# Public Health Reports 

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## PROBLEMS CREATED BY RETURNING MALARIA CARRIERS ${ }^{1}$

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During the past year we have been exposed to a sample of what may be expected in the way of malaria carriers in the future when large numbers of troops return to this country from the fighting fronts. Already malaria is rated as the No. 1 disease by both Army and Navy. We are not at liberty to quote rates but some indication of the magnitude of the problem is gained by the statement that 75 percent of the malaria among troops in the Continental United States at this moment is of foreign origin. The rate among returning troops can be imagined from this figure when one considers the extremely small proportion of the troops now in the United States who have actually seen foreign service.

When one lists the important theatres of the war-the southwest Pacific, southeast Asia, India, and the eastern Mediterranean-he has noted all the most important malarial centers of the world, except equatorial Africa and tropical America, and even in these areas there are concentrations of troops and considerable military activity.

The very nature of military operations precludes the possibility of sound antimalarial precautions until the occupied areas have been consolidated to the extent that antianopheline measures become feasible.

It is true that enormous strides have been made in the development of effective repellents to protect against the bites, and in the use of aerosol sprays to keep down the numbers of infective mosquitoes in the shelters or quarters of troops that are in mobile units. In addition, the production of atabrine has reached a point where no shortage is probable, at least among the armed forces. Its effectiveness as a suppressive is well recognized, and it apparently controls falciparum (subtertian) malaria in some cases if taken in sufficiently large doses and far enough in advance of exposure to produce an adequate blood

[^0]level. Apparently, however, vivax (tertian) malaria breaks through the atabrine suppressive dosage quite consistently and almost invariably relapses as soon as atabrine consumption is stopped. Since tertian malaria is noted for its ability to relapse for months and even years after the initial attack, the management problem for these carriers is a complicated one. While absolutely necessary to keep troops on their feet during a campaign, the use of any drug developed thus far is useless in reducing the infection rate.

A recent report of a national committee on tropical diseases states: "Malaria infection rates have never been controlled by drugs. If malaria control is the proposed purpose of suppressive treatment, then it is not advisable. Treatment should be provided to control the death rate. Control of population movements or control of anophelines is necessary in the prevention of epidemics, but the endemic infection rate depends on separating the populations from constant contact with mosquitoes. This last can be done through screening, killing adult mosquitoes, or preventing the production of large numbers of anophelines. Wholesale suppressive treatment would only serve to increase the number of subclinical cases. It is much better to let attacks become apparent through frank paroxysm and then give full therapeutic medication."

No malariologist would quarrel with the proposal to control malaria with drugs or vaccines if an effective prophylactic were available. None has been produced, however, and in its absence the only timetested recourse is the reduction of anopheline carriers. It is known from experience that the examination of a single blood smear will detect only from 20 to 50 percent of those infected. To hold all returning personnel over a period of 5 to 8 weeks in quarantine with weekly examinations of blood smears would probably result in the detection of perhaps 80 to 85 percent of those infected but the cost would be terrific and the results problematical.

If such a procedure were followed and the results showed that only 10 percent were harboring parasites, we would still be confronted by a serious dilemma as to what course to follow with those found to be positive. To keep that many men under surveillance or quarantine from 6 to 9 months, which would be the shortest time that could logically be established if such a procedure of quarantine were inaugurated, would cost enormous sums and create a resentment on the part of the troops and their families that could not be withstood by military or public health authorities.

To liberate them without plans and facilities to protect the communities to which they travel would be to subscribe to defeatism and would be little short of criminal negligence on the part of those charged with the protection of the public health. As a solution to this problem, Dr. L. L. Williams, Jr., of the United States Public Health Service,
has proposed an original and daring hypothesis-that of eradicating malaria from the United States. He proposes an antianopheline attack in the endemic areas that still persist and the activation of mobile antianopheline units to control the expected explosive epidemics that will occur in those areas outside the endemic foci where the introduction of new human carriers will overbalance the handicaps against the transmission of malaria in favor of transmission.

Before dismissing this proposal as idealistic and academic, as one is apt to do in visualizing the thousands of acres of anopheline breeding waters in the United States, let us look at the facts.

In 1880 malaria was endemic over the entire United States except the tip of New England, the crest of the Appalachians, and the semiarid West. Even in this last section, malaria was a problem in the Central Valley of California, the Willamette Valley of Oregon, and in some of the Mormon settlements of Utah. Malaria is not simply an association of a potent anopheline vector and human carriers despite the fact that these are absolutely necessary factors in the perpetuation of the disease. Potent anopheline vectors of malaria occur in every State in the Union. It is probable that there are also human carriers present in the same areas. However, malaria is now considered to be endemic in a relatively small proportion of the States in which it was an important disease in 1880.

The third factor to make up the triumvirate with anophelines and human carriers which makes malaria possible is a composite group of conditions which are included in a properly vague phrase which is known as the "ecological niche." Many of the factors which make up a favorable "ecological niche" are unknown. Others are very obvious as, for instance, temperature. Malaria is a disease of warm climates. This is apparent not only from its distribution but also from the optimum temperatures required for the development of the parasite in the body of the mosquito- $71^{\circ} \mathrm{F}$. for quartan malaria, $77^{\circ} \mathrm{F}$. for tertian, and $86^{\circ} \mathrm{F}$. for subtertian. Temperatures slightly below these points lengthen the period of development and if markedly lower inhibit the development completely. Obviously, a mosquito which succeeds in obtaining a meal of infective blood in cool northern Michigan would have a much smaller chance of becoming infective than an anopheline of the same species in hot, humid South Georgia.

Anophelines are also particularly susceptible to low relative humidities. This is particularly important in California. There is fairly good evidence that in the Central Valley the humidities in July and August are so low that the average length of life of anopheline females is materially shortened. It is sufficiently long to enable them to lay eggs and perpetuate the species but too short to develop the malaria parasite and transmit it, thus reducing transmission to the spring and early fall when the humidity is higher.

Added to these natural obstacles are those interposed by man. The advent of substantial housing and screening was probably the greatest accomplishment in reducing the malarial rate, as it interposed an effective barrier to prevent mosquitoes from becoming infected and from passing the infection on to nonimmunes. In recent years when the relative amount of screening has not been increasing at the rate that it did when first introduced, the greatest aid in reducing the malaria rate has doubtless been the "flit" gun and pyrethrum sprays. As far as numbers of mosquitoes eliminated by this method are concerned, they are probably comparable to the numbers that we eliminate as larvae by dipping in suspected waters to determine the breeding rate. However, the mosquitoes killed by household spraying are the important ones as they are the ones that either have bitten or will bite human beings.
As far as can be determined, none of the anophelines that carry malaria in the United States are inordinately fond of human blood. They are easily deviated, to use a term of Hackett's, to other hosts such as cows, horses, and other domesticated or wild animals. They are totally unlike $A$. gambiae, the world's most serious malaria carrier, which was introduced into Brazil some years ago from equatorial Africa, or Aedes aegypti, the predominant yellow fever and dengue carrier, which prefer human blood to all others and choose inhabited human domiciles above all other available shelters.

Precipitin tests to determine the source of blood meals which show 5 percent of local anophelines as having fed on human blood are high. With gambiae or aegypti, rates of 80 percent are not unexpected.

If, therefore, only 5 percent have imbibed human blood, or one in twenty, provided that the group is homozygous in its catholicity of taste, the chances for one mosquito that has obtained one meal of human blood to obtain a second one in two meals would be one in four hundred. Assuming that all the ecological hurdles of temperature, humidity, and access to carriers in proper shape to infect the mosquitoes and to nonimmunes ready to be infected are surmounted, the mathematical chances of a successful transmission are then in odds of one to several thousand when it is considered that the human carrier rate in even the endemic areas of the United States is now only about one person in five hundred.
I have gone into some detail to enlarge on the difficulties of transmission because I believe a thorough appreciation of these points will explain why malaria has receded to its present endemic foci, why an eradication program is feasible, and why, if proper precautions are taken, there need be little fear of malaria epidemics as a result of returning carriers from the theatres of war.
At the present time, the endemic foci of malaria are limited to the southeastern portion of the United States in an area roughly bounded
by the latitude of Washington, D. C., and the longitude of San Antonio. Low grade endemicity occurs outside this area in the Pecos Valley of New Mexico, the Central Valley of California, the Willamette Valley of Oregon, and in scattered spots along the Ohio Valley.

The malaria rate in the southeast has been cyclic in character in peaks roughly 7 years apart. In 1932-33, which was an all-time low at that time, a blood smear survey of 129,000 school children showed a positive rate of 5.8 percent, or about one in twenty infected. This residual infection rate with the mosquito densities and ecological conditions as they were in 1934-35 was sufficient to produce an upswing in the rate which produced a peak which, in turn, started to recede in 1934. The expected 7 -year peak did not materialize in 1941 but continued to recede. A survey of school children in 1942 comprising 109,000 slides so far examined and which covered much the same territory now shows a rate of 0.21 percent, or one in five hundred.

If anopheline densities and ecological conditions remain the same, at some stage in the recession of malaria carriers the critical point will be reached when the mathematical chances for a mosquito actually to transmit malaria will become so slight that fewer and fewer cases will develop and the disease will disappear for lack of carriers.

However, there are about 100 counties located in 12 States of the Southeast where the mortality rates exceed 30 per 100,000 per annum. It is obvious that with rates this high the mosquito densities and the ecological conditions are of such character that the disease is still able to perpetuate itself. The introduction of a few human carriers here, particularly if they harbor new strains of malaria from foreign shores for which the native population has no tolerance, will unquestionably produce an increase in the rate. By the same token, in the countries where malaria is waging a losing battle at the present moment by virtue of a lack of carriers, the introduction of fresh sources of infection is bound to counterbalance the decrease in mosquitoes or improved housing that has been responsible for the previous decrease and produce an unwelcome increase in the number of cases.

The perpetuation of malaria and its degree of endemicity is a meticulously balanced relationship between mosquito vectors, human carriers, and the ecological conditions under which they operate.

Dr. Williams' proposal to control by means of antianopheline measures the centers of easiest transmission (the present endemic foci) and to be ready to suppress by antianopheline measures the explosive epidemics outside the recognized endemic foci is a sound philosophy and good public health procedure.

Properly activated and progressively motivated, the impact of returning carriers could be offset by a reduction in mosquito vectors in the areas where the balance appeared to be turning against us so
that, instead of increasing, the national malaria rate would continue to recede to the point of eradication.

The Public Health Service has been given a mandate for the prosecution of at least a portion of this suggested proposal of Dr. Williams. At present antianopheline programs are being carried on with the cooperation of 20 States, the District of Columbia, and Puerto Rico. In addition, 12 city programs for the prevention of yellow fever and dengue are being carried on in 5 States and the Territory of Hawaii.

The antimalaria programs are centered about war areas, i. e., Army and Navy establishments, critical war industries, and congregating, recreational, or housing areas for service men. Originally intended to protect the military forces from the malaria hazards incident to the areas where they were quartered, the program is on the point of reversing itself at the present moment into an attempt not only to fulfill its original purpose but to prevent an increase in the civilian malaria rate as a result of the returning malaria carriers from overseas.

The frank, recognized cases of malaria and the malaria cases that are concurrent with other causes of hospitalization will be quartered in general hospitals throughout the country. These cases will be of little danger to the community as long standing experience of both the Army and Navy has established well regulated regimes of treatment and screening that should obviate most of the danger of transmission.

However, because there will be comparatively heavy concentrations of potential carriers at all general hospitals, their sites have all been surveyed and if effective mosquito carriers are present they are being kept under inspection and control operations inaugurated when and if the densities become even moderately serious.

The prisoner-of-war camps furnish a more serious complication. The rate of infection is relatively high and, even though they are receiving excellent medical attention, the possibilities for them to transmit infection to the countryside in their roles as agricultural workers is much greater than in the case of the hospitalized patient. As in the case of the general hospitals, the prisoner-of-war camps are being surveyed and the same precautions taken.

Far more serious than either of these categories is the case of the apparently healthy members of the armed forces who return to this country for a rest period or eventually for discharge. The release from atabrine treatment, coupled with a change of climate, a different daily routine, or possibly an overindulgence, even if it is only in mother's cooking, will combine to bring a relapse or even sometimes a primary attack which has remained latent. These men become the most dangerous carriers because they are seldom under close
medical observation and they may be scattered to the very last crossroad in the country on furlough.

At this point, the degree of vigilance of the local, county, and State health authorities will decide how serious the establishment of each small focus of infection is to become. In many cases the possibilities of transmission may be so slight, even though potent anophelines are present, that the case will remain unique. However, if transmission does ensue, the more quickly steps are taken, the smaller the chances for the establishment of a troublesome focus. An explosive epidemic of 53 cases this summer in an area where transmission is not easy was abated after the advent of an antimosquito and interior spraying program.

In addition to our established program, the Malaria Control in War Areas program has already taken steps to establish a skeleton team of entomologists and engineers in all the Public Health Service districts not included in our regular program. The principal function of these units will be to survey, inspect, and institute control if necessary in the vicinity of general hospitals, prisoner-of-war camps, and other stations where concentrations of malaria carriers are present. These units will have available one or more mobile control units equipped to inaugurate antianopheline measures designed to decrease breeding and for interior spraying to destroy adults. They will be available at the request of the State to the Public Health Service district office to work under the State's direction for the suppression of localized epidemics wherever they may occur.

## SICKNESS ABSENTEEISM AMONG INDUSTRIAL WORKERS THIRD QUARTER OF $1943{ }^{1}$

By W. M. Gafafer, Principal Statistician, United States Public Health Service

The data on the frequency of sickness and nonindustrial injuries causing disability for more than 1 week during the third quarter and the first 9 months of 1943 and 1942, presented in table 1, are derived from analyses of periodic reports from industrial sick benefit associations, group insurance plans, and company relief departments. The group reported upon comprises over 250,000 workers.

## THIRD QUARTER OF 1948

A comparison of the rates for the third quarter of 1943 with the corresponding ones for 1942 shows with only a few exceptions an increase for each cause. The number of absences of $\mathbf{8}$ days or longer on account

[^1]of sickness and nonindustrial injuries for 1943 is 107.8 per 1,000 males which is 15 percent higher than the rate for 1942 (93.4). The respiratory, the digestive, and the nonrespiratory-nondigestive disease groups show increases of 18,10 , and 16 percent, respectively.

Attention is also directed to the increases shown by bronchitis ( 31 percent), diseases of the stomach except cancer ( 29 percent), and diseases of the heart and arteries, and nephritis ( 50 percent).

Table 1.-Average annual number of absences on account of sickness and nonindustrial injuries disabling for 8 consecutive calendar days or longer among male employees in various industries, by cause, the third quarter of 1943 compared with the third quarter of 1942, and the first 9 months of 1949 compared with the first 9 months of the years 1938-42, inclusive

| Cause. (Numbers in parentheses are disease title numbers from the International List of Causes of Death, 1939) | Annual number of absences per 1,000 males |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Third quarter |  | First 9 months |  |  |
|  | 1943 | 1942 | 1943 | 1942 | 1938-42 |
| Sickness and nonindustrial injuries ${ }^{1}$ | 107.8 | 93.4 | 132.7 | 104.6 | 98.4 |
| Nonindustrial injuries (169-195). | 12.7 | 12.5 | 12.2 | 11.8 | 11.4 |
| Sickness | 95.1 | 80.9 | 120.5 | 92.8 | 87.0 |
| Respiratory diseases | 31.4 | 27.5 | 61.3 | 39.1 | 38.0 |
| Tuberculosis of the respiratory system (13) | . 8 | . 8 | . 8 | . 7 | . 8 |
| Influenza, grippe (33) | 8.8 | 8.2 | 23.2 | 14.5 | 16.9 |
| Bronchitis, acute and chronic (106) | 6.3 | 4.8 | 10.6 | 6.3 | 5.2 |
| Pneumonia, all forms (107-109) | 3.3 | 3.1 | 9.4 | 5.1 | 3.8 |
| Diseases of the pharnyx and tonsils ( $115 \mathrm{~b}, 115 \mathrm{c}$ ) | 5.1 | 4.7 | 7.2 | 5.4 | 5.3 |
| Other respiratory diseases (104, 105, 110-114) | 7.1 | 5.9 | 10.1 | 7.1 | 6.0 |
| Digestive diseases. | 19.4 | 17.7 | 16.8 | 16.6 | 15.1 |
| Diseases of the stomach except cancer (117, | 6.6 | 5.1 | 5. 7 | 4.7 | 4.1 |
| Diarrhea and enteritis (120) | 2.8 | 2.6 | 2.0 | 1.9 | 1.5 |
| Appendicitis (121) | 5.2 | 4.9 | 4.4 | b. 2 | 4.9 |
| Hernia (1228). | 1.9 | 1.9 | 1.9 | 1.8 | 1.7 |
| Other digestive diseases (1158, 115d, 116, 122b-129) | 2.9 | 3.2 | 2.8 | 3.0 | 2.9 |
| Nonrespiratory-nondigestive diseases. | 39.2 | 33.8 | 38.1 | 35.0 | 31.6 |
| Infectious and parasitic diseases (1-12, 14-24, 26-29, 31, 32, 34-44) ${ }^{2}$ | 2.1 | 1.9 | 2.7 | 2.7 | 2.4 |
| Rheumatism, acute and chronic ( 58,59 ) | 4.6 | 3.8 | 4.7 | 4.0 | 4.0 |
| Neurasthenia and the like (part of 84d) | 1.8 | 1.3 | 1.5 | 1.1 | 1.0 |
| Neuralgia, neuritis, sciatica (87b). | 2.8 | 1.9 | 2.8 | 2.2 | 2.2 |
| Other diseases of the nervous system (80-85, 87, except part of 84d, and 87b) | 1.7 | 1.2 | 1.5 | 1.2 | 1.2 |
| Diseases of the heart and arteries, and nephritis (90-99, 102, 130-132) | 5.4 | 3.6 | 5.4 | 4.4 | 4.3 |
| Other diseases of the genitourinary system (133-138) | 2.9 | 2.5 | 2.7 | 2.5 | 2.5 |
| Diseases of the skin (151-153). | 3.9 | 3.9 | 3.2 | 3.0 | 2.9 |
| Diseases of the organs of movement except diseases of the joints (156b) | 3.5 | 2.7 | 3.6 | 3.0 | 2.8 |
| All other diseases (45-57, 60-79, 88, 89, 100, 101, 103, 154, 155, 156a, 157, 162) | 10.5 | 11.0 | 10.0 | 10.9 | 8.3 |
| Ill-defined and unknown causes (200) | 5.1 | 1.9 | 4.3 | 2.1 | 2.3 |
| Average number of males covered in the record Number of organizations. | $\begin{array}{\|r} 273,151 \\ 18 \end{array}$ | $\begin{array}{\|r} 263,008 \\ 21 \end{array}$ | $\begin{array}{r} 270,915 \\ 21 \end{array}$ | $\begin{array}{r} 258,021 \\ 21 \end{array}$ | 1,026, 254 |

[^2]
## THIRD QUARTERS, 1934-43

Broad cause groups.-Figure 1 presents the variation over the 10-year period 1934-43 of the contribution of each of the three broad cause groups to the varying total sickness rate. The varying total sickness rate (shown three times in the figure) reveals an upward trend since 1938; the mean of the 10 third-quarter rates is 68.4 and when the yearly
rates are related to this mean only three excesses arise, namely, excesses of 6,18 , and 39 percent for the years 1941, 1942, and 1943, respectively.

The contributions made by the respiratory group of diseases to the total sickness rate are also of considerable interest. The 10 respiratory rates yield a mean of 20.3 . Prior to 1940 each of the yearly rates is below the mean; in 1940 and thereafter the yearly rates show excesses that increase in magnitude. These excesses covering 1940 through 1943 are 4, 11, 35, and 55 percent, respectively. The only excesses presented by the digestive group of diseases occur in the 3 years 1941 through 1943; these excesses are 8, 16, and 27 percent, respectively, the mean rate being 15.3. In the instance of the nonrespiratorynondigestive group of diseases yielding a mean of 30.0 there are only


Finure 1.-A verage annual number of absences per 1,000 males on account of sickness disabling for 8 consecutive calendar days or longer, variation of the third-quarter rates with time; experience of male employees in various industries, 1934-43, inclusive. (Each bar for a particular year represents the average annual frequency from all sickness and the contribution made to that frequency by a particular cause group.)
two excesses, 13 and 31 percent, occurring in 1942 and 1943, respectively.
Causes showing relatively high rates in 1943.-Figure 2 shows graphically the movement during 1934-43 of the third-quarter rates for five causes: rheumatic diseases (rheumatism, acute and chronic; neuralgia, neuritis, and sciatica; and diseases of the organs of movement except diseases of the joints); diseases of the stomach except cancer; diseases of the heart and arteries, and nephritis; bronchitis, acute and chronic; and nervous diseases (neurasthenia and the like, and "other diseases of the nervous system').

It will be observed that each of the five causes shows a third-quarter rate for 1943 that has never been equalled or exceeded during the 10year period. When the 1943 third-quarter rate for each of the five causes is related to the appropriate mean rate for the 10 years, certain


Ficure 2.-Average annual number of absences per 1,000 males on account of selected causes disabling for 8 consecutive calendar days or longer, variation of the third-quarter rates with time; experience of male employees in various industries, 1934-43, inclusive. (The rheumatic diseases include rheumatism, acute and chronic; neuralgia, neuritis, and sciatica; and diseases of the organs of movement except diseases of the joints. The nervous diseases include neurasthenia and the like, and "other diseases of the nervous system.")
percentage excesses emerge. These excesses, together with the corresponding 10 -year means, are presented in the following table:

| Cause | , | Number of absences per 1,000 males (mean of 10 third quarters, 1934-43) | Percent the thirdquarter rate for 1943 is above the mean for 1934-43 |
| :---: | :---: | :---: | :---: |
| Rheumatic diseases. |  | 8.3 | 31 |
| Diseases of the stomach except cancer |  | 4. 3 | 53 |
| Diseases of the heart and arteries, and |  | 3.8 | 42 |
| Bronchitis, acute and chronic.--. |  | 3.5 | 80 |
| Nervous diseases..--------.-- |  | 2.3 | 52 |

Thus the 1943 rate for bronchitis is 80 percent above the 10 -year mean of 3.5 .

It is of interest to observe in figure 2 that each of the five causes shows an upward trend since 1941, a spectacular change in each instance being precipitated by the 1943 rate. The rates for three causes moved upward since 1939: rheumatic diseases, diseases of the stomach, and bronchitis. The nervous diseases are on a level trend to 1940 and thereafter the movement is upward. Diseases of the heart and arteries, and nephritis show a minimum rate in 1941, a slight elevation in 1942, and a 50 percent increase from 1942 to 1943.

These extraordinary changes in rate occurred during the defense and war programs of the Nation. As indicated elsewhere, ${ }^{2}$ the underlying causes effecting these changes are probably related to certain factors among which are the increased employment of youth and of the older worker; the hiring of workers long unemployed, inexperienced workers, and many persons excluded from the armed forces for some reason or another; green authority; overcrowding in the plant; the migration of workers, particularly from the country to the city;and the associated multitudinous changes in working, home, and community conditions.

## PREVALENCE OF COMMUNICABLE DISEASES IN THE UNITED STATES

## January 30-February 26, 1944

The accompanying table summarizes the prevalence of nine important communicable diseases, based on weekly telegraphic reports from State health departments. The reports from each State are published in the Public Health Reports under the section "Prevalence of disease." The table gives the number of cases of these diseases for the 4 weeks ended February 26, 1944, the number reported for the corresponding period in 1943, and the median number for the years 1939-43.

## DISEASES ABOVE MEDIAN PREVALENCE

Scarlet fever.-Each geographic area reported an increase in the incidence of scarlet fever during the 4 weeks ended February 26 over the preceding 4 -week period. While the largest numbers of cases were reported from the Middle Atlantic and North Central regions, the greatest percentage increase over the seasonal expectancy was reported from the Pacific and South Atlantic regions. In the Pacific region the number of cases $(2,659)$ was more than 3 times the 1939-43 median, while in the South Atlantic region the number $(2,460)$ was 2.2 times

[^3]the median. In other regions the excesses over the median expectancy ranged from 10 percent in both the East North Central and East South Central regions to 50 percent in the New England section. For the country as a whole the number of cases totaled 23,362 as compared with 16,265 for this period in 1943, which figure also represents the preceding 5 -year median. The current incidence is the highest for this period since 1938. The increase of the current 4-week period over the preceding period was about 37 percent, while the corresponding increase of this period in each of the two preceding years over immediately preceding periods was only about 15 percent.

Meningococcus meningitis.-The number of cases of this disease was slightly lower than the number reported during the preceding 4 -week period. Three States, Ohio (117 cases), Michigan (114), and Illinois (111), all in the East North Central area, reported an unusually high incidence. Other States reporting a relatively high incidence were in widely scattered areas; New York reported 244 cases, California 183, Pennsylvania 136, Tennessee 104, Virginia and Texas 94 each, and Missouri 90 cases. This disease is usually increasing at this season of the year, so the decline from the preceding 4 -week period, although slight, is significant. During this period in 1943 the number of cases increased 30 percent over its preceding period, and the average increase during this period over the preceding period is about 22 percent for the past 5 years. However, the actual incidence was high. For the country as a whole the number of cases $(2,214)$ was 1.3 times last year's figure which was also high, and about 10 times the 1939-43 median for this period. In the nine geographic regions the excess cases ranged from 3 times the median in the Mountain section to 23 times the median in the Pacific region.

Measles.-The number of reported cases of measles rose from approximately 50,000 during the preceding 4 -week period to nearly 92,000 during the current 4 weeks. The incidence was more than 50 percent above the 1939-43 median, which was represented by the 1943 figure ( 60,335 cases). An increase of this disease is expected at this season of the year, but the rate of increase over the preceding 4 -week period was 85 percent, while the increases in the 2 preceding years over their preceding periods were about 70 percent. The rate was about the same, however, as in other recent years when the disease reached an unusually high incidence (1938 and 1941). In the Pacific region the number of cases was only about 55 percent of the median, but in all other regions the incidence was relatively high; the largest increase over the median occurred in the East North Central section, and the smallest in the Mountain region.

Typhoid and paratyphoid fever.-For the 4 weeks ended February 26 there were 398 cases of these diseases reported, as compared with 208 for the corresponding period in 1943 and a 5 -year median of

292 cases. Of the total, 174 cases of typhoid fever were reported from Indiana. An interesting outbreak which involved nine counties in the north central part of the State was caused by a carrier transporting food by automobile, the contaminated food being either cottage or cheddar cheese. The incidence dropped from a maximum of 70 cases during the week ended February 5 to 12 cases during the week ended February 26. In other regions of the country the incidence either closely approximated the 5 -year median or fell considerably below it.

Influenza.-The number of reported cases of influenza dropped from 261,481 during the 4 weeks ended January 29 to 39,274 during the current 4 -week period. From a maximum of 126,488 cases reported during the last week in December 1943, the number declined to 6,425 for the week ended February 26, 1944. Compared with preceding years, the number of cases reported for the current 4-week period was 2.1 times the number reported for the corresponding period in 1943 and 1.6 times the 1939-43 median. In each geographic area except the Middle Atlantic and East and West North Central the incidence was considerably above the normal seasonal expectancy.

In the 90 cities included in the Census Bureau's Weekly Health Index the deaths from all causes reached a maximum of 14,262 during the last week of December and declined to 9,591 deaths for the week ended February 26, a figure approximately the same as the preceding 3 -year average for this week.

## DISEASES BELOW MEDIAN PREVALENCE

Diphtheria.-The number of cases (972) of diphtheria reported for the 4 weeks ended February 26 was only about 80 percent of the median seasonal expectancy (approximately 1,200 cases). In the New England and Pacific regions the numbers of cases were slightly above the 1939-43 median, but in all other regions the incidence was relatively low. While the number of cases (33) reported from the New England region was not large, it was the highest incidence in that region in 5 years. For the country as a whole the number of cases was the lowest on record for this period of the year.

Poliomyelitis.-This disease stood approximately at the 1943 level and the number of cases ( 90 ) was about 10 percent below the 1939-43 median. California reported 22 cases, Washington 9, Texas 7, and New York 5, but no other State reported more than 4 cases. The incidence in the Pacific region (34 cases) was the highest since 1935, when 46 cases were reported for this period.

Smallpox.-The incidence of smallpox continued at a low level. There were 53 cases reported during the current 4 weeks, as compared with 102 for the corresponding period in 1943 and a preceding 5 -year median of 188 cases. In the Pacific region 7 cases were
reported as compared with a median of 1 case; the North and South Central regions reported significant decreases from the median figures, and few or no cases occurred elsewhere.

Whooping cough.-There were 7,396 cases of whooping cough reported for the 4-week period ended February 26. The number was less than 50 percent of the number reported for the corresponding period in 1943 and also of the 1939-43 median. In each region the incidence was considerably below that of 1943, and in each region except the West South Central the number of cases was considerably below the 1939-43 median.

## MORTALITY, ALL CAUSES

The average weekly number of deaths from all causes in large cities as reported by the Bureau of the Census for the 4 weeks ended

Number of reported cases of 9 communicable diseases in the United States during the 4week period January S0-February 26, 1944, the number for the corresponding period in 1948, and the median number of cases reported for the corresponding period, 1989-48

| Division | Current period | 1943 | 5-year medi$8 \mathbf{n}$ | Current period | 1943 | 5-year median | $\begin{array}{\|c} \text { Cur- } \\ \text { rent } \\ \text { period } \end{array}$ | 1943 | 8-year medi8 n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Diphtheria |  |  | Influenza 1 |  |  | Measles ${ }^{\text {8 }}$ |  |  |
| United States. <br> New England Middle Atlantic. East North Central West North Central South Atlantic East South Central $\qquad$ West South Central. Mountain. Pacific | 972 | 1,125 | 1, 171 | 39, 274 | 18. 933 | 23,994 | 91,984 | 60.335 | 60. 335 |
|  | 33 | 18 | 123 | 234 | 32 |  | 5, 527 | 5,731 | 4.084 |
|  | 77 | 116 | 191 | 167 | 118 | 285 | 19,096 | 21,714 | 7,860 |
|  | 160 | 133 | 195 | 1. 509 | 477 | 6,016 | 27, 676 | 7, 455 | 5, 799 |
|  | 91 | 97 | 104 | 473 | 235 | 793 | 10,081 | 4, 196 | 4. 196 |
|  | 138 | 163 | 237 | 10.615 | 6, 738 | 9, 184 | 14.809 | 2.476 | 7,041 |
|  | 69 | 106 | 125 | 3,803 | 1,372 | 2,825 | 3,236 | 3, 578 | 1, 494 |
|  | 232 | 247 | 247 | 17, 134 | 7. 853 | 9, 254 | 4,282 | 2,785 | 2,117 |
|  | 49 | 89 | 86 | 4,077 | 1,566 | 1. 566 | 3, 403 | 5,233 | 3,215 |
|  | 123 | 156 | 115 | 1,262 | 542 | 634 | 3,874 | 7, 167 | 7,167 |
|  | Meningococcus meningitis |  |  | Poliomyelitis |  |  | Scarlet fever |  |  |
| United States $\qquad$ <br> New England. Middle Atlantic. East North Central West North Central South Atlantic. East South Central West South Central Mountain. Pacifla $\qquad$ | 2. 214 | 1,677 | 227 | 90 | 92 | 101 | 23,362 | 16, 265 | 16. 265 |
|  | 129 | , 203 | 13 | 2 | 0 | 2 | 2,344 | 2, 602 | 1, 539 |
|  | 455 | 361 | 51 | 6 | 8 | 8 | 4,778 | 3,798 | 3,945 |
|  | 421 | 151 | 19 | 5 | 9 | 17 | 5, 435 | 4,181 | 4.801 |
|  | 177 | 102 | 13 | 5 | 12 | 10 | 2,984 | 1,602 | 1,796 |
|  | 327 | 363 | 45 | 10 | 14 | 14 | 2,460 | 1, 159 | 1. 127 |
|  | 261 | 128 | 43 | 7 | 9 | 12 | 772 | 696 | 687 |
|  | 184 | 94 | 22 | 15 | 11 | 11 | 546 | 454 | 439 |
|  | 33 | 53 | 11 | 6 | 8 | 6 | 1,384 | 1,008 | 647 |
|  | 227 | 222 | 10 | 34 | 21 | 10 | 2,659 | 865 | 865 |
|  | Smallpox |  |  | Typhoid and paratyphoid fever |  |  | Whooping cough ${ }^{\text {a }}$ |  |  |
| United States. <br> New England <br> Middle Atlantic. <br> East North Central $\qquad$ <br> West North Central <br> South Atlantic. $\qquad$ <br> East Bouth Central $\qquad$ <br> West South Central $\qquad$ <br> Mountain <br> Pacific $\qquad$ $\qquad$ | 63001654612337 | $\begin{array}{r} 102 \\ 0 \\ 0 \\ 39 \\ 17 \\ 2 \\ 4 \\ 86 \\ 4 \\ 0 \end{array}$ | 18800477731336171 | $\begin{array}{r} 398 \\ 9 \\ 36 \\ 207 \\ 8 \\ 43 \\ 24 \\ 50 \\ 8 \\ 8 \\ 13 \end{array}$ | 208 | 292 | 7.396 | 15, 061 | 15, 121 |
|  |  |  |  |  | 7 | 12 | 597 | 1,203 | 1. 293 |
|  |  |  |  |  | 83 | 46 | 1,273 | 3, 307 | 3, 325 |
|  |  |  |  |  | 28 | 89 | 1, 473 | 3, 549 | 3, 549 |
|  |  |  |  |  | 11 | 15 | , 515 | 729 | ${ }^{669}$ |
|  |  |  |  |  | 43 | 46 | 1,469 | 2,001 | 2,001 |
|  |  |  |  |  | 21 | 26 | 397 | , 587 | 580 |
|  |  |  |  |  | 38 | 46 | 658 | 1,856 | 610 |
|  |  |  |  |  | 11 | 13 | 430 | 469 | 769 |
|  |  |  |  |  | 16 | 21 | 884 | 1,270 | 1,270 |

[^4]February 26 was 9,543 , as compared with 9,659 for the corresponding weeks in the 3 preceding years-a decrease of about 1.2 percent. During the period of the influenza epidemic the deaths reached the high level of approximately 12,000 per week. During the weeks ended February 5 and 12, 1944, the number of deaths fell below the 3 -year average for the first time since September 1942; during the third and fourth weeks of this 4 -week period the deaths stood at about the level of the 3-year average.

## DEATHS DURING WEEK ENDED MARCH 4, 1944

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


# 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

## REPORTS FROM STATES FOR WEEK ENDED MARCH 11, 1944

## Summary

For the first time this year the weekly incidence of meningococcus meningitis was lower than for the corresponding week last year. A total of 517 cases was reported currently as compared with 586 last week, 525 for the corresponding week last year, and 55 for the 5 -year (1939-43) median. Decreases occurred in 6 of the 9 geographic divisions. Slight increases were reported in the Middle Atlantic, East South Central, and Mountain sections. A total of 5,590 cases has been reported to date this year, as compared with 4,040 for the same period last year, and a 5 -year (1939-43) median of 533 cases.

States reporting 20 or more cases currently (last week's figures in parentheses) are as follows: Increases-New York 67 (65), Pennsylvania 40 (32), Michigan 28 (22), Mississippi 23 (7), Texas 20 (12); decreases-Ohio 26 (27), Illinois 29 (46), Missouri 20 (26), Tennessee 26 (29), California 32 (44).

A total of 6,945 cases of scarlet fever was reported for the week, a slight decrease from last week's total of 6,985 . The 5 -year median is 5,024 . The total to date is 54,358 , as compared with 38,235 for the same period last year.

Nineteen cases of poliomyelitis and 12 cases of smallpox were reported, as compared with 15 and 11, respectively, for last week. Decreased incidence was recorded for diphtheria, influenza, measles, typhoid fever, and whooping cough. The current figure for measles, however, is about 46 percent above the corresponding 5 -year median.

A total of 9,526 deaths was recorded for the current week in 92 large cities of the United States, as compared with 9,834 last week, and 9,685 for a 3 -year (1941-43) average. The cumulative total to date this year is 103,505 , as compared with 102,388 for the same period last year.

## Telegraphic morbidity reports from State health officers for the week ended March 11, 1944, and comparison with corresponding week of 1943 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.


See footnotes at end of table.

Telegraphic morbidityreportsfrom State health officers for the week ended March 11, 1944, and comparison with corresponding week of 1945 and 5 -year median-Continued


See footnotes at end of tablo.

Telegraphic morbidityreports from State health officers for the week ended March 11, 1944, and comparison with corresponding week of 1945 and 5 -year median-Continued


1 New York City only.
Period ended earlier than Saturday.
3 Iater information from Texas shows 1 case of anthrax for the week ended Feb. 26, instead of none as previously reported.
'Including paratyphoid fever cases reported separately as follows: New York, 2; South Carolina, 1; Georgia, 1.
NOTIFIABLE DISEASES, YEAR 1945
The figures in the following table are the totals of the monthly morbidity reports received from the State Health authorities for the year 1943. These reports are preliminary and the figures are therefore more or less incomplete. In most instances they include cases reported in both civilian and military populations. The comparisons made are with similar preliminary reports; but owing to population shifts and the presence of large military populations in certain States, the figures for some States are not comparable with those for prior years, especially for certain diseases. Each State health officer has been requested to include in the monthly report for his State all diseases that are required by law or regulation to be reported in the state. The lists of diseases required to be reported are not the same for each State, although the common communicable diseases are notifiable in all the States. Certain diseases, however, may be a health problem in some States but not in others. There are variations among the States also in the degree of completeness of reporting of cases. As
 in many States other diseases, such as puerperal septicemia and Vincent's infection, are not reportable.
In spite of these known deficiencies, however, these monthly reports, which are published quarterly and annually in consolidated
form, have proved of value in presenting early information regarding the reported incidence of a large group of diseases and in indicating form, have proved of value in presenting early information regarding the reported incidence of a large group of diseases and in indicating graphic prevalence of certain diseases, as the States are arranged by geographic location.
Consolidated monthly State morbidity reports for the year 1945

| Division and State | $\xrightarrow[\substack{\text { An- } \\ \text { thrax }}]{ }$ | Chickenpox | Diphtheria | $\begin{gathered} \text { D ysen- } \\ \text { tery. } \\ \text { amebic } \end{gathered}$ | $\begin{gathered} \text { Dysen- } \\ \text { fery } \\ \text { backl } \\ \text { lary } \end{gathered}$ | $\begin{gathered} \text { Dysen- } \\ \text { tery, } \\ \text { unde. } \\ \text { fined } \end{gathered}$ | En- cepha- Ittis, infoc- tious | $\left.\begin{gathered} \text { Ger- } \\ \text { man } \\ \text { measles } \end{gathered} \right\rvert\,$ | Hookdiseas diseas | $\begin{aligned} & \text { Influ- } \\ & \text { enza } \end{aligned}$ | Malaria | Measles | $\left\|\begin{array}{c} \text { Menin- } \\ \text { gitis, } \\ \text { menin- } \\ \text { gococ-- } \\ \text { cus } \end{array}\right\|$ | Mumps | Ophthalmia norum to $\qquad$ | $\begin{gathered} \text { Pella- } \\ \text { gra } \end{gathered}$ | Pneumonia, forms | Polio- myelimye |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| new englan |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine. |  | 2,537 | 27 |  | 1 |  | 2 | 836 |  |  | 4 | 2,316 | 276 | 1,702 |  |  |  |  |
| New Hampshire. | 6 |  | 2 |  |  |  | 1 | 1,395 |  | 44 |  | 1,019 |  |  |  |  |  | ${ }^{13}$ |
| Massachusetts. | 5 | 11, 531 | 163 | 1 |  |  |  | 34, 144 |  |  | 118 | 35, 101 | 864 | ${ }_{7}^{1,086}$ |  |  | 3, 102 | 200 |
| Rhode Island.. |  | 1,070 | 33 |  |  |  | 8 | 3,555 |  | 1,1i0 | 6 | 2,467 | 497 | 1,196 | 3 |  | , 239 | 188 |
| Connecticut.......... |  | 6,085 | 40 | 8 | 188 |  |  | 14, 280 | 1 | 1,773 | 20 | 10,281 | 310 | 4,740 | 2 |  | 3,401 | 379 |
| middle atlantic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| New York. |  | 23, 118 | 415 | 233 | 1,886 |  |  |  |  | 1 1, 382 | 104 |  | 2,248 |  |  |  | 25,088 | 602 |
| New Jersey | 88 | $\begin{aligned} & 21,617 \\ & 24,859 \end{aligned}$ | 159 499 | $\begin{aligned} & 40 \\ & 10 \end{aligned}$ | $130$ | 9 | ${ }_{21}^{15}$ | $\left\lvert\, \begin{array}{r} 51,010 \\ 229,478 \end{array}\right.$ |  | 1,3240 | 16 | $\begin{aligned} & 44,582 \\ & 57,150 \end{aligned}$ | 1,213 | $\begin{aligned} & 20,129 \\ & 16,088 \end{aligned}$ | 34 | 4 | 8,657 | ${ }_{14} 8$ |
| east north centra |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio... |  | 16,436 | 490 |  |  |  |  | 7,035 |  | 18,029 | 41 | 20, 442 | 503 | 8,460 | 676 | 2 | 3,601 | 184 |
| Indiana | 1 | 3,109 12,651 | 352 <br> 585 <br> 8 | $\begin{array}{r}8 \\ 40 \\ \hline\end{array}$ | 14 108 | 4 | 6 | 14,477 | 1 | 3, ${ }^{3,100}$ | 191 | 10, 407 | 787 | 7,104 | 391 | 3 | 11, 139 | 1,575 |
| Michigan. |  | 18, 016 | 282 | 19 | 204 |  | 8 | 6,028 |  | 1,289 | 257 | 51,763 | 747 |  | 18 |  | 4,627 | 150 |
| W isconsin. |  | 22,928 | 135 | 1 |  |  | 12 | 65, 991 |  | 6,717 | 31 | 44,607 | 252 | 16,604 | 1 |  | 1,034 | 208 |


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Consolidated monthly State morbidity reports for the year 1943－Continued

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- Including the cities of Colon and Panama.
see notes on page 380.

Granuloma: Ohio, 19 (unspecified); Missouri, 24 (Inguinale); Tennesses, 51 (in(inguinale); Washipgion, is (inguinaie); Louisiana, 74 (inguinale); Arizona,
 Montana, 10; Idaho, 19; WYoming, 4; Nevada, 1; Washington, 76; Oregon, 43; Jaundice (ail forms): Indiana, , ; I Ilinois, 2; Minnesota, 36; Maryland, 2; Florida, 17; Leprosy: Massachusots, $1 ;$ New York, $5 ;$ New Jersey, $1 ;$ Pennsylvania, $1 ;$ IIInois
 Lymphocytic ohoriomeningitis: Massachusetts, 3; Ilinois, 2; Minnesota, 1. Lymphogranuloma venereum: Maine, 1; Missouri, 33; Florida, 24; Tenneseee, 120; Plague (human): Calliornil, 1. Hawail Territory, 7 (all fatal).

Rat-bite fever: M Mnnesota, 1; Tennessee, 2; Oklahoma, 1 . Rheumatic fever: Illinois, 289; Michigan, 75; Missouri, 12; Maryland, 65; Georgia, Weil's disease: Massachusetts, 2; Michigan, 33; Maryland, 4; Louisiana, 1; Utah, 1; Hawail Territory, 49.

The following Hist includes certain rare conditions, diseases of restricted geographical American " ${ }^{2}$ ever: Montana, ${ }^{1}$. ${ }^{2}$, California, 6 Coccidioidomycosis: Indiana, 1; Arizona, 219; Calirornia, 18. Minnesota, 20; North Dakota, 1 ;
American ${ }^{2}$ (ever: Montana
Botulism: Now York, $1 ;$ Washingt 4றOO Island, 3 (Includes 2 Kerato); Connecticut, 48; Indiana, 12 (suppurative); Huode (kerato); Michigan, 391 (kerato), 121 (pink eye); Missouri, 2; North Dakota, 6 Maryland, 79 (14 pink eye); Georgia, 15; Florlia, 9; Tennessee, 9 (kerato); Okla: homa, 7 ( 6 plnk eye); Montana, 7; Idaho, 7; Wyoming 2 (Includes 1 Yerato), ${ }^{4}$ (pink eve); New Mexico, 8; Arizona, 12; U tah, 1 (kerato); A evada, 17; Washington, Dengue: South Carolina, 8; Florida, 4; Mississippi, 7; Louisiana, 1; Texas, 101; Diarthea and enteritis: Rhode Island, 4; New Jersey, 65 (newborn); Ohio, 718; Indianh, 73; Ilinisis, 2; Manigan, 105 (newborn); North Dakota, 1; Maryland, 220 New Mexico, 279; Nevada, 09 (infant); Washington, 28; Californla, 152 (diarrhea o Dog bites: Illinois, 12,835 (all animals); Michigan, 7,131.
205;

Food poisoning:
New Marico, 8 ; Arizona,

## WEEKLY REPORTS FROM CITIES

City reports for week ended February 26, 1944
This table lists the reports from 87 cities of more than 10,000 population distributed throughout the United States, and represents a cross section of the current urban incldence of the diseases included in the table.


City reports for weok ended Pebruary 86, 1944-Continued


City reports for week ended February 80, 1944-Continued

|  |  |  |  |  | $\begin{aligned} & \text { \% } \\ & \text { 8 } \\ & \text { 若 } \\ & \text { Ede } \end{aligned}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pactinc |  |  |  |  |  |  |  |  |  |  |  |  |
| Washington: <br> Seattle. <br> Sporane $\qquad$ <br> Tacoma $\qquad$ | 1 0 | 0 0 0 | 1 | 0 1 0 | 27 30 0 | 1 1 0 | 10 2 0 | 1 0 0 | 81 21 57 | 0 0 0 | 0 0 0 | 8 |
| California: |  |  |  |  |  |  |  |  |  |  |  |  |
| Los Angeles.......--- | 4 | 0 | 25 | 8 | 92 | 6 | 7 | 0 | 48 | 0 | 0 | 1 |
| Sacramento............- | 0 | 0 |  | 0 | 7 | 0 | 0 | 0 | 3 | 0 | 0 | 2 |
| San Francisco......-- | 1 | 0 | 5 | 1 | 23 | 4 | 10 | 2 | 41 | 0 | 0 | 4 |
| Total | 65 | 0 | 216 | 71 | 7,805 | 208 | 493 | 5 | 2,091 | 1 | 6 | 348 |
| Corresponding week, 1943 | 64 | 2 | 264 | 49 | 4,286 | 132 | 588 | 8 | 1,675 | 4 | 10 | 909 |
| A verage, 1939-43....... | 78 |  | 778 | 163 | 24,066 |  | ${ }^{1} 546$ |  | 1,569 | 13 | 16 | 1,055 |

13-year average, 1941-43.
25 -year median.
Dysentery, amebic.-Cases: Philadelphia, 1; Richmond, 1.
Dysentery, bacillary.-Cases: Providence, 4; Worcester, 2; New York, 9; Charleston, S. C., 1; Los Angeles, 3. Dysentery, unspecified.-Cases: San Antonio, 2.
Typhus féper.-Cases: Tampa, 1; Mobile, 1; Savannah, 1; Dallas, 1; San Antonio, 1.
Rates (annual basis) per 100,000 population, by geographic groups, for the 87 cities in the preceding table (estimated population, 1942, 34,577,700)

|  |  |  | Influenza |  |  |  |  |  |  | Smallpox case rates |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| New England. | 10.0 | 0.0 | 5.0 | 12.5 | 1, 144 | 20.0 | 75.0 | 0.0 | 541 | 0.0 | 5.0 | 65 |
| Middle Atlantic. | 7.2 | 0.0 | 12.1 | 8.0 | 1,899 | 27.7 | 78.3 | 0.4 | 225 | 0.0 | 0.4 | 36 |
| East North Central | 9.4 | 0.0 | 4.7 | 7.0 | 1, 089 | 35.7 | 54.5 | 0.0 | 312 | 0.6 | 0.0 | 78 |
| West North Central | 20.0 | 0.0 | 11.8 | 7.8 | 3, 235 | 37.2 | 96.0 | 0.0 | 406 | 0.0 | 0.0 | 71 |
| South Atlantic.- | 8.7 | 0.0 | 120.1 | 15.7 | 2, 149 | 48.7 | 104.4 | 0.0 | 539 | 0.0 | 3.5 | 35 |
| East South Central. | 17.9 | 0.0 | 137.0 | 35.7 | 506 | 53.6 | 65.5 | 0.0 | 1,668 | 0.0 | 0.0 | 71 |
| West South Central | 12.5 | 0.0 | 103.0 | 31.2 | 6, 181 | 21.9 | 96.8 | 3.1 | 499 | 0.0 | 0.0 | 6 |
| Mountain. | 8.1 | 0.0 | 137.0 | 16.1 | 1,201 | 16.1 | 120.9 | 0.0 | 613 | 0.0 | 8.1 | 242 |
| Pacific. | 10.5 | 0.0 | 54.3 | 8.8 | , 314 | 21.0 | 50.8 | 5.3 | 352 | 0.0 | 0.0 | 19 |
| Total | 9.8 | 0.0 | 32.7 | 10.7 | 1,180 | 31.5 | 74.5 | 0.8 | 316 | 0.2 | 0.9 | 53 |

## TERRITORIES AND POSSESSIONS

## Hawaii Territory

Plague (human).-On February 10, 1944, a death from plague occurred in a 51 -year-old male in Honokaa, Hamakua District, Island of Hawaii, T. H. This is the third death reported in Hamakua District this year, the others occurring on January 19 and 26, respectively.

## FOREIGN REPORTS

## CANADA

Provinces-Communicable diseases-Week ended February 12, 1944.During the week ended February 12, 1944, 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 | $\begin{aligned} & \text { Que- } \\ & \text { bec } \end{aligned}$ | Ontario | Manitoba | Sas-katchewan | $\underset{\text { berta }}{\text { Al- }}$ | $\begin{aligned} & \text { British } \\ & \text { Colum- } \\ & \text { bia } \end{aligned}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chickenpox |  | 16 |  | 244 | 377 | 62 | 58 | 127 | 71 | 955 |
| Diphtheria-...-... |  | 16 | 5 | 58 | 5 | 2 | 2 |  |  | 88 |
| Dysentery (bacillary) |  |  |  | 2 |  |  |  |  |  | 2 |
| German measles...-- |  | 4 |  | 14 | 30 | 13 | 17 | 10 | 10 | 98 |
| Measles. | 3 | 69 | 1 | 495 | 43 553 | 54 | 5 4 | 205 | 49 28 | 1, 191 |
| Meningitis, menin- |  |  |  |  |  |  |  |  |  |  |
| gococcus. |  | 1 |  | 1 | 5 |  |  |  |  | 7 |
| Mumps -.... |  | 1 |  | 70 | 264 | 79 | 12 | 30 | 40 | 496 |
| Scarlet fever-- ${ }^{\text {a }}$ - |  | 5 | 3 | 63 | 242 | 67 | 21 | 67 | 28 | 496 |
| Tuberculosis (all forms)- |  | 24 |  | 110 | 52 | 12 | .-..-- | 27 | 42 | 267 |
| Typhoid and para- |  | 2 |  | 15 | 1 |  |  |  |  | 18 |
| Undulant fever... |  |  |  | 1 |  |  |  |  |  | 1 |
| Whooping cough |  | 18 |  | 69 | 174 | 3 | 15 | 3 | 14 | 296 |

## reports of cholera, plague, smallpox, typhus fever, and YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

[^5]
## Plague

Egypt-Suez.-During the week ended February 19, 1944, 6 cases of plague with 2 deaths were reported in Suez, Egypt, as compared with 5 cases of plague with 2 deaths reported for the preceding week.

## Smallpox

Egypt-Port Said.-During the week ended February 12, 1944, 64 cases of smallpox with 2 deaths were reported in Port Said, Egypt.

India-Calcutta.-Deaths from smallpox in Calcutta, India, continue to rise with 254 deatbs reported for the week ended February 12, 1944, as compared with 230 deaths reported for the preceding week.

Mexico-Torreon.-For the week ended February 26, 1944, 17 cases of smallpox were reported in Torreon, Mexico.

## Typhus Fever

Ecuador.-For the period December 16-31, 1943, 8 cases of typhus fever with 3 deaths were reported in Ecuador.

Mexico.-For the 2 weeks ended January 15, 1944, 40 cases of typhus fever were reported in Mexico, including 21 cases reported in Mexico, D. F.


[^0]:    ${ }^{1}$ Presented at Health Officers' Section, California League of Municipalities, Sacramento, Calif.

[^1]:    ${ }^{1}$ From the Industrial Hygiene Division. The report on the second quarter appeared th Public Fealth Reports, 58:1885-1888 (Dec. 24, 1933).

[^2]:    ${ }^{1}$ Industrial injuries, venereal diseases, and a few numerically unimportant causes of disability are not reported.
    ${ }^{2}$ Except influenza and grippe, respiratory tuberculosis, and the venereal diseases.

[^3]:    ${ }^{2}$ Manual of Industrial Hygiene and Medical Service in War Industries. W. B. Saunders Company. Philadelphia, 1943. p. 420.

[^4]:    ${ }^{1}$ Mississippi and New York excluded, New York City included.
    ${ }^{2}$ Mississippi excluded.

[^5]:    Nort.-Except in cases of unusual prevalence, only those places are included which had not previously reported any of the above-mentioned diseases, except yellow fever, during the current year. All reports of yellow fever are published currently.
    A cumulative table showing the reported prevalence of these diseases for the year to date is published in the Public Health Reports for the last Friday in each month.
    (Few reports are available from the invaded countries of Europe and other nations in war zones.)

