



# Health Status of Children Entering Kindergarten: Results of the 2008-2009 Nevada Kindergarten Health Survey

February 2009

This project was completed in collaboration with the following:  
Clark County School District  
Southern Nevada Health District  
Nevada State Health Division  
and  
Nevada School District Superintendents

Nevada Institute For Children's Research & Policy

# NICRP

**UNLV**  
UNIVERSITY OF NEVADA LAS VEGAS

HEALTH SCIENCES |  
School of Community Health Sciences

**The Nevada Institute for Children's Research and Policy (NICRP) is a not-for-profit, non-partisan organization dedicated to advancing children's issues in Nevada.**

As a research center within the UNLV School of Public Health, NICRP is dedicated to improving the lives of children through research, advocacy and other specialized services.

**NICRP's History:** NICRP started in 1998 based on a vision of First Lady Sandy Miller. She wanted an organization that could bring credible research and rigorous policy analysis to problems that confront Nevada's children. But she didn't want to stop there. She wanted to transform that research into meaningful legislation that would make a real difference in the lives of our children.

**NICRP's Mission:** The Nevada Institute for Children's Research and Policy (NICRP) looks out for Nevada's children. Our mission is to conduct community based research that will guide the development of programs and services for Nevada's children. For more information regarding NIDRP research and services, please visit our website at: <http://www.nic.unlv.edu>

**NICRP Staff Contributors:**

Denise Tanata Ashby, J.D.  
Executive Director

Tara Phebus, M.A.  
Research Analyst

Amanda Haboush, M.A.  
Research Analyst

Jennifer Waddoups, B.A.  
Graduate Assistant

Enrique Lopez  
Research Assistant

**Nevada Institute for Children's Research and Policy  
School of Community Health Sciences  
University of Nevada, Las Vegas  
4505 S. Maryland Parkway, 453030  
Las Vegas, NV 89154-3030  
(702) 895-1040  
<http://nic.unlv.edu>**

# TABLE OF CONTENTS

|  |    |
|--|----|
| <b>Introduction</b> .....  | 5  |
| Methodology .....  | 6  |
| Limitations .....  | 6  |
| <b>Results</b> .....   | 7  |
| <b>Demographics</b> .....  | 7  |
| Figure 1.1: School District Participation .....                  | 7  |
| Figure 1.2 Participation by Rural County .....                   | 8  |
| Figure 1.3: Annual Household Income .....                        | 9  |
| Figure 1.4: Race/Ethnicity .....                                 | 9  |
| <b>Insurance Status</b> .....                                    | 10 |
| Figures 2.1: Currently Covered by Insurance.....                 | 10 |
| Figure 2.2: Annual Household Income by Insurance Status.....     | 11 |
| Figure 2.3: Race/Ethnicity by Insurance Status .....             | 12 |
| Figure 2.4: Type of Insurance.....                               | 12 |
| <b>Routine Care</b> .....  | 13 |
| Figure 3.1: Routine Check Up in the Past 12 months.....          | 13 |
| Figure 3.2: Routine Check up at Least Once per Year .....        | 13 |
| Figure 3.3: Primary Care Provider (PCP).....                     | 14 |
| Figure 3.4: Primary Care Provider (PCP) by Insurance Status..... | 14 |
| Figure 3.5: Routine Check Up by PCP Status .....                 | 15 |
| <b>Dental Care</b> .....   | 16 |
| Figure 4.1: Dentist in the Past 12 months.....                   | 16 |
| <b>Care for Illness or Injury</b> .....                          | 16 |
| Figure 5.1: ER or Urgent Care Visits.....                        | 17 |
| Figure 5.2: ER or Urgent Care Visits by Insurance Status .....   | 17 |
| Figure 5.3: Primary Care Provider.....                           | 18 |
| <b>Medical Conditions</b> .....                                  | 18 |
| Figure 6.1: Medical Condition Requiring Special Treatment.....   | 19 |
| Figure 6.2: Type of Medical Condition .....                      | 19 |
| Figure 6.3: Untreated Medical Condition .....                    | 20 |
| <b>Immunizations</b> .....                                       | 20 |
| Figure 7.1: Immunization Locations.....                          | 21 |
| Figure 7.2: Likelihood of Immunization without Mandate .....     | 21 |

|   |    |
|---|----|
| <b>Lead Screening</b> .....                                       | 22 |
| Figure 8.1: Tested for Lead Poisoning.....                        | 22 |
| <b>Access to Healthcare and Compliance</b> .....                  | 23 |
| Figure 9.1: Barriers to Accessing Healthcare .....                | 23 |
| Figure 9.2: Following Doctor’s Recommendations.....               | 24 |
| <b>Mental Health</b> .....  | 24 |
| Figure 10.1: Accessing Mental Health Services .....               | 25 |
| <b>Weight and Healthy Behaviors</b> .....                         | 25 |
| Figure 11.1: Weight Status Categories .....                       | 26 |
| Figure 11.2: Race/Ethnicity for Participants with Valid BMI ..... | 27 |
| Figure 11.3: Weight Status by Race/Ethnicity.....                 | 27 |
| Figure 11.4: Transportation to School .....                       | 28 |
| <b>References</b> .....   | 29 |
| <b>Appendix A: Survey Instrument</b> .....                        | 30 |

## INTRODUCTION

Academic achievement for children is vital to their success in life. Those that do well in school have greater opportunities for post secondary education, and later have better prospects for employment. One of the major factors that can affect a child's academic achievement is his or her health status. Academic outcomes and health conditions are consistently linked in the literature (Taras & Potts-Datema, 2005). Children with poor health status and especially those with common chronic health conditions have increased numbers of school absences, and more academic deficiencies (Taras & Potts-Datema, 2005). Children who miss more than ten days per semester have difficulty staying on grade level, and absenteeism due to chronic illness relates to even lower school achievement than the general high absence population (Klerman, 1988). Therefore to increase the likelihood for academic success in children we need address their health concerns. For this reason preventative care is crucial to a child's ability to succeed in school.

According To the most recent KIDS COUNT data from the Annie E Casey Foundation, 11% of Nevada's teens are high school dropouts, compared to 7% nationally. The national dropout prevention center lists poor attendance and low achievement as two of the significant risk factors for school dropout (Hammond et.al., 2007). Additionally studies examining school drop out indicate that early intervention is necessary to prevent students from dropping out of school. Middle and high school students that drop out likely stopped being engaged in school much earlier in their academic career. Therefore, early prevention and intervention is crucial to improving graduation rates. Ensuring that children have their basic needs met, including receiving adequate health care, can directly impact a child's academic achievement as well as increase their likelihood for high school graduation.

To gain baseline information on the health status of children entering the school system and better track student health status, the Nevada Institute for Children's Research and Policy (NICRP), in partnership with the state's 17 school districts, the Southern Nevada Health District (SNHD), and the Nevada State Health Division, conducted a health survey examining the health status as well health insurance status of Nevada's children entering kindergarten. This study was conducted with the goal of quantifying the health status of children as they enter school to be able to identify specific areas for improvement to eventually increase academic success among Nevada's students.

## **METHODOLOGY**

In the fall of 2008, NICRP partnered with the Clark County School District (CCSD) and the SNHD to create a health survey designed for parents of children entering kindergarten. The survey was intended to provide a general understanding of the overall health status of children when they enter school. The short questionnaire was developed in both English and Spanish and contained 22 questions. During the development of the project, the Nevada State Health Division presented the opportunity to participate in the survey to officials in the other school districts in Nevada. The superintendents of all 17 school districts in the state agreed to participate in the study. Questionnaires were distributed to kindergarten teachers in all public elementary schools in the state. Teachers then distributed the surveys to parents during the first part of the school year. Parents who chose to participate then turned the survey into either the school office or their child's teacher. The surveys were then returned to NICRP via mail. In Clark County, teachers sent the surveys to the CCSD Office of Research via school mail where NICRP staff picked them up. Each survey was then assigned a unique ID number by NICRP staff so that each survey could be tracked. All information was entered into the statistical analysis software SPSS 15.0. The surveys completed in Spanish were entered into the English database by a bilingual staff member at NICRP. No identifying information was included on any of the surveys.

Each school district provided the total number of kindergarten students enrolling that fall. For the entire state it was estimated that there were 30,744 kindergarteners enrolled in the fall of 2008. At the end of the data collection period 11,073 surveys were received and entered resulting in a 36% response rate for the state. Response rates were also calculated for each of the school districts individually. These ranged from 0% in Lyon and Lander to 100% participation in Eureka. In Clark County the response rate was 37.4%, in Washoe County 22.7% and the total response rate for all other counties was 43.9%. Washoe County may have had a lower response rate because of a delay in getting the surveys distributed to parents in that district.

## **LIMITATIONS TO THE STUDY**

As in all research studies there are limitations to the data collected. First, all information contained in this report was self-report data from parents. This information relies on the memory and honesty of the participants in the survey. Additionally, several of the questions were left blank on the surveys received. NICRP kept all surveys in the database for analysis, but it is important to note when reading percentages presented in tables that not all respondents answered all questions. Some tables may have a total of 11,073 (all participants responded to the question) while others may have a lesser number of total cases because several people left the question blank. In the graphs presented in this report all percentages are calculated based on the total number of people answering the question – not the total number of people who completed a survey.

## RESULTS

Presented in the tables below are the basic frequencies (counts and percentages) for all questions asked in the survey. This information provides excellent baseline health data for school aged children in Nevada. In addition, cross tabulations were calculated for selected variables to provide additional information on specific topics. A chi square statistic was also calculated to test for the statistical significance of the differences provided in the cross tabulation tables. Percentage calculations as well as statistical significance are presented with the appropriate graphs.

### DEMOGRAPHICS

The surveys were created to be one page in length so that one side was written in English and the other side in Spanish. Of the 11,073 completed surveys, the majority of parents (79.54%) completed the survey in English while 20.46% completed it in Spanish.

Figures 1.1 and 1.2 illustrate parent participation by school district. The first pie chart illustrates the divisions between Washoe, Clark and all other counties. Because Clark County is the largest school district the state, it was expected that Clark County parents comprise the vast majority of the respondents for this survey. Figure 1.2 illustrates the county specific participation for all rural counties, which represent 12.4% (n=1,368) of the total sample.

Figure 1.1

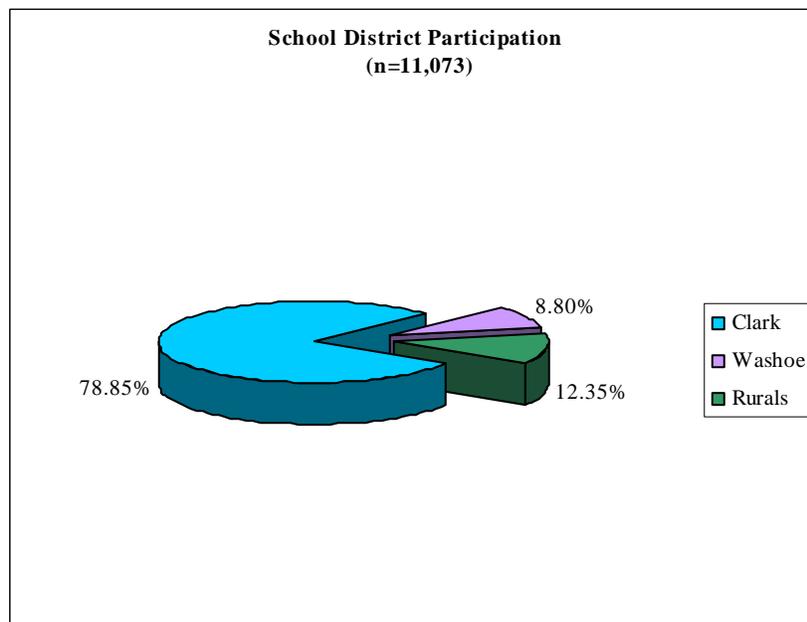
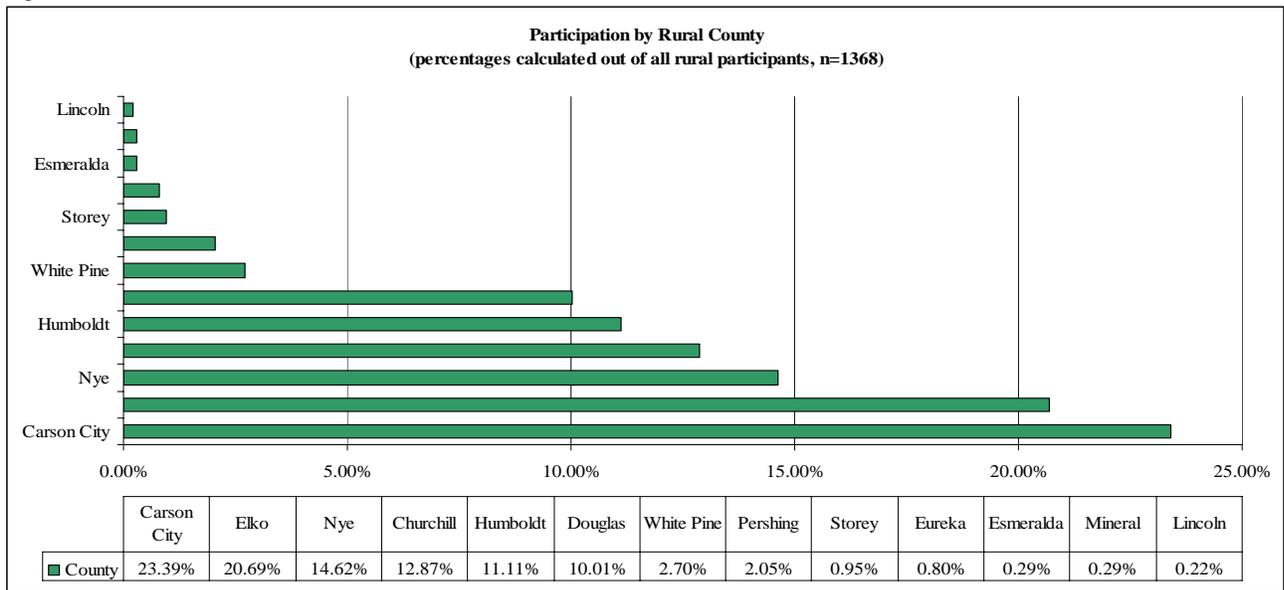


Figure 1.2

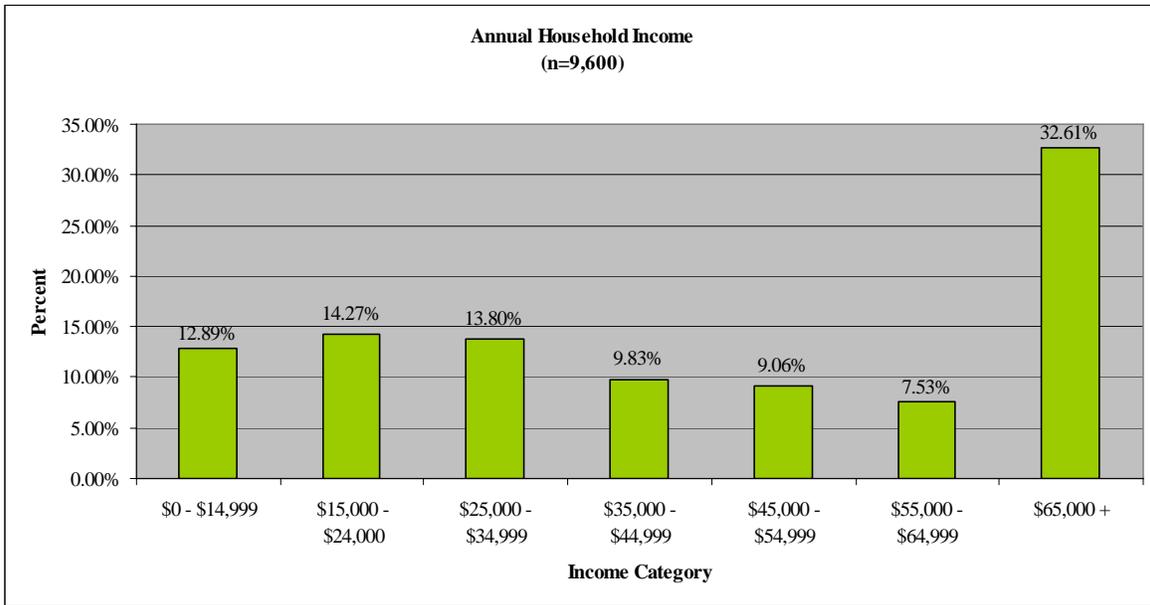


Additionally, information on the gender of the kindergarten student was recorded. The distribution was almost exactly split with 50.22% male and 49.78% female. These percentages represent only the 8,526 participants that answered this question (2,547 respondents (23%) left this question blank).

Parents were also asked to respond to questions regarding their annual household income, the child’s race/ethnicity, and the child’s insurance status and type of insurance, if applicable. Below the title of each of the figures is the total ‘n’ or number of people that answered that question on the survey. All percentages are taken out of the total number of people that answered the question, not the total number of people who returned a survey. Figures 1.3 through 1.5 represent the demographic data.

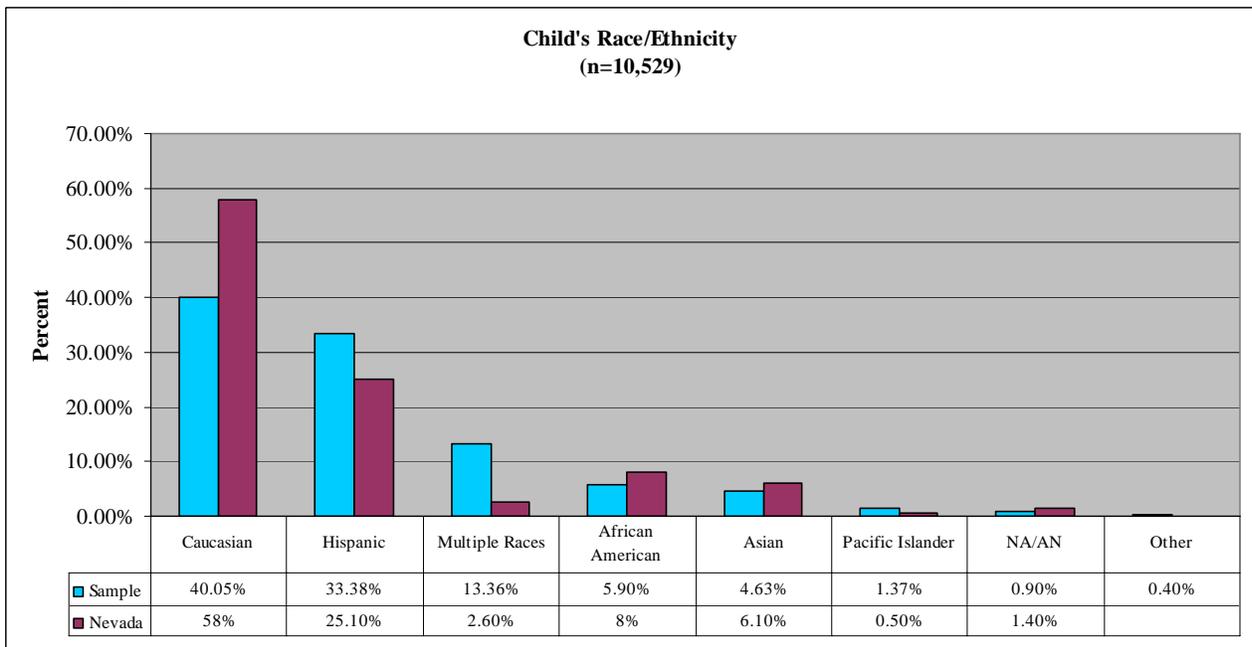
Figure 1.3 illustrates the income distribution among parents participating in the survey. According to the US Census Bureau, the average median household income from 2004 to 2006 in Nevada was \$50,819.00. The median represents the middle number in a distribution, and is the best measure of central tendency to reduce the impact of outliers (those with very high or very low incomes) in the distribution. The sample of participating parents has a similar distribution as illustrated in the figure below. 50.8% of all participants reported income below \$45,000, while 49.2% reported incomes at \$45,000 or higher

Figure 1.3



The sample for this survey is representative of the state of Nevada in terms of race and ethnicity for most categories. Figure 1.4 displays the race/ethnicity of the respondents to this survey compared to the race/ethnicity of the state of Nevada according 2007 estimates from the US Census.

Figure 1.4



\*NA/AN = Native American/Alaska Native  
 \*\*Nevada state data from <http://quickfacts.census.gov>

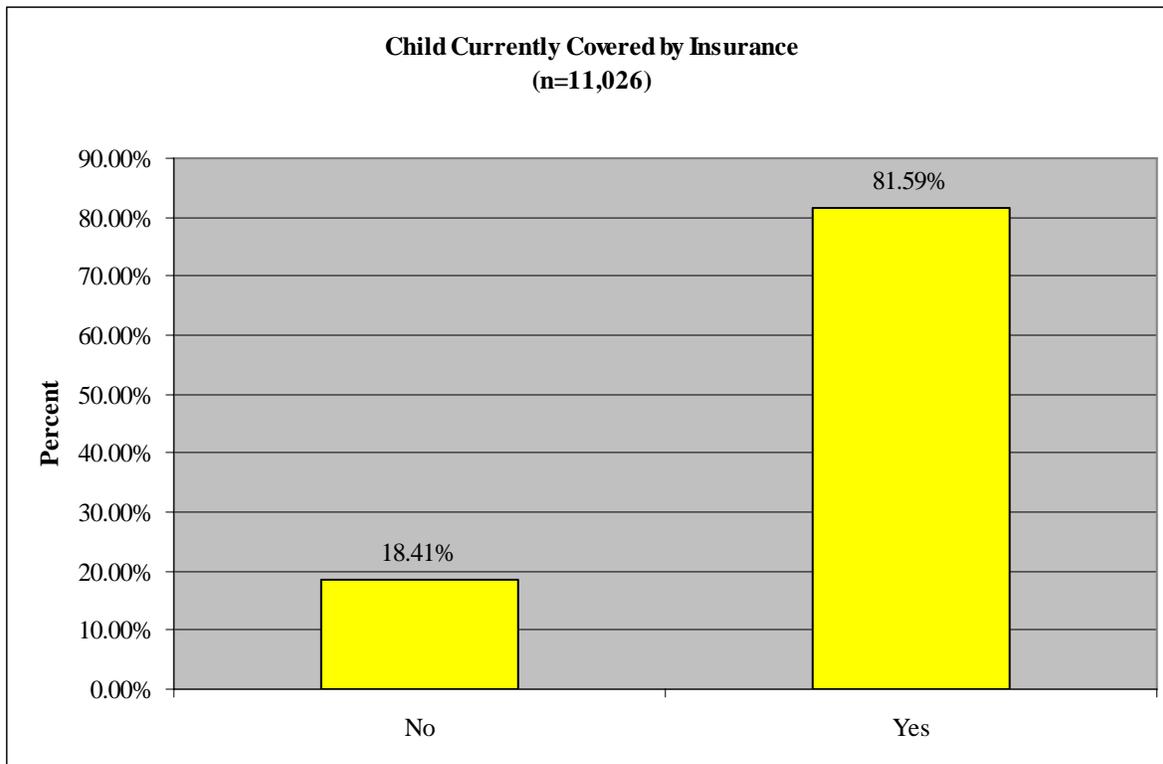
## INSURANCE STATUS

Many children in Nevada and across the country are uninsured. According to the latest Census data, approximately 8.1 million children under the age of 18 are uninsured (DeNavas-Walt et al. 2008). The most recent data ranks Nevada fifth in the country for the number of children without health insurance, at 15.8 percent of children (Families USA, 2008).

Children's health insurance status is correlated among states with the highest levels of with children's access to health care services. Research indicates that uninsured children are less likely to have access to the care they need and are more likely to have poorer health outcomes than insured children. For example, uninsured children were nearly ten times as likely as insured children to have an unmet health need (Covering Kids and Families, 2005). Nevada is ranked the second highest among uninsured children not receiving any care at 43.4 percent of children (Covering Kids and Families, 2005).

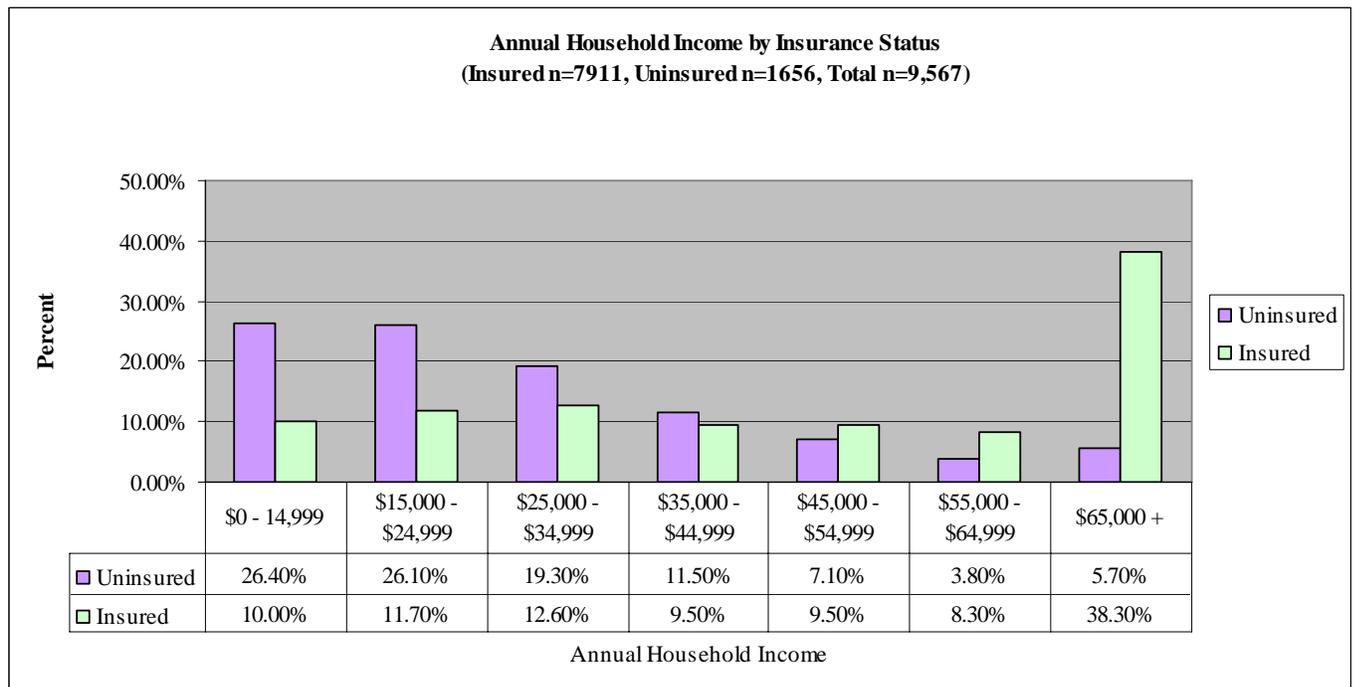
Participants in the current study were asked whether or not their child had insurance. Approximately eighty-one percent of parents surveyed indicated that their children had some type of health insurance coverage. Slightly more than 18 percent of participants stated their child had no health insurance coverage.

Figure 2.1



Not surprisingly, Figure 2.2 illustrates that children from lower income families are more likely to be uninsured. At the lower end almost three times as many children whose parents make less than \$15,000 per year are uninsured while there are almost eight times as many children whose parents are making \$65,000 or more that have insurance. These differences are statistically significant at  $p=.000$ . This correlation between income and insurance status reflects both the lack of access and affordability of private health insurance coverage options for lower and middle income families. A recent Kaiser Family Foundation (2009) study found that of those lower and middle income families that had access to private health insurance coverage, only 19 percent could afford the premiums.

Figure 2.2

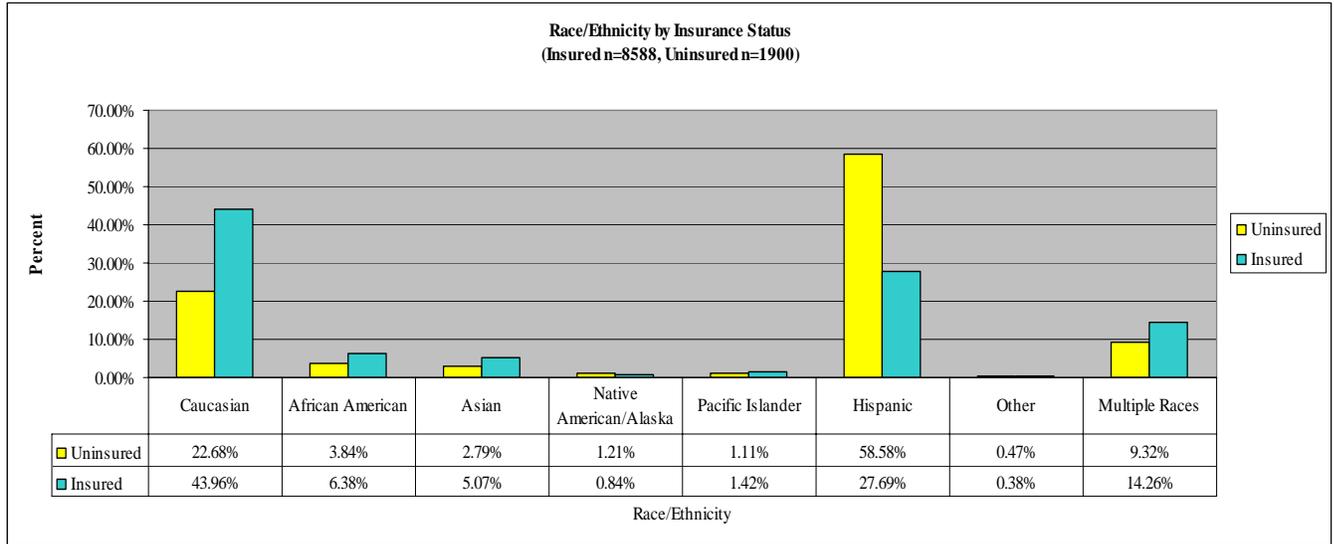


\*These findings are significant at  $p=.000$

\*\*Percentages are calculated out of the number within each insurance category

In examining the relationship between race/ethnicity and insurance status (as shown in Figure 1.7) we can see that most children who are uninsured are Hispanic (58.58%), followed by Caucasian at 22.868% of all uninsured children in this study. Differences in these categories are statistically significant at  $p=.000$ . Research indicates that in Nevada and across the United States, Hispanic populations are much more likely to be uninsured than Caucasian populations (Covering Kids and Families, 2005). In Nevada and other states with a relatively large percentage of Hispanic immigrants, the rates of uninsured children are higher. Many uninsured Hispanic children coming from these immigrant families are eligible for public insurance coverage, yet enrollment and access barriers continue to block these children from obtaining public coverage.

Figure 2.3

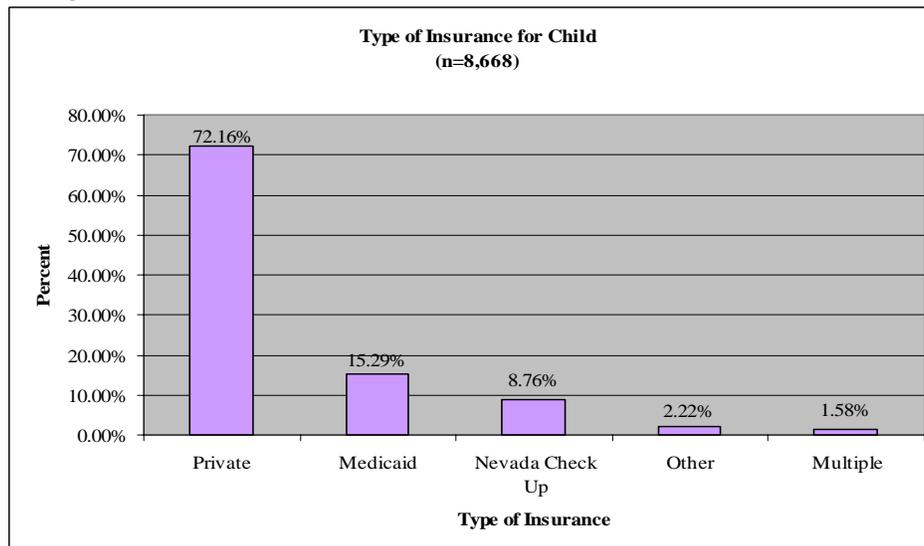


\*These findings are statistically significant at p=.000

\*\*Percentages are calculated out of the number within each insurance category

Parents were also asked to indicate the type of insurance their child had. A majority of parents responded that their children (55.58%) had private health insurance coverage, while 24% of children had public health insurance coverage. Of those children with public coverage, 15.17% were covered by Medicaid and 8.75% were covered by Nevada Check-up. This data mirrors national trends in children’s health insurance coverage, although there are some slight differences that must be noted. A recent study by the Kaiser Family Foundation (2009) found that more than 25 percent of children in the United States are covered by public health insurance. This study indicates that only 23.92% of children entering kindergarten are covered by public health insurance. This percentage may be reflective of the greater barriers to enrollment in Nevada’s public health insurance programs.

Figure 2.4



Just over two percent of respondents indicated that they had some “other” type of insurance, but did not fill in the space left to specify that type of insurance. In addition there were 1.5% respondents that selected multiple types of insurance for their children, these respondents were categorized in the “multiple” category. The majority of these responses specified that their child had either two forms of private insurance or Medicaid as well as some private insurance carrier.

**ROUTINE CARE**

Access to routine medical care services is a major factor contributing to children’s health status. Routine care includes basic health care services such as immunizations, vision screening and child well visits. Having access to routine medical check ups is one key indicator that contributes to children’s health and well-being. Children without health insurance are more likely to miss out on routine care than insured children. Children without a regular source of care are nine times more likely to be hospitalized for a preventable problem (Shi, et. al., 1999).

Survey results indicate approximately 83% of children had at least one routine check-up in the past twelve-months from the date of the survey and 86.52 % of children had at least one routine check-up once a year since birth. This may seem counterintuitive as you would expect that if a child has been in for a check up at least once a year since birth then he or she would have been in for a check up in the past 12 months. However, the frequencies indicate the opposite. Data were cleaned for entry errors, therefore this inconsistency may have been due to a parent misunderstanding of the questions. This should be corrected in future iterations of the survey.

Figure 3.1

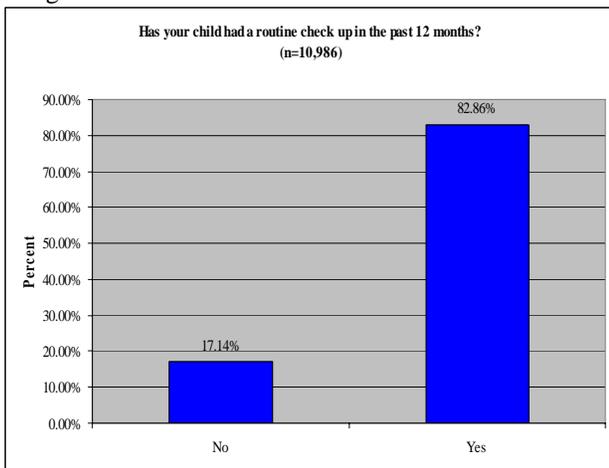
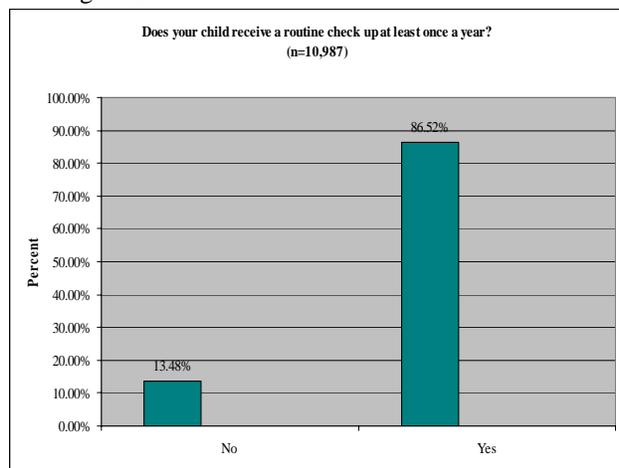


Figure 3.2



Having access to regular primary care services or a medical home is another key indicator of children’s overall health status. Primary care providers, which include physicians and nurses in general practice, offer routine personalized medical care to children. They provide a medical home where children can get basic care services such as annual check-ups. Children that have access to a regular primary care provider in charge of coordinating and organizing their care tend to have a better health status than children without access to a primary care provider. According

results of the current study, 79.12% of participants reported that they had a primary care provider. Almost 21% had no primary care provider.

Figure 3.3

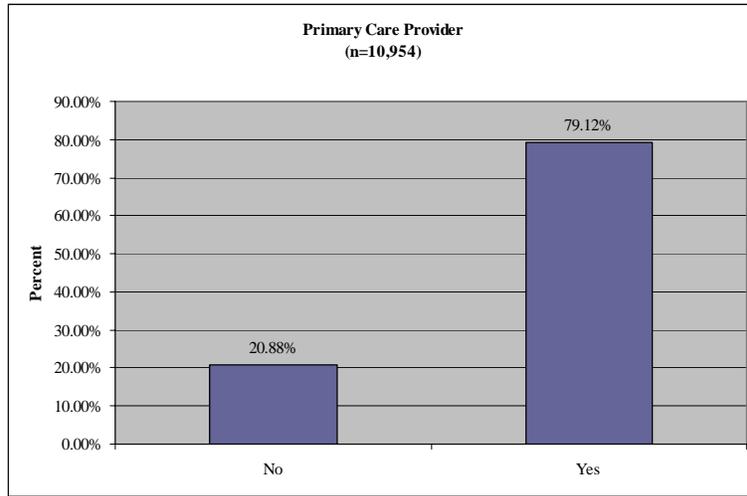
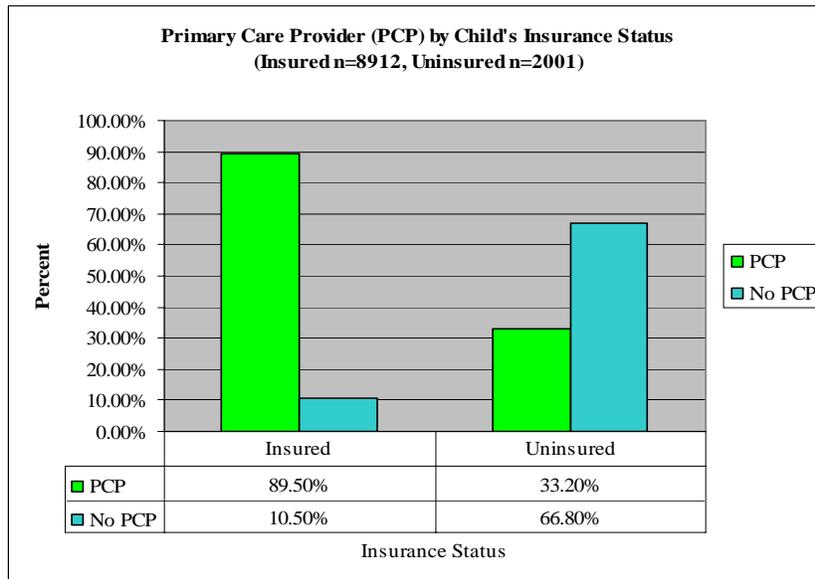


Figure 3.4 provides further information regarding insurance status and primary care providers. Almost 90% of those children with insurance reported that they had a primary care provider (PCP), while only one third of those without insurance reported that they had a primary care provider. This difference is statistically significant at  $p=.000$ . Since most PCP belong to a private practice, uninsured children are much less likely to have access to a PCP. This is partially attributable to the disparities in health status between insured and uninsured children.

Figure 3.4

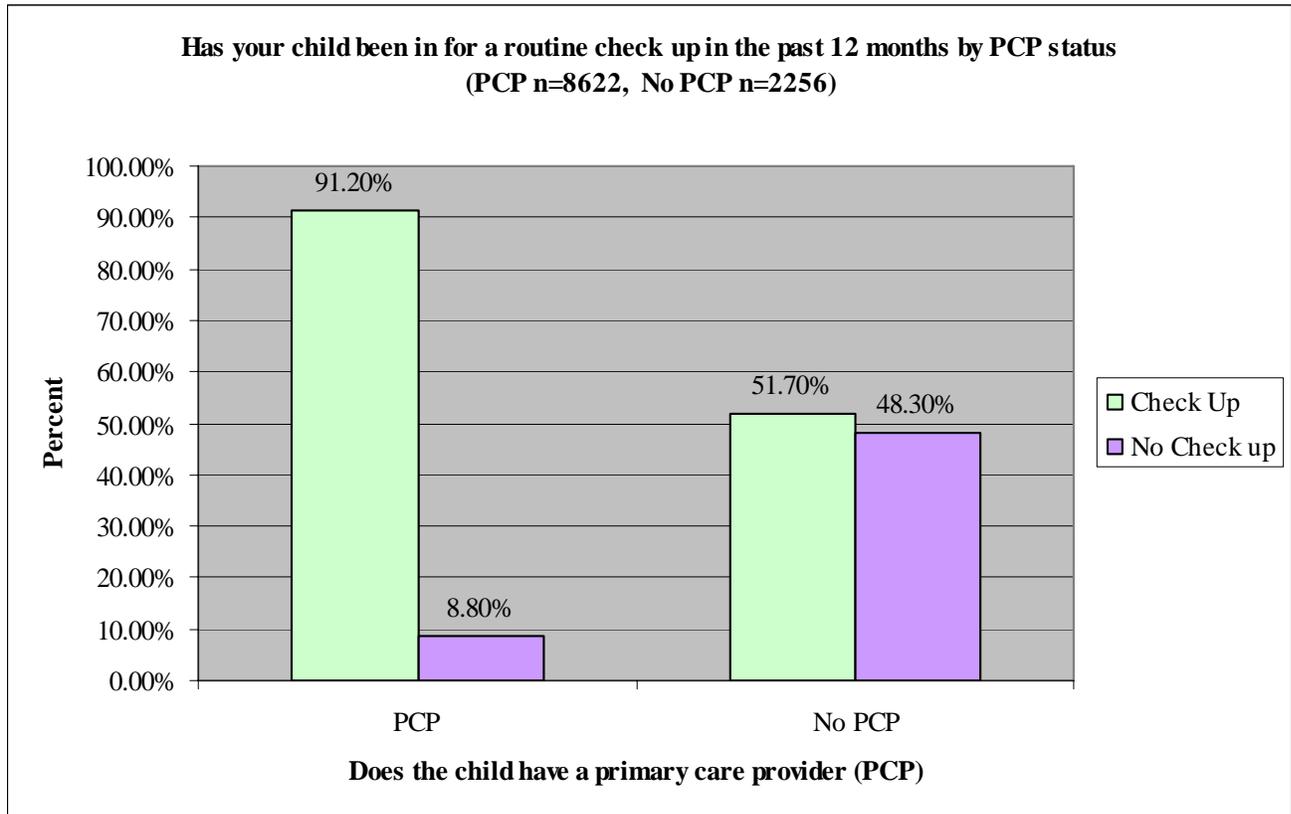


\*These findings are statistically significant at  $p=.000$

\*\*Percentages are calculated out of the number within each insurance category

For example, Figure 3.5 shows the proportion of children within each category (those children without a PCP, and those that have a PCP) and whether they have received a routine check up in the past twelve months. Of the children that have a primary care provider (PCP) only 8.8% have not had a routine check up in the last year. For those children without a PCP, almost half (48.3%) had not had a routine check up in the last year. These differences are statistically significant at  $p=.000$ .

Figure 3.5



\*These findings are statistically significant at  $p=.000$

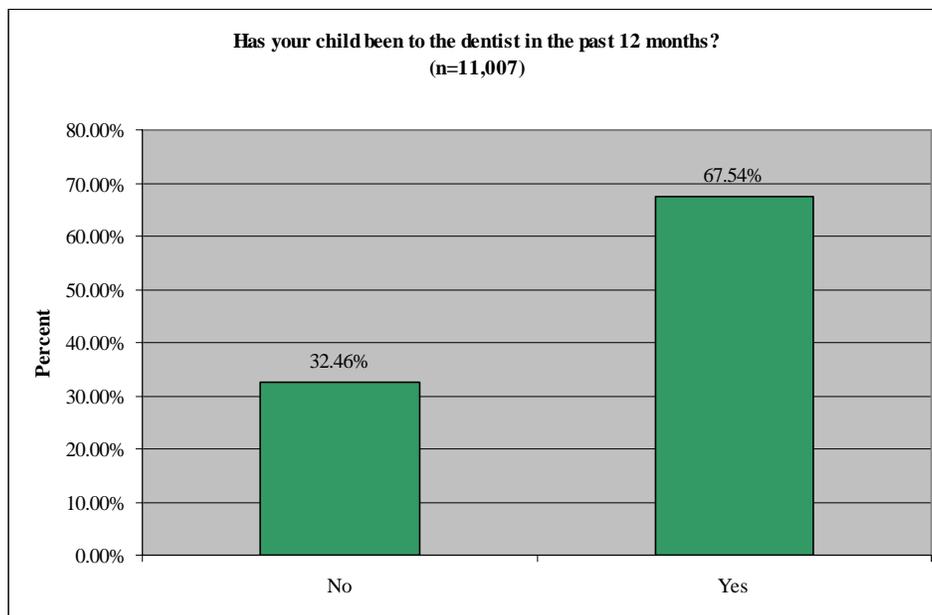
\*\*Percentages are calculated out of the number within each PCP category

## DENTAL CARE

Routine dental care is also important to children’s health and daily functioning. Children without access to regular dental care are more likely to experience dental problems, such as dental cavities and tooth abscesses. These children also miss more days of school than children without dental problems. Research indicates that uninsured children are much more likely to have unmet dental needs. One study found that uninsured children were up to four times more likely than insured children to have an unmet dental need (Brown et al, 2004).

To prevent oral health problems in children, it is generally recommended that they receive regular dental check-ups every six months to a year. Roughly 32.5 % of survey respondents indicated that their children had not seen a dentist in the last twelve months.

Figure 4.1

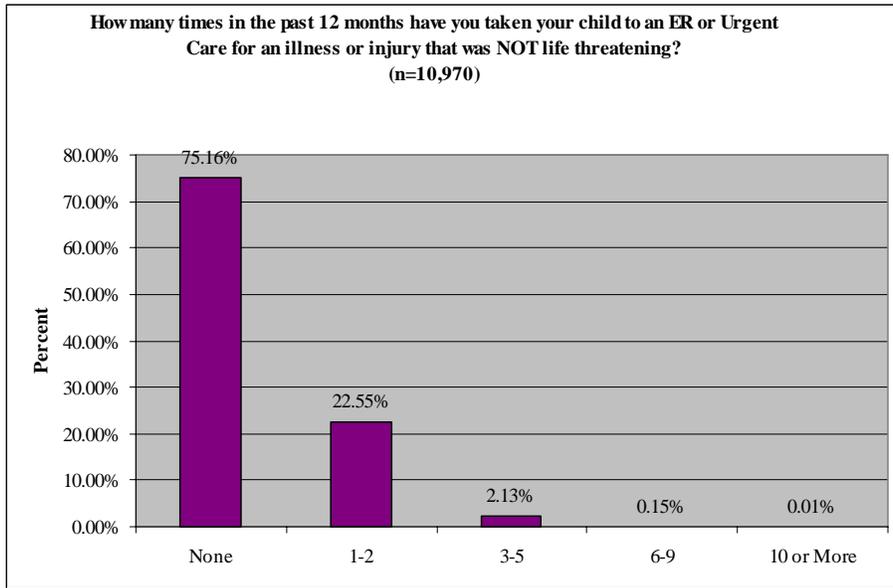


## CARE FOR ILLNESS OR INJURY

In recent years, a growing number of uninsured children with minor, non life-threatening conditions have accessed health care services in emergency care facilities. This upward trend is related to an expanding uninsured population and higher costs for health care. Most uninsured children come from lower income families that cannot afford to pay the high costs for medical care. These families are often forced to use the Emergency Room (ER) or other urgent care facilities for non life-threatening conditions.

Parents were asked about the frequency of accessing Emergency Room (ER) or Urgent Care facilities for non-emergency care for their child. Nearly 25% of respondents indicated that they had accessed an ER or Urgent Care facility for a non-life threatening illness or injury within the past 12 months.

Figure 5.1



Insurance status was not a significant indicator on whether or not the child had been to an Emergency Room or Urgent Care within the past 12 months for a non life threatening illness or injury. Figure 5.2 below shows the percentage of children within each insurance status category that have been to an ER or urgent care in the past 12 months. In both insurance categories the majority of children had not been to an ER or Urgent care for non-emergencies in the past 12 months.

Figure 5.2

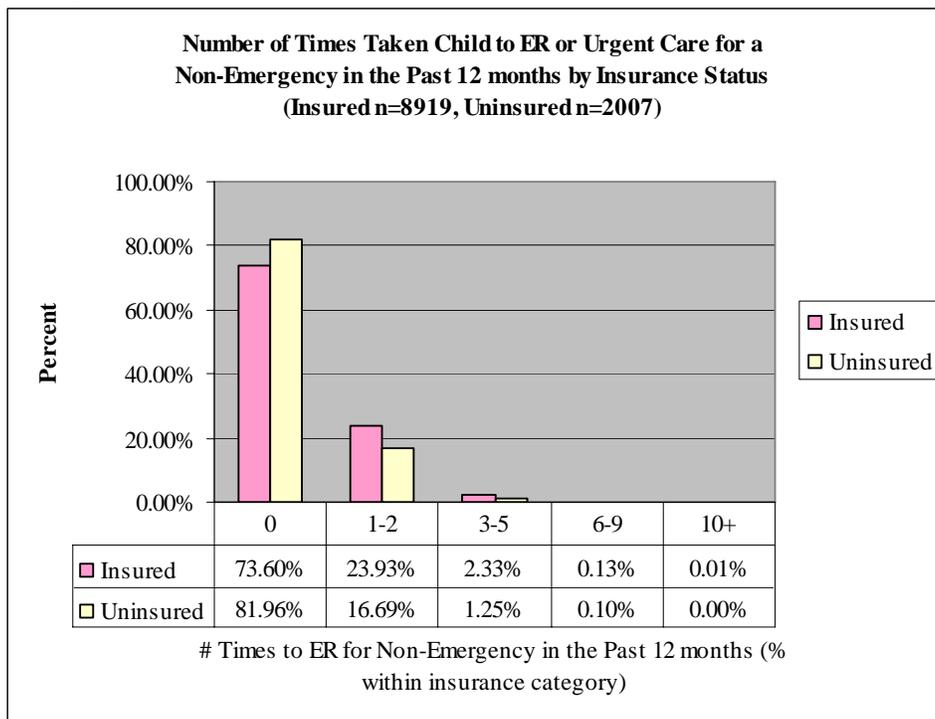
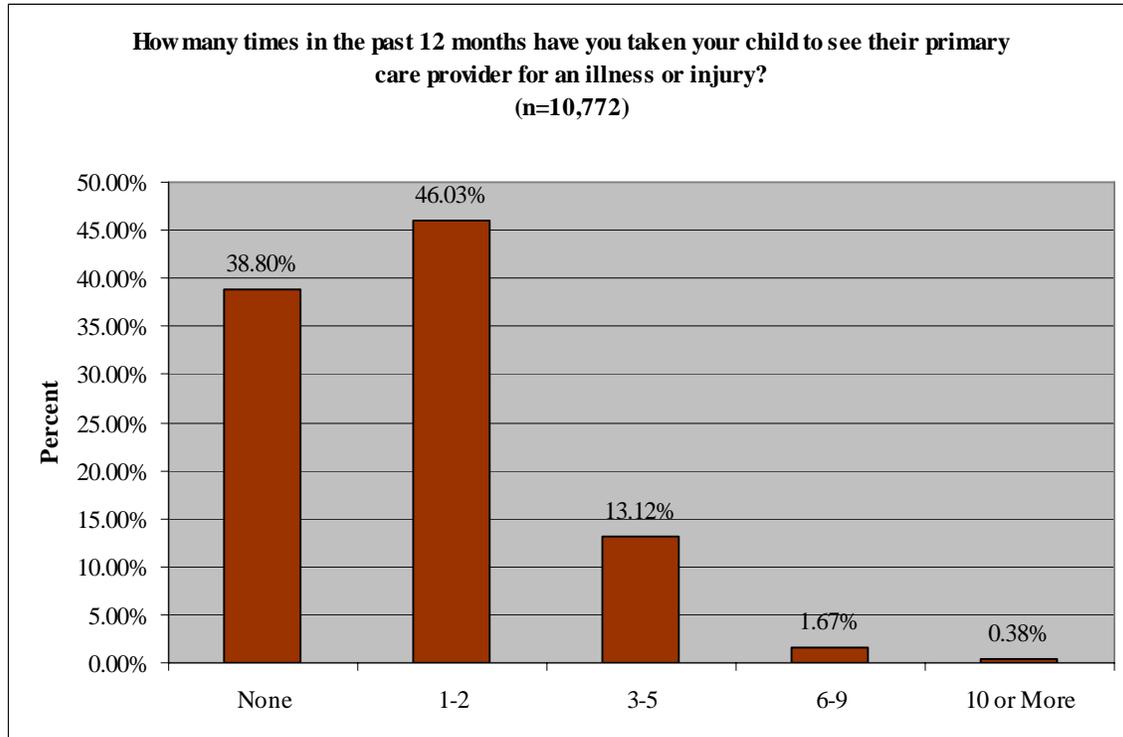


Figure 5.3 illustrates the total number of times parents had taken their child to see their primary care provider for an illness or injury in the last 12 months. The vast majority of parents (84.83%) reported that they had taken their child in less than 3 times in the past 12 months.

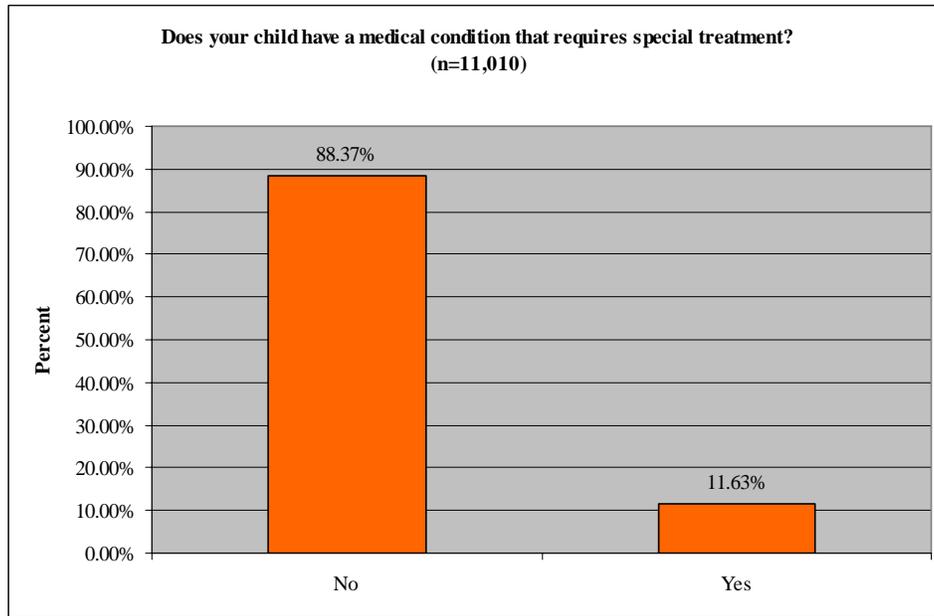
Figure 5.3



## MEDICAL CONDITIONS

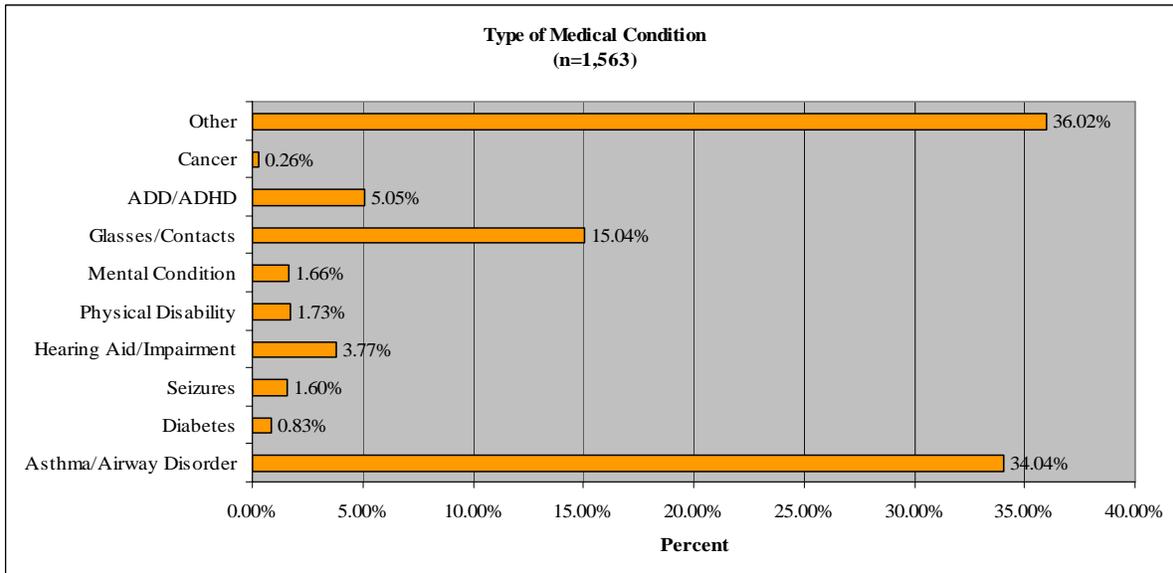
Many of Nevada’s children have special medical conditions. Treatment for children with special medical conditions is often expensive and requires a team of medical care providers lead by a primary care physician that are devoted to the treatment and maintenance of such conditions. Thus, health insurance coverage is vital for children with special health conditions, as it ensures that these children to have access to ongoing care and treatment. Generally, health insurance serves as a safeguard for parents and families against the higher costs necessary in the treatment and maintenance of special medical conditions. According to the survey results, nearly 12 percent of parents indicated that their child had a medical condition requiring special treatment.

Figure 6.1



As Figure 6.2 illustrates below, the most common medical conditions indicated were asthma (34.04%), glasses and contacts (15.04%), and ADD/ADHD (5.05%). A study released by the University of Rochester Medical Center (2008) examining the health insurance status of American children with asthma found that 13 percent of children with asthma (759,000) were uninsured at some time during the year. These children were more likely than insured children to be at risk for severe complications and unnecessary hospitalizations.

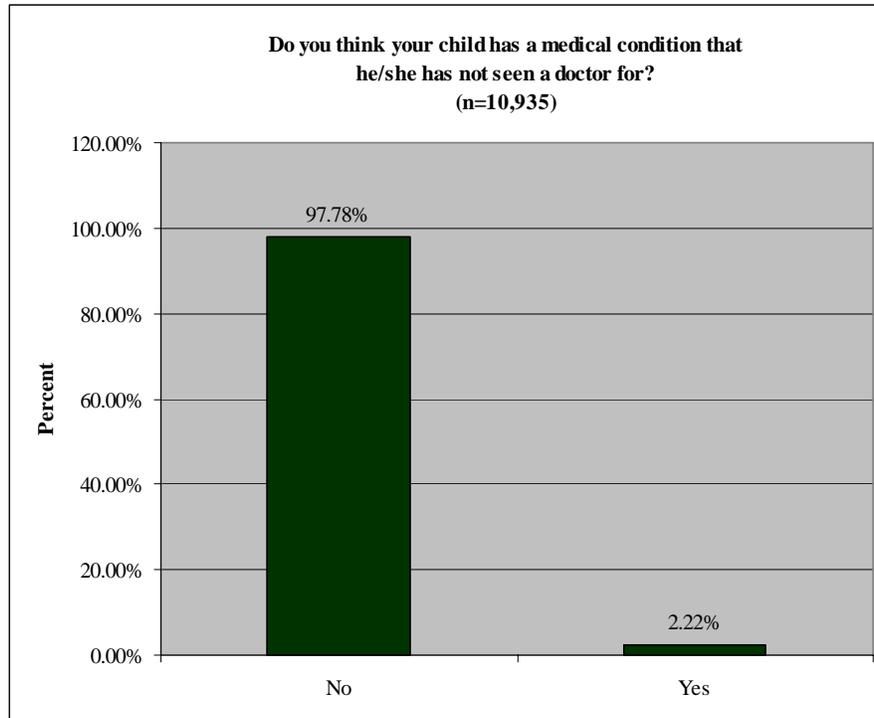
Figure 6.2



\* “Other” conditions included allergies, dental problems, chronic infections, digestive disorders, etc.

Respondents were also asked if they thought their child had a medical condition that he/she has not seen a doctor for. The vast majority of parents reported taking their child in to see a doctor for any medical conditions they thought their child may have.

Figure 6.3



Only 2.22% of survey respondents indicated that their children had not seen a doctor for a suspected medical condition. Of the respondents that indicated that their child had not seen a doctor for a suspected medical condition, 35.4% did not have insurance which is nearly twice the percentage of uninsured for all participants in the survey (Total with no insurance=18.41% see Figure 2.1)

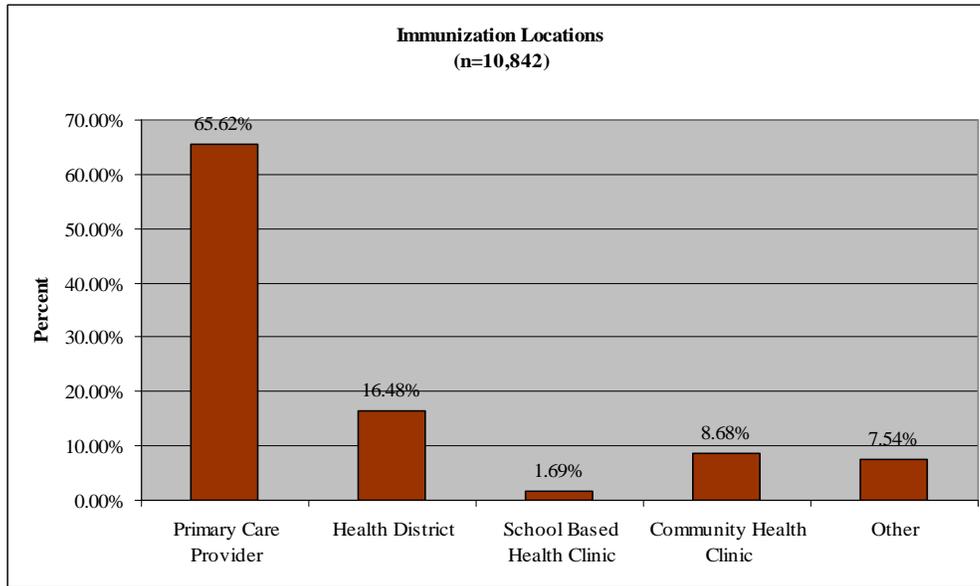
## IMMUNIZATIONS

Immunizing children in Nevada is important to preventing the spread of certain childhood diseases and avoiding a public health crisis. According to the Centers for Disease Control and Prevention (2006), vaccinations are particularly important for children, as they have lower disease-fighting immunity than adults and may be more susceptible to complications. Getting children immunized also protects the community by preventing the spread of infectious diseases.

To ensure all children receive their immunizations on schedule, there is a broad array of organizations and clinics around Nevada that offer low-cost immunizations for children. Some common locations that offer immunizations for children include: primary care providers office, local health districts, school-based health clinics, and community health clinics. According to the results of this survey, a majority of children were immunized by a primary care provider (64.78%). Local health districts were the second most common place for children to get immunized (16.31%) followed by community health clinics (7.5%) and school-based health

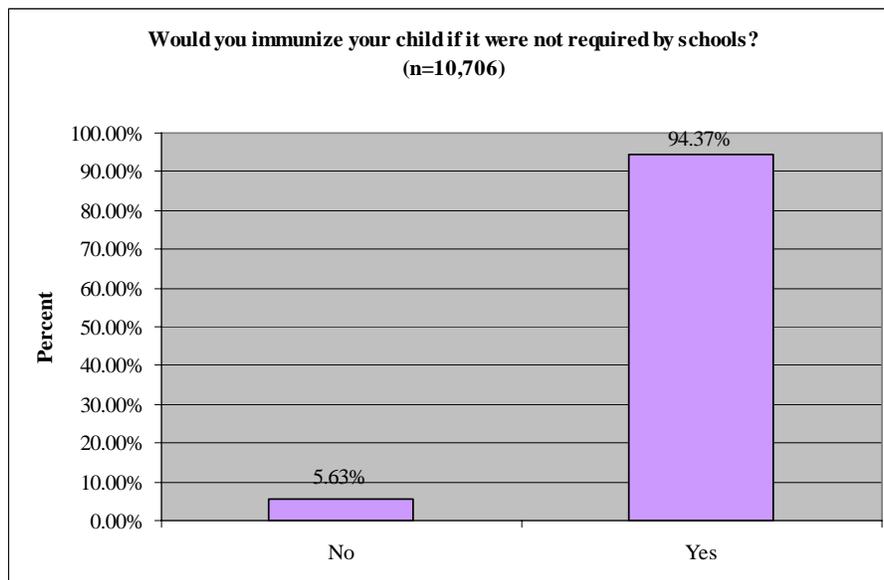
clinics (1.66 percent). Those responses placed in the “Other” category (7.54%) included parents that indicated multiple locations for receiving immunizations, those using military facilities, WIC Providers, as well as those that indicated that they chose not to immunize their child due to religious beliefs or doctor’s recommendations.

Figure 7.1



It seems that most of Southern Nevada’s parents understand the importance of immunizing their children against diseases. Just over ninety-four percent of parents would still immunize their children, even if immunizations were not required by law. However, 603 parents indicated that they would not have their child immunized if it were not required by law. The demographics for these respondents were very similar to the demographics for the entire sample. However, there were slightly more Caucasians (45.1% compared to 39.6% overall) as well as slightly more reporting that their child did not have health insurance (21.6% compared to 18.4% overall).

Figure 7.2

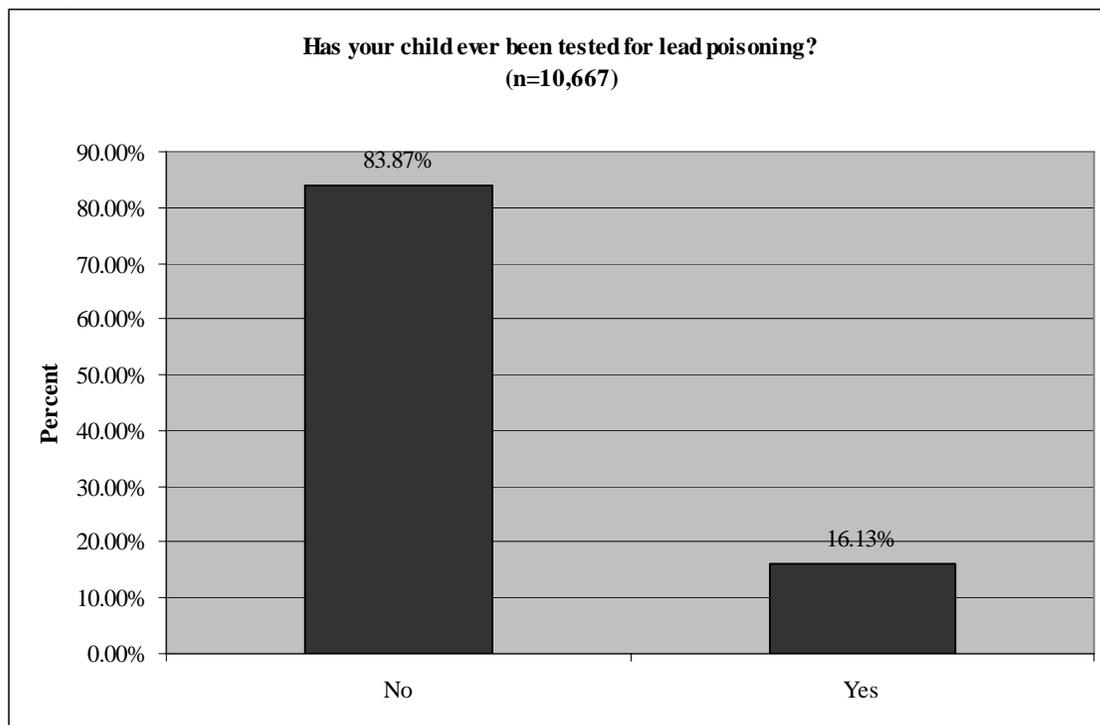


## LEAD SCREENING

Screening for elevated blood lead levels is important to prevent serious health complications in Nevada's children exposed to lead. Testing for elevated blood lead levels enables health care practitioners and public health professionals both to treat exposed children and to track the source of the lead exposure. In an effort to establish federal and state targets to control lead exposure, the Childhood Lead Poisoning Prevention Program (CLPPP) was established in Southern Nevada.

In the current study, parents were asked whether or not their child had been tested for lead poisoning. Only a small percentage of children (16.12%) had been tested for lead poisoning as of the time of the study. Further efforts to encourage screening of children, particularly at 12 and 24 months of age, are needed to fully understand the level of exposure in Nevada.

Figure 8.1

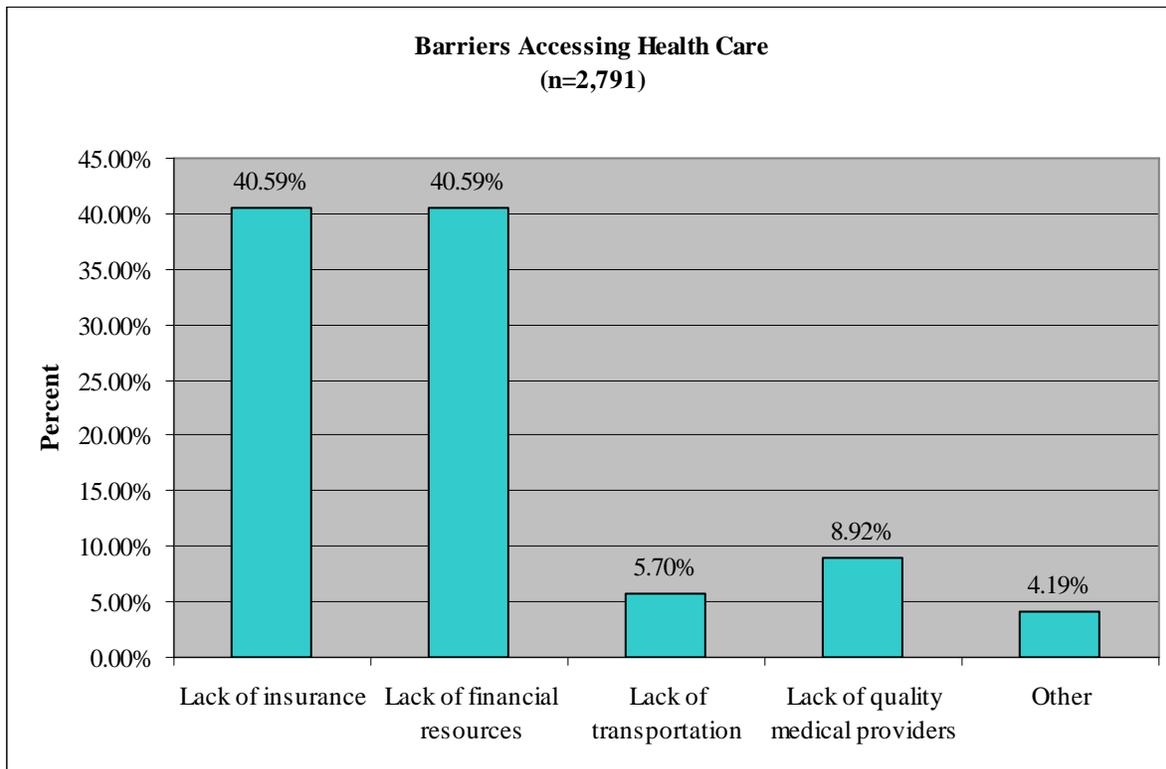


## ACCESS TO HEALTHCARE AND COMPLIANCE

Barriers to health care access are those structural, procedural, or situational mechanisms that hamper children's access to health care services. When asked about barriers to accessing health care, most of the survey respondents 83.76% indicated that they had not experienced barriers to accessing health care for their children. However, 16.24% (n=1,775) of participating parents indicated that they had experienced barriers to accessing health care for their children. Upon reviewing the demographics of parents who had experienced barriers to accessing medical care, there were a disproportionate percentage of Hispanic parents in this group, 38.4% compared to

33.19% overall, over half (51.5%) those that reported experiencing barriers to accessing healthcare did not have insurance, which is nearly three times the number of all participants without insurance, and nearly half (40.7%) of these parents reported an annual household income of less than \$25,000.

Figure 9.1



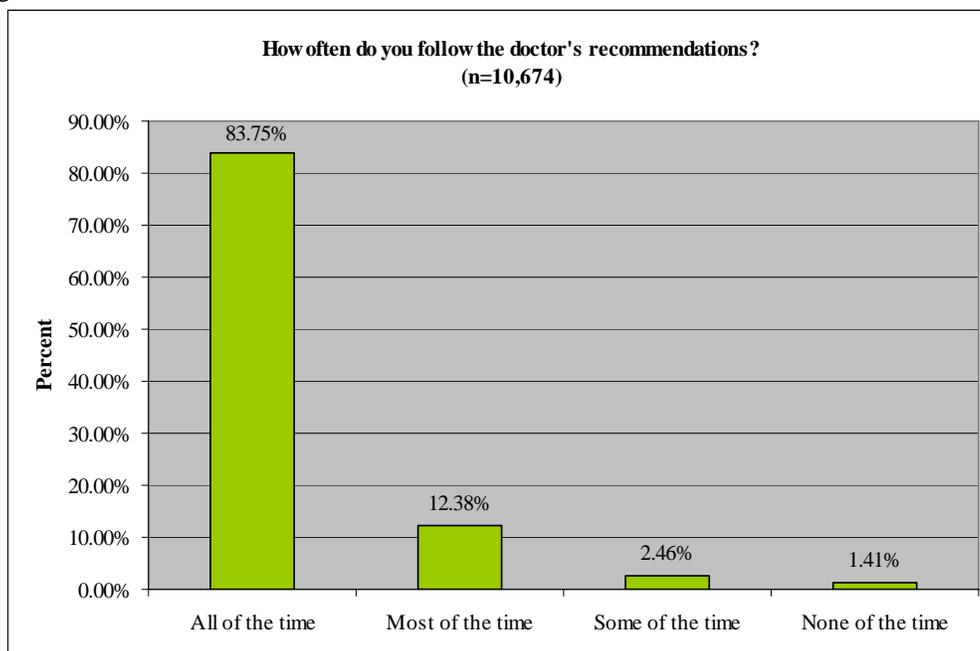
Not surprisingly, financial barriers (40.58%) and lack of insurance (40.00%) were cited as the two most common barriers parents experienced in accessing health care for their children. Most parents of uninsured children cannot afford to pay the high out-of-pocket costs charged for medical services. A recent report examining uninsured families found that financial barriers were less likely to be an issue for lower income families with an insured child or children (Kaiser Family Foundation 2009). Even if children are covered by health insurance, other financial barriers such as high co-pays or premiums are likely to impede children’s access to health care. A combination of these financial barriers may result in many parents forgoing necessary medical care for their children.

Responses in the “Other” category included: language barriers, not having adequate insurance coverage, and bad experiences with doctors in the past. Some respondents indicated that waiting lists and long wait times in offices were also barriers to accessing care for their children. This category was not mutually exclusive, meaning that respondents could indicate multiple barriers.

Parents were also asked about how often they followed the recommendations provided by their child’s doctor. According to the survey results, most parents (83.75%) indicated that they followed their child’s doctor’s recommendations all of the time. Only 1.41 % reported that they

followed their children’s doctor’s orders ‘none of the time’. If parents indicated anything other than “all of the time” in response to this question they were asked to list reasons that they were unable to comply with the doctor’s recommendations. The most frequently listed reasons had to do with financial barriers, indicating that the family could not afford the prescribed care plans because of lack of insurance or inadequate income. Second to that reason were various accessibility issues, including inconvenient scheduling of appointments and treatments, frustration with getting automated messages when calling a doctor, and lack of adequate transportation. The remaining responses indicated a lack of trust in medical providers, forgetting to administer medications, or that the child was feeling better so the parent chose not to continue with the prescribed care plans. These responses can help demonstrate further the impact of barriers to adequate healthcare for families as it impacts not only their ability to see a medical care provider but also follow through with prescribed care plans.

Figure 9.2



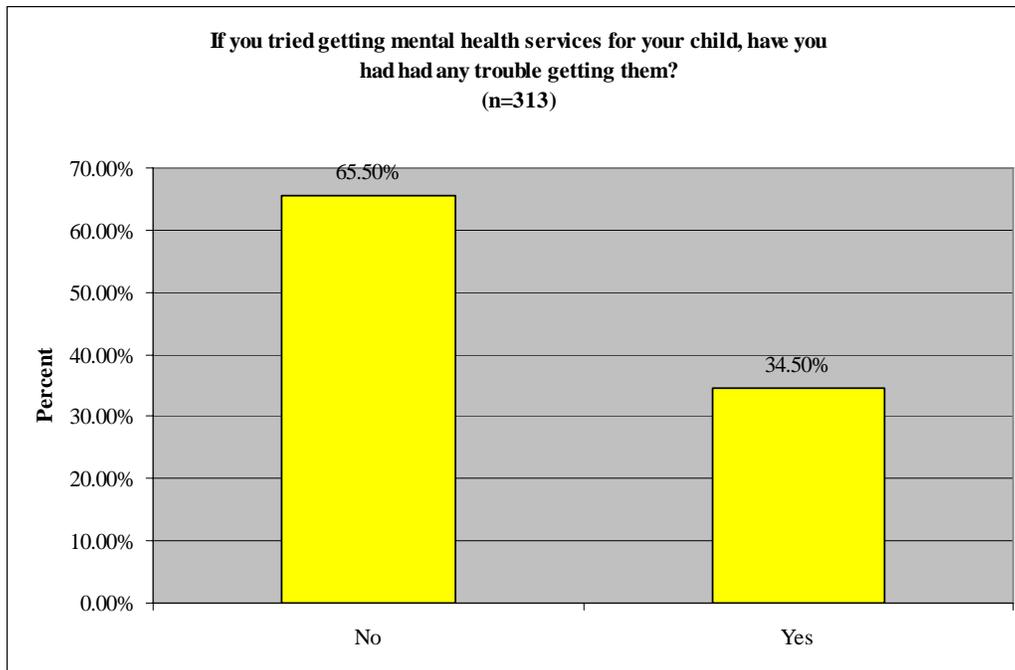
## MENTAL HEALTH

Many of Nevada’s children have mental health conditions that require specialized treatment from mental health providers. It is important that these children have regular access to mental health services. This is particularly true for young children entering the elementary school system. Without access to mental health care providers to manage and treat their conditions, children with mental health conditions are more likely to experience learning difficulties and developmental delays (Brown, 2004).

The survey results indicated only a small percentage, 3.37% (n=313) of respondents have tried to access mental health services for their children. Out of the parents who have tried to access these services (n=313), just over one third (34.5%) of parents reported having trouble accessing mental health services for their children. A disproportionate number of these parents were uninsured (25.2% compared to 18.4% overall), and 35.4% reported an annual household income of less

than \$25,000, compared to 17.3% overall. In terms of geographic location and race/ethnicity this sub-group was comparable to the total sample.

Figure 10.1

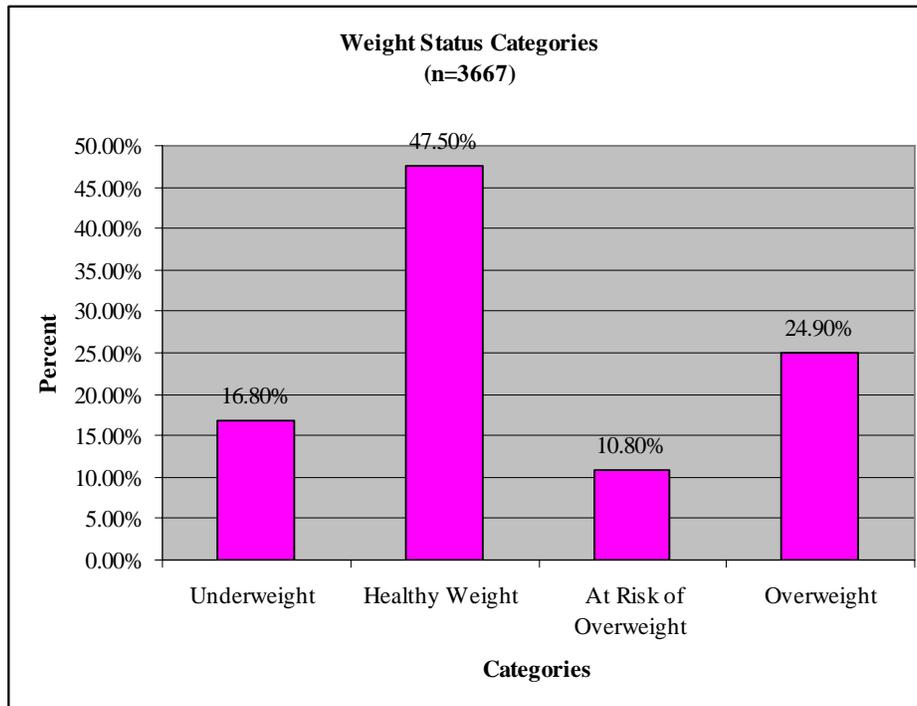


## WEIGHT AND HEALTHY BEHAVIORS

Childhood obesity is a growing public health problem across the entire country. Epidemiologists have shown increases in children with Type II diabetes in recent years. Therefore, monitoring children's weight has become even more important. For this survey parents were asked to write in their child's height and weight information. NICRP used this information to calculate a BMI for all children. Many of the respondents left one or both of these questions blank, resulting in only 3,667 cases (33.1%) that had enough information to calculate BMI.

Once BMI was calculated they were grouped based on CDC categories for weight using the percentile associated with the child's BMI, age and gender. For the purpose of this study researchers assumed that children were around 5 years of age or 60 months. There were no differences in the percentile tables for BMI values for boys compared to girls. The categories include: underweight (BMI less than the 5<sup>th</sup> percentile), healthy weight (BMI between the 5<sup>th</sup> percentile and less than 85<sup>th</sup> percentile), at risk of overweight (BMI between the 85<sup>th</sup> to less than 95<sup>th</sup> percentile), and overweight (BMI equal to or greater than the 95<sup>th</sup> percentile). The percentages for participants in this study are presented in Figure 11.1 below.

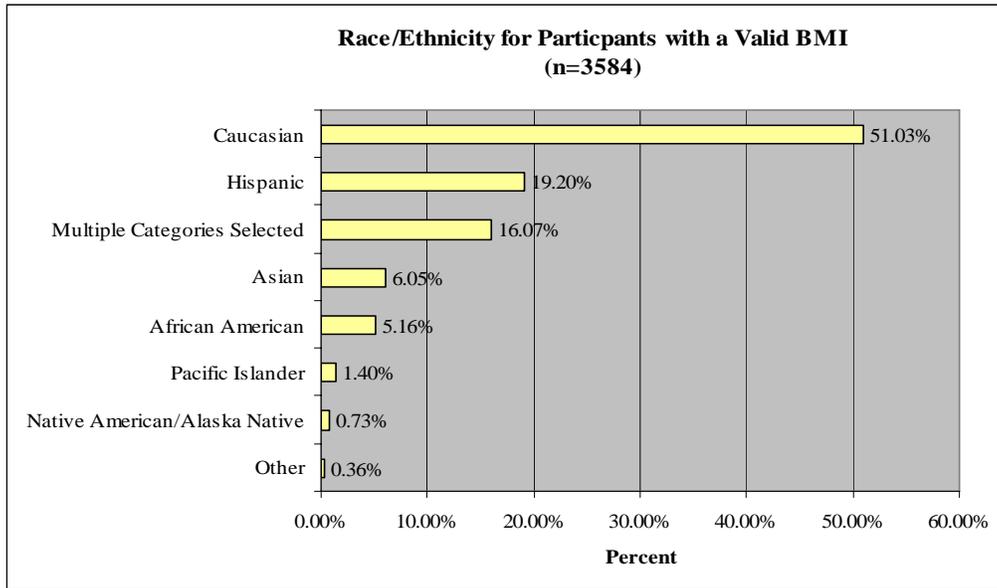
Figure 11.1



Almost half (47.5%) of children entering kindergarten whose parents participated in this survey are of a healthy weight. However, almost one fourth of these children are overweight and combining those that are at risk of being overweight and currently overweight this is just over one third (35.7%) of all respondents. There were no significant differences between the total sample and those that were in the overweight category with regard to insurance status, annual household income, geographic location, or gender (there were slightly more males than female in the at risk and overweight categories).

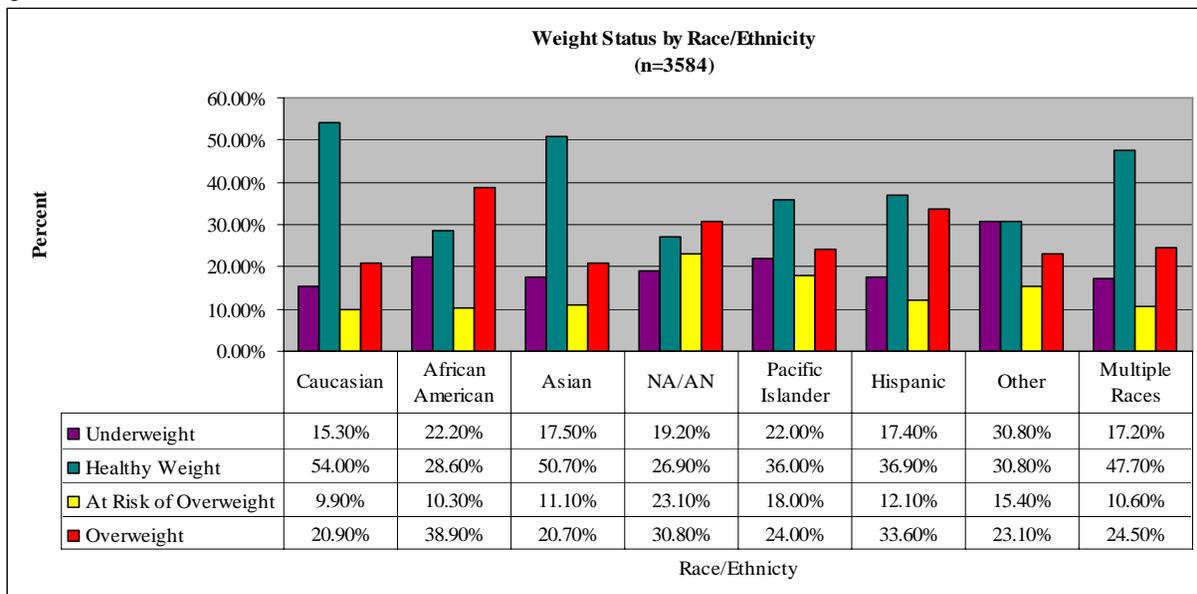
However, in comparing the child's race ethnicity with their BMI we can see some differences in their distribution across weight categories for each racial/ethnic group. It is important to note that the total number of participants included in this analysis is even fewer than those in the previous display of the child's BMI category. This is because to be included in this analysis, respondents must have indicated their child's height, weight and race/ethnicity. The distribution of race/ethnicity for this group only varies slightly from the entire sample, with there being a greater concentration of Caucasian participants eligible for this analysis and about 14% fewer Hispanic participants eligible for this analysis. Figure 11.2 illustrates the race/ethnicity data for this group.

Figure 11.2



In Figure 11.3 we can see that African American and Native American/Alaska Native children had a greater percentage of children that were overweight (38.9% and 30.8% respectively), while Hispanic children were equally distributed between healthy weight (36.9%) and overweight (33.6%). For Caucasian and Asian children, there were more children at a healthy weight than overweight within each of these racial categories. In addition, in comparing the overall percentages of the respondents that are overweight (24.9%) and those at risk of being overweight (10.8%), almost all non-white children (with the exception of Asian children) are disproportionately represented in these categories.

Figure 11.3

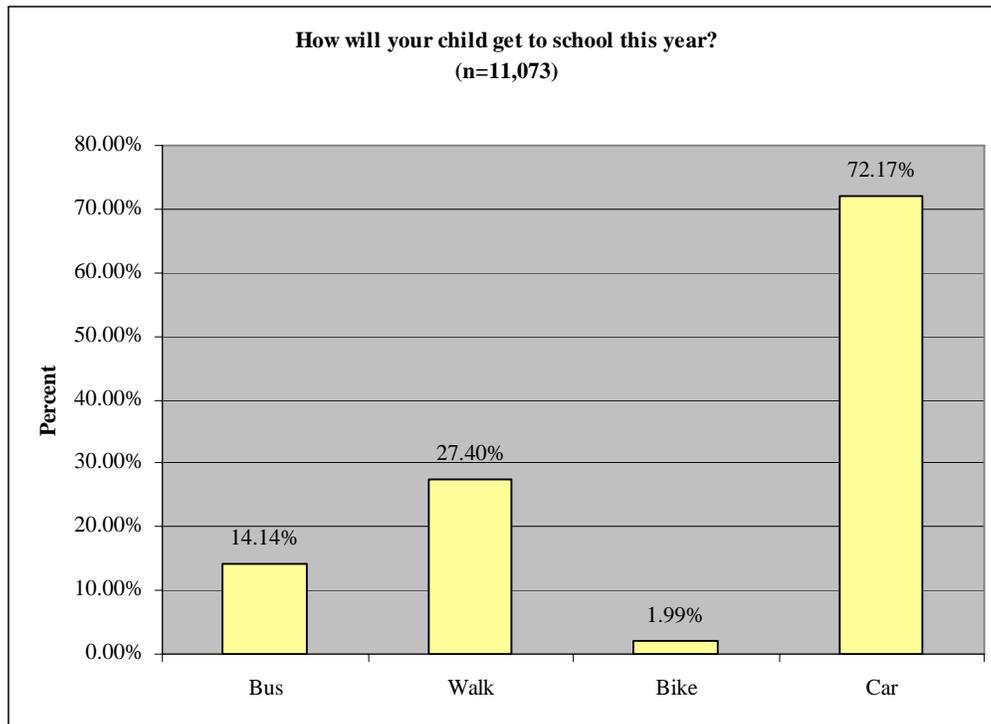


\* These findings are significant at p=.000

\*\* Percentages are calculated out of the total number in each racial/ethnic category (NA/AN – Native American/Alaska Native)

In conjunction with children’s BMI, the current study attempted to get some baseline information for physical activity by asking about how parents plan to get their child to school. Studies on childhood obesity and physical activity indicate that children that walk to school are less likely to be overweight. Parents were asked how they planned to get their child to school this year. Parents could choose multiple answers to this question so responses are not mutually exclusive, meaning one parent could select all four response categories if they so chose. Percentages in Figure 11.4 represent the number of parents that selected each option out of the total number of participants, 11,073.

Figure 11.4



Most parents (72.2%) indicated their children would get to school this year by car. 14.1% of parents stated their children would ride the bus. Almost a third of parents (29.4%) reported that their child would be either walking or riding a bike to school this year. In terms of geographic location there were no significant differences between rural and urban respondents in how their child would get to school with the exception of walking and riding the bus to school. Parents of children in rural areas reported that they would take the bus more than twice as often as those in urban areas (12.6% urban, 27.4% rural), and conversely nearly twice as many parents living in urban areas (29.4%) reported that their child would be walking to school than those in rural areas (15.9%). This is possibly due to the longer distances children in rural areas are likely to have to go to get to their elementary school as compared to more urban areas.

## REFERENCES

1. The Henry J. Kaiser Family Foundation. 2008. *Dental Coverage and Care for Low-Income Children: The Role of Medicaid and SCHIP*. Available online at [www.kff.org/kcmu](http://www.kff.org/kcmu)
2. N. Zill, 1990. *Child Health and School Readiness: Background Paper on a National Educational Goal*. Washington, DC: Child Trends, Inc.
3. Carmen DeNavas-Walt, Bernadette D. Proctor, Jessica C. Smith, *Income, Poverty, and Health Insurance Coverage in the United States: 2007, Current Population Reports, P60-235* (Washington: U.S. Census Bureau, 2008), available online at <http://www.census.gov/prod/2008pubs/p60-235.pdf>
4. *Left Behind: Nevada's Uninsured Children*. (Washington: Families USA, October 2008). Available online at <http://www.familiesusa.org/assets/pdfs/uninsured-kids-2008/nevada.pdf>.
5. *Going Without: America's Uninsured Children*. (Washington: Covering Kids and Families, August 2005). Available online at <http://www.coveringkidsandfamilies.org/press/docs/2005BTSResearchReport.pdf>
6. The Kaiser Family Foundation. 2009. *Next Steps in Covering Uninsured Children: Findings from the Kaiser Survey of Children's Health Insurance Coverage*. Available online at: <http://www.kff.org/uninsured/upload/7844.pdf>.
7. Shi et al. 1999. 'Patient Characteristics Associated With Hospitalizations for Ambulatory Care Sensitive Conditions in South Carolina'. *Southern Medical Journal* 92(10): 989-998.
8. Brett Brown, et al., *Early Child Development in Social Context: A Chartbook* (New York: The Commonwealth Fund, September 2004).
9. University of Rochester Medical Center. 2008. '759,000 Children with Asthma Endure Gaps in Insurance Every Year'. *ScienceDaily*. Retrieved February 17, 2009 from <http://www.sciencedaily.com/releases/2008/01/080116080309.htm>
10. Centers for Disease Control and Prevention. November 2006. Basic Common Questions: the Importance of Childhood Immunizations. Retrieved February 18, 2009 from <http://www.cdc.gov/vaccines/vac-gen/importance.htm>.
11. Hammond, Kathy, Linton, Dan, Smink, Jay, & Drew, Sam. "Dropout Risk Factors and Exemplary Programs: A Technical Report." . National Dropout Prevention Center, May 2007 Available at: [http://www.dropoutprevention.org/resource/major\\_reports/communities\\_in\\_schools/Dropout%20Risk%20Factors%20and%20Exemplary%20Programs%20FINAL%205-16-07.pdf](http://www.dropoutprevention.org/resource/major_reports/communities_in_schools/Dropout%20Risk%20Factors%20and%20Exemplary%20Programs%20FINAL%205-16-07.pdf)
12. Taras, . Howard and William Potts-Datema "Chronic Health Conditions and Student Performance at School." *Journal of School Health*. September 2005 Vol 75 No. 7
13. Annie E Casey Foundation . KIDS COUNT Data Book, 2007. Retrieved February 20, 2009 from [http://www.kidscount.org/datacenter/compare\\_results.jsp?i=440](http://www.kidscount.org/datacenter/compare_results.jsp?i=440)
14. Klerman, L.V. "School Absence- A Health Perspective" *Pediatric Clinics of North America*, 35: 1988

# APPENDIX A: SURVEY INSTRUMENT



## Kindergarten Health Survey

**DEAR PARENT OR GUARDIAN:** *The following survey has been designed by the Nevada Institute for Children's Research and Policy at the University of Nevada Las Vegas, in partnership with the Southern Nevada Health District and the Clark County School District. The information gathered in this survey will be used to help understand the health of children entering kindergarten this year. You have been asked to participate because you have a child in kindergarten. All information gathered will be used to discuss children's health on a group level, not an individual level. Your child's name will never be connected to your responses in any way. Confidentiality will be maintained without qualification.*

**Child's Date of Birth:** \_\_\_\_/\_\_\_\_/\_\_\_\_  
**Gender of Child (circle one):** Male Female  
**Annual household income (circle one):**  
1. \$0 - \$14,999      5. \$45,000-54,000  
2. \$15,000 - \$24,999      6. \$55,000-64,999  
3. \$25,000 - \$34,999      7. \$65,000 +  
4. \$35,000 - \$44,999

**Elementary School Name:** \_\_\_\_\_  
**Weight of Child:** \_\_\_\_\_ lbs. **Child's Height:** \_\_\_\_\_ ft. \_\_\_\_\_ in.  
**Child's Race/Ethnicity (circle all that apply):**  
1. Caucasian      5. Pacific Islander  
2. African American      6. Hispanic  
3. Asian      7. Native American/Alaskan Native  
4. Other (please specify): \_\_\_\_\_

**How many other children are living in the home? (circle one):** 0 1 2 3 4 5 6+

**Please answer the following questions for the child that is enrolled in kindergarten this year.**

1. Is your child currently covered by medical insurance?  Yes  No  
If yes, what type of insurance?  Private  Medicaid  Nevada Check Up  Other: \_\_\_\_\_
2. Has your child been seen by a medical provider for a routine check-up (not for an illness) in the past 12 months?  
 Yes  No
3. Has your child been seen by a medical provider at least once per year for a routine check-up (not for an illness) since birth?  
 Yes  No
4. Does your child have a primary care provider (regular doctor, nurse practitioner or physician's assistant)?  
 Yes  No
5. Has your child seen a dentist in the past 12 months?  Yes  No
6. Within the last 12 months how many times have you taken your child to the Emergency Room or Urgent Care for an illness or injury that was not life-threatening?  None (0)  1-2  3-5  6-9  10 or more
7. Within the last 12 months, how many times have you taken your child to see their primary care provider (regular doctor, nurse practitioner or physician's assistant) for an illness or injury?  None (0)  1-2  3-5  6-9  10 or more
8. Have you been told that your child has a medical condition which requires specialized treatment or visits to a specialty medical care provider?  Yes  No  
If yes, please check all conditions that apply:  Asthma/Airway Disorder  Diabetes  Seizures  
 Hearing Aid/Impairment  Physical Disability  Mental Health Condition  Glasses/Contacts  
 ADD/ADHD  Cancer  Other (specify): \_\_\_\_\_
9. Do you think that your child may have a medical problem that you have not gone to see a doctor for?  
 Yes  No If yes, please specify: \_\_\_\_\_
10. Where do you take your child for immunizations (shots)? If you have used more than one type of facility, please indicate the most recent:  Primary Care Provider (regular doctor)  Health District  
 School-Based Health Clinic  Community Health Clinic  Other (specify): \_\_\_\_\_
11. If immunizations were not required for school, would you still have your child immunized?  Yes  No
12. Has your child ever been tested for lead poisoning?  Yes  No
13. Have you experienced any barriers to accessing health care for your child?  Yes  No  
If yes, please check the barriers you have experienced:  
 Lack of insurance  Lack of transportation  Lack of quality medical providers  
 Lack of financial resources (money)  Other (please specify): \_\_\_\_\_
14. Have you ever tried to get mental or behavioral health services for your child?  Yes  No  
If yes, have you had trouble getting services?  Yes, explain: \_\_\_\_\_  No
15. In general, are you able to follow your doctor's recommendations in regard to medications and/or follow up visits?  
 All of the time  Most of the time  Some of the time  None of the time  
If you were unable to follow your doctor's recommendations "all of the time", please list the primary reason(s) why not: \_\_\_\_\_
16. How will your child get to school this year?  Bus  Walk  Ride Bike  Car  Other: \_\_\_\_\_

**PLEASE RETURN THIS SURVEY TO YOUR CHILD'S TEACHER BY FRIDAY, SEPTEMBER 12, 2008**

Thank you for your participation. If you are interested in participating in future research please contact the Nevada Institute for Children's Research and Policy at (702) 895-1040 or via email at nicrp@unlv.nevada.edu.



Cuestionario de Salud de Kinder

ESTIMADOS PADRES DE FAMILIA O TUTORES: La siguiente encuesta ha sido diseñada por el Nevada Institute Children's Research and Policy en la Universidad de Nevada Las Vegas, en colaboración con el Centro de Salud de Sur Nevada y el Distrito Escolar del Condado de Clark. La información adquirida en este estudio se utilizará para ayuda comprender la salud de los niños que comienzan preescolar este año. Le hemos pedido que participe porque usted tiene niño en preescolar. Toda la información obtenida será utilizada para discutir y estudiar el nivel de salud en grupo pero individual. No habrá conexión entre el nombre de su niño(a) y sus respuestas. Este estudio será confidencial.

Fecha de nacimiento del niño: \_\_\_/\_\_\_/\_\_\_ Nombre de la escuela primaria: \_\_\_\_\_
Sexo del niño(a) (circule uno): Masculino Femenino Peso Del Niño(a): \_\_\_ lbs. Estatura del Niño(a): \_\_\_ ft. \_\_\_ in.
Ingreso anual del hogar (circule uno): Etnicidad del Niño(a) (circule todos los que apliquen):
1. \$0 - \$14,999 5. \$45,000 - \$54,999 1. Americano 4. Nativo Americano/Nativo Alaska
2. \$15,000 - \$24,999 6. \$55,000 - \$64,999 2. Afro Americano 5. Isleño Pacífico
3. \$25,000 - \$34,999 7. \$65,000 + 3. Asiático 6. Latino
4. \$35,000 - \$44,999 7. Otro (especifique): \_\_\_\_\_
¿Cuántos niños viven en casa? (circule uno) 0 1 2 3 4 5 6+

Por favor conteste las siguientes preguntas sobre el niño(a) que se va a matricular en kinder este año.

- 1. ¿Su niño(a) en este momento cuenta con seguro médico? [ ] Si [ ] No
¿Encaso de sí? ¿Qué tipo de seguro? [ ] Privado [ ] Medicaid [ ] Nevada Check-up [ ] Otro: \_\_\_\_\_
2. ¿Su niño(a) ha sido visto por un proveedor de servicio médico este año para un examen de rutina (no por enfermedad) en los últimos 12 meses? [ ] Si [ ] No
3. ¿Su niño(a) ha sido visto por un proveedor de servicio médico al menos una vez al año para un examen médico (no por una enfermedad) desde su nacimiento? [ ] Si [ ] No
4. ¿Tiene su niño(a) un médico familiar (médico, enfermera de práctica o asistente de médico)? [ ] Si [ ] No
5. ¿Ha visto su niño(a) a un dentista en los últimos 12 meses? [ ] Si [ ] No
6. En los últimos 12 meses, ¿cuántas veces ha tenido que llevar a su niño(a) a la sala de emergencias por una enfermedad o lesión sin peligro la vida? [ ] Ninguna [ ] 1-2 [ ] 3-5 [ ] 6-9 [ ] 10 o mas
7. En los últimos 12 meses, ¿cuántas veces ha llevado a su niño(a) a ver a un proveedor primario de cuidados de salud (médico, enfermera o asistente de médico) para una enfermedad o lesión? [ ] Ninguno [ ] 1-2 [ ] 3-5 [ ] 6-9 [ ] 10+
8. ¿Le han dicho que su niño(a) tiene una condición médica que requiere tratamiento especializado o visitas a un proveedor de cuidado médico especializado? [ ] Si [ ] No
Si la respuesta es sí, por favor, escoja todas las condiciones que apliquen.
[ ] Oído/Discapacidad Auditiva [ ] Discapacidad medica [ ] Condición de Salud Mental [ ] Lentes/ de Contacto
[ ] ADD(Síndrome de déficit de atención) /ADHD(Síndrome de déficit de atención e hiperactividad)
[ ] Cáncer [ ] Otro (especifique): \_\_\_\_\_
9. ¿Cree que su niño(a) puede tener un problema médico pero usted no ha ido a ver a un médico? [ ] Si [ ] No
Si la respuesta es sí, por favor explique: \_\_\_\_\_
10. ¿Dónde lleva a su hijo para inmunizaciones (vacunas)? Si ha utilizado más de un tipo de local, por favor, indique la más reciente: [ ] Proveedor cuidado primario (médico regular) [ ] Centro de Salud [ ] Clínica de salud basada en la escuela [ ] Clínica de Salud Comunitaria [ ] Otros (especifique): \_\_\_\_\_
11. Si las vacunas no fueran necesarias para la escuela, ¿Vacunaría (inmunizaciones) a su niño? [ ] Si [ ] No
12. ¿A sido su niño(a) examinado por contaminación de plomo? [ ] Si [ ] No
13. ¿Se ha enfrentado con obstáculos en el acceso de salud para su hijo? [ ] Si [ ] No
Si la respuesta es afirmativa, por favor, explique las barreras con las cuales se a enfrentado:
[ ] La falta de seguro [ ] La falta de recursos financieros (dinero) para pagar el cuidado de la salud
[ ] La falta de transporte [ ] La falta de calidad de proveedores médicos [ ] Otro (por favor especifique): \_\_\_\_\_
14. ¿Alguna vez ha tratado de obtener servicio de salud mental o de comportamiento para su hijo? [ ] Si [ ] No
En caso que sí, ¿ha tenido problemas para obtener servicios? [ ] Si, explique: \_\_\_\_\_ [ ] No
15. En general, ¿está usted en condiciones de seguir recomendaciones del médico en cuanto a medicamentos y/o seguimiento de las visitas? [ ] Todo el tiempo [ ] La mayor parte del tiempo [ ] Algunas de las veces [ ] Nunca
Si no pudo seguir las recomendaciones del médico "todo el tiempo", por favor, anote los motivos principales ¿por qué no?: \_\_\_\_\_
16. ¿Cómo llegara su niño(a) a la escuela este año? [ ] Autobús [ ] Caminando [ ] Bicicleta [ ] Coche [ ] Otro: \_\_\_\_\_

VUELVA POR FAVOR ESTA INSPECCION A MAESTRO DE SU NIÑO POR EL VIERNES, 9/12/08
Gracias por su participación. Si estas interesado en participar en investigaciones futures por favor ponte en contacto con el Nevada Institute for Children's Research and Policy al (702) 895-1040 o via email al nicrp@unlv.nevada.edu