

# The 2010 Iowa Child and Family Household Health Survey

Statewide results

First report in a series

Public Policy Center  
The University of Iowa

Iowa Department of Public Health

Child Health Specialty Clinics



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### **First report in a series**

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The results and views expressed are the independent products of university research and do not necessarily represent the views of the sponsors or the University of Iowa.



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# INTRODUCTION

The Iowa Child and Family Household Health Survey (IHHS) is a comprehensive, statewide effort to evaluate the health and well-being of children and families in Iowa, including health status, access to health care, and social environment. This survey, conducted every 5 years, represents a collaboration between the Iowa Department of Public Health (IDPH), the Public Policy Center (PPC), and Child Health Specialty Clinics (CHSC). Funding for the 2010 survey was provided by the IDPH, with additional funding from: the U.S. Department of Health and Human Services Maternal and Child Health Bureau (MCHB), Blank Children's Hospital; American Academy of Pediatrics – Iowa Chapter; Child Health Specialty Clinics; and ARRA funding through Early ACCESS.

The primary goals of the 2010 IHHS were to: 1) assess the health and well-being of children and families in Iowa, 2) assess a set of early childhood issues, 3) evaluate the health insurance coverage of children in Iowa and features of the uninsured, and 4) assess the health and well-being of racial and ethnic minority children in Iowa.

Questions in the 2010 survey included a wide range of topic areas encompassing health, overall well-being, and family environment of children in Iowa with a special emphasis on early childhood issues.

Topic areas in the 2010 survey include:

- Functional health status
- Access/need
- Medical home
- Prescription medication
- Dental care
- Emergency room use
- Behavioral and emotional health
- Early childhood
- Child care
- Social determinants of health
- Nutrition, physical activity, food insecurity
- Parent health status/family health
- Substance use and gambling
- Demographics

*Address-based  
sampling was  
used to identify  
potential families*

*The survey  
included 2,386  
participants  
—1,859 phone  
—527 online*

This text portion of the report summarizes the findings from the 2010 survey for the state as a whole. The results for the individual questions from the survey, organized by frequency percent of children in Iowa, as well as by age category and Federal Poverty Level (FPL) of the child, can be found in the appendices at the end of this report.

## **METHODS**

The 2010 Iowa Household Health Survey was a population-based statewide survey using a mixed-mode approach to the data collection, and included an oversample of African-American and Latino children. The survey was conducted with parents of children in Iowa using an address-based sampling design. Data collection was completed using a combination of telephone and Internet survey methods. The University of Northern Iowa Center for Social and Behavioral Research coordinated the data collection efforts.

For the survey process: 1) A packet was mailed to a statewide random sample of addresses drawn from the United States Postal Service (USPS) Delivery Sequence File (DSF). The packet included an information letter with instructions for completing a web-based questionnaire; 2) The USPS DSF included telephone numbers for about 60% of addresses. Non-respondents for whom a phone number was available were called if they did not complete the web survey within the first week.

During the core data collection period, 2,386 participated: 1,859 phone and 527 online interviews took place with the parent or guardian of one randomly selected child age 0-17 years living in the household. The data were weighted to account for family size and post-stratified to reflect the 2010 child population in Iowa. As the 2010 Census had just been completed at the time of the 2010 Iowa Household Health Survey, a relatively precise count of children in Iowa was obtained. This was used to determine if the characteristics of the population who completed the survey varied significantly from the total population as identified in the census data.

A weight related to the design effect was added to the analysis in order to make statistical testing more accurate. Weights for individual cases range from .28 to 3.84, with a mean weight of .7629.

Respondents were primarily mothers (78%), although 16% were fathers. The remaining 6% were other types of guardians, primarily relatives of the child. There were almost equal numbers of boys (51%) and girls (49%) represented in the sample. The demographic characteristics of the children in the sample is shown in Table 1

Table 1. Demographics of children in survey, 2010 (weighted data)

Demographics (weighted)	2010
<b>Age</b>	
0-4	27.8%
5-9	27.6%
10-14	27.6%
15-17	17.1%
<b>Income</b>	
0-\$25,000	9.4%
\$25,001-\$40,000	12.1%
\$40,001-\$55,000	15.2%
\$55,001-\$70,000	14.9%
\$70,001-\$80,000	11.7%
More than \$80,000	36.7%
<b>Sex</b>	
% Female	48.7%
<b>Race (check all that apply)</b>	
African/American	4.7%
White	92.2%
Other	7.9%
<b>Ethnicity</b>	
% Spanish/Hispanic	6.5%

For these analyses, results were calculated for children by age group (0-4 years, 5-9 years, 10-14 years, and 15-17 years) and family income (lower: <133% FPL, moderate: 133-200% FPL, and higher: >200% FPL).

# NUMBER OF CHILDREN IN IOWA

There were about 820,000 children in Iowa in 2010 according to the US Census. The number of children remained relatively constant from 2000 to 2010 (Table 2).<sup>1</sup>

Table 2. Iowa child population change, 2000 and 2010

	2000 Census	2010 Census	Percent change
Children ages 0-19 years in Iowa	827,983	820,510	-0.01%

Table 3 presents data concerning the number of births and the number of children enrolled in Iowa schools from 2000-2010. According to the Iowa Department of Education, between the 1999-2000 and the 2009-2010 school years, there was a 6.3% decline in students K-12. Meanwhile, it is interesting to note that the number of births in Iowa has increased since 2000, leveling out in the past few years at around 40,000 births/year.

Table 3. Change in number of Iowa births and Iowa K-12 school enrollment, 2000, 2005 and 2010

	2000	2005	2010	Percent change 2000-2010
Iowa births <sup>2</sup>	38,250	39,275	39,662	+3.7%
School enrollment <sup>3</sup>	540,887	518,355	507,048	-6.3%

The number of families with children in Iowa decreased during the past decade. In the 2000 Census, there were 377,687 families in Iowa. By the 2010 Census, the number dropped to 347,118 families with children under 18 years, an 8.1% decrease. Thus, there was a slight increase in the average number of children in a household in Iowa over the past ten years.

<sup>1</sup> State Library of Iowa, State Data Center Program. Available at [www.iowadatacenter.org](http://www.iowadatacenter.org). Accessed December 2011.

<sup>2</sup> Iowa birth: [http://www.idph.state.ia.us/apl/vital\\_stats.asp#summary](http://www.idph.state.ia.us/apl/vital_stats.asp#summary). Accessed December 2011. The number shown is the 2009 Iowa births, which is the most current information available.

<sup>3</sup> Iowa school enrollment: [http://educateiowa.gov/index.php?option=com\\_content&task=view&id=1348&Itemid=2410](http://educateiowa.gov/index.php?option=com_content&task=view&id=1348&Itemid=2410). Accessed December 2011.

*Number of children in Iowa consistent over past decade*

*Although number of births in Iowa increased slightly in the past decade, there were fewer families and school enrollment was lower*

# CHILD HEALTH STATUS

Overall, the health status of children in Iowa was reported to be very positive. Ninety percent of children were rated to be in 'excellent' or 'very good' health. As Figure 1 shows, this is slightly higher than in 2005, when 89% of children had these ratings.

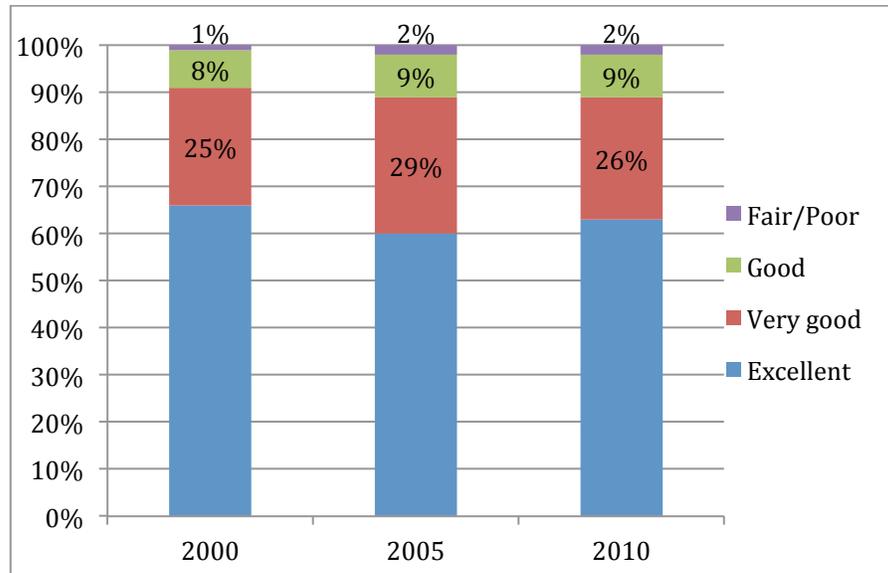


Figure 1. Overall health status of Iowa children, 2000, 2005 and 2010

Iowa children are healthier than children nationally, where 84% have parents who rate their health as 'excellent' or 'very good.'<sup>4</sup> Health status did vary significantly by income, with 46% of children in families with incomes less than 133% FPL being rated as 'excellent' compared to 67% of higher income children (>200% FPL).

About one-in-five children in Iowa (19%) were reported to have a special health care need (Figure 2), as defined by the CAHMI children with special health care needs (CSHCN) screening tool.<sup>5</sup> This represents a slight decrease from 2005, when 21% of Iowa children had a special health care need. Nationally in 2005, about 14% of children had special health care needs.<sup>6</sup>

<sup>4</sup> 2007 National Survey of Children's Health, National Center for Health Statistics. Available at: <http://childhealthdata.org/browse/survey?s=2>. Accessed December 2011.

<sup>5</sup> Child and Adolescent Health Measurement Initiative (CAHMI). The Children with Special Health Care Needs Screener. Available at: <http://cahmi.org/ViewDocument.aspx?DocumentID=115>. Accessed December 2011.

<sup>6</sup> The National Survey of Children with Special Health Care Needs <http://mchb.hrsa.gov/cshcn05/>. Accessed December 2011.

*9 out of 10 children were reported to be in excellent or very good health—better than the national average*

*Reported health status was lower for lower income Iowans*

*One in five children in Iowa have a special health care need—higher than the national average*

*Over half of CSHCN had a chronic health condition*

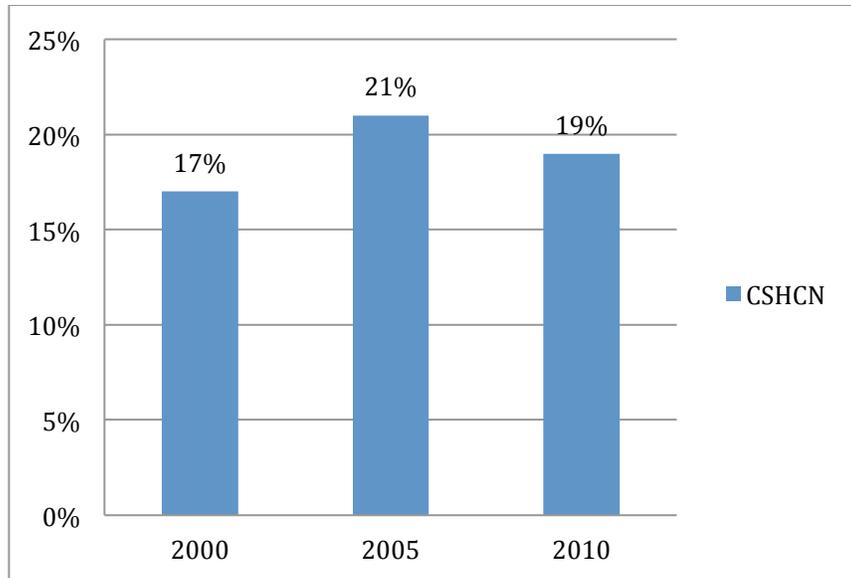


Figure 2. Iowa Children with Special Health Care Need, 2000, 2005 and 2010

Of the 19% of children in Iowa identified as having a special health care need, 53% had parents who reported that their child had been diagnosed with a chronic health condition. Older children were more likely to be identified as having a special health care need (Figure 3). Boys (22%) were more likely to have a special health care need than girls (17%).

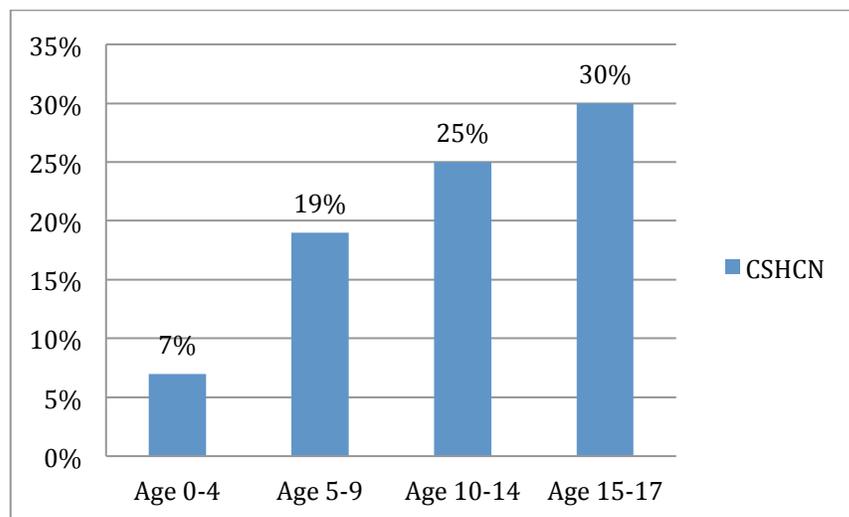


Figure 3. Percent of Iowa children with a special health care need, by age in years

*Lower income children were more likely to have a special health care need*

Children living in households with the lowest incomes were also more likely to have a special health care need (Figure 4).

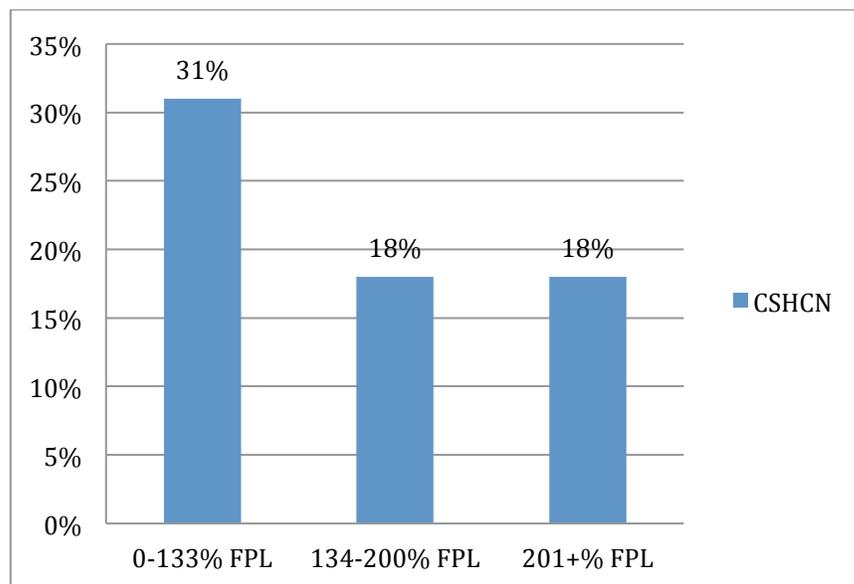


Figure 4. Percent of Iowa children with a special health care need, by income status

*Three percent of Iowa children were uninsured —of these, two-thirds appeared to be eligible for Medicaid or hawk-i*

## HEALTH INSURANCE COVERAGE

Parents were asked about the type and amount of health insurance coverage they had for their children and themselves.

### Child's health insurance coverage

Three percent of children in Iowa were uninsured at the time of the interview. This was similar to the rate of uninsured children found in 2005 (3%), and half that found in 2000 (6%). The percentage of children without insurance varied by income. While only 1% of children in higher income families (>200% FPL) were without health insurance, about 6% of children in households with incomes between 134-199% FPL, and 4% of children in households with incomes equal to or less than 133% FPL, were uninsured. Most lower income children are likely eligible for either the Medicaid or *hawk-i* programs, since income eligibility for these programs extends up to 300% FPL.

Among children with insurance, about 3% had been uninsured at some point in the previous 12 months, with lower income children being most likely to have been without coverage (8%). The period of time without insurance was relatively low, however, with 80% of those who had been uninsured being without insurance for less than 6 months. Most Iowa children (70%) were

*70% of children had employer-based coverage, especially higher income Iowans*

*Lower income Iowans rated their insurance higher*

covered by employer-based insurance. Once again, however, type of coverage varied significantly by income. About 18% of lower income children (<133% FPL) had employer-based insurance, while 50% of moderate-income children (134-200% FPL) and 85% of higher income children (>200% FPL) had such insurance. Public insurance program participation showed the reverse trend, with 77% of lower income, 43% of moderate-income, and 6% of higher income children having public insurance. The proportion of lower income children and moderate-income children with public insurance did increase from 2005-2010 (65% and 27%, respectively). This corresponds to a general decrease in employer-based coverage in the past decade.<sup>7</sup>

Iowa's 3% uninsured rate compares favorably to the national rate of 9% for children (2007).<sup>8</sup> Iowa's decline in uninsured children from 2000 to 2010 parallels a national decline from the mid-1990s to 2007. The national rate for uninsured (non-Hispanic white) children declined from 12.6 percent to 6.1 percent from 1996-2007. Much of this decline is attributed to the start of the Children's Health Insurance Program (CHIP) in 1997, and the concurrent expansion of eligibility of Medicaid for children. Iowa has seen an increase in the number of children enrolled in the Medicaid and *hawk-i* (Iowa's Children's Health Insurance Program) programs. Our results indicate that the proportion of children with public insurance has increased from 11% in 2000 to 22% in 2010, as the number of uninsured children declined in the state.

The perceived adequacy of insurance coverage varied by income: parents of lower income children were more likely to rate their child's insurance as excellent (50%) than parents of higher income children (40%). Lower income children, however, were most likely to have parents who had a 'big' or 'moderate' problem paying for uncovered services.

Almost all respondents (97%) indicated that they believed that it was very important for children to have health insurance, with no difference by age or income status of the child. Improved insurance coverage did not eliminate parent's concerns about health care costs. The parents of one-third of children reported that they had worried 'a great deal' (5%), 'somewhat' (9%) or 'a little' (16%), about their ability to pay for their children's health care in the previous 12 months. Moderate-income parents were significantly more likely to have these concerns.

Questions were asked about the two public insurance program options for children: Medicaid and *hawk-i*. Ninety-four percent of all respondents had heard of the Medicaid program, and one in six children (16%) not currently enrolled in Medicaid had been in the program at some point in their lives. This was highest for lower income children (58%); however, almost one in 10 of the higher income children had also been in the program at some point in their

<sup>7</sup> Employer-Based Health Coverage Declined Sharply Over Past Decade. Center for Budget and Policy Priorities, Dec. 2010: <http://www.cbpp.org/cms/index.cfm?fa=view&id=3335>

<sup>8</sup> 2007 National Survey of Children's Health, National Center for Health Statistics. Available at: <http://childhealthdata.org/browse/survey?s=2>. Accessed December 2011.

lives (11%). As for the *hawk-i* program, 6% of children not currently in the program had been enrolled in *hawk-i* at some point in their lives.

## Parent's health insurance coverage

Eleven percent of Iowa's children had parents who were uninsured at the time of the survey. This was the same percentage of uninsured parents as in 2000 and 2005. Figure 5 shows the change in uninsured children compared to the change for their parents in 2000, 2005 and 2010. Eighty-nine percent of parents had the same insurance plan as their child, similar to the 88% in 2000, and up from the 83% in 2005. Having the same insurance was most common for higher income children (86%) and least common for lower income children (58%). Over half of adults had employer-based insurance (53% through their employer, 16% through someone else's employer), 14% had individually purchased policies, and the rest had either Medicare or Medicaid (11%) or some other source (6%). This varied by income: parents of lower income children were more likely to have public insurance through Medicaid.

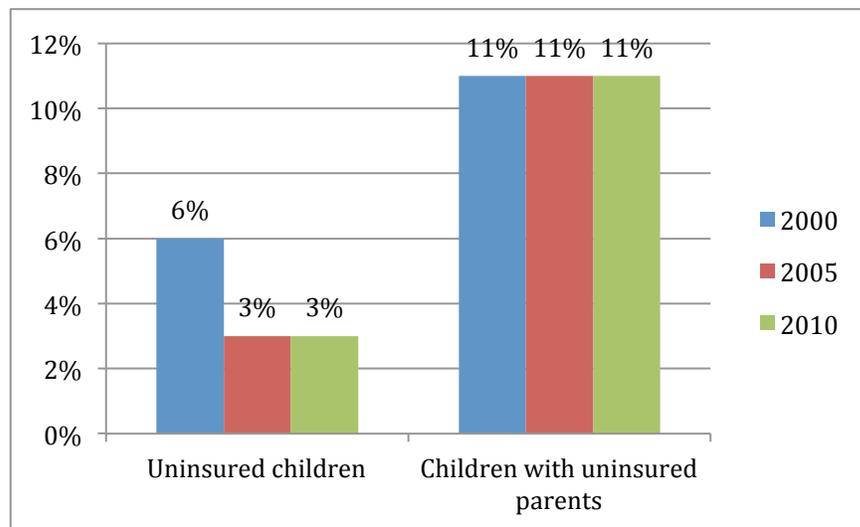


Figure 5. Health insurance status of children and their parents, 2000, 2005, and 2010

In 2010, about the same number of parents purchased their own health insurance as in 2005, and about 2% fewer had employer-sponsored insurance. As in 2000 and 2005, adults had mixed perceptions about how well their own health insurance coverage met their needs. About one-third of children had parents who rated their own coverage 'excellent' (33%) or 'very good' (34%). Twenty-three percent rated coverage as 'good,' 7% as 'fair,' and 3% as 'poor.' Parents of higher income children were most likely to rate their own insurance as 'excellent' (34%). Adults considered health insurance to be slightly less important for themselves than for their children: parents of 88% of children indicated that it was 'very important' for them to have health insurance,

*Over one in ten higher income children had been in Medicaid in their lifetime*

*Eleven percent of parents were uninsured*

compared with 97% for their children. Parents of lower income children were least likely to rate having insurance themselves as 'very important' (81%).

## HEALTH CARE

### Access and need

Over half of children (57%) were reported to have needed medical care of any kind at some point during the previous 12 months. Need was reported to be highest for children ages 15-17 years (64%) and lowest for children ages 5-9 years (55%). Need also varied by income: the highest income children (200+% of FPL) had the highest reported need (61%).

Access to medical care declined slightly for children in Iowa from 2005 to 2010. Three percent of children who needed any medical care had an unmet need for medical care in the previous year in 2010, compared to 3% in 2000, and 1.6% in 2005. Meanwhile, 98% of children reported to have 'always' (86%) or 'usually' (12%) received care for an illness or injury as soon as they wanted. Unmet need for specialty care was higher than unmet need for medical care. About one-third of all children (38%) were reported to have needed care from a specialist in the previous 12 months, and adolescents (46%) and lower income children (44%) were most likely to need specialty care. Eight percent of children who needed such care had an unmet need for specialty care in the previous 12 months. Moderate-income children (134-199% FPL) had the highest unmet need (11%). Seventeen percent of all children who needed care indicated it was a 'big' (3%) or 'small' (14%) problem receiving care from a specialist.

### Medical home

The patient-centered medical home concept is a movement in the health care industry to provide care to patients that assures ease of access to care, including extended hours of care, improved communication and care coordination, and team-based approaches to health care.<sup>9</sup> The goal is to increase quality of health care while reducing costs. The 2010 IHHS included a series of new questions designed to measure the percent of children in the state whose health care is provided through a medical home. In order to qualify as having a medical home for the purposes of this study, children needed to have 1) a personal doctor or nurse, AND 2) if care was needed, a regular source of both sick and well-child care; children also were required to have adequate referrals, or care coordination, or family-centered care when needed.

<sup>9</sup> <http://www.ncqa.org/tabid/631/default.aspx>

*Fifty-seven percent of children needed medical care in the past year*

*Three percent of children were unable to get needed medical care in past year*

*80% of children received care in a way that met the definition of having a medical home*

Eighty percent of children in the state had a medical home, and this did not differ statistically by age. However, children in lower income groups were less likely to meet the definition of having a medical home; 68% of children living below 133% FPL had a medical home, along with 75% of those between 134-199% FPL, and 84% of those over 200% FPL. Children with Special Health Care Needs (CSHCN) were less likely to have a medical home than children without special health care needs (Figure 6).

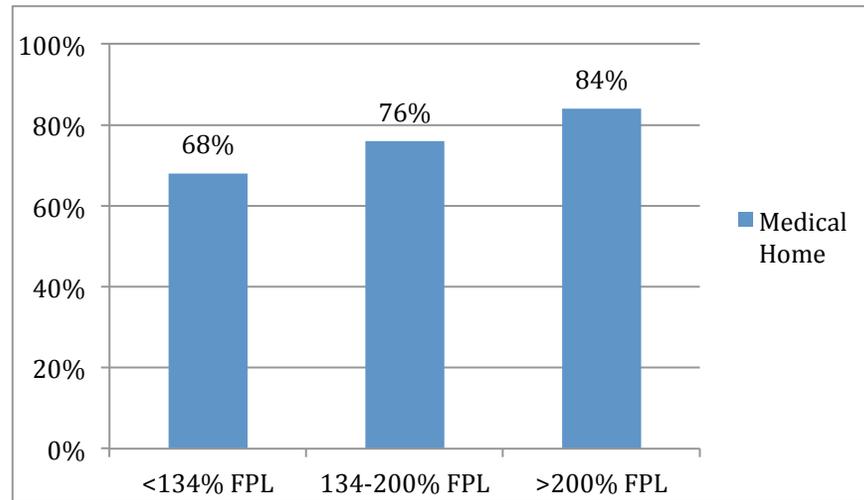


Figure 6. Iowa children with a personal doctor or nurse, 2000, 2005, and 2010

### Personal Doctor or Nurse

Ninety-four percent of children had a (one or more) personal doctor or nurse in 2010, up from 90% in 2000 (Figure 7). However, more than one in ten lower income children (13%) were without a personal doctor or nurse.

*Lower income children were less likely to have a medical home*

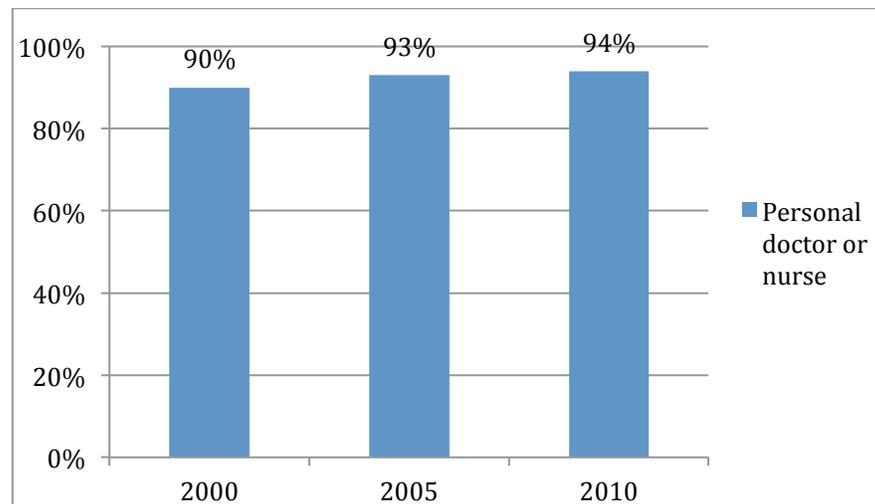


Figure 7. Iowa children with a personal doctor or nurse, 2000, 2005, and 2010

*Low-income kids were most likely to need a specialty referral, but middle-income kids had the most trouble getting one if needed*

*One in four kids went to an Emergency Room in the past year—71% for something that could have been treated elsewhere*

## Main place for care

When parents were asked if they had a main place they usually go for care when their child is sick, almost all parents (98%) said yes. Children in the lowest income group were least likely to have a main place for care when ill (94%). A main place for routine preventive care was also common among all Iowa children (97%).

## Referrals

Twenty-nine percent of children were reported to have a need for a referral to see doctors or receive services, and of those who needed referrals, 86% were able to receive them without a problem. In the lower income group, 46% of children needed a referral, compared with 29% of the 134-199% FPL group and 26% of the 200% or more FPL group. The middle income category had the most trouble receiving a referral, with 26% reporting having a problem receiving needed referrals.

## Preventive care

Access to routine preventive care was generally good for children in Iowa, but varied by the age of the child. Four out of five children in Iowa received routine preventive care in the year prior to the survey, with less than one percent being unable to receive needed preventive care. Young children (ages 0-4 years) were most likely to receive a preventive visit (97%), while children ages 5-9 years were least likely (83%). The parents of 27% of children remembered receiving anticipatory guidance for their child (e.g., told to use car seats or bike helmets depending on the age of child). Young children had parents who were most likely to recall receiving this message (68%), while older children ages 10-14 years (35%) and adolescents (43%) had parents who were least likely to recall hearing this message.

## Emergency care

Twenty-six percent of children in Iowa went to a hospital emergency room (ER) in the 12 months prior to the survey. This was a decline from 28% in 2005 and 32% in 2000. Eight percent of children went two or more times in 2010. Lower income children (43%) were most likely to have gone to the ER. When asked about their child's most recent visit, 37% indicated it was for an emergent situation such as 'trauma/broken bones/stitches' with the remainder (63%)

*Six out of ten kids needed a prescription drug in past year*

being for non-traumatic reasons (e.g., colds, high fever). A doctor or other health professional had told the parent to take the child to the ER in about one-third of the situations (35%). Parents of 71% of children indicated that their most recent ER care could have been provided at a doctor's office or clinic if one had been available. For 78% of these children, parents indicated that 'inconvenient hours/clinic not open when care needed' was the main reason they took the child to the ER. Seven percent of children had parents who reported not knowing where to receive care at night or on the weekend as the reason for going to the ER.

## Prescription medicine

More than half (59%) of all children were reported to have needed a prescription drug during the 12 months prior to the survey. Among those who needed a prescription medication, unmet need was less, with 4% unable to receive a needed prescription in 2010, as compared to 10% in 2005.

## Dental care

Eighteen percent of children in Iowa did not have dental insurance in 2010, similar to 2005. This is an improvement from one in four children in 2000. Ninety-one percent of children over age 1 had a main place to receive dental care, and almost 9 out of 10 children (89%) in the state had been to the dentist at least once in the previous 12 months. Children ages 0-4 were least likely to have received dental care in the past year (68%), with almost one third (29%) never having been to the dentist. Ninety-six percent of children ages 5-9 years had a dental visit in the previous 12 months, 94% of children ages 10-14 years, and 90% of adolescents ages 15-17 years. Eighty eight percent of lower income children had an annual dental visit, compared to 90% of higher income children.

*Low-income kids more likely to have dental insurance but also an unmet dental need*

Almost 60% of children over age 1 year had parents reporting that their child needed dental care within the last 12 months. Of those, about 95% needed check-ups or cleaning, and about 28% needed treatment, such as fillings or emergency care. Young children ages 0-4 years were least likely to have a treatment need (15% of all 1-4 year old children), while children age 5-9 years (33%), and 10-17 years (27%), were most likely to need dental treatment. Unmet need for dental care was slightly higher than for medical care (4% vs. 3%). It should be noted, however, that the rate has declined from 8 percent in 2000. Children under 133% FPL were most likely to have an unmet dental need (10%). Cost was the most common reason given for having an unmet need for dental care.

Children's dental health was reported to be generally good, with over three-quarters rated as 'excellent' (43%) or 'very good' (34%). Five percent were

*Almost one in five low-income kids needed behavioral or emotional care in past year*

*Parents reported being very engaged in their children's activities*

rated as 'fair' or 'poor.' Higher income children were most likely to be rated as being in excellent dental health (47%) and lower income least likely (31%).

Although dental insurance is not as prevalent as medical insurance, coverage did improve from 2000 to 2005, and remained steady until 2010, similar to the trend for medical insurance. The increase in the number of children receiving public insurance (i.e., Medicaid and *hawk-i*) increased dental care coverage, since both programs cover a comprehensive list of dental services. In contrast, many private health insurance policies have limited or no dental insurance benefits. However, the higher unmet need for dental care indicates that the increase in insurance coverage did not automatically translate into better access to dental care for lower income children.

## **Behavioral and emotional health care**

Nine percent of children in Iowa were reported to have needed care for a behavioral or emotional problem in the previous 12 months. Most of the need occurred in children over age five. This was an increase from 8% for all Iowa children in 2000, and a decline from 10% in 2005. Need varied by income, with 19% of lower income children needing behavioral/emotional care as compared to 9% of higher income children. Fifteen percent of children who needed care for a behavioral or emotional problem were unable to get that care due to cost issues.

## **EARLY CHILDHOOD ISSUES**

Parents of children ages 0-5 years were asked questions regarding issues of early childhood, including parental engagement and child care. A more extensive report is planned to address in-depth issues related to early childhood. The following is a brief preview of some of the results related to early childhood.

### **Parental engagement**

The frequency of parents participating in activities with their children—such as reading, telling stories, working on letters, singing songs and playing music, working on arts and crafts, and playing games—were measured in this survey. Almost 8 in 10 children ages 0-5 years in Iowa had parents who reported reading a story to them 'almost every day' or 'most days.' In the last week, 94% of children were told a story, 79% worked on letters or numbers, 97% sang songs or played music, 66% worked on arts and crafts, and 87% played

a game with a family member. All of the children participated in at least one of the activities in the last week, and over 50% participated in all of them.

## Childcare

To thoroughly examine the issue of childcare, questions about childcare arrangements were asked of parents of children ages 0-5 years, including hours in childcare and types of settings.

Almost two-thirds of children in Iowa ages 0-5 years spent at least some time in childcare in the week prior to the survey, with lower income children being less likely to have been in any childcare. Just under half of all children ages 0-5 years who were in childcare in Iowa received at least some of their care at a home-based childcare setting. Thirty-three percent received care in a childcare center, 33% were cared for by grandparents, and 24% were in a preschool. About one-fifth of all young Iowa children (1/3 of children in any childcare setting) had received care in more than one setting in the previous week. The number of childcare settings did not differ by income level for those receiving childcare.

## CHILD EMOTIONAL/BEHAVIORAL HEALTH

In order to gain a better understanding of the behavioral and emotional health of children, respondents were asked a series of six questions. Responses were then combined for analysis as a scale score of the behavioral and emotional health of children. These questions were only asked of parents with children ages 6-17 years. There was a core set of three questions, plus another three items in each of two age groups (6-11 years and 12-17 years) pertaining more specifically to children in those groups. Questions included how often during the past month the child:

- 1) Didn't get along with other kids
- 2) Couldn't concentrate or pay attention for long
- 3) Was unhappy, sad, or depressed

Parents of 6-11 year old children were also asked how often during the past month the child:

- 1) Felt worthless or inferior
- 2) Was high-strung or tense
- 3) Acted too young for his or her age

*Two-thirds of kids age 0-5 were in childcare in the previous week—mostly in home-based settings*

*Twelve percent of low-income kids ages 6-17 had a high level of behavioral or emotional problems*

*While 87% of all kids live in a supportive neighborhood, only ¾ of low-income children do so*

*90% felt their children were safe in their neighborhood, but this was less true for low-income children (81%)*

Parents of 12-17 year olds were asked how often during the past month the child:

- 1) Had trouble sleeping
- 2) Lied or cheated
- 3) Did poorly on school work

When these items were scaled together and compared to standardized norms, 7% of children ages 6-17 years in Iowa had scores suggesting higher levels of behavioral and emotional health problems. This rate varied by income status: 12% of children in the under 133% FPL group had higher scores on the behavior and emotional health status scale, compared to about 11% in the 134-200% FPL group, and 6% of the 200+ FPL group.

## **SOCIAL DETERMINANTS OF HEALTH**

In order to understand more about how neighborhood and community characteristics are related to health and well being, the 2010 IHHS introduced a new set of questions designed to measure some of the social determinants of health.<sup>10</sup> These questions were similar to the children's health indicators from the 2007 National Survey of Children's Health that were related to a supportive neighborhood and safety at home and school.

A supportive neighborhood was assessed by rating levels of agreement with four statements:

- 1) People in this neighborhood help each other
- 2) We watch out for each other's children in this community
- 3) There are people I can count on in this community
- 4) If my child were outside playing and got hurt or scared, there are adults nearby who I trust to help my child

These statements created an indicator resulting from a mean value of the four questions.<sup>11</sup>

Eighty-seven percent asserted that their neighborhood is supportive. This indicator varied by income status, however; parents of 73% of children in the under 133% FPL group said their neighborhood is supportive, compared to about 84% in the 134-200% FPL group, and 90% of the 200+ FPL group.

Two additional indicators measured perceived safety:

<sup>10</sup> World Health Organization: Social Determinants of Health: [http://www.who.int/social\\_determinants/en/](http://www.who.int/social_determinants/en/)

<sup>11</sup> Child and Adolescent Health Measurement Initiative (CAHMI). 2007 National Survey of Children's Health SPSS Code for Data Users, Data Resource Center for Child and Adolescent Health, [www.childhealthdata.org](http://www.childhealthdata.org).

- 1) How often do you feel that your child is safe in your community or neighborhood?
- 2) How often do you feel your child is safe at school?

More than 9 out of 10 respondents (92%) said that they feel their children are safe in their community or neighborhood. This indicator also varied by income status: 81% of children in the under 133% FPL group said their neighborhood is safe, compared to about 87% in the 134-200% FPL group, and 95% of the 200+ FPL group.

The vast majority of respondents (95%), with children between 6-17 years, reported that they feel their children are safe at school. Again, this indicator varied by income: 90% of children in the under 133% FPL group said children are safe in school, compared to about 93% in the 134-200% FPL group, and 97% of the 200+ FPL group.

## NUTRITION

Nutrition and exercise among children in Iowa are a very important concern, especially in relationship to childhood obesity and life-long wellness. To learn more about these issues for children in Iowa, parents were asked about the eating and exercise practices of their children. Nine out of 10 children usually or always eat breakfast (90%). Younger children were more likely to eat breakfast every day than older children (Figure 8). Ninety-six percent of children ages 0-4 years usually or always eat breakfast, compared with 73% of teens ages 15-17 years.

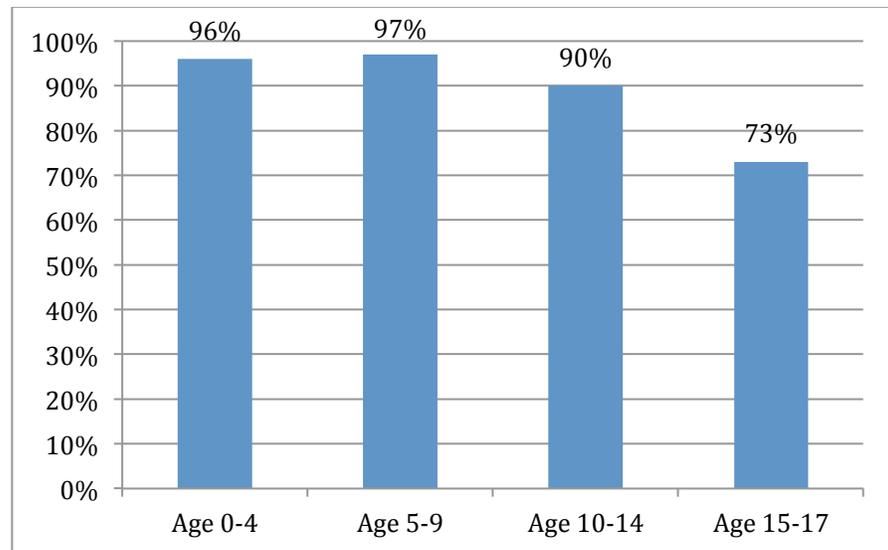


Figure 8. Percent of Iowa children who 'usually' or 'always' eat breakfast, by age category

*90% of children usually or always eat breakfast*



*Almost half of teens (age 15-17) drink at least one soda pop on a given day*

*13% of all kids lived in a home where having enough food was sometimes or often an issue*

Four out of five children (80%) don't drink any soda on an average day, up from 69% in 2005. Sixteen percent drink one serving per day, and 4% drink 2 or more servings per day. Girls were less likely to drink soda than boys. Older children drink more soda than younger children (Figure 9).

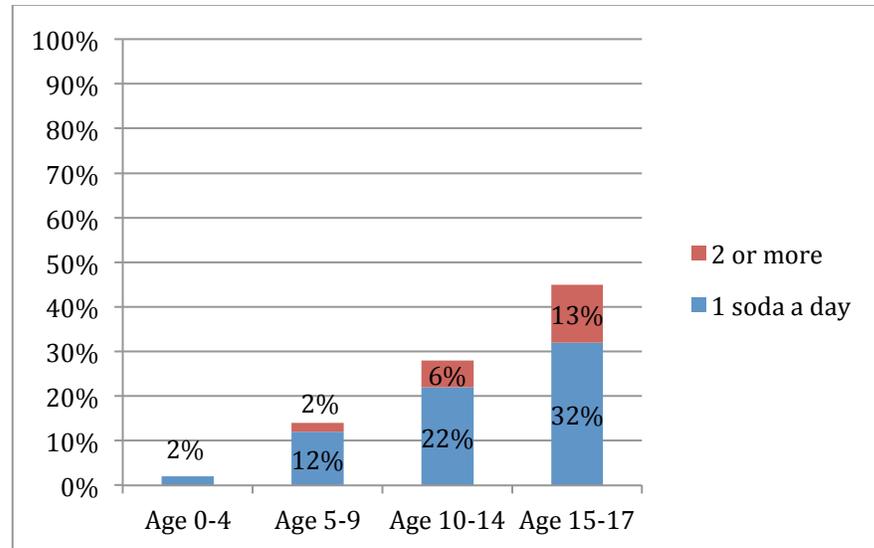


Figure 9. Daily soda consumption of Iowa children, by age category

## Food Insecurity

In 2010, new questions were added to the IHHS in order to document family issues regarding paying for food. Overall, about 13% of children lived in a household where it was sometimes (11%) or often (2%) true that purchased food did not last and there was not enough money to buy more. Eight percent of children lived in a household where adults sometimes cut the size of meals or skipped meals because there was not enough money for food, and 5% of children had a parent who said sometimes they were hungry but did not eat because there was not enough money for food.

This varied by income level (Figure 10). Almost one-quarter of children in families living below 133% FPL had adults in the household who cut portions or skipped meals because of money. Sixteen percent of children living in the 134-199% FPL range had such issues, while 4% of children over 200% FPL had parents reporting this food insecurity.

*Almost 4 in 10 low-income kids lived in a home where having enough food was sometimes or often an issue*

*Activity among kids declined with age*

*Over half of kids watch more than two hours of TV or videos daily*

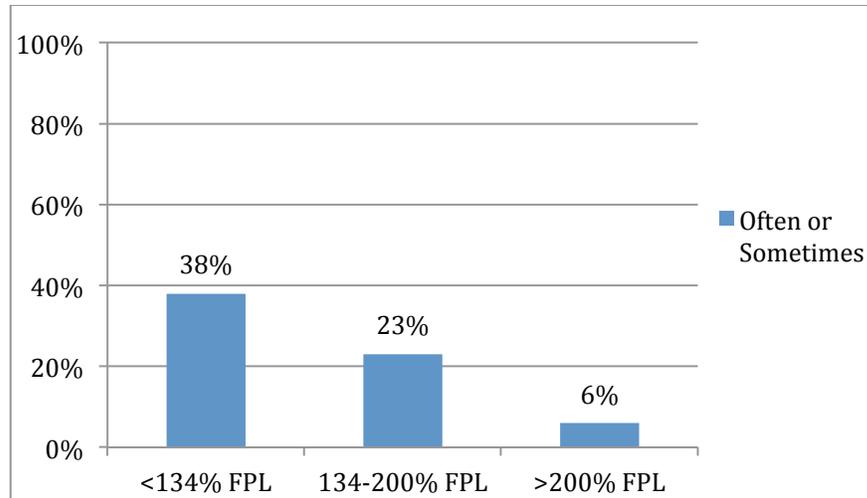


Figure 10. Inadequate food in home and no money for more, by income

## PHYSICAL ACTIVITY

Almost nine out of ten (85%) children were physically active for at least 60 minutes per day, 4 or more times per week. Boys (88%) were more likely to be physically active than girls (83%). Younger children were more likely to be active than older children (Figure 11).

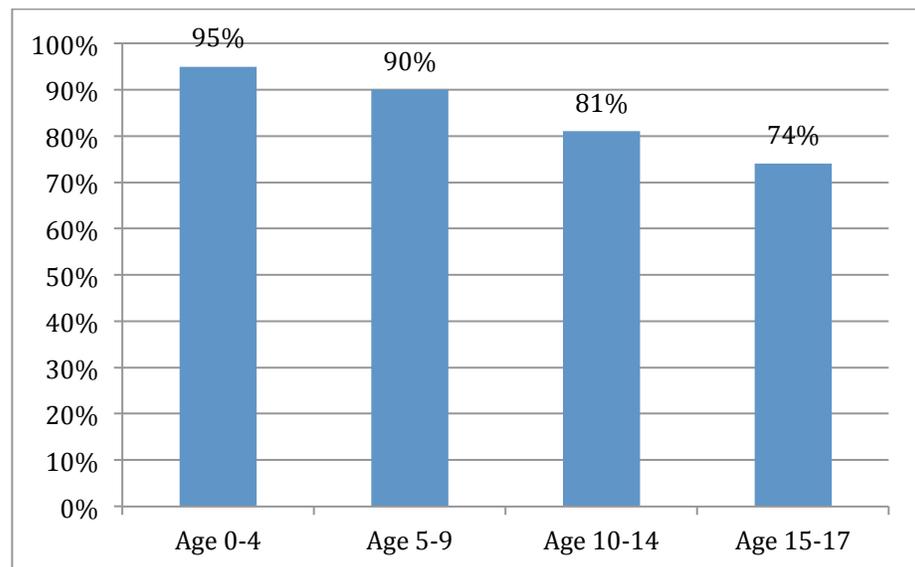


Figure 11. Percent of Iowa children who were physically active for a total of at least 60 minutes per day, 4 or more times per week, by age category

Sedentary activities such as watching television or videos, playing video games, and using computers have been raised as a factor affecting childhood

*Children that watched more TV/videos were more likely to be reported to be overweight*

obesity, as these prevent children from doing physical activities. Eighty percent of children watched some television daily, a decline from 90% in 2005. Among those that did watch television, 1.8 hours was the average time spent watching daily. Over half of children (53%) watch over 2 hours of television, videos, or movies each day. Children in lower income households were more likely to watch 2 or more hours a day than children in higher income households. Also, younger children were more likely to watch 2 or more hours daily than older children.

Sixty percent of children use the computer or play video games daily, with an average time of 1.5 hours. Almost 20% of children in Iowa play video games or use computers for at least 2 hours daily. Older children were more likely to play video games or use computers for at least 2 hours daily than younger children. Also, boys were more likely than girls to play video games or use computers for at least 2 hours daily.

Children who watch less television or videos are more likely to have parents reporting their weight to be 'the right amount' or 'too little' (Figure 12).

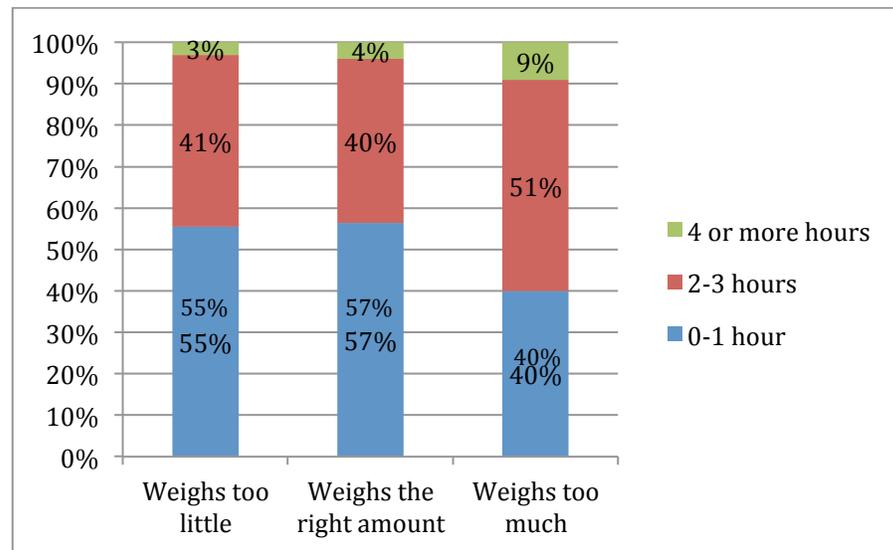


Figure 12. Parental report of Iowa children's weight status, by daily hours of television watched

*Ten percent of kids had parents meeting the definition of poor mental health status*

*Low-income and parents of older children were more likely to meet the definition of poor mental health status*

## PARENT HEALTH AND WELL-BEING

Respondents were asked a number of questions about, their own mental health, stress in parenting and health. Because respondents were primarily parents, (mothers (78%) and fathers (16%)) we have included only their results.

### Parent mental health

Parent mental health was calculated using a series of 5 questions derived from the Medical Outcomes Study Mental Health Inventory short form (MHI-5). Questions asked included how frequently parents have:

- 1) Been a very nervous person
- 2) Felt calm or peaceful
- 3) Felt downhearted and blue
- 4) Been a happy person, and
- 5) Felt so down in the dumps that nothing could cheer you up

These items were scaled and the results were calculated using a standardized cut-off for symptoms suggesting poor mental health status.

About 10% of Iowa's children lived with a parent whose symptoms suggested poor mental health status. Mothers (11%) were more likely than fathers (5%) to have poor mental health status. Mental health status also varied by income, with 22% of children having parents in the under 133% FPL group reporting poor mental health, compared to about 15% in the 134-200% FPL group, and 7% of the 200+ FPL group (Figure 13). In addition, mental health status varied by children's age group; parents with older children were more likely to have poorer mental health status than parents with younger children.

*Low-income parents were more likely to meet the definition of having poor mental health status*

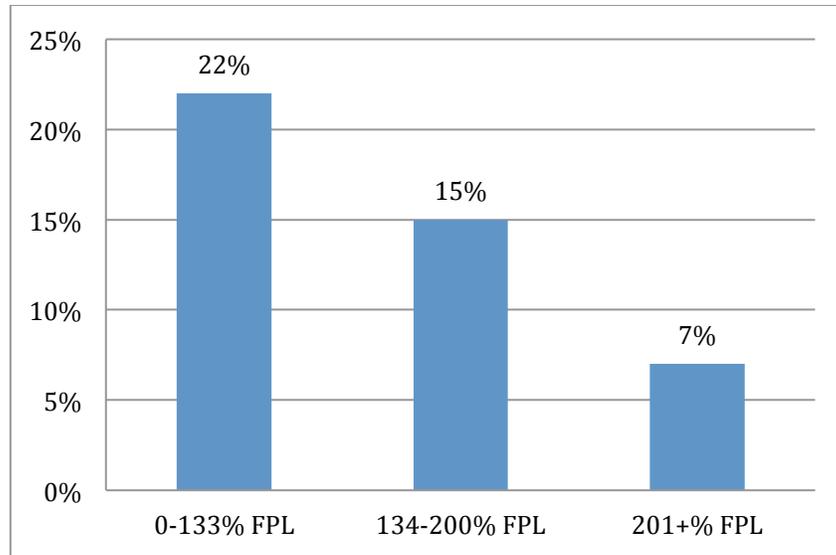


Figure 13. Percent of parents' with poor mental health status by income status

## Parenting stress

Parenting stress was defined using a series of 4 questions that asked how much time in the past month respondents had felt:

- 1) Your child is much harder to care for than most
- 2) Your child does things that really bother you a lot
- 3) You are giving up more of your life to meet your child's needs than you ever expected
- 4) You have felt angry with your child

These items were combined together and the results were calculated using a standardized approach for evaluating symptoms suggesting levels of parenting aggravation or stress.

Parents of most children (64%) reported moderate stress related to parenting. About 5% of children were living in households with a 'highly stressed' parent. This represents a slight decline from the 2000 and 2005 surveys, and is lower than nationwide data indicating that 8% of children have highly stressed parents. Parenting stress differed by income status. In the under 133% FPL group, 10% of children lived with a highly stressed parent, compared with 6% in the 134-200% FPL group and 4% in the 201+ % FPL group.

*Parents of ¾ of kids reported moderate stress due to parenting—about 5% reported being highly stressed*

*Parents of teens were more likely to meet the definition of being highly stressed*

As may be seen in Figure 14, there were also variations in parenting stress by child age group.

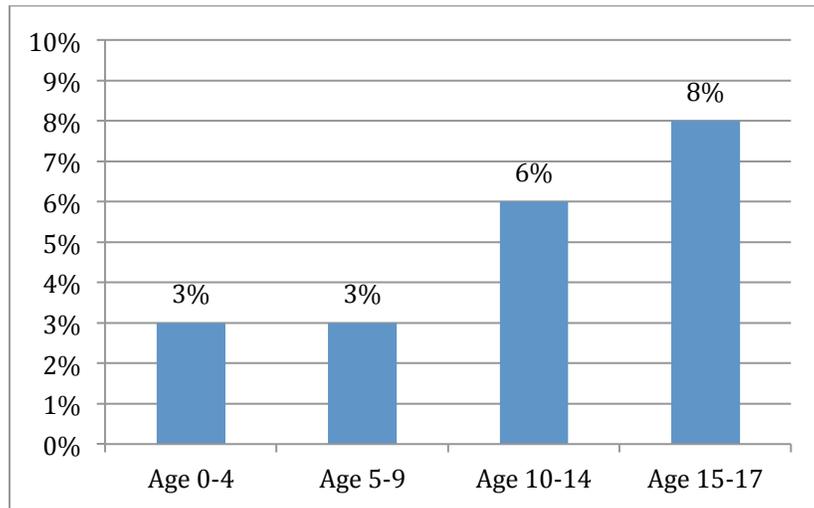


Figure 14. Percent of lowa children with 'highly stressed' parents, by age category

A link between reported child behavior problems and reported parenting stress was evident in this data. As Figure 15 shows, parents who reported high levels of stress in parenting were far more likely to have reported significant problems with child behavioral and emotional health status. Among children of parents reporting high levels of parenting stress, 54% were reported to have significant behavioral problems. Zero percent of children with parents reporting low parenting stress were reported to have significant behavioral problems.

*Parenting stress was highly related to having children with significant behavior problems*

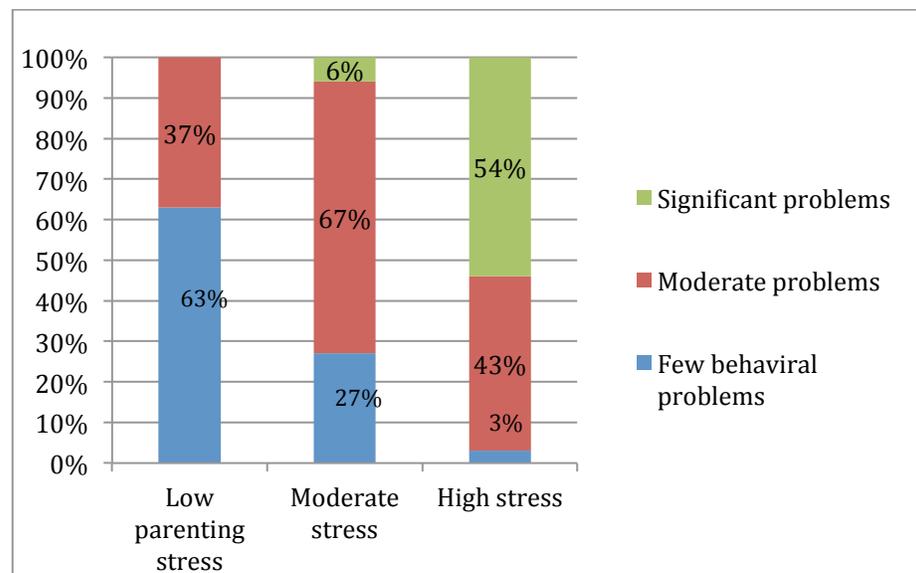


Figure 15. Percent of children with behavior problems, by parenting stress level

*Eighty-four percent of children live with married parents*

*About 1 in 10 kids live in a household where smoking and/or alcohol is reported to be a problem*

## Marriage

Eighty-four percent of children in Iowa live with parents who are married, and another 5% in a married-like relationship. Eighty percent of children have married parents who rate their relationship as 'excellent' or 'very good.' The percent of children with married parents varied by income group: over half of those in the 0-133% FPL group had married parents, while three-quarters in the 134-200% FPL group, and more than 9 in 10 in the 200+%FPL group did.

## SMOKING, DRUGS, ALCOHOL AND GAMBLING

To further investigate the environment in which Iowa children live, parents were asked about problems with tobacco, alcohol, and drug use in the household. Overall, 82% of children live in households where tobacco, alcohol, and drug use are not a reported problem. Eleven percent of children were living in a household where smoking was reported as a problem, 9% with problems with alcohol use, 2% prescription or illegal drugs. Two percent of Iowa children were reported to be living in a household where gambling was a problem.

## CONCLUSIONS

This report presents the results of the third Iowa Child and Family Household Health Survey, providing an assessment of the health and well being of children and families in Iowa over a ten-year period.

In general, the health and well being of Iowa children is as good if not better than children nationally in many areas for which data are available. For example, Iowa has one of the highest rates of health insurance coverage in the country (97%) as a result of expansions in Medicaid and the **hawk-i** program. About two-thirds of the uninsured children are likely to be eligible for either Medicaid or **hawk-i** already.

The access to care and health status of children is also generally good. Ninety percent of children are rated in excellent or very good health, and among the 57% who needed care, only 3% of were not able to receive needed medical care in the past year. However the proportion of children with a special health care need is slightly higher than national estimates (19% vs 15%). Of concern is also that over half of these children have a diagnosed chronic health condition.



Although there are few medical homes in Iowa that are certified through the accrediting body—the National Center for Quality Assurance (NCQA)<sup>12</sup>—the proportion of children receiving care that includes many of the services of a medical home is quite high (80%). Over 90% had a personal doctor or nurse and over 95% had a main place for sick and preventive care.

Parents in Iowa tend to support activities that lead to positive development for their young children. Iowa continues to have a large proportion of children in childcare with about 2/3rds of children ages 0-5 in a childcare setting during the week.

Emergency room (ER) use for non-urgent situations remains an issue. Among the 1 in 4 kids who received care in an ER in the past year, almost ¾ were seen for health issues that parents reported could have been cared for in a primary care setting. This can contribute to higher health care costs.

There were some areas of concern identified, especially among the most vulnerable children in families with incomes below 133% FPL. Traditional health issues included slightly lower health status and access to care, as well as being more likely to have a special health care need, a behavioral or emotional problem, and subsequent need for behavioral or emotional care.

Many of the disparities found fall outside the health care delivery system itself and relate to factors often considered to be the social determinants of the health of a child. For example, having enough food on a consistent basis (food insecurity) was an issue for families of 4 out of 10 low-income children. Safe and supportive neighborhoods were a significantly greater issue for ¼ of lower income children. Parents of low-income children were under greater stress and reported to have lower mental health status, and low-income children were more likely to have behavioral or emotional problems.

Thus, while there are many positives concerning the state of children and families in Iowa, health and social disparities exist for the most vulnerable, low-income children in the state.

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<sup>12</sup> <http://www.ncqa.org/tabid/631/default.aspx>

# 2010 Iowa Child and Family Household Health Survey

This report is the first in a series presenting the results from the 2010 Iowa Child and Family Household Health Survey (IHHS). The IHHS a comprehensive, statewide effort to evaluate the health and well being of children and families in Iowa including the health status, access to health care, and social environment. This survey, conducted every 5 years, is collaboration between the Iowa Department of Public Health (IDPH), the Public Policy Center (PPC), and Child Health Specialty Clinics (CHSC). Funding for the 2010 survey was provided by the IDPH, with additional funding from the U.S. Department of Health and Human Services Maternal and Child Health Bureau (MCHB), Blank Children’s Hospital; American Academy of Pediatrics—Iowa Chapter; Child Health Specialty Clinics; and ARRA funding through Early ACCESS.

Researchers at the University of Iowa Public Policy Center, in collaboration with the IDPH and CHSC developed the survey instrument, completed the data analysis, and produced this report. Data collection for the telephone and online surveys were facilitated by the University of Northern Iowa Center for Social and Behavioral Research. For more information about this study, contact the Iowa Department of Public Health, Bureau of Family Health , 321 E. 12th St., Lucas State Office Bldg, Des Moines, IA 50319, 1-800-443-8336, or the University of Iowa Public Policy Center, 227 South Quadrangle, Iowa City, IA 52242, 319-335-6800.