

Mothers, Infants and Toddlers Fast Facts

Voices for Healthy Kids, an initiative of the American Heart Association, creates science facts paired with facts in consumer-friendly language on an array of topics. These are meant to help advocates in their search for up to date, vetted, science-based information to use in their campaigns.

We have a science review process in place to ensure that emerging science is correctly translated and that all materials are firmly rooted in the American Heart Association's tradition of rigorous review.

We recognize that when working on campaigns, materials are often created on a quick turn-around. To provide campaigns with the resources needed to run effective campaigns, Voices for Healthy Kids is pleased to share American Heart Association science-approved fast facts.

Importance of the Prenatal-to-3 Period for Lifelong Health and Wellbeing

FACT 1

Increasing evidence suggests that the earliest years, including the prenatal period, impact lifelong health and wellbeing. What happens during this period can have substantial effects on both short- and long-term health outcomes in learning behavior, and both physical and mental health.

Fast Facts:

- ▶ Children begin learning before they are even born. In fact, their experiences during the prenatal period, can impact their short-and long-term health..
- ▶ A child's experiences, including their early years and those during the prenatal period, can have short- and long-term health outcomes.
- ▶ A child's experiences, including those during the prenatal period, can impact their mental health, physical health and learning behavior in both the short- and long-term.

Source:

National Scientific Council on the Developing Child, Center on the Developing Child at Harvard University. Connecting the Brain to the Rest of the Body: Early Childhood Development and Lifelong Health are Deeply Intertwined. Working Paper No. 15. June 2020. Available at: https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2020/06/wp15_health_FINALv2.pdf.

FACT 2

According to the Harvard University Center on the Developing Child, the early years matter because in the first few years of life, more than 1 million new neural connections are formed every second. These are the connections that build brain architecture—the foundation upon which all later learning, behavior and health depend.

Fast Facts:

- ▶ In the early years of life, a child forms 1 million new brain connections every second.
- ▶ In the early years of life, a child forms 1 million new neural connections every second. These connections build the foundation that later learning, behavior and health are built upon.
- ▶ The brain development that takes place during the early part of a child's life is especially important as this development is the foundation of learning, behavior and health.

Source:

Center on the Developing Child at Harvard University. From Best Practices to Breakthrough Impacts: A Science-Based Approach to Building a More Promising Future for Young Children and Families. May 2016. Available at: https://developingchild.harvard.edu/wp-content/uploads/2016/05/From_Best_Practices_to_Breakthrough_Impacts-4.pdf.

FACT 3

The environments we create and the experiences we provide for young children and their families affect not just the developing brain, but also many other physiological systems, including heart and lung function, digestion, fighting infections and physical growth.

Fast Facts:

- ▶ The environment a child grows up in doesn't only impact the child's brain development, but also their heart and lung function, digestive and immune systems and physical growth.
- ▶ The environments we create for young children can impact many aspects of their physical health.

Source:

National Scientific Council on the Developing Child, Center on the Developing Child at Harvard University. Connecting the Brain to the Rest of the Body: Early Childhood Development and Lifelong Health are Deeply Intertwined. Working Paper No. 15. June 2020. Available at: https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2020/06/wp15_health_FINALv2.pdf.

FACT 4

Three of the most common and costly examples of chronic disease in adults – heart disease, type 2 diabetes and depression – share a common association with elevated inflammation, which can be traced to recurrent hardships or threats in early childhood. Efforts to prevent these chronic diseases in adults needs to begin in the early childhood years.

Fast Facts:

- ▶ Recurrent hardships and trauma in childhood can have lasting health consequences that linger well into adulthood.
- ▶ Heart disease, type 2 diabetes and depression – the three most common and costly chronic diseases experienced in adulthood – share a common association with elevated inflammation, which can be traced back to trauma experienced in childhood.
- ▶ In order to reduce chronic illnesses in adults, including heart disease, type 2 diabetes and depression, we must take measures to reduce recurrent hardships and trauma in childhood.
- ▶ The hardships and trauma people experience in childhood can impact their health as adults, appearing as chronic illnesses including heart disease, type 2 diabetes and depression.

Source:

National Scientific Council on the Developing Child, Center on the Developing Child at Harvard University. Connecting the Brain to the Rest of the Body: Early Childhood Development and Lifelong Health are Deeply Intertwined. Working Paper No. 15. June 2020. Available at: https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2020/06/wp15_health_FINALv2.pdf.

Healthy Parents Lead to Healthy Babies, Infants and Toddlers

FACT 5

According to the Prenatal-to-3 Policy Impact Center, healthy parents who are equipped with the resources and skills necessary to care for their children are likely to engage in higher quality interactions with them. Adequate household resources, parents' ability to work and healthy parenting skills help to create nurturing environments that children need.

Fast Facts:

- ▶ Healthy parents and caregivers who are equipped with the resources and skills they need to take care of their children are more likely to have positive child-parent and/or caregiver interactions.
- ▶ Ensuring families receive the resources they need and that parents and/or caregivers have job prospects and good child rearing skills can create the nurturing environments children need to thrive.

Source:

Prenatal-to-3 Policy Impact Center, University of Texas at Austin. Why Do We Focus on the Prenatal-to-3 Age Period? Understanding the Importance of the Earliest Years. January 2021. Available at: https://pn3policy.org/wp-content/uploads/2020/12/PN3PolicyImpactCenter_B001202101_WhyFocusonPN3.pdf.

FACT 6

Household economic security is important to ensure healthy infants and toddlers, and experiences of financial hardship during early childhood can disrupt healthy brain development. In 2018, approximately 1 in 5 children (19.5 percent) ages 0 to 3 in the U.S. lived in families with annual household incomes of less than 100% of the federal poverty level, or \$24,300 per year for a family of four.

Fast Facts:

- ▶ Infants and children are more likely to be healthy when they come from families with financial security.
- ▶ Infants and children are more likely to be healthy when they come from families with financial security. In fact, economic hardships during early childhood can disrupt healthy brain development in children.
- ▶ Nearly 20% of children ages 3 and younger live in families where the annual household income is less than 100% of the federal poverty level.
- ▶ Nearly 20% of children ages 3 and younger live in families where the annual household income is less than 100% of the federal poverty level, or \$24,300 per year for a family of four.
- ▶ Financial resources are key to a child's healthy brain development.

Source:

Calculations were done by the Prenatal-to-3 Policy Impact Center using the 2018 American Community Survey (ACS), Public Use Microdata Sample (PUMS). See also: Prenatal-to-3 Policy Impact Center, University of Texas at Austin. Why Do We Focus on the Prenatal-to-3 Age Period? Understanding the Importance of the Earliest Years. January 2021. Available at: https://pn3policy.org/wp-content/uploads/2020/12/PN3PolicyImpactCenter_B001202101_WhyFocusonPN3.pdf.

FACT 7

Social factors, such as parental support and community inclusiveness, can have a beneficial effect on parents' physical and mental health and wellbeing, which affects their ability to care for their children and engage in the positive interactions that infants and toddlers need for long-term healthy development.

Fast Facts:

- ▶ When parents and/or caregivers are physically and mentally healthy, they are more able to care for their children in a positive way.
- ▶ When parents and/or caregivers are physically and mentally healthy, they are more able to care for their children in a positive way which supports the long-term development of infants and toddlers.
- ▶ It's important for parents and/or caregivers to receive the social support they need as this can impact their health and well-being which influences their interactions with the infants and toddlers in their care.

Source:

Prenatal-to-3 Policy Impact Center, University of Texas at Austin. Why Do We Focus on the Prenatal-to-3 Age Period? Understanding the Importance of the Earliest Years. January 2021. Available at: https://pn3policy.org/wpcontent/uploads/2020/12/PN3PolicyImpactCenter_BO01202101_WhyFocusonPN3.pdf.

FACT 8

The health of individuals who may become pregnant can have an important impact on infant's health and well-being. Those who receive recommended health care services before they get pregnant are more likely to be healthy during pregnancy and to have healthy babies.

Fast Facts:

- ▶ People who have access to health care before they become pregnant are more likely to remain healthy during pregnancy and to have healthy babies.
- ▶ An individual's health, even before they become pregnant, can impact a newborn's health and well-being.

Source:

U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Healthy People 2030: Pregnancy and Childbirth. Accessed October 2021. Available at: <https://health.gov/healthypeople/objectives-and-data/browse-objectives/pregnancy-and-childbirth>.

FACT 9

Despite the importance of adequate prenatal health services, several studies have found a significant relationship between racial discrimination in provider-patient interactions and low birth weight, preterm birth and small-for-gestational-age babies.

Fast Facts:

- ▶ Racism from health care providers is linked to newborns having low birth weight.
- ▶ Racism from health care providers is linked to newborns being born preterm.
- ▶ Racism from health care providers is linked to newborns being small for their gestational age.
- ▶ Racism from health care providers is linked to newborns having low birth weight, being born preterm and being small for their gestational age.

Source:

Alhusen JL, Bower KM, Epstein E, Sharps P. Racial discrimination and adverse birth outcomes: an integrative review. *J Midwifery Women's Health*. 2016;61:707–720. doi: 10.1111/jmwh.12490.

FACT 10

Diet during pregnancy may affect a child's risk of weight gain later in life. In one study, each additional serving of a sugary beverage consumed by a pregnant individual during the second trimester was associated with an additional 0.15 kg/m² of body fat when children reached about 8 years old. The risk of weight gain did not differ by a child's race/ ethnicity or sex.

Fast Facts:

- ▶ A healthy diet is important during pregnancy as it can impact the child's ability to maintain a healthy weight later in life.
- ▶ A healthy diet is important during pregnancy as it can impact the child's ability to maintain a healthy weight later in life, regardless of race, ethnicity or sex.

Source:

Gillman MW, Rifas-Shiman SL, Fernandez-Barres S, Kleinman K, Taveras EM, Oken E. Beverage intake during pregnancy and childhood adiposity. *Pediatrics*. 2017; 140(2):e20170031. doi: 10.1542/peds.2017-0031.

FACT 11

Emerging evidence suggests that consuming excessive added sugars during pregnancy may impact newborn and childhood metabolism, shape feeding behaviors and taste perception, and increase risk of future weight gain.

Fast Facts:

- ▶ Consuming excessive added sugars during pregnancy can impact the health of newborns and children.
- ▶ Consuming excessive added sugars during pregnancy can impact the metabolism of newborns and children.
- ▶ Consuming excessive added sugars during pregnancy can impact the relationship newborns and children have with food, including the way they eat and the way they taste food.
- ▶ Consuming excessive added sugars during pregnancy can increase a child's risk of future weight gain.

Source:

Goran MI, Plows JF, Ventura EE. Effects of consuming sugars and alternative sweeteners during pregnancy on maternal and child health: evidence for a secondhand sugar effect. *Proc Nutr Soc.* 2019; 28(3):262-271. doi: 10.1017/S002966511800263X.

Investing in State and Local Policies and Services for Prenatal-to-3

FACT 12

Location, race, ethnicity and racism are critical factors influencing the quality of care that parents and infants receive. In 26 states and the District of Columbia, the percentage of pregnant non-Hispanic Black people who receive late or no prenatal care is more than twice the percentage for pregnant non-Hispanic white people.

Fast Facts:

- ▶ A person's race, ethnicity and location influence the quality of care they receive.
- ▶ A child's race, ethnicity and location influence the quality of care they receive.
- ▶ Racism negatively influences the quality of care a person receives.
- ▶ Racism negatively influences the quality of care a child receives.
- ▶ In 26 states and the District of Columbia, pregnant Black people are twice as likely to receive late or no prenatal care than pregnant white people.
- ▶ Pregnant Black people are twice as likely to receive late or no prenatal care than pregnant white people.

Source:

Zero to Three and Child Trends. The State of Babies Yearbook: 2021: Racism Creates Inequities in Maternal and Child Health, Even Before Birth. May 2021. Available at: https://www.childtrends.org/wp-content/uploads/2021/07/ZTTMaternalChildHealth_ChildTrends_May2021.pdf.

FACT 13

In every state (and the District of Columbia) except Arkansas, Indiana, Kentucky, Mississippi, Tennessee and West Virginia, the mortality rate for non-Hispanic Black babies is at least twice that of non-Hispanic white babies. In these remaining states, both the infant mortality rate for non-Hispanic Black and non-Hispanic white babies exceeds the national average.

Fast Facts:

- ▶ In __fill in state name if it is not listed above__, the mortality rate of Black babies is twice that of white babies.
- ▶ In __fill in state name if it is not listed above__, Black babies are twice as likely to die during childbirth or during infancy than white babies.
- ▶ In (Arkansas, Indiana, Kentucky, Mississippi, Tennessee or West Virginia), the infant mortality rate for Black and white babies exceeds the national average.

Source:

Zero to Three and Child Trends. The State of Babies Yearbook: 2021: Racism Creates Inequities in Maternal and Child Health, Even Before Birth. May 2021. Available at: https://www.childtrends.org/wp-content/uploads/2021/07/ZTTMaternalChildHealth_ChildTrends_May2021.pdf.

FACT 14

According to the Prenatal-to-3 Policy Impact Center, five effective state-level policies and six effective strategies help to create a system of care to ensure that infant and toddlers get off to a healthy start. These include the following policies and number of states that have adopted and fully implemented them: expanded income eligibility for health insurance (39 states), reduced administrative burden for the Supplemental Nutrition Assistance Program (SNAP) (26 states), paid family leave (6 states), state minimum wage (22 states) and state earned income tax credits (18 states). Additionally, several states are leading the way in the following effective strategies: comprehensive screening and connection programs, child care subsidies, group prenatal care, evidence-based home visiting programs, Early Head Start and early intervention services.

Fast Facts:

- ▶ Policy and program actions can ensure infants and toddlers get off to a healthy start including expanding programs like state Medicaid and Supplemental Nutrition Assistance Program (SNAP), implementing paid family leave and increasing the minimum wage and state earned income tax credits.
- ▶ Certain actions can ensure infants and toddlers get off to a healthy start including expanding comprehensive screening and connection programs, child care subsidies, group prenatal care, evidence-based home visiting programs, Early Head Start and early intervention services.

Source:

Prenatal-to-3 Policy Impact Center, University of Texas at Austin. Prenatal-to-3 State Policy Road Map 2021. Accessed October 2021. Available at: <https://pn3policy.org/pn-3-state-policy-roadmap-2021/>.

FACT 15

In a 2012 national survey, almost half (46%) of all parents with a child under age 6, reported searching for child care: 66% reported searching for care so that a parent could work or attend school, 30% reported searching for care to support child development, and 2% search for reasons related to affordability. Parents from higher-income households were more likely to search for care compared to parents from lower-income households (51% vs. 41%), and parents with infants and toddlers (under age 3) were four times as likely to report searching for care to meet parents' needs than to support child development (77% vs. 19%).

Fast Facts:

- ▶ Nearly half of all parents with a child under age 6 have searched or are searching for child care for personal and or child development.
- ▶ Two-thirds of parents have searched or are searching for child care so that at least one parent could work or attend school.
- ▶ Sixty-six percent of parents have searched or are searching for child care so that at least one parent could work or attend school.
- ▶ Nearly one-third of parents have searched or are searching for child care to help with their child's learning and development.
- ▶ Thirty percent of U.S. parents have searched or are searching for child care to help with their child's learning and development.
- ▶ Parents from higher-income households were more likely to search for child care compared to parents from lower-income households.
- ▶ Parents from lower-income households were less likely to search for child care compared to parents from higher-income households.
- ▶ Fifty-one percent of parents from higher-income households have searched or are searching for child care compared with 41% of parents from lower-income households.

Source:

U.S. Department of Health & Human Services, Administration for Children and Families, Office of Planning, Research & Evaluation and Child Trends. Parents' Reasons for Searching for Care and Results of Search: An Analysis Using the Access framework. OPRE Report #2021-39. April 2021. Available at: <https://www.acf.hhs.gov/sites/default/files/documents/opre/Search%20and%20Use%20of%20Care%20Snapshot%20508.pdf>.

FACT 16

According to a national survey that assessed the well-being of families with children under age 5 during the first year of the COVID-19 pandemic, policies that supported families in meeting basic needs such as food, housing and medical enabled parents and caregivers to experience less stress, which allowed them to provide the critical emotional and well-being support that children need.

Fast Facts:

- ▶ Families with children under age 5 are overall healthier when their basic needs, including food, housing and medical care, are addressed.
- ▶ Parents and caregivers experience less stress and are better able to care for their children emotionally when their basic needs, including food, housing and medical care, are addressed.
- ▶ Children receive better emotional and well-being support from parents and caregivers who are able to meet their family's basic needs, including food, housing and medical care.

Source:

Masten C, Lombardi J, and Fisher P; Center on Budget and Policy Priorities. Helping families meet basic needs - enables parents to promote children's healthy growth, development. October 2021. Available at: <https://www.cbpp.org/sites/default/files/10-28-21pov.pdf>.

Investments in Prenatal-to-3 Services Lead to Short- and Long-term Benefits for Maternal and Child Health

FACT 17

Research suggests that caregivers and children who participate in the Supplemental Nutrition Assistance Program (SNAP) have improved birth outcomes, reduced childhood food insecurity (by up to 36%), increased health care use among children and improved long-term child health.

Fast Facts:

- ▶ Caregivers and children who participate in Supplemental Nutrition Assistance Program (SNAP) experience positive health outcomes including decreases in infant mortality and childhood food insecurity, increases in health care used among kids and improved long-term child health.
- ▶ Children who participate in Supplemental Nutrition Assistance Program (SNAP) experience positive health outcomes including decreases in food insecurity, increases in their access to health care and improved long-term health.

Source:

Prenatal-to-3 Policy Impact Center, University of Texas at Austin. Prenatal-to-3 Policy Clearinghouse: Reduced Administrative Burden for SNAP. Accessed October 2021. Available at: <https://pn3policy.org/policy-clearinghouse/reduced-administrative-burden-for-snap/>.

FACT 18

One study found that children from prenatal to age 5 with access to the Supplemental Nutrition Assistance Program (SNAP) was associated with later-in-life increases in human capital, economic self-sufficiency and neighborhood quality, as well as an increase in life expectancy and a decrease in the likelihood of incarceration.

Fast Facts:

- ▶ Kids who qualify and participate in Supplemental Nutrition Assistance Program (SNAP) experience improvements to their quality of life well into adulthood including improved economic stability, better neighborhood quality, increased life expectancy and a reduced chance of being incarcerated.
- ▶ Kids who qualify and participate in Supplemental Nutrition Assistance Program (SNAP) experience improved economic stability in adulthood.
- ▶ Kids who qualify and participate in Supplemental Nutrition Assistance Program (SNAP) experience improved environmental and household quality in adulthood.
- ▶ Kids who qualify and participate in Supplemental Nutrition Assistance Program (SNAP) live longer lives.
- ▶ Kids who qualify and participate in Supplemental Nutrition Assistance Program (SNAP) are less likely to experience incarceration.

Source:

Bailey M, Hoynes H, Rossin-Slater M., and Walker R. Is the social safety net a long-term investment? Large-scale evidence from the Food Stamps Program. 2020, Working Paper 26942, National Bureau of Economic Research. <https://doi.org/10.3386/w26942>.

FACT 19

Early Head Start improves aspects of parental health and emotional wellbeing, nurturing child-parent relationships and optimal health and child development, while also supporting participation in high-quality early child care and education.

Fast Facts:

- ▶ Early Head Start programs offer resources to help both the parent and/or caregiver and the child.
- ▶ Kids who participate in Early Head Start receive high-quality child care and education, meanwhile, their parents and/or caregivers get the support they need for their own health and well-being.
- ▶ Early Head Start can help parents and/or caregivers improve their own health and emotional well-being, while also teaching them about nurturing child-parent relationships and optimal health and child development.

Source:

Prenatal-to-3 Policy Impact Center, University of Texas at Austin. Prenatal-to-3 Policy Clearinghouse: Early Head Start. Accessed October 2021. Available at: <https://pn3policy.org/policy-clearinghouse/2021-early-head-start/>.

FACT 20

A recent research review found that non-Hispanic Black children who participated in Early Head Start experienced the greatest number of positive impacts across both social-emotional and cognitive domains compared non-participating children. For example, they had higher engagement and sustained attention with objects during play and were more likely to sustain these behaviors at age 5.

Fast Facts:

- ▶ Black children who participate in Early Head Start have the most positive experiences, including higher engagement and sustained attention with objects during play.
- ▶ Black children who participate in Early Head Start have the most positive experiences, including improvements to their social-emotional and cognitive development.

Source:

Prenatal-to-3 Policy Impact Center, University of Texas at Austin. Prenatal-to-3 Policy Clearinghouse: Early Head Start. Accessed October 2021. Available at: <https://pn3policy.org/policy-clearinghouse/2021-early-head-start/>.