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## BIRTHS, INFANT MORTALITY AND MATERNAL MORTALITY IN THE UNITED STATES-1944

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Persistent reductions in the loss of life from causes associated with childbirth and infancy were apparent at the end of the third year of the country's participation in the war. At the outbreak of the war, the dislocation of a large portion of the population, the increased strain upon housing, sanitary, and medical facilities, and the large number of women working led to the expectation of an increase in the infant and maternal mortality rates, or at best maintenance of the existing low rates. Contrary to these expectations, new low records for both the infant and maternal mortality rates were attained in 1944.

The minima reached in 1944, however, were accompanied by a slowing of the downward trend of both the maternal mortality rate and the infant mortality rate. This leveling off has been evident since 1942. It remains to be seen whether the downward trend will be accelerated with the return to normal peacetime conditions.

The continuous upward trend of the birth rate which began in 1937 was interrupted in 1944 with a decrease of 6 percent from the previous year. Perhaps this can be accounted for by the large proportion of the male population overseas. At this time it is not possible to determine whether this is the beginning of a long-time trend or merely a result of wartime conditions. It is of exceptional interest that in spite of the inadequacies of hospitalization and medical personnel the percentage of births in hospitals was at its highest in 1944.

The loss of life associated with childbirth and early infancy is still too high despite continued reductions. A total of 192,991 deaths from maternal mortality, infant mortality and stillbirths was reported in 1944. This figure is an underestimate because of the known incompleteness of registration of stillbirths in some sections.

The purpose of this paper is to present the statistics on births, infant mortality and maternal mortality for 1944. In addition, there is included a comparison of the data for part of the period of the

[^0]country's participation in the war (1942-44) with that of the two preceding periods: 1939-41 and 1936-38. At least the last 2 of the 3 years immediately preceding 1939-41, the war period, are characterized by extensive defense activities. These are contrasted with the 3 -vear period 1936-38 which represents a comparatively normal period prior to the declaration of the war in Europe. All data has been furnished by the National Office of Vital Statistics.

## BIRTHS

The number of live births registered in 1944 was $2,794,800$ and the crude birth rate was 20.2 per 1,000 population, representing decreases of 4.8 and 6 percent respectively from the corresponding figures in 1943 which were $2,934,860$ and 21.5 . Of the total births, $1,623,564$ (58.1 percent) occurred among residents of urban areas and the remaining $1,171,236$ ( 41.9 percent) among residents of rural areas.

Of the total number of infants born in 1944, 2,454,700 (87.8 percent) were white and 340,100 ( 12.2 percent) ${ }^{2}$ were nonwhite. Comparison with figures for 1943 shows that the decrease in the total number of births was due entirely to a decrease in the number of births of white infants, as there was no appreciable change in the number of births of nonwhite infants.

Physicians attended 93.3 percent of the births; midwives and other nonmedical personnel the remainder. The proportion attended by nonmedical persons among the nonwhites was quite high (39.9 percent) in comparison to the relatively low proportion of 2.1 percent for the whites. In the rural areas 12.7 percent of the births were attended by no medical person, contrasted with 2.4 percent in urban areas.

In 1944, 75.6 percent of the births occurred in hospitals, representing an increase of 4.9 percent over the similar figures for 1943. Again, the percentage was higher for urban areas (89.1) than for rural areas (56.9) and for white infants (81) than for nonwhite infants (37).

In the 9 years since 1935 (the first year of record) the proportion of births in hospitals has nearly doubled. The proportion of births attended by physicians has increased from 87.5 percent to 93.3 percent and the proportion with no medical attendant has decreased from 12.5 to 6.7 percent.

Table 1 shows the percentage of births attended by physicians and nonmedical persons in each State. ${ }^{3}$ The percentage of births in hospitals ranged from 97.9 in Connecticut to 31.2 in Mississippi.

[^1]Over 95 percent of the births in California, Massachusetts, Oregon, and Washington occurred in hospitals, contrasted with less than 40 percent in Alabama and Kentucky. In general, the highest percentages of births in hospitals occurred in the West Coast States; the lowest in the Southern States.

Table 1.-Attendant at birth in each State, 1944

| State | Number of live births in 1944 | Percent attended by- |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Physician |  | Nonmedical person |
|  |  | In hospital | In home |  |
| United States.. | 2, 794, 800 | 75.6 | 17.7 | 6.7 |
| Alabama | 74, 415 | 39.3 | 35.8 | 24.9 |
| Arizona- | 14,225 41,240 | 79.6 41.9 | 11.3 392 | 9.1 18.9 |
| California | 179, 123 | 91.9 98.2 | 4.2 | 18.9 .5 |
| Colorado. | 23, 931 | 82.1 | 16.3 | 1.6 |
| Connecticut | 34, 278 | 97.9 | 2.1 | 0 |
| Delaware - | 5,993 | 83.6 | 9.9 | 6.5 |
| District of Columbia. | 15,758 | 95.0 | 5.0 | 0 |
| Florida. | 48, 418 | 66. 8 | 14.8 | 18.4 |
| Idaho.. | 76,540 12,241 | 50.7 92.3 | 14.2 7.6 | 25.1 .1 |
| Illinois. | 142,005 | 9.0 | 9.8 | .1 |
| Indiana. | 71, 354 | 80.9 | 19.0 | .1 |
| Iowa. | 46,564 | 85.3 | 14.7 | 0 |
| Kansas | 34,976 | 83.9 | 16.0 | . 1 |
| Kentucky | 64, 225 | 38.6 | 51.1 | 10.3 |
| Louisiana | 61,050 <br> 17 | 61.7 812 | 15.6 | 22.7 |
| Maryland.-.-. | 43,915 | 81.2 73.8 | 18.2 20.6 | 5.6 |
| Massachusetts. | 78, 209 | 95.2 | 4.7 | . 1 |
| Michigan. | 114, 700 | 88.2 | 11.6 | . 2 |
| Minnesota | 56, 113 | 90.0 | 9.4 | . 6 |
| Mississippi | 56,940 | 31.2 | 27.5 | 41.3 |
| Montana. | 67,990 | 68.5 93.4 | 29.0 5.2 | 2.5 1.4 |
| Nebraska. | 24, 575 | 84.4 | 15. 5 | . 1 |
| Nevada. | 3,028 | 94.6 | 4.2 | 1. 2 |
| New Hampshire | 8,548 | 93.2 | 6.8 | 0 |
| New Jersey- | 76, 265 | 92.5 | 6.2 | 1.3 |
| New Mexico | 15,585 | 55.9 | 24.4 | 19.7 |
| New York | 229, 534 | 95.0 | 4.4 | . 6 |
| North Carolina. | 90, 629 | 51.1 | 32.4 | 16.5 |
| North Dakota. | 13, 530 | 86.2 | 12.7 | 1.1 |
| Ohio ...... | 133, 598 | 84.0 | 16.0 | 0 |
| Oklahoma | 46, 725 | 68.1 | 28.4 | 3.5 |
| Oregon Pennsylvania | 24,150 178,370 | 96.8 | 2.9 | . 3 |
| Rhode Island | 178, 13754 | 81.5 91.9 | 18.3 7.4 | . 7 |
| South Carolina | 51,467 | 41.2 | 24.4 | 34.4 |
| South Dakota | 12,769 | 82.2 | 15.3 | 2.5 |
| Tennessee | 68,272 | 47.1 | 44.2 | 8.7 |
| Texas.- | 165, 900 | 65.9 | 20.7 | 13.4 |
| Vermont | 16,180 688 | 90.3 81.3 | 9.5 18.6 | . 1 |
| Virginia | 69,175 | 55.7 | 18.6 28.5 | 15.8 |
| Washington | 44, 528 | 97.1 | 2.6 | . 3 |
| West Virginia | 41, 304 | 42.7 | 53.8 | 3.5 |
| W isconsin. | 61,547 | 87.9 | 12.0 | . 1 |
| W yoming- | 5,635 | 89.7 | 9.8 | . 5 |

In 37 of the States more than 90 percent of the births were attended by a physician either in a hospital or at home. In four of these States, Connecticut, Iowa, New Hampshire, Ohio, and the District of Columbia all of the births in 1944 were attended by a physician. On the
other hand, the percentage of births with no medical attendant was more than 25 percent in Georgia, Mississippi, and South Carolina. The 12 States in which more than 10 percent of the births occurred without medical attention were located in the area extending across the southern United States from New Mexico to Virginia. It is of interest to note that the two groups having the highest proportion of births with no medical attendant-rural and nonwhite-constituted a larger proportion of the total births in those 12 States than in the whole country. In the United States 41.9 percent of the total births were among residents of rural areas whereas the similar figure in the above States was 59.8 percent. Similarly 12.2 percent of the total births in the United States were among nonwhites as compared to 27.5 percent for the 12 States.

Births during the war periods compared with previous periods.The relatively large shift in the population which started with industrial defense activities in the United States complicates any comparison of the birth rates of the States prior to that time with those of a later date.

The comparison of the actual number of births will, however, to a certain degree reflect this shifting of the population. Also, from the standpoint of administration of maternal health and infant-care programs, data on the changes in the number of births are of more value. For these reasons, the number of births, rather than the birth rates have been used in the comparisons presented in table 2.

The number of live births in the United States was 7.6 percent higher during the period of defense activities than during the 3 -year period preceding it. Similarly, there were 19.6 percent more births during the war period than during the defense period. Thus, it may be seen that the rate of increase of the number of live births in the country as a whole was considerably larger during the war than during the defense period.

In 33 States the increases from the predefense period to the period of defense activities were less than 10 percent. Generally, the increases ranged from a high of 21.4 percent in California to 0.8 percent in Maine. Kentucky, Nebraska, and South Dakota showed a slight decrease in this period.

The increases from the period of defense activities to the war period had a wider range with a maximum of 50.1 percent in Washington and a minimum of less than 0.05 percent in Montana. In 13 States the increase in the number of births was less than 10 percent; in 16 between 10 and 20 percent; in 11 between 20 and 30 percent, and in 9,30 percent or more. The group with the highest percentage in-
crease includes the three West Coast States and Nevada, and also five of the East Coast States.

Table 2.-Number of live births in 1942-44, 1939-41 and 1996-38 and the percent change from 1939-41 to 1942-44 and from 1936-38 to 1939-41 (by place of residence)

| State | Number of live births |  |  | Percent change <br> drom- |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1942-44 | 1939-41 | 1936-38 | $\begin{aligned} & \text { 1939-41 } \\ & \text { to } \\ & 1942-44 \end{aligned}$ | $\begin{aligned} & 1936-38 \\ & \text { to } \\ & 1939-41 \end{aligned}$ |
| United States. | 8,538; 656 | 7, 139, 414 | 6, 635, 089 | 19.6 | 7.6 |
| Alabama | 223, 086 | 188, 995 | 184, 092 | 18.0 | 2.7 |
| Arizona | 41, 186 | 33, 984 | 31, 250 | 21.2 | 8.7 |
| Arkansas | 126, 509 | 114, 665 | 106, 272 | 10.3 | 7.9 |
| Colorado. | 508,110 71,864 | 341,082 63,045 | 281,068 58,215 | 49.0 | 21.4 |
| Connecticu | 110,547 | 78, 339 | 69, 308 | 41.1 | 12.9 |
| Delaware | 17,879 | 13,952 | 12,616 | 28.1 | 10.6 |
| District of Columbia | 47, 117 | 34,871 | 30,344 | 34.8 | 14.9 |
| Florida. | 136, 063 | 103, 694 | 88,984 | 31.2 | 16.5 |
| Georgia. | 227,418 | 197, 070 | 189, 715 | 15.4 | 3.9 |
| Idaho- | 36,086 | 34, 546 | 32,048 | 4.5 | 7.8 |
| Illinois | 453, 972 | 379,626 | 352, 587 | 19.6 | 7.7 |
| Indiana | 219, 732 | 185, 437 | 169, 520 | 18.5 | 9.4 |
| Iowa. | 142,635 | 134, 314 | 127, 166 | 6.2 | 5.6 |
| Kansas | 104, 917 | 88,590 | 88,761 | 18.4 | -0.2 |
| Kentucky | 196, 058 | 188, 019 | 174, 249 | 4.3 | 7.9 |
| Louisiana | 181, 148 | 154, 321 | 138, 551 | 17.4 | 11.4 |
| Maine.-- | 54, 425 | 46, 283 | 45, 916 | 17.6 | . 8 |
| Maryland. | 135, 523 | 99, 557 | 87, 074 | 36.1 | 14.3 |
| Massachusetts | 246,899 | 198, 278 | 183, 601 | 24.5 | 8.0 |
| Michigan. | 364,364 | 300. 781 | 276, 899 | 21.1 | 8.6 |
| Minnesota | 173, 391 | 157, 395 | 145, 580 | 10.2 | 8.1 |
| Mississippi | 173, 453 | 159, 108 | 155, 316 | 9.0 | 2.4 |
| Missouri. | 211, 159 | 184, 977 | 170, 141 | 14.2 | 8.7 |
| Montana | 34,085 | 34, 098 | 31,615 | ${ }^{1}{ }^{1}$ | 7.9 |
| Nebraska | 73, 299 | 66,163 | 68, 202 | 10.8 | -3.0 |
| Nevada | 8,836 | 6,308 | 5,274 | 40.1 | 19.6 |
| New Hampshire | 27,088 | 24,684 | 22,770 | 9.7 | 8.4 |
| New Jersey .-... | 241, 006 | 184, 359 | 167, 176 | 30.7 | 10.3 |
| New Mexico | 44, 925 | 43,757 | 41, 169 | 2.7 | 6.3 |
| New York | 722,963 | 593, 381 | 555, 946 | 21.8 | 6.7 |
| North Carolina | 275, 051 | 244, 183 | 235, 306 | 12.6 | 3.8 |
| North Dakota | 40,309 | 39, 285 | 38.845 | 2.6 | 1.1 |
| Ohio | 422,012 | 349,685 | 323, 180 | 20.7 | 8.2 |
| Oklahoma | 141, 372 | 134,267 | 127, 946 | 5.3 | 4.9 |
| Oregon. | 72, 118 | 53, 032 | 45, 309 | 36.0 | 17.0 |
| Pennsylvania | 574, 913 | 500, 427 | 486, 038 | 14.9 | 3.0 |
| Rhode Island. | 42,603 | 32, 855 | 30,872 | 29. 7 | 6.4 |
| South Carolina | 154, 446 | 134,983 | 121, 106 | 14.4 | 11.5 |
| South Dakota | 38,009 | 36, 253 | 36,943 | 4.8 | -1.9 |
| Tennessee. | 203, 622 | 168, 106 | 155, 335 | 21.1 | 8.2 |
| Texas. | 475, 155 | 385, 016 | 348,868 | 23.4 | 10.4 |
| Utah | 49,163 | 39,651 | 37, 660 | 24.0 | 5.3 |
| Vermont | 21,302 | 20,492 | 19,602 | 4.0 | 4.5 |
| Virginia | 209, 282 | 172,351 | 159, 314 | 21.4 | 8.2 |
| Washington. | 128,055 | 85, 319 | 75, 255 | 50.1 | 13.4 |
| West Virginia | 128,598 | 128, 021 | 126,153 | .5 | 1.5 |
| Wisconsin. | 189, 979 | 166, 271 | 161,282 | 14.3 | 3. 1 |
| W yoming | 17,024 | 15,538 | 14,590 | 9.6 | 6.5 |

## ${ }^{1}$ Less than 0.05 percent.

In 43 States a larger percentage increase occurred during the war than during the defense period, thus evidencing increases in the rate of increase during the war. In the remaining six States there was a reduction in the rate of increase.

The number of infant deaths in 1944 was 111,127. The total infant mortality rate ${ }^{4}$ for that year was 39.8 deaths per 1,000 live births, as compared to 40.4 in 1943. This represents a low record with a decrease of 43.8 percent from the rate two decades ago.

The mortality rate for white infants in 1944 was 36.9 and that for nonwhite infants was 60.3 . The corresponding rates in 1943 were 37.5 and 62.5. The rate for nonwhite infants reached in 1944 was equal to that for white infants 14 years ago. However, since 1942 the rate for nonwhite infants has been decreasing more rapidly than that for white infants.

Of the 111,127 infant deaths in 1944, 68,996 were neonatal deaths (deaths of infants under 1 month of age). The neonatal mortality rate was 24.7 deaths per 1,000 live births and the mortality of infants 1 to 11 months of age was 15.5 deaths per 1,000 infants surviving the first month of life. Approximately one-half of the neonatal deaths were those of infants who died in the first day of life. The mortality of infants less than 1 day old was 11.5 per 1,000 live births and of those between 1 day and 1 month was 13.2. There has been very little change from the corresponding rates in 1943. The infant and neonatal mortality rates and the rates for the ages under 1 day, 1 day to 1 month, and 1 to 11 months in 1943 and 1944 are presented for each State in table 3. In 32 States the infant mortality rate was lower in 1944 than in 1943, in 1 State the two were equal, and in the remainder of the States the rate in 1944 was higher, but the increases were not very large. Only 16 States showed continuous decreases from 1942. However, it is necessary to be cautious in interpreting yearly fluctuations in rates based on a small number of births.

The infant mortality rate in 18 States was less than 35 deaths per 1,000 live births; in 15 from 35 to 44 ; in 14 from 45 to 54 ; and in 2 greater than 55 . In general, the highest rates occurred in the southeastern and south central United States.

Causes of infant deaths.-The causes of infant deaths which had their origin in utero or at birth have been segregated from those which had their origin in environmental conditions. The first group, prenatal and natal causes, includes premature birth, congenital malformations, congenital debility, syphilis, and other diseases peculiar to the first year of life; the second group included pneumonia, influenza, diarrhea, enteritis, dysentery, epidemic and other communicable diseases.

Prenatal and natal causes were responsible for 67,713 ( 60.9 percent)

[^2]of the infant deaths in 1944. Of the so-called "environmental" causes, pneumonia and influenza accounted for 15,674 (14.1 percent) deaths; diarrhea, enteritis and dysentery 10,230 ( 9.2 percent) and epidemic and other communicable diseases 2,749 (2.5 percent).

Table 3.-Infant mortality rates by age in each State, 1944 and 1943 (by place of residence)

| State | Under 1 year ${ }^{1}$ |  | $\begin{aligned} & \text { Under } 1 \\ & \text { day } 1 \end{aligned}$ |  | 1 day to 1 month 1 |  | Under 1 month 1 |  | $\begin{gathered} 1-11 \\ \text { months } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1944 | 1943 | 1944 | 1943 | 1944 | 1943 | 1944 | 1943 | 1944 | 1943 |
| United States | 39.8 | 40.4 | 11.5 | 11.6 | 13.2 | 13.2 | 24.7 | 24.7 | 15.5 | 16.0 |
| Alabama | 45.5 | 44.8 | 12.0 | 12.3 | 15.2 | 13.9 | 27.2 | 26.2 | 18.9 | 19.1 |
| Arizona. | 68.8 | 76.7 | 13.4 | 10.7 | 17.9 | 19.0 | 31.3 | 29.7 | 38.8 | 48.5 |
| Arkansas | 34.7 | 37.4 | 8.3 | 7.1 | 11.0 | 12.5 | 19.3 | 19.6 | 15.7 | 18.2 |
| California | 34.5 | 34.4 | 12.5 | 11.9 | 11.2 | 10.8 | 23.7 | 22.7 | 11.1 | 12.0 |
| Colorado. | 49.4 | 50.4 | 13.9 | 13.0 | 15.0 | 14.2 | 28.9 | 27.2 | 21.2 | 23.8 |
| Connecticu | 30.7 | 29.8 | 10.5 | 9.4 | 11.3 | 10.9 | 21.7 | 20.3 | 9.2 | 9.7 |
| Delaware | 48.7 | 46.7 | 12.3 | 10.3 | 17.0 | 17.3 | 29.4 | 27.6 | 19.9 | 19.6 |
| District of Columbia | 44.8 | 47.6 | 15.5 | 13.4 | 17.8 | 17.7 | 33.3 | 31.2 | 11.9 | 16.9 |
| Florida | 45.5 | 46.7 | 13.4 | 13.3 | 15.7 | 15.7 | 29.1 | 29.0 | 16.8 | 18.2 |
| Georgia | 44.5 | 46.6 | 11.4 | 12.2 | 15.2 | 16.1 | 26.6 | 28.4 | 18.4 | 18.8 |
| Idaho- | 34.0 | 32.0 | 11.0 | 10.1 | 11.4 | 10.4 | 22.4 | 20.5 | 11.9 | 11.7 |
| Illinois | 32.4 | 33.3 | 10.6 | 11.4 | 11.2 | 10.9 | 21.9 | 22.3 | 10.8 | 11.2 |
| Indiana | 34.5 | 39.6 | 9.0 | 10.1 | 12.5 | 12.9 | 21.5 | 23.0 | 13.3 | 17.0 |
| Iowa. | 33.1 | 34.0 | 11.0 | 11.9 | 12.1 | 11.7 | 23.1 | 23.6 | 10.2 | 10.6 |
| Kansas | 33.3 | 33.6 | 10.6 | 12.2 | 11.1 | 10.2 | 21.7 | 22.4 | 11.8 | 11.8 |
| Kentucky | 46.7 | 50.0 | 11.2 | 12.1 | 15.5 | 16. 2 | 26.7 | 28.2 | 20.5 | 22.4 |
| Louisiana | 46.3 | 44.7 | 12.3 | 11.7 | 14.8 | 15.0 | 27.1 | 26.6 | 19.7 | 18.6 |
| Maine. | 46.7 | 51.3 | 14.8 | 13.1 | 12.4 | 17.2 | 27.2 | 30.3 | 20.0 | 21.7 |
| Maryland | 41.5 | 43.0 | 11.1 | 11.0 | 14.0 | 13.9 | 25.1 | 24.9 | 16.7 | 18.6 |
| Massachusetts | 33.1 | 34.2 | 11.2 | 10.7 | 11.3 | 11.7 | 22.5 | 22.4 | 10.8 | 12.1 |
| Michigan | 37.9 | 38.3 | 11.2 | 10.7 | 13.3 | 13.1 | 24.5 | 23.8 | 13.7 | 14.8 |
| Minnesota | 31.3 | 30.9 | 11.4 | 12.2 | 9.6 | 9.9 | 21.0 | 22.1 | 10.5 | 9.0 |
| Mississippi | 44.1 | 46.8 | 12.1 | 12.7 | 13.6 | 15.2 | 25.7 | 27.9 | 19.0 | 19.5 |
| Missouri. | 37.6 | 40.3 | 10.6 | 11.6 | 12.5 | 13.0 | 23.1 | 24.7 | 14.8 | 16.0 |
| Montana | 36.1 | 38.7 | 11.1 | 12.6 | 10.5 | 13.1 | 21.7 | 25.8 | 14.8 | 13.3 |
| Nebraska | 33.0 | 35.5 | 12.7 | 13.1 | 10.3 | 11.3 | 23.0 | 24.4 | 10.2 | 11.4 |
| Nevada | 50.2 | 52.2 | 19.2 | 16.9 | 16.8 | 16.5 | 36.0 | 33.4 | 14.7 | 19.5 |
| New Hampshir | 37.7 | 46.1 | 14.0 | 14.4 | 9.7 | 14.7 | 23.7 | 29.1 | 14.3 | 17.5 |
| New Jersey | 34.0 | 33.7 | 10.9 | 10.4 | 12.4 | 12.3 | 23.2 | 22.7 | 11.0 | 11.2 |
| New Mexico | 89.1 | 91.6 | 15.8 | 15.0 | 22.4 | 23.5 | 38.2 | 38.5 | 52.9 | 55.3 |
| New York | 32.8 | 32.7 | 11.5 | 11.1 | 11.7 | 11.3 | 23.2 | 22.4 | 9.8 | 10.5 |
| North Carolina | 45.4 | 46.7 | 11.0 | 11.6 | 14.5 | 15.4 | 25.4 | 27.0 | 20.5 | 20.2 |
| North Dakota. | 35.4 | 34.9 | 11.7 | 13.6 | 11.9 | 11.0 | 23.6 | 24.7 | 12.1 | 10.5 |
| Ohio. | 38.5 | 39.1 | 11.7 | 12.0 | 12.6 | 12.4 | 24.3 | 24.4 | 14.6 | 15.1 |
| Oklahoma | 41.2 | 42.5 | 11.8 | 12.4 | 13.0 | 13.5 | 24.8 | 25.9 | 16.8 | 17.1 |
| Oregon | 30.5 | 30.0 | 10.7 | 9.6 | 11.3 | 8.8 | 22.0 | 18.4 | 8.7 | 11.8 |
| Pennsylvania | 40.0 | 37.9 | 11.7 | 11.8 | 13.8 | 12.3 | 25.6 | 24.1 | 14.8 | 14.1 |
| Rhode Island. | 35.3 | 43.5 | 11.1 | 10.0 | 11.8 | 16.2 | 22.8 | 26.2 | 12.8 | 17.8 |
| South Carolina | 54.9 | 55.1 | 12.3 | 13.0 | 17.7 | 17.9 | 30.0 | 30.9 | 25. 7 | 25.0 |
| South Dakota | 34.9 | 35.7 | 8.7 | 11.2 | 12.5 | 10.6 | 21.2 | 21.8 | 13.9 | 14.2 |
| Tennessee. | 45.5 | 44.8 | 12.2 | 11.1 | 14.3 | 13.9 | 26.5 | 24.9 | 19.5 | 20.3 |
| Texas | 50.4 | 51.4 | 10.5 | 11.6 | 15.8 | 15.9 | 26.3 | 27.5 | 24.7 | 24.6 |
| Utah | 33.9 | 31.4 | 11.2 | 10.6 | 13.3 | 11.9 | 24.5 | 22.6 | 9.6 | 9.1 |
| Vermont | 40.6 | 39.0 | 15.7 | 14.2 | 10.8 | 10.7 | 26.5 | 24.9 | 14.5 | 14.5 |
| Virginia | 47.1 | 47.1 | 13.3 | 13.0 | 15.4 | 15.6 | 28.7 | 28.6 | 19.0 | 19.0 |
| Washington | 33.8 | 34.8 | 10.4 | 11.0 | 12.1 | 11.2 | 22.5 | 22.2 | 11.5 | 12.9 |
| West Virginia | 52.0 | 52.1 | 11.1 | 12.7 | 17.6 | 16.7 | 28.6 | 29.4 | 24.1 | 23.4 |
| W isconsin. | 32.0 | 35.0 | 10.1 | 11.3 | 11.1 | 12.0 | 21.2 | 23.3 | 11.1 | 12.0 |
| W yoming. | 41.2 | 37.1 | 13.5 | 13.4 | 11.4 | 9.6 | 24.8 | 23.0 | 16.7 | 14.4 |
| ${ }^{1}$ Deaths per 1,000 live <br> ${ }^{2}$ Deaths per 1,000 infa | irst | nth | life. |  |  |  |  |  |  |  |

The majority of deaths due to prenatal and natal causes occurred in the first month of life. The greater portion of deaths due to premature birth and injury at birth occurred during the first day of life, whereas for the other prenatal and natal causes the greater portion of the deaths were distributed over the remaining days of the first month of life.


Figure 1.-Infant mortality rate in each State: United States, 1944.

Table 4.-Infant deaths by age and by cause; United States, 1944

| Cause of death | $\begin{gathered} \text { Under } 1 \\ \text { year } \end{gathered}$ | $\begin{gathered} \text { Under } 1 \\ \text { day } \end{gathered}$ | 1 day to 1 month | Under 1 month | $\begin{gathered} \text { 1-11 } \\ \text { months } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| All causes. | 111, 127 | 32, 052 | 36,944 | 68,996 | 42, 131 |
| Prenatal and natal causes | 67, 713 | 30,655 | 28, 694 | 59,349 | 8,364 |
| Premature birth | 33, 120 | 18, 909 | 13, 156 | 32, 065 | 1,055 |
| Congenital malformations | 14,205 | 2,997 | 6, 198 | 9,195 | 5, 010 |
| Injury at birth | 10, 199 | 5,599 | 4, 386 | 9,985 | 214 |
| Congenital debility | 2,493 | 439 | 864 | 1,303 | 1,190 |
| Syphilis. | 746 | 131 | 225 | 356 | 390 |
| Other diseases peculiar to first | 6,950 | 2, 580 | 3,865 | 6,445 | 505 |
| Pneumonia and influenza. | 15, 674 | 104 | 2,798 | 2,902 | 12,772 |
| Diarrhea, enteritis and dysentery | 10, 230 | 7 | 1,575 | 1,582 | 8,648 |
| Epidemic and other communicable | 2,749 | 2 | 116 | 118 | 2,631 |
| All other specified causes. | 10, 340 | 389 | 2, 087 | 2, 476 | 7,864 |
| Ill-defined and unknown causes | 4,421 | 895 | 1,674 | 2, 569 | 1,852 |

[^3]Trend of the infant mortality rate.-The trend of the infant mortality rate from 1930-44 for white and nonwhite infants is shown in figure 2. The decreases were slight up to 1936 when they accelerated considerably up to 1942 , at which time there seems to have been a slight leveling off. There is no great difference in the relative decreases in the rates for white and nonwhite infants ( 38.6 and 39.6 percent) from the rates in 1930. However, since 1942 the rate for nonwhite infants has been decreasing more rapidly than that for white infants.


Figure 2.-Infant mortality rates by race, United States expanding birth registration area, 1930-44.
Infant mortality during the war period compared with previous periods.-The infant mortality rate for the 3 years of war was 14.1 percent lower than during the defense period. The decrease from the predefense period to the defense period was 13.5 percent. Thus,
it can be seen that there was no appreciable change in the rate of decrease with the beginning of each of the later two periods. If the rate for the earliest period had been operating throughout the two succeeding periods there would have been 848,183 infant deaths. The actual number that occurred was 676,822 . Thus, 171,361 more infants would have died if the higher rate for the earliest period had been operating throughout the two succeeding periods.

Table 5.-Infant mortality rates 1942-44, 1939-41, and 1936-38 and the percent change from 1939-41 to 1942-44 and from 1936-38 to 1939-41 (by place of residence)

| State | Infant mortality rate ${ }^{1}$ |  |  | Percent change from- |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1942-44 | 1939-41 | 1936-38 ${ }^{\text {? }}$ | $\begin{gathered} 1939-41 \\ \text { to } \\ 1942-44 \end{gathered}$ | $\begin{gathered} 1936-38 \\ \text { to } \\ 1939-41 \end{gathered}$ |
| United States. | 40.2 | 46.8 | 54.1 | -14.1 | -13.5 |
| Alabama | 46.7 | 60.2 | 63.3 | -22.4 | -4.9 |
| Arizona | 75.0 | 89.9 | 112.7 | -16.6 | -20.2 |
| Arkansas. | 37.3 | 46.0 | 52.3 | -18.9 | -12.0 |
| California | 34.6 | 39.2 | 49.9 | $-11.7$ | -21.4 |
| Colorado- | 49.9 | 55.6 | 69.0 | $-10.3$ | -19.4 |
| Connecticut | 29.9 | 33.5 | 39.5 | $-10.7$ | -15.2 |
| Delaware | 47.5 | 44.9 | 60.2 | +5.8 | -25.4 |
| Florida | 46.6 | 54.1 | 59.0 | -13.9 | -8.3 |
| Georgia | 46.8 | 58.2 | 66.4 | -19.6 | -12.3 |
| Idaho.- | 34.0 | 41.7 | 46. 5 | -18.5 | -10.3 |
| Ilinois | 32.9 | 35.8 | 43.5 | -8.1 | -17.7 |
| Indiana | 37.0 | 40.5 | 47.5 | -8.6 | -14.7 |
| Iowa. | 33.5 | 37.2 | 44.3 | -9.9 | -16.0 |
| Kansas | 34.1 | 38.4 | 46.4 | -11.2 | -17.2 |
| Kentucky | 48.4 | 55.0 | 62.4 | -12.0 | -11.9 |
| Louisiana | 46.4 | 61.5 | 68.1 | -24.6 | -9.7 |
| Maine... | 48.1 | 52.3 | 61.9 | -8.0 | -15.5 |
| Maryland | 42.8 | 50.1 | 61.9 | -14.6 | -19.1 |
| Massachusetts. | 33.1 | 36.6 | 43.5 | -9.6 | -15.9 |
| Michigan. | 37.8. | 40.3 | 47.6 | -6.2 | -15.3 |
| Minnesota | 30.6 | 34.4 | 41.3 | -11.0 | -16.7 |
| Mississippi | 46.1 | 55.4 | 57.9 | -16.8 | -4.3 |
| Missouri. | 39.0 | 46. 2 | 55.3 | -15.6 | -16.5 |
| Montana | 36.1 | 44.4 | 51.0 | -18.7 | -12.9 |
| Nebraska | 34.0 | 35.9 | 40.9 | -5.3 | -12.2 |
| Nevada. | 53.1 | 46.0 | 51.3 | +15.4 | -10.3 |
| New Hampshire | 40.0 | 42.0 | 47.3 | -4.8 | -11.2 |
| New Jersey-..- | 32.9 | 36.5 | 41.1 | -9.9 | -11.2 |
| New Mexico. | 92.7 | 102.3 | 117.9 | -9.4 | $-13.2$ |
| New York. | 32.5 | 36.3 | 44.2 | -10.5 | -17.9 |
| North Carolina | 46.8 | 58.8 | 67.7 | -20.4 | -13.1 |
| North Dakota. | 35.6 | 43.8 | 50.6 | -18.7 | -13.4 |
| Ohio | 38.2 | 41.6 | 47.9 | -8.2 | -13.2 |
| Oklahoma | 41.7 | 49.2 | 55.1 | -15.2 | -10.7 |
| Oregon. | 30.3 | 32.8 | 41.5 | -7.6 | -21.0 |
| Pennsylvania. | 38.6 | 43.7 | 49.1 | -11.7 | -11.0 |
| Rhode Island | 39.5 | 37.2 | 46.5 | +6.2 | $-20.0$ |
| South Carolina | 56. 2 | 70.1 | 78.9 | -19.8 | -11.2 |
| South Dakota. | 36. 2 | 40.3 | 47.6 | -10.2 | -15.3 |
| Tennessee. | ${ }^{45.5}$ | 53.5 | 64.3 | $-15.0$ | -16.8 |
| Texas. | 51.7 | 63.9 | 70.0 | -19.1 | -8.7 |
| Utah. | 32.7 | 36.4 | 46.9 | -10.2 | -22.4 |
| Vermont | 40.4 | 44.3 | 52.0 | $-8.8$ | -14.8 |
| Virginia | 48.8 | 61.1 | 69.9 | -20.1 | -12.6 |
| Washington. | 34.0 | 35.5 | 41.2 | $-4.2$ | -13.8 |
| West Virginia | 52.4 | 56.4 | 65.0 | -7.1 | $-13.2$ |
| Wisconsin. | 33.1 | 37.5 | 44.3 | -11.7 | -15.3 |
| Wyoming | 41.1 | 44.2 | 55.0 | -7.0 | -19.6 |

[^4]The rates in all of the States ${ }^{5}$ were lower during the defense period than during the predefense period. In the majority of the States the decreases were between 10 and 20 percent with the maximum 25.4 percent in Delaware and the minimum 4.3 percent in Mississippi. Decreases of 20 or more percent occurred in six States and less than 10 percent in five.

Comparison of the rates during the war and the period of national defense is similar to the preceding one. Decreases ranged from 24.6 percent in Louisiana to 4.2 percent in Washington. The reduction was between 10 and 20 percent in 25 States; between 20 and 25 percent in 4 States, and less than 10 percent in 19 States. Included in the latter group are 3 States in which there was an increase in the infant mortality rate (Delaware, Nevada, and Rhode Island).

The rate of decrease of the infant mortality rate was larger during the war than during the defense period in 17 States. Included in this group of States were Idaho, Montana, Nevada, and North Dakota in the Northwest; Arkansas, Louisiana, Oklahoma and Texas in the South Central; and Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina and Virginia in the Southeast. Also included were Kentucky and Pennsylvania.

The mortality rate for white infants decreased 14.2 percent from the predefense period to the defense period and 13.3 percent from the latter to the war. The similar figures for nonwhite infants were 10.7 and 16. Thus, the rate of decrease of the mortality rate for white infants was somewhat smaller during the war than during the defense period in contrast to the noticeably larger decrease in the mortality rate for nonwhite infants during the war.

The reductions in the infant mortality rate have not been uniform for the entire span of the first year of life. The reduction from the predefense period to the defense period in the rate for infants 1 to 11 months was 20.9 percent, whereas the reduction in the rate for the age group under 1 month was 8.4 percent. Similarly, the reduction in the former from the defense period to the war was 17 percent, and in the latter, 12.3 percent. The reduction also was not uniform for the death rates from the different causes of death. The reductions in the rates due to environmental causes were more than twice as large as that from prenatal and natal causes. The rate of decrease of the rate for prenatal and natal causes was larger during the war than during the defense period, whereas the rate of decrease of the rate for environmental causes was smaller during the war.

[^5]
## MATERNAL MORTALITY

In 1944, 6,369 women died from causes directly associated with pregnancy, childbirth, and the puerperium. The maternal mortality rate was 22.8 deaths per 10,000 live births. There has been a 6.9 percent reduction from the 1943 rate (24.5) and a reduction of 65.2 percent from the rate two decades ago.

> Table 6.-Maternal mortality rates in each State, 1944 and 1943 (by place of residence)

${ }^{1}$ Deaths due directly to diseases of pregnancy, childbirth, and the puerperium per 10,000 live births.
Of the total number of mothers dying in 1944, 4,648 were white and 1,721 were nonwhite. The maternal mortality rate for nonwhite women was 50.6 deaths per 10,000 live births, more than $2 \frac{1}{2}$
times as high as that for white women (18.9). The reduction in the maternal mortality rate from 1943 to 1944 was entirely due to the reduction in the rate for white women from 21.1 to 18.9 .

Reductions in the maternal mortality rate have continued in the majority of the States despite the crowded conditions and scarcity of physicians in wartime. In 36 States the rate in 1944 was lower than in 1943. In the remaining States the increases were statistically insignificant. Although no great importance can be attached to yearly fluctuations in rates in States in which a relatively small number of births occur, only 26 of the States have demonstrated continuous decreases in the maternal mortality rate since 1942. In four States there has been a continuous increase and in the remainder of the States the rates have fluctuated.

Twenty-five of the States had a mortality rate lower than 20 in 1944. There were only 15 such States in 1943. The lowest rate (8.9) occurred in Wyoming. Other States with low rates were Minnesota, Montana, and Utah. The highest rate (39.8) occurred in New Mexico. Alabama, Georgia, Mississippi, and South Carolina had rates over 35. In general the rates were highest in the South and lowest in the northern Rocky Mountain area.

Causes of maternal death.-The major causes of maternal deaths: (infection, toxemias, and hemorrhage, trauma, or shock) accounted for 88 percent of the 6,369 deaths in 1944. The remaining deaths were due to other and unspecified causes.

Infection was the leading cause of maternal mortality and was responsible for 2,125 ( 33 percent) of the maternal deaths. The death rate from this cause was 7.6 deaths per 10,000 live births. Infection classed as general or local accounted for 679 of the deaths in this group. Also mentioned were thrombophlebitis, embolism and sudden death which included a total of 642 deaths.

The next in numerical importance was hemorrhage, trauma, or shock which accounted for 1,897 ( 30 percent) of the deaths with a death rate of 6.8. Specific causes most frequently mentioned in this group were placenta previa and premature separation of the normally implanted placenta. Toxemias were the cause of 1,607 ( 25 percent) of the maternal deaths. Eclampsia comprised the major portion (800) and albuminusia and nephritis accounted for 390.

The change in the relative importance of toxemias and hemorrhage, trauma, or shock which was first recognizable in 1942 has continued through 1944. ${ }^{6}$ Prior to 1941 the number of deaths from toxemias had been greater than from hemorrhage, trauma, or shock. In 1941 the two groups were responsible for an equal number of deaths, and in 1942 the number of deaths from the latter surpassed those from

[^6]
toxemias. This condition remained the same in 1943 and has been intensified in 1944. The difference in the number of deaths from the 2 causes has increased from 152 in 1942 to 290 in 1944.

Physicians failed to give satisfactory information on cause of death for 740 ( 12 percent) of the maternal deaths. The cause of death for these cases was stated in such general terms that little more is known than that a child had been born to the mother or that pregnancy was the most important factor of the death. The lack of specific information as to the cause of death for this considerable number of deaths points to a need for improvement of statement of causes of death on the certificate.

Time of death in relation to delivery.-Maternal deaths by time of death in relation to delivery have been tabulated in four classifications: Deaths associated with abortion, deaths associated with ectopic gestation, deaths before delivery, and deaths during or after childbirth. The latter is defined as following a uterine pregnancy of seven or more lunar months ( 28 weeks) of gestation. A death terminating a uterine pregnancy of less than 28 weeks' gestation has been classified as an abortion.

In the United States 4,113 ( 64.6 percent) of the total maternal deaths occurred during or after childbirth. The number of deaths associated with abortion and those occurring before delivery were almost the same, 996, and 915, representing respectively 15.6 and 14.4 percent of the total. There were 345 ( 5.4 percent) deaths associated with ectopic gestation.

Table 7 shows a cross-tabulation of maternal deaths by cause and by time of death in relation to delivery. Thus, it is possible to determine on one hand the distribution of the major causes of death for the various classifications of time of death in relation to delivery and on the other hand, the distribution of the time of death in relation to delivery for each of the major causes of death. For example, nearly three-fourths of all deaths occurring during or after abortion were due to infection and a very small proportion were due to other causes. From the other view-point, about three-fifths of all deaths due to infection occurred during or after childbirth and one third were associated with abortion.

The distribution for the States is similar with a few exceptions. The proportion of deaths associated with abortion was relatively high in the District of Columbia, Kansas, Montana, and Nevada, whereas in Utah, North Dakota, New Hampshire, and Nebraska a relatively large number of deaths occurred during or after childbirth with an accompanying low number associated with abortion. The percentage of deaths associated with ectopic gestation was comparatively high in Delaware; however, this percentage was based upon only nine total
deaths. In Mississippi, Texas, and West Virginia the percentage of deaths occurring before delivery was relatively high.
Table 7.-Maternal deaths ${ }^{1}$ from each cause and by time of death in relation to delivery; United States, 1944

${ }^{1}$ Deaths due directly to diseases of pregnancy, childbirth, and the puerperium.
Trend of the maternal mortality rate.-The maternal mortality rate has been decreasing steadily since 1930 and at a more rapid rate than the infant mortality rate. Again there was a sudden sharp decline in 1936 and a similar leveling off in 1942. The relative decrease has been greater in the rate for white women than in the rate for nonwhite women. The 1944 rate for white women was 68.8 percent lower than that in 1930 and for nonwhite women 57.7 percent.


Figure 4.-Maternal mortality rates by race, United States expanding birth registration area, 1930-44.

Table 8.-Percentage distribution of maternal deaths ${ }^{1}$ by time of death in relation to delivery; each State, 1944 (by place of residence)

| State | Number of deaths in 1944 | Death in relation to delivery |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Abortion | Ectopic gestation | Before delivery | During or after childbirth |
|  |  | Percent of total maternal deaths |  |  |  |
| United States..... | 6, 369 | 16 | 5 | 14 | 65 |
| Alabama | 278 | 14 | 4 | 16 | 66 |
| Arizona | 42 | 10 | 5 | 14 | 71 |
| Arkansas.-. | 114 304 | 13 21 | 3 7 | 17 9 | 67 63 |
| Colorado. | 59 | 19 | 7 | 8 | 66 |
| Connecticut | 52 | 15 | 4 | 8 | 73 |
| Delaware | 9 |  | 22 | 11 | 67 |
| District of Columbia. | 33 | 27 | 3 | 18 | 52 |
| Florida -- | 161 | 13 | 3 | 17 | 67 |
| Georgia. | 279 | 12 | 4 | 13 | 71 |
| Idaho-.-- | 30 | 20 | 3 | 17 | 60 |
| Illinois.-- | 254 | 20 | 7 | 9 | 64 |
| Indiana.. | 141 | 16 | 12 | 19 | 53 |
| Iowa---- | 83 | 13 | 9 | 12 | 66 |
| Kansas,--- | 64 | 28 | 6 | 11 | 55 |
| Kentucky | 159 | 10 | 5 | 14 | 71 |
| Louisiana. | 207 | 13 | 7 | 17 | 63 |
| Maine-.-- | 40 | 15 | 3 | 7 | 75 |
| Maryland.--- | 82 | 12 | 9 | 18 | 61 |
| Massachusetts | 140 | 18 | 6 | 14 | 62 |
| Michigan | 193 | 13 | 7 | 9 | 71 |
| Minnesota | 77 | 8 | 4 | 14 | 74 |
| Mississippi | 219 | 12 | 4 | 29 | 55 |
| Missouri.- | 152 | 17 | 7 | 12 | 64 |
| Montana. | 16 | 37 | 6 | 13 | 44 |
| Nebraska | 43 | 5 | 2 | 12 | 81 |
| Nevada.- | 7 | 29 |  |  | 71 |
| New Hampshire. | 24 |  | 4 | 4 | 92 |
| New Jersey--- | 120 | 24 | 6 | 7 | 63 |
| New Mexico. | 62 | 8 | 5 | 6 | 81 |
| New York | 425 | 15 | 8 | 11 | 66 |
| North Carolina | 266 | 16 | 4 | 12 | 68 |
| North Dakota. | 24 | 4 |  | 13 | 83 |
| Ohio------ | 257 | 20 | 7 | 11 | 62 |
| Oklahoma | 111 | 11 | 3 | 13 | 73 |
| Oregon.-.-- | 43 | 18 | 7 | 12 | 63 |
| Pennsylvania | 454 | 18 | 4 | 11 | 67 |
| Rhode Island. | 25 |  | 8 | 16 | 76 |
| South Carolina. | 193 | 11 | 4 | 20 | 65 |
| South Dakota. | 23 | 13 |  | 13 | 74 |
| Tennessee.. | 191 | 19 | 3 | 15 | 63 |
| Texas..... | 422 | - 17 | 5 | 25 | 53 |
| Utah | 22 |  | 9 | 5 | 86 |
| Vermont- | 13 | 15 |  | 23 | 62 |
| Virginia. | 183 | 19 | 5 | 19 | 57 |
| Washington. | 70 | 18 | 6 | 16 | 60 |
| West Virginia. | 89 | 11 | 4 | 25 | 60 |
| Wisconsin.-.-- | 109 | 14 | 4 | 13 | 69 |
| W yoming... | 5 | 20 |  | 20 | 60 |

${ }^{1}$ Deaths due directly to diseases of pregnancy, childbirth, and the puerperium.

## MATERNAL MORTALITY DURING THE WAR PERIOD COMPARED WITH PREVIOUS PERIODS

During the 3-year period 1942-44 there were 20,833 maternal deaths and $8,538,656$ live births. The maternal mortality rate was, therefore, 24.4 deaths per 10,000 live births. The rates for the two preceding periods were 36.4 in 1939-41 and 49.6 in 1936-38. The reduction in the maternal mortality rate over the two periods represents the saving of the lives of 30,947 mothers.

The maternal mortality rate for the 3 years of war was 33 percent lower than during the period of national defense and the latter rate was 26.6 percent lower than in the predefense period. Thus, there was a slight acceleration in the rate of decrease of the maternal mortality rate during the war.

In table 9 are presented for each State ${ }^{7}$ the percentage change from the predefense period to the defense period and from the defense period to end of the war. The decreases from the predefense period to the defense period ranged from 44 percent in Oregon to 10

Table 9.-Maternal mortality rates 1942-44, 1939-41, and 1996-38 and the percent change from 1939-41 to 1942-44 and from 1936-38 to 1939-41 (by place of residence)

| State | Maternal mortality rate ${ }^{1}$ |  |  | Percent change from- |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1942-44 | 1939-41 | 1936-38 ${ }^{2}$ | $\begin{gathered} 1939-41 \\ \text { to } 1942-44 \end{gathered}$ | $\begin{aligned} & 1936-38 \\ & \text { to } 1939-41 \end{aligned}$ |
| United States | 24.4 | 36.4 | 49.6 | -33.0 | -26.6 |
| Alabama. | 34.7 | 57.9 | 68.3 | -40.1 | -15.2 |
| Arizona. | 31.3 | 40.9 | 63.4 | -23.5 | -35.5 |
| Arkansas. | 34.8 | 48.8 | 65.9 | -28.7 | -25.9 |
| California | 19.0 | 26.5 | 39.7 | -28.3 | $-33.2$ |
| Colorado. | 23.1 | 42.7 | 55.7 | -45.9 | -23.3 |
| Connecticut | 16.5 | 24.5 | 30.5 | -32.7 | -19.7 |
| Delaware | 18.5 | 38.7 | 55.1 | -52.2 | -29.8 |
| Florida. | 36.7 | 63.6 | 74.5 | -42.3 | -14.6 |
| Georgia | 39.0 | 53.7 | 74.1 | -27.4 | -27.5 |
| Idaho.- | 24.7 | 26.9 | 43.3 | $-8.2$ | -37.9 |
| Illinois. | 19.8 | 28.6 | 38.9 | -30.8 | $-26.5$ |
| Indiana | 21.3 | 30.1 | 39.9 | -29.2 | -24.6 |
| Iowa .- | 18.0 | 30.0 | 41.5 | -40.0 | -27. 7 |
| Kansas. | 21.8 | 34.5 | 47.1 | -36.8 | -26.8 |
| Kentucky | 25.5 | 39.1 | 48. 3 | -34.8 | -19.0 |
| Louisiana | 33.5 | 52.6 | 72.1 | -36. 3 | -27. 0 |
| Maine -- | 22.0 | 36. 5 | 54.2 | -39.7 | -32.7 |
| Maryland | 18.8 | 30.2 | 42.1 | -37.7 | -28.3 |
| Massachusetts | 19.7 | 30.7 | 44.7 | -35.8 | -31.3 |
| Michigan .-. | 18.6 | 28.9 | 41.8 | -35.6 | -30.9 |
| Minnesota | 14.8 | 23.5 | 33.4 | -37.0 | -29.6 |
| Mississippi | 40.6 | 59.6 | 66.2 | -31.9 | -10.0 |
| Missouri.. | 24.5 | 36.0 | 50.4 | -31.9 | -28.6 |
| Montana | 18.2 | 27.3 | 41.5 | $-33.3$ | -34.2 |
| Nebraska | 17.7 | 29.6 | 42.4 | -40.2 | -30.2 |
| Nevada. | 17.0 | 42.8 | 59.4 | -60.3 | -27.9 |
| New Hampshire | 22.2 | 31.2 | 43.6 | -28.8 | -28.4 |
| New Jersey | 18.4 | 29.6 | 38.1 | -37.8 | -22.3 |
| New Mexico | 44.7 | 48.2 | 60.0 | -7.3 | -19.7 |
| New York | 20.6 | 28.1 | 42.3 | $-26.7$ | -33.6 |
| North Carolina | 32.0 | 45.8 | 57.5 | -30.1 | -20.3 |
| North Dakota | 22.8 | 21.4 | 37.7 | $+6.5$ | -43.2 |
| Ohio | 20.9 | 31.5 | 44.6 51 | $-33.7$ | -29.4 |
| Oklahoma | 26.5 | 37.8 | 51.6 | -29.9 | -26.7 |
| Oregon. | 16. 5 | ${ }^{23.9}$ | 42.7 | -31.0 | -44. 0 |
| Pennsylvania. | 25.7 | 33.9 | 46.2 | -24.2 | -26.6 |
| Rhode Island. | 19.7 | 26.5 | 35.2 | -25.7 | $-24.7$ |
| South Carolina | 44.9 | 64.2 | 81.8 | -30.1 | -21. 5 |
| South Dakota. | 17.9 | 29.8 | 40.7 | -39.9 | -26.8 |
| Tennessee. | 29.1 | 44.4 | 62.1 | -34.5 | -28.5 |
| Texas. | 27.0 | 43.6 | 60.6 | -38.1 | -28.1 |
| Utah. | 15. 5 | 25.7 | 35.6 | -39.7 | -23.8 |
| Vermont. | 20.7 | 31.7 | 47.7 | $-34.7$ | -33.5 |
| Virginia | 29.3 | 44.3 | 55.3 | -33.9 | -19.9 |
| Washington- | 16.4 | 27.3 | 43.2 | -39.9 | -36.8 |
| West Virginia | 24.7 | 32.3 | 47.4 | -23.5 | -31.9 |
| Wisconsin. | 18.4 | 26.8 | 35.8 | $-31.3$ | -25.1 |
| W yoming | 15.9 | 32.2 | 40.1 | -50.6 | -19.7 |

[^7]percent in Mississippi. In 38 States the reduction was between 20 and 40 percent; in 2 States greater than 40 percent, and in 8 States less than 20 percent.

The rates in all of the States except North Dakota were lower during the war than during the defense period. The increase in therate in North Dakota was statistically insignificant. The largest percentage decrease occurred in Nevada and the smallest in New Mexico. In 14 of the States the reduction was less than 30 percent (includes North Dakota), in 14 from 30 to 35 percent; in 12 from 35 to 40 percent, and in 8 over 40 percent.

The rate of decrease of the maternal mortality rate was larger during the war than during the period of national defense in 37 of the States. There was a noticeable reduction in the rate of decrease of the maternal mortality rate in the remaining 11 States. These States included the West Coast States (except Washington) with two parallel strips extending eastward, along the north border to Minnesota and along the southern border to Texas. Also included were four eastern States: New York, Pennsylvania, West Virginia, and Georgia.

The rate among white women was 20.7 during the war, 31.1 during the defense period, and 44 during the predefense period, representing a decrease of 29.3 percent from the predefense period to the defense period, and 33.4 percent from the latter to the war. Among nonwhite women the reductions were somewhat smaller- 17.4 percent and 29.4 percent. There were increases in the rate of decrease of both the rate for white women and nonwhite women during the war.

## SUMMARY

The proportion of births in hospitals has increased from 36.9 percent in the 1935 to the highest yet recorded, 75.6 percent in 1944. Simultaneously, the proportion of births attended by nonmedical persons decreased from 12.5 to 6.7 percent.

The rate of increase of the number of live births was larger during the war than during the defense period. However, both the number of live births and the birth rate decreased during the 1 year from 1943 to 1944 , representing the first interruption in the definite upward trend of the birth rate which started in 1937.

The downward trends of the infant mortality rate and the maternal mortality rate have continued through 1944. Both exhibited a slight leveling off beginning in 1942. In recent years the mortality rate for nonwhite infants has been decreasing more rapidly than the rate for white infants. The opposite was true of the maternal mortality rate.

Reductions in the infant and maternal mortality rates have continued in some of the States in spite of the changes in living conditions brought about by the war. Sixteen States showed continuous annual reductions in the infant mortality rate from 1942 to 1944 and similarly 26 States showed continuous reductions in the maternal mortality rate.

The reductions in the infant and maternal mortality rate from the rate in the predefense period through the war were responsible for the saving of some 200,000 lives of mothers and infants. The rate of decrease of the infant mortality rate was approximately the same during the war as during the defense period, whereas, that figure for the maternal mortality rate was larger during the war.

Although the infant and maternal mortality rates for the country as a whole, as well as the number of births with no medical attendant, reached an all time low in 1944, there are still many States in which these figures are considerably above those for the country.

## CONFERENCE OF STATE AND TERRITORIAL HEALTH OFFICERS

The Annual Conference of the Surgeon General with the State and Territorial Health Officers will be held in the Social Security Building at Fourth Street and Independence Avenue SW., Washington, D. C.. from December 1 to 4, 1947.

The State mental health authorities and the State hospital authorities will meet officially with the State and Territorial Health Officers for the first time at this conference.

On the general program this year, in addition to an address by the Surgeon General, there will be an address by the newly appointed Federal Security Administrator, Oscar R. Ewing. Dr. Haven Emerson, eminent public health authority, will describe the need for a marked expansion of local public health services.

The attendance of all State health officers, mental health authorities, and hospital authorities is urged because of the importance of the subjects to be discussed at this conference.

## INCIDENCE OF COMMUNICABLE DISEASES IN THE UNITED STATES

## September 7-October 4, 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 Poblic Health Reports under the section "Incidence of Disease." The table gives the number of cases of these diseases for the 4 weeks ended October 4, 1947, the number reported for the corresponding period in 1946, and the median number for the years 1942-46.

## DISEASES ABOVE MEDIAN INCIDENCE

Influenza.-The incidence of influenza reported during the 4 weeks ended October 4 was about normal for this period of the year, the number of cases $(3,595)$ being approximately the same as the 1942-46 median. In the South Atlantic section the number of cases 1.5 times the $1942-46$ median and in the East South Central section the incidence was about normal, but in all other sections the incidence was relatively low. For the country as a whole the expected increase of this disease over the preceding 4 weeks was about normal.

Poliomyelitis.-The number of cases of poliomyelitis rose from 2,370 during the 4 weeks ended September 6 to 3,243 for the 4 weeks ended October 4. The peak of this disease has normally occurred during the 4 weeks preceding the one under consideration, but this year the disease did not appear in epidemic form until about the first of August and the highest weekly incidence was reported for the week ended September 13 which is included in the current 4-week period. Since the number of cases has declined during each of the succeeding weeks it may be expected to continue to decline. Compared with preceding years the current incidence was less than 60 percent of the number reported for the corresponding period in 1946, but it was slightly above the $1942-46$ median ( 3,198 cases). The excess over the 1942-46 median was due largely to a persistently high incidence in the Atlantic Coast and East North Central sections. Since there have recently been 3 years of unusually high incidence of this disease, the 1942-46 median is itself unusually high. Hence, a more significant comparison for the country as a whole is with the average of normal poliomyelitis years in this same 4 -week period (approximately 2,200 cases).

Whooping cough.-The incidence of whooping cough remained at a relatively high level, the number of cases $(12,227)$ being 1.7 times the incidence for the corresponding period in 1946 and 1.5 times the 1942-46 median. Each section of the country contributed to the comparatively large number of cases reported; the number in each section was above the normal seasonal expectancy.

## DISEASES BELOW MEDIAN INCIDENCE

Diphtheria.-The increase in the number of cases during the 4 weeks ended October 4 was about normal for this time of the year. However, the number of cases (991) was only 80 percent of the incidence during the corresponding weeks in 1946 and 70 percent of the 1942-46 median. The incidence was below the median of the 5 preceding years in all sections of the country. For the country as a whole the current incidence was the lowest for this period in the 19 years for which data are available in this form.

Measles.-For the current 4 weeks there were 2,298 cases of measles reported, as compared with a 5 -year ( $1942-46$ ) median of 2,450 cases. Of the 9 geographic sections, 4 reported an excess over the normal seasonal median, the greatest excesses being reported from the South Atlantic and West North Central sections. In the other 5 sections the disease was below normal. With the exception of the year 1944 ( 1,657 cases) the current incidence was the lowest for this period since 1936 when approximately 1,200 cases were reported for these same weeks.

Meningococcus meningitis.-The incidence of meningococcus meningitis was the lowest reported for the corresponding 4 -weeks since 1942. The number of cases (177) was 70 percent of the number reported for the corresponding period in 1946 and 50 percent of the median of the preceding 5 years. Not only is the current incidence considerably below the 1942-46 median, which is based upon a period of unusually high incidence of this disease, but the number of cases also compares very favorably with the average of non-epidemic years.

Scarlet fever.-The incidence of scarlet fever ( 2,248 cases) continued at a relatively low level, the number of cases reported during the 4 weeks ended October 4 being 65 percent of the 1946 incidence and less than 45 percent cf the 1942-46 median. The incidence was below the normal seasonal expectancy in all sections of the country. For the country as a whole and for each geographic section except the Mountain the current incidence was the lowest for this period in the 19 years for which these data are available.

Smallpox.-During the 4 weeks ended October 4 there were 2 cases of smallpox repcrted, 1 in North Dakota and 1 in Mississippi. The number of cases was the lowest reported during any 4 -week period on record. Since the high years of 1937 and 1938 the reported incidence of this disease has been on a gradual decline; in those years the cases for the corresponding 4-week period totaled 232 and 157, respectively.

Typhoid and paratyphoid fever.-The number of cases (467) of these diseases was higher than during the corresponding 4 weeks in 1946, but it was only 70 percent of the median of the 5 preceding years. The South Atlantic and East South Central sections reported significant increases over the 1946 incidence, but no section reported an increase of any consequence over the 1942-46 medians.

## MORTALITY, ALL CAUSES

For the 4 weeks ended October 4 there were 33,302 deaths from all causes reported to the National Office of Vital Statistics by 93 large cities. The median number reported for the corresponding period in 1944-46 was 32,945 . The number of deaths was higher than the preceding 3 -year median in each week of the 4 -week period except the third, the greatest excess occurring during the last week (ended October 4) ; the deaths for that week $(8,504)$ were 3.5 percent more than the median of the preceding 3 years for the corresponding week.

Number of reported cases of 9 communicable diseases in the United States during the 4-week period September 7-October 4, 1947, the number for the corresponding period in 1946, and the median number of cases reported for the corresponding period, 1942-46

| Division | Cur- <br> rent <br> peri- <br> od | 1946 | 5-year median | Cur- <br> rent <br> peri- <br> od | 1946 | 5-year median | Cur- <br> rent <br> peri- <br> od | 1946 | 5-year median |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Diphtheria |  |  | Influenza ${ }^{1}$ |  |  | Measles |  |  |
|  | 991 | 1,232 | 1,440 | 3,595 | 3,592 | 3,592 | 2, 298 | 2,403 | 2,450 |
| New England | 21 | 80 | 30 | 6 | 4 | 16 | 118 | 521 | 286 |
| Middle Atlantic. | 56 | 129 | 77 | 13 | 30 | 26 | 386 | 575 | 460 |
| East North Central | 79 | 156 | 143 | 95 | 86 | 111 | 521 | 350 | 391 |
| West North Central. | 94 | 71 | 100 | 9 | 44 | 34 | 237 | 55 | 69 |
| South Atlantic.... | 329 | 260 | 485 | 1,552 | 721 | 1,013 | 324 | 220 | 124 |
| East South Central | 167 | 195 | 264 | 116 | 110 | 110 | 40 | 79 | 54 |
| West South_Central | 137 | 152 | 287 | 1,632 | 2, 332 | 1,950 | 236 | 160 | 127 |
| Mountain... | 46 | 44 | 67 | 137 | 248 | 248 | 118 | 169 | 270 |
| Pacific.- | 62 | 145 | 126 | 35 | 17 | 52 | 318 | 274 | 558 |
|  | Meningococcus meningitis |  |  | Poliomyelitis |  |  | Scarlet fever |  |  |
| United States, | 177 | 249 | 359 | 3,243 | 5,488 | 3,198 | 2, 248 | 3, 447 | 5,035 |
| New England. | 6 | 22 | 22 | 249 | 231 | 231 | 202 | 299 | 386 |
| Middle Atlantic. | 30 | 50 | 78 | 774 | 487 | 487 | 401 | 613 | 772 |
| East North Central | 29 | 54 | 72 | 1,361 | 1,616 | 811 | 506 | 867 | 1,169 |
| West North Central | 16 | 16 | 41 | 210 | 1,530 | 343 | 195 | 278 | 478 |
| South A tlantic. | 22 | 36 | 46 | 287 | 166 | 166 | 261 | 474 | 919 |
| East South Central | 24 | 20 |  | 101 | 117 |  | 188 | 243 | 377 |
| West South Central | 33 | 18 | 24 | -37 | 288 | 216 | 104 | 140 | 181 |
| Mountain. | 5 | 10 | 10 | 84 | 367 | 172 | 145 | 115 | 179 |
| Pacific.- | 12 | 23 | 44 | 140 | 686 | 275 | 246 | 418 | 550 |
|  | Smallpox |  |  | Typhoid and paratyphoid fever |  |  | Whooping cough |  |  |
| United States | 2 | 16 | 16 | 467 | 411 | 646 | 12, 227 | 7,364 | 8,184 |
| New England --- | 0 | 0 | 0 | 23 | 29 | 34 | 1,172 | 813 | 886 |
| Middle Atlantic.-- | 0 | 0 | 0 | 50 | 66 | 80 | 2, 622 | 1,587 | 1,953 |
| West North Central | 0 | 7 | 7 | 62 37 | 61 33 | 75 33 | 3, 431 | $\begin{array}{r}1,587 \\ \hline 249\end{array}$ | 12,587 409 |
| South Atlantic...... | 0 | 1 | 1 | 98 | 48 | 118 | 1,517 | 657 | 969 |
| East South Central | 1 | 1 | 1 | 66 | 32 | 87 | 320 | 181 | 295 |
| West South Central | 0 | 1 | 3 | 66 | 76 | 109 | 1,116 | 685 | 594 |
| Mountain. |  | 5 | 0 | 25 | 41 | 41 | 588 | 211 | 358 |
| Pacific.- |  | 0 | 0 | 40 | 25 | 30 | 705 | 394 | 610 |

${ }^{1}$ North Carolina, New York and Pennsylvania excluded; New York City and Philadelphia included.

## DEATHS DURING WEEK ENDED OCT. 4, 1947

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

|  | Week ended Oct. 4, 1947 | Corresponding week, 1946 |
| :---: | :---: | :---: |
| Data for 93 large cities of the United States: |  |  |
| Total deaths. | 8, 604 | 8,503 |
| Median for 3 prior years. | 8,316 |  |
| Total deaths, first 40 weeks of year | 367, 842 | 362, 522 |
| Deaths under 1 year of age | 691 | 785 |
| Median for 3 prior years ...-. | 649 29 |  |
| Deaths under 1 year of age, first 40 weeks of year | 29,678 | 25,900 |
| Data from industrial insurance companies: |  |  |
| Number of death claims | 67, 11, 300 | 11,117 |
| Death claims per 1,000 policies in force, annual rate | 8.8 | 8.6 |
| Death claims per 1,000 policies, first 40 weeks of year, annual rate | 9.3 | 9.6 |

## 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 OCTOBER 11, 1947

## Summary

A total of 540 cases of poliomyelitis was reported for the current week, as compared with 613 last week, 1,042 for the corresponding week last year, and a 5 -year (1942-46) median of 549 . The decline during the week was approximately 12 percent, as compared with 23 percent last week and 9 percent for the same week last y jear. Only 11 States reported currently more than 12 cases. Five of these States (notably Idaho) showed increases. The States are as follows (last week's figures in parentheses): Increases-Pennsylvania 30 (25), Indiana 15 (7), Wisconsin 15 (13), Idaho 50 (17), California 23 (21); decreases-Massachusetts 24 (29), New York 61 (100), Ohio 88 (109), Illinois 29 (45), Michigan 31 (44), North Carolina 18 (23).

During the 30 weeks since March 15 (the approximate average date of seasonal low incidence), 7,842 cases have been reported, as compared with 20,219 for the corresponding period last year and a 5 -year median of 10,448 . Eleven States reporting the largest numbers during this period (aggregating about 67 percent of the total) are as follows (last year's corresponding figures in parentheses): Ohio 1,109 (567), New York 922 ( 1,069 ), Illinois 708 (2,052), California 556 ( 1,721 ), Michigan 507 (761), Pennsylvania 358 (205), Massachusetts 292 (235), New Jersey 236 (195), Indiana 186 (301), Idaho 185 (35), Minnesota $182(2,593)$.

A total of 1,956 cases of influenza was reported, as compared with 1,171 last week and a 5 -year median of 1,346 . The increase is chiefly accounted for in the reports of Virginia ( 619 cases, last week 104), South Carolina (332, last week 229), and Texas (705, last week 646).

One case of small pox was reported (in Missouri), and 1 case of anthrax (in New York). Current figures for Rocky Mountain spotted fever, tularemia, and whooping cough are above the 5 -year medians.

Deaths recorded during the week in 93 large cities of the United States totaled 9,175 , as compared with 8,604 last week, 8,585 and 8,380 , respectively, for the same weeks in 1946 and 1945, and a 3 -year (1944-46) median of 8,390 . The total for the year to date is 377,017 , as compared with 371,107 for the corresponding period last year. Infant deaths during the week totaled 702, as compared with 692 last week and a 3 -year median of 655 . The total to date is 30,381 , as compared with 26,643 for the same period last year.

Telegraphic morbidity reports from State health officers for the week ended Oct. 11, 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.


## Telegraphic morbidity reports from State health officers for the week ended Oct. 11,

 1947, and comparison with corresponding week of 1946 and 5-year median-Con.
${ }^{3}$ Period ended earlier than Saturday.
4 Dates between which the approximate low week ends. The specific date will vary form year to year.
${ }^{3}$ Including paratyphoid fever reported separately as follows: Massachusetts 1 (salmonella infection); Connecticut 1; Pennsylvania 1 (salmonella infection); Indiana 1; North Dakota 5; Virginia 1; Georgia 1; Florida 1; Arizona 2; California 2; Washington 1.
6 Delayed reports: Poliomyelitis-Nebraska, week ended July 26, 1 case, week ended August 23, 1 case; South Carolina week ended September 27, 1 case; scarlet fever-Massachusetts week ended September 13, 28 cases. These cases included in cumulative totals only. Correction: Poliomyelitis-Nebraska week ended August 16, 9 cases (instead of 10), deducted from cumulative totals.

Telegraphic morbidity reports from State health officers for the week ended Oct. 11, 1947, and comparison with corresponding week of 1946 and 5-year median-Con.

| Division and State | Whooping cough |  |  | Week ended October 11, 1947 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Week ended- |  | $\begin{gathered} \text { Me- } \\ \text { dian } \\ 1942- \\ 46 \end{gathered}$ | Dysentery |  |  | En-cephalitisinfectious | Rocky Mt. spotted fever | Tularemia |  | Un-dn-lantfever |
|  | $\begin{aligned} & \text { Oct. } \\ & 11, \\ & 1947 \end{aligned}$ | $\begin{aligned} & \text { Oct. } \\ & 12, \\ & 1946 . \end{aligned}$ |  | $\underset{\text { bic }}{\text { Ame }}$ | $\begin{array}{\|l\|l} \hline \text { Bacil- } \\ \text { lary } \end{array}$ | $\begin{gathered} \text { Un- } \\ \text { speci- } \\ \text { fied } \end{gathered}$ |  |  |  |  |  |
| MEW ENGLAND | 7 |  | 12 |  |  |  |  |  |  |  |  |
| New Hampshire |  |  |  |  |  |  |  |  |  |  |  |
| Vermont.. | 49 | 5 | 10 |  |  |  |  |  |  |  |  |
| Massachusetts | 90 | 95 | 95 |  | 6 |  |  |  |  |  |  |
| Rhode Island. | 21 | 29 | 22 |  |  |  |  |  |  |  |  |
| Connecticut. $\qquad$ MIDDLE ATLANTIC | 75 | 26 | 22 |  |  |  |  |  |  |  |  |
| New York | 180 | 142 | 207 |  |  |  |  | 1 |  |  |  |
| New Jersey. | 124 | 91 | 92 | 1 |  |  |  |  |  |  |  |
| Pennsylvania EABT NORTH CENTRAL | 225 | 110 | 132 |  |  |  | 1 |  |  |  |  |
| Ohio.. | 169 | 32 | 97 |  | 1 | 7 |  |  |  |  |  |
| Indians. | 33 | 19 | 17 |  |  | 1 |  |  |  |  |  |
| Illinois. | 71 | 84 | 84 | 4 | 1 |  | 4 | 2 |  |  | 13 |
| Michigan ${ }^{2}$ | 158 | 222 | 167 |  |  |  |  |  |  |  |  |
| Wisconsin.................... WEST NORTH CENTRAL | 127 | 115 | 115 |  |  |  | 1 |  |  |  | 4 |
| Minnesota | 129 | 12 | 29 |  | 1 |  | 2 |  |  |  |  |
| Iowa ... | 13 | 14 | 11 | 1 |  |  | 2 |  |  |  |  |
| Missouri --.- | $4_{4}^{4}$ | 4 | 13 |  |  |  |  |  | 7 |  | 4 |
| North Dakota South Dakota | 11 | 1 | 6 | 1 | ------ |  | 4 |  |  |  | 1 |
| Nebraska..... | 14 | 5 | 5 | 1 |  |  | 1 |  |  |  |  |
| Kansas. SOUTH ATLANTIC | 55 | 5 | 22 |  |  |  |  |  |  |  |  |
| Delaware | 4 | 4 | 1 |  |  |  |  |  |  |  |  |
| Maryland ${ }^{\text {8 }}$ | 76 | 18 | 49 |  |  | 3 |  | 1 |  |  | 2 |
| District of Columbia | 24 | 9 | 7 |  |  |  |  |  |  |  |  |
| Virginia.--....... | 52 | 28 | 28 |  |  | 69 | 1 | 3 |  |  | 1 |
| North Carolina. | ${ }_{3}^{2}$ | 12 | 8 |  |  |  |  |  |  | 1 | 1 |
| South Carolina. | 116 | 4 | 25 |  | 10 |  |  |  |  | 1 |  |
| Georgia...- | 15 | 7 | 17 | 1 | 2 |  |  | 3 |  | 5 | 4 |
| Florida $\qquad$ EAST SOUTH CRNTRAL | 20 |  |  | 1 |  |  |  |  |  | 1 | 3 |
| Kentucky.. | 9 | 10 | 10 |  |  |  |  |  |  |  |  |
| Tennessee.. | 9 | 26 | 26 |  |  |  |  |  | 1 | 1 | 3 |
| Alabama---- | 8 | 7 | 7 |  |  |  |  |  |  |  | 2 |
| Mississippi ${ }^{2}$ WEST SOUTH CENTRAL | 7 |  |  | 1 |  |  |  |  |  | 2 |  |
| Arkansas... | 15 | 5 | 9 |  |  | 1 |  |  | 4 |  |  |
| Lovisiana.. | 2 |  |  | 2 | 1 |  |  |  |  | 1 | 2 |
| Texas................... | 217 | 151 | 99 | 15 | 275 | 15 |  |  |  | 11 | 10 |
| Montans... | 12 | 3 | 17 |  |  |  |  |  |  |  |  |
| Idaho.-. | 11 | 1 |  |  |  |  |  |  |  |  |  |
| Wyoming | 2 |  | 2 |  |  |  |  |  |  |  |  |
| Colorado. | 30 | 18 | 18 |  | 2 |  |  |  |  |  | 1 |
| New Mexico. | 12 | 10 | 5 | 1 |  | 1 |  |  |  |  |  |
| Arizona | 11 | 8 | 0 |  |  | 11 | 2 |  |  |  |  |
| Utah ${ }^{\text {a }}$ Nevada......... | 7 | 3 | 9 |  |  |  |  |  | 1 |  | 2 |
| Nevada.- | 2 |  |  |  |  |  |  |  |  |  |  |
| PACIFIC |  |  |  |  |  |  |  |  |  |  |  |
| Washington. | 21 | 9 | 15 |  |  |  |  |  |  |  | 3 |
| Oregon. | 13 | 5 | 7 | 3 | 1 |  |  |  |  |  |  |
| California | 112 | 61 | 122 | 4 | 11 |  | 4 |  |  | 2 | 12 |
| Total | 2,418 | 1,435 | 1,566 | 46 | 314 | 108 | 22 | 10 | 18 | 24 | 110 |
| Same week: 1946 | 1,435 |  |  | 29 | 219 |  |  |  | 15 | 85 | 124 |
| Median, 1942-46 | 1,566 |  |  | 47 | 438 | 124 | 10 | 2 | 11 | 137 | ${ }^{7} 101$ |
| 41 weeks: 1947 | 26, 753 |  |  | 2,328 | 2, 662 | 8, 101 | 506 | 526 | 1,169 | 1,636 | 4,970 |
| 1946 | 78,899 |  |  | 1,924 | 3, 339 | 5, 358 | 515 | 543 | 749 | 2,824 | 4, 072 |
| Median, 1942-46. | 0,909 |  | -...- | 1,525\|1 | 3, 406 | 6,467 | 521 | 440 | 677 | 3,34917 | 3,926 |

[^8]
## WEEKLY REPORTS FROM CITIES ${ }^{1}$

City reports for week ended October 4, 1947
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 incidence of the diseases included in the table.


I In some instances the figures include nonresident cases.

City reports for week ended October 4, 1947-Continued


City reports for week ended October 4，1947—Continued

| Division，State，and City | Díphtheria cases |  | Influenza |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { ひ. } \\ & \text { むむ } \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| PaCIFIC |  |  |  |  |  |  |  |  |  |  |  |  |
| Washington： Seattle | 1 |  |  |  | 3 | 0 | 6 |  |  |  | 0 |  |
| Spokane． | 0 | 0 |  | 0 | 2 | 0 | 1 | 1 | 0 | 0 | 0 |  |
| Tacoma | 0 | 0 |  | 0 |  | 0 | ， | 0 | 0 | 0 | 0 |  |
| California： |  |  |  |  |  |  |  |  |  |  |  |  |
| Los Angeles． | 7 | 0 | 2 | 0 | 12 | 0 | 0 | 8 | 10 | 0 | 0 | 20 |
| Sacramento．．． | 0 |  | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| San Francisco． | 0 | 1 |  | 0 | 10 | 0 | 4 | 1 | 3 | 0 | 0 | 8 |
| Total． | 42 | 8 | 21 | 11 | 109 | 17 | 188 | 197 | 191 | 0 | 12 | 722 |
| Corresponding week， $1946{ }^{1}$－ | 69 |  | 24 | 10 | ${ }^{142}$ |  | ${ }_{2} 225$ |  | 234 | 0 | 11 | 422 |
| A verage 1942－46 ${ }^{1}$ | 72 |  | 39 | 29 | ${ }^{2} 193$ |  | 2246 |  | 376 | 0 | 21 | 657 |

${ }^{1}$ Exclusive of Oklahoma City．
${ }^{2}$ 3－year average，1944－46．
${ }^{3}$ 5－year median，1942－46．
Dysentery，amebic．－Cases：New York 5；Chicago 1；Charleston，S．C．，1；New Orleans 3；Los Angeles 2； San Francisco 1.
Dysentery，bacillary．－Cases：New York 2；Rochester，N．Y．1；Chicago 1；Minneapolis 1；Baltimore 1； Memphis 1；New Orleans 1.
Dysentery，unspecified．－Gases：Baltimore 10；San Antonio 2.
Leprosy．－Cases：Tampa 2.
Typhus fever，endemic．－Cases：Raleigh 1；Atlanta 1；Tampa 2：Mobile 1；New Orleans 1.

Rates（annual basis）per 100，000 population，by geographic groups，for the 87 cities in the preceding table（latest available estimated population，34，072，800）


## TERRITORIES AND POSSESSIONS

## Puerto Rico

Notifiable diseases-4 weeks ended September 27, 1947.-During the 4 weeks ended September 27, 1947, cases of certain notifiable diseases were reported in Puerto Rico as follows.

| Disease | Cases | Disease | Cases |
| :---: | :---: | :---: | :---: |
| Chickenpox | 23 | Syphilis | 104 |
| Diphtheria.. | 32 | Tetanus. | 18 |
| Dysentery, unspecified | 3 | Tetanus, infantile | 1 |
| Gonorrhea. | 148 | Tuberculosis (anl forms) | 677 |
| Influenza | 101 | Typhoid fever -...---- | 9 |
| Malaria | 842 | Typhus fever (murine). | 5 |
| Measles.---. | 110 | Whooping cough.------ | 54 |
| Poliomyelitis | 1 |  |  |

## FOREIGN REPORTS

## CANADA

Provinces-Communicable diseases-Week ended September 20, 1947.-During the week ended September 20, 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 | Que- | Ontario | $\underset{\text { Mani- }}{\text { Mana }}$ | Sas-katchewan | Alberta | British Columbia | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chickenpox |  | 5 |  | 10 | 33 | 14 | 26 | 9 | 19 | 116 |
| Diphtheria. |  | 2 |  | 19 | 4 | 1 |  |  | 1 | 27 |
| Encephalitis, infectious..- |  |  |  |  |  | 8 | 16 |  | 1 | 25 |
| German measles...-....-- |  | 1 |  |  | 11 |  |  |  | --- | 14 |
| Influenza |  | 44 |  |  | 12 | 1 |  |  |  | 57 |
| Measles..... |  | 1 |  | 36 | 48 | 34 | 1 | 8 | 14 | 142 |
| Meningitis, meningococcus |  |  |  |  | 1 |  | 1 |  |  | 2 |
| Mumps |  | 4 |  | 20 | 63 | 8 | 9 | 18 | 12 | 134 |
| Poliomyelitis |  | 3 |  |  | 88 | 35 | 19 | 4 | 20 | 170 |
| Scarlet fever |  | 2 | 2 | 20 | 29 | 1 | 2 | 1 | 2 | 59 |
| Tuberculosis (all forms).- |  | 2 | 16 | 185 | 30 | 70 | 12 | 3 | 79 | 397 |
| Typhoid and paratyphoid fever. |  |  |  | 16 | 6 |  |  |  | 10 | 32 |
| Undulant fever. |  |  |  | 2 | 3 |  |  | 1 |  | 6 |
| Venereal diseases: |  |  |  |  |  |  |  |  |  |  |
| Gonorrhea... |  | 16 | 11 | 130 | 120 | 23 | 35 | 34 | 130 | 499 |
| Syphilis... |  | 9 | 4 | 74 | 64 | 13 | 17 | 11 | 43 | 235 |
| Wher forms |  |  |  |  |  |  |  |  | 4 | 4 |
| Whooping cough |  | 5 | 1 | 32 | 109 | 25 | 10 | 19 | 19 | 220 |

## GREAT BRITAIN

England and Wales-Poliomyelitis.-For the week ended September 27, 1947, 474 cases of poliomyelitis (including polioencephalitis) were reported in England and Wales, as compared with 594 cases reported for the week ended September 20, 1947, making a total of 6666 cases reported to date.

## WORLD DISTRIBUTION OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

From consular reports, international health organizations, medical officers of the Public Health Service and other sources. The reports contained in the folowing tabıes must not be considered as complete or final as regards either the list of countries included or the figures for the particular countries for which reports are given.

## CHOLERA

[C indicates cases]
Notr.-Since many of the figures in the following tables are from weekly reports, the accumulated totals are for approximate dates.


[^9]
## PLAGUE

[C indicates cases; D, deaths]

| Place | January- <br> July 1947 | $\underset{1947}{\text { August }}$ | September 1947-week ended- |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 6 | 13 | 20 | 27 |
| Belgian Congo AFrica |  |  |  |  |  |  |
| Belgian Congo- | 112 | 2 |  |  |  |  |
|  | 46 | 5 |  |  |  |  |
|  | 1 |  |  |  |  |  |
|  | 17 | 1 |  |  |  |  |
|  | 2176 | 10 |  |  | ${ }^{3} 12$ | -...-- |
|  | 424 | 1 |  |  |  |  |
| ASIA |  |  |  |  |  |  |
|  | 1,200 | 37 | 7 | --- | 1 | .-.- |
|  |  |  |  |  |  |  |
| Mandalay | 17 | 4 |  |  |  |  |
| Chins: |  |  |  |  |  |  |
|  | 112 | 4 |  |  |  |  |
|  | 1 |  |  |  |  |  |
| Fukien Province................................. $C$ | 618 | 10 |  |  |  |  |
|  | 13 |  |  |  |  |  |
|  | 21 |  |  |  |  |  |
|  | 143 | 10 |  |  |  |  |
|  | 35 | , 1 | .-..--- |  |  |  |
| Kiangsu Province: Shanghai.........-......-C | 28 |  |  |  |  |  |
|  | 77 |  |  | B 112 |  |  |
| India | 66, 469 | 901 |  |  |  |  |
| Indochina (French): |  |  |  |  |  |  |
|  | 51 | 23 |  |  | 34 |  |
|  | 27 | 3 |  |  | 31 | - |
|  | ${ }^{7} 37$ |  |  |  |  |  |
|  | 22 | -------- |  |  |  | 8100 |
|  | 19 | 5 |  |  |  |  |
| Siam (Thailand).......................................... | 31 | 2 | -..-- | 3 |  |  |
|  | 6 |  |  |  |  |  |
|  | 19 | -------- |  |  |  |  |
| EUROPE |  |  |  |  |  |  |
| Germany: East Prussia: ${ }^{\text {P }}$ |  |  |  |  |  |  |
|  | 2 |  |  |  |  |  |
| Turkey (see Turkey in Asia). <br> NORTH AMERICA |  |  |  |  |  |  |
| Canada. ${ }^{10}$ Alberta Province. |  |  |  |  |  |  |
| south america |  |  |  |  |  |  |
| Argentina: |  |  |  |  |  |  |
|  | 1 |  |  |  |  |  |
| Santa Fe Province..-.-...-.-.-.............- C | 3 |  |  |  |  |  |
| Brazil: |  |  |  |  |  |  |
|  | 2 |  |  |  |  |  |
|  | - 7 |  |  |  |  |  |
| Pernambuco State | 1 |  |  |  |  |  |
| Chimborazo Province. $\qquad$ C | 4 |  |  |  |  |  |
|  | 5 |  |  |  |  |  |
| Peru: ${ }^{\text {a }}$ |  |  |  |  |  |  |
| Lambayeque Department....-.-...-.-....- $\mathbf{C}$ | 5 | 1 |  |  |  |  |
|  | 17 |  |  |  |  |  |
|  | $\begin{array}{r}1124 \\ \\ \hline\end{array}$ | 9 |  |  |  |  |
|  | ${ }^{11} 78$ |  |  |  |  |  |
| oceania |  |  |  |  |  |  |
| Hawaii Territory: Plague infected rats ${ }^{12} \ldots . . . . . . .$. | 1 | -------- |  |  | --- |  |

${ }^{1}$ Includes 5 cases of pneumonic plague.
${ }^{2}$ Includes 50 cases of pneumonic plague.
${ }^{3}$ For the period Sept. 1-20, 1947.
${ }^{4}$ Includes 2 cases of pneumonic plague.

- During the month of June 1947, an outbreak of plague with high mortality occurred in Konigsburg, East Prussia, Germany.
${ }^{16}$ For the period July 5 to Sept. 20, 1947, 6 lots of plague infected fleas from squirrels were reported in Alberta and Saskatchewan Provinces, Canada.
${ }^{11}$ In addition 82 cases with 65 deaths in Ayabaca Province and 58 cases with 48 deaths in Huancabamba
Province, all unconfirmed, were reported for the period September 1946 to March 1947.
12 Plague infection was also reported in Hawaii Territory as follows: On Jan. 9, 1947, in a pool of 31 rats.
on Mar. 20, 1947, in a pool of 32 fieas collected from 59 rats.

SMALLPOX
[C indicates cases; $P$, present]

| Place |
| :--- |

See footnotes at end of table.

SMALLPOX-Continued

${ }^{1}$ Includes alastrim.
${ }^{2}$ For thelperiodiSept. 1-20, 1947.
${ }^{3}$ Imported.
TYPHUS FEVER*
[C indicates cases; $\mathbf{P}$, present]



See footnotes at end of table.


[^10]
# YBLLOW FEVER <br> [C indicates cases; D, deaths] 



[^11]
[^0]:    ${ }^{1}$ From the Field Studies Section, Tuberculosis Control Division.

[^1]:    ${ }^{2}$ More than 90 percent of the infants included in this group are Negro. The remainder consists of other racial groups such as Chinese, Japanese, Indians, and other nonwhite races. Mexicans are included among the whites.
    ${ }^{3}$ The term "States" as used in this paper includes the District of Columbia, except as indicated.

[^2]:    ${ }^{4}$ The infant mortality rates presented here have not been adjusted for the changing birth rate, since the necessary data are not available at this time. The inaccuracies of the unadjusted rates are discussed in Effect of Changing Birth Rates Upon Infant Mortality Rates by I. M. Moriyama and Thomas N. E. Greville. Vital Statistics, Special Reports, Vol. 19, No. 21.

[^3]:    ${ }^{1}$ Includes cerebrospinal meningitis, scarlet fever, whooping cough, diphtheria, tuberculosis, and measles.

[^4]:    ${ }^{1}$ Deaths under 1 year per 1,000 live births.
    2 The rates for 1936-38 are by place of occurrence, as residence data for the entire period are not available.

[^5]:    "The term "states" in this section did not include the District of Columbia because of the large discrepancy between occurrence and residence data. The rate for the District of Columbia, by place of occurrence was 10.5 percent less than that by place of residence in 1939-41.

[^6]:    6 Yerushalmy, J.: Births, Infant Mortality, and Maternal Mortality in the United States, 1942.

[^7]:    ${ }^{1}$ Deaths due directly to diseases of pregnancy, childbirth, and the puerperium per 10,000 live births.
    ${ }^{2}$ The rates for 1936-38 are by place of occurrence as residence data are not available for the entire period.
    ${ }^{7}$ The term "States" in this section did not include the District of Columbia for the purpose of comparability with the similar section on infant mortality.

[^8]:    ${ }^{2}$ Period ended earlier than Saturday.
    ${ }^{7}$ 2-year average, 1945-46.
    Anthrax: New York 1. Leprosy: Florida 2.
    Alaska, week ended Oct. 11, 1947: Influenza 23, measles 1, pneumonia 4, septic sore throat 1.
    Territory of Hawaii, week ended Oct. 11, 1947: Bacillary dysentery 1, influenza 1, measles 3, scarlet fever 1 , endemic typhus fever 1, whooping cough 30.

[^9]:    ${ }^{1}$ Cholera has been reported present in the provinces of Dakahliya, Gharbiya, Giza, Kalyubiya, Minufiya, and Sharkiya.
    ${ }_{2}^{2}$ For the period Sept. 22-Oct. 6; officially reported cases in which the diagnosis was confirmed.
    ${ }^{3}$ For the period Sept. 1-20, 1947.
    ${ }^{4}$ Inludes imported cases.

[^10]:    * Reports from some areas are probably murine type, while others probably included both murine and louse-borne types.

    1 Murine type.
    2 Includes murine type.
    ${ }^{3}$ Imported.
    4 Includes imported cases.

[^11]:    ${ }^{1}$ For the week ended October 4, 1947, 1 fatal case of yellow fever was reported in Bamako, French Sudan.
    ${ }^{2}$ Includes 1 fatal case.
    ${ }^{3}$ Deaths.

