Sunny Start
Healthy Bodies
Healthy Minds

2011
Report

the state of the Young Hoosier Child

Birth to Age Five





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Introduction

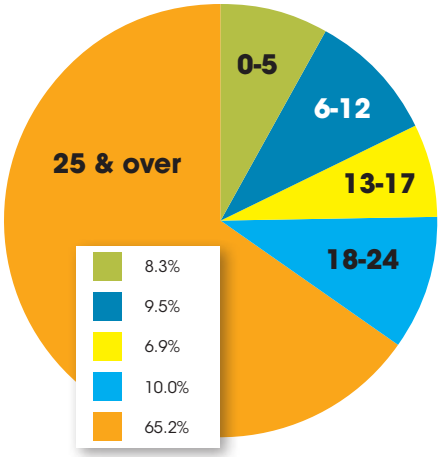
The truth of the statement "children are our future," is never more apparent than when looking at the investment in early childhood. Multiple studies show significant benefits from investing in early childhood in regard to health and education, with a return to greater society in various ways, such as improved health, reduced reliance on government programs, and positive academic outcomes.[1] The research of James Heckman, Nobel Laureate in Economic Sciences, demonstrates the benefits of investing in young children and shows that early experiences and environments follow children through to later life.[2] This life course perspective helps to understand the importance of early childhood and what the outcomes mean for society as a whole. This includes the concept that disparities during the early years may lead to differential developmental trajectories across the life span.[3] Researchers, economists, and legislators have achieved a general consensus regarding the need to invest in the early childhood years in order for young children to be prepared for success in school and beyond.

Numerous research studies show that at a minimum, every dollar invested in early childhood programs is returned, if not returned in greater numbers.[4] These costs are calculated based on the greater academic success and reduced reliance on government programs that result from greater early childhood investment.[5] Health research shows the positive effect on investing in early childhood, noting that healthy children are more likely to become healthy adults. Negative health outcomes from early experiences affect the "wiring" of the body and reactions, which means greater susceptibility to illness and negative health outcomes well into adulthood. Therefore, focusing on health promotion in early childhood can help reduce the social and economic burdens of illness, not only in childhood but also throughout the adult years.[6]

The recent federal focus on young children and the critical importance of a "good start" for those children in developmental, educational and emotional areas underscores what policy makers in Indiana have been working toward for a long time. With funding provided by the Federal Maternal and Child Health Bureau, Indiana has participated in the national Early Childhood Comprehensive Systems (ECCS) initiative since 2003. Facilitated by the Indiana State Department of Health's Maternal and Child Health Division, Indiana's ECCS initiative titled Sunny Start: Healthy Bodies, Healthy Minds brings together representatives of numerous state agencies, community organizations and families of young children to coordinate, inform and advocate for young children and their families. By federal intent, ECCS is focused on five component areas:

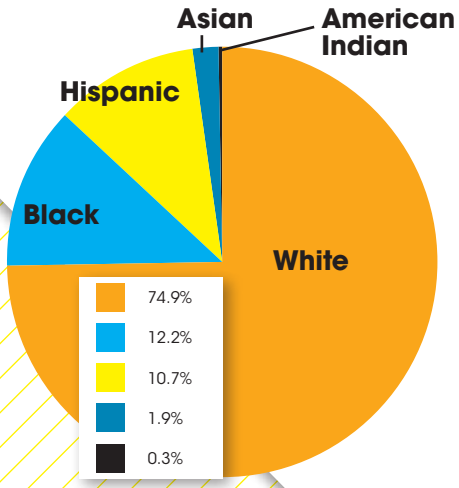
- Access to Health Insurance and Medical Homes
- Early Care and Education
- Mental Health and Social/Emotional Development
- Family Support
- Parent Education

Figure 1: Total Population by Age Group



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Easy Access to Juvenile Populations: 1990 - 2009

Figure 2: Zero to Five Population by Race and Ethnicity, Indiana: 2009



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Easy Access to Juvenile Populations: 1990 - 2009

Introduction (continued)

This report, *The State of the Young Hoosier Child,* is the result of the significant efforts of the many Sunny Start stakeholders on behalf of young Hoosier children. The report is intended to provide a snapshot of the well-being of children in Indiana from birth through age five. Reflecting the five component areas of ECCS, the report is focused on four areas:

- Physical Health and Well-Being
- Social and Emotional Development
- School Readiness
- Family Support

This report shines a spotlight on indicators that research has shown influence the outcomes for young children and their future well-being. Indicators help provide a picture of how well children are doing in certain areas.[7] Starting with the basic indicators of population, demographics can help with understanding who exactly the young children in Indiana are.

Children ages birth to age five comprise an estimated 8.3% of the total Hoosier population. In 2009, there were an estimated 534,603 children between the ages of zero (birth) and five in the state of Indiana. When looking only at children under 18, those in the 0 - 5 category make up a third (33.6%) of the child population.[8] Hoosier children are more racially and ethnically diverse than the adult population (here regarded as 18+), and children ages 0 - 5 are more diverse than the total under age 18 population.[9] The sheer size of the population and the needs discovered in this report illustrate the importance of continued and improved investment in young Hoosier children.

Children's physical health, social and emotional development, and family and environmental factors all influence their health and well-being throughout their life course.[10] This report, The State of the Young Hoosier Child (SYHC) contains state level information and national comparisons that can be used as a resource by communities, policy makers, and youth workers. When 0 - 5 data are not available, information on the whole child population is used to complete the picture. Measurable indicators that enable tracking of progress are critical to understanding children's well-being;[11] therefore, this report also provides a set of County Data Profiles which includes indicators of the well-being of children 0 – 5 across time for each of Indiana's 92 counties. These profiles can be used for comparison to the state or other counties. This information is useful for local program development and grant applications. These County Data Profiles are available online at www.sunnystart.in.gov/syhc.

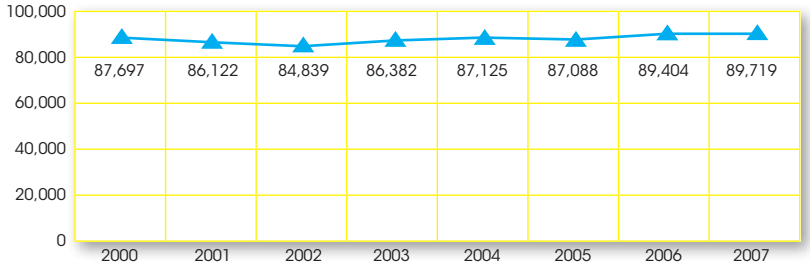
Physical Health and Well-Being

There are a number of factors that contribute to a child's physical health and well-being. For example, access to health care is an essential component of the equation.[12] Access may be limited by geography, transportation, or the lack of health insurance. Health insurance coverage enables children to receive medical services, preventive and otherwise.[13] Research has found that problems such as heart disease and diabetes may be consequences of low birthweight or other early health issues.[14] Newborn screenings and establishing a medical home are all important to children's health, as well as certain other indicators, such as oral health and lead poisoning. Certain groups may be at greater risk for health issues or lower access to care, so understanding the population is important to gauging overall health and well-being.[15] From existing research into the life course perspective, we now know that health care for a child starts with prenatal care for the mother. This report begins with birth outcomes and prenatal care.

Birth Outcomes

Research identifies several maternal health factors that give children a strong start at birth and can positively affect their childhood. These factors include good pre-pregnancy maternal health, access to financial and social support, along with a high level of maternal education and the absence of smoking, drinking alcohol and drug use during pregnancy.[16] A father's intentions for having children and active involvement during pregnancy may also have positive implications for his children, such as better health outcomes.[17]

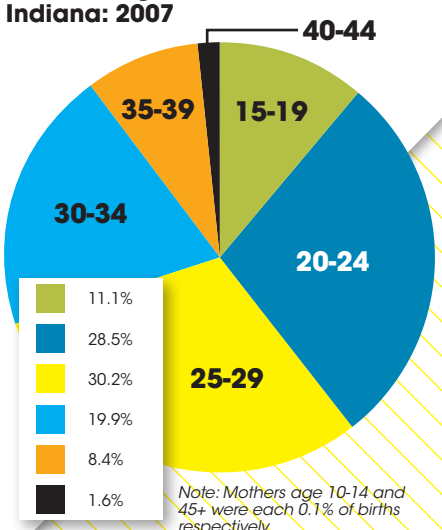
Figure 3: Total Number of Live Births, Indiana: 2000 - 2007



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team

The most recent birth data available in Indiana are for 2007. The total number of live births in Indiana has been increasing since 2002 following a period of decline from 2000. In Indiana, a slightly higher proportion of males are born (51.2% of 2007 live births), compared to females (48.8%).[18] Women between the ages of 20 and 34 account for the majority of births in Indiana (78.6%).[19]

Figure 4: Percentage of Live Births by Age of Mother, Indiana: 2007

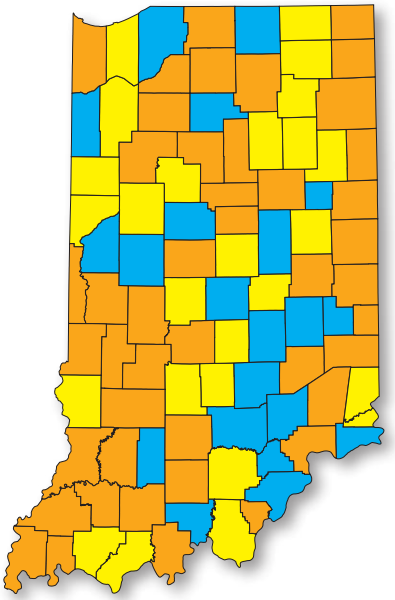


Note: Mothers age 10-14 and 45+ were each 0.1% of births respectively
Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team

Births to Teen Mothers

Teen mothers face a variety of issues and needs that older mothers may not face. As seen within this report, younger mothers are less likely to obtain prenatal care or breastfeed their baby. Research also shows that children of teen mothers may have poorer academic and health outcomes, and teen mothers themselves are less likely to complete school and more likely to rely on government programs.[20]

Figure 5: Teen Birth Rate per 1,000 Females Ages 15-17 by County, Indiana: 2007



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team

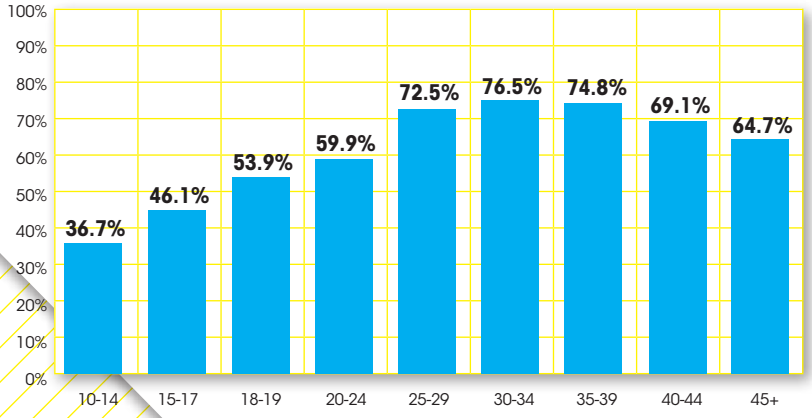
After several years of decrease, Indiana's teen birthrate has increased slightly in the last few years of reported data. In CY 2007, the birthrate for Hoosier females ages 15-17 was 22.0 per 1,000 females of that age, similar to the nation's rate of 22.1. This is an increase from 2006, when the birthrate for females ages 15-17 was 20.8 per 1,000. When the age range is extended, the birthrate for Indiana girls ages 15-19 was 45.1 per 1,000, compared to the national birthrate of 42.5 for females 15-19.[21]

Prenatal Care

A child's health can be influenced before they are born. Research shows that mothers who receive late or no prenatal care are more likely to deliver babies with health problems. Mothers who receive no prenatal care are three times more likely to give birth to a low birthweight baby.[22] However, some health researchers are concerned that increased prenatal care alone may not result in substantial improvements to birth outcomes. Many women who lack adequate care also have social risk factors including low socioeconomic status or becoming pregnant at a young age, factors that cannot be fully addressed through better prenatal care.[23]

In Indiana during 2007, 67.5% of women, overall, received first trimester prenatal care. Due to the change in the definition of prenatal care with the use of the "Revised" U.S. Standard Certificate of Live Birth starting in 2007 comparison to previous years is not recommended;[24] however, trends do indicate that first trimester prenatal care in Indiana was on the decline even before the change to the revised birth certificate system.[25] Fewer women in Indiana receive first trimester prenatal care than in the nation, but the rates for both have been declining since the 1970s.[26] Nationally, about every one out of 14 women (7.1%) receives late (post-first trimester) or no prenatal care at all.[27]

Figure 6: Percentage of Mothers Receiving First Trimester Prenatal Care by Age, Indiana: 2007



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team

Table 1: Percentage of Mothers Receiving First Trimester Prenatal Care by Race and Ethnicity, Indiana: 2007

Race	Percent
Hispanic (of any race)	49.5%
Black	53.4%
American Indian/ Alaskan Native	60.8%
White	69.4%
Asian/ Pacific Islander	69.7%

Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team

Early prenatal care varies by the mother's race and ethnicity. In Indiana, Hispanic women (of any race) and Black women are least likely to receive first trimester prenatal care. Early prenatal care also varies with age among Indiana mothers: the youngest mothers are the least likely to obtain first trimester prenatal care.[28]

Just over two out of every five babies born in Indiana are born to women on Medicaid.[29] Getting health care to pregnant women before they deliver has been a quality improvement strategy for the Office of Medicaid Policy and Planning (OMPP). Access to health care coverage for prenatal care as soon as a woman suspects that she is pregnant became one of the driving forces behind the implementation of Presumptive Eligibility for Pregnant Women (PE) on July 1, 2009. PE is short-term health

coverage for outpatient prenatal care available to women with low income while a Medicaid application is pending. The goal of PE is to provide women who are early in their pregnancy with the health care they need to ensure they remain healthy and have healthy babies. Due to the timing of implementation, the OMPP is unable to report trends currently, but is monitoring the program for outcomes.[30]

Smoking During Pregnancy

In addition to receiving prenatal care, pregnant women can improve their babies' health by abstaining from specific behaviors such as smoking and drinking alcohol. Women who smoke during pregnancy have more than twice the risk of delivering a low-birthweight baby, as well as a 30-50% higher risk for miscarriage than nonsmokers. The babies of mothers who smoke during pregnancy have twice the risk of dying from Sudden Infant Death Syndrome (SIDS) than infants of nonsmoking mothers.[31] The revised birth certificate form changed the smoking during pregnancy question, making comparisons to data before 2007 invalid.[32]

In 2007, nearly one out of five (18.5%) Hoosier mothers reported smoking at any time during their pregnancies, compared to 10.4% for the 21 states using the revised birth certificate. Rates varied by age group, with Indiana mothers ages 18-19 having the highest rate of smoking during pregnancy (28.4%), followed closely by those between ages 20-24 (26.7%).[33]

Preterm, Low Birthweight and Very Low Birthweight Babies

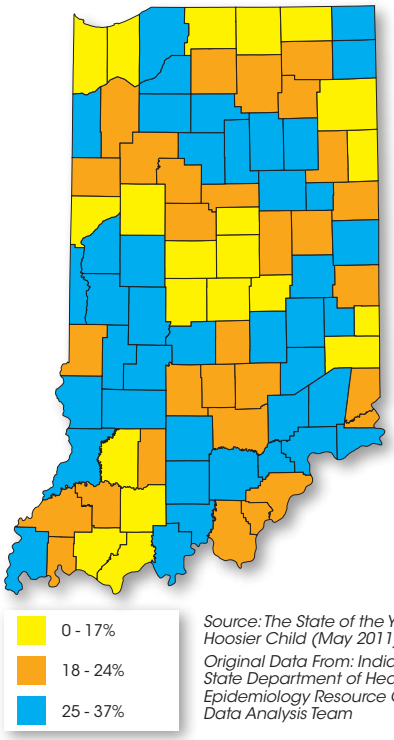
Births occurring at least three weeks before an infant's due date (earlier than the 37th week of pregnancy) are considered preterm births and are at higher risk for complications.[34] These complications can include breathing issues, heart problems, and intestinal issues.[35] In 2007, 12.9% of all births in Indiana were preterm, compared to 12.7% nationally. Black and Hispanic women have the highest rate of preterm births in Indiana.[36]

Table 2: Percentage of Mothers Who Smoked During Pregnancy by Age, Race, and Ethnicity, U.S. vs. Indiana: 2007

	White	Black	Hispanic, of any race
Indiana	**19.6%**	**13.3%**	**4.1%**
U.S.	**16.3%**	**10.1%**	**2.1%**

Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team

Figure 7: Percentage of Mothers Who Smoke During Pregnancy by County, Indiana: 2007



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team

Figure 8: Percentage of Preterm Births by Race and Ethnicity, U.S. vs. Indiana: 2005-2007 Average

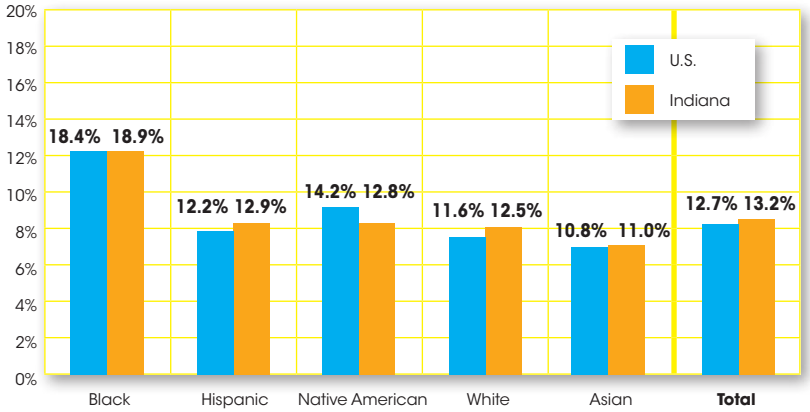
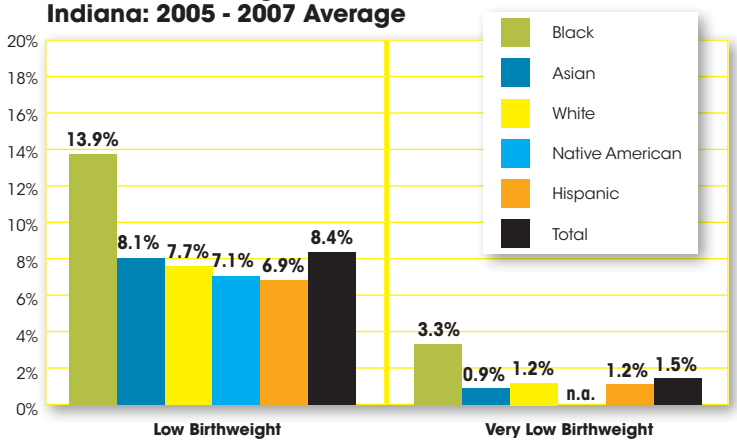


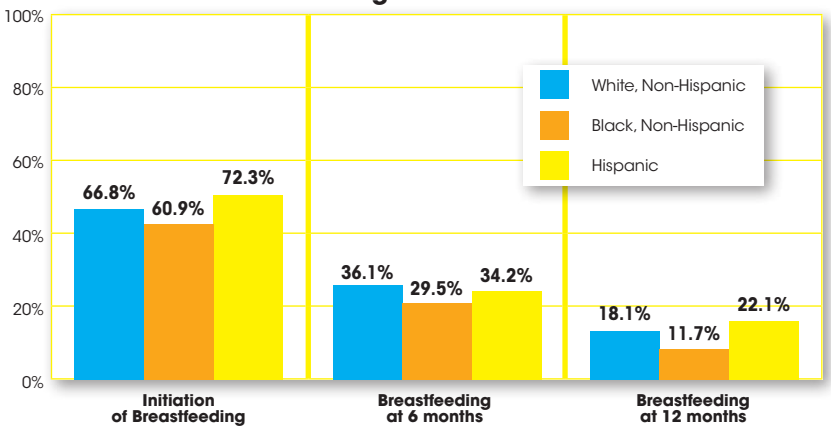
Figure 9: Percentage Low Birthweight and Very Low Birthweight by Race and Ethnicity, Indiana: 2005 - 2007 Average



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: March of Dimes, PeriStats

Infants born weighing between 1,500 and 2,499 grams (three lbs., five oz. to five lbs., eight oz.) are considered low birthweight (LBW); those born with a weight under 1,500 grams (three lbs., four oz.) are considered very low birthweight (VLBW). Infants born at low, or very low, birthweight are at increased risk for serious health problems such as mortality, long-term disability, or impaired development. Babies of mothers who smoke during pregnancy have an increased risk of being born LBW or VLBW.[37] In 2007, Indiana had a slightly higher percentage of low birthweight babies than the nation (8.5% in Indiana compared to 8.2% nationally), but the same rate of VLBW babies (at 1.5%).[38] LBW and VLBW rates vary by race and ethnicity, with Black babies having the highest rates for both in Indiana.[39]

Figure 10: Prevalence of Breastfeeding Initiation and Duration to 6 Months and 12 Months by Race and Ethnicity, Indiana: 2004 - 2008 Average



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Centers for Disease Control and Prevention

Breastfeeding Rates

In January 2010, the U.S. Surgeon General called for support for breastfeeding from employers as well as communities and policymakers, noting research and statistics that show that breastfeeding benefits babies, as well as parents.[40] Research has shown that breastfeeding supports the baby's immune system, as well as strengthens the mother's health. In addition, babies who are breastfed are less likely to be sick, which in turn means parents are able to miss fewer days of work.[41]

The Centers for Disease Control and Prevention (CDC) monitors breastfeeding rates and notes that the high initiation rates show that mothers want to breastfeed and are trying to do so, but may not have the support they need.[42] Indiana has lower rates of breastfeeding across the CDC indicators, but trends mirror national numbers. The National Survey of Children's Health also shows Indiana with lower overall breastfeeding rates, with 71.4% of Hoosier children ages 0 - 5 ever having been breastfed compared to 75.5% nationally.[43]

Rates of breastfeeding differ by demographic characteristics such as race, age, and education. Black women have the lowest rates compared to White and Hispanic women for initiation and duration of breastfeeding. At the national level, mothers who are 30 or older have the highest rates of initiation (77.5%) and duration at six months (48.5%) and one year (25.4%). Mothers younger than 20 years old have the lowest rates of initiation and duration compared to the other age categories. Women who have some college or graduated from college have higher rates of breastfeeding initiation and duration compared to women who have a high school diploma or less. However, women who have no high school diploma actually have slightly higher rates of initiation and duration than women with a high school diploma and no college.[44]

Infant Mortality and Young Child Deaths

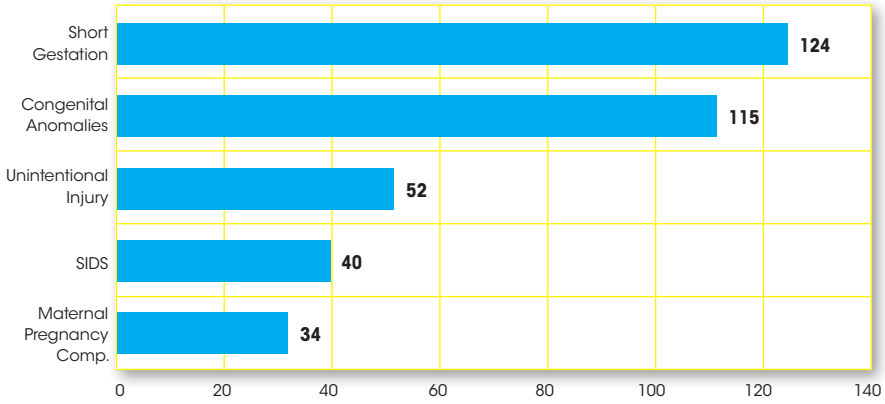
The Centers for Disease Control and Prevention (CDC) has identified low birthweight as the major reason behind the increase in U.S. infant mortality.[45] The number of infants that die before they reach their first birthday per 1,000 live births is known as the infant mortality rate, and Indiana consistently ranks higher than the nation on this indicator.[46] During Calendar Year (CY) 2007, 677 Hoosier infants died within a year of birth. The leading cause of infant death in Indiana was short gestation/low birthweight.[47] In 2007, the national infant mortality rate was 6.8 deaths per 1,000 infants; in Indiana, the rate was higher at 7.6 per 1,000 infants.[48] Babies with mothers age 20 and younger have the highest infant mortality rate (11.5 per 1,000 births) when comparing age groups, followed by women age 40 and older (7.9 per 1,000 births).[49] African Americans have 2.4 times the infant mortality rate as non-Hispanic Whites, and Black babies are four times as likely to die as infants due to complications related to low birthweight as compared to non-Hispanic White infants.[50]

Table 3: Infant Mortality Rate by Race and Ethnicity, Indiana: 2007

	Rate per 1,000 births
Black or African American	16.0
Hispanic or Latino	6.9
Non-Hispanic White	6.6
State Total	**7.6**

Note: American Indian and Asian not included due to unstable rate because of small population
Source: The State of the Young Hoosier Child (May 2011)
Original Data From: KIDS COUNT Data Center

Figure 11: Top Five Leading Causes of Death for Infants (Under Age 1), Indiana: 2007



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Centers for Disease Control, WISQARS

The leading cause of death for children ages 1 – 5 in Indiana is unintentional injury. For children ages 1 - 5 in Indiana in 2007, there were a total of 123 deaths from unintentional injury. The next most common cause of death in Indiana in 2007 for children ages 1 - 5 were: birth defects (17 deaths in 2007), followed by cancer (14 deaths), homicide (13 deaths) and Septicemia (3 deaths).[51]

Table 4: Five Leading Causes of Injury Deaths for Infants, Indiana: 2003 - 2006

Cause	Number	Percent*
Unintentional Suffocation	138	60.8
Undetermined Suffocation	11	4.8
Unintentional Motor Vehicle, Overall	10	4.4
Unintentional Fire/Burn	8	3.5
Unintentional Drowning	6	2.6

**All percentages out of total number of injury deaths*
Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team; Chart produced by Injury Prevention Program

Screenings at Birth

Screenings at birth are meant to ensure that children who may need treatment or services are identified and their needs are confirmed. Various screenings should occur when a baby is born that can help identify babies who are at risk for certain conditions. Since a baby may appear healthy, these screenings can help discover conditions that might not have outward symptoms, and treatment can then be assigned. Indiana state law requires that all babies in Indiana be tested for 46 conditions (including sickle cell anemia) and hearing loss, and the test must be done before the baby leaves the hospital. For babies born at home, the test must be completed within one week of birth.[52] Most of the tests are performed using a heel stick blood spot. Then the blood samples are sent to a newborn screening lab for testing and parents are notified if there is a problem or a need to retest.[53]

Table 5: Percentage of Valid Newborn Screening Performed and Total Number of Children with Confirmed Metabolic Conditions Based on Newborn Screening, Indiana: 2003 - 2007

Year	Percentage of Live Births with Valid Initial Newborn Screens Performed	Total Number of Children with Confirmed Positive Metabolic Conditions Based on Newborn Screening*
2003	99.97%	81
2004	99.08%	74
2005	99.80%	66
2006	99.63%	80
2007	99.20%	109

** Metabolic conditions included in this count include partial biotinidase deficiency, hyperphenylalanemia, hypercitrullinemia, and galactosemia variants.*

Source: The State of the Young Hoosier Child (May 2011)

Original Data From: Indiana State Department of Health, Genomics and Newborn Screening Program

Table 6: Children Diagnosed with Permanent Hearing Loss at Birth as Reported to EHDI, Indiana: 2005 - 2010

Birth Year	Number of Children
2005	117
2006	159
2007	166
2008	137
2009	157
2010	125*

** This number is likely to increase as several children are still completing the diagnostic process to confirm their hearing status*

Source: The State of the Young Hoosier Child (May 2011)

Original Data From: Indiana State Department of Health, Early Hearing Detection and Intervention Program

In Indiana, the numbers that are reported reflect children who were born in Indiana, regardless of whether or not the parents reside in the state. If a baby is born within state lines, Indiana is responsible for ensuring that he/she receives a timely and valid initial newborn screen.[54]

Another screening at birth is for hearing loss. The goal of early hearing detection and intervention (EHDI) is to ensure children who are deaf or hard of hearing are able to obtain linguistic understanding and literacy development. The Joint Committee on Infant Hearing (JCIH) notes that without appropriate diagnosis and opportunities to learn languages, these children may fall behind their hearing peers in communication, cognition, reading ability and social-emotional development. These types of delays may result in overall lower educational and employment outcomes in adulthood, therefore early intervention is key.[55]

In Indiana, children are to be screened before they leave the hospital or before one month of age. There are two types of tests available to screen the hearing of babies, both of which are painless and babies often sleep right through.[56] Children who do not pass the test should be referred to their primary care provider, or to an audiologist who specializes in infant hearing assessment. [57] EHDI has recommended that hospitals schedule an appointment with an audiologist prior to discharge. Children who have been diagnosed with permanent hearing loss should be referred to First Steps and other early intervention services as appropriate.[58] The EHDI Program tracks the number of children diagnosed with permanent hearing loss with a majority of reports coming from audiologists across the state.

Medical Home

A medical home is sustained medical care between a child, family, and pediatric care team. The American Academy of Pediatrics (AAP) specifies seven qualities essential to medical home care: accessible, family-centered, continuous, comprehensive, coordinated, compassionate, and culturally effective. Ideally, medical home care is delivered within the context of a trusting and collaborative relationship between the child's family and a competent health professional who is familiar with the child and family and the child's health history.[59]

Overall, 61.7% of Hoosier children under age 18 receive medical care within a medical home, compared to 57.5% of children nationwide. Younger children, especially those 0 - 5 are more likely to have a medical home as defined by the AAP. Since the indicator changed between survey years, cross-time calculation is not recommended.[60]

When looking specifically at Children with Special Health Care Needs (CSHCN), Indiana does better than the nation in terms of CSHCN receiving adequate care within a medical home. For all children under 18, 54.6% of CSHCN received medical home services, compared to 47.1% nationally. Again, children ages 0 – 5 are more likely than children in other age groups to have care in a medical home.[61]

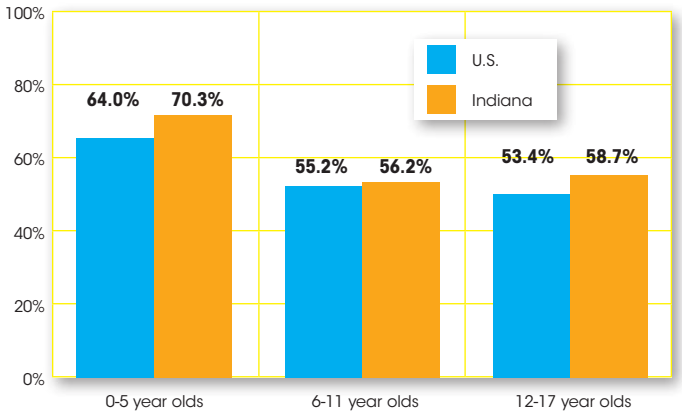
Vaccines and Immunizations

Childhood immunizations help prevent outbreaks of disease. Newborns are immune to many diseases through possessing the antibodies of their mother. However, this immunity does not last long, so vaccines can help build immunity against preventable diseases, as well as help stop the spread of disease among groups of children and the larger community. Because children are highly susceptible to disease, the Centers for Disease Control and Prevention (CDC) recommends children receive vaccines for preventable diseases by the time they are two years old.[62]

The CDC's immunization schedule for children recommends four doses of the diphtheria, tetanus, and pertussis (DTP) vaccine, three or more doses of polio vaccine, one or more doses of the measles-mumps-rubella (MMR) vaccine, three or more doses of the Haemophilus influenzae type b (Hib) vaccine, the hepatitis B vaccine, and the varicella (chickenpox) vaccine. The DTP, polio, MMR, and Hib vaccines are collectively referred to as the combination or 4:3:1:3 series. Since 2002, the CDC has also tracked a combination series that includes all of these vaccines (called the 4:3:1:3:3:1 series). Immunization data for 2009 was affected by a shortage of Hib vaccine that occurred between December 2007 and September 2009.[63]

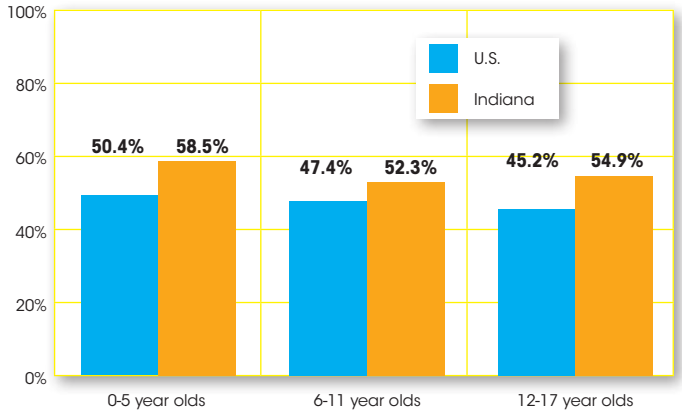
According to the 2009 National Immunization Survey, 70.5% of children between the ages of 19-35 months were immunized with the modified vaccine series nationwide, compared with 67.3% of Indiana children in the same age group.[64] Immunization estimates fluctuate slightly over time, but both national and Indiana estimates declined in 2009.[65]

Figure 12: Percentage of Children Who Receive Health Care that Meets the AAP Definition of Medical Home, U.S. vs. Indiana: 2007



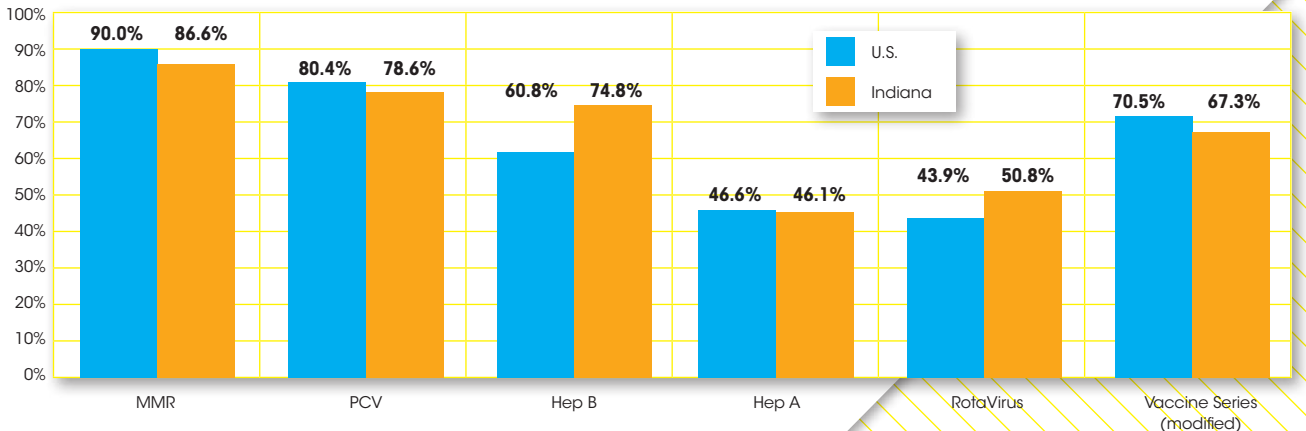
Source: The State of the Young Hoosier Child (May 2011)
Original Data From: National Survey of Children's Health

Figure 13: Percentage of CSHCN Who Receive Coordinated, Ongoing, Comprehensive Care Within a Medical Home, U.S. vs. Indiana: 2005/2006



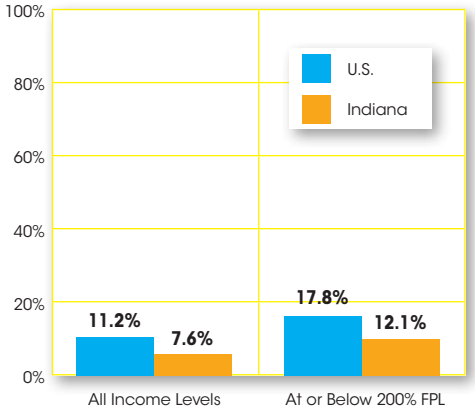
Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Survey of Children with Special Health Care Needs

Figure 14: Estimated Vaccination Coverage Among Young Children Ages 19 - 35 Months, U.S. vs. Indiana: 2009



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Centers for Disease Control and Prevention

Figure 15: Percentage of Children Under Age 19 Uninsured by Income Group, U.S. vs. Indiana: 2007



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: U.S. Census Bureau, Small Area Health Insurance Estimates

Health Insurance Coverage

Access to health care is important for children's overall well-being. Inability to pay for care is one of the greatest barriers to health care access. As more children move from private insurance to public programs, increasing attention should be paid to those who are still uninsured.[66] The availability of health insurance is an important determinant of childhood health because insured children are likely to be healthier and have lower rates of avoidable hospitalizations and childhood mortality than their uninsured peers. Without access to a medical home or primary care doctor, parents are more likely to rely on the emergency room as a source of care, and to forgo preventive visits and other necessary health, dental or other medical care for their children.[67]

A higher percentage of Hoosier children are covered by health insurance than their peers nationally. Fewer children continue to be uninsured, with 7.6% of children under 19 of all income levels being uninsured in 2007, down from 9.0% in 2006.[68] Children with special health care needs may face greater barriers to obtaining health insurance coverage. During the 2005-2006 Survey of Children and Youth with Special Health Care Needs (CYSHCN) parents reported that in Indiana, 9.2% of CYSHCN under 18 went without health insurance at some point during the past year and 4.2% were uninsured the whole year. A third (32.7%) of the currently insured CYSHCN have inadequate insurance.[69]

Medicaid

Though some children receive coverage from their parents' private health insurance plan, many, including wards of the state, rely on government programs for access to health care. In Indiana, Hoosier Healthwise and Medicaid provide public health insurance to children from low-income families. During State Fiscal Year (SFY) 2010, there were 323,179 children under six served by public health insurance in Indiana.[70] This represents an estimated 60.5% of all children ages 0 - 5 in Indiana. [71]

Early and Periodic Screening, Diagnosis and Treatment (EPSDT) Program

One of the most important roles of the pediatrician is to identify medical, developmental, emotional and behavioral problems in children as early as possible and to treat them, or link them to specialty care. The Early and Periodic Screening, Diagnosis and Treatment (EPSDT) program is a preventive health care program designed to improve the overall health of eligible infants, children, and adolescents on Medicaid. Special emphasis is given to early detection and treatment of health issues to reduce the risks of costly treatment that can result when detection is delayed.[72] EPSDT is the child health component of Medicaid and is required in every state.[73]

To monitor the frequency of early screening and diagnosis, the Office of Medicaid Policy and Planning (OMPP) reports annually to the Centers for Medicare and Medicaid Services (CMS) the number of children

enrolled in Medicaid who receive EPSDT services. CMS revised the guidelines for how states are to calculate and report these measures for Federal Fiscal Year (FFY) 2010, therefore making it difficult to compare data before 2010. In addition, enrollment in Medicaid and the State Child Health Improvement Program (SCHIP) overall increased. From 2006 to 2009, the number receiving at least one initial or periodic screen has also increased. Just under half (48.0%) of children enrolled in public health insurance received at least one initial or periodic screen in FFY 2009.[74]

Table 7: Children Ages 0 - 5 Enrolled in Medicaid or SCHIP and Receiving EPSDT, Indiana: 2006 – 2009

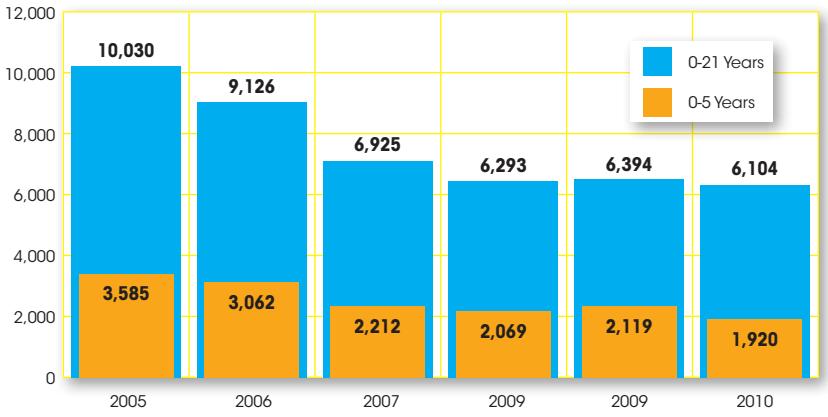
Federal Fiscal Years	Enrollment All Programs		Total Eligible Receiving at Least One Initial or Periodic Screen	
	Medicaid	SCHIP	Medicaid	SCHIP
2006	251,885	12,474	187,794	8,002
2007	256,395	11,428	201,118	7,956
2008	263,348	10,313	123,866	3,174
2009	277,891	11,061	135,427	3,413

Source: The State of the Young Hoosier Child (May 2011) Original Data From: Indiana Family and Social Services Administration, Indiana Office of Medicaid Policy and Planning

Children with Special Health Care Needs

Estimates from the Children and Youth with Special Health Care Needs (CYSHCN) survey show that one in ten children (10.6%) ages 0 - 5 in Indiana have special health care needs. Of all children under 18 in Indiana who have special health care needs, roughly a quarter (23.8%) of their parents report that their conditions affect their activities usually, always, or a great deal. Often, this can be seen in a variety of ways such as school attendance, with 10.7% of respondents noting that they missed 11 or more days of school due to illness.[75]

Figure 16: Number of Children with Special Health Care Needs by Age of Participant, Indiana: 2005 - 2010



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana State Department of Health, Children's Special Health Care Services (CSHCS) Division
Note: The figures represent all participants enrolled at any time during the specified State fiscal years based on state fy (7/1-6/30). as of 6/15/2010.

According to the survey, children with special health care needs also have problems with access to medical care, with about one in five (20.0%) of Indiana's children with special health care needs noting that they needed a referral but had difficulty obtaining one. Some of these children (5.7% in Indiana) also do not have a source of primary care or rely on emergency rooms. Their special health care needs may impact their families in such ways as having to pay more than $1,000 out of pocket for medical expenses (20.1%) or even needing a family member to cut back on or stop working (24.3%).[76]

The Indiana State Department of Health Children's Special Health Care Services (CSHCS) Division provides supplemental medical coverage to families with children from birth to 21 years with certain serious, chronic medical conditions that have lasted, or may be expected to last, at least two years. A family is eligible if their income is at or below 250% of the Federal Poverty Level (FPL).[77] The CSHCS Program served 6,104 Hoosier children and youth with special health care needs during SFY 2010, with 1,902 of those children being ages 0 - 5. Children ages 0 - 5 represent about a third (31.4%) of children enrolled in CSHCS.[78]

Table 8: Oral Health and Dental Needs of Children Ages 1 - 5, U.S. vs. Indiana: 2007

	U.S.	Indiana
Children Who Received One or More Preventive Dental Care Visit(s) in the Past Year	53.5%	53.8%
Children Who Had Decay or Cavities	11.9%	12.0%
Children Who Parent Knew Had a Toothache in last 6 months	7.2%	6.2%

Source: The State of the Young Hoosier Child (May 2011)
Original Data From: National Survey of Children's Health

Oral Health

Research indicates a connection between oral health and general health. Lack of oral care and treatment may lead to lung and heart disease, infections, low birthweight, and pre-term babies later in life.[79] People with low incomes, minorities, those with special health care needs, and people who reside in rural areas have the greatest difficulty accessing oral health care. Research shows that poor children have particular difficulty accessing dental care. Unmet dental needs can also have negative consequences for a child in other realms of their life, such as experiencing pain and difficulty eating and sleeping, making learning under such circumstances difficult.[80] The National Survey of Children's Health provides measures of children's oral health for the state and the nation. Parental reports show that younger children are less likely to receive preventive dental care, but are noted as having good overall dental health.[81]

A majority (81.5%) of children ages 1 - 5 in Indiana are considered by their parents to have teeth which are in very good or excellent condition, compared to 77.9% nationally. Another 13.5% of young Hoosier children's teeth were ranked as good compared to 16.7% nationally, while 5.0% of Hoosier children's teeth were ranked fair or poor compared to 5.4% nationally. When looking at all age groups of children, for Indiana, children 0 - 5 rank higher than the other age groups (6 - 11 and 12 - 17) for good oral health. However, children 0 - 5 fall behind other age groups in preventive dental care.[82]

Table 9: EPSDT Participation Rates for Dental Services for Children 0-5, Indiana: 2007 - 2009

	Medicaid			SCHIP		
	2007	2008	2009	2007	2008	2009
Enrollment, All Programs	256,395	263,340	277,891	11,428	10,278	11,061
Total Eligible Receiving Any Dental Services	25.4%	25.7%	28.8%	28.1%	31.2%	41.9%
Total Eligible Receiving Preventive Dental Services	22.4%	23.7%	25.9%	24.8%	28.0%	27.4%
Total Eligible Receiving Dental Treatment Services	9.2%	9.1%	9.5%	9.0%	8.9%	12.9%

Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Famiy and Social Services Administration, Indiana Office of Medicaid Policy and Planning

Medicaid-eligible children receiving dental care are documented in the CMS 416 Participation report. The CMS 416 provides basic information on participation in the Medicaid child health program, including their use of dental care.[83] Children enrolled in Medicaid or SCHIP for any portion of the year are counted in the report for the time period in which they were enrolled.

From FFY 2007 to 2009, there has been an increase in children enrolled in Medicaid or SCHIP receiving dental services. One-quarter of children on Medicaid (25.9%) and SCHIP (27.4%) received preventive dental services in Federal Fiscal Year 2009. One out of every ten children on Medicaid received dental treatment, while one out of every eight children on SCHIP received dental treatment services.[84]

Lead Poisoning

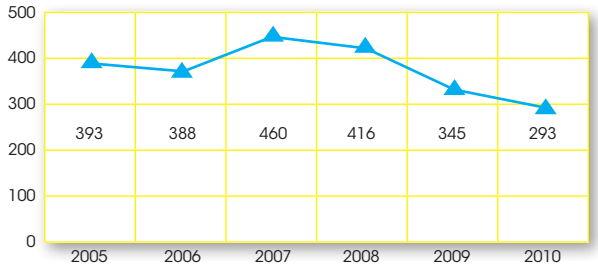
Though lead poisoning may have no obvious symptoms, elevated lead levels in the blood can be harmful to the nervous systems of young children and may cause learning disabilities, lowered intelligence, and behavior problems. Extremely high levels of lead in a child's blood may cause seizures, coma, and even death. Until it was banned as an ingredient for residential use in 1978, lead was commonly found in the paint used in many homes. It is still commonly found in older homes, and very young children are particularly susceptible to exposure through inhaling or ingesting lead paint chips or dust. Young children should be tested regularly to detect lead poisoning.[85] In Indiana, children are tested for lead poisoning if they are younger than 7 years old and present with defined risk factors, including living in a house built before 1978, being a minority, or having a family member who works around lead.[86]

Lead Poisoning Risk Factors:

- lives in or regularly visits a house or other structure built before 1978;
- has a sibling or playmate who has been lead poisoned;
- has frequent contact with an adult who works in an industry or has a hobby that uses lead;
- is an immigrant or refugee or has recently lived abroad;
- is a member of a minority group;
- is a Hoosier Healthwise (Medicaid) recipient;
- uses medicines or cosmetics containing lead; or
- lives in a geographic area that increases the child's probability of exposure to lead.[87]

In 2010 in Indiana, 293 children ages 0 – 5 had confirmed elevated levels of lead in their blood. Overall, the number of children under seven years old who were tested for lead increased over time, since the creation of the Childhood Lead Poisoning Prevention program in the early 1990s. However, there is still a need in the state to ensure that all children who meet one or more risk factors are tested for elevated levels of lead. While more children have been tested, the number of confirmed lead poisoned, however, has decreased. From 2000 to 2009, 469,322 Hoosier children ages 0 - 7 have been tested for elevated blood levels. Of those tested, 5,313 children tested positive.[88]

Figure 17: Hoosier Children Ages 0 - 5 with Elevated Blood Levels of Lead, Indiana: 2005 - 2010



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana State Department of Health, Lead and Healthy Homes Program

Social and Emotional Development

Developing skills such as cooperation and playing with other children are just a few examples of social-emotional skills that are important for children to develop in the early years. Parents, as well as others around them, are the most important factors in whether children develop healthy social-emotional skills. Often, Kindergarten teachers rate social and emotional skills as an important precursor to school readiness.[89] The social and emotional needs and development of young children can impact them throughout the life course.[90] Children in the welfare system have great needs but may be less likely to receive services in the social emotional area.[91] Children react to exposure to violence in many ways and many show resilience, but many still may experience physical, mental, and emotional harm from these experiences.[92]

Maternal Depression

Maternal depression is a significant risk factor affecting the well-being and school readiness of young children. However, maternal depression can also be compounded by other environmental factors such as poverty, with research showing low-income mothers experiencing higher levels of depression.[93] Maternal depression can impact children's development of social-emotional skills through impairment of the mother's ability to complete tasks that are vital to young children, such as bonding and attachment.[94] Other studies show similar findings, with maternal depression increasing the risk to a child's social development, in particular their social interactions and exhibiting of problem behaviors.[95]

Estimates show that roughly one out of every ten women is depressed during any trimester of her pregnancy or any month within the first year after delivery.[96] State-level data on maternal depression are not available, but using a nationally representative sample, the Center for Disease Control and Prevention (CDC) gauged prevalence rates of depression among women postpartum. Certain groups of women were more likely to report severe depression: women with less than 12 years of education, those who were Medicaid recipients, and those who delivered low-birthweight babies. Also, women who experience physical abuse during pregnancy and those who reported emotional, partner-related, financial, or traumatic stress were more likely to report being severely depressed compared to women who did not report these abuses and stresses.[97]

Table 10: Prevalence of Three Levels of Self-Reported Postpartum Depression Among Pregnancy Risk Assessment Monitoring System (PRAMS) Participants by Age, Race, and Ethnicity, Seven State Sample: 2000

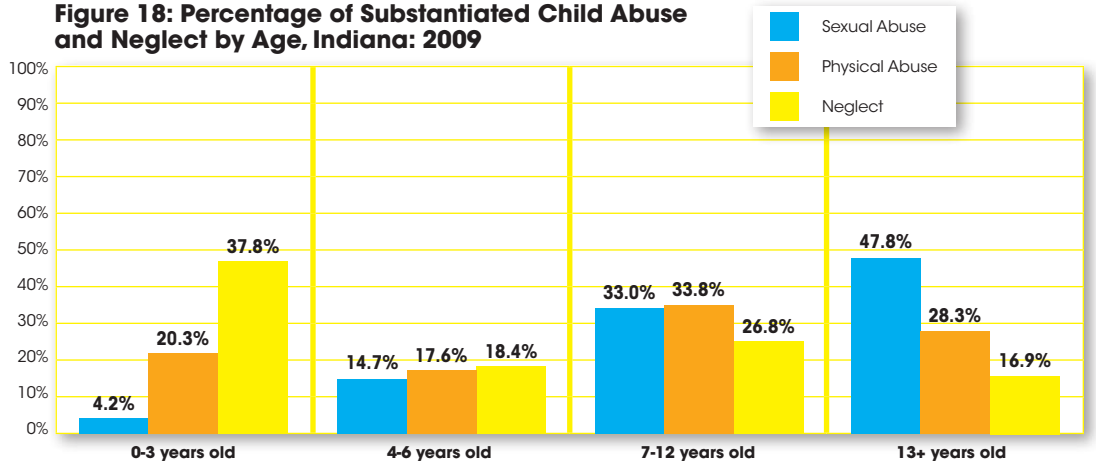
Selected Demographic Characteristics and Risk Factors, 2000			
	None	**Low to Moderate**	**Severe**
Overall	41.3%	51.6%	7.1%
Age	None	Low to Moderate	Severe
<20	34.0%	57.1%	8.9%
20-24	37.5%	52.4%	10.0%
25-34	43.2%	51.0%	5.8%
35+	47.0%	47.6%	5.3%
Race	None	Low to Moderate	Severe
White	41.1%	52.3%	6.6%
Black	42.2%	48.3%	9.5%
Other	39.2%	52.1%	8.7%
Hispanic Ethnicity	44.9%	46.7%	8.4%

Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Centers for Disease Control and Prevention

Abuse and Neglect

Abused and neglected children are more likely than their peers to struggle physically, emotionally, socially, cognitively, and behaviorally. [98] While research and statistics have shown that younger children make up a larger proportion of abuse and neglect victims than older children, due to their developing bodies and sense of self, they may be able to recover more easily from maltreatment, thus highlighting the importance of early support and intervention.[99] Prevention efforts can be key in this area of children's well-being.[100]

Figure 18: Percentage of Substantiated Child Abuse and Neglect by Age, Indiana: 2009



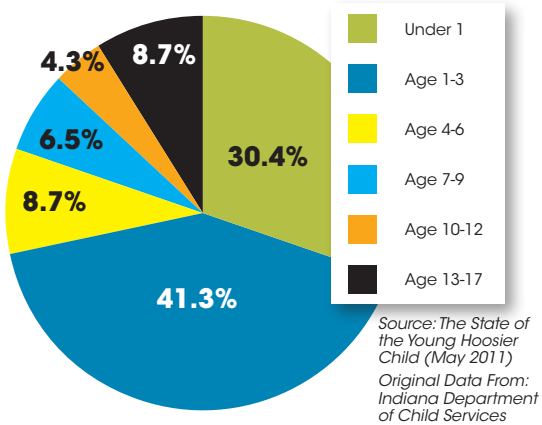
Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Department of Child Services

When looking at the statistics, there are two main categories of child maltreatment: abuse and neglect. Further distinctions within the category of abuse are sexual abuse and physical abuse. The Indiana Department of Child Services (DCS) will assess allegations of abuse or neglect if those allegations are deemed legally sufficient as set forth in state statute. The allegations are substantiated if, based on the evidence, the allegations are true. When referencing Indiana's data it is important to note that a child is counted in only one category per investigation using the Federal hierarchy of sexual abuse, physical abuse, then neglect.

In Indiana, females of all age groups are more likely to experience sexual abuse compared to males. Younger male children are more likely to experience physical abuse, as well as be neglected (female children ages 13+ are more likely in both categories). The youngest children (ages 0 – 3) are more likely to be neglected than any other age group, making up over a third (37.8%) of substantiated neglect cases in Indiana during SFY 2009. National trends reflect those seen in Indiana – a third (33.4%) of maltreatment victims are under the age of four.[101]

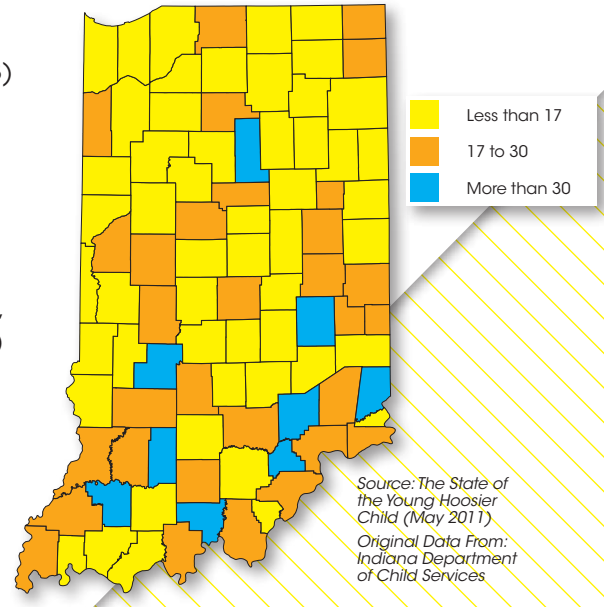
Death rates from abuse and neglect vary by age, with younger children having higher fatality numbers. In Indiana, children under the age of four comprised a majority (71.7%) of all fatalities; of these deaths, 30.4% were infants under age one. National numbers display a similar pattern, with children under the age of four accounting for 80.8% of all fatalities. Of these deaths in FFY 2008, 46.2% were infants under age one.[102]

Figure 19: Percentage of Abuse and Neglect Deaths by Age Group, Indiana: 2008



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Department of Child Services

Figure 20: Child Abuse and Neglect Rate per 1,000 Children by County, Indiana: 2009



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Department of Child Services

Referral to Early Intervention

Research continues to show the benefits of early identification and treatment for children's health outcomes.[103] The Department of Child Services tracks young children who had been reported as victims for the following maltreatment types: Drug Exposed Infant, Fetal Alcohol Syndrome and Illegal Manufacturing of Drug or Controlled Substance Where Child Resides. Of the assessments of maltreatment between October 2010 and April 2011, 342 contained one of these three allegations. Results showed no assessments of Fetal Alcohol Syndrome for children three years old and younger. Fetal Alcohol Syndrome may not be recognized until the child is school age. Typically, the Drug Exposed Infant allegation type is only used on newborn babies when their newborn screenings test positive for drugs, but the data show that there are a few examples of older youth who also have this allegation.[104]

Table 11: Number of Young Children by Particular Maltreatment Type, Indiana: 2009

Maltreatment Type	0-3 Months	4-6 Months	7-9 Months	10-12 Months	13-18 Months	19-24 Months	25-30 Months	31-36 Months
Drug Exposed Infant	283	0	0	0	1	1	0	0
Fetal Alcohol Syndrome	0	0	0	0	0	0	0	0
Illegal Manufacturing of Drug or Controlled Substance Where Child Resides	5	7	6	8	10	8	12	1

Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Department of Child Services

Table 12: Pre-Kindergarten Expulsion Rates by Child Age, Gender, Race, and Ethnicity, U.S.: 2005

Age	Expulsions per 1,000 children in that category
2 years old	3.75
3 years old	3.96
4 years old	5.85
5-6 years old	11.57
Gender	
Female	2.26
Male	10.46
Race/Ethnicity	
Asian American	1.82
Latino	4.42
White (Non-Latino)	5.77
Other	6.81
African American	10.04

Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Gilliam, W. (2005)

Expelled from Early Childhood Setting

Often, children may express themselves through emotional or behavioral ways, which in turn can get them expelled from their early childhood settings. Contrary to popular belief, young children can and do experience significant mental health issues, which can have consequences on their early learning, social interactions and lifelong health.[105] Research has shown that early onset of emotional and behavior problems in young children are often related to health and behavior problems throughout the life course.[106]

While state expulsion rate data are not available, national estimates are. In a nationally representative study, results showed distinct patterns in terms of expulsion from preschool. One out of every ten Pre-kindergarten teachers (10.4%) reported expelling one preschooler in the past year, and two out of ten (19.9%) report expelling more than one. This issue is important because nationally, 6.67 preschoolers were expelled per 1,000 enrolled – 3.2 times higher than the rate for K-12 students. Expulsion rates were lowest in classrooms in public schools and Head Start and highest in faith-affiliated centers and for-profit child care. The likelihood of expulsion decreases significantly with access to classroom-based mental health consultation.[107]

Out of Home Placement

Judges ordering placement of children who cannot safely stay in their homes have multiple placement alternatives. Kinship care includes placement with a relative or with a non-relative who has a bond with the family. Children may also be placed in a licensed foster home, a group home or child-caring institution, or other court-approved facility. Approved caregivers can choose to become licensed in order to receive funding through the state. There are three types of licensed resource homes available: standard foster care homes, special needs foster care homes, and therapeutic foster care homes which care for seriously emotionally disturbed or developmentally disabled children. Children may be placed in non-licensed homes if court approved. When possible, a child is placed in close proximity to the child's family, particularly when reunification with the family is the case-plan goal. The aim is to provide substitute family life in a safe, stable, and nurturing environment. The state strives to place children in the least restrictive, most family-like setting that meets the child's needs.[108]

Table 13: Total CHINS Under 18 and Percentage Assigned to Each Type of Placement, Indiana: 2005-2009

Placement Type	2005	2006	2007	2008	2009
Total CHINS	12,243	13,241	13,158	14,355	14,931
Own Home	22.7%	23.9%	24.4%	28.1%	29.8%
Relative Home	15.0%	13.8%	15.2%	17.8%	21.3%
Foster Home	44.2%	45.2%	44.2%	40.3%	37.0%
Residential Care	12.7%	12.3%	11.9%	10.5%	9.7%
Other	5.5%	4.7%	4.2%	3.2%	2.3%

Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Department of Child Services

Out of home placement can impact young children's attachment and bonding. Young children need continuity in their relationships, which should be factored into foster care or placement decisions.[109] Recent research has shown that children placed in kinship care experience fewer placements and are more likely to achieve permanency through guardianship.[110] In Indiana, one out of every five Children in Need of Services (CHINS) age 18 and younger is placed in a relative home.[111]

School Readiness

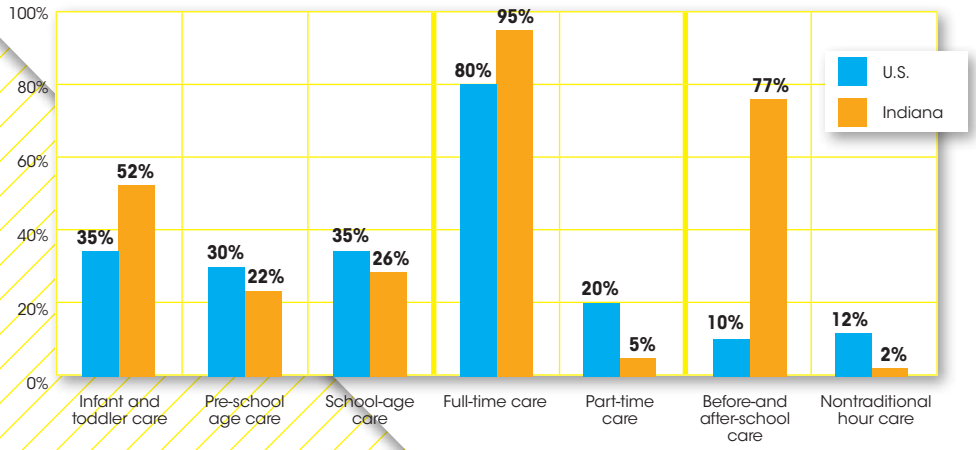
Early Care and Education

Early childhood education has been noted for the benefits it brings to all children, as well as society at large.[112] Children who receive high-quality early education earn more, pay more taxes, and commit fewer crimes. The benefits of investing in early childhood also have a ripple effect on the economy – through purchasing of goods as well as employed parents. Early education, much like highways, is part of an infrastructure that supports businesses and citizens.[113] The results of a recent study show that early education has positive impacts on children later in their life such as higher educational attainment, as well as better health and positive health behaviors,[114] echoing previous research. School readiness incorporates many aspects, from child care to early programming to parents and socio-economic factors. Higher levels of parental education were tied to higher levels of school readiness, and poverty was correlated with lower levels of school readiness.[115] A state level analysis of implementing universal, high-quality pre-k programs showed the effect on Indiana would be beneficial. For every $1 invested, there would be a $7 return on this type of program in the state in increased wages and crime reduction.[116] This section tracks young Hoosier children in terms of the programs they attend and care they receive.

Child Care

There are four types of state-regulated child care providers: licensed child care centers, licensed child care homes, unlicensed registered child care ministries, and legally licensed exempt providers who are taking CCDF vouchers and meeting minimum provider eligibility standards. Unlicensed Registered Ministries are required to register with the state and must meet minimal health and safety standards. Registered Ministries can also participate in a voluntary certification program through which they can become eligible to join the Paths to Quality program at Level One.[117] As of June 2010 in Indiana, licensed centers had the capacity to serve 63,763 children, licensed homes had a capacity of 37,999 spaces, and registered ministries had a capacity of 48,181.[118]

Figure 21: Percentage of Child Care Requests by Groups, U.S. vs. Indiana: 2010



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Association for Child Care and Resource Referral

The Indiana Association for Child Care Resource and Referral (IACCRR) provides research and statistics on child care in the state. The 2010 fact sheet shows that a majority (95%) of child care requests in Indiana are for full time care, and just over half (52%) are for infant or toddler care.[119]

Table 14: Average Annual Fees for Full-Time Child Care by Provider Type, Indiana: 2007 – 2009

Year	Child Care Center			Family Child Care		
	Infant	4-year-old	School-age	Infant	4-year old	School-age
2009	$9,927	$7,245	$6,940	$5,671	$4,998	$4,598
2008	$9,590	$6,990	$6,341	$5,627	$4,938	$4,559
2007	$9,005	$7,001	$6,108	$5,304	$4,690	$4,368

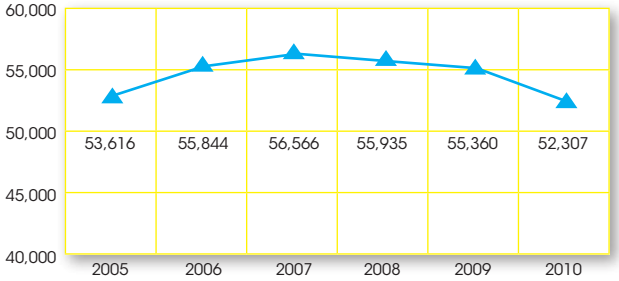
Source: The State of the Young Hoosier Child (May 2011)
Original Data From: National Association of Child Care Resource and Referral Agencies

In 2009, cost of child care for an infant in an Indiana center was over one-third (42.1%) of the state median income for a single mother and 13.4% of the state median income for a two-parent family. For care of a 4-year-old, cost of child care in an Indiana center is 30.7% of the state median income for a single mother, and 9.8% of the state median income for a two-parent family.[120]

Child Care Vouchers

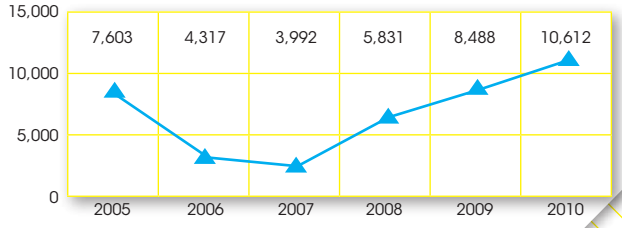
Families who meet poverty guidelines (127% FPL) and are either working or going to school are eligible for subsidized child care through Indiana's Child Care Development Fund (CCDF) voucher program. All licensed child care providers as well as legally licensed exempt homes and centers meeting the minimum provider eligibility are considered eligible to receive reimbursement through the program. Family and Social Services Administration (FSSA) increased the eligibility levels of families served from those whose income was up to 140% of the federal poverty level to those with an income of up to 170% of the poverty level. Families get onto the program at or below 127% of the FPL, but can stay on the program to 170% FPL. For those above the poverty line, a sliding scale co-payment applies.

Figure 22: Number of Children Receiving Child Care Vouchers, Indiana: 2005 - 2010



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Family and Social Services Administration, Bureau of Child Care

Figure 23: Monthly Average Number of Children On Waitlist for Child Care Vouchers, Indiana: 2005 - 2010



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Family and Social Services Administration, Bureau of Child Care

The number of children receiving child care vouchers has decreased since 2007, and the number of children on the waiting list for vouchers has increased during the same period of time. The program has had an increasing number of families remaining in the program for longer periods of time, which means that fewer unique families are served during the year. Therefore, these families that are participating are seeing more stability in their child care experience by being able to remain in the program for a longer period of time.[121]

Child Care Quality

The quality of child care children receive can influence their future in the form of better academic outcomes later in life.[122] Indiana is one of many states that have implemented a voluntary quality rating and improvement system designed to help parents find high-quality care for their children.[123] In Indiana this system is entitled "Paths to QUALITY™ (PTQ)." Substantial and valid evidence supports PTQ's tiered

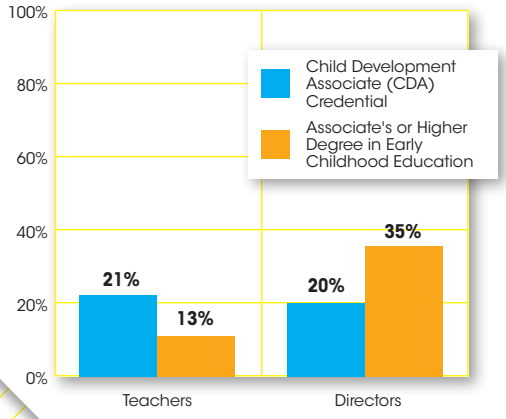
approach,[124] and enrollment in PTQ is an ongoing process. Statewide implementation of the program began in 2008 and enrollment of licensed homes, licensed centers and registered ministries has continued to increase, as has the capacity to serve children in high-quality programs. In SFY 2008, there were 1,436 providers enrolled in PTQ, with a total capacity to serve 58,986 children. By SFY 2010, there were 1,867 providers enrolled with a capacity of 69,264. As of April 2011, 2001 providers are enrolled in PTQ with the capacity to serve 73,887 children.[125]

Figure 24: PTQ Enrollment by Provider Type, Indiana: April 2011

Provider Type	Level 1 Provider meets basic health and safety needs of children		Level 2 Environment supports children's learning		Level 3 Providers include a planned curriculum that aligns with Indiana Early Learning Guidelines		Level 4 National accreditation (the highest indicator of quality) is achieved	
	Count	Capacity	Count	Capacity	Count	Capacity	Count	Capacity
Centers	163	17,336	103	10,405	113	11,947	107	12,034
Homes	1,161	14,781	116	1,462	138	1,826	80	1,085
Ministries	16	1,814	7	505	7	692	–	–

Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Family and Social Services Administration, Bureau of Child Care

Figure 25: Educational Attainment of Child Care Teachers and Directors, Indiana: 2007



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Association for the Education of Young Children, Inc.

Child Care Workforce Development

In a review of early child care experiences, well-trained staff and smaller ratios of children to teachers have been found to have better outcomes for children.[126] The Indiana Association for the Education of Young Children conducts surveys of child care workers in Indiana. Most teachers responding to the survey noted that they work with children birth to five years of age. A majority of respondents were female (98%) as well as a majority having children of their own (64% of teachers and 81% of directors). In terms of their educational attainment, an increase was noted between the two survey years of 2005 and 2007, especially among directors. In addition, in the 2007 report, of survey respondents who were not taking courses, 41% of teachers and 20% of the directors said they were interested in attending college to earn a degree. In the most recent report, average wages were $8.25 for teachers and $13.80 per hour for director.[127]

Early Head Start and Head Start

To be eligible to receive Early Head Start (EHS) and Head Start (HS), a family's income must be at or below the federal poverty line. Children from families receiving public assistance (such as Temporary Assistance for Needy Families or Social Security Income) are also eligible for EHS and HS services. Foster care children are also eligible for services regardless of their foster family's income.[128] Early Head Start is a federally funded community-based program for low-income pregnant women

and children ages 0 - 3. The program promotes healthy prenatal outcomes, and enhances the development and health of very young children and their families.[129] Head Start serves children ages 3-5, and focuses on comprehensive child development services, parental involvement, and partnering with the community to provide services.[130] In a survey of families enrolled in Head Start in Indiana, the three top benefits of the program were noted as socialization, school readiness skills, and access to health services. [131] During SFY 2010 in Indiana, there were 1,945 funded enrollment slots available for Early Head Start, 13,620 funded enrollment slots for Head Start, and 401 enrollment slots for the Migrant Seasonal Head Start.[132]

Table 15: Total Number of Funded Enrollment Slots for Early Head Start and Head Start, Indiana: 2008 - 2010

	2008	2009	2010
Early Head Start	1,050	908	1,945
Head Start	13,561	13,690	14,021*

**Includes Migrant Head Start program*
Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Family and Social Services Administration, Office of Early Head Start and Head Start

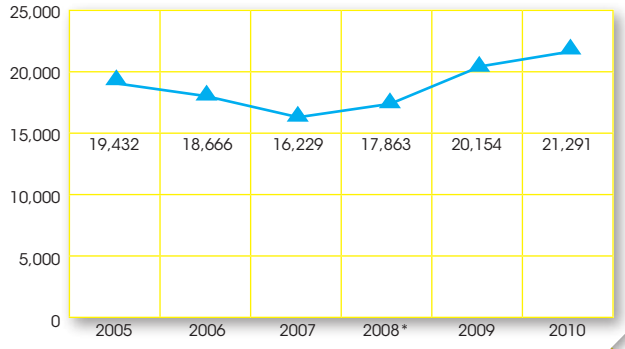
Support for Children with Special Needs

Some children have special needs, such as physical disabilities or mental disabilities. Due to these impairments, they may need special support through the education system to ensure their academic and overall success. The Individuals with Disabilities Education Act (IDEA) is a law that ensures services to children with disabilities throughout the nation. IDEA governs how states and public agencies provide early intervention, special education, and related services to children with disabilities.[133]

First Steps

Children with limitations may have special health care and educational needs. The First Steps program provides physical, speech, and developmental therapies and services for those children ages 0 – 3 who are experiencing developmental delays or disabilities.[134] Infants and toddlers with disabilities and their families receive early intervention services under IDEA Part C through First Steps.[135] Services are free for families whose income is at 250% or less of the federal poverty guidelines; fees are charged on a sliding scale for families with higher incomes.[136]

Figure 26: Annual Count of Children with IFSP, Indiana: 2005 - 2010



**2008 and before were labeled as Total # of Children Served; from 2009 onward now reported as "Annual Count of Children with IFSP"*
Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Family and Social Services Administration, First Steps

During SFY 2010, there were 21,291 children with an Individualized Family Service Plan (IFSP) served through First Steps, with the average referral age of 13 months old. Three-quarters (73%) of Hoosier children served by First Steps are White, followed by Black (11%) and Hispanic (10%) children. Children of two or more races account for 5% of children served by First Steps, and Asian children made up 1% of those served.[137] In SFY 2010, the average paid on behalf of each child was $2,046. The top five services received through First Steps in Indiana during SFY 2010 were: Developmental Therapy (70%), Speech Therapy (58%), Occupational Therapy (46%), Physical Therapy (46%), and Audiology (12%).[138]

Preschool Special Education

Preschool programs have been found to boost school readiness by strengthening academic skills including reading and math.[139] Special education is instruction specifically designed to meet the educational and developmental needs of children with disabilities, or those who are experiencing developmental delays. Services for preschool children (those ages 3 - 5) with disabilities are provided through the public school system free of charge.[140] Children and youth (ages 3 - 21) receive special education and related services under IDEA Part B.[141]

Table 16: Number of Children Enrolled in Early Education by Type of Program, Indiana: 2009 -2010	2009	2010
Pre-School (General Education Students, <3 years old)	200	346
Pre-School Count (Special Education Only)	12,913	13,300
Pre-Kindergarten (General Education + Special Education, 3-5 years old)	14,189	15,661

Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Department of Education, Differentiated Learning

The top three most common disabilities for receiving IDEA services during School Year 2009 in Indiana were: speech or language impairment (61.3%), developmental delay (20.7%), and Autism (5.5%). During School Year 2009, a higher percentage of the children ages 3-5 are served by IDEA in Indiana (7.2%), compared to the nation (at 5.7%). This trend has held steady since School Year 2005.[142]

The total number of children in preschool who receive services for special education and have an Individual Education Plan increased from 2009, when 12,913 students were receiving services to 13,300 in 2010. These totals come from a one-day student count that occurs each December. Indiana also tracks the education settings for preschoolers ages 3 - 5. Kindergarten students who are less than six years old in Indiana are also included in these early childhood setting counts due to coding, so the total number is greater than the preschool counts.[143]

Table 17: Educational Setting for Children in Pre-School, Indiana: 2010	Number	% by Setting
Regular Early Childhood Program at least 10 hrs/wk with majority of hours of special education and related services in the Regular Early Childhood Program	6,338	33.08%
Regular Early Childhood Program at least 10 hrs/wk with majority of hours of special education and related services in some other location	2,184	11.40%
Regular Early Childhood Program less than 10 hrs/wk with majority of hours of special education and related services in the Regular Early Childhood Program	869	4.54%
Regular Early Childhood Program less than 10 hrs/wk with majority of hours of special education and related services in some other location	761	3.97%
Special education program (not in ANY regular early childhood program) that is a separate class	6,122	31.95%
Special education program (not in ANY regular early childhood program) that is a separate school	304	1.59%
Special education program (not in ANY regular early childhood program) that is a residential facility	10	0.05%
NEITHER a Regular Early Childhood Program NOR a special education program with majority of hours of special education and related services at the service provider location	2,507	13.08%
NEITHER a Regular Early Childhood Program NOR a special education program with the majority of hours of special education and related services at home	67	0.35%
Total	**19,162**	**100%**

Source: The State of the Young Hoosier Child (May 2011)
Source: Indiana Department of Education, Differentiated Learning

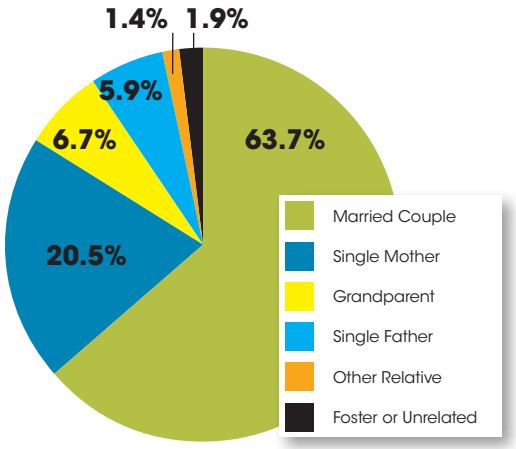
Family Environment and Support

Parents and families have a significant impact on a young child's outcomes. Parents influence a child's readiness for school.[144] Parents also have an impact on a child's outcomes in a variety of well-being areas, such as health, school attendance, maltreatment, and employment. Parents and families have the ability to act as a buffer against adversity, such as poverty, or a mediator of damage, as in child abuse cases.[145] Families take many diverse forms and the realities that these families face are important in gauging the well-being of their children.[146] The combination of risk factors among family characteristics can also impact a child's outcomes. Research shows that two-thirds (67%) of Hoosier children have multiple risk factors, while roughly one out of every four Hoosier children have three or more risk factors, such as single parent family, living in poverty, linguistically isolated, and parents with less than high school education.[147] All of these various factors will be explored in this section.

Living Arrangements

Hoosier children's living arrangements are also diverse. A majority (63.7%) of children under 18 live in two-parent, married households. Almost one in five children in Indiana under 18 live in a single mother household and 6.7% live in a grandparent-headed household.[148]

Figure 27: Children's Living Arrangements, Indiana: 2009



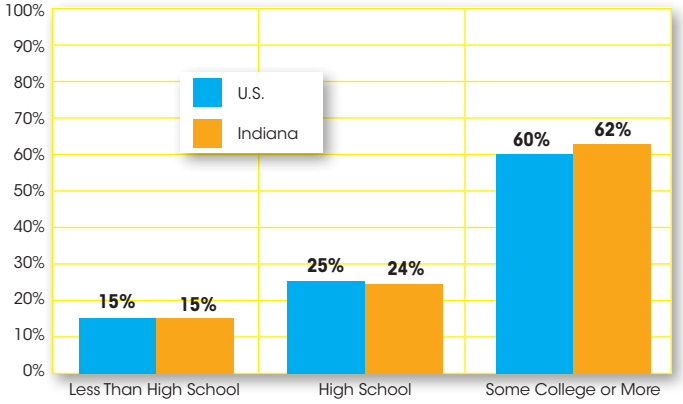
Source: The State of the Young Hoosier Child (May 2011)
Original Data From: U.S. Census Bureau, American Community Survey

Families where English is the Second Language

Families who speak English as a second language are a diverse group. Some children in these families have had little or no exposure to English when being placed in child care or school, while others will have experience with the language through siblings or previous experiences at home. Young children learning English as a second language may still be acquiring their first language while learning English as a second. Families provide a child's first exposure to language.[149] In Indiana, 7.6% of Hoosiers speak a language other than English at home, with 4.2% speaking Spanish or Spanish Creole, 2.3% speaking other Indo-European languages, 0.8% speaking Asian or Pacific Island Languages, and the remaining 0.2% speaking other languages.[150]

Research shows that ESL families are more likely to be of lower socio-economic class, more often due to low wages rather than unemployment. These difficulties can be compounded by living in poor communities as well as trouble accessing social services due to linguistic or cultural barriers.[151] Programs such as Head Start have identified the importance of providing culturally responsive services to children and families of diverse backgrounds and have implemented various strategies, from establishing multicultural understanding to translating materials into other languages.[152]

Figure 28: Education Levels of Mothers with Young Children, U.S. vs. Indiana: 2009



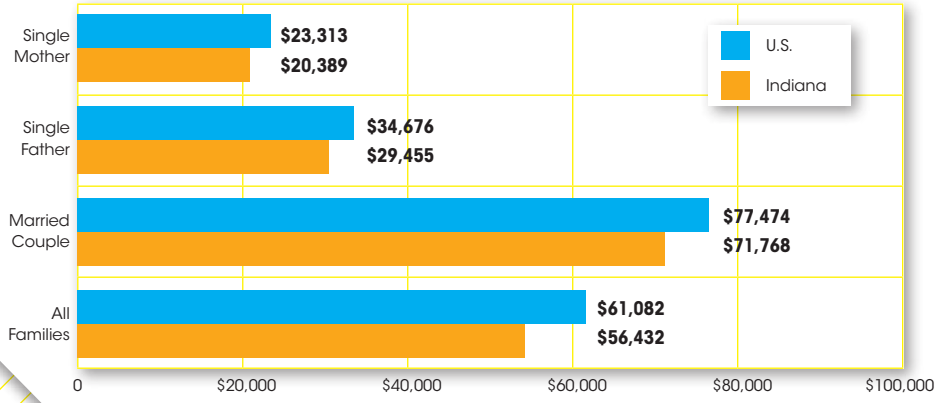
Source: The State of the Young Hoosier Child (May 2011)
Original Data From: National Center for Children on Poverty

Parental Education, Employment, and Family Income

According to a recent report by the National Center for Children in Poverty (NCCP), mothers of children under 6 in Indiana have similar education rates compared to the nation.[153] Parental education matters - higher levels of educational attainment on the parents' part have a positive impact on a child's school readiness and educational outcomes.[154] In addition, statistics show a correlation between obtaining more education and higher incomes,[155] which gives children living in those families greater access to financial and material resources.

When looking at parents of children in the 0 - 5 population specifically, nearly two-thirds (65%) of Indiana's children ages 0 - 5 have all available parents in the labor force. However, estimates show that one in ten (9%) Hoosier children under age six have no parent in the labor force, reflecting national trends.[156] Even for those families who work, half (49%) of Indiana's children 0 - 5 live in families that are considered low-income, which are those families living at 200% of the Federal Poverty Level or less (which would equal $44,100 per year for a family of four[157]). Almost half of these low-income children (44%) in Indiana have a parent who works full-time, similar to the nation (43%).[158]

Figure 29: Median Family Income by Family Type with Children Under 18, U.S. vs. Indiana: 2009



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: U.S. Census Bureau, American Community Survey

Stable parental employment is important because higher, consistent income is associated with positive outcomes for children such as better academic outcomes and access to health insurance.[159] The American Community Survey which provides information regarding income for families focuses on three types of families: married couple, single mother and single father. Data show that married couples have higher incomes among families with children under 18. All Hoosier family types have lower median family incomes compared to the United States.[160]

Poverty

Compared with their wealthier peers, children who live in poverty are more likely to have low educational attainment and achievement, and an increased likelihood of leaving high school without a diploma. They are also more at risk for health, behavioral, and emotional problems. These issues are especially prevalent for children who have experienced poverty in early childhood.[161] Indiana's youngest children are more

likely to reside in poverty compared to other groups. One in four (24.9%) Hoosier children under age five live in a family who resides in poverty, similar to the national rate (23.2%). This is compared to 20.0% for all children under 18 in Indiana and 14.4% of all Hoosiers.[162]

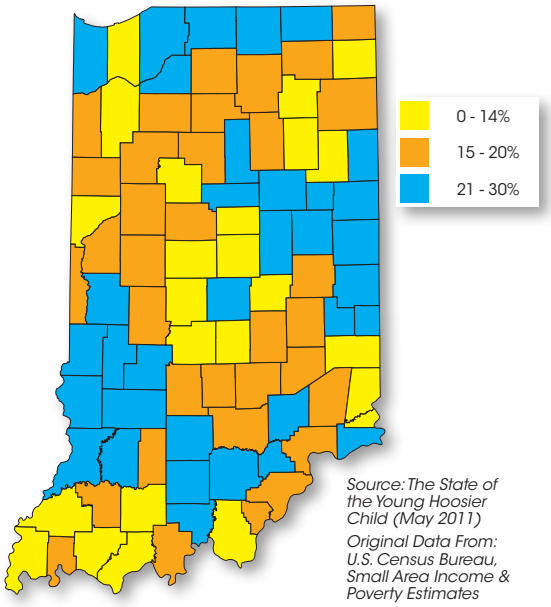
Table 18: Percentage of Children in Poverty by Poverty Type, Indiana: 2007 - 2009

Year	Extreme Poverty Rate of Children Under Age 6 (at or below 50% of FPL)	Poverty Rate of Children Under Age 6 (at or below 100% FPL)	Low-Income Rate of Children Under Age 6 (at or below 200% of FPL)
2007	10.5%	20.4%	42.9%
2008	11.0%	22.3%	46.4%
2009	11.6%	24.5%	50.1%

Source: The State of the Young Hoosier Child (May 2011)
Original Data: CLASP Data Tool

A greater number of children under age six reside in families that are considered low-income, or those living at or below 200% of the Federal Poverty Level. Half of Indiana's 0 - 5 population reside in low-income families. Furthermore, more than one in ten Hoosier children under age six were considered to reside in extreme poverty. This level of poverty is determined to be 50% of the Federal Poverty Level.[163] So, for instance, a single parent and a child under age six would have to be living on less than $7,394 a year.

Figure 30: Percentage of Children under Age 18 Living in Poverty by County, Indiana: 2009



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: U.S. Census Bureau, Small Area Income & Poverty Estimates

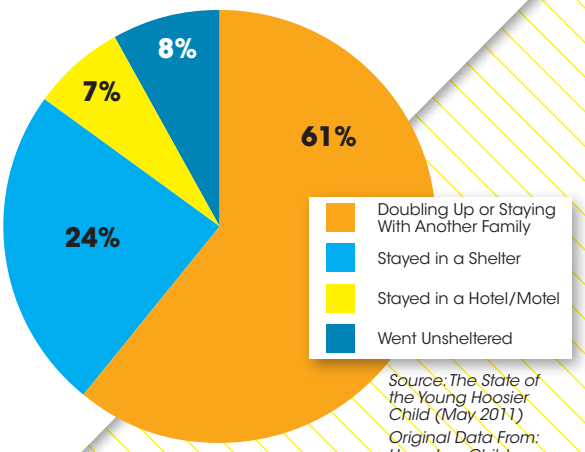
Housing

Estimates show that nearly one-third (31%) of the costs of raising a child are housing-related.[164] Housing is a critical issue faced by families in poverty, with children residing in low-income families being more likely to experience housing instability and homelessness.[165] Housing instability has been shown to have many of the same detrimental effects on social and educational outcomes as poverty itself.

In a nationally representative study, it was found that over half (57%) of children who had moved by age five moved more than three times in that time period. One in ten children had moved four times or more, with the remaining third (32%) of children in the study never having moved in the first five years of their life.[166] While these estimates do not mean the families were necessarily homeless, it indicates a certain amount of housing instability.

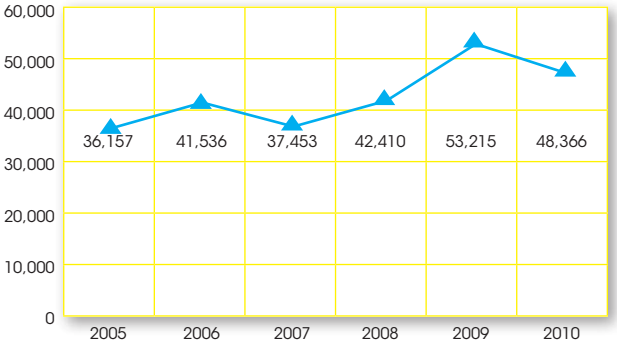
According to estimates collected through the McKinney-Vento Act, 42.0% of homeless children in Indiana are under six years of age (5,465 children).[167] However, some caution should be used in interpreting homelessness numbers as older children are less likely to report their homelessness to their school. A majority of homeless children say they doubled up with another family for shelter.[168]

Figure 31: Nighttime Residence of Homeless Children, U.S.: 2007



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Homeless Children America

Figure 32: Number of Families with Children under 6 that Received Utility Assistance from the Indiana Energy Assistance Program, Indiana: 2005 - 2010



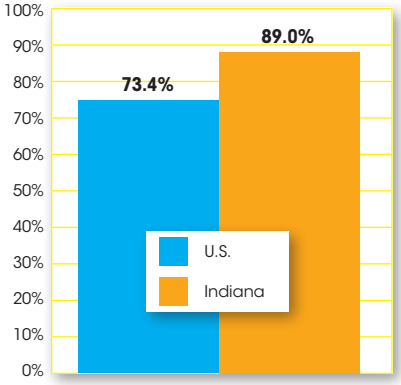
Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Housing and Community Development Authority

Heating Assistance

To qualify for energy assistance, a household's annual income cannot exceed 150% of the poverty guidelines. The Energy Assistance Program provides financial assistance to low-income households to maintain utility services during the winter heating season. The program is implemented through the Community Action Agencies with outreach offices in every county. These agencies provide intake, application processing, and utility vendor payments.[169] From 2005 to 2010, there has been an overall increase in the number of families with children under six receiving utility assistance, with a peak of 53,215 families in 2009.[170]

Families previously involved with Child Protection Services (CPS)

Figure 33: First Time Maltreatment Victims Children Under 18, U.S. vs. Indiana: 2009



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: U.S. Department of Health and Human Services, Administration on Children, Youth, and Families

Some children who are maltreated have been previously involved with the Department of Child Services (DCS). While a majority of maltreatment victims nationally and in Indiana are considered first time victims (73.4% nationally and 89.0% in Indiana[171]), there is still a percentage of children who have previously been involved with CPS. While research on these families is scarce, other studies on child maltreatment have acknowledged risk factors among families where abuse is present. Research has identified four common co-occurring parental risk factors for abuse: substance abuse, mental illness, domestic violence, and child conduct problems. However, research has also found that parenting education programs may help mitigate these factors and lower abuse.[172]

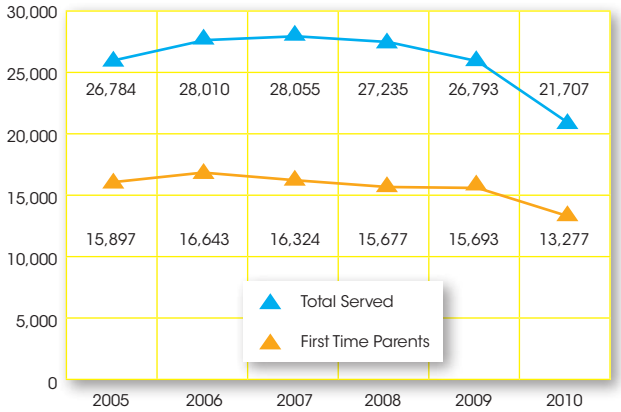
Prior involvement with CPS is reported at both the state and national level in cases of child fatality from abuse or neglect. In Indiana in 2008, 15 of 46 (32.6%) of abuse or neglect deaths occurred in a family with at least one prior CPS substantiated investigation, compared to 25.0% in SFY 2007.[173] Nationally in 2009, 11.9% of child fatalities were children in families who had received CPS family preservation services in the past five years. This indicator changed in 2009 making comparisons to previous years not recommended.[174]

First Time Parents in Healthy Families Indiana

Healthy Families Indiana (HFI) seeks to strengthen families and reduce the incidences of child maltreatment and health problems through parent education and connecting families to related services. HFI works closely with hospital maternity wards, prenatal clinics, and other local agencies to identify families who could benefit from education and support services. The program provides voluntary home visiting services to families throughout Indiana.[175] Evaluation of the Healthy Families program shows that positive parenting practices are promoted, families who participate are healthier and use medical services more appropriately, and the program has been shown to enhance school readiness in the children who participate.[176] Research has found home visiting programs to be most effective for low-income, first-time, adolescent mothers.[177]

Roughly three out of every five Healthy Families Indiana participants are first time parents. In 2010, 13,277 of the total 21,707 participants in Healthy Families were first time parents. Of those enrolled in Healthy Families in SFY 2010, 21.5% were parents under the age of 20; 80.3% of children were up to date on well child visits; 67.9% of families had at least one employed parent. Funding for HFI was $34.4 million in 2010 compared to $41.7 million in 2009.[178] In a recent analysis of the HFI program, it was found that families showed improvement over time in areas such as transportation, budgeting, support services, and social support. In addition, nearly all (96.3%) of children served by HFI have a medical home.[179]

Figure 34: Number of Participants in Healthy Families, Indiana: 2005 - 2010

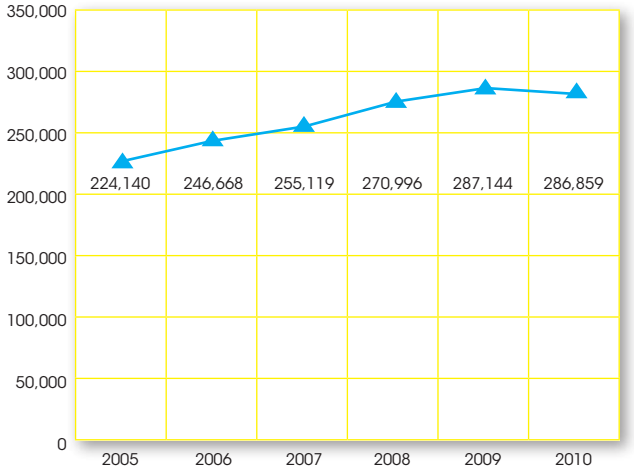


Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana Department of Child Services, Healthy Families Indiana

Women, Infants, and Children (WIC)

Women, Infants, and Children (WIC) is a program designed to improve access to nutritious foods and promote healthier eating habits and lifestyles for pregnant women, infants, and young children. To be eligible, an applicant must be an Indiana resident, have a medically-based risk or a "nutrition risk" as determined by a health and dietary assessment, and be income eligible (less than or equal to 185% of federal poverty line).[180] Categories of WIC program recipients include: Pregnant Women, Breastfeeding Women (up to baby's first birthday), Non-Breastfeeding Postpartum Women (up to six months), Infants (up to their first birthday), and Children (up to their fifth birthday).[181] Studies show that infants and children who receive WIC services are more likely to be breast-fed, less likely to be underweight at birth, less likely to be sick, and more likely to be intellectually prepared when they start school.[182]

Figure 35: Total Number of Women, Infants, and Children Receiving WIC, Indiana: 2005 - 2010



Source: The State of the Young Hoosier Child (May 2011)
Original Data From: Indiana State Department of Health, WIC

During SFY 2010, 286,859 women, infants, and children participated in Indiana's WIC program. In 2010, the majority of recipients were children (39.7%), followed by infants (31.2%), pregnant women (16.9%), non-breastfeeding women (8.1%), and breastfeeding women (4.0%). These patterns hold true across years of data.[183] In 2007, more than half (55.2%) of pregnant women who had a live birth participated in WIC.[184]

The average monthly benefit, in Federal FY 2010, per person in the WIC program in Indiana was $35.96, compared to an average of $41.45 per person nationally.[185] Preliminary results show that Indiana's WIC program had food costs of just over $75 million during FFY 2010. This was down slightly from FFY 2009 when over $76 million was spent on food costs.[186]

Key Findings

Much like a house without a foundation, lack of investment in early childhood puts our society on shaky ground. Through life course research, we now know that the health and well-being of a child determines the health and well-being of that child as an adult which in turn affects his/her children and future generations to come. This "generational" effect on certain populations leads to a cyclic effect on health and well-being. There is no simple solution. Improvement in the outcomes of young children requires improvement in social, economic, environmental, and health care systems.[187] To accomplish these improvements, we must reorient our understanding of all factors that contribute to the health and well-being of our children and families. We must also understand, based on significant research, that investment in social, economic, environmental, and medical determinants of health will have a tremendous positive impact on the well-being of individuals, families, neighborhoods, communities, counties, and the state as a whole.[188]

Overall, children 0 to 5 in Indiana fare worse than the nation in several areas: teen births, first trimester prenatal care, preterm births, breastfeeding rates, and infant mortality. Within a majority of these indicators, racial disparities are clear – with Black women and children being at greater risk for these complications or outcomes. For instance, when looking at a three year average (2005 – 2007) for Low Birthweight babies, 13.9% of Black babies are born at LBW in Indiana, compared to their White counterparts at 7.7% – almost double the rate.[189] These racial and ethnic contrasts are apparent across many of the health indicators presented in this report – putting these groups of children at greater risk for later adverse outcomes.

Indiana's young children do fare better than the nation in some indicator categories, including: children served in a medical home, fewer uninsured children, good oral health, and fewer repeat maltreatment victims. Indiana has also seen improvement in areas of children diagnosed with elevated blood levels, nearly every baby receiving a newborn screening, and a strong child care rating system (PTQ). Below are the specific trends and highlights from each section in regards to young Hoosier children's well-being.

Sunny Start
Healthy Bodies
Healthy Minds

Key Findings

Highlights of the SYHC – Outcomes for Indiana's Young Children:

Physical Health and Well-Being:

- Teen births in Indiana are on the rise after a long period of decline.
- First trimester prenatal care continues to decline in Indiana, with the lowest rates among younger mothers and Hispanic and Black mothers.
- Nearly one in five Hoosier mothers report smoking during pregnancy, with White mothers having the highest rate.
- Black women are more likely to give birth to a preterm, low birthweight or very low birthweight baby compared to other racial and ethnic groups in Indiana.
- Indiana mothers are less likely than their national counterparts to breastfeed, but Hispanic women have the highest initiation rate.
- Infant mortality rates continue to be higher in Indiana compared to the nation, with Black babies dying at the highest rate.
- Nearly every baby in Indiana receives a valid initial newborn screening, and over 100 babies per year are diagnosed with having permanent hearing loss.
- A greater percentage of Indiana children and Children with Special Health Care Needs receive medical home care, compared to the nation.
- Children in Indiana are immunized at a slightly lower, but similar rate to the nation.
- Fewer children are uninsured in Indiana than in the nation, and more than half of children age 0 - 5 in Indiana are on public insurance.
- Just under half of Hoosier children enrolled in public health insurance received at least one initial or periodic screen.
- Children ages 0 - 5 represent about a third of children enrolled in Children's Special Health Care Services Program in Indiana.
- A majority of children ages 1 - 5 in Indiana are considered by their parents to have teeth which are in very good or excellent condition, better than the national rate.
- More children are being tested for elevated blood lead levels in Indiana, but fewer are testing positive.

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Key Findings

Social and Emotional Development:

- Nationally, certain groups of women were more likely to report severe depression: women with less than 12 years of education, those who were Medicaid recipients, and those who delivered low birthweight babies.
- Children under age four account for over a third of neglect cases in Indiana, and infants under age one account for over a third of abuse/neglect deaths in the state.
- Male preschoolers and African American preschoolers have higher rates of expulsion compared to other groups nationally.
- In Indiana, just under half of Children in Need of Services (CHINS) are placed in out-of-home care, compared to home or relative care placements.

School Readiness:

- A majority of child care requests in Indiana are for full time care, and just over half are for infant or toddler care.
- More providers continue to be enrolled in Paths to Quality in Indiana, increasing the number of children who can be served in quality settings.
- A majority of early Hoosier child care workers are female and have children of their own.
- Early Head Start and Head Start continue to serve thousands of Hoosier children.
- Developmental therapy was the most common service receiving by Hoosier children in First Steps.
- A higher percentage of children are served by IDEA in preschool education in Indiana, compared to the nation.

Family Environment and Support:

- Over half of Indiana's children live in a married couple home; one in five live in a single mother home.
- Roughly one out of every 13 Hoosiers speaks a language other than English at home.
- Nearly two-thirds of Indiana's children ages 0 - 5 have all available parents in the labor force.
- One in four children 0 - 5 live in poverty in Indiana, and one in ten live in extreme poverty.
- Roughly two out of five reported homeless children are under age six in Indiana.
- Fewer children are repeat victims of maltreatment in Indiana compared to the nation.
- Roughly three out of every five Healthy Families Indiana participants are first time parents.
- Over two-thirds of Hoosier WIC participants are infants and children.

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Future Recommendations

Despite the research, young children receive less per dollar investment than older children. In an analysis of investments in early childhood at the national level, it was found that for every dollar invested in a school-aged child (ages 6 - 18), only 25.3 cents is invested in a pre-school aged child (ages 3 - 5) and 6.4 cents in an infant or toddler (ages 0 - 2).[190] However, understanding the impact of these investments relies on valid and reliable data collection.

Indicators are a key part of understanding children's well-being in the state and the nation. Indicators allow decision-makers and researchers to gather information they need to better understand a certain population or program, as well as address gaps that may exist.[191] However, many important indicators that can give a better picture of the birth to five population are still missing – especially those that gauge socioeconomic status in addition to race and age. In addition, more attention should be paid to the obvious racial and ethnic disparities that exist between children of different groups in Indiana.

While data continue to become more accessible and available, there are many areas of children's lives from birth to age five for which no data are available. For instance, many indicators are only available at the state level or nationally, or for those under 18 as a whole. One problem with collecting and reporting on data for children ages 0 – 5 at the local level, as with many general indicators, is that in some small communities a small number of children means a lack of anonymity. However, even state-level information can help illuminate the experience of early childhood in Indiana.

The State of the Young Hoosier Child Report has identified areas of interest for gauging children's well-being from birth to age five in Indiana across four domains, but more work can be done to understand the experience of the young Hoosier child. By expanding current indicators, and creating new quality indicators, Indiana's youngest children can receive the investment they warrant, and the whole state can benefit.

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Young Hoosier Child

Birth to Age Five

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Indiana

Child Population Age 0 to 5	2005	521,723	2009	534,603

Physical Health and Well-Being	Base Year		Current Year	
# of Live Births (CY)	2005	87,088	2007	89,719
Teen Birth Rate per 1,000 Females, Age 15-17 (CY)	2005	20.5	2007	22.0
% of Mothers Who Received 1st Trimester Prenatal Care (CY)	2005	N.R.	2007	67.5
% of Mothers Who Reported Smoking During Pregnancy (CY)	2005	N.R.	2007	18.5
% of Low Birthweight Babies (CY)	2005	8.3	2007	8.5
Infant Mortality Rate per 1,000 Live Births (CY)	2005	8.0	2007	7.5
# of Children Under 6 on Public Health Insurance (SFY)	2005	276,516	2010	323,179
# of Children w/ Confirmed Elevated Blood Levels of Lead, Ages 0 - 5 (CY)	2005	393	2010	293

Social and Emotional Development	Base Year		Current Year	
Child Abuse/Neglect Rate per 1,000 Children Under Age 18 (SFY)	2005	12.9	2009	15.6

Early Childhood - School Readiness	Base Year		Current Year	
# of Licensed Child Care Centers (SFY)	2005	603	2010	597
# of Licensed Child Care Homes (SFY)	2005	3,020	2010	3,040
# of Registered Child Care Ministries (SFY)	2005	652	2010	714
# of Licensed Child Care Slots per 100 Children, Age 0-4 (SFY)	2005	22.5	2010	22.8
# of Children Receiving Child Care Vouchers (FFY)	2005	53,616	2010	52,307
Monthly Avg # of Children on Wait List for Child Care Vouchers (FFY)	2005	7,603	2010	10,612
# of Early Head Start and Head Start Funded Enrollment Slots (SFY)	2005	14,864	2010	15,966
# of Children Served by First Steps (SFY)	2005	19,808	2010	21,291

Family Support	Base Year		Current Year	
% of Children Under 18 Living in Poverty (CY)	2005	16.6	2009	19.9
# of Women, Infants, and Children (WIC) Participants (CY)	2005	224,140	2010	286,859

*Not Recommended: Comparison between these two time periods not recommended as defintion has changed

CY- Calendar Year: Jan 1 to Dec 31
FFY- Federal Fiscal Year: Oct 1 to Sept 30
SFY- State Fiscal Year: July 1 to June 30

Child Population Ages 0 - 5: CY 2009			
Race/Ethnicity	Total	Females	Males
White	400,642	195,135	205,507
Black	65,269	32,046	33,223
American Indian	1,376	666	710
Asian	10,078	5,150	4,928
Hispanic, of any race	57,238	28,229	29,009
Total	534,603	261,226	273,377

Sources

[1] Corporate Voices for Working Families, Business Roundtable. (2009). Why America Needs High-Quality Early Care and Education. Retrieved from www.cvworkingfamilies.org/system/files/Early%20Childhood%20Education%20Principles%202009.pdf

[2] Heckman, J. (2000). Invest in the Very Young. Retrieved from www.ounceofprevention.org/downloads/publications/Heckman.pdf

[3] Pies, C., Parthasarathy, P., Kotelchuck, M., Lu, M. (2008). Making a Paradigm Shift in Maternal and Child Health: A Report on the National MCH Life Course Meeting.

[4] Karoly, L., Kilburn, M. R., Cannon, J. (2005). Early Childhood Interventions. Retrieved from www.rand.org/pubs/monographs/2005/RAND_MG341.pdf

[5] Galinsky, E. (2006). The Economic Benefits of High-Quality Early Childhood Programs: What Makes the Difference? Retrieved from http://familiesandwork.org/site/research/reports/ced.pdf

[6] Center on the Developing Child at Harvard University. (2010). The Foundations of Lifelong Health Are Built in Early Childhood. Retrieved from www.developingchild.harvard.edu

[7] National Center for Children in Poverty, Project Thrive. (2008). State Indicators for Early Childhood. Retrieved from www.nccp.org/publications/pdf/text_822.pdf

[8] Puzzanchera, C., Sladky, A. and Kang, W. (2010). Easy Access to Juvenile Populations: 1990-2009. Online. Retrieved from www.ojjdp.ncjrs.gov/ojstatbb/ezapop/

[9] Ibid.

[10] Center on the Developing Child at Harvard University. (2010). The Foundations of Lifelong Health Are Built in Early Childhood. Retrieved from www.developingchild.harvard.edu

[11] Rhode Island Kids Count. (2005). Getting Ready: Findings from the National School Readiness Indicators Initiative A 17 State Partnership. Retrieved from www.gettingready.org/matriarch/d.asp?PageID=303&PageName2=pdfhold&p=&PageName=Getting+Ready+-+Full+Report.pdf

[12] Schneider, W., Smith, S., Walters, D., and Cooper, J. (2010). Promoting Young Children's Health and Development. Retrieved from www.nccp.org/publications/pdf/text_941.pdf

[13] Lewit, E. M., and Schuurman Baker, L. (1995). Health Insurance Coverage. Retrieved from www.princeton.edu/futureofchildren/publications/docs/05_03_Indicators.pdf

[14] Godfrey, K. and Barker, D. (2000). Fetal Nutrition and Adult Diseases. The American Journal of Clinical Nutrition, 71, 1344S – 52S.

[15] For more information regarding minority children's access to health care specifically, see www.familiesusa.org/issues/minority-health/resource-center/access-to-health-care.html

[16] Child Trends. (2007). Conceptualizing a "Strong Start": Antecedents of Positive Child Outcomes at Birth and Into Early Childhood. Retrieved from www.childtrends.org/Files//Child_Trends-2007_02_12_RB_StrongStart.pdf

[17] Bronte-Tinkew, J., Horowitz, A., Kennedy, E., and Perper, K. (2007). Men's Pregnancy Intentions and Prenatal Behaviors: What They Mean for Father's Involvement with Their Children. Child Trends. Retrieved from www.childtrends.org/Files//Child_Trends-2007_06_11_RB_Prenatal.pdf

[18] Indiana State Department of Health. (2007). Number and Percent of Live Births by Sex of Infant and Race of Mother: Indiana Residents, 1997-2007. Retrieved from www.in.gov/isdh/reports/natality/2007/tbl01.htm

[19] Indiana State Department of Health. (2007). Percent of Live Births by Age and Race of Mother: Indiana Residents, 1997-2007. Retrieved from www.in.gov/isdh/reports/natality/2007/tbl03.htm

[20] Child Trends Data Bank. (2010). Teen Births. Retrieved from www.childtrendsdatabank.org/?q=node/52

[21] Indiana State Department of Health. (2010). Indiana Natality Report 2007, Table 30. Retrieved from www.in.gov/isdh/reports/natality/2007/tbl30_t.htm; U.S. Department of Health and Human Services, National Vital Statistics Reports. (2010). Births: Final Data for 2007. Retrieved from www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_24.pdf

[22] U.S. Department of Health and Human Services, Health Resources and Service Administration. (n.d.). A Healthy Start: Begin Before Baby's Born. Retrieved from http://mchb.hrsa.gov/programs/womeninfants/prenatal.htm

[23] Child Trends Data Bank. (2010). Late or No Prenatal Care. Retrieved from www.childtrendsdatabank.org/?q=node/243

[24] Indiana State Department of Health. (2010). Indiana Natality Report 2007: Preface. Retrieved from www.in.gov/isdh/reports/natality/2007/index.htm

[25] Indiana State Department of Health. (2010). Indiana Natality Report 2007, Table 24. Retrieved from www.in.gov/isdh/reports/natality/2007/tbl24a.htm

[26] Child Trends. (2010). Late or No Prenatal Care. Retrieved from www.childtrendsdatabank.org/?q=node/214

[27] U.S. Department of Health and Human Services, National Vital Statistics Reports. (2010). Births: Final Data for 2007. Retrieved from www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_24.pdf

[28] Indiana State Department of Health. (2010). Indiana Natality Report 2007, Table 24. Retrieved from www.in.gov/isdh/reports/natality/2007/tbl24a.htm

[29] 39,568 singleton births in 2007 were to mothers on Medicaid.

[30] Indiana Family and Social Services, Indiana Medicaid for Providers. (n.d.). Presumptive Eligibility. http://provider.indianamedicaid.com/provider-specific-information/managed-care/presumptive-eligibility.aspx

[31] Indiana Tobacco Prevention and Cessation. (2009). Pregnant Women and Smoking. Retrieved from www.in.gov/itpc/files/Pregnant_women_Feb2009(1).pdf

[32] Indiana State Department of Health. (2010). Indiana Natality Report 2007: Preface. Retrieved from www.in.gov/isdh/reports/natality/2007/index.htm

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Sources

[33] Indiana State Department of Health. (2010). Indiana Natality Report 2007, Table 20. Retrieved from www.in.gov/isdh/reports/natality/2007/tbl20a.htm; U.S. Department of Health and Human Services, National Vital Statistics Reports. (2010). Births: Final Data for 2007. Retrieved from www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_24.pdf

[34] Child Trends Data Bank. (2010). Preterm Births. Retrieved from www.childtrendsdatabank.org/?q=node/361

[35] March of Dimes. (2010) Resource Library: Premature Birth. Retrieved from www.marchofdimes.com/prematurity/21326_1157.asp

[36] March of Dimes. (2011). Peristats. Retrieved from www.marchofdimes.com/peristats/default.aspx

[37] Child Trends Data Bank. (2010). Low and Very Low Birth Weight Infants. Retrieved from www.childtrendsdatabank.org/pdf/57_PDF.pdf

[38] Indiana State Department of Health. (2010). Indiana Natality Report 2007, Table 6. Retrieved from www.in.gov/isdh/reports/natality/2007/tbl6y.htm; U.S. Department of Health and Human Services, National Vital Statistics Reports. (2010). Births: Final Data for 2007. Retrieved from www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_24.pdf

[39] March of Dimes. (2011). Peristats. Retrieved from www.marchofdimes.com/peristats/default.aspx

[40] U.S. Department of Health and Human Services, Office of the Surgeon General. (2011). The Surgeon General's Call to Action to Support Breastfeeding. Retrieved from www.surgeongeneral.gov/topics/breastfeeding/factsheet.html

[41] U.S. Department of Health and Human Services, The National Woman's Health Information Center. (2010). Why Breastfeeding is Important. Retrieved from www.womenshealth.gov/breastfeeding/why-breastfeeding-is-important/

[42] Centers for Disease Control and Prevention. (2010). Breastfeeding Report Card- United States, 2010. Retrieved from www.cdc.gov/breastfeeding/pdf/BreastfeedingReportCard2010.pdf

[43] National Survey of Children's Health. (n.d.). 2007 National Survey of Children's Health. Retrieved from www.nschdata.org/StateProfiles/CustomProfile07.aspx?rid=5&geo=Indiana&geo2=Nationwide

[44] Centers for Disease Control and Prevention. (2010). Racial and Ethnic Differences in Breastfeeding Initiation and Duration, by State — National Immunization Survey, United States, 2004–2008. Retrieved from www.cdc.gov/mmwr/pdf/wk/mm5911.pdf

[45] Centers for Disease Control and Prevention. (2005). More Babies Born at Very Low Birthweight: Linked to Rise in Infant Mortality in 2002. Retrieved from www.cdc.gov/nchs/pressroom/05news/lowbirthwt.htm

[46] Centers for Disease Control and Prevention, Office of Minority Health and Health Disparities. (n.d.). Eliminate Disparities in Infant Mortality. Retrieved from www.cdc.gov/omhd/AMH/factsheets/infant.htm

[47] Indiana State Department of Health. (2010). Indiana Mortality Report: 2007. Retrieved from www.in.gov/isdh/reports/mortality/2007/toc.htm

[48] KIDS COUNT Data Center. (2010). Infant Mortality Rate. Retrieved from http://kidscount.datacenter.org

[49] March of Dimes. (2011). Peristats. Retrieved from www.marchofdimes.com/peristats/default.aspx

[50] U.S. Department of Health and Human Services. (2010). Infant Mortality and African Americans. Retrieved from http://minorityhealth.hhs.gov/templates/content.aspx?ID=3021

[51] Centers for Disease Control and Prevention. (2010). Injury Prevention and Control: Data and Statistics. Retrieved from www.cdc.gov/injury/wisqars/fatal.html

[52] Indiana State Department of Health. (n.d.). Newborn Screening home. Retrieved from www.in.gov/isdh/20215.htm

[53] American Academy of Pediatrics. (n.d.). Children Health Topics Newborn Screenings. Retrieved from www.aap.org/healthtopics/newbornscreening.cfm

[54] Indiana State Department of Health, Genomics & Newborn Screening Program. (2011). Data Request.

[55] American Academy of Pediatrics. (2007). Year 2007 Position Statement: Principles and Guidelines for Early Hearing Detection and Intervention Programs. Retrieved from http://aappolicy.aappublications.org/cgi/reprint/pediatrics;120/4/898.pdf

[56] Indiana State Department of Health. (n.d.). Early Hearing Detection and Intervention Program. Retrieved from www.in.gov/isdh/20217.htm

[57] Centers for Disease Control and Prevention. (2008). EHDI State and Territorial Profiles: Indiana. Retrieved from www.cdc.gov/ncbddd/hearingloss/states/Indiana.pdf

[58] Indiana State Department of Health, Early Hearing Detection and Intervention Program. (2011). Data Request.

[59] American Academy of Pediatrics. (n.d.). Medical Home. Retrieved from http://aap.org/healthtopics/medicalhome.cfm

[60] National Survey of Children's Health. (2009). Indiana State Profile Page. Retrieved from http://nschdata.org/StateProfiles/CustomProfile07.aspx?rid=5&geo2=Nationwide&geo=Indiana ; Medical Home items and criteria in the 2007 NSCH differ substantially from the 2003 survey. The goal of these changes was to align measurement of Medical Home in the NSCH more closely with the Medical Home measure used in the 2005-2006 National Survey of Children with Special Health Care Needs. Please take this into consideration when comparing across survey years.

[61] Data Resource Center for Child and Adolescent Health. (n.d.). Access more Medical Home Data. Retrieved from http://medicalhomedata.org/content/medicalhomedata.aspx

[62] Centers for Disease Control and Prevention. (2009). How Vaccines Prevent Diseases. Retrieved from www.cdc.gov/vaccines/vac-gen/howvpd.htm

[63] Child Trends Data Bank. (2010). Immunization. Retrieved from www.childtrendsdatabank.org/?q=node/71

[64] Centers for Disease Control and Prevention. (2010). National, State, and Local Area Vaccination Coverage Among Children Aged 19–35 Months — United States, 2009. Retrieved from www.cdc.gov/mmwr/preview/mmwrhtml/mm5936a2.htm?s_cid=mm5936a2_w

[65] Centers for Disease Control and Prevention. (2010). Vaccines and Immunizations. Retrieved from www.cdc.gov/vaccines/stats-surv/nis/articles.htm#09

Sunny Start
Healthy Bodies
Healthy Minds

Sources

[66] Lewit, E.M., and Schuurman Baker, L. (1995). Health Insurance Coverage. Retrieved from www.princeton.edu/futureofchildren/publications/docs/05_03_Indicators.pdf

[67] Baker Institute Policy Report. (2009). The Economic Impact of Uninsured Children on America. Retrieved from www.bakerinstitute.org/publications/HPF-pub-HoShortUninsuredChildren-060309.pdf

[68] U.S. Census Bureau, Small Area Health Insurance Estimates. (2010). Health Insurance Coverage Status. Retrieved from www.census.gov/did/www/sahie/

[69] U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. (2008). The National Survey of Children with Special Health Care Needs Chartbook 2005–2006. Retrieved from http://mchb.hrsa.gov/cshcn05/SD/indiana.htm

[70] Indiana Family and Social Services Administration, Office of Medicaid Policy and Programming. (2011). Data Request.

[71] This estimate was calculated by taking the total number of children 0-5 on public insurance provided by OMPP divided by the 2009 populate estimate of children 0-5 in Indiana.

[72] Indiana Family and Social Services Administration. (n.d.). Indiana Medicaid: HealthWatch/Early and Periodic Screening, Diagnosis and Treatment Provider Manual. Retrieved from www.indianamedicaid.com

[73] U.S. Department of Health and Human Services, Health Resources and Services Administration. (n.d.). Retrieved from www.hrsa.gov/epsdt/

[74] Indiana Family and Social Services Administration, Office of Medicaid Policy and Planning. (2011). Data Request of Annual CMS 416 Participation Reports.

[75] U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. (2008). The National Survey of Children with Special Health Care Needs Chartbook 2005–2006. Retrieved from http://mchb.hrsa.gov/cshcn05/SD/indiana.htm

[76] Ibid.

[77] Indiana State Department of Health. (n.d.). Children's Special Health Care Services. Retrieved from www.in.gov/isdh/19613.htm

[78] Indiana State Department of Health, Children's Special Health Care Services. (2011). Data Request.

[79] U.S. Department of Health and Human Services. (2000). Oral Health in America: A Report of the Surgeon General–Executive Summary. Retrieved from www.surgeongeneral.gov/library/oralhealth/

[80] Gehshan, S. and Wyatt, M. (2007). Improving Oral Health Care for Young Children. Retrieved from www.nashp.org/sites/default/files/improving_oral_health.pdf

[81] National Survey of Children's Health. (2009). Data Resource Center. Retrieved from www.nschdata.org/Content/Default.aspx

[82] Ibid.

[83] U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services. (n.d.). State Agency Responsibilities. Retrieved from www.cms.gov/MedicaidEarlyPeriodicScrn/03_StateAgencyResponsibilities.asp

[84] Indiana Family and Social Services Administration, Office of Medicaid Policy and Programming. (2011). Data Request.

[85] Child Trends Data Bank. (n.d.). Lead Poisoning. Retrieved from www.childtrendsdatabank.org/pdf/81_PDF.pdf

[86] Indiana State Department of Health. (n.d.). At-Risk of Lead Poisoning. Retrieved from www.in.gov/isdh/19151.htm

[87] Ibid.

[88] Indiana State Department of Health. (n.d.). Lead Program Statistics. Retrieved from www.in.gov/isdh/19137.htm

[89] Boyd, J., Barnett, W.S., Bodrova, E., Leong, D.J., and Gomby, D. (2005). Promoting Children's Social and Emotional Development Through Preschool Education. Retrieved from http://nieer.org/resources/policyreports/report7.pdf

[90] Cooper, J.L., Masi, R., and Vick, J. (2009). Social-Emotional Development in Early Childhood. Retrieved from www.nccp.org/publications/pdf/text_882.pdf

[91] Ibid.

[92] Finkelhor, D., Turner, H., Ormrod, R., Hamby, S., and Kracke, K. (2009). Children's Exposure to Violence: a Comprehensive National Survey. Retrieved from www.ncjrs.gov/pdffiles1/ojjdp/227744.pdf

[93] Knitzer, J., Theberge, S., and Johnson, K. (2008). Reducing Maternal Depression and Its Impact on Young Children. Retrieved from www.nccp.org/publications/pub_791.html#6

[94] Stewart, R.C. (2007). Maternal depression and infant growth: a review of recent evidence. Retrieved from www.ncbi.nlm.nih.gov/pubmed/17355442; and Dahlgreen, J. (2009). The effect of maternal depression on infant social-emotional development. Retrieved from http://minds.wisconsin.edu/handle/1793/38568

[95] Zapata, L.B. (2005). Associations Between Maternal Depression and Child Social Competence and Display of Problem Behaviors: A Longitudinal Investigation of Direct, Indirect and Moderating Effects. Retrieved from http://etd.fcla.edu/SF/SFE0001174/Zapata-Lauren-Dissertation.pdf

[96] Centers for Disease Control and Prevention. (2010). Maternal and Infant Health Research: Pregnancy Complications. Retrieved from www.cdc.gov/Reproductivehealth/MaternalInfantHealth/PregComplications.htm#depression

[97] Centers for Disease Control and Prevention. (2009). Pregnancy Risk Assessment Monitoring System (PRAMS): PRAMS and Postpartum Depression. Retrieved from www.cdc.gov/prams/PPD.htm

[98] Wang, C., and Holton, J. (2007). Total Estimated Cost of Child Abuse in the United States. Chicago, IL: Prevent Child Abuse America. Retrieved from www.preventchildabuse.org

[99] National Center for Infants, Toddlers, and Families, Zero to Three. (2011). Child Abuse and Neglect. Retrieved from www.zerotothree.org/maltreatment/child-abuse-neglect/child-abuse-and-neglect.html

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Sources

[100] Zimmerman, F., Mercy, J. (2010). A Better Start: Child Maltreatment Prevention as a Public Health Priority. Retrieved from www.zerotothree.org/maltreatment/child-abuse-neglect/30-5-zimmerman.pdf

[101] Indiana Department of Child Services. (2010). Demographic Trend Report for SFY 2009. Retrieved from www.in.gov/dcs/files/DraftDemographicsTrendingReportSFY2009.pdf; U.S. Department of Health and Human Services, Administration on Children, Youth, and Families. (2011). Child Maltreatment 2009. Retrieved from www.acf.hhs.gov/programs/cb/pubs/cm09/cm09.pdf

[102] Indiana Department of Child Services. (2010). Child Abuse and Neglect Annual Report of Child Fatalities SFY 2008. Retrieved from www.in.gov/dcs/images/SFY_2008_Child_Fatality_Report.pdf ; U.S. Department of Health and Human Services, Administration on Children, Youth, and Families. (2011). Child Maltreatment 2009. Retrieved from www.acf.hhs.gov/programs/cb/pubs/cm09/cm09.pdf

[103] National Center for Medical Home Implementation. (n.d.). Developmental/Behavioral Screening. Retrieved from www.medicalhomeinfo.org/how/clinical_care/developmental_screening/#early

[104] Indiana Department of Child Services. (2011). Data Request.

[105] National Scientific Council on the Developing Child. (2008). Mental Health Problems in Early Childhood Can Impair Learning and Behavior for Life. Working Paper 6. Retrieved from http://developingchild.harvard.edu/index.php/library/reports_and_working_papers/working_papers/wp6/

[106] Brauner, C., and Stephens, C. (2006). Estimating the Prevalence of Early Childhood Serious Emotional/Behavioral Disorders: Challenges and Recommendations. Retrieved from www.ncbi.nlm.nih.gov/pmc/articles/PMC1525276/

[107] Gilliam, W. (2005). Prekindergarteners Left Behind: Expulsion Rates in State Prekindergarten Systems. Retrieved from www.hartfordinfo.org/issues/wsd/education/NationalPreKExpulsionPaper.pdf

[108] Indiana Department of Child Services. (n.d.). Foster Care. Retrieved from www.in.gov/dcs/2418.htm

[109] Troutman, B., Ryan, S., and Cardi, M. (n.d.). The Effects of Foster Care Placement on Young Children's Mental Health. Retrieved from www.medicine.uiowa.edu/icmh/archives/reports/Foster_care.pdf

[110] Winokur, M.A., Crawford, G.A., Longobardi, R.C., and Valentine, D.P. (2008). Matched Comparison of Children in Kinship Care and Foster Care on Child Welfare Outcomes. Families In Society: The Journal of Contemporary Social Science. Retrieved from www.familiesinsociety.org/New/Teleconf/081007Winokur/89-3Winokur.pdf

[111] Indiana Department of Children's Services. (2010). Demographic Trend Report for SFY 2009. Retrieved from www.in.gov/dcs/files/DraftDemographicsTrendingReportSFY2009.pdf

[112] Calman, L., Tarr-Whelan, L. (2005). Early Childhood Education for All. Retrieved from http://web.mit.edu/workplacecenter/docs/Full%20Report.pdf

[113] Ibid.

[114] Muennig, P., Robertson, D., Johnson, G., Campbell, F., Pungello, E., and Neidell, M. (2011). The Effect of an Early Education Program on Adult Health: The Carolina Abecedarian Project Randomized Controlled Trial. Retrieved from http://ajph.aphapublications.org/cgi/content/abstract/101/3/512

[115] O'Donnell, K. (2008). Parents' Reports of the School Readiness of Young Children from the National Household Education Surveys Program of 2007 (NCES 2008-051). Retrieved from http://nces.ed.gov/pubs2008/2008051.pdf

[116] Lynch, R. (2007). Enriching Children, Enriching the Nation. Indiana Summary. Retrieved from www.epi.org/page/-/old/books/enriching/states/in.pdf

[117] Indiana Family and Social Services Administration. (n.d.). Becoming a Licensed or Registered Provider. Retrieved from www.in.gov/fssa/carefinder/2736.htm; Voluntary Certification Program Guidelines for Unlicensed Registered Ministries. Retrieved from www.in.gov/fssa/files/vcp_providerguidelinesFinalRevision(1).pdf

[118] Indiana Family and Social Services Administration, Bureau of Child Care. (2011). Data Request.

[119] National Association of Child Care Resource and Referral Agencies. (2010). Child Care in the State of: Indiana. Retrieved from www.naccrra.org/publications/naccrra-publications/publications/8880000_State%20Fact%20Bk%202010-states.pks_IN.pdf

[120] National Association of Child Care Resource and Referral Agencies. (2010). Parents and the High Cost of Child Care: 2010 Update. Retrieved from www.naccrra.org/publications/naccrra-publications/parents-and-the-high-cost-of-child-care.php

[121] Indiana Family and Social Services Administration, Bureau of Child Care. (2011). Data Request and Email Correspondence.

[122] Vandell, D., Burchinal, M., Vandergrift, N. (2010). Do Effects of Early Child Care Extend to Age 15 Years? Results from the NICHD Study of Early Child Care and Youth Development. Retrieved from http://nieer.org/docs/?DocID=293

[123] Child Trends. (2009). What We Know and Don't Know About Measuring Quality in Early Childhood and School-Age Care and Education Settings. Retrieved from www.childtrends.org/Files//Child_Trends-2009_5_20_RB_WhatWeKnow.pdf

[124] Indiana Family and Social Services Administration. (n.d.). Scientific Basis for PTQ. Retrieved from www.in.gov/fssa/pathstoquality/3764.htm

[125] Indiana Family and Social Services Administration, Bureau of Child Care. (2011). Data Request.

[126] Karoly, L. A., Kilburn, M. R., and Cannon, J. S. (2005). Early Childhood Interventions. Retrieved from www.rand.org/pubs/monographs/2005/RAND_MG341.pdf

[127] Indiana Association for the Education of Young Children, Inc. (2007). Working in Child Care in Indiana. Retrieved from http://editor.ne16.com/iaeyc/2007_Workforce_Study_SpecialReport.pdf

[128] Indiana Family and Social Services Administration, Head Start Office. (2011). Data Request.

[129] U.S. Department of Health and Human Services, Administration for Children and Families. (n.d.). The Early Head

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Sources

Start National Resource Center. Retrieved from www.ehsnrc.org/AboutUs/ehs.htm

[130] Indiana Family and Social Services Administration. (n.d.). Overview of Head Start. Retrieved from www.in.gov/fssa/dfr/3293.htm

[131] Dobbs-Oates, J., Elicker, J., and Thomas, V. (2010). Head Start: It Works for Indiana Children and Families! Center for Families Publications, Paper 21. Retrieved from http://docs.lib.purdue.edu/cffpub/21 http://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1035&context=cffpub

[132] Indiana Family and Social Services Administration, Head Start Office. (2011). Data Request.

[133] U.S. Department of Education. (n.d.). Building the Legacy: IDEA 2004. Retrieved from http://idea.ed.gov/

[134] Indiana Family and Social Services Administration, First Steps. (n.d.). About First Steps. Retrieved from www.in.gov/fssa/ddrs/2813.htm

[135] U.S. Department of Education. (n.d.). Building the Legacy: IDEA 2004. Retrieved from http://idea.ed.gov/

[136] Indiana Family and Social Services Administration, First Steps. (2009). First Steps Participation Costs. Retrieved from www.in.gov/fssa/files/FIRST_STEPS_COST_PARTICIPATION_2009.pdf

[137] Indiana Family and Social Services Administration, First Steps. (2010). Indiana Statewide Profile Report. Retrieved from www.in.gov/fssa/ddrs/2812.htm

[138] Ibid.

[139] Gormley W.T., Phillips, D., and Gayer, T. (2008). Preschool Programs Can Boost School Readiness. Retrieved from http://nieer.org/resources/research/Gormley062708.pdf

[140] National Dissemination Center for Children with Disabilities. (2010). Special Education Services for Preschoolers with Disabilities. Retrieved from http://nichcy.org/schoolage/preschoolers

[141] Department of Education. (n.d.). Building the Legacy: IDEA 2004. Retrieved from http://idea.ed.gov/

[142] Data Accountability Center. (n.d.). Individuals with Disabilities Education Act (IDEA) Data. Retrieved from www.ideadata.org

[143] Indiana Department of Education, Differentiated Learning. (2011). Data Request.

[144] Kreider, H. (2002). Getting Parents "Ready" for Kindergarten: The Role of Early Childhood Education. Retrieved from www.hfrp.org/publications-resources/browse-our-publications/getting-parents-ready-for-kindergarten-the-role-of-early-childhood-education

[145] Hoghughi, M. (1998). The Importance of Parenting in Child Health. Retrieved from www.ncbi.nlm.nih.gov/pmc/articles/PMC1113192/

[146] Hanssen, E., and Zimanyi, L. (2000). Support for Families: Working with Parents and Caregivers to Support Children from Birth to Three Years of Age. Retrieved from www.ecdgroup.com/pdfs/CN24SupportingFamilies.pdf

[147] National Center for Children in Poverty. (2008). Indiana State Profile Retrieved from www.nccp.org/profiles/pdf/profile_early_childhood_IN.pdf

[148] U.S. Census Bureau. (2010). American Community Survey: 2009. Tables 09006 and 09002.

[149] Clarke, P. (2009). Supporting Children Learning English as a Second Language in the Early Years (birth to six years). Retrieved from www.vcaa.vic.edu.au/earlyyears/supporting_children_learning_esl.pdf

[150] U.S. Census Bureau. (2010). American Community Survey: 2009. Table S1601.

[151] Ballantyne, K. G., Sanderman, A. R., De'Emilio, T., and McClaughlin, N. (2008). Dual Language Learners in the Early Years: Getting Ready to Succeed in School. Retrieved from http://researchconnections.org/childcare/resources/15134/pdf

[152] National Head Start Training and Technical Assistance Resource Center. (2008). Dual Language Learning: What Does it Take? Retrieved from http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/eecd/Individualization/Learning%20in%20Two%20Languages/DLANA_final_2009%5B1%5D.pdf

[153] National Center for Children in Poverty. (n.d.) Indiana Early Childhood Profile. Retrieved from www.nccp.org/profiles/early_childhood.html

[154] Child Trends Data Bank. (2010). Parental Education. Retrieved from www.childtrendsdatabank.org/?q=node/183

[155] U.S. Census Bureau. (2010). American Community Survey: 2009. Table B20004.

[156] KIDS COUNT Data Center. (2009). Children Under 6 with No Parent in the Labor Force. Retrieved from http://datacenter.kidscount.org/data/acrossstates/Rankings.aspx?ind=5056

[157] U.S. Department of Health and Human Services. (2009). The 2009 HHS Poverty Guidelines. Retrieved from http://aspe.hhs.gov/poverty/09poverty.shtml

[158] National Center for Children in Poverty. (n.d.). Indiana Early Childhood Profile. Retrieved from www.nccp.org/profiles/early_childhood.html

[159] Child Trends. (2010). Secure Parental Employment. Retrieved from www.childtrendsdatabank.org/?q=node/192

[160] U.S. Census Bureau. (2010). American Community Survey: 2009. Table B19126.

[161] Moore, K.A., Redd, Z., Burkhauser, M., Mbwana, K. and Collins, A. Child Trends. (2009). Children in Poverty: Trends, Consequences, and Policy Options. Retrieved from www.childtrends.org/Files/Child_Trends-2009_04_07_RB_ChildreninPoverty.pdf

[162] U.S. Census Bureau. (2010). American Community Survey: 2009. Select Economic Characteristics Comparative Profiles.

[163] National Center for Children in Poverty. (2011). Indiana Early Childhood Profile. Retrieved from www.nccp.org/profiles/pdf/profile_early_childhood_IN.pdf

[164] U.S. Department of Agriculture, Center for Nutrition Policy and Promotion. (2009). Expenditures on Children by

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Sources

Family. Retrieved from www.cnpp.usda.gov/expenditureson children renbyfamilies.htm

[165] Institute for Children in Poverty. (2009). Examination of Residential Instability and Homelessness Among Young Children. Retrieved from www.icphusa.org/PDF/reports/ICP%20Report_Examination%20of%20Residential%20Instability%20and%20Homelessness%20among%20Young%20Children.pdf

[166] Ibid.

[167] Homeless Children America. (2009). America's Outcasts: State Report Card on Child Homelessness Indiana. Retrieved from www.homelesschildrenamerica.org/pdf/report_cards/long/in_long.pdf

[168] National Center for Homeless Education. (2008). Education for Homeless Children and Youth Program. Retrieved from http://center.serve.org/nche/downloads/data_comp_03-06.pdf

[169] Indiana Community Action Association. (2009). 2009 Energy Assistance Income Guidelines. Retrieved from www.incap.org/eap.htm; Indiana Housing and Community Development Authority. (n.d.). Energy Programs. Retrieved from www.in.gov/ihcda/2523.htm

[170] Indiana Housing and Community Development Authority. (2011). Data Request.

[171] U.S. Department of Health and Human Services, Administration on Children, Youth, and Families. (2011). Child Maltreatment 2009. Retrieved from www.acf.hhs.gov/programs/cb/pubs/cm09/

[172] Barth, R. (2009). Preventing Child Abuse and Neglect with Parent Training: Evidence and Opportunities. Retrieved from www.princeton.edu/futureofchildren/publications/docs/19_02_05.pdf

[173] Indiana Department of Child Services. (2010). Child Abuse and Neglect Annual Report of Child Fatalities SFY 2008. Retrieved from www.in.gov/dcs/images/SFY_2008_Child_Fatality_Report.pdf

[174] U.S. Department of Health and Human Services, Administration on Children, Youth, and Families. (2011). Child Maltreatment 2009. Retrieved from www.acf.hhs.gov/programs/cb/pubs/cm09/

[175] Indiana Department of Child Services. (n.d.). Healthy Families. Retrieved from www.in.gov/dcs/2459.htm

[176] Healthy Families America. (2002). Healthy Families America: A Program That Works. Retrieved from www.healthyfamiliesamerica.org/downloads/hfa_that_works.pdf

[177] Howard, K. S., Brooks-Gunn, J. (2009). The Role of Home-Visiting Programs in Preventing Child Abuse and Neglect. Retrieved from www.princeton.edu/futureofchildren/publications/docs/19_02_06.pdf

[178] Indiana Department of Child Services, Healthy Families Division. (2010). Data Request.

[179] Ibid.

[180] U.S. Department of Agriculture, Food and Nutrition Service. (n.d.). WIC Income Eligibility Guidelines 2009-2010. Retrieved from www.fns.usda.gov/wic/howtoapply/incomeguidelines.htm

[181] Indiana State Department of Health, WIC Division. (n.d.). Eligibility Requirements. Retrieved from www.in.gov/isdh/19695.htm

[182] Indiana State Department of Health. (n.d.). Indiana Women, Infants, and Children Program. Retrieved from www.in.gov/isdh/19691.htm

[183] Indiana State Department of Health, WIC Division. (2010). Data Request.

[184] 49,539 pregnant women participated in WIC in 2007, out of 89,719 live births in Indiana in 2007.

[185] U.S. Department of Agriculture, Food and Nutrition Service. (2011). WIC Program: Average Monthly Benefit per Person. Retrieved from www.fns.usda.gov/pd/25wifyavgfd$.htm

[186] U.S. Department of Agriculture, Food and Nutrition Service. (2011). WIC Program: Food Cost. Retrieved from www.fns.usda.gov/pd/24wicfood$.htm

[187] Gaylord, M., Greer, M., and Botti, J. (2008). Improving Perinatal Health: A Novel Approach to Improve Community and Adult Health. Journal of Perinatalogy, 28, 91-96.

[188] Pies, C., Parthasarathy, P., Kotelchuck, M., Lu, M. (2008). Making a Paradigm Shift in Maternal and Child Health: A Report on the National MCH Life Course Meeting.

[189] March of Dimes. (2011). Peristats. Retrieved from www.marchofdimes.com/peristats/default.aspx

[190] Bruner, C. (2010). Early Learning Left Out: Building an Early Learning Childhood System to Secure America's Future. Retrieved from www.voices.org/wp-content/uploads/2010/11/ELLO.pdf

[191] Isakson, E. A., Davidson, L. L., Higgins, L. B., and Cooper, J. L. (2011). State-level Indicators for Social-emotional Development. Retrieved from www.nccp.org/publications/pdf/text_997.pdf

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The Sunny Start Vision:

In Indiana, children are safe, healthy and reach their full potential

The Sunny Start: Healthy Bodies, Healthy Minds Initiative is a comprehensive, collaborative, statewide effort to implement a strategic plan to support a coordinated system of resources and supports for young children from birth through age five and their families in Indiana. The goal of the project is to ensure that Indiana's children arrive at school healthy and ready to learn.

For More Information, go to sunnystart.in.gov

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