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The 2005 Iowa Child and Family Household Health Survey. Early Childhood Results for children ages 0 to 5. Second report in a series

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The 2005 Iowa Child and Family Household Health Survey

Early Childhood Results for children ages 0 to 5

Second report in a series

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INTRODUCTION

This report of early childhood issues confronting Iowa’s children is the second in a series of reports from the 2005 Iowa Child and Family Household Health Survey (IHHS), the second comprehensive, statewide effort to evaluate the health status, access to health care, and social environment of children in families in Iowa. The first IHHS was conducted in 2000.

The 2005 IHHS was a collaboration between the Iowa Department of Public Health (IDPH), the Public Policy Center (PPC), and the Child Health Specialty Clinics (CHSC). Funding for the 2005 IHHS was provided primarily by the IDPH, with additional funding from the U.S. Department of Health and Human Services Maternal and Child Health Bureau (MCHB) and the Centers for Disease Control and Prevention (CDC).

The primary goals of the 2005 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 the features of the uninsured, and 4) assess the health and well-being of racial and ethnic minority children in Iowa.

Questions were asked from a wide range of topic areas encompassing health, well-being, and family environment. General topic areas of the 2005 IHHS included:

- Demographics of Iowa families with children
- Health status
  - Functional health status
  - Children with Special Health Care Needs
  - Additional emphasis on asthma
- Health insurance coverage of children and parents
- Health care issues
  - Medical care
  - Preventive care
  - Dental care
  - Behavioral/emotional health care
  - Prescription medication
  - Emergency room use
- Family and social environment
  - Nutrition and exercise
  - Behavioral/emotional health status
  - Parenting stress
  - Tobacco, alcohol, and drug use
  - Gambling
  - Marital satisfaction
The State of Iowa has in recent years placed a special emphasis on early care, education, and health for the youngest Iowans. The purpose of this report is to provide information about Iowa’s children ages 0-5 (i.e., pre-kindergarten). The data provided is based on the core questions in the survey as well as questions specific to issues of early childhood, including child care and family activities.

The specific early childhood issues addressed in this report include:

- Early childhood environment
- Maternal well-being/depression
- Developmental assessment for children
- Child care issues

The results for the individual questions from the survey relevant to early childhood (pre-kindergarten) organized by total, as well as by age category (infants: 0-1, toddlers: 2-3, preschoolers: 4-5) and the Federal Poverty Level (FPL) status of the child can be found in the appendices of this report.

**METHODS**

The 2005 Household Health Survey was a population-based statewide household telephone survey. The University of Northern Iowa Center for Social and Behavioral Research conducted the data collection for the survey. Interviews were completed with the parents of 3674 children throughout the state of Iowa.

Phone numbers dialed included a combination of random digit dial and targeted phone numbers obtained from a private vendor. Targeted lists came from a variety of resources including white pages and other lists (e.g., voter registration, magazine subscriptions, warranty cards, census data). Screening questions were asked to determine if the number was connected to a private residence, and if so, if there was at least one child living in the household. The survey questions were answered by the ‘adult most knowledgeable about the health and well-being’ of one randomly chosen child in the household, and the questions were asked about that child.

Respondents were primarily mothers (77%) and fathers (18%). The other 5% of respondents included grandmothers (2%), step-parents (2%), and other relatives and guardians (1%). Because 95% of the respondents were either a mother or father, respondents will be referred to as ‘parents’ throughout this report. Among the final respondents, 78% were identified from the targeted sample and 22% from randomly dialed numbers.
In order to account for biases related to design and data collection factors, the data used in this report were weighted to provide a representative sample of children in Iowa. Weighting first consisted of accounting for biases related to family size (i.e., the sampling design originally biased the sample toward children in smaller families because the chances of being the child chosen for the survey were much higher. A child in a one-child household was twice as likely to be the ‘chosen’ child as a child in a two-child household, etc.).

Also factored into the weighting were biases related to having a partially targeted sample as opposed to a totally random sample. Results from the targeted calls were compared with random digit dial data, and both were compared to externally collected data sources. The data were then weighted to match the income and age distribution from the 2000 Census.

Finally, a weight related to the design effect was added for the analysis in order to make statistical testing more conservatively accurate. Weights for individual cases range from .51 to 5.09, with a mean weight of .6163. In order to account for biases related to design and data collection factors, the data used in this report were weighted to provide a representative sample of children in Iowa.

For this report, data were used only for children ages 0-5. Because this report focuses specifically on early childhood, school-age children (e.g., were 5 years old and in kindergarten) were excluded. The total number of families with young children interviewed for this study was 1,094. Results will be described in terms of total number of young children for three different income categories (lower: <133% FPL, moderate: 133-200% FPL, and higher: >200% FPL), and by the following age categories: 0-1 (infant), 2-3 (toddler), 4-5 (preschool).

**DEMOGRAPHICS**

Current estimates of Iowa’s child population from state and national data sources (e.g., US Census), indicate that there were about 182,000 children in Iowa between the ages of 0 and 5 in 2005.1 This represents about a 3 percent decline from the 2000 decennial U.S. Census where there were just over 188,000 children in this age group. Children in the 0-5 age group represent about 30% of Iowa’s child population (age 0-18). About 17% of children age 0-5 are living below the FPL. Among all of Iowa’s children who are living below the FPL, about 34% are between ages 0 and 5 (Figures 1 and 2).

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Among the young children in poverty, about one-third are under the age of six.

About one in six young children in Iowa are living under the poverty level.

**Figure 1.** Percent of Iowa children under age 6 who live under the FPL

**Figure 2.** Percent of children living under the FPL who are under age 6
HEALTH STATUS

The health status of young children was evaluated in two ways: a) using a global measure of parents’ rating of their child’s health and b) using a series of questions about functional health status to identify children with a special health care need. Young children in Iowa were in generally good health, with over 90% of children reported as having excellent (62%) or very good (31%) overall health status. There was a statistically significant difference by income level in the reported health of Iowa’s youngest children. In Iowa’s age 0-5 population, the lowest income group (up to 133% of the FPL) were reported as the most healthy with 96% reported to be in excellent or very good health. Ninety-three percent of the higher income children (200+% FPL) were reported to have excellent or very good health, along with 90% of young children in the 134-200% FPL group.

About 14% of Iowa’s youngest children were defined as having a special health care need (CSHCN) using the nationally recognized Children and Adolescent Health Measurement Inventory (CAHMI) CSHCN screening tool. The CAHMI is a series of five questions that categorizes children as having a special health care need as part of a survey instrument. Younger children (age 0-5) were significantly less likely to be defined as having a special health care need than older children in Iowa (21% for all Iowa children). The proportion of young children categorized as having a special health care need was not statistically significantly different by income or age of the child.

HEALTH CARE COVERAGE

Most of the youngest Iowans had health care coverage (98%). Insurance coverage varied by income however. As may be seen in Figure 3, 5% of children who lived in households earning less than 133% FPL were reported to be uninsured at the time of the call, which was statistically significantly higher than for children in higher income. Most children whose households earn less than 200% FPL should be eligible for health care coverage through either the Medicaid or hawk-i programs.

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Most young children with health insurance in Iowa were covered by private insurance (77%). Only about 1 in 5 were covered by a public insurance program (primarily Medicaid but also hawk-i). Among those whose household income fell below 133% of the FPL (approximates Medicaid eligibility), about two-thirds were covered by public insurance, however, one-third had some form of employer-based health insurance. Infants were most likely to be covered by the Medicaid or hawk-i programs (about one-third) compared to about 1 in 5 toddlers and preschoolers. In all, over 1 in 3 young children in Iowa are either currently covered by Medicaid or have been at some time in the past. Eighty-four percent of children in the lowest income group had Medicaid experience, along with 47% of those in the 134-200% FPL group. In the 200%+ FPL group, 15% have had Medicaid experience.

Parents of young children were less likely than their children to have health care coverage (89% have coverage). This varied greatly by income level. Figure 4 shows this discrepancy by income level.
Nearly all of Iowa’s young children (96%) were reported to have a regular source of health care, and very few (1%) reported that their child had an unmet need for medical care in the previous year (i.e., were stopped from getting needed medical care). Although there were no significant differences in having a regular source of care by income, unmet need for care was higher for lower income children. Five percent of low-income children could not get medical care that their parents thought was necessary in the past 12 months.

Thirty-four percent of young children had visited an emergency room (ER) at least one time in the past twelve months. Low-income children were more likely than higher income children to have visited an ER two or more times in the past year (23% of children living below 134% FPL vs. 7% for those over 200%). Primary reasons for ER visits were trauma, including broken bones or stitches (24%), high fever (15%), and ear infections (10%). In 2 out of 5 cases (41%), respondents said that a health care provider told them to go to an emergency room. In two-thirds (68%) of cases, the care could have been provided in a doctor’s office had one been available. For the most part, these children were taken to the ER because the doctor’s office was not open or it was at night or on a weekend (86%).

About one-third of children had parents who worried at least a little about their ability to pay for their child’s health care. Figure 5 shows the discrepancy in the likelihood of having this worry based on income.
Parents of low-income young children were most likely to worry about paying for their child’s health care

PREVENTIVE HEALTH CARE

Young children in Iowa were highly likely to have had a preventive medical visit in the last 12 months (91%), and almost all had a preventive visit in the last 2 years (99%). Almost half (46%) of the parents of young children in Iowa reported remembering having received preventive counseling (i.e., anticipatory guidance)—about subjects such as watching what the child eats or using seatbelts—in the previous year from a health care provider. Reports of preventive counseling were most prevalent in the infant population (59%), and in the highest income group (53%). Only one-third of children in the lowest income category had parents who reported receiving anticipatory guidance.

Parents of 41% of children reported that their child had received a developmental assessment in the past year. This did not vary significantly by age or income category. One in five young children had parents who had been referred to parenting classes such as classes in breastfeeding, child development, and support groups in the past year. Infants were most likely to have had a parent referred to parenting classes (32%), and of those, most (81%) were referred for breastfeeding/lactation support.
DENTAL HEALTH, ACCESS, AND COVERAGE

Over three-quarters (76%) of children ages 0-5 in Iowa have dental insurance. There were no statistically significant differences in the likelihood of having dental insurance by income status or age.

Almost half of young children (48%) had a reported dental visit in the past year. As shown in Figure 6, there was great variation by age in the time since last dental check-up. Older children were much more likely to have had a dental visit in the previous year.

There were also differences in time of last dental check-up by income level (Figure 7). Children who lived in households with incomes under 133% of the FPL were less likely to have had a dental visit in the past 12 months compared to those with incomes over 200% of the FPL. Almost half (47%) of young children had parents who reported that their child visited the dentist regularly. To better understand parents’ perception of the relative importance of dental health a question asking if dental health is “more important,” “just as important,” or “less important” than other health issues was asked. Most parents (88%) reported that dental health was just as important as other health issues. Seven percent thought it was more important, and 5% less important.
Almost all (96%) young children in Iowa have parents who report that their children’s teeth get brushed at least once a day. Almost half (48%) of children have their teeth brushed twice a day. There were no statistically significant differences in teeth brushing frequency by income level. There were however, differences by age. As Figure 8 shows, younger children’s teeth get brushed less frequently than older children.

Figure 8. Frequency of tooth brushing, by age
**BEHAVIORAL AND EMOTIONAL HEALTH AND CARE**

About 2% of young children in Iowa had parents who thought their child needed care for behavioral or emotional issues. Among those children, 16% were unable to get the needed care (i.e., had unmet need for behavioral or emotional care). Overall, less than 1% of young children were reported to have unmet need for behavioral and emotional health care.

**EARLY CHILDHOOD FAMILY ACTIVITIES**

Parents of children ages 0-5 were asked questions regarding how frequently they participated 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. Most of Iowa’s young children had recently participated in at least some of these activities. In the week prior to the survey, 95% were told a story; 81% worked with letters, words or numbers; 97% sang songs or played music; 65% worked on arts and crafts; and 88% played a game. Two-thirds of Iowa’s young children were read to every day, and only 2% were not read to at all. Most of the children who were not read to were infants under age 1. Figure 9 shows the variation by age for the activities in which young children participated.

![Figure 9. Children who participated in early childhood family activities in the last week, by age](image)
PARENT SOCIAL AND EMOTIONAL HEALTH

Parents were asked a series of questions relating to their mental health. This series included 5 items 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 16% of young children in Iowa had parents with a lower mental health status, indicating possible depression or issues with anxiety. There were no statistically significant differences by age of the child, however there were significant differences by income level. As shown in Figure 10, children in lower income households were more likely to have a primary caregiver with symptoms indicating lower mental health status.

![Figure 10. Children in households with a primary caregiver who may be depressed or anxious, by FPL status](image)

Another series of questions were designed to measure parenting stress or aggravation. About 4% of Iowa’s young children were living in households with a primary caregiver who reported a high level of parenting stress. There were no statistically significant differences by income level. This measure did demonstrate a difference by the age of the

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child. Infants were less likely to have parents reporting a high level of parenting stress using this measure than were toddlers or preschoolers.

**TOBACCO, ALCOHOL AND DRUG USE PROBLEMS**

An extensive series of questions were asked about household smoking. About one-fourth (27%) of young children in Iowa live in a household where someone smokes. This varies considerably by age of the child and by FPL. The youngest children were most likely to live in a household with someone who smokes (Figure 11), as were children living in lower income households (Figure 12).

![Bar Chart: Children living in a household with someone who smokes, by age]

**Figure 11. Children living in a household with someone who smokes, by age**

Most young children in Iowa lived in households where smoking was not allowed anywhere inside the home (86%). Young children in lower income households were more likely to live in a house where smoking was allowed, at least in some places or some times (23% for <134% FPL vs. 10% for those >200% FPL). Household smoking was most likely to have a financial impact for households with incomes below 200% FPL, and was most likely to cause family stress for those in households above 200% FPL.

Alcohol use by someone in the household was reported to be a problem for about 4% of young children in Iowa, which did not differ significantly by income level or child age. Household drug use problems were rarely reported (0.2%) for young children in Iowa.
Almost two-thirds of Iowa children under age 6 are in child care

Half of those in child care spent some time in a home-based setting

In order to more thoroughly examine the issue of child care, a series of questions about child care arrangements and satisfaction with those arrangements was asked of parents of young children.

Almost two-thirds (61%) of children in Iowa ages 0-5 spent at least some time in child care in the week prior to the survey. About a third (35%) of Iowa’s young children had one setting where they received child care, and about a quarter (26%) received care from two or more settings. Just over half (52%) of the children ages 0-5 who were in child care received at least some of their care at a home-based child care setting. Twenty-eight percent received care in a child care center, and 30% in a preschool. One-fourth of children received care from a friend or neighbor. For those children receiving child care, the number of child care settings did not differ by income level; however, lower income children were less likely to have been in any child care.

For the most part, parents chose their primary child care site based on quality. Thirty-three percent of children were in their main child care setting because their parents had made quality their top priority. However, for many parents, a combination of factors affected the choice of a child care arrangement. Location, previous experience with the provider, and
hours of operation were also important reasons for choosing a child care settings. Parents of 6% of children chose their primary child care setting primarily because of cost, and 42% of these children lived in households with incomes below 200% FPL.

Many parents had trouble arranging child care for their young children. Parents of 42% of children who needed child care had either a big (16%) or small (26%) problem finding it. There was a problem finding care for 38% of young children with special health care needs, but those who had trouble were more likely to have a big problem (29% big, 10% small). One-fourth with a problem had this trouble due to the child’s special health care need. One percent of all young children in Iowa had been asked to leave a child care setting because of issues with behavior.

About 6% of children had to change child care providers due to the cost of the care. For those who chose child care providers based primarily on cost, 24% had previously switched providers due to cost. Parents were asked about the likelihood of switching providers if costs were not an issue. About one-quarter of children had parents who would consider switching providers if costs were not an issue.

Parents were asked to evaluate the “primary” site (i.e., most hours) in which their child was cared for in the previous week. The distribution of “primary” child care settings is as follows: 50% in a home-based setting, 25% in center-based care, 17% in a preschool setting, 8% from family members (in most cases grandparents). Weekly hours in the primary child care site differed by setting. As indicated in Figure 13, three-quarters of children whose care is primarily received in a preschool are in this setting for 20 hours or less per week. For the most part, children in home-based, center-based, or family care received care for more than 20 hours per week. Primary setting did not differ by income level, however, there were differences by age. Children ages 4-5 were more likely than younger children to be in a preschool, and infants and toddlers were more likely than 4-5 year olds to be in home-based child care.

Parents’ satisfaction with different aspects of their child care arrangement was determined for parents with a child in center-based care, home-based care, and preschool/Head Start as their primary site. Questions included satisfaction with arrangements, cost, staff training, activities, distance, and overall quality. As Figure 14 shows, generally speaking, young Iowans’ parents report high levels of satisfaction with their primary child care site. Of the various attributes of child care sites evaluated, parents were least likely to report ‘very satisfied’ with cost (60%).
Overall, parents were least satisfied with cost and most satisfied with the proximity of their child care.

Figure 13. Hours in primary child care site, by setting

Figure 14. Very satisfied with child care
When the satisfaction questions are broken down by income category, there are some large discrepancies. As may be seen in Figure 15, lower income households were less likely to report being ‘very satisfied’ in a number of categories. All differences were statistically significant (p<0.05) with the exceptions of satisfaction with distance and staff training. The only age-related satisfaction difference was in the category ‘Overall quality,’ where younger children were least likely to have parents reporting ‘very satisfied.’

As Figure 16 shows, there were some differences in satisfaction by primary setting. Preschoolers were most likely to have parents that were ‘very satisfied’ with staff training, available activities, and overall quality. Those whose children’s primary setting was home-based child care were more likely than those in other settings to report they were ‘very satisfied’ with cost (71% vs. 36% center-based, and 57% preschool). There were no statistically significant differences by site for satisfaction with distance traveled.
CONCLUSIONS

Young children in Iowa are generally getting off to a healthy start in life. However, some subgroups of children have factors putting them at risk for serious problems. For example, about one in six preschool children in Iowa are living below 100% of the FPL, placing them at risk for health and environmental problems as they grow and mature. Lower income children were least likely to have had health insurance coverage (even though they were likely to be eligible for Medicaid or **hawk-i**), were more likely to have unmet need for medical and dental care (and less likely to have had a dental check-up in the previous year), and were more likely to have been to an emergency room for care in the past year.

Lower income children were also more likely to have been in a challenging home environment. Parents of lower income children were more likely to report a low score on a mental health scale, and a high level of parenting stress.

Young children in Iowa appear to be more likely to be in child care than children nationally. Almost two-thirds of children under five in Iowa were in child care for some time in the week prior to the interviews. Although not an exact national comparison, half of the children in the US were in some kind of child care arrangement at 9 months of age according to the
Early Childhood Longitudinal Study of 10,000 children born in 2001.\(^4\)

Parents of low-income children found it much more difficult to find satisfactory child care arrangements for their children. While the vast majority of parents were satisfied with their child care arrangement, having concerns about the cost of child care was not just an issue for lower income parents. About one-fourth of the children’s parents indicated they would consider changing their child’s primary child care setting if cost were not an issue.

Parents of infants were less satisfied with the overall quality, activities provided, and staff training of their main child care setting than parents of toddlers or preschoolers. These parents also had more trouble finding child care than parents of toddlers, and were most likely to report having a ‘big’ problem finding child care. Parents of preschool-aged children appear to have the highest likelihood of having a ‘small’ problem finding care.

One-third of young children in Iowa utilized an ER at least once in the year prior to the survey. Most of the care provided in the ER could have been provided in a doctor’s office, had one been open when parents were seeking care for their child. More available health care facilities for illness during the evenings and weekends could provide parents with a less resource-intensive alternative for children’s health care.

While Iowa has one of the lower rates of children being uninsured (3%), three-quarters of the state’s uninsured young children appear to be eligible for either Medicaid or \textit{hawk-i} (the Iowa S-SCHIP program) in that they live in households with incomes under 200% of the FPL. The lower rate of uninsured children is in part the reason for the relatively high scores on access to health care services, likelihood of having a regular source of care and the overall low rate of unmet need. It also could be related to the relatively high overall health status of Iowa children, although this linkage is less direct.

Access to dental care is also generally good; about three-quarters of young Iowa children have dental insurance and about half have had a dental visit in the past year. Getting children in for a dental visit that focuses on anticipatory guidance by age one is a challenge, but is particularly important for those most at risk (e.g., lower income children).

While mentioned above as an issue for lower income families, parental mental health status and parenting stress is an important issue for all young children. Regardless of income, children will be at greater risk if they are raised in an environment where parents are having difficulties coping with the challenges of parenthood. Creative approaches to supporting new parents could benefit all children in the state.
