

a state focus on  
**Early Childhood Care  
and Education**

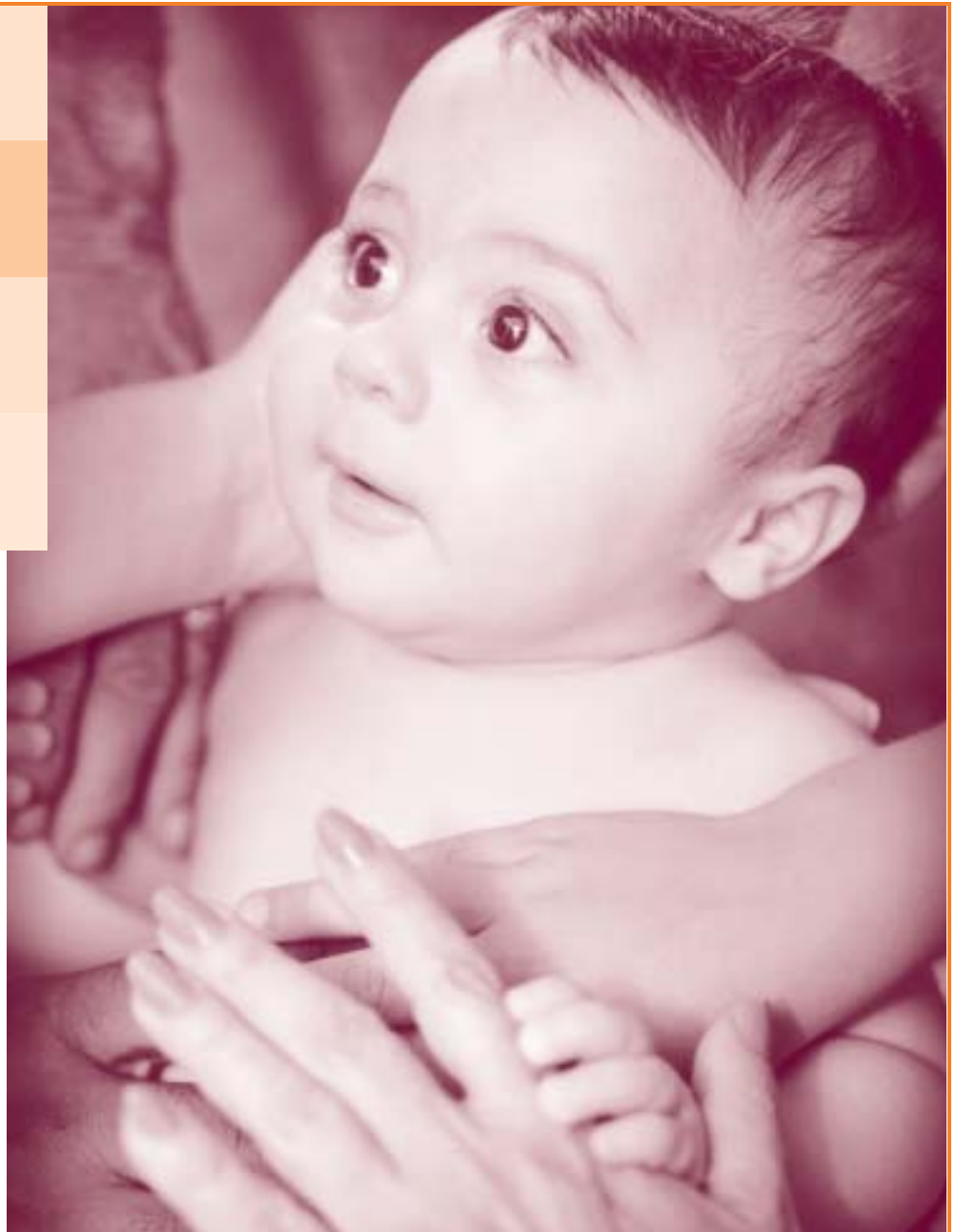
Oklahoma's very young — infants, toddlers and preschool children — are the focus of this edition of the Oklahoma KIDS COUNT Factbook. Two hundred seventy-five thousand (275,002), or about one-third (31.3%) of Oklahoma's children, are under six years of age. Special attention to early childhood issues is compelled by several factors:

Research increasingly demonstrates that high quality early childhood care and educational experiences are vital to a young child's brain development.

Oklahoma children are increasingly likely to spend at least part of their early years in the care of people other than their parents.

Measures of child well-being indicate problems for Oklahoma's very young children.

Prevention and early intervention are cost effective investments capable of reaping long term benefits.



## Early Childhood Care and Education



### Research increasingly demonstrates that high quality early childhood care and educational experiences are vital to a young child's brain development.

As recently as two decades ago, scientists believed that by the time babies were born, the structure of their brains was fixed and determined. As more has been learned about how a person's brain develops, it has become understood that the first years of life have a decisive impact on the architecture of a child's brain and the nature and extent of his or her adult capabilities.

Effective brain functioning requires a well organized network to rapidly pass signals from one part of the brain to another. The network is composed of brain cells (neurons) and the connections (synapses) they form to other brain cells. There are roughly 100 billion cells (neurons) in a child's brain at birth – nearly enough to last a lifetime. Each neuron can produce up to 15,000 connections (synapses). Experiences “activate” the synapses and the pathways they form. The majority of synapses are produced during the first three years of life at an astonishing speed.

It is not news that babies thrive on warm, responsive, nurturing care. Science demonstrates that this type of caregiving also plays a vital role in healthy cognitive and emotional development. Early care has a long-lasting impact on how people develop, their ability to learn and their capacity to regulate their own emotions.

Children who are nurtured, protected, provided for, loved and stimulated before birth and early in life can reap large rewards. These fortunate children have healthy cognitive and emotional development capable of cushioning them from life's inevitable problems. They grow older with the ability to recover from serious stress or trauma.

Children who are exposed to violence, nicotine, drugs or alcohol before birth or who are abandoned, abused, traumatized, deprived or neglected early in life can pay a high price. These children start at a severe disadvantage. Their brain cells (neurons) can be destroyed, connections (synapses) reduced, emotional control and neurological development undermined, and in some cases, brain function impaired.

There is mounting scientific evidence that an individual's capabilities are not fixed at birth and the human brain has a remarkable capacity to

change. Parents, friends, caregivers, teachers, doctors and service providers have ample opportunity to facilitate healthy growth and development — or help compensate for problems — with carefully timed, intensive interventions, especially during the first few years when the brain's ability to change and compensate is exceptional.

A good start for Oklahoma's youngest will be ineffective if purchased at the expense of their older brothers and sisters. While quality early childhood experiences provide the crucial foundation necessary to create a healthy human being, they are not enough. Growth is a lifelong venture requiring continuing support, protection and nurturing of school-age children and adolescents if each young Oklahoman is to reach his or her optimal development.



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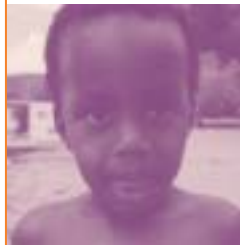


## Oklahoma children are increasingly likely to spend at least part of their early years in the care of people other than their parents.

Two decades ago the majority of Oklahoma infants, toddlers and preschool children had a parent at home; not so today. Now, two-parent households increasingly need a second income to support the family. The increased participation of Oklahoma women in the workforce is further fueled by the growing number of single-parent families headed by women and new welfare requirements which compel attendance at work or training. Currently, three out of five mothers with children younger than six are in the workforce.

With the increasing number of people in the workforce, a majority of Oklahoma's children are now spending at least part of their early years in the care of people other than their parents. Such changes accelerate the need for quality, affordable and available child care.

Charged with undertaking a comprehensive assessment of Oklahoma's early childhood system, the *Governor's Task Force on Early Childhood Education* maintained an ambitious schedule of meetings and investigation during the summer and fall of 2000.



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As indicated in its recently released report, the *Governor's Task Force* discovered a child care system in Oklahoma often providing poor to mediocre care, maintaining long waiting lists for young children, plagued with high staff turnover, and unaffordable to most families. It costs less to pay the tuition at a public college than it does to enroll a four-year-old in full-time child care. The *Governor's Task Force* determined that improvements in the quality and affordability of child care would have a significant and long-lasting impact on a child's life and Oklahoma's future.

## Early Brain Development: The Science

### **Brain development is fast, early and permanent.**

The process of brain development is energy intensive. The majority of neurons are born in utero, making the first and most important development stage to occur during pregnancy.

The most active brain development period is early childhood. In contrast to body growth which continues into adulthood, brain growth is about 90% adult size by age four.

Opportunities missed early cannot be recaptured — problems resulting from deficiencies in utero, infancy and toddlerhood cannot be fixed in kindergarten.

### **Brain development is influenced by a child's early experiences.**

Experience alters the brain. A child's brain develops and organizes in response to his or her experiences during the first days, weeks, months and years of life — interacting with the environment, reacting to stimuli, taking in information, processing or storing it.

Functionality is compromised if appropriate and rich experiences are withheld during key stages of brain development.

### **Early childhood experiences provide the organizing template for the rest of life.**

All the structures that allow the complex functioning in adult life are put in place in early childhood.

The root core template for all relationships comes from original attachments with primary caregivers. Relationships and social-emotional development are the glue which provide the foundation for a healthy family, community and society.

*The Governor's Task Force on Early Childhood Education: Report and Recommendations for Oklahoma Infants, Toddlers and Preschool Children (from Birth through Age Four) and their Families December 13, 2000*

## Measures of child well-being indicate problems for Oklahoma's very young children.

Many of the key indicators of young child well-being tracked by KIDS COUNT paint a grim picture for Oklahoma infants, toddlers and preschool children. An average of almost 3,500 (3,457) babies a year are born too small. Almost 400 (389) a year die before their first birthday. More than forty percent (40.6%) of the victims of child abuse are under age six, with children that young making up more than three-quarters (78.4%) of the deaths attributable to child abuse or neglect.

During its comprehensive assessment of Oklahoma's early childhood system, the *Governor's Task Force* discovered several Oklahoma trends which made healthy development more difficult for Oklahoma's youngest:

- an increase in the number of families headed by a single parent (resulting from rising divorce rates and increasing births to unmarried mothers)
- an increase in the number of children not living with either parent (resulting from children being raised by other relatives, growth in foster care placements and incarceration of the child's parent)
- a decrease in the amount of time parents spend with their child (caused by increased hours at work and increased participation of mothers in the workforce)



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Oklahoma leads the nation in worsening poverty among its youngest children. The *Governor's Task Force* noted that a substantial number of young Oklahoma children were exposed by poverty to risks which can impede early brain development (inadequate nutrition, exposure to environmental toxins, trauma and abuse, poor quality daily care, and poor health care). The concerns of the *Governor's Task Force* were substantiated by its discovery that statewide, about one-fourth of incoming kindergarten children were not ready to begin school. Many individual schools reported much higher rates.

For the first time, Oklahoma KIDS COUNT ranks Oklahoma's 77 counties based on seven indicators related to early childhood care and education:

**Population of Young Children (1998)**  
identifying counties with the largest numbers of infants, toddlers and preschool children (birth through age five)

**Immunizations Completed by Age Two (1995)**  
measuring the provision of preventive health services to infants and toddlers in the community

**Elevated Lead-based Poisoning Tests (1994 - 1997)**  
measuring community environmental hazards dangerous to young children

**Births to Mothers Under Age 20 (1998)**  
counting children born into the community less likely to have adequate emotional and financial resources

**Inadequate Prenatal Care (1998)**  
counting pregnancies in the community likely to result in health problems for the babies

**Child Care Availability (2000)**  
measuring the availability of licensed child care in the community for children under age six with working parents

**Young Child Poverty Rates (1997, estimates)**  
a measure of the presence of very poor infants, toddlers and preschool children in the community

Taken together, these indicators provide a comprehensive picture of a county's early childhood status in a manner which can be ranked, updated and tracked from year to year. Each county is ranked on each of the seven indicators. All measures were given the same weight, making no attempt to judge relative importance. The seven individual county rankings are totaled into an *Early Childhood County Index* in which the higher the number, the more improvement the county needs to achieve in order to provide the best start for its youngest citizens.

Birth outcomes in large cities are not as good as those elsewhere. A recent national KIDS COUNT Special Report, *The Right Start*, assessed the conditions of babies and their families in America's largest cities finding that both of Oklahoma's largest cities, Oklahoma City and Tulsa, follow this inauspicious national trend.

Compared to Oklahoma as a whole (62.5%), a smaller proportion of the births in Oklahoma City (61.0%) and Tulsa (57.5%) were classified as healthy (based on birthweight, APGAR score, prenatal care

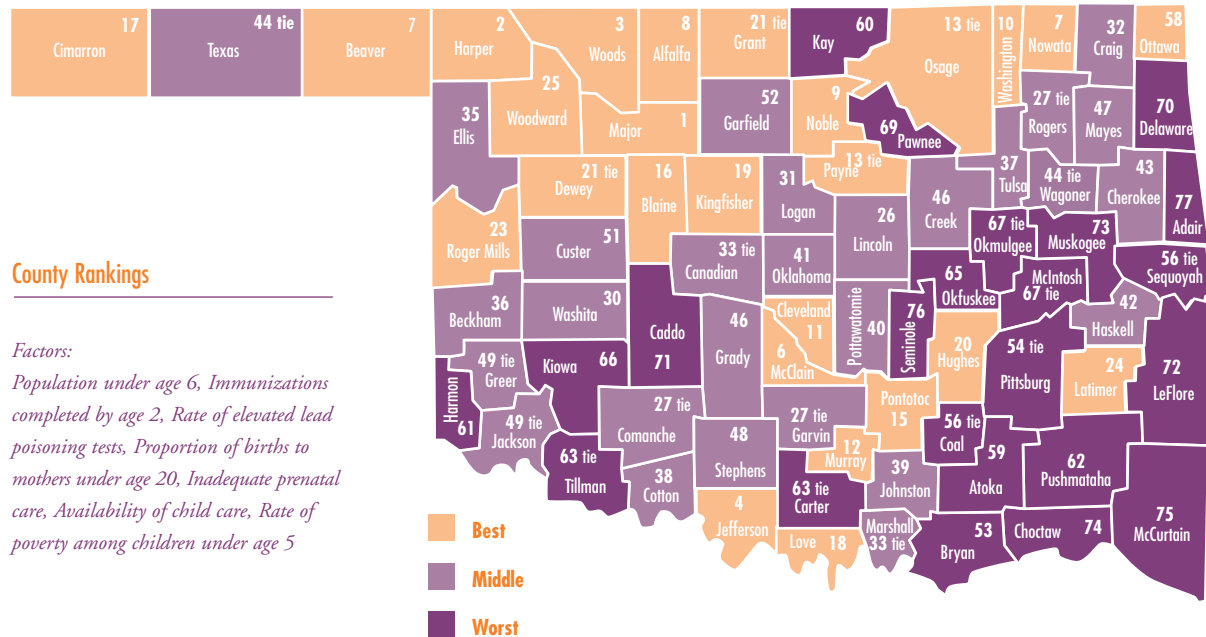
received and length of gestation). Births in Oklahoma City and Tulsa were less healthy than the average for the nation's fifty largest cities (61.6%).

The percent of births classified as at risk based on the mother's characteristics (under age twenty, unmarried, less than twelve years of education) in both Oklahoma City (9.1%) and Tulsa (8.8%) was worse (higher) than the average for the nation's fifty largest cities (8.6%) and worse (higher) than the comparable percent for Oklahoma as a whole (8.0%).

## Early Childhood Status

### State Data

Child Population < 6	1998	275,002
Immunizations by Age 2	1995	76.0%
Lead-based Poisoning	1994-97	3.82/ <sub>1000</sub>
Births to Mothers < 20	1998	162.5/ <sub>1000</sub>
Inadequate Prenatal Care	1998	6.2%
Child Care Availability	2000	0.579
Poverty - Children < 5	1997	29.0%



## Prevention and early intervention are cost effective investments capable of reaping long term benefits.

In undertaking its assessment of early childhood, the *Governor's Task Force* looked both within and outside Oklahoma borders to identify effective ideas and approaches for improving Oklahoma's early childhood care and education system. The *Governor's Task Force* documented that high quality care and education resulted in positive, long lasting results, particularly among low-income children.

The *Governor's Task Force* concluded that prevention and early intervention strategies were cost effective and held great promise, reducing the need for

Success requires that parents are acknowledged as their child's first and most important teacher and that parents have access to whatever they need to make the most of each child's unique opportunities to develop.



remediation, treatment or crisis intervention in later years. For example, the benchmark respected High/Scope Perry Preschool Project demonstrated that quality preschool programs decreased the need for special schooling, increased employment, reduced welfare dependence, decreased crime, and more ... all saving taxpayer dollars at the rate of \$7.16 for every public dollar invested in quality preschool services.

More recently, the Abecedarian Project demonstrated similarly impressive results through a carefully controlled study comparing infants from low-income families who received early intervention in a high quality child care setting with infants who did not. Both groups were assured adequate nutrition, supportive social services and access to primary health care services. The Abecedarian children each received individualized educational activities consisting of "games" that were incorporated into his or her day. By following the children's progress through age 21, the Abecedarian Project found that high-quality, intensive, sustained, multi-faceted early intervention programs improve the course of intellectual development in young children. Documented positive effects included higher IQ and cognitive performance, improved language, fewer instances of grade retention, decreased need for special education, higher reading and math achievement scores, higher levels of formal education, delayed parenthood, and, for teen mothers, higher rates of post-high school education. Impressive savings would flow to taxpayers if the results of the Abecedarian Project were only partially realized in Oklahoma.

Ensuring that Oklahoma children have the best start possible requires understanding the value of and investing in family support, preschool and early intervention programs, child care and health care. Family support helps families provide a nurturing home environment. Success requires that parents are acknowledged as their child's first and most important teacher and that parents have access to whatever they need to make the most of each child's unique opportunities to develop. Preschool and early intervention programs provide developmental support to help prepare children for school and assure that children start school ready to learn. Children who are low-income, socially vulnerable and have developmental delays benefit greatly from such developmental support. Child care must be of high quality, and safe and affordable, providing developmentally-appropriate care while parents are at work or away from home. Health care coverage and access to primary and preventive services, physical activity, and nutrition are necessary to develop and maintain healthy minds and bodies.

Oklahoma has made a good start by implementing innovative programs and making significant investments in the early care and education of Oklahoma children. However, the *Governor's Task Force* found that Oklahoma's creativity and concern were being stymied by the absence of a comprehensive, coordinated policy structure focusing on families and communities.

The recently released *Governor's Task Force* report advocated four key strategies (accompanied in the report by numerous detailed recommendations). This long-term early childhood initiative is designed to achieve their vision that *all Oklahoma children will be healthy, eager to learn, and ready to succeed by the time they enter school.*



Implementation of the *Governor's Task Force* strategies promises the right start for Oklahoma's infants, toddlers and preschool children. To take such action will maximize the benefits of Oklahoma's current and future investments in family support, preschool and early intervention programs, child care and health care. To do otherwise will neglect Oklahoma's youngest and Oklahoma's future.



Health care coverage and access to primary and preventive services, physical activity, and nutrition are necessary to develop and maintain healthy minds and bodies.

**1** Strategy One:  
Enact a strong *public policy* promoting early childhood care and education

**2** Strategy Two:  
Create a statewide public-private early childhood *partnership*

**3** Strategy Three:  
Implement a comprehensive *public engagement* campaign

**4** Strategy Four:  
Mobilize *communities* to provide environments that support children and families

