

VITAL and HEALTH STATISTICS
DATA FROM THE NATIONAL VITAL STATISTICS SYSTEM

Weight at Birth and Cause of Death in the Neonatal Period

United States, Early 1950

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Statistics derived from vital records on neonatal mortality by age and cause according to weight at birth, by color and sex, for infants born in the United States during the first 3 months of 1950.

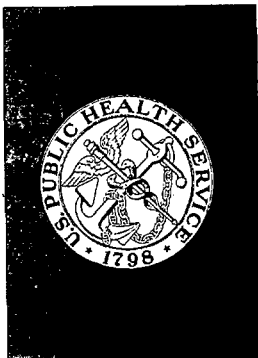
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Symbols Used in Special Reports

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)-----	-

Relation of Weight at Birth to Cause of Death and Age at Death in the Neonatal Period: United States, Early 1950

By Sam Shapiro and Jeanne Unger

INTRODUCTION

This is the second in a series of reports in which weight at birth is introduced as a major characteristic in the study of national data on mortality during early infancy. The first report presented birth weight distributions and considered the relation of weight at birth to mortality in the neonatal period (first 4 weeks after birth) for a variety of characteristics, including race, sex, and plurality of birth.¹ In the current report, the relationship between birth weight and age and cause of death among the newborn is examined.

During the period that has elapsed since the events that are analyzed here took place (early 1950), there has been no fundamental change in the relative importance of neonatal mortality. Over two-thirds of the deaths in the first year occur in the neonatal period, and mortality in these 4 weeks is higher than in any single year of age after the first and up through age 60. The progress made in the past several years in reducing neonatal loss has fallen far short of the remarkable success in saving lives after early infancy.

The problem of mortality among the newborn is concentrated principally among immature births. Neonatal deaths among these infants account for over two-thirds of the total. The repetitive series of vital statistics based on entries on the death certificates have pointed to the magnitude of this problem and have focused attention on the need for special programs to deal with it. However, it has long been recognized that information on additional factors is essential for an adequate evaluation of the problem of immaturity. One of these factors is birth weight.

With the addition of the item "birth weight" to practically all State certificates of birth in 1949, the development of data on this characteristic on a national basis became possible for the first time. The opportunity to obtain information on mortality in the neonatal period in relation to weight at birth for this

series of reports was afforded by the matching of neonatal death records with corresponding birth records for babies born in the United States between January 1 and March 31, 1950, incidental to a test of birth registration completeness.²

Registration completeness

The test of birth registration completeness covering the period of this study indicated that 98.6 percent of the white births and 93.5 percent of the nonwhite were registered.

No definitive information is available on the completeness of death registration. While this factor is thought to vary generally as birth registration completeness, it is believed that there is a slight bias in the direction of underreporting of small infants who die immediately after birth or in reporting some of them as fetal deaths. This would result in some understatement of mortality rates at the very low weights and at the younger ages.

Classification

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.

²Birth and death certificates relating to children born to residents of Massachusetts were excluded from all tabulations since this State did not require the reporting of birth weight. For details on the procedures in the matching, see the report cited in footnote 1.

¹National 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.

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.³

Seasonality

In 1950, seasonal differences were found both in the incidence of immature birth and in neonatal mortality. The proportion of immature children in the first 3 months of 1950 (7.4 percent) was slightly smaller than in the year as a whole (7.6 percent). Neonatal mortality was also lower among children born in January through March 1950—19.9 per 1,000 live births for the United States and 20.0 for the United States excluding Massachusetts—as compared with 20.5 in 1950 for the United States.

With regard to data by age at death and cause, the distributions shown in table A indicate that for the first quarter as compared with the year as a whole, there were: Smaller proportions of the neonatal deaths in the first day of life; smaller proportions attributed to Immaturity unqualified; and higher proportions due to Congenital malformations,

³For a more detailed discussion, see National Office of Vital Statistics, "Vital Statistics Instruction Manual, Part II, Cause-of-Death Coding, 1951."

Intracranial and spinal injury at birth, and All other causes. In addition, among the nonwhite group there was a considerably larger proportion of the deaths relating to births in the first quarter due to Pneumonia of the newborn and a smaller proportion due to Diarrhea of the newborn.

Even though these differences are statistically significant, they are small and the relationships described in this report may be taken as generally applicable for the entire year. On a weight-specific basis, in fact, it is likely that seasonality in mortality is of less importance than for the group as a whole since the differences in mortality described above may be partly explained by the lower incidence of immaturity among children born in January-March 1950.

Interpretation of cause of death data

Cause of death information on death certificates generally reflects the results of clinical diagnoses. In the case of the newborn infant, the only condition apparent to the certifying physician is frequently immaturity in development or a failure in the respiratory system. These observations lead to entries classified as Immaturity unqualified and Postnatal asphyxia and atelectasis.

An obvious shortcoming of such entries is that they do not indicate the specific morbid condition that led to the death. Also, there is some question concerning the consistency among physicians in recording these terms and the extent to which their use results in an understatement of more definite conditions responsible for loss in early infancy.

Autopsy findings in a Chicago study⁴ throw considerable light on this situation. It was found that "most of the infants designated (by the pathologist) as dying of prematurity showed widespread atelectasis and many of those designated as dying of atelectasis were premature. It was largely a matter of terminology that was responsible for differentiating atelectasis, prematurity, and unknown." These three categories were then grouped together under the heading "Abnormal pulmonary ventilation" with the statement that they "showed no specific pathological lesions outside the lungs—and (death) could be accounted for only on the basis of inadequate functioning of the lungs."

In this report, data are shown separately for

⁴Bundesen, Herman N., et al., "Progress in the Prevention of Needless Neonatal Deaths," Annual Report of the Chicago Health Department, 1951. Since the preparation of this transcript, the report, "Perinatal Mortality in New York City," New York Academy of Medicine, Harvard University Press, 1955, in which comparisons are made of the cause of death information reported on death certificates, clinical causes as recorded on hospital charts, and autopsy findings, has been published.

TABLE A. PERCENTAGE DISTRIBUTIONS OF DEATHS UNDER 28 DAYS, BY AGE AND SELECTED CAUSES, BY RACE:
UNITED STATES, JANUARY 1 TO MARCH 31, 1950, AND CALENDAR YEAR 1950

(Data for Jan.-Mar. 1950 are based on deaths among children born Jan. 1 to Mar. 31, 1950, excluding data for Massachusetts. Numbers after causes of death are category numbers of the Sixth Revision of the International Lists, 1948)

AGE AND CAUSE OF DEATH	ALL RACES		WHITE		NONWHITE	
	1950	Jan.- Mar. 1950	1950	Jan.- Mar. 1950	1950	Jan.- Mar. 1950
AGE						
All ages-----	100.0	100.0	100.0	100.0	100.0	100.0
Under 1 day-----	49.5	48.4	50.0	49.2	47.2	44.8
1 day-----	15.2	14.8	15.6	15.1	13.5	13.4
2 days-----	10.0	9.9	10.3	10.3	8.3	8.5
3-6 days-----	12.4	12.9	12.1	12.5	13.6	14.7
7-13 days-----	6.6	6.8	6.1	6.3	8.8	8.9
14-20 days-----	3.6	4.0	3.3	3.7	5.0	5.7
21-27 days-----	2.7	3.2	2.5	3.0	3.6	4.0
CAUSE OF DEATH						
All causes-----	100.0	100.0	100.0	100.0	100.0	100.0
Congenital malformations-----750-759	12.3	12.7	13.8	14.3	6.0	6.1
Certain diseases of early infancy-----760-776	80.7	79.5	80.8	79.8	80.5	78.4
Birth injuries-----760,761	16.1	16.2	17.0	17.2	12.2	12.0
Intracranial and spinal injury at birth-----760	6.7	7.1	6.8	7.2	6.1	6.6
Other birth injury-----761	9.4	9.1	10.2	10.0	6.0	5.3
Postnatal asphyxia and atelectasis-----762	17.7	17.8	18.4	18.5	14.8	14.9
Pneumonia of newborn-----763	3.8	4.2	3.5	3.7	5.3	6.4
Diarrhea of newborn-----764	1.0	0.9	0.8	0.8	1.6	1.2
Other infections of newborn-----765-768	0.5	0.4	0.4	0.3	0.9	0.7
Neonatal disorders arising from maternal toxemia--769	1.4	1.7	1.5	1.8	1.3	1.4
Hemolytic disease of newborn (erythroblastosis)---770	3.4	3.2	3.9	3.7	1.1	1.1
Hemorrhagic disease of newborn-----771	1.2	1.2	1.1	1.1	1.4	1.6
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	4.0	4.0	3.6	3.5	5.7	6.2
Immaturity with mention of any other subsidiary condition-----774	1.3	1.2	1.4	1.2	1.1	0.8
Immaturity unqualified-----776	30.4	28.7	29.3	27.9	35.1	32.1
All other causes-----Residual	6.9	7.8	5.4	6.0	13.5	15.5

Immaturity unqualified, and Postnatal asphyxia and atelectasis since no supplementary information is available. But the possibility of an overlapping of these groups should be borne in mind when interpreting the relationships discussed.

Post-mortem examinations indicated further that some deaths ascribed to atelectasis by the attending physician were actually caused by pneumonia. This may account in part for the appreciably higher proportion of deaths attributed to pneumonia in the Chicago study (10.8 percent) than in this report (4.2 percent). Comparison of age at

death statistics from both sources suggests that a major segment of this difference arises from an understatement of pneumonia as a cause of death among infants who die very soon after birth.⁵ For example, about a fourth of the pneumonia deaths in

⁵The Chicago study indicates that many of these pneumonia deaths stem from infections incurred before the birth of the child, in distinction to the extra-uterine environmental factors that caused pneumonia deaths later in the neonatal period.

the former study occurred in the first day, as compared with only 1 in 20 in the current report.

The other condition most often missed without autopsy was "intracranial hemorrhage." It was determined that "congenital debility" (classified under Ill-defined diseases peculiar to early infancy, International List number 773) often applied to a death caused by "intracranial hemorrhage." However, the effect of this situation does not appear to be great for Birth injuries as a whole.

A fundamental problem associated with cause of death data for neonatal deaths is that the cause may arise from a condition in the mother rather than in the infant. However, because the relationship of some maternal conditions to neonatal mortality is not too well known, and because information on complications of pregnancy and labor resulting in the abnormal development of the fetus and in the early termination of the pregnancy may not be available to the physician completing the certificate, these conditions are frequently not reflected in the medical certification of the cause of death. In addition, in some cases where they are reported, they would not appear in the statistics as distinct entities because of the limitations of the classification.⁶

The imprecision of some of the clinical diagnoses, as indicated by the autopsy findings, and the lack of data on maternal conditions impose important limitations on the utility of the cause of death statistics derived from the vital record. However, many of the relationships considered are only partially affected by this situation. The data presented extend the area of knowledge presently available from repetitive statistical series derived from clinical observations. For years to come, these observations will remain the principal source of cause of death information and will be the basis for measuring changes in the causal factors in infant loss. Even such indefinite entries as "prematurity" on the death record have served a positive function. They have focused attention on the critical part played by premature birth in infant mortality and have aided in the development of many programs designed to cope with the problem.

Distribution of "not stated" birth weights

Birth weight reporting was less complete for infants born at the early gestation ages than for those born at more advanced stages of the pregnancy cycle. Accordingly, a method for distributing the not stated, which took account of gestation age, was used to derive the basic data by race, sex, and plu-

rality without regard to age and cause. This method is described in detail in vol. 39, No. 1, p. 6. 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 basic adjusted weight totals obtained in this way are hereafter identified as "standard" totals.

Although it would have been desirable to use the same procedure for distribution of the not stated weights throughout, considerations related to the small frequencies militated against this. The simplified procedures followed in deriving the adjusted weight data on neonatal deaths by age at death and cause, which are based on other significant relationships, are believed to yield consistent and reliable statistics. In the cause tables the adjusted data, however, may differ slightly from the standard or reported totals since the adjustment procedure did not include a balancing to these figures. Both derived and standard or reported totals are shown for purposes of comparison. The differences are generally small and will not affect the comparability or interpretation of the data.

Despite the fact that reasonable bases were used for distributing the not stated, the reader is cautioned not to draw conclusions from relatively small differences because the not stated group was fairly large (see table 17). An exception to this would be a series of small differences which were all in the same direction.

Detailed descriptions of the procedures used in distributing the not stated weights in the tables by age at death and cause follow:

1. To obtain data by age (tables 2, 4, and 6), the deaths at each age for which birth weights were not stated were first distributed proportionately according to the stated weights. These figures were then adjusted proportionately to the standard weight totals. Finally, minor adjustments were made in the data so that the figures would add to the reported age totals without changing the weight totals.
2. To obtain data by cause for tables 8 and 10, the not stated weight groups for the most detailed components in each were distributed proportionately by cause at each weight according to the distribution of deaths for which birth weights were stated. Under this procedure the derived weight totals agree with the standards, but the cause totals differ from the reported totals. Additional balancing adjustments were made only in the few instances where the new totals for cause categories for the white group differed appreciably from those reported.
3. In obtaining the adjusted numbers of deaths appearing in tables B and 12, the not stated for each cause group shown were distributed pro-

⁶For discussion, see "Recommendations for the Improvement of Fetal Death Statistics," U. S. National Committee on Vital and Health Statistics, Public Health Reports, vol. 70, No. 11, pp. 1049-1056, 1955.

portionately according to the stated weights for that cause group. In table B, although no further adjustments were made, the adjusted data add to the standard totals by weight. However, for table 12, the sums of the adjusted figures differ slightly from the standard totals by weight and age.

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.⁷ Mortality rates were not computed in accompanying tables for certain small frequency groups, i. e., where the birth population was less than 100 and there were fewer than 20 deaths. Percentages were also not computed where the base was less than 100.

Birth weight and certification of immaturity on cause of death

In the Sixth Revision of the International Lists each of the cause groups in the general category, Certain diseases of early infancy, has two subcategories to indicate whether immaturity was or

⁷The 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_1 and R_2 , 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_1 and R_2 , is

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

was not reported. The criterion for immaturity specified in the International Lists is a birth weight of 2,500 grams or less (or lacking this, a gestation of less than 37 weeks). However, weight and gestation-age information are not available in classifying cause of death entries on the death certificate and the cause is coded "with mention of immaturity" only if the physician's statement on certification of cause of death is to this effect.⁸

Statistics on cause of death are regularly tabulated for the detailed subcategories in order to provide some basis for assessing the association of immaturity with specific causes. This study, in which it has been possible to cross-classify neonatal deaths by birth weight and cause, presents an opportunity to evaluate the effectiveness of the cause data in this respect.

The data on neonatal deaths from Certain diseases of early infancy according to whether immaturity was recorded provide an estimate of the proportionate mortality relating to immature infants who died from these diseases. Deaths from other causes (for example, Congenital malformations) are not classified according to whether immaturity was reported. Thus, cause-of-death data do not measure the proportion of all neonatal deaths that involve immature children.

The cause of death information reported must be considered only as an estimate of the proportion of immatures even for specific causes because of inconsistencies and incompleteness in reporting. For example, some physicians are not aware of the need for reporting "immaturity." Furthermore, the criterion for immaturity of 2,500 grams or less, despite its wide usage, may not be uniformly applied.

Deaths due to Certain diseases of early infancy with immaturity mentioned represented 55 percent of all neonatal deaths in January-March 1950. On the basis of birth weight data, 64 percent of all neonatal deaths in this period related to infants weighing 2,500 grams or less. A large part of the difference in these two percentages, as mentioned earlier, can be explained by the failure of the cause data to take account of any deaths among immatures due to causes other than Certain diseases of early infancy. If the group of deaths due to Certain diseases of early infancy is considered separately, the percentages are much closer, being 69 percent according to the cause of death certification and 72 percent according to the birth weight data.

The data by weight and cause in table B indicate the effect of differences in classification. For example, in the group of deaths among total births coded to subcategories without mention of immaturity, 21 percent represented children weighing 2,500 grams or less at birth. Similarly, in the

⁸For exception in the case of plural births, see p. 231.

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TABLE B. DEATHS UNDER 28 DAYS FROM CERTAIN DISEASES OF EARLY INFANCY, ACCORDING TO WHETHER IMMATUREITY MENTIONED, BY BIRTH WEIGHT, RACE, AND PLURALITY OF BIRTH: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed. Excludes data for Massachusetts. "Certain diseases of early infancy" include three-digit categories 760-776 of the Sixth Revision of the International Lists, 1948. For detailed list, see table 16. Two dots (..) indicate percent not computed where base is less than 100)

CAUSE OF DEATH	ALL RACES			WHITE			NONWHITE		
	Total	2,500 grams or less	2,501 grams or more	Total	2,500 grams or less	2,501 grams or more	Total	2,500 grams or less	2,501 grams or more
DEATHS AMONG TOTAL BIRTHS									
NUMBER									
All causes-----	16,741	10,706	6,035	13,521	8,779	4,742	3,220	1,927	1,293
Certain diseases of early infancy-----	13,308	9,611	3,697	10,783	7,887	2,896	2,525	1,724	801
Without mention of immaturity-----	4,096	869	3,227	3,231	685	2,548	865	186	679
With immaturity-----	9,212	8,742	470	7,552	7,204	348	1,660	1,538	122
All other causes-----	3,433	1,095	2,338	2,738	892	1,846	695	203	492
PERCENT DISTRIBUTION BY BIRTH WEIGHT									
All causes-----	100.0	64.0	36.0	100.0	64.9	35.1	100.0	59.8	40.2
Certain diseases of early infancy-----	100.0	72.2	27.8	100.0	73.1	26.9	100.0	68.3	31.7
Without mention of immaturity-----	100.0	21.2	78.8	100.0	21.1	78.9	100.0	21.5	78.5
With immaturity-----	100.0	94.9	5.1	100.0	95.4	4.6	100.0	92.7	7.3
All other causes-----	100.0	31.9	68.1	100.0	32.6	67.4	100.0	29.2	70.8
PERCENT DISTRIBUTION BY CAUSE									
All causes-----	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Certain diseases of early infancy-----	79.5	89.8	61.3	79.8	89.8	61.1	78.4	89.5	61.9
Without mention of immaturity-----	24.5	8.1	53.5	23.9	7.8	53.7	26.9	9.7	52.5
With immaturity-----	55.0	81.7	7.8	55.9	82.1	7.3	51.6	79.8	9.4
All other causes-----	20.5	10.2	38.7	20.2	10.2	38.9	21.6	10.5	38.1
DEATHS AMONG SINGLE BIRTHS									
NUMBER									
All causes-----	15,049	9,109	5,940	12,183	7,501	4,682	2,866	1,608	1,258
Certain diseases of early infancy-----	11,746	8,111	3,635	9,536	6,681	2,855	2,210	1,430	780
Without mention of immaturity-----	3,989	793	3,196	3,151	625	2,526	838	168	670
With immaturity-----	7,757	7,318	439	6,385	6,056	329	1,372	1,262	110
All other causes-----	3,303	998	2,305	2,647	820	1,827	656	178	478
PERCENT DISTRIBUTION BY BIRTH WEIGHT									
All causes-----	100.0	60.5	39.5	100.0	61.6	38.4	100.0	56.1	43.9
Certain diseases of early infancy-----	100.0	69.1	30.9	100.0	70.1	29.9	100.0	64.7	35.3
Without mention of immaturity-----	100.0	19.9	80.1	100.0	19.8	80.2	100.0	20.0	80.0
With immaturity-----	100.0	94.3	5.7	100.0	94.8	5.2	100.0	92.0	8.0
All other causes-----	100.0	30.2	69.8	100.0	31.0	69.0	100.0	27.1	72.9
PERCENT DISTRIBUTION BY CAUSE									
All causes-----	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Certain diseases of early infancy-----	78.1	89.0	61.2	78.3	89.1	61.0	77.1	88.9	62.0
Without mention of immaturity-----	26.5	8.7	53.8	25.9	8.3	54.0	29.2	10.4	53.3
With immaturity-----	51.5	80.3	7.4	52.4	80.7	7.0	47.9	78.5	8.7
All other causes-----	21.9	11.0	38.8	21.7	10.9	39.0	22.9	11.1	38.0

TABLE B. DEATHS UNDER 28 DAYS FROM CERTAIN DISEASES OF EARLY INFANCY, ACCORDING TO WHETHER IMMATUREITY MENTIONED, BY BIRTH WEIGHT, RACE, AND PLURALITY OF BIRTH: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 230)

CAUSE OF DEATH	ALL RACES			WHITE			NONWHITE		
	Total	2,500 grams or less	2,501 grams or more	Total	2,500 grams or less	2,501 grams or more	Total	2,500 grams or less	2,501 grams or more
DEATHS AMONG BIRTHS IN PLURAL SETS									
NUMBER									
All causes-----	1,692	1,597	95	1,338	1,278	60	354	319	35
Certain diseases of early infancy-----	1,562	1,500	62	1,247	1,206	41	315	294	21
Without mention of immaturity-----	107	76	31	80	58	22	27	18	9
With immaturity-----	1,455	1,424	31	1,167	1,148	19	288	276	12
All other causes-----	130	97	33	91	72	19	39	25	14
PERCENT DISTRIBUTION BY BIRTH WEIGHT									
All causes-----	100.0	94.4	5.6	100.0	95.5	4.5	100.0	90.1	9.9
Certain diseases of early infancy-----	100.0	96.0	4.0	100.0	96.7	3.3	100.0	93.3	6.7
Without mention of immaturity-----	100.0	71.0	29.0	..	..	..	..	..	..
With immaturity-----	100.0	97.9	2.1	100.0	98.4	1.6	100.0	95.8	4.2
All other causes-----	100.0	74.6	25.4	..	..	..	..	..	..
PERCENT DISTRIBUTION BY CAUSE									
All causes-----	100.0	100.0	..	100.0	100.0	..	100.0	100.0	..
Certain diseases of early infancy-----	92.3	93.9	..	93.2	94.4	..	89.0	92.2	..
Without mention of immaturity-----	6.3	4.8	..	6.0	4.5	..	7.6	5.6	..
With immaturity-----	86.0	89.2	..	87.2	89.8	..	81.4	86.5	..
All other causes-----	7.7	6.1	..	6.8	5.6	..	11.0	7.8	..

group with immaturity, 5 percent comprised infants weighing 2,501 grams or more.

Eighty percent of the deaths relating to single births of 2,500 grams or less are identified as immature in cause of death statistics. Eleven percent are coded to causes other than Certain diseases of early infancy, while for the remaining 9 percent, the notation of immaturity was omitted in certifying the death to Certain diseases of early infancy.

For deaths among plural births, a smaller percentage of infants of weights of 2,500 grams or less fall into the subcategories without immaturity than of those in the single group. This is due in part to inclusion in the group "with immaturity" (in accordance with the International Lists) of all cases in which the cause of death certification contained

an entry such as "plural birth" or "twin." Also as a result, a large proportion of the deaths among plural births of more than 2,500 grams, were assigned to the group "with immaturity."

On the basis of the data in table 16 for neonatal deaths with birth weight reported, it was found that for most causes 10 percent or less of the deaths assigned to the subcategories "with immaturity" refer to children weighing over 2,500 grams at birth. As would be expected, however, larger percentages of the groups "without immaturity" related to infants who would be classified as immature according to the weight criterion. These percentages ranged from 12 to 30. The net effect is a considerable understatement of the proportion "with immaturity" for particular causes of the group.

GENERAL MORTALITY

Mortality in the neonatal period took a heavy toll among immature children born in January through March 1950. About 174 in every 1,000 infants weighing 2,500 grams or less (the immature babies) died before the completion of 28 days of life (table 3). In contrast, mature infants of 3,001-4,500 grams, a group frequently used for comparison in this report, had a neonatal mortality rate of 6.4 per 1,000. The rate for all infants above the immature level (2,501 grams or more) was somewhat higher (7.8).

Within the immature group, mortality varied greatly with weight. Close to seven-eighths of the children weighing 1,000 grams or less and a little over half of the infants 1,001-1,500 grams at birth died in early infancy. For the largest of the immatures, those weighing 2,001-2,500 grams, mortality in the neonatal period (50 per 1,000) was only a quarter of the loss experienced among those weighing on the average only about 500 grams less (211 per 1,000).

The risk of neonatal death continued to drop sharply well into the mature weights and reached a minimum of 5.6 per 1,000 at weights of 3,501-4,000 grams. Additional weight, particularly when it brought the weight above 4,500 grams, increased the risk of mortality appreciably.

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. The proportion dying this soon after birth varied considerably with the weight of the baby, being highest for the very small infants who were the least able to cope with extrauterine life (table C). First day

mortality among babies weighing 1,000 grams or less at birth represented about three-fourths of all neonatal deaths in the group as compared with slightly over one-half among babies weighing 1,001-1,500 grams. The proportion diminished somewhat at subsequent weight intervals, but remained fairly stable for the groups above 2,500 grams where the first day deaths comprised about one-third of the total.

Mortality fell off sharply for all weight groups after the first day. By the end of the first week, about three-fourths of the neonatal deaths among infants born weighing over 2,500 grams had already taken place. At the lower weights, the proportions dying in the first week were 10 to 20 percent higher.

The risk of mortality in specified age intervals among infants who survived to the beginning of these intervals is given by the rates shown in table 3 for each weight group. Figure 1 indicates how rapidly the risk declined during the first week. For the group weighing 2,500 grams or less, it had dropped from 97.9 per 1,000 on the first day to 3.1 by the seventh day. However, even with the extended hospital care that many of the immatures receive, the period after the first week was still a relatively hazardous one for these infants as compared with the critical first week for the mature infants. In fact, the risk of mortality among the immatures at ages 7-27 days (18.3 per 1,000) was almost 3 times the rate among children 3,001-4,500 grams in the entire neonatal period (6.4 per 1,000).

At each age throughout the neonatal period the risk of dying was closely related to the infant's weight. Additional weight at birth (until reaching the higher weights) was an advantage not only shortly after birth, but also 3 and 4 weeks later. The comparison in table D of the rates for the weight groups experiencing less favorable mortality in the

TABLE C. PERCENTAGE DISTRIBUTION OF DEATHS UNDER 28 DAYS, BY AGE, BY BIRTH WEIGHT: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(Based on frequencies shown in table 2)

AGE	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
ALL AGES-----	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 1 week-----	86.0	98.2	90.5	88.2	83.8	77.2	74.8	78.4	79.1	77.4
Under 1 day-----	48.4	75.2	55.3	47.0	37.8	33.2	34.0	34.8	36.4	34.7
1-6 days-----	37.6	23.0	35.2	41.2	46.0	44.0	40.8	43.7	42.7	42.7
7-27 days-----	14.0	1.8	9.5	11.8	16.2	22.8	25.2	21.6	20.9	22.6

Figure 1

Risk of Mortality by Birth Weight at Specified Ages: United States, Jan.-Mar. 1950

(Rates per 1,000 children in each specified group alive at the beginning of each age interval)

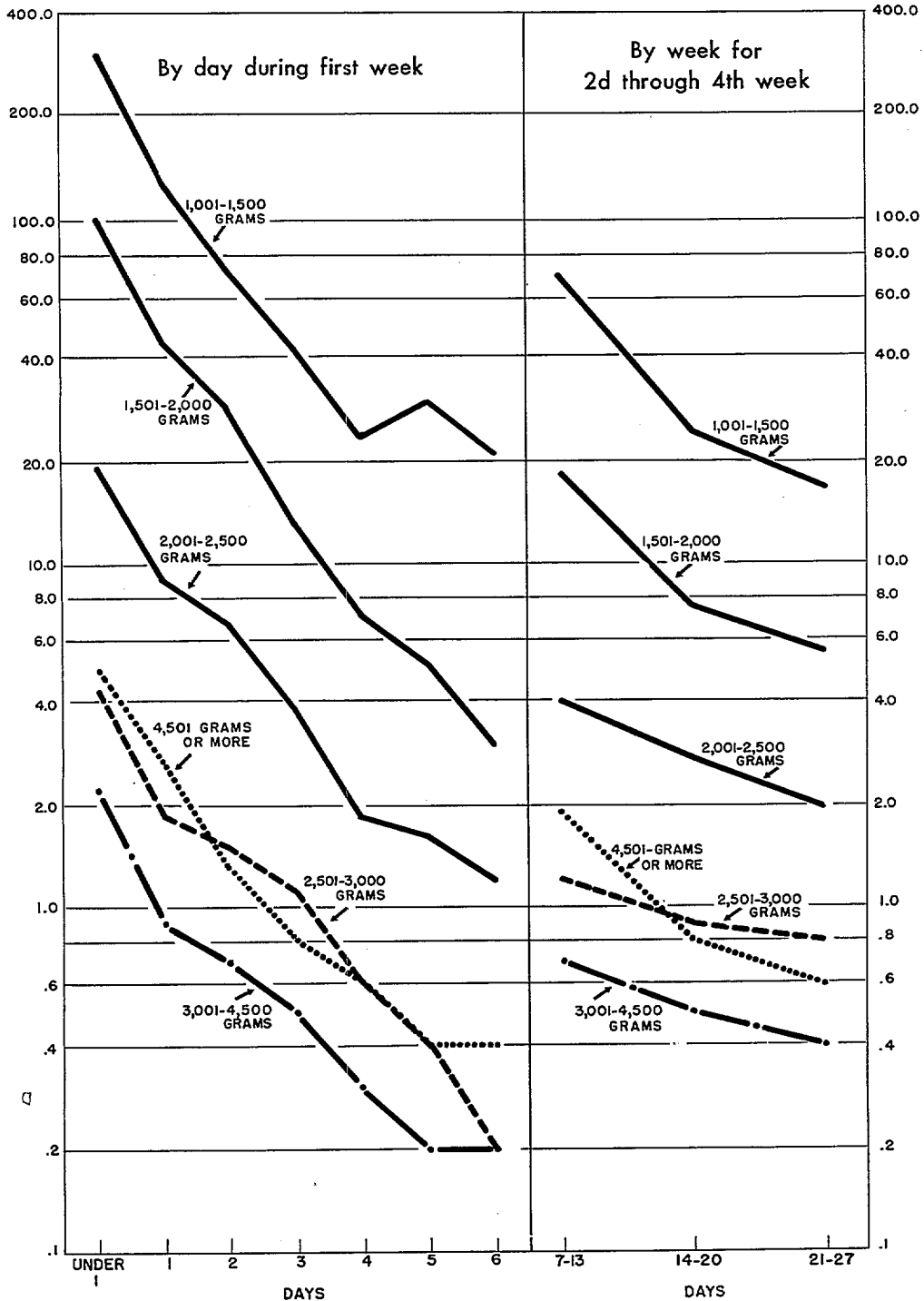


TABLE D. INDEX OF RELATIVE MORTALITY AT SPECIFIED AGES UNDER 28 DAYS, BY BIRTH WEIGHT: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(Based on rates shown in table 3. Rates for optimum weight group, 3,001-4,500 grams, are equal to 1.0, and other rates are expressed as ratios to these rates)

AGE	BIRTH WEIGHT (IN GRAMS)					
	1,001-1,500	1,501-2,000	2,001-2,500	2,501-3,000	3,001-4,500	4,501 or more
ALL AGES-----	86.1	33.0	7.9	2.0	1.0	2.2
Under 1 hour-----	70.8	24.2	6.2	1.7	1.0	3.2
1-23 hours-----	171.1	53.7	9.6	2.0	1.0	1.9
1 day-----	142.1	48.2	9.8	2.0	1.0	2.9
2 days-----	103.0	41.1	9.6	2.1	1.0	1.9
3-6 days-----	99.2	25.0	7.5	2.0	1.0	2.0
7-13 days-----	96.4	25.4	5.7	1.7	1.0	2.7
14-20 days-----	48.0	15.0	5.4	1.8	1.0	1.6
21-27 days-----	41.0	14.0	4.8	2.0	1.0	1.5

neonatal period with the rates for those weighing 3,001-4,500 grams at birth show that relative to this group:

1. Even those children weighing 2,501-3,000 grams at birth experienced higher mortality in the third and fourth weeks as well as earlier in the neonatal period.
2. Children of weights below 2,501 grams were at their greatest disadvantage in the first few days, following the first hour of life. For example, at 1-23 hours, the risk of mortality for children weighing 1,001-1,500 grams was 171 times that for children weighing 3,001-4,500 grams. The corresponding mortality ratios in the first hour and for the last week of the neonatal period were 71 to 1 and 41 to 1, respectively. Similar but less marked differences are evident in comparing the higher weight immature babies with the normal weight babies.
3. The prognosis for children 4,501 grams or more at birth was less favorable at each age. The first hour, particularly, was more critical for these heavier babies. This suggests obstetrical difficulties in delivery as an especially important factor in the over-all excess of mortality at this weight. Continuation of the excess, even in the third and fourth weeks of the neonatal period, although on a smaller scale, points to the possibility that these difficulties have their counterpart in pediatric problems posed by the group.

A closer look at the experience within the broad interval 3,001-4,500 grams shows that the optimum 500 gram weight group throughout the neonatal period was 3,501-4,000 grams. Babies slightly lighter than this (3,001-3,500 grams) fared better than the infants weighing 4,001-4,500 grams. This

difference was due principally to the latter group's higher mortality during the remainder of the first day after the first hour and in the second day. At subsequent ages, mortality among these babies differed very little.

Cause of death

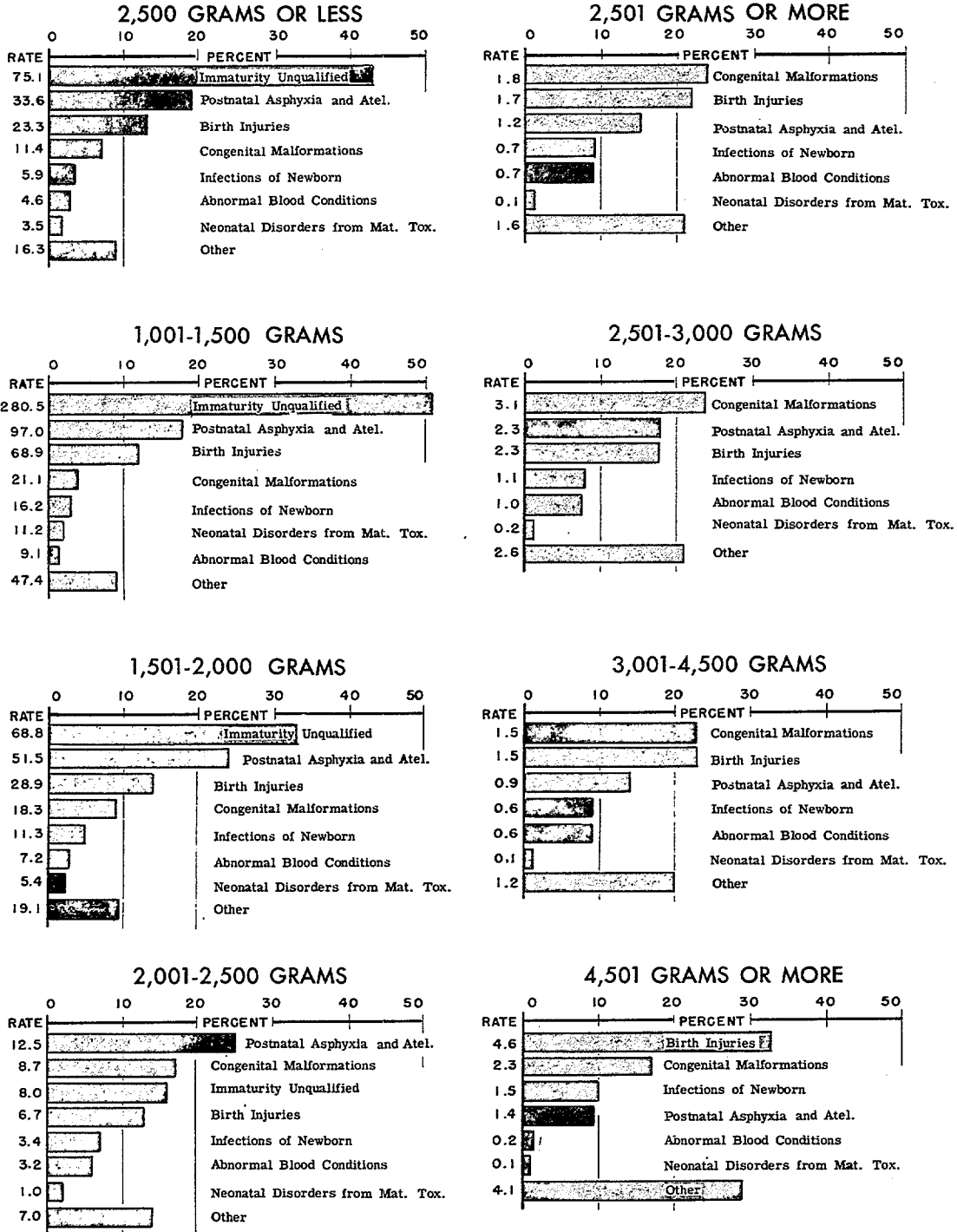
As discussed in the section Interpretation of cause of death data, (p. 226), there are important shortcomings in cause data derived from information reported on death certificates. Outstanding among these is the lack of the specific etiology of causal factors involved in the many deaths attributed to Immaturity unqualified (and possibly to a less extent to Postnatal asphyxia and atelectasis). Reporting of Immaturity unqualified conveys the idea that prevention of the death could have been avoided only by prolongation of the pregnancy or by general improvement in methods in the care of the premature infant. As stated earlier, use of this term may to some extent result in an understatement of more definite conditions. The introduction of birth weight in the analysis of cause data does not resolve this problem, but it helps to isolate the weight groups where it is of particular importance. For large segments of the newborn, the significance of causes other than Immaturity unqualified is thereby more clearly indicated.

Principal causes of death by weight.—With the effective control of the infectious diseases, mortality in the neonatal period among children of all weights in the United States is related principally to developmental deficiencies present at time of birth and to injuries sustained in parturition (tables 8 and 9). Among children of birth weights of 2,500

Figure 2

Neonatal Mortality at Specified Weights; Percent Distributions and Rates by Cause of Death: United States, Jan.-Mar. 1950

(Rates per 1,000 live births in each specified group)



grams or less, immaturity, unqualified by any other condition, was cited as the cause of death in over two-fifths of the neonatal deaths. This represented a rate of 75.1 per 1,000 live births. Postnatal asphyxia and atelectasis and Birth injuries with rates of 33.6 and 23.3, respectively, ranked next as reported causes of death among the immature children. In a high proportion of these cases, immaturity was also mentioned on the death certificate (see table 16).

Congenital malformations was another cause resulting in a significant loss among children 2,500 grams or less at birth. Actually, the mortality rate in the group for this cause alone was about $1\frac{1}{2}$ times the rate for all causes among mature infants.

For the infants weighing 2,501 grams or more at birth, Congenital malformations was reported as the cause of death most frequently, but even for this cause the neonatal rate was only 1.8 per 1,000. The rate for Birth injuries was virtually the same at these weights, while that for the third ranking cause of death for the mature group, Postnatal asphyxia and atelectasis, was 1.2 per 1,000.

Figure 2 showing mortality by cause and weight indicates that within the immature and mature groups, the importance of many of the factors responsible for death in the neonatal period varied considerably. At 1,000 grams or less—a group not shown separately in the chart—Immaturity unqualified accounted for about three-fifths of all neonatal deaths. With increasing weight, the significance of this group in the over-all mortality diminished sharply. At 2,001-2,500 grams, mortality attributed to Immaturity unqualified represented only 16 percent of the total, and this cause no longer ranked as the principal cause of death. Among infants of this birth weight, Postnatal asphyxia and atelectasis, the second-ranking cause for all immature children, became the principal cause of death reported (25 percent of the total mortality). Also of increased significance at the higher immature weights was Congenital malformations.

Throughout the range of immature weights, Birth injuries accounted for an almost constant part of the toll (between 12 and 14 percent). However, the rank of this cause changed from second at 1,000 grams or less to fourth at 2,001-2,500 grams as a result of variations in the other causes.

Just above the immaturity level (2,501-3,000 grams) Congenital malformations was responsible for the greatest proportion of the mortality (24 percent). With an increase in weight, Birth injuries assumed added importance in the over-all mortality and for the very heavy infants (4,501 grams or more), this cause alone accounted for about one-third of the total.

Other causes.—Infections of newborn (pneumonia, diarrhea, and other infections) and Abnormal blood conditions (hemolytic and hemorrhagic diseases of newborn) were responsible for only

about one-fifth of the mortality among mature infants. For the lower weight children, they caused an even smaller segment of the over-all mortality (about one-sixteenth). Although these causes were unimportant as compared with other causes of death within each weight group, the level of the rates was far higher among the immature infants than among the mature.

Changes in cause rates with birth weight

Close to half of the difference between the mortality rate for children weighing 2,500 grams or less (173.7 per 1,000) and that for children 2,501 grams or more at birth (7.8) was accounted for by deaths assigned to Immaturity unqualified. Children of 2,500 grams or less also sustained particularly more severe losses than the mature from causes classified as Other birth injury⁹ and Neonatal disorders arising from maternal toxemia. These conditions involve complications of pregnancy and labor which have been shown to occur more frequently among immature births.¹⁰ For both causes, the mortality rates among immatures were about 20 to 30 times those among children mature according to weight.

Postnatal asphyxia and atelectasis was the only other cause for which mortality among mature and immature infants contrasted so sharply. The excessive mortality among immatures for this cause, as well as for Immaturity unqualified, is probably related to the inadequate development and functioning of the lungs of the immature infant (see section on Interpretation of cause of death data, p. 226).

Mortality among the infants 2,500 grams or less from each of the remaining major groups of causes—Congenital malformations, Intracranial and spinal injury at birth, Abnormal blood conditions, and Infections of newborn—was between 6 and 8 times that among those weighing 2,501 grams or more.

Within the immature group, reductions in the mortality attributed to Immaturity unqualified and Other birth injury with increase in weight progressed somewhat more rapidly than for other

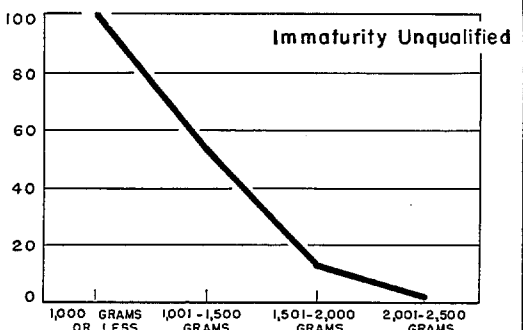
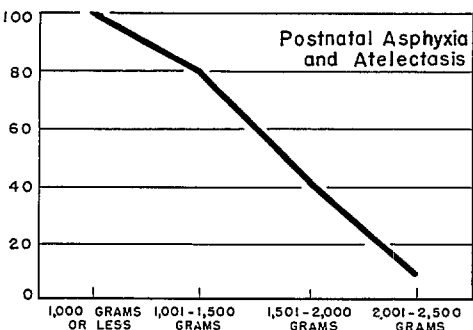
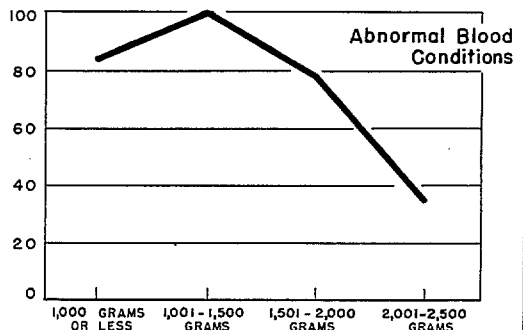
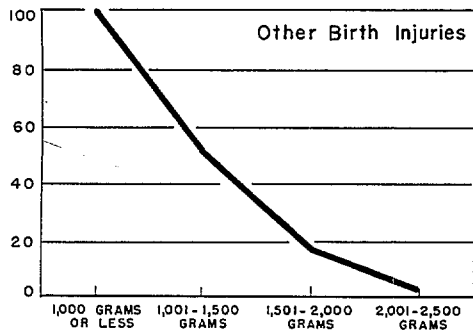
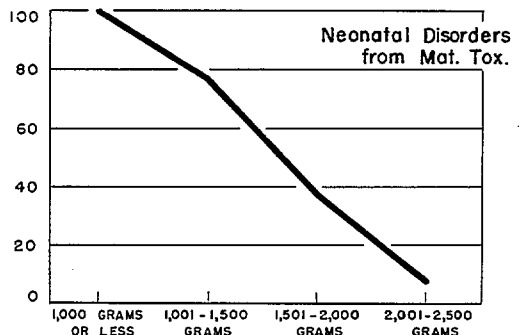
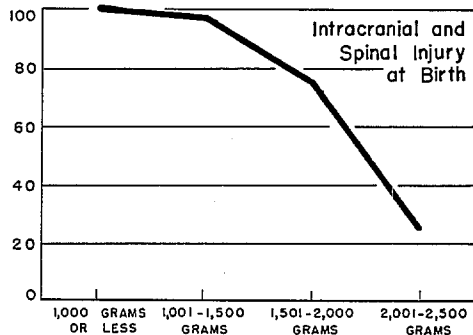
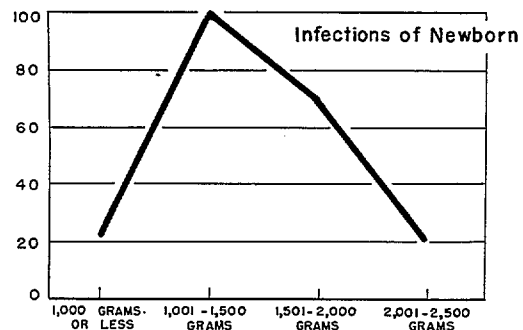
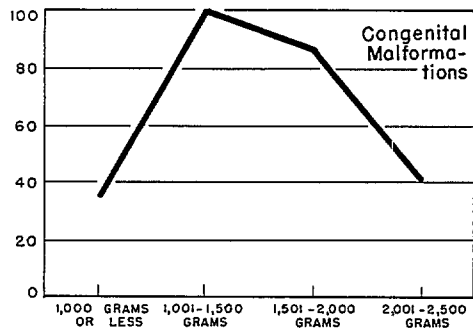
⁹Note that this title includes anoxia due to placenta praevia, premature separation of placenta or other complications of labor and other birth injuries not classifiable under Intracranial and spinal injury at birth.

¹⁰Anderson, Nina A., Brown, Estelle W., and Lyon, R. A., "Causes of Prematurity," *American Journal of Diseases of Children*, vol. 61, No. 1, pp. 72-87, January 1941; and Haenszel, William, "The Incidence of Prematurity, Complications of Pregnancy and Labor, and Operative Procedures for Births in Connecticut During 1948 and Their Relationship to Stillbirth and Neonatal Mortality," Connecticut State Department of Health, 1951.

Figure 3

Index of Neonatal Mortality From Specified Causes by Birth Weight for Infants 2,500 Grams or Less: United States, Jan.-Mar. 1950

(Based on rates shown in table 9. Maximum weight-specific rate for each cause equals 100)



causes (figure 3). For these causes, the rates for the highest weight group of immatures were only a small fraction (2 to 3 percent) of the rates for the very small infants (1,000 grams or less). For Postnatal asphyxia and atelectasis and Neonatal disorders arising from maternal toxemia, improvement in the rates was just slightly less.

For other causes—Congenital malformations, Infections of newborn, and Abnormal blood conditions—mortality began to decline only after an initial increase between the lowest birth weight group and 1,001-1,500 grams. The subsequent reductions for these causes were also generally smaller. In the case of Infections of newborn, this pattern of change with an increase in weight may be partially explained by the substantially smaller proportion of the more immature infants who survive to the ages where postnatal infections begin to attack. However, for both Infections of newborn and Congenital malformations, the lower mortality among the very small infants as compared with the pretermes 1,001-2,500 grams does not correspond to the findings in the Chicago study.¹¹ This might indicate that the advantage found at the very low weights is an artifact due to inaccuracies of diagnoses for these infants.

The added risk of mortality for the very heavy babies can be traced in large part to problems of delivery. The rate for Birth injuries for this group was 3 times that for the babies weighing 3,001-4,500 grams.

Other specific conditions which accounted for the major part of the increase in mortality at the very high weights are Congenital malformations and Pneumonia of newborn.

Cause distribution at each age

Relationships between cause of death and age at death among children of different weights are indicated in the percentage distributions given in tables 13 and 14. In table 13, the distributions of deaths by cause at specified ages show the relative impact of each cause among deaths at a specified age. The percentages shown in table 14, on the other hand, show what proportions of deaths in the neonatal period from a specific cause occurred at different ages in this period.

From table 13, it is seen that for deaths in the first week, physiological abnormalities, inadequacies in the child at birth, and injuries in the birth process accounted for most deaths. In the balance of the neonatal period (7-27 days), these conditions, although still exceedingly important, represented much smaller proportions of the deaths.

¹¹Bundeser, Herman N., et al., *op. cit.*, footnote 4, p. 226.

During the first week, mortality also changed somewhat in nature. Looking at only changes in the more important causes of death among children 2,500 grams or less at birth reveals that between the first hour and the remainder of the first day, the proportion of the toll from Congenital malformations for this weight group dropped (from 12 to 4 percent) and that from Postnatal asphyxia and atelectasis increased (from 10 to 19 percent). When detailed weight data for immatures are examined it also becomes clear that Immaturity unqualified was relatively more often certified as the cause among deaths at 1-23 hours than among deaths that took place in the first hour.

At 1-6 days, Immaturity unqualified decreased somewhat in importance as a cause of death among the total group of immatures (from about 50 percent to less than 40 percent). Other changes were a continuing increase in the proportion of the toll attributed to Postnatal asphyxia and atelectasis, a proportionately smaller loss from Other birth injury, and a greater loss from Intracranial and spinal injury at birth. Part of these changes for the immature group as a whole arise because of the small proportion of the very low weight babies surviving to this age, the consequent lower proportions of deaths of small immatures, and the variations with weight in the cause distributions.

Infections of newborn despite present-day methods for their treatment, are still responsible after the first week for an important segment of the mortality among infants under 2,501 grams at birth. The loss due to these diseases (21 percent of the total at ages 7-27 days) came fairly close to equaling that due to Immaturity unqualified (28 percent), which remained the principal cause of death reported for immatures even this late in the neonatal period. Congenital malformations gained in significance (particularly among the larger immatures) and ranked as the third major cause.

Some features of the changes with age in the distributions by cause of death among infants over 2,500 grams at birth, differed from those noted for the smaller infants. For example, in distinction to the situation among the immatures, the proportion of deaths attributed to Congenital malformations among infants over 2,500 grams appeared to increase gradually throughout the first week and then rose to a peak at 7-27 days. In addition, the proportion of the toll due to Postnatal asphyxia and atelectasis did not increase so radically after the first hour as in the case of immature babies.

At 7-27 days, a higher proportion of deaths of infants 2,501 grams or more were attributed to All other causes than at the younger ages, and of these relatively more fell in the subcategories All other diseases and Accidents. The percent distribution

of deaths from All other causes at these ages by detailed cause follow:

	<u>Under 7 days</u>	<u>7-27 days</u>
All other causes----	100.0	100.0
Symptoms and ill-defined conditions-	50.0	24.3
All other diseases-	41.9	54.2
Accidents-----	7.9	20.9
Homicide-----	0.2	0.6

With regard to the high proportion of deaths reported as due to Accidents at 7-27 days, it is noteworthy that, in a special study of deaths assigned to "accidental suffocation" in New York City, it was found that a sizable number were, in fact, due to a respiratory disease.¹²

Age distribution of deaths from each cause

With 56 percent of the deaths among the immaturely born infants occurring in the first day of life, it is not surprising to find that a high proportion of the deaths from practically all causes took place this soon after birth (table 14). An outstanding exception was Infections of newborn. Less than a tenth of the neonatal deaths from this group of causes occurred in the first day. The only other cause shown in table 14 with appreciably less than half the deaths this early is Intracranial and spinal injury at birth (38 percent).

For most of the causes, the bulk of the remaining deaths among the immatures occurred in the balance of the first week. Congenital malformations and Infections of newborn were the only relatively specific cause groups with substantial proportions of deaths in the last 3 weeks of the neonatal period.

Although only about a third of the deaths among infants over 2,500 grams at birth occurred in the first day, for many causes the age distributions of deaths were similar to those described for the immaturely born infants. There were, however, a few causes—the most important being Congenital malformations—from which the immatures in the study succumbed somewhat earlier than the mature infants. In addition, in a few instances, where the proportion of first day mortality for mature and immature infants was about equal, the immature infant was less likely to have died in the first hour than the mature infant. Causes in which this relation was found are Other birth injury and Postnatal asphyxia and atelectasis.

RACE

At the immature weights, nonwhite infants had a somewhat better chance of surviving the neonatal period than the white. However, in the mature weights, at which a preponderance of the births occur, the mortality risk among nonwhite births was greater, with the gap between the two race groups becoming relatively wider at each successive level through 3,501-4,000 grams and then narrowing slightly. Among white children, the group weighing 3,501-4,000 grams had the lowest mortality rate (5.0). For the nonwhite group, the rate (9.7) was most favorable for children weighing somewhat less (3,001-3,500 grams).

Age at death

The nonwhite infants in the study weighing 2,500 grams or less showed a better chance of surviving the immediate period following parturition and the first few days afterwards than did the white infants of equal weight. The lower mortality among the small nonwhite children, taking the neonatal period as a whole, is explained entirely by this early difference. By the fourth or fifth day after birth, the advantage for the nonwhite infants of these weights had disappeared (table 3). At subsequent ages, where postnatal environmental factors can be expected to exert an increasingly greater influence, mortality was more favorable for the small white infant and by the third week, the rate among the nonwhite was more than twice that among the white. The difference in the last week was slightly less.

Within the group weighing 2,500 grams or less, the advantage for the nonwhite infants appeared to have a tendency to continue somewhat longer for the smaller than for the larger immature babies (figure 4).

It is unlikely that underregistration of births and deaths or inaccuracies in weighing the newborn are significant factors in explaining the lower mortality experienced by nonwhite infants weighing 2,500 grams or less during the first few days of life since data for births occurring in hospitals, which are virtually completely registered, show the same general pattern. One explanation that has been advanced is that the nonwhite infant of low weight is more fully developed at birth than the white infant of the same weight and thus better able to survive the hazardous first few days of life.

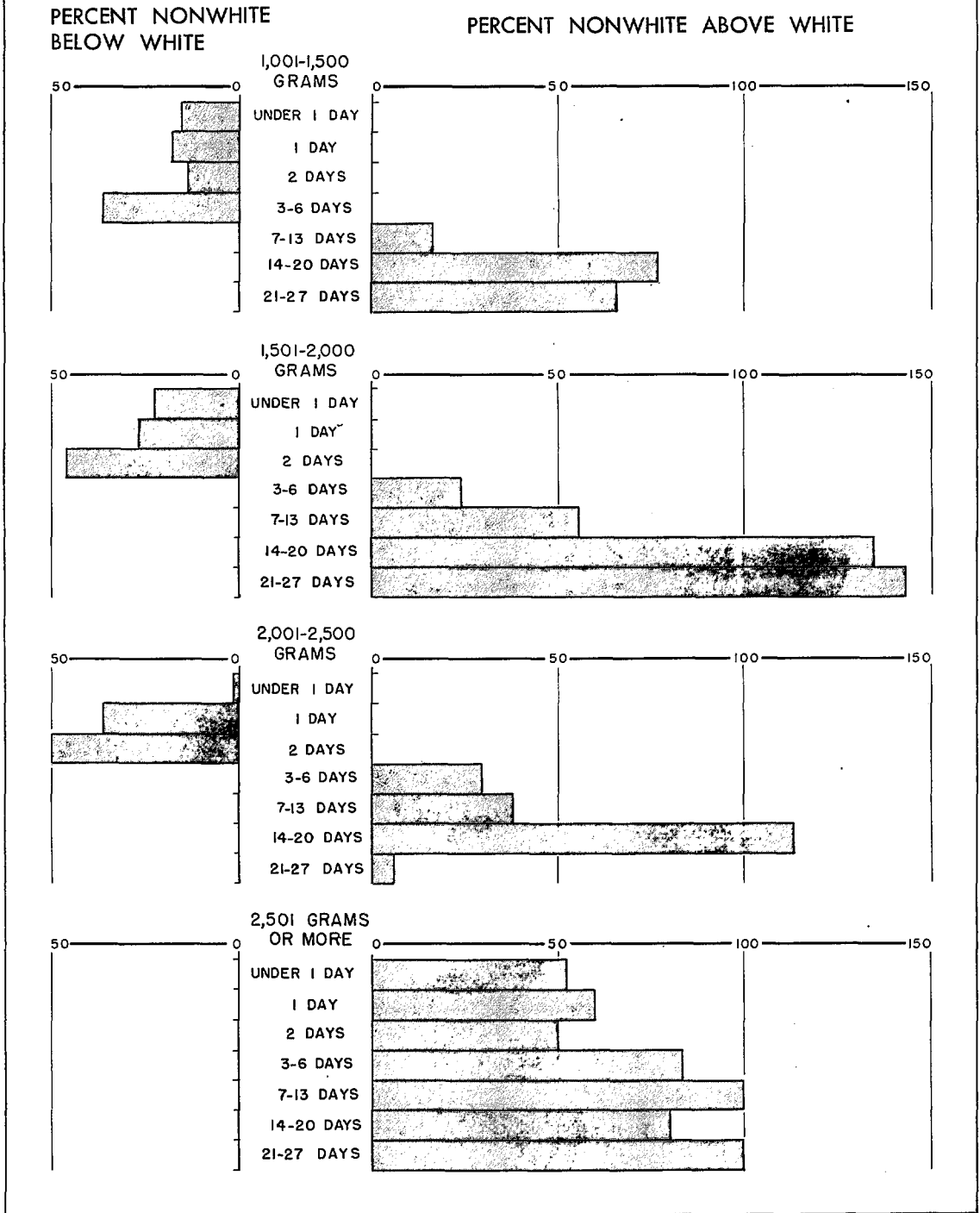
The higher mortality among nonwhite as compared with white infants 2,500 grams or less after the initial advantage following birth usually is ascribed to environmental differences. "Environment" for the small infant covers a wide range of elements—the type and duration of medical or hospital care as well as home conditions. For small infants the former plays an exceptionally important role considering the close supervision and special

¹²Werne, Jacob, and Garrow, Irene, "Sudden Deaths of Infants Allegedly Due to Mechanical Suffocation," American Journal of Public Health, vol. 37, pp. 675-687, June 1947.

Figure 4

Percent Difference Between Mortality Rates Among White and Nonwhite Infants of Same Birth Weight at Specified Ages: United States, Jan.-Mar. 1950

(Rates for white infants used as bases in computing percent differences)



equipment required in the management of the prematurely born infant. Investigation of these various factors which affect the comparative mortality of white and nonwhite infants is beyond the scope of this report.

Turning to the babies weighing 2,501 grams or more at birth, the loss among the nonwhite exceeded that among the white babies in the early days of life as well as later in the neonatal period. The advantage for the white at these weights was, however, usually more pronounced after the first few days. Rates among infants over 4,500 grams were an exception to this general situation. While the data at these weights by detailed age at death are subject to considerable variability due to low frequencies, it is apparent that in the first day or two after birth, the heavy nonwhite infant has a far higher mortality risk than the white. Later the difference in loss is not as marked.

The relationships between mortality rates for the white and nonwhite described thus far were presented principally from the point of view of all births regardless of place of birth. Data for hospital births, which have only been referred to incidentally, show the same general relationships. In addition, however, it should be noted from table 5 that at the mature weights and at higher ages where the rates for the total group of nonwhite births were above those for the white, the gaps between the corresponding rates for white and nonwhite hospital births were, as a rule, less pronounced. In fact, in the hospital data, nonwhite children of 2,501-3,000 grams appeared to have even a slightly better chance for survival than the white.

The minimum mortality rates throughout the neonatal period for both white and nonwhite infants were found with but few exceptions, and these probably due to the variability of small frequencies, among the group 3,001-4,500 grams at birth. In both the white and nonwhite groups the disadvantage of immature infants 2,500 grams or less as compared with those weighing 3,001-4,500 grams was considerably less marked at the end of the neonatal period than at the beginning—excluding the first hour. However, for the nonwhite, the differentials were substantially smaller than for the white except in the last 2 weeks of the neonatal period.

Data by more detailed weight for the group of infants weighing 3,001-4,500 grams indicate that for the white race, the lower neonatal mortality for those children of 3,501-4,000 grams than for other children in this weight range can be traced to differences occurring in the first 2 weeks. For the nonwhite race, generally lower mortality in the first 2 weeks also explains the more favorable over-all rate for the infants of 3,001-3,500 grams.

Hospital versus total births, nonwhite group

In this section, the mortality experience among hospital births is contrasted with the experience for all births regardless of place of delivery. This comparison is limited to nonwhite births of which 14.6 percent were delivered by physicians at home, and 30.0 percent were attended by midwives. For the white race where all but 8.2 percent of the births took place in hospitals, only small differences could be expected between rates for hospital births and all births.

In evaluating differences in mortality between hospital births and all births, it should be borne in mind that the comparison is affected not only by actual care received in a hospital at time of birth and immediately after, but by factors correlated with whether a birth occurred in or out of a hospital. Furthermore, the effect of underregistration of births and deaths, particularly in the group that dies soon after birth, must be considered. The problem of underregistration, which is concentrated among nonhospital births, may be serious enough in some cases to cause the rates for the combined in-hospital and nonhospital births to be appreciably understated. It would be of particular significance at the lower weights.

One condition, which might significantly raise the rates for the hospital group, is the possible selection of obstetrical cases presenting complications for referral to hospitals where ordinarily the mother would have remained at home for delivery. Another factor affecting the comparison which could not be taken into consideration in this study was the subsequent hospitalization of some of the babies born at home.

Nonwhite children born in hospitals and weighing between 1,501 and 3,000 grams at birth had a lower risk of mortality throughout most of the neonatal period than did all nonwhite children in these weight groups. The advantage of the hospital group was consistently high except for the second day (that is, at age 1 day), when the rates were virtually the same. Additional observations would be necessary before this deviation from the general pattern could be accepted as significant.

At the very favorable weights of 3,001-4,500 grams, the risk among hospital births differed only slightly from that of total births for the first 3 days. But, thereafter, the group born in a hospital had a major advantage.

Among infants of very low weight (1,500 grams or less) the difference in mortality between those born in hospitals and total births was small before the third day of life but, after this, there was a tendency to higher mortality in the hospital group. At

these weights, and especially during the first day of life, mortality among the total group might be understated because of failure to register as births and deaths the infants born outside of hospitals who die soon after birth. Consequently, the benefits of hospitalization at early ages may be concealed in a comparison of the two sets of data. Furthermore, children 1,500 grams or less born outside of a hospital and surviving the immediate postpartum period, must represent a select group, who also receive special care either at home or in a hospital. This may explain the anomalous situation after the first few days when rates were lower for the total number of children than for those born in hospitals.

Detailed age data for the heavy weight group (4,501 grams or more) are of limited value because of the small frequencies. However, in the first day of life mortality among nonwhite hospital births of these weights was significantly higher than among all births. This situation more than any other relationship revealed by the data suggests a selectivity of difficult cases by both midwives and physicians for referral to hospitals.

Cause of death

The quality of cause of death information, if measured by the proportion of deaths assigned to the category Symptoms and ill-defined conditions (780-795), appears to be poorer for the nonwhite than for the white group. Throughout the entire weight range, the proportion in this category was at least 5 times as great for the nonwhite as for the white race. Actually, above 2,500 grams the differences in the rates for this category alone amounted to about 40 percent of the excess of nonwhite mortality.

Other causes which may be considered as indices of the quality of reporting include Ill-defined diseases peculiar to early infancy, Immaturity with mention of any other subsidiary condition, and Immaturity unqualified. Comparison of the rates for white and nonwhite for these causes, however, does not show consistently higher rates for the nonwhite. For Ill-defined diseases and Immaturity unqualified, the rates for white and nonwhite infants were about the same at 1,500 grams or less, but considerably higher for the nonwhite above 1,500 grams.

Postnatal asphyxia and atelectasis may also be used frequently in cases where the specific etiology for a neonatal death is not known. In fact, in the Chicago study, as indicated earlier, infants designated as dying of prematurity and those for which atelectasis was indicated as the cause were not differentiated because of the large degree of similarity in the two groups. It is interesting to note, therefore, that at the immature weights the combined rates for these two categories for the white and nonwhite groups differ only slightly.

The fact that a much smaller proportion of nonwhite than white children come under medical attendance at time of (and also prior to) birth may introduce for some of the more specific causes a serious source of incomparability between the two race groups. This point would apply particularly to the causes grouped as Other birth injury where a clinical history of complications of delivery is often needed for proper diagnosis. It will be noted that at all immature weights, one of the more important race differentials in mortality was in the loss attributed to Other birth injury. In fact, for the two lowest weight groups of immatures, the more favorable over-all mortality experience among nonwhite children could be traced mainly to the smaller toll from this cause. Important as deficiencies in diagnosis are, however, they could certainly account for only part of this difference. Another area for inquiry relates to fetal mortality. Causes in the category Other birth injury are responsible for a large number of deaths that occur before complete birth (fetal deaths) in addition to deaths following delivery.¹³ It would be of especial interest, therefore, to see what effect combining fetal and neonatal deaths would have on the relation between mortality for the white and nonwhite groups.

Above 2,500 grams, the nonwhite infants experienced higher mortality than the white from Other birth injury. The same holds true for Intracranial and spinal injury at birth. At weights of 1,500 grams or less, however, where the rates for the nonwhite pertaining to Other birth injury were so much lower than for the white, those relating to Intracranial and spinal injury at birth for the nonwhite exceeded the corresponding rates for the white. Only between 1,501 and 2,500 grams did the rates for the nonwhite for Intracranial and spinal injury at birth drop below those for the white.

The one group of causes from which nonwhite infants of all weights suffered consistently greater mortality than the white was Infections of newborn (pneumonia, diarrhea, and other infections). For immatures, the rate among the nonwhite was almost twice that of the white, while among children weighing 2,501 grams or more, the rate for the nonwhite was between 2 and 3 times that for the white.

For two causes, namely, Congenital malformations and Hemolytic disease of newborn, consistently lower rates were recorded for nonwhite babies at mature as well as immature weights. Similar relations were found in the data on these causes for the group of autopsied deaths covered in the Chicago Board of Health study. In the case of Hemolytic disease of the newborn, the race dif-

¹³Potter, Edith L., "Pathology of the Fetus and the Newborn," The Yearbook Publishers, Inc., Chicago, Ill., 1952.

ferential in mortality can be explained by the lower incidence of Rh negatives among nonwhites than among whites.¹⁴

The lower mortality among nonwhite children attributed to Neonatal disorders arising from maternal toxemia at some weights (2,000 grams or less) may also be partly explained by the factors mentioned earlier with relation to Other birth injury.

PLURALITY

Members of plural sets represented only 2.0 percent of all live births but they accounted for 14.8 percent of the children weighing 2,500 grams or less at birth. Because of the heavy concentration at the low weights, the neonatal mortality rate for babies born in multiple sets was 5 to 6 times the rate for single births. On a weight-specific basis, the mortality risk among plural births was considerably lower than among single births between 1,501 and 2,500 grams. Above 3,000 grams, single births had a major advantage. The optimum weight was 3,001-3,500 grams for plural births (mortality rate, 10.4), and 3,501-4,000 grams for single births (mortality rate, 5.6). At every weight above 1,500 grams, the loss among nonwhite multiple births was far greater than among the white.

The completely different distributions of single and plural births place a particularly high premium on studying age at death and cause of death differences between these two groups on the basis of weight-specific information. Data that combine all weights indicate that plural births have a far higher mortality rate at all points in the first four weeks after birth; also that their loss from each cause in Certain diseases of early infancy is several times greater than the loss among single births. Variations of an entirely different nature emerge in the discussions on weight data that follow.

Age at death

The mortality risk among both single and plural births was heavily influenced throughout the neonatal period by the weight of the child at birth (table 7). Relationships discussed previously for single and plural births combined apply to the single group. Although the small numbers of plural births place a restriction on the inferences that can be drawn for this group, it is clear that over the broad weight range, 1,001-3,000 grams, additional weight was exceedingly important in surviving the first day or

two following parturition. The advantage was less marked 2 to 4 weeks after birth, but it was still of major proportions. Rates for weights 3,001-4,500 grams show no distinctive pattern of change from the figures for 2,501-3,000 grams. However, there is the suggestion that the risk for plural births may rise appreciably in the first day as weight increases much beyond 3,000 grams. To establish this definitely would require a larger group of births than was available through this study.

First day mortality among plural births weighing 1,501-2,000 and 2,001-2,500 grams was only about one-half the loss among single births of comparable weights. At no other point in the neonatal period was the margin as great for these weights. The data suggest further that within the first day, the plural births had a particularly strong advantage in the first hour after birth. The pattern of a much lower rate among plural births in the first day of life extended into births weighing over 2,500 grams, but it was not maintained for the "under 1 hour" period.

In every weight group, except 1,000 grams or less, mortality among nonwhite infants in plural sets was considerably higher than among the white during the first hour. The rates at the other ages were also for the most part far greater for the nonwhite, but only after the first week were the relative differences again as large as in the first hour.

Cause of death

The close similarity between the neonatal mortality rate (175.6) for plural births weighing 2,500 grams or less and the corresponding rate (173.4) for single births conceals striking differences in causes of death (table 11). At this weight, rates for Congenital malformations, Birth injuries, and Neonatal disorders arising from maternal toxemia were between one and a half times and twice as high among the single births as among the plural. Although these causes are closely associated with complications in pregnancy, labor, and delivery, or in the development of the fetus, the rates cannot be taken as an index of the comparative incidence of such complications. There is some evidence, for example, that complications in the presentation and delivery of the child are far more common in plural births, even when weight is taken into account.¹⁵

It may be that the maternal complications present in pregnancies terminating with the birth of an infant weighing 2,500 grams or less are more severe for single births than for multiple births, or that developmental differences make it more likely for

¹⁴Eastman, Nicholson J., "Williams Obstetrics," Appleton-Century-Crofts, Inc., New York, 1950.

¹⁵Haenszel, William, *op. cit.*, footnote 10, p. 236.

the latter group to overcome the handicap of similar complications.¹⁶ In either event, it would be expected that rates for other causes reflecting developmental shortcomings would be higher for single births. This is the case for two of the large cause groups, Postnatal asphyxia and atelectasis and Immaturity unqualified, when the rates are examined within 500 gram intervals, over the range 1,001-2,500 grams. Of equal importance is the appearance of even greater differences in the rates for Congenital malformations, Birth injuries, and Neonatal disorders arising from maternal toxemia than was evident in the broader grouping of weights.

Data for the total group weighing 2,500 grams or less indicate that many of these findings hold for white and also for nonwhite births. However, in most of the important instances they were not of the same relative magnitude. Generally, where the rates among white births were in favor of the plural births, the corresponding differentials in the nonwhite group were dampened; where single births had the advantage, the differentials increased.

Above 2,500 grams, mortality rates among single births were lower than among multiple births for almost all of the causes. Of particular interest is the fact that the rate for Infections of newborn was twice as high in the plural birth group. Nonwhite mortality contributed heavily to this over-all relationship. In addition, while the rate for Immaturity unqualified was exceedingly small among the single births it was fairly high among the multiple births. As discussed in the section Birth weight and certification of immaturity on cause of death, this situation may result from coding rules.

SEX OF CHILD

The loss among male infants was about a third more than among the female during the neonatal period, despite their more favorable weight distribution. This resulted from considerably higher mortality rates at almost all weights. In the 500 gram intervals between 1,001 and 4,000 grams, the rates among baby boys were between 30 and 84 percent higher than those for girls. Above 4,500 grams, a lower rate is found for males. The optimum weight group was the same for both males and females—3,501-4,000 grams. Sex differences in mortality in the nonwhite races were slightly less pronounced than in the white at most premature weight levels and at weights between 2,501 and 3,500 grams.

Developmental differences between males and females at the same weight may partially explain the much lower mortality in the female at most

points in the weight scale. Equating males at one weight to females at a somewhat lower weight brings the mortality rates for the two sexes closer. But, the issue is incompletely resolved since at no weight does the male mortality reach the lows recorded for females at 3,001-4,000 grams.

Age at death

The risk of loss in every weight group but the extremes of the weight scale was substantially greater among the males than the females at practically all stages of the neonatal period (table 3). One important exception was the very small difference in mortality during the first hour after birth, where neither sex showed a consistent advantage.

At weights 1,001-3,000 grams, mortality differentials between the sexes increased sharply almost immediately after the first hour (figure 5). Relative differences reached a peak generally within a day or two and remained at this high level throughout most of the first week. There seemed to be a tendency for the advantage among the female births to decline in the second or third week and to increase again at the end of the neonatal period. In view of the small numbers of observations on which the increases for the fourth week are based, however, this relationship should be interpreted as being only suggestive.

Male-female mortality differences in the weight interval 3,001-4,500 grams appeared to fluctuate somewhat less during the first week than in other weight intervals. Comparisons at the older ages would indicate a peak difference during the third week. Above 4,500 grams where males were in a more favored position than females with regard to over-all mortality, the difference was due mainly to the lower risk of death among the males during the first day.

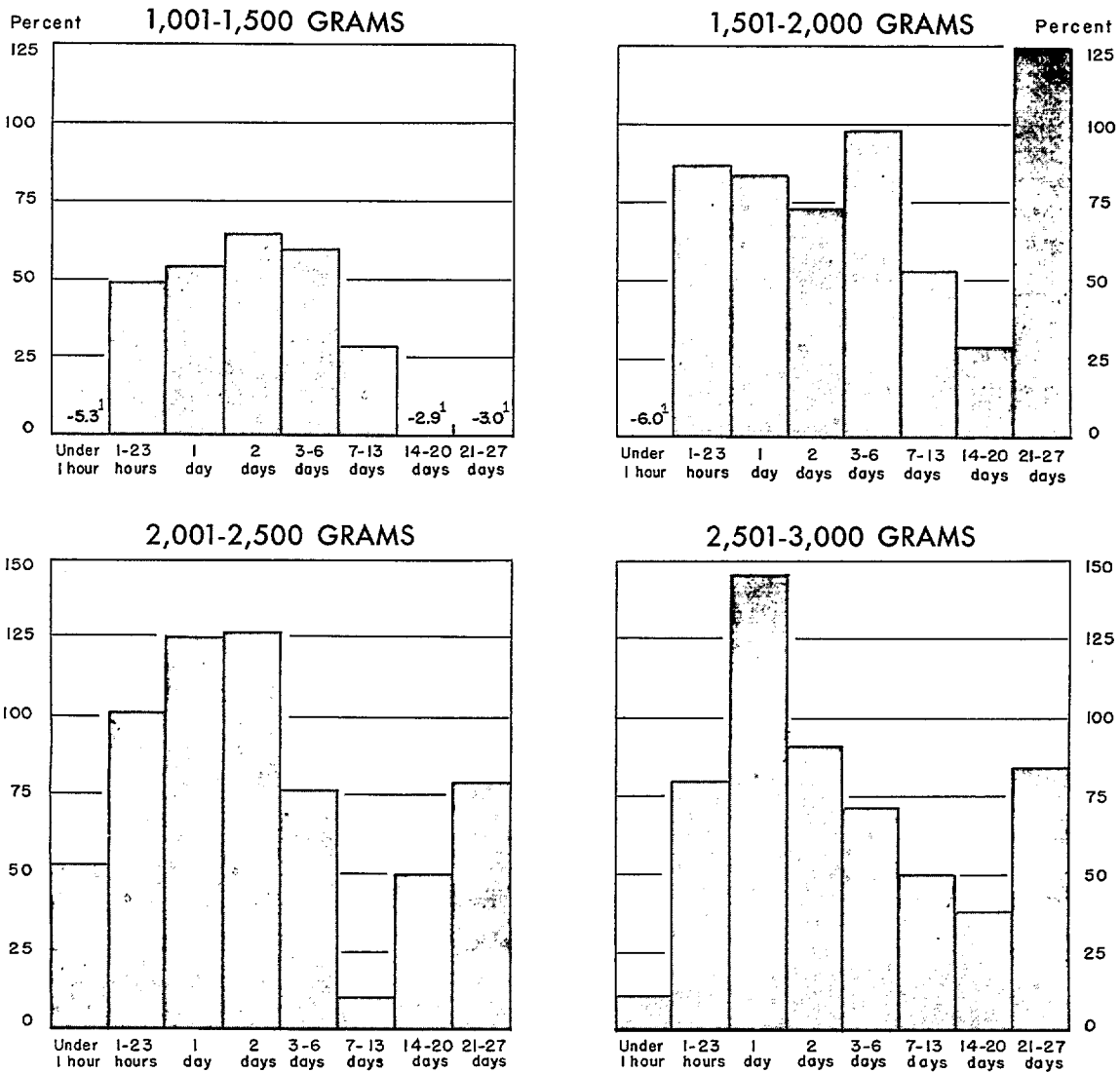
The pattern of sex differentials in mortality in the white race is similar in its broad features to what has already been discussed for all races combined. However, there are significant differences in detail. One specific instance concerns weight group 1,501-2,000 grams. Here, the relative advantage among white female births dropped sharply after the first week and remained at the same level in the balance of the neonatal period. But, this was one of the weight groups in which there occurred a marked increase in the fourth week in the gap between male and female mortality for all races. On the other hand, this is the week in which a major sex differential in mortality was found among white babies weighing 1,001-1,500 grams at birth, in contrast to no significant difference for the all races group. Another interesting variation between white births and the total group was found among babies of 4,501 grams or more. Substantially greater loss among females at this weight was not confined to

¹⁶See Record, R. G.; Gibson, J. R., and McKeown, Thomas, "Foetal and Infant Mortality in Multiple Pregnancy," *Journal of Obstetrics and Gynecology of the British Empire*, vol. 59, No. 4, pp. 471-482. August 1952.

Figure 5

**Percent Excess of Male Over Female Mortality Rates at Specified Ages by Birth Weight:
United States, Jan.-Mar. 1950**

(Rates for females used as bases in computing percent differences)



¹At this age the rate was lower for males than females by the percent given.

the first day as was the case for all races, but extended into most of the neonatal period.

For the nonwhite births, the sex differences in mortality risk were very erratic below 2,501 grams, with no clear pattern from one weight group to another. Combining all of these weight groups, however, gives a fairly consistent progression from a considerably greater risk among the males during

the first day after birth to a more moderate disadvantage in the balance of the first week, and finally to the reverse situation of higher mortality among the females towards the end of the neonatal period. In the group weighing 2,501 grams or more, the differential was never definitely in favor of the males. The advantage for the females was fairly small in the first day, increased sharply to a peak

during the rest of the first week, and then became small again. Despite the fact that heavy baby girls (over 4,500 grams) had a lower neonatal mortality rate than boys of the same weight, their loss in the first day appeared to be greater.

Cause of death

Neonatal mortality rates for all cause categories were higher among the males than among the females in the birth weight group 2,500 grams or less (table 9). The smallest relative excess (11 percent) was in the Infections of newborn (figure 6). The largest absolute and relative differences among the more frequently cited causes were in the rates for Birth injuries, Postnatal asphyxia and atelectasis, and Immaturity unqualified. These rates were between 50 and 80 percent higher for the males and they accounted for almost seven-eighths of the excess in the over-all male mortality rate at this weight. Among the Birth injuries, an exceptionally large difference was found in the rates for Intracranial and spinal injury—the male rate for births under 2,501 grams being $2\frac{1}{2}$ times the female rate.

Congenital malformations was responsible for a significant segment of the loss among both male and female prematurely born infants. While male mortality was greater than female for the entire group weighing 2,500 grams or less, the relative difference between the rates (19 percent) was one of the lowest. Furthermore, detailed weight data strongly suggest that below 1,501 grams, the loss due to Congenital malformations was higher among baby girls. The differentials follow the interesting course from a far lower rate for the males at 1,000 grams or less, to a substantial advantage for the females at 2,001-2,500 grams. Carrying this comparison into the mature weights indicates that the differential remained large at 2,501-3,000 grams, but thereafter diminished.

In a number of the other causes of death, there was also no consistent advantage for female births over the entire weight range. For example, in the case of Infections of newborn, higher mortality occurred among the baby girls than boys at weights 1,500 grams or less.

Birth injuries and Postnatal asphyxia and atelectasis persisted as the largest contributors to the over-all male-female difference in mortality at the mature weights. However, the other causes assumed greater relative prominence here than at the lower weights, and for those weighing over 2,500 grams, the mortality among the males due to Birth injuries and Postnatal asphyxia and atelectasis, was matched by the excess in the loss from all other causes combined. In the heavy weight

group, 4,501 grams or more, the principal reason for the previously noted higher female rate was a markedly greater risk of mortality from Birth injuries.

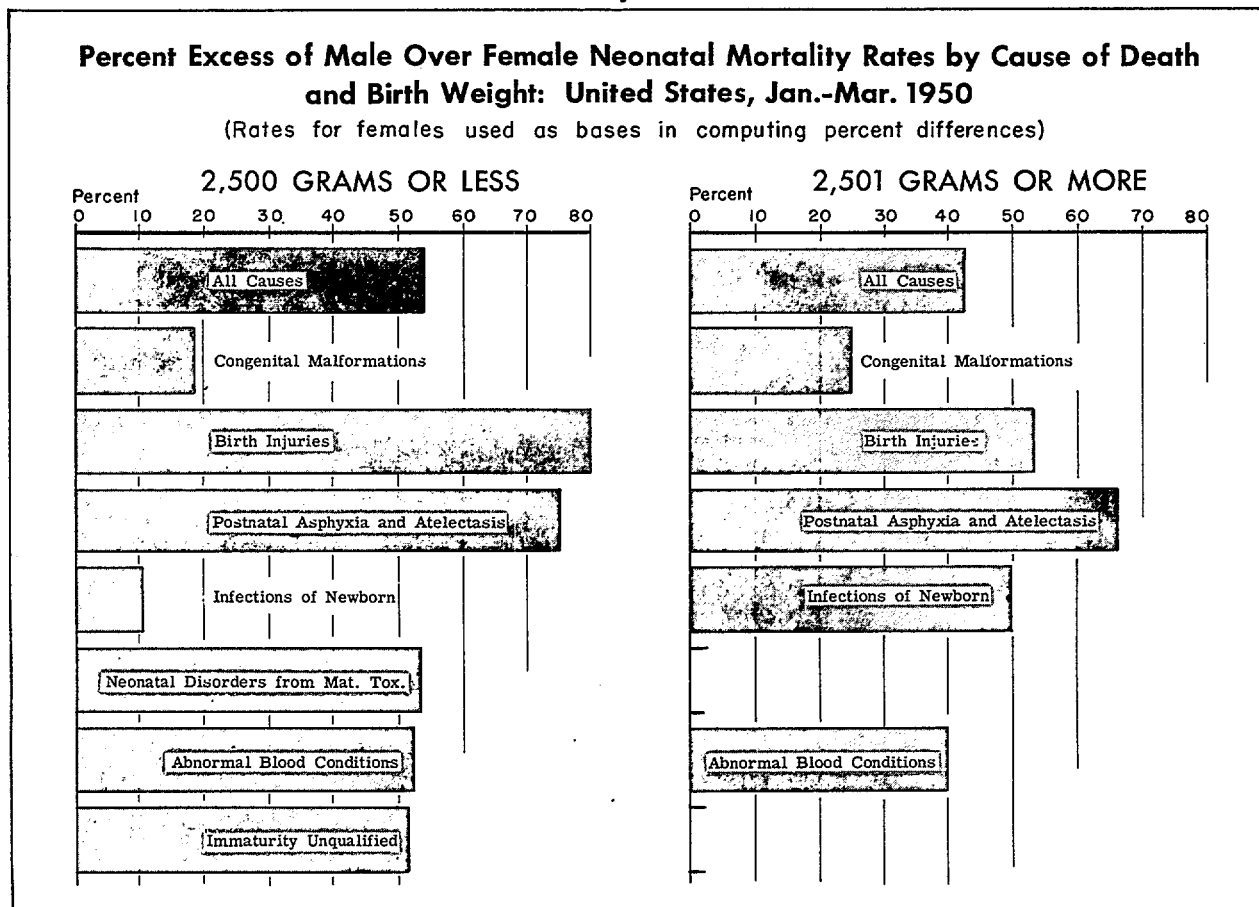
In the main, the pattern of male-female mortality differences found when all races were considered as a group, was present in the white race. However, the differentials at weights below 2,501 grams, were somewhat greater among white births in a number of the cause groups, including the large contributors—Postnatal asphyxia and atelectasis, and Infections of newborn.

Above 2,500 grams, the clearest instance in which sex differentials in mortality among white infants varied from the situation for all races, was at 4,501 grams or more. Among these heavy babies, the females had a higher rate in practically every cause group, including Congenital malformations. Birth injuries accounted for a large share of the sex differences in the over-all loss in the group, but Postnatal asphyxia and atelectasis, together with Infections of newborn contributed almost as much.

Among the prematurely born infants, the differential between male and female mortality for the nonwhite was appreciably smaller than for the white. In the former group, the rate for males weighing under 2,501 grams was 36 percent above the rate for females; among white babies, the figure was 58 percent. The major reasons for this difference were much closer mortality rates for Postnatal asphyxia and atelectasis and moderate reductions in the gaps between the male-female rates for Birth injuries and Immaturity unqualified. Also, rates for Infections of newborn in the nonwhite race tended to be higher among the female infants rather than the male. The only cause for which the differential increased was Neonatal disorders arising from maternal toxemia. Although the 2 race groups differed greatly in the level of mortality from Congenital malformations, they showed the same small sex differential. Another instance of strong consistency between the races was in the minor cause Hemorrhagic disease of newborn, the rates for which were over twice as high among males.

In the group of infants weighing more than 2,500 grams, the largest relative excess (about 89 percent) in male mortality among nonwhite births was in deaths attributed to Congenital malformations. This is in sharp contrast to the small difference (24 percent) among the white births. The situation was very similar in specific weight groups above 2,500 grams. Among nonwhite babies weighing over 4,500 grams, the rate for Congenital malformations was over twice as high for the males as for the females, whereas among the white infants at this weight, there was virtually no difference between the sexes in mortality from these conditions.

Figure 6



SUMMARY

Statistics on neonatal mortality by age and cause according to weight at birth derived from vital records for infants born in the United States during the first 3 months of 1950 are presented in this report. For this group of children:

1. Close to half of the deaths during the first 28 days of life occurred before the end of the first day. The proportion dying this soon varied considerably with the weight of the baby, being highest for the very small infants (about three-fourths) and lowest (one-third) for those 2,501 grams or more.
2. At each age throughout the neonatal period, the risk of dying was related to the infant's weight. Additional weight (except at the highest weight) was an advantage not only shortly after birth, but also 3 or 4 weeks later.
3. Among children 2,500 grams or less, Immaturity unqualified, accounting for over 40 percent of the mortality, was the principal cause of death

reported, and Postnatal asphyxia and atelectasis and Birth injuries ranked second and third. Above 2,500 grams, Congenital malformations ranked first and this was followed by Birth injuries, and Postnatal asphyxia and atelectasis. Within these broad weight groupings, however, there was considerable variation in the causal pattern.

4. Close to half of the difference between the mortality rates for immature children and those weighing 2,501 grams or more at birth was accounted for by deaths assigned to Immaturity unqualified. Among the causes other than Immaturity, from which children of 2,500 grams or less sustained particularly more severe losses than the mature, were Other birth injury and Neonatal disorders arising from maternal toxemia. Except for slight increases in the mortality rates from a few of the causes between the two lowest weight groups, mortality from each cause dropped sharply with a rise in weight through 3,001-4,500 grams. The

- increase in mortality for the very heavy babies was traced in large part to problems of delivery, although some increase was also noted in Congenital malformations and Pneumonia of newborn.
5. The most marked changes in the composition of causes of deaths among immatures occurred after the first week. After this period, the percentage of deaths due to Infections of newborn increased sharply and the proportion due to Congenital malformations also rose. However, Immaturity unqualified was still the most frequently cited cause of death.
 6. For most causes, the distributions of deaths by age among both mature and immature infants were about the same. The peak period of mortality for all causes except Infections of newborn was during the first day of life. Another cause with appreciably less than half the deaths this early was Intracranial and spinal injury at birth.
 7. 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 2,501 grams or more, the loss among the nonwhite exceeded that among the white in the early as well as the later days in the neonatal period, but was usually more pronounced after the first few days.
 8. Rates for nonwhite hospital births as compared with total nonwhite births indicate that children weighing 1,501-3,000 grams born in hospitals had lower mortality throughout most of the neonatal period than did all nonwhite children of those weights. Mortality was also more favorable for the hospital group 3,001-4,500 grams except in the first 3 days. For the small immatures and the heavy babies, however, the record was not quite as favorable for the hospital group. Underreporting and selectivity of poorer risk cases for hospitalization at time of birth may account for this situation.
 9. In the two lowest weight groups, the more favorable over-all mortality experience among nonwhite than white children could be traced mainly to the smaller toll from Other birth injury. Mortality from Congenital malformations and Hemolytic disease of newborn was lower among nonwhite than white children at all weights. For Infections of newborn, however, the rates for the nonwhite were consistently higher.
 10. For plural births, additional weight up to 3,000 grams was exceedingly important in surviving the first day or two after birth. The advantage was less marked 2 to 4 weeks later. Mortality among plural births 1,501-2,500 grams as compared with single births of these weights was especially favorable in the first day. In every weight group except 1,000 grams or less, mortality among nonwhite infants in plural sets was considerably higher than among the white during the first hour, and after the first week. During most of the first week, the differences in the rates were not as great but were in the same direction.
 11. For births at 2,500 grams or less, the rates for Congenital malformations, Birth injuries, and Neonatal disorders arising from maternal toxemia were almost twice as high among single births as among plural. For detailed weight groups under 2,501 grams, the rates were also higher for single births for Postnatal asphyxia and atelectasis and Immaturity unqualified. Above 2,500 grams, mortality rates among single births were lower than among multiple births for almost all causes.
 12. Except for the first hour after birth, the risk of loss in every weight group but at the two extremes of the weight scale was substantially greater among males than females throughout most of the neonatal period. At weights 1,001-3,000 grams the relative differences reached a peak within a day or two after birth and remained at that high level throughout the first week. For slightly heavier children, the difference was at about the same level throughout the first week. For babies 4,501 grams or more, the advantage for males was due to lower mortality in the first day.
 13. Neonatal mortality rates for all cause categories were higher among males than females of 2,500 grams or less. The smallest differences were found in the rates for Infections of newborn and Congenital malformations, and the largest for Birth injuries (especially Intracranial and spinal injury), Postnatal asphyxia and atelectasis, and Immaturity unqualified. Birth injuries and Postnatal asphyxia and atelectasis persisted as the largest contributors to the over-all male-female difference in mortality at the mature weights. In the heavy weight group (4,501 grams or more) the higher rate for females was due to the markedly greater risk of mortality in this sex from Birth injuries.

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

(Birth weights not stated are distributed. Excludes data for Massachusetts)

RACE, SEX, 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
RACE AND SEX										
All races-----	837,786	3,928	5,081	11,388	41,240	151,808	315,629	226,739	64,508	17,465
Male----	429,506	2,014	2,586	5,501	18,467	66,044	154,868	127,927	40,736	11,363
Female--	408,280	1,914	2,495	5,887	22,773	85,764	160,761	98,812	23,772	6,102
White-----	717,133	3,189	4,079	9,206	33,460	126,906	273,285	198,389	55,753	12,866
Male----	368,378	1,621	2,121	4,480	15,034	54,833	133,719	112,366	35,564	8,640
Female--	348,755	1,568	1,958	4,726	18,426	72,073	139,566	86,023	20,189	4,226
Nonwhite-----	120,653	739	1,002	2,182	7,780	24,902	42,344	28,350	8,755	4,599
Male----	61,128	393	465	1,021	3,433	11,211	21,149	15,561	5,172	2,723
Female--	59,525	346	537	1,161	4,347	13,691	21,195	12,789	3,583	1,876
RACE AND PLURALITY										
Single births-----	820,618	3,243	4,128	8,946	36,225	146,751	313,216	226,258	64,403	17,448
White-----	702,966	2,630	3,308	7,199	29,322	122,663	271,274	198,028	55,683	12,859
Nonwhite-----	117,652	613	820	1,747	6,903	24,088	41,942	28,230	8,720	4,589
Births in plural sets-----	17,168	685	953	2,442	5,015	5,057	2,413	481	105	17
White-----	14,167	559	771	2,007	4,138	4,243	2,011	361	70	7
Nonwhite-----	3,001	126	182	435	877	814	402	120	35	10

VITAL STATISTICS—SPECIAL REPORTS

TABLE 2. DEATHS UNDER 28 DAYS, BY BIRTH WEIGHT, AGE, RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

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

RACE, AGE, 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
ALL RACES-----	16,741	3,424	2,801	2,403	2,078	1,912	2,112	1,280	483	248
Under 1 hour-----	1,691	598	216	165	153	146	207	132	40	34
1-23 hours-----	6,405	1,976	1,332	964	632	489	511	313	136	52
1 day-----	2,470	368	452	445	358	273	268	185	76	45
2 days-----	1,663	209	222	283	267	231	238	131	59	23
3 days-----	928	89	116	121	147	162	157	93	29	14
4 days-----	519	48	63	66	72	85	88	66	21	10
5 days-----	420	43	79	48	64	55	60	51	13	7
6 days-----	293	30	54	27	48	35	51	33	8	7
7-13 days-----	1,141	40	172	165	157	179	224	122	49	33
14-20 days-----	678	19	57	68	106	138	158	91	28	13
21-27 days-----	533	4	38	51	74	119	150	63	24	10
Male-----	9,751	1,801	1,608	1,458	1,245	1,096	1,252	823	312	156
Under 1 hour-----	920	337	107	77	85	68	112	91	24	19
1-23 hours-----	3,775	1,069	809	613	391	281	307	191	84	30
1 day-----	1,470	172	262	275	230	180	149	117	56	29
2 days-----	993	99	129	169	172	139	153	81	36	15
3-6 days-----	1,271	103	176	164	192	189	218	161	43	25
7-13 days-----	620	16	85	92	73	96	125	81	29	23
14-20 days-----	378	3	24	35	58	71	99	57	24	7
21-27 days-----	324	2	16	33	44	72	89	44	16	8
Female-----	6,990	1,623	1,193	945	833	816	860	457	171	92
Under 1 hour-----	771	261	109	88	68	78	95	41	16	15
1-23 hours-----	2,630	907	523	351	241	208	204	122	52	22
1 day-----	1,000	196	190	170	128	93	119	68	20	16
2 days-----	670	110	93	114	95	92	85	50	23	8
3-6 days-----	889	107	136	98	139	148	138	82	28	13
7-13 days-----	521	24	87	73	84	83	99	41	20	10
14-20 days-----	300	16	33	33	48	67	59	34	4	6
21-27 days-----	209	2	22	18	30	47	61	19	8	2
WHITE-----	13,521	2,817	2,293	1,976	1,693	1,528	1,703	982	374	155
Under 1 hour-----	1,403	506	174	141	136	113	172	106	34	21
1-23 hours-----	5,252	1,628	1,108	813	503	403	414	246	112	25
1 day-----	2,040	303	372	378	312	228	221	141	58	27
2 days-----	1,388	170	180	250	239	196	190	104	43	16
3 days-----	747	68	98	98	127	128	129	67	20	12
4 days-----	399	35	55	52	47	69	69	49	17	6
5 days-----	326	34	64	35	46	41	52	39	12	3
6 days-----	214	22	49	15	34	23	43	19	6	3
7-13 days-----	854	33	129	119	119	129	183	84	35	23
14-20 days-----	494	14	38	43	71	107	117	74	20	10
21-27 days-----	404	4	26	32	59	91	113	53	17	9
Male-----	7,952	1,467	1,364	1,218	1,039	873	1,021	633	244	93
Under 1 hour-----	761	282	84	67	76	46	98	74	21	13
1-23 hours-----	3,122	867	699	520	315	232	252	152	70	15
1 day-----	1,225	145	228	239	199	151	123	85	40	15
2 days-----	829	78	104	159	155	116	117	65	26	9
3-6 days-----	1,006	75	153	130	155	152	178	116	33	14
7-13 days-----	471	15	65	64	59	68	105	59	21	15
14-20 days-----	283	3	16	22	43	52	78	46	18	5
21-27 days-----	255	2	15	17	37	56	70	36	15	7

TABLE 2. DEATHS UNDER 28 DAYS, BY BIRTH WEIGHT, AGE, RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950--Con.

(See headnote on p. 250)

RACE, AGE, 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
WHITE--Continued										
Female-----	5,569	1,350	929	758	654	655	682	349	130	62
Under 1 hour-----	642	224	90	74	60	67	74	32	13	8
1-23 hours-----	2,130	761	409	293	188	171	162	94	42	10
1 day-----	815	158	144	139	113	77	98	56	18	12
2 days-----	559	92	76	91	84	80	73	39	17	7
3-6 days-----	680	84	113	70	99	109	115	58	22	10
7-13 days-----	363	18	64	55	60	61	78	25	14	8
14-20 days-----	211	11	22	21	28	55	39	28	2	5
21-27 days-----	149	2	11	15	22	35	43	17	2	2
NONWHITE-----	3,220	607	508	427	385	384	409	298	109	93
Under 1 hour-----	288	92	42	24	17	33	35	26	6	13
1-23 hours-----	1,153	348	224	151	129	86	97	67	24	27
1 day-----	430	65	80	67	46	45	47	44	18	18
2 days-----	275	39	42	33	28	35	48	27	16	7
3 days-----	181	21	18	23	20	34	28	26	9	2
4 days-----	120	13	8	14	25	16	19	17	4	4
5 days-----	94	9	15	13	18	14	8	12	1	4
6 days-----	79	8	5	12	14	12	8	14	2	4
7-13 days-----	287	7	43	46	38	50	41	38	14	10
14-20 days-----	184	5	19	25	35	31	41	17	8	3
21-27 days-----	129	-	12	19	15	28	37	10	7	1
Male-----	1,799	334	244	240	206	223	231	190	68	63
Under 1 hour-----	159	55	23	10	9	22	14	17	3	6
1-23 hours-----	653	202	110	93	76	49	55	39	14	15
1 day-----	245	27	34	36	31	29	26	32	16	14
2 days-----	164	21	25	10	17	23	36	16	10	6
3-6 days-----	265	28	23	34	37	37	40	45	10	11
7-13 days-----	149	1	20	28	14	28	20	22	8	8
14-20 days-----	95	-	8	13	15	19	21	11	6	2
21-27 days-----	69	-	1	16	7	16	19	8	1	1
Female-----	1,421	273	264	187	179	161	178	108	41	30
Under 1 hour-----	129	37	19	14	8	11	21	9	3	7
1-23 hours-----	500	146	114	58	53	37	42	28	10	12
1 day-----	185	38	46	31	15	16	21	12	2	4
2 days-----	111	18	17	23	11	12	12	11	6	1
3-6 days-----	209	23	23	28	40	39	23	24	6	3
7-13 days-----	138	6	23	18	24	22	21	16	6	2
14-20 days-----	89	5	11	12	20	12	20	6	2	1
21-27 days-----	60	-	11	3	8	12	18	2	6	-

VITAL STATISTICS—SPECIAL REPORTS

TABLE 3. MORTALITY RATES AT SPECIFIED AGES UNDER 28 DAYS, BY BIRTH WEIGHT, RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(Based on deaths 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. Excludes data for Massachusetts. Two dots (..) indicate rate not computed where the number of births is less than 100 and the number of deaths is less than 20)

RACE, AGE, 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	3,001- 4,500	2,500 or less	2,501 or more
ALL RACES-----	20.0	871.7	551.3	211.0	50.4	12.6	6.7	5.6	7.5	14.2	6.4	173.7	7.8
Under 1 day-----	9.7	655.3	304.7	99.1	19.0	4.2	2.3	2.0	2.7	4.9	2.2	97.9	2.7
Under 1 hour-----	2.0	152.2	42.5	14.5	3.7	1.0	0.7	0.6	0.6	1.9	0.6	18.4	0.7
1-23 hours-----	7.7	593.4	273.8	85.9	15.4	3.2	1.6	1.4	2.1	3.0	1.6	81.1	1.9
1 day-----	3.0	271.8	127.9	43.4	8.8	1.8	0.9	0.8	1.2	2.6	0.9	29.2	1.1
2 days-----	2.0	212.0	72.1	28.8	6.7	1.5	0.8	0.6	0.9	1.3	0.7	18.2	0.9
3-6 days-----	2.6	270.3	109.1	27.5	8.3	2.2	1.1	1.1	1.1	2.2	1.1	21.0	1.4
3 days-----	1.1	114.5	40.6	12.7	3.7	1.1	0.5	0.4	0.5	0.8	0.5	8.9	0.6
4 days-----	0.6	69.8	23.0	7.0	1.8	0.6	0.3	0.3	0.3	0.6	0.3	4.7	0.3
5 days-----	0.5	67.2	29.5	5.1	1.6	0.4	0.2	0.2	0.2	0.4	0.2	4.5	0.2
6 days-----	0.4	50.3	20.8	2.9	1.2	0.2	0.2	0.1	0.1	0.4	0.2	3.1	0.2
7-13 days-----	1.4	70.5	67.5	17.8	4.0	1.2	0.7	0.5	0.8	1.9	0.7	10.3	0.8
14-20 days-----	0.8	36.1	24.0	7.5	2.7	0.9	0.5	0.4	0.4	0.8	0.5	4.9	0.6
21-27 days-----	0.6	7.9	16.4	5.6	1.9	0.8	0.5	0.3	0.4	0.6	0.4	3.3	0.5
Male-----	22.7	894.2	621.8	265.0	67.4	16.6	8.1	6.4	7.7	13.7	7.4	213.9	9.1
Under 1 day-----	10.9	698.1	354.2	125.4	25.8	5.3	2.7	2.2	2.7	4.3	2.5	122.1	3.0
Under 1 hour-----	2.1	167.3	41.4	14.0	4.6	1.0	0.7	0.7	0.6	1.7	0.7	21.2	0.8
1-23 hours-----	8.8	637.4	326.3	113.0	21.3	4.3	2.0	1.5	2.1	2.6	1.8	103.1	2.2
1 day-----	3.5	282.9	156.9	57.2	12.8	2.7	1.0	0.9	1.4	2.6	1.0	37.4	1.3
2 days-----	2.3	227.1	91.6	37.3	9.7	2.1	1.0	0.6	0.9	1.3	0.8	23.6	1.1
3-6 days-----	3.0	305.6	137.6	37.6	10.9	2.9	1.4	1.3	1.1	2.2	1.5	26.9	1.6
7-13 days-----	1.5	68.4	77.1	21.9	4.2	1.5	0.8	0.6	0.7	2.0	0.7	11.6	0.9
14-20 days-----	0.9	13.8	23.6	8.5	3.3	1.1	0.6	0.4	0.6	0.6	0.6	5.3	0.6
21-27 days-----	0.8	9.5	16.1	8.1	2.5	1.1	0.6	0.3	0.4	0.7	0.5	4.2	0.6
Female-----	17.1	848.0	478.2	160.5	36.6	9.5	5.3	4.6	7.2	15.1	5.3	138.9	6.4
Under 1 day-----	8.3	610.2	253.3	74.6	13.6	3.3	1.9	1.6	2.9	6.1	1.9	77.1	2.3
Under 1 hour-----	1.9	136.4	43.7	14.9	3.0	0.9	0.6	0.4	0.7	2.5	0.5	15.9	0.7
1-23 hours-----	6.5	548.7	219.2	60.5	10.6	2.4	1.3	1.2	2.2	3.6	1.3	62.1	1.6
1 day-----	2.5	262.7	102.0	31.2	5.7	1.1	0.7	0.7	0.8	2.6	0.7	22.4	0.8
2 days-----	1.7	200.0	55.6	21.6	4.3	1.1	0.5	0.5	1.0	1.5	0.6	13.8	0.7
3-6 days-----	2.2	243.2	86.1	19.0	6.2	1.7	0.9	0.8	1.2	2.2	0.9	16.3	1.1
7-13 days-----	1.3	72.1	60.2	14.4	3.8	1.0	0.6	0.4	0.8	1.7	0.6	9.3	0.7
14-20 days-----	0.7	51.8	24.3	6.6	2.2	0.8	0.4	0.3	0.2	1.0	0.3	4.5	0.5
21-27 days-----	0.5	6.8	16.6	3.6	1.4	0.6	0.4	0.2	0.3	0.3	0.3	2.5	0.4
WHITE-----	18.9	883.3	562.1	214.6	50.6	12.0	6.2	5.0	6.7	12.0	5.8	175.8	7.1
Under 1 day-----	9.3	669.2	314.3	103.6	19.1	4.1	2.1	1.8	2.6	3.6	2.1	100.3	2.5
Under 1 hour-----	2.0	158.7	42.7	15.3	4.1	0.9	0.6	0.5	0.6	1.6	0.6	19.2	0.7
1-23 hours-----	7.3	606.8	283.7	89.7	15.1	3.2	1.5	1.2	2.0	1.9	1.5	82.7	1.8
1 day-----	2.9	287.2	133.0	45.8	9.5	1.8	0.8	0.7	1.0	2.1	0.8	30.4	1.0
2 days-----	2.0	226.1	74.2	31.8	7.4	1.6	0.7	0.5	0.8	1.3	0.6	19.3	0.8
3-6 days-----	2.4	273.2	118.5	26.2	7.9	2.1	1.1	0.9	1.0	1.9	1.0	20.6	1.2
3 days-----	1.1	116.8	43.7	12.9	3.9	1.0	0.5	0.3	0.4	0.9	0.4	9.2	0.5
4 days-----	0.6	68.1	25.6	6.9	1.5	0.5	0.3	0.2	0.3	0.5	0.3	4.5	0.3
5 days-----	0.5	71.0	30.6	4.7	1.4	0.3	0.2	0.2	0.2	0.2	0.2	4.2	0.2
6 days-----	0.3	49.4	24.2	2.0	1.1	0.2	0.2	0.1	0.1	0.2	0.1	2.9	0.1
7-13 days-----	1.2	78.0	65.2	16.0	3.7	1.0	0.7	0.4	0.6	1.8	0.6	9.6	0.7
14-20 days-----	0.7	35.9	20.5	5.9	2.2	0.9	0.4	0.4	0.4	0.8	0.4	4.0	0.5
21-27 days-----	0.6	10.6	14.3	4.4	1.9	0.7	0.4	0.3	0.3	0.7	0.3	2.9	0.4
Male-----	21.6	905.0	643.1	271.9	69.1	15.9	7.6	5.6	6.9	10.8	6.7	218.8	8.3
Under 1 day-----	10.5	708.8	369.2	131.0	26.0	5.1	2.6	2.0	2.6	3.2	2.4	125.1	2.8
Under 1 hour-----	2.1	174.0	39.6	15.0	5.1	0.8	0.7	0.7	0.6	1.5	0.7	21.9	0.7
1-23 hours-----	8.5	647.5	343.2	117.8	21.1	4.2	1.9	1.4	2.0	1.7	1.7	105.6	2.1
1 day-----	3.4	307.2	170.4	61.4	13.6	2.8	0.9	0.8	1.1	1.7	0.9	39.9	1.2
2 days-----	2.3	238.5	93.7	43.5	10.7	2.1	0.9	0.6	0.7	1.0	0.7	25.4	1.0
3-6 days-----	2.8	301.2	152.1	37.2	10.8	2.8	1.3	1.0	0.9	1.6	1.2	26.9	1.4
7-13 days-----	1.3	86.2	76.2	19.0	4.2	1.3	0.8	0.5	0.6	1.7	0.7	11.0	0.8
14-20 days-----	0.8	18.9	20.3	6.7	3.1	1.0	0.6	0.4	0.5	0.6	0.5	4.6	0.6
21-27 days-----	0.7	12.8	19.4	5.2	2.6	1.0	0.5	0.3	0.4	0.8	0.4	3.9	0.5

TABLE 3. MORTALITY RATES AT SPECIFIED AGES UNDER 28 DAYS, BY BIRTH WEIGHT, RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 252)

RACE, AGE, 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	3,001- 4,500	2,500 or less	2,501 or more
WHITE—Con.													
Female-----	16.0	861.0	474.5	160.4	35.5	9.1	4.9	4.1	6.4	14.7	4.7	138.4	5.8
Under 1 day-----	7.9	628.2	254.9	77.7	13.5	3.3	1.7	1.5	2.7	4.3	1.7	78.7	2.1
Under 1 hour-----	1.8	142.9	46.0	15.7	3.3	0.9	0.5	0.4	0.6	1.9	0.5	16.8	0.6
1-23 hours-----	6.1	566.2	219.0	63.0	10.2	2.4	1.2	1.1	2.1	2.4	1.2	62.9	1.5
1 day-----	2.4	271.0	98.7	31.9	6.2	1.1	0.7	0.7	0.9	2.9	0.7	22.5	0.8
2 days-----	1.6	216.5	57.8	21.6	4.6	1.1	0.5	0.5	0.8	1.7	0.5	14.3	0.7
3-6 days-----	2.0	252.3	91.2	17.0	5.5	1.5	0.8	0.7	1.1	2.4	0.8	15.5	1.0
7-13 days-----	1.1	72.3	56.8	13.6	3.4	0.9	0.6	0.3	0.7	1.9	0.5	8.4	0.6
14-20 days-----	0.6	47.6	20.7	5.2	1.6	0.8	0.3	0.3	0.1	1.2	0.3	3.5	0.4
21-27 days-----	0.4	9.1	10.6	3.8	1.2	0.5	0.3	0.2	0.1	0.5	0.3	2.2	0.3
NONWHITE-----	26.7	821.4	507.0	195.7	49.5	15.4	9.7	10.5	12.5	20.2	10.3	164.7	11.9
Under 1 day-----	11.9	595.4	265.5	80.2	18.8	4.8	3.1	3.3	3.4	8.7	3.2	87.8	3.8
Under 1 hour-----	2.4	124.5	41.9	11.0	2.2	1.3	0.8	0.9	0.7	2.8	0.8	15.0	1.0
1-23 hours-----	9.6	537.9	233.3	70.0	16.6	3.5	2.3	2.4	2.7	5.9	2.4	73.9	2.8
1 day-----	3.6	217.4	108.7	33.4	6.0	1.8	1.1	1.6	2.1	3.9	1.4	24.2	1.6
2 days-----	2.3	166.7	64.0	17.0	3.7	1.4	1.1	1.0	1.8	1.5	1.2	13.6	1.2
3-6 days-----	4.0	261.5	74.9	32.5	10.2	3.1	1.5	2.4	1.8	3.1	1.9	23.0	2.2
3 days-----	1.5	107.7	29.3	12.1	2.6	1.4	0.7	0.9	1.0	0.4	0.8	8.0	0.9
4 days-----	1.0	74.7	13.4	7.4	3.3	0.6	0.5	0.6	0.5	0.9	0.5	5.9	0.6
5 days-----	0.8	55.9	25.5	7.0	2.4	0.6	0.2	0.4	0.1	0.9	0.3	5.4	0.4
6 days-----	0.7	52.6	8.7	6.5	1.9	0.5	0.2	0.5	0.2	0.9	0.3	3.9	0.4
7-13 days-----	2.4	48.6	75.7	24.9	5.1	2.0	1.0	1.4	1.6	2.2	1.2	13.3	1.4
14-20 days-----	1.6	36.5	36.2	13.9	4.7	1.3	1.0	0.6	0.9	0.7	0.8	8.5	0.9
21-27 days-----	1.1	0	23.7	10.7	2.0	1.1	0.9	0.4	0.8	0.2	0.7	4.7	0.8
Male-----	29.4	849.9	524.7	235.1	60.0	19.9	10.9	12.2	13.1	23.1	11.7	192.8	13.9
Under 1 day-----	13.3	653.9	286.0	100.9	24.8	6.3	3.3	3.6	3.3	7.7	3.4	108.8	4.2
Under 1 hour-----	2.6	139.9	49.5	9.8	2.6	2.0	0.7	1.1	0.6	2.2	0.8	18.3	1.1
1-23 hours-----	10.7	597.6	248.7	92.0	22.2	4.4	2.6	2.5	2.7	5.5	2.6	92.2	3.1
1 day-----	4.1	198.5	102.4	39.2	9.3	2.6	1.2	2.1	3.1	5.2	1.8	27.0	2.1
2 days-----	2.7	192.7	83.9	11.3	5.1	2.1	1.7	1.0	1.9	2.2	1.5	15.8	1.6
3-6 days-----	4.4	318.2	84.2	39.0	11.2	3.3	1.9	2.9	1.9	4.1	2.3	26.9	2.6
7-13 days-----	2.5	..	80.0	33.4	4.3	2.5	1.0	1.4	1.6	3.0	1.2	14.3	1.6
14-20 days-----	1.6	0	34.8	16.0	4.6	1.7	1.0	0.7	1.2	0.8	0.9	8.3	1.1
21-27 days-----	1.2	0	4.5	20.1	2.2	1.5	0.9	0.5	0.2	0.4	0.7	5.6	0.8
Female-----	23.9	789.0	491.6	161.1	41.2	11.8	8.4	8.4	11.4	16.0	8.7	141.3	9.7
Under 1 day-----	10.6	528.9	247.7	62.0	14.0	3.5	3.0	2.9	3.6	10.1	3.0	70.3	3.4
Under 1 hour-----	2.2	106.9	35.4	12.1	1.8	0.8	1.0	0.7	0.8	3.7	0.9	12.2	1.0
1-23 hours-----	8.4	472.5	220.1	50.6	12.2	2.7	2.0	2.2	2.8	6.4	2.1	58.8	2.4
1 day-----	3.1	233.1	113.9	28.5	3.5	1.2	1.0	0.9	0.6	2.2	0.9	21.9	1.0
2 days-----	1.9	144.0	47.5	21.7	2.6	0.9	0.6	0.9	1.7	0.5	0.8	11.9	0.8
3-6 days-----	3.6	215.0	67.4	27.1	9.4	2.9	1.1	1.9	1.7	1.6	1.4	19.9	1.8
7-13 days-----	2.4	..	72.3	17.9	5.7	1.6	1.0	1.3	1.7	1.1	1.2	12.6	1.3
14-20 days-----	1.5	..	37.3	12.1	4.8	0.9	0.9	0.5	0.6	0.5	0.8	8.6	0.8
21-27 days-----	1.0	0	38.7	3.1	1.9	0.9	0.9	0.2	1.7	0	0.7	8.6	0.7

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TABLE 4. DEATHS UNDER 28 DAYS AMONG HOSPITAL BIRTHS BY BIRTH WEIGHT, AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(Includes deaths among children born in hospitals Jan. 1 to Mar. 31, 1950, regardless of where the death occurred. Birth weights not stated are distributed. Excludes data for Massachusetts)

RACE AND AGE	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
ALL RACES-----	13,821	3,083	2,393	2,038	1,657	1,530	2,990	130
Under 1 hour-----	1,395	532	164	144	112	119	301	23
1-23 hours-----	5,515	1,810	1,147	822	486	400	818	32
1 day-----	2,099	320	391	399	307	237	423	22
2 days-----	1,424	188	201	250	240	198	342	5
3 days-----	743	70	105	103	122	125	212	6
4 days-----	408	43	53	55	59	71	122	5
5 days-----	309	38	73	27	48	35	83	5
6 days-----	211	26	45	19	34	25	59	3
7-13 days-----	840	36	144	135	118	133	259	15
14-20 days-----	489	17	41	50	77	94	202	8
21-27 days-----	388	3	29	34	54	93	169	6
White-----	11,990	2,602	2,064	1,803	1,448	1,337	2,635	101
Under 1 hour-----	1,232	456	146	132	107	102	273	16
1-23 hours-----	4,761	1,529	998	742	415	353	706	18
1 day-----	1,844	273	343	354	276	209	368	21
2 days-----	1,267	156	170	229	225	184	298	5
3 days-----	652	56	90	90	115	110	186	5
4 days-----	353	31	49	50	42	64	113	4
5 days-----	268	34	61	24	35	33	78	3
6 days-----	176	21	44	15	26	15	53	2
7-13 days-----	715	31	113	106	101	111	238	15
14-20 days-----	392	12	31	36	56	79	172	6
21-27 days-----	330	3	19	25	50	77	150	6
Nonwhite-----	1,831	481	329	235	209	193	355	29
Under 1 hour-----	163	76	18	12	5	17	28	7
1-23 hours-----	754	281	149	80	71	47	112	14
1 day-----	255	47	48	45	31	28	55	1
2 days-----	157	32	31	21	15	14	44	-
3 days-----	91	14	15	13	7	15	26	1
4 days-----	55	12	4	5	17	7	9	1
5 days-----	41	4	12	3	13	2	5	2
6 days-----	35	5	1	4	8	10	6	1
7-13 days-----	125	5	31	29	17	22	21	-
14-20 days-----	97	5	10	14	21	15	30	2
21-27 days-----	58	-	10	9	4	16	19	-

TABLE 5. MORTALITY RATES AT SPECIFIED AGES UNDER 28 DAYS AMONG HOSPITAL BIRTHS, BY BIRTH WEIGHT AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(Based on deaths among children born in hospitals Jan. 1 to Mar. 31, 1950, regardless of where the death occurred. Rates per 1,000 children in each specified group alive at the beginning of each age interval. Birth weights not stated are distributed. Excludes data for Massachusetts. Two dots (..) indicate rate not computed where the number of births is less than 100 and the number of deaths is less than 20)

RACE AND AGE	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
ALL RACES-----	19.1	882.4	549.5	203.7	45.7	11.2	5.7	13.0	169.5	6.9
Under 1 day-----	9.5	670.3	301.0	96.5	16.5	3.8	2.1	5.5	96.4	2.5
Under 1 hour-----	1.9	152.3	37.7	14.4	3.1	0.9	0.6	2.3	17.6	0.7
1-23 hours-----	7.6	611.1	273.7	83.3	13.5	2.9	1.6	3.2	80.3	1.9
1 day-----	2.9	277.8	128.4	44.1	8.6	1.7	0.8	2.2	29.0	1.0
2 days-----	2.0	226.0	75.8	28.9	6.8	1.5	0.7	0.5	18.5	0.8
3-6 days-----	2.3	274.8	112.6	24.3	7.5	1.9	0.9	1.9	19.8	1.1
3 days-----	1.0	108.7	42.8	12.3	3.5	0.9	0.4	0.6	8.6	0.5
4 days-----	0.6	74.9	22.6	6.6	1.7	0.5	0.2	0.5	4.5	0.3
5 days-----	0.4	71.6	31.8	3.3	1.4	0.3	0.2	0.5	4.0	0.2
6 days-----	0.3	52.7	20.3	2.3	1.0	0.2	0.1	0.3	2.7	0.1
7-13 days-----	1.2	77.1	66.2	16.5	3.4	1.0	0.5	1.5	9.5	0.6
14-20 days-----	0.7	39.4	20.2	6.2	2.2	0.7	0.4	0.8	4.1	0.5
21-27 days-----	0.5	7.2	14.6	4.2	1.6	0.7	0.3	0.6	2.7	0.4
White-----	18.2	890.8	558.1	211.5	46.7	11.2	5.4	10.8	171.6	6.7
Under 1 day-----	9.1	679.6	309.4	102.5	16.8	3.8	2.0	3.6	98.1	2.4
Under 1 hour-----	1.9	156.1	39.5	15.5	3.5	0.9	0.6	1.7	18.2	0.6
1-23 hours-----	7.2	620.3	281.0	88.4	13.4	3.0	1.5	1.9	81.3	1.8
1 day-----	2.8	291.7	134.3	46.3	9.1	1.8	0.8	2.2	29.9	1.0
2 days-----	1.9	235.3	76.9	31.4	7.5	1.6	0.6	0.5	19.3	0.8
3-6 days-----	2.2	280.1	119.5	25.3	7.3	1.9	0.9	1.5	19.8	1.1
3 days-----	1.0	110.5	44.1	12.7	3.8	0.9	0.4	0.5	8.9	0.5
4 days-----	0.5	68.7	25.1	7.2	1.4	0.5	0.2	0.4	4.4	0.3
5 days-----	0.4	81.0	32.1	3.5	1.2	0.3	0.2	0.3	3.9	0.2
6 days-----	0.3	54.4	23.9	2.2	0.9	0.1	0.1	0.2	2.7	0.1
7-13 days-----	1.1	84.9	62.9	15.4	3.4	0.9	0.5	1.6	9.0	0.6
14-20 days-----	0.6	35.9	18.4	5.3	1.9	0.7	0.4	0.6	3.5	0.4
21-27 days-----	0.5	9.3	11.5	3.7	1.7	0.7	0.3	0.6	2.5	0.4
Nonwhite-----	27.4	839.4	500.8	158.5	39.8	11.2	8.7	44.1	157.5	9.8
Under 1 day-----	13.7	623.0	254.2	62.0	14.5	3.7	3.4	32.0	86.9	3.8
Under 1 hour-----	2.4	132.6	27.4	8.1	1.0	1.0	0.7	10.7	13.9	0.9
1-23 hours-----	11.3	565.4	233.2	54.4	13.5	2.7	2.7	21.5	74.0	2.9
1 day-----	3.9	217.6	98.0	32.4	6.0	1.6	1.3	1.6	23.5	1.4
2 days-----	2.4	189.3	70.1	15.6	2.9	0.8	1.1	0	13.9	1.0
3-6 days-----	3.4	255.5	77.9	18.9	8.8	2.0	1.1	7.9	19.6	1.5
3 days-----	1.4	102.2	36.5	9.8	1.4	0.9	0.6	1.6	7.0	0.7
4 days-----	0.8	97.6	10.1	3.8	3.3	0.4	0.2	1.6	5.5	0.3
5 days-----	0.6	36.0	30.6	2.3	2.5	0.1	0.1	3.2	4.6	0.2
6 days-----	0.5	46.7	2.6	3.1	1.6	0.6	0.1	1.6	2.6	0.3
7-13 days-----	1.9	49.0	81.8	22.3	3.3	1.3	0.5	0	11.9	0.7
14-20 days-----	1.5	..	28.7	11.0	4.1	0.9	0.7	3.2	7.4	0.8
21-27 days-----	0.9	0	29.6	7.2	0.8	0.9	0.5	0	3.4	0.6

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TABLE 6. DEATHS UNDER 28 DAYS BY BIRTH WEIGHT, AGE, RACE, AND PLURALITY OF BIRTH: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

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

RACE AND AGE	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
DEATHS AMONG SINGLE BIRTHS								
ALL RACES-----	15,049	2,827	2,321	2,048	1,913	1,855	3,837	248
Under 1 hour-----	1,522	490	185	155	143	140	375	34
1-23 hours-----	5,632	1,603	1,113	840	593	481	950	52
1 day-----	2,209	306	362	378	332	262	524	45
2 days-----	1,520	187	183	236	244	222	425	23
3-6 days-----	1,977	185	260	210	297	327	660	38
7-27 days-----	2,189	56	218	229	304	423	903	56
White-----	12,183	2,315	1,902	1,716	1,568	1,492	3,035	155
Under 1 hour-----	1,275	415	153	135	130	111	310	21
1-23 hours-----	4,625	1,320	925	717	474	399	765	25
1 day-----	1,827	250	298	326	292	217	417	27
2 days-----	1,264	148	149	211	217	188	335	16
3-6 days-----	1,543	156	218	164	227	257	517	24
7-27 days-----	1,649	46	159	163	228	320	691	42
Nonwhite-----	2,866	512	419	332	345	363	802	93
Under 1 hour-----	247	75	32	20	13	29	65	13
1-23 hours-----	1,007	283	188	123	119	82	185	27
1 day-----	382	56	64	52	40	45	107	18
2 days-----	256	39	34	25	27	34	90	7
3-6 days-----	434	49	42	46	70	70	143	14
7-27 days-----	540	10	59	66	76	103	212	14
DEATHS AMONG BIRTHS IN PLURAL SETS.								
ALL RACES-----	1,692	597	480	355	165	57	38	-
Under 1 hour-----	169	108	31	10	10	6	4	-
1-23 hours-----	773	373	219	124	39	8	10	-
1 day-----	261	62	90	67	26	11	5	-
2 days-----	143	22	39	47	23	9	3	-
3-6 days-----	183	25	52	52	34	10	10	-
7-27 days-----	163	7	49	55	33	13	6	-
White-----	1,338	502	391	260	125	36	24	-
Under 1 hour-----	128	91	21	6	6	2	2	-
1-23 hours-----	627	308	183	96	29	4	7	-
1 day-----	213	53	74	52	20	11	3	-
2 days-----	124	22	31	39	22	8	2	-
3-6 days-----	143	23	48	36	27	4	5	-
7-27 days-----	103	5	34	31	21	7	5	-
Nonwhite-----	354	95	89	95	40	21	14	-
Under 1 hour-----	41	17	10	4	4	4	2	-
1-23 hours-----	146	65	36	28	10	4	3	-
1 day-----	48	9	16	15	6	-	2	-
2 days-----	19	-	8	8	1	1	1	-
3-6 days-----	40	2	4	16	7	6	5	-
7-27 days-----	60	2	15	24	12	6	1	-

TABLE 7. MORTALITY RATES AT SPECIFIED AGES UNDER 28 DAYS, BY BIRTH WEIGHT, RACE, AND PLURALITY OF BIRTH: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(Based on deaths 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. Excludes data for Massachusetts. Two dots (..) indicate rate not computed where the number of births is less than 100 and the number of deaths is less than 20)

RACE AND AGE	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
RATES AMONG SINGLE BIRTHS										
ALL RACES-----	18.3	871.7	562.3	228.9	52.8	12.6	6.4	14.2	173.4	7.7
Under 1 day-----	8.7	645.4	314.4	111.2	20.3	4.2	2.2	4.9	97.5	2.6
Under 1 hour-----	1.9	151.1	44.8	17.3	3.9	1.0	0.6	1.9	18.5	0.7
1-23 hours-----	6.9	582.3	282.3	95.6	16.4	3.3	1.6	3.0	80.5	1.9
1 day-----	2.7	266.1	127.9	47.5	9.4	1.8	0.9	2.6	29.1	1.1
2 days-----	1.9	221.6	74.1	31.2	6.9	1.5	0.7	1.3	18.5	0.9
3-6 days-----	2.4	281.6	113.8	28.6	8.5	2.2	1.1	2.2	21.1	1.3
7-27 days-----	2.7	118.6	107.7	32.1	8.8	2.9	1.5	3.2	18.2	1.8
White-----	17.3	880.2	575.0	238.4	53.5	12.2	5.8	12.1	176.7	7.1
Under 1 day-----	8.4	659.7	325.9	118.3	20.6	4.2	2.0	3.6	100.5	2.5
Under 1 hour-----	1.8	157.8	46.3	18.8	4.4	0.9	0.6	1.6	19.6	0.7
1-23 hours-----	6.6	595.9	293.2	101.5	16.2	3.3	1.5	1.9	82.5	1.8
1 day-----	2.6	279.3	133.6	51.4	10.2	1.8	0.8	2.1	30.5	1.0
2 days-----	1.8	229.5	77.1	35.0	7.6	1.5	0.6	1.3	19.6	0.8
3-6 days-----	2.2	273.6	122.3	28.2	8.0	2.1	1.0	1.9	20.5	1.2
7-27 days-----	2.4	127.4	101.6	28.9	8.1	2.6	1.3	3.3	16.8	1.6
Nonwhite-----	24.4	835.2	511.0	190.0	50.0	15.1	10.2	20.3	159.5	11.7
Under 1 day-----	10.7	584.0	268.3	81.9	19.1	4.6	3.2	8.7	84.6	3.7
Under 1 hour-----	2.1	122.3	39.0	11.4	1.9	1.2	0.8	2.8	13.9	1.0
1-23 hours-----	8.6	526.0	238.6	71.2	17.3	3.4	2.3	5.9	71.7	2.7
1 day-----	3.3	219.6	106.7	32.4	5.9	1.9	1.4	4.0	23.0	1.6
2 days-----	2.2	196.0	63.4	16.1	4.0	1.4	1.1	1.5	13.9	1.2
3-6 days-----	3.7	306.3	83.7	30.1	10.4	2.9	1.8	3.1	23.3	2.1
7-27 days-----	4.7	90.1	128.3	44.6	11.5	4.3	2.7	3.1	24.3	3.1
RATES AMONG BIRTHS IN PLURAL SETS										
ALL RACES-----	98.6	871.5	503.7	145.4	32.9	11.3	12.7	0	175.6	11.8
Under 1 day-----	54.9	702.2	262.3	54.9	9.8	2.8	4.7	0	100.5	3.5
Under 1 hour-----	9.8	157.7	32.5	4.1	2.0	1.2	1.3	0	17.5	1.2
1-23 hours-----	45.5	646.4	237.5	51.0	7.8	1.6	3.3	0	84.5	2.2
1 day-----	16.1	303.9	128.0	29.0	5.2	2.2	1.7	0	29.9	2.0
2 days-----	9.0	154.9	63.6	21.0	4.7	1.8	1.0	0	16.5	1.5
3-6 days-----	11.6	208.3	90.6	23.7	6.9	2.0	3.4	0	20.9	2.5
7-27 days-----	10.4	..	93.9	25.7	6.8	2.6	2.0	0	18.8	2.4
White-----	94.4	898.0	507.1	129.5	30.2	8.5	9.8	0	171.0	9.0
Under 1 day-----	53.3	713.8	264.6	50.8	8.5	1.4	3.7	0	99.0	2.2
Under 1 hour-----	9.0	162.8	27.2	3.0	1.4	0.5	0.8	0	16.6	0.6
1-23 hours-----	44.7	658.1	244.0	48.0	7.0	0.9	2.9	0	83.8	1.6
1 day-----	15.9	331.3	130.5	27.3	4.9	2.6	1.2	0	29.5	2.1
2 days-----	9.4	205.6	62.9	21.0	5.4	1.9	0.8	0	17.4	1.5
3-6 days-----	10.9	..	103.9	19.8	6.6	0.9	2.1	0	20.9	1.4
7-27 days-----	8.0	..	82.1	17.4	5.2	1.7	2.1	0	14.5	1.8
Nonwhite-----	118.0	754.0	489.0	218.4	45.6	25.8	25.1	0	196.9	25.3
Under 1 day-----	62.3	650.8	252.7	73.6	16.0	9.8	9.0	0	107.4	9.4
Under 1 hour-----	13.7	134.9	54.9	9.2	4.6	4.9	3.6	0	21.6	4.3
1-23 hours-----	49.3	596.3	209.3	65.0	11.5	4.9	5.4	0	87.7	5.1
1 day-----	17.1	..	117.6	37.2	7.0	0	3.6	0	31.8	1.5
2 days-----	6.9	0	66.7	20.6	1.2	1.2	1.8	0	12.1	1.5
3-6 days-----	14.6	..	35.7	42.1	8.2	7.5	9.1	0	21.0	8.1
7-27 days-----	22.2	..	138.9	65.9	14.1	7.5	1.8	0	39.1	5.2

TABLE 8. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT, RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed. Excludes data for Massachusetts. Numbers after causes of death are category numbers of the Sixth Revision of the International Lists, 1948)

RACE, SEX, AND CAUSE OF DEATH	TOTAL		BIRTH WEIGHT (IN GRAMS)						
	Tabulated	Adjusted ¹	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
ALL RACES, BOTH SEXES-----All causes	16,741	16,741	3,424	2,801	2,403	2,078	1,912	3,875	248
Congenital malformations-----750-759	2,127	2,125	30	107	208	359	464	916	41
Certain diseases of early infancy-----760-776	13,308	13,368	3,365	2,654	2,129	1,540	1,187	2,339	154
Birth injuries-----760,761	2,712	2,752	479	350	329	277	348	888	81
Intracranial and spinal injury at birth-----760	1,183	1,211	56	71	124	150	202	566	42
Other birth injury-----761	1,529	1,541	423	279	205	127	146	322	39
Postnatal asphyxia and atelectasis-----762	2,983	3,003	476	493	586	514	356	554	24
Pneumonia of newborn-----763	708	714	13	69	89	106	121	294	22
Diarrhea of newborn-----764	143	151	-	10	27	24	29	61	-
Other infections of newborn-----765-768	63	57	1	3	12	8	10	20	3
Neonatal disorders arising from maternal toxemia-----769	292	281	57	57	61	40	24	40	2
Hemolytic disease of newborn (erythroblastosis)-----770	530	543	17	32	55	89	125	224	1
Hemorrhagic disease of newborn-----771	202	216	13	14	27	41	25	94	2
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	672	666	182	148	100	84	53	90	9
Immaturity with mention of any other subsidiary condition-----774	193	199	37	53	60	28	16	4	1
Immaturity unqualified-----776	4,810	4,786	2,090	1,425	783	329	80	70	9
All other causes-----Residual	1,306	1,248	29	40	66	179	261	620	53
ALL RACES, MALE-----All causes	9,751	9,751	1,801	1,608	1,458	1,245	1,096	2,387	156
Congenital malformations-----750-759	1,178	1,172	6	50	107	193	246	542	28
Certain diseases of early infancy-----760-776	7,798	7,837	1,777	1,537	1,311	948	707	1,464	93
Birth injuries-----760,761	1,646	1,687	254	217	203	199	207	562	45
Intracranial and spinal injury at birth-----760	760	790	40	42	82	110	126	367	23
Other birth injury-----761	886	897	214	175	121	89	81	195	22
Postnatal asphyxia and atelectasis-----762	1,828	1,838	256	297	374	318	227	350	16
Pneumonia of newborn-----763	396	399	5	31	51	50	70	178	14
Diarrhea of newborn-----764	90	92	-	2	16	11	22	41	-
Other infections of newborn-----765-768	30	26	-	1	6	3	7	6	3
Neonatal disorders arising from maternal toxemia-----769	171	164	31	30	35	28	17	23	-
Hemolytic disease of newborn (erythroblastosis)-----770	299	302	10	14	30	48	67	132	1
Hemorrhagic disease of newborn-----771	124	134	9	9	19	26	6	64	1
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	380	368	92	80	55	48	26	61	6
Immaturity with mention of any other subsidiary condition-----774	105	105	16	23	37	16	11	2	-
Immaturity unqualified-----776	2,729	2,722	1,104	833	485	201	47	45	7
All other causes-----Residual	775	742	18	21	40	104	143	381	35
ALL RACES, FEMALE-----All causes	6,990	6,990	1,623	1,193	945	833	816	1,488	92
Congenital malformations-----750-759	949	953	24	57	101	166	218	374	13
Certain diseases of early infancy-----760-776	5,510	5,531	1,589	1,117	818	592	480	875	61
Birth injuries-----760,761	1,066	1,065	225	133	126	78	141	326	36
Intracranial and spinal injury at birth-----760	423	421	16	29	42	40	76	199	19
Other birth injury-----761	643	644	209	104	84	38	65	127	17
Postnatal asphyxia and atelectasis-----762	1,155	1,165	220	196	212	196	129	204	8
Pneumonia of newborn-----763	312	315	8	38	38	56	51	116	8
Diarrhea of newborn-----764	53	59	-	8	11	13	7	20	-
Other infections of newborn-----765-768	33	31	1	2	6	5	3	14	-
Neonatal disorders arising from maternal toxemia-----769	121	117	26	27	26	12	7	17	2
Hemolytic disease of newborn (erythroblastosis)-----770	231	241	7	18	25	41	58	92	-
Hemorrhagic disease of newborn-----771	78	82	4	5	8	15	19	30	1
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	292	298	90	68	45	36	27	29	3
Immaturity with mention of any other subsidiary condition-----774	88	94	21	30	23	12	5	2	1
Immaturity unqualified-----776	2,081	2,064	986	592	298	128	33	25	2
All other causes-----Residual	531	506	11	19	26	75	118	239	18

See footnote on p. 260.

TABLE 8. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT, RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 258)

RACE, SEX, AND CAUSE OF DEATH	TOTAL		BIRTH WEIGHT (IN GRAMS)						
	Tabu- lated	Ad- justed ¹	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
WHITE, BOTH SEXES-----All causes	13,521	13,521	2,817	2,293	1,976	1,693	1,528	3,059	155
Congenital malformations-----750-759	1,930	1,924	29	93	197	325	416	832	32
Certain diseases of early infancy-----760-776	10,783	10,829	2,772	2,179	1,743	1,255	937	1,840	103
Birth injuries-----760,761	2,327	2,356	437	317	295	242	276	730	59
Intracranial and spinal injury at birth-----760	969	989	39	56	108	128	162	467	29
Other birth injury-----761	1,358	1,367	398	261	187	114	114	263	30
Postnatal asphyxia and atelectasis-----762	2,504	2,507	360	401	520	460	296	454	16
Pneumonia of newborn-----763	503	509	10	55	62	76	83	205	18
Diarrhea of newborn-----764	103	106	-	7	15	18	22	44	-
Other infections of newborn-----765-768	39	36	-	1	6	7	8	13	1
Neonatal disorders arising from maternal toxemia-----769	246	235	52	51	53	31	19	28	1
Hemolytic disease of newborn (erythroblastosis)-----770	496	505	17	29	52	83	115	208	1
Hemorrhagic disease of newborn-----771	150	156	13	11	21	27	20	63	1
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772-773	471	466	148	117	65	58	26	50	2
Immaturity with mention of any other subsidiary condition-----774	167	173	32	47	51	23	15	4	1
Immaturity unqualified-----776	3,777	3,780	1,703	1,143	603	230	57	41	3
All other causes-----Residual	808	768	16	21	36	113	175	387	20
WHITE, MALE-----All causes	7,952	7,952	1,467	1,364	1,218	1,039	873	1,898	93
Congenital malformations-----750-759	1,055	1,049	6	42	101	177	216	486	21
Certain diseases of early infancy-----760-776	6,411	6,442	1,451	1,309	1,095	796	569	1,163	59
Birth injuries-----760,761	1,420	1,448	233	200	182	175	166	457	35
Intracranial and spinal injury at birth-----760	628	646	29	33	70	94	105	297	18
Other birth injury-----761	792	802	204	167	112	81	61	160	17
Postnatal asphyxia and atelectasis-----762	1,575	1,582	194	257	338	294	191	299	9
Pneumonia of newborn-----763	291	296	5	26	35	38	54	128	10
Diarrhea of newborn-----764	66	66	-	2	8	10	17	29	-
Other infections of newborn-----765-768	18	18	-	-	4	3	5	5	1
Neonatal disorders arising from maternal toxemia-----769	141	133	27	25	31	20	13	17	-
Hemolytic disease of newborn (erythroblastosis)-----770	280	281	10	11	29	47	62	121	1
Hemorrhagic disease of newborn-----771	91	94	9	6	14	19	2	44	-
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	271	260	74	67	36	36	11	36	-
Immaturity with mention of any other subsidiary condition-----774	89	91	15	22	30	12	10	2	-
Immaturity unqualified-----776	2,169	2,173	884	693	388	142	38	25	3
All other causes-----Residual	486	461	10	13	22	66	88	249	13
WHITE, FEMALE-----All causes	5,569	5,569	1,350	929	758	654	655	1,161	62
Congenital malformations-----750-759	875	875	23	51	96	148	200	346	11
Certain diseases of early infancy-----760-776	4,372	4,387	1,321	870	648	459	368	677	44
Birth injuries-----760,761	907	908	204	117	113	67	110	273	24
Intracranial and spinal injury at birth-----760	341	343	10	23	38	34	57	170	11
Other birth injury-----761	566	565	194	94	75	33	53	103	13
Postnatal asphyxia and atelectasis-----762	929	925	166	144	182	166	105	155	7
Pneumonia of newborn-----763	212	213	5	29	27	38	29	77	8
Diarrhea of newborn-----764	37	40	-	5	7	8	5	15	-
Other infections of newborn-----765-768	21	18	-	1	2	4	3	8	-
Neonatal disorders arising from maternal toxemia-----769	105	102	25	26	22	11	6	11	1
Hemolytic disease of newborn (erythroblastosis)-----770	216	224	7	18	23	36	53	87	-
Hemorrhagic disease of newborn-----771	59	62	4	5	7	8	18	19	1
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	200	206	74	50	29	22	15	14	2
Immaturity with mention of any other subsidiary condition-----774	78	82	17	25	21	11	5	2	1
Immaturity unqualified-----776	1,608	1,607	819	450	215	88	19	16	-
All other causes-----Residual	322	307	6	8	14	47	87	138	7

See footnote on p. 260.

VITAL STATISTICS--SPECIAL REPORTS

TABLE 8. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT, RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950--Continued

(See headnote on p. 258)

RACE, SEX, AND CAUSE OF DEATH	TOTAL		BIRTH WEIGHT (IN GRAMS)						
	Tabulated	Adjusted ¹	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
NONWHITE, BOTH SEXES-----All causes	3,220	3,220	607	508	427	385	384	816	93
Congenital malformations-----750-759	197	201	1	1½	11	34	48	84	9
Certain diseases of early infancy-----760-776	2,525	2,539	593	475	386	285	250	499	51
Birth injuries-----760,761	585	596	42	33	34	35	72	158	22
Intracranial and spinal injury at birth-----760	214	222	17	15	16	22	40	99	13
Other birth injury-----761	171	174	25	18	18	13	32	59	9
Postnatal asphyxia and atelectasis-----762	479	496	116	92	66	54	60	100	8
Pneumonia of newborn-----763	205	205	3	14	27	30	38	89	4
Diarrhea of newborn-----764	40	45	-	3	12	6	7	17	-
Other infections of newborn-----765-768	24	21	1	2	6	1	2	7	2
Neonatal disorders arising from maternal toxemia---769	46	46	5	6	8	9	5	12	1
Hemolytic disease of newborn (erythroblastosis)----770	34	38	-	3	3	6	10	16	-
Hemorrhagic disease of newborn-----771	52	60	-	3	6	14	5	31	1
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	201	200	34	31	35	26	27	40	7
Immaturity with mention of any other subsidiary condition-----774	26	26	5	6	9	5	1	-	-
Immaturity unqualified-----776	1,033	1,006	387	282	180	99	23	29	6
All other causes-----Residual	498	480	13	19	30	66	86	233	33
NONWHITE, MALE-----All causes	1,799	1,799	334	244	240	206	223	489	63
Congenital malformations-----750-759	123	123	-	8	6	16	30	56	7
Certain diseases of early infancy-----760-776	1,387	1,395	326	228	216	152	138	301	34
Birth injuries-----760,761	226	239	21	17	21	24	41	105	10
Intracranial and spinal injury at birth-----760	132	144	11	9	12	16	21	70	5
Other birth injury-----761	94	95	10	8	9	8	20	35	5
Postnatal asphyxia and atelectasis-----762	253	256	62	40	36	24	36	51	7
Pneumonia of newborn-----763	105	103	-	5	16	12	16	50	4
Diarrhea of newborn-----764	24	26	-	-	8	1	5	12	-
Other infections of newborn-----765-768	12	8	-	1	2	-	2	1	2
Neonatal disorders arising from maternal toxemia---769	30	31	4	5	4	8	4	6	-
Hemolytic disease of newborn (erythroblastosis)----770	19	21	-	3	1	1	5	11	-
Hemorrhagic disease of newborn-----771	33	40	-	3	5	7	4	20	1
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	109	108	18	13	19	12	15	25	6
Immaturity with mention of any other subsidiary condition-----774	16	14	1	1	7	4	1	-	-
Immaturity unqualified-----776	560	549	220	140	97	59	9	20	4
All other causes-----Residual	289	281	8	8	18	38	55	132	22
NONWHITE, FEMALE-----All causes	1,421	1,421	273	264	187	179	161	327	30
Congenital malformations-----750-759	74	78	1	6	5	18	18	28	2
Certain diseases of early infancy-----760-776	1,138	1,144	267	247	170	133	112	198	17
Birth injuries-----760,761	159	157	21	16	13	11	31	53	12
Intracranial and spinal injury at birth-----760	82	78	6	6	4	6	19	29	8
Other birth injury-----761	77	79	15	10	9	5	12	24	4
Postnatal asphyxia and atelectasis-----762	226	240	54	52	30	30	24	49	1
Pneumonia of newborn-----763	100	102	3	9	11	18	22	39	-
Diarrhea of newborn-----764	16	19	-	3	4	5	2	5	-
Other infections of newborn-----765-768	12	13	1	1	4	1	-	6	-
Neonatal disorders arising from maternal toxemia---769	16	15	1	1	4	1	1	6	1
Hemolytic disease of newborn (erythroblastosis)----770	15	17	-	-	2	5	5	5	-
Hemorrhagic disease of newborn-----771	19	20	-	-	1	7	1	11	-
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	92	92	16	18	16	14	12	15	1
Immaturity with mention of any other subsidiary condition-----774	10	12	4	5	2	1	-	-	-
Immaturity unqualified-----776	473	457	167	142	83	40	14	9	2
All other causes-----Residual	209	199	5	11	12	28	31	101	11

¹Data 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.

TABLE 9. NEONATAL MORTALITY RATES FOR SELECTED CAUSES, BY BIRTH WEIGHT, RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

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

RACE, SEX, AND CAUSE OF DEATH	Total ¹	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
ALL RACES, BOTH SEXES-----All causes	20.0	871.7	551.3	211.0	50.4	12.6	6.4	14.2	173.7	7.8
Congenital malformations-----750-759	2.5	7.6	21.1	18.3	8.7	3.1	1.5	2.3	11.4	1.8
Certain diseases of early infancy-----760-776	15.9	856.7	522.3	187.0	37.3	7.8	3.9	8.8	157.2	4.7
Birth injuries-----760,761	3.2	121.9	68.9	28.9	6.7	2.3	1.5	4.6	23.3	1.7
Intracranial and spinal injury at birth-----760	1.4	14.3	14.0	10.9	3.6	1.3	0.9	2.4	6.5	1.0
Other birth injury-----761	1.8	107.7	54.9	18.0	3.1	1.0	0.5	2.2	16.8	0.7
Postnatal asphyxia and atelectasis-----762	3.6	121.2	97.0	51.5	12.5	2.3	0.9	1.4	33.6	1.2
Pneumonia of newborn-----763	0.8	3.3	13.6	7.8	2.6	0.8	0.5	1.3	4.5	0.6
Diarrhea of newborn-----764	0.2	0	2.0	2.4	0.6	0.2	0.1	0	1.0	0.1
Other infections of newborn-----765-768	0.1	0.3	0.6	1.1	0.2	0.1	0.0	0.2	0.4	0.0
Neonatal disorders arising from maternal toxemia-----769	0.3	14.5	11.2	5.4	1.0	0.2	0.1	0.1	3.5	0.1
Hemolytic disease of newborn (erythroblastosis)-770	0.6	4.3	6.3	4.8	2.2	0.8	0.4	0.1	3.1	0.5
Hemorrhagic disease of newborn-----771	0.2	3.3	2.8	2.4	1.0	0.2	0.2	0.1	1.5	0.2
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.8	46.3	29.1	8.8	2.0	0.3	0.1	0.5	8.3	0.2
Immaturity with mention of any other subsidiary condition-----774	0.2	9.4	10.4	5.3	0.7	0.1	0.0	0.1	2.9	0.0
Immaturity unqualified-----776	5.7	532.1	280.5	68.8	8.0	0.5	0.1	0.5	75.1	0.2
All other causes-----Residual	1.6	7.4	7.9	5.8	4.3	1.7	1.0	3.0	5.1	1.2
ALL RACES, MALE-----All causes	22.7	894.2	621.8	265.0	67.4	16.6	7.4	13.7	213.9	9.1
Congenital malformations-----750-759	2.7	3.0	19.3	19.5	10.5	3.7	1.7	2.5	12.5	2.0
Certain diseases of early infancy-----760-776	18.2	882.3	594.4	238.3	51.3	10.7	4.5	8.2	195.1	5.6
Birth injuries-----760,761	3.8	126.1	85.9	36.9	10.8	3.1	1.7	4.0	30.6	2.0
Intracranial and spinal injury at birth-----760	1.8	19.9	16.2	14.9	6.0	1.9	1.1	2.0	9.6	1.3
Other birth injury-----761	2.1	106.3	67.7	22.0	4.8	1.2	0.6	1.9	21.0	0.7
Postnatal asphyxia and atelectasis-----762	4.3	127.1	114.8	68.0	17.2	3.4	1.1	1.4	43.6	1.5
Pneumonia of newborn-----763	0.9	2.5	12.0	9.3	2.7	1.1	0.6	1.2	4.8	0.7
Diarrhea of newborn-----764	0.2	0	0.8	2.9	0.6	0.3	0.1	0	1.0	0.2
Other infections of newborn-----765-768	0.1	0	0.4	1.1	0.2	0.1	0.0	0.3	0.4	0.0
Neonatal disorders arising from maternal toxemia-----769	0.4	15.4	11.6	6.4	1.5	0.3	0.1	0	4.3	0.1
Hemolytic disease of newborn (erythroblastosis)-770	0.7	5.0	5.4	5.5	2.6	1.0	0.4	0.1	3.6	0.5
Hemorrhagic disease of newborn-----771	0.3	4.5	3.5	3.5	1.4	0.1	0.2	0.1	2.2	0.2
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.9	45.7	30.9	10.0	2.6	0.4	0.2	0.5	9.6	0.2
Immaturity with mention of any other subsidiary condition-----774	0.2	7.9	8.9	6.7	0.9	0.2	0.0	0	3.2	0.0
Immaturity unqualified-----776	6.4	548.2	322.1	88.2	10.9	0.7	0.1	0.6	91.8	0.2
All other causes-----Residual	1.8	8.9	8.1	7.3	5.6	2.2	1.2	3.1	6.4	1.4
ALL RACES, FEMALE-----All causes	17.1	848.0	478.2	160.5	36.6	9.5	5.3	15.1	138.9	6.4
Congenital malformations-----750-759	2.3	12.5	22.8	17.2	7.3	2.5	1.3	2.1	10.5	1.6
Certain diseases of early infancy-----760-776	13.5	829.7	447.7	139.0	26.0	5.6	3.1	10.0	124.4	3.8
Birth injuries-----760,761	2.6	117.6	53.3	21.4	3.4	1.6	1.2	5.9	17.0	1.3
Intracranial and spinal injury at birth-----760	1.0	8.4	11.6	7.1	1.8	0.9	0.7	3.1	3.8	0.8
Other birth injury-----761	1.6	109.2	41.7	14.3	1.7	0.8	0.4	2.8	13.2	0.6
Postnatal asphyxia and atelectasis-----762	2.8	114.9	78.6	36.0	8.6	1.5	0.7	1.3	24.9	0.9
Pneumonia of newborn-----763	0.8	4.2	15.2	6.5	2.5	0.6	0.4	1.3	4.2	0.5
Diarrhea of newborn-----764	0.1	0	3.2	1.9	0.6	0.1	0.1	0	1.0	0.1
Other infections of newborn-----765-768	0.1	0.5	0.8	1.0	0.2	0.0	0.0	0	0.4	0.0
Neonatal disorders arising from maternal toxemia-----769	0.3	13.6	10.8	4.4	0.5	0.1	0.1	0.3	2.8	0.1
Hemolytic disease of newborn (erythroblastosis)-770	0.6	3.7	7.2	4.2	1.8	0.7	0.3	0	2.8	0.4
Hemorrhagic disease of newborn-----771	0.2	2.1	2.0	1.4	0.7	0.2	0.1	0.2	1.0	0.1
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.7	47.0	27.3	7.6	1.6	0.3	0.1	0.5	7.2	0.2
Immaturity with mention of any other subsidiary condition-----774	0.2	11.0	12.0	3.9	0.5	0.1	0.0	0.2	2.6	0.0
Immaturity unqualified-----776	5.1	515.2	237.3	50.6	5.6	0.4	0.1	0.3	60.6	0.2
All other causes-----Residual	1.3	5.7	7.6	4.4	3.3	1.4	0.8	2.9	4.0	1.0

¹Based on tabulated totals shown in table 8.

VITAL STATISTICS—SPECIAL REPORTS

TABLE 9. NEONATAL MORTALITY RATES FOR SELECTED CAUSES, BY BIRTH WEIGHT, RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 261)

RACE, SEX, AND CAUSE OF DEATH	Total ¹	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
WHITE, BOTH SEXES-----All causes	18.9	883.3	562.1	214.6	50.6	12.0	5.8	12.0	175.8	7.1
Congenital malformations-----750-759	2.7	9.1	22.8	21.4	9.7	3.3	1.6	2.5	12.9	1.9
Certain diseases of early infancy-----760-776	15.0	869.2	534.2	189.3	37.5	7.4	3.5	8.0	159.2	4.3
Birth injuries-----760,761	3.2	137.0	77.7	32.0	7.2	2.2	1.4	4.6	25.9	1.6
Intracranial and spinal injury at birth-----760	1.4	12.2	13.7	11.7	3.8	1.3	0.9	2.3	6.6	1.0
Other birth injury-----761	1.9	124.8	64.0	20.3	3.4	0.9	0.5	2.3	19.2	0.6
Postnatal asphyxia and atelectasis-----762	3.5	112.9	98.3	56.5	13.7	2.3	0.9	1.2	34.9	1.1
Pneumonia of newborn-----763	0.7	3.1	13.5	6.7	2.3	0.7	0.4	1.4	4.1	0.5
Diarrhea of newborn-----764	0.1	0	1.7	1.6	0.5	0.2	0.1	0	0.8	0.1
Other infections of newborn-----765-768	0.1	0	0.2	0.7	0.2	0.1	0.0	0.1	0.3	0.0
Neonatal disorders arising from maternal										
toxemia-----769	0.3	16.3	12.5	5.8	0.9	0.1	0.1	0.1	3.7	0.1
Hemolytic disease of newborn (erythroblastosis)-770	0.7	5.3	7.1	5.6	2.5	0.9	0.4	0.1	3.6	0.5
Hemorrhagic disease of newborn-----771	0.2	4.1	2.7	2.3	0.8	0.2	0.1	0.1	1.4	0.1
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.7	46.4	28.7	7.1	1.7	0.2	0.1	0.2	7.8	0.1
Immaturity with mention of any other subsidiary condition-----774	0.2	10.0	11.5	5.5	0.7	0.1	0.0	0.1	3.1	0.0
Immaturity unqualified-----776	5.3	534.0	280.2	65.5	6.9	0.4	0.1	0.2	73.7	0.2
All other causes-----Residual	1.1	5.0	5.1	3.9	3.4	1.4	0.7	1.6	3.7	0.9
WHITE, MALE-----All causes	21.6	905.0	643.1	271.9	69.1	15.9	6.7	10.8	218.8	8.3
Congenital malformations-----750-759	2.9	3.7	19.8	22.5	11.8	3.9	1.7	2.4	14.0	2.1
Certain diseases of early infancy-----760-776	17.4	895.1	617.2	244.4	52.9	10.4	4.1	6.8	200.0	5.2
Birth injuries-----760,761	3.9	143.7	94.3	40.6	11.6	3.0	1.6	4.1	34.0	1.9
Intracranial and spinal injury at birth-----760	1.7	17.9	15.6	15.6	6.3	1.9	1.1	2.1	9.7	1.2
Other birth injury-----761	2.1	125.8	78.7	25.0	5.4	1.1	0.6	2.0	24.3	0.7
Postnatal asphyxia and atelectasis-----762	4.3	119.7	121.2	75.4	19.6	3.5	1.1	1.0	46.6	1.4
Pneumonia of newborn-----763	0.8	3.1	12.3	7.8	2.5	1.0	0.5	1.2	4.5	0.6
Diarrhea of newborn-----764	0.2	0	0.9	1.8	0.7	0.3	0.1	0	0.9	0.1
Other infections of newborn-----765-768	0.0	0	0	0.9	0.2	0.1	0.0	0.1	0.3	0.0
Neonatal disorders arising from maternal										
toxemia-----769	0.4	16.7	11.8	6.9	1.3	0.2	0.1	0	4.4	0.1
Hemolytic disease of newborn (erythroblastosis)-770	0.8	6.2	5.2	6.5	3.1	1.1	0.4	0.1	4.2	0.5
Hemorrhagic disease of newborn-----771	0.2	5.6	2.8	3.1	1.3	0.0	0.2	0	2.1	0.1
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.7	45.7	31.6	8.0	2.4	0.2	0.1	0	9.2	0.1
Immaturity with mention of any other subsidiary condition-----774	0.2	9.3	10.4	6.7	0.8	0.2	0.0	0	3.4	0.0
Immaturity unqualified-----776	5.9	545.3	326.7	86.6	9.4	0.7	0.1	0.3	90.6	0.2
All other causes-----Residual	1.3	6.2	6.1	4.9	4.4	1.6	0.9	1.5	4.8	1.0
WHITE, FEMALE-----All causes	16.0	861.0	474.5	160.4	35.5	9.1	4.7	14.7	138.4	5.8
Congenital malformations-----750-759	2.5	14.7	26.0	20.3	8.0	2.8	1.4	2.6	11.9	1.7
Certain diseases of early infancy-----760-776	12.5	842.5	444.3	137.1	24.9	5.1	2.8	10.4	123.6	3.4
Birth injuries-----760,761	2.6	130.1	59.8	23.9	3.6	1.5	1.1	5.7	18.8	1.3
Intracranial and spinal injury at birth-----760	1.0	6.4	11.7	8.0	1.8	0.8	0.7	2.6	3.9	0.7
Other birth injury-----761	1.6	123.7	48.0	15.9	1.8	0.7	0.4	3.1	14.8	0.5
Postnatal asphyxia and atelectasis-----762	2.7	105.9	73.5	38.5	9.0	1.5	0.6	1.7	24.7	0.8
Pneumonia of newborn-----763	0.6	3.2	14.8	5.7	2.1	0.4	0.3	1.9	3.7	0.4
Diarrhea of newborn-----764	0.1	0	2.6	1.5	0.4	0.1	0.1	0	0.7	0.1
Other infections of newborn-----765-768	0.1	0	0.5	0.4	0.2	0.0	0.0	0	0.3	0.0
Neonatal disorders arising from maternal										
toxemia-----769	0.3	15.9	13.3	4.7	0.6	0.1	0.0	0.2	3.1	0.1
Hemolytic disease of newborn (erythroblastosis)-770	0.6	4.5	9.2	4.9	2.0	0.7	0.4	0	3.1	0.4
Hemorrhagic disease of newborn-----771	0.2	2.6	2.6	1.5	0.4	0.2	0.1	0.2	0.9	0.1
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.6	47.2	25.5	6.1	1.2	0.2	0.1	0.5	6.6	0.1
Immaturity with mention of any other subsidiary condition-----774	0.2	10.8	12.8	4.4	0.6	0.1	0.0	0.2	2.8	0.0
Immaturity unqualified-----776	4.6	522.3	229.8	45.5	4.8	0.3	0.1	0	58.9	0.1
All other causes-----Residual	0.9	3.8	4.1	3.0	2.6	1.2	0.6	1.7	2.8	0.7

¹Based on tabulated totals shown in table 8.

TABLE 9. NEONATAL MORTALITY RATES FOR SELECTED CAUSES, BY BIRTH WEIGHT, RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 261)

RACE, SEX, AND CAUSE OF DEATH	Total ¹	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
NONWHITE, BOTH SEXES-----All causes	26.7	821.4	507.0	195.7	49.5	15.4	10.3	20.2	164.7	11.9
Congenital malformations-----750-759	1.6	1.4	14.0	5.0	4.4	1.9	1.1	2.0	5.1	1.3
Certain diseases of early infancy-----760-776	20.9	802.4	474.1	176.9	36.6	10.0	6.3	11.1	148.6	7.3
Birth injuries-----760,761	3.2	56.8	32.9	15.6	4.5	2.9	2.0	4.8	12.3	2.3
Intracranial and spinal injury at birth-----760	1.8	23.0	15.0	7.3	2.8	1.6	1.2	2.8	6.0	1.4
Other birth injury-----761	1.4	33.8	18.0	8.2	1.7	1.3	0.7	2.0	6.3	0.9
Postnatal asphyxia and atelectasis-----762	4.0	157.0	91.8	30.2	6.9	2.4	1.3	1.7	28.0	1.5
Pneumonia of newborn-----763	1.7	4.1	14.0	12.4	3.9	1.5	1.1	0.9	6.3	1.2
Diarrhea of newborn-----764	0.3	0	3.0	5.5	0.8	0.3	0.2	0	1.8	0.2
Other infections of newborn-----765-768	0.2	1.4	2.0	2.7	0.1	0.1	0.1	0.4	0.9	0.1
Neonatal disorders arising from maternal toxemia-----769	0.4	6.8	6.0	3.7	1.2	0.2	0.2	0.2	2.4	0.2
Hemolytic disease of newborn (erythroblastosis)-770	0.3	0	3.0	1.4	0.8	0.4	0.2	0	1.0	0.2
Hemorrhagic disease of newborn-----771	0.4	0	3.0	2.7	1.8	0.2	0.4	0.2	2.0	0.3
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	1.7	46.0	30.9	16.0	3.3	1.1	0.5	1.5	10.8	0.7
Immaturity with mention of any other subsidiary condition-----774	0.2	6.8	6.0	4.1	0.6	0.0	0	0	2.1	0.0
Immaturity unqualified-----776	8.6	523.7	281.4	82.5	12.7	0.9	0.4	1.3	81.0	0.5
All other causes-----Residual	4.1	17.6	19.0	13.7	8.5	3.5	2.9	7.2	10.9	3.2

¹Based on tabulated totals shown in table 8.

VITAL STATISTICS—SPECIAL REPORTS

TABLE 10. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT, RACE, AND PLURALITY OF BIRTH: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed. Excludes data for Massachusetts. Numbers after causes of death are category numbers of the Sixth Revision of the International Lists, 1948)

RACE AND CAUSE OF DEATH	TOTAL		BIRTH WEIGHT (IN GRAMS)				
	Tabu- lated	Ad- justed ¹	1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501 or more
DEATHS AMONG SINGLE BIRTHS							
ALL RACES-----All causes	15,049	15,049	2,827	2,321	2,048	1,913	5,940
Congenital malformations-----750-759	2,052	2,054	25	94	187	340	1,408
Certain diseases of early infancy-----760-776	11,746	11,796	2,775	2,195	1,800	1,409	3,617
Birth injuries-----760,761	2,550	2,592	421	313	298	262	1,298
Intracranial and spinal injury at birth-----760	1,136	1,165	49	63	107	145	801
Other birth injury-----761	1,414	1,427	372	250	191	117	497
Postnatal asphyxia and atelectasis-----762	2,688	2,708	407	397	508	471	925
Pneumonia of newborn-----763	658	659	12	57	70	93	427
Diarrhea of newborn-----764	126	131	-	5	23	17	86
Other infections of newborn-----765-768	61	59	1	2	12	9	35
Neonatal disorders arising from maternal toxemia-----769	266	262	48	50	57	41	66
Hemolytic disease of newborn (erythroblastosis)-----770	502	513	15	24	47	81	346
Hemorrhagic disease of newborn-----771	185	197	11	9	20	36	121
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	536	513	112	106	76	73	146
Immaturity with mention of any other subsidiary condition-----774	164	171	31	45	48	25	22
Immaturity unqualified-----776	4,010	3,991	1,717	1,187	641	301	145
All other causes-----Residual	1,251	1,199	27	32	61	164	915
WHITE-----All causes	12,183	12,183	2,315	1,902	1,716	1,568	4,682
Congenital malformations-----750-759	1,863	1,858	24	81	177	310	1,266
Certain diseases of early infancy-----760-776	9,536	9,574	2,276	1,800	1,508	1,151	2,839
Birth injuries-----760,761	2,188	2,219	383	287	268	230	1,051
Intracranial and spinal injury at birth-----760	925	946	32	48	92	124	650
Other birth injury-----761	1,263	1,273	351	239	176	106	401
Postnatal asphyxia and atelectasis-----762	2,258	2,261	310	318	454	420	759
Pneumonia of newborn-----763	468	472	9	46	51	64	302
Diarrhea of newborn-----764	91	91	-	2	14	12	63
Other infections of newborn-----765-768	38	37	-	1	5	8	23
Neonatal disorders arising from maternal toxemia-----769	225	218	44	45	50	31	48
Hemolytic disease of newborn (erythroblastosis)-----770	470	476	15	21	43	76	321
Hemorrhagic disease of newborn-----771	138	143	11	8	16	24	84
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	362	350	90	83	53	51	73
Immaturity with mention of any other subsidiary condition-----774	143	150	27	39	43	20	21
Immaturity unqualified-----776	3,155	3,157	1,387	950	511	215	94
All other causes-----Residual	784	751	15	21	31	107	577
NONWHITE-----All causes	2,866	2,866	512	419	332	345	1,258
Congenital malformations-----750-759	189	196	1	13	10	30	142
Certain diseases of early infancy-----760-776	2,210	2,222	499	395	292	258	778
Birth injuries-----760,761	362	373	38	26	30	32	247
Intracranial and spinal injury at birth-----760	211	219	17	15	15	21	151
Other birth injury-----761	151	154	21	11	15	11	96
Postnatal asphyxia and atelectasis-----762	430	447	97	79	54	51	166
Pneumonia of newborn-----763	190	187	3	11	19	29	125
Diarrhea of newborn-----764	35	40	-	3	9	5	23
Other infections of newborn-----765-768	25	22	1	1	7	1	12
Neonatal disorders arising from maternal toxemia-----769	41	44	4	5	7	10	18
Hemolytic disease of newborn (erythroblastosis)-----770	32	37	3	3	4	5	25
Hemorrhagic disease of newborn-----771	47	54	-	1	4	12	37
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	174	163	22	23	23	22	73
Immaturity with mention of any other subsidiary condition-----774	21	21	4	6	5	5	1
Immaturity unqualified-----776	855	834	330	237	130	86	51
All other causes-----Residual	467	448	12	11	30	57	358

See footnote on p. 265.

TABLE 10. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT, RACE, AND PLURALITY OF BIRTH: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 264)

RACE AND CAUSE OF DEATH	TOTAL		BIRTH WEIGHT (IN GRAMS)				
	Tabu- lated	Ad- justed ¹	1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501 or more
DEATHS AMONG BIRTHS IN PLURAL SETS							
ALL RACES-----All causes	1,692	1,692	597	480	355	165	95
Congenital malformations-----750-759	75	75	5	14	21	18	17
Certain diseases of early infancy-----760-776	1,562	1,568	590	459	329	132	58
Birth injuries-----760,761	162	158	58	36	32	17	15
Intracranial and spinal injury at birth-----760	47	46	7	8	17	6	8
Other birth injury-----761	115	112	51	28	15	11	7
Postnatal asphyxia and atelectasis-----762	295	298	69	97	78	42	12
Pneumonia of newborn-----763	50	53	1	11	19	13	9
Diarrhea of newborn-----764	17	19	-	5	5	6	3
Other infections of newborn-----765-768	2	2	-	1	1	-	-
Neonatal disorders arising from maternal toxemia-----769	26	20	9	7	3	1	-
Hemolytic disease of newborn (erythroblastosis)-----770	28	29	2	7	9	8	3
Hemorrhagic disease of newborn-----771	17	15	1	3	6	5	-
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	136	150	69	43	23	11	4
Immaturity with mention of any other subsidiary condition-----774	29	30	6	8	13	3	-
Immaturity unqualified-----776	800	794	375	241	140	26	12
All other causes-----Residual	55	49	2	7	5	15	20
WHITE-----All causes	1,338	1,338	502	391	260	125	60
Congenital malformations-----750-759	67	69	5	13	20	14	17
Certain diseases of early infancy-----760-776	1,247	1,252	496	378	236	104	38
Birth injuries-----760,761	139	136	54	30	27	14	11
Intracranial and spinal injury at birth-----760	44	43	7	8	16	5	7
Other birth injury-----761	95	93	47	22	11	9	4
Postnatal asphyxia and atelectasis-----762	246	248	51	83	66	38	10
Pneumonia of newborn-----763	35	36	1	9	11	12	3
Diarrhea of newborn-----764	12	13	-	5	1	5	2
Other infections of newborn-----765-768	1	1	-	-	1	-	-
Neonatal disorders arising from maternal toxemia-----769	21	18	8	6	3	1	-
Hemolytic disease of newborn (erythroblastosis)-----770	26	27	2	7	9	7	2
Hemorrhagic disease of newborn-----771	12	10	1	2	4	3	-
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	109	115	57	35	12	7	4
Immaturity with mention of any other subsidiary condition-----774	24	24	5	8	8	3	-
Immaturity unqualified-----776	622	624	317	193	94	14	6
All other causes-----Residual	24	17	1	-	4	7	5
NONWHITE-----All causes	354	354	95	89	95	40	35
Congenital malformations-----750-759	8	6	-	1	1	4	-
Certain diseases of early infancy-----760-776	315	316	94	81	93	28	20
Birth injuries-----760,761	23	22	4	6	5	3	4
Intracranial and spinal injury at birth-----760	3	3	-	-	1	1	1
Other birth injury-----761	20	19	4	6	4	2	3
Postnatal asphyxia and atelectasis-----762	49	50	18	14	12	4	2
Pneumonia of newborn-----763	15	17	-	2	8	1	6
Diarrhea of newborn-----764	5	6	-	-	4	1	1
Other infections of newborn-----765-768	1	1	-	1	-	-	-
Neonatal disorders arising from maternal toxemia-----769	5	2	1	1	-	-	-
Hemolytic disease of newborn (erythroblastosis)-----770	2	2	-	-	-	1	1
Hemorrhagic disease of newborn-----771	5	5	-	1	2	2	-
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	27	35	12	8	11	4	-
Immaturity with mention of any other subsidiary condition-----774	5	6	1	-	5	-	-
Immaturity unqualified-----776	178	170	58	48	46	12	6
All other causes-----Residual	31	32	1	7	1	8	15

¹Data 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.

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TABLE 11. NEONATAL MORTALITY RATES FOR SELECTED CAUSES, BY BIRTH WEIGHT, RACE, AND PLURALITY OF BIRTH: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

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

RACE AND CAUSE OF DEATH	Total ¹	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
		RATES AMONG SINGLE BIRTHS					
ALL RACES-----All causes	18.3	871.7	562.3	228.9	52.8	173.4	7.7
Congenital malformations-----750-759	2.5	7.7	22.8	20.9	9.4	12.3	1.8
Certain diseases of early infancy-----760-776	14.3	855.7	531.7	201.2	38.9	155.7	4.7
Birth injuries-----760,761	3.1	129.8	75.8	33.3	7.2	24.6	1.7
Intracranial and spinal injury at birth-----760	1.4	15.1	15.3	12.0	4.0	6.9	1.0
Other birth injury-----761	1.7	114.7	60.6	21.4	3.2	17.7	0.6
Postnatal asphyxia and atelectasis-----762	3.3	125.5	96.2	56.8	13.0	33.9	1.2
Pneumonia of newborn-----763	0.8	5.7	15.8	7.8	2.6	4.4	0.6
Diarrhea of newborn-----764	0.2	0	1.2	2.6	0.5	0.9	0.1
Other infections of newborn-----765-768	0.1	0.3	0.5	1.3	0.2	0.5	0.0
Neonatal disorders arising from maternal toxemia-----769	0.3	14.8	12.1	6.4	1.1	3.7	0.1
Hemolytic disease of newborn (erythroblastosis)-----770	0.6	4.6	5.8	5.3	2.2	3.2	0.5
Hemorrhagic disease of newborn-----771	0.2	3.4	2.2	2.2	1.0	1.4	0.2
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.7	34.5	25.7	8.5	2.0	7.0	0.2
Immaturity with mention of any other subsidiary condition-----774	0.2	9.6	10.9	5.4	0.7	2.8	0.0
Immaturity unqualified-----776	4.9	529.4	287.5	71.7	8.3	73.2	0.2
All other causes-----Residual	1.5	8.3	7.8	6.8	4.5	5.4	1.2
WHITE-----All causes	17.3	880.2	575.0	238.4	53.5	176.7	7.1
Congenital malformations-----750-759	2.7	9.1	24.5	24.6	10.6	13.9	1.9
Certain diseases of early infancy-----760-776	13.6	865.4	544.1	209.5	39.3	158.6	4.3
Birth injuries-----760,761	3.1	145.6	86.8	37.2	7.8	27.5	1.6
Intracranial and spinal injury at birth-----760	1.3	12.2	14.5	12.8	4.2	7.0	1.0
Other birth injury-----761	1.8	133.5	72.2	24.4	3.6	20.5	0.6
Postnatal asphyxia and atelectasis-----762	3.2	117.9	96.1	63.1	14.3	35.4	1.1
Pneumonia of newborn-----763	0.7	3.4	13.9	7.1	2.2	4.0	0.5
Diarrhea of newborn-----764	0.1	0	0.6	1.9	0.4	0.7	0.1
Other infections of newborn-----765-768	0.1	0	0.3	0.7	0.3	0.3	0.0
Neonatal disorders arising from maternal toxemia-----769	0.3	16.7	13.6	6.9	1.1	4.0	0.1
Hemolytic disease of newborn (erythroblastosis)-----770	0.7	5.7	6.3	6.0	2.6	3.7	0.5
Hemorrhagic disease of newborn-----771	0.2	4.2	2.4	2.2	0.8	1.4	0.1
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	0.5	34.2	25.1	7.4	1.7	6.5	0.1
Immaturity with mention of any other subsidiary condition-----774	0.2	10.3	11.8	6.0	0.7	3.0	0.0
Immaturity unqualified-----776	4.5	527.4	287.2	71.0	7.3	72.1	0.1
All other causes-----Residual	1.1	5.7	6.3	4.3	3.6	4.1	0.9
NONWHITE-----All causes	24.4	835.2	511.0	190.0	50.0	159.5	11.7
Congenital malformations-----750-759	1.6	1.6	15.9	5.7	4.3	5.4	1.3
Certain diseases of early infancy-----760-776	18.8	814.0	481.7	167.1	37.4	143.2	7.2
Birth injuries-----760,761	3.1	62.0	31.7	17.2	4.6	12.5	2.3
Intracranial and spinal injury at birth-----760	1.8	27.7	18.3	8.6	3.0	6.7	1.4
Other birth injury-----761	1.3	34.3	13.4	8.6	1.6	5.8	0.9
Postnatal asphyxia and atelectasis-----762	3.7	158.2	96.3	30.9	7.4	27.9	1.5
Pneumonia of newborn-----763	1.6	4.9	13.4	10.9	4.2	6.1	1.2
Diarrhea of newborn-----764	0.3	0	3.7	5.2	0.7	1.7	0.2
Other infections of newborn-----765-768	0.2	1.6	1.2	4.0	0.1	1.0	0.1
Neonatal disorders arising from maternal toxemia-----769	0.3	6.5	6.1	4.0	1.4	2.6	0.2
Hemolytic disease of newborn (erythroblastosis)-----770	0.3	0	3.7	2.3	0.7	1.2	0.2
Hemorrhagic disease of newborn-----771	0.4	0	1.2	2.3	1.7	1.7	0.3
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	1.5	35.9	28.0	13.2	3.2	8.9	0.7
Immaturity with mention of any other subsidiary condition-----774	0.2	6.5	7.3	2.9	0.7	2.0	0.0
Immaturity unqualified-----776	7.3	538.3	289.0	74.4	12.5	77.7	0.5
All other causes-----Residual	4.0	19.6	13.4	17.2	8.3	10.9	3.2

¹Based on tabulated totals shown in table 10.

TABLE 11. NEONATAL MORTALITY RATES FOR SELECTED CAUSES, BY BIRTH WEIGHT, RACE, AND PLURALITY OF BIRTH: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 266)

RACE AND CAUSE OF DEATH	Total ¹	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
		RATES AMONG BIRTHS IN PLURAL SETS					
ALL RACES-----All causes	98.6	871.5	503.7	145.4	32.9	175.6	11.8
Congenital malformations-----750-759	4.4	7.3	14.7	8.6	3.6	6.4	2.1
Certain diseases of early infancy-----760-776	91.0	861.3	481.6	134.7	26.3	166.0	7.2
Birth injuries-----760,761	9.4	84.7	37.8	13.1	3.4	15.7	1.9
Intracranial and spinal injury at birth-----760	2.7	10.2	8.4	7.0	1.2	4.2	1.0
Other birth injury-----761	6.7	74.5	29.4	6.1	2.2	11.5	0.9
Postnatal asphyxia and atelectasis-----762	17.2	100.7	101.8	31.9	8.4	31.4	1.5
Pneumonia of newborn-----763	2.9	1.5	11.5	7.8	2.6	4.8	1.1
Diarrhea of newborn-----764	1.0	0	5.2	2.0	1.2	1.8	0.4
Other infections of newborn-----765-768	0.1	0	1.0	0.4	0	0.2	0
Neonatal disorders arising from maternal toxemia-----769	1.5	13.1	7.3	1.2	0.2	2.2	0
Hemolytic disease of newborn (erythroblastosis)-----770	1.6	2.9	7.3	3.7	1.6	2.9	0.4
Hemorrhagic disease of newborn-----771	1.0	1.5	3.1	2.5	1.0	1.6	0
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	7.9	100.7	45.1	9.4	2.2	16.1	0.5
Immaturity with mention of any other subsidiary condition-----774	1.7	8.8	8.4	5.3	0.6	3.3	0
Immaturity unqualified-----776	46.6	547.4	252.9	57.3	5.2	86.0	1.5
All other causes-----Residual	3.2	2.9	7.5	2.0	3.0	3.2	2.5
WHITE-----All causes	94.4	898.0	507.1	129.5	30.2	171.0	9.0
Congenital malformations-----750-759	4.7	8.9	16.9	10.0	3.4	7.0	2.5
Certain diseases of early infancy-----760-776	88.0	887.3	490.3	117.6	25.1	162.4	5.7
Birth injuries-----760,761	9.8	96.6	38.9	13.5	3.4	16.7	1.6
Intracranial and spinal injury at birth-----760	3.1	12.5	10.4	8.0	1.2	4.8	1.0
Other birth injury-----761	6.7	84.1	28.5	5.5	2.2	11.9	0.6
Postnatal asphyxia and atelectasis-----762	17.4	91.2	107.7	32.9	9.2	31.8	1.5
Pneumonia of newborn-----763	2.5	1.8	11.7	5.5	2.9	4.4	0.4
Diarrhea of newborn-----764	0.8	0	6.5	0.5	1.2	1.5	0.3
Other infections of newborn-----765-768	0.1	0	0	0.5	0	0.1	0
Neonatal disorders arising from maternal toxemia-----769	1.5	14.3	7.8	1.5	0.2	2.4	0
Hemolytic disease of newborn (erythroblastosis)-----770	1.8	3.6	9.1	4.5	1.7	3.3	0.3
Hemorrhagic disease of newborn-----771	0.8	1.8	2.6	2.0	0.7	1.3	0
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	7.7	102.0	45.4	6.0	1.7	14.8	0.6
Immaturity with mention of any other subsidiary condition-----774	1.7	8.9	10.4	4.0	0.7	3.2	0
Immaturity unqualified-----776	43.9	567.1	250.3	46.8	3.4	82.7	0.9
All other causes-----Residual	1.7	1.8	0	2.0	1.7	1.6	0.7
NONWHITE-----All causes	118.0	754.0	489.0	218.4	45.6	196.9	25.3
Congenital malformations-----750-759	2.7	0	5.5	2.3	4.6	3.7	0
Certain diseases of early infancy-----760-776	105.0	746.0	445.1	213.8	31.9	182.7	14.5
Birth injuries-----760,761	7.7	31.7	33.0	11.5	3.4	11.1	2.9
Intracranial and spinal injury at birth-----760	1.0	0	0	2.3	1.1	1.2	0.7
Other birth injury-----761	6.7	31.7	33.0	9.2	2.3	9.9	2.2
Postnatal asphyxia and atelectasis-----762	16.3	142.9	76.9	27.6	4.6	29.6	1.4
Pneumonia of newborn-----763	5.0	0	11.0	18.4	1.1	6.8	4.3
Diarrhea of newborn-----764	1.7	0	0	9.2	1.1	3.1	0.7
Other infections of newborn-----765-768	0.3	0	5.5	0	0	0.6	0
Neonatal disorders arising from maternal toxemia-----769	1.7	7.9	5.5	0	0	1.2	0
Hemolytic disease of newborn (erythroblastosis)-----770	0.7	0	0	0	1.1	0.6	0.7
Hemorrhagic disease of newborn-----771	1.7	0	5.5	4.6	2.3	3.1	0
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	9.0	95.2	44.0	25.3	4.6	21.6	0
Immaturity with mention of any other subsidiary condition-----774	1.7	7.9	0	11.5	0	3.7	0
Immaturity unqualified-----776	59.3	460.3	263.7	105.7	13.7	101.2	4.3
All other causes-----Residual	10.3	7.9	38.5	2.3	9.1	10.5	10.9

¹Based on tabulated totals shown in table 10.

TABLE 12. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES BY BIRTH WEIGHT, AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(Includes deaths among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed. Excludes data for Massachusetts. Numbers after causes of death are category numbers of the Sixth Revision of the International Lists, 1948)

AGE, RACE, AND CAUSE OF DEATH	Total	BIRTH WEIGHT (IN GRAMS)				
		1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501 or more
UNDER 28 DAYS						
ALL RACES ¹ -----All causes (Standard weight totals)-----	16,741 (16,741)	3,378 (3,424)	2,794 (2,801)	2,414 (2,403)	2,091 (2,078)	6,064 (6,035)
Congenital malformations-----750-759	2,127	30	107	209	356	1,425
Certain diseases of early infancy-----760-776	13,308	3,319	2,644	2,134	1,537	3,674
Birth injuries-----760,761	2,712	458	341	325	276	1,312
Intracranial and spinal injury at birth-----760	1,183	52	68	119	147	797
Other birth injury-----761	1,529	406	273	206	129	515
Postnatal asphyxia and atelectasis-----762	2,983	462	489	588	512	932
Pneumonia of newborn-----763	708	11	67	88	105	437
Diarrhea of newborn-----764	143	-	9	25	23	86
Other infections of newborn-----765-768	63	1	4	13	9	36
Neonatal disorders arising from maternal toxemia-----769	292	59	58	63	44	68
Hemolytic disease of newborn (erythroblastosis)-----770	530	17	30	52	84	347
Hemorrhagic disease of newborn-----771	202	11	13	25	38	115
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	672	177	147	102	88	158
Immaturity with mention of any other subsidiary condition-----774	193	34	53	58	26	22
Immaturity unqualified-----776	4,810	2,089	1,433	795	332	161
All other causes-----Residual	1,306	29	43	71	198	965
WHITE ¹ -----All causes (Standard weight totals)-----	13,521 (13,521)	2,782 (2,817)	2,284 (2,293)	1,977 (1,976)	1,704 (1,693)	4,774 (4,742)
Congenital malformations-----750-759	1,930	29	94	198	322	1,287
Certain diseases of early infancy-----760-776	10,783	2,737	2,167	1,740	1,253	2,886
Birth injuries-----760,761	2,327	418	310	292	242	1,065
Intracranial and spinal injury at birth-----760	969	36	54	104	126	649
Other birth injury-----761	1,358	382	256	188	116	416
Postnatal asphyxia and atelectasis-----762	2,504	356	401	522	459	766
Pneumonia of newborn-----763	503	9	53	61	74	306
Diarrhea of newborn-----764	103	-	7	14	18	64
Other infections of newborn-----765-768	39	-	1	6	8	24
Neonatal disorders arising from maternal toxemia-----769	246	54	52	55	34	51
Hemolytic disease of newborn (erythroblastosis)-----770	496	17	27	49	79	324
Hemorrhagic disease of newborn-----771	150	11	10	20	26	83
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	471	143	117	67	62	82
Immaturity with mention of any other subsidiary condition-----774	167	30	46	49	22	20
Immaturity unqualified-----776	3,777	1,699	1,143	605	229	101
All other causes-----Residual	808	16	23	39	129	601
NONWHITE ¹ -----All causes (Standard weight totals)-----	3,220 (3,220)	596 (607)	510 (508)	437 (427)	387 (385)	1,290 (1,293)
Congenital malformations-----750-759	197	1	13	11	34	138
Certain diseases of early infancy-----760-776	2,525	582	477	394	284	788
Birth injuries-----760,761	385	40	31	33	34	247
Intracranial and spinal injury at birth-----760	214	16	14	15	21	148
Other birth injury-----761	171	24	17	18	13	99
Postnatal asphyxia and atelectasis-----762	479	106	88	66	53	166
Pneumonia of newborn-----763	205	2	14	27	31	131
Diarrhea of newborn-----764	40	-	2	11	5	22
Other infections of newborn-----765-768	24	1	3	7	1	12
Neonatal disorders arising from maternal toxemia-----769	46	5	6	8	10	17
Hemolytic disease of newborn (erythroblastosis)-----770	34	-	3	3	5	23
Hemorrhagic disease of newborn-----771	52	-	3	5	12	32
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	201	34	30	35	26	76
Immaturity with mention of any other subsidiary condition-----774	26	4	7	9	4	2
Immaturity unqualified-----776	1,033	390	290	190	103	60
All other causes-----Residual	498	13	20	32	69	364

See footnote on p. 272.

TABLE 12. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES BY BIRTH WEIGHT, AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 268)

AGE, RACE, AND CAUSE OF DEATH	Total	BIRTH WEIGHT (IN GRAMS)				
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501 or more
UNDER 1 HOUR						
ALL RACES ¹ -----All causes (Standard weight totals)-----	1,691 (1,691)	596 (598)	221 (216)	166 (165)	153 (153)	555 (559)
Congenital malformations-----750-759	263	21	40	48	38	116
Certain diseases of early infancy-----760-776	1,316	575	170	112	84	375
Birth injuries-----760,761	367	96	19	32	29	191
Intracranial and spinal injury at birth-----760	68	4	-	7	6	51
Other birth injury-----761	299	92	19	25	23	140
Postnatal asphyxia and atelectasis-----762	219	57	23	17	19	103
Pneumonia of newborn-----763	2	-	-	-	-	2
Diarrhea of newborn-----764	-	-	-	-	-	-
Other infections of newborn-----765-768	1	-	-	-	-	1
Neonatal disorders arising from maternal toxemia-----769	38	11	5	7	-	15
Hemolytic disease of newborn (erythroblastosis)-----770	53	6	6	8	7	26
Hemorrhagic disease of newborn-----771	7	1	-	2	-	4
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	59	30	8	1	4	16
Immaturity with mention of any other subsidiary condition-----774	17	4	8	-	2	3
Immaturity unqualified-----776	553	370	101	45	23	14
All other causes-----Residual	112	-	11	6	31	64
WHITE ¹ -----All causes (Standard weight totals)-----	1,403 (1,403)	507 (506)	178 (174)	140 (141)	136 (136)	442 (446)
Congenital malformations-----750-759	246	20	39	45	35	107
Certain diseases of early infancy-----760-776	1,083	487	133	91	76	296
Birth injuries-----760,761	313	90	18	27	27	151
Intracranial and spinal injury at birth-----760	52	3	-	2	5	42
Other birth injury-----761	261	87	18	25	22	109
Postnatal asphyxia and atelectasis-----762	170	47	14	16	17	76
Pneumonia of newborn-----763	2	-	-	-	-	2
Diarrhea of newborn-----764	-	-	-	-	-	-
Other infections of newborn-----765-768	-	-	-	-	-	-
Neonatal disorders arising from maternal toxemia-----769	31	9	3	4	-	15
Hemolytic disease of newborn (erythroblastosis)-----770	52	6	6	8	7	25
Hemorrhagic disease of newborn-----771	7	1	-	2	-	4
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	45	24	7	1	4	9
Immaturity with mention of any other subsidiary condition-----774	13	4	6	-	2	1
Immaturity unqualified-----776	450	306	79	33	19	13
All other causes-----Residual	74	-	6	4	25	39
NONWHITE ¹ -----All causes (Standard weight totals)-----	288 (288)	89 (92)	43 (42)	26 (24)	17 (17)	113 (113)
Congenital malformations-----750-759	17	1	1	3	3	9
Certain diseases of early infancy-----760-776	233	88	37	21	8	79
Birth injuries-----760,761	54	6	1	5	2	40
Intracranial and spinal injury at birth-----760	16	1	-	5	1	9
Other birth injury-----761	38	5	1	-	1	31
Postnatal asphyxia and atelectasis-----762	49	10	9	1	2	27
Pneumonia of newborn-----763	-	-	-	-	-	-
Diarrhea of newborn-----764	-	-	-	-	-	-
Other infections of newborn-----765-768	1	-	-	-	-	1
Neonatal disorders arising from maternal toxemia-----769	7	2	2	3	-	-
Hemolytic disease of newborn (erythroblastosis)-----770	1	-	-	-	-	1
Hemorrhagic disease of newborn-----771	-	-	-	-	-	-
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	14	6	1	-	-	7
Immaturity with mention of any other subsidiary condition-----774	4	-	2	-	-	2
Immaturity unqualified-----776	103	64	22	12	4	1
All other causes-----Residual	38	-	5	2	6	25

See footnote on p. 272.

VITAL STATISTICS—SPECIAL REPORTS

TABLE 12. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES BY BIRTH WEIGHT, AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 268)

AGE, RACE, AND CAUSE OF DEATH	Total	BIRTH WEIGHT (IN GRAMS)				
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501 or more
1-23 HOURS						
ALL RACES ¹ -----All causes (Standard weight totals)-----	6,405 (6,405)	1,934 (1,976)	1,324 (1,332)	974 (964)	645 (632)	1,528 (1,501)
Congenital malformations-----750-759	522	6	34	73	85	324
Certain diseases of early infancy-----760-776	5,866	1,916	1,281	882	521	1,066
Birth injuries-----760,761	1,173	266	193	161	101	452
Intracranial and spinal injury at birth-----760	373	26	21	38	44	244
Other birth injury-----761	800	240	172	123	57	208
Postnatal asphyxia and atelectasis-----762	1,314	275	245	254	195	345
Pneumonia of newborn-----763	37	2	8	7	5	15
Diarrhea of newborn-----764	1	-	-	-	1	-
Other infections of newborn-----765-768	2	-	-	-	-	2
Neonatal disorders arising from maternal toxemia-----769	135	35	29	27	19	25
Hemolytic disease of newborn (erythroblastosis)-----770	153	7	10	10	26	100
Hemorrhagic disease of newborn-----771	42	3	1	4	10	24
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	253	93	61	39	22	38
Immaturity with mention of any other subsidiary condition-----774	62	20	20	15	6	1
Immaturity unqualified-----776	2,494	1,215	714	365	136	64
All other causes-----Residual	217	12	9	19	39	138
WHITE ¹ -----All causes (Standard weight totals)-----	5,252 (5,252)	1,596 (1,628)	1,100 (1,108)	817 (813)	511 (503)	1,228 (1,200)
Congenital malformations-----750-759	471	6	28	71	78	288
Certain diseases of early infancy-----760-776	4,659	1,565	1,071	734	408	861
Birth injuries-----760,761	1,018	247	177	141	82	371
Intracranial and spinal injury at birth-----760	295	19	17	30	34	195
Other birth injury-----761	723	228	160	111	48	176
Postnatal asphyxia and atelectasis-----762	1,087	209	207	225	169	277
Pneumonia of newborn-----763	30	1	7	6	4	12
Diarrhea of newborn-----764	1	-	-	-	1	-
Other infections of newborn-----765-768	2	-	-	-	-	2
Neonatal disorders arising from maternal toxemia-----769	115	32	25	24	18	16
Hemolytic disease of newborn (erythroblastosis)-----770	145	7	9	9	24	96
Hemorrhagic disease of newborn-----771	29	3	1	1	7	17
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	199	84	52	27	14	22
Immaturity with mention of any other subsidiary condition-----774	58	18	19	15	5	1
Immaturity unqualified-----776	1,975	984	574	286	84	47
All other causes-----Residual	122	5	1	12	25	79
NONWHITE ¹ -----All causes (Standard weight totals)-----	1,153 (1,153)	338 (348)	224 (224)	157 (151)	134 (129)	300 (301)
Congenital malformations-----750-759	51	-	6	2	7	36
Certain diseases of early infancy-----760-776	1,007	331	210	148	113	205
Birth injuries-----760-761	155	19	16	20	19	81
Intracranial and spinal injury at birth-----760	78	7	4	8	10	49
Other birth injury-----761	77	12	12	12	9	32
Postnatal asphyxia and atelectasis-----762	227	66	38	29	26	68
Pneumonia of newborn-----763	7	1	1	1	1	3
Diarrhea of newborn-----764	-	-	-	-	-	-
Other infections of newborn-----765-768	-	-	-	-	-	-
Neonatal disorders arising from maternal toxemia-----769	20	3	4	3	1	9
Hemolytic disease of newborn (erythroblastosis)-----770	8	-	1	1	2	4
Hemorrhagic disease of newborn-----771	13	-	-	3	3	7
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	54	9	9	12	8	16
Immaturity with mention of any other subsidiary condition-----774	4	2	1	-	1	-
Immaturity unqualified-----776	519	231	140	79	52	17
All other causes-----Residual	95	7	8	7	14	59

See footnote on p. 272.

TABLE 12. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES BY BIRTH WEIGHT, AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 268)

AGE, RACE, AND CAUSE OF DEATH	Total	BIRTH WEIGHT (IN GRAMS)				
		1,000 or less	1,001- 1,500	1,501- 2,000	2,001- 2,500	2,501 or more
1-6 DAYS						
ALL RACES ¹ -----All causes	6,293	780	981	985	958	2,589
(Standard weight totals)-----	(6,293)	(787)	(986)	(990)	(956)	(2,574)
Congenital malformations-----750-759	829	2	28	67	147	585
Certain diseases of early infancy-----760-776	4,985	765	944	898	751	1,627
Birth injuries-----760,761	1,058	90	114	122	137	595
Intracranial and spinal injury at birth-----760	646	19	39	67	88	433
Other birth injury-----761	412	71	75	55	49	162
Postnatal asphyxia and atelectasis-----762	1,311	123	197	283	281	427
Pneumonia of newborn-----763	289	7	22	43	44	175
Diarrhea of newborn-----764	8	-	-	1	-	7
Other infections of newborn-----765-768	29	1	2	6	6	14
Neonatal disorders arising from maternal toxemia-----769	111	13	23	24	25	26
Hemolytic disease of newborn (erythroblastosis)-----770	279	4	12	31	44	188
Hemorrhagic disease of newborn-----771	123	4	10	12	24	73
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	230	47	52	42	39	50
Immaturity with mention of any other subsidiary condition-----774	73	8	18	22	16	9
Immaturity unqualified-----776	1,472	466	494	312	155	65
All other causes-----Residual	481	15	9	20	60	377
WHITE ¹ -----All causes	5,114	625	813	824	808	2,044
(Standard weight totals)-----	(5,114)	(632)	(818)	(828)	(805)	(2,031)
Congenital malformations-----750-759	744	2	22	62	128	530
Certain diseases of early infancy-----760-776	4,091	614	786	752	642	1,297
Birth injuries-----760,761	904	78	101	115	124	486
Intracranial and spinal injury at birth-----760	545	14	30	66	78	357
Other birth injury-----761	359	64	71	49	46	129
Postnatal asphyxia and atelectasis-----762	1,131	96	160	255	257	363
Pneumonia of newborn-----763	210	6	17	30	34	123
Diarrhea of newborn-----764	5	-	-	1	-	4
Other infections of newborn-----765-768	18	-	1	4	6	7
Neonatal disorders arising from maternal toxemia-----769	96	13	23	24	16	20
Hemolytic disease of newborn (erythroblastosis)-----770	263	4	10	29	43	177
Hemorrhagic disease of newborn-----771	93	4	8	10	18	53
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	151	31	41	28	29	22
Immaturity with mention of any other subsidiary condition-----774	64	6	17	19	13	9
Immaturity unqualified-----776	1,156	376	408	237	102	33
All other causes-----Residual	279	9	5	10	38	217
NONWHITE ¹ -----All causes	1,179	155	168	161	150	545
(Standard weight totals)-----	(1,179)	(155)	(168)	(162)	(151)	(543)
Congenital malformations-----750-759	85	-	6	5	19	55
Certain diseases of early infancy-----760-776	892	149	158	146	109	330
Birth injuries-----760,761	154	12	13	7	13	109
Intracranial and spinal injury at birth-----760	101	5	9	1	10	76
Other birth injury-----761	53	7	4	6	3	33
Postnatal asphyxia and atelectasis-----762	180	27	37	28	24	64
Pneumonia of newborn-----763	79	1	5	13	10	50
Diarrhea of newborn-----764	3	-	-	-	-	3
Other infections of newborn-----765-768	11	1	1	2	-	7
Neonatal disorders arising from maternal toxemia-----769	15	-	-	-	9	6
Hemolytic disease of newborn (erythroblastosis)-----770	16	-	2	2	1	11
Hemorrhagic disease of newborn-----771	30	-	2	2	6	20
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	79	16	11	14	10	28
Immaturity with mention of any other subsidiary condition-----774	9	2	1	3	3	-
Immaturity unqualified-----776	316	90	86	75	33	32
All other causes-----Residual	202	6	4	10	22	160

See footnote on p. 272.

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TABLE 12. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES BY BIRTH WEIGHT, AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950--Continued

(See headnote on p. 268)

AGE, RACE, AND CAUSE OF DEATH	Total	BIRTH WEIGHT (IN GRAMS)				
		1,000 or less	1,001-1,500	1,501-2,000	2,001-2,500	2,501 or more
7-27 DAYS						
ALL RACES ¹ -----All causes (Standard weight totals)-----	2,352 (2,352)	68 (63)	268 (267)	289 (284)	335 (337)	1,392 (1,401)
Congenital malformations-----750-759	513	1	5	21	86	400
Certain diseases of early infancy-----760-776	1,343	65	249	242	181	606
Birth injuries-----760,761	114	6	15	10	9	74
Intracranial and spinal injury at birth-----760	96	3	8	7	9	69
Other birth injury-----761	18	3	7	3	-	5
Postnatal asphyxia and atelectasis-----762	139	7	24	34	17	57
Pneumonia of newborn-----763	380	2	37	38	56	247
Diarrhea of newborn-----764	134	-	9	24	22	79
Other infections of newborn-----765-768	31	-	2	7	3	19
Neonatal disorders arising from maternal toxemia-----769	8	-	1	5	-	2
Hemolytic disease of newborn (erythroblastosis)-----770	45	-	2	3	7	33
Hemorrhagic disease of newborn-----771	30	3	2	7	4	14
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	130	7	26	20	23	54
Immaturity with mention of any other subsidiary condition-----774	41	2	7	21	2	9
Immaturity unqualified-----776	291	38	124	73	38	18
All other causes-----Residual	496	2	14	26	68	386
WHITE ¹ -----All causes (Standard weight totals)-----	1,752 (1,752)	54 (51)	193 (193)	196 (194)	249 (249)	1,060 (1,065)
Congenital malformations-----750-759	469	1	5	20	81	362
Certain diseases of early infancy-----760-776	950	51	177	163	127	432
Birth injuries-----760,761	92	3	14	9	9	57
Intracranial and spinal injury at birth-----760	77	-	7	6	9	55
Other birth injury-----761	15	3	7	3	-	2
Postnatal asphyxia and atelectasis-----762	116	4	20	26	16	50
Pneumonia of newborn-----763	261	2	29	25	36	169
Diarrhea of newborn-----764	97	-	7	13	17	60
Other infections of newborn-----765-768	19	-	-	2	2	15
Neonatal disorders arising from maternal toxemia-----769	4	-	1	3	-	-
Hemolytic disease of newborn (erythroblastosis)-----770	36	-	2	3	5	26
Hemorrhagic disease of newborn-----771	21	3	1	7	1	9
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	76	4	17	11	15	29
Immaturity with mention of any other subsidiary condition-----774	32	2	4	15	2	9
Immaturity unqualified-----776	196	33	82	49	24	8
All other causes-----Residual	333	2	11	13	41	266
NONWHITE ¹ -----All causes (Standard weight totals)-----	600 (600)	14 (12)	75 (74)	93 (90)	86 (88)	332 (336)
Congenital malformations-----750-759	44	-	-	1	5	38
Certain diseases of early infancy-----760-776	393	14	72	79	54	174
Birth injuries-----760,761	22	3	1	1	-	17
Intracranial and spinal injury at birth-----760	19	3	1	1	-	14
Other birth injury-----761	3	-	-	-	-	3
Postnatal asphyxia and atelectasis-----762	23	3	4	8	1	7
Pneumonia of newborn-----763	119	-	8	13	20	78
Diarrhea of newborn-----764	37	-	2	11	5	19
Other infections of newborn-----765-768	12	-	2	5	1	4
Neonatal disorders arising from maternal toxemia-----769	4	-	-	2	-	2
Hemolytic disease of newborn (erythroblastosis)-----770	9	-	-	-	2	7
Hemorrhagic disease of newborn-----771	9	-	1	-	3	5
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	54	3	9	9	8	25
Immaturity with mention of any other subsidiary condition-----774	9	-	3	6	-	-
Immaturity unqualified-----776	95	5	42	24	14	10
All other causes-----Residual	163	-	3	13	27	120

¹These totals differ somewhat from the corresponding standard totals shown in parentheses below because of the procedure used for distributing the birth weights not stated. For discussion, see section in text on Distribution of "not stated" birth weights.

TABLE 13. PERCENTAGE DISTRIBUTION OF DEATHS UNDER 28 DAYS AT SPECIFIED AGES, BY SELECTED CAUSES, BY BIRTH WEIGHT: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(Based on deaths under 28 days among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed. Excludes data for Massachusetts. Numbers after causes of death are category numbers of the Sixth Revision of the International Lists, 1948. Two dots (..) indicate percent not computed where base is less than 100)

AGE AND CAUSE OF DEATH	Total	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
UNDER 28 DAYS							
ALL CAUSES-----	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Congenital malformations-----750-759	12.7	0.9	3.8	8.7	17.0	6.6	23.5
Certain diseases of early infancy-----760-776	79.5	98.3	94.6	88.4	73.5	90.2	60.6
Birth injuries-----760-761	16.2	13.6	12.2	13.5	13.2	13.1	21.6
Intracranial and spinal injury at birth-----760	7.1	1.5	2.4	4.9	7.0	3.6	13.1
Other birth injury-----761	9.1	12.0	9.8	8.5	6.2	9.5	8.5
Postnatal asphyxia and atelectasis-----762	17.8	13.7	17.5	24.4	24.5	19.2	15.4
Pneumonia of newborn-----763	4.2	0.3	2.4	3.6	5.0	2.5	7.2
Diarrhea of newborn-----764	0.9	0	0.3	1.0	1.1	0.5	1.4
Other infections of newborn-----765-768	0.4	0.0	0.1	0.5	0.4	0.3	0.6
Neonatal disorders arising from maternal toxemia-----769	1.7	1.7	2.1	2.6	2.1	2.1	1.1
Hemolytic disease of newborn (erythroblastosis)-----770	3.2	0.5	1.1	2.2	4.0	1.7	5.7
Hemorrhagic disease of newborn-----771	1.2	0.3	0.5	1.0	1.8	0.8	1.9
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	4.0	5.2	5.3	4.2	4.2	4.8	2.6
Immaturity with mention of any other subsidiary condition-774	1.2	1.0	1.9	2.4	1.2	1.6	0.4
Immaturity unqualified-----776	28.7	61.8	51.3	32.9	15.9	43.5	2.7
All other causes-----Residual	7.8	0.9	1.5	2.9	9.5	3.2	15.9
UNDER 1 HOUR							
ALL CAUSES-----	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Congenital malformations-----750-759	15.6	3.5	18.1	28.9	24.8	12.9	20.9
Certain diseases of early infancy-----760-776	77.8	96.5	76.9	67.5	54.9	82.8	67.6
Birth injuries-----760,761	21.7	16.1	8.6	19.3	19.0	15.5	34.4
Intracranial and spinal injury at birth-----760	4.0	0.7	0	4.2	3.9	1.5	9.2
Other birth injury-----761	17.7	15.4	8.6	15.1	15.0	14.0	25.2
Postnatal asphyxia and atelectasis-----762	13.0	9.6	10.4	10.2	12.4	10.2	18.6
Pneumonia of newborn-----763	0.1	0	0	0	0	0	0.4
Diarrhea of newborn-----764	0	0	0	0	0	0	0
Other infections of newborn-----765-768	0.1	0	0	0	0	0	0.2
Neonatal disorders arising from maternal toxemia-----769	2.2	1.8	2.3	4.2	0	2.0	2.7
Hemolytic disease of newborn (erythroblastosis)-----770	3.1	1.0	2.7	4.8	4.6	2.4	4.7
Hemorrhagic disease of newborn-----771	0.4	0.2	0	1.2	0	0.3	0.7
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	3.5	5.0	3.6	0.6	2.6	3.8	2.9
Immaturity with mention of any other subsidiary condition-774	1.0	0.7	3.6	0	1.3	1.2	0.5
Immaturity unqualified-----776	32.7	62.1	45.7	27.1	15.0	47.4	2.5
All other causes-----Residual	6.6	0	5.0	3.6	20.3	4.2	11.5
1-23 HOURS							
ALL CAUSES-----	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Congenital malformations-----750-759	8.1	0.3	2.6	7.5	13.2	4.1	21.2
Certain diseases of early infancy-----760-776	88.5	99.1	96.8	90.6	80.8	94.3	69.8
Birth injuries-----760,761	18.3	13.8	14.6	16.5	15.7	14.8	29.6
Intracranial and spinal injury at birth-----760	5.8	1.3	1.6	3.9	6.8	2.6	16.0
Other birth injury-----761	12.5	12.4	13.0	12.6	8.8	12.1	13.6
Postnatal asphyxia and atelectasis-----762	20.5	14.2	18.5	26.1	30.2	19.9	22.6
Pneumonia of newborn-----763	0.6	0.1	0.6	0.7	0.8	0.5	1.0
Diarrhea of newborn-----764	0.0	0	0	0	0.2	0.0	0
Other infections of newborn-----765-768	0.0	0	0	0	0	0	0.1
Neonatal disorders arising from maternal toxemia-----769	2.1	1.8	2.2	2.8	2.9	2.3	1.6
Hemolytic disease of newborn (erythroblastosis)-----770	2.4	0.4	0.8	1.0	4.0	1.1	6.5
Hemorrhagic disease of newborn-----771	0.7	0.2	0.1	0.4	1.6	0.4	1.6
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	4.0	4.8	4.6	4.0	3.4	4.4	2.5
Immaturity with mention of any other subsidiary condition-774	1.0	1.0	1.5	1.5	0.9	1.3	0.1
Immaturity unqualified-----776	38.9	62.8	53.9	37.5	21.1	49.8	4.2
All other causes-----Residual	3.4	0.6	0.7	2.0	6.0	1.6	9.0

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TABLE 13. PERCENTAGE DISTRIBUTION OF DEATHS UNDER 28 DAYS AT SPECIFIED AGES, BY SELECTED CAUSES, BY BIRTH WEIGHT: UNITED STATES, JANUARY 1 TO MARCH 31, 1950--Continued

(See headnote on p. 273)

AGE AND CAUSE OF DEATH	Total	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
1-6 DAYS							
ALL CAUSES-----	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Congenital malformations-----750-759	13.2	0.3	2.9	6.8	15.3	6.6	22.6
Certain diseases of early infancy-----760-776	79.2	97.8	96.2	91.2	78.4	90.6	62.8
Birth injuries-----760,761	16.8	11.5	11.6	12.4	14.3	12.5	23.0
Intracranial and spinal injury at birth-----760	10.3	2.4	4.0	6.8	9.2	5.8	16.7
Other birth injury-----761	6.5	9.1	7.6	5.6	5.1	6.7	6.3
Postnatal asphyxia and atelectasis-----762	20.8	15.8	20.1	28.7	29.3	23.9	16.5
Pneumonia of newborn-----763	4.6	0.9	2.2	4.4	4.6	3.1	6.7
Diarrhea of newborn-----764	0.1	0	0	0.1	0	0.0	0.3
Other infections of newborn-----765-768	0.5	0.1	0.2	0.6	0.6	0.4	0.5
Neonatal disorders arising from maternal toxemia-----769	1.8	1.7	2.3	2.4	2.6	2.3	1.0
Hemolytic disease of newborn (erythroblastosis)-----770	4.4	0.5	1.2	3.1	4.6	2.5	7.3
Hemorrhagic disease of newborn-----771	2.0	0.5	1.0	1.2	2.5	1.3	2.8
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	3.7	6.0	5.3	4.3	4.1	4.9	1.9
Immaturity with mention of any other subsidiary condition-774	1.2	1.0	1.8	2.2	1.7	1.7	0.3
Immaturity unqualified-----776	23.4	59.7	50.4	31.7	14.1	38.0	2.5
All other causes-----Residual	7.6	1.9	0.9	2.0	6.3	2.8	14.6
7-27 DAYS							
ALL CAUSES-----	100.0	..	100.0	100.0	100.0	100.0	100.0
Congenital malformations-----750-759	21.8	..	1.9	7.3	25.7	11.8	28.7
Certain diseases of early infancy-----760-776	57.1	..	92.9	83.7	54.0	76.8	43.5
Birth injuries-----760,761	4.8	..	5.6	3.5	2.7	4.2	5.3
Intracranial and spinal injury at birth-----760	4.1	..	3.0	2.4	2.7	2.8	5.0
Other birth injury-----761	0.8	..	2.6	1.0	0	1.4	0.4
Postnatal asphyxia and atelectasis-----762	5.9	..	9.0	11.8	5.1	8.5	4.1
Pneumonia of newborn-----763	16.2	..	13.8	13.1	16.7	13.9	17.7
Diarrhea of newborn-----764	5.7	0	3.4	8.3	6.6	5.7	5.7
Other infections of newborn-----765-768	1.3	0	0.7	2.4	0.9	1.2	1.4
Neonatal disorders arising from maternal toxemia-----769	0.3	0	0.4	1.7	0	0.6	0.1
Hemolytic disease of newborn (erythroblastosis)-----770	1.9	0	0.7	1.0	2.1	1.2	2.4
Hemorrhagic disease of newborn-----771	1.3	..	0.7	2.4	1.2	1.7	1.0
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	5.5	..	9.7	6.9	6.9	7.9	3.9
Immaturity with mention of any other subsidiary condition-774	1.7	..	2.6	7.3	0.6	3.3	0.6
Immaturity unqualified-----776	12.4	..	46.3	25.3	11.3	28.4	1.3
All other causes-----Residual	21.1	..	5.2	9.0	20.3	11.5	27.7

TABLE 14. PERCENTAGE DISTRIBUTION OF DEATHS UNDER 28 DAYS FOR SELECTED CAUSES, BY AGE, BY BIRTH WEIGHT: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(Based on deaths under 28 days among children born Jan. 1 to Mar. 31, 1950. Birth weights not stated are distributed. Excludes data for Massachusetts. Numbers after causes of death are category numbers of the Sixth Revision of the International Lists, 1948. Two dots (..) indicate percent not computed where base is less than 100)

CAUSE OF DEATH AND AGE	Total	BIRTH WEIGHT (IN GRAMS)	
		2,500 or less	2,501 or more
ALL CAUSES-----	100.0	100.0	100.0
Under 1 day-----	48.4	56.3	34.4
Under 1 hour-----	10.1	10.6	9.2
1-23 hours-----	38.3	45.7	25.2
1-6 days-----	37.6	34.7	42.7
7-27 days-----	14.0	9.0	23.0
Congenital malformations-----750-759	100.0	100.0	100.0
Under 1 day-----	36.9	49.1	30.9
Under 1 hour-----	12.4	20.9	8.1
1-23 hours-----	24.5	28.2	22.7
1-6 days-----	39.0	34.8	41.1
7-27 days-----	24.1	16.1	28.1
Certain diseases of early infancy-----760-776	100.0	100.0	100.0
Under 1 day-----	52.5	57.5	39.2
Under 1 hour-----	9.9	9.8	10.2
1-23 hours-----	42.6	47.7	29.0
1-6 days-----	37.4	34.8	44.3
7-27 days-----	10.1	7.6	16.5
Birth injuries-----760,761	100.0	100.0	100.0
Under 1 day-----	56.8	64.1	49.0
Under 1 hour-----	13.5	12.6	14.6
1-23 hours-----	43.3	51.5	34.5
1-6 days-----	39.0	33.1	45.4
7-27 days-----	4.2	2.9	5.6
Intracranial and spinal injury at birth-----760	100.0	100.0	100.0
Under 1 day-----	37.3	37.8	37.0
Under 1 hour-----	5.7	4.4	6.4
1-23 hours-----	31.5	33.4	30.6
1-6 days-----	54.6	55.2	54.3
7-27 days-----	8.1	7.0	8.7
Other birth injury-----761	100.0	100.0	100.0
Under 1 day-----	71.9	74.1	67.6
Under 1 hour-----	19.6	15.7	27.2
1-23 hours-----	52.3	58.4	40.4
1-6 days-----	26.9	24.7	31.5
7-27 days-----	1.2	1.3	1.0
Postnatal asphyxia and atelectasis-----762	100.0	100.0	100.0
Under 1 day-----	51.4	52.9	48.1
Under 1 hour-----	7.3	5.7	11.1
1-23 hours-----	44.0	47.2	37.0
1-6 days-----	43.9	43.1	45.8
7-27 days-----	4.7	4.0	6.1
Infections of newborn-----763,764,765-768	100.0	100.0	100.0
Under 1 day-----	4.7	6.5	3.6
Under 1 hour-----	0.3	0	0.5
1-23 hours-----	4.4	6.5	3.0
1-6 days-----	35.7	37.2	34.7
7-27 days-----	59.6	56.3	61.7

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TABLE 14. PERCENTAGE DISTRIBUTION OF DEATHS UNDER 28 DAYS FOR SELECTED CAUSES, BY AGE, BY BIRTH WEIGHT: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 275)

CAUSE OF DEATH AND AGE	Total	BIRTH WEIGHT (IN GRAMS)	
		2,500 or less	2,501 or more
Pneumonia of newborn-----763	100.0	100.0	100.0
Under 1 day-----	5.5	8.1	3.9
Under 1 hour-----	0.3	0	0.5
1-23 hours-----	5.2	8.1	3.4
1-6 days-----	40.8	42.8	39.6
7-27 days-----	53.7	49.1	56.5
Neonatal disorders arising from maternal toxemia-----769	100.0	100.0	..
Under 1 day-----	59.2	59.4	..
Under 1 hour-----	13.0	10.3	..
1-23 hours-----	46.2	49.1	..
1-6 days-----	38.0	37.9	..
7-27 days-----	2.7	2.7	..
Hemolytic disease of newborn (erythroblastosis)-----770	100.0	100.0	100.0
Under 1 day-----	38.9	43.7	36.3
Under 1 hour-----	10.0	14.8	7.5
1-23 hours-----	28.9	29.0	28.8
1-6 days-----	52.6	49.7	54.2
7-27 days-----	8.5	6.6	9.5
Hemorrhagic disease of newborn-----771	100.0	..	100.0
Under 1 day-----	24.3	..	24.3
Under 1 hour-----	3.5	..	3.5
1-23 hours-----	20.8	..	20.9
1-6 days-----	60.9	..	63.5
7-27 days-----	14.9	..	12.2
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	100.0	100.0	100.0
Under 1 day-----	46.4	50.2	34.2
Under 1 hour-----	8.8	8.4	10.1
1-23 hours-----	37.6	41.8	24.1
1-6 days-----	34.2	35.0	31.6
7-27 days-----	19.3	14.8	34.2
Immaturity with mention of any other subsidiary condition-----774	100.0	100.0	..
Under 1 day-----	40.9	43.9	..
Under 1 hour-----	8.8	8.2	..
1-23 hours-----	32.1	35.7	..
1-6 days-----	37.8	37.4	..
7-27 days-----	21.2	18.7	..
Immaturity unqualified-----776	100.0	100.0	100.0
Under 1 day-----	63.3	63.9	48.4
Under 1 hour-----	11.5	11.6	8.7
1-23 hours-----	51.9	52.3	39.8
1-6 days-----	30.6	30.3	40.4
7-27 days-----	6.0	5.9	11.2
All other causes-----Residual	100.0	100.0	100.0
Under 1 day-----	25.2	37.2	20.9
Under 1 hour-----	8.6	14.1	6.6
1-23 hours-----	16.6	23.2	14.3
1-6 days-----	36.8	30.5	39.1
7-27 days-----	38.0	32.3	40.0

TABLE 15. DEATHS UNDER 28 DAYS, BY BIRTH WEIGHT (UNADJUSTED), AGE, RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(Includes deaths among children born Jan. 1 to Mar. 31, 1950. Excludes data for Massachusetts)

RACE, AGE, 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	Not stated
ALL RACES-----	16,741	2,782	2,355	2,071	1,812	1,666	1,846	1,115	423	216	2,455
Under 1 hour-----	1,691	440	165	128	118	115	164	103	31	25	402
1-23 hours-----	6,405	1,620	1,118	831	552	425	448	274	120	47	970
1 day-----	2,470	305	381	383	313	238	235	163	67	39	346
2 days-----	1,663	177	191	247	241	207	212	118	54	20	196
3 days-----	928	79	104	110	135	147	145	85	26	13	84
4 days-----	519	43	56	59	63	74	80	59	18	10	57
5 days-----	420	37	68	43	55	48	52	45	11	6	55
6 days-----	293	24	45	21	39	28	42	27	7	6	56
7-13 days-----	1,141	36	146	144	136	159	197	106	43	29	145
14-20 days-----	678	17	50	59	94	120	139	78	24	12	85
21-27 days-----	533	4	33	46	66	105	132	57	22	9	59
Male-----	9,751	1,451	1,352	1,267	1,094	959	1,102	719	276	136	1,395
Under 1 hour-----	920	246	81	59	65	52	88	70	19	14	226
1-23 hours-----	3,775	869	677	531	342	245	271	166	74	28	572
1 day-----	1,470	142	222	238	202	157	132	104	49	25	199
2 days-----	993	84	112	150	156	125	136	74	34	13	109
3 days-----	562	37	55	75	87	89	95	60	18	8	38
4 days-----	310	20	31	40	42	40	49	39	11	6	32
5 days-----	241	23	41	25	24	22	29	34	7	4	32
6 days-----	158	10	26	8	22	18	26	13	3	5	27
7-13 days-----	620	15	72	81	64	86	111	71	26	20	74
14-20 days-----	378	3	21	30	51	60	86	48	20	6	53
21-27 days-----	324	2	14	30	39	65	79	40	15	7	33
Female-----	6,990	1,331	1,003	804	718	707	744	396	147	80	1,060
Under 1 hour-----	771	194	84	69	53	63	76	33	12	11	176
1-23 hours-----	2,630	751	441	300	210	180	177	108	46	19	398
1 day-----	1,000	163	159	145	111	81	103	59	18	14	147
2 days-----	670	93	79	97	85	82	76	44	20	7	87
3 days-----	366	42	49	35	48	58	50	25	8	5	46
4 days-----	209	23	25	19	21	34	31	20	7	4	25
5 days-----	179	14	27	18	31	26	23	11	4	2	23
6 days-----	135	14	17	13	17	10	16	14	4	1	29
7-13 days-----	521	21	74	63	72	73	86	35	17	9	71
14-20 days-----	300	14	29	29	43	60	53	30	4	6	32
21-27 days-----	209	2	19	16	27	40	53	17	7	2	26
WHITE-----	13,521	2,325	1,955	1,722	1,495	1,352	1,511	872	332	138	1,819
Under 1 hour-----	1,403	379	135	111	106	90	137	85	27	16	317
1-23 hours-----	5,252	1,357	941	705	443	354	368	219	100	23	742
1 day-----	2,040	255	319	331	276	201	197	126	52	24	259
2 days-----	1,388	147	159	222	218	178	173	96	40	14	141
3 days-----	747	60	88	89	117	118	120	62	18	11	64
4 days-----	399	32	49	47	43	62	63	45	15	6	37
5 days-----	326	30	56	32	40	36	46	35	10	3	38
6 days-----	214	18	40	12	28	19	36	16	5	3	37
7-13 days-----	854	30	111	106	107	118	165	76	32	21	88
14-20 days-----	494	13	34	38	64	94	104	64	17	9	57
21-27 days-----	404	4	23	29	53	82	102	48	16	8	39
Male-----	7,952	1,207	1,161	1,068	924	779	912	565	219	83	1,034
Under 1 hour-----	761	211	65	52	59	36	78	59	17	10	174
1-23 hours-----	3,122	721	591	453	278	205	225	135	62	14	438
1 day-----	1,225	121	195	210	177	133	110	76	36	13	154
2 days-----	829	68	93	142	142	106	107	61	25	8	77
3 days-----	451	28	46	60	75	74	78	43	14	6	27
4 days-----	246	14	29	34	31	37	37	30	8	4	22
5 days-----	190	17	34	20	19	16	27	27	6	2	22
6 days-----	119	8	25	4	18	13	22	8	2	2	17
7-13 days-----	471	14	56	58	54	63	96	54	20	14	42
14-20 days-----	283	3	14	19	38	44	68	39	15	4	39
21-27 days-----	255	2	13	16	33	52	64	33	14	6	22

TABLE 15. DEATHS UNDER 28 DAYS, BY BIRTH WEIGHT (UNADJUSTED), AGE, RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950--Con.

(Includes deaths among children born Jan. 1 to Mar. 31, 1950. Excludes data for Massachusetts)

RACE, AGE, 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	Not stated
WHITE--Continued											
Female-----	5,569	1,118	794	654	571	573	599	307	113	55	785
Under 1 hour-----	642	168	70	59	47	54	59	26	10	6	143
1-23 hours-----	2,130	636	350	252	165	149	143	84	38	9	304
1 day-----	815	134	124	121	99	68	87	50	16	11	105
2 days-----	559	79	66	80	76	72	66	35	15	6	64
3 days-----	296	32	42	29	42	44	42	19	4	5	37
4 days-----	153	18	20	13	12	25	26	15	7	2	15
5 days-----	136	13	22	12	21	20	19	8	4	1	16
6 days-----	95	10	15	8	10	6	14	8	3	1	20
7-13 days-----	383	16	55	48	53	55	69	22	12	7	46
14-20 days-----	211	10	20	19	26	50	36	25	2	5	18
21-27 days-----	149	2	10	13	20	30	38	15	2	2	17
NONWHITE -----	3,220	457	400	349	317	314	335	243	91	78	636
Under 1 hour-----	288	61	30	17	12	25	27	18	4	9	85
1-23 hours-----	1,153	263	177	126	109	71	80	55	20	24	228
1 day-----	430	50	62	52	37	37	38	37	15	15	87
2 days-----	275	30	32	25	23	29	39	22	14	6	55
3 days-----	181	19	16	21	18	29	25	23	8	2	20
4 days-----	120	11	7	12	20	12	17	14	3	4	20
5 days-----	94	7	12	11	15	12	6	10	1	3	17
6 days-----	79	6	3	9	11	9	6	11	2	3	19
7-13 days-----	287	6	35	38	29	41	32	30	11	8	57
14-20 days-----	184	4	16	21	30	26	35	14	7	3	28
21-27 days-----	129	-	10	17	13	23	30	9	6	1	20
Male-----	1,799	244	191	199	170	180	190	154	57	53	361
Under 1 hour-----	159	35	16	7	6	16	10	11	2	4	52
1-23 hours-----	653	148	86	78	64	40	46	31	12	14	134
1 day-----	245	21	27	28	25	24	22	28	13	12	45
2 days-----	164	16	19	8	14	19	29	13	9	5	32
3 days-----	111	9	9	15	12	15	17	17	4	2	11
4 days-----	64	6	2	6	11	3	12	9	3	2	10
5 days-----	51	6	7	5	5	6	2	7	1	2	10
6 days-----	39	2	1	4	4	5	4	5	1	3	10
7-13 days-----	149	1	16	23	10	23	15	17	6	6	32
14-20 days-----	95	-	7	11	13	16	18	9	5	2	14
21-27 days-----	69	-	1	14	6	13	15	7	1	1	11
Female-----	1,421	213	209	150	147	134	145	89	34	25	275
Under 1 hour-----	129	26	14	10	6	9	17	7	2	5	33
1-23 hours-----	500	115	91	48	45	31	34	24	8	10	94
1 day-----	185	29	35	24	12	13	16	9	2	3	42
2 days-----	111	14	13	17	9	10	10	9	5	1	23
3 days-----	70	10	7	6	6	14	8	6	4	-	9
4 days-----	56	5	5	6	9	9	5	5	-	2	10
5 days-----	43	1	5	6	10	6	4	3	-	1	7
6 days-----	40	4	2	5	7	4	2	6	1	-	9
7-13 days-----	138	5	19	15	19	18	17	13	5	2	25
14-20 days-----	89	4	9	10	17	10	17	5	2	1	14
21-27 days-----	60	-	9	3	7	10	15	2	5	-	9

TABLE 16. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950

(Includes deaths among children born Jan. 1 to Mar. 31, 1950. Excludes data for Massachusetts. Numbers after causes of death are category numbers of the Sixth Revision of the International Lists, 1948)

RACE, SEX, AND CAUSE OF DEATH	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	Not stated
ALL RACES, BOTH SEXES-----All causes	16,741	2,782	2,355	2,071	1,812	1,666	1,846	1,115	423	216	2,455
Congenital malformations-----750-759	2,127	25	91	181	314	415	482	245	94	37	243
Certain diseases of early infancy-----760-776	13,308	2,734	2,231	1,834	1,344	1,037	1,095	685	273	134	1,941
Birth injuries-----760,761	2,712	393	296	285	244	303	393	270	114	69	345
Without mention of immaturity (.0)-----	1,458	14	9	55	114	256	381	268	110	68	183
With immaturity (.5)-----	1,254	379	287	230	130	47	12	2	4	1	162
Intracranial and spinal injury at birth-----760	1,183	45	60	107	132	177	250	172	73	36	131
Without mention of immaturity (.0)-----	885	2	5	30	68	158	244	171	72	36	99
With immaturity (.5)-----	298	43	55	77	64	19	6	1	1	-	32
Other birth injury-----761	1,529	348	236	178	112	126	143	98	41	33	214
Without mention of immaturity (.0)-----	573	12	4	25	46	98	137	97	38	32	84
With immaturity (.5)-----	956	336	232	153	66	28	6	1	3	1	130
Postnatal asphyxia and atelectasis-----762	2,983	405	436	528	462	315	276	156	61	21	323
Without mention of immaturity (.0)-----	1,166	14	32	78	185	264	257	148	46	21	121
With immaturity (.5)-----	1,817	391	404	450	277	51	19	8	15	-	202
Pneumonia of newborn-----763	708	10	58	76	92	104	140	85	30	19	94
Without mention of immaturity (.0)-----	512	1	6	17	51	94	132	83	29	19	80
With immaturity (.5)-----	196	9	52	59	41	10	8	2	1	-	14
Diarrhea of newborn-----764	143	-	8	23	21	25	31	15	7	-	13
Without mention of immaturity (.0)-----	93	-	-	3	7	23	31	15	4	-	10
With immaturity (.5)-----	50	-	8	20	14	2	-	-	3	-	3
Other infections of newborn-----765-768	63	1	3	10	8	9	9	7	2	3	11
Without mention of immaturity (.0)-----	46	-	2	2	4	9	9	7	2	3	8
With immaturity (.5)-----	17	1	1	8	4	-	-	-	-	-	3
Neonatal disorders arising from maternal toxemia-----769	292	47	48	52	36	21	17	14	4	2	51
Without mention of immaturity (.0-.4)-----	77	1	2	4	14	18	12	12	4	2	8
With immaturity (.5-.9)-----	215	46	46	48	22	3	5	2	-	-	43
Hemolytic disease of newborn (erythroblastosis)---770	530	14	26	48	78	114	118	64	22	1	45
Without mention of immaturity (.0-.2)-----	412	-	4	23	50	103	117	64	19	1	31
With immaturity (.5-.7)-----	118	14	22	25	28	11	1	-	3	-	14
Hemorrhagic disease of newborn-----771	202	10	11	23	36	22	39	31	11	2	17
Without mention of immaturity (.0)-----	142	2	1	7	22	20	39	31	10	2	8
With immaturity (.5)-----	60	8	10	16	14	2	-	-	1	-	9
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	672	147	124	85	72	45	40	26	10	8	115
Without mention of immaturity (.0)-----	190	-	7	9	24	26	35	22	8	6	53
With immaturity (.5)-----	482	147	117	76	48	19	5	4	2	2	62
Immaturity with mention of any other subsidiary condition-----774	193	30	45	52	25	14	3	1	-	1	22
Immaturity unqualified-----776	4,810	1,677	1,176	652	270	65	29	16	12	8	905
Symptoms and ill-defined conditions-----780-795	521	11	13	18	54	71	106	71	28	25	124
All other diseases-----Residual	586	10	17	29	76	107	121	92	25	17	92
Accidents-----E800-E962	178	2	3	9	24	34	41	22	3	3	37
Homicide-----E964,E980-E999	21	-	-	-	-	2	1	-	-	-	18

TABLE 16. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 279)

RACE, SEX, AND CAUSE OF DEATH	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	Not stated
ALL RACES, MALE-----All causes	9,751	1,451	1,352	1,267	1,094	959	1,102	719	276	136	1,395
Congenital malformations-----750-759	1,178	5	42	94	170	217	283	141	58	25	143
Certain diseases of early infancy-----760-776	7,798	1,432	1,293	1,139	834	623	662	459	175	80	1,101
Birth injuries-----760,761	1,646	207	183	177	176	181	244	178	72	38	190
Without mention of immaturity (.0)-----	897	11	5	34	78	150	235	178	71	37	98
With immaturity (.5)-----	749	196	178	143	98	31	9	-	1	1	92
Intracranial and spinal injury at birth-----760	760	32	35	71	97	111	159	114	49	19	73
Without mention of immaturity (.0)-----	559	1	1	20	47	98	154	114	49	19	56
With immaturity (.5)-----	201	31	34	51	50	13	5	-	-	-	17
Other birth injury-----761	886	175	149	106	79	70	85	64	23	19	117
Without mention of immaturity (.0)-----	338	10	4	14	31	52	81	64	22	18	42
With immaturity (.5)-----	548	165	144	92	48	18	4	-	1	1	75
Postnatal asphyxia and atelectasis-----762	1,828	219	267	342	289	202	164	107	44	14	180
Without mention of immaturity (.0)-----	704	5	15	51	104	166	152	100	33	14	64
With immaturity (.5)-----	1,124	214	252	291	185	36	12	7	11	-	116
Pneumonia of newborn-----763	396	4	26	44	44	61	85	55	15	12	50
Without mention of immaturity (.0)-----	292	-	4	12	23	55	79	53	14	12	40
With immaturity (.5)-----	104	4	22	32	21	6	6	2	1	-	10
Diarrhea of newborn-----764	90	-	2	14	10	19	18	12	6	-	9
Without mention of immaturity (.0)-----	61	-	-	1	3	17	18	12	4	-	6
With immaturity (.5)-----	29	-	2	13	7	2	-	-	2	-	3
Other infections of newborn-----765-768	30	-	1	5	3	6	3	2	1	3	6
Without mention of immaturity (.0)-----	25	-	1	1	2	6	3	2	1	3	6
With immaturity (.5)-----	5	-	-	4	1	-	-	-	-	-	-
Neonatal disorders arising from maternal toxemia--769	171	25	25	30	25	15	8	9	3	-	31
Without mention of immaturity (.0-.4)-----	46	1	-	4	7	12	6	9	3	-	4
With immaturity (.5-.9)-----	125	24	25	26	18	3	2	-	-	-	27
Hemolytic disease of newborn (erythroblastosis)---770	299	8	11	26	43	64	66	46	12	1	22
Without mention of immaturity (.0-.2)-----	234	-	1	10	28	57	66	46	10	1	15
With immaturity (.5-.7)-----	65	8	10	16	15	7	-	-	2	-	7
Hemorrhagic disease of newborn-----771	124	7	7	16	23	5	26	20	9	1	10
Without mention of immaturity (.0)-----	80	-	-	4	13	4	26	20	8	1	4
With immaturity (.5)-----	44	7	7	12	10	1	-	-	1	-	6
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	380	74	67	47	42	22	28	17	7	5	71
Without mention of immaturity (.0)-----	110	-	3	5	11	13	24	14	5	3	32
With immaturity (.5)-----	270	74	64	42	31	9	4	3	2	2	39
Immaturity with mention of any other subsidiary condition-----774	105	13	20	32	14	10	2	-	-	-	14
Immaturity unqualified-----776	2,729	875	684	406	165	38	18	13	6	6	518
Symptoms and ill-defined conditions-----780-795	296	6	5	11	32	34	60	45	19	17	67
All other diseases-----Residual	356	7	10	17	42	61	73	59	23	11	53
Accidents-----E800-E962	111	1	2	6	16	22	24	15	1	3	21
Homicide-----E964,E980-E999	12	-	-	-	-	2	-	-	-	-	10

TABLE 16. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950--Continued

(See headnote on p. 279)

RACE, SEX, AND CAUSE OF DEATH	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	Not stated
ALL RACES, FEMALE-----All causes	6,990	1,331	1,003	804	718	707	744	396	147	80	1,060
Congenital malformations-----750-759	949	20	49	87	144	198	199	104	36	12	100
Certain diseases of early infancy-----760-776	5,510	1,302	938	695	510	414	433	226	98	54	840
Birth injuries-----760,761	1,066	186	113	108	68	122	149	92	42	31	155
Without mention of immaturity (.0)-----	561	3	4	21	36	106	146	90	39	31	85
With immaturity (.5)-----	505	183	109	87	32	16	3	2	3	-	70
Intracranial and spinal injury at birth-----760	423	13	25	36	35	66	91	58	24	17	58
Without mention of immaturity (.0)-----	326	1	4	10	21	60	90	57	23	17	43
With immaturity (.5)-----	97	12	21	26	14	6	1	1	1	-	15
Other birth injury-----761	643	173	88	72	33	56	58	34	18	14	97
Without mention of immaturity (.0)-----	235	2	-	11	15	46	56	33	16	14	42
With immaturity (.5)-----	408	171	88	61	18	10	2	1	2	-	55
Postnatal asphyxia and atelectasis-----762	1,155	186	169	186	173	113	112	49	17	7	143
Without mention of immaturity (.0)-----	462	9	17	27	81	98	105	48	13	7	57
With immaturity (.5)-----	693	177	152	159	92	15	7	1	4	-	86
Pneumonia of newborn-----763	312	6	32	32	48	43	55	30	15	7	44
Without mention of immaturity (.0)-----	220	1	2	5	29	38	53	30	15	7	40
With immaturity (.5)-----	92	5	30	27	20	4	2	-	-	-	4
Diarrhea of newborn-----764	53	-	6	9	11	6	13	3	1	-	4
Without mention of immaturity (.0)-----	32	-	-	2	4	6	13	3	-	-	4
With immaturity (.5)-----	21	-	6	7	7	-	-	-	1	-	-
Other infections of newborn-----765-768	33	1	2	5	5	3	6	5	1	-	5
Without mention of immaturity (.0)-----	21	-	1	1	2	3	6	5	1	-	2
With immaturity (.5)-----	12	1	1	4	3	-	-	-	-	-	3
Neonatal disorders arising from maternal toxemia--769	121	22	23	22	11	6	9	5	1	2	20
Without mention of immaturity (.0-.4)-----	31	-	2	-	7	6	6	3	1	2	4
With immaturity (.5-.9)-----	90	22	21	22	4	-	3	2	-	-	16
Hemolytic disease of newborn (erythroblastosis)---770	231	6	15	22	35	50	52	18	10	-	23
Without mention of immaturity (.0-.2)-----	178	-	3	13	22	46	51	18	9	-	16
With immaturity (.5-.7)-----	53	6	12	9	13	4	1	-	1	-	7
Hemorrhagic disease of newborn-----771	78	3	4	7	13	17	13	11	2	1	7
Without mention of immaturity (.0)-----	62	2	1	3	9	16	13	11	2	1	4
With immaturity (.5)-----	16	1	3	4	4	1	-	-	-	-	3
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	292	73	57	38	30	23	12	9	3	3	44
Without mention of immaturity (.0)-----	80	-	4	4	13	13	11	8	3	3	21
With immaturity (.5)-----	212	73	53	34	17	10	1	1	-	-	23
Immaturity with mention of any other subsidiary condition-----774	88	17	25	20	11	4	1	1	-	1	8
Immaturity unqualified-----776	2,091	802	492	246	105	27	11	3	6	2	387
Symptoms and ill-defined conditions-----780-795	225	5	8	7	22	37	46	26	9	8	57
All other diseases-----Residual	230	3	7	12	34	46	48	33	2	6	39
Accidents-----E800-E962	67	1	1	3	8	12	17	7	2	-	16
Homicide-----E964,E980-E999	9	-	-	-	-	-	1	-	-	-	8

TABLE 16. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 279)

RACE, SEX, AND CAUSE OF DEATH	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	Not stated
WHITE, BOTH SEXES-----All causes	13,521	2,325	1,955	1,722	1,495	1,352	1,511	872	332	138	1,819
Congenital malformations-----750-759	1,930	24	80	172	286	376	447	222	83	29	211
Certain diseases of early infancy-----760-776	10,783	2,288	1,857	1,519	1,109	833	886	538	221	91	1,441
Birth injuries-----760,761	2,327	361	270	257	215	244	331	223	93	51	282
Without mention of immaturity (.0)-----	1,187	12	7	47	95	201	321	221	90	50	143
With immaturity (.5)-----	1,140	349	263	210	120	43	10	2	3	1	139
Intracranial and spinal injury at birth-----760	969	32	48	94	114	144	210	145	59	25	98
Without mention of immaturity (.0)-----	722	1	3	24	57	127	205	144	58	25	78
With immaturity (.5)-----	247	31	45	70	57	17	5	1	1	-	20
Other birth injury-----761	1,358	329	222	163	101	100	121	78	34	26	184
Without mention of immaturity (.0)-----	465	11	4	23	38	74	116	77	32	25	65
With immaturity (.5)-----	893	318	218	140	63	26	5	1	2	1	119
Postnatal asphyxia and atelectasis-----762	2,504	318	364	474	417	267	227	130	54	14	239
Without mention of immaturity (.0)-----	957	11	23	67	158	221	213	124	40	14	86
With immaturity (.5)-----	1,547	307	341	407	259	46	14	6	14	-	153
Pneumonia of newborn-----763	503	8	47	54	67	73	99	62	21	16	56
Without mention of immaturity (.0)-----	352	-	4	9	36	66	96	61	20	16	44
With immaturity (.5)-----	151	8	43	45	31	7	3	1	1	-	12
Diarrhea of newborn-----764	103	-	6	13	16	19	22	11	6	-	10
Without mention of immaturity (.0)-----	69	-	-	3	6	17	22	11	3	-	7
With immaturity (.5)-----	34	-	6	10	10	2	-	-	3	-	3
Other infections of newborn-----765-768	39	-	1	5	7	7	5	5	2	1	6
Without mention of immaturity (.0)-----	30	-	-	2	4	7	5	5	2	1	4
With immaturity (.5)-----	9	-	1	3	3	-	-	-	-	-	2
Neonatal disorders arising from maternal toxemia--769	246	43	43	46	28	17	11	10	4	1	43
Without mention of immaturity (.0-.4)-----	58	1	1	2	12	15	9	8	4	1	5
With immaturity (.5-.9)-----	188	42	42	44	16	2	2	2	-	-	38
Hemolytic disease of newborn (erythroblastosis)---770	496	14	24	45	73	106	113	57	21	1	42
Without mention of immaturity (.0-.2)-----	380	-	3	20	46	95	112	57	18	1	28
With immaturity (.5-.7)-----	116	14	21	25	27	11	1	-	3	-	14
Hemorrhagic disease of newborn-----771	150	10	9	18	24	18	30	18	8	1	14
Without mention of immaturity (.0)-----	100	2	1	4	14	16	30	18	7	1	7
With immaturity (.5)-----	50	8	8	14	10	2	-	-	1	-	7
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	471	122	100	57	51	23	26	13	5	2	72
Without mention of immaturity (.0)-----	98	-	5	4	10	14	23	10	4	2	26
With immaturity (.5)-----	373	122	95	53	41	9	3	3	1	-	46
Immaturity with mention of any other subsidiary condition-----774	167	26	40	44	21	13	3	1	-	1	18
Immaturity unqualified-----776	3,777	1,386	953	506	190	46	19	8	7	3	659
Symptoms and ill-defined conditions-----780-795	210	4	4	5	23	34	53	23	7	3	54
All other diseases-----Residual	448	9	12	19	59	88	88	71	20	12	70
Accidents-----E800-E962	132	-	2	7	18	20	37	18	1	3	26
Homicide-----E964, E980-E999	18	-	-	-	-	1	-	-	-	-	17

TABLE 16. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950--Continued

(See headnote on p. 279)

RACE, SEX, AND CAUSE OF DEATH	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	Not stated
WHITE, MALE-----All causes	7,952	1,207	1,161	1,068	924	779	912	565	219	83	1,034
Congenital malformations-----750-759	1,055	5	36	89	157	193	260	124	52	19	120
Certain diseases of early infancy-----760-776	6,411	1,194	1,114	960	708	512	542	365	143	52	821
Birth injuries-----760,761	1,420	192	170	159	156	148	206	143	59	30	157
Without mention of immaturity (.0)-----	736	10	5	29	65	120	199	143	58	29	78
With immaturity (.5)-----	684	182	165	130	91	28	7	-	1	1	79
Intracranial and spinal injury at birth-----760	628	24	28	61	84	94	131	94	40	15	57
Without mention of immaturity (.0)-----	462	1	1	16	39	83	127	94	40	15	46
With immaturity (.5)-----	166	23	27	45	45	11	4	-	-	-	11
Other birth injury-----761	792	168	142	98	72	54	75	49	19	15	100
Without mention of immaturity (.0)-----	274	9	4	13	26	37	72	49	18	14	32
With immaturity (.5)-----	518	159	138	85	46	17	3	-	1	1	68
Postnatal asphyxia and atelectasis-----762	1,575	174	236	312	269	173	140	94	39	8	130
Without mention of immaturity (.0)-----	596	4	12	44	93	141	131	88	29	8	46
With immaturity (.5)-----	979	170	224	268	176	32	9	6	10	-	84
Pneumonia of newborn-----763	291	4	22	31	34	48	60	42	12	9	29
Without mention of immaturity (.0)-----	208	-	2	7	17	44	57	41	11	9	20
With immaturity (.5)-----	83	4	20	24	17	4	3	1	1	-	9
Diarrhea of newborn-----764	66	-	2	7	9	15	11	10	5	-	7
Without mention of immaturity (.0)-----	44	-	-	1	2	13	11	10	3	-	4
With immaturity (.5)-----	22	-	2	6	7	2	-	-	2	-	3
Other infections of newborn-----765-768	18	-	-	3	3	4	3	1	1	1	2
Without mention of immaturity (.0)-----	15	-	-	1	2	4	3	1	1	1	2
With immaturity (.5)-----	3	-	-	2	1	-	-	-	-	-	-
Neonatal disorders arising from maternal toxemia--769	141	22	21	27	18	12	6	6	3	-	26
Without mention of immaturity (.0-.4)-----	35	1	-	2	5	10	6	6	3	-	2
With immaturity (.5-.9)-----	106	21	21	25	13	2	-	-	-	-	24
Hemolytic disease of newborn (erythroblastosis)---770	280	8	9	25	42	60	62	42	11	1	20
Without mention of immaturity (.0-.2)-----	217	-	-	9	28	53	62	42	9	1	13
With immaturity (.5-.7)-----	63	8	9	16	14	7	-	-	2	-	7
Hemorrhagic disease of newborn-----771	91	7	5	12	17	2	20	13	6	-	9
Without mention of immaturity (.0)-----	53	-	1	10	1	20	13	5	-	-	3
With immaturity (.5)-----	38	7	5	11	7	1	-	-	1	-	6
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	271	61	57	32	32	10	21	7	4	-	47
Without mention of immaturity (.0)-----	58	-	2	2	4	7	19	5	3	-	16
With immaturity (.5)-----	213	61	55	30	28	3	2	2	1	-	31
Immaturity with mention of any other subsidiary condition-----774	89	12	19	26	11	9	2	-	-	-	10
Immaturity unqualified-----776	2,169	714	573	326	117	31	11	7	3	3	384
Symptoms and ill-defined conditions-----780-795	114	2	2	3	15	13	30	14	5	2	28
All other diseases-----Residual	276	6	7	10	32	48	58	48	18	7	42
Accidents-----E800-E962	85	-	2	6	12	12	22	14	1	3	13
Homicide-----E964, E980-E999	11	-	-	-	-	1	-	-	-	-	10

TABLE 16. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 279)

RACE, SEX, AND CAUSE OF DEATH	Total	BIRTH WEIGHT (IN GRAMS)									Not stated
		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	
NONWHITE, BOTH SEXES-----All causes	3,220	457	400	349	317	314	335	243	91	78	636
Congenital malformations-----750-759	197	1	11	9	28	39	35	23	11	8	32
Certain diseases of early infancy-----760-776	2,525	446	374	315	235	204	209	147	52	43	500
Birth injuries-----760,761	385	32	26	28	29	59	62	47	21	18	63
Without mention of immaturity (.0)-----	271	2	2	8	19	55	60	47	20	18	40
With immaturity (.5)-----	114	30	24	20	10	4	2	-	1	-	23
Intracranial and spinal injury at birth-----760	214	13	12	13	18	33	40	27	14	11	33
Without mention of immaturity (.0)-----	163	1	2	6	11	31	39	27	14	11	21
With immaturity (.5)-----	51	12	10	7	7	2	1	-	-	-	12
Other birth injury-----761	171	19	14	15	11	26	22	20	7	7	30
Without mention of immaturity (.0)-----	108	1	-	2	8	24	21	20	6	7	19
With immaturity (.5)-----	63	18	14	13	3	2	1	-	1	-	11
Postnatal asphyxia and atelectasis-----762	479	87	72	54	45	48	49	26	7	7	84
Without mention of immaturity (.0)-----	209	3	9	11	27	43	44	24	6	7	35
With immaturity (.5)-----	270	84	63	43	18	5	5	2	1	-	49
Pneumonia of newborn-----763	205	2	11	22	25	31	41	23	9	3	38
Without mention of immaturity (.0)-----	160	1	2	8	15	28	36	22	9	3	36
With immaturity (.5)-----	45	1	9	14	10	3	5	1	-	-	2
Diarrhea of newborn-----764	40	-	2	10	5	6	9	4	1	-	3
Without mention of immaturity (.0)-----	24	-	-	-	1	6	9	4	1	-	3
With immaturity (.5)-----	16	-	2	10	4	-	-	-	-	-	-
Other infections of newborn-----765-768	24	1	2	5	1	2	4	2	-	2	5
Without mention of immaturity (.0)-----	16	-	2	-	-	2	4	2	-	2	4
With immaturity (.5)-----	8	1	-	5	1	-	-	-	-	-	1
Neonatal disorders arising from maternal toxemia--769	46	4	5	6	8	4	6	4	-	1	8
Without mention of immaturity (.0-.4)-----	19	-	1	2	2	3	3	4	-	1	3
With immaturity (.5-.9)-----	27	4	4	4	6	1	3	-	-	-	5
Hemolytic disease of newborn (erythroblastosis)---770	34	-	2	3	5	8	5	7	1	-	3
Without mention of immaturity (.0-.2)-----	32	-	1	3	4	8	5	7	1	-	3
With immaturity (.5-.7)-----	2	-	1	-	1	-	-	-	-	-	-
Hemorrhagic disease of newborn-----771	52	-	2	5	12	4	9	13	3	1	3
Without mention of immaturity (.0)-----	42	-	-	3	8	4	9	13	3	1	1
With immaturity (.5)-----	10	-	2	2	4	-	-	-	-	-	2
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	201	25	24	28	21	22	14	13	5	6	43
Without mention of immaturity (.0)-----	92	-	2	5	14	12	12	12	4	4	27
With immaturity (.5)-----	109	25	22	23	7	10	2	1	1	2	16
Immaturity with mention of any other subsidiary condition-----774	26	4	5	8	4	1	-	-	-	-	4
Immaturity unqualified-----776	1,033	291	223	146	80	19	10	8	5	5	246
Symptoms and ill-defined conditions-----780-795	311	7	9	13	31	37	53	48	21	22	70
All other diseases-----Residual	138	1	5	10	17	19	33	21	5	5	22
Accidents-----E800-E962	46	2	1	2	6	14	4	4	2	-	11
Homicide-----E964,E980-E999	3	-	-	-	-	1	1	-	-	-	1

TABLE 16. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 279)

RACE, SEX, AND CAUSE OF DEATH	Total	BIRTH WEIGHT (IN GRAMS)									Not stated
		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	
NONWHITE, MALE-----All causes	1,799	244	191	199	170	180	190	154	57	53	361
Congenital malformations-----750-759	123	-	6	5	13	24	23	17	6	6	23
Certain diseases of early infancy-----760-776	1,387	238	179	179	126	111	120	94	32	28	280
Birth injuries-----760,761	226	15	13	18	20	33	38	35	13	8	33
Without mention of immaturity (.0)-----	161	1	-	5	13	30	36	35	13	8	20
With immaturity (.5)-----	65	14	13	13	7	3	2	-	-	-	13
Intracranial and spinal injury at birth-----760	132	8	7	10	13	17	28	20	9	4	16
Without mention of immaturity (.0)-----	97	-	-	4	8	15	27	20	9	4	10
With immaturity (.5)-----	35	8	7	6	5	2	1	-	-	-	6
Other birth injury-----761	94	7	6	8	7	16	10	15	4	4	17
Without mention of immaturity (.0)-----	64	1	-	1	5	15	9	15	4	4	10
With immaturity (.5)-----	30	6	6	7	2	1	1	-	-	-	7
Postnatal asphyxia and atelectasis-----762	253	45	31	30	20	29	24	13	5	6	50
Without mention of immaturity (.0)-----	108	1	3	7	11	25	21	12	4	6	18
With immaturity (.5)-----	145	44	28	23	9	4	3	1	1	1	32
Pneumonia of newborn-----763	105	-	4	13	10	13	25	13	3	3	21
Without mention of immaturity (.0)-----	84	-	2	5	6	11	22	12	3	3	20
With immaturity (.5)-----	21	-	2	8	4	2	3	1	-	-	1
Diarrhea of newborn-----764	24	-	-	7	1	4	7	2	1	-	2
Without mention of immaturity (.0)-----	17	-	-	-	1	4	7	2	1	-	2
With immaturity (.5)-----	7	-	-	7	-	-	-	-	-	-	-
Other infections of newborn-----765-768	12	-	1	2	-	2	-	1	-	2	4
Without mention of immaturity (.0)-----	10	-	1	-	-	2	-	1	-	2	4
With immaturity (.5)-----	2	-	-	2	-	-	-	-	-	-	-
Neonatal disorders arising from maternal toxemia--769	30	3	4	3	7	3	2	3	-	-	5
Without mention of immaturity (.0-.4)-----	11	-	-	2	2	2	-	3	-	-	2
With immaturity (.5-.9)-----	19	3	4	1	5	1	2	-	-	-	3
Hemolytic disease of newborn (erythroblastosis)---770	19	-	2	1	1	4	4	4	1	-	2
Without mention of immaturity (.0-.2)-----	17	-	1	1	-	4	4	4	1	-	2
With immaturity (.5-.7)-----	2	-	1	-	1	-	-	-	-	-	-
Hemorrhagic disease of newborn-----771	33	-	2	4	6	3	6	7	3	1	1
Without mention of immaturity (.0)-----	27	-	-	3	3	3	6	7	3	1	1
With immaturity (.5)-----	6	-	2	1	3	-	-	-	-	-	-
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	109	13	10	15	10	12	7	10	3	5	24
Without mention of immaturity (.0)-----	52	-	1	3	7	6	5	9	2	3	16
With immaturity (.5)-----	57	13	9	12	3	6	2	1	1	2	8
Immaturity with mention of any other subsidiary condition-----774	16	1	1	6	3	1	-	-	-	-	4
Immaturity unqualified-----776	560	161	111	80	48	7	7	6	3	3	134
Symptoms and ill-defined conditions-----780-795	182	4	3	8	17	21	30	31	14	15	39
All other diseases-----Residual	80	1	3	7	10	13	15	11	5	4	11
Accidents-----E800-E962	26	1	-	-	4	10	2	1	-	-	8
Homicide-----E964,E980-E999	1	-	-	-	-	1	-	-	-	-	-

TABLE 16. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), RACE, AND SEX: UNITED STATES, JANUARY 1 TO MARCH 31, 1950--Continued

(See headnote on p. 279)

RACE, SEX, AND CAUSE OF DEATH	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	Not stated
NONWHITE, FEMALE-----All causes	1,421	213	209	150	147	134	145	89	34	25	275
Congenital malformations-----750-759	74	1	5	4	15	15	12	6	5	2	9
Certain diseases of early infancy-----760-776	1,138	208	195	136	109	93	89	53	20	15	220
Birth injuries-----760,761	159	17	13	10	9	26	24	12	8	10	30
Without mention of immaturity (.0)-----	110	1	2	3	6	25	24	12	7	10	20
With immaturity (.5)-----	49	16	11	7	3	1	-	-	1	-	10
Intracranial and spinal injury at birth-----760	82	5	5	3	5	16	12	7	5	7	17
Without mention of immaturity (.0)-----	66	1	2	2	3	16	12	7	5	7	11
With immaturity (.5)-----	16	4	3	1	2	-	-	-	-	-	6
Other birth injury-----761	77	12	8	7	4	10	12	5	3	3	13
Without mention of immaturity (.0)-----	44	-	-	1	3	9	12	5	2	3	9
With immaturity (.5)-----	33	12	8	6	1	1	-	-	1	-	4
Postnatal asphyxia and atelectasis-----762	226	42	41	24	25	19	25	13	2	1	34
Without mention of immaturity (.0)-----	101	2	6	4	16	18	23	12	2	1	17
With immaturity (.5)-----	125	40	35	20	9	1	2	1	-	-	17
Pneumonia of newborn-----763	100	2	7	9	15	18	16	10	6	-	17
Without mention of immaturity (.0)-----	76	1	-	3	9	17	14	10	6	-	16
With immaturity (.5)-----	24	1	7	6	6	1	2	-	-	-	1
Diarrhea of newborn-----764	16	-	2	3	4	2	2	2	-	-	1
Without mention of immaturity (.0)-----	7	-	-	-	-	2	2	2	-	-	1
With immaturity (.5)-----	9	-	2	3	4	-	-	-	-	-	-
Other infections of newborn-----765-768	12	1	1	3	1	-	4	1	-	-	1
Without mention of immaturity (.0)-----	6	-	1	-	-	-	4	1	-	-	-
With immaturity (.5)-----	6	1	-	3	1	-	-	-	-	-	1
Neonatal disorders arising from maternal toxemia--769	16	1	1	3	1	1	4	1	-	1	3
Without mention of immaturity (.0-.4)-----	8	-	1	-	-	1	3	1	-	1	1
With immaturity (.5-.9)-----	8	1	-	3	1	-	1	-	-	-	2
Hemolytic disease of newborn (erythroblastosis)---770	15	-	-	2	4	4	1	3	-	-	1
Without mention of immaturity (.0-.2)-----	15	-	-	2	4	4	1	3	-	-	1
With immaturity (.5-.7)-----	-	-	-	-	-	-	-	-	-	-	-
Hemorrhagic disease of newborn-----771	19	-	-	1	6	1	3	6	-	-	2
Without mention of immaturity (.0)-----	15	-	-	-	5	1	3	6	-	-	-
With immaturity (.5)-----	4	-	-	1	1	-	-	-	-	-	2
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	92	12	14	13	11	10	7	3	2	1	19
Without mention of immaturity (.0)-----	40	-	1	2	7	6	7	3	2	1	11
With immaturity (.5)-----	52	12	13	11	4	4	-	-	-	-	8
Immaturity with mention of any other subsidiary condition-----774	10	3	4	2	1	-	-	-	-	-	-
Immaturity unqualified-----776	473	130	112	66	32	12	3	2	2	2	112
Symptoms and ill-defined conditions-----780-795	129	3	6	5	14	16	23	17	7	7	31
All other diseases-----Residual	58	-	2	3	7	6	18	10	-	1	11
Accidents-----E800-E962	20	1	1	2	2	4	2	3	2	-	3
Homicide-----E964, E980-E999	2	-	-	-	-	-	1	-	-	-	1

TABLE 17. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 288)

AGE, RACE, AND CAUSE OF DEATH	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	Not stated
UNDER 1 HOUR—Continued											
NONWHITE-----All causes	288	61	30	17	12	25	27	18	4	9	85
Congenital malformations-----750-759	17	1	1	2	2	2	3	-	1	1	4
Certain diseases of early infancy-----760-776	233	60	26	14	7	19	21	15	2	6	63
Birth injuries-----760,761	54	4	1	4	2	8	9	10	1	4	11
Without mention of immaturity (.0)-----	41	-	-	3	2	8	8	10	1	4	5
With immaturity (.5)-----	13	4	1	1	-	-	1	-	-	-	6
Intracranial and spinal injury at birth-----760	16	1	-	4	1	1	3	2	-	2	2
Without mention of immaturity (.0)-----	12	-	-	3	1	1	3	2	-	2	-
With immaturity (.5)-----	4	1	-	1	-	-	-	-	-	-	2
Other birth injury-----761	38	3	1	-	1	7	6	8	1	2	9
Without mention of immaturity (.0)-----	29	-	-	-	1	7	5	8	1	2	5
With immaturity (.5)-----	9	3	1	-	-	-	1	-	-	-	4
Postnatal asphyxia and atelectasis-----762	49	8	7	1	2	8	10	3	1	-	9
Without mention of immaturity (.0)-----	30	-	3	-	-	6	10	3	1	-	7
With immaturity (.5)-----	19	8	4	1	2	2	-	-	-	-	2
Pneumonia of newborn-----763	-	-	-	-	-	-	-	-	-	-	-
Without mention of immaturity (.0)-----	-	-	-	-	-	-	-	-	-	-	-
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Diarrhea of newborn-----764	-	-	-	-	-	-	-	-	-	-	-
Without mention of immaturity (.0)-----	-	-	-	-	-	-	-	-	-	-	-
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Other infections of newborn-----765-768	1	-	-	-	-	-	1	-	-	-	-
Without mention of immaturity (.0)-----	1	-	-	-	-	-	1	-	-	-	-
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Neonatal disorders arising from maternal toxemia-----769	7	1	1	1	-	-	-	-	-	-	4
Without mention of immaturity (.0-.4)-----	4	-	1	-	-	-	-	-	-	-	3
With immaturity (.5-.9)-----	3	1	-	1	-	-	-	-	-	-	1
Hemolytic disease of newborn (erythroblastosis)-----770	1	-	-	-	-	1	-	-	-	-	-
Without mention of immaturity (.0-.2)-----	1	-	-	-	-	1	-	-	-	-	-
With immaturity (.5-.7)-----	-	-	-	-	-	-	-	-	-	-	-
Hemorrhagic disease of newborn-----771	-	-	-	-	-	-	-	-	-	-	-
Without mention of immaturity (.0)-----	-	-	-	-	-	-	-	-	-	-	-
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Ill-defined diseases peculiar to early infancy, including											
nutritional maladjustment-----772,773	14	4	1	-	-	1	1	2	-	1	4
Without mention of immaturity (.0)-----	8	-	1	-	-	1	1	2	-	-	3
With immaturity (.5)-----	6	4	-	-	-	-	-	-	-	1	1
Immaturity with mention of any other subsidiary condition-----774	4	-	1	-	-	1	-	-	-	-	2
Immaturity unqualified-----776	103	43	15	8	3	-	-	-	-	1	33
Symptoms and ill-defined conditions-----780-795	30	-	3	-	3	2	2	3	1	2	14
All other diseases-----Residual	3	-	-	-	-	1	-	-	-	-	2
Accidents-----E800-E962	4	-	-	1	-	1	-	-	-	-	2
Homicide-----E964,E980-E999	1	-	-	-	-	-	1	-	-	-	-

TABLE 17. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950--Continued

(See headnote on p. 288)

AGE, RACE, AND CAUSE OF DEATH	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	Not stated
1-23 HOURS											
WHITE-----All causes	5,252	1,357	941	705	443	354	368	219	100	23	742
Congenital malformations-----750-759	471	5	24	60	66	90	80	46	25	3	72
Certain diseases of early infancy-----760-776	4,659	1,348	916	636	358	246	264	162	70	19	640
Birth injuries-----760,761	1,018	214	153	123	73	84	117	81	35	10	128
Without mention of immaturity (.0)-----	414	5	2	20	33	64	112	80	35	10	53
With immaturity (.5)-----	604	209	151	103	40	20	5	1	-	-	75
Intracranial and spinal injury at birth-----760	295	17	15	27	31	36	61	51	23	4	30
Without mention of immaturity (.0)-----	222	1	-	7	19	34	59	50	23	4	25
With immaturity (.5)-----	73	16	15	20	12	2	2	1	-	-	5
Other birth injury-----761	723	197	138	96	42	48	56	30	12	6	98
Without mention of immaturity (.0)-----	192	4	2	13	14	30	53	30	12	6	28
With immaturity (.5)-----	531	193	136	83	28	18	3	-	-	-	70
Postnatal asphyxia and atelectasis-----762	1,087	189	188	204	153	93	81	50	22	5	102
Without mention of immaturity (.0)-----	356	9	13	29	53	76	74	48	16	5	33
With immaturity (.5)-----	731	180	175	175	100	17	7	2	6	-	69
Pneumonia of newborn-----763	30	1	6	5	4	3	2	5	1	-	3
Without mention of immaturity (.0)-----	15	-	1	-	3	1	2	5	1	-	2
With immaturity (.5)-----	15	1	5	5	1	2	-	-	-	-	1
Diarrhea of newborn-----764	1	-	-	-	1	-	-	-	-	-	-
Without mention of immaturity (.0)-----	1	-	-	-	1	-	-	-	-	-	-
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Other infections of newborn-----765-768	2	-	-	-	-	-	-	1	-	-	1
Without mention of immaturity (.0)-----	1	-	-	-	-	-	-	1	-	-	-
With immaturity (.5)-----	1	-	-	-	-	-	-	-	-	-	1
Neonatal disorders arising from maternal toxemia-----769	115	24	18	18	13	7	1	3	1	-	30
Without mention of immaturity (.0-.4)-----	20	1	-	1	6	5	1	3	1	-	2
With immaturity (.5-.9)-----	95	23	18	17	7	2	-	-	-	-	28
Hemolytic disease of newborn (erythroblastosis)-----770	145	6	8	8	21	26	43	11	4	-	18
Without mention of immaturity (.0-.2)-----	111	-	-	3	16	21	42	11	4	-	14
With immaturity (.5-.7)-----	34	6	8	5	5	5	1	-	-	-	4
Hemorrhagic disease of newborn-----771	29	3	1	1	6	3	5	6	1	-	3
Without mention of immaturity (.0)-----	17	-	-	-	2	2	5	6	1	-	1
With immaturity (.5)-----	12	3	1	1	4	1	-	-	-	-	2
Ill-defined diseases peculiar to early infancy, including											
nutritional maladjustment-----772,773	199	74	46	24	12	5	8	3	2	2	23
Without mention of immaturity (.0)-----	33	-	2	1	3	5	7	2	1	2	10
With immaturity (.5)-----	166	74	44	23	9	-	1	1	1	-	13
Immaturity with mention of any other subsidiary condition-----774	58	16	17	14	5	1	-	-	-	-	5
Immaturity unqualified-----776	1,975	821	479	239	70	24	7	2	4	2	327
Symptoms and ill-defined conditions-----780-795	39	4	-	2	7	4	9	3	1	1	8
All other diseases-----Residual	66	-	1	5	10	12	13	8	4	-	13
Accidents-----E800-E962	11	-	-	2	2	2	2	-	-	-	3
Homicide-----E964,E980-E999	6	-	-	-	-	-	-	-	-	-	6

TABLE 17 DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950--Continued

(See headnote on p. 288)

AGE, RACE, AND CAUSE OF DEATH	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	Not stated
1-23 HOURS--Continued											
NONWHITE-----All causes	1,153	263	177	126	109	71	80	55	20	24	228
Congenital malformations-----750-759	51	-	5	2	6	9	11	4	4	2	8
Certain diseases of early infancy-----760-776	1,007	258	166	119	92	50	54	41	12	18	197
Birth injuries-----760,761	155	16	13	17	16	19	22	14	7	8	23
Without mention of immaturity (.0)-----	98	1	-	2	11	17	22	14	7	8	16
With immaturity (.5)-----	57	15	13	15	5	2	-	-	-	-	7
Intracranial and spinal injury at birth-----760	78	6	4	7	9	9	14	11	5	5	8
Without mention of immaturity (.0)-----	58	1	-	2	6	8	14	11	5	5	6
With immaturity (.5)-----	20	5	4	5	3	1	-	-	-	-	2
Other birth injury-----761	77	10	9	10	7	10	8	3	2	3	15
Without mention of immaturity (.0)-----	40	-	-	-	5	9	8	3	2	3	10
With immaturity (.5)-----	37	10	9	10	2	1	-	-	-	-	5
Postnatal asphyxia and atelectasis-----762	227	55	32	24	22	14	21	13	4	5	37
Without mention of immaturity (.0)-----	87	3	2	5	13	14	17	11	3	5	14
With immaturity (.5)-----	140	52	30	19	9	-	4	2	1	-	23
Pneumonia of newborn-----763	7	1	1	1	1	1	1	1	-	-	-
Without mention of immaturity (.0)-----	5	1	-	1	1	-	1	1	-	-	-
With immaturity (.5)-----	2	-	1	-	-	1	-	-	-	-	-
Diarrhea of newborn-----764	-	-	-	-	-	-	-	-	-	-	-
Without mention of immaturity (.0)-----	-	-	-	-	-	-	-	-	-	-	-
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Other infections of newborn-----765-768	-	-	-	-	-	-	-	-	-	-	-
Without mention of immaturity (.0)-----	-	-	-	-	-	-	-	-	-	-	-
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Neonatal disorders arising from maternal toxemia-----769	20	3	4	3	1	1	4	2	-	1	1
Without mention of immaturity (.0-.4)-----	8	-	-	1	1	1	2	2	-	1	-
With immaturity (.5-.9)-----	12	3	4	2	-	-	2	-	-	-	1
Hemolytic disease of newborn (erythroblastosis)-----770	8	-	1	1	2	-	2	2	-	-	-
Without mention of immaturity (.0-.2)-----	8	-	1	1	2	-	2	2	-	-	-
With immaturity (.5-.7)-----	-	-	-	-	-	-	-	-	-	-	-
Hemorrhagic disease of newborn-----771	13	-	-	3	3	1	-	4	-	1	1
Without mention of immaturity (.0)-----	10	-	-	2	2	1	-	4	-	1	-
With immaturity (.5)-----	3	-	-	1	1	-	-	-	-	-	1
Ill-defined diseases peculiar to early infancy, including											
nutritional maladjustment-----772,773	54	7	8	10	7	8	2	2	1	1	8
Without mention of immaturity (.0)-----	19	-	-	-	6	5	1	2	1	1	3
With immaturity (.5)-----	35	7	8	10	1	3	1	-	-	-	5
Immaturity with mention of any other subsidiary condition-----774	4	2	1	-	1	-	-	-	-	-	-
Immaturity unqualified-----776	519	174	106	60	39	6	2	3	-	2	127
Symptoms and ill-defined conditions-----780-795	79	5	5	5	9	9	12	8	4	3	19
All other diseases-----Residual	13	-	1	-	2	2	3	1	-	1	3
Accidents-----E800-E962	2	-	-	-	-	1	-	1	-	-	-
Homicide-----E964,E980-E999	1	-	-	-	-	-	-	-	-	-	1

TABLE 17. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950--Continued

(See headnote on p. 288)

AGE, RACE, AND CAUSE OF DEATH	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	Not stated
1 DAY											
WHITE-----All causes	2,040	255	319	331	276	201	197	126	52	24	259
Congenital malformations-----750-759	206	1	11	17	28	41	54	25	3	8	18
Certain diseases of early infancy-----760-776	1,770	252	307	312	241	148	131	90	47	16	226
Birth injuries-----760,761	401	32	45	44	56	54	57	45	21	10	37
Without mention of immaturity (.0)-----	235	3	1	8	24	45	57	44	20	10	23
With immaturity (.5)-----	166	29	44	36	32	9	-	1	1	-	14
Intracranial and spinal injury at birth-----760	197	2	9	18	33	35	40	25	13	6	16
Without mention of immaturity (.0)-----	145	-	-	3	15	30	40	25	13	6	13
With immaturity (.5)-----	52	2	9	15	18	5	-	-	-	-	3
Other birth injury-----761	204	30	36	26	23	19	17	20	8	4	21
Without mention of immaturity (.0)-----	90	3	1	5	9	15	17	19	7	4	10
With immaturity (.5)-----	114	27	35	21	14	4	-	1	1	-	11
Postnatal asphyxia and atelectasis-----762	559	42	79	116	108	65	50	19	13	3	64
Without mention of immaturity (.0)-----	206	-	3	16	41	49	47	17	9	3	21
With immaturity (.5)-----	353	42	76	100	67	16	3	2	4	-	43
Pneumonia of newborn-----763	46	2	1	13	10	3	3	8	2	1	3
Without mention of immaturity (.0)-----	29	-	-	3	7	3	3	8	2	1	2
With immaturity (.5)-----	17	2	1	10	3	-	-	-	-	-	1
Diarrhea of newborn-----764	2	-	-	1	-	1	-	-	-	-	-
Without mention of immaturity (.0)-----	1	-	-	-	-	1	-	-	-	-	-
With immaturity (.5)-----	1	-	-	1	-	-	-	-	-	-	-
Other infections of newborn-----765-768	2	-	-	1	1	-	-	-	-	-	-
Without mention of immaturity (.0)-----	1	-	-	1	-	-	-	-	-	-	-
With immaturity (.5)-----	1	-	-	-	1	-	-	-	-	-	-
Neonatal disorders arising from maternal toxemia-----769	38	3	7	12	5	1	4	3	-	-	3
Without mention of immaturity (.0-.4)-----	9	-	-	1	1	1	3	2	-	-	1
With immaturity (.5-.9)-----	29	3	7	11	4	-	1	1	-	-	2
Hemolytic disease of newborn (erythroblastosis)-----770	55	1	1	12	6	11	6	9	5	-	4
Without mention of immaturity (.0-.2)-----	37	-	-	3	3	10	6	9	4	-	2
With immaturity (.5-.7)-----	18	1	1	9	3	1	-	-	1	-	2
Hemorrhagic disease of newborn-----771	29	2	2	3	3	3	7	3	3	-	3
Without mention of immaturity (.0)-----	23	1	1	1	3	3	7	3	2	-	2
With immaturity (.5)-----	6	1	1	2	-	-	-	-	1	-	1
Ill-defined diseases peculiar to early infancy, including											
nutritional maladjustment-----772,773	65	12	10	12	9	4	1	-	1	-	16
Without mention of immaturity (.0)-----	7	-	-	2	-	1	1	-	1	-	2
With immaturity (.5)-----	58	12	10	10	9	3	-	-	-	-	14
Immaturity with mention of any other subsidiary condition-----774	18	2	2	6	2	1	1	1	-	1	2
Immaturity unqualified-----776	555	156	160	92	41	5	2	2	2	1	94
Symptoms and ill-defined conditions-----780-795	16	-	-	-	-	1	5	5	1	-	4
All other diseases-----Residual	39	2	1	1	7	9	6	6	1	-	6
Accidents-----E800-E962	6	-	-	1	-	2	1	-	-	-	2
Homicide-----E964,E980-E999	3	-	-	-	-	-	-	-	-	-	3

TABLE 17. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950--Continued

(See headnote on p. 288)

AGE, RACE, AND CAUSE OF DEATH	Total	BIRTH WEIGHT (IN GRAMS)									Not stated
		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	
1 DAY--Continued											
NONWHITE-----All causes	430	50	62	52	37	37	38	37	15	15	87
Congenital malformations-----750-759	27	-	2	3	5	1	2	4	2	2	6
Certain diseases of early infancy-----760-776	355	50	60	48	29	28	30	22	11	4	73
Birth injuries-----760,761	76	6	5	4	5	13	11	12	5	2	13
Without mention of immaturity (.0)-----	59	-	1	3	1	13	11	12	5	2	11
With immaturity (.5)-----	17	6	4	1	4	-	-	-	-	-	2
Intracranial and spinal injury at birth-----760	47	2	2	1	3	11	7	6	4	-	11
Without mention of immaturity (.0)-----	39	-	1	1	-	11	7	6	4	-	9
With immaturity (.5)-----	8	2	1	-	3	-	-	-	-	-	2
Other birth injury-----761	29	4	3	3	2	2	4	6	1	2	2
Without mention of immaturity (.0)-----	20	-	-	2	1	2	4	6	1	2	2
With immaturity (.5)-----	9	4	3	1	1	-	-	-	-	-	-
Postnatal asphyxia and atelectasis-----762	77	8	13	12	6	10	9	3	-	1	15
Without mention of immaturity (.0)-----	38	-	1	3	5	10	8	3	-	1	7
With immaturity (.5)-----	39	8	12	9	1	-	1	-	-	-	8
Pneumonia of newborn-----763	10	-	-	2	3	1	2	1	1	-	-
Without mention of immaturity (.0)-----	7	-	-	1	1	1	2	1	1	-	-
With immaturity (.5)-----	3	-	-	1	2	-	-	-	-	-	-
Diarrhea of newborn-----764	1	-	-	-	-	-	1	-	-	-	-
Without mention of immaturity (.0)-----	1	-	-	-	-	-	1	-	-	-	-
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Other infections of newborn-----765-768	-	-	-	-	-	-	-	-	-	-	-
Without mention of immaturity (.0)-----	-	-	-	-	-	-	-	-	-	-	-
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Neonatal disorders arising from maternal toxemia-----769	8	-	-	-	2	2	1	1	-	-	2
Without mention of immaturity (.0-.4)-----	4	-	-	-	-	2	1	1	-	-	-
With immaturity (.5-.9)-----	4	-	-	-	2	-	-	-	-	-	2
Hemolytic disease of newborn (erythroblastosis)-----770	2	-	1	-	-	1	-	-	-	-	-
Without mention of immaturity (.0-.2)-----	1	-	-	-	-	1	-	-	-	-	-
With immaturity (.5-.7)-----	1	-	1	-	-	-	-	-	-	-	-
Hemorrhagic disease of newborn-----771	9	-	-	1	1	-	3	2	1	-	1
Without mention of immaturity (.0)-----	8	-	-	1	1	-	3	2	1	-	-
With immaturity (.5)-----	1	-	-	-	-	-	-	-	-	-	1
Ill-defined diseases peculiar to early infancy, including											
nutritional maladjustment-----772,773	25	3	5	6	2	-	-	1	-	1	7
Without mention of immaturity (.0)-----	11	-	-	3	-	-	-	1	-	1	6
With immaturity (.5)-----	14	3	5	3	2	-	-	-	-	-	1
Immaturity with mention of any other subsidiary condition-----774	2	-	-	1	1	-	-	-	-	-	-
Immaturity unqualified-----776	145	33	36	22	9	1	3	2	4	-	35
Symptoms and ill-defined conditions-----780-795	36	-	-	-	2	4	4	9	2	7	8
All other diseases-----Residual	9	-	-	1	1	2	1	2	-	2	-
Accidents-----E800-E962	3	-	-	-	-	2	1	-	-	-	-
Homicide-----E964,E980-E999	-	-	-	-	-	-	-	-	-	-	-

TABLE 17. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 288)

AGE, RACE, AND CAUSE OF DEATH	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	Not stated
2 DAYS											
WHITE-----All causes	1,388	147	159	222	218	178	173	96	40	14	141
Congenital malformations-----750-759	189	1	1	18	30	39	53	21	8	2	16
Certain diseases of early infancy-----760-776	1,120	143	158	201	178	125	104	64	28	9	110
Birth injuries-----760,761	255	21	23	36	32	31	43	23	13	5	28
Without mention of immaturity (.0)-----	152	-	-	10	13	27	43	23	12	5	19
With immaturity (.5)-----	103	21	23	26	19	4	-	-	1	-	9
Intracranial and spinal injury at birth-----760	167	4	6	22	21	25	37	20	11	4	17
Without mention of immaturity (.0)-----	124	-	-	8	10	22	37	20	10	4	13
With immaturity (.5)-----	43	4	6	14	11	3	-	-	1	-	4
Other birth injury-----761	88	17	17	14	11	6	6	3	2	1	11
Without mention of immaturity (.0)-----	28	-	-	2	3	5	6	3	2	1	6
With immaturity (.5)-----	60	17	17	12	8	1	-	-	-	-	5
Postnatal asphyxia and atelectasis-----762	346	23	30	81	85	47	32	20	6	1	21
Without mention of immaturity (.0)-----	148	-	2	10	33	37	31	19	3	1	12
With immaturity (.5)-----	198	23	28	71	52	10	1	1	3	-	9
Pneumonia of newborn-----763	49	1	2	4	6	13	7	8	1	2	5
Without mention of immaturity (.0)-----	36	-	1	-	3	11	7	8	1	2	3
With immaturity (.5)-----	13	1	1	4	3	2	-	-	-	-	2
Diarrhea of newborn-----764	-	-	-	-	-	-	-	-	-	-	-
Without mention of immaturity (.0)-----	-	-	-	-	-	-	-	-	-	-	-
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Other infections of newborn-----765-768	1	-	-	-	-	1	-	-	-	-	-
Without mention of immaturity (.0)-----	1	-	-	-	-	1	-	-	-	-	-
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Neonatal disorders arising from maternal toxemia-----769	30	4	9	7	3	3	-	3	1	-	-
Without mention of immaturity (.0-.4)-----	8	-	-	-	2	3	-	2	1	-	-
With immaturity (.5-.9)-----	22	4	9	7	1	-	-	1	-	-	-
Hemolytic disease of newborn (erythroblastosis)-----770	76	2	1	4	17	19	17	5	5	-	6
Without mention of immaturity (.0-.2)-----	65	-	-	3	11	19	17	5	5	-	5
With immaturity (.5-.7)-----	11	2	1	1	6	-	-	-	-	-	1
Hemorrhagic disease of newborn-----771	21	1	3	-	5	3	2	4	1	1	1
Without mention of immaturity (.0)-----	14	-	-	-	3	3	2	4	1	1	-
With immaturity (.5)-----	7	1	3	-	2	-	-	-	-	-	1
Ill-defined diseases peculiar to early infancy, including											
nutritional maladjustment-----772,773	38	6	10	5	6	2	2	1	1	-	5
Without mention of immaturity (.0)-----	7	-	-	-	2	-	1	1	1	-	2
With immaturity (.5)-----	31	6	10	5	4	2	1	-	-	-	3
Immaturity with mention of any other subsidiary condition-----774	24	2	6	8	4	1	-	-	-	-	3
Immaturity unqualified-----776	280	83	74	56	20	5	1	-	-	-	41
Symptoms and ill-defined conditions-----780-795	28	-	-	2	4	4	4	3	2	1	8
All other diseases-----Residual	43	3	-	1	5	9	9	7	2	2	5
Accidents-----E800-E962	8	-	-	-	1	1	3	1	-	-	2
Homicide-----E964,E980-E999	-	-	-	-	-	-	-	-	-	-	-

TABLE 17. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950--Continued

(See headnote on p. 288)

AGE, RACE, AND CAUSE OF DEATH	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	Not stated
2 DAYS--Continued											
NONWHITE-----All causes	275	30	32	25	23	29	39	22	14	6	55
Congenital malformations-----750-759	18	-	1	-	4	4	4	1	-	-	4
Certain diseases of early infancy-----760-776	217	29	30	25	16	19	26	16	10	3	43
Birth injuries-----760,761	34	1	3	1	3	4	7	4	5	1	5
Without mention of immaturity (.0)-----	24	-	1	-	3	2	7	4	4	1	2
With immaturity (.5)-----	10	1	2	1	-	2	-	-	1	-	3
Intracranial and spinal injury at birth-----760	23	-	3	-	2	2	6	3	2	1	4
Without mention of immaturity (.0)-----	17	-	1	-	2	1	6	3	2	1	1
With immaturity (.5)-----	6	-	2	-	-	1	-	-	-	-	3
Other birth injury-----761	11	1	-	1	1	2	1	1	3	-	1
Without mention of immaturity (.0)-----	7	-	-	-	1	1	1	1	2	-	1
With immaturity (.5)-----	4	1	-	1	-	1	-	-	1	-	-
Postnatal asphyxia and atelectasis-----762	51	6	11	3	6	6	7	2	1	-	9
Without mention of immaturity (.0)-----	22	-	-	-	5	5	7	2	1	-	2
With immaturity (.5)-----	29	6	11	3	1	1	-	-	-	-	7
Pneumonia of newborn-----763	11	-	1	1	-	2	3	1	-	-	3
Without mention of immaturity (.0)-----	9	-	-	-	-	2	3	1	-	-	3
With immaturity (.5)-----	2	-	1	1	-	-	-	-	-	-	-
Diarrhea of newborn-----764	-	-	-	-	-	-	-	-	-	-	-
Without mention of immaturity (.0)-----	-	-	-	-	-	-	-	-	-	-	-
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Other infections of newborn-----765-768	2	-	-	-	-	-	1	1	-	-	-
Without mention of immaturity (.0)-----	2	-	-	-	-	-	1	1	-	-	-
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Neonatal disorders arising from maternal toxemia-----769	2	-	-	-	1	-	-	-	-	-	1
Without mention of immaturity (.0-.4)-----	1	-	-	-	1	-	-	-	-	-	1
With immaturity (.5-.9)-----	1	-	-	-	-	-	-	-	-	-	-
Hemolytic disease of newborn (erythroblastosis)-----770	4	-	-	1	-	1	-	1	-	-	1
Without mention of immaturity (.0-.2)-----	4	-	-	1	-	1	-	1	-	-	1
With immaturity (.5-.7)-----	-	-	-	-	-	-	-	-	-	-	-
Hemorrhagic disease of newborn-----771	14	-	1	-	-	2	4	4	2	-	1
Without mention of immaturity (.0)-----	13	-	-	-	-	2	4	4	2	-	1
With immaturity (.5)-----	1	-	1	-	-	-	-	-	-	-	-
Ill-defined diseases peculiar to early infancy, including nutritional maladjustment-----772,773	18	4	2	1	-	1	2	2	1	2	3
Without mention of immaturity (.0)-----	9	-	-	-	-	-	2	2	1	1	3
With immaturity (.5)-----	9	4	2	1	-	1	-	-	-	1	-
Immaturity with mention of any other subsidiary condition-----774	1	1	-	-	-	-	-	-	-	-	-
Immaturity unqualified-----776	80	17	12	18	6	3	2	1	1	-	20
Symptoms and ill-defined conditions-----780-795	28	1	-	-	2	6	7	1	3	3	5
All other diseases-----Residual	8	-	1	-	1	-	1	3	-	-	2
Accidents-----E800-E962	4	-	-	-	-	-	1	1	1	-	1
Homicide-----E964,E980-E999	-	-	-	-	-	-	-	-	-	-	-

TABLE 17. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 288)

AGE, RACE, AND CAUSE OF DEATH	Total	BIRTH WEIGHT (IN GRAMS)									Not stated
		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	
3-6 DAYS											
WHITE-----All causes	1,686	140	233	180	228	235	265	158	48	23	176
Congenital malformations-----750-759	349	-	8	22	59	73	83	56	18	3	27
Certain diseases of early infancy-----760-776	1,201	138	222	155	157	134	157	83	26	14	115
Birth injuries-----760,761	248	16	21	23	23	35	48	32	11	10	29
Without mention of immaturity (.0)-----	165	-	2	4	11	32	46	32	10	10	18
With immaturity (.5)-----	83	16	19	19	12	3	2	-	1	-	11
Intracranial and spinal injury at birth-----760	181	7	12	20	17	29	39	27	8	5	17
Without mention of immaturity (.0)-----	131	-	2	4	8	26	37	27	8	5	14
With immaturity (.5)-----	50	7	10	16	9	3	2	-	-	-	3
Other birth injury-----761	67	9	9	3	6	6	9	5	3	5	12
Without mention of immaturity (.0)-----	34	-	-	-	3	6	9	5	2	5	4
With immaturity (.5)-----	33	9	9	3	3	-	-	-	1	-	8
Postnatal asphyxia and atelectasis-----762	226	22	37	35	41	23	32	15	3	1	17
Without mention of immaturity (.0)-----	96	-	1	6	17	21	29	15	2	1	4
With immaturity (.5)-----	130	22	36	29	24	2	3	-	1	-	13
Pneumonia of newborn-----763	115	2	12	9	14	17	24	11	4	3	19
Without mention of immaturity (.0)-----	86	-	-	2	9	17	24	11	4	3	16
With immaturity (.5)-----	29	2	12	7	5	-	-	-	-	-	3
Diarrhea of newborn-----764	3	-	-	-	-	1	1	1	-	-	-
Without mention of immaturity (.0)-----	2	-	-	-	-	-	1	1	-	-	-
With immaturity (.5)-----	1	-	-	-	-	1	-	-	-	-	-
Other infections of newborn-----765-768	15	-	1	2	4	-	3	1	1	-	3
Without mention of immaturity (.0)-----	12	-	-	1	3	-	3	1	1	-	3
With immaturity (.5)-----	3	-	1	1	1	-	-	-	-	-	-
Neonatal disorders arising from maternal toxemia-----769	28	5	6	4	7	4	1	-	-	-	1
Without mention of immaturity (.0-.4)-----	7	-	-	-	3	4	-	-	-	-	-
With immaturity (.5-.9)-----	21	5	6	4	4	-	1	-	-	-	1
Hemolytic disease of newborn (erythroblastosis)-----770	132	1	7	12	18	37	31	18	5	-	3
Without mention of immaturity (.0-.2)-----	107	-	-	5	10	36	31	18	4	-	3
With immaturity (.5-.7)-----	25	1	7	7	8	1	-	-	1	-	-
Hemorrhagic disease of newborn-----771	43	1	2	6	9	6	11	3	2	-	3
Without mention of immaturity (.0)-----	31	1	-	2	5	5	11	3	2	-	2
With immaturity (.5)-----	12	-	2	4	4	1	-	-	-	-	1
Ill-defined diseases peculiar to early infancy, including											
nutritional maladjustment-----772,773	48	7	14	6	9	3	2	1	-	-	6
Without mention of immaturity (.0)-----	7	-	-	1	-	2	1	1	-	-	2
With immaturity (.5)-----	41	7	14	5	9	1	1	-	-	-	4
Immaturity with mention of any other subsidiary condition-----774	22	1	7	3	6	3	-	-	-	-	2
Immaturity unqualified-----776	321	83	115	55	26	5	4	1	-	-	32
Symptoms and ill-defined conditions-----780-795	40	-	1	-	1	10	10	5	2	-	11
All other diseases-----Residual	77	2	2	2	8	17	10	14	2	4	16
Accidents-----E800-E962	19	-	-	1	3	1	5	-	-	2	7
Homicide-----E964, E980-E999	-	-	-	-	-	-	-	-	-	-	-

TABLE 17. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 288)

AGE, RACE, AND CAUSE OF DEATH	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	Not stated
3-6 DAYS—Continued											
NONWHITE-----All causes	474	43	38	53	64	62	54	58	14	12	76
Congenital malformations-----750-759	40	-	2	1	7	9	6	6	1	3	5
Certain diseases of early infancy-----760-776	320	39	34	45	45	35	29	31	4	6	52
Birth injuries-----760,761	44	3	3	1	3	11	12	3	1	2	5
Without mention of immaturity (.0)-----	33	1	-	-	2	11	11	3	1	2	2
With immaturity (.5)-----	11	2	3	1	1	-	-	-	-	-	3
Intracranial and spinal injury at birth-----760	31	2	2	-	3	6	9	3	1	2	3
Without mention of immaturity (.0)-----	24	-	-	-	2	6	8	3	1	2	2
With immaturity (.5)-----	7	2	2	-	1	-	1	-	-	-	1
Other birth injury-----761	13	1	1	1	-	5	3	-	-	-	2
Without mention of immaturity (.0)-----	9	1	-	-	-	5	3	-	-	-	-
With immaturity (.5)-----	4	-	1	1	-	-	-	-	-	-	2
Postnatal asphyxia and atelectasis-----762	52	8	6	8	8	6	1	5	-	1	9
Without mention of immaturity (.0)-----	21	-	1	2	3	5	1	5	-	1	3
With immaturity (.5)-----	31	8	5	6	5	1	-	-	-	-	6
Pneumonia of newborn-----763	58	1	3	8	5	9	10	11	-	1	10
Without mention of immaturity (.0)-----	43	-	-	2	3	8	9	11	-	1	9
With immaturity (.5)-----	15	1	3	6	2	1	1	-	-	-	1
Diarrhea of newborn-----764	2	-	-	-	-	-	1	-	-	-	1
Without mention of immaturity (.0)-----	2	-	-	-	-	-	1	-	-	-	1
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Other infections of newborn-----765-768	9	1	1	2	-	1	-	1	-	2	1
Without mention of immaturity (.0)-----	6	-	1	-	-	1	-	1	-	2	1
With immaturity (.5)-----	3	1	-	-	-	-	-	-	-	-	-
Neonatal disorders arising from maternal toxemia-----769	5	-	-	-	4	-	-	1	-	-	-
Without mention of immaturity (.0-.4)-----	1	-	-	-	-	-	-	1	-	-	-
With immaturity (.5-.9)-----	4	-	-	-	4	-	-	-	-	-	-
Hemolytic disease of newborn (erythroblastosis)-----770	10	-	-	1	1	1	1	3	1	-	2
Without mention of immaturity (.0-.2)-----	10	-	-	1	1	1	1	3	1	-	2
With immaturity (.5-.7)-----	-	-	-	-	-	-	-	-	-	-	-
Hemorrhagic disease of newborn-----771	7	-	-	1	5	-	-	1	-	-	-
Without mention of immaturity (.0)-----	3	-	-	-	2	-	-	1	-	-	-
With immaturity (.5)-----	4	-	-	1	3	-	-	-	-	-	-
Ill-defined diseases peculiar to early infancy, including											
nutritional maladjustment-----772,773	36	5	1	4	6	3	2	4	2	-	9
Without mention of immaturity (.0)-----	21	-	1	1	3	3	2	3	2	-	6
With immaturity (.5)-----	15	5	-	3	3	-	-	1	-	-	3
Immaturity with mention of any other subsidiary condition-----774	6	1	1	2	2	-	-	-	-	-	-
Immaturity unqualified-----776	91	20	19	18	11	4	2	2	-	-	15
Symptoms and ill-defined conditions-----780-795	75	1	1	3	7	11	14	14	7	3	14
All other diseases-----Residual	28	1	1	4	4	3	5	5	2	-	3
Accidents-----E800-E962	11	2	-	-	1	4	-	2	-	-	2
Homicide-----E964,E980-E999	-	-	-	-	-	-	-	-	-	-	-

TABLE 17. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 288)

AGE, RACE, AND CAUSE OF DEATH	Total	BIRTH WEIGHT (IN GRAMS)									Not stated
		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	
7-27 DAYS											
WHITE-----All causes	1,752	47	168	173	224	294	371	188	65	38	184
Congenital malformations-----750-759	469	1	5	19	75	108	141	56	24	11	29
Certain diseases of early infancy-----760-776	950	44	154	143	114	122	141	77	31	19	105
Birth injuries-----760,761	92	3	13	8	8	15	17	9	3	6	10
Without mention of immaturity (.0)-----	59	-	1	2	3	11	17	9	3	6	7
With immaturity (.5)-----	33	3	12	6	5	4	-	-	-	-	3
Intracranial and spinal injury at birth-----760	77	-	6	5	8	15	17	9	3	5	9
Without mention of immaturity (.0)-----	56	-	1	1	3	11	17	9	3	5	6
With immaturity (.5)-----	21	-	5	4	5	4	-	-	-	-	3
Other birth injury-----761	15	3	7	3	-	-	-	-	-	1	1
Without mention of immaturity (.0)-----	3	-	-	1	-	-	-	-	-	1	1
With immaturity (.5)-----	12	3	7	2	-	-	-	-	-	-	-
Postnatal asphyxia and atelectasis-----762	116	4	19	25	16	20	14	9	4	2	3
Without mention of immaturity (.0)-----	64	-	2	6	7	19	14	9	4	2	1
With immaturity (.5)-----	52	4	17	19	9	1	-	-	-	-	2
Pneumonia of newborn-----763	261	2	26	23	33	37	62	30	13	10	25
Without mention of immaturity (.0)-----	184	-	2	4	14	34	59	29	12	10	20
With immaturity (.5)-----	77	2	24	19	19	3	3	1	1	-	5
Diarrhea of newborn-----764	97	-	6	12	15	17	21	10	6	-	10
Without mention of immaturity (.0)-----	65	-	-	3	5	16	21	10	3	-	7
With immaturity (.5)-----	32	-	6	9	10	1	-	-	3	-	3
Other infections of newborn-----765-768	19	-	-	2	2	6	2	3	1	1	2
Without mention of immaturity (.0)-----	15	-	-	-	1	6	2	3	1	1	1
With immaturity (.5)-----	4	-	-	2	1	-	-	-	-	-	1
Neonatal disorders arising from maternal toxemia-----769	4	-	1	2	-	-	-	-	-	-	1
Without mention of immaturity (.0-.4)-----	-	-	-	-	-	-	-	-	-	-	-
With immaturity (.5-.9)-----	4	-	1	2	-	-	-	-	-	-	1
Hemolytic disease of newborn (erythroblastosis)-----770	36	-	2	2	5	7	8	9	1	-	2
Without mention of immaturity (.0-.2)-----	29	-	1	-	3	6	8	9	1	-	1
With immaturity (.5-.7)-----	7	-	1	2	2	1	-	-	-	-	1
Hemorrhagic disease of newborn-----771	21	2	1	6	1	2	4	1	1	-	3
Without mention of immaturity (.0)-----	11	-	-	1	1	2	4	1	1	-	1
With immaturity (.5)-----	10	2	1	5	-	-	-	-	-	-	2
Ill-defined diseases peculiar to early infancy, including											
nutritional maladjustment-----772,773	76	3	14	9	12	8	9	6	1	-	14
Without mention of immaturity (.0)-----	35	-	2	-	4	5	9	5	1	-	9
With immaturity (.5)-----	41	3	12	9	8	3	-	1	-	-	5
Immaturity with mention of any other subsidiary condition-----774	32	2	3	13	2	6	2	-	-	-	4
Immaturity unqualified-----776	196	28	69	41	20	4	2	-	1	-	31
Symptoms and ill-defined conditions-----780-795	63	-	2	1	7	13	19	6	-	1	14
All other diseases-----Residual	183	2	5	7	17	36	44	32	9	6	25
Accidents-----E800-E962	85	-	2	3	11	14	26	17	1	1	10
Homicide-----E964,E980-E999	2	-	-	-	-	1	-	-	-	-	1

TABLE 17. DEATHS UNDER 28 DAYS FROM SELECTED CAUSES, BY BIRTH WEIGHT (UNADJUSTED), AGE, AND RACE: UNITED STATES, JANUARY 1 TO MARCH 31, 1950—Continued

(See headnote on p. 288)

AGE, RACE, AND CAUSE OF DEATH	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	Not stated
7-27 DAYS—Continued											
NONWHITE-----All causes	600	10	61	76	72	90	97	53	24	12	105
Congenital malformations-----750-759	44	-	-	1	4	14	9	8	3	-	5
Certain diseases of early infancy-----760-776	393	10	58	64	46	53	49	22	13	6	72
Birth injuries-----760,761	22	2	1	1	-	4	1	4	2	1	6
Without mention of immaturity (.0)-----	16	-	-	-	-	4	1	4	2	1	4
With immaturity (.5)-----	6	2	1	1	-	-	-	-	-	-	2
Intracranial and spinal injury at birth-----760	19	2	1	1	-	4	1	2	2	1	5
Without mention of immaturity (.0)-----	13	-	-	-	-	4	1	2	2	1	3
With immaturity (.5)-----	6	2	1	1	-	-	-	-	-	-	2
Other birth injury-----761	3	-	-	-	-	-	-	2	-	-	1
Without mention of immaturity (.0)-----	3	-	-	-	-	-	-	2	-	-	1
With immaturity (.5)-----	-	-	-	-	-	-	-	-	-	-	-
Postnatal asphyxia and atelectasis-----762	23	2	3	6	1	4	1	-	1	-	5
Without mention of immaturity (.0)-----	11	-	2	1	1	3	1	-	1	-	2
With immaturity (.5)-----	12	2	1	5	-	1	-	-	-	-	3
Pneumonia of newborn-----763	119	-	6	10	16	18	25	9	8	2	25
Without mention of immaturity (.0)-----	96	-	2	4	10	17	21	8	8	2	24
With immaturity (.5)-----	23	-	4	6	6	1	4	1	1	-	1
Diarrhea of newborn-----764	37	-	2	10	5	6	7	4	1	-	2
Without mention of immaturity (.0)-----	21	-	-	-	1	6	7	4	1	-	2
With immaturity (.5)-----	16	-	2	10	4	-	-	-	-	-	-
Other infections of newborn-----765-768	12	-	1	3	1	1	2	-	-	-	4
Without mention of immaturity (.0)-----	7	-	1	-	-	1	2	-	-	-	3
With immaturity (.5)-----	5	-	-	3	1	-	-	-	-	-	1
Neonatal disorders arising from maternal toxemia-----769	4	-	-	2	-	1	1	-	-	-	-
Without mention of immaturity (.0-.4)-----	1	-	-	1	-	-	-	-	-	-	-
With immaturity (.5-.9)-----	3	-	-	1	-	1	1	-	-	-	-
Hemolytic disease of newborn (erythroblastosis)-----770	9	-	-	-	2	4	2	1	-	-	-
Without mention of immaturity (.0-.2)-----	8	-	-	-	1	4	2	1	-	-	-
With immaturity (.5-.7)-----	1	-	-	-	1	-	-	-	-	-	-
Hemorrhagic disease of newborn-----771	9	-	1	-	3	1	2	2	-	-	-
Without mention of immaturity (.0)-----	8	-	-	-	3	1	2	2	-	-	-
With immaturity (.5)-----	1	-	1	-	-	-	-	-	-	-	-
Ill-defined diseases peculiar to early infancy, including											
nutritional maladjustment-----772,773	54	2	7	7	6	9	7	2	1	1	12
Without mention of immaturity (.0)-----	24	-	-	1	5	3	6	2	-	1	6
With immaturity (.5)-----	30	2	7	6	1	6	1	1	1	-	6
Immaturity with mention of any other subsidiary condition-----774	9	-	2	5	-	-	-	-	-	-	2
Immaturity unqualified-----776	95	4	35	20	12	5	1	-	-	2	16
Symptoms and ill-defined conditions-----780-795	63	-	-	5	8	5	14	13	4	4	10
All other diseases-----Residual	77	-	2	5	9	11	23	10	3	2	12
Accidents-----E800-E962	22	-	1	1	5	6	2	-	1	-	6
Homicide-----E964,E980-E999	1	-	-	-	-	1	-	-	-	-	-

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