

## **Performance Outcomes Measurement System Quarterly Report**

### ***The Current Status of Clients Served by the Children and Families Commission of Orange County***

#### ***Special Focus: Comparison with the Orange County Health Needs Assessment***

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### **Executive Summary**

In Spring 2005, the Orange County Health Needs Assessment (OCHNA) released results from its 2004 survey of families with children birth to 5. This report makes a number of comparisons between the OCHNA data and children receiving services funded by the Commission during the same time period (2004). The comparisons span available information in four areas:

- Population characteristics
- Prenatal care and birth outcomes
- Health care coverage
- General health and school readiness

The OCHNA 2004 surveys allowed for estimates across all 259,993 children ages 0-5 in Orange County. The Commission's database, by comparison, had records for 29,859 children whose initial interview data were supplied in 2004, making them comparable with the OCHNA results. Selected highlights from the comparison results follow:

- In 2004, Commission-funded programs collected data on over 11 percent of the County's children ages 0-5 (p. 4).
- The Commission serves disproportionately *more* 0 and 1-year-olds than the county wide sample.
- Of the families receiving Commission services, far fewer mothers had completed high school (p. 7).
- Far more Commission-served families fell into the lowest income ranges (p. 8).
- The number of mothers receiving timely prenatal care exceeded Healthy People 2010 goals in both samples (p. 10).

- Children in the Commission-served sample were more likely to have been low or very low birth weight babies (p. 11).
- The percentage of children with health coverage was high in both samples (p. 12).
- There were proportionately more uninsured children in the age range 2 to 5 in the Commission-served sample than countywide (p. 13).
- Over one-third of children ages 2 to 5 countywide and over one quarter of children in Commission-funded programs were categorized as obese by CDC growth chart standards (p. 16).
- More 2-year-olds, and slightly more 5-year-olds, who have been served by Commission-funded programs have up-to-date immunizations (p. 16).
- Many more parents countywide report reading to their children five times per week or more when compared to Commission-served families (p. 17).

### **Introduction, Report Overview and Description of Data Sources**

In Spring 2005, the Orange County Health Needs Assessment (OCHNA) released its report summarizing the status of children ages 0 to 5 across the County<sup>1</sup>. Because many of the data elements in the OCHNA report are comparable to those compiled for the Commission in the Core Data Outcomes Module (CDOM) of the Outcomes Collection, Evaluation and Reporting Service (OCERS), many informative comparisons are possible. With that in mind, this report is devoted to a selected group of those comparisons spanning four major areas related to children's health:

- Population characteristics
- Prenatal Care and Birth Outcomes
- Health Care Coverage
- General Health and School Readiness.

The comparisons found in subsequent sections of the report are useful insofar as they allow an assessment of the children being reached by Commission-funded programs in relation to same-aged children across the county. Dental health is omitted from this report because an extensive report dedicated exclusively to Commission-funded dental health programs will be available in the near future.

*The Orange County Health Needs Assessment (OCHNA).* The OCHNA data come from a community-wide telephone survey conducted in 2004 to learn about the health status and needs of people living in Orange County. The data used in this report originated from 684 surveys of adult caregivers with children ages 0-5.

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<sup>1</sup> Available for online review or download at [www.ochna.org](http://www.ochna.org) "Status of Children 0-5, 2005"

The survey completed in 2004 was the third administration of the OCHNA survey, each conducted three years apart. With each administration, the scientific methodology used for sampling has been enhanced, improving the usefulness and reliability of the data. Through the use of required weightings it is possible to estimate the *actual* population figures for the various demographic and other characteristics examined. Population estimates drawn from the OCHNA report are reproduced in this report. In each discussion below, a page number in the OCHNA report where data were originally published is supplied (Look for: OCHNA p. ##).

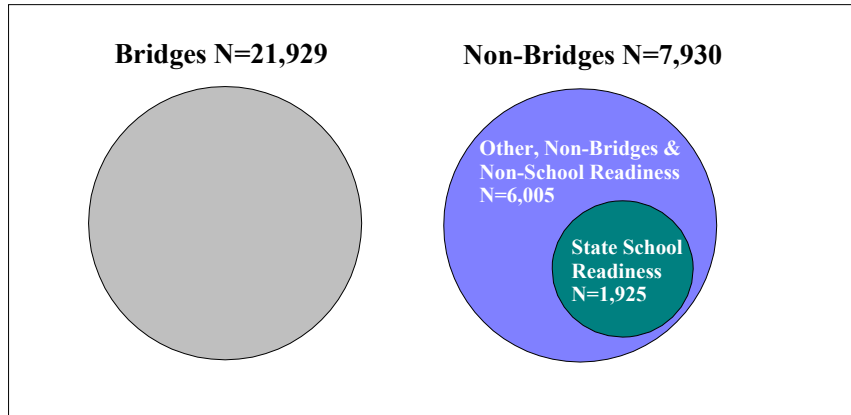
Although the sampling procedures were rigorous and introduced many improvements in the quality of the data, there is one concern about the reliability of the sampling methodology. Because the OCHNA surveyors<sup>2</sup> relied on a Computer Assisted Telephone Interviewing (CATI) system that did not call cell phones, persons relying totally on cell phones for communication could not be included in the sample. Many poor families share their living facilities with other families and relocate frequently. It is believed that families in this situation may rely exclusively on cell phones for communication, but there is little data to describe the extent to which this is the case. Thus the omission of cell phone numbers from the survey sample introduces a bias of unknown proportions that could potentially distort statistics produced for policy decision making. This is true of all CATI-dependent surveys. For example, the California Health Interview Survey (CHIS) is subject to the same concerns. A new question was added to the Commission's CDOM questionnaire on July 1, 2005 to learn the extent to which Commission-served families rely partially or exclusively on cell phones and to develop an estimate of the potential for bias from their omission.

*The Commission's Core Data Outcomes Module (CDOM).* The CDOM data used in this report come from questionnaires completed in 2004 by families with children ages 0-5 receiving services from Commission-funded programs. It is important to note that the data used for this report do not represent every child touched by Commission-funded projects during 2004. With the exception of the Bridges for Newborns program, CDOM data typically are collected only on children receiving a moderate to intensive level of service. Therefore, children and families attending a health fair, a single parent education class, or watching *Help Me Grow*, for example, are not included in the database. In addition, participation in the CDOM database is voluntary; children and families may receive Commission-funded services even if they refuse to sign the CDOM authorization form. Finally, only data from initial interviews were used for this report. Children who received Commission-funded services and completed the initial CDOM questionnaire in a previous year were not included in this report.

As seen in previous POMS Quarterly reports, the CDOM database is dominated by data on newborns retrieved from the Bridges for Newborns program. Therefore, when the influence of Bridges (i.e., child's age) distorts findings, comparisons to OCHNA statistics are made both with and without Bridges' infants. Figure 1 shows the three major subpopulations found in the CDOM database and reports their numbers for 2004.

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<sup>2</sup> ORC Macro, Macro Int'l Inc. More information is available at [www.macroid.com](http://www.macroid.com)

**Figure 1. Summary of Subpopulations in 2004**

It is evident in the graphics that follow that there are fluctuations in the number of responses to various questions. There are many reasons why the same number of responses is not available for every item. Some questions were introduced more recently, when the CDOM questionnaire was revised, and there have been far fewer opportunities to obtain responses to them. Other questions are posed only after a child reaches a certain age, and as a result, these also have fewer responses. Some questions ask for sensitive information and families are not required to answer every question. Sometimes “unknown” and “declined to answer” responses are omitted so as to obtain more valid percentage values.

*About the Comparisons.* The OCHNA data were collected during calendar year 2004. Therefore, this report uses CDOM data only from interviews completed during the same time period. Although this limitation ensures that the two populations being compared are contemporaneous, it also reduces the size of the CDOM samples from those seen in previous POMS Quarterly reports. Even with the smaller sample, the total number of data points available from CDOM’s 2004 initial interviews is still sufficient to ensure that the percentages reported are reliable and stable.

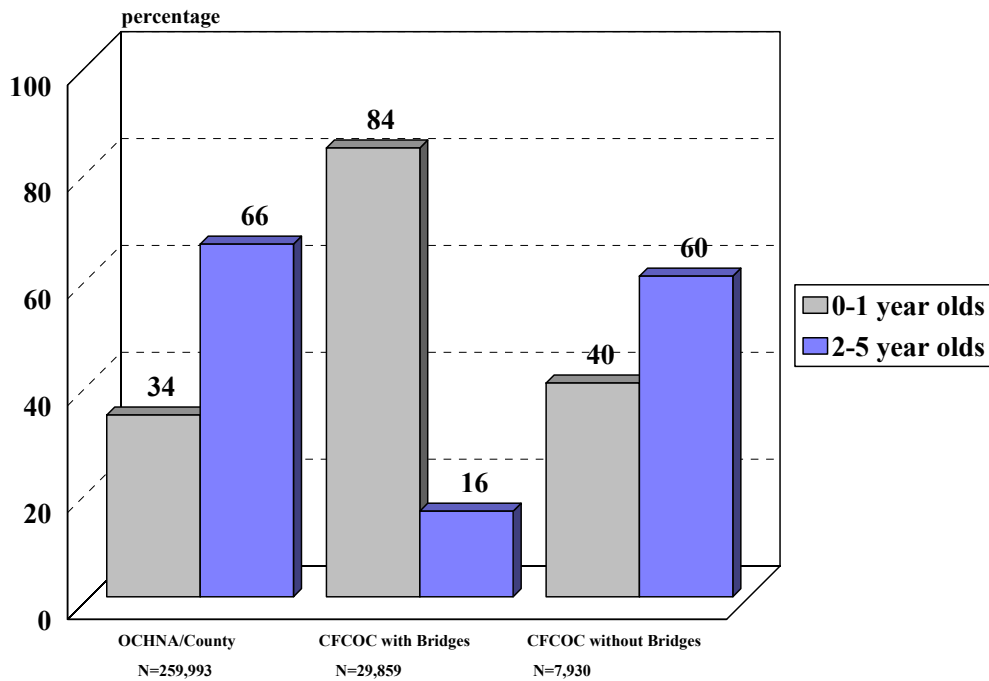
A final note concerns significance testing. No formal testing of differences between the OCHNA survey responses and CDOM data were conducted for this report. Given the large amounts of available data in both databases it is likely that significant differences will be identified that are not meaningful and could, therefore, be misleading.

### Population Characteristics

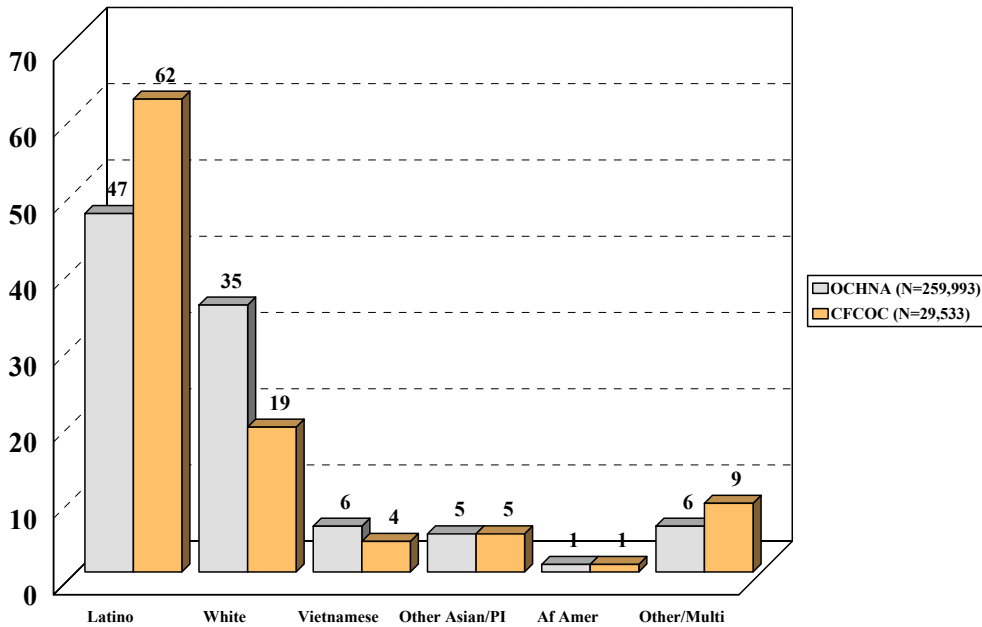
Based on data supplied by the California Department of Finance in 2004, OCHNA reports that there were 259,993 children between the ages of 0 and 5 in Orange County. This number represents nearly 9 percent of the total Orange County population. As shown in Figure 1 above, initial CDOM interviews were completed for 29,859 children receiving services from Commission-funded programs in the same year. Thus Commission-funded programs collected data on 11.5 percent of the county’s population of 0 to 5-year-old children.

*Age.* The OCHNA report subdivides children by age into 2 blocks: birth to 1-year-olds and 2- to 5-year-olds (OCHNA, p. 11). The comparison of OCHNA percentages with those for Commission-funded programs is summarized in Figure 2. As seen in the figure, and as would be expected, there are about twice as many 2- to 5-year-olds in the county as there are 0 and 1-year-olds. For CDOM data, the Bridges for Newborns program greatly influences the number of children in the two blocks, with 84 percent 0 and 1-year-olds. However, when Bridges’ newborns are excluded from the analysis, OCHNA and Commission-served groups look more alike, although Commission-funded programs reach more birth to 1-year-olds (OCHNA reports 34% birth to 1-year-olds compared to 40% in the CDOM database).

**Figure 2. Age Groups as a Percentage of the 0-5 Population: OCHNA Compared with Commission-Funded Programs in 2004**



**Figure 3. Ethnicity in the 0-5 Population: OCHNA Compared with CFCOC in 2004**

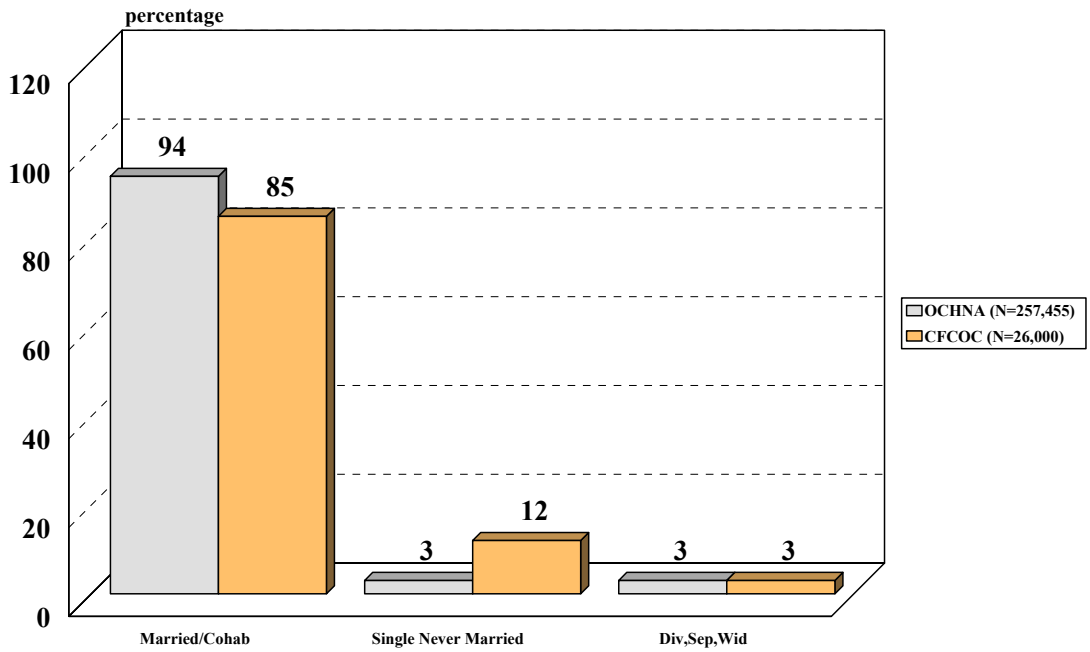


*Children’s Ethnicity.* The OCHNA uses six groups to display the ethnic breakdown of the county’s children (OCHNA, p. 16). CDOM data were reconfigured to use the same six groups and then compared to OCHNA results. The comparison is captured in Figure 3. As seen there, Commission-funded programs serve many more Latino children than their numbers in the County population would suggest. Similarly, a disproportionately low number of white children are served. This is also true of the Vietnamese population. This may be the result of continued and greater socioeconomic need in the population of recent Latino immigrants.

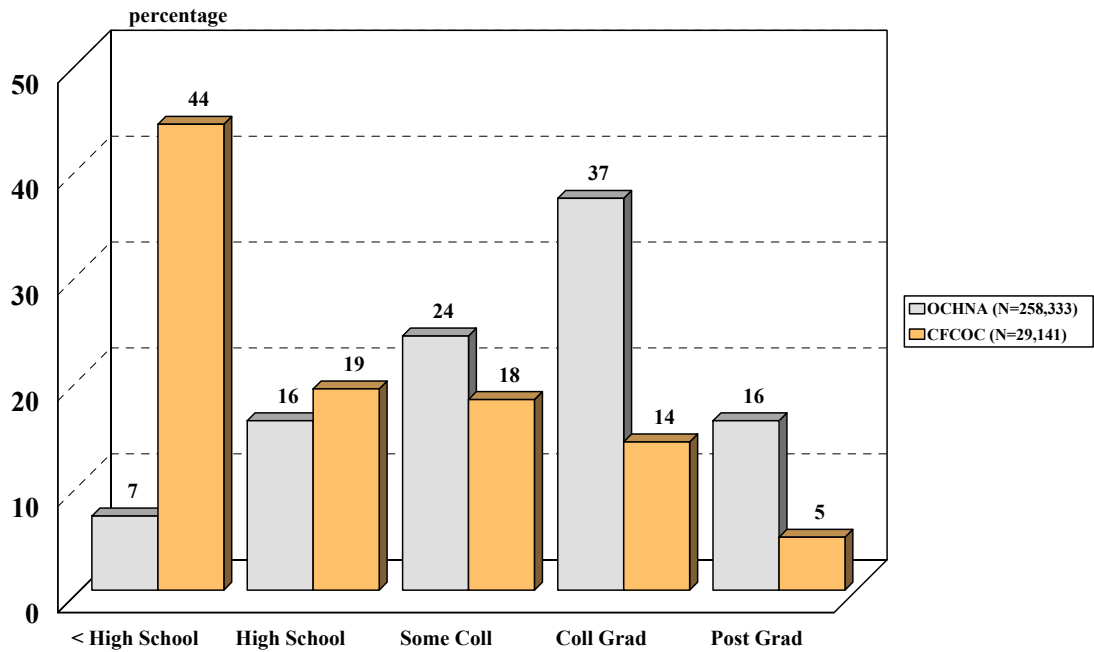
*Caregiver’s Marital Status.* A stable two-parent household remains a critical variable in the lives of young children and the marital status of parents is the best surrogate measure of such stability. Three categories of marital status were used to simplify the comparison of CDOM and OCHNA results: Married or cohabiting, single-never-married, and divorced-separated-widowed. The comparison to OCHNA data (OCHNA, p. 18) is summarized in Figure 4.

The decision to combine married and cohabiting caregivers was based on the observation that the number of unmarried partners was relatively small (about 2% for OCHNA data and 6% for Commission-funded programs). Be that as is may, there are noticeably more married parents countywide (by nearly 10 percentage points) than among families served by Commission-funded programs. Similarly there are more single-never-married parents among Commission families (by a similar margin). The percent of divorced-separated-widowed caregivers is identical.

**Figure 4. Marital Status of Parent(s) in Households with Children Zero to Five in 2004**



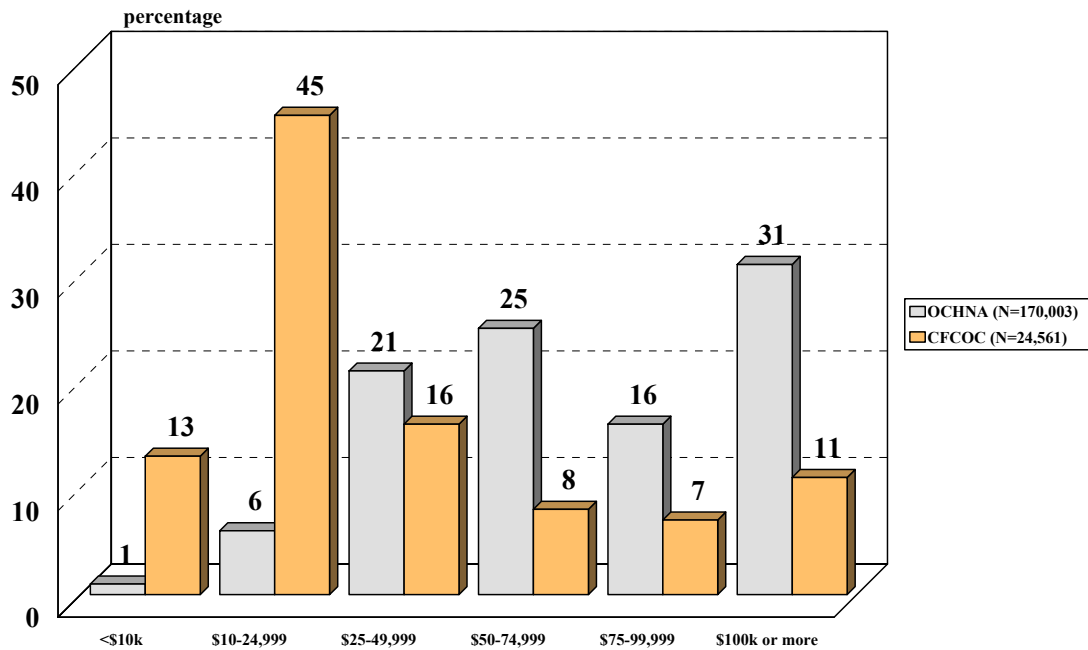
**Figure 5. Education Level of Parent/Guardian (OCHNA) Compared to Mothers' Education Level (CFCOC)**



*Caregiver Education Level.* The ability of a parent to contribute to his/her child’s preparation for school is believed to be related to the education level of that parent. While CDOM data have relied more on the education level of mothers because they are more often the primary caretakers of very young children, the OCHNA surveyors addressed their education level question to the parent or caregiver who answered the survey questions, which could have been the mother, father, step-parent or grandparent. The CDOM interview, on the other hand, relies exclusively on the mother’s education to examine this relationship with the question: *What is the highest level of school or degree completed by the child's mother?* Therefore, in Figure 5, the comparison is between the education level of the OCHNA respondent (OCHNA, p. 20) and the education level of CDOM mothers.

The figure suggests two wide disparities: CFCOC-served mothers are far more likely to have less than a high school education and OCHNA parents are far more likely to have baccalaureate or graduate degrees. To a lesser extent, CFCOC-served mothers were less likely to have even some college-level instruction. It should be borne in mind, however, that 25 percent of OCHNA respondents were birth fathers (OCHNA, p. 16) whose level of education may have been higher simply because they are males. Because the gender gap in education has narrowed considerably at the national level of late, it is difficult to estimate the influence that change has made on current data.

**Figure 6. Annual Household Income Reported in OCHNA Compared to Families Receiving CFCOC Services in 2004**



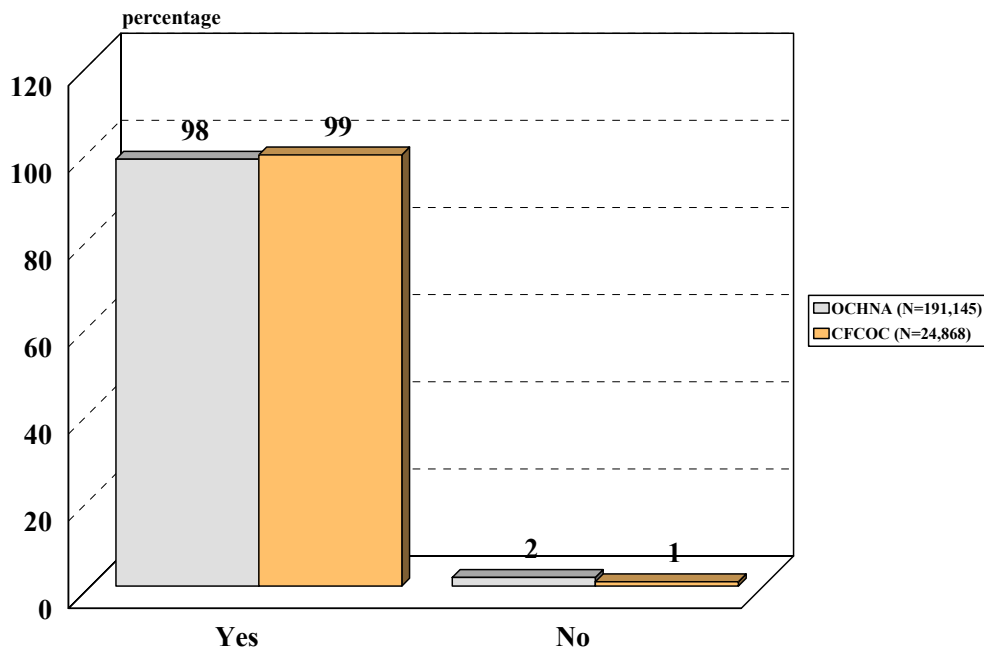
*Annual Household Income.* Figure 6 shows the comparison of annual household income reported to OCHNA surveyors (OCHNA, p. 20) and in CDOM interviews. The figure shows that, again, there are wide disparities. Families participating in CDOM were far more likely to fall in the lowest income groups while OCHNA respondents were more likely to fall in the upper income groups.

OCHNA (p. 21) reports poverty figures from the 2003 U.S. Census American Community Survey, which indicates that among Orange County households caring for children in the 0- to 5-year-old age group, nearly 18 percent were living at or below 100 percent of the federal poverty level. Because the dollar ranges for income levels reported annually in the *Federal Register* do not coincide with the ranges used in the CDOM analysis, the analysis of CDOM data uses a method of linear interpolation based on family size and income to estimate the *percentage* of families living at 100 or 200 percent of the federal poverty guidelines. For 2004, it was estimated that 64 percent of Commission-served families in CDOM were living at or below the 100 percent level.

### Prenatal Care and Birth Outcomes

It has long been understood that the early health outcomes experienced by young children can have a long-term impact on school readiness and subsequent academic performance. Therefore, both the OCHNA and CDOM interviews place heavy emphasis on variables associated with early health outcomes. This section of the report introduces a selection of comparisons in the area of early health outcomes.

**Figure 7. The Number of Mothers Receiving Prenatal Care as Reported in OCHNA and Among CFCOC-Served Mothers**

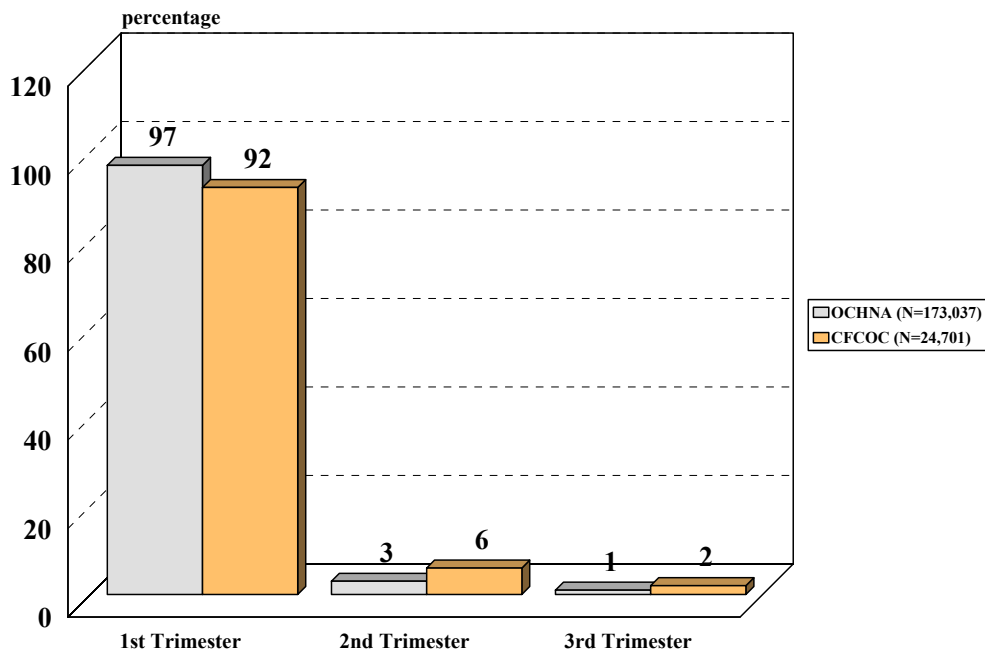


*Prenatal Care.* The number of mothers receiving prenatal care is shown to be high in both the Countywide population, as characterized by the OCHNA sample (p. 74) and in the CDOM sample. The results of the comparison are summarized in Figure 7. In both cases nearly all mothers are reported to have received prenatal care. Of utmost importance, however, is the timely commencement of prenatal care, ideally in the first trimester of the pregnancy. The comparison of OCHNA results with those from CDOM on the commencement of prenatal care is summarized in Figure 8.

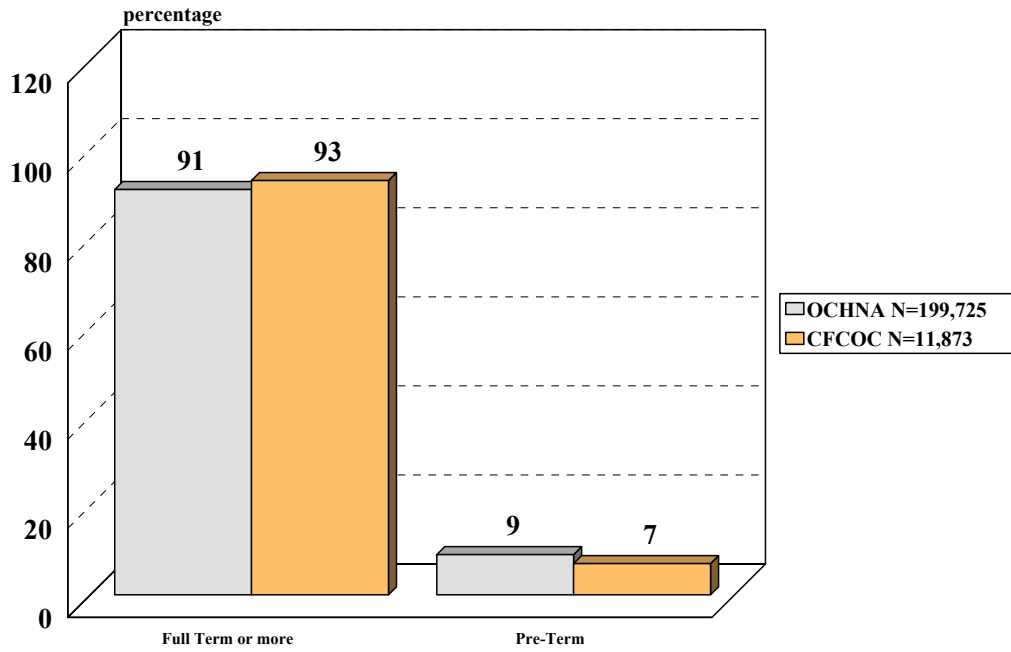
As seen in the figure, over 90 percent of mothers in both groups commenced their prenatal care in the first trimester, suggesting that Orange County as a whole, as well as mothers served by Commission-funded programs, received timely prenatal care. The Healthy People 2010 goal of no more than 10 percent with late or no prenatal care has already been achieved in both groups.

*Preterm births.* Another early health factor strongly influencing the health and school readiness of young children is preterm birth and its potential negative sequelae. Therefore the gestation age of newborns is an important factor that is routinely observed in connection with a child’s future. Figure 9 shows the comparison of gestational terms in both the OCHNA (see p. 95) and CDOM samples. The figure shows that over 90 percent of children in both groups were full term or more. While 7 percent of births in the CDOM sample were observed to be preterm births, 9 percent were preterm in the countywide population.

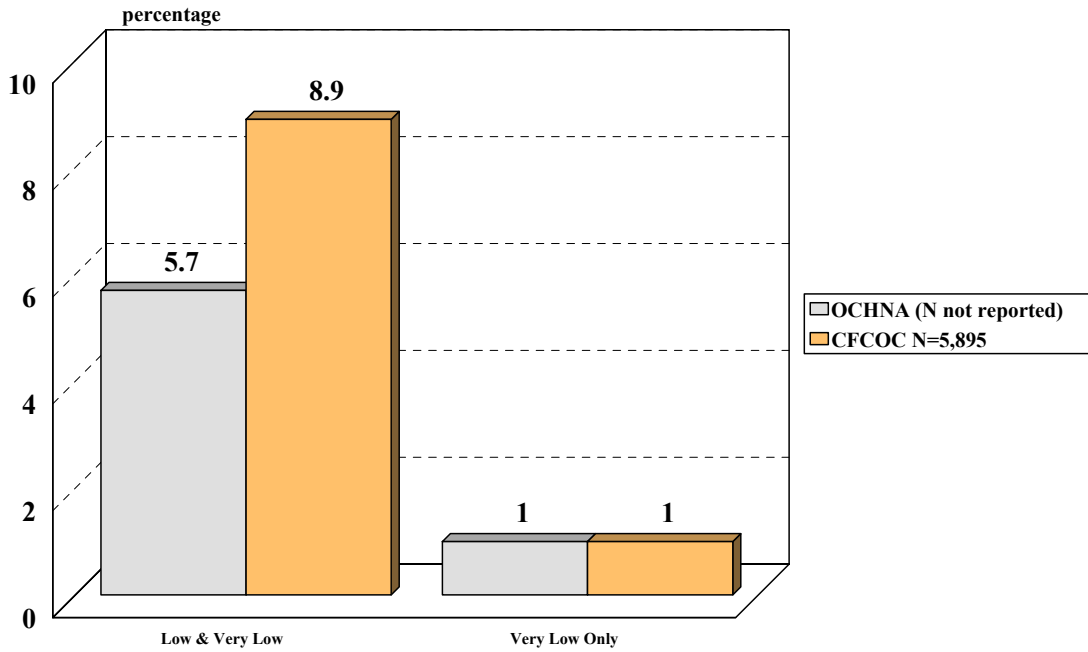
**Figure 8. Commencement of Prenatal Care as Reported in OCHNA and Compared to CFCOC-Served Mothers**



**Figure 9. Percentage of Preterm Births as Reported in OCHNA and Compared to CFCOC-Served Mothers**



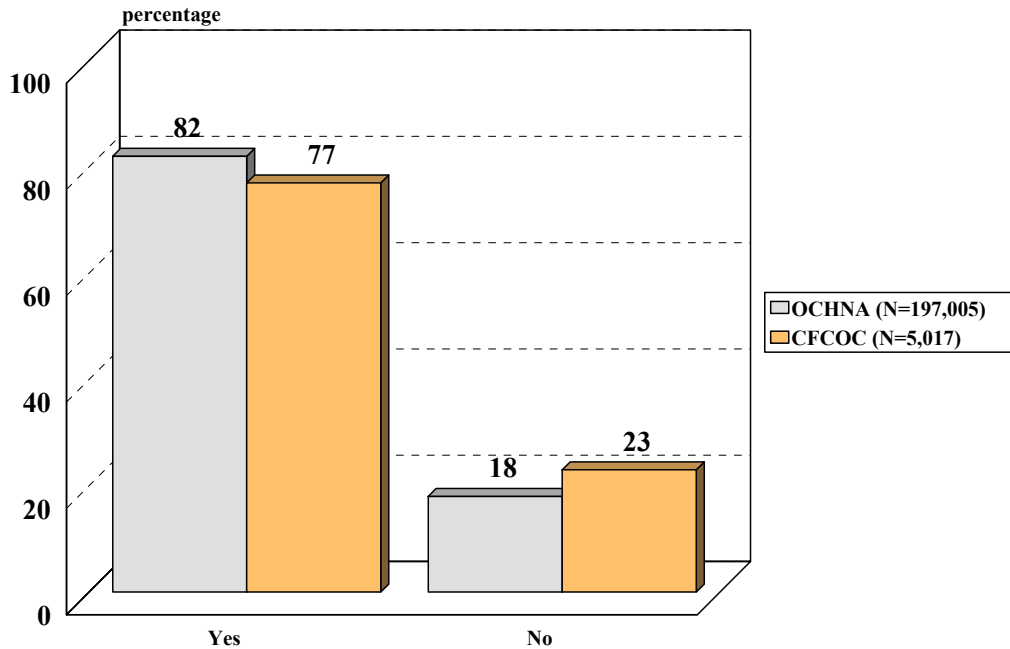
**Figure 10. Percentage of Low and Very Low Birth Weights as Reported in OCHNA and Compared to CFCOC-Served Mothers**



*Low and very low birth weight.* Low and very low birth weights can also interfere with an infant’s early health and preparation for school. Figure 10 summarizes the comparison of CDOM to the countywide population as reported in OCHNA (p. 96). As the figure suggests, there were more low or very low birth weights among infants served by Commission-funded programs. This difference was especially prominent when children served in State School Readiness Programs (9.7% low or very low birth weight) and other Non-Bridges Programs (10.3% low or very low birth weight) were compared with newborns receiving services through Bridges (4.2%).<sup>3</sup>

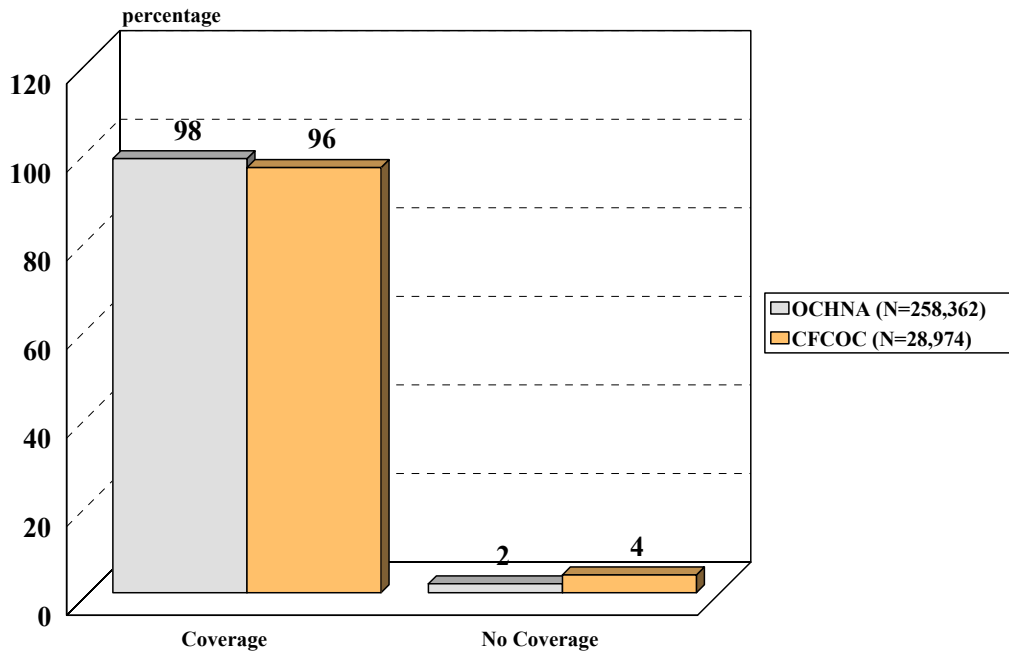
*Breastfeeding.* Mother/child health professionals continue to advocate for breastfeeding as new research findings emerge that demonstrate its benefits. Figure 11 shows the number of newborns reported to have been breastfed countywide and among Commission-served families. As seen in the figure, somewhat fewer Commission-served infants were breastfed when compared to the OCHNA sample (p. 98). Although the difference is only 5 percentage points, most would argue that continued effort is required to ensure that all mothers breastfed their newborns if they are able to.

**Figure 11. Percentage of Breastfed Newborns as Reported in OCHNA and Compared to CFCOC-Served Mothers**



<sup>3</sup> First reported in the POMS Quarterly Report dated December 1, 2004.

**Figure 12. Percentage of Children with Any Type of Health Care Coverage as Reported in OCHNA and Compared to CFCOC-Served Children**



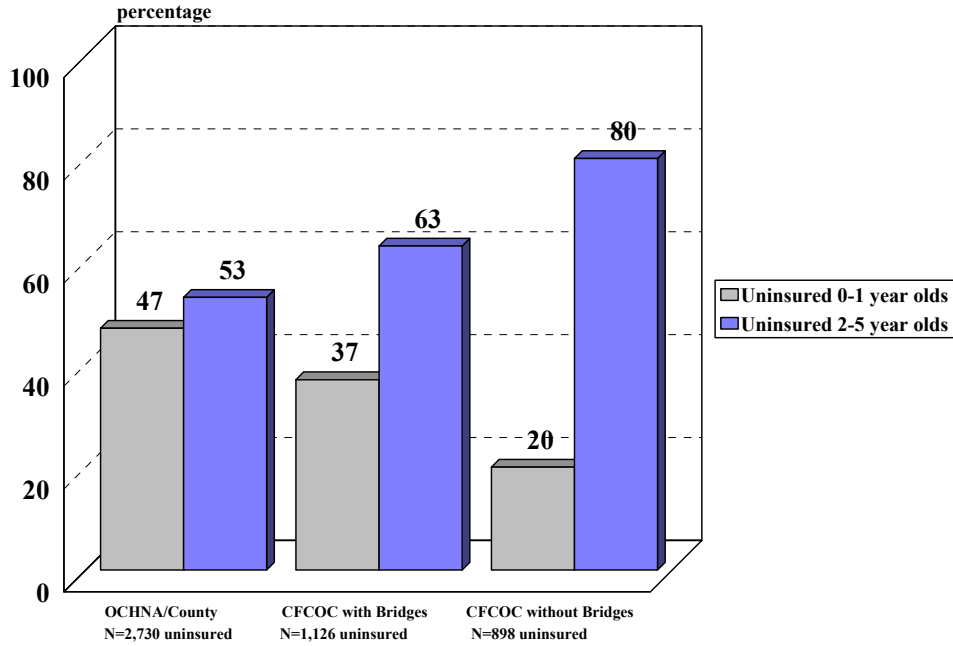
**Health Care Coverage**

As one of the critical correlates of child health, health care coverage continues to be seen by many policy makers as one of the most important variables supporting access to care. Both the OCHNA and CDOM interviews ask a number of questions that allow a detailed analysis of the status of health coverage among the county’s children. A number of the responses given to those interview items are analyzed and compared in this section of the report.

First, Figure 12 compares the number of children in both populations to learn what percentage of them has *any* form of health care coverage. As seen in the figure, only two percent of children 0-5 countywide and four percent of all Commission-served children (Bridges and non-Bridges combined) had no coverage of any kind in 2004 (see OCHNA, p. 45). However, when the child’s age is examined and children without coverage are isolated, a picture of which children are more likely to be without coverage emerges. These comparisons are provided in Figure 13.

Concentrating only on uninsured children, Figure 13 shows that although a few more older children (ages 2-5) have no medical coverage among the countywide population (OCHNA, p. 46), many more children in the older segment are without coverage among Commission-served children. This is especially true when children served in the Bridges for Newborns program are removed from the analysis, as they are in the two columns on the far right of the figure.

**Figure 13. Ages of Uninsured Children as Reported in OCHNA and Compared with Commission-Served Families in 2004**



**Figure 14. Source of Health Coverage Health Care Coverage as Reported in OCHNA and Compared to CFCOC-Served Children**

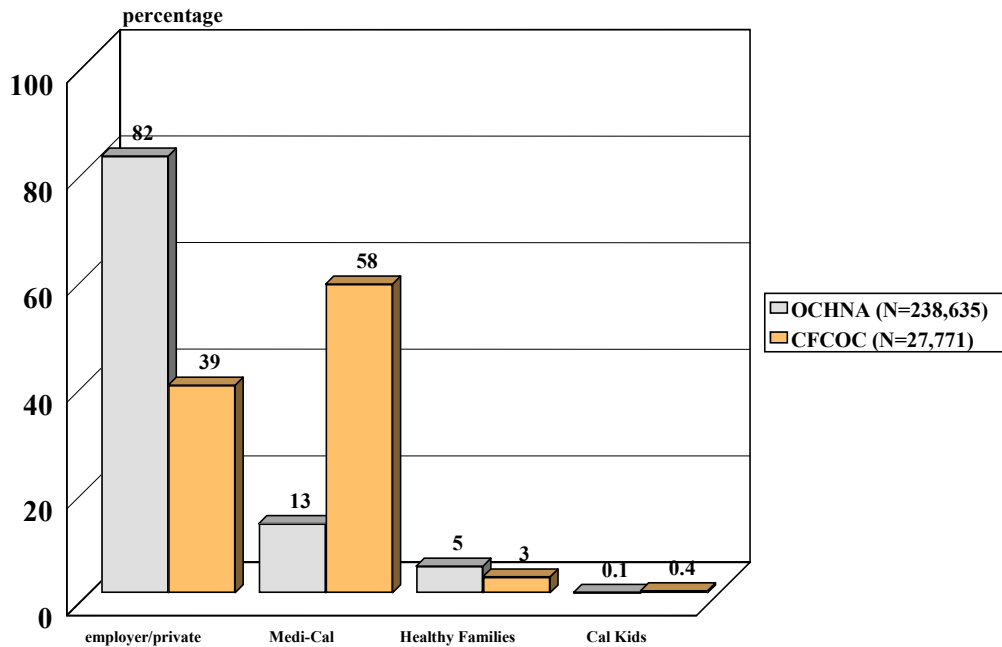


Figure 14 examines the source of health care coverage for children who are *insured*. The figure shows that, in the OCHNA sample (OCHNA, p. 49) many more children were covered through programs sponsored by an employer or otherwise privately funded (82% in OCHNA versus 39% Commission). The opposite is true among children covered by Medi-Cal where Commission-served clients outpace the OCHNA sample by over 4 to 1 (58% Commission versus 13% in OCHNA). In both samples, Healthy Families, California Kids (and similar programs) cover far fewer children.

## General Health and School Readiness

Many measures could be selected to indicate the general health and school readiness of young children. For this report, three were chosen based on relevance to current funding efforts as well as availability of data. They are childhood obesity, immunization status, and the frequency with which parents read to their children.

*Obesity.* The weight status of young children has become a major health concern as more youngsters achieve Body Mass Index (BMI) values that fall into the *obese* range as defined by the Centers for Disease Control and Prevention (CDC) growth charts.<sup>4</sup> Figure 15 compares the percentage of 2- to 5-year-olds who fall into each of the three CDC-provided ranges of normal, at risk for overweight, or overweight. As seen in the figure, the number of children observed to be of normal weight was equal in the two samples at 56 percent (see OCHNA, p. 111). For 2- to 5-year-old children at risk for overweight, there were twice as many in the CDOM sample (16% versus 8%). However, for the overweight category, there were many more in the OCHNA sample representing the population of 2- to 5-year-olds countywide (36% versus 28%).

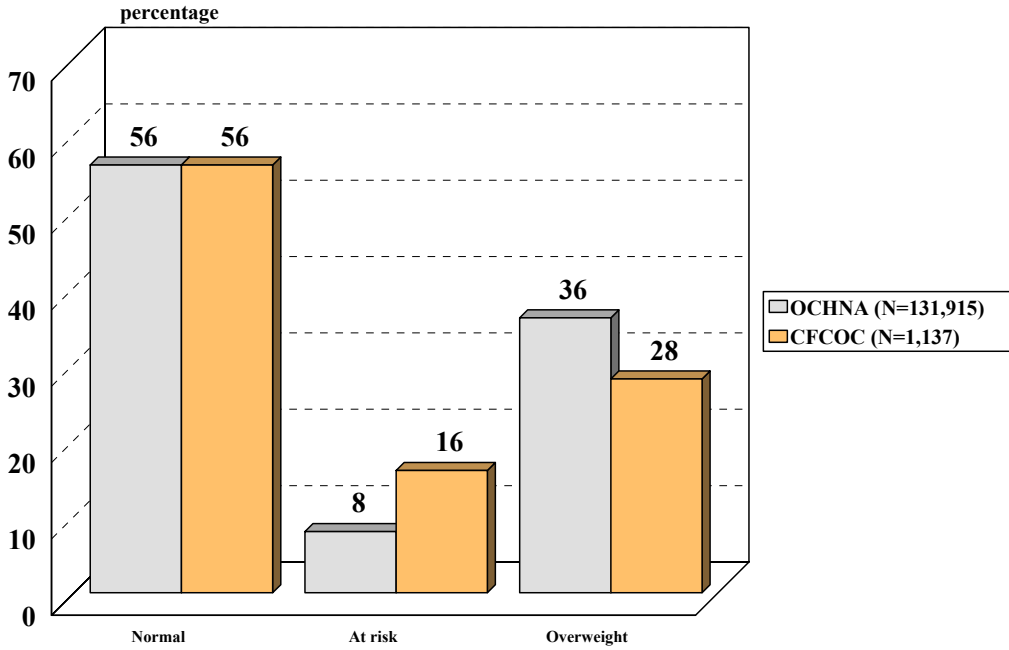
*Immunizations.* Two ages are used by the OCHNA survey to evaluate the timeliness of children's immunizations, 2 and 5 (see OCHNA, p. 118). This report will follow suit. Figure 16 reports the percentage of 2-year-olds and 5-year-olds in both the OCHNA and CDOM samples who have up-to-date immunizations. Among 2-year-olds, more Commission-served children had up-to-date immunizations than their counterparts countywide (90% versus 74%). Among 5-year-olds, the gap was much narrowed with about equal percentages in each group having up-to-date immunizations (93% in OCHNA's sample versus 95% in CDOM's).

*Reading Frequency.* When parents read to their children frequently, children have many more opportunities to grow cognitively. The final comparison between the OCHNA (p. 149) and CDOM samples, displayed in Figure 17, examines reading frequency.

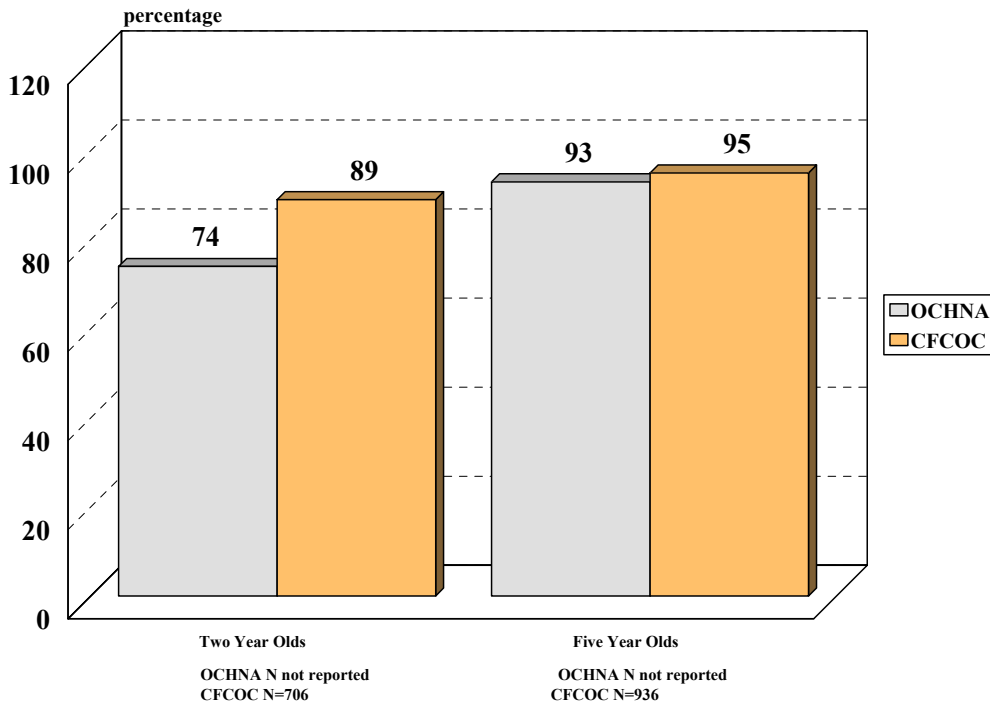
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<sup>4</sup> [www.cdc.gov](http://www.cdc.gov)

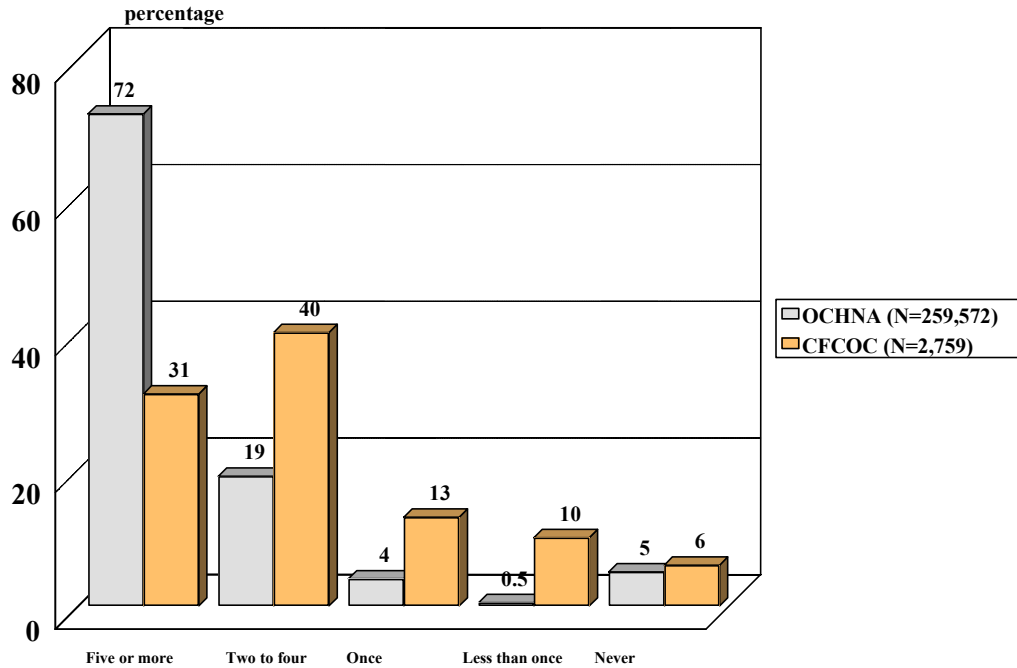
**Figure 15. Weight Status of Children Two to Five Years Old as Reported in OCHNA and Compared to CFCOC-Served Children**



**Figure 16. Up-to-Date Immunizations for Two- and Five-Year Old Children as Reported in OCHNA and Compared to CFCOC-Served Children**



**Figure 17. Number of Times Per Week Children are Read To As Reported in OCHNA and Compared to CFCOC-Served Children**



As the figure suggests, over twice as many parents queried in the OCHNA sample reported reading to their children five times a week or more (72% versus 31%). Forty percent of CFCOC-served parents reported reading to their children two to four times weekly, and 13 percent and 10 percent, respectively, reported reading to them only once weekly or less. About the same number of parents in both samples admitted they never read to their children.

**Summary**

The results of comparisons between the OCHNA families and families in the CDOM data base present a mixed picture, showing important successes for Commission programs in some areas and the need for more growth in others. Many children are being encountered very early in their lives in numbers disproportionate to their numbers in the countywide population, even when Bridges for Newborns data are excluded from analyses. The Commission continues to successfully reach the county’s poorest families. Almost all mothers continue to commence their prenatal care in the first trimester, with both samples exceeding goals for Healthy People 2010 in accessing timely prenatal care. More 2- and 5-year-old Commission-served children had up-to-date immunizations.

At the same time, while most children had some form of health care coverage in both the OCHNA and CDOM samples, children between 2 and 5 continue to be the largest group without coverage in either sample, but especially among Commission-served children. Although fewer Commission-served children qualified for the CDC label of *obese*, too many children—from one quarter to one third—still fall into that category.