

## Asthma initiative helps children and families

# BREATHE EASIER



Sandra Brooks was sure allergies, or a bad cold, were to blame for the barking cough keeping her 3-year-old daughter, Jennifer, awake at night.\*

So she was shocked when doctors said “asthma”— though doctors weren’t surprised by Brooks’ reaction.

“There’s a misconception that if you don’t wheeze, it’s not asthma,” says Amanda Lefkowitz, M.D., a Hospital of Central Connecticut pediatrician. “Coughing is also a primary symptom, even though many people don’t realize it. Not everyone with asthma wheezes. That’s one of the things we’re working to educate people about.”

To help parents like Brooks better understand and manage their child’s illness — plus assure every child with asthma gets the best possible care — The Hospital of Central Connecticut launched the New Britain Asthma Initiative (NBAI) case management program in January.

The program offers each family, or “case,” specific tools, education and one-on-one mentoring to ensure all families can recognize asthma symptoms and learn to keep a child’s asthma under control and

symptoms at bay by following a specific treatment plan.

More than 22 million people in the United States have this chronic affliction of the airways in the lungs, which can cause gasping, coughing or wheezing. Symptoms tend to vary among people, but generally include fatigue, coughing or itchy throat, in addition to difficulty breathing. During a full-blown asthma attack, the sufferer may feel like it’s impossible to breathe; as if each breath is being drawn through a straw.

Like Jennifer, about seven million asthma sufferers are under 18. Asthma is the most common chronic illness among school-age children and the number one reason for missed school days.

**“The best way to treat asthma is to know how to control it, and that’s what this program is all about.”**

“We want to help parents feel confident about caring for their child, and one of the challenges of asthma is that everyone experiences it differently,” says NBAI Coordinator Loreen E. Gawel. “Every family situation is also different, so we try to vary our services to fit different needs.”

“Asthma is scary,” says Brooks, an assistant supervisor at a local business. “Sometimes, I get up two or three times during the night to check that Jennifer is breathing. I want to learn everything I can about this disease.”

Some families may benefit from receiving a free spacer, a device to help deliver medication to the lungs that’s preferable to using the inhaler by itself. NBAI staff also offer community agency referrals if parents struggle with medication costs, insurance problems or other health-related issues.

All Initiative families have their cases reviewed by the program coordinator and a nurse educator, Lori Chudzik, R.N., from the New Britain Health Department. Each pediatrician referral to the program should be accompanied by a treatment plan that Initiative staff use for educational

*\*Names have been changed*



"It's part of the reason the Initiative was set up as a case management system," Gawel says. "Instead of just one educational meeting, or us just handing out literature, we stay with the family over the long-term, offering whatever we can to help manage a child's care."

Follow-up appointments to check treatment response and any other issues are scheduled every six months or more frequently, if needed, Gawel says.

Funded by the hospital and grants from the American Savings Foundation and Community Foundation of Greater New Britain, among other sources, the Initiative is free and open to any child 18 or younger. The only requirement is a referral from the child's primary care physician.

"The best way to treat asthma is to know how to control it, and that's what this program is all about," Lefkowitz says, adding that many people wrongly believe asthma is no big deal. The reality is that as many as 4,000 Americans die from the con-

dition each year, according to the Lung Association.

dition so important." That's because although asthma cannot be cured, it can usually be controlled. Treatment protocols outlined by the National Institutes of Health, coupled with today's prescription medications, are helping many asthma sufferers breathe easier than ever before, Lefkowitz says.

Although asthma's exact cause is unknown, health experts believe it's a combination of genetics and environmental triggers, such as allergies, smog, cigarette smoke, dust, cockroaches, mold, sudden temperature change, perfumes, pet dander and in some cases, vigorous physical exertion, excitement or stress.

This means young people living in inner cities like New Britain are particularly at risk for developing, or worsening, asthma symptoms, Lefkowitz says. Crowded living conditions and air pollution are among many environmental risk factors prevalent here and in similar communities, she adds. The numbers back up her assertion.

According to a state Department of Public Health report released to the Legislature last year, more than 18,000 Connecticut students were known to have asthma during the 2005-2006 school year—the majority from inner cities like New Britain, Hartford, New Haven and Bridgeport. Both private and public schools were included in the study, which also showed slightly more boys with the condition.

Whites made up the majority of young local asthma sufferers in the report, followed by Hispanics in public schools and blacks in private ones.

"There are so many issues related to effective asthma care, not the least of which are social and economic ones," Lefkowitz says. "When you're worried about paying the bills, affording food or your family's safety, you may not be as focused on your

purposes and to reinforce the importance of keeping asthma controlled.

"Asthma is very much a patient-driven disease, meaning that to help avoid attacks and keep it under control, a patient needs to take medications as prescribed. This can be a challenge with asthma, because it's a disease you need to treat when you're feeling well — not just when

**Asthma is the most common chronic illness among school-age children and the number one reason for missed school days.**

you're sick," Lefkowitz says. "Parents who don't follow instructions could wind up with a child having an asthma emergency."

According to the American Lung Association, asthma is the third-leading cause of hospitalization for children under 10 — something Lefkowitz and Gawel would like to help change.

dition each year, according to the Lung Association.

"But learn how to properly manage asthma, and you can live a long, full and active life," Lefkowitz adds. "What amazes me is that so few people are willing to make the time needed to educate themselves — but proper management is what makes all the difference with this disease.

child's asthma."

To help identify asthma triggers at home, NBAI families can request an environmental home assessment, thanks to a partnership between the hospital and New Britain Health Department. The visit includes suggestions to asthma-proof a home, such as:

- Replace rugs and carpets with tile or wooden floors.
- Zip allergen-proof covers over mattresses, box springs and pillows.
- Trade cloth curtains for plastic blinds or shades.
- Dust frequently and regularly with a damp cloth.
- Keep Rover and Tabby outdoors, or at least out of the bedroom.
- Forbid smoking.

"Nothing is worse for asthma than cigarette smoke," Lefkowitz says simply.

Asthma treatment is based on its severity, as diagnosed by the child's doctor. Initiative staff do not pre-

relaxes airway muscles and increases air flow to the lungs.

Yellow means "caution — slow down!" The child should take medications as listed (dosage is usually raised). Yellow actions are implemented with the first signs of a cold, exposure to a known trigger, cough, mild wheeze, tight chest or coughing at night. Parents should ask their child's healthcare provider how long to continue in this zone if they don't see improvement. Common treatments for symptoms in the yellow zone, or for acute (individual) attacks, may include inhaled corticosteroids; bronchodilators; anti-leukotriene drugs; or allergy injections. Initiative personnel review with parents when, how often, and how much of these medications their child should be taking.

Red, the "danger zone," means children should take their medica-

## "We stay with the family over the long-term, offering whatever we can to help manage a child's care."

scribe medications or treatment; instead, they use a color-coded sheet to help parents understand physician-prescribed treatments.

The personalized asthma treatment plan uses traffic light colors to indicate their child's condition and course of action. The color-coded plan is part of a nationwide effort to use a consistent system to help patients and their parents manage asthma.

On the plan, green means the patient is doing well, but should continue to take all medicines every day. Breathing is good; there's no cough or wheeze, the child can sleep through the night, work and play. Mild asthma symptoms may subside after inhaling a few doses of the bronchodilator albuterol, which

tion and parents should call the doctor immediately. In most cases the child should go to the emergency room. In the red zone, the child's emergency medication (albuterol) is not helping; the child is breathing hard and fast with nose opening wide, ribs showing; and the patient is unable to talk well.

"Every time Jennifer coughs, I'm reminded she has asthma. But I feel good knowing that if she has an attack, I'm prepared," Brooks says. "When I was in high school, a kid I knew died from asthma — so I've seen that it's nothing to fool around with. Any parent of a child with a constant cough, or who doesn't seem to breathe right, needs to see a doctor, ask for help and find out what's going on." \*

## What happens to the body during an asthma attack?

Some describe it as a chest pain or tightening that makes it impossible to breathe. Others say it feels like trying to breathe through a straw.

Asthma affects each person differently, and often there are no warning signs before an attack. For everyone, however, a severe or even moderate attack can be terrifying and happens in the same physiological way.

An asthma attack occurs when the lungs' airways become inflamed by a trigger, like dust, mold or cold air. Inflammation causes disease-fighting cells to accumulate, and the lungs to swell. Airways become obstructed as the muscles surrounding the lungs tighten and spasm. Mucous clogs and narrows the airways, making breathing even more difficult.

Because air cannot freely flow in and out of the lungs, a whistling or wheezing sound may be heard. In the most severe attacks, wheezing may actually stop because not enough air is moving to make noise.

While many asthma attacks last only a few minutes, some can last a few hours or days.