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Adolescent Health in Iowa

An Overview From the 2010 Iowa Child and Family Household Health Survey

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Background

The Iowa Child and Family Household Health Survey is a collaborative effort of the Iowa Department of Public Health, the University of Iowa Public Policy Center, and the Iowa Child Health Specialty Clinics to study the health and well being of children and families in the state.

This survey, the third HHS since 2000, was conducted in the fall of 2010 through spring of 2011. Iowa families were asked over 165 questions regarding a randomly-selected child in the household about the following topic areas: functional health status; insurance coverage; access/need; medical home; prescription medication; dental care; behavioral and emotional health care; child behavioral and emotional health; early childhood; child care; school; social determinants of health; nutrition; physical activity; parent health status/family health; substance use and gambling; and demographics.

This policy brief provides statewide results about a sample of issues related to the health of adolescents ages 10-17 years in Iowa, and that of their parents, from the population-based 2010 Iowa Child and Family Household Health Survey (2010 HHS). There are many other noteworthy statistics that can be found in the tables accompanying this report.

Methods

The survey utilized an address-based sampling design. Data collection was completed using mixed-mode telephone and Internet survey methods. A packet was mailed to a statewide random sample of addresses drawn from the United States Postal Service (USPS) Delivery Sequence File (DSF). This file also listed telephone numbers for about 60% of addresses. The packet included an information letter with instructions for completing a web-based questionnaire and information indicating that we would call if the web mode was not accessed within the next week. The University of Northern Iowa Center for Social and Behavioral Research coordinated the data collection efforts.

During the core data collection period, 1859 phone and 527 online interviews took place with the parent or guardian of one randomly selected child age 0-18 living in the household. Respondents were primarily mothers (78%), although 16% were fathers. The data were weighted to account for family size and post-stratified to reflect the 2010 child population in Iowa. Included in this report are results for children/adolescents ages 10-17 in Iowa and their parents.

There were almost equal numbers of boys (51%) and girls (49%) in the sample. The age distribution of the children in the sample is shown in the Table 1.

Table 1. Demographic characteristics for adolescents and their families from whom data were collected (unweighted sample)

Child age	N (%)
10-11 years	235 (20.6%)
12-13 years	262 (21.1%)
14-15 years	354 (28.6%)
16-17 years	366 (29.6%)
Total	1,237
Parent education	
High school or less	249 (20.1%)
Some college	468 (37.8%)
4-year college graduate or more	520 (42.0%)
Total	1,237
Federal Poverty Level (FPL) status	
<134%FPL	98 (9.2%)
134-199% FPL	131 (12.3%)
200+% FPL	839 (78.6%)
Total*	1,068
Child race/ethnicity	
African-American (non-Hispanic)	20 (1.7%)
Hispanic/Latino	63 (5.1%)
White (non-Hispanic)	1084 (92.9%)
Total*	1,167

*Total is less than sample because of missing data

Because our sample was skewed toward older youth, the data were weighted to provide a more accurate representation of all adolescents in the state.

Demographics

The results in this brief represent information for the 325,224 youth in Iowa (based on 2010 Census), Adolescents account for almost 11% of Iowa's population. Iowa's proportion of youth ages 10-17 is similar to that of the US as a whole (also 11%).

Health Status

Adolescents in Iowa report lower health status than children in Iowa as a whole. Overall, 66% of children in Iowa reported excellent health status, while only 59% of adolescents were reported to be in excellent health. Among adolescents, when evaluated by Federal Poverty Level status (FPL), there was great disparity in reported health status, with lower income children reported to be in a significantly lower health state (Figure 1).

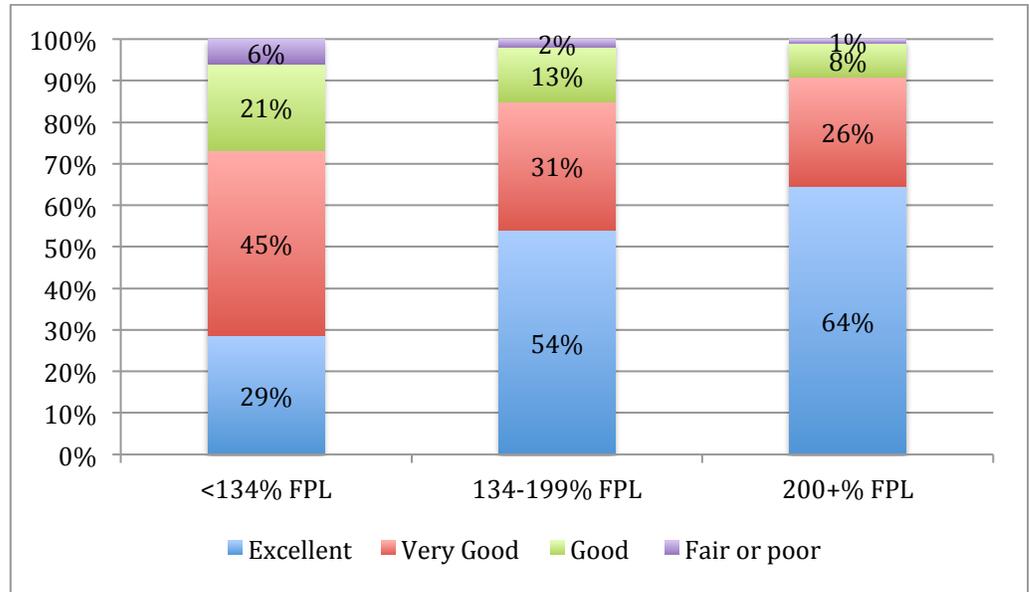


Figure 1. Overall health status of adolescents in Iowa (parent report), by FPL status

A disparity was also evident between adolescents who were African-American or Hispanic and white adolescents. Sixty-six percent of white adolescents were in excellent health compared with 43% of African American and 44% of Hispanic youth. Children with more educated parents had a higher likelihood of being in excellent health (65% with college graduate parents vs. 57% with some college and 51% high school or less).

Children with Special Health Care Needs (CSHCN) were also more prevalent among adolescents (27% adolescents; 20% all children in Iowa). This was statistically significantly different by income, but not by race/ethnicity or by parent education. Forty-one percent of adolescents in the lowest income category had a special health care need.

Insurance Coverage

Overall, adolescents had a low rate of being uninsured, with about 3% having no health insurance coverage. There were no statistically significant differences by income category in our survey. There were no uninsured African-American adolescents in our sample, and 2% of white teens were uninsured. However, 15% of

Hispanic teens had no insurance. Also noteworthy, 9% of adolescents with parents who had a high school diploma or less education had no insurance. About 4% of insured adolescents had a time in the past 12 months where they did not have any health care coverage.

For those adolescents who had insurance, 72% were reported to have excellent or very good coverage that met their needs, although 28% of adolescents had parents reporting that health care costs caused some level of problem for the family. Eight percent delayed getting needed care because of the costs, and 7% of adolescents had parents who worried a great deal about their ability to get health care for their child. This worry was most prevalent among those living below 134% FPL. There were also differences based on race/ethnic category (Figure 2), and by parent education. Thirty percent of Hispanic youth had parents who worried a great deal about paying for health care, along with 12% of those with parents who had a high school diploma or lower.

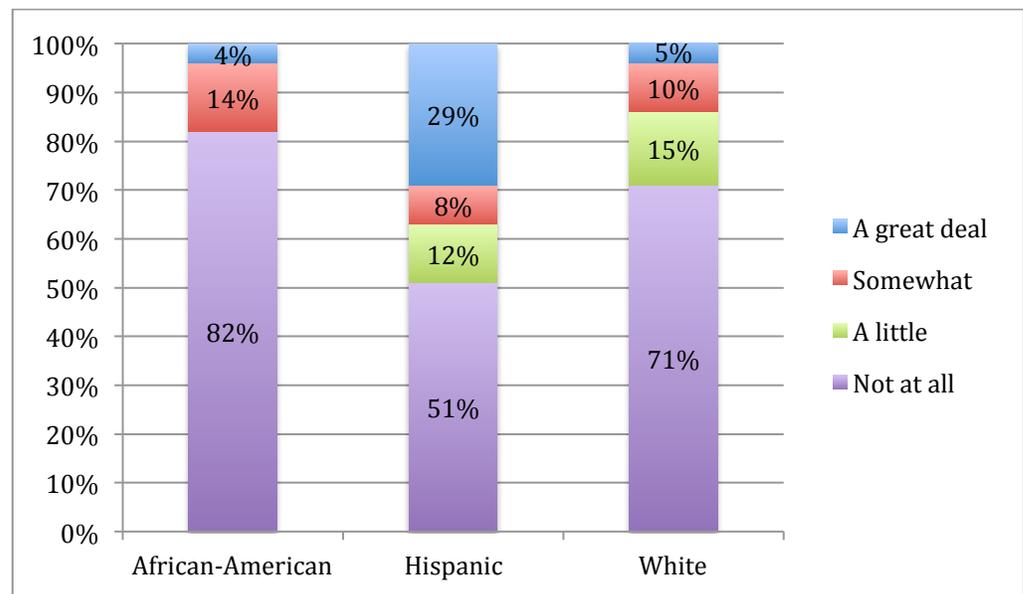


Figure 2. Worry about paying for child's health care, by race/ethnic group

Access/Need for Medical Care

Almost 4% of children statewide had a time in the last 12 months when they were prevented from getting healthcare for some reason. However, for children living below 133% FPL, this number was 11%, and even higher for African-American adolescents (18%) and Hispanic adolescents (13%).

Almost one in four youth visited a hospital emergency room (ER) at least once in the previous 12 months; the biggest reason given was for issues such as trauma/broken bones/stitches. Low income and Hispanic youth were most likely to visit an ER: About 43% of adolescents living below 133% FPL went to the emergency room in the previous 12 months. Hispanic adolescents were the most likely racial/ethnic group to



have visited the ER (57% had no visits to the ER in the last year, compared with 75% of African-American and 78% of white adolescents). Most of the adolescents who went to the emergency room went only one time (17% of all kids). For about two-thirds of these adolescents, parents reported that the care for their last ER visit could have been received in a doctor's office if one had been available.

Medical Home

The patient-centered medical home concept is an effort to provide care to patients that assures ease of access, including extended hours of care, improved communication and care coordination, and team-based approaches to health care.¹ 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 were also required to have adequate referrals, or care coordination, or family-centered care when needed (See Appendix 1).

Overall, about 79% of adolescents fit the study criteria for having a medical home. Adolescents below the 134% FPL threshold were least likely to have a medical home (63%). This also differed by racial/ethnic category (African-Americans least likely), and parent education status (high school or less least likely).

Dental Care

Adolescents are less likely to have insurance coverage for dental care than for medical care. Fourteen percent of adolescents do not have dental insurance as compared to 3% for medical care. About 5% of adolescents were prevented from getting needed dental care at some time in the past 12 months. This problem was most likely among those living below 134%FPL (12%). White children were least likely to have trouble accessing dental care, at 4% (13% Hispanic, 11% African-American adolescents).

For 95% of adolescents with a usual source of care, dental care is provided at a dental office. There were differences by income level, race/ethnicity, and parent education. Adolescents in the lowest income category and those with less education were more likely to go to a clinic or community health center for dental care than going to a private practice setting. Figures 3 and 4 note the differences by income level and by parent education level.

¹ American Academy of Pediatrics. National Center for Medical Home Implementation. <http://medicalhomeinfo.org/>. Accessed May 2012

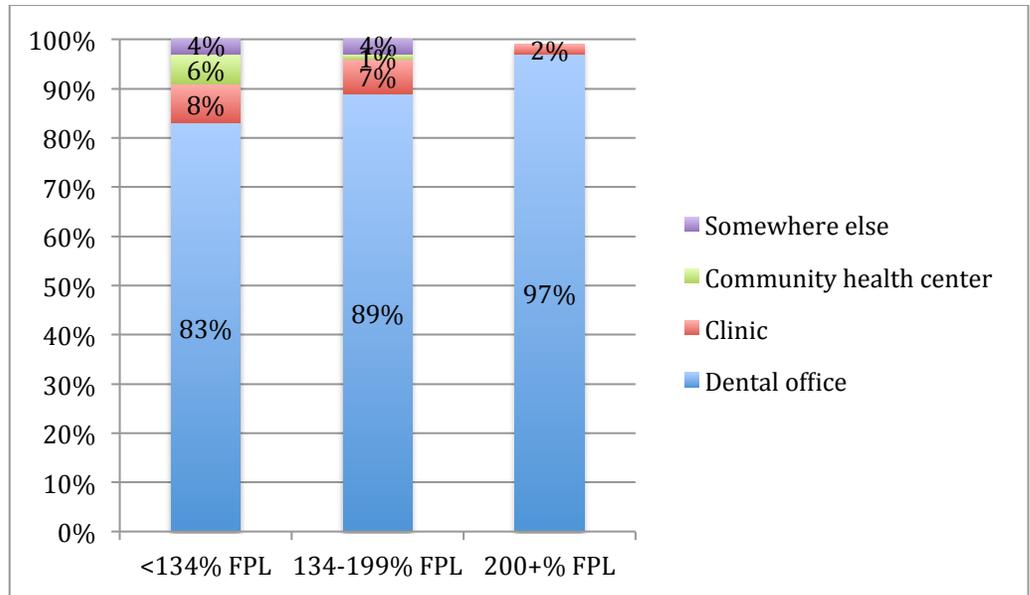


Figure 3. Main place for adolescent dental care, by FPL status

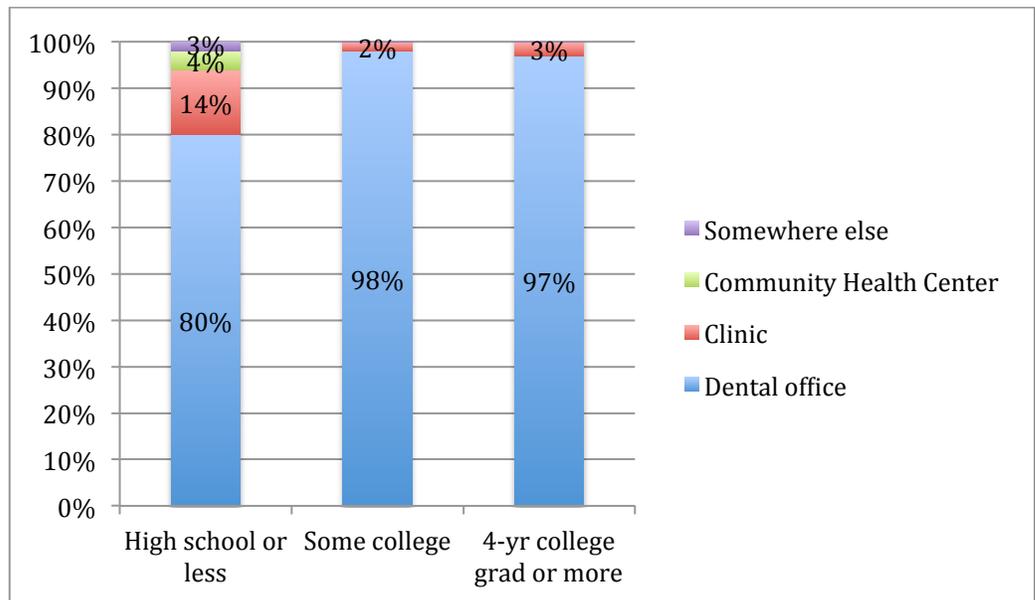


Figure 4. Main place for adolescent dental care by parent education status

Behavioral/Emotional Care and Health Status

Behavioral and emotional health of adolescents is an increasing priority in Iowa and across the nation.² About 13% of adolescents were reported to have been unable to receive behavioral and emotional health care at some point in the last 12 months. In Iowa, about 7% of adolescents ages 10-17 were reported to have high levels of behavioral and emotional problems as measured by the The Child Behavior Scale, designed to measure child mental health.³ Youth in the 133% FPL group were more likely to have these problems (15%). Twelve percent of African-American youth were also reported to have a high level of problems.

Social Determinants of Health

Family activities such as eating a meal together or attending religious services have been shown to contribute to healthy decision-making in adolescents.⁴ Just over 70% of adolescents were reported to eat a meal with family everyday or most days. Adolescents living under 134% FPL were almost twice as likely as adolescents in higher income groups to eat a meal with family every day, but were also more likely to never eat a family meal (Figure 5). Hispanic youth were most likely to eat family meals together everyday (59%), as were those with parents who had the lowest educational attainment (43%).

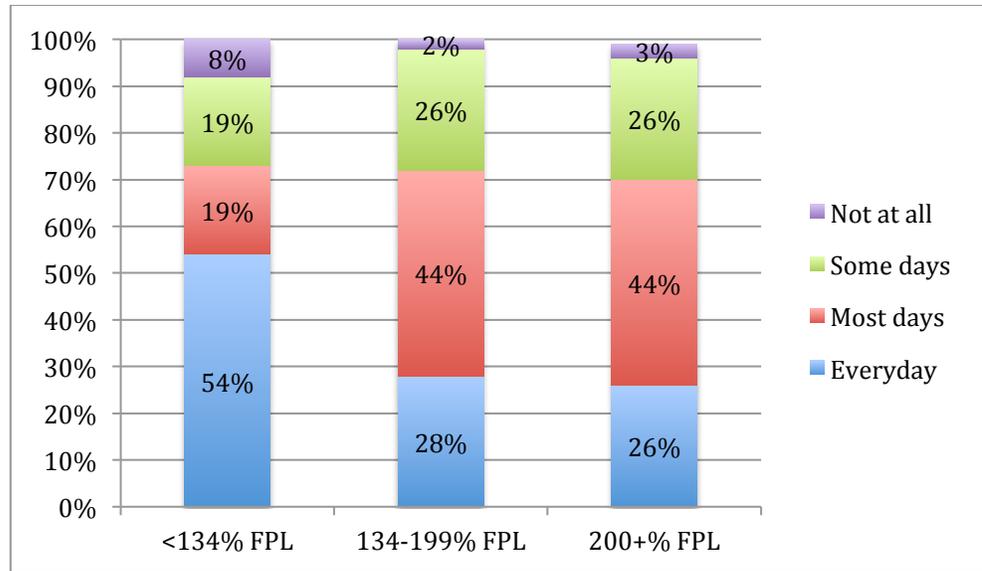


Figure 5. Frequency of eating a meal together in the last week, by FPL status

² U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at <http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=28>. Accessed 21 September 2012.

³ NSAF child behavioral scale

⁴ [Arch Pediatr Adolesc Med](#). 2004 Aug;158(8):792-6.



In addition to family activities, the environment in which teens live can affect their day-to-day lives. Using a scale designed to measure supportive neighborhoods, 87% of adolescents were reported to live in a supportive neighborhood based on a set of four questions. When broken down by income, race/ethnicity, and parent education, however, there were differences. Seventy-one percent of adolescents living below 134% FPL lived in a supportive neighborhood, compared with 91% of those who were above 200% FPL. Among Hispanic teens, 68% lived in a supportive neighborhood compared with 72% of African-American teens and 90% of white teens. Adolescents living in a household with a parent whose education level was a high school diploma or less were less likely to live in a supportive neighborhood (81% vs. 89% of those with some college or more education).

Nutrition and Physical Activity

New this year to the Household Health Survey were questions asking about food insecurity. Among adolescents, about 15% were in households where sometimes the food they bought just did not last, and they didn't have money to buy more. This varied by income, with this being a problem for about 40% for those living under 134% FPL, nearly 30% for those 134-199% FPL, and about 6% for those over 200% FPL. About 42% of Hispanic children live in a household where this was reported to be true, and 26% of adolescents in a household with lower educational attainment. Approximately 8% of adolescents lived in a household where one or more adults cut the size of meals, or skipped them altogether because there wasn't enough money for food.

Also related to nutrition and physical activity, about 65% of adolescents were reported not to drink soda in an average day, 25% drink one can, and about 10% drink two or more cans. Forty-seven percent of adolescents were reported to watch one hour or less of TV on an average day, and just over half watched two hours or more.

Smoking, Drugs, Alcohol and Gambling

Parents were asked a set of questions related to problems with smoking, drug use, alcohol, and gambling within the household. When asked how much of a problem smoking had been in their households, about 13% of adolescents lived in a household where smoking was a problem. However, 32% of adolescents in the lowest income group lived in a household where smoking was a reported problem. Meanwhile, 11% were reported to have household problems with alcohol use, and this number was consistent across income groups. About 4% reported household problems with prescription or illegal drug use, and 2% lived in a household where gambling was a problem. There were disparities across income groups for both drug use and gambling problems. Figure 6 summarizes the differences and similarities by income groups.

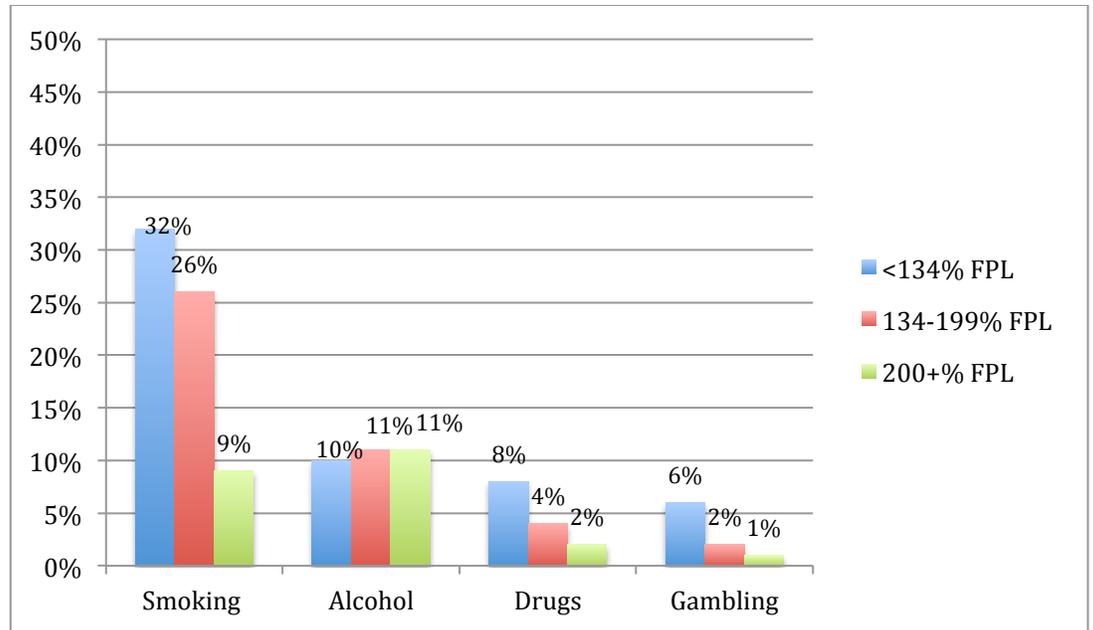


Figure 6. Problems with substance use and gambling in the household, by FPL

Summary and discussion

Adolescents in Iowa have lower reported health and mental health status than children across other age groups in the state, and there are disparities across income groups and between African-American, Hispanic, and white youth. Differences also existed for adolescents based on education level of the responding parent.

Although almost all adolescents in Iowa were covered by health insurance, many families still had concerns about medical costs that were not covered by insurance. Transformations are currently occurring in the medical care landscape in Iowa due to rising health care costs and the implementations of portions of the Affordable Care Act (ACA). The State of Iowa has many decisions to make regarding this legislation, and these decisions will undoubtedly affect family environments for teens and all families in Iowa.

Household food insecurity appears to be a problem for many adolescents, across all income categories, but especially in the lower income groups, and families with Hispanic children. This finding is important because food insecurity and hunger are correlated with psychosocial and physical problems in children.^{5, 6} This was the first IHHS survey to ask questions about food insecurity.

⁵ Kleinman, R. E., Murphy, J. M., Little, M., Pagano, M., Wehler, C. A., Regal, K. & Jellinek, M. S. (1998) Hunger in children in the United States: potential behavioral and emotional correlates. *Pediatrics* 101: 1-6.

⁶ Murphy, J. M., Wehler, C. A., Pagano, M. E., Little, M., Kleinman, R. E. & Jellinek, M. S. (1998) Relationship between hunger and psychosocial functioning in low-income American children. *J. Am. Acad. Child Adolesc. Psychiatry* 37:163-170.



Adolescent emotional and behavioral health is a concern for many families in Iowa. Access to health care for these issues is quite good for most, however, many adolescents in Iowa face barriers to getting the care they need. It is especially important that adolescents and their families have support in this area as they gain independence and begin to transition into adulthood and adult mental health care services.

Although Medicaid covers dental care, many low-income people face barriers to accessing dental services for their children. While most adolescents in Iowa visit a dental office for most of their care, many lower income Iowa teens successfully access services from community health centers or clinics to receive care. These alternatives provide access to services for youth who are most at risk.

This survey has many limitations related to adolescent youth. A major issue is that all our results are parent-reported. The teens themselves were not interviewed, and there is evidence in the literature that their answers would have differed from the responses garnered from parents. Indeed, the questionnaire was entirely designed based on parent report, and many questions relevant to teens were not asked. Lacking in this survey were behavioral risk factors such as seat belt use, safe sex, and substance use specific to the adolescent.