FACTS ABOUT CHILD HEALTH

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Births

In 1939, the latest year for which figures are available, 2,265,588 infants were born alive in the United States. This is a birth rate of 17.3 per 1,000 estimated population. In 1915, when the birth-registration area was first established, the birth rate was 25.1.

The trend in the birth rate in the United States has been downward for many years. The decline reached its low point in 1933, when the rate was 16.5.

	Births	Birth rate
1933	2,081,232	16.5
1934	2,167,636	17.1
1935	2,155,105	16.9
1936	2,144,790	16.7
1937	2,203,337	17.0
1938	2,286,962	17.6
1939	2,265,588	17.3

Children and youth in the United States

Preliminary figures from the 1940 census, based on a 5 percent cross section of the returns, show 45,461,179 persons under 20 years of age in the United States, grouped as follows:

Under 5 years of age	10,597,891
5 to 9 years	10,725,873
10 to 14 years	11,790,934
15 to 19 years	12.346.481

Children under 20 comprise slightly more than one-third of the total population; those under 15 comprise one-fourth. The White House Conference on Children in a Democracy (1940) stated: "For numbers alone, if for no other reason, these voteless fellow citizens who hold the national future in their bodies and minds are necessarily a first interest of the Nation."

Fewer children

Children and youth represented a smaller proportion of the population in 1940 than in earlier years. In 1900, 44 percent of the entire population was under 20 years of age; in 1930, 39; and in 1940, 34 percent.

Distribution of children

The number of children in proportion to the number of adults in the productive age groups varies greatly among the States and among the regions of the country. The latest available data (1930 census) shows that among the geographic regions the number of children under 15 years of age per 1,000 adults 20-64 years of age varied as follows:

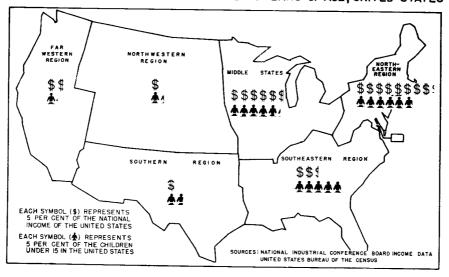
Far West	378	Northwest	569
Northeast	475	Southwest	623
Middle	482	Southeast	696

The number of children of school age in relation to adults 20-64 years of age is lowest in cities of 100,000 or more and is also low in small cities. It is higher in rural nonfarm areas than in cities and highest in farm areas.

In some parts of the country the supporting group carries responsibility for young dependents more than twice as great as that in other areas. Counties having an extremely high ratio of children to adults are located, in the main, in the southeastern States. For the most part areas with the lowest level of income carry the greatest responsibility for child nurture and education.

In every region of the United States except the Far West the farm population has a percentage of children of school age far in excess of its percentage of the national income. Since the dominant feature of migration within the United States in recent years has been the movement from farms to cities, it is as important to cities as to rural areas that children in rural areas receive adequate care.

NATIONAL INCOME AND CHILDREN UNDER 15 YEARS OF AGE; UNITED STATES



Child health, growth, and development

The health, growth, and development of the child depend upon heredity and environment.



Heredity determines certain characteristics, such as the color of the eyes and hair. Heredity is also a factor in the size of the child. Short, stocky parents should not worry because their child is not so tall as one whose parents are tall and slender. Heredity plays a role in many other ways.

Environment begins to influence the baby long before he is born. In order to provide the best possible environment before birth it is necessary to protect the mother's health, to be sure that she has proper food, exercise, and rest and that she is under the supervision of a physician who will early recognize any abnormalities and take the necessary steps to correct them. He will then know in advance whether any difficulties may be expected when the baby is born and will be prepared to meet them. If these precautions are taken the baby should start out in life with a well-developed body and without injuries resulting from a difficult birth.

Good environment after birth includes the general surroundings, fresh air, warmth, sunshine, quiet, freedom from crowding, and cleanliness. These are all important, but a good environment also includes proper food, provision for the formation of good habits in eating, sleeping, and elimination, as well as protection against certain diseases, correction of physical defects, training, and education. It is only when we keep all these factors of environment at the best possible level that we are doing all that can be done to promote the physical and mental health of the child.

For the young infant "proper food" means his mother's milk, if possible, or cow's milk (made safe by boiling) in a mixture suited to his needs according to his age and weight. Vitamins that promote health and the development of a sound body should be supplied early by giving cod-liver oil and orange juice or their substitutes in the proper amounts. As the child grows older other essential foods are added to his diet but milk remains a most important item.

To develop good health habits the baby should have regular hours for eating, sleeping, elimination, sunshine, and play. Proper habits can be taught at an early age. Later, proper habits of outdoor exercise and personal hygiene must be established. During the first year the child should be immunized against smallpox and diphtheria. Exposure to all communicable diseases should be avoided by keeping the young child away from persons known to have colds or other communicable diseases and from crowded places. The child should be under the supervision of a physician from earliest infancy and should be examined regularly to make sure that feeding and care are adjusted to his needs and that if defects are present they are recognized and corrected early.

Children need proper housing to protect their health and social development. Good housing includes healthful surroundings, pure water, sanitary toilets, adequate light, heat, and ventilation, enough room to avoid overcrowding, and a house that is weatherproof and dampproof.

To provide a good environment, the community must safeguard the water and milk supply, control communicable disease, supervise sanitation, provide educational and recreational facilities and health services, and make available protective services for children who are dependent or handicapped or in danger of becoming delinquent The family should learn to take advantage of the opportunities for health which the community offers its children.

Physical and mental health cannot be separated. A good environment must provide for the mental health of the child as well as for his physical health. With proper home life, training, education, and companionship he should attain well-rounded development as an individual and a member of society.

Child-health protection

Parents have the opportunity to give the most essential and most continuous protection to the health of children. Physicians, dentists, nurses, and other health workers and community health agencies play a major role in protecting the health of children.

Most cities and many counties have local health departments with physicians and nurses on the staff who give all or much of their time to maternal and child-health services. In many other areas the town, the county, or the school board employs at least one public-health nurse to give some measure of protection to the health of mothers and children.

In an increasing number of communities, urban and rural, physicians, assisted by public-health nurses, are conducting prenatal and child-health conferences; public-health nurses are instructing mothers in child care at home and in classes; health publications are distributed; and the health of school children is being safeguarded by medical and dental examinations, by nursing supervision, and by the teaching of hygiene.

The State health departments have maternal and child-health divisions with physicians in charge to direct the State-wide maternal and child-health program. Public-health nurses and, in some States, additional physicians, dentists, nutritionists, and health educators are on the State department staff to aid local agencies in carrying on their maternal and child-health programs. Many State health departments are providing postgraduate instruction in maternal and child care to physicians, dentists, and nurses so that they may be kept abreast of the latest knowledge in these fields.

Each State has a crippled children's agency and all such State agencies have facilities for locating crippled children and for giving them medical, surgical, hospital, and aftercare services to aid in their physical restoration and social readjustment.

To assist the State and local governments in these and related programs, the Federal Government under the Social Security Act is making available, through the Children's Bureau, \$5,820,000 a year for grants to the States for maternal and child-health services and \$3,870,000 for services for crippled children, and, through the Public Health Service, \$11,000,000 a year for strengthening State and local public-health organization.

Although the child-health program has been greatly expanded during the past few years, there are still many communities where no public child-health service is available or where the number of health workers is so few that they cannot serve the whole community.

Services essential for protection of health of children

The White House Conference on Children in a Democracy met in Washington in 1940 to consider all aspects of child welfare. The reports of this conference should be studied in detail, but the following recommendations adopted by the conference indicate some of the services considered essential for the conservation of the health of the Nation's children:

- 1. The health and well-being of children depend to a large extent upon the health of all the members of their families. Preventive and curative health service and medical care should be made available to the entire population, rural and urban, in all parts of the country.
- 2. For all women during maternity and for all newborn infants, complete service for maternity care and care of newborn infants should be available through private resources or public funds.
- 3. For all infants and children preventive and curative medical services should be available, including adequate means for control of communicable disease.

Medical care for mothers and babies

The Report of the Committee on Findings of the Conference on Better Care for Mothers and Babies (Washington, D.C., January 1938), based on the premise the the continuance and vigor of American civilization depend primarily upon the extent to which the lives and health of newborn infants and their mothers are safeguarded, listed the following conditions as favorable to preserving the lives and health of mothers and newborn infants:

- Parents who are well informed and provided with proper food, rest, and living conditions.
- Cooperation of the father, who helps the mother to carry out good health measures during the child-bearing period.
- Adequate medical, dental, and nursing supervision and care during pregnancy, labor, and the postpartum and postnatal periods.
- Breast feeding followed by other proper and sufficient food, and an environment free from infection.
- Periodic examination and advice by a physician trained in the care and feeding of the infant.
- Hospital care for illnesses necessitating treatment not available in the home.
- Consultation services of a specialist as needed, including obstetrician, pediatrician, internist, dentist, and others in the various medical and surgical specialties.

The committee also proposed: Community provision for care by a qualified physician and nurse, for consultation service, and for hospital care when indicated, including transportation to the hospital, for the mother or baby to whom such care is otherwise inaccessible or who cannot obtain care unaided.

The increased funds authorized in 1939 for grants to the States for maternal and child-health services (see p. 6) are being used in part for medical and nursing services and hospital care, when necessary, for mothers and babies in a limited number of local areas.

Medical care for children

During childhood, exclusive of the first year of life, the probability of dying is less than in adult life, but the probability of being sick is greater for children than for adults. Though the average duration of illness is less than in later years, such illnesses often result in protracted or permanent disability.

Early diagnosis and prompt treatment of illness among children are important because without them such illness may become chronic.

There occur in childhood many minor abnormal conditions that interfere with growth and development or with the general health of the child. Prompt treatment of these conditions is often as important in preventing future disability as is the treatment of more serious diseases.

Much ill health and many deaths of children can be prevented by measures previously mentioned, such as more adequate control of communicable disease, protection of the milk supply, and systematic health supervision.

Since about half of the 33,000,000 children under 15 years of age in the United States are in families with incomes (including home produce on farms) of less than \$1,000 per year or are on relief, it is apparent that such families are able to pay little toward the medical care needed by their children. Care of children in such families must be provided by health and welfare authorities.

There is special need of care for children handicapped by heart disease, diabetes, congenital syphilis, injury due to accident, and other conditions requiring prolonged care. There is great need for discovering early and treating promptly children with defects of vision and hearing and those with dental defects, in order to prevent serious disability.

The Federal-State funds for services for crippled children (see p. 6) are used for the most part for the care of children suffering from orthopedic or plastic conditions. The increased Federal funds authorized in 1939 for this program are being used in part for the care of children suffering from heart disease.

Medical care for children is more adequate and economical when provision is made for helping families to overcome the adverse social and economic factors related to disease or disability.

Maternal mortality

During 1939, 9,151 women died from causes due directly to pregnancy and childbirth—a rate of 40 deaths of mothers per 10,000 live births. This was 802 fewer deaths than in 1938, when 9,953 women died from such causes and the maternal mortality rate was 44.

The 1939 maternal mortality rate was the lowest on record for the United States. There are still, however, far too many maternal deaths. Of the 9,151 deaths of mothers in 1939, 3,834 (42 percent) were due to infections; 2,232 (24 percent), to toxemias of pregnancy; 1,808 (20 percent), to hemorrhage; and 1,277 (14 percent), to other puerperal causes. (Abortion was responsible for 1,786 maternal deaths (almost 20 percent)--1,393 with mention of infection and 393 without.)

The lowest maternal mortality rate in 1939 was in Idaho—22 deaths of mothers per 10,000 live births. Six other States also had rates between 20 and 30: North Dakota and Oregon, 24; Connecticut, 26; Wisconsin, 28; Minnesota and South Dakota, 29. The highest rates were in Louisiana (62) and in Florida (65). The low rates in some States emphasize the fact that further reduction of the national rate is possible.

The maternal mortality rate for white mothers in 1939 was 35 per 10,000 live births and for Negro mothers 77.

For 1935, the only year for which the maternal-mortality figures are available by residence of mothers, the maternal mortality rate for women who lived in rural areas was 59, as compared with 57 for women who lived in cities.

Stillbirths

In 1939, 72,598 infants were stillborn. The findings of the Children's Bureau study of stillbirths in hospitals emphasize the importance of good prenatal and delivery care in prevention of stillbirth. More than half (58 percent) of the stillborn infants included in the study died before labor; the remainder (42 percent) died during labor. The causes of death of the stillborn infants who died during labor are similar to those for infants dying during the first day of life.

Infant mortality

In 1939 there were 108,846 deaths in the first year of life. The infant mortality rate for the year was 48 per 1,000 live births. In other words, one baby out of every 21 born alive died before his first birthday. The 1939 infant mortality rate was lower than that of any previous year. Oregon established a new minimum record for State infant mortality rates—35 per 1,000 live births; Connecticut and Minnesota had rates of 36.

Since 1915 the trend of the infant mortality rate in the birth-registration area has been downward. The rate in 1915 was 100 as compared with 57 in 1936, 54 in 1937, 51 in 1938, and 48 in 1939.

From 1915 to 1928 the infant mortality rate was greater in urban than in rural areas. From 1929 to 1939 the rural infant mortality rate was higher than the urban rate. The rates were 54 for rural and 48 for urban areas in 1938 and 51 for rural and 45 for urban areas in 1939.

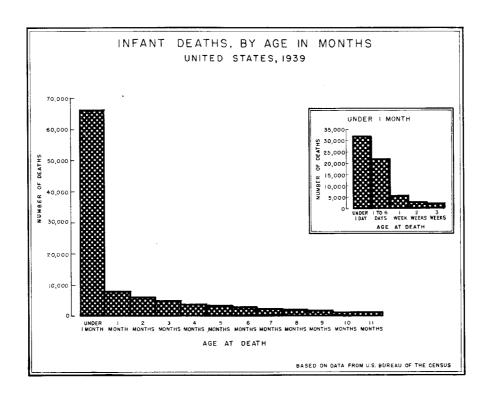
The reduction in infant mortality between 1915 and 1939 was due largely to reduction in the rate for infants dying from the second through the twelfth month of life and especially to decreasing mortality from gastrointestinal and communicable diseases.

The death rate of infants under 1 month of age (neonatal mortality) has declined (1915, birth-registration area, 44; 1939, United States, 29) but much less than the general infant mortality rate (1915, 100; 1939, 48). The death rate on the first day of life has been reduced very little.

The deaths of 66,383 babies occurred in the first month of life in 1939. Eighty-four percent died as a result of conditions arising during pregnancy or at the time of birth; included in this group are the 47 percent born prematurely and the 15 percent injured at birth. Deaths in the first month of life constituted 58 percent of the deaths in the first year.

Saving mothers and babies

On the basis of 190,595 deaths—stillbirths, deaths of mothers, and deaths of infants during the first year of life—that occurred in 1939, it is estimated that about 68,000 lives of mothers and infants might have been saved. The lower mortality rates that prevailed in 1939 show progress in saving lives of mothers and babies. The gain in 1939 was about 100 stillbirths, about 800 mothers, and about 6,700 infants saved who would have died if the 1938 mortality rates had prevailed.



Chances of survival of children and youth

If a child is born alive and is strong enough to survive the hazards of the first month, his chance of reaching maturity is good. United States life tables for 1929 to 1931 (United States Bureau of the Census) show that the expectation of life at birth of a white boy baby is 59 years and of a white girl baby is 63 years. If the boy baby survives the first year he may expect to live to 62; if the girl baby survives the first year she may expect to live to 65.

Mortality rates for boys and girls rapidly decrease after the first year until the lowest rate is reached at the age of 10 or ll. From then on the mortality rates increase with each year of age.

Study of the major causes of death of children and young persons throws light on the high incidence and relative importance of certain causes of death. It also gives some indication of the number of children affected by similar conditions who, though they recover, may have suffered injury to their health.

THE 15 LEADING CAUSES OF DEATH AMONG PERSONS UNDER 20 YEARS OF AGE; UNITED STATES, 1939

	Total		Under		i		
Cause of death	Number	Per-	1	1 to 4	5 to 9	10 to 14	15 to 19
		cent	year	years	years	years	years
All causes	182,825	100.0	108,846	26,887	12,338	12,614	22,140
he 15 leading causes	139,514	76.3	88,945	19,574	7,864	8,191	14,940
Premature birth	32,251	17.6	32,251	_	_	_	_
Pneumonie (all forms)	21,604	11.8	13,786	4,682	1,053	867	1,216
Accidents	19,394	10.6	2,379	4,426	3,158	3,350	6,081
Gastrointestinal diseases	14,128	7.7	10,129	3,536	193	1.09	161
Congenital malformations	11,907	6.5	10,390	893	258	188	178
Injury at birth	10,164	5.6	10,164	_	_	_	-
Tuberculosis (all forms)	6,596	3.6	540	1,149	514	861	3,532
Influenza	4,759	2.6	2,311	1,256	377	305	510
Diseases of the heart	4,301	2.4	370	373	719	1,181	1,658
Appendicitis	3,980	2.2	40	63 8	884	1,102	1,316
Whooping cough	3,010	1.6	2,013	907	74	10	6
Congenital debility	2,808	1.5	2,808	-	_	- !	_
Diphtheria	1,831	1.0	167	1,130	422	73	39
Syphilis	1,749	1.0	1,300	140	38	70	201
Measles	1,032	0.6	297	444	174	7 5	42
ll other causes	43,311	23.7	19,901	7,313	4,474	4,423	7,200

Based on data from U. S. Bureau of the Census.

