

# PARENTS IDENTIFY TOP CHILD HEALTH ISSUES

Regional Pediatric Health Assessment 2008

July 2008



Improving the health status of children is a key component of The Children's Medical Center of Dayton's mission. To help develop meaningful strategies in this area, Dayton Children's evaluates the status of our region's pediatric health through an assessment conducted every three years.

This paper outlines and discusses the key findings from the 2008 assessment and offers some suggestions for action to address the health concerns of the region's children.

The 2008 study, funded by the Dayton Children's Foundation Board, shows great strides in the area of safety as a result of strong awareness and education programs. However, it also points to some continuing areas of concern about the health of the region's children:

- ▶ Almost 1 in 4 children are overweight – caused by a lack of proper nutrition and physical activity.
- ▶ Allergies or asthma continue to affect almost 1 in 5 area children; over 1 in 10 children have been diagnosed with developmental delays/learning disabilities.
- ▶ Nearly 1 in 10 children ages 6 to 14 has not had a dental visit within the past year.

## *How was the study conducted?*

Professional Research Consultants (PRC) randomly interviewed 600 parents with children younger than 15 years old within the Dayton Children's service area. That area was then divided into the primary (Clark, Greene, Miami and Montgomery counties), northern (Allen, Auglaize and Shelby counties), and southern (parts of Butler and Warren counties) service areas.

The interviews took place by telephone and covered these aspects of children's health and safety:

- ▶ Daily life
- ▶ General and mental health status
- ▶ Special health needs
- ▶ Injury
- ▶ Violence
- ▶ Environmental health
- ▶ Safety
- ▶ Nutrition and weight
- ▶ Physical activity
- ▶ Medical care and health care access
- ▶ Health care information sources

Experts at Dayton Children's offer insight on these statistics and how they compare to national trends, while providing actions and tips for continued education and prevention.

While the Regional Pediatric Health Assessment covers many health topics, it is intended to provide community health advocates with a guide to the health issues affecting the region's children. Dayton Children's hopes this report will be a resource to all community members focused on improving the health status of our region's children.

## Introduction

Dayton Children's conducted regional pediatric health assessments in 2002, 2004\* and in 2008 and through these studies has identified areas for improved education and services to address the most pressing children's health issues in our area.

John Pascoe, MD, director of child health research at Dayton Children's, says these types of studies are important for a community. "You may miss important needs of the community if you simply stay in your office or hospital and don't reach out to the community to ask groups of citizens, especially parents, about what they think is important to their children's health," Dr. Pascoe explains. "These answers and issues can then be used to plan services that are more carefully tailored to meet the needs of the community as a whole rather than solely the families that show up at your door."

## Comparisons

PRC compared the 2008 findings to previous survey data, and this comparison showed which areas have improved and which need to be addressed. PRC compared the three service areas to each other and the region's findings to national averages. The national averages were determined by the 2003 PRC National Health Survey. Both studies used the same methodological approach allowing for solid comparisons.

PRC also compared the region's results to the goals in *Healthy People 2010: Understanding and Improving Health*. *Healthy People 2010* is sponsored by the U.S. Department of Health and Human Services and outlines a comprehensive, nationwide health promotion and disease prevention agenda. It is designed to serve as a roadmap for improving the health of all people in the United States during the first decade of the 21st century.

## Health concerns emerging from the study

Overall, the health assessment showed children in this region are basically healthy. In fact, 56 percent of parents said their children experienced no days of poor physical health in the previous month. That is similar to the 2004 data and an increase from the nearly 50 percent in 2002.

### Three areas of concern needing increased awareness regarding prevention and treatment:

1. The number of overweight children in the region;
2. The number of children diagnosed with allergies, or developmental delays/learning disabilities; and
3. The number of children regularly visiting a dentist.

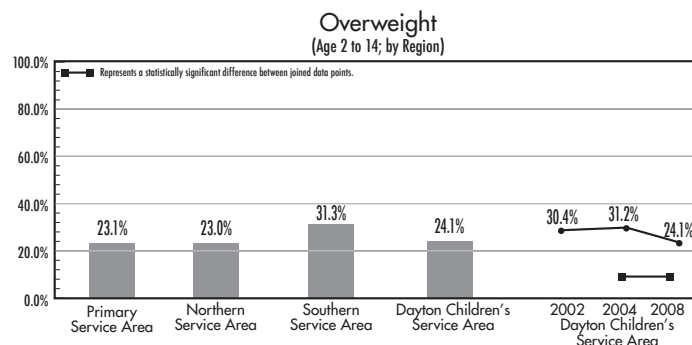
The data relating to these statistics suggest a focus for the region's pediatric health agenda for the coming years.

## Childhood obesity continues to present major health implications

Respondents were asked to indicate what they perceive to be the number-one health issue facing children in their community. Nearly one-fourth of respondents identified obesity, nutrition or exercise as the number-one community health issue facing children under age 15. In comparison with the 2004 findings, this marks a significant increase in mention of obesity as the number-one health issue.

"While it is good to see that parents are becoming more aware of childhood obesity, this disease still leads to major health issues for children," says James Ebert, MD, lead physician of the lipid clinic at Dayton Children's. "Risk factors for heart disease, such as high cholesterol and high blood pressure, occur more frequently in overweight children as compared to children with a healthy weight."

Nationally and regionally, obesity continues to be a major pediatric health concern. According to the health assessment, 1 in 4 children between the ages of 2 and 14 are overweight, a slight decrease since 2004. Parents of overweight children often believe their child's weight is just fine. The health assessment showed that only 27.3 percent of parents with overweight children perceive their child as overweight.

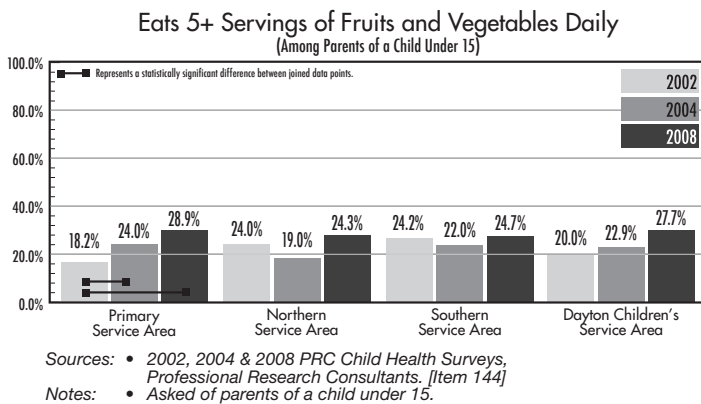


- Sources: • 2002, 2004 & 2008 PRC Child Health Surveys, Professional Research Consultants. [Item 143]
- Notes: • In those aged 6 to 19 years, overweight or obesity is defined as at or above the gender- and age-specific 95th percentile of BMI based on analysis of data used to construct the year 2000 growth charts.
- Asked of parents a child aged 2 through 14.
- Note that an improved method of calculating weight status was used in 2008, one that is slightly different from that used in 2002 and 2004; however, the effect on overweight prevalence appears to be marginal.

Poor diet and lack of physical activity are the primary causes for the increased prevalence of obesity among children. The 2008 health assessment pointed clearly to those as contributors.

## Poor diet

Healthy eating is associated with reduced risk for many diseases, including the three leading causes of death: heart disease, cancer and stroke. Currently, only 1 in 5 children in the region is eating a combination of fruits and vegetables that averages five servings each day. *The Healthy People 2010* goal is for 50 percent of the population to consume at least three daily servings of vegetables and 75 percent to eat at least two servings of fruit each day.



## Lack of adequate physical activity

Regular physical activity reduces the risk for many diseases, helps control weight and strengthens muscles, bones and joints. With the combination of television, computers, video games and reduced physical education classes, children are spending less time engaged in moderate to vigorous physical activity.

The assessment showed only 70 percent of kids participated in vigorous physical activity at least three days a week and nine percent did not report any vigorous physical activity. (Vigorous physical activity is defined as exercise that lasts for at least 20 minutes and causes the child to sweat and/or breathe hard.) This compares negatively to the *Healthy People 2010* target of 85 percent participating in vigorous physical activity at least three days a week.

Further, many kids do not have an adequate number of physical education (PE) classes at school during the week. Only 15.3 percent report daily PE classes (five or more times per week). Among parents with children in physical education classes, only 40.3 percent report that their

child spends 30 minutes or more of each PE class actually exercising or playing sports.

The *Healthy People 2010* objectives strive to change two things. First, the goal is for 50 percent of children to have daily PE classes. The second goal is to increase the amount of time the kids spend being active in these classes. Ideally, 50 percent of kids will spend at least half of PE class time being active.

What are kids doing? More than 26 percent of local children ages 6 to 14 spend three or more hours a day watching television. Nine percent of kids from the same age group spend three or more hours on the computer each day. *Healthy People 2010* has established a goal of 75 percent of children watching two or fewer hours of TV a day compared to the 73.3 percent reported as part of this assessment.

With increased community awareness about the dangers of obesity, some changes are beginning to emerge. Almost one-fourth of the region's overweight children are trying to lose weight. This finding is similar to 2004 but is significant when compared to 2002 when only 15 percent of overweight children were working to lose weight. When asked to describe the specific weight loss or weight control methods that their children used in the past month, 33.8 percent of parents mentioned dieting and 26.3 percent of parents mentioned exercising.

“Dayton Children’s works with children to not only help them safely lose weight but to change their lifestyle to reduce the likelihood that they will become overweight again,” says Dr. Ebert. “Just a few changes in diet and activity can make a big difference.”

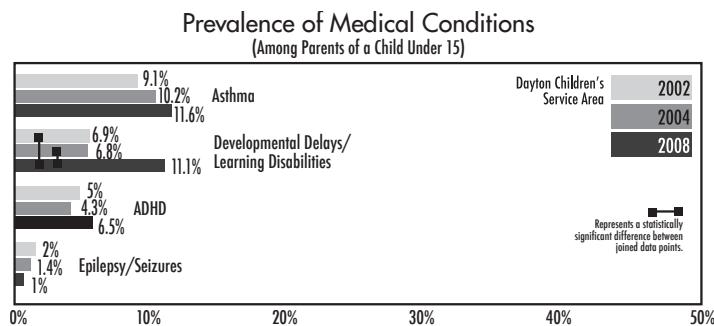
Dayton Children’s offers several programs and clinics for children struggling with weight problems. A few of the clinics and programs are the nutrition clinic, the lipid clinic and The Body Shop. These classes can help educate kids about healthy lifestyles—lifestyles that will help them avoid becoming overweight or help them fix the problem.

In addition, Dayton Children’s helped develop and sponsors the Boonshoft Museum of Discovery’s Exhibits-to-Go program titled *Food, Fitness and Fun*. This program, available to all schools in the region, explores proper food choices, portion control and exercise to help address obesity in our community.

Dayton Children’s continues to work with community groups, school nurses, local physicians and caregivers to develop resources to address childhood obesity and to help families develop healthy lifestyles.

## ***Almost 1 in 5 children affected by asthma or developmental delays/learning disabilities; nearly 14 percent of children have allergies***

Just over 10 percent of the region's children suffer from or have been diagnosed with asthma, parents reported. According to Robert Fink, MD, director of pulmonary medicine at Dayton Children's, this statistic is not surprising. When compared with other cities regarding the prevalence of asthma, the Miami Valley very often ranks high on the list.



Sources: • 2002, 2004 & 2008 PRC Child Health Surveys, Professional Research Consultants. [Items 50-53]  
Notes: • Asked of parents of a child under 15.9.1%

Even though the prevalence in the Miami Valley is lower than the nationwide average, the number of asthmatic children in the region causes concern because of the implications of asthma. Dr. Fink says kids often have to go to the emergency department, be hospitalized and miss school because of asthma. Nearly 60 percent of asthmatic children went to a physician or clinic last year specifically for their asthma, and 60 percent of asthmatic kids must take medicine for it.

According to national data, asthma is the number-one cause of school absence. The health assessment revealed that 25 percent of area kids with asthma missed school in the past year because of it. While this number is a significant decrease from 2004 (46 percent), attention to proper asthma management is necessary to keep kids healthy.

While there has been an increase in better asthma management due to improved medications and widespread use of appropriate drugs, Dayton Children's is still concerned that children and their parents are not always

keeping up with their asthma routine. Over-the-counter medicines will provide short-term relief, but do not treat the lung inflammation caused by asthma.

"Children may not feel bad if they miss a day of their medication, however skipping a day or two can cause trouble down the road because asthma management requires routine maintenance," says Dr. Fink. "Proper use of medication can have the greatest impact on reducing asthma hospital admissions."

National data suggests that children usually take their prescribed medicine 20 to 40 percent of the time. Dayton Children's will continue to work with children and parents to take medication routinely to reduce the likelihood of an asthma attack resulting in a visit to the emergency department or hospitalization.

Dayton Children's website has information about taking care of a child after an asthma attack, and the Asthma and Allergy Foundation of America (AAFA) guides families in making a management plan which will help prevent the attacks from occurring.

Allergies continue to be a problem for children in the region. Almost 14 percent of the region's children have been diagnosed with an allergy to an airborne substance and 11.5 percent of children missed one or more school days due to allergic symptoms in the last year.

Dayton Children's website has information about possible allergens in the environment and tips for making a living area more comfortable for the child with allergies. According to the AAFA, even though one's capacity to become allergic is genetic, what one is allergic to is not. As with asthma, children can take some control of their allergies.

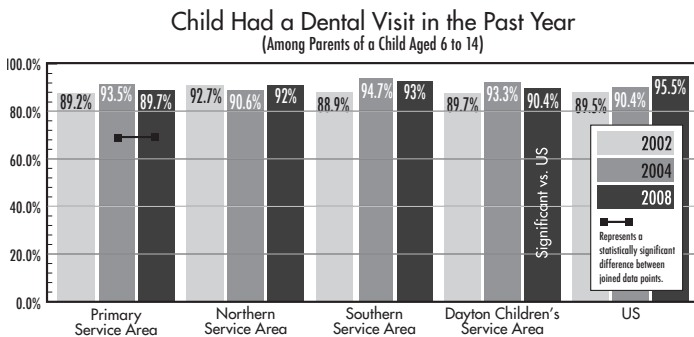
Additionally, the assessment identifies an increase in children who have been diagnosed with developmental delays/learning disabilities from 6.9 percent in 2002 to 11.1 percent in 2008.

"While it is difficult to tell why there was such an increase in those diagnosed with developmental delays or learning disabilities, there may be some contributing factors to note," says Eileen Kasten, MD, director of developmental pediatrics at Dayton Children's. "Over the past few years, there has been an increase in the recognition of the autism spectrum and more children are being diagnosed earlier and with milder symptoms."

Dr. Kasten explains that recent policies from the American Academy of Pediatrics coupled with greater community awareness and referrals from organizations such as *Help Me Grow* may partially explain the rise in diagnoses of developmental delays and learning disabilities. This will be an issue that Dayton Children's will continue to monitor.

## ***Better dental health needed***

According to the survey, nearly 1 in 10 children ages 6 to 14 has not had a dental visit within the past year. These numbers compare unfavorably to the national statistics.



Sources: • 2002, 2004 & 2008 PRC Child Health Surveys, Professional Research Consultants. [Item 26]  
• 2008 PRC National Health Survey, Professional Research Consultants  
Notes: • Asked of parents of a child aged 6 through 14.

“Tooth decay is the single most common chronic childhood disease, yet 90 percent of all tooth decay is preventable,” says Gordon Womack, DDS, medical director of Dayton Pediatric Dentistry at Dayton Children's. “It is well known that cavities in primary teeth increase the risk of the secondary teeth also developing a disease. When children are in pain from dental-related causes, that pain either directly or indirectly affects their ability to speak, eat, sleep or concentrate.”

One of the main causes of tooth decay is sugary foods and drinks. Many parents may not be aware that letting kids sip on sugary drinks for hours or putting them to bed with a bottle of milk can be harmful.

The American Association of Pediatric Dentistry recommends that a child's first dental visit occur shortly after the first tooth erupts and no later than the child's first birthday. At this visit, a pediatric dentist cannot only assess the child for potential problems, but parents have the opportunity to learn about proper brushing techniques and how to achieve good dental health throughout the child's life.

In addition, 58.9 percent of parents reported that their child brushes his or her teeth at least twice a day, 25.1 percent once a day and eight percent less often or not at all.

“In addition to making sure children brush their teeth at least twice a day, parents should make sure it is quality brushing,” says Dr. Womack. “Tooth brushing should be supervised for children up to 8 years old to make sure they brush for two full minutes, use fluoridated toothpaste with a soft bristle brush and brush in circles. Less than 40 percent of children actually follow these proper brushing techniques.”

Dayton Children's will continue to educate parents on having their children visit a dentist early in life and for regular check ups.

“Proper preventive care and a balanced diet are key to the oral and overall health of every child,” says Dr. Womack. “When kids are exposed to sugar for extended periods, they are at a higher risk of tooth decay. If left untreated, this puts children at increased risk for pain and infection, which can lead to missed school, lost sleep and loss of appetite.”

## ***Increased awareness and education positively impacted child safety and environment***

Accidental injury remains the leading killer of our nation's children (ages 1 to 14). Since the initial study in 2002, Dayton Children's has focused intently on increasing awareness of the importance of car seats and helmets in preventing accidental injury. The 2008 results show the programs continue to impact the community.

According to the report, over 9 in 10 area parents (94.8 percent) indicate that their child “always” uses a car seat or safety belt when riding in a car, which is an increase since 2002. However, Dayton Children's has continued to focus on young children being properly restrained. Locally, 95.3 percent of parents report their child under the age of 5 uses a car seat or safety belt when riding in a vehicle. This indicator is close to but fails to satisfy the *Healthy People 2010* goal that all children under the age of 5 will use a car seat or safety belt when riding in a vehicle and is slightly less than the national rate of 97.4 percent.

“Dayton Children's knows a car seat can reduce death by up to 71 percent,” says Thomas Krzmarzick, MD, director of the Regional Pediatric Trauma and Emergency Center at Dayton Children's. “With that in mind, we seek opportunities to educate the community about the importance of these safety devices and make them available where we can.”

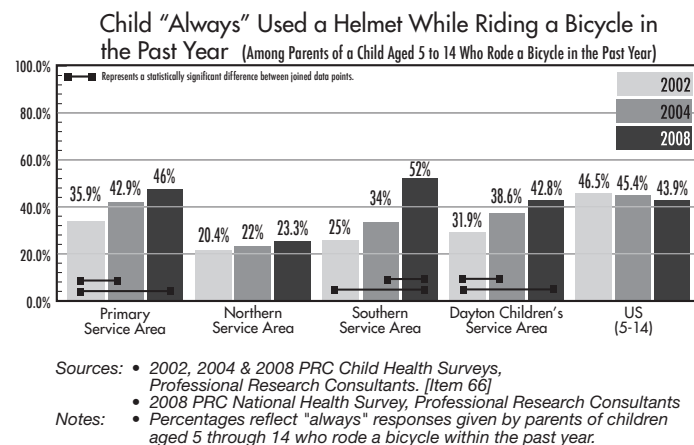
Since December 2002, Dayton Children’s received grants to provide an internal car seat distribution program. Since the start of the program, Dayton Children’s has distributed nearly 500 car seats to patients who did not have a car seat or those who had an unsafe car seat.

In addition, Dayton Children’s and Safe Kids Greater Dayton (proudly led by Dayton Children’s) have checked more than 2,000 car seats in the community for proper use and have replaced or distributed more than 1,000 seats to families in need.

Also in 2008, the hospital supported legislation that would strengthen Ohio’s child passenger safety law to include children ages 4 through 8 currently not required to be in booster seats.

“Without a booster seat, an adult seat belt can actually cause injury in the event of a crash rather than prevent it,” says Dr. Krzmarzick. “For instance, if the lap belt rests on your child’s stomach, which typically happens without a booster seat, your child could suffer stomach, liver or spleen damage in a crash.”

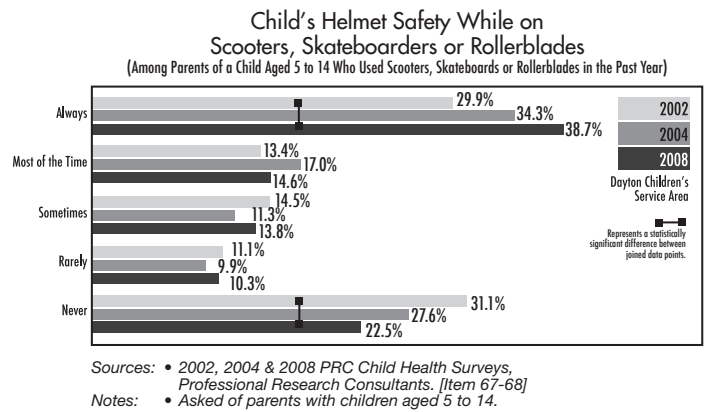
In addition, the number of children always using a helmet while riding a bicycle in the past year was reported at 42.8 percent, significantly higher than the 31.9 percent reported in 2002. However, this falls slightly below the US average of 43.9 percent.



“Helmets are the most important piece of safety gear a child can wear when riding his or her bike,” says Dr. Krzmarzick. “A properly fitted helmet can reduce the risk of serious head injuries by about 85 percent.”

The challenge is that as children age, the likelihood of always using a helmet decreases. Roughly 57 percent of children age 5 are reported to always wear a helmet,

however only 45.6 percent of children ages 6 to 10 and 35.8 percent of children ages 11 to 14 always wear their helmets.



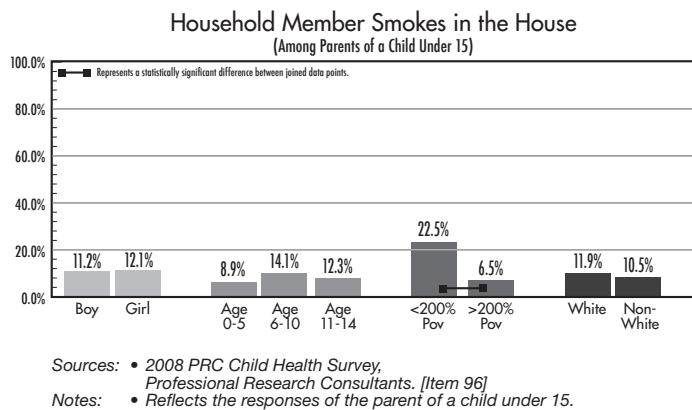
“We need to concentrate on encouraging older children to continue to wear helmets and protective gear,” says Dr. Krzmarzick. “Older children and teens are less likely to be wearing a helmet and yet are more likely to be riding faster and attempting tricks on their bikes. This combination can have damaging consequences.”

Dayton Children’s works with city officials to pass helmet ordinances. Since 2002, Dayton Children’s has helped three local cities (including the City of Dayton) educate the community and council members about the importance of helmets.

In 2005, the hospital partnered with The Junior League of Dayton to offer POWER (Program of Wellness Education and Resources) to the community. POWER is an outreach program offering safety information about many topics including helmet and car seat safety. Through this partnership more than 12,000 helmets have been distributed to law enforcement agencies and at other community events where children in need can receive a free helmet and safety education.

Since 2002, Dayton Children’s has also worked diligently to educate parents about the impact of smoking. Children exposed to secondhand smoke are three to five times more likely to be hospitalized and show an increased use of medical resources. These children also tend to have a stressed immune system that makes them more susceptible to ear infections, asthma, sepsis and infection compared to those not exposed to secondhand smoke. Maternal smoking causes poor fetal growth and contributes to more than 25 percent of all premature births and increases the risk of SIDS.

As for smoking, the 2008 study revealed a nearly 10 percent drop in six years for parents reporting a household member smoking in the house. In the Dayton Children's service area, 11.6 percent of kids are exposed to secondhand smoke in their homes, just falling short of the *Healthy People 2010* objective to reduce the proportion to 10 percent.



During that six-year period, Dayton Children's provided education to decrease the number of children who smoke and who are exposed to secondhand smoke.

With funding from local councils and foundations, Dayton Children's:

- ▶ Presented tobacco education to more than 2,500 youth
- ▶ Educated more than 900 health professionals about prenatal and general tobacco usage
- ▶ Counseled more than 2,000 families on the effects of secondhand smoke
- ▶ Offered free smoking cessation classes for teens

In 2008, Dayton Children's also became a smoke-free campus to ensure a healthy and safe environment for all patients and visitors.

"Children of parents who smoke are 10 times more likely to smoke as teens and adults," Dr. Fink says. "While the assessment points to significant improvements in the area of safety and smoke-free environments, Dayton Children's will continue to build awareness about the importance of staying smoke-free."

## Conclusions

While the Regional Pediatric Health Assessment covers many health topics, it is intended to provide community health advocates with a guide to the health issues impacting the region's children and suggest some areas of focus for future programming and education.

The 2008 study clearly points to obesity as a significant health concern that requires the community—health professionals, schools and parents—to work together to keep all children healthy. Providing environments where children can have a healthy lifestyle can prevent future obesity and its subsequent health problems.

Further, the study confirms asthma and allergies continue to affect children and requires education and proper treatment to minimize the impact on medical costs, schoolwork and overall health. It also points to continued monitoring of developmental delays and learning disabilities.

Better education regarding dental health is needed to reduce the likelihood of tooth decay, the single most common chronic childhood disease. Parents must be reminded that early dental visits and proper brushing techniques lead to good dental health throughout the child's life.

Finally, it shows that educational programming and community advocacy can work to prevent injuries. However work is still needed to make sure children of all ages observe safe habits.

***Thank you to the Dayton Children's Foundation Board for providing funding for this project. For more information about the 2008 Regional Pediatric Health Assessment call 937-641-3385 or visit [www.childrensdayton.org](http://www.childrensdayton.org).***