

**VITAL and HEALTH STATISTICS**  
DATA FROM THE NATIONAL VITAL STATISTICS SYSTEM

# Weight at Birth and Survival of the Newborn

By Geographic Divisions and  
Urban and Rural Areas

United States, Early 1950

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Statistics derived from vital records on neonatal mortality by weight at birth, by color and sex, for infants born in the United States, during the first 3 months of 1950, by geographic divisions and by urban and rural areas.

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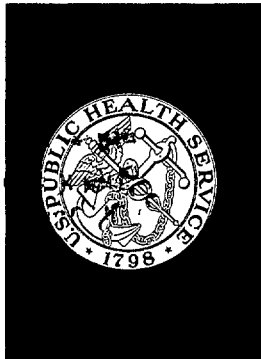
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# Weight at Birth and Its Effect on Survival of the Newborn: United States by Geographic Divisions and by Urban and Rural Areas, Early 1950

By Jeanne Unger, Analytical Statistician

## INTRODUCTION

This is the third in a series of reports in which weight at birth is introduced as a characteristic in the study of births between January 1 and March 31, 1950, and neonatal deaths among this group. In the earlier reports details were given for the country as a whole by race, sex, plurality, attendant at birth, cause of death, and age at death. In this report somewhat less detail is shown for the United States by type of area (urban, rural) and for geographic divisions.

Since 1950 there has been some reduction in neonatal mortality in the United States and in all sections of the country, but the risk of dying at this critical time of life is still much greater than at all except the very old ages.

The frequency of immature birth is one factor that is of prime importance in considering mortality among the newborn because such a large segment—about two-thirds—of neonatal deaths in the United States occur among these small children. In this report, comparison of the experience in various sections and areas of the Nation, with regard to incidence of immaturity and mortality at immature as well as at heavier weights, is of interest in interpreting the differences in overall neonatal mortality in these areas. The information also has significance in relation to differences in composition of the population, in fertility patterns, and in the level of care at childbirth. In this report, demographic and related data have been referred to only in discussing variations found among urban and rural areas.

### Basis of study

With the addition of the item "birth weight" to practically all State certificates of birth in 1949, the development of data for this characteristic on a national basis became possible for the first time. Annual data on births by weight have been published since 1950. From a special study covering births in the first quarter of 1950, of which this report is a part, data are available on neonatal deaths as well as live births by birth weight. The opportunity to obtain information on mortality in the neonatal period in relation to weight at birth was afforded by the matching of neonatal death records with corre-

sponding birth records, incidental to a test of birth registration completeness.<sup>1</sup>

All birth and related death certificates filed in the United States for children born between January 1 and March 31, 1950, except those for residents of Massachusetts, are included in the study group. Certificates relating to residents of Massachusetts were omitted since this State did not require the reporting of birth weight. This omission biases the information for the New England Division somewhat. In January to March 1950, the neonatal mortality rate for New England including Massachusetts was 19.0 as compared with 20.1 for New England excluding Massachusetts. Corresponding rates for the United States including and excluding Massachusetts were 19.9 and 20.0, respectively.

### Registration completeness

A test of birth registration completeness covering the period of this study indicated that practically all (98.6 percent) of the white births and 93.5 percent of the nonwhite were registered. Data on birth registration completeness by certain of the classifications studied in this report are shown in table A.

No definitive information is available on the completeness of death registration, but it is thought to vary generally as birth registration completeness. Since there is probably a slight bias in the direction of underreporting of small infants who died immediately after birth or in reporting some of them as fetal deaths, understatement of the proportion of infants at the low weights and of the mortality rates at these weights and at the younger ages may result. This biasing situation would, it seems likely, generally be of greater significance in areas with low birth registration completeness.

\* \* \* \* \*

For other explanatory material relating to qualifications, adjustments, and classification of data, see Explanatory Notes.

<sup>1</sup>For details on the procedures in the matching, see National Office of Vital Statistics, "Weight at Birth and Its Effect on Survival of the Newborn in the United States, Early 1950," Vital Statistics--Special Reports, Vol. 39, No. 1, 1954.

TABLE A. PERCENT COMPLETENESS OF BIRTH REGISTRATION, BY RACE, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES AND FOR GEOGRAPHIC DIVISIONS: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(By place of residence)

AREA	Total	White	Non-white
UNITED STATES-----	97.9	98.6	93.5
Urban-----	98.9	99.3	96.4
Rural-----	96.5	97.6	90.1
Metropolitan counties----	99.2	99.4	97.3
Urban-----	99.3	99.5	97.7
Rural-----	98.8	99.1	95.1
Nonmetropolitan counties--	96.4	97.5	90.0
Urban-----	98.0	98.8	92.3
Rural-----	95.6	96.9	89.3
Geographic Divisions			
New England-----	99.7	99.7	99.3
Middle Atlantic-----	99.5	99.6	98.6
East North Central-----	99.0	99.2	97.1
West North Central-----	99.1	99.2	95.4
South Atlantic-----	95.7	97.2	92.1
East South Central-----	96.2	96.5	95.5
West South Central-----	94.8	96.6	88.3
Mountain-----	96.7	97.9	78.3
Pacific-----	99.2	99.2	98.2

### GEOGRAPHIC DIVISIONS

#### General statistics by race

**Birth distribution.**—Of the children born in the United States in January to March 1950, 7.4 percent weighed 2,500 grams or less. A greater proportion of the nonwhite children were born at these immature<sup>2</sup> weights and also at weights above 4,500 grams where the major problems of obstetric and pediatric care exist. Infants weighing 2,500 grams or less represented 7.0 percent of all white live births as compared with 9.7 percent of nonwhite. At the highest weight level shown, the percent of nonwhite births (3.8) was double that of the white (1.8).

The proportion of children born prematurely varied appreciably from area to area (table 2), being highest (9.1 percent) in the Mountain Division and lowest in the West North Central (6.3 percent).

<sup>2</sup>See section on Classifications for usage of terms 'immature' and 'premature.'

Areas having the maximum problem with regard to immature birth differed for the white and nonwhite groups. For the white group, the proportion of children weighing 2,500 grams or less at birth was particularly high in the Mountain Division—9.1 percent. Other divisions in which the corresponding proportion was also somewhat above the national average include the Middle Atlantic, the South Atlantic, and the Pacific.

For the nonwhite group, premature births occurred most frequently among children born to residents of the following divisions—New England, Middle Atlantic, and East North Central. In these divisions the proportions of immatures for the nonwhite and white groups contrasted sharply, the nonwhite being as much as double the white. The incidence of immaturity, however, was also somewhat higher among nonwhite than among white births in all other divisions.

Other important differences in birth weight relate to the frequency of babies of the low mature weights (2,501 to 3,000 grams) and of very heavy weights (4,501 grams or more) for whom mortality in the neonatal period is substantially greater than for babies in the more normal range of 3,001 to 4,500 grams.

The areas having greater proportions of births at the low mature weights generally corresponded to those with comparatively high incidence of immaturity. Births at weights of 4,501 grams or more occurred more frequently in the 3 Southern divisions (South Atlantic, East South Central, and West South Central) among both the white and nonwhite groups. In addition, in each the percentage among nonwhite children was about double that for the white. In 1 other division, the West North Central, the percentage of white children weighing this much also exceeded the national average.

The peak concentration of births is found at weights 3,001 to 3,500 grams, with the median birth weights in all divisions except the Mountain Division falling somewhat above the midpoint of this interval (table B). For nonwhite babies, however, it was only in the Southern divisions that the median weights were this high and differed little from the average weights of white babies. In contrast, in all other divisions except the Mountain Division, the median weights for nonwhite babies were between 130 and 200 grams lower.

**Mortality.**—The risk of death among the newborn varied sharply with birth weight. For children born between January and March 1950 in the United States, the neonatal mortality rate was 20.0 per 1,000. For infants weighing 2,500 grams or less, however, the rate (173.7) was over 20 times that (7.8) for mature weight children (table 4). The weight range for optimum survival was between 3,001 and 4,500 grams.

TABLE B. MEDIAN BIRTH WEIGHTS (IN GRAMS) OF LIVE-BORN INFANTS BY RACE: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950

(By place of residence. Computed to nearest 10 grams on basis of exact conversion of interval limits from pounds and ounces; see section on Classifications. Birth weights not stated are distributed)

AREA	Total	White	Non-white
UNITED STATES <sup>1</sup> -----	3,320	3,330	3,280
New England <sup>1</sup> -----	3,320	3,320	3,180
Middle Atlantic-----	3,280	3,290	3,130
East North Central-----	3,330	3,340	3,140
West North Central-----	3,370	3,380	3,210
South Atlantic-----	3,330	3,320	3,340
East South Central-----	3,380	3,390	3,360
West South Central-----	3,360	3,370	3,340
Mountain-----	3,240	3,240	3,190
Pacific-----	3,300	3,310	3,180

<sup>1</sup>Excludes data for Massachusetts.

Mortality in the neonatal period in the entire country was considerably higher among nonwhite than white infants. Nonwhite children weighing 2,500 grams or less, however, fared somewhat better than the white children of equal size. At higher weights, however, the experience for the nonwhite infant was particularly unfavorable.

Areas having the greatest losses during the neonatal period did not coincide for immature and heavier weight children. At weights of 2,500 grams or less the risk of mortality was highest in the West North Central, Pacific, and East South Central Divisions. In only one of these divisions, the East South Central, was the experience among children weighing 2,501 grams or more comparatively poor. Other divisions in which rates for babies of these mature weights were also high are the New England,<sup>3</sup> South Atlantic, and West South Central.

For the white group, mortality at immature weights was least favorable in the West North Central, Pacific, and East South Central Divisions. At weights of 2,501 grams or more the rates were particularly high in the New England and East South Central Divisions.

Considering only divisions with substantial numbers of nonwhite births,<sup>4</sup> nonwhite children of immature weights in the South Atlantic Division sustained the greatest loss. For the babies weighing 2,501 grams or more, the rate in this division, and particularly the rate in the East South Central, were comparatively high.

The principal factors relating to birth weight that are responsible for the unfavorable overall neonatal mortality rates in the South Atlantic, East South Central, and Mountain Divisions may be noted in figure 1. In both the South Atlantic and the East South Central Divisions high mortality at mature weights—among both white and nonwhite children in the East South Central but only among nonwhite children in the South Atlantic—is the significant factor. The extremely poor record of mortality in the Mountain Division, however, can be traced in large part to the greater proportion of births at weights of 2,500 grams or less where mortality is so high.

Turning to the divisions with the most favorable neonatal mortality rates, it is found that in one, the Middle Atlantic Division, the chances of survival both for the immature and heavier child were substantially better than in the country as a whole. In the East North Central Division the somewhat advantageous experience for mature children and lower frequency of premature birth accounted for the reduced risk in the overall group, while in the Pacific Division the exceptionally good record for children weighing 2,501 grams or more can be pointed to as the significant factor.

Detailed birth weight data reveal a difference that is noteworthy. At 1,000 grams or less the rates for 3 of the divisions with generally high mortality, namely, the South Atlantic, East South Central, and the West South Central were considerably below corresponding rates for the other 6 divisions. In view of the smaller proportions of births occurring in hospitals in these divisions, it is possible that this may be indicative of a bias in the data due to poorer reporting of babies dying soon after birth and may explain some of the reversals in comparative mortality between the immature and higher weight babies.

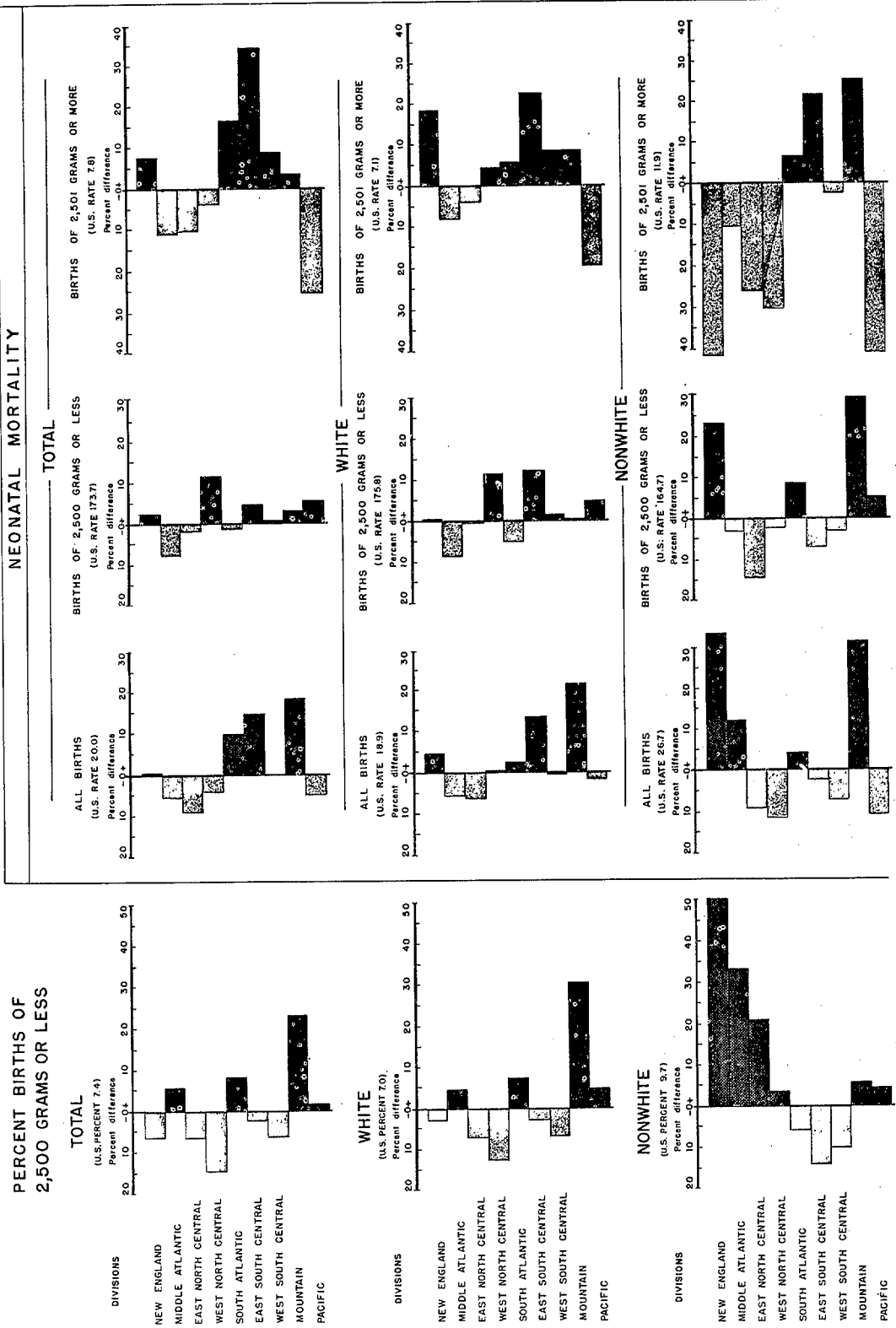
Comparison of mortality among white and nonwhite children in each of the 5 divisions with the largest numbers of nonwhite births also deserves some comment. In 2 of these divisions (Middle Atlantic and South Atlantic) the risk among non-

<sup>3</sup>All data for New England in this report exclude births to residents of Massachusetts.

<sup>4</sup>These divisions include the Middle Atlantic, East North Central, South Atlantic, East South Central, and West South Central.

SELECTED BIRTH WEIGHT STATISTICS—COMPARISON OF DATA FOR GEOGRAPHIC DIVISIONS AND THE UNITED STATES, JANUARY 1 TO MARCH 31, 1950  
(PERCENT DIFFERENCES BASED ON FIGURES FOR THE UNITED STATES)

FIGURE 1



white infants weighing 2,500 grams or less was about the same as or higher than that for the white. Also, mortality among nonwhite children of mature weights in the East North Central Division was comparatively less unfavorable than in the other areas.

### Sex

**Birth distribution.**—In the country as a whole and in each division, male babies weighed on the average about 120 or 130 grams more than female babies (table C). Differentials in weight extended over virtually the entire weight scale. In terms of weight groups that are of particular interest, it means that greater proportions of female than male children were born at weights under 2,501 grams and it was much more likely for a male than for a female child to weigh over 4,500 grams (table 2).

**Mortality.**—The overall neonatal mortality rate among female babies born in the United States in January to March 1950 was only three-quarters of that among male babies. At all but the very low and high birth weights the differences between the mortality risks of boys and girls were even more pronounced.

In view of the attention being given today to the higher death rate found among male than among female babies, it is of interest to examine data for the divisions with respect to variations in comparative mortality (table 4). Both in the white and nonwhite groups the disadvantage for the male infant was least in the West South Central Division. This was due to smaller relative differences at all

weights for the white and at mature weights for the nonwhite. The sex differentials in mortality for white babies of 2,501 grams or more were also comparatively small in the New England and Mountain Divisions. At weights of 2,500 grams or less, however, the most unfavorable experience for males as compared with females was recorded in the Mountain Division.

It is also interesting to note that, of the 5 divisions with substantial numbers of nonwhite births, the sex differentials among the nonwhite at weights under 2,501 grams were less in the 3 Southern (South Atlantic, East South Central, and West South Central) than in the 2 Northern (Middle Atlantic and East North Central) divisions. An explanation for this would have to take into account differences in fetal mortality.

### Plurality

**Birth distribution.**—Members of plural sets represented only 2.0 percent of all live births in the United States in January to March 1950, but they accounted for 14.8 percent of the children weighing 2,500 grams or less at birth. The contrasts in the weight of babies of single and plural deliveries can be noted from table 6.

Generally, the ranking of an area according to percentage of children of 2,500 grams or less corresponded very closely for single and plural births. This was true both in the case of white and nonwhite births when the areas studied in the latter case are limited to the 5 divisions having the largest numbers of nonwhite births. For the white group, 2 of the divisions for which the rankings differed most were the New England and the East South Central. In the New England Division the percentage of children under 2,501 grams at birth among plural deliveries ranked first, while the percentage of single immatures ranked fifth among the 9 divisions. The reverse situation was found in the East South Central Division. These variations should be viewed only as suggestive of possible differences in the handling of plural pregnancies in view of the small numbers of plural births in the study.

**Mortality.**—For the United States, the neonatal mortality rate for babies born in multiple deliveries was 5 to 6 times the rate for single births. On a weight-specific basis, however, the mortality risk among plural births was slightly lower than among single births at 2,500 grams or less (table 8). Particularly favorable were the rates for babies of plural sets weighing between 1,501 and 2,500 grams.

The disadvantage for children in plural sets as compared with those of single births was lowest in the New England, Mountain, and Pacific Divisions. In these divisions, neonatal mortality among plural births was between 4 and 5 times that among the

TABLE C. MEDIAN BIRTH WEIGHTS (IN GRAMS) OF LIVE-BORN INFANTS BY SEX: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950

(By place of residence. Computed to nearest 10 grams on basis of exact conversion of interval limits from pounds and ounces; see section on Classifications. Birth weights not stated are distributed.)

AREA	Total	Male	Female
UNITED STATES <sup>1</sup> -----	3,320	3,390	3,260
New England <sup>1</sup> -----	3,320	3,380	3,260
Middle Atlantic-----	3,280	3,340	3,220
East North Central-----	3,330	3,390	3,260
West North Central-----	3,370	3,440	3,310
South Atlantic-----	3,330	3,390	3,270
East South Central-----	3,380	3,450	3,320
West South Central-----	3,360	3,430	3,300
Mountain-----	3,240	3,300	3,180
Pacific-----	3,300	3,370	3,240

<sup>1</sup>Excludes data for Massachusetts.

single. For white births, the corresponding ratio was also low in the South Atlantic Division.

With the exception of the Mountain Division, the areas mentioned above were also those in which the rates for children of plural sets weighing 2,500 grams or less were most favorable. When the weight distributions of plural births in these and other divisions are compared, it is seen that the favorable rates in the former may be partly explained by a comparatively low frequency of births at 1,500 grams or less. Babies at these low weights, who represent a very poor risk group, occurred less often among plural white births in the New England, South Atlantic, and Pacific Divisions. Among the nonwhite this explanation also applies to the low rates in the Middle Atlantic and the West South Central Divisions.

Small frequencies prevent any detailed comparison of rates for plural births by weight.

#### Age at death

In the January through March 1950 study group, close to half of the deaths during the first 28 days of life occurred before the end of the first day, and over four-fifths before the end of the first week. The proportions dying this soon after birth varied considerably with the weight of the baby, being highest for the very small infants.

For children weighing 2,500 grams or less at birth the mortality rate was 97.9 per 1,000 on the first day as compared with 18.3 at ages 7 to 27 days (table 10). Corresponding rates for the group 2,501 grams or more were 2.7 and 1.8.

For the United States, the lower mortality among small nonwhite children in the neonatal period is explained wholly by differences in the first few days. At subsequent ages, mortality was more favorable for the small white infant. For babies of 2,501 grams or more, the loss among the nonwhite exceeded that among the white in the early as well as the later days of the neonatal period.

When data for the white and nonwhite groups in each of the five divisions with substantial numbers of nonwhite births are compared, it is seen that the lower risk in the first day found among nonwhite immatures in the country as a whole was not duplicated in the Middle Atlantic and South Atlantic Divisions. In the latter, mortality this early was about the same for white and nonwhite immatures. The particularly heavy losses sustained by nonwhite as compared with white infants in the South Atlantic Division during the last 3 weeks of the neonatal period— $2\frac{1}{2}$  times as high at immature weights and twice as high at weights above this—are also notable.

Considering mortality by age separately for white and nonwhite babies, it is seen that some of the cohorts had consistently favorable or unfavorable mortality throughout the neonatal period. Thus, among white children in the Middle Atlantic Division and nonwhite children in the East North Central Division immature and heavier weight babies experienced lower than average mortality both early and late in this period. Cohorts with poor records during the entire neonatal age span both at 2,500 grams or less and at higher weights were white children in the East South Central Division and nonwhite children in the South Atlantic.

In some instances, high overall mortality in the neonatal period was accounted for by a disadvantage at a particular age rather than at all ages. Such was the case for white children weighing 2,500 grams or less in the Pacific and the West North Central Divisions and those weighing more than 2,500 grams in the Mountain and West South Central Divisions. In all but the West South Central Division the unfavorable rates for these cohorts were due to excessive mortality in the first day or week.

Reversals in comparative mortality during the neonatal period, a relatively high rate at the beginning of life followed by very low mortality at later ages or extremely low mortality in the first day followed by high mortality thereafter—are frequently found to be the pattern for both the immature and higher weight babies in a division (figure 2). Thus, white children in the West North Central and Mountain Divisions and nonwhite children in the Middle Atlantic Division weighing 2,500 grams or less and 2,501 grams or more both sustained higher than average mortality in the first day or week and lower mortality at older ages. Contrastingly low mortality at the early ages and high mortality later is found among white and nonwhite infants of all weights in the West South Central Division.

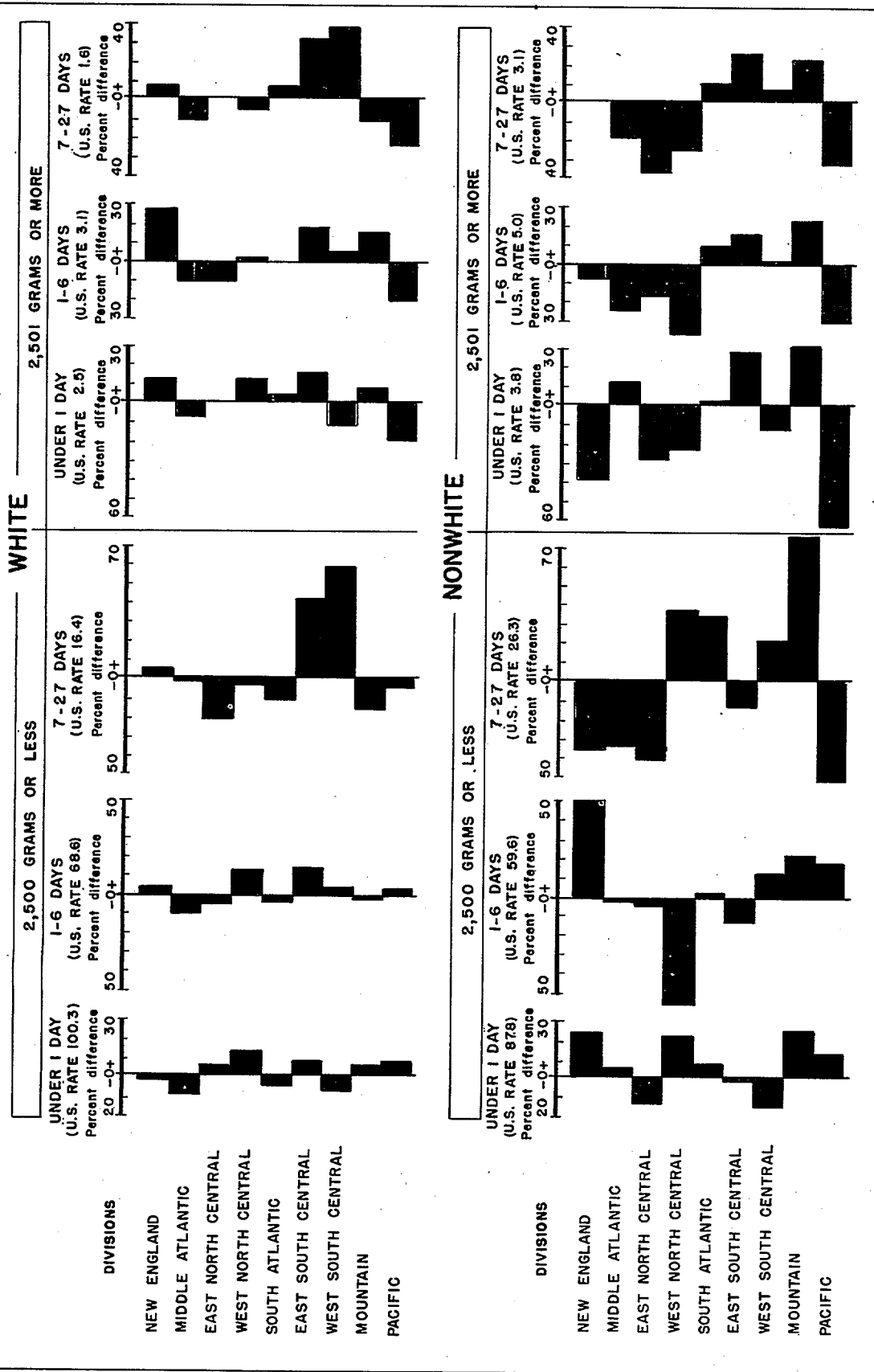
Without additional information any explanation that can be offered for these reversals would be speculative. One factor, that may be involved, relates to special programs operating for care of the newborn. These programs may have the effect of reducing or negating the impact on early mortality of socioeconomic differences which may continue to exert an important effect on mortality later in the neonatal period.

Other factors that may also be partially responsible relate to completeness of reporting of infants dying soon after birth and the comparative loss ascribed to fetal as distinguished from neonatal mortality.

FIGURE 2

**Mortality Rates at Specified Ages Under 28 Days by Birth Weight and Race—Comparison of Data for Geographic Divisions and the United States, January 1 to March 31, 1956**

(PERCENT DIFFERENCES BASED ON FIGURES FOR THE UNITED STATES)





### Cause of death

The shortcomings of clinical diagnoses and certain other factors relating to the accuracy and consistency of information on causes of neonatal death affect interpretation of data by cause for the divisions. One factor that probably has an important bearing on the reporting of cause information in the case of neonatal deaths is the proportion of births in a division which are nonmedically-attended.<sup>5</sup> In addition, possible differences among the divisions in the manner of certifying cause of death for infants in whom no specific morbid condition is detected should also be considered. Categories affected by the latter would be immaturity unqualified (776) postnatal asphyxia and atelectasis, (762), and ill-defined and unknown causes. It would be expected that for areas as large as divisions these differences are of minor significance; however, registration practices and certain medical and health organizations influencing a wide area might have the effect of creating regional variations.

With the effective control of the infectious diseases, mortality in the neonatal period among children of all weights in this country is related principally to developmental deficiencies present at the time of birth and to injury sustained in parturition (table 12). In the United States and in all divisions except the West South Central, the four principal causes of death among white immatures by order of decreasing importance were immaturity unqualified, postnatal asphyxia and atelectasis, other birth injuries, and congenital malformations. In the West South Central Division, the toll due to congenital malformations (750-759) exceeded that ascribed to other birth injuries (761).

Despite the general consistency among the divisions in the principal causes of neonatal mortality among white immatures, there was substantial variation in the proportionate toll in some cases. For example, the percentage of neonatal mortality due to immaturity unqualified was low in the New England and Pacific Divisions (37 and 34 percent, respectively) and high in the West South Central Division (51 percent). The situation was reversed with respect to postnatal asphyxia and atelectasis with the highest proportions in the New England and Pacific Divisions (25 and 27 percent) and the lowest in the West South Central Division (13 percent). The apparent reciprocal relationship between proportionate mortality attributed to immaturity unqualified and to postnatal asphyxia and atelectasis in these three divisions is of particular

interest with respect to possible reporting biases. Its significance might lie in differences in the use of terminology rather than any underlying differences in clinical manifestations.

Of the other principal causes among white immatures, the percentage of the neonatal toll due to other birth injuries varied between 9.8 and 13.3 percent for all divisions except the West South Central in which it was somewhat lower (5.9 percent). For congenital malformations the proportionate loss differed little among the divisions, being at a high of 8.8 percent for the West North Central Division and lows of between 6.0 and 6.5 percent for the South Atlantic, Mountain, and Pacific Divisions.

The specific causes to which the high mortality rates among white immatures in the East South Central, the West North Central, and the Pacific Divisions can be attributed varied somewhat. For the East South Central Division the toll due to immaturity unqualified (86.1 per 1,000) was particularly high. Two other causes that can be pointed to as contributing to the excess in this division, as well as in the West North Central Division, are congenital malformations and pneumonia of newborn. In the West North Central Division the loss due to other birth injuries (25.2) was also relatively great. Causes for which high mortality was reported in the Pacific Division include other birth injuries (24.4) and postnatal asphyxia and atelectasis (49.9).

For one cause, intracranial and spinal injury at birth, the lowest rates among white immatures were found in the three divisions with the least favorable total mortality. This is interesting because a low rate for the category would be expected to signify good obstetrical practice. A more favorable rate in the Pacific Division for one other cause, congenital malformations, is also notable.

The low neonatal mortality rate for white children under 2,501 grams at birth in the Middle Atlantic Division can be explained by generally lower mortality for all causes rather than by large differences for particular causes. An exception is the substantially lower mortality attributed to neonatal disorders arising from maternal toxemia. It should also be noted that mortality recorded as due to blood dyscrasias in this division was somewhat higher than in the country as a whole.

Comparison of the principal causes of death for nonwhite immatures in the Southern, Middle Atlantic, and East North Central Divisions with those for the white indicates some important differences in the ranking of causes other than immaturity unqualified and postnatal asphyxia and atelectasis. For example, pneumonia of newborn, which did not rank as one of the principal causes in any division for immature white children, was the third most important cause of neonatal death for nonwhite children under 2,501 grams at birth in the South Atlantic and West South Central Di-

<sup>5</sup>For a detailed discussion on interpretation of cause of death data, see National Office of Vital Statistics, "Relation of Weight at Birth to Cause of Death and Age at Death in the Neonatal Period: United States, Early 1950." Vital Statistics—Special Reports, Vol. 39, No. 6, 1956.

visions; In addition, the toll due to intracranial and spinal injury at birth, although not large, ranked as the third most important cause in the Middle Atlantic and East North Central Divisions. The absence of congenital malformations among the principal causes for the nonwhite groups is also noteworthy.

Small frequencies limit the detail for the nonwhite group that can be interpreted meaningfully even for the 5 divisions with the largest numbers of nonwhite births. Another factor which affects interpretation of some of the data by cause for the nonwhite group to a much greater degree than for the white is the proportion of deaths assigned to the residual group, all other causes. This category represents to a large extent ill-defined and unknown causes. In all Southern divisions the rates among the nonwhite immatures for this category exceeded 10 deaths per 1,000 live births.

High rates for other birth injuries and pneumonia of newborn contributed to the excess of mortality recorded for nonwhite infants of 2,500 grams or less in the South Atlantic and West South Central Divisions. In the South Atlantic Division, the neonatal loss attributed to immaturity unqualified also exceeded that in all other divisions.

A difference similar to that found for white births at immature weights may be noted in the cause of death data for the corresponding nonwhite group. This refers to the reciprocal relationship in the toll attributed to immaturity unqualified and postnatal asphyxia and atelectasis. In the East North Central Division a low rate for immaturity unqualified was associated with a high rate for postnatal asphyxia and atelectasis.

In all divisions the four causes which accounted for the greatest toll among white infants of 2,501 grams or more at birth were congenital malformations, intracranial and spinal injury at birth, other birth injuries, and postnatal asphyxia and atelectasis. The rate for congenital malformations ranked highest and that for other birth injuries lowest in all but the New England Division where the loss attributed to intracranial and spinal injury at birth was slightly less than that due to other birth injuries.

For specific causes of death other than intracranial and spinal injury at birth, the rates for white children with birth weights of 2,501 grams or more in the New England Division were as high as or exceeded the corresponding rates in all other divisions. The loss attributed to intracranial and spinal injury at birth in this division, however, was low (0.8).

The poorest mortality experience in the neonatal period for white children above the immature level was recorded in the East South Central Division. Yet, most rates for specific causes in this division were below those in New England. It is assumed that better diagnoses of the causes of neo-

natal death in the East South Central Division would raise the specific rates and also reduce the high toll attributed to all other causes.

For most causes the rates for white infants of 2,501 grams or more at birth were at a minimum in the Pacific Division, where total neonatal mortality for this group was also lowest. Exceptions are the slightly lower rates relating to congenital malformations and postnatal asphyxia and atelectasis in the West South Central Division. Considering the high rate in the latter division for the residual group, all other causes, however, it is possible that these exceptions have significance only in terms of reporting differences.

The cause-specific rates for the Middle Atlantic Division, another area where white infants at weights above 2,500 grams experienced comparatively favorable mortality, were generally the same as or slightly higher than in the Pacific Division. The principal difference is found in intracranial and spinal injury at birth (1.1 for the Middle Atlantic and 0.7 for the Pacific).

A parallel can be drawn between the experience of white and nonwhite infants at weights over 2,500 grams with that at immature weights. For the mature as well as the immature child, congenital malformations were of less importance and pneumonia of newborn of more importance for the nonwhite infants. In all of the Southern divisions, pneumonia of newborn ranked second as a cause of death among nonwhite babies of 2,501 grams or more. It is interesting to note, however, that in the East North Central Division, where the overall rate for nonwhite children above the immature level was most favorable, the ranking of the principal causes coincided with that for the corresponding white group.

#### URBAN-RURAL AND METROPOLITAN- NONMETROPOLITAN AREAS<sup>6</sup>

##### General statistics by race

The pattern of life in urban as compared with rural areas and the characteristics of residents of these areas are known to differ. Certain of the differentials, for example, those relating to availability and use of facilities for good prenatal care, to socioeconomic factors, and to demographic characteristics (such as, race, nativity, and birth order) are likely to have a bearing on the comparative birth weight and mortality of babies born in the areas.

<sup>6</sup>For definitions of these areas and exposition of errors in reporting residence, see Explanatory Notes.

Another factor in which a differential may be found between urban and rural areas that would affect comparative weight data is underreporting of low weight infants who die immediately after birth or reporting them as fetal deaths. A presumption of this type of difference is based on the lower percentage completeness of registration of live births in rural than in urban areas.

Similar comments apply to comparative birth weight data for metropolitan or nonmetropolitan counties. As indicated in the Explanatory Notes, the metropolitan counties are those counties which are oriented to large cities. Cross-classification of the county grouping with the urban-rural categories helps to delineate types of areas. For instance, the population of rural areas of nonmetropolitan counties represents a more truly rural population than that of all rural areas. In contrast, the metropolitan-rural classification is comprised in large part of suburban and other populations to whom hospital and medical facilities of the larger urban areas are readily available.

**Birth distribution.**—The percentage distributions in table 14 indicate that babies born to residents of rural areas generally weighed somewhat more at birth than did babies born to urban area residents. In terms of median birth weights, infants in rural areas weighed on the average 3,380 grams as compared with 3,290 grams for urban resident births (table D).

The higher incidence of immaturity in the urban areas, 7.8 percent, as compared with 6.7 percent for the rural areas is of particular concern both because of the special care needed by these small infants and the greater mortality risks for the group. Other weight groups that are of significance because of relatively poor prognosis for the neonatal period are 2,501-3,000 grams and 4,501 grams or more. Slightly larger percentages of urban (19.6) than rural (16.0) births occurred at weights 2,501-3,000 grams; however, at the very heavy weights (4,501 grams or more) the percentage for rural areas (3.1) exceeded that for urban areas (1.4).

The birth weights of babies in urban and rural areas contrasted much more sharply for the nonwhite than the white. Children weighing 2,500 grams or less at birth accounted for 11.2 percent of nonwhite births in urban areas as compared with only 7.8 percent in rural areas. The corresponding percentages for the white group were 7.3 and 6.5, respectively. Furthermore, the median birth weights in urban and rural areas differed by only 70 grams for white children as against 220 grams for nonwhite.

Variations in birth weight between urban and rural areas may be partly explained by differentials in parity of the women giving birth. Birth order and its relation to birth weight has been the subject

TABLE D. MEDIAN BIRTH WEIGHTS (IN GRAMS) OF LIVE-BORN INFANTS BY RACE, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(By place of residence. Computed to nearest 10 grams on basis of exact conversion of interval limits from pounds and ounces; see section on Classifications. Birth weights not stated are distributed. Excludes data for Massachusetts)

AREA	Total	White	Non-white
ALL COUNTIES-----	3,320	3,330	3,280
Urban-----	3,290	3,300	3,190
Rural-----	3,380	3,370	3,410
Metropolitan counties---	3,290	3,300	3,160
Urban-----	3,280	3,300	3,150
Rural-----	3,330	3,330	3,260
Nonmetropolitan counties-	3,370	3,360	3,410
Urban-----	3,320	3,320	3,320
Rural-----	3,400	3,390	3,440

of many investigations.<sup>7</sup> These studies have shown that, on the average, birth weight varies directly with birth order. Babies of the lower birth orders tend to be lighter than the babies of higher birth orders.

From table E it can be seen that the birth order pattern in 1950 differed considerably for urban and rural areas. When these differences are related to the variations in birth weight, it is found that, just as greater proportions of births to rural areas residents are of higher birth order, so greater proportions of these births occurred at higher weights.

The pattern of variation of median birth weights with type of area diverged somewhat for the white and nonwhite groups. In the white group, the median birth weight for nonmetropolitan urban areas was intermediate between the situation found in urban areas of metropolitan counties and in rural areas

<sup>7</sup>McKeown, Thomas, and Gibson, J. R., "Observations On All Births (23,970) In Birmingham, 1947," *British Journal of Social Medicine*, Vol. 5, No. 2, pp. 98, April 1951; Van Gelderen, H. H., Posthuma, J. Hermans, and De Haas, J. H., "Geboortegewicht en praematuritas in Nederland," *Tijdschrift v. Soc. Geneeskunde*, pp. 443-454, November 19, 1954; Bromberg, Y. M., Halevi, H. S., and Brzezinsky, A., "Studies in Anthropometry of Jewish Infants in Palestine," *American Journal of Physical Anthropology*, Vol. 9, No. 3, pp. 307, September 1951.

TABLE E. PERCENTAGE DISTRIBUTION OF LIVE BIRTHS BY LIVE-BIRTH ORDER AND RACE, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, 1950

(By place of residence. Live-birth order refers to number of children born alive to mother. In computing percents, births of order not stated were omitted, including births that occurred in Massachusetts which did not require reporting of birth order)

AREA AND RACE	Total	LIVE-BIRTH ORDER						
		1st	2d	3d	4th	5th	6th and 7th	8th and over
ALL COUNTIES-----	100.0	31.6	30.3	17.4	8.6	4.5	4.4	3.2
White-----	100.0	32.6	31.6	17.5	8.2	4.0	3.6	2.4
Nonwhite--	100.0	25.1	22.3	16.7	11.1	7.5	9.0	8.4
Urban-----	100.0	34.8	32.2	17.1	7.7	3.6	2.9	1.7
White-----	100.0	35.9	33.4	17.0	7.2	3.1	2.3	1.2
Nonwhite--	100.0	28.1	25.0	17.8	11.0	6.7	6.9	4.5
Rural-----	100.0	26.7	27.5	17.9	10.0	5.9	6.5	5.6
White-----	100.0	27.7	29.0	18.3	9.8	5.4	5.5	4.2
Nonwhite--	100.0	20.8	18.6	15.2	11.1	8.5	12.0	13.7
Metropolitan counties-----	100.0	34.1	32.4	17.3	7.8	3.6	3.0	1.7
White-----	100.0	35.1	33.5	17.3	7.3	3.2	2.4	1.3
Nonwhite--	100.0	28.0	25.2	17.9	10.9	6.7	6.8	4.6
Urban-----	100.0	35.6	32.7	16.9	7.4	3.4	2.7	1.4
White-----	100.0	36.7	33.9	16.7	6.9	2.9	2.0	1.0
Nonwhite--	100.0	28.8	25.8	18.0	10.8	6.4	6.3	3.9
Rural-----	100.0	28.4	31.2	19.1	9.3	4.7	4.3	3.0
White-----	100.0	28.9	32.1	19.3	9.1	4.4	3.8	2.4
Nonwhite--	100.0	22.2	20.6	16.5	11.4	8.5	10.5	10.4
Nonmetropolitan counties----	100.0	28.6	27.9	17.4	9.6	5.5	6.0	5.1
White-----	100.0	29.7	29.4	17.8	9.3	5.0	5.1	3.8
Nonwhite--	100.0	22.1	19.4	15.5	11.2	8.3	11.3	12.2
Urban-----	100.0	32.9	31.0	17.5	8.4	4.1	3.7	2.4
White-----	100.0	33.8	32.1	17.6	7.9	3.7	3.1	1.9
Nonwhite--	100.0	26.0	22.3	16.9	11.7	7.7	8.6	6.8
Rural-----	100.0	26.1	26.1	17.4	10.3	6.3	7.3	6.5
White-----	100.0	27.3	27.7	17.9	10.1	5.9	6.2	4.9
Nonwhite--	100.0	20.6	18.3	14.9	11.1	8.6	12.2	14.3

of these counties. From figure 3 it is seen that the percentage of births of second and higher orders varied in like manner.

In contrast, among the nonwhite there was closer similarity between the median weights of babies born to urban and rural residents of metropolitan counties than between those for urban area residents of the two types of counties. On the basis of birth order data alone, a relationship corresponding to that for the white group would be expected. This conflict, in combination with the much lower incidence of immature birth among nonwhite babies in nonmetropolitan as opposed to metropolitan counties and the relatively poorer record on birth registration completeness in the nonmetropolitan counties suggests a possible biasing effect due to underreporting of the small babies in nonmetropolitan counties. One observation that would

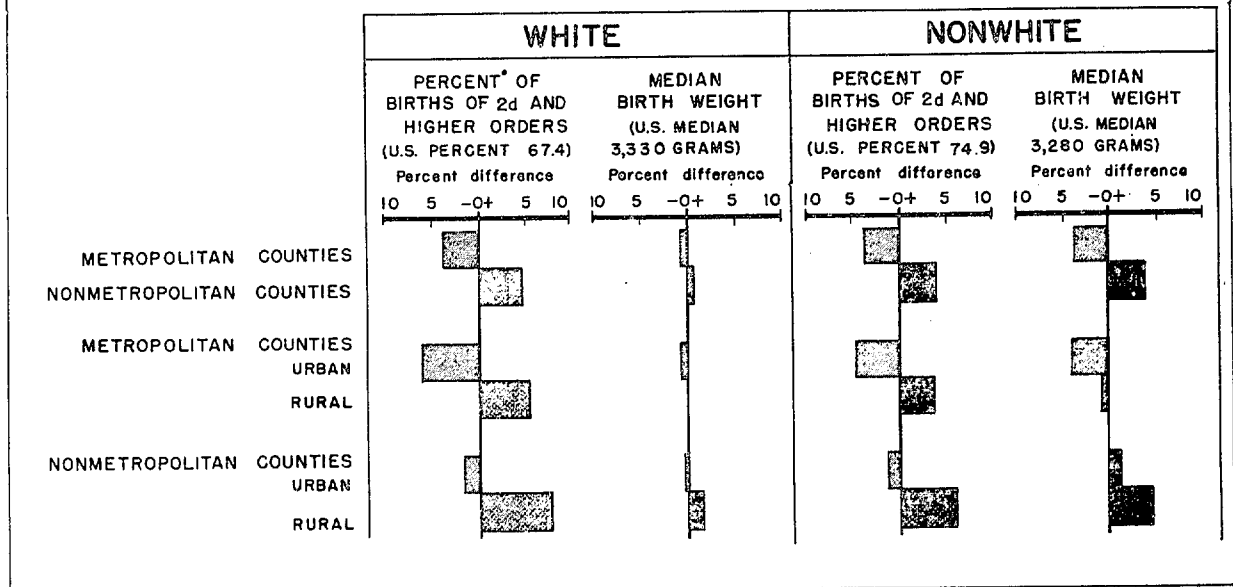
tend to discount the importance of the biasing situation (especially at 1,501 to 2,500 grams), however, is the continuity of differences at weights beyond the premature.

Comparison of the median birth weights of white and nonwhite children for the area categories appearing in table D indicates that only in urban and rural areas of metropolitan counties did the nonwhite baby weigh on the average less than the white baby. For the nonmetropolitan county groups the average weight was about the same as or greater for nonwhite than for white babies. In all areas, however, the incidence of immature birth in the nonwhite group exceeded that in the white but the gap varied markedly—from a difference of 4.5 percentage points in urban areas of metropolitan counties to only 1.1 points in rural areas of nonmetropolitan counties.

FIGURE 3

**Percent of Live Births of Second and Higher Orders for 1950 and Median Birth Weights for January 1 to March 31, 1950, by Race—Comparison of Data for Urban-Rural Areas With Data for the United States**

(PERCENT DIFFERENCES BASED ON FIGURES FOR THE UNITED STATES)



**Mortality.**—Hospital care at birth is more frequently received in urban than in rural areas and in metropolitan than in nonmetropolitan counties. Since this is sometimes used as an index of the availability and use of good medical care, it is of interest to relate the mortality experience among the newborn in the different area classifications (table 16) to the percentages of births hospitalized (table F).

For the babies born in the first 3 months of 1950, the overall neonatal mortality rates were somewhat more favorable in urban areas (19.7) and in metropolitan counties (19.2), where hospitalization for birth was also more frequent, than in rural areas (20.4) and nonmetropolitan counties (20.9).<sup>8</sup> The variation in mortality, however, was not consistently related in this way to the level of hospitalization. Digressions are found when data for urban and rural areas are examined separately for

<sup>8</sup>For comparison of the rates by place of residence shown in this report with annual data for 1950 and explanation of differences, see section on Problems in residence reporting.

TABLE F. PERCENT OF LIVE BIRTHS IN HOSPITALS BY RACE, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(By place of residence. Excludes data for Massachusetts)

AREA	Total	White	Non-white
ALL COUNTIES-----	86.6	91.8	55.5
Urban-----	94.0	96.8	76.6
Rural-----	75.9	84.5	28.5
Metropolitan counties----	95.1	97.1	82.2
Urban-----	96.1	97.9	85.5
Rural-----	90.9	93.8	59.3
Nonmetropolitan counties--	76.8	85.6	29.4
Urban-----	88.5	93.9	47.0
Rural-----	70.6	80.8	23.3

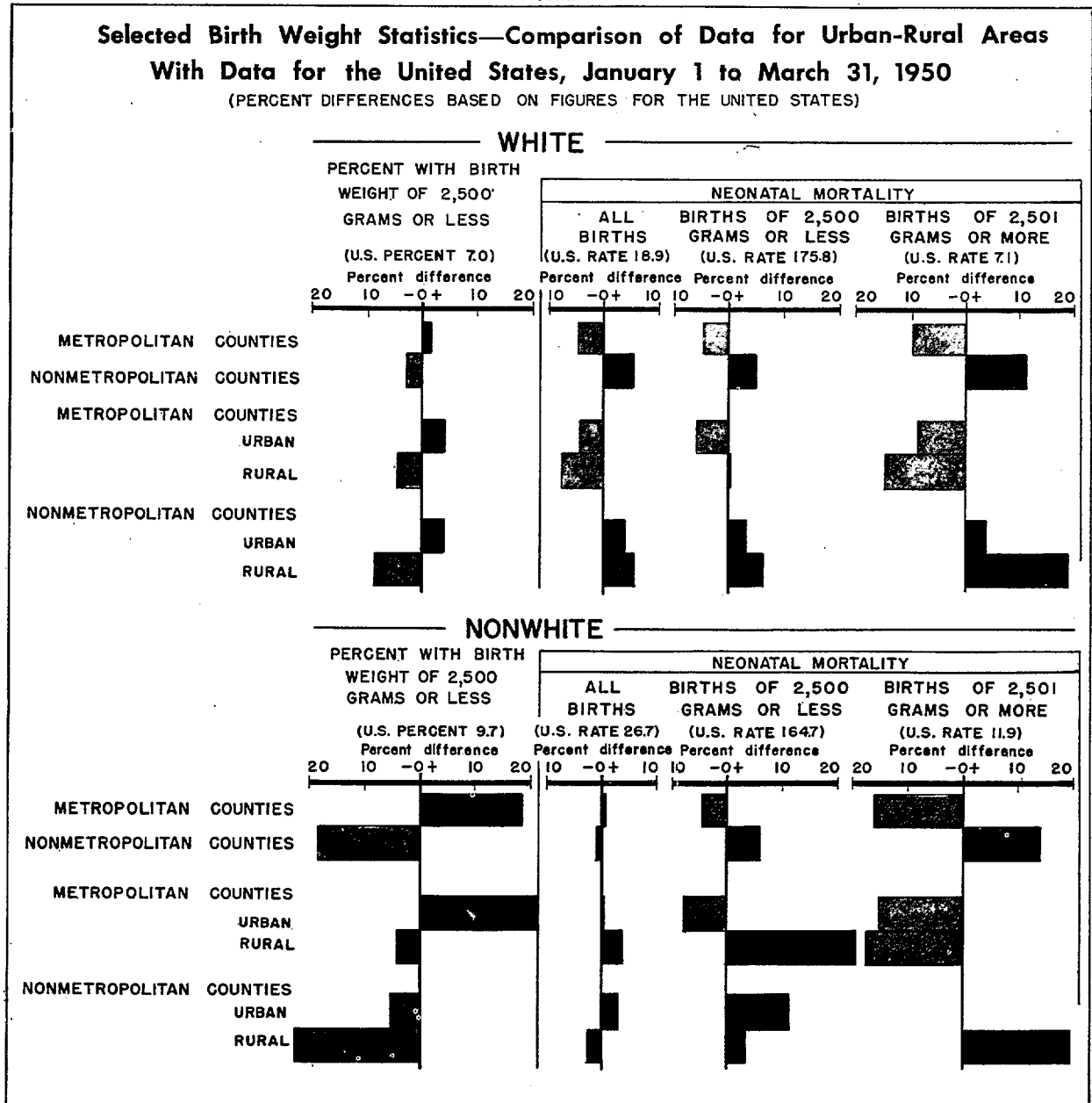
the white and nonwhite groups residing in metropolitan and nonmetropolitan counties. For the white group, the rate for rural areas in metropolitan counties (17.4) was below that for urban areas of these counties (18.1). In addition, in the nonwhite group mortality was low in both urban and rural areas of nonmetropolitan counties, especially the latter, considering the comparatively small proportions of these babies who were hospitalized at birth.

In seeking significant factors relating to birth weight to explain the favorable neonatal mortality

rates in some areas, it should be remembered that these rates are very sensitive to differences in the frequency of births of low weight. A difference of as little as 1 percentage point in the proportion of children of immature weight has the effect of changing the neonatal mortality rate by about 1.5 per 1,000 births. Variations in this proportion, therefore, must be considered along with variations in mortality by birth weight as shown in figure 4 in evaluating differences in neonatal mortality rates.

One instance where comparatively low mor-

FIGURE 4



tality can be traced in large part to a smaller percentage of babies with birth weights of 2,500 grams or less relates to nonwhite births. As indicated earlier, the percentage of births at immature weights in this group was much smaller among the nonmetropolitan than the metropolitan counties.

The contrasts revealed when mortality rates for the various area groups are examined separately for babies of 2,500 grams or less and for those above this weight are of particular interest. In these comparisons the distinction between metropolitan and nonmetropolitan county groups appears to be of critical importance. The experience for all rural area residents compared unfavorably with that for urban area residents at both immature and higher weights. But, in metropolitan counties only the immature babies born to rural residents sustained a greater loss. For the babies weighing 2,501 grams or more at birth, mortality was somewhat lower in rural than in urban areas of these counties. The more detailed weight data show that the area of particular advantage for the rural resident births was at 3,001 to 4,000 grams. These comments generally apply for both the white and nonwhite groups.

Turning to the nonmetropolitan counties it is seen that the position of the urban and rural residents in relation to mortality by birth weight was somewhat reversed from that found in metropolitan counties. At weights of 2,500 grams or less the rates for urban and rural areas differed only slightly, while at higher weights the mortality for the rural areas (9.5) far exceeded that for the urban areas (7.4). For the nonwhite, the rate among the immatures of rural areas (171.1) even fell slightly below that for the urban group (183.6). This difference can be traced to lower mortality among the very small babies (under 1,501 grams) where underreporting of infants dying immediately after birth may enter as a biasing factor.

#### Attendant

In this section, children born in hospitals, those delivered by physicians outside of hospitals, and those delivered by nonmedical persons will be treated as separate cohorts, and variations in birth weight and mortality by area will be discussed.

There are many factors that may be reflected in the variations discussed below. For example, conditions relating to care at and after birth are likely to be most favorable in metropolitan counties, and particularly in urban areas of these counties, where the facilities of large hospitals and the knowledge and skills of specialized medical personnel are readily available. Children delivered outside of hospitals, as well as the hospital cohorts, would be expected to benefit from these advantages.

Factors relating to accuracy and representativeness are also of special significance in data by area and attendant. The most accurate information

is undoubtedly obtained for deliveries in hospitals. For the other attendant groups, the lack of accurate scales and improper procedures in weighing the babies may lead to errors in reporting birth weight. In addition, biases due to less complete reporting of infants dying immediately after birth are likely to be found principally in these attendant groups. The slightly poorer record on completeness of birth registration in nonmetropolitan than in metropolitan counties for each attendant group also indicates a possible bias in area data by attendant.

In considering area differences it should also be remembered that while in some areas a specific attendant cohort may be generally representative for the entire population, in others the corresponding cohort may be representative of only a limited segment of the population or of deliveries in the population. For example, for areas in which only a small percentage of births occur outside of hospitals, the birth weight distributions and mortality experience for the hospital group are, of course, closely representative of the area as a whole. However, units for which a considerable portion of the births ordinarily take place outside of hospitals, as for the nonwhite group in other than metropolitan urban areas, present another situation. In these cases, the hospital cohort may represent to a large extent births involving complications that were referred to hospitals for special care at delivery.

The considerations just mentioned relative to accuracy and representativeness of data are believed to operate differentially by weight, being particularly important for the low and the very high weight groups. Accordingly, comparisons of the weight-specific data are of special interest.

Another factor affecting comparative data by attendant relates to subsequent hospitalization of babies born outside of hospitals and to medical care received by others soon after delivery by a nonphysician. The special programs for the care and hospitalization after birth of prematures born outside of hospitals would be expected to make this more significant at the low weights, tending to bring the neonatal mortality experience among immature births delivered by the various attendant groups into closer agreement.

Birth distribution.—In the first report in this series it was shown that babies born in hospitals generally weighed less at birth than those delivered at home, and also that infants delivered by nonphysicians were on the average the heaviest. In the white group, the differences were found mainly above the level of immaturity but, among the nonwhite, important differences were observed even at the very low weights. For nonwhite babies born in hospitals, 11.9 percent weighed 2,500 grams or less at birth as compared with 8.8 percent of the births attended by physicians outside of hospitals and 6.1 percent of other births. In addition, sub-

stantial proportions of both white and nonwhite children delivered by midwives weighed 4,501 grams or more, while births of children this heavy occurred least frequently in hospitals.

With a few exceptions relating to incidence of immaturity, the differences just described apply to each area category. In urban areas of metropolitan counties, however, a substantially higher proportion of the cohort of white births attended by physicians outside of hospitals (9.8 percent) than of hospital births (7.2 percent) occurred at weights of 2,500 grams or less. Similarly, in metropolitan rural and nonmetropolitan urban areas the corresponding percentages in the groups delivered by other than physicians were high. These differences may be significant in terms of the emergency nature of some of the deliveries outside of hospitals.

It is also noteworthy that among the nonwhite group, the percentage of births at weights of 2,500 grams or less was consistently low in nonmetropolitan counties for all attendant categories other than the hospital. In metropolitan counties only the group attended by nonphysicians had a comparatively small percentage of births at weights this low.

Most births among the white populations in all areas were delivered in hospitals. Consequently, variations in birth weights by area for the hospital cohorts closely parallel the situation described earlier for the total group. The additional data prepared on births in hospitals by size of urban area show further that for white children birth weight also varied somewhat within the urban group. In metropolitan counties, more babies born to residents of the larger urban areas than to residents of the intermediate-sized areas weighed 2,500 grams or less at birth, but there was practically no difference in the incidence of immaturity among intermediate-sized cities with populations of 10,000 to 50,000, small cities, and rural areas. Furthermore, although the median birth weight increased slightly with decrease in urban size (except for the very small cities) and was highest for rural areas (table G), the close correspondence between the birth weight distributions of hospital births in all areas is evident from table 14. In the nonmetropolitan counties the pattern of differences was similar but the gap between the distributions for the small urban places and rural areas was somewhat more pronounced than in metropolitan counties.

For the physician-attended white births occurring outside of hospitals, the differences among area groups were distinctly greater than in the hospital cohorts. For example, births of 2,500 grams

TABLE G. MEDIAN BIRTH WEIGHTS (IN GRAMS) OF LIVE-BORN INFANTS, BY RACE AND ATTENDANT AT BIRTH, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NON-METROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(By place of residence. Computed to nearest 10 grams on basis of exact conversion of interval limits from pounds and ounces; see section on Classifications. Birth weights not stated are distributed. Excludes data for Massachusetts)

ATTENDANT AND AREA	Total	White	Non-white
<b>BIRTHS ATTENDED BY PHYSICIAN IN HOSPITAL</b>			
Metropolitan counties----	3,280	3,300	3,130
Urban-----	3,270	3,290	3,130
Places of 250,000 or more----	3,260	3,280	3,120
Places of 50,000 to 250,000--	3,280	3,300	3,150
Places of 10,000 to 50,000---	3,310	3,320	3,150
Places of 2,500 to 10,000----	3,310	3,320	3,150
Rural-----	3,320	3,330	3,170
Nonmetropolitan counties--	3,340	3,340	3,200
Urban-----	3,300	3,310	3,170
Places of 10,000 to 50,000---	3,290	3,300	3,170
Places of 2,500 to 10,000---	3,320	3,320	3,170
Rural-----	3,360	3,370	3,220
<b>BIRTHS ATTENDED BY PHYSICIAN NOT IN HOSPITAL</b>			
Metropolitan counties----	3,320	3,370	3,240
Urban-----	3,270	3,310	3,220
Rural-----	3,410	3,430	3,310
Nonmetropolitan counties--	3,450	3,480	3,360
Urban-----	3,380	3,400	3,350
Rural-----	3,470	3,490	3,370
<b>BIRTHS ATTENDED BY MIDWIFE, OTHER, AND NOT SPECIFIED</b>			
Metropolitan counties----	3,480	3,500	3,470
Urban-----	3,470	3,510	3,450
Rural-----	3,490	3,470	3,500
Nonmetropolitan counties--	3,570	3,560	3,580
Urban-----	3,550	3,500	3,570
Rural-----	3,580	3,570	3,580



or less were reported much more frequently among metropolitan urban area residents (9.8 percent) and less frequently among nonmetropolitan rural area residents (5.6 percent) than among the other area cohorts. The differences in median weights were also larger.

The erratic nature of changes in the median weights for the nonmedically-attended white births in different areas may be due to the small frequencies in this group for some areas and certain selective factors.

The lower proportions of immatures among all nonwhite births in nonmetropolitan counties and in rural than in other areas is reflected to a much smaller degree for certain of the attendant groups. For births in hospitals and births attended by nonphysicians the percentages differed comparatively little. Substantial differences, however, are found for the group of children born outside of hospitals with medical attendance.

**Mortality.**—In the first report in this series it was noted that the record of survival among white births was best for hospital events, intermediate for the group handled by physicians at home, and poorest for nonmedically-attended births. The advantage for the hospital group over other physician-attended births was found to be most marked between 2,001 and 3,500 grams. In addition, comparison of rates for hospital births and nonmedically-attended births indicated important differences past the 3,500 gram level.

In the nonwhite group, the neonatal mortality rate for all of the deliveries by nonphysicians was lower than the rates for deliveries in the other two attendant categories. A significant factor in the higher rate for hospitals births was undoubtedly the relatively large proportion of these deliveries that fell at the low weights where the mortality risk was highest. Actually, at weights between 2,001 and 3,000 grams, the neonatal loss among nonwhite babies delivered by nonmedical persons was twice that among the events in hospitals. Also, considering all immature weight births together and infants of 2,501 grams or more as another group, it will be noted that the rates for the hospital cohorts were more favorable, particularly at the mature weights. Births attended by physicians at home in comparison with the nonmedically attended, however, experienced substantially lower mortality only in the weight group 2,001-2,500 grams.

When the data are classified according to whether residence was in a metropolitan or nonmetropolitan county and an urban or rural area, it is seen that the variations in mortality by attendant

were generally quite similar in nature in each area. An exception in the nonwhite group is the somewhat lower mortality in nonmetropolitan rural areas among deliveries at immature weights by other than physicians (162.9) than among corresponding deliveries in hospitals (178.1). Failures in reporting or selective factors in determining place of delivery probably contribute to this difference.

The variations by area in weight-specific mortality of white children born in hospitals closely resembled the area pattern described earlier for total white births. For both, mortality among the cohorts in urban areas of metropolitan counties exceeded the mortality among rural areas of these counties at weights of 2,501 grams or more. In nonmetropolitan counties, the urban resident births at these weights had the advantage.

For the nonwhite group, the variations with area differed in certain notable ways for hospital births and total births. In general, the excess in mortality among rural resident children was smaller in the hospital cohorts. However, for immature births in nonmetropolitan counties, the situation was reversed with the urban group having a somewhat higher rate in the case of total nonwhite births but a slightly lower rate in the case of hospital births.

Rates by urban size for children born in hospitals show that neonatal mortality was slightly lower among immatures of the very large urban centers (populations of 250,000 or more) than among those of other areas. This is not unexpected in view of the greater likelihood that special care for immatures would be available in these areas. It is difficult, however, to explain the high rates at weights of 2,501 grams or more for children born in hospitals to residents of cities of 50,000 to 250,000 in comparison with other metropolitan county areas.

Among white births the mortality in the physician not in hospital cohort was particularly high for urban area residents of metropolitan counties. It is possible that more of the babies of these residents delivered by physicians outside of hospitals represent emergency cases. In terms of birth weight this high mortality can be explained by the greater percentage of births at weights of 2,500 grams or less and unfavorable mortality experience for both immature infants and those weighing more.

For nonwhite infants delivered by physicians outside of hospitals, the rates for metropolitan counties were somewhat above those for nonmetropolitan counties. It is significant that the percentage of low weight babies was also relatively high in the former. Comparison of the rates at imma-

ture and higher weights, however, shows wide and sometimes conflicting variations among the different areas.

Small frequencies limit what can be said about the nonmedically-attended group, especially for metropolitan counties. In general, the neonatal mortality rates among births in this cohort to residents of metropolitan counties were high both at weights of 2,500 grams or less and at heavier weights. The situation is somewhat different, however, in nonmetropolitan counties. The rate for nonmedically-attended immature nonwhite children in rural areas of these counties compared favorably even with the rate for the corresponding group of physician-attended births in hospitals. Furthermore, at weights of 2,501 grams or more the rate for the nonmedically-attended nonwhite group in these areas was only 14 percent above that for hospital births. Here again, the factors of accuracy of data, completeness of registration, selectivity of cases, and extent of fetal mortality need to be taken into account.

#### SUMMARY

Information from vital records relating to the birth weight of children born in the United States during the first 3 months of 1950 and neonatal deaths among this group for each division and for urban and rural areas and metropolitan and nonmetropolitan counties showed that:

1. The percentage of children weighing 2,500 grams or less at birth was particularly high in the Mountain Division. Comparatively large proportions of heavy babies (4,501 grams or more), on the other hand, were born in the Southern divisions.
2. Factors relating to birth weight that were important in determining the comparative level of overall neonatal mortality in the divisions were: For the Mountain Division, the greater proportion of immature births; for the South Atlantic and East South Central Divisions, the relatively large losses among mature babies; for the Middle Atlantic Division, generally low mortality at all weights; for the East North Central and Pacific Divisions, an advantage at mature weights.
3. For the most part there was only slight variation among the divisions in the relative excess of male over female mortality when considered on a weight-specific basis.
4. Generally, the rankings of an area according to percentage of children of 2,500 grams or less among single and plural births corresponded very closely. In instances where the disadvantage for children in plural sets, as measured by neonatal mortality, was least, comparatively low frequency of extremely small babies seemed to be a factor.
5. Considering the white and nonwhite groups separately, relatively low mortality throughout the neonatal age span was experienced by white babies of all weights in the Middle Atlantic Division and by nonwhite babies in the East North Central Division. In contrast, poor records throughout the period both at 2,500 grams or less and at higher weights were shown by data for white children in the East South Central and nonwhite children in the South Atlantic Divisions.
6. In all but one division, the principal causes of death among white immatures by rank order were immaturity unqualified, postnatal asphyxia and atelectasis, other birth injuries, and congenital malformations. At mature weights the four causes which accounted for the greatest toll among white infants were congenital malformations, intracranial and spinal injury at birth, other birth injuries, and postnatal asphyxia and atelectasis.
7. For the nonwhite immature and heavier weight child, pneumonia of newborn continued to rank among the main causes of death in some divisions (third for immatures in the South Atlantic and West South Central Divisions and second for matures in the three Southern divisions). At immature weights, another cause which fell among the top causes of death for the nonwhites but not for the white group was intracranial and spinal injury at birth (third in the Middle Atlantic and East North Central Divisions). At mature weights, the ranking of the principal causes for the nonwhite coincided with that for the corresponding white group in the division (East North Central) having the most favorable rate for the nonwhite.
8. Babies born to residents of rural areas weighed on the average somewhat more at birth than did babies to urban area residents. In the urban areas there was a higher incidence of immaturity, whereas births at very heavy weights occurred more frequently in the rural areas. The contrast was much sharper for the non-

- white than the white. Variations in birth order and birth weight for urban and rural areas were in part consistent with relations demonstrated between these two factors in other studies.
9. Nonwhite babies weighed on the average less than white babies only in urban and rural areas of metropolitan counties. In all areas, however, the incidence of immature birth in the nonwhite group exceeded that in the white.
  10. In metropolitan counties, babies of rural residents experienced a slightly greater loss at immature weights but a smaller loss at weights of 2,501 grams or more than did babies of urban residents.
  11. In nonmetropolitan counties, the neonatal mortality rates for urban and rural areas differed only slightly at weights of 2,500 grams or less, while at higher weights the mortality for the rural area group far exceeded that for the urban.
  12. Comparison of the incidence of immaturity among hospital births as opposed to other births indicated that, for the white, higher percentages occurred among the nonhospital group in many areas but, for the nonwhite, the reverse was generally true.
  13. The detailed urban size data on hospital births for the white group showed a slight tendency toward greater incidence of immaturity in the larger urban places. For the nonwhite, the area differentials in immaturity (smaller proportions in nonmetropolitan counties and in rural areas) were greatly reduced when data for each attendant category were considered separately.
  14. For the nonwhite group, variations in mortality with area differed in certain notable ways for hospital births and total births. In general, the excess in mortality among rural resident children was smaller in the hospital cohorts.
  15. Rates by urban size for children born in hospitals showed lower mortality among immatures of the very large urban centers but higher mortality at weights of 2,501 grams or more for residents of cities of 50,000 to 250,000.
  16. Among white births, mortality in the cohort attended by physicians outside of hospitals was particularly high for urban area residents of metropolitan counties due to a high proportion of premature births and unfavorable mortality at specific weights.
  17. There is evidence that variations in completeness and in accuracy of reporting may affect the comparability of area data. This evidence relates to certain inconsistencies or peculiarities, including the high mortality among immatures in the West North Central and Pacific Divisions, reversals during the neonatal period in the relative level of mortality in the divisions, comparatively low incidence of immaturity among nonwhite births in nonmetropolitan rural areas, and low mortality in this group. In addition, quality of diagnoses and variability in use of diagnostic terms probably account for the reciprocal relationship in proportionate mortality attributed to immaturity unqualified and postnatal asphyxia and atelectasis, and the comparatively low mortality at weights of 2,501 grams or more for specific causes in the East South Central Division.

#### EXPLANATORY NOTES

##### Distribution of "not stated" birth weights

The not stated birth weights which represented 3.8 percent of the births and 14.7 percent of the neonatal deaths included in the study have been distributed in all data shown.

The method of distribution used in deriving the adjusted standard totals by race, sex, plurality, and attendant for the United States takes into account the bias toward less complete reporting for infants born at early gestation ages. This method is described in detail in another report.<sup>9</sup> Briefly, the not stated birth weights in each gestation group were distributed according to the distribution of the known weights in that group. The procedure was applied separately to the neonatal death distributions and to distributions relating to children who survived.

The adjusted standard totals on deaths by age for the United States were obtained by first distributing the not stated birth weights at each age proportionately according to the stated weights and then adjusting the figures to the standard weight totals. In the case of cause data for the United States the not stated at each weight were distributed proportionately by cause according to the distribution of deaths for which birth weights were stated. Under this last procedure the derived totals by cause differed in some cases from the reported totals. Both sets of totals are shown in the tables. The figures for the United States by urban and rural areas of metropolitan and nonmetropolitan counties were obtained by distributing the not stated

<sup>9</sup>National Office of Vital Statistics, *op. cit.*, footnote 1.

weights according to the stated weights for each attendant group in these places and making subsequent adjustments to totals for the United States.

Corresponding procedures were followed in distributing the not stated weights for the divisions except in one instance.<sup>10</sup> An additional step was required at the end, however, to adjust the figures for the divisions to add to the United States totals.<sup>11</sup>

Despite the fact that reasonable bases were used for distributing the not stated weights, the fairly large proportions of not stated birth weights in some instances would be expected to increase the variability of the data shown. In view of this, the reader is particularly cautioned in using the data not to draw conclusions from relatively small differences.

### Classifications

1. Birth weight is generally reported in terms of pounds and ounces on the birth certificate. The traditional gram groupings, however, have been used to tabulate and present the data in order to facilitate comparison with other studies of this type. The equivalents of these groupings in terms of pounds and ounces are as follows:

1,000 grams or less	= 2 lb. 3 oz. or less
1,001-1,500 grams	= 2 lb. 4 oz.-3 lb. 4 oz.
1,501-2,000 grams	= 3 lb. 5 oz.-4 lb. 6 oz.
2,001-2,500 grams	= 4 lb. 7 oz.-5 lb. 8 oz.
2,501-3,000 grams	= 5 lb. 9 oz.-6 lb. 9 oz.
3,001-3,500 grams	= 6 lb. 10 oz.-7 lb. 11 oz.
3,501-4,000 grams	= 7 lb. 12 oz.-8 lb. 13 oz.
4,001-4,500 grams	= 8 lb. 14 oz.-9 lb. 14 oz.
4,501 grams or more	= 9 lb. 15 oz. or more.

In computing median weights, however, the end-points of the intervals were assumed to be  $\frac{1}{2}$  ounce less at the lower limit and  $\frac{1}{2}$  ounce more at the upper limit. These limits were then converted exactly to grams.

For purposes of classification, the terms "immature," "premature," and "prematurely born" are used in this report to refer to infants weighing 2,500 grams or less at birth. This definition was recommended by the American Academy of Pediatrics in 1935, and later adopted in the Sixth Revision of the International Lists of Diseases and Causes of Death (1948). The term "premature," although containing the concept of duration of pregnancy,

has been used for many years in connection with the birth weight criterion. The Sixth Revision of the International Lists defines "premature" as relating to children of gestations of less than 37 weeks and indicates that for reporting and classification purposes, this criterion may be considered as equivalent to an immature infant as defined above. It is recognized in using these terms, that there may be basic differences in physical development for some of the subgroupings of births discussed, which would affect the general applicability of the criteria for classifying births as immature or premature.

2. The statistics by cause shown in this report were compiled according to the International Statistical Classification of Diseases, Injuries, and Causes of Death, 1948 (Sixth Revision of the International Lists of Diseases and Causes of Death). The categories of this list which are included in each of the cause groups used are indicated in the tables. In general, when more than one cause of death is reported, the cause designated by the certifying physician as the underlying cause of death is the cause tabulated.<sup>12</sup>
3. The term "urban" as used in this publication includes all incorporated places with enumerated populations of 2,500 or more in 1950 and a number of unincorporated places defined as urban under special rules. "Rural" includes all other areas. These definitions correspond to the "old" classification of urban and rural as used by the Bureau of the Census.
4. A county is classified as "metropolitan" or "nonmetropolitan" depending on whether it is included or excluded from the standard metropolitan areas, developed by the Bureau of the Census in cooperation with other Federal agencies.<sup>13</sup> Except in New England, a county is included in a standard metropolitan area, if it contains at least one city of 50,000 population or more in the 1950 census, or if it is contiguous to a metropolitan county, is essentially metropolitan in character, and its population is socially and economically integrated with the central city or cities of the area, according to specified criteria.

<sup>10</sup>In the case of data by sex for which period of gestation was not available for the divisions, the not stated weights at each weight were distributed proportionately by sex and then adjustments made to the reported sex totals.

<sup>11</sup>This step was omitted in the case of data by cause of death (table 11).

<sup>12</sup>For a more detailed discussion, see National Office of Vital Statistics, Vital Statistics Instruction Manual, "Part II, Cause-of-Death Coding, 1951."

<sup>13</sup>U. S. Bureau of the Census, U. S. Census of Population: 1950, Vol. I, Number of Inhabitants, U. S. Government Printing Office, Washington, D. C., 1952.

In New England, the towns and cities, rather than the counties are the units used to define the standard metropolitan area. However, since vital statistics are not tabulated by town in this Office, all counties with more than half their population in standard metropolitan areas are classified as "metropolitan."<sup>14</sup>

5. The States (exclusive of Massachusetts in New England) included in each of the nine geographic divisions for which data are shown are:

New England:	South Atlantic—Con.
Maine	West Virginia
New Hampshire	North Carolina
Vermont	South Carolina
Rhode Island	Georgia
Connecticut	Florida
Middle Atlantic:	East South Central:
New York	Kentucky
New Jersey	Tennessee
Pennsylvania	Alabama
	Mississippi
East North Central:	West South Central:
Ohio	Arkansas
Indiana	Louisiana
Illinois	Oklahoma
Michigan	Texas
Wisconsin	
West North Central:	Mountain:
Minnesota	Montana
Iowa	Idaho
Missouri	Wyoming
North Dakota	Colorado
South Dakota	New Mexico
Nebraska	Arizona
Kansas	Utah
	Nevada
South Atlantic:	Pacific:
Delaware	Washington
Maryland	Oregon
District of Columbia	California
Virginia	

6. The category "White" includes, in addition to persons reported as "White," those reported

as Mexican and Puerto Rican. The category "Nonwhite" consists of persons reported as Negro, American Indian, Chinese, and Japanese; other numerically small nonwhite groups; and persons of mixed races.

7. Births are classified as occurring "in hospital" on the basis of entries on the birth certificate. The classification is unrelated to American Medical Association (AMA) registered hospital listings. It is assumed that all births in hospitals are attended by physicians.

#### Seasonality

For 1950, seasonal differences are found both in the incidence of immature birth and in neonatal mortality. The proportion of immatures among births in the United States and each geographic division and the corresponding neonatal mortality rates for the group of children included in this study (January through March 1950) are compared with data for the whole year in table H.

In the United States and seven of the divisions (New England,<sup>15</sup> Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, and West South Central), the percentages of immature births were lower for the study group than for births in the year as a whole. In all of these divisions except the New England, mortality was also lower in January to March 1950 than in the full year.

Many of the differences in mortality may be explained in part by differences in incidence of immaturity. Three instances where other factors of seasonality are probably largely involved relate to the high rates in the New England and Mountain Divisions and the low rate in the West South Central Division.

Even though most of the variations shown in the table are statistically significant, and in a few cases alter the comparative standing of divisions substantially, the relationships described in this report are, in the main, believed to be applicable to the entire year.<sup>16</sup>

<sup>15</sup>It will be noted that in the New England Division data on births by weight for Connecticut are included for the January to March group but excluded in the annual figures.

<sup>16</sup>It should also be noted that in the years 1951-54, the ranking of the divisions according to rates of neonatal mortality was similar to that in 1950 in that the New England, Middle Atlantic, East North Central, West North Central, and Pacific Divisions had consistently lower rates than the other divisions. For the corresponding years, see National Office of Vital Statistics, Vital Statistics of the United States, Vol. I, U. S. Government Printing Office, Washington, D. C.

<sup>14</sup>This classification corresponds to State economic areas in New England. See U. S. Bureau of the Census, State Economic Areas, by Donald J. Bogue, 1951.

TABLE H. PERCENT OF LIVE BIRTHS WITH BIRTH WEIGHTS OF 2,500 GRAMS OR LESS AND NEONATAL MORTALITY RATES: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950, AND CALENDAR YEAR 1950

(By place of residence. Neonatal mortality rates are deaths under 28 days per 1,000 live births in each area. Rates for Jan. 1 to Mar. 31, 1950, relate to children born during this period.)

SUBJECT AND AREA	Jan. 1 to Mar. 31, 1950	1950
PERCENT OF LIVE BIRTHS WITH BIRTH WEIGHTS OF 2,500 GRAMS OR LESS <sup>1</sup>		
United States-----	27.4	27.6
New England-----	26.9	27.4
Middle Atlantic-----	7.8	7.9
East North Central-----	6.9	7.3
West North Central-----	6.3	6.4
South Atlantic-----	8.0	8.4
East South Central-----	7.2	7.5
West South Central-----	6.9	7.4
Mountain-----	9.1	9.1
Pacific-----	7.5	7.4
NEONATAL MORTALITY RATES		
United States <sup>2</sup> -----	20.0	20.6
New England <sup>2</sup> -----	20.1	19.2
Middle Atlantic-----	18.9	19.6
East North Central-----	18.2	19.1
West North Central-----	19.2	19.5
South Atlantic-----	22.0	22.5
East South Central-----	22.9	23.3
West South Central-----	20.0	22.3
Mountain-----	23.7	22.5
Pacific-----	19.0	18.6

<sup>1</sup>Birth weights not stated are distributed.

<sup>2</sup>Excludes data for Massachusetts.

<sup>3</sup>Excludes data for Connecticut and Massachusetts.

Chance variation

Chance variation, in addition to the biases in reporting already discussed, must be considered in evaluating the data shown. This variation is related to the size of the birth population on which the figures are based and on the frequency of the occurrence measured. The smaller the population, or the smaller the frequency of the event in a given population group, the greater the relative

variability.<sup>17</sup> Mortality rates were not computed in accompanying tables for certain small frequency groups, i. e., where there were fewer than 10 deaths. Percentages were also not computed where the base was less than 100. Special note has also been made in the text where differences based on comparatively small frequencies are discussed.

Problems in residence reporting.

Place of residence as recorded on the birth certificate was used in this study in classifying both live births and neonatal deaths. In other national data published on neonatal deaths, these deaths have been allocated according to place of residence reported on the death certificate.

It is known that in some instances residence information is not reported accurately on vital records. The inaccuracies are believed to arise mainly because residents of areas surrounding an urban place are likely to give the urban place as their residence.

For records included in a 1950 birth registration test, it was possible to estimate the overall effect of these errors by comparing place of residence on the birth certificate and in the census

<sup>17</sup>The standard error is the measure used to evaluate this variability. Chances are less than 1 in 20 that a difference as large as 2 standard errors would arise by chance. Generally, the standard error of a rate per 1,000 births is

$$\sqrt{\frac{R(1,000-R)}{B}}$$

where *R* is the rate and *B* is the number of births used to compute the rate. The standard error of the difference between 2 rates, *R*<sub>1</sub> and *R*<sub>2</sub>, is

$$\sqrt{\frac{R_1(1,000-R_1)}{B_1} + \frac{R_2(1,000-R_2)}{B_2}}$$

If 2 rates differ by less than twice this standard error, it is usually concluded that they are not significantly different (statistically). When a rate is small and the number of deaths is very small, the standard error of the rate is  $\frac{R}{\sqrt{D}}$  where *R*

is the rate and *D* is the number of deaths. The standard error of the difference between 2 such rates, *R*<sub>1</sub> and *R*<sub>2</sub> is

$$\sqrt{\frac{R_1^2}{D_1} + \frac{R_2^2}{D_2}}$$

enumeration.<sup>18</sup> The relative errors in birth statistics for this group are shown in table J. In the comparison, it was assumed that county of residence was reported correctly.

From data in table J it is evident that the numbers of births and deaths shown in this report for certain area groupings (the urban) undoubtedly overstate and data for others (the rural) understate the true figures. Despite these biases, it is probable that the distributions of births by weight and the neonatal mortality rates for these areas are not seriously distorted.

Neonatal mortality rates for urban and rural residents during the whole year 1950 and for the 3-month period, January through March 1950 are shown in table K. Comparison of the relationships between the rates for urban and rural areas indicates some important differences in these two sets

TABLE J. PERCENT DIFFERENCE BETWEEN REGISTERED LIVE BIRTHS AND ESTIMATES OF LIVE BIRTHS ADJUSTED FOR MISREPORTING OF RESIDENCE, BY RACE, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, 1950

(By place of residence. In computing percent differences, registered births used as base)

AREA	Total	White	Non-white
<b>ALL COUNTIES</b>			
Urban-----	-6.4	-6.8	-3.8
Places of 250,000 or more----	-5.1	-5.4	-3.4
Places of 50,000 to 250,000--	-7.1	-7.8	-2.8
Places of 10,000 to 50,000---	-6.5	-6.6	-4.7
Places of 2,500 to 10,000----	-8.4	-8.6	-6.3
Rural-----	+9.9	+10.7	+5.3
<b>METROPOLITAN COUNTIES</b>			
Urban-----	-5.1	-5.5	-3.0
Places of 250,000 or more----	-5.1	-5.4	-3.4
Places of 50,000 to 250,000--	-7.1	-7.8	-2.8
Places of 10,000 to 50,000---	-1.1	-1.2	+0.2
Places of 2,500 to 10,000----	-5.3	-5.4	-2.2
Rural-----	+21.3	+21.2	+22.3
<b>NONMETROPOLITAN COUNTIES</b>			
Urban-----	-10.0	-10.4	-6.5
Places of 10,000 to 50,000---	-10.1	-10.6	-6.2
Places of 2,500 to 10,000----	-9.8	-10.1	-6.9
Rural-----	+5.6	+6.3	+2.4

TABLE K. NEONATAL MORTALITY RATES BY RACE, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950, AND CALENDAR YEAR 1950

(By place of residence at birth. Based on deaths under 28 days. Rates per 1,000 live births in each specified group. Data for Jan. 1 to Mar. 31, 1950, include only deaths among children born during this period. Excludes data for Massachusetts)

TIME PERIOD AND AREA	Total	White	Non-white
<b>JANUARY 1 TO MARCH 31, 1950</b>			
All counties-----	20.0	18.9	26.7
Urban-----	19.7	18.6	27.0
Rural-----	20.4	19.3	26.3
<b>Metropolitan counties----</b>			
Urban-----	19.4	18.1	26.8
Rural-----	18.3	17.4	27.8
<b>Nonmetropolitan counties--</b>			
Urban-----	20.6	19.7	27.6
Rural-----	21.1	20.0	26.1
<b>1950</b>			
All counties-----	20.6	19.4	27.5
Urban-----	21.3	20.0	29.1
Rural-----	19.5	18.5	25.5
<b>Metropolitan counties----</b>			
Urban-----	20.2	18.9	28.2
Rural-----	18.3	17.5	27.7
<b>Nonmetropolitan counties--</b>			
Urban-----	24.0	22.9	31.9
Rural-----	20.0	18.9	25.1

of data. The rates for the first 3 months of 1950 for white and nonwhite residents of rural areas in metropolitan and nonmetropolitan counties were frequently about the same as, or somewhat higher than the corresponding rates for urban residents of the same counties. A similar comparison of the annual data for 1950 shows a somewhat divergent situation in that the rates were consistently lower, sometimes by as much as 20 percent, for rural than for urban areas.

Seasonal and chance variations are believed to be of minor significance in explaining this conflict between the rates for the two periods. It is

<sup>18</sup>For a full discussion, see National Office of Vital Statistics, Vital Statistics of the United States, 1950, Vol. I, U. S. Government Printing Office, Washington, D. C., 1954, pp. 36-39.

likely due in large part to a lack of consistency in the reporting of residence on birth and death certificates. As indicated earlier, in classifying the data on neonatal deaths routinely published, residence at time of death as it appears on the death certificate is used instead of residence reported on the birth certificate as in the 3-month data for this study.

Variation in residence classification of an infant at birth and death might arise partly as the result of migration in the interim but for the most part it is believed due to a difference in the reporting of the usual place of residence on the birth and death records. On the birth certificate the information requested relates to usual residence of mother, while on the death certificate the item ap-

pears as usual residence of the deceased. Special instructions are given to report the mother's usual place of residence in the case of newborn infants; however, in some cases where infants delivered in hospitals die before release, residence on the death certificate may be reported as the city in which the hospital is located although the mother's residence was outside the city.

The divergence of the annual data from the rates for January through March 1950 are consistent with the above interpretation since an urban residence appears to be reported more frequently on the death than on the birth certificate. As a result, the annual rates of neonatal mortality routinely published for urban areas likely overstate and the rates for rural areas understate the true figures.

#### SYMBOLS

Class or item not applicable (3 dots)-----	...
Data not available (3 dashes)-----	---
Quantity is zero, in frequency tables (1 dash)-----	-
Quantity is zero, in rate or percent tables (1 cipher)--	0
If rate or percent is more than 0, but less than 0.05 --	0.0
If both frequency and population base are zero in rate or percent tables (1 dash)-----	-

#### RELATED REPORTS

Vital Statistics—Special Reports, Volume 39:

- No. 1. Weight at Birth and Its Effect on Survival of the Newborn in the United States, Early 1950.
- No. 6. Relation of Weight at Birth to Cause of Death and Age at Death in the Neonatal Period:  
United States, Early 1950.



## VITAL STATISTICS—SPECIAL REPORTS

TABLE 1. LIVE BIRTHS BY BIRTH WEIGHT, RACE, AND SEX: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950

(By place of residence. Birth weights not stated are distributed)

AREA, RACE, AND SEX	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
UNITED STATES <sup>1</sup> -----	837,786	3,928	5,081	11,388	41,240	151,808	315,629	226,739	64,508	17,465	61,637	776,149
Male-----	429,506	2,014	2,586	5,501	18,467	66,044	154,868	127,927	40,736	11,363	28,568	400,938
Female--	408,280	1,914	2,495	5,887	22,773	85,764	160,761	98,812	23,772	6,102	33,069	375,211
White-----	717,133	3,189	4,079	9,206	33,460	126,306	273,285	198,389	55,753	12,866	49,934	667,199
Male-----	368,378	2,121	4,480	4,480	15,034	54,833	133,719	112,366	35,564	8,640	23,256	345,122
Female--	348,755	1,568	1,958	4,726	18,426	72,072	139,566	86,023	20,189	4,226	26,678	322,077
Nonwhite-----	120,653	739	1,002	2,182	7,780	24,902	42,344	28,350	8,755	4,599	11,703	108,950
Male-----	61,128	393	465	1,021	3,433	11,211	21,149	15,561	5,172	2,723	5,312	55,816
Female--	59,525	346	537	1,161	4,347	13,691	21,195	12,789	3,583	1,876	6,391	53,134
NEW ENGLAND <sup>1</sup> -----	24,150	113	116	294	1,148	4,362	9,479	6,564	1,728	346	1,671	22,479
Male-----	12,439	60	66	158	494	1,939	4,596	3,776	1,119	231	778	11,661
Female--	11,711	53	50	136	654	2,423	4,883	2,788	609	115	893	10,818
White-----	23,644	107	105	282	1,103	4,255	9,280	6,465	1,709	338	1,597	22,047
Male-----	12,175	58	61	156	466	1,891	4,490	3,719	1,108	226	741	11,434
Female--	11,469	49	44	126	637	2,364	4,790	2,746	601	112	856	10,613
Nonwhite-----	506	6	11	12	45	107	199	99	19	8	74	432
Male-----	264	2	5	2	28	48	106	57	11	5	37	227
Female--	242	4	6	10	17	59	93	42	8	3	37	205
MIDDLE ATLANTIC-----	150,340	794	872	2,146	7,946	30,015	59,564	37,630	9,530	1,843	11,758	138,582
Male-----	77,133	424	409	1,023	3,508	13,094	29,623	21,623	6,192	1,237	5,364	71,769
Female--	73,207	370	463	1,123	4,438	16,921	29,941	16,007	3,338	606	6,394	66,813
White-----	137,126	647	757	1,831	6,815	26,498	54,334	35,442	9,070	1,732	10,050	127,076
Male-----	70,525	338	355	873	3,034	11,532	26,963	20,368	5,895	1,167	4,600	65,925
Female--	66,601	309	402	958	3,781	14,966	27,371	15,074	3,175	565	5,450	61,151
Nonwhite-----	13,214	147	115	315	1,131	3,517	5,230	2,188	460	111	1,708	11,506
Male-----	6,608	86	54	150	474	1,562	2,660	1,255	297	70	764	5,844
Female--	6,606	61	61	165	657	1,955	2,570	933	163	41	944	5,662
EAST NORTH CENTRAL-----	170,653	857	930	2,129	7,856	30,571	65,537	47,072	12,981	2,720	11,772	158,881
Male-----	87,619	431	514	1,042	3,521	13,256	31,961	26,729	8,298	1,867	5,508	82,111
Female--	83,034	426	416	1,087	4,335	17,315	33,576	20,343	4,683	853	6,264	76,770
White-----	157,330	740	821	1,846	6,801	26,995	60,475	44,610	12,452	2,590	10,208	147,122
Male-----	80,928	371	459	897	3,059	11,660	29,403	25,312	7,984	1,783	4,786	76,142
Female--	76,402	369	362	947	3,742	15,335	31,072	19,298	4,468	807	5,422	70,980
Nonwhite-----	13,323	117	109	283	1,055	3,576	5,062	2,462	529	130	1,564	11,759
Male-----	6,891	60	55	145	462	1,596	2,558	1,417	314	84	722	5,969
Female--	6,632	57	54	138	593	1,980	2,504	1,045	215	46	842	5,790
WEST NORTH CENTRAL-----	80,185	363	421	958	3,322	12,785	29,927	23,549	7,174	1,686	5,064	75,121
Male-----	41,181	191	216	490	1,457	5,465	14,553	13,111	4,528	1,150	2,354	38,827
Female--	39,004	172	205	468	1,865	7,300	15,374	10,438	2,646	536	2,710	36,294
White-----	76,708	333	396	893	3,094	11,962	28,589	22,840	6,983	1,618	4,716	71,992
Male-----	39,435	174	208	461	1,361	5,108	13,878	12,725	4,410	1,110	2,204	37,231
Female--	37,273	159	188	432	1,733	6,854	14,711	10,115	2,573	508	2,512	34,761
Nonwhite-----	3,477	30	25	65	228	823	1,338	709	191	68	348	3,129
Male-----	1,746	17	8	29	96	377	675	386	118	40	150	1,586
Female--	1,731	13	17	36	132	446	663	323	73	28	198	1,533
SOUTH ATLANTIC-----	132,642	589	928	2,033	7,002	24,129	48,153	35,317	10,650	3,841	10,552	122,090
Male-----	67,723	286	458	972	3,175	10,637	23,618	19,566	6,603	2,408	4,891	62,832
Female--	64,919	303	470	1,061	3,827	13,492	24,535	15,751	4,047	1,433	5,661	59,258
White-----	91,788	375	554	1,298	4,613	16,738	34,365	24,792	7,135	1,918	6,840	84,948
Male-----	47,064	187	284	621	2,106	7,230	16,852	13,980	4,554	1,250	3,198	43,866
Female--	44,724	188	270	677	2,507	9,508	17,513	10,812	2,581	668	3,642	41,082
Nonwhite-----	40,854	214	374	735	2,389	7,391	13,788	10,525	3,515	1,923	3,712	37,142
Male-----	20,659	99	174	351	1,069	3,407	6,766	5,586	2,049	1,158	1,693	18,966
Female--	20,195	115	200	384	1,320	3,984	7,022	4,939	1,466	765	2,019	18,176
EAST SOUTH CENTRAL-----	76,093	290	505	1,027	3,683	12,304	26,367	21,482	7,263	3,172	5,505	70,588
Male-----	38,807	144	258	481	1,674	5,273	12,796	11,828	4,391	1,962	2,557	36,250
Female--	37,286	146	247	546	2,009	7,031	13,571	9,654	2,872	1,210	2,948	34,338
White-----	52,769	198	340	692	2,335	8,195	18,659	15,587	5,059	1,704	3,565	49,204
Male-----	26,981	91	184	319	1,069	3,472	9,009	8,614	3,099	1,124	1,663	25,318
Female--	25,788	97	156	373	1,266	4,723	9,650	6,973	1,960	580	1,902	23,886
Nonwhite-----	23,324	102	165	335	1,348	4,109	7,708	5,895	2,204	1,468	1,940	21,384
Male-----	11,826	53	74	162	605	1,801	3,787	3,214	1,292	838	894	10,932
Female--	11,498	39	91	173	743	2,308	3,921	2,681	912	630	1,046	10,452

<sup>1</sup>Excludes data for Massachusetts.

TABLE 1. LIVE BIRTHS BY BIRTH WEIGHT, RACE, AND SEX: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950—Continued

(By place of residence. Birth weights not stated are distributed)

AREA, RACE, AND SEX	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
WEST SOUTH CENTRAL-----	89,080	355	551	1,112	4,161	15,226	31,860	25,652	7,686	2,477	6,179	82,901
Male----	45,639	187	275	515	1,866	6,595	15,526	14,584	4,729	1,562	2,843	42,796
Female--	43,441	168	276	597	2,295	8,631	16,334	11,268	2,957	915	3,336	40,105
White-----	70,647	270	413	808	3,092	11,721	25,858	20,667	6,164	1,654	4,583	66,064
Male----	36,196	140	202	390	1,406	5,040	12,492	11,612	3,844	1,070	2,138	34,058
Female--	34,451	130	211	418	1,686	6,681	13,366	9,055	2,320	584	2,445	32,006
Nonwhite-----	18,433	85	138	304	1,069	3,505	6,002	4,985	1,522	823	1,596	16,837
Male----	9,443	47	73	125	460	1,555	3,034	2,772	885	492	705	8,738
Female--	8,990	38	65	179	609	1,950	2,968	2,213	637	331	891	8,099
MOUNTAIN-----	33,625	178	247	547	2,098	7,411	13,149	7,901	1,766	328	3,070	30,555
Male----	17,285	96	121	257	943	3,255	6,637	4,602	1,154	220	1,417	15,868
Female--	16,340	82	126	290	1,155	4,156	6,512	3,299	612	108	1,653	14,687
White-----	31,829	171	234	512	1,970	6,966	12,462	7,540	1,673	301	2,887	28,942
Male----	16,369	91	117	245	888	3,041	6,291	4,405	1,086	205	1,341	15,028
Female--	15,460	80	117	267	1,082	3,925	6,171	3,135	587	96	1,546	13,914
Nonwhite-----	1,798	7	13	35	128	445	687	361	93	27	183	1,613
Male----	916	5	4	12	55	214	346	197	68	15	76	840
Female--	880	2	9	23	73	231	341	164	25	12	107	773
PACIFIC-----	81,018	389	511	1,142	4,024	15,005	31,593	21,572	5,730	1,052	6,066	74,952
Male----	41,680	195	269	563	1,829	6,510	15,558	12,308	3,722	726	2,856	38,824
Female--	39,338	194	242	579	2,195	8,495	16,035	9,264	2,008	326	3,210	36,128
White-----	75,292	348	459	1,044	3,637	13,576	29,263	20,446	5,508	1,011	5,488	69,804
Male----	38,705	171	251	518	1,645	5,859	14,341	11,631	3,584	705	2,585	36,120
Female--	36,587	177	208	526	1,992	7,717	14,922	8,815	1,924	306	2,903	33,684
Nonwhite-----	5,726	41	52	98	387	1,429	2,330	1,126	222	41	578	5,148
Male----	2,975	24	18	45	184	651	1,217	677	138	21	271	2,704
Female--	2,751	17	34	53	203	778	1,113	449	84	20	307	2,444

TABLE 2. PERCENTAGE DISTRIBUTION OF LIVE BIRTHS BY BIRTH WEIGHT, BY RACE AND SEX: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950

(By place of residence. Birth weights not stated are distributed)

AREA, RACE, AND SEX	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
UNITED STATES <sup>1</sup> ----	100.0	0.5	0.6	1.4	4.9	18.1	37.7	27.1	7.7	2.1	7.4	92.6
Male----	100.0	0.5	0.6	1.3	4.3	15.4	36.1	29.8	9.5	2.6	6.7	93.3
Female--	100.0	0.5	0.6	1.4	5.6	21.0	39.4	24.2	5.8	1.5	8.1	91.9
White-----	100.0	0.4	0.6	1.3	4.7	17.7	38.1	27.7	7.8	1.8	7.0	93.0
Male----	100.0	0.4	0.6	1.2	4.1	14.9	36.3	30.5	9.7	2.3	6.3	93.7
Female--	100.0	0.4	0.6	1.4	5.3	20.7	40.0	24.7	5.8	1.2	7.6	92.4
Nonwhite-----	100.0	0.6	0.8	1.8	6.4	20.6	35.1	23.5	7.3	3.8	9.7	90.3
Male----	100.0	0.6	0.8	1.7	5.6	18.3	34.6	25.5	8.5	4.5	8.7	91.3
Female--	100.0	0.6	0.9	2.0	7.3	23.0	35.6	21.5	6.0	3.2	10.7	89.3
NEW ENGLAND <sup>1</sup> ----	100.0	0.5	0.5	1.2	4.8	18.1	39.3	27.2	7.2	1.4	6.9	93.1
Male----	100.0	0.5	0.5	1.3	4.0	15.6	36.9	30.4	9.0	1.9	6.3	93.7
Female--	100.0	0.5	0.4	1.2	5.6	20.7	41.7	23.8	5.2	1.0	7.6	92.4
White-----	100.0	0.5	0.4	1.2	4.7	18.0	39.2	27.3	7.2	1.4	6.8	93.2
Male----	100.0	0.5	0.5	1.3	3.8	15.5	36.9	30.5	9.1	1.9	6.1	93.9
Female--	100.0	0.4	0.4	1.1	5.6	20.6	41.8	23.9	5.2	1.0	7.5	92.5
Nonwhite-----	100.0	1.2	2.2	2.4	8.9	21.1	39.3	19.6	3.8	1.6	14.6	85.4
Male----	100.0	0.8	1.9	0.8	10.6	18.2	40.2	21.6	4.2	1.9	14.0	86.0
Female--	100.0	1.7	2.5	4.1	7.0	24.4	38.4	17.4	3.3	1.2	15.3	84.7
MIDDLE ATLANTIC-----	100.0	0.5	0.6	1.4	5.3	20.0	39.6	25.0	6.3	1.2	7.8	92.2
Male----	100.0	0.5	0.5	1.3	4.5	17.0	38.4	28.0	8.0	1.6	7.0	93.0
Female--	100.0	0.5	0.6	1.5	6.1	23.1	40.9	21.9	4.6	0.8	8.7	91.3
White-----	100.0	0.5	0.6	1.3	5.0	19.3	39.6	25.8	6.6	1.3	7.3	92.7
Male----	100.0	0.5	0.5	1.2	4.3	16.4	38.2	28.9	8.4	1.7	6.5	93.5
Female--	100.0	0.5	0.6	1.4	5.7	22.5	41.1	22.6	4.8	0.8	8.2	91.8
Nonwhite-----	100.0	1.1	0.9	2.4	8.6	26.6	35.6	16.6	3.5	0.8	12.9	87.1
Male----	100.0	1.3	0.8	2.3	7.2	23.6	40.3	19.0	4.5	1.1	11.6	88.4
Female--	100.0	0.9	0.9	2.5	9.9	29.6	38.9	14.1	2.5	0.6	14.3	85.7

<sup>1</sup>Excludes data for Massachusetts.

## VITAL STATISTICS—SPECIAL REPORTS

TABLE 2. PERCENTAGE DISTRIBUTION OF LIVE BIRTHS BY BIRTH WEIGHT, BY RACE AND SEX: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950—Continued

(By place of residence. Birth weights not stated are distributed)

AREA, RACE, AND SEX	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501- 3,000	3,001- 3,500	3,501- 4,000	4,001- 4,500	4,501 or more	2,500 or less	2,501 or more
EAST NORTH CENTRAL-----	100.0	0.5	0.5	1.2	4.6	17.9	38.4	27.6	7.6	1.6	6.9	93.1
Male-----	100.0	0.5	0.6	1.2	4.0	15.1	36.5	30.5	9.5	2.1	6.3	93.7
Female--	100.0	0.5	0.5	1.3	5.2	20.9	40.4	24.5	5.6	1.0	7.5	92.5
White-----	100.0	0.5	0.5	1.2	4.3	17.2	38.4	28.4	7.9	1.6	6.5	93.5
Male-----	100.0	0.5	0.6	1.1	3.8	14.4	36.3	31.3	9.9	2.2	5.9	94.1
Female--	100.0	0.5	0.5	1.2	4.9	20.1	40.7	25.3	5.8	1.1	7.1	92.9
Nonwhite-----	100.0	0.9	0.8	2.1	7.9	26.8	38.0	18.5	4.0	1.0	11.7	88.3
Male-----	100.0	0.9	0.8	2.2	6.9	25.9	38.2	21.2	4.7	1.3	10.8	89.2
Female--	100.0	0.9	0.8	2.1	8.9	29.9	37.8	15.8	3.2	0.7	12.7	87.3
WEST NORTH CENTRAL-----	100.0	0.5	0.5	1.2	4.1	15.9	37.3	29.4	8.9	2.1	6.3	93.7
Male-----	100.0	0.5	0.5	1.2	3.5	13.3	35.3	31.8	11.0	2.8	5.7	94.3
Female--	100.0	0.4	0.5	1.2	4.8	18.7	39.4	26.8	6.8	1.4	6.9	93.1
White-----	100.0	0.4	0.5	1.2	4.0	15.6	37.3	29.8	9.1	2.1	6.1	93.9
Male-----	100.0	0.4	0.5	1.2	3.5	13.0	35.2	32.3	11.2	2.8	5.6	94.4
Female--	100.0	0.4	0.5	1.2	4.6	18.4	39.5	27.1	6.9	1.4	6.7	93.3
Nonwhite-----	100.0	0.9	0.7	1.9	6.6	23.7	38.5	20.4	5.5	2.0	10.0	90.0
Male-----	100.0	1.0	0.5	1.7	5.5	21.6	38.7	22.1	6.8	2.3	8.6	91.4
Female--	100.0	0.8	1.0	2.1	7.6	25.8	38.3	18.7	4.2	1.6	11.4	88.6
SOUTH ATLANTIC-----	100.0	0.4	0.7	1.5	5.3	18.2	36.3	26.6	8.0	2.9	8.0	92.0
Male-----	100.0	0.4	0.7	1.4	4.7	15.7	34.9	28.9	9.8	3.6	7.2	92.8
Female--	100.0	0.5	0.7	1.6	5.9	20.8	37.8	24.3	6.2	2.2	8.7	91.3
White-----	100.0	0.4	0.6	1.4	5.0	18.2	37.4	27.0	7.8	2.1	7.5	92.5
Male-----	100.0	0.4	0.6	1.3	4.5	15.4	35.8	29.7	9.7	2.7	6.8	93.2
Female--	100.0	0.4	0.6	1.5	5.6	21.3	39.2	24.2	5.8	1.5	8.1	91.9
Nonwhite-----	100.0	0.5	0.9	1.8	5.8	18.1	33.7	25.8	8.6	4.7	9.1	90.9
Male-----	100.0	0.5	0.8	1.7	5.2	16.5	32.8	27.0	9.9	5.6	8.2	91.8
Female--	100.0	0.6	1.0	1.9	6.5	19.7	34.8	24.5	7.3	3.8	10.0	90.0
EAST SOUTH CENTRAL-----	100.0	0.4	0.7	1.3	4.8	16.2	34.7	28.2	9.5	4.2	7.2	92.8
Male-----	100.0	0.4	0.7	1.2	4.3	13.6	33.0	30.5	11.3	5.1	6.6	93.4
Female--	100.0	0.4	0.7	1.5	5.4	18.9	36.4	25.9	7.7	3.2	7.9	92.1
White-----	100.0	0.4	0.6	1.3	4.4	15.5	33.4	29.5	9.6	3.2	6.8	93.2
Male-----	100.0	0.3	0.7	1.2	4.0	12.9	33.4	31.9	11.5	4.2	6.2	93.8
Female--	100.0	0.4	0.6	1.4	4.9	18.3	37.4	27.0	7.6	2.2	7.4	92.6
Nonwhite-----	100.0	0.4	0.7	1.4	5.8	17.6	33.0	25.3	9.4	6.3	8.3	91.7
Male-----	100.0	0.4	0.6	1.4	5.1	15.2	32.0	27.2	10.9	7.1	7.6	92.4
Female--	100.0	0.3	0.8	1.5	6.5	20.1	34.1	23.3	7.9	5.5	9.1	90.9
WEST SOUTH CENTRAL-----	100.0	0.4	0.6	1.2	4.7	17.1	35.8	28.8	8.6	2.8	6.9	93.1
Male-----	100.0	0.4	0.6	1.1	4.1	14.5	34.0	31.5	10.4	3.4	6.2	93.8
Female--	100.0	0.4	0.6	1.4	5.3	19.9	37.6	25.9	6.8	2.1	7.7	92.3
White-----	100.0	0.4	0.6	1.1	4.4	16.6	36.6	29.3	8.7	2.3	6.5	93.5
Male-----	100.0	0.4	0.6	1.1	3.9	13.9	34.5	32.1	10.6	3.0	5.9	94.1
Female--	100.0	0.4	0.6	1.2	4.9	19.4	38.8	26.3	6.7	1.7	7.1	92.9
Nonwhite-----	100.0	0.5	0.7	1.6	5.8	19.0	32.6	27.0	8.3	4.5	8.7	91.3
Male-----	100.0	0.5	0.8	1.3	4.9	16.5	32.1	29.4	9.4	5.2	7.5	92.5
Female--	100.0	0.4	0.7	2.0	6.8	21.7	33.0	24.6	7.1	3.7	9.9	90.1
MOUNTAIN-----	100.0	0.5	0.7	1.6	6.2	22.0	39.1	23.5	5.3	1.0	9.1	90.9
Male-----	100.0	0.6	0.7	1.5	5.5	18.8	38.4	26.6	6.7	1.3	8.2	91.8
Female--	100.0	0.5	0.8	1.8	7.1	25.4	39.9	20.2	3.7	0.7	10.1	89.9
White-----	100.0	0.5	0.7	1.6	6.2	21.9	39.2	23.7	5.3	0.9	9.1	90.9
Male-----	100.0	0.6	0.7	1.5	5.4	18.6	38.4	26.9	6.6	1.3	8.2	91.8
Female--	100.0	0.5	0.8	1.7	7.0	25.4	39.9	20.3	3.8	0.6	10.0	90.0
Nonwhite-----	100.0	0.4	0.7	1.9	7.1	24.8	36.3	20.1	5.2	1.5	10.2	89.8
Male-----	100.0	0.5	0.4	1.3	6.0	23.4	37.8	21.5	7.4	1.6	8.3	91.7
Female--	100.0	0.2	1.0	2.6	8.3	26.2	38.7	18.6	2.8	1.4	12.2	87.8
PACIFIC-----	100.0	0.5	0.6	1.4	5.0	18.5	39.0	26.6	7.1	1.3	7.5	92.5
Male-----	100.0	0.5	0.6	1.4	4.4	15.6	37.3	29.5	8.9	1.7	6.9	93.1
Female--	100.0	0.5	0.6	1.5	5.6	21.6	40.8	23.5	5.1	0.8	8.2	91.8
White-----	100.0	0.5	0.6	1.4	4.8	18.0	38.9	27.2	7.3	1.3	7.3	92.7
Male-----	100.0	0.4	0.6	1.3	4.3	15.1	37.1	30.1	9.3	1.8	6.7	93.3
Female--	100.0	0.5	0.6	1.4	5.4	21.1	40.8	24.1	5.3	0.8	7.9	92.1
Nonwhite-----	100.0	0.7	0.9	1.7	6.8	25.0	40.7	19.7	3.9	0.7	10.1	89.9
Male-----	100.0	0.8	0.6	1.5	6.2	21.9	40.9	22.8	4.6	0.7	9.1	90.9
Female--	100.0	0.6	1.2	1.9	7.4	28.3	40.5	16.3	3.1	0.7	11.2	88.8

TABLE 3. DEATHS UNDER 28 DAYS BY BIRTH WEIGHT, RACE, AND SEX: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950

(By place of residence at birth. Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed.)

AREA, RACE, AND SEX	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
UNITED STATES <sup>1</sup> -----	16,741	3,424	2,801	2,403	2,078	1,912	2,112	1,280	483	248	10,706	6,035
Male-----	9,751	1,801	1,608	1,458	1,245	1,096	1,252	823	312	156	6,112	3,639
Female-----	6,990	1,623	1,193	945	833	816	860	457	171	92	4,594	2,396
White-----	13,521	2,817	2,293	1,976	1,693	1,528	1,703	982	374	155	8,779	4,742
Male-----	7,952	1,467	1,364	1,218	1,039	873	1,021	635	244	93	5,088	2,864
Female-----	5,569	1,350	929	758	654	655	682	349	130	62	3,691	1,878
Nonwhite-----	3,220	607	508	427	385	384	409	298	109	93	1,927	1,293
Male-----	1,799	334	244	240	206	223	231	190	68	63	1,024	775
Female-----	1,421	273	264	187	179	161	178	108	41	30	903	518
NEW ENGLAND <sup>1</sup> -----	485	104	75	70	48	62	71	34	14	7	297	188
Male-----	278	55	47	44	24	30	39	22	12	5	170	108
Female-----	207	49	28	26	24	32	32	12	2	2	127	80
White-----	467	99	69	68	46	61	71	33	14	6	282	185
Male-----	271	53	45	44	23	29	39	21	12	5	165	106
Female-----	196	46	24	24	23	32	32	12	2	1	117	79
Nonwhite-----	18	5	6	2	2	1	-	1	-	1	15	3
Male-----	7	2	2	-	1	1	-	1	-	-	5	2
Female-----	11	3	4	2	1	-	-	-	-	1	10	1
MIDDLE ATLANTIC-----	2,836	725	456	385	318	292	374	195	69	22	1,884	952
Male-----	1,637	396	234	232	197	165	218	132	49	14	1,059	578
Female-----	1,199	329	222	153	121	127	156	63	20	8	825	374
White-----	2,441	594	396	347	274	256	328	168	59	19	1,611	830
Male-----	1,408	316	209	210	169	140	193	114	44	13	904	504
Female-----	1,033	278	187	137	105	116	135	54	15	6	707	326
Nonwhite-----	395	131	60	38	44	36	46	27	10	3	275	122
Male-----	229	80	25	22	28	25	25	18	5	1	155	74
Female-----	166	51	35	16	16	11	21	9	5	2	118	48
EAST NORTH CENTRAL-----	3,110	782	507	404	311	350	369	233	120	34	2,004	1,106
Male-----	1,863	403	316	251	194	216	236	148	78	21	1,164	699
Female-----	1,247	379	191	153	117	134	133	85	42	13	840	407
White-----	2,787	677	460	357	290	306	339	216	113	29	1,784	1,003
Male-----	1,674	347	293	217	186	187	216	139	73	16	1,043	631
Female-----	1,113	330	167	140	104	119	123	77	40	13	741	372
Nonwhite-----	323	105	47	47	21	44	30	17	7	5	220	103
Male-----	189	56	23	34	8	29	20	9	5	5	121	68
Female-----	134	49	24	13	13	15	10	8	2	-	99	35
WEST NORTH CENTRAL-----	1,539	320	249	232	177	173	188	133	42	25	978	561
Male-----	911	172	153	151	102	90	119	86	23	15	578	333
Female-----	628	148	96	81	75	83	69	47	19	10	400	228
White-----	1,457	296	238	220	168	170	177	125	41	22	922	535
Male-----	865	156	149	146	97	89	111	81	22	14	548	317
Female-----	592	140	89	74	71	81	66	44	19	8	374	218
Nonwhite-----	82	24	11	12	9	3	11	8	1	3	56	26
Male-----	46	16	4	5	5	1	8	5	1	1	30	16
Female-----	36	8	7	7	4	2	3	3	-	2	26	10
SOUTH ATLANTIC-----	2,913	471	489	445	401	372	352	248	81	54	1,806	1,107
Male-----	1,681	235	271	264	235	228	202	159	52	35	1,005	676
Female-----	1,232	236	218	181	168	144	150	89	29	19	801	431
White-----	1,776	302	299	284	256	222	215	144	38	16	1,141	635
Male-----	1,057	156	179	171	158	135	129	93	28	8	664	393
Female-----	719	146	120	113	98	87	86	51	10	8	477	242
Nonwhite-----	1,137	169	190	161	145	150	137	104	43	38	665	472
Male-----	624	79	92	93	77	93	73	66	24	27	341	283
Female-----	513	90	98	68	68	57	64	38	19	11	324	189
EAST SOUTH CENTRAL-----	1,739	238	270	238	253	223	258	161	51	47	999	740
Male-----	1,013	120	154	145	147	121	159	105	34	28	566	447
Female-----	726	118	116	93	106	102	99	56	17	19	433	293
White-----	1,131	166	192	167	177	141	159	86	25	18	702	429
Male-----	661	77	116	105	110	78	100	53	13	9	408	253
Female-----	470	89	76	62	67	63	59	33	12	9	294	176
Nonwhite-----	608	72	78	71	76	82	99	75	26	29	297	311
Male-----	352	43	38	40	37	43	59	52	21	19	158	194
Female-----	256	29	40	31	39	39	40	23	5	10	139	117

<sup>1</sup>Excludes data for Massachusetts.

## VITAL STATISTICS—SPECIAL REPORTS

TABLE 3. DEATHS UNDER 28 DAYS BY BIRTH WEIGHT, RACE, AND SEX: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950—Con.

(By place of residence at birth. Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed)

AREA, RACE, AND SEX	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
WEST SOUTH CENTRAL-----	1,783	264	302	256	258	184	247	164	65	43	1,080	703
Male----	985	143	168	135	146	98	137	95	37	26	592	393
Female--	798	121	134	121	112	86	110	69	28	17	488	310
White-----	1,325	206	227	191	194	139	182	111	44	31	818	507
Male----	743	113	122	109	113	77	100	66	26	17	457	286
Female--	582	93	105	82	81	62	82	45	18	14	361	221
Nonwhite-----	458	58	75	65	64	45	65	53	21	12	262	196
Male----	242	30	46	26	33	21	37	29	11	9	135	107
Female--	216	28	29	39	31	24	28	24	10	3	127	89
MOUNTAIN-----	796	164	140	132	113	99	88	39	18	3	549	247
Male----	475	93	86	85	69	59	47	23	11	2	333	142
Female--	321	71	54	47	44	40	41	16	7	1	216	105
White-----	735	157	132	119	102	90	80	32	18	3	510	223
Male----	438	88	83	76	62	55	43	18	11	2	309	129
Female--	295	69	49	43	40	35	37	14	7	1	201	94
Nonwhite-----	63	7	8	13	11	9	8	7	-	-	39	24
Male----	37	5	3	9	7	4	4	5	-	-	24	13
Female--	26	2	5	4	4	5	4	2	-	-	15	11
PACIFIC-----	1,540	356	313	241	199	157	165	73	23	13	1,109	431
Male----	908	184	179	151	131	89	95	53	16	10	645	263
Female--	632	172	134	90	68	68	70	20	7	3	464	168
White-----	1,404	320	280	223	186	143	152	67	22	11	1,009	395
Male----	835	161	168	140	121	83	90	48	15	9	590	245
Female--	569	159	112	83	65	60	62	19	7	2	419	150
Nonwhite-----	136	36	33	18	13	14	13	6	1	2	100	36
Male----	73	23	11	11	10	6	5	5	1	1	55	18
Female--	63	13	22	7	3	8	8	1	-	1	45	18

TABLE 4. NEONATAL MORTALITY RATES BY BIRTH WEIGHT, RACE, AND SEX: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950

(By place of residence at birth. Based on deaths under 28 days among children born Jan. 1 to Mar. 31, 1950. Rates per 1,000 live births in each specified group. Birth weights not stated are distributed. Two dots (..) indicate rate not computed where the number of deaths is less than 10)

AREA, RACE, AND SEX	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
UNITED STATES <sup>1</sup> -----	20.0	871.7	551.3	211.0	50.4	12.6	6.7	5.6	7.5	14.2	173.7	7.8
Male----	22.7	894.2	621.8	265.0	67.4	16.6	8.1	6.4	7.7	13.7	213.9	9.1
Female--	17.1	848.0	478.2	160.5	36.6	9.5	5.3	4.6	7.2	15.1	138.9	6.4
White-----	18.9	883.3	562.1	214.6	50.6	12.0	6.2	4.9	6.7	12.0	175.8	7.1
Male----	21.6	905.0	643.1	271.9	69.1	15.9	7.6	5.6	6.9	10.8	218.8	8.3
Female--	16.0	861.0	474.5	160.4	35.5	9.1	4.9	4.1	6.4	14.7	138.4	5.8
Nonwhite-----	26.7	821.4	507.0	195.7	49.5	15.4	9.7	10.5	12.5	20.2	164.7	11.9
Male----	29.4	849.9	524.7	235.1	60.0	19.9	10.9	12.2	13.1	23.1	192.8	13.9
Female--	23.9	789.0	491.6	161.1	41.2	11.8	8.4	8.4	11.4	16.0	141.3	9.7
NEW ENGLAND <sup>1</sup> -----	20.1	920.4	646.6	238.1	41.8	14.2	7.5	5.2	8.1	..	177.7	8.4
Male----	22.3	916.7	712.1	278.5	48.6	15.5	8.5	5.8	10.7	..	218.5	9.3
Female--	17.7	924.5	560.0	191.2	36.7	13.2	6.6	4.3	..	..	142.2	7.4
White-----	19.8	925.2	657.1	241.1	41.7	14.3	7.7	5.1	8.2	..	176.6	8.4
Male----	22.3	913.8	737.7	282.1	49.4	15.3	8.7	5.6	10.8	..	222.7	9.3
Female--	17.1	938.8	545.5	190.5	36.1	13.5	6.7	4.4	..	..	136.7	7.4
Nonwhite-----	35.6	..	..	..	..	..	0	..	0	..	202.7	..
Male----	..	..	..	0	..	..	0	..	0	..	..	..
Female--	45.5	..	..	..	..	..	0	0	..	..	270.3	..
MIDDLE ATLANTIC-----	18.9	913.1	522.9	179.4	40.0	9.7	6.3	5.2	7.2	11.9	160.2	6.9
Male----	21.2	934.0	572.1	226.8	56.2	12.6	7.4	6.1	7.9	11.3	197.4	8.1
Female--	16.4	889.2	479.5	136.2	27.3	7.5	5.2	3.9	6.0	..	129.0	5.6
White-----	17.8	918.1	523.1	189.5	40.2	9.7	6.0	4.7	6.5	11.0	160.3	6.5
Male----	20.0	934.9	588.7	240.5	55.7	12.1	7.2	5.6	7.5	11.1	196.5	7.6
Female--	15.5	899.7	465.2	143.0	27.8	7.8	4.9	3.6	4.7	..	129.7	5.3
Nonwhite-----	29.9	891.2	521.7	120.6	38.9	10.2	8.8	12.3	21.7	..	159.8	10.6
Male----	34.7	930.2	463.0	146.7	59.1	16.0	9.4	14.3	..	..	202.9	12.7
Female--	25.1	836.1	573.8	97.0	24.4	5.6	8.2	..	..	..	125.0	8.5

<sup>1</sup>Excludes data for Massachusetts.

TABLE 4. NEONATAL MORTALITY RATES BY BIRTH WEIGHT, RACE, AND SEX: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950—Con.

(See footnote on p. 182)

AREA, RACE, AND SEX	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501- 3,000	3,001- 3,500	3,501- 4,000	4,001- 4,500	4,501 or more	2,500 or less	2,501 or more
EAST NORTH CENTRAL-----	18.2	912.5	545.2	189.8	39.6	11.4	5.6	4.9	9.2	12.5	170.2	7.0
Male-----	21.3	935.0	614.8	240.9	55.1	16.3	7.4	5.5	9.4	11.2	211.3	8.5
Female-----	15.0	889.7	459.1	140.8	27.0	7.7	4.0	4.2	9.0	15.2	134.1	5.3
White-----	17.7	914.9	560.3	193.4	42.6	11.3	5.6	4.8	9.1	11.2	174.8	6.8
Male-----	20.7	935.3	638.3	241.9	60.8	16.0	7.3	5.5	9.1	9.0	217.9	8.3
Female-----	14.6	894.3	461.3	147.5	27.8	7.8	4.0	4.0	9.0	16.1	136.7	5.2
Nonwhite-----	24.2	897.4	431.2	166.1	19.9	12.3	5.9	6.9	..	..	140.7	8.8
Male-----	28.2	935.3	418.2	234.5	..	18.2	7.8	..	..	..	167.6	11.4
Female-----	20.2	859.6	444.4	94.2	21.9	7.6	4.0	..	..	0	117.6	6.0
WEST NORTH CENTRAL-----	19.2	861.5	591.4	242.2	53.3	13.5	6.3	5.6	5.9	14.8	193.1	7.5
Male-----	22.1	900.5	708.3	308.2	70.0	16.4	8.2	6.6	5.1	13.0	245.5	8.6
Female-----	16.1	860.5	468.3	173.1	40.2	11.4	4.5	4.5	7.2	16.7	147.6	6.3
White-----	19.0	888.9	601.0	246.4	54.3	14.2	6.2	5.5	5.9	13.6	195.5	7.4
Male-----	21.9	896.6	716.3	316.7	71.3	17.4	8.0	6.4	5.0	12.6	248.6	8.5
Female-----	15.9	890.5	473.4	171.3	41.0	11.8	4.5	4.3	7.4	..	148.9	6.3
Nonwhite-----	23.6	800.0	440.0	184.6	..	..	8.2	..	..	..	160.9	8.3
Male-----	26.3	941.2	..	..	..	..	..	..	..	..	200.0	10.0
Female-----	20.8	..	..	..	..	..	..	0	..	..	131.3	6.5
SOUTH ATLANTIC-----	22.0	799.7	526.9	218.9	57.3	15.4	7.3	7.0	7.6	14.1	171.2	9.1
Male-----	24.8	821.7	591.7	271.6	74.0	21.4	8.6	8.1	7.9	14.5	205.5	10.8
Female-----	19.0	778.9	465.8	170.6	43.4	10.7	6.1	5.7	7.2	13.3	141.5	7.3
White-----	19.3	805.3	539.7	218.8	55.5	13.3	6.3	5.8	5.3	8.3	166.8	7.5
Male-----	22.5	834.2	630.3	275.4	75.0	18.7	7.7	6.7	6.1	..	207.6	9.0
Female-----	16.1	776.6	444.4	168.9	39.1	9.2	4.9	4.7	3.9	..	131.0	5.9
Nonwhite-----	27.8	789.7	508.0	219.0	60.7	20.3	9.9	9.9	12.2	19.8	179.1	12.7
Male-----	30.2	798.0	528.7	265.0	72.0	27.3	10.8	11.8	11.7	23.3	201.4	14.9
Female-----	25.4	782.6	490.0	177.1	51.5	14.3	9.1	7.7	13.0	14.4	160.5	10.4
EAST SOUTH CENTRAL-----	22.9	820.7	534.7	231.7	68.7	18.1	9.8	7.5	7.0	14.8	181.5	10.5
Male-----	26.1	833.3	596.9	301.5	87.8	22.9	12.4	8.9	7.7	14.3	221.4	12.3
Female-----	19.5	808.2	469.6	170.3	52.8	14.5	7.3	5.8	5.9	15.7	146.9	8.5
White-----	21.4	838.4	564.7	241.3	75.8	17.2	8.5	5.5	4.9	10.6	196.9	8.7
Male-----	24.5	846.2	630.4	329.2	102.9	22.5	11.1	6.2	4.2	..	245.3	10.0
Female-----	18.2	831.8	487.2	166.2	52.9	13.3	6.1	4.7	6.1	..	154.6	7.4
Nonwhite-----	26.1	782.6	472.7	211.9	58.4	20.0	12.8	12.7	11.8	19.8	153.1	14.5
Male-----	29.8	811.3	513.5	246.9	61.2	23.9	15.6	16.2	16.3	22.7	176.7	17.7
Female-----	22.3	743.6	439.6	179.2	52.5	16.9	10.2	8.6	..	15.9	132.9	11.2
WEST SOUTH CENTRAL-----	20.0	743.7	548.1	230.2	62.0	12.1	7.8	6.4	8.5	17.4	174.8	8.5
Male-----	21.6	764.7	610.9	262.1	78.2	14.9	8.8	6.6	7.8	16.6	208.2	9.2
Female-----	18.4	720.2	485.5	202.7	48.8	10.0	6.7	6.1	9.5	18.6	146.3	7.7
White-----	18.8	763.0	549.6	236.4	62.7	11.9	7.0	5.4	7.1	18.7	178.5	7.7
Male-----	20.5	807.1	604.0	279.5	80.4	15.3	8.0	5.7	6.8	15.9	213.8	8.4
Female-----	16.9	715.4	497.6	186.2	48.0	9.3	6.1	5.0	7.8	24.0	147.6	6.9
Nonwhite-----	24.8	682.4	543.5	213.8	59.9	12.8	10.8	10.6	13.8	14.6	164.2	11.6
Male-----	25.6	638.3	630.1	208.0	71.7	13.5	12.2	10.5	12.4	..	191.5	12.2
Female-----	24.0	736.8	446.2	217.9	50.9	12.3	9.4	10.8	15.7	..	142.5	11.0
MOUNTAIN-----	23.7	921.3	566.8	241.3	53.9	13.4	6.7	4.9	10.2	..	178.8	8.1
Male-----	27.5	968.8	710.7	330.7	73.2	18.1	7.1	5.0	9.5	..	235.0	8.9
Female-----	19.6	865.9	428.6	162.1	38.1	9.6	6.3	4.8	..	..	130.7	7.1
White-----	23.0	918.1	564.1	232.4	51.8	12.9	6.4	4.2	10.8	..	176.7	7.7
Male-----	26.8	967.0	709.4	310.2	69.8	16.1	6.8	4.1	10.1	..	230.4	8.6
Female-----	19.1	862.5	418.8	161.0	37.0	8.9	6.0	4.5	..	..	130.0	6.8
Nonwhite-----	35.1	..	..	371.4	65.9	..	..	..	0	0	213.1	14.9
Male-----	40.4	..	..	..	..	..	..	..	0	0	315.8	15.5
Female-----	29.5	..	..	..	..	..	..	..	0	0	140.2	14.2
PACIFIC-----	19.0	915.2	612.5	211.0	49.5	10.5	5.2	3.4	4.0	12.4	182.8	5.8
Male-----	21.8	943.6	665.4	268.2	71.6	13.7	6.1	4.3	4.3	13.8	225.8	6.8
Female-----	16.1	886.6	553.7	155.4	31.0	8.0	4.4	2.2	..	..	144.5	4.7
White-----	18.6	919.5	610.0	213.6	51.1	10.5	5.2	3.3	4.0	10.9	183.9	5.7
Male-----	21.6	941.5	669.3	270.3	73.6	14.2	6.3	4.1	4.2	..	228.2	6.8
Female-----	15.6	898.3	538.5	157.8	32.6	7.8	4.2	2.2	..	..	144.3	4.5
Nonwhite-----	23.8	878.0	634.6	183.7	33.6	9.8	5.6	..	..	..	173.0	7.0
Male-----	24.5	958.3	611.1	244.4	54.3	..	..	..	..	..	203.0	6.7
Female-----	22.9	764.7	647.1	..	..	..	..	0	..	..	146.6	7.4

## VITAL STATISTICS—SPECIAL REPORTS

TABLE 5. LIVE BIRTHS BY BIRTH WEIGHT, RACE, AND PLURALITY OF BIRTH: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950

(By place of residence. Birth weights not stated are distributed)

AREA, RACE, AND PLURALITY	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501- 3,000	3,001- 3,500	3,501- 4,000	4,001- 4,500	4,501 or more	2,500 or less	2,501 or more
UNITED STATES <sup>1</sup> -----	637,786	3,928	5,081	11,388	41,240	151,808	315,629	226,739	64,508	17,465	61,637	776,149
White-----	717,133	3,189	4,079	9,206	33,460	126,906	275,285	198,389	55,753	12,866	49,934	667,199
Nonwhite--	120,653	739	1,002	2,182	7,780	24,902	42,344	28,350	8,755	4,599	11,703	108,950
Single births-----	820,618	3,243	4,128	8,946	36,225	146,751	313,216	226,258	64,403	17,448	52,542	768,076
White-----	702,966	2,630	3,308	7,199	29,522	122,663	271,274	198,028	55,683	12,859	42,459	660,507
Nonwhite--	117,652	613	820	1,747	6,903	24,088	41,942	28,230	8,720	4,589	10,083	107,569
Births in plural sets-----	17,168	685	953	2,442	5,015	5,057	2,413	481	105	17	9,095	8,073
White-----	14,167	559	771	2,007	4,138	4,243	2,011	361	70	7	7,475	6,692
Nonwhite--	3,001	126	182	435	877	814	402	120	35	10	1,620	1,381
NEW ENGLAND <sup>1</sup> -----	24,150	113	116	294	1,148	4,362	9,479	6,564	1,728	346	1,671	22,479
White-----	23,644	107	105	282	1,103	4,255	9,280	6,465	1,709	338	1,597	22,047
Nonwhite--	506	6	11	12	45	107	199	99	19	8	74	432
Single births-----	23,689	96	104	222	1,021	4,213	9,410	6,556	1,721	346	1,443	22,246
White-----	23,203	94	93	213	979	4,113	9,214	6,457	1,702	338	1,379	21,824
Nonwhite--	486	2	11	9	42	100	196	99	19	8	64	422
Births in plural sets-----	461	17	12	72	127	149	69	8	7	-	228	233
White-----	441	13	12	69	124	142	66	8	7	-	218	223
Nonwhite--	20	4	-	3	3	7	3	-	-	-	10	10
MIDDLE ATLANTIC-----	150,340	794	872	2,146	7,946	30,015	59,564	37,630	9,530	1,843	11,758	138,582
White-----	137,126	647	757	1,831	6,815	26,498	54,334	35,442	9,070	1,732	10,050	127,076
Nonwhite--	13,214	147	115	315	1,131	3,517	5,230	2,188	460	111	1,708	11,506
Single births-----	147,228	671	693	1,667	7,050	29,059	59,140	37,579	9,526	1,843	10,081	137,147
White-----	134,342	533	598	1,416	6,018	25,639	53,948	35,392	9,066	1,732	8,565	125,777
Nonwhite--	12,886	138	95	251	1,032	3,420	5,192	2,187	460	111	1,516	11,370
Births in plural sets-----	3,112	123	79	479	896	956	424	51	4	-	1,677	1,435
White-----	2,784	114	159	415	797	859	386	50	4	-	1,485	1,299
Nonwhite--	328	9	20	64	99	97	38	1	-	-	192	136
EAST NORTH CENTRAL-----	170,653	857	930	2,129	7,856	30,571	65,537	47,072	12,981	2,720	11,772	158,881
White-----	157,330	740	821	1,846	6,801	26,995	60,475	44,610	12,452	2,590	10,208	147,122
Nonwhite--	13,323	117	109	283	1,055	3,576	5,062	2,462	529	130	1,564	11,759
Single births-----	167,277	699	756	1,701	6,881	29,524	65,042	46,987	12,967	2,720	10,037	157,240
White-----	154,264	602	666	1,459	5,932	26,042	60,007	44,527	12,439	2,590	8,659	145,605
Nonwhite--	13,013	97	90	242	949	3,482	5,035	2,460	528	130	1,378	11,635
Births in plural sets-----	3,376	158	174	428	975	1,047	495	85	14	-	1,735	1,641
White-----	3,066	138	155	387	869	953	468	83	13	-	1,549	1,517
Nonwhite--	310	20	19	41	106	94	27	2	1	-	186	124
WEST NORTH CENTRAL-----	80,185	363	421	958	3,322	12,785	29,927	23,549	7,174	1,686	5,064	75,121
White-----	76,708	333	396	893	3,094	11,862	26,589	22,840	6,983	1,618	4,716	71,992
Nonwhite--	3,477	30	25	65	228	823	1,338	709	191	68	348	3,129
Single births-----	76,694	301	350	717	2,952	12,335	29,677	23,507	7,169	1,686	4,320	74,374
White-----	75,511	275	329	671	2,748	11,543	28,345	22,803	6,979	1,618	4,023	71,288
Nonwhite--	3,383	26	21	46	204	792	1,332	704	190	68	297	3,086
Births in plural sets-----	1,491	62	71	241	370	450	250	42	5	-	744	747
White-----	1,397	58	67	222	346	419	244	37	4	-	693	704
Nonwhite--	94	4	4	19	24	31	6	5	1	-	51	43
SOUTH ATLANTIC-----	132,642	589	928	2,033	7,002	24,129	48,153	35,317	10,650	3,841	10,552	122,090
White-----	91,788	375	554	1,298	4,613	16,738	34,365	24,792	7,135	1,918	6,840	84,948
Nonwhite--	40,854	214	374	735	2,389	7,391	13,788	10,525	3,515	1,923	3,712	37,142
Single births-----	129,875	498	769	1,605	6,225	23,325	47,788	35,219	10,612	3,834	9,097	120,778
White-----	90,012	325	468	1,007	4,094	16,201	34,148	24,745	7,109	1,915	5,894	84,118
Nonwhite--	39,863	173	301	598	2,131	7,124	13,640	10,474	3,503	1,919	3,203	36,660
Births in plural sets-----	2,767	91	159	428	777	804	365	98	38	7	1,455	1,312
White-----	1,776	50	86	291	519	537	217	47	26	3	946	830
Nonwhite--	991	41	73	137	258	267	148	51	12	4	509	482
EAST SOUTH CENTRAL-----	76,093	290	505	1,027	3,683	12,304	26,367	21,482	7,263	3,172	5,505	70,588
White-----	52,769	198	340	692	2,335	8,195	18,659	15,587	5,059	1,704	3,565	49,204
Nonwhite--	23,324	92	165	335	1,348	4,109	7,708	5,895	2,204	1,468	1,940	21,384
Single births-----	74,393	213	406	776	3,192	11,854	26,132	21,411	7,246	3,163	4,597	69,806
White-----	51,684	149	279	518	1,997	7,909	18,528	15,548	5,055	1,701	2,943	48,741
Nonwhite--	22,709	64	127	258	1,195	3,945	7,604	5,863	2,191	1,462	1,644	21,065
Births in plural sets-----	1,700	77	99	251	491	450	235	71	17	9	918	782
White-----	1,085	49	61	174	338	286	131	39	4	3	622	463
Nonwhite--	615	28	38	77	153	164	104	32	13	6	296	319

<sup>1</sup>Excludes data for Massachusetts.

TABLE 5. LIVE BIRTHS BY BIRTH WEIGHT, RACE, AND PLURALITY OF BIRTH: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950--Continued.

(By place of residence. Birth weights not stated are distributed.)

AREA, RACE, AND PLURALITY	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501- 3,000	3,001- 3,500	3,501- 4,000	4,001- 4,500	4,501 or more	2,500 or less	2,501 or more
WEST SOUTH CENTRAL-----	89,080	355	551	1,112	4,161	15,226	31,860	25,652	7,686	2,477	6,179	82,901
White-----	70,647	270	413	808	3,092	11,721	25,858	20,667	6,164	1,654	4,583	66,064
Nonwhite--	18,433	85	138	304	1,069	3,505	6,002	4,985	1,522	823	1,596	16,837
Single births-----	87,219	291	425	897	3,580	14,722	31,598	25,578	7,671	2,477	5,173	82,046
White-----	69,270	216	307	661	2,667	11,331	25,659	20,618	6,157	1,654	3,851	65,419
Nonwhite--	17,949	75	118	236	893	3,391	5,939	4,960	1,514	823	1,322	16,627
Births in plural sets-----	1,861	64	126	215	601	504	262	74	15	-	1,006	855
White-----	1,377	54	108	147	425	390	199	49	7	-	732	645
Nonwhite--	484	10	20	68	176	114	63	25	8	-	274	210
MOUNTAIN-----	35,625	178	247	547	2,098	7,411	13,149	7,901	1,766	328	3,070	30,555
White-----	31,829	171	234	512	1,970	6,966	12,462	7,540	1,673	301	2,887	28,942
Nonwhite--	1,796	7	13	35	128	445	687	361	93	27	183	1,613
Single births-----	32,902	136	196	440	1,877	7,211	13,056	7,893	1,765	328	2,649	30,253
White-----	31,147	131	189	415	1,764	6,771	12,372	7,532	1,672	301	2,499	28,648
Nonwhite--	1,755	5	7	25	113	440	684	361	93	27	150	1,605
Births in plural sets-----	723	42	51	107	221	200	93	8	1	-	421	302
White-----	682	40	45	97	208	195	90	8	1	-	388	294
Nonwhite--	41	2	6	10	15	5	3	-	-	-	33	8
PACIFIC-----	81,018	389	511	1,142	4,024	15,005	31,593	21,572	5,730	1,052	6,066	74,952
White-----	75,292	348	459	1,044	3,637	13,576	29,263	20,446	5,508	1,011	5,488	69,804
Nonwhite--	5,726	41	52	98	387	1,429	2,330	1,126	222	41	578	5,148
Single births-----	79,341	338	429	921	3,467	14,508	31,373	21,528	5,728	1,051	5,155	74,186
White-----	75,733	305	379	839	3,123	13,114	29,053	20,406	5,504	1,010	4,646	69,087
Nonwhite--	5,608	33	50	82	344	1,394	2,320	1,122	222	41	509	5,099
Births in plural sets-----	1,677	51	82	221	557	497	220	44	4	1	911	766
White-----	1,559	43	80	205	514	462	210	40	4	1	842	717
Nonwhite--	118	8	2	16	43	35	10	4	-	-	69	49

TABLE 6. PERCENTAGE DISTRIBUTION OF LIVE BIRTHS BY BIRTH WEIGHT, BY RACE AND PLURALITY OF BIRTH: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950.

(By place of residence. Birth weights not stated are distributed. Two dots (..) indicate percent not computed where base is less than 100)

AREA, RACE, AND PLURALITY	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501- 3,000	3,001- 3,500	3,501- 4,000	4,001- 4,500	4,501 or more	2,500 or less	2,501 or more
UNITED STATES <sup>1</sup> -----	100.0	0.5	0.6	1.4	4.9	18.1	37.7	27.1	7.7	2.1	7.4	92.6
White-----	100.0	0.4	0.6	1.3	4.7	17.7	38.1	27.7	7.8	1.8	7.0	93.0
Nonwhite--	100.0	0.6	0.8	1.8	6.4	20.6	35.1	23.5	7.3	3.6	9.7	90.3
Single births-----	100.0	0.4	0.5	1.1	4.4	17.9	38.2	27.6	7.8	2.1	6.4	93.6
White-----	100.0	0.4	0.5	1.0	4.2	17.4	38.6	28.2	7.9	1.8	6.0	94.0
Nonwhite--	100.0	0.5	0.7	1.5	5.9	20.5	35.6	24.0	7.4	3.9	8.6	91.4
Births in plural sets-----	100.0	4.0	5.6	14.2	29.2	29.5	14.1	2.8	0.6	0.1	53.0	47.0
White-----	100.0	3.9	5.4	14.2	29.2	29.9	14.2	2.5	0.5	0.0	52.8	47.2
Nonwhite--	100.0	4.2	6.1	14.5	29.2	27.1	13.4	4.0	1.2	0.3	54.0	46.0
NEW ENGLAND <sup>1</sup> -----	100.0	0.5	0.5	1.2	4.8	18.1	39.5	27.2	7.2	1.4	6.9	93.1
White-----	100.0	0.5	0.4	1.2	4.7	18.0	39.2	27.3	7.2	1.4	6.8	93.2
Nonwhite--	100.0	1.2	2.2	2.4	8.9	21.1	39.3	19.6	3.8	1.6	14.6	85.4
Single births-----	100.0	0.4	0.4	0.9	4.3	17.8	39.7	27.7	7.3	1.5	6.1	93.9
White-----	100.0	0.4	0.4	0.9	4.2	17.7	39.7	27.8	7.3	1.5	5.9	94.1
Nonwhite--	100.0	0.4	2.3	1.9	8.6	20.6	40.3	20.4	3.9	1.6	13.2	86.8
Births in plural sets-----	100.0	3.7	2.6	15.6	27.5	32.3	15.0	1.7	1.5	0	49.5	50.5
White-----	100.0	2.9	2.7	15.6	28.1	32.2	15.0	1.8	1.6	0	49.4	50.6
Nonwhite--	..	..	0	..	..	..	..	0	0	0	..	..
MIDDLE ATLANTIC-----	100.0	0.5	0.6	1.4	5.3	20.0	39.6	25.0	6.3	1.2	7.8	92.2
White-----	100.0	0.5	0.6	1.3	5.0	19.3	39.6	25.8	6.6	1.3	7.3	92.7
Nonwhite--	100.0	1.1	0.9	2.4	8.6	26.6	39.6	16.6	3.5	0.8	12.9	87.1
Single births-----	100.0	0.5	0.5	1.1	4.8	19.7	40.2	25.5	6.5	1.3	6.8	93.2
White-----	100.0	0.4	0.4	1.1	4.5	19.1	40.2	26.3	6.7	1.3	6.4	93.6
Nonwhite--	100.0	1.1	0.7	1.9	8.0	26.5	40.3	17.0	3.6	0.9	11.8	88.2
Births in plural sets-----	100.0	4.0	5.8	15.4	28.8	30.7	13.6	1.6	0.1	0	53.9	46.1
White-----	100.0	4.1	5.7	14.9	28.6	30.9	13.9	1.8	0.1	0	53.3	46.7
Nonwhite--	100.0	2.7	6.1	19.5	30.2	29.6	11.6	0.3	0	0	58.5	41.5

<sup>1</sup>Excludes data for Massachusetts.



## VITAL STATISTICS—SPECIAL REPORTS

TABLE 6. PERCENTAGE DISTRIBUTION OF LIVE BIRTHS BY BIRTH WEIGHT, BY RACE AND PLURALITY OF BIRTH: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950—Continued

(By place of residence. Birth weights not stated are distributed. Two dots (..) indicate percent not computed where base is less than 100)

AREA, RACE, AND PLURALITY	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501- 3,000	3,001- 3,500	3,501- 4,000	4,001- 4,500	4,501 or more	2,500 or less	2,501 or more
EAST NORTH CENTRAL-----	100.0	0.5	0.5	1.2	4.6	17.9	38.4	27.6	7.6	1.6	6.9	93.1
White-----	100.0	0.5	0.5	1.2	4.3	17.2	38.4	28.4	7.9	1.6	6.5	93.5
Nonwhite--	100.0	0.9	0.8	2.1	7.9	26.8	38.0	18.5	4.0	1.0	11.7	88.3
Single births-----	100.0	0.4	0.5	1.0	4.1	17.6	38.9	28.1	7.8	1.6	6.0	94.0
White-----	100.0	0.4	0.4	0.9	3.8	16.9	38.9	28.9	8.1	1.7	5.6	94.4
Nonwhite--	100.0	0.7	0.7	1.9	7.3	26.8	38.7	18.9	4.1	1.0	10.6	89.4
Births in plural sets-----	100.0	4.7	5.2	12.7	28.9	31.0	14.7	2.5	0.4	0	51.4	48.6
White-----	100.0	4.5	5.1	12.6	28.3	31.1	15.3	2.7	0.4	0	50.5	49.5
Nonwhite--	100.0	6.5	6.1	13.2	34.2	30.3	8.7	0.6	0.3	0	60.0	40.0
WEST NORTH CENTRAL-----	100.0	0.5	0.5	1.2	4.1	15.9	37.3	29.4	8.9	2.1	6.3	93.7
White-----	100.0	0.4	0.5	1.2	4.0	15.6	37.3	29.8	9.1	2.1	6.1	93.9
Nonwhite--	100.0	0.9	0.7	1.9	6.6	23.7	38.5	20.4	5.5	2.0	10.0	90.0
Single births-----	100.0	0.4	0.4	0.9	3.8	15.7	37.7	29.9	9.1	2.1	5.5	94.5
White-----	100.0	0.4	0.4	0.9	3.6	15.3	37.6	30.3	9.3	2.1	5.3	94.7
Nonwhite--	100.0	0.8	0.6	1.4	6.0	23.4	39.4	20.8	5.6	2.0	8.8	91.2
Births in plural sets-----	100.0	4.2	4.8	16.2	24.8	30.2	16.8	2.8	0.3	0	49.9	50.1
White-----	100.0	4.2	4.8	15.9	24.8	30.0	17.5	2.6	0.3	0	49.6	50.4
Nonwhite--	..	..	..	..	..	..	..	..	..	0	..	..
SOUTH ATLANTIC-----	100.0	0.4	0.7	1.5	5.3	18.2	36.3	26.6	8.0	2.9	8.0	92.0
White-----	100.0	0.4	0.6	1.4	5.0	18.2	37.4	27.0	7.8	2.1	7.5	92.5
Nonwhite--	100.0	0.5	0.9	1.8	5.8	18.1	33.7	25.8	8.6	4.7	9.1	90.9
Single births-----	100.0	0.4	0.6	1.2	4.8	18.0	36.8	27.1	8.2	3.0	7.0	93.0
White-----	100.0	0.4	0.5	1.1	4.5	18.0	37.9	27.5	7.9	2.1	6.5	93.5
Nonwhite--	100.0	0.4	0.8	1.5	5.3	17.9	34.2	26.3	8.8	4.8	8.0	92.0
Births in plural sets-----	100.0	3.3	5.7	15.5	28.1	29.1	13.2	3.5	1.4	0.3	52.6	47.4
White-----	100.0	2.8	4.8	16.4	29.2	30.2	12.2	2.6	1.5	0.2	53.3	46.7
Nonwhite--	100.0	4.1	7.4	13.8	26.0	26.9	14.9	5.1	1.2	0.4	51.4	48.6
EAST SOUTH CENTRAL-----	100.0	0.4	0.7	1.3	4.8	16.2	34.7	28.2	9.5	4.2	7.2	92.8
White-----	100.0	0.4	0.6	1.3	4.4	15.5	35.4	29.5	9.6	3.2	6.8	93.2
Nonwhite--	100.0	0.4	0.7	1.4	5.8	17.6	33.0	25.3	9.4	6.3	8.3	91.7
Single births-----	100.0	0.3	0.5	1.0	4.3	15.9	35.1	28.8	9.7	4.3	6.2	93.8
White-----	100.0	0.3	0.5	1.0	3.9	15.3	35.8	30.1	9.8	3.3	5.7	94.3
Nonwhite--	100.0	0.3	0.6	1.1	5.3	17.4	33.5	25.8	9.6	6.4	7.2	92.8
Births in plural sets-----	100.0	4.5	5.8	14.8	28.9	26.5	13.8	4.2	1.0	0.5	54.0	46.0
White-----	100.0	4.5	5.6	16.0	31.2	26.4	12.1	3.6	0.4	0.3	57.3	42.7
Nonwhite--	100.0	4.6	6.2	12.5	24.9	26.7	16.9	5.2	2.1	1.0	48.1	51.9
WEST SOUTH CENTRAL-----	100.0	0.4	0.6	1.2	4.7	17.1	35.8	28.8	8.6	2.8	6.9	93.1
White-----	100.0	0.4	0.6	1.1	4.4	16.6	36.6	29.3	8.7	2.3	6.5	93.5
Nonwhite--	100.0	0.5	0.7	1.6	5.8	19.0	32.6	27.0	8.3	4.5	8.7	91.3
Single births-----	100.0	0.3	0.5	1.0	4.1	16.9	36.2	29.3	8.8	2.8	5.9	94.1
White-----	100.0	0.3	0.4	1.0	3.9	16.4	37.0	29.8	8.9	2.4	5.6	94.4
Nonwhite--	100.0	0.4	0.7	1.3	5.0	18.9	33.1	27.6	8.4	4.6	7.4	92.6
Births in plural sets-----	100.0	3.4	6.8	11.6	32.3	27.1	14.1	4.0	0.8	0	54.1	45.9
White-----	100.0	3.9	7.7	10.7	30.9	28.3	14.5	3.6	0.5	0	53.2	46.8
Nonwhite--	100.0	2.1	4.1	14.0	36.4	23.6	13.0	5.2	1.7	0	56.6	43.4
MOUNTAIN-----	100.0	0.5	0.7	1.6	6.2	22.0	39.1	23.5	5.3	1.0	9.1	90.9
White-----	100.0	0.5	0.7	1.6	6.2	21.9	39.2	23.7	5.3	0.9	9.1	90.9
Nonwhite--	100.0	0.4	0.7	1.9	7.1	24.8	38.3	20.1	5.2	1.5	10.2	89.8
Single births-----	100.0	0.4	0.6	1.3	5.7	21.9	39.7	24.0	5.4	1.0	8.1	91.9
White-----	100.0	0.4	0.6	1.3	5.7	21.7	39.7	24.2	5.4	1.0	8.0	92.0
Nonwhite--	100.0	0.3	0.4	1.4	6.4	25.1	39.0	20.6	5.3	1.5	8.5	91.5
Births in plural sets-----	100.0	5.8	7.1	14.8	30.6	27.7	12.9	1.1	0.1	0	58.2	41.8
White-----	100.0	5.9	6.6	14.2	30.2	28.6	13.2	1.2	0.1	0	56.9	43.1
Nonwhite--	..	..	..	..	..	..	..	0	0	0	..	..
PACIFIC-----	100.0	0.5	0.6	1.4	5.0	18.5	39.0	26.6	7.1	1.3	7.5	92.5
White-----	100.0	0.5	0.6	1.4	4.8	18.0	38.9	27.2	7.3	1.3	7.3	92.7
Nonwhite--	100.0	0.7	0.9	1.7	6.8	25.0	40.7	19.7	3.9	0.7	10.1	89.9
Single births-----	100.0	0.4	0.5	1.2	4.4	18.3	39.5	27.1	7.2	1.3	6.5	93.5
White-----	100.0	0.4	0.5	1.1	4.2	17.8	39.4	27.7	7.5	1.4	6.3	93.7
Nonwhite--	100.0	0.6	0.9	1.5	6.1	24.9	41.4	20.0	4.0	0.7	9.1	90.9
Births in plural sets-----	100.0	3.0	4.9	13.2	33.2	29.6	13.1	2.6	0.2	0.1	54.3	45.7
White-----	100.0	2.8	5.1	13.1	33.0	29.6	13.5	2.6	0.3	0.1	54.0	46.0
Nonwhite--	100.0	6.8	1.7	13.6	36.4	29.7	8.5	3.4	0	0	58.5	41.5

TABLE 7. DEATHS UNDER 28 DAYS BY BIRTH WEIGHT, RACE, AND PLURALITY OF BIRTH: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950

(By place of residence at birth. Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed)

AREA, RACE, AND PLURALITY	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
UNITED STATES <sup>1</sup> -----	16,741	3,424	2,801	2,403	2,078	1,912	2,112	1,280	483	248	10,706	6,035
White-----	13,521	2,817	2,293	1,976	1,693	1,528	1,703	982	374	155	8,779	4,742
Nonwhite--	3,220	607	508	427	385	384	409	298	109	93	1,927	1,293
Deaths among single births-----	15,049	2,827	2,321	2,048	1,913	1,855	2,087	1,271	479	248	9,109	5,940
White-----	12,183	2,315	1,902	1,716	1,568	1,492	1,687	976	372	155	7,501	4,682
Nonwhite--	2,866	512	419	332	345	363	400	295	107	93	1,608	1,258
Deaths among births in plural sets-----	1,692	597	480	355	165	57	25	9	4	-	1,597	95
White-----	1,338	502	391	260	125	36	16	6	2	-	1,278	60
Nonwhite--	354	95	89	95	40	21	9	3	2	-	319	35
NEW ENGLAND <sup>2</sup> -----	485	104	75	70	48	62	71	34	14	7	297	188
White-----	467	99	69	68	46	61	71	33	14	6	282	185
Nonwhite--	18	5	6	2	2	1	-	1	-	1	15	3
Deaths among single births-----	448	88	70	59	44	62	71	33	14	7	261	187
White-----	433	86	64	57	42	61	71	32	14	6	249	184
Nonwhite--	15	2	6	2	2	1	-	1	-	1	12	3
Deaths among births in plural sets-----	37	16	5	11	4	-	-	1	-	-	36	1
White-----	34	13	5	11	4	-	-	1	-	-	33	1
Nonwhite--	3	3	-	-	-	-	-	-	-	-	3	-
MIDDLE ATLANTIC-----	2,836	725	456	385	318	292	374	195	69	22	1,884	952
White-----	2,441	594	396	347	274	256	328	168	59	19	1,611	830
Nonwhite--	395	131	60	38	44	36	46	27	10	3	273	122
Deaths among single births-----	2,550	613	372	329	294	284	372	195	69	22	1,608	942
White-----	2,180	498	321	300	250	249	326	168	59	19	1,359	821
Nonwhite--	370	125	51	29	44	35	46	27	10	3	249	121
Deaths among births in plural sets-----	286	112	84	56	24	8	2	-	-	-	276	10
White-----	261	106	75	47	24	7	2	-	-	-	252	9
Nonwhite--	25	6	9	9	-	1	-	-	-	-	24	1
EAST NORTH CENTRAL-----	3,110	782	507	404	311	350	369	233	120	34	2,004	1,106
White-----	2,787	677	460	357	290	306	339	216	113	29	1,784	1,003
Nonwhite--	323	105	47	47	21	44	30	17	7	5	220	103
Deaths among single births-----	2,788	635	420	356	289	337	368	232	117	34	1,700	1,088
White-----	2,497	548	379	313	270	294	338	215	111	29	1,510	987
Nonwhite--	291	87	41	43	19	43	30	17	6	5	190	101
Deaths among births in plural sets-----	322	147	87	48	22	13	1	1	3	-	304	18
White-----	290	129	81	44	20	12	1	1	2	-	274	16
Nonwhite--	32	18	6	4	2	1	-	-	1	-	30	2
WEST NORTH CENTRAL-----	1,539	320	249	232	177	173	188	133	42	25	978	561
White-----	1,457	296	238	220	168	170	177	125	41	22	922	535
Nonwhite--	82	24	11	12	9	3	11	8	1	3	56	26
Deaths among single births-----	1,379	265	214	186	160	171	184	132	42	25	825	554
White-----	1,307	245	206	176	152	168	173	124	41	22	779	528
Nonwhite--	72	20	8	10	8	3	11	8	1	3	46	26
Deaths among births in plural sets-----	160	55	35	46	17	2	4	1	-	-	153	7
White-----	150	51	32	44	16	2	4	1	-	-	143	7
Nonwhite--	10	4	3	2	1	-	-	-	-	-	10	-
SOUTH ATLANTIC-----	2,913	471	489	445	401	372	352	248	81	54	1,806	1,107
White-----	1,776	302	299	284	256	222	215	144	38	16	1,141	635
Nonwhite--	1,137	169	190	161	145	150	137	104	43	38	665	472
Deaths among single births-----	2,626	403	405	368	368	356	345	246	81	54	1,544	1,082
White-----	1,636	263	256	248	242	217	212	144	38	16	1,009	627
Nonwhite--	990	140	149	120	126	139	133	102	43	38	535	455
Deaths among births in plural sets-----	287	68	84	77	33	16	7	2	-	-	262	25
White-----	140	39	43	36	14	5	3	-	-	-	132	8
Nonwhite--	147	29	41	41	19	11	4	2	-	-	130	17
EAST SOUTH CENTRAL-----	1,739	238	270	238	253	223	258	161	51	47	999	740
White-----	1,131	166	192	167	177	141	159	86	25	18	702	429
Nonwhite--	608	72	78	71	76	82	99	75	26	29	297	311
Deaths among single births-----	1,549	174	229	194	226	214	256	159	50	47	823	726
White-----	1,019	125	164	146	160	138	158	85	25	18	595	424
Nonwhite--	530	49	65	48	66	76	98	74	25	29	228	302
Deaths among births in plural sets-----	190	64	41	44	27	9	2	2	1	-	176	14
White-----	112	41	28	21	17	3	1	1	-	-	107	5
Nonwhite--	78	23	13	23	10	6	1	1	-	-	69	9

<sup>1</sup>Excludes data for Massachusetts.

## VITAL STATISTICS--SPECIAL REPORTS

TABLE 7. DEATHS UNDER 28 DAYS BY BIRTH WEIGHT, RACE, AND PLURALITY OF BIRTH: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950--Continued

(By place of residence at birth. Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed)

AREA, RACE, AND PLURALITY	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
WEST SOUTH CENTRAL-----	1,783	264	302	256	258	184	247	164	65	43	1,080	703
White-----	1,325	206	227	191	194	139	182	111	44	31	818	507
Nonwhite--	458	58	75	65	64	45	65	53	21	12	262	196
Deaths among single births-----	1,587	216	226	218	233	182	240	164	65	43	893	694
White-----	1,170	162	164	164	176	139	179	111	44	31	666	504
Nonwhite--	417	54	62	54	57	43	61	53	21	12	227	190
Deaths among births in plural sets-----	196	48	76	38	25	2	7	-	-	-	187	9
White-----	155	44	63	27	18	-	3	-	-	-	152	3
Nonwhite--	41	4	13	11	7	2	4	-	-	-	35	6
MOUNTAIN-----	796	164	140	132	113	99	88	39	18	3	549	247
White-----	733	157	132	119	102	90	80	32	18	3	510	223
Nonwhite--	63	7	8	13	11	9	8	7	-	-	39	24
Deaths among single births-----	718	125	117	120	111	99	86	39	18	3	473	245
White-----	662	120	112	109	100	90	78	32	18	3	441	221
Nonwhite--	56	5	5	11	11	9	8	7	-	-	32	24
Deaths among births in plural sets-----	78	39	23	12	2	-	2	-	-	-	76	2
White-----	71	37	20	10	2	-	2	-	-	-	69	2
Nonwhite--	7	2	3	2	-	-	-	-	-	-	7	-
PACIFIC-----	1,540	356	313	241	199	157	165	73	23	13	1,109	431
White-----	1,404	320	280	223	186	143	152	67	22	11	1,009	395
Nonwhite--	136	36	33	18	13	14	13	6	1	2	100	36
Deaths among single births-----	1,404	308	268	218	188	150	165	71	23	13	982	422
White-----	1,279	278	236	203	176	136	152	65	22	11	893	386
Nonwhite--	125	30	32	15	12	14	13	6	1	2	89	36
Deaths among births in plural sets-----	136	48	45	23	11	7	-	2	-	-	127	9
White-----	125	42	44	20	10	7	-	2	-	-	116	9
Nonwhite--	11	6	1	3	1	-	-	-	-	-	11	-

TABLE 8. NEONATAL MORTALITY RATES BY BIRTH WEIGHT, RACE, AND PLURALITY OF BIRTH: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950

(By place of residence at birth. Based on deaths under 28 days among children born Jan. 1 to Mar. 31, 1950. Rates per 1,000 live births in each specified group. Birth weights not stated are distributed. Two dots (..) indicate rate not computed where the number of deaths is less than 10)

AREA, RACE, AND PLURALITY	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
UNITED STATES <sup>1</sup> -----	20.0	871.7	551.3	211.0	50.4	12.6	6.7	5.6	7.5	14.2	173.7	7.8
White-----	18.9	883.3	562.1	214.6	50.6	12.0	6.2	4.9	6.7	12.0	175.8	7.1
Nonwhite--	26.7	821.4	507.0	195.7	49.5	15.4	9.7	10.5	12.5	20.2	164.7	11.9
Deaths among single births-----	18.3	871.7	562.3	228.9	52.8	12.6	6.7	5.6	7.4	14.2	173.4	7.7
White-----	17.3	880.2	575.0	238.4	53.5	12.2	6.2	4.9	6.7	12.1	176.7	7.1
Nonwhite--	24.4	835.2	511.0	190.0	50.0	15.1	9.5	10.4	12.3	20.3	159.5	11.7
Deaths among births in plural sets-----	98.6	871.5	503.7	145.4	32.9	11.3	10.4	..	..	0	175.6	11.8
White-----	94.4	898.0	507.1	129.5	30.2	8.5	8.0	..	..	0	171.0	9.0
Nonwhite--	118.0	754.0	489.0	218.4	45.6	25.8	..	..	..	0	196.9	25.3
NEW ENGLAND <sup>1</sup> -----	20.1	920.4	646.6	238.1	41.8	14.2	7.5	5.2	8.1	..	177.7	8.4
White-----	19.8	925.2	657.1	241.1	41.7	14.3	7.7	5.1	8.2	..	176.6	8.4
Nonwhite--	35.6	..	..	..	..	..	0	0	0	..	202.7	..
Deaths among single births-----	18.9	916.7	673.1	265.8	43.1	14.7	7.5	5.0	8.1	..	180.9	8.4
White-----	18.7	914.9	688.2	267.6	42.9	14.8	7.7	5.0	8.2	..	180.6	8.4
Nonwhite--	30.9	..	..	..	..	..	0	0	0	..	187.5	..
Deaths among births in plural sets-----	80.5	941.2	..	152.8	..	0	0	..	0	..	157.9	..
White-----	77.1	1,000.0	..	159.4	..	0	0	..	0	..	151.4	..
Nonwhite--	..	..	..	0	0	0	0	..	..	..	..	0
MIDDLE ATLANTIC-----	18.9	913.1	522.9	179.4	40.0	9.7	6.3	5.2	7.2	11.9	160.2	6.9
White-----	17.8	918.1	523.1	189.5	40.2	9.7	6.0	4.7	6.5	11.0	160.3	6.5
Nonwhite--	29.9	891.2	521.7	120.6	38.9	10.2	8.8	12.3	21.7	..	158.8	10.6
Deaths among single births-----	17.3	913.6	536.8	197.4	41.7	9.8	6.3	5.2	7.2	11.9	158.5	6.9
White-----	16.2	915.6	536.8	211.9	41.5	9.7	6.0	4.7	6.5	11.0	158.7	6.5
Nonwhite--	28.7	905.8	536.8	115.5	42.6	10.2	8.9	12.3	21.7	..	164.2	10.6
Deaths among births in plural sets-----	91.9	910.6	469.3	116.9	26.8	..	..	0	0	..	164.6	7.0
White-----	93.8	929.8	471.7	113.3	30.1	..	..	0	0	..	169.7	..
Nonwhite--	76.2	..	..	..	0	..	0	0	0	..	125.0	..

<sup>1</sup>Excludes data for Massachusetts.

TABLE 8. NEONATAL MORTALITY RATES BY BIRTH WEIGHT, RACE, AND PLURALITY OF BIRTH: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 188)

AREA, RACE, AND PLURALITY	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
EAST NORTH CENTRAL-----	18.2	912.5	545.2	189.8	39.6	11.4	5.6	4.9	9.2	12.5	170.2	7.0
White-----	17.7	914.9	560.3	195.4	42.6	11.3	5.6	4.8	9.1	11.2	174.8	6.8
Nonwhite--	24.2	897.4	431.2	165.1	19.9	12.3	5.9	6.9	..	..	140.7	8.8
Deaths among single births-----	16.7	908.4	555.6	209.3	42.0	11.4	5.7	4.9	9.0	12.5	169.4	6.9
White-----	16.2	910.3	569.1	214.5	45.5	11.3	5.6	4.8	8.9	11.2	174.4	6.8
Nonwhite--	22.4	896.9	455.6	177.7	20.0	12.3	6.0	6.9	..	..	137.9	8.7
Deaths among births in plural sets-----	95.4	930.4	500.0	112.1	22.6	12.4	..	..	..	..	175.2	11.0
White-----	94.6	934.8	522.6	113.7	23.0	12.6	..	..	..	..	176.9	10.5
Nonwhite--	103.2	900.0	..	..	..	..	0	0	..	..	161.3	..
WEST NORTH CENTRAL-----	19.2	881.5	591.4	242.2	53.3	13.5	6.3	5.6	5.9	14.8	193.1	7.5
White-----	19.0	888.9	601.0	245.4	54.3	14.2	6.2	5.5	5.9	13.6	195.5	7.4
Nonwhite--	23.6	800.0	440.0	184.6	..	..	8.2	..	..	..	160.9	8.3
Deaths among single births-----	17.5	880.4	611.4	259.4	54.2	13.9	6.2	5.6	5.9	14.8	191.0	7.4
White-----	17.4	890.9	626.1	262.3	55.3	14.6	6.1	5.4	5.9	13.6	195.6	7.4
Nonwhite--	21.3	789.2	..	217.4	..	..	8.3	..	..	..	154.9	8.4
Deaths among births in plural sets-----	107.3	887.1	493.0	190.9	45.9	..	..	..	0	..	205.6	..
White-----	107.4	879.3	477.6	198.2	46.2	..	..	..	0	..	206.3	..
Nonwhite--	106.4	..	..	..	..	0	0	0	0	..	196.1	0
SOUTH ATLANTIC-----	22.0	799.7	526.9	218.9	57.3	15.4	7.3	7.0	7.6	14.1	171.2	9.1
White-----	19.3	805.3	539.7	218.8	55.5	13.3	6.3	5.8	5.3	8.3	166.8	7.5
Nonwhite--	27.8	789.7	508.0	219.0	60.7	20.3	9.9	9.9	12.2	19.8	179.1	12.7
Deaths among single births-----	20.2	809.2	526.7	229.3	59.1	15.3	7.2	7.0	7.6	14.1	169.7	9.0
White-----	18.2	809.2	547.0	246.3	59.1	13.4	6.2	5.8	5.3	8.4	171.2	7.5
Nonwhite--	24.8	809.2	495.0	200.7	59.1	19.5	9.8	9.7	12.3	19.8	167.0	12.4
Deaths among births in plural sets-----	103.7	747.3	528.3	179.9	42.5	19.9	..	..	0	0	180.1	19.1
White-----	78.8	780.0	500.0	123.7	27.0	..	..	0	0	0	139.5	..
Nonwhite--	148.3	707.3	561.6	299.3	73.6	41.2	..	..	0	0	255.4	35.3
EAST SOUTH CENTRAL-----	22.9	820.7	534.7	231.7	68.7	18.1	9.8	7.5	7.0	14.8	181.5	10.5
White-----	21.4	838.4	564.7	241.3	75.8	17.2	8.5	5.5	4.9	10.6	196.9	8.7
Nonwhite--	26.1	782.6	472.7	211.9	56.4	20.0	12.8	12.7	11.8	19.8	153.1	14.5
Deaths among single births-----	20.8	816.9	564.0	250.0	70.8	18.1	9.8	7.4	6.9	14.9	179.4	10.4
White-----	19.7	838.9	587.8	281.9	80.1	17.4	8.5	5.5	4.9	10.6	202.2	8.7
Nonwhite--	23.3	765.6	511.8	185.0	55.2	19.3	12.9	12.6	11.4	19.8	138.7	14.3
Deaths among births in plural sets-----	111.8	831.2	434.1	175.3	55.0	..	..	..	0	0	191.7	17.9
White-----	103.2	836.7	459.0	120.7	50.3	..	..	..	0	0	172.0	..
Nonwhite--	126.8	821.4	342.1	298.7	65.4	..	..	..	0	0	233.1	..
WEST SOUTH CENTRAL-----	20.0	743.7	548.1	230.2	62.0	12.1	7.8	6.4	8.5	17.4	174.8	8.5
White-----	18.8	763.0	549.6	236.4	62.7	11.9	7.0	5.4	7.1	18.7	178.5	7.7
Nonwhite--	24.8	682.4	543.5	215.8	59.9	12.8	10.8	10.6	13.8	14.6	164.2	11.6
Deaths among single births-----	18.2	742.3	531.8	243.0	65.4	12.4	7.6	6.4	8.5	17.4	172.6	8.5
White-----	16.9	750.0	534.2	248.1	66.0	12.3	7.0	5.4	7.1	18.7	172.9	7.7
Nonwhite--	23.2	720.0	525.4	228.8	63.8	12.7	10.3	10.7	13.9	14.6	171.7	11.4
Deaths among births in plural sets-----	105.3	750.0	603.2	176.7	41.6	..	..	0	0	0	185.9	..
White-----	112.6	814.8	594.3	183.7	42.4	0	..	0	0	0	207.7	..
Nonwhite--	84.7	..	650.0	161.8	..	..	..	0	0	0	127.7	..
MOUNTAIN-----	23.7	921.3	566.8	241.3	53.9	13.4	6.7	4.9	10.2	..	178.8	8.1
White-----	23.0	918.1	564.1	232.4	51.8	12.9	6.4	4.2	10.8	..	176.7	7.7
Nonwhite--	35.1	..	..	371.4	85.9	..	..	..	0	0	213.1	14.9
Deaths among single births-----	21.8	919.1	596.9	272.7	59.1	13.7	6.6	4.9	10.2	..	178.6	8.1
White-----	21.3	916.0	592.6	262.7	56.7	13.3	6.3	4.2	10.8	..	176.5	7.7
Nonwhite--	31.9	..	..	440.0	97.3	..	..	..	0	0	213.3	15.0
Deaths among births in plural sets-----	107.9	928.6	451.0	112.1	..	0	..	0	0	0	180.5	..
White-----	104.1	925.0	444.4	103.1	..	0	..	0	0	0	177.8	..
Nonwhite--	..	..	..	..	0	0	0	0	0	0	..	0
PACIFIC-----	19.0	915.2	612.5	211.0	49.5	10.5	5.2	3.4	4.0	12.4	182.8	5.8
White-----	18.6	919.5	610.0	213.6	51.1	10.5	5.2	3.3	4.0	10.9	183.9	5.7
Nonwhite--	23.8	878.0	634.6	183.7	33.6	9.8	5.6	..	..	..	173.0	7.0
Deaths among single births-----	17.7	911.2	624.7	236.7	54.2	10.3	5.3	3.3	4.0	12.4	190.5	5.7
White-----	17.3	911.5	622.7	242.0	56.4	10.4	5.2	3.2	4.0	10.9	192.2	5.6
Nonwhite--	22.3	909.1	640.0	182.9	34.9	10.0	5.6	..	..	..	174.9	7.1
Deaths among births in plural sets-----	81.1	941.2	548.8	104.1	19.7	..	0	..	0	0	139.4	..
White-----	80.2	976.7	550.0	97.6	19.5	0	0	..	0	0	137.8	..
Nonwhite--	93.2	..	..	..	..	0	0	0	0	0	159.4	0

## VITAL STATISTICS—SPECIAL REPORTS

TABLE 9. DEATHS UNDER 28 DAYS BY BIRTH WEIGHT, AGE, AND RACE: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950  
(By place of residence at birth. Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed)

AREA, AGE, AND RACE	Total	BIRTH WEIGHT (IN GRAMS)								
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-4,500	4,501 or more	2,500 or less	2,501 or more
UNITED STATES <sup>1</sup> -----	16,741	3,424	2,801	2,403	2,078	1,912	3,875	248	10,706	6,035
Under 1 hour-----	1,691	598	218	165	153	146	379	34	1,132	559
1-23 hours-----	6,405	1,976	1,332	964	632	489	960	52	4,904	1,501
1 day-----	2,470	368	452	445	358	273	529	45	1,623	847
2 days-----	1,663	209	222	283	267	251	428	23	981	682
3-6 days-----	2,160	210	312	262	331	337	670	38	1,115	1,045
7-13 days-----	1,141	40	172	165	157	179	395	33	534	607
14-20 days-----	678	19	57	68	106	136	277	13	250	428
21-27 days-----	535	4	38	51	74	119	237	10	187	366
White-----	13,521	2,817	2,293	1,976	1,693	1,528	3,059	155	8,779	4,742
Under 1 hour-----	1,403	506	174	141	136	113	312	21	957	446
1-23 hours-----	5,252	1,628	1,108	813	503	403	772	25	4,052	1,200
1 day-----	2,040	303	372	378	312	228	420	27	1,365	675
2 days-----	1,388	170	180	250	239	196	337	16	839	549
3-6 days-----	1,686	159	266	200	254	261	522	24	879	807
7-13 days-----	854	33	129	119	119	129	302	23	400	454
14-20 days-----	494	14	38	43	71	107	211	10	166	328
21-27 days-----	404	4	26	32	59	91	183	9	121	283
Nonwhite-----	3,220	607	508	427	385	384	816	93	1,927	1,293
Under 1 hour-----	288	92	42	24	17	33	67	13	175	113
1-23 hours-----	1,153	348	224	151	129	86	188	27	852	301
1 day-----	430	65	80	67	46	45	109	18	258	172
2 days-----	275	39	42	33	28	35	91	7	142	133
3-6 days-----	474	51	46	62	77	76	148	14	236	238
7-13 days-----	287	7	43	46	38	50	93	10	134	153
14-20 days-----	184	5	19	25	35	51	66	3	84	100
21-27 days-----	129	-	12	19	15	28	54	1	46	83
NEW ENGLAND <sup>1</sup> -----	485	104	75	70	48	62	119	7	297	188
Under 1 hour-----	63	21	3	8	2	8	17	4	34	29
1-23 hours-----	163	58	34	26	12	8	24	1	130	33
1 day-----	72	11	14	13	7	9	18	-	45	27
2 days-----	68	7	10	16	9	9	16	1	42	26
3-6 days-----	58	5	8	4	5	15	21	-	22	36
7-13 days-----	31	1	4	2	6	6	12	-	13	18
14-27 days-----	30	1	2	1	7	7	11	1	11	19
White-----	467	99	69	68	46	61	118	6	282	185
Under 1 hour-----	61	20	3	8	2	8	17	3	33	28
1-23 hours-----	156	55	31	25	12	8	24	1	123	33
1 day-----	69	11	12	13	7	8	18	-	43	26
2 days-----	66	7	9	15	9	9	16	1	40	26
3-6 days-----	55	4	8	4	4	15	20	-	20	35
7-13 days-----	31	1	4	2	6	6	12	-	13	18
14-27 days-----	29	1	2	1	6	7	11	1	10	19
Nonwhite-----	18	5	6	2	2	1	1	1	15	3
Under 1 hour-----	2	1	-	-	-	-	-	1	1	1
1-23 hours-----	7	3	3	1	-	-	-	-	7	-
1 day-----	3	-	2	-	-	1	-	-	2	1
2 days-----	2	-	1	1	-	-	-	-	2	-
3-6 days-----	3	1	-	-	1	-	1	-	2	1
7-13 days-----	-	-	-	-	-	-	-	-	-	-
14-27 days-----	1	-	-	-	1	-	-	-	1	-
MIDDLE ATLANTIC-----	2,836	725	456	365	318	292	638	22	1,884	952
Under 1 hour-----	321	136	43	36	15	26	57	8	230	91
1-23 hours-----	1,082	408	191	147	86	71	177	2	832	250
1 day-----	393	87	57	59	52	40	92	6	255	138
2 days-----	305	53	44	49	46	41	72	-	192	113
3-6 days-----	361	30	75	45	62	49	97	3	212	149
7-13 days-----	173	11	29	28	25	23	56	1	93	80
14-27 days-----	201	-	17	21	32	42	87	2	70	131

<sup>1</sup>Excludes data for Massachusetts.

TABLE 9. DEATHS UNDER 28 DAYS BY BIRTH WEIGHT, AGE, AND RACE: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950—Con.

(By place of residence at birth. Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed)

AREA, AGE, AND RACE	Total	BIRTH WEIGHT (IN GRAMS)								
		1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501- 3,000	3,001- 4,500	4,501 or more	2,500 or less	2,501 or more
<b>MIDDLE ATLANTIC--Continued</b>										
White-----	2,441	594	396	347	274	256	555	19	1,611	830
Under 1 hour-----	279	116	39	32	14	21	51	6	201	78
1-23 hours-----	917	333	167	133	71	62	149	2	704	213
1 day-----	342	69	48	56	47	35	82	5	220	122
2 days-----	266	41	38	47	40	37	63	-	166	100
3-6 days-----	317	24	66	41	51	45	87	3	182	135
7-13 days-----	147	11	22	22	22	19	50	1	77	70
14-27 days-----	173	-	16	16	29	37	73	2	61	112
Nonwhite-----	395	131	60	38	44	36	83	3	273	122
Under 1 hour-----	42	20	4	4	1	5	6	2	29	13
1-23 hours-----	165	75	24	14	15	9	28	-	128	37
1 day-----	51	18	9	3	5	5	10	1	35	16
2 days-----	39	12	6	2	6	4	9	-	26	13
3-6 days-----	44	6	9	4	11	4	10	-	30	14
7-13 days-----	26	-	7	6	3	4	6	-	16	10
14-27 days-----	28	-	1	5	3	5	14	-	9	19
<b>EAST NORTH CENTRAL</b>										
White-----	3,110	782	507	404	511	350	722	34	2,004	1,106
Under 1 hour-----	305	125	26	33	23	26	66	6	207	98
1-23 hours-----	1,278	490	263	144	85	89	201	6	982	296
1 day-----	456	68	82	94	60	50	96	6	304	152
2 days-----	326	48	45	54	46	42	89	2	193	133
3-6 days-----	366	44	53	45	46	61	110	7	188	178
7-13 days-----	182	6	25	22	27	32	69	1	80	102
14-27 days-----	197	1	13	12	24	50	91	6	50	147
Nonwhite-----	2,787	677	460	357	290	306	668	29	1,784	1,003
Under 1 hour-----	277	112	24	25	23	25	63	5	184	93
1-23 hours-----	1,157	431	245	134	78	77	187	5	888	269
1 day-----	403	59	70	82	57	40	90	5	268	135
2 days-----	289	38	38	52	45	38	76	2	173	116
3-6 days-----	325	32	50	38	42	54	103	6	162	163
7-13 days-----	162	4	23	17	22	31	64	1	66	96
14-27 days-----	174	1	10	9	23	41	85	5	43	131
Nonwhite-----	323	105	47	47	21	44	54	5	220	103
Under 1 hour-----	28	13	2	8	-	1	3	1	23	5
1-23 hours-----	121	59	18	10	7	12	14	1	94	27
1 day-----	53	9	12	12	3	10	6	1	36	17
2 days-----	37	10	7	2	1	4	13	-	20	17
3-6 days-----	41	12	3	7	4	7	7	1	26	15
7-13 days-----	20	2	2	5	5	1	5	-	14	6
14-27 days-----	23	-	3	3	1	9	6	1	7	16
<b>WEST NORTH CENTRAL</b>										
White-----	1,539	320	249	232	177	173	363	25	978	561
Under 1 hour-----	176	59	17	20	18	14	46	2	114	62
1-23 hours-----	606	176	137	96	48	55	88	6	457	149
1 day-----	240	29	43	41	39	27	53	8	152	88
2 days-----	140	26	10	20	24	20	38	2	80	60
3-6 days-----	192	23	23	32	25	26	59	4	103	89
7-13 days-----	94	3	15	17	9	16	32	2	44	50
14-27 days-----	91	4	4	6	14	15	47	1	28	63
Nonwhite-----	1,457	296	238	220	168	170	343	22	922	535
Under 1 hour-----	169	56	17	19	16	14	45	2	108	61
1-23 hours-----	567	159	130	94	43	54	84	3	426	141
1 day-----	233	29	41	39	39	27	50	8	148	85
2 days-----	135	25	10	19	24	20	35	2	78	57
3-6 days-----	186	22	23	31	25	26	55	4	101	85
7-13 days-----	85	3	14	13	9	15	29	2	39	46
14-27 days-----	82	2	3	5	12	14	45	1	22	60
Nonwhite-----	82	24	11	12	9	3	20	3	56	26
Under 1 hour-----	7	3	-	1	2	-	1	-	6	1
1-23 hours-----	39	17	7	2	5	1	4	3	31	8
1 day-----	7	-	2	2	-	-	3	-	4	3
2 days-----	5	1	-	1	-	-	3	-	2	3
3-6 days-----	6	1	-	1	-	-	4	-	2	4
7-13 days-----	9	-	1	4	-	1	3	-	5	4
14-27 days-----	9	2	1	1	2	1	2	-	6	3

TABLE 9. DEATHS UNDER 28 DAYS BY BIRTH WEIGHT, AGE, AND RACE: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950—Con.

(By place of residence at birth. Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed)

AREA, AGE, AND RACE	Total	BIRTH WEIGHT (IN GRAMS)								
		1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501- 3,000	3,001- 4,500	4,501 or more	2,500 or less	2,501 or more
SOUTH ATLANTIC-----	2,913	471	489	445	401	372	681	54	1,806	1,107
Under 1 hour-----	275	85	45	24	27	30	59	5	181	94
1-23 hours-----	1,089	262	219	198	133	101	161	15	812	277
1 day-----	442	66	77	70	77	50	93	9	290	152
2 days-----	264	18	38	46	42	39	73	8	144	120
3-6 days-----	377	30	48	49	57	63	121	9	184	193
7-13 days-----	230	4	42	36	32	39	71	6	114	116
14-27 days-----	236	6	20	22	33	50	103	2	81	155
White-----	1,776	302	299	284	256	222	397	16	1,141	635
Under 1 hour-----	173	51	29	24	20	15	34	-	124	49
1-23 hours-----	698	167	138	127	90	70	98	8	522	176
1 day-----	293	49	48	49	62	36	48	1	208	65
2 days-----	170	11	23	31	29	28	46	2	94	76
3-6 days-----	211	20	36	26	27	30	71	1	109	102
7-13 days-----	110	1	19	20	16	17	35	2	56	54
14-27 days-----	121	3	6	7	12	26	65	2	28	93
Nonwhite-----	1,137	169	190	161	145	150	284	38	665	472
Under 1 hour-----	102	34	16	-	7	15	25	5	57	45
1-23 hours-----	391	95	81	71	43	31	63	7	290	101
1 day-----	149	17	29	21	15	14	45	8	82	67
2 days-----	94	7	15	15	13	11	27	6	50	44
3-6 days-----	166	10	12	23	30	33	50	8	75	91
7-13 days-----	120	3	23	16	16	22	36	4	58	62
14-27 days-----	115	3	14	15	21	24	38	-	53	62
EAST SOUTH CENTRAL-----	1,739	238	270	238	253	223	470	47	999	740
Under 1 hour-----	146	35	20	13	19	15	38	6	87	59
1-23 hours-----	654	141	126	103	93	61	117	13	463	191
1 day-----	249	32	44	40	37	33	55	8	153	96
2 days-----	155	5	23	26	29	26	44	2	83	72
3-6 days-----	245	20	27	26	34	38	94	6	107	138
7-13 days-----	137	3	19	16	18	20	52	9	56	81
14-27 days-----	153	2	11	14	23	30	70	3	50	103
White-----	1,131	166	192	167	177	141	270	18	702	429
Under 1 hour-----	87	27	12	5	16	8	17	2	60	27
1-23 hours-----	442	97	87	79	61	44	72	2	324	118
1 day-----	175	21	37	30	31	19	33	4	119	56
2 days-----	113	4	18	22	23	15	30	1	67	46
3-6 days-----	144	12	18	13	21	23	53	4	64	80
7-13 days-----	85	3	15	10	10	12	30	5	38	47
14-27 days-----	85	2	5	8	15	20	35	-	30	55
Nonwhite-----	608	72	78	71	76	82	200	29	297	311
Under 1 hour-----	59	8	8	8	3	7	21	4	27	32
1-23 hours-----	212	44	39	24	32	17	45	11	139	73
1 day-----	74	11	7	10	6	14	22	4	34	40
2 days-----	42	1	5	4	6	11	14	1	16	26
3-6 days-----	101	8	9	13	13	15	41	2	43	58
7-13 days-----	52	-	4	6	8	8	22	4	18	34
14-27 days-----	68	-	6	6	8	10	35	3	20	48
WEST SOUTH CENTRAL-----	1,783	264	302	256	258	184	476	43	1,080	703
Under 1 hour-----	180	49	32	16	22	11	48	2	119	61
1-23 hours-----	558	139	129	76	76	44	89	5	420	138
1 day-----	264	29	59	53	35	19	62	7	176	88
2 days-----	167	17	21	29	27	17	51	5	94	73
3-6 days-----	271	17	28	34	48	37	100	7	127	144
7-13 days-----	158	6	17	20	24	24	56	11	67	91
14-27 days-----	185	7	16	28	26	32	70	6	77	108
White-----	1,325	206	227	191	194	139	337	31	818	507
Under 1 hour-----	146	42	25	14	19	7	39	2	100	48
1-23 hours-----	416	108	97	59	57	31	63	1	321	95
1 day-----	198	21	42	40	25	19	48	3	128	70
2 days-----	127	12	17	24	25	14	30	5	78	49
3-6 days-----	192	10	23	24	34	26	70	5	91	101
7-13 days-----	114	6	12	14	19	16	38	9	51	63
14-27 days-----	130	7	11	16	15	26	49	6	49	81

TABLE 9. DEATHS UNDER 28 DAYS BY BIRTH WEIGHT, AGE, AND RACE: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950—Con.

(By place of residence at birth. Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed)

AREA, AGE, AND RACE	Total	BIRTH WEIGHT (IN GRAMS)								
		1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501- 3,000	3,001- 4,500	4,501 or more	2,500 or less	2,501 or more
<b>WEST SOUTH CENTRAL--Continued</b>										
Nonwhite-----	458	58	75	65	64	45	139	12	262	196
Under 1 hour-----	32	7	7	2	3	4	9	-	19	13
1-23 hours-----	142	31	32	17	19	13	26	4	99	43
1 day-----	66	8	17	13	10	-	14	4	48	18
2 days-----	40	5	4	5	2	3	21	-	16	24
3-6 days-----	79	7	5	10	14	11	30	2	36	43
7-13 days-----	44	-	5	6	5	8	18	2	16	28
14-27 days-----	55	-	5	12	11	6	21	-	28	27
<b>MOUNTAIN-----</b>	<b>796</b>	<b>164</b>	<b>140</b>	<b>132</b>	<b>113</b>	<b>99</b>	<b>145</b>	<b>3</b>	<b>549</b>	<b>247</b>
Under 1 hour-----	84	31	6	6	15	5	20	1	58	26
1-23 hours-----	326	92	84	59	31	22	39	-	265	61
1 day-----	122	13	22	35	13	17	22	-	83	39
2 days-----	84	10	10	12	16	17	18	1	48	36
3-6 days-----	95	15	9	13	18	17	22	1	55	40
7-13 days-----	38	3	8	5	6	2	14	-	22	16
14-27 days-----	47	-	1	3	14	19	10	-	18	29
White-----	733	157	132	119	102	90	130	3	510	223
Under 1 hour-----	79	31	4	5	14	5	19	1	54	25
1-23 hours-----	303	89	79	55	26	20	34	-	249	54
1 day-----	112	13	22	31	11	17	18	-	77	35
2 days-----	80	10	10	10	16	15	18	1	46	34
3-6 days-----	87	13	9	12	17	15	20	1	51	36
7-13 days-----	32	1	7	3	6	2	13	-	17	15
14-27 days-----	40	-	1	3	12	16	8	-	16	24
Nonwhite-----	63	7	8	13	11	9	15	-	39	24
Under 1 hour-----	5	-	2	1	1	-	1	-	4	1
1-23 hours-----	23	3	5	3	5	2	5	-	16	7
1 day-----	10	-	-	4	2	-	4	-	6	4
2 days-----	4	-	-	2	-	-	-	-	2	2
3-6 days-----	8	2	-	1	1	2	2	-	4	4
7-13 days-----	6	2	1	2	-	-	1	-	5	1
14-27 days-----	7	-	-	-	2	3	2	-	2	5
<b>PACIFIC-----</b>	<b>1,540</b>	<b>356</b>	<b>313</b>	<b>241</b>	<b>199</b>	<b>157</b>	<b>261</b>	<b>13</b>	<b>1,109</b>	<b>431</b>
Under 1 hour-----	141	57	24	9	12	11	28	-	102	39
1-23 hours-----	649	210	149	116	68	38	64	4	543	106
1 day-----	232	33	54	40	38	28	38	1	165	67
2 days-----	154	25	21	31	28	20	27	2	105	49
3-6 days-----	195	26	41	14	36	31	46	1	117	78
7-13 days-----	98	3	13	19	10	17	33	3	45	53
14-27 days-----	71	2	11	12	7	12	25	2	32	39
White-----	1,404	320	280	223	186	143	241	11	1,009	395
Under 1 hour-----	130	51	21	9	12	10	27	-	93	37
1-23 hours-----	596	189	134	107	65	37	61	3	495	101
1 day-----	215	31	52	38	33	27	33	1	154	61
2 days-----	142	22	17	30	28	20	23	2	97	45
3-6 days-----	169	22	33	11	33	27	43	-	99	70
7-13 days-----	88	3	13	18	9	11	31	3	43	45
14-27 days-----	64	2	10	10	6	11	23	2	28	36
Nonwhite-----	136	36	33	18	13	14	20	2	100	36
Under 1 hour-----	11	6	3	-	-	1	1	-	9	2
1-23 hours-----	53	21	15	9	3	1	3	1	48	5
1 day-----	17	2	2	2	5	1	5	-	11	6
2 days-----	12	3	4	1	-	-	4	-	8	4
3-6 days-----	26	4	8	3	3	4	3	1	18	8
7-13 days-----	10	-	-	1	1	6	2	-	2	8
14-27 days-----	7	-	1	2	1	1	2	-	4	3



## VITAL STATISTICS—SPECIAL REPORTS

TABLE 10. MORTALITY RATES AT SPECIFIED AGES UNDER 28 DAYS BY BIRTH WEIGHT AND RACE: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950

(By place of residence at birth. Based on deaths under 28 days among children born Jan. 1 to Mar. 31, 1950. Rates per 1,000 children in each specified group alive at the beginning of each age interval. Birth weights not stated are distributed. Two dots (..) indicate rate not computed where the number of deaths is less than 10)

AREA, AGE, AND RACE	Total	BIRTH WEIGHT (IN GRAMS)								
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-4,500	4,501 or more	2,500 or less	2,501 or more
UNITED STATES <sup>1</sup> -----	20.0	871.7	551.3	211.0	50.4	12.6	6.4	14.2	173.7	7.8
Under 1 day-----	9.7	655.3	304.7	99.1	19.0	4.2	2.2	4.9	97.9	2.7
Under 1 hour-----	2.0	152.2	42.5	14.5	3.7	1.0	0.6	1.9	18.4	0.7
1-23 hours-----	7.7	593.4	273.8	85.9	15.4	3.2	1.6	3.0	81.1	1.9
1-6 days-----	7.6	581.2	279.1	96.5	23.6	5.6	2.7	6.1	66.9	3.3
1 day-----	3.0	271.8	127.9	43.4	8.8	1.8	0.9	2.6	29.2	1.1
2 days-----	2.0	212.0	72.1	28.8	6.7	1.5	0.7	1.3	18.2	0.9
3-6 days-----	2.6	270.3	109.1	27.5	8.3	2.2	1.1	2.2	21.0	1.4
7-13 days-----	1.4	70.5	67.5	17.8	4.0	1.2	0.7	1.9	10.3	0.8
14-20 days-----	0.8	36.1	24.0	7.5	2.7	0.9	0.5	0.8	4.9	0.6
21-27 days-----	0.6	..	16.4	5.6	1.9	0.8	0.4	0.6	3.3	0.5
White-----	18.9	883.3	562.1	214.6	50.6	12.0	5.8	12.0	175.8	7.1
Under 1 day-----	9.3	669.2	314.3	103.6	19.1	4.1	2.1	3.6	100.3	2.5
Under 1 hour-----	2.0	158.7	42.7	15.3	4.1	0.9	0.6	1.6	19.2	0.7
1-23 hours-----	7.3	606.8	283.7	89.7	15.1	3.2	1.5	1.9	82.7	1.8
1-6 days-----	7.2	599.1	292.5	100.3	24.5	5.4	2.4	5.2	68.6	3.1
1 day-----	2.9	287.2	133.0	45.8	9.5	1.8	0.8	2.1	30.4	1.0
2 days-----	2.0	226.1	74.2	31.8	7.4	1.6	0.6	1.3	19.3	0.8
3-6 days-----	2.4	273.2	118.5	26.2	7.9	2.1	1.0	1.9	20.6	1.2
7-13 days-----	1.2	78.0	65.2	16.0	3.7	1.0	0.6	1.8	9.6	0.7
14-20 days-----	0.7	35.9	20.5	5.9	2.2	0.9	0.4	0.8	4.0	0.5
21-27 days-----	0.6	..	14.3	4.4	1.9	0.7	0.3	..	2.9	0.4
Nonwhite-----	26.7	821.4	507.0	195.7	49.5	15.4	10.3	20.2	164.7	11.9
Under 1 day-----	11.9	595.4	265.5	80.2	18.8	4.8	3.2	8.7	87.8	3.8
Under 1 hour-----	2.4	124.5	41.9	11.0	2.2	1.3	0.8	2.8	15.0	1.0
1-23 hours-----	9.6	537.9	233.3	70.0	16.6	3.5	2.4	5.9	73.9	2.8
1-6 days-----	9.9	518.4	228.3	80.7	19.8	6.3	4.4	8.6	59.6	5.0
1 day-----	3.6	217.4	108.7	33.4	6.0	1.8	1.4	3.9	24.2	1.6
2 days-----	2.3	166.7	64.0	17.0	3.7	1.4	1.2	..	13.6	1.2
3-6 days-----	4.0	261.5	74.9	32.5	10.2	3.1	1.9	3.1	23.0	2.2
7-13 days-----	2.4	..	75.7	24.9	5.1	2.0	1.2	2.2	13.3	1.4
14-20 days-----	1.6	..	36.2	13.9	4.7	1.3	0.8	..	8.5	0.9
21-27 days-----	1.1	0	23.7	10.7	2.0	1.1	0.7	..	4.7	0.8
NEW ENGLAND <sup>1</sup> -----	20.1	920.4	646.6	238.1	41.8	14.2	6.7	..	177.7	8.4
Under 1 day-----	9.4	699.1	319.0	115.6	12.2	3.7	2.3	..	98.1	2.8
1-6 days-----	8.3	676.5	405.1	128.9	18.5	7.6	3.1	..	72.4	4.0
1 day-----	3.0	323.5	177.2	50.0	..	..	1.0	0	29.9	1.2
2 days-----	2.9	..	153.8	64.8	..	..	0.9	..	28.7	1.2
3-6 days-----	2.4	..	..	..	..	3.5	1.2	0	15.5	1.6
7-27 days-----	2.6	..	..	..	11.7	3.0	1.3	..	17.2	1.7
White-----	19.8	925.2	657.1	241.1	41.7	14.3	6.8	..	176.6	8.4
Under 1 day-----	9.2	700.9	323.8	117.0	12.7	3.8	2.3	..	97.7	2.8
1-6 days-----	8.1	687.5	408.5	128.5	18.4	7.5	3.1	..	71.5	4.0
1 day-----	2.9	343.8	169.0	52.2	..	..	1.0	0	29.8	1.2
2 days-----	2.8	..	..	63.6	..	..	0.9	..	28.6	1.2
3-6 days-----	2.4	..	..	..	..	3.6	1.2	0	14.7	1.6
7-27 days-----	2.6	..	..	..	11.2	3.1	1.3	..	17.2	1.7
Nonwhite-----	35.6	..	..	..	..	..	..	..	202.7	..
Under 1 day-----	..	..	..	..	0	0	0	..	..	..
1-6 days-----	..	..	..	..	..	..	..	0	..	..
1 day-----	..	0	..	0	0	..	0	0	..	..
2 days-----	..	0	..	..	0	..	0	0	..	0
3-6 days-----	..	..	0	0	..	0	..	0	..	..
7-27 days-----	..	0	0	0	..	0	0	0	..	0
MIDDLE ATLANTIC-----	18.9	913.1	522.9	179.4	40.0	9.7	6.0	11.9	160.2	6.9
Under 1 day-----	9.3	685.1	268.3	85.3	12.7	3.2	2.2	5.4	90.3	2.5
1-6 days-----	7.1	680.0	275.9	77.9	20.4	4.3	2.5	..	61.6	2.9
1 day-----	2.6	348.0	89.3	30.1	6.6	1.3	0.9	..	23.8	1.0
2 days-----	2.1	325.2	75.7	25.7	5.9	1.4	0.7	0	18.4	0.8
3-6 days-----	2.4	272.7	139.7	24.3	8.0	1.6	0.9	..	20.7	1.1
7-27 days-----	2.5	137.5	99.6	27.1	7.4	2.2	1.3	..	16.2	1.5

<sup>1</sup>Excludes data for Massachusetts.

TABLE 10. MORTALITY RATES AT SPECIFIED AGES UNDER 28 DAYS BY BIRTH WEIGHT AND RACE: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 194)

AREA, AGE, AND RACE	Total	BIRTH WEIGHT (IN GRAMS)								
		1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501- 3,000	3,001- 4,500	4,501 or more	2,500 or less	2,501 or more
MIDDLE ATLANTIC—Continued										
White-----	17.8	918.1	523.1	189.5	40.2	9.7	5.6	11.0	160.3	6.5
Under 1 day-----	8.7	694.0	272.1	90.1	12.5	3.1	2.0	..	90.0	2.3
1-6 days-----	6.8	676.8	275.9	86.4	20.5	4.4	2.4	..	62.1	2.8
1 day-----	2.5	348.5	87.1	33.6	7.0	1.3	0.8	..	24.1	1.0
2 days-----	2.0	317.8	75.5	29.2	6.0	1.4	0.6	0	18.6	0.8
3-6 days-----	2.3	272.7	141.9	26.2	7.7	1.7	0.9	..	20.8	1.1
7-27 days-----	2.4	171.9	95.2	25.0	7.7	2.1	1.2	..	16.1	1.4
Nonwhite-----	29.9	891.2	521.7	120.6	38.9	10.2	10.5	..	159.8	10.6
Under 1 day-----	15.7	646.3	243.5	57.1	14.1	4.0	4.3	..	91.9	4.3
1-6 days-----	10.3	692.3	275.9	..	19.7	3.7	3.7	..	58.7	3.8
1 day-----	3.9	346.2	..	..	..	..	1.3	..	22.6	1.4
2 days-----	3.0	352.9	..	..	..	..	..	0	17.2	1.1
3-6 days-----	3.4	..	..	..	10.0	..	1.3	0	20.1	1.2
7-27 days-----	4.2	0	..	38.2	..	..	2.6	0	17.1	2.5
EAST NORTH CENTRAL-----										
White-----	18.2	912.5	545.2	189.8	39.6	11.4	5.7	12.5	170.2	7.0
Under 1 day-----	9.3	717.6	310.8	83.1	13.7	3.8	2.1	4.4	101.0	2.5
1-6 days-----	6.8	661.2	280.8	98.9	19.6	5.0	2.4	5.5	64.7	2.9
1 day-----	2.7	281.0	127.9	48.2	7.7	1.6	0.8	..	28.7	1.0
2 days-----	1.9	275.9	80.5	29.1	6.0	1.4	0.7	..	18.8	0.8
3-6 days-----	2.2	349.2	103.1	24.9	6.0	2.0	0.9	..	18.6	1.1
7-27 days-----	2.3	..	82.4	19.3	6.7	2.7	1.3	..	13.1	1.6
Nonwhite-----	17.7	914.9	560.3	193.4	42.6	11.3	5.7	11.2	174.8	6.8
Under 1 day-----	9.1	733.8	327.6	86.1	14.9	3.8	2.1	3.9	105.0	2.5
1-6 days-----	6.5	654.8	286.2	102.0	21.5	4.9	2.3	5.0	66.0	2.8
1 day-----	2.6	299.5	126.8	48.6	8.5	1.5	0.8	..	29.3	0.9
2 days-----	1.9	275.4	78.8	32.4	6.8	1.4	0.6	..	19.5	0.8
3-6 days-----	2.1	320.0	112.6	24.5	6.4	2.0	0.9	..	18.6	1.1
7-27 days-----	2.2	..	83.8	17.2	6.9	2.7	1.3	..	12.8	1.6
Nonwhite-----	24.2	897.4	431.2	166.1	19.9	12.3	6.7	..	140.7	8.8
Under 1 day-----	11.2	615.4	183.5	63.6	..	3.6	2.1	..	74.8	2.7
1-6 days-----	9.9	688.9	247.2	79.2	..	5.9	3.2	..	56.7	4.2
1 day-----	4.0	..	134.8	45.3	..	2.8	..	..	24.9	1.4
2 days-----	2.8	277.8	..	..	..	..	1.6	0	14.2	1.5
3-6 days-----	3.1	461.5	..	..	..	..	..	..	18.7	1.3
7-27 days-----	3.3	..	..	..	..	2.8	1.4	..	15.4	1.9
WEST NORTH CENTRAL-----										
White-----	19.2	881.5	591.4	242.2	53.3	13.5	6.0	14.8	193.1	7.5
Under 1 day-----	9.8	647.4	365.8	121.1	19.9	5.4	2.2	..	112.8	2.8
1-6 days-----	7.2	609.4	284.6	110.5	27.0	5.7	2.5	8.3	74.6	3.2
1 day-----	3.0	226.6	161.0	48.7	12.0	2.1	0.9	..	33.8	1.2
2 days-----	1.8	262.6	44.6	25.0	7.5	1.6	0.6	..	18.4	0.8
3-6 days-----	2.4	315.1	107.5	41.0	7.8	2.1	1.0	..	24.2	1.2
7-27 days-----	2.3	..	99.5	30.7	7.3	2.5	1.3	..	17.3	1.5
Nonwhite-----	19.0	888.9	601.0	246.4	54.3	14.2	5.9	13.6	195.5	7.4
Under 1 day-----	9.6	645.6	371.2	126.5	19.1	5.7	2.2	..	113.2	2.8
1-6 days-----	7.3	644.1	297.2	114.1	29.0	6.1	2.4	8.7	78.2	3.2
1 day-----	3.1	245.8	164.7	50.0	13.0	2.3	0.9	..	35.4	1.2
2 days-----	1.8	280.9	48.1	25.6	8.0	1.7	0.6	..	19.3	0.8
3-6 days-----	2.5	243.8	116.2	42.9	8.4	2.2	0.9	..	25.5	1.2
7-27 days-----	2.2	..	97.1	26.0	7.1	2.5	1.3	..	15.8	1.5
Nonwhite-----	23.6	800.0	440.0	184.6	..	..	8.9	..	160.9	8.3
Under 1 day-----	13.2	666.7	..	..	..	..	..	..	106.3	..
1-6 days-----	5.2	..	..	..	0	0	4.5	0	..	3.2
1 day-----	..	0	..	..	0	0	..	0	..	..
2 days-----	..	..	0	..	0	0	..	0	..	..
3-6 days-----	..	..	0	..	0	0	..	0	..	..
7-27 days-----	5.3	..	..	..	..	..	..	0	36.3	..

## VITAL STATISTICS—SPECIAL REPORTS

TABLE 10. MORTALITY RATES AT SPECIFIED AGES UNDER 28 DAYS BY BIRTH WEIGHT AND RACE: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 194)

AREA, AGE, AND RACE	Total	BIRTH WEIGHT (IN GRAMS)								
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-4,500	4,501 or more	2,500 or less	2,501 or more
SOUTH ATLANTIC-----	22.0	799.7	526.9	218.9	57.3	15.4	7.2	14.1	171.2	9.1
Under 1 day-----	10.3	589.1	284.5	109.2	22.9	5.4	2.3	5.2	94.1	3.0
1-6 days-----	8.2	471.1	245.5	91.1	25.7	6.3	3.1	6.8	64.7	3.8
1 day-----	3.4	272.7	116.0	38.7	11.3	2.1	1.0	..	30.3	1.2
2 days-----	2.0	102.3	64.7	26.4	6.2	1.6	0.8	..	15.5	1.0
3-6 days-----	2.9	189.9	87.4	28.9	8.5	2.6	1.3	..	20.2	1.6
7-27 days-----	3.6	78.1	123.8	35.2	9.8	3.7	1.9	..	21.8	2.2
White-----	19.3	805.3	539.7	218.8	55.5	13.3	6.0	8.3	166.8	7.5
Under 1 day-----	9.5	581.3	301.4	116.3	23.8	5.1	2.0	..	94.4	2.6
1-6 days-----	7.4	509.6	276.5	92.4	26.2	5.6	2.5	..	66.4	3.1
1 day-----	3.2	312.1	124.0	42.7	13.8	2.2	0.7	..	33.6	1.0
2 days-----	1.9	101.9	67.8	28.2	6.5	1.7	0.7	..	15.7	0.9
3-6 days-----	2.3	206.2	113.9	24.4	6.1	1.8	1.1	..	18.5	1.2
7-27 days-----	2.6	..	89.3	25.9	6.4	2.6	1.5	..	14.5	1.7
Nonwhite-----	27.8	789.7	508.0	219.0	60.7	20.3	10.2	19.8	179.1	12.7
Under 1 day-----	12.1	602.8	259.4	96.6	20.9	6.2	3.2	6.2	93.5	3.9
1-6 days-----	10.1	400.0	202.2	88.9	24.8	7.9	4.4	11.5	61.5	5.5
1 day-----	3.7	200.0	104.7	31.6	6.4	1.9	1.6	..	24.4	1.8
2 days-----	2.3	..	60.5	23.3	5.6	1.5	1.0	..	15.2	1.2
3-6 days-----	4.1	163.9	51.5	36.6	13.0	4.5	1.8	..	23.2	2.5
7-27 days-----	5.9	..	167.4	51.2	16.2	6.3	2.7	..	35.1	3.4
EAST SOUTH CENTRAL-----	22.9	820.7	534.7	231.7	68.7	18.1	8.5	14.8	181.5	10.5
Under 1 day-----	10.5	806.9	289.1	113.0	30.4	6.2	2.8	6.0	99.9	3.5
1-6 days-----	8.6	500.0	261.8	101.0	28.0	7.9	3.5	5.1	69.2	4.4
1 day-----	3.3	280.7	122.6	43.9	10.4	2.7	1.0	..	30.9	1.4
2 days-----	2.1	..	73.0	29.9	8.2	2.1	0.8	..	17.3	1.0
3-6 days-----	3.3	259.7	92.5	30.8	9.7	3.1	1.7	..	22.7	2.0
7-27 days-----	3.9	..	113.2	36.6	11.8	4.1	2.2	3.8	23.0	2.6
White-----	21.4	838.4	564.7	241.3	75.8	17.2	6.9	10.6	196.9	8.7
Under 1 day-----	10.0	626.3	291.2	121.4	33.0	6.3	2.3	..	107.7	2.9
1-6 days-----	8.3	500.0	302.9	106.9	33.2	7.0	3.0	..	78.6	3.7
1 day-----	3.3	283.8	153.5	49.3	13.7	2.3	0.8	..	37.4	1.1
2 days-----	2.2	..	88.2	38.1	10.3	1.8	0.8	..	21.9	0.9
3-6 days-----	2.8	244.9	96.8	23.4	9.5	2.8	1.4	..	21.4	1.6
7-27 days-----	3.3	..	119.0	33.1	11.5	4.0	1.7	..	23.2	2.1
Nonwhite-----	26.1	782.6	472.7	211.9	56.4	20.0	12.7	19.8	153.1	14.5
Under 1 day-----	11.6	565.2	284.8	95.5	26.0	5.8	4.2	10.2	85.6	4.9
1-6 days-----	9.4	500.0	178.0	89.1	19.0	9.8	4.9	..	52.4	5.8
1 day-----	3.2	275.0	..	33.0	..	3.4	1.4	..	19.2	1.9
2 days-----	1.8	..	..	..	..	2.7	0.9	..	9.2	1.2
3-6 days-----	4.4	..	..	45.0	10.0	3.7	2.6	..	24.9	2.7
7-27 days-----	5.3	0	103.1	43.5	12.4	4.4	3.6	..	22.6	3.9
WEST SOUTH CENTRAL-----	20.0	743.7	548.1	230.2	62.0	12.1	7.3	17.4	174.8	8.5
Under 1 day-----	8.3	529.6	292.2	82.7	23.6	3.6	2.1	..	87.2	2.4
1-6 days-----	7.9	377.2	276.9	113.7	27.1	4.8	3.3	7.7	70.4	3.7
1 day-----	3.0	173.7	151.3	52.0	8.6	1.3	1.0	..	31.2	1.1
2 days-----	1.9	123.2	63.4	30.0	6.7	1.1	0.8	..	17.2	0.9
3-6 days-----	3.1	140.5	90.3	36.2	12.0	2.4	1.5	..	23.6	1.7
7-27 days-----	3.9	125.0	117.0	53.1	12.6	3.7	1.9	6.9	27.5	2.4
White-----	18.8	763.0	549.6	236.4	62.7	11.9	6.4	18.7	178.5	7.7
Under 1 day-----	8.0	555.6	295.4	90.3	24.6	3.2	1.9	..	91.9	2.2
1-6 days-----	7.4	358.3	281.8	119.7	27.9	5.1	2.8	7.9	71.4	3.3
1 day-----	2.8	175.0	144.3	54.4	8.3	1.6	0.9	..	30.8	1.1
2 days-----	1.8	121.2	68.3	34.5	8.4	1.2	0.6	..	19.3	0.7
3-6 days-----	2.8	114.9	99.1	35.8	11.5	2.2	1.3	..	23.0	1.5
7-27 days-----	3.5	168.8	110.0	46.4	11.6	3.6	1.7	9.2	25.9	2.2

TABLE 10. MORTALITY RATES AT SPECIFIED AGES UNDER 28 DAYS BY BIRTH WEIGHT AND RACE: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 194)

AREA, AGE, AND RACE	Total	BIRTH WEIGHT (IN GRAMS)								
		1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501- 3,000	3,001- 4,500	4,501 or more	2,500 or less	2,501 or more
WEST SOUTH CENTRAL—Continued										
Nonwhite-----	24.8	682.4	543.5	213.8	59.9	12.8	11.1	14.6	164.2	11.6
Under 1 day-----	9.4	447.1	282.6	62.5	20.6	4.9	2.8	..	73.9	3.3
1-6 days-----	10.1	425.5	262.6	98.2	24.8	4.0	5.2	..	67.7	5.1
1 day-----	3.6	..	171.7	45.6	9.6	0	1.1	..	32.5	1.1
2 days-----	2.2	..	..	..	..	..	1.7	0	11.2	1.4
3-6 days-----	4.4	..	..	37.5	13.5	3.2	2.4	..	25.5	2.6
7-27 days-----	5.5	0	137.0	70.0	15.7	4.0	3.1	..	31.9	3.3
MOUNTAIN-----	23.7	921.3	566.8	241.3	53.9	13.4	6.4	..	178.8	8.1
Under 1 day-----	12.2	691.0	364.4	117.0	21.9	3.6	2.6	..	105.2	2.8
1-6 days-----	9.1	690.9	261.1	124.2	22.9	6.9	2.7	..	67.7	3.8
1 day-----	3.7	236.4	140.1	72.5	6.3	2.3	1.0	0	30.2	1.3
2 days-----	2.5	238.1	74.1	26.8	7.8	2.3	0.8	..	18.0	1.2
3-6 days-----	2.9	468.8	..	29.8	8.9	2.3	1.0	..	21.0	1.3
7-27 days-----	2.6	..	..	..	10.0	2.9	1.1	0	15.6	1.5
White-----	23.0	918.1	564.1	232.4	51.8	12.9	6.0	..	176.7	7.7
Under 1 day-----	12.0	701.8	354.7	117.2	20.3	3.6	2.4	..	105.0	2.7
1-6 days-----	8.9	705.9	271.5	117.3	22.8	6.8	2.6	..	67.3	3.6
1 day-----	3.6	254.9	145.7	68.6	5.7	2.4	0.8	0	29.8	1.2
2 days-----	2.6	263.2	77.5	23.8	8.3	2.2	0.8	..	18.3	1.2
3-6 days-----	2.8	464.3	..	29.2	8.9	2.2	0.9	..	20.7	1.3
7-27 days-----	2.3	..	..	..	9.5	2.6	1.0	0	13.7	1.4
Nonwhite-----	35.1	..	..	371.4	85.9	..	13.1	0	213.1	14.9
Under 1 day-----	15.6	..	..	..	..	..	..	0	109.3	..
1-6 days-----	12.4	..	0	..	..	..	..	0	73.6	6.2
1 day-----	5.7	0	0	..	..	0	..	0	..	..
2 days-----	..	0	0	..	0	..	0	0	..	..
3-6 days-----	..	..	0	..	..	..	..	0	..	..
7-27 days-----	7.4	..	..	..	..	..	..	0	..	..
PACIFIC-----	19.0	915.2	612.5	211.0	49.5	10.5	4.4	12.4	182.8	5.8
Under 1 day-----	9.8	686.4	338.6	109.5	19.9	3.3	1.6	..	106.3	1.9
1-6 days-----	7.2	688.5	343.2	83.6	25.9	5.3	1.9	..	71.4	2.6
1 day-----	2.9	270.5	159.8	39.3	9.6	1.9	0.6	..	30.4	0.9
2 days-----	1.9	280.9	73.9	31.7	7.2	1.3	0.5	..	20.0	0.7
3-6 days-----	2.4	406.3	155.9	14.8	9.3	2.1	0.8	..	22.7	1.0
7-27 days-----	2.1	..	108.1	33.3	4.4	1.9	1.0	..	15.3	1.2
White-----	18.6	919.5	610.0	213.6	51.1	10.5	4.4	10.9	183.9	5.7
Under 1 day-----	9.6	689.7	337.7	111.1	21.2	3.5	1.6	..	107.1	2.0
1-6 days-----	7.1	694.4	335.5	85.1	26.4	5.5	1.8	..	71.4	2.5
1 day-----	2.9	287.0	171.1	40.9	9.3	2.0	0.6	..	31.4	0.9
2 days-----	1.9	285.7	67.5	33.7	7.9	1.5	0.4	..	20.4	0.6
3-6 days-----	2.3	400.0	140.4	12.8	9.4	2.0	0.8	0	21.3	1.0
7-27 days-----	2.1	..	113.9	33.0	4.3	1.6	1.0	..	15.6	1.2
Nonwhite-----	23.8	878.0	634.6	183.7	33.6	9.8	5.4	..	173.0	7.0
Under 1 day-----	11.2	658.5	346.2	..	..	..	..	..	98.6	..
1-6 days-----	9.7	..	411.8	..	..	..	3.3	..	71.0	3.5
1 day-----	3.0	..	..	..	..	..	..	0	21.1	..
2 days-----	2.1	..	..	..	0	0	..	0	..	..
3-6 days-----	4.6	..	..	..	..	..	..	..	35.9	..
7-27 days-----	3.0	0	..	..	..	..	..	0	..	2.1

TABLE 11. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT AND RACE

(By place of residence at birth. Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated)

AREA AND CAUSE OF DEATH	ALL RACES							
	Total		Birth weight (in grams)					
	Tabu- lated	Ad- justed <sup>1</sup>	1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,500 or less	2,501 or more
1 UNITED STATES <sup>2 3</sup> -----All causes	16,741	16,741	3,424	2,801	2,403	2,078	10,706	6,035
2 Congenital malformations-----750-759	2,127	2,125	30	107	208	359	704	1,421
3 Certain diseases of early infancy-----760-776	13,308	13,368	3,365	2,654	2,129	1,540	9,688	3,680
4 Birth injuries-----760,761	2,712	2,752	479	350	329	277	1,435	1,317
5 Intracranial and spinal injury-----760	1,183	1,211	56	71	124	150	401	81.0
6 Other birth injury-----761	1,529	1,541	423	279	205	127	1,034	507
7 Postnatal asphyxia and atelectasis-----762	2,983	3,003	476	493	586	514	2,069	934
8 Pneumonia of newborn-----763	708	714	13	69	89	106	277	437
9 Diarrhea of newborn-----764	143	151	-	10	27	24	61	90
10 Other infections of newborn-----765-768	63	57	1	3	12	8	24	33
11 Neonatal disorders arising from maternal toxemia-----769	292	281	57	57	61	40	215	66
12 Hemolytic disease of newborn (erythroblastosis)-----770	530	543	17	32	55	89	193	350
13 Hemorrhagic disease of newborn-----771	202	216	13	14	27	41	95	121
14 Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	672	666	182	148	100	84	514	152
15 Immaturity with mention of any other subsidiary condition-----774	193	199	37	53	60	28	178	21
16 Immaturity unqualified-----776	4,810	4,786	2,090	1,425	783	329	4,627	159
17 All other causes-----Residual	1,306	1,248	29	40	66	179	314	934
18 NEW ENGLAND <sup>3</sup> -----All causes	485	485	104	75	70	48	297	188
19 Congenital malformations-----750-759	77	77	3	3	12	4	22	55
20 Certain diseases of early infancy-----760-776	381	382	101	71	55	40	267	115
21 Birth injuries-----760,761	85	86	9	15	12	10	46	40
22 Intracranial and spinal injury-----760	31	32	-	-	5	9	14	18
23 Other birth injury-----761	54	54	9	15	7	1	32	22
24 Postnatal asphyxia and atelectasis-----762	107	108	15	20	21	19	75	33
25 Pneumonia of newborn-----763	17	17	-	-	-	2	2	15
26 Diarrhea of newborn-----764	4	4	-	-	-	3	3	1
27 Other infections of newborn-----765-768	1	1	-	-	-	-	-	1
28 Neonatal disorders arising from maternal toxemia-----769	8	8	3	3	1	-	7	1
29 Hemolytic disease of newborn (erythroblastosis)-----770	17	17	-	-	1	1	2	15
30 Hemorrhagic disease of newborn-----771	6	6	4	-	-	-	4	2
31 Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	12	12	4	-	3	1	8	4
32 Immaturity with mention of any other subsidiary condition-----774	8	8	6	1	1	-	8	-
33 Immaturity unqualified-----776	116	115	60	32	16	4	112	3
34 All other causes-----Residual	27	26	-	1	3	4	8	18
35 MIDDLE ATLANTIC-----All causes	2,836	2,836	725	456	385	318	1,884	952
36 Congenital malformations-----750-759	405	399	5	24	39	67	135	264
37 Certain diseases of early infancy-----760-776	2,317	2,328	717	427	340	239	1,723	605
38 Birth injuries-----760,761	486	495	107	65	49	42	263	232
39 Intracranial and spinal injury-----760	228	233	10	21	20	24	75	158
40 Other birth injury-----761	258	262	97	44	29	18	188	74
41 Postnatal asphyxia and atelectasis-----762	557	557	103	95	116	81	395	162
42 Pneumonia of newborn-----763	117	116	3	8	12	21	44	72
43 Diarrhea of newborn-----764	26	26	-	-	5	1	6	20
44 Other infections of newborn-----765-768	7	7	-	1	3	2	6	1
45 Neonatal disorders arising from maternal toxemia-----769	24	23	2	4	5	5	16	7
46 Hemolytic disease of newborn (erythroblastosis)-----770	111	111	3	8	16	17	44	67
47 Hemorrhagic disease of newborn-----771	35	35	2	4	2	9	17	18
48 Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	100	102	40	25	16	14	95	7
49 Immaturity with mention of any other subsidiary condition-----774	29	30	5	7	7	10	29	1
50 Immaturity unqualified-----776	825	825	452	210	109	37	808	18
51 All other causes-----Residual	114	109	3	5	6	12	26	83
52 EAST NORTH CENTRAL-----All causes	3,110	3,110	782	507	404	311	2,004	1,106
53 Congenital malformations-----750-759	453	450	8	21	46	59	134	316
54 Certain diseases of early infancy-----760-776	2,506	2,516	771	483	355	231	1,840	676
55 Birth injuries-----760,761	514	525	118	73	59	40	290	235
56 Intracranial and spinal injury-----760	221	228	21	18	25	22	86	142
57 Other birth injury-----761	293	297	97	55	34	18	204	93
58 Postnatal asphyxia and atelectasis-----762	660	662	146	106	121	92	465	197
59 Pneumonia of newborn-----763	111	110	1	16	15	14	46	64
60 Diarrhea of newborn-----764	34	34	-	2	8	4	14	20
61 Other infections of newborn-----765-768	16	16	-	-	2	1	3	13
62 Neonatal disorders arising from maternal toxemia-----769	45	47	15	6	10	9	40	7

See footnotes on p. 202.

UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950

are distributed. Numbers after causes of death are category numbers of the Sixth Revision of the International Lists, 1948)

WHITE								NONWHITE								
Total		Birth weight (in grams)						Total		Birth weight (in grams)						
Tabu- lated	Ad- justed <sup>1</sup>	1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,500 or less	2,501 or more	Tabu- lated	Ad- justed <sup>1</sup>	1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,500 or less	2,501 or more	
13,521	13,521	2,817	2,295	1,976	1,695	8,779	4,742	3,220	3,220	607	508	427	385	1,927	1,293	1
1,930	1,924	29	93	197	325	644	1,280	197	201	1	14	11	34	60	141	2
10,785	10,829	2,772	2,179	1,743	1,255	7,949	2,880	2,525	2,539	593	475	386	285	1,739	800	3
2,327	2,356	437	317	295	242	1,291	1,065	385	396	42	33	34	35	144	252	4
969	989	39	56	108	128	331	658	214	222	17	15	16	22	70	152	5
1,358	1,367	398	261	187	114	960	407	171	174	25	18	18	13	74	100	6
2,504	2,507	360	401	520	460	1,741	766	479	496	116	92	66	54	328	168	7
503	509	10	55	62	76	203	306	205	205	3	14	27	30	74	131	8
103	106	-	7	15	18	40	66	40	45	-	3	12	6	21	24	9
39	36	-	1	6	7	14	22	24	21	1	2	6	1	10	11	10
246	235	52	51	53	31	187	48	46	46	5	6	8	9	28	18	11
496	505	17	29	52	83	181	324	34	38	-	3	3	6	12	26	12
150	156	13	11	21	27	72	84	52	60	-	3	6	14	23	37	13
471	466	148	117	65	58	388	78	201	200	34	31	35	26	126	74	14
167	173	32	47	51	23	153	20	26	26	5	6	9	5	25	1	15
3,777	3,780	1,705	1,143	603	230	3,679	1,011	1,033	1,006	387	282	180	99	948	58	16
808	768	16	21	36	113	166	582	498	480	13	19	30	66	128	352	17
467	467	99	69	68	46	282	185	18	18	5	6	2	2	15	3	18
77	77	3	3	12	4	22	55	-	-	-	-	-	-	-	-	19
364	365	96	65	53	39	253	112	17	17	5	6	2	1	14	3	20
82	83	9	15	12	9	45	38	3	3	-	-	-	-	1	2	21
30	31	-	-	5	8	13	18	1	1	-	-	-	-	1	1	22
52	52	9	15	7	1	32	20	2	2	-	-	-	-	-	2	23
102	103	13	19	20	19	71	32	5	5	2	1	1	-	4	1	24
17	17	-	-	-	2	2	15	-	-	-	-	-	-	-	-	25
4	4	-	-	-	3	3	1	-	-	-	-	-	-	-	-	26
1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	27
8	8	3	3	1	-	7	1	-	-	-	-	-	-	-	-	28
16	16	-	-	-	1	1	15	1	1	-	-	1	-	1	-	29
6	6	4	-	-	-	4	2	-	-	-	-	-	-	-	-	30
12	12	4	-	3	1	8	4	-	-	-	-	-	-	-	-	31
8	8	6	1	1	-	8	-	-	-	-	-	-	-	-	-	32
108	107	57	27	16	4	104	3	8	8	3	5	-	-	8	-	33
26	25	-	1	3	3	7	18	1	1	-	-	1	1	1	-	34
2,441	2,441	594	396	347	274	1,611	830	395	395	131	60	38	44	273	122	35
375	370	5	21	35	66	127	243	30	29	-	3	4	1	8	21	36
1,971	1,981	586	373	308	199	1,466	815	346	347	131	54	32	40	257	90	37
436	446	101	62	44	37	244	202	50	49	6	3	5	5	19	30	38
193	199	8	18	18	21	65	134	35	34	2	3	2	3	10	24	39
243	247	93	44	26	16	179	68	15	15	4	-	3	2	9	6	40
475	472	81	79	106	69	335	137	82	85	22	16	10	12	60	25	41
95	95	2	6	12	18	38	57	22	21	1	2	-	3	6	15	42
19	19	-	-	3	1	4	15	7	7	-	-	2	-	2	5	43
6	6	-	1	2	2	5	1	1	1	-	-	1	-	1	-	44
24	23	2	4	5	5	16	7	-	-	-	-	-	-	-	-	45
107	107	3	8	15	16	42	65	4	4	-	-	1	1	2	2	46
28	28	2	4	2	8	16	12	7	7	-	-	-	1	1	6	47
79	81	33	20	14	9	76	5	21	21	7	5	2	5	19	2	48
25	26	5	7	7	6	25	1	4	4	-	-	-	4	4	-	49
677	678	357	182	98	28	665	13	148	148	95	28	11	9	143	5	50
95	90	3	2	4	9	18	72	19	19	-	3	2	3	8	11	51
2,787	2,787	677	460	357	290	1,784	1,003	323	323	105	47	47	21	220	103	52
419	417	7	20	43	55	125	292	34	33	1	1	3	4	9	24	53
2,228	2,237	668	437	311	214	1,630	607	278	279	103	46	44	17	210	69	54
469	480	107	69	54	37	267	213	45	45	11	4	5	3	23	22	55
191	198	14	15	21	19	69	129	30	30	7	3	4	3	17	13	56
278	282	93	54	33	18	198	84	15	15	4	1	1	-	6	9	57
559	558	101	87	105	69	382	176	101	104	45	19	16	3	83	21	58
97	96	1	14	12	11	38	58	14	14	-	2	3	3	8	6	59
27	27	-	2	4	3	9	18	7	7	-	-	4	4	5	2	60
13	13	-	-	1	1	2	11	3	3	-	-	1	-	1	2	61
43	45	15	6	8	9	38	7	2	2	-	-	2	-	2	-	62

TABLE 11. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT AND RACE:

(By place of residence at birth. Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated)

AREA AND CAUSE OF DEATH		ALL RACES							
		Total		Birth weight (in grams)					
		Tabu- lated	Ad- justed <sup>1</sup>	1,000- or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,500 or less	2,501 or more
EAST NORTH CENTRAL—Continued									
Certain diseases of early infancy—Continued									
1	Hemolytic disease of newborn (erythroblastosis)-----770	121	121	5	7	14	19	45	76
2	Hemorrhagic disease of newborn-----771	35	35	1	3	5	5	14	21
3	Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772, 773	76	76	25	12	11	9	57	19
4	Immaturity with mention of any other subsidiary condition-----774	38	37	4	13	11	4	32	5
5	Immaturity unqualified-----776	856	853	456	245	99	34	834	19
6	All other causes-----Residual	151	144	3	3	3	21	30	114
7	WEST NORTH CENTRAL-----All causes	1,539	1,539	320	249	232	177	978	561
8	Congenital malformations-----750-759	257	259	6	13	26	37	82	177
9	Certain diseases of early infancy-----760-776	1,199	1,200	314	233	196	128	873	327
10	Birth injuries-----760, 761	274	277	50	31	41	24	146	131
11	Intracranial and spinal injury-----760	100	101	2	2	11	10	25	76
12	Other birth injury-----761	174	176	48	29	30	14	121	55
13	Postnatal asphyxia and atelectasis-----762	240	241	36	40	50	44	170	71
14	Pneumonia of newborn-----763	58	58	-	5	8	12	25	33
15	Diarrhea of newborn-----764	12	12	-	-	1	4	5	7
16	Other infections of newborn-----765-768	3	3	1	-	-	1	2	1
17	Neonatal disorders arising from maternal toxemia-----769	39	38	9	8	10	3	27	11
18	Hemolytic disease of newborn (erythroblastosis)-----770	64	64	4	4	4	6	18	46
19	Hemorrhagic disease of newborn-----771	18	18	1	-	2	1	4	14
20	Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772, 773	62	61	30	17	4	7	58	3
21	Immaturity with mention of any other subsidiary condition-----774	21	21	1	7	7	4	19	2
22	Immaturity unqualified-----776	408	407	185	121	71	22	399	8
23	All other causes-----Residual	83	80	-	3	8	12	23	57
24	SOUTH ATLANTIC-----All causes	2,913	2,913	471	489	445	401	1,806	1,107
25	Congenital malformations-----750-759	297	296	2	17	19	54	92	204
26	Certain diseases of early infancy-----760-776	2,313	2,322	461	466	415	296	1,638	684
27	Birth injuries-----760, 761	422	427	47	49	59	54	209	218
28	Intracranial and spinal injury-----760	196	200	6	14	19	29	68	132
29	Other birth injury-----761	226	227	41	35	40	25	141	86
30	Postnatal asphyxia and atelectasis-----762	453	460	54	50	88	94	286	174
31	Pneumonia of newborn-----763	137	139	1	14	23	19	57	82
32	Diarrhea of newborn-----764	20	20	-	3	1	2	6	14
33	Other infections of newborn-----765-768	11	11	1	1	1	3	6	5
34	Neonatal disorders arising from maternal toxemia-----769	60	61	17	9	11	7	44	17
35	Hemolytic disease of newborn (erythroblastosis)-----770	55	55	-	3	4	5	12	43
36	Hemorrhagic disease of newborn-----771	50	52	1	1	13	10	25	27
37	Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772, 773	153	153	26	29	20	24	99	54
38	Immaturity with mention of any other subsidiary condition-----774	25	25	5	3	10	-	18	7
39	Immaturity unqualified-----776	927	919	309	304	185	78	876	43
40	All other causes-----Residual	303	295	8	6	11	51	76	219
41	EAST SOUTH CENTRAL-----All causes	1,739	1,739	238	270	238	253	999	740
42	Congenital malformations-----750-759	168	170	5	10	14	35	64	106
43	Certain diseases of early infancy-----760-776	1,279	1,286	228	247	208	180	863	423
44	Birth injuries-----760, 761	245	247	23	19	26	38	106	141
45	Intracranial and spinal injury-----760	103	104	1	1	5	15	22	82
46	Other birth injury-----761	142	143	22	18	21	23	84	59
47	Postnatal asphyxia and atelectasis-----762	242	243	24	43	36	40	143	100
48	Pneumonia of newborn-----763	85	85	2	5	6	10	23	62
49	Diarrhea of newborn-----764	9	9	-	-	1	3	4	5
50	Other infections of newborn-----765-768	5	5	-	-	-	-	-	5
51	Neonatal disorders arising from maternal toxemia-----769	37	37	3	9	6	6	24	13
52	Hemolytic disease of newborn (erythroblastosis)-----770	39	39	-	1	4	10	15	24
53	Hemorrhagic disease of newborn-----771	25	25	-	-	1	3	4	21
54	Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772, 773	71	72	10	18	12	7	47	25
55	Immaturity with mention of any other subsidiary condition-----774	15	15	2	7	1	5	15	-
56	Immaturity unqualified-----776	506	509	164	145	115	58	482	27
57	All other causes-----Residual	292	283	5	13	16	38	72	211

See footnote on p. #02.

UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950—Continued

are distributed. Numbers after causes of death are category numbers of the Sixth Revision of the International Lists, 1948)

WHITE								NONWHITE							
Total		Birth weight (in grams)						Total		Birth weight (in grams)					
Tabu- lated	Ad- justed <sup>1</sup>	1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,500 or less	2,501 or more	Tabu- lated	Ad- justed <sup>1</sup>	1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,500 or less	2,501 or more
114	114	5	7	14	19	45	69	7	7	-	-	-	-	-	7
28	28	1	2	4	3	10	18	7	7	-	1	1	2	4	3
69	69	24	12	10	7	53	16	7	7	1	-	1	2	4	3
37	36	4	12	11	4	31	5	1	1	-	1	-	-	1	4
772	771	410	226	88	31	755	16	84	82	46	19	11	3	79	3
140	133	2	3	3	21	29	104	11	11	1	-	-	-	1	10
1,457	1,457	296	238	220	168	922	535	82	82	24	11	12	9	56	26
253	255	6	12	26	37	81	174	4	4	-	1	-	-	1	3
1,131	1,132	290	224	187	121	822	310	68	68	74	9	11	7	51	17
264	267	49	31	39	22	141	126	10	10	1	-	2	2	5	5
93	94	2	2	10	8	22	72	7	7	-	-	1	2	3	4
171	173	47	29	29	14	119	54	3	3	1	-	1	-	2	1
225	226	31	37	50	41	159	67	15	15	5	3	-	3	11	4
49	49	-	5	5	11	21	28	9	9	-	-	3	1	4	5
11	11	-	-	1	4	5	6	1	1	-	-	-	-	-	1
2	2	-	-	-	1	1	1	1	1	-	-	-	-	-	1
39	38	6	8	10	3	27	11	-	-	-	-	-	-	-	1
63	63	4	4	4	6	18	45	1	1	-	-	-	-	-	1
17	17	1	-	2	1	4	13	1	1	-	-	-	-	-	1
61	60	30	17	3	7	57	3	1	1	-	-	1	-	1	20
19	19	-	6	7	4	17	2	2	2	1	1	-	-	2	2
381	380	169	116	66	21	372	8	27	27	16	5	5	1	27	21
73	70	-	2	7	10	19	51	10	10	-	1	1	2	4	6
1,776	1,776	302	299	284	256	1,141	635	1,137	1,137	169	190	161	145	665	472
233	231	2	12	19	40	73	158	64	65	-	5	-	14	19	46
1,407	1,413	297	284	260	190	1,031	382	906	909	164	182	155	106	607	302
294	298	37	34	49	40	160	138	128	129	10	15	10	14	49	80
136	139	3	10	14	21	48	91	60	61	3	4	5	8	20	41
158	159	34	24	35	19	112	47	68	68	7	11	5	6	29	39
315	316	31	32	62	77	202	114	138	144	23	18	26	17	84	60
60	61	1	7	12	6	26	35	77	78	-	7	11	13	31	47
11	11	-	2	-	-	2	9	9	9	-	1	1	2	4	5
2	2	-	-	-	2	-	-	9	9	1	1	1	1	4	5
39	40	15	6	6	5	32	8	21	21	2	3	5	2	12	9
44	44	-	2	3	4	9	35	11	11	-	1	1	1	3	8
25	25	1	-	9	3	13	12	25	27	-	1	4	7	12	15
60	60	17	16	8	11	52	8	93	93	9	13	12	13	47	46
15	15	3	2	4	-	9	6	10	10	2	1	6	-	9	1
542	541	192	183	107	42	524	17	385	378	117	121	78	36	352	26
136	132	3	3	5	26	37	95	167	163	5	3	6	25	39	124
1,131	1,131	166	192	167	177	702	429	608	608	72	78	71	76	297	311
137	138	5	9	14	27	55	83	31	32	-	1	-	8	9	23
893	897	161	179	150	134	624	273	386	389	67	68	58	46	239	150
185	185	17	18	21	36	92	93	60	62	6	1	5	2	14	48
74	74	-	1	4	14	19	55	29	30	1	-	1	1	3	27
111	111	17	17	17	22	73	38	31	32	5	1	4	1	11	21
202	202	23	39	35	38	135	67	40	41	1	4	1	2	8	33
48	47	2	3	3	8	16	31	37	38	-	2	3	2	7	31
7	7	-	-	1	2	3	4	2	2	-	-	-	-	1	1
4	4	-	-	-	-	-	4	1	1	-	-	-	-	-	1
25	25	2	7	6	4	19	6	12	12	1	2	-	2	5	7
34	34	-	1	4	9	14	20	5	5	-	-	-	-	1	4
19	19	-	-	1	2	3	16	6	6	-	-	-	1	1	5
42	42	4	11	7	1	23	19	29	30	6	7	5	6	24	6
12	12	2	6	-	4	12	-	3	3	-	1	1	1	3	-
315	320	111	94	72	30	307	13	191	189	53	51	43	28	175	14
101	96	-	4	3	16	23	73	191	187	5	9	13	22	49	138



## VITAL STATISTICS—SPECIAL REPORTS

TABLE 11. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT AND RACE:

(By place of residence at birth. Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated)

AREA AND CAUSE OF DEATH	ALL RACES							
	Total		Birth weight (in grams)					
	Tabu- lated	Ad- justed <sup>1</sup>	1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,500 or less	2,501 or more
1 WEST SOUTH CENTRAL-----All causes	1,783	1,783	264	302	256	258	1,080	703
2 Congenital malformations-----750-759	188	187	-	10	18	40	68	119
3 Certain diseases of early infancy-----760-776	1,398	1,406	259	287	228	190	964	441
4 Birth injuries-----760,761	261	263	16	23	27	28	94	169
5 Intracranial and spinal injury-----760	141	142	1	4	12	18	35	107
6 Other birth injury-----761	120	121	15	19	15	10	59	62
7 Postnatal asphyxia and atelectasis-----762	204	205	18	37	33	44	132	73
8 Pneumonia of newborn-----763	102	103	5	6	7	16	34	69
9 Diarrhea of newborn-----764	26	26	-	3	8	3	14	12
10 Other infections of newborn-----765-768	12	12	-	-	5	-	5	7
11 Neonatal disorders arising from maternal toxemia-----769	30	29	2	5	7	8	22	7
12 Hemolytic disease of newborn (erythroblastosis)-----770	46	46	-	4	5	11	20	26
13 Hemorrhagic disease of newborn-----771	19	19	1	1	1	5	8	11
14 Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	110	113	30	15	23	12	80	33
15 Immaturity with mention of any other subsidiary condition-----774	22	22	5	5	7	-	17	5
16 Immaturity unqualified-----776	566	567	182	188	105	63	538	29
17 All other causes-----Residual	197	191	5	5	10	28	48	143
18 MOUNTAIN-----All causes	796	796	164	140	132	113	549	247
19 Congenital malformations-----750-759	87	85	-	2	13	17	32	53
20 Certain diseases of early infancy-----760-776	645	649	164	138	113	84	499	150
21 Birth injuries-----760,761	158	160	36	32	18	17	103	57
22 Intracranial and spinal injury-----760	69	69	7	6	12	9	34	35
23 Other birth injury-----761	89	91	29	26	6	8	69	22
24 Postnatal asphyxia and atelectasis-----762	136	136	20	22	29	24	95	41
25 Pneumonia of newborn-----763	26	26	-	2	3	7	12	14
26 Diarrhea of newborn-----764	7	7	-	-	2	2	4	3
27 Other infections of newborn-----765-768	4	4	-	-	1	-	1	3
28 Neonatal disorders arising from maternal toxemia-----769	18	17	5	4	4	1	14	3
29 Hemolytic disease of newborn (erythroblastosis)-----770	28	28	-	2	1	10	13	15
30 Hemorrhagic disease of newborn-----771	4	4	1	-	-	2	3	1
31 Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	36	36	5	7	11	4	27	9
32 Immaturity with mention of any other subsidiary condition-----774	11	10	4	1	3	2	10	-
33 Immaturity unqualified-----776	217	221	93	68	41	15	217	4
34 All other causes-----Residual	64	62	-	-	6	12	16	44
35 PACIFIC-----All causes	1,540	1,540	356	313	241	199	1,109	431
36 Congenital malformations-----750-759	195	194	2	8	17	41	68	126
37 Certain diseases of early infancy-----760-776	1,270	1,275	350	301	218	150	1,019	256
38 Birth injuries-----760,761	267	268	65	38	40	28	171	97
39 Intracranial and spinal injury-----760	94	94	4	3	12	16	35	59
40 Other birth injury-----761	173	174	61	35	28	12	136	38
41 Postnatal asphyxia and atelectasis-----762	384	386	63	84	91	75	313	73
42 Pneumonia of newborn-----763	55	56	-	10	12	5	27	29
43 Diarrhea of newborn-----764	5	5	-	1	-	-	1	4
44 Other infections of newborn-----765-768	4	4	-	1	1	2	4	-
45 Neonatal disorders arising from maternal toxemia-----769	31	31	5	11	9	3	28	3
46 Hemolytic disease of newborn (erythroblastosis)-----770	49	49	2	-	2	8	12	37
47 Hemorrhagic disease of newborn-----771	10	10	1	2	-	3	6	4
48 Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	52	52	13	23	4	9	49	3
49 Immaturity with mention of any other subsidiary condition-----774	24	24	4	7	11	2	24	-
50 Immaturity unqualified-----776	389	390	197	124	48	15	384	6
51 All other causes-----Residual	75	71	4	4	6	8	22	49

<sup>1</sup>Data by weight add to figures shown in this column. Figures differ somewhat from the tabulated totals shown in the first column because of the procedure used for distributing birth weights not stated. For discussion, see section in text on Distribution of "not stated" birth weights.

<sup>2</sup>Figures by cause for the United States and the divisions were adjusted independently, and in some cases the sum of the figures for the divisions may differ slightly from the totals for the United States.

<sup>3</sup>Excludes data for Massachusetts.

UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950—Continued

are distributed. Numbers after causes of death are category numbers of the Sixth Revision of the International Lists, 1948)

WHITE										NONWHITE						
Total		Birth weight (in grams)						Total		Birth weight (in grams)						
Tabu- lated	Ad- justed <sup>1</sup>	1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,500 or less	2,501 or more	Tabu- lated	Ad- justed <sup>1</sup>	1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,500 or less	2,501 or more	
1,325	1,325	206	227	191	194	818	507	458	458	58	75	65	64	262	196	1
171	170	-	9	17	37	63	107	17	17	-	1	1	3	5	12	2
1,031	1,038	203	215	169	141	728	310	367	367	56	72	59	49	256	131	3
191	192	12	16	25	23	76	116	70	71	4	7	2	5	18	53	4
103	103	1	1	10	16	28	75	38	39	-	3	2	2	7	32	5
88	89	11	15	15	7	48	41	32	32	4	4	-	3	11	21	6
159	159	16	28	28	32	104	55	45	46	2	9	5	12	28	18	7
69	69	3	6	3	8	20	49	33	34	2	-	4	8	14	20	8
13	13	-	2	4	2	8	5	13	13	-	1	4	1	6	7	9
6	6	-	-	2	2	2	4	6	6	-	-	3	2	3	3	10
23	22	1	4	6	4	15	7	7	7	1	1	1	4	7	-	11
41	41	-	3	5	8	16	25	5	5	-	1	-	3	4	1	12
14	14	1	1	1	4	7	7	5	5	-	-	-	1	1	4	13
71	73	22	8	12	12	54	19	39	40	8	7	11	-	26	14	14
16	16	3	3	5	-	11	5	6	6	2	2	2	-	6	-	15
428	433	145	144	78	48	415	18	138	134	37	44	27	15	123	11	16
123	117	3	3	5	16	27	90	74	74	2	2	5	12	21	53	17
733	733	157	132	119	102	510	223	63	63	7	8	13	11	39	24	18
85	83	-	2	12	17	31	52	2	2	-	-	1	-	1	1	19
598	602	157	130	103	75	465	137	47	47	7	8	10	9	34	13	20
152	154	33	32	17	16	98	56	6	6	3	-	1	1	5	1	21
65	65	4	6	12	9	31	34	4	4	3	-	-	-	3	1	22
87	89	29	26	5	7	67	22	2	2	-	-	1	1	2	-	23
126	126	18	19	27	21	85	41	10	10	2	3	2	3	10	-	24
22	22	-	2	3	7	12	10	4	4	-	-	-	-	-	4	25
6	6	-	-	2	2	4	1	1	1	-	-	-	-	1	1	26
2	2	-	-	-	-	-	2	2	2	-	-	1	-	1	1	27
15	14	5	4	4	-	13	1	3	3	-	-	-	1	1	2	28
28	28	-	2	1	10	13	15	-	-	-	-	-	-	-	-	29
4	4	1	-	-	2	3	1	-	-	-	-	-	-	-	-	30
28	28	5	7	7	4	23	5	8	8	-	-	4	-	4	4	31
11	10	4	1	3	2	10	-	-	-	-	-	-	-	-	-	32
204	208	91	63	39	11	204	4	13	13	2	5	2	4	13	3	33
50	48	-	-	4	10	14	34	14	14	-	-	2	2	4	10	34
1,404	1,404	320	280	223	186	1,009	395	136	136	36	33	18	13	100	36	35
180	179	2	7	16	38	63	116	15	15	-	1	1	3	5	10	36
1,160	1,165	314	270	203	140	927	238	110	110	36	31	15	10	92	18	37
254	255	65	37	38	26	166	89	13	13	-	1	2	2	5	8	38
84	84	4	2	12	14	32	52	10	10	-	1	-	2	3	7	39
170	171	61	35	26	12	134	37	3	3	-	-	2	2	2	1	40
341	342	52	66	85	71	274	68	43	44	11	18	6	4	39	5	41
46	48	-	10	10	4	24	24	9	8	-	-	2	1	3	5	42
5	5	-	1	-	2	1	4	-	-	-	-	-	-	-	-	43
3	3	-	-	1	2	3	1	1	1	-	1	-	-	1	-	44
30	30	4	11	9	3	27	3	1	1	1	-	-	-	1	-	45
49	49	2	-	2	8	12	37	-	-	-	-	-	-	-	-	46
9	9	1	2	-	2	5	4	1	1	-	-	-	1	1	-	47
49	49	10	23	4	9	46	3	3	3	3	-	-	-	3	-	48
24	24	4	7	11	2	24	-	-	-	-	-	-	-	-	-	49
350	351	176	113	43	13	345	6	39	39	21	11	5	2	39	5	50
64	60	4	3	4	8	19	41	11	11	-	1	2	-	3	8	51

## VITAL STATISTICS—SPECIAL REPORTS

TABLE 12. NEONATAL MORTALITY RATES FOR SELECTED CAUSES, BY BIRTH WEIGHT

(By place of residence at birth. Based on deaths under 28 days among children born Jan. 1 to Mar. 31, 1950. Rates per 1,000 live births in the International Lists, 1948. Two dots (..) indicate rate

AREA AND CAUSE OF DEATH		ALL RACES						
		Total <sup>1</sup>	Birth weight (in grams)					
			1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,500 or less	2,501 or more
1	UNITED STATES <sup>2</sup> -----All causes	20.0	871.7	551.3	211.0	50.4	173.7	7.8
2	Congenital malformations-----750-759	2.5	7.6	21.1	18.3	8.7	11.4	1.8
3	Certain diseases of early infancy-----760-776	15.9	856.7	522.3	187.0	37.3	157.2	4.7
4	Birth injuries-----760,761	3.2	121.9	68.9	28.9	6.7	23.3	1.7
5	Intracranial and spinal injury-----760	1.4	14.3	14.0	10.9	3.6	6.5	1.0
6	Other birth injury-----761	1.8	107.7	54.9	18.0	3.1	16.8	0.7
7	Postnatal asphyxia and atelectasis-----762	3.6	121.2	97.0	51.5	12.5	33.6	1.2
8	Pneumonia of newborn-----763	0.8	3.3	13.6	7.8	2.6	4.5	0.6
9	Diarrhea of newborn-----764	0.2	0	2.0	2.4	0.6	1.0	0.1
10	Other infections of newborn-----765-768	0.1	..	..	1.1	..	0.4	0.0
11	Neonatal disorders arising from maternal toxemia-----769	0.3	14.5	11.2	5.4	1.0	3.5	0.1
12	Hemolytic disease of newborn (erythroblastosis)-----770	0.6	4.3	6.3	4.8	2.2	3.1	0.5
13	Hemorrhagic disease of newborn-----771	0.2	3.3	2.8	2.4	1.0	1.5	0.2
14	Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.8	46.3	29.1	8.8	2.0	8.3	0.2
15	Immaturity with mention of any other subsidiary condition-----774	0.2	9.4	10.4	5.3	0.7	2.9	0.0
16	Immaturity unqualified-----776	5.7	532.1	280.5	68.8	8.0	75.1	0.2
17	All other causes-----Residual	1.6	7.4	7.9	5.8	4.3	5.1	1.2
18	NEW ENGLAND <sup>2</sup> -----All causes	20.1	920.4	646.6	238.1	41.8	177.7	8.4
19	Congenital malformations-----750-759	3.2	..	..	40.8	..	13.2	2.4
20	Certain diseases of early infancy-----760-776	15.8	893.8	612.1	187.1	34.8	159.8	5.1
21	Birth injuries-----760,761	3.5	..	129.3	40.8	8.7	27.5	1.8
22	Intracranial and spinal injury-----760	1.3	0	0	..	..	8.4	0.8
23	Other birth injury-----761	2.2	..	129.3	..	..	19.2	1.0
24	Postnatal asphyxia and atelectasis-----762	4.4	132.7	172.4	71.4	16.6	44.9	1.5
25	Pneumonia of newborn-----763	0.7	0	0	0	..	..	0.7
26	Diarrhea of newborn-----764	..	0	0	0	..	..	..
27	Other infections of newborn-----765-768	..	0	0	0	0	0	..
28	Neonatal disorders arising from maternal toxemia-----769	..	..	..	..	0	..	..
29	Hemolytic disease of newborn (erythroblastosis)-----770	0.7	0	0	..	..	..	0.7
30	Hemorrhagic disease of newborn-----771	..	..	0	0	0	..	..
31	Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.5	..	0	..	..	..	..
32	Immaturity with mention of any other subsidiary condition-----774	..	..	..	..	0	..	0
33	Immaturity unqualified-----776	4.8	531.0	275.9	54.4	..	67.0	..
34	All other causes-----Residual	1.1	0	..	..	..	..	0.8
35	MIDDLE ATLANTIC-----All causes	18.9	913.1	522.9	179.4	40.0	160.2	6.9
36	Congenital malformations-----750-759	2.7	..	27.5	18.2	8.4	11.5	1.9
37	Certain diseases of early infancy-----760-776	15.4	903.0	489.7	158.4	30.1	146.5	4.4
38	Birth injuries-----760,761	3.2	134.8	74.5	22.8	5.3	22.4	1.7
39	Intracranial and spinal injury-----760	1.5	12.6	24.1	9.3	3.0	6.4	1.1
40	Other birth injury-----761	1.7	122.2	50.5	13.5	2.3	16.0	0.5
41	Postnatal asphyxia and atelectasis-----762	3.7	129.7	108.9	54.1	10.2	33.6	1.2
42	Pneumonia of newborn-----763	0.8	..	..	5.6	2.6	3.7	0.5
43	Diarrhea of newborn-----764	0.2	0	0	..	..	..	0.1
44	Other infections of newborn-----765-768	..	0	..	..	..	..	..
45	Neonatal disorders arising from maternal toxemia-----769	0.2	..	..	..	..	1.4	..
46	Hemolytic disease of newborn (erythroblastosis)-----770	0.7	..	..	7.5	2.1	3.7	0.5
47	Hemorrhagic disease of newborn-----771	0.2	..	..	..	..	1.4	0.1
48	Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.7	50.4	28.7	7.5	1.8	8.1	..
49	Immaturity with mention of any other subsidiary condition-----774	0.2	..	..	..	1.3	2.5	..
50	Immaturity unqualified-----776	5.5	569.3	240.8	50.8	4.7	68.7	0.1
51	All other causes-----Residual	0.8	..	..	..	1.5	2.2	0.6
52	EAST NORTH CENTRAL-----All causes	18.2	912.5	545.2	189.8	39.6	170.2	7.0
53	Congenital malformations-----750-759	2.7	..	22.6	21.6	7.5	11.4	2.0
54	Certain diseases of early infancy-----760-776	14.7	899.6	519.4	166.7	29.4	156.3	4.3
55	Birth injuries-----760,761	3.0	137.7	78.5	27.7	5.1	24.6	1.5
56	Intracranial and spinal injury-----760	1.3	24.5	19.4	11.7	2.8	7.3	0.9
57	Other birth injury-----761	1.7	113.2	59.1	16.0	2.3	17.3	0.6
58	Postnatal asphyxia and atelectasis-----762	3.9	170.4	114.0	56.8	11.7	39.5	1.2
59	Pneumonia of newborn-----763	0.7	..	17.2	7.0	1.8	3.9	0.4
60	Diarrhea of newborn-----764	0.2	0	..	..	..	1.2	0.1
61	Other infections of newborn-----765-768	0.1	0	0	..	..	..	..
62	Neonatal disorders arising from maternal toxemia-----769	0.3	17.5	..	4.7	..	3.4	..

<sup>1</sup>Rates based on tabulated totals shown in table 11.<sup>2</sup>Excludes data for Massachusetts.

AND RACE: UNITED STATES AND EACH GEOGRAPHIC DIVISION, JANUARY 1 TO MARCH 31, 1950

each specified group. Birth weights not stated are distributed. Numbers after causes of death are category numbers of the Sixth Revision of not computed where the number of deaths is less than 10)

WHITE							NONWHITE							
Total <sup>1</sup>	Birth weight (in grams)						Total <sup>1</sup>	Birth weight (in grams)						
	1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,500 or less	2,501 or more		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,500 or less	2,501 or more	
18.9	883.3	562.1	214.6	50.6	175.8	7.1	26.7	821.4	507.0	195.7	49.5	164.7	11.9	1
2.7	9.1	22.8	21.4	9.7	12.9	1.9	1.6	..	14.0	5.0	4.4	5.1	1.3	2
15.0	869.2	534.2	189.3	37.5	159.2	4.3	20.9	802.4	474.1	176.9	36.6	148.6	7.3	3
3.2	137.0	77.7	32.0	7.2	25.9	1.6	3.2	56.8	32.9	15.6	4.5	12.3	2.3	4
1.4	12.2	13.7	11.7	3.8	6.6	1.0	1.8	23.0	15.0	7.3	2.8	6.0	1.4	5
1.9	124.8	64.0	20.3	3.4	19.2	0.6	1.4	33.8	18.0	6.2	1.7	6.3	0.9	6
3.5	112.9	98.3	58.5	13.7	34.9	1.1	4.0	157.0	91.8	30.2	6.9	28.0	1.5	7
0.7	3.1	13.5	6.7	2.3	4.1	0.5	1.7	..	14.0	12.4	3.9	6.3	1.2	8
0.1	0	..	1.6	0.5	0.8	0.1	0.3	0	..	5.5	..	1.8	0.2	9
0.3	0	..	..	..	0.3	0.0	0.2	..	..	..	..	0.9	0.1	10
0.3	16.3	12.5	5.8	0.9	3.7	0.1	0.4	..	..	..	..	2.4	0.2	11
0.7	5.3	7.1	5.6	2.5	3.6	0.5	0.3	0	..	..	..	1.0	0.2	12
0.2	4.1	2.7	2.5	0.8	1.4	0.1	0.4	0	..	..	1.8	2.0	0.3	13
0.7	46.4	28.7	7.1	1.7	7.8	0.1	1.7	46.0	30.9	16.0	3.3	10.8	0.7	14
0.2	10.0	11.5	5.5	0.7	3.1	0.0	0.2	..	..	..	..	2.1	..	15
5.3	534.0	280.2	65.5	6.9	73.7	0.2	8.6	523.7	281.4	82.5	12.7	81.0	0.5	16
1.1	5.0	5.1	3.9	3.4	3.7	0.9	4.1	17.6	19.0	13.7	8.5	10.9	3.2	17
19.8	925.2	657.1	241.1	41.7	176.6	8.4	35.6	..	..	..	..	202.7	..	18
3.3	..	..	42.6	..	13.8	2.5	0	0	0	0	0	0	0	19
15.4	897.2	619.0	187.9	35.4	158.4	5.1	33.6	..	..	..	..	189.2	..	20
3.5	..	142.9	42.6	..	28.2	1.7	..	0	0	0	..	..	..	21
1.3	0	0	..	..	8.1	0.8	..	0	0	0	..	..	..	22
2.2	..	142.9	..	..	20.0	0.9	..	0	0	0	0	0	..	23
4.3	121.5	181.0	70.9	17.2	44.5	1.5	..	..	..	..	..	0	..	24
0.7	0	0	0	..	..	0.7	0	0	0	0	0	0	0	25
..	0	0	0	..	..	..	0	0	0	0	0	0	0	26
..	0	0	0	0	0	..	0	0	0	0	0	0	0	27
..	0	0	0	0	0	..	0	0	0	0	0	0	0	28
0.7	0	0	0	..	..	0.7	..	0	0	0	0	0	0	29
..	..	0	0	0	..	..	0	0	0	0	0	0	0	30
0.5	..	0	..	..	..	..	0	0	0	0	0	0	0	31
..	..	..	..	0	..	0	0	0	0	0	0	0	0	32
4.6	532.7	257.1	56.7	..	65.1	..	..	..	..	0	0	..	..	33
1.1	0	..	..	..	..	0.8	..	0	0	0	..	..	..	34
17.8	918.1	523.1	189.5	40.2	160.3	6.5	29.9	891.2	521.7	120.6	38.9	159.8	10.6	35
2.7	..	27.7	19.1	9.7	12.6	1.9	2.3	0	..	..	..	..	1.8	36
14.4	905.7	492.7	168.2	29.2	145.9	4.1	26.2	891.2	469.6	101.6	35.4	150.5	7.8	37
3.2	156.1	81.9	24.0	5.4	24.3	1.6	3.8	..	..	..	..	11.1	2.6	38
1.4	..	23.8	9.8	3.1	6.5	1.1	2.6	..	..	..	..	5.9	2.1	39
1.8	143.7	58.1	14.2	2.3	17.8	0.5	1.1	..	0	..	..	..	..	40
3.5	125.2	104.4	57.9	10.1	33.3	1.1	6.2	149.7	139.1	31.7	10.6	35.1	2.2	41
0.7	0	0	6.6	2.6	3.8	0.4	1.7	..	..	0	..	..	1.3	42
0.1	0	..	..	..	..	0.1	..	0	0	0	0	0	..	43
..	0	..	..	..	..	..	..	0	0	0	0	0	0	44
0.2	..	..	..	..	1.6	..	0	0	0	0	0	0	0	45
0.8	..	..	8.2	2.3	4.2	0.5	..	0	0	..	..	..	..	46
0.2	..	..	..	..	1.6	0.1	..	0	0	0	..	..	..	47
0.6	51.0	26.4	7.6	..	7.6	..	1.6	..	..	..	..	11.1	..	48
0.2	..	..	..	..	2.5	..	..	0	0	0	..	..	..	49
4.9	551.8	240.4	53.5	4.1	66.2	0.1	11.2	646.3	243.5	34.9	..	83.7	..	50
0.7	..	..	..	..	1.8	0.6	1.4	..	..	..	..	..	1.0	51
17.7	914.9	560.3	193.4	42.6	174.8	6.8	24.2	897.4	431.2	166.1	19.9	140.7	8.8	52
2.7	..	24.4	23.3	8.1	12.2	2.0	2.6	..	..	..	..	..	2.0	53
14.2	902.7	532.3	188.5	31.5	159.7	4.1	20.9	880.3	422.0	155.5	16.1	134.3	5.9	54
3.0	144.6	84.0	34.7	5.4	26.2	1.4	3.4	94.0	..	..	..	14.7	1.9	55
1.2	18.9	18.3	11.4	2.8	6.8	0.9	2.3	..	..	..	..	10.9	1.1	56
1.8	125.7	65.8	17.9	2.6	19.4	0.6	1.1	..	0	..	..	..	..	57
3.6	136.5	106.0	56.9	13.1	37.4	1.2	7.6	384.6	174.3	56.5	..	53.1	1.8	58
0.6	..	17.1	6.5	1.6	3.7	0.4	1.1	0	..	..	..	..	..	59
0.2	0	..	..	..	..	0.1	..	0	0	0	0	0	0	60
0.1	0	0	..	..	..	0.1	..	0	0	0	0	0	0	61
0.3	20.3	..	..	..	3.7	..	..	0	0	0	0	0	0	62

## VITAL STATISTICS—SPECIAL REPORTS

TABLE 12. NEONATAL MORTALITY RATES FOR SELECTED CAUSES, BY BIRTH WEIGHT

(See headnote)

AREA AND CAUSE OF DEATH		ALL RACES						
		Total <sup>1</sup>	Birth weight (in grams)					
			1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,500 or less	2,501 or more
EAST NORTH CENTRAL—Continued								
Certain diseases of early infancy—Continued								
1	Hemolytic disease of newborn (erythroblastosis)-----770	0.7	..	..	6.6	2.4	3.8	0.5
2	Hemorrhagic disease of newborn-----771	0.2	..	..	..	..	1.2	0.1
3	Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.4	29.2	12.9	5.2	..	4.8	0.1
4	Immaturity with mention of any other subsidiary condition-----774	0.2	..	14.0	5.2	..	2.7	..
5	Immaturity unqualified-----776	5.0	532.1	263.4	46.5	4.3	70.8	0.1
6	All other causes-----Residual	0.9	..	..	..	2.7	2.5	0.7
7	WEST NORTH CENTRAL-----All causes	19.2	881.5	591.4	242.2	53.3	193.1	7.5
8	Congenital malformations-----750-759	3.2	..	30.9	27.1	11.1	16.2	2.4
9	Certain diseases of early infancy-----760-776	15.0	865.0	553.4	206.7	38.5	172.4	4.4
10	Birth injuries-----760,761	3.4	137.7	73.6	42.8	7.2	28.8	1.7
11	Intracranial and spinal injury-----760	1.2	..	..	11.5	3.0	4.9	1.0
12	Other birth injury-----761	2.2	132.2	68.9	31.3	4.2	23.9	0.7
13	Postnatal asphyxia and atelectasis-----762	3.0	99.2	95.0	52.2	13.2	33.6	0.9
14	Pneumonia of newborn-----763	0.7	0	..	..	3.6	4.9	0.4
15	Diarrhea of newborn-----764	0.1	0	0	0	..	..	..
16	Other infections of newborn-----765-768	..	..	0	0	..	..	..
17	Neonatal disorders arising from maternal toxemia-----769	0.5	..	..	10.4	..	5.3	0.1
18	Hemolytic disease of newborn (erythroblastosis)-----770	0.8	..	..	..	..	3.6	0.6
19	Hemorrhagic disease of newborn-----771	0.2	..	0	..	..	..	0.2
20	Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.8	82.6	40.4	..	..	11.5	..
21	Immaturity with mention of any other subsidiary condition-----774	0.3	..	..	..	..	3.8	..
22	Immaturity unqualified-----776	5.1	509.6	287.4	74.1	6.6	78.8	..
23	All other causes-----Residual	1.0	0	..	..	3.6	4.5	0.8
24	SOUTH ATLANTIC-----All causes	22.0	799.7	526.9	218.9	57.3	171.2	9.1
25	Congenital malformations-----750-759	2.2	..	18.3	9.3	7.7	8.7	1.7
26	Certain diseases of early infancy-----760-776	17.4	782.7	502.2	204.1	42.3	155.2	5.6
27	Birth injuries-----760,761	3.2	79.8	52.8	29.0	7.7	19.8	1.8
28	Intracranial and spinal injury-----760	1.5	..	15.1	9.3	4.1	6.4	1.1
29	Other birth injury-----761	1.7	69.6	37.7	19.7	3.6	13.4	0.7
30	Postnatal asphyxia and atelectasis-----762	3.4	91.7	53.9	43.3	13.4	27.1	1.4
31	Pneumonia of newborn-----763	1.0	..	15.1	11.3	2.7	5.4	0.7
32	Diarrhea of newborn-----764	0.2	0	..	..	..	..	0.1
33	Other infections of newborn-----765-768	0.1	..	..	..	..	..	..
34	Neonatal disorders arising from maternal toxemia-----769	0.5	28.9	..	5.4	..	4.2	0.1
35	Hemolytic disease of newborn (erythroblastosis)-----770	0.4	0	..	..	..	1.1	0.4
36	Hemorrhagic disease of newborn-----771	0.4	..	..	6.4	1.4	2.4	0.2
37	Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	1.2	44.1	31.2	9.8	3.4	9.4	0.4
38	Immaturity with mention of any other subsidiary condition-----774	0.2	..	..	4.9	0	1.7	..
39	Immaturity unqualified-----776	7.0	524.6	327.6	91.0	11.1	83.0	0.4
40	All other causes-----Residual	2.3	..	..	5.4	7.3	7.2	1.8
41	EAST SOUTH CENTRAL-----All causes	22.9	820.7	534.7	231.7	68.7	181.5	10.5
42	Congenital malformations-----750-759	2.2	..	19.8	13.6	9.5	11.6	1.5
43	Certain diseases of early infancy-----760-776	16.8	786.2	489.1	202.5	48.9	156.8	6.0
44	Birth injuries-----760,761	3.2	79.3	37.6	25.3	10.3	19.3	2.0
45	Intracranial and spinal injury-----760	1.4	..	..	..	4.1	4.0	1.2
46	Other birth injury-----761	1.9	75.9	35.6	20.4	6.2	15.3	0.8
47	Postnatal asphyxia and atelectasis-----762	3.2	82.8	85.1	35.1	10.9	26.0	1.4
48	Pneumonia of newborn-----763	1.1	..	..	..	2.7	4.2	0.9
49	Diarrhea of newborn-----764	..	0	0	0	..	..	..
50	Other infections of newborn-----765-768	..	0	0	0	..	0	..
51	Neonatal disorders arising from maternal toxemia-----769	0.5	..	..	..	..	4.4	0.2
52	Hemolytic disease of newborn (erythroblastosis)-----770	0.5	0	..	..	2.7	2.7	0.3
53	Hemorrhagic disease of newborn-----771	0.3	0	0	..	..	..	0.3
54	Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.9	34.5	35.6	11.7	..	8.5	0.4
55	Immaturity with mention of any other subsidiary condition-----774	0.2	..	..	..	..	2.7	0
56	Immaturity unqualified-----776	6.6	565.5	287.1	112.0	15.7	87.6	0.4
57	All other causes-----Residual	3.8	..	25.7	15.6	10.3	13.1	3.0

<sup>1</sup>Rates based on tabulated totals shown in table 11.

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WHITE							NONWHITE							
Total <sup>1</sup>	Birth weight (in grams)						Total <sup>1</sup>	Birth weight (in grams)						
	1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,500 or less	2,501 or more		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,500 or less	2,501 or more	
0.7	..	..	7.6	2.8	4.4	0.5	..	0	0	0	0	0	..	1
0.2	..	..	..	..	1.0	0.1	..	0	..	..	..	..	..	2
0.4	32.4	14.6	5.4	..	5.2	0.1	..	..	0	..	..	..	..	3
0.2	..	14.6	6.0	..	3.0	..	..	0	..	0	0	..	0	4
4.9	554.1	275.3	47.7	4.6	74.0	0.1	6.3	393.2	174.3	38.9	..	50.5	..	5
0.9	..	..	..	3.1	2.8	0.7	0.8	..	0	0	0	..	0.9	6
19.0	888.9	601.0	246.4	54.3	195.5	7.4	23.6	800.0	440.0	184.6	..	160.9	8.3	7
3.3	..	30.3	29.1	12.0	17.2	2.4	..	0	..	0	0	..	..	8
14.7	870.9	565.7	209.4	39.1	174.3	4.3	19.6	800.0	..	169.2	..	146.6	5.4	9
3.4	147.1	78.3	43.7	7.1	29.9	1.8	2.9	..	0	..	..	..	..	10
1.2	..	..	11.2	..	4.7	1.0	..	0	0	..	..	..	..	11
2.2	141.1	73.2	32.5	4.5	25.2	0.8	..	0	0	..	0	..	..	12
2.9	93.1	93.4	56.0	13.3	33.7	0.9	4.3	..	..	0	..	31.6	..	13
0.6	0	..	..	3.6	4.5	0.4	..	0	0	..	..	..	..	14
0.1	0	0	..	..	..	..	..	0	0	0	0	0	0	15
..	0	0	..	..	..	..	..	0	0	0	0	0	0	16
0.5	..	..	11.2	..	5.7	0.2	0	..	0	0	0	0	0	17
0.8	..	..	..	..	3.8	0.6	..	0	0	0	0	0	0	18
0.2	..	0	..	..	..	0.2	..	0	0	0	0	0	0	19
0.8	90.1	42.9	..	..	12.1	..	..	0	0	..	0	..	0	20
0.2	0	..	..	..	3.6	..	..	..	0	0	0	..	0	21
5.0	507.5	292.9	73.9	6.8	78.9	..	7.8	533.3	..	..	..	77.6	..	22
1.0	0	..	..	3.2	4.0	0.7	2.9	0	..	..	..	..	..	23
19.3	805.3	539.7	218.8	55.5	166.8	7.5	27.8	789.7	508.0	219.0	60.7	179.1	12.7	24
2.5	..	21.7	14.6	8.7	10.7	1.9	1.6	0	..	0	5.9	5.1	1.2	25
15.3	792.0	512.6	200.3	41.2	150.7	4.5	22.2	766.4	486.6	210.9	44.4	163.5	8.1	26
3.2	98.7	61.4	37.8	8.7	23.4	1.6	3.1	46.7	40.1	13.6	5.9	13.2	2.2	27
1.5	..	18.1	10.8	4.6	7.0	1.1	1.5	..	..	..	..	5.4	1.1	28
1.7	90.7	43.3	27.0	4.1	16.4	0.6	1.7	..	29.4	..	..	7.8	1.1	29
3.4	82.7	57.8	47.8	16.7	29.5	1.3	3.4	107.5	48.1	35.4	7.1	22.6	1.6	30
0.7	..	..	9.2	..	3.8	0.4	1.9	0	..	15.0	5.4	8.4	1.3	31
0.1	0	0	0	0	..	..	..	0	..	..	..	..	..	32
..	0	0	0	..	..	0	..	..	..	..	..	..	..	33
0.4	40.0	..	..	..	4.7	..	0.5	..	..	..	..	3.2	..	34
0.5	0	..	..	..	..	0.4	0.3	0	..	..	..	..	..	35
0.3	..	0	..	..	1.9	0.1	0.6	0	..	..	..	3.2	0.4	36
0.7	45.3	28.9	..	2.4	7.6	..	2.3	..	34.8	16.3	5.4	12.7	1.2	37
0.2	..	..	..	0	..	..	0.2	..	..	..	0	..	..	38
5.9	512.0	330.3	82.4	9.1	76.6	0.2	9.4	546.7	323.5	106.1	15.1	94.8	0.7	39
1.5	..	..	..	5.6	5.4	1.1	4.1	..	..	..	10.5	10.5	3.3	40
21.4	839.4	564.7	241.3	75.8	196.9	8.7	26.1	782.6	472.7	211.9	56.4	153.1	14.5	41
2.6	..	..	20.2	11.6	15.4	1.7	1.3	0	..	0	..	..	1.1	42
16.9	813.1	526.5	216.8	57.4	175.0	5.5	16.5	728.3	412.1	173.1	34.1	123.2	7.0	43
3.5	85.9	52.9	30.3	15.4	25.8	1.9	2.6	..	..	..	..	7.2	2.2	44
1.4	0	..	..	6.0	5.3	1.1	1.2	..	0	..	..	..	1.3	45
2.1	85.9	50.0	24.6	9.4	20.5	0.8	1.3	..	..	..	..	5.7	1.0	46
3.8	116.2	114.7	50.6	16.3	37.9	1.4	1.7	..	..	..	..	..	1.5	47
0.9	..	..	..	..	4.5	0.6	1.6	0	..	..	..	..	1.4	48
..	0	0	..	..	..	..	..	0	0	0	0	0	..	49
..	0	0	0	0	0	..	..	0	0	0	0	0	0	50
0.5	..	..	..	..	5.3	..	0.5	..	..	..	..	..	..	51
0.6	0	..	..	..	3.9	0.4	..	0	0	0	0	..	..	52
0.4	0	0	..	..	..	0.3	..	0	0	0	0	..	..	53
0.8	..	32.4	..	..	6.5	0.4	1.2	..	..	..	..	12.4	..	54
0.2	..	..	0	..	3.4	0	..	0	..	..	..	..	0	55
6.0	560.6	276.5	104.0	12.8	86.1	0.3	8.2	576.1	309.1	128.4	20.8	90.2	0.7	56
1.9	0	..	..	6.9	6.5	1.5	8.2	..	..	38.8	16.3	25.3	6.5	57

## VITAL STATISTICS—SPECIAL REPORTS

TABLE 12. NEONATAL MORTALITY RATES FOR SELECTED CAUSES, BY BIRTH WEIGHT

(See headnote)

AREA AND CAUSE OF DEATH		ALL RACES						
		Total <sup>1</sup>	Birth weight (in grams)					
			1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,500 or less	2,501 or more
1	WEST SOUTH CENTRAL-----All causes	20.0	743.7	548.1	230.2	62.0	174.8	8.5
2	Congenital malformations-----750-759	2.1	0	18.1	16.2	9.6	11.0	1.4
3	Certain diseases of early infancy-----760-776	15.7	729.6	520.9	205.0	45.7	156.0	5.3
4	Birth injuries-----760,761	2.9	45.1	41.7	24.3	6.7	15.2	2.0
5	Intracranial and spinal injury-----760	1.6	..	..	10.8	4.3	5.7	1.3
6	Other birth injury-----761	1.3	42.3	34.5	13.5	2.4	9.5	0.7
7	Postnatal asphyxia and atelectasis-----762	2.3	50.7	67.2	29.7	10.6	21.4	0.9
8	Pneumonia of newborn-----763	1.1	..	..	..	3.8	5.5	0.8
9	Diarrhea of newborn-----764	0.3	0	..	..	..	2.3	0.1
10	Other infections of newborn-----765-768	0.1	0	0	..	0	..	..
11	Neonatal disorders arising from maternal toxemia-----769	0.3	..	..	..	..	3.6	..
12	Hemolytic disease of newborn (erythroblastosis)-----770	0.5	0	..	..	2.6	3.2	0.3
13	Hemorrhagic disease of newborn-----771	0.2	..	..	..	..	..	0.1
14	Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	1.2	84.5	27.2	20.7	2.9	12.9	0.4
15	Immaturity with mention of any other subsidiary condition-----774	0.2	..	..	..	0	2.8	..
16	Immaturity unqualified-----776	6.4	512.7	341.2	94.4	15.1	87.1	0.3
17	All other causes-----Residual	2.2	..	..	9.0	6.7	7.8	1.7
18	MOUNTAIN-----All causes	23.7	921.3	566.8	241.3	53.9	178.8	8.1
19	Congenital malformations-----750-759	2.6	0	..	23.8	8.1	10.4	1.7
20	Certain diseases of early infancy-----760-776	19.2	921.3	558.7	206.6	40.0	162.5	4.9
21	Birth injuries-----760,761	4.7	202.2	129.6	32.9	8.1	33.6	1.9
22	Intracranial and spinal injury-----760	2.1	..	..	21.9	..	11.1	1.1
23	Other birth injury-----761	2.6	162.9	105.3	..	..	22.5	0.7
24	Postnatal asphyxia and atelectasis-----762	4.0	112.4	89.1	53.0	11.4	30.9	1.3
25	Pneumonia of newborn-----763	0.8	0	..	..	..	3.9	0.5
26	Diarrhea of newborn-----764	..	0	0	..	..	..	..
27	Other infections of newborn-----765-768	..	0	0	..	0	..	..
28	Neonatal disorders arising from maternal toxemia-----769	0.5	..	..	..	..	4.6	..
29	Hemolytic disease of newborn (erythroblastosis)-----770	0.8	0	..	..	4.8	4.2	0.5
30	Hemorrhagic disease of newborn-----771	..	..	0	0	..	..	..
31	Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	1.1	..	..	20.1	..	8.8	..
32	Immaturity with mention of any other subsidiary condition-----774	0.3	..	..	..	..	3.3	0
33	Immaturity unqualified-----776	6.5	522.5	275.3	75.0	7.1	70.7	..
34	All other causes-----Residual	1.9	0	0	..	5.7	5.9	1.4
35	PACIFIC-----All causes	19.0	915.2	612.5	211.0	49.5	182.8	5.8
36	Congenital malformations-----750-759	2.4	..	..	14.9	10.2	11.2	1.7
37	Certain diseases of early infancy-----760-776	15.7	899.7	589.0	190.9	37.3	168.0	3.4
38	Birth injuries-----760,761	3.3	167.1	74.4	35.0	7.0	28.2	1.3
39	Intracranial and spinal injury-----760	1.2	..	..	10.5	4.0	5.8	0.8
40	Other birth injury-----761	2.1	156.8	68.5	24.5	3.0	22.4	0.5
41	Postnatal asphyxia and atelectasis-----762	4.7	162.0	164.4	79.7	18.6	51.6	1.0
42	Pneumonia of newborn-----763	0.7	0	19.6	10.5	..	4.5	0.4
43	Diarrhea of newborn-----764	..	0	..	0	0	..	..
44	Other infections of newborn-----765-768	..	0	..	..	..	..	0
45	Neonatal disorders arising from maternal toxemia-----769	0.4	..	21.5	..	..	4.6	..
46	Hemolytic disease of newborn (erythroblastosis)-----770	0.6	..	0	..	..	2.0	0.5
47	Hemorrhagic disease of newborn-----771	0.1	..	..	0	..	..	..
48	Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.6	33.4	45.0	..	..	8.1	..
49	Immaturity with mention of any other subsidiary condition-----774	0.3	..	..	9.6	..	4.0	0
50	Immaturity unqualified-----776	4.8	506.4	242.7	42.0	3.7	63.3	..
51	All other causes-----Residual	0.9	..	..	..	..	3.6	0.7

<sup>1</sup>Rates based on tabulated totals shown in table 11.

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WHITE							NONWHITE							
Total <sup>1</sup>	Birth weight (in grams)						Total <sup>1</sup>	Birth weight (in grams)						
	1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,500 or less	2,501 or more		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,500 or less	2,501 or more	
18.8	763.0	549.6	236.4	62.7	178.5	7.7	24.8	682.4	543.5	213.8	59.9	164.2	11.6	1
2.4	0	..	21.0	12.0	13.7	1.6	0.9	0	..	..	..	..	0.7	2
14.6	751.9	520.6	209.2	45.6	158.8	4.7	19.9	658.8	521.7	194.1	45.8	147.9	7.8	3
2.7	44.4	38.7	30.9	7.4	16.3	1.8	3.8	..	..	..	..	11.3	3.1	4
1.5	..	..	12.4	5.2	6.1	1.1	2.1	0	..	..	..	..	1.9	5
1.2	40.7	36.3	18.6	..	10.5	0.6	1.7	..	..	0	..	6.9	1.2	6
2.3	59.3	67.8	34.7	10.3	22.7	0.8	2.4	..	..	..	11.2	17.5	1.1	7
1.0	..	..	..	..	4.4	0.7	1.8	..	0	..	..	8.8	1.2	8
0.2	0	0	..	0	..	..	0.7	0	..	..	..	..	..	9
..	0	0	..	0	..	..	..	0	0	..	..	0	..	10
0.3	..	..	..	..	3.3	..	..	..	..	..	..	..	0	11
0.6	0	..	..	..	3.5	0.4	..	0	..	0	..	..	..	12
0.2	..	..	..	..	..	..	..	0	0	0	..	..	..	13
1.0	81.5	..	14.9	3.9	11.8	0.3	2.1	..	..	36.2	0	16.3	0.8	14
0.2	..	..	..	0	2.4	..	..	..	..	..	0	..	..	15
6.1	537.0	348.7	96.5	15.5	90.6	0.3	7.5	435.3	318.8	88.8	14.0	77.1	0.7	16
1.7	..	..	..	5.2	5.9	1.4	4.0	..	..	..	11.2	13.2	3.1	17
23.0	918.1	564.1	232.4	51.8	176.7	7.7	35.1	..	..	371.4	85.9	213.1	14.9	18
2.7	0	..	23.4	8.6	10.7	1.8	..	0	0	..	0	..	..	19
18.8	918.1	555.6	201.2	38.1	161.1	4.7	26.2	..	..	285.7	..	185.8	8.1	20
4.8	195.0	136.8	33.2	8.1	33.9	1.9	..	..	0	..	..	..	..	21
2.0	..	..	23.4	..	10.7	1.2	..	..	0	0	0	..	..	22
2.7	169.6	111.1	..	..	23.2	0.8	..	0	0	..	..	..	0	23
4.0	105.3	81.2	52.7	10.7	29.4	1.4	5.6	..	..	..	..	54.6	0	24
0.7	0	..	..	..	4.2	0.3	..	0	0	0	0	0	..	25
..	0	0	..	..	..	..	..	0	0	0	0	0	..	26
..	0	0	0	0	0	..	..	0	0	0	0	0	..	27
0.5	..	..	..	0	4.5	..	..	0	0	0	0	..	..	28
0.9	0	..	..	5.1	4.5	0.5	0	0	0	0	0	0	0	29
..	..	0	0	..	..	..	0	0	0	0	0	0	0	30
0.9	..	..	..	..	8.0	..	..	0	0	..	0	..	..	31
0.3	..	..	..	..	3.5	0	0	0	0	0	0	0	0	32
6.4	532.2	289.2	76.2	5.6	70.7	..	7.2	..	..	..	..	71.0	0	33
1.6	0	0	..	5.1	4.8	1.2	7.8	0	0	..	..	..	6.2	34
18.6	919.5	610.0	213.6	51.1	183.9	5.7	23.8	878.0	634.6	183.7	33.6	173.0	7.0	35
2.4	..	..	15.3	10.4	11.5	1.7	2.6	0	..	..	..	..	1.9	36
15.4	902.3	588.2	194.4	38.5	168.9	3.4	19.2	878.0	596.2	153.1	25.8	159.2	3.5	37
3.4	186.8	80.6	36.4	7.1	30.2	1.3	2.3	0	..	..	..	..	..	38
1.1	..	..	11.5	3.8	5.8	0.7	1.7	0	..	0	..	..	..	39
2.3	175.3	76.3	24.9	3.3	24.4	0.5	..	0	..	0	..	..	..	40
4.5	149.4	143.8	81.4	19.5	49.9	1.0	7.5	268.3	346.2	..	..	67.5	..	41
0.6	0	21.8	9.6	..	4.4	0.3	0.0	0	0	..	..	..	..	42
..	0	..	0	0	..	..	0	0	0	0	0	0	0	43
..	0	0	..	..	..	0	..	0	..	0	0	0	0	44
0.4	..	24.0	..	..	4.9	..	..	0	0	0	0	..	..	45
0.7	..	0	..	..	2.2	0.5	0	0	0	0	0	0	0	46
..	..	..	0	..	..	..	..	0	0	0	..	..	..	47
0.7	28.7	50.1	..	..	8.4	..	..	..	0	0	0	..	0	48
0.3	..	..	10.5	..	4.4	0	0	0	0	0	0	0	0	49
4.6	505.7	246.2	41.2	3.6	62.9	..	6.8	512.2	211.5	..	..	67.5	0	50
0.9	..	..	..	..	3.5	0.6	1.9	0	..	..	0	..	..	51



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TABLE 13. LIVE BIRTHS BY BIRTH WEIGHT, RACE, AND ATTENDANT, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(By place of residence. Birth weights not stated are distributed. Excludes data for Massachusetts)

AREA AND RACE	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
TOTAL BIRTHS												
ALL COUNTIES-----	837,786	3,928	5,081	11,388	41,240	151,808	315,629	226,739	84,508	17,465	61,637	776,149
White-----	717,133	3,189	4,079	9,206	33,460	126,906	273,285	198,389	55,753	12,866	49,934	667,199
Nonwhite--	120,653	739	1,002	2,182	7,780	24,902	42,344	28,350	8,755	4,599	11,703	108,950
Urban-----	493,051	2,591	3,107	7,035	25,790	96,584	192,273	126,472	32,492	6,707	38,523	454,528
White-----	425,453	2,053	2,465	5,637	20,795	79,982	167,131	112,843	29,112	5,435	30,950	394,503
Nonwhite--	67,598	538	642	1,398	4,995	16,602	25,142	13,629	3,380	1,272	7,573	60,025
Rural-----	344,735	1,337	1,974	4,353	15,450	55,224	123,356	100,267	32,016	10,758	23,114	321,621
White-----	291,680	1,136	1,614	3,569	12,665	46,924	106,154	85,546	26,641	7,431	18,984	272,696
Nonwhite--	53,055	201	360	784	2,785	8,300	17,202	14,721	5,375	3,327	4,130	48,925
Metropolitan counties-----	447,770	2,432	2,731	6,289	23,114	88,016	175,147	114,642	29,439	5,960	34,566	413,204
White-----	388,094	1,922	2,160	5,007	18,620	72,784	152,374	103,338	26,773	5,116	27,709	360,385
Nonwhite--	59,676	510	571	1,282	4,494	15,232	22,773	11,304	2,666	844	6,857	52,819
Urban-----	357,352	1,983	2,225	5,148	18,966	71,866	140,655	89,787	22,408	4,314	28,322	329,030
White-----	305,342	1,522	1,732	4,003	14,919	58,213	120,774	80,227	20,270	3,682	22,176	283,166
Nonwhite--	52,010	461	493	1,145	4,047	13,653	19,881	9,560	2,138	632	6,146	45,864
Rural-----	90,418	449	506	1,341	4,148	16,150	34,922	24,855	7,031	1,646	6,244	84,174
White-----	82,752	400	428	1,004	3,701	14,571	31,600	23,111	6,503	1,434	5,533	77,219
Nonwhite--	7,666	49	78	137	447	1,579	2,892	1,744	528	212	711	6,955
Nonmetropolitan counties-----	390,016	1,496	2,350	5,099	18,126	63,792	140,482	112,097	35,099	11,505	27,071	362,945
White-----	329,039	1,267	1,919	4,199	14,840	54,122	120,911	95,051	28,980	7,750	22,225	308,614
Nonwhite--	60,977	229	431	900	3,286	9,670	19,571	17,046	6,089	3,755	4,846	56,331
Urban-----	135,699	608	882	1,887	6,824	24,718	51,618	36,685	10,084	2,993	10,201	125,496
White-----	120,111	531	733	1,634	5,876	21,769	46,357	32,616	8,842	1,753	8,774	111,537
Nonwhite--	15,588	77	149	253	948	2,949	5,261	4,069	1,242	640	1,427	14,161
Rural-----	254,317	888	1,468	3,212	11,302	39,074	88,864	75,412	24,985	9,112	16,870	237,447
White-----	208,928	736	1,186	2,565	8,964	32,353	74,554	62,435	20,138	5,997	13,451	195,477
Nonwhite--	45,389	152	282	647	2,338	6,721	14,310	12,977	4,847	3,115	3,419	41,970
BIRTHS ATTENDED BY PHYSICIAN IN HOSPITAL												
ALL COUNTIES-----	725,226	3,494	4,355	10,007	36,238	136,481	280,371	192,807	51,437	10,036	54,094	671,132
White-----	658,295	2,921	3,698	8,524	30,990	119,198	254,291	180,548	48,746	9,379	46,133	612,162
Nonwhite--	66,931	573	657	1,483	5,248	17,283	26,080	12,259	2,691	657	7,961	58,970
Urban-----	453,569	2,415	2,861	6,611	24,237	91,899	182,525	118,140	29,587	5,294	36,124	427,445
White-----	411,757	1,946	2,344	5,441	20,108	77,933	162,455	108,960	27,704	4,866	29,839	381,818
Nonwhite--	51,812	469	517	1,170	4,129	13,966	20,070	9,180	1,683	428	6,285	45,627
Places of 250,000 or more-----	179,489	1,058	1,114	2,761	9,890	37,625	70,773	42,977	10,415	1,876	14,823	163,666
White-----	148,230	753	826	2,059	7,423	29,214	59,037	37,899	9,377	1,642	11,061	137,189
Nonwhite--	30,259	305	288	702	2,467	8,411	11,736	5,078	1,038	234	3,762	26,497
Places of 50,000 to 250,000-----	99,071	508	621	1,400	5,139	19,553	39,030	25,387	6,307	1,126	7,668	91,403
White-----	87,837	415	498	1,133	4,261	16,619	34,632	23,336	5,895	1,028	6,327	81,510
Nonwhite--	11,234	93	123	267	858	2,934	4,398	2,051	412	98	1,341	9,983
Places of 10,000 to 50,000-----	116,702	555	712	1,562	5,779	22,034	45,953	30,879	7,795	1,433	8,608	108,094
White-----	109,537	501	645	1,423	5,205	20,230	43,211	29,471	7,491	1,359	7,775	101,762
Nonwhite--	7,165	54	66	139	574	1,804	2,742	1,408	304	74	833	6,332
Places of 2,500 to 10,000-----	69,307	294	414	888	3,429	12,687	26,769	16,897	5,070	859	5,025	64,282
White-----	66,153	277	374	826	3,199	11,870	25,575	18,254	4,941	837	4,876	61,477
Nonwhite--	3,154	17	40	62	230	817	1,194	643	129	22	349	2,805
Rural-----	261,657	1,079	1,494	3,396	12,001	44,582	97,846	74,667	21,850	4,742	17,970	243,667
White-----	246,538	975	1,354	3,083	10,882	41,265	91,836	71,588	21,042	4,513	16,294	230,244
Nonwhite--	15,119	104	140	313	1,119	3,317	6,010	3,079	808	229	1,676	13,443
Metropolitan counties-----	425,697	2,277	2,539	5,967	21,940	84,385	167,586	108,616	27,366	5,021	32,723	392,974
White-----	376,670	1,822	2,060	4,860	16,051	71,133	148,426	100,081	25,607	4,630	28,793	349,877
Nonwhite--	49,027	455	479	1,107	3,889	13,252	19,160	8,535	1,759	391	5,930	43,097
Urban-----	343,513	1,871	2,094	4,923	18,154	69,381	135,871	86,180	21,242	3,797	27,042	316,471
White-----	299,029	1,456	1,662	3,901	14,590	57,237	118,572	78,488	19,677	3,446	21,609	277,420
Nonwhite--	44,484	415	432	1,022	3,564	12,144	17,299	7,692	1,565	351	5,433	39,051
Places of 250,000 or more-----	178,489	1,058	1,114	2,761	9,890	37,625	70,773	42,977	10,415	1,876	14,823	163,666
White-----	148,230	753	826	2,059	7,423	29,214	59,037	37,899	9,377	1,642	11,061	137,169
Nonwhite--	30,259	305	288	702	2,467	8,411	11,736	5,078	1,038	234	3,762	26,497
Places of 50,000 to 250,000-----	99,071	508	621	1,400	5,139	19,553	39,030	25,387	6,307	1,126	7,668	91,403
White-----	87,837	415	498	1,133	4,261	16,619	34,632	23,336	5,895	1,028	6,327	81,510
Nonwhite--	11,234	93	123	267	858	2,934	4,398	2,051	412	98	1,341	9,983
Places of 10,000 to 50,000-----	44,512	214	234	519	2,101	8,288	17,576	12,010	3,009	561	3,068	41,444
White-----	42,164	201	220	462	1,910	7,664	16,449	11,575	2,920	543	2,813	39,351
Nonwhite--	2,348	13	14	37	191	624	927	435	89	18	255	2,093
Places of 2,500 to 10,000-----	21,441	91	125	243	1,024	3,915	8,492	5,806	1,511	234	1,483	19,958
White-----	20,798	87	118	227	976	3,740	8,254	5,878	1,485	233	1,408	19,390
Nonwhite--	643	4	7	16	48	175	238	128	26	1	75	568
Rural-----	82,184	406	445	1,044	3,786	15,004	31,715	22,436	6,124	1,224	5,681	76,503
White-----	77,641	366	398	959	3,461	13,896	29,854	21,593	5,930	1,184	5,184	72,457
Nonwhite--	4,543	40	47	85	325	1,108	1,861	843	194	40	497	4,046

TABLE 13. LIVE BIRTHS BY BIRTH WEIGHT, RACE, AND ATTENDANT, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950--Continued

(By place of residence. Birth weights not stated are distributed. Excludes data for Massachusetts)

AREA AND RACE	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
BIRTHS ATTENDED BY PHYSICIAN IN HOSPITAL--Continued												
Nonmetropolitan counties-----	299,529	1,217	1,816	4,040	14,298	52,096	112,785	84,191	24,071	5,015	21,371	278,158
White-----	281,625	1,099	1,638	3,664	12,939	48,065	105,855	80,467	23,139	4,749	19,340	262,285
Nonwhite--	17,904	118	178	376	1,359	4,031	6,920	3,724	932	266	2,031	15,873
Urban-----	120,056	544	767	1,688	6,083	22,518	46,654	31,960	8,345	1,497	9,082	110,974
White-----	112,728	490	692	1,540	5,519	20,698	43,885	30,472	8,027	1,420	8,230	104,498
Nonwhite--	7,328	54	85	148	565	1,822	2,771	1,488	318	77	852	6,476
Places of 10,000 to 50,000-----	72,190	341	478	1,043	3,678	13,746	28,377	18,869	4,786	872	5,540	66,650
White-----	67,373	300	426	941	3,295	12,566	26,562	17,896	4,571	816	4,962	62,411
Nonwhite--	4,817	41	52	102	383	1,180	1,815	973	215	56	578	4,239
Places of 2,500 to 10,000-----	47,866	203	289	645	2,405	8,772	18,277	13,091	3,559	625	3,542	44,524
White-----	45,355	190	256	599	2,223	8,130	17,321	12,576	3,456	604	3,262	42,087
Nonwhite--	2,511	13	33	46	182	642	956	515	103	21	274	2,237
Rural-----	179,473	673	1,049	2,352	8,215	29,578	66,131	52,231	15,726	3,518	12,289	167,184
White-----	169,897	609	956	2,124	7,421	27,369	61,982	49,995	15,112	3,329	11,110	157,787
Nonwhite--	10,576	64	93	228	794	2,209	4,149	2,236	614	189	1,179	9,397
BIRTHS ATTENDED BY PHYSICIAN NOT IN HOSPITAL												
ALL COUNTIES-----	65,406	314	476	607	2,940	9,663	22,052	19,041	6,904	3,557	4,537	60,869
White-----	47,846	226	291	532	1,934	6,383	15,919	14,426	5,576	2,559	2,983	44,863
Nonwhite--	17,560	88	185	275	1,006	3,280	6,133	4,615	1,328	650	1,554	16,006
Urban-----	17,794	139	175	263	1,002	3,196	6,369	4,560	1,486	604	1,579	16,215
White-----	10,194	90	94	145	495	1,629	3,642	2,781	958	350	824	9,370
Nonwhite--	7,600	49	81	118	507	1,567	2,727	1,779	528	244	755	6,845
Rural-----	47,612	175	301	544	1,938	6,467	15,683	14,481	5,418	2,605	2,958	44,654
White-----	37,652	136	197	387	1,439	4,754	12,277	11,645	4,618	2,199	2,159	35,493
Nonwhite--	9,960	39	104	157	499	1,713	3,406	2,836	800	406	799	9,161
Metropolitan counties-----	14,883	127	160	233	863	2,667	5,301	3,802	1,224	506	1,383	13,500
White-----	8,949	64	89	125	439	1,570	3,158	2,466	850	338	737	8,212
Nonwhite--	5,934	43	71	108	424	1,297	2,133	1,316	374	168	646	5,288
Urban-----	9,324	94	110	163	614	1,875	3,358	2,193	644	273	981	8,343
White-----	4,498	55	61	83	242	774	1,631	1,155	357	140	441	4,057
Nonwhite--	4,826	39	49	80	372	1,101	1,727	1,038	287	133	540	4,286
Rural-----	5,559	33	50	70	249	792	1,943	1,609	580	233	402	5,157
White-----	4,451	29	28	42	197	596	1,537	1,331	493	198	296	4,155
Nonwhite--	1,108	4	22	28	52	196	406	278	87	35	108	1,002
Nonmetropolitan counties-----	50,523	187	316	574	2,077	6,996	16,751	15,239	5,680	2,703	3,154	47,369
White-----	38,897	142	202	407	1,495	5,013	12,751	11,940	4,726	2,221	2,246	36,651
Nonwhite--	11,626	45	114	167	582	1,983	4,000	3,299	954	482	908	10,718
Urban-----	8,470	45	65	100	388	1,321	3,011	2,367	842	331	598	7,872
White-----	5,696	35	33	62	253	855	2,011	1,626	601	220	383	5,313
Nonwhite--	2,774	10	32	38	135	466	1,000	741	241	111	215	2,559
Rural-----	42,053	142	251	474	1,689	5,675	13,740	12,872	4,838	2,372	2,556	39,497
White-----	33,201	107	169	345	1,242	4,158	10,740	10,314	4,125	2,001	1,863	31,338
Nonwhite--	8,852	35	82	129	447	1,517	3,000	2,558	713	371	693	8,159
BIRTHS ATTENDED BY MIDWIFE, OTHER, AND NOT SPECIFIED												
ALL COUNTIES-----	47,154	120	250	574	2,062	5,664	13,206	14,891	6,167	4,220	3,006	44,146
White-----	10,992	42	90	150	536	1,325	3,075	3,415	1,431	928	818	10,174
Nonwhite--	36,162	78	160	424	1,526	4,339	10,131	11,476	4,736	3,292	2,188	33,974
Urban-----	11,688	37	71	161	551	1,489	3,379	3,772	1,419	809	820	10,868
White-----	3,502	17	27	51	192	420	1,034	1,102	450	209	287	3,215
Nonwhite--	8,186	20	44	110	359	1,069	2,345	2,670	969	600	533	7,653
Rural-----	35,466	83	179	413	1,511	4,175	9,827	11,119	4,748	3,411	2,186	33,280
White-----	7,490	25	63	99	344	905	2,041	2,313	981	719	531	6,959
Nonwhite--	27,976	58	116	314	1,167	3,270	7,786	8,806	3,767	2,692	1,655	26,321
Metropolitan counties-----	7,190	28	32	89	311	964	2,260	2,224	849	433	460	6,730
White-----	2,475	16	11	22	130	281	780	771	316	148	179	2,296
Nonwhite--	4,715	12	21	67	181	683	1,480	1,453	533	285	281	4,434
Urban-----	4,515	18	21	62	198	610	1,425	1,414	522	244	299	4,216
White-----	1,815	11	9	19	87	202	571	584	236	96	126	1,689
Nonwhite--	2,700	7	12	43	111	408	855	850	286	148	173	2,527
Rural-----	2,675	10	11	27	113	354	834	810	327	189	161	2,514
White-----	660	5	2	3	43	79	209	187	80	52	53	607
Nonwhite--	2,015	5	9	24	70	275	625	623	247	137	108	1,907

VITAL STATISTICS—SPECIAL REPORTS

TABLE 13. LIVE BIRTHS BY BIRTH WEIGHT, RACE, AND ATTENDANT, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(By place of residence. Birth weights not stated are distributed. Excludes data for Massachusetts)

AREA AND RACE	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
BIRTHS ATTENDED BY MIDWIFE, OTHER, AND NOW SPECIFIED—Continued												
Nonmetropolitan counties-----	39,964	92	218	485	1,751	4,700	10,946	12,667	5,318	3,787	2,546	37,418
White-----	8,517	26	79	128	406	1,044	2,295	2,644	1,115	780	639	7,878
Nonwhite--	31,447	66	139	357	1,345	3,656	8,651	10,023	4,203	3,007	1,907	29,540
Urban-----	7,173	19	50	99	353	879	1,953	2,358	897	565	521	6,652
White-----	1,687	6	18	32	105	218	463	518	214	115	161	1,526
Nonwhite--	5,486	13	32	67	248	661	1,490	1,840	683	452	360	5,126
Rural-----	32,791	73	168	386	1,398	3,821	8,993	10,309	4,421	3,222	2,025	30,766
White-----	6,830	20	61	96	301	826	1,832	2,126	901	667	478	6,352
Nonwhite--	25,961	53	107	290	1,097	2,995	7,161	8,183	3,520	2,555	1,547	24,414

NOTE.—For definitions of areas, see Explanatory Notes.

TABLE 14. PERCENTAGE DISTRIBUTION OF LIVE BIRTHS BY BIRTH WEIGHT, BY RACE AND ATTENDANT, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(By place of residence. Birth weights not stated are distributed. Excludes data for Massachusetts)

AREA AND RACE	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
TOTAL BIRTHS												
ALL COUNTIES-----	100.0	0.5	0.6	1.4	4.9	16.1	37.7	27.1	7.7	2.1	7.4	92.6
White-----	100.0	0.4	0.6	1.3	4.7	17.7	38.1	27.7	7.8	1.8	7.0	93.0
Nonwhite--	100.0	0.6	0.8	1.8	6.4	20.6	35.1	23.5	7.3	3.8	9.7	90.3
Urban-----	100.0	0.5	0.6	1.4	5.2	19.6	39.0	25.7	6.6	1.4	7.8	92.2
White-----	100.0	0.5	0.6	1.3	4.9	18.8	39.3	26.5	6.8	1.3	7.3	92.7
Nonwhite--	100.0	0.8	0.9	2.1	7.4	24.6	37.2	20.2	5.0	1.9	11.2	88.8
Rural-----	100.0	0.4	0.6	1.3	4.5	16.0	35.8	29.1	9.3	3.1	6.7	93.3
White-----	100.0	0.4	0.6	1.2	4.3	16.1	36.4	29.3	9.1	2.5	6.5	93.5
Nonwhite--	100.0	0.4	0.7	1.5	5.2	15.6	32.4	27.7	10.1	6.3	7.8	92.2
Metropolitan counties-----	100.0	0.5	0.6	1.4	5.2	19.7	39.1	25.6	6.6	1.3	7.7	92.3
White-----	100.0	0.5	0.6	1.3	4.8	18.8	39.3	26.6	6.9	1.3	7.1	92.9
Nonwhite--	100.0	0.9	1.0	2.1	7.5	25.5	38.2	18.9	4.5	1.4	11.5	88.5
Urban-----	100.0	0.6	0.8	1.4	5.3	20.1	39.4	25.1	6.3	1.2	7.9	92.1
White-----	100.0	0.5	0.6	1.3	4.9	19.1	39.6	26.3	6.6	1.2	7.3	92.7
Nonwhite--	100.0	0.9	0.9	2.2	7.8	26.3	38.2	18.4	4.1	1.2	11.8	88.2
Rural-----	100.0	0.5	0.6	1.3	4.6	17.9	38.1	27.5	7.8	1.8	6.9	93.1
White-----	100.0	0.5	0.5	1.2	4.5	17.6	38.2	27.9	7.9	1.7	6.7	93.3
Nonwhite--	100.0	0.6	1.0	1.8	5.8	20.6	37.7	22.7	6.9	2.8	9.3	90.7
Nonmetropolitan counties-----	100.0	0.4	0.6	1.3	4.6	16.4	36.0	28.7	9.0	2.9	6.9	93.1
White-----	100.0	0.4	0.6	1.3	4.5	16.4	36.7	28.9	8.8	2.4	6.8	93.2
Nonwhite--	100.0	0.4	0.7	1.5	5.4	15.9	32.1	28.0	10.0	6.2	7.9	92.1
Urban-----	100.0	0.4	0.6	1.4	5.0	18.2	38.0	27.0	7.4	1.8	7.5	92.5
White-----	100.0	0.4	0.6	1.4	4.9	18.1	38.6	27.2	7.4	1.5	7.3	92.7
Nonwhite--	100.0	0.5	1.0	1.6	6.1	18.9	33.8	26.1	8.0	4.1	9.2	90.8
Rural-----	100.0	0.3	0.6	1.3	4.4	15.4	34.9	29.7	9.8	3.6	6.6	93.4
White-----	100.0	0.4	0.6	1.2	4.3	15.5	35.7	29.9	9.6	2.9	6.4	93.6
Nonwhite--	100.0	0.3	0.6	1.4	5.2	14.8	31.5	28.6	10.7	6.9	7.5	92.5
BIRTHS ATTENDED BY PHYSICIAN IN HOSPITAL												
ALL COUNTIES-----	100.0	0.5	0.6	1.4	5.0	16.8	38.7	28.6	7.1	1.4	7.5	92.5
White-----	100.0	0.4	0.6	1.3	4.7	18.1	38.6	27.4	7.4	1.4	7.0	93.0
Nonwhite--	100.0	0.9	1.0	2.2	7.8	25.8	39.0	18.3	4.0	1.0	11.9	88.1
Urban-----	100.0	0.5	0.6	1.4	5.2	19.8	39.4	25.5	6.4	1.1	7.8	92.2
White-----	100.0	0.5	0.6	1.3	4.9	18.9	39.5	26.5	6.7	1.2	7.2	92.8
Nonwhite--	100.0	0.9	1.0	2.3	8.0	27.0	38.7	17.7	3.6	0.8	12.1	87.9
Places of 250,000 or more-----	100.0	0.6	0.6	1.5	5.5	21.1	39.7	24.1	5.8	1.1	8.3	91.7
White-----	100.0	0.5	0.6	1.4	5.0	19.7	39.8	25.6	6.3	1.1	7.5	92.5
Nonwhite--	100.0	1.0	1.0	2.3	8.2	27.8	38.8	16.8	3.4	0.8	12.4	87.6
Places of 50,000 to 250,000-----	100.0	0.5	0.6	1.4	5.2	19.7	39.4	25.6	6.4	1.1	7.7	92.3
White-----	100.0	0.5	0.6	1.3	4.9	18.9	39.4	26.6	6.7	1.2	7.2	92.8
Nonwhite--	100.0	0.8	1.1	2.4	7.6	26.1	39.1	18.3	3.7	0.9	11.9	88.1
Places of 10,000 to 50,000-----	100.0	0.5	0.6	1.3	5.0	18.9	39.4	26.5	6.7	1.2	7.4	92.6
White-----	100.0	0.5	0.6	1.3	4.8	18.5	39.4	26.9	6.8	1.2	7.1	92.9
Nonwhite--	100.0	0.8	0.9	1.9	8.0	25.2	38.3	19.7	4.2	1.0	11.6	88.4
Places of 2,500 to 10,000-----	100.0	0.4	0.6	1.3	4.9	18.3	38.6	27.3	7.3	1.2	7.3	92.7
White-----	100.0	0.4	0.6	1.2	4.8	17.9	38.7	27.6	7.5	1.3	7.1	92.9
Nonwhite--	100.0	0.5	1.3	2.0	7.3	25.9	37.9	20.4	4.1	0.7	11.1	88.9
Rural-----	100.0	0.4	0.6	1.3	4.6	17.0	37.4	28.5	8.4	1.8	6.9	93.1
White-----	100.0	0.4	0.5	1.3	4.4	16.7	37.3	29.0	8.5	1.8	6.6	93.4
Nonwhite--	100.0	0.7	0.9	2.1	7.4	21.9	39.8	20.4	5.3	1.5	11.1	88.9

TABLE 14. PERCENTAGE DISTRIBUTION OF LIVE BIRTHS BY BIRTH WEIGHT, BY RACE AND ATTENDANT, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(By place of residence. Birth weights not stated are distributed. Excludes data for Massachusetts)

AREA AND RACE	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
BIRTHS ATTENDED BY PHYSICIAN IN HOSPITAL—Continued												
Metropolitan counties-----	100.0	0.5	0.6	1.4	5.2	19.8	39.4	25.5	6.4	1.2	7.7	92.3
White-----	100.0	0.5	0.5	1.3	4.8	18.9	39.4	26.6	6.8	1.2	7.1	92.9
Nonwhite--	100.0	0.9	1.0	2.3	7.9	27.0	39.1	17.4	3.6	0.8	12.1	87.9
Urban-----	100.0	0.5	0.6	1.4	5.3	20.2	39.6	25.1	6.2	1.1	7.9	92.1
White-----	100.0	0.5	0.6	1.3	4.9	19.1	39.7	26.2	6.6	1.2	7.2	92.8
Nonwhite--	100.0	0.9	1.0	2.3	8.0	27.3	38.9	17.3	3.5	0.8	12.2	87.8
Places of 250,000 or more-----	100.0	0.6	0.6	1.5	5.5	21.1	39.7	24.1	5.8	1.1	8.3	91.7
White-----	100.0	0.5	0.6	1.4	5.0	19.7	39.8	25.6	6.3	1.1	7.5	92.5
Nonwhite--	100.0	1.0	1.0	2.3	8.2	27.8	38.8	16.8	3.4	0.8	12.4	87.6
Places of 50,000 to 250,000-----	100.0	0.5	0.6	1.4	5.2	19.7	39.4	25.6	6.4	1.1	7.7	92.3
White-----	100.0	0.5	0.6	1.3	4.9	18.9	39.4	26.6	6.7	1.2	7.2	92.8
Nonwhite--	100.0	0.8	1.1	2.4	7.6	26.1	39.1	18.3	3.7	0.9	11.9	88.1
Places of 10,000 to 50,000-----	100.0	0.5	0.5	1.2	4.7	18.6	39.5	27.0	6.8	1.3	6.9	93.1
White-----	100.0	0.5	0.5	1.1	4.5	18.2	39.5	27.5	6.9	1.3	6.7	93.3
Nonwhite--	100.0	0.6	0.6	1.6	8.1	26.6	39.5	18.5	3.8	0.8	10.9	89.1
Places of 2,500 to 10,000-----	100.0	0.4	0.6	1.1	4.8	18.3	39.6	27.1	7.0	1.1	6.9	93.1
White-----	100.0	0.4	0.6	1.1	4.7	18.0	39.7	27.3	7.1	1.1	6.8	93.2
Nonwhite--	100.0	0.6	1.1	2.5	7.5	27.2	37.0	19.9	4.0	0.2	11.7	88.3
Rural-----	100.0	0.5	0.5	1.3	4.6	18.3	38.6	27.3	7.5	1.5	6.9	93.1
White-----	100.0	0.5	0.5	1.2	4.5	17.9	38.5	27.8	7.6	1.5	6.7	93.3
Nonwhite--	100.0	0.9	1.0	1.9	7.2	24.4	41.0	18.6	4.3	0.9	10.9	89.1
Nonmetropolitan counties-----	100.0	0.4	0.6	1.3	4.8	17.4	37.7	28.1	8.0	1.7	7.1	92.9
White-----	100.0	0.4	0.6	1.3	4.6	17.1	37.6	28.6	8.2	1.7	6.9	93.1
Nonwhite--	100.0	0.7	1.0	2.1	7.6	22.5	38.7	20.8	5.2	1.5	11.3	88.7
Urban-----	100.0	0.5	0.6	1.4	5.1	18.8	38.9	26.6	7.0	1.2	7.6	92.4
White-----	100.0	0.4	0.6	1.4	4.9	18.4	38.9	27.0	7.1	1.3	7.3	92.7
Nonwhite--	100.0	0.7	1.2	2.0	7.7	24.9	37.8	20.3	4.3	1.1	11.6	88.4
Places of 10,000 to 50,000-----	100.0	0.5	0.7	1.4	5.1	19.0	39.3	26.1	6.6	1.2	7.7	92.3
White-----	100.0	0.4	0.6	1.4	4.9	18.7	39.4	26.6	6.8	1.2	7.4	92.6
Nonwhite--	100.0	0.9	1.1	2.1	8.0	24.5	37.7	20.2	4.5	1.2	12.0	88.0
Places of 2,500 to 10,000-----	100.0	0.4	0.6	1.3	5.0	18.3	38.2	27.3	7.4	1.3	7.4	92.6
White-----	100.0	0.4	0.6	1.3	4.9	17.9	38.2	27.7	7.6	1.3	7.2	92.8
Nonwhite--	100.0	0.5	1.3	1.8	7.2	25.6	38.1	20.5	4.1	0.8	10.9	89.1
Rural-----	100.0	0.4	0.6	1.3	4.6	16.5	36.8	29.1	8.8	2.0	6.8	93.2
White-----	100.0	0.4	0.6	1.3	4.4	16.2	36.7	29.6	8.9	2.0	6.6	93.4
Nonwhite--	100.0	0.6	0.9	2.2	7.5	20.9	39.2	21.1	5.8	1.8	11.1	88.9
BIRTHS ATTENDED BY PHYSICIAN NOT IN HOSPITAL												
ALL COUNTIES-----	100.0	0.5	0.7	1.2	4.5	14.8	33.7	29.1	10.6	4.9	6.9	93.1
White-----	100.0	0.5	0.6	1.1	4.0	13.3	33.3	30.2	11.7	5.3	6.2	93.8
Nonwhite--	100.0	0.5	1.1	1.6	5.7	18.7	34.9	26.3	7.6	3.7	8.8	91.2
Urban-----	100.0	0.8	1.0	1.5	5.6	18.0	35.8	25.6	8.4	3.4	8.9	91.1
White-----	100.0	0.9	0.9	1.4	4.9	16.0	35.7	27.3	9.4	3.5	8.1	91.9
Nonwhite--	100.0	0.6	1.1	1.6	6.7	20.6	35.9	23.4	6.9	3.2	9.9	90.1
Rural-----	100.0	0.4	0.6	1.1	4.1	13.6	32.9	30.4	11.4	5.5	6.2	93.8
White-----	100.0	0.4	0.5	1.0	3.8	12.6	32.6	30.9	12.3	5.8	5.7	94.3
Nonwhite--	100.0	0.4	1.0	1.6	5.0	17.2	34.2	28.5	8.0	4.1	8.0	92.0
Metropolitan counties-----	100.0	0.9	1.1	1.6	5.8	17.9	35.6	25.5	8.2	3.4	9.3	90.7
White-----	100.0	0.9	1.0	1.4	4.9	15.3	35.4	27.8	9.5	3.8	8.2	91.8
Nonwhite--	100.0	0.7	1.2	1.8	7.1	21.9	35.9	22.2	6.3	2.8	10.9	89.1
Urban-----	100.0	1.0	1.2	1.7	6.6	20.1	36.0	23.5	6.9	2.9	10.5	89.5
White-----	100.0	1.2	1.4	1.8	5.4	17.2	36.3	25.7	7.9	3.1	9.8	90.2
Nonwhite--	100.0	0.8	1.0	1.7	7.7	22.8	35.8	21.5	5.9	2.8	11.2	88.8
Rural-----	100.0	0.6	0.9	1.2	4.5	14.2	35.0	28.9	10.4	4.2	7.2	92.8
White-----	100.0	0.7	0.6	0.9	4.4	13.4	34.5	29.9	11.1	4.4	6.7	93.3
Nonwhite--	100.0	0.4	2.0	2.5	4.7	17.7	36.6	25.1	7.9	3.2	9.6	90.4
Nonmetropolitan counties-----	100.0	0.4	0.6	1.1	4.1	13.8	33.2	30.2	11.2	5.4	6.2	93.8
White-----	100.0	0.4	0.5	1.0	3.8	12.9	32.8	30.7	12.2	5.7	5.8	94.2
Nonwhite--	100.0	0.4	1.0	1.4	5.0	17.1	34.4	28.4	8.2	4.1	7.8	92.2
Urban-----	100.0	0.5	0.8	1.2	4.6	15.6	35.5	27.9	9.9	3.9	7.1	92.9
White-----	100.0	0.6	0.6	1.1	4.4	15.0	35.3	28.5	10.6	3.9	6.7	93.3
Nonwhite--	100.0	0.4	1.2	1.4	4.9	16.8	36.0	26.7	8.7	4.0	7.8	92.2
Rural-----	100.0	0.3	0.6	1.1	4.0	13.5	32.7	30.6	11.5	5.6	6.1	93.9
White-----	100.0	0.3	0.5	1.0	3.7	12.5	32.3	31.1	12.4	6.0	5.6	94.4
Nonwhite--	100.0	0.4	0.9	1.5	5.0	17.1	33.9	28.9	8.1	4.2	7.8	92.2

## VITAL STATISTICS—SPECIAL REPORTS

TABLE 14. PERCENTAGE DISTRIBUTION OF LIVE BIRTHS BY BIRTH WEIGHT, BY RACE AND ATTENDANT, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(By place of residence. Birth weights not stated are distributed. Excludes data for Massachusetts)

AREA AND RACE	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
ALL COUNTIES-----	100.0	0.3	0.5	1.2	4.4	12.0	28.0	31.6	13.1	8.9	6.4	93.6
White-----	100.0	0.4	0.8	1.4	4.9	12.1	28.0	31.1	13.0	8.4	7.4	92.6
Nonwhite--	100.0	0.2	0.4	1.2	4.2	12.0	28.0	31.7	13.1	9.1	6.1	93.9
Urban-----	100.0	0.3	0.6	1.4	4.7	12.7	28.9	32.3	12.1	6.9	7.0	93.0
White-----	100.0	0.5	0.8	1.5	5.5	12.0	29.5	31.5	12.8	6.0	8.2	91.8
Nonwhite--	100.0	0.2	0.5	1.3	4.4	13.1	28.6	32.6	11.8	7.3	6.5	93.5
Rural-----	100.0	0.2	0.5	1.2	4.3	11.8	27.7	31.4	13.4	9.6	6.2	93.8
White-----	100.0	0.3	0.8	1.3	4.6	12.1	27.2	30.9	13.1	9.6	7.1	92.9
Nonwhite--	100.0	0.2	0.4	1.1	4.2	11.7	27.8	31.5	13.5	9.6	5.9	94.1
Metropolitan counties-----	100.0	0.4	0.4	1.2	4.3	13.4	31.4	30.9	11.8	6.0	6.4	93.6
White-----	100.0	0.6	0.4	0.9	5.3	11.4	31.5	31.2	12.8	6.0	7.2	92.8
Nonwhite--	100.0	0.3	0.4	1.4	3.8	14.5	31.4	30.8	11.3	6.0	6.0	94.0
Urban-----	100.0	0.4	0.5	1.4	4.4	13.5	31.6	31.3	11.6	5.4	6.6	93.4
White-----	100.0	0.6	0.5	1.0	4.8	11.1	31.5	32.2	13.0	5.3	6.9	93.1
Nonwhite--	100.0	0.3	0.4	1.6	4.1	15.1	31.7	30.7	10.6	5.5	6.4	93.6
Rural-----	100.0	0.4	0.4	1.0	4.2	13.2	31.2	30.3	12.2	7.1	6.0	94.0
White-----	100.0	0.8	0.3	0.5	6.5	12.0	31.7	28.3	12.1	7.9	8.0	92.0
Nonwhite--	100.0	0.2	0.4	1.2	3.5	13.6	31.0	30.9	12.3	6.8	5.4	94.6
Nonmetropolitan counties-----	100.0	0.2	0.5	1.2	4.4	11.8	27.4	31.7	13.3	9.5	6.4	93.6
White-----	100.0	0.3	0.9	1.5	4.8	12.3	26.9	31.0	13.1	9.2	7.5	92.5
Nonwhite--	100.0	0.2	0.4	1.1	4.3	11.6	27.5	31.9	13.4	9.6	6.1	93.9
Urban-----	100.0	0.3	0.7	1.4	4.9	12.3	27.2	32.9	12.5	7.9	7.3	92.7
White-----	100.0	0.4	1.1	1.9	6.2	12.9	27.4	30.7	12.7	6.7	9.5	90.5
Nonwhite--	100.0	0.2	0.6	1.2	4.5	12.0	27.2	33.5	12.4	8.2	6.6	93.4
Rural-----	100.0	0.2	0.5	1.2	4.3	11.7	27.4	31.4	13.5	9.8	6.2	93.8
White-----	100.0	0.3	0.9	1.4	4.4	12.1	26.8	31.1	13.2	9.8	7.0	93.0
Nonwhite--	100.0	0.2	0.4	1.1	4.2	11.5	27.6	31.5	13.6	9.8	6.0	94.0

NOTE.—For definitions of areas, see Explanatory Notes.

TABLE 15. DEATHS UNDER 28 DAYS BY BIRTH WEIGHT, RACE, AND ATTENDANT, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(By place of residence at birth. Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed. Excludes data for Massachusetts)

AREA AND RACE	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
ALL COUNTIES-----	16,741	3,424	2,801	2,403	2,078	1,912	2,112	1,280	483	248	10,706	6,035
White-----	13,521	2,817	2,293	1,976	1,693	1,528	1,703	982	374	155	8,779	4,742
Nonwhite--	3,220	607	508	427	385	384	409	298	109	93	1,927	1,293
Urban-----	9,717	2,294	1,679	1,377	1,128	1,066	1,203	668	207	95	6,478	3,239
White-----	7,893	1,842	1,352	1,149	938	857	984	541	169	61	5,281	2,612
Nonwhite--	1,824	452	327	228	190	209	219	127	38	34	1,197	627
Rural-----	7,024	1,130	1,122	1,026	950	846	909	612	276	153	4,228	2,796
White-----	5,628	975	941	827	755	671	719	441	205	94	3,498	2,130
Nonwhite--	1,396	155	181	199	195	175	190	171	71	59	730	666
Metropolitan counties-----	8,583	2,155	1,458	1,181	943	946	1,062	554	198	86	5,737	2,846
White-----	6,976	1,724	1,174	977	782	767	872	454	171	55	4,657	2,319
Nonwhite--	1,607	431	284	204	161	179	190	100	27	31	1,080	527
Urban-----	6,926	1,763	1,169	935	750	760	877	461	143	68	4,617	2,309
White-----	5,532	1,375	924	764	619	606	705	377	119	43	3,682	1,850
Nonwhite--	1,394	388	245	171	131	154	172	84	24	25	935	459
Rural-----	1,657	392	289	246	193	186	185	93	55	18	1,120	537
White-----	1,444	349	250	213	163	161	167	77	52	12	975	469
Nonwhite--	213	43	39	33	30	25	18	16	3	6	145	69
Nonmetropolitan counties-----	8,158	1,269	1,343	1,222	1,135	966	1,050	728	285	162	4,969	3,189
White-----	6,545	1,093	1,119	999	911	761	831	528	203	100	4,122	2,423
Nonwhite--	1,613	176	224	223	224	205	219	198	82	62	847	766
Urban-----	2,791	531	510	442	378	306	326	207	64	27	1,861	930
White-----	2,361	467	428	385	319	251	279	164	50	18	1,599	762
Nonwhite--	430	64	82	57	59	55	47	43	14	9	262	168
Rural-----	5,367	738	833	780	757	660	724	519	221	135	3,108	2,259
White-----	4,184	626	691	614	592	510	552	364	153	82	2,523	1,661
Nonwhite--	1,183	112	142	166	165	150	172	155	68	53	585	598

TABLE 15. DEATHS UNDER 28 DAYS BY BIRTH WEIGHT, RACE, AND ATTENDANT, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

AREA AND RACE	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
DEATHS AMONG BIRTHS ATTENDED BY PHYSICIAN IN HOSPITAL												
ALL COUNTIES-----	13,821	3,083	2,393	2,038	1,657	1,530	1,674	973	343	130	9,171	4,650
White-----	11,990	2,602	2,064	1,803	1,448	1,337	1,470	857	308	101	7,917	4,073
Nonwhite--	1,831	481	329	235	209	193	204	116	35	29	1,254	577
Urban-----	8,850	2,147	1,537	1,270	1,014	982	1,077	599	174	70	5,968	2,882
White-----	7,470	1,752	1,281	1,107	874	817	916	518	153	52	5,014	2,456
Nonwhite--	1,380	395	256	163	140	145	161	81	21	18	954	426
Places of 250,000 or more-----	3,398	930	560	460	363	358	398	226	70	33	2,313	1,085
White-----	2,623	671	422	388	286	282	313	180	59	22	1,767	856
Nonwhite--	775	259	138	72	77	76	85	46	11	11	546	229
Places of 50,000 to 250,000-----	1,930	456	332	276	201	220	262	138	33	12	1,265	665
White-----	1,614	380	270	222	178	187	219	121	30	7	1,050	564
Nonwhite--	316	76	62	54	23	33	43	17	3	5	215	101
Places of 10,000 to 50,000-----	2,198	498	389	317	279	224	270	150	47	14	1,493	705
White-----	2,004	453	364	295	254	202	247	134	42	13	1,366	638
Nonwhite--	194	45	35	22	25	22	23	16	5	1	127	67
Places of 2,500 to 10,000-----	1,324	263	246	217	171	160	147	85	24	11	897	427
White-----	1,229	248	225	202	156	146	137	83	22	10	831	398
Nonwhite--	95	15	21	15	15	14	10	2	2	1	66	29
Rural-----	4,971	936	856	768	643	562	597	374	169	60	3,203	1,768
White-----	4,520	850	783	696	574	520	554	339	155	49	2,903	1,617
Nonwhite--	451	86	73	72	69	48	43	35	14	11	300	151
Metropolitan counties-----	7,902	2,025	1,344	1,092	852	861	968	518	174	68	5,313	2,589
White-----	6,614	1,641	1,110	943	722	733	820	440	157	48	4,416	2,198
Nonwhite--	1,288	384	234	149	130	128	148	76	17	20	897	391
Urban-----	6,458	1,667	1,094	877	694	699	805	438	128	56	4,332	2,126
White-----	5,297	1,317	882	743	583	585	666	369	112	40	3,525	1,772
Nonwhite--	1,161	350	212	134	111	114	139	69	16	16	807	354
Places of 250,000 or more-----	3,398	930	560	460	363	358	398	226	70	33	2,313	1,085
White-----	2,623	671	422	388	286	282	313	180	59	22	1,767	856
Nonwhite--	775	259	138	72	77	76	85	46	11	11	546	229
Places of 50,000 to 250,000-----	1,930	456	332	276	201	220	262	138	33	12	1,265	665
White-----	1,614	380	270	222	178	187	219	121	30	7	1,050	564
Nonwhite--	316	76	62	54	23	33	43	17	3	5	215	101
Places of 10,000 to 50,000-----	764	197	130	87	93	70	109	55	18	5	507	257
White-----	712	166	123	83	84	67	98	50	16	5	476	236
Nonwhite--	52	11	7	4	9	3	11	5	2	-	31	21
Places of 2,500 to 10,000-----	366	84	72	54	37	51	36	19	7	6	247	119
White-----	348	80	67	50	35	49	36	18	7	6	232	116
Nonwhite--	18	4	5	4	2	2	-	1	-	-	15	3
Rural-----	1,444	358	250	215	158	162	163	80	46	12	981	463
White-----	1,317	324	228	200	139	148	154	71	45	8	891	426
Nonwhite--	127	34	22	15	19	14	9	9	1	4	90	37
Nonmetropolitan counties-----	5,919	1,058	1,049	946	805	669	706	455	169	62	3,858	2,061
White-----	5,376	961	954	860	726	604	650	417	151	53	3,501	1,875
Nonwhite--	543	97	95	86	79	65	56	38	18	9	357	186
Urban-----	2,392	480	443	393	320	263	272	161	46	14	1,636	756
White-----	2,173	435	399	364	291	232	250	149	41	12	1,489	684
Nonwhite--	219	45	44	29	29	31	22	12	5	2	147	72
Places of 10,000 to 50,000-----	1,434	301	269	230	166	154	161	95	29	9	986	448
White-----	1,292	267	241	212	170	135	149	84	26	8	890	402
Nonwhite--	142	34	28	18	16	19	12	11	3	1	96	46
Places of 2,500 to 10,000-----	958	179	174	163	134	109	111	66	17	5	650	308
White-----	881	168	158	152	121	97	101	65	15	4	599	282
Nonwhite--	77	11	16	11	13	12	10	1	2	1	51	26
Rural-----	3,527	578	606	553	465	406	434	294	123	48	2,222	1,305
White-----	3,203	526	555	496	435	372	400	268	110	41	2,012	1,191
Nonwhite--	324	52	51	57	50	34	34	26	13	7	210	114
DEATHS AMONG BIRTHS ATTENDED BY PHYSICIAN NOT IN HOSPITAL												
ALL COUNTIES-----	1,673	249	265	214	232	227	241	136	60	49	960	713
White-----	1,136	180	168	136	183	143	167	82	42	35	667	469
Nonwhite--	537	69	97	78	49	84	74	54	18	14	293	244
Urban-----	515	118	93	75	56	56	62	28	13	14	342	173
White-----	288	77	51	35	37	22	40	13	9	4	200	88
Nonwhite--	227	41	42	40	19	34	22	15	4	10	142	85
Rural-----	1,158	131	172	139	176	171	179	108	47	35	618	540
White-----	848	103	117	101	146	121	127	69	33	31	467	381
Nonwhite--	310	28	55	38	30	50	52	39	14	4	151	159

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TABLE 15. DEATHS UNDER 28 DAYS BY BIRTH WEIGHT, RACE, AND ATTENDANT, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

AREA AND RACE	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501- 3,000	3,001- 3,500	3,501- 4,000	4,001- 4,500	4,501 or more	2,500 or less	2,501 or more
DEATHS AMONG BIRTHS ATTENDED BY PHYSICIAN NOT IN HOSPITAL—Continued												
Metropolitan counties-----	462	105	91	68	55	52	50	25	9	7	319	143
White-----	267	69	53	33	40	20	33	12	6	1	195	72
Nonwhite--	195	36	38	35	15	32	17	13	3	6	124	71
Urban-----	318	80	61	45	30	38	34	18	5	7	216	102
White-----	164	48	33	20	19	10	22	8	3	1	120	44
Nonwhite--	154	32	28	25	11	28	12	10	2	6	96	58
Rural-----	144	25	30	23	25	14	16	7	4	-	103	41
White-----	103	21	20	13	21	10	11	4	3	-	75	28
Nonwhite--	41	4	10	10	4	4	5	3	1	-	28	13
Nonmetropolitan counties-----	1,211	144	174	146	177	175	181	111	51	42	641	570
White-----	669	111	115	103	143	123	134	70	36	34	472	397
Nonwhite--	542	33	59	43	34	52	57	41	15	8	169	173
Urban-----	197	38	32	30	26	18	28	10	8	7	126	71
White-----	124	29	18	15	18	12	18	5	6	3	80	44
Nonwhite--	73	9	14	15	8	6	10	5	2	4	46	27
Rural-----	1,014	106	142	116	151	157	163	101	43	35	515	499
White-----	745	82	97	88	125	111	116	65	30	31	392	353
Nonwhite--	269	24	45	28	26	46	47	36	13	4	123	146
DEATHS AMONG BIRTHS ATTENDED BY MIDWIFE, OTHER, AND NOT SPECIFIED												
ALL COUNTIES-----	1,247	92	143	151	189	155	197	171	80	69	575	672
White-----	395	35	61	37	62	48	66	43	24	19	195	200
Nonwhite--	852	57	82	114	127	107	131	128	56	50	380	472
Urban-----	352	29	49	32	58	48	64	41	20	11	168	184
White-----	135	13	20	7	27	18	28	10	7	5	67	68
Nonwhite--	217	16	29	25	31	30	36	31	13	6	101	116
Rural-----	895	63	94	119	131	107	133	130	60	58	407	488
White-----	260	22	41	30	35	30	38	33	17	14	128	132
Nonwhite--	635	41	53	89	96	77	95	97	43	44	279	356
Metropolitan counties-----	219	25	23	21	36	33	44	11	15	11	105	114
White-----	95	14	11	1	20	14	19	2	8	6	46	49
Nonwhite--	124	11	12	20	16	19	25	9	7	5	59	65
Urban-----	150	16	14	13	26	23	38	5	10	5	69	81
White-----	71	10	9	1	17	11	17	-	4	2	37	34
Nonwhite--	79	6	5	12	9	12	21	5	6	3	32	47
Rural-----	69	9	9	8	10	10	6	6	5	6	36	33
White-----	24	4	2	-	3	3	2	2	4	4	9	15
Nonwhite--	45	5	7	8	7	7	4	4	1	2	27	18
Nonmetropolitan counties-----	1,028	67	120	130	153	122	153	160	65	58	470	558
White-----	300	21	50	36	42	34	47	41	18	13	149	151
Nonwhite--	728	46	70	94	111	88	106	119	49	45	321	407
Urban-----	202	13	35	19	32	25	26	36	10	6	99	103
White-----	64	3	11	6	10	7	11	10	3	3	30	34
Nonwhite--	138	10	24	13	22	18	15	26	7	3	69	69
Rural-----	826	54	85	111	121	97	127	124	55	52	371	455
White-----	236	18	39	30	32	27	36	31	13	10	119	117
Nonwhite--	590	36	46	81	89	70	91	93	42	42	252	338

NOTE.—For definitions of areas, see Explanatory Notes.

TABLE 16. NEONATAL MORTALITY RATES BY BIRTH WEIGHT, RACE, AND ATTENDANT, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(By place of residence at birth. Based on deaths under 28 days among children born Jan. 1 to Mar. 31, 1950. Rates per 1,000 live births in each specified group. Birth weights not stated are distributed. Excludes data for Massachusetts. Two dots (..) indicate rate not computed where the number of deaths is less than 10)

AREA AND RACE	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
TOTAL DEATHS												
ALL COUNTIES-----	20.0	871.7	551.3	211.0	50.4	12.6	6.7	5.6	7.5	14.2	173.7	7.8
White-----	18.9	883.3	562.1	214.6	50.6	12.0	6.2	4.9	6.7	12.0	175.8	7.1
Nonwhite--	26.7	821.4	507.0	195.7	49.5	15.4	9.7	10.5	12.5	20.2	164.7	11.9
Urban-----	19.7	885.4	540.4	195.7	43.7	11.0	6.3	5.3	5.4	14.2	168.2	7.1
White-----	18.6	897.2	548.5	203.8	45.1	10.7	5.9	4.8	5.8	11.2	170.6	6.6
Nonwhite--	27.0	840.1	509.3	163.1	38.0	12.6	8.7	9.3	11.2	26.7	158.1	10.4
Rural-----	20.4	845.2	568.4	235.7	61.5	15.3	7.4	6.1	8.6	14.2	182.9	8.7
White-----	19.3	858.3	583.0	231.7	59.6	14.3	6.8	5.2	7.7	12.6	184.3	7.8
Nonwhite--	26.3	771.1	502.8	253.8	70.0	21.1	11.0	11.6	13.2	17.7	176.8	13.6
Metropolitan counties-----	19.2	886.1	553.9	187.8	40.8	10.7	6.1	4.8	6.7	14.4	166.0	6.9
White-----	18.0	897.0	543.5	195.1	42.0	10.5	5.7	4.4	6.4	10.8	168.1	6.4
Nonwhite--	26.9	845.1	497.4	159.1	35.8	11.8	8.3	8.8	10.1	36.7	157.5	10.0
Urban-----	19.4	889.1	525.4	181.6	39.5	10.6	6.2	5.1	6.4	15.8	163.0	7.0
White-----	18.1	903.4	533.5	190.9	41.5	10.4	5.8	4.7	5.9	11.7	168.0	6.5
Nonwhite--	26.8	841.6	497.0	149.3	32.4	11.3	8.7	8.8	11.2	39.6	152.1	10.0
Rural-----	18.3	873.1	571.1	215.6	45.5	11.5	5.4	3.7	7.8	10.9	179.4	6.4
White-----	17.4	872.5	584.1	212.2	44.0	11.0	5.3	3.3	8.0	8.4	176.2	6.1
Nonwhite--	27.8	877.6	500.0	240.9	67.1	15.8	6.2	9.2	..	..	203.9	9.8
Nonmetropolitan counties-----	20.9	848.3	571.5	239.7	62.6	15.1	7.5	6.5	8.1	14.1	183.6	8.8
White-----	19.9	862.7	583.1	237.9	41.4	14.1	6.9	5.6	7.0	12.9	185.5	7.9
Nonwhite--	26.5	768.6	519.7	247.8	68.2	21.2	11.2	11.2	13.5	16.5	174.8	13.6
Urban-----	20.6	873.4	578.7	234.2	55.4	12.4	6.3	5.0	6.3	11.3	182.4	7.4
White-----	19.7	879.5	583.9	235.6	54.3	11.5	6.0	5.0	5.7	10.3	182.2	6.8
Nonwhite--	27.6	831.2	550.3	225.3	62.2	18.7	8.9	10.6	11.3	..	183.6	11.9
Rural-----	21.1	831.1	567.4	242.8	67.0	16.9	8.1	6.9	8.8	14.4	184.2	9.5
White-----	20.0	850.5	582.6	239.4	66.0	15.8	7.4	5.8	7.6	13.7	187.6	8.5
Nonwhite--	26.1	736.8	503.5	256.6	70.6	22.3	12.0	11.9	14.0	17.0	171.1	14.2
DEATHS AMONG BIRTHS ATTENDED BY PHYSICIAN IN HOSPITAL												
ALL COUNTIES-----	19.1	882.4	549.5	203.7	45.7	11.2	6.0	5.0	6.7	13.0	169.5	6.9
White-----	18.2	890.8	558.1	211.5	45.7	11.2	5.8	4.7	6.3	10.8	171.6	6.7
Nonwhite--	27.4	839.4	500.8	158.5	39.8	11.2	7.8	9.5	13.0	44.1	157.5	9.8
Urban-----	19.1	889.0	537.2	192.1	41.8	10.5	5.9	5.1	5.9	13.2	165.2	6.7
White-----	18.1	920.3	546.5	203.5	43.5	10.5	5.6	4.8	5.5	10.7	168.0	6.4
Nonwhite--	26.6	842.2	495.2	139.3	33.9	10.4	8.0	8.8	11.2	42.1	131.8	9.4
Places of 250,000 or more-----	19.0	879.0	502.7	166.6	36.7	9.5	5.6	5.3	6.7	17.6	156.0	6.6
White-----	17.7	891.1	510.9	188.4	38.5	9.7	5.3	4.7	6.3	13.4	159.8	6.2
Nonwhite--	25.6	849.2	479.2	102.6	31.2	9.0	7.2	9.1	10.6	47.0	145.1	8.6
Places of 50,000 to 250,000-----	19.5	897.6	534.6	197.1	39.1	11.3	6.7	5.4	5.2	10.7	165.0	7.3
White-----	18.4	915.7	542.2	195.9	41.6	11.3	6.3	5.2	5.1	..	166.0	6.9
Nonwhite--	28.1	817.2	504.1	202.2	26.8	11.2	9.8	8.3	..	..	160.3	10.2
Places of 10,000 to 50,000-----	18.8	897.3	560.4	202.9	48.3	10.2	5.9	4.9	6.0	9.8	173.4	6.5
White-----	18.3	904.2	563.5	207.3	48.8	10.0	5.7	4.6	5.6	3.6	175.7	6.3
Nonwhite--	27.1	833.3	530.3	158.3	43.6	12.2	8.4	11.4	..	..	152.5	10.6
Places of 2,500 to 10,000-----	19.1	894.6	594.2	244.4	49.3	12.6	5.5	4.5	4.7	12.8	178.5	6.6
White-----	18.6	895.3	601.6	244.6	48.8	12.3	5.4	4.5	4.5	11.9	177.7	6.5
Nonwhite--	30.1	882.4	525.0	241.9	65.2	17.1	8.4	..	..	..	189.1	10.3
Rural-----	19.0	867.5	573.0	226.1	33.6	12.7	6.1	5.0	7.7	12.7	172.2	7.3
White-----	18.3	871.8	578.3	225.8	32.7	12.6	6.0	4.7	7.4	10.9	178.2	7.0
Nonwhite--	29.8	826.9	521.4	230.0	61.7	14.5	7.2	11.4	17.3	48.0	179.0	11.2
Metropolitan counties-----	18.6	889.3	529.5	185.0	38.8	10.2	5.8	4.8	6.4	13.5	162.4	6.6
White-----	17.6	900.7	538.8	194.0	40.0	10.3	5.5	4.4	6.1	10.4	164.8	6.3
Nonwhite--	26.3	844.0	488.5	134.6	33.4	9.7	7.7	9.1	9.7	51.2	151.3	9.1
Urban-----	18.8	891.0	522.4	178.1	38.2	10.1	5.9	5.1	6.0	14.7	160.2	6.7
White-----	17.7	904.5	530.7	190.5	40.0	10.2	5.6	4.7	5.7	11.6	163.1	6.4
Nonwhite--	26.1	843.4	490.7	131.1	31.1	9.4	8.0	9.0	10.2	45.6	148.5	9.1
Places of 250,000 or more-----	19.0	879.0	502.7	166.6	36.7	9.5	5.6	5.3	6.7	17.6	156.0	6.6
White-----	17.7	891.1	510.9	188.4	38.5	9.7	5.3	4.7	6.3	13.4	159.8	6.2
Nonwhite--	25.6	849.2	479.2	102.6	31.2	9.0	7.2	9.1	10.6	47.0	145.1	8.6
Places of 50,000 to 250,000-----	19.5	897.6	534.6	197.1	39.1	11.3	6.7	5.4	5.2	10.7	165.0	7.3
White-----	18.4	915.7	542.2	195.9	41.6	11.3	6.3	5.2	5.1	..	166.0	6.9
Nonwhite--	28.1	817.2	504.1	202.2	26.8	11.2	9.8	8.3	..	..	160.3	10.2
Places of 10,000 to 50,000-----	17.2	920.6	555.6	167.6	44.3	8.4	6.2	4.6	6.0	..	163.3	6.2
White-----	16.9	925.4	559.1	172.2	44.0	8.7	5.9	4.3	5.9	..	169.2	6.0
Nonwhite--	22.1	846.2	..	..	..	..	11.9	..	..	0	121.6	10.0
Places of 2,500 to 10,000-----	17.1	923.1	576.0	222.2	36.1	13.0	4.2	3.3	..	..	166.6	6.0
White-----	16.7	919.5	567.8	220.3	35.9	13.1	4.4	3.2	..	..	164.8	6.0
Nonwhite--	28.0	..	..	..	..	..	..	..	0	..	200.0	..
Rural-----	17.6	881.8	561.8	205.9	41.7	10.8	5.1	3.6	7.5	9.8	172.7	6.1
White-----	17.0	885.2	572.9	208.6	40.2	10.7	5.2	3.3	7.6	..	171.9	5.9
Nonwhite--	28.0	850.0	468.1	176.5	58.5	12.6	..	..	..	..	181.1	9.1



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TABLE 16. NEONATAL MORTALITY RATES BY BIRTH WEIGHT, RACE, AND ATTENDANT, FOR URBAN AND RURAL AREAS IN METROPOLITAN AND NONMETROPOLITAN COUNTIES: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 217)

AREA AND RACE	Total	BIRTH WEIGHT (IN GRAMS)										
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-3,500	3,501-4,000	4,001-4,500	4,501 or more	2,500 or less	2,501 or more
DEATHS AMONG BIRTHS ATTENDED BY PHYSICIAN IN HOSPITAL—Continued												
Nonmetropolitan counties-----	19.8	869.4	577.6	234.2	56.3	12.8	6.3	5.4	7.0	12.4	180.5	7.4
White-----	19.1	874.4	582.4	234.7	56.1	12.6	6.1	5.2	6.5	11.2	181.0	7.1
Nonwhite--	30.3	822.0	533.7	228.7	58.1	16.1	8.1	10.2	19.3	..	175.8	11.7
Urban-----	19.9	882.4	577.6	232.8	52.6	11.7	5.8	5.0	5.5	9.4	180.1	6.8
White-----	19.3	887.8	585.0	236.4	52.7	11.2	5.7	4.9	5.1	8.5	180.9	6.5
Nonwhite--	29.9	833.3	517.6	195.9	51.3	17.0	7.9	8.1	..	..	172.5	11.1
Places of 10,000 to 50,000-----	19.9	882.7	562.8	220.5	50.6	11.2	5.7	5.0	6.1	..	178.0	6.7
White-----	19.2	890.0	565.7	225.3	51.6	10.7	5.6	4.7	5.7	..	179.4	6.4
Nonwhite--	29.5	829.3	538.5	176.5	41.8	16.1	6.6	11.3	..	..	166.1	10.9
Places of 2,500 to 10,000-----	20.0	881.8	602.1	252.7	55.7	12.4	6.1	5.0	4.8	..	183.5	6.9
White-----	19.4	884.2	617.2	253.8	54.4	11.9	5.8	5.2	4.3	..	183.3	6.7
Nonwhite--	30.7	846.2	484.8	239.1	71.4	18.7	10.5	..	..	..	186.1	11.6
Rural-----	19.7	858.8	577.7	235.1	59.0	13.7	6.6	5.6	7.8	13.6	180.6	7.8
White-----	19.0	863.7	560.5	233.5	58.6	13.6	6.5	5.4	7.3	12.3	181.1	7.5
Nonwhite--	30.6	812.5	548.4	250.0	63.0	15.4	8.2	11.6	21.2	..	178.1	12.1
DEATHS AMONG BIRTHS ATTENDED BY PHYSICIAN NOT IN HOSPITAL												
ALL COUNTIES-----	25.6	793.0	556.7	265.2	78.9	23.5	10.9	7.1	8.7	15.3	211.6	11.7
White-----	23.7	796.5	577.3	255.6	94.6	22.4	10.5	5.7	7.5	13.7	223.6	10.5
Nonwhite--	30.6	784.1	524.3	263.6	48.7	25.6	12.1	11.7	13.6	21.5	188.5	15.2
Urban-----	28.9	848.9	531.4	265.2	55.9	17.5	9.7	6.1	8.7	23.2	216.6	10.7
White-----	28.3	855.6	542.6	241.4	74.7	13.5	11.0	4.7	..	..	242.7	9.4
Nonwhite--	29.9	836.7	518.5	339.0	37.5	21.7	8.1	8.4	..	41.0	188.1	12.4
Rural-----	24.3	748.6	571.4	255.5	90.8	26.4	11.4	7.5	8.7	13.4	208.9	12.1
White-----	22.5	757.4	593.9	261.0	101.5	25.5	10.3	5.9	7.1	14.1	216.3	10.7
Nonwhite--	31.1	717.9	528.8	242.0	60.1	29.2	15.3	13.8	17.5	..	189.0	17.4
Metropolitan counties-----	31.0	826.8	568.8	291.8	63.7	19.5	9.4	6.6	..	..	230.7	10.6
White-----	29.8	821.4	595.5	264.0	91.1	14.6	10.4	4.8	..	..	264.6	8.8
Nonwhite--	32.9	837.2	536.2	324.1	35.4	24.7	8.0	9.9	..	..	192.0	13.4
Urban-----	34.1	851.1	554.5	276.1	48.9	20.3	10.1	8.2	..	..	220.2	12.2
White-----	36.5	872.7	541.0	241.0	78.5	12.9	13.5	..	..	..	272.1	10.8
Nonwhite--	31.9	820.5	571.4	312.5	29.6	25.4	6.9	9.6	..	..	177.8	13.5
Rural-----	25.9	757.6	600.0	328.6	100.4	17.7	8.2	..	..	0	256.2	8.0
White-----	23.1	724.1	714.3	309.5	106.6	16.8	7.2	..	..	0	253.4	6.7
Nonwhite--	37.0	..	454.5	357.1	..	..	..	..	..	0	264.2	13.0
Nonmetropolitan counties-----	24.0	770.1	550.6	254.4	85.2	25.0	11.4	7.3	9.0	15.5	203.2	12.0
White-----	22.3	781.7	569.3	253.1	95.7	24.5	10.5	5.9	7.6	15.3	210.2	10.8
Nonwhite--	29.4	733.3	517.5	257.5	59.4	26.2	14.3	12.4	15.7	..	186.1	16.1
Urban-----	23.3	844.4	492.3	300.0	67.0	13.6	9.3	4.2	..	..	210.7	9.0
White-----	21.8	828.6	545.5	241.9	71.1	14.0	9.0	..	..	..	208.9	8.3
Nonwhite--	26.3	..	437.5	394.7	..	..	10.0	..	..	..	214.0	10.6
Rural-----	24.1	746.5	565.7	244.7	89.4	27.7	11.9	7.8	8.9	14.8	201.5	12.6
White-----	22.4	766.4	574.0	255.1	100.6	26.7	10.8	6.3	7.3	15.5	210.4	11.3
Nonwhite--	30.4	685.7	548.8	217.1	58.2	30.3	15.7	14.1	18.2	..	177.5	17.9
DEATHS AMONG BIRTHS ATTENDED BY MIDWIFE, OTHER, AND NOT SPECIFIED												
ALL COUNTIES-----	26.4	766.7	572.0	263.1	91.7	27.4	14.9	11.5	13.0	16.4	191.3	15.2
White-----	35.9	833.3	677.8	246.7	115.7	36.2	21.5	12.6	16.8	20.5	238.4	19.7
Nonwhite--	23.6	730.8	512.5	268.9	83.2	24.7	12.9	11.2	11.8	15.2	173.7	13.9
Urban-----	30.1	783.8	690.1	198.8	105.3	32.2	18.9	10.9	14.1	13.6	204.9	16.9
White-----	38.5	764.7	740.7	..	140.6	42.9	27.1	9.1	..	..	233.4	21.2
Nonwhite--	26.5	800.0	659.1	227.3	86.4	28.1	15.4	11.6	13.4	..	189.5	15.2
Rural-----	25.2	759.0	525.1	288.1	86.7	25.6	13.5	11.7	12.6	17.0	186.2	14.7
White-----	34.7	880.0	650.8	303.0	101.7	33.1	18.6	14.3	17.3	19.5	241.1	19.0
Nonwhite--	22.7	705.9	458.9	283.4	82.3	23.5	12.2	11.0	11.4	16.3	168.6	13.5
Metropolitan counties-----	30.5	892.9	718.8	236.0	115.8	34.2	19.5	4.9	17.7	25.4	228.3	16.9
White-----	38.4	875.0	1,000.0	..	153.8	49.8	24.4	..	..	..	257.0	21.3
Nonwhite--	26.3	916.7	571.4	298.5	88.4	27.8	16.9	..	..	..	210.0	14.7
Urban-----	33.2	888.9	666.7	209.7	131.3	37.7	26.6	..	19.2	..	230.8	19.2
White-----	39.1	909.1	..	..	195.4	54.5	29.8	0	..	..	293.7	20.1
Nonwhite--	29.3	..	..	279.1	..	29.4	24.6	..	..	..	185.0	18.6
Rural-----	25.8	..	..	..	88.5	28.2	..	..	..	..	223.6	13.1
White-----	36.4	..	..	0	..	..	..	..	..	..	..	24.7
Nonwhite--	22.3	..	..	..	..	..	..	..	..	..	250.0	9.4
Nonmetropolitan counties-----	25.7	728.3	550.5	266.0	87.4	26.0	14.0	12.6	12.2	15.3	184.6	14.9
White-----	35.2	807.7	632.9	281.3	103.4	32.6	20.5	15.5	14.3	16.7	233.2	19.2
Nonwhite--	23.2	697.0	503.6	263.3	82.5	24.1	12.3	11.9	11.7	15.0	168.3	13.8
Urban-----	28.2	684.2	700.0	191.9	90.7	26.4	13.3	15.3	11.1	..	190.0	15.5
White-----	37.9	..	611.1	..	95.2	..	23.8	19.3	..	..	186.3	22.3
Nonwhite--	25.2	769.2	750.0	194.0	88.7	27.2	10.1	14.1	..	..	191.7	13.5
Rural-----	25.2	738.7	506.0	287.6	86.6	25.4	14.1	12.0	12.4	16.1	183.2	14.8
White-----	34.6	900.0	639.3	312.5	106.3	32.7	19.7	14.6	14.4	15.0	249.0	18.4
Nonwhite--	22.7	679.2	429.9	279.3	81.1	23.4	12.7	11.4	11.9	16.4	162.9	13.8

NOTE.—For definitions of areas, see Explanatory Notes.

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