	19	10	14	1	1	-----	-----	-----	1	16	1
Florida	49	13	15	1	1	1	-----	-----	-----	9	-----
EAST SOUTH CENTRAL											
Kentucky	51	24	26	-----	-----	-----	-----	-----	1	1	-----
Tennessee	18	29	29	-----	-----	-----	-----	-----	7	3	-----
Alabama	100	19	19	-----	-----	-----	-----	-----	-----	9	4
Mississippi [2]	-----	-----	-----	-----	-----	-----	-----	-----	3	1	5
WEST SOUTH CENTRAL											
Arkansas	21	12	17	2	3	-----	-----	-----	3	-----	-----
Louisiana	8	1	3	8	3	-----	-----	-----	1	11	2
Oklahoma	4	27	10	-----	-----	-----	-----	-----	2	-----	1
Texas	219	141	144	18	326	325	-----	-----	-----	10	6
MOUNTAIN											
Montana	3	6	10	-----	-----	-----	-----	-----	-----	-----	-----
Idaho	4	11	9	-----	-----	-----	-----	-----	-----	-----	-----
Wyoming	2	-----	2	-----	-----	-----	-----	-----	-----	-----	-----
Colorado	11	24	24	-----	-----	-----	-----	-----	-----	-----	1
New Mexico	14	25	19	-----	2	-----	-----	-----	-----	-----	-----
Arizona	31	13	18	-----	-----	53	-----	-----	-----	-----	-----
Utah [2]	3	29	23	-----	-----	-----	-----	-----	-----	-----	1
Nevada	-----	-----	2	-----	-----	-----	-----	-----	-----	-----	-----
PACIFIC											
Washington	21	34	34	-----	-----	-----	-----	-----	-----	-----	-----
Oregon	1	12	12	1	-----	-----	1	-----	-----	-----	1
California	117	115	239	2	11	-----	1	-----	-----	1	-----
Total	2,623	1,897	2,403	60	345	426	6	0	36	69	77
Same week, 1946	1,897	-----	-----	35	326	167	10	1	18	50	75
Median, 1942–46	2,403	-----	-----	23	184	56	10	0	18	50	[7]80
5 weeks: 1947	12,123	-----	-----	185	2,160	1,253	32	1	258	271	419
1946	9,233	-----	-----	198	1,748	692	42	1	122	296	321
Median, 1942–46	11,388	-----	-----	117	1,199	270	42	1	122	296	[7]338

[2] Period ended earlier than Saturday.
[7] 2-year average, 1945–46.

Anthrax: New York 1 case.
Leprosy: California 2 cases.

WEEKLY REPORTS FROM CITIES [1]

City reports for week ended Jan. 25, 1947

This table lists the reports from 88 cities of more than 10,000 population distributed throughout the United States, and represents a cross section of the current urban incidence of the diseases included in the table.

Division, State, and City	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Poliomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
NEW ENGLAND												
Maine:												
Portland	0	1		0	39	0	1	0	5	0	0	
New Hampshire:												
Concord	0	0		0		0	0	0	0	0	0	
Vermont:												
Barre	0	0		0	3	0	0	0	0	0	0	1
Massachusetts:												
Boston	7	0		0	9	1	16	0	21	0	1	50
Fall River	0	0		0	2	0	2	0	0	0	0	3
Springfield	0	0		0	7	0	0	0	2	0	0	5
Worcester	0	0		0	1	0	13	0	0	0	1	16
Rhode Island												
Providence	2	0		0	30	0	6	0	8	0	0	16
Connecticut:												
Bridgeport	0	0		0	7	0	4	0	1	0	0	2
Hartford	0	0		0	1	0	2	0	6	0	0	
New Haven	0	0		0	33	0	0	0	7	0	0	8
MIDDLE ATLANTIC												
New York:												
Buffalo	2	0		1		0	8	0	9	0	0	1
New York	19	1	6	0	54	3	65	2	111	0	2	65
Rochester	1	0		0	2	1	2	0	10	0	0	
Syracuse	2	0		0		0	2	0	12	0	0	17
New Jersey:												
Camden	0	0		0		0	3	0	1	0	0	7
Newark	0	0	1	1	4	1	7	0	23	0	0	38
Trenton	0	0	1	1	18	0	2	0	3	0	0	1
Pennsylvania:												
Philadelphia	2	0	6	2	10	2	24	0	38	0	2	44
Pittsburgh	2	0		0	162	2	7	0	13	0	0	5
Reading	0	0		0	1	0	2	0	0	0	0	1
EAST NORTH CENTRAL												
Ohio:												
Cincinnati	1	0		0		2	3	0	13	0	0	8
Cleveland	0	0	1	0	185	0	6	0	23	0	0	23
Columbus	2	0		0	1	0	6	0	15	0	0	5
Indiana:												
Fort Wayne	0	0		0	9	0	3	0	0	0	0	
Indianapolis	1	0		1		0	3	0	24	0	0	24
South Bend	0	0		0		0	0	0	3	0	0	3
Terre Haute	0	0		0		0	1	0	1	0	1	
Illinois:												
Chicago	1	0	1	0	9	1	24	1	55	0	0	51
Michigan:												
Detroit	4	0		0	5	1	8	0	35	0	0	67
Flint	0	0		0		0	5	0	2	0	0	3
Grand Rapids	0	0		0	1	0	1	0	1	0	0	1
Wisconsin:												
Kenosha	0	0		0		0	0	0	2	0	0	
Milwaukee	0	0		0	13	1	2	0	27	0	0	53
Racine	0	0		0		0	0	2	3	0	0	4
Superior	0	0		0	1	0	1	0	0	0	0	
WEST NORTH CENTRAL												
Minnesota:												
Duluth	0	0		0		0	0	0	1	0	0	1
Minneapolis	1	0		2	2	0	1	0	13	0	0	1
St. Paul	1	0		0	5	0	4	0	7	0	0	12
Missouri:												
Kansas City	2	0		0	3	0	7	0	9	0	0	21
St. Joseph	0	0		0		0	0	0	2	0	0	2
St. Louis	2	0	2	0	2	4	7	1	9	0	0	3

[1] In some instances the figures include nonresident cases.

City reports for week ended Jan. 25, 1947—Continued

Division, State, and City	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Poliomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
WEST NORTH CENTRAL—continued												
Nebraska:												
Omaha	1	0		0	2	0	4	1	2	0	0	
Kansas:												
Topeka	0	0		0		0	2	0	0	0	0	2
Wichita	0	1		0	1	0	1	0	4	0	0	1
SOUTH ATLANTIC												
Delaware:												
Wilmington	0	0		0		0	3	0	4	0	0	2
Maryland:												
Baltimore	5	0	1	0	6	0	8	0	8	0	0	56
Cumberland	0	0		0	7	0	0	0	0	0	0	
Frederick	0	0		0		0	0	0	0	0	0	
District of Columbia:												
Washington	0	0		0	14	0	4	0	15	0	0	3
Virginia:												
Lynchburg	0	0		0		0	0	0	0	0	0	
Richmond	0	0		0	37	0	2	0	0	0	0	
Roanoke	1	0		0		0	0	0	5	0	0	
West Virginia:												
Charleston	0	0		0		0	0	0	2	0	0	
Wheeling	0	0		0	1	0	0	0	1	0	0	3
North Carolina:												
Raleigh	0	0		0	4	0	1	0	0	0	0	9
Wilmington	0	0		0	4	0	2	0	0	0	0	
Winston-Salem	0	0		0	25	0	2	0	2	0	0	4
South Carolina:												
Charleston	0	0	11	0	4	0	3	0	1	0	0	
Georgia:												
Atlanta	0	0		0	10	0	1	0	8	0	0	1
Brunswick	0	0		0	1	0	0	0	0	0	0	
Savannah	0	0	1	1	39	0	1	0	0	0	0	
Florida:												
Tampa	4	0		0	3	0	2	1	2	0	1	1
EAST SOUTH CENTRAL												
Tennessee:												
Memphis	2	1		0	1	0	14	0	1	0	0	8
Nashville	0	0		1		0	3	0	3	0	0	
Alabama:												
Birmingham	1	0	7	1	8	0	2	0	3	0	0	
Mobile	0	0	3	1		0	2	0	0	0	0	
WEST SOUTH CENTRAL												
Arkansas:												
Little Rock	1	0		0	2	0	2	0	0	0	0	2
Louisiana:												
New Orleans	1	0	1	1	2	2	6	0	4	0	1	2
Shreveport	0	0		0		0	10	0	0	0	0	
Texas:												
Dallas	0	0	1	1	1	0	2	0	2	0	0	1
Galveston	0	0		0		0	0	0	0	0	0	
Houston	0	0		0		0	5	1	1	0	0	
San Antonio	3	0		0		1	9	0	1	0	2	1
MOUNTAIN												
Montana:												
Billings	0	0		0		0	1	0	2	0	0	2
Great Falls	0	0		0	74	0	3	0	0	0	0	
Helena	0	0		0	6	0	0	0	0	0	0	
Missoula	0	0		0		0	0	0	1	0	0	7
Idaho:												
Boise	0	0		0		0	3	0	0	0	0	1
Colorado:												
Denver	2	0	5	0	5	0	12	0	25	0	0	5
Pueblo	0	0		0		0	1	0	0	0	0	
Utah:											0	
Salt Lake City	0	0		0		0	1	0	7	0	0	

City reports for week ended Jan. 25, 1947—Continued

Division, State, and City	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Poliomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
PACIFIC												
Washington:												
Seattle	0	0	-----	0	5	1	4	0	7	0	1	5
Spokane	1	0	-----	0	2	0	3	0	7	0	0	2
Tacoma	0	0	-----	0	3	0	0	0	6	0	0	-----
California:												
Los Angeles	8	0	9	3	4	2	8	11	13	0	0	25
Sacramento	1	0	-----	0	-----	0	2	0	2	0	0	2
San Francisco	1	0	1	1	4	0	3	1	10	0	0	2
Total	84	4	58	18	894	25	380	21	664	0	12	714
Corresponding week, 1946	120	-----	359	50	2,672	-----	463	-----	852	1	8	549
Average 1942–46	76	-----	506	[2] 85	[2] 2,799	•	[3] 544	-----	1,311	1	12	772

[2] 3-year average, 1944–46.
[3] 5-year median, 1942–46.

Dysentery, amebic.—Cases: New York 2; Chicago 1; Detroit 1; Los Angeles 1.
Dysentery, bacillary.—Cases: Worcester 1; Los Angeles 3.
Dysentery, unspecified.—Cases: San Antonio 3.
Tularemia.—Cases: St. Louis 1; Houston 1.
Typhus fever, endemic.—Cases: New York 1; Baltimore 2; Wilmington, N. C., 1; Mobile 1; New Orleans 2.

Rates (annual basis) per 100,000 population, by geographic groups, for the 88 cities in the preceding table (estimated population, 1943, 34,293,900)

	Diphtheria case rates	Encephalitis, infectious, case rates	Influenza		Measles case rates	Meningitis, meningococcus, case rates	Pneumonia death rates	Poliomyelitis case rates	Scarlet fever case rates	Smallpox case rates	Typhoid and paratyphoid fever case rates	Whooping cough case rates
			Case rates	Death rates								
New England	23.5	2.6	0.0	0.0	345	2.6	115.0	0.0	131	0.0	5.2	264
Middle Atlantic	13.0	0.5	6.5	2.3	116	4.2	56.5	0.9	102	0.0	1.9	83
East North Central	5.5	0.0	1.2	0.6	137	3.1	38.6	1.8	125	0.0	0.6	148
West North Central	14.1	2.0	4.0	4.0	30	8.0	52.3	4.0	95	0.0	0.0	86
South Atlantic	16.3	0.0	21.2	1.6	253	0.0	47.4	1.6	78	0.0	1.6	129
East South Central	17.7	5.9	59.0	17.7	53	0.0	123.9	0.0	41	0.0	0.0	47
West South Central	14.3	0.0	5.7	5.7	14	8.6	97.6	2.9	23	0.0	8.6	32
Mountain	15.9	0.0	39.7	0.0	675	0.0	166.8	0.0	278	0.0	0.0	119
Pacific	17.4	0.0	15.8	6.3	28	4.7	31.6	19.0	71	0.0	1.6	57
Total	12.8	0.6	8.8	2.7	136	3.8	57.9	3.2	101	0.0	1.8	109

TERRITORIES AND POSSESSIONS

Panama Canal Zone

Notifiable diseases—December 1946.—During the month of December 1946, cases of certain notifiable diseases were reported in the Panama Canal Zone and terminal cities as follows:

Disease	Residence [1]									
	Panama City		Colon		Canal Zone		Outside the Zone and terminal cities		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Chickenpox	14		5		12		1		32	
Diphtheria	21						9		30	
Dysentery:										
Amebic	2				1		8		11	
Bacillary	2				5		2		9	
Leprosy							1		1	
Malaria [2]	7		2		27		42	5	78	5
Measles	6		10	1	25		8		49	1
Meningitis, meningococcus	1						1		2	
Mumps					6				6	
Paratyphoid fever					1				1	
Pneumonia		4		5	26	6		7	[3] 26	22
Tuberculosis		23		12	3	2		5	[3] 3	42
Whooping cough					3				[3] 3	

[1] If place of infection is known, cases are so listed instead of by residence.
[2] 4 recurrent cases.
[3] In the Canal Zone only.

* * *

DEATHS DURING WEEK ENDED JAN. 25, 1947

[From the Weekly Mortality Index, issued by the National Office of Vital Statistics]

	Week ended Jan. 25, 1947	Corresponding week, 1946
Data for 93 large cities of the United States:		
Total deaths	9,958	10,157
Median for 3 prior years	10,068	
Total deaths, first 4 weeks of year	40,765	44,156
Deaths under 1 year of age	848	597
Median for 3 prior years	622	
Deaths under 1 year of age, first 4 weeks of year	3,371	2,428
Data from industrial insurance companies:		
Policies in force	67,208,392	67,142,890
Number of death claims	13,844	17,211
Death claims per 1,000 policies in force, annual rate	10.7	13.4
Death claims per 1,000 policies, first 4 weeks of year, annual rate	9.8	11.7

FOREIGN REPORTS

CANADA

Provinces—Communicable diseases—Week ended January 11, 1947.—During the week ended January 11, 1947, cases of certain communicable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

Disease	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Chickenpox	1	12	1	270	703	46	45	68	128	1,274
Diphtheria		1	1	32	6	4		3	3	50
Dysentery, amebic					11					11
German measles				4	14		3	10	9	40
Influenza		8			29	2	2		4	45
Measles		201	3	123	64	120	264	360	558	1,693
Meningitis, meningococcus		1			1	1				3
Mumps		3		86	524	22	179	26	310	1,150
Poliomyelitis		1		1						2
Scarlet fever		2	9	36	114	6	1	11	17	196
Tuberculosis (all forms)			15	43	40	7	5	9	46	165
Typhoid and paratyphoid fever				11	2		1		3	17
Undulant fever				1						1
Venereal diseases:										
Gonorrhea		20	31	98	122	51	47	57	92	518
Syphilis		9	11	71	71	14	8	9	31	224
Other forms									3	3
Whooping cough		5	68	20	140	16	6	7	10	272

JAMAICA

Notifiable diseases—4 weeks ended January 11, 1947.—During the 4 weeks ended January 11, 1947, cases of certain notifiable diseases were reported in Kingston, Jamaica, and in the island outside of Kingston, as follows:

Disease	Kingston	Other localities	Disease	Kingston	Other localities
Cerebrospinal meningitis	1		Puerperal sepsis		2
Chickenpox	3	2	Tuberculosis (pulmonary)	23	41
Diphtheria	1	3	Typhoid fever	6	65
Dysentery, unspecified	2	2	Typhus fever (murine)	2	1
Erysipelas	1	4			

JAPAN

Notifiable diseases—2 weeks ended December 28, 1946, and total number of cases reported for the year to date.—During the 2 weeks ended December 28, 1946, and for the year to date, cases of certain notifiable diseases were reported in Japan as follows:

Disease	2 weeks ended Dec. 28, 1946	Total number of cases reported for the year to date	Disease	2 weeks ended Dec. 28, 1946	Total number of cases reported for the year to date
Cholera	16	1,229	Paratyphoid fever	240	9,090
Diphtheria	1,748	49,166	Scarlet fever	103	2,209
Dysentery, unspecified	224	67,737	Smallpox	32	17,800
Encephalitis, Japanese "B"	2	[1] 176	Syphilis	3,745	74,009
Gonorrhea	5,709	128,845	Typhoid fever	904	44,421
Malaria	366	[1] 26,207	Typhus fever	116	31,141
Meningitis, epidemic	39	1,468			

[1] For the period June 2, 1946, to date.

NEW ZEALAND

Notifiable diseases—4 weeks ended December 28, 1946.—During the 4 weeks ended December 28, 1946, certain notifiable diseases were reported in New Zealand as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Cerebrospinal meningitis	4	1	Ophthalmia neonatorum	1	
Diphtheria	63	2	Puerperal fever	4	
Dysentery:			Scarlet fever	80	
Amebic	3		Trachoma	1	
Bacillary	5		Tuberculosis (all forms)	154	40
Erysipelas	14		Typhoid fever	9	1
Food poisoning	10		Undulant fever	3	
Malaria	2				

REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

NOTE.—Except in cases of unusual incidence, only those places are included which had not previously reported any of the above-named diseases, except yellow fever, during recent months. All reports of yellow fever are published currently.

A table showing the accumulated figures for these diseases for the year to date is published in the PUBLIC HEALTH REPORTS for the last Friday of each month.

Smallpox

Paraguay.—For the month of November 1946, 82 cases of smallpox (alastrim) were reported in Paraguay, including 64 cases unconfirmed in P. J. Caballero, 11 cases in Paraguari, and 6 cases in San Cosme.

Typhus Fever

Colombia.—For the month of December 1946, 288 cases of typhus fever with 14 deaths were reported in Colombia, including 206 cases with 13 deaths reported in Cundinamarca Department.

Peru.—For the month of November 1946, 104 cases of typhus fever were reported in Peru.

Yellow Fever

Colombia.—Yellow fever has been reported in Colombia as follows: Antioquia Department—Remedios, October 19, 1946, 1 death; Santander Department—Lebrija, January 7, 1947, 1 death, Rionegro, December 22, 1946, 1 death, Simacota, December 12, 1946, 1 death, San Vincente de Chucuri, December 9, 1946, 1 death.