

Cook Children's Health Care System
Community-wide Children's Health Assessment and Planning Survey (CCHAPS)
Asthma Position Paper
April, 2011

Background

In 2009, Cook Children's conducted a ground-breaking study known as the Community-wide Children's Health Assessment and Planning Survey (CCHAPS). CCHAPS surveyed more than 7,400 parents in Tarrant, Denton, Hood, Wise, Parker, and Johnson counties to craft a comprehensive picture of children's health in this six-county region.

One of the key findings of CCHAPS was that children are being diagnosed with asthma at an alarming rate, peaking at 25 percent of the population around age 9, and then leveling off at around 20 percent in the population of children ages 10 to 14. In raw numbers, this means that in this region, more than 120,000 children in the 0 to 14 age range have asthma. Children in our region ages 6 to 9 are three times more likely to have asthma than the same age group at the statewide level.

Medical experts do not know what exactly causes asthma. It has been established that genetics play a role – if one or both parents have asthma, the child's chances of developing asthma increase considerably. It is also well known that certain environmental irritants will trigger the onset of symptoms in people who already have asthma; however, these irritants do not necessarily trigger asthma in everyone. People with asthma have varying triggers, and what affects one person will not necessarily affect another. Those triggers include, but are not limited to, cigarette smoke, indoor and outdoor mold, pet dander, air pollution, dust mites, cockroaches, pollen, smoke and strong odors.

Given the startling statistics on how many children in North Texas are affected by asthma, many in our community are asking what can be done to better care for the children affected by asthma. As part of the CCHAPS process, Cook Children's held a think tank on asthma in December 2010, which included more than 30 individuals from various backgrounds and disciplines, including medical, public policy, nonprofit, education, philanthropy, business, the faith community and government. Participants identified and agreed on some key components that should be central to any effort to better manage asthma in affected children. Expert medical specialists at Cook Children's Health Care System have also provided their recommendations, which are incorporated into this paper.

Public policy makers, health care professionals, parents, and concerned citizens also wonder, naturally, if there are steps that can be taken to reduce the onset of asthma in children. However, as it is not clear to scientists and doctors what the precise cause of asthma is, there is no consensus on what those steps might be. In addition, CCHAPS studied the current state of children's health on a variety of topics, including asthma. CCHAPS did not test hypotheses on the causes of childhood asthma or study the prevalence of environmental factors which may trigger asthma in certain individuals.

CHILDHOOD ASTHMA INFORMATION *FOR PARENTS*

The onset of asthma can be frightening for a child and his or her parents. It is natural to fear that the child's activities and lifestyle must be limited or significantly modified in order to prevent flare-ups.

However, there is no reason, in most instances, that a child with asthma cannot live a healthy, normal life. Experts agree that the key to this normal life is access to qualified health care and the implementation of an asthma management or "action" plan.

If a child's asthma is properly managed, the child and his or her parents should be able to answer yes to each of the following questions:

1. Do you use a rescue inhaler less than four times per week?
2. Do you have normal school attendance?
3. Do you sleep normally?
4. Are you able to participate in PE at school and other physical activity?
5. Do you have minimal visits to the emergency room due to asthma attacks?

If the answer to any of the above questions is "no," then there is work to be done with the child's family, doctor and school to better manage the asthma.

Best practices for managing childhood asthma

These are the most important steps a parent should take to manage their child's asthma and give them the best opportunity for a normal, healthy childhood:

Establish a medical home that can manage asthma

It is imperative that the child regularly see a doctor who can help develop an asthma management plan in accordance with the National Heart, Lung and Blood Institute (NHLBI) guidelines. NHLBI information on asthma can be found at <http://www.nhlbi.nih.gov/health/public/lung/index.htm#asthma>.

The asthma management plan will determine what kind of medication your child must take and how often, as well as the steps to take if the asthma flares up and how to determine if immediate medical attention is required.

The asthma management plan must be shared with and understood by all members of the family, plus any babysitters or relatives who may supervise the child at times. In addition, the plan must be shared with and understood by the child's school, day care facility or sitter and extracurricular organizations.

The medical home must be a primary care provider, i.e., not a specialist or the emergency room. The existence of a medical home for a child is essential for both asthma and other aspects of the child's health.

According to the [American Academy of Pediatrics](#), "(a) medical home means that:

- Your pediatric team

- Knows your child's health history
- Listens to your concerns and needs, as well as your child's
- Works in partnership with you to make sure that the medical and non-medical needs of your child and family are met
- Creates a trusting, collaborative relationship with you and your child
- Treats your child with compassion and an understanding of his/her strengths
- Develops a care plan with you and your child when needed
- Respects and honors your culture and traditions
- You and your child
 - Are comfortable sharing concerns and questions with your pediatric team and other health care providers
 - Routinely communicate your child's needs and family priorities to your pediatric team who promote communication and coordination between your family and other health care providers, as well as educational and community services when necessary"

Take preventative (controller) medication as prescribed

In most cases, your child's doctor will prescribe an anti-inflammatory "controller" medication that is meant to be taken on a daily basis in order to prevent an asthma attack. This medication is an inhaler, but is different from a "rescue" inhaler that one takes once an asthma attack has begun.

It is extremely important that parents work with their child to ensure that the medication is being taken on a regular basis at the prescribed times. Patients with asthma will often believe that because they have not had an asthma attack in some time, they no longer need to take the controller medication. This is one of the worst things to do and will likely lead to a recurrence of the asthma symptoms and can result in the need for emergency medical attention.

Some parents have concerns about their child taking a controller medication on a regular basis, as the medication is an inhaled steroid. There is a lot of misinformation about these medicines. In a nutshell, an inhaled asthma medication, such as Advair or Symbicort, is a very different type of steroid than the kind we often hear about in the news. The steroids that some professional athletes have gotten in trouble for taking are called anabolic steroids, which are nothing like an asthma medicine.

In addition to having the right kind of medication, it is very important that your child know how to take it properly. Sometimes it may take a child a while to learn how to properly use an inhaler so that they are inhaling the actual medication. Your child's doctor can help show you and your child how to use the inhaler correctly.

Get all immunizations as scheduled

Your child's immunizations must be kept up to date, and it is very important to get a flu vaccine every fall. The flu can be especially dangerous in people with asthma, but it can be easily prevented with a yearly vaccination.

A complete immunization schedule can be found here:

http://kidshealth.org/PageManager.jsp?lic=403&article_set=24786&ps=104&cat_id=164&rss=24786#.

Eliminate or reduce exposure to known asthma triggers

- **No smoking!** A child with asthma simply cannot live in a home where someone smokes. Even if the smoking occurs outdoors, the irritants will come inside through doors and windows and on people's clothes. If you smoke, quit! It is the single best thing you can do for your child's health – and yours.
- **Keep the house clean:** regular household cleaning can go a long way toward reducing asthma triggers.
 - Cockroaches are known to trigger asthma, so putting food away and eliminating roaches are critical actions.
 - Dust mites also trigger asthma, so keeping your home well-dusted and vacuumed reduces potential irritants.
 - Indoor mold is another asthma trigger, so it is important to keep bathrooms --especially showers and bathtubs -- clean and free of mold and mildew. Repair any roof, air conditioning or water pipe leaks, as they can also cause mold to form.
- **Replace mattresses periodically:** as mattresses retain dust and attract dust mites, it is recommended that they be replaced every 5 to 6 years.
- **Avoid fumes and odors:** sometimes strong smells, such as perfumes, can trigger asthma. Reduce exposure to perfumes, fragrances, fireplace smoke, etc.
- **Watch for high ozone days:** in North Texas, we often have summer days on which there is high ozone content in the air, which can also be an asthma trigger. Parents should watch for those days on the local news or online at <http://www.nctcog.org/trans/air/ozone/current.asp>. If the ozone level is expected to be in the orange or red zones, it is best that your child stay indoors that day.

Communicate with your child's school and organizations

Taking the steps above will go a long way toward helping manage your child's asthma at home. Just as it is important that you have an asthma management plan to refer to at home, it is necessary that your child's school, church or soccer team also know how to handle your child's asthma.

Once your asthma management plan is established by your child's physician, you should take it to your child's school and share a copy with the school nurse and/or teachers so that they know exactly what to do should your child experience a flare up. Your child's school will want to help you manage your child's asthma, as doing so will improve your child's performance in school and reduce absences.

Similarly, parents should share the same information with anyone else whose care your child is in from time to time. This could include a church youth leader, a scout troop leader, athletic coach, dance instructor, etc.

Conclusion

If parents take the steps outlined above, they will dramatically improve their child's health and increase the quality of life for the entire family. Living with asthma does not mean that a child cannot enjoy a happy, normal childhood. It just means that parents and children have to have a plan, stick to the plan and know what situations to avoid in order to keep the asthma under control.

CHILDHOOD ASTHMA INFORMATION *FOR SCHOOLS*

Schools play a vitally important role in helping young people live healthy lives. From kindergarten through 12th grade, a child spends approximately eight hours a day in school for 2,340 days. For children to grow up physically healthy, the school environment must play a major role. This is especially true for children who have a chronic health condition, such as asthma.

Schools have every reason to develop strategies to mitigate the effects of childhood asthma. The Community-wide Children's Health and Planning Survey (CCHAPS) shows that:

- Asthma is the most common reason for student absences
- Asthma leads to an increased risk of health, behavior and school problems
- Almost one in five children in North Texas have asthma

In addition to its harmful effects on children's health and school performance, asthma is costing schools money. Since school districts' funding is determined largely through the state's Average Daily Attendance (ADA) formula, excessive and repeated student absences due to asthma add up and cost schools funding, putting more pressure on local property taxpayers.

If managed properly, asthma does not have to leave a student unable to participate in school PE classes or sports. It also does not mean that an asthmatic child is automatically destined to be absent for an abnormally high number of school days. A child with asthma can have normal school attendance and participate in most activities with other students.

To foster the best circumstances possible for children with asthma, schools should take the following steps:

1. Develop a system to identify students who have asthma and work with students and parents to be a partner in the asthma action plan. Encourage the development of an action plan if there is not one already.
2. Convene a working group of school nurses, administrators, teachers, maintenance/facilities staff, and parents to identify known asthma triggers in the school environment.
3. Consider the approach taken by the Keller Independent School District (KISD), which created an Indoor Air Quality Team to identify and mitigate asthma triggers. Steps taken by KISD include:
 - Cleaning with approved chemicals
 - Promptly fixing and cleaning up water leaks
 - Replacing wet ceiling tiles
 - Cleaning up food and water to mitigate cockroaches and other pests

Cook Children's and the CCHAPS team are happy to serve as a resource for any school district that would like assistance in setting up an asthma plan for its schools. Contact Ginny Hickman at ginny.hickman@cookchildrens.org for more information.

CHILDHOOD ASTHMA INFORMATION *FOR PUBLIC POLICY MAKERS AND BUSINESS LEADERS*

Many individuals in the public policy and business leadership arenas are asking what actions they can initiate to mitigate the problem of childhood asthma, which affects nearly one in five children in North Texas, according to the Community-wide Children's Health Assessment and Planning Survey (CCHAPS). While the true causes of asthma are unknown, there is a great deal that has been established as it relates to how best to manage asthma in children.

Accordingly, Cook Children's has formulated the following recommendations:

Extend Medicaid enrollment period from six to 12 months

In Texas, parents must renew their child's Medicaid enrollment every six months. This is different from virtually any other insurance program (including the Children's Health Insurance Program), which typically have annual renewals. As a result of the six month enrollment period, many children fall off the Medicaid rolls and are uninsured. In 2009, the Texas Health and Human Services Commission estimated that extending Medicaid enrollment to 12 months would reduce the number of uninsured children in Texas by 25 percent. (Source: http://www.cphp.org/files/3/376_12_month_Medicaid.pdf)

Access to care is the single biggest obstacle facing many asthmatic children and their parents in Texas. Extending the Medicaid enrollment period will improve access to care, giving more children a medical home with a primary care physician and ensure access to needed controller medications. These steps will reduce school absences, improve business productivity (parents will not have to stay home with their children as often) and reduce the burden on local property taxpayers who fund county hospitals.

Eliminate co-pays for controller medications

Controller medications are essential to any plan to control and manage asthma. The co-pays for these medications can sometimes be relatively expensive, ranging from \$50 to \$100 per month. To address this issue and to encourage employees to take their controller medications as prescribed, the Cook Children's health insurance plan does not charge co-pays for asthma controller medications.

Employers should consider negotiating with their health insurance companies to eliminate or dramatically reduce co-pays for asthma controller medications. Doing so will likely increase the number of people using these medications as prescribed, thereby improving their health, decreasing school and work absences and increasing productivity. Additionally, regular use of controller medications leads to a reduction in asthma-related emergency department visits, saving the insurance company money on those expensive treatments.

Businesses may also consider working with both insurance and prescription drug companies to initiate a pilot program that eliminates controller co-pays, allowing all parties the ability to evaluate the results after an adequate amount of time has passed.

Resources

Community-wide Children's Health Assessment and Planning Survey (CCHAPS):

www.cchaps.org

National Heart Lung Blood Institute asthma guidelines & resources:

http://www.nhlbi.nih.gov/health/public/lung/asthma/asthma_actplan.pdf

<http://www.nhlbi.nih.gov/guidelines/asthma/index.htm>

<http://www.nhlbi.nih.gov/health/public/lung/index.htm#asthma>

American Academy of Pediatrics:

<http://www.aap.org/healthtopics/asthma.cfm>