



NEW [NEWSPAPER SEARCH](#)

[→ FIND A BUSINESS](#)

NEWS

The Post-Standard

Click here to subscribe!

[» More From The Post-Standard](#)

Top News

Does bad indoor air cause asthma in newborns?

July 21, 2002

By **Mark Weiner**
Staff writer

Marisol Cartagena says she knows her 2-month-old son, Amadeus, has a good chance of developing asthma. The 30-year-old mother of three has asthma. So does her 9-year-old son, Geraldo, her brother and her grandfather.

With such a family history, Cartagena said she didn't hesitate to volunteer when doctors asked if she would take part in the first study to look for environmental causes of asthma in Syracuse newborns.

Cartagena, who lives in the 800 block of Midland Avenue, is among 120 mothers of infants living in Syracuse's low-income urban core who agreed to open their homes to an array of tests for indoor air pollution.

Scientists suspect the pollutants play a leading role in the onset of childhood asthma, an often debilitating chronic disease with higher rates among blacks, women and children.

The study comes as cases of childhood asthma are on the rise at rates that alarm public health officials. The prevalence of asthma increased 74 percent among children ages 5 to 14 from 1980 to 1994, according to the U.S. Centers for Disease Control and Prevention.

In children under age 4, the incidence of asthma jumped by 160 percent during the same period, the CDC said.

The \$2.3 million Syracuse study, paid for by the U.S. Environmental Protection Agency, is among a handful nationally to look at indoor air pollution's role in the development of asthma in newborns.

It's also the first initiative of the New York Indoor Environmental Quality Center, a three-year-old Syracuse research consortium which received the EPA grant.

INSIDE

News

- » [Business](#)
- » [Technology](#)
- » [NewsFlash](#)
- » [Weather](#)
- » [Photo Galleries](#)
- » [Obituaries](#)
- » [Search](#)
- » [Special Reports](#)
- » [NY Lottery](#)
- » [Online Polls](#)
- » [News Releases](#)
- » [The Hot List](#)
- » [Corrections](#)

[▶ SEND THIS PAGE](#)

[▶ PRINT THIS PAGE](#)

SPEAK UP!

- » [Talk about Top News events!](#)
- » [More Forums](#)
- » [Log On to ChatXtra!](#)

» [Win Syracuse Crunch Family Four Pack!](#)

CNY Entertainment!

- » [Dining and Bar Guide](#)
- » [Tourism Guide](#)
- » [Local Music](#)
- » [Preview the latest movies](#)
- » [Calendar of Events](#)

Focused Education for Focused Students



Open House Saturday, November 9th



Technology and professional studies

1 (866) 2 SUNYIT

Does bad indoor air cause asthma in newborns?

The center is a partnership of more than 50 local companies and academic, research and medical institutions.

The first phase of the study began in the winter and has picked up momentum this summer. Scientists from SUNY Upstate Medical University, Syracuse University and the SUNY College of Environmental Science and Forestry are identifying, collecting and measuring indoor air pollution in city homes.

"We're recruiting mothers with a genetic predisposition for asthma development," said Andrew Hunt, a research associate professor of pathology at Upstate Medical University, and one of the scientists leading the investigation. "The study could eventually help stop the development of asthma in their children or reduce the frequency of the attacks," he said. "There have been suggestions (from other studies) that you can stop the onset of asthma if you intervene early enough." Previous studies show that up to 40 percent of children in urban areas whose mothers have the genetic predisposition will develop asthma, Hunt said.

Cartagena is among the local mothers who agreed to allow scientists into their homes during different seasons. Half of the homes will be tested during the winter and summer. The other half will be tested during the spring and fall, Hunt said.

At Cartagena's home on Midland Avenue, scientists last week set up an array of equipment with lasers, high-tech vacuums, hoses, fans and other attachments. For 24 hours, the devices measured pollutants that can help trigger asthma. That includes dust mites, cockroach droppings, mold spores, pet dander, tobacco smoke and chemicals from cleaning products and moth balls.

"A lot of the homes are built very tight and often sealed for safety reasons," Hunt said. "The pollutants are essentially trapped in the house."

Researchers know that dust mites, which live in bedding, carpets and furniture, are the single largest cause of asthma. Doctors even recommend vacuuming the bedding of infants, Hunt said. In some big-city housing projects, however, roach droppings become the biggest factor.

But scientists are still puzzled as to what makes some people with a genetic history of asthma develop the disease, while others never show symptoms. One theory is that children with early infections and exposure to specific components of dust develop an immunity, Hunt said.

The first phase of the 18-month Syracuse study will help establish a baseline on the newborns that could eventually answer some of those questions.

As part of the study, a nurse practitioner visits the children quarterly to check their respiratory health, and takes urine samples, Hunt said. The privacy of the medical records of families who agree to take part in the study is guaranteed. Individuals are identified only as case numbers.

The Onondaga County Health Department is cooperating and helping to recruit pregnant mothers for the study. Applicants are being screened through county prenatal programs based on family histories of asthma and where they live.

"Childhood asthma is a priority health problem in Syracuse and throughout the nation," said Dr. Lloyd Novick, the county's health commissioner. Novick said he does not know how Syracuse compares to other cities when it comes to the number of childhood asthma cases.

In Onondaga County, 15,805 adults and 8,383 children have been diagnosed with asthma, said Glenn Ivers, executive director of the American Lung



FROM OUR ADVERTISERS

>> [M & T Bank's Everyday Banking Solutions](#)

>> [Sales - Sales = Money + Money - Apply Here](#)

» [Advertise With Us](#)

Does bad indoor air cause asthma in newborns?

Association of Central New York. The statistics are from 1998, the most recent information available.

Nationally, an estimated 17.7 million Americans have asthma, including 5.6 million children.

In future phases of the Syracuse asthma study, researchers may try intervention strategies in homes with high levels of indoor pollution, said R. Leland Davis, executive director of the New York Indoor Environmental Quality Center.

The center, headquartered in the SUNY Institute for Human Performance on Irving Avenue, was established after the Metropolitan Development Association identified indoor environmental research as having tremendous growth potential for Central New York.

Davis said the EPA grant for the asthma study has given the research consortium a good start.

© 2002 The Post-Standard. Used with permission.

[» Send This Page](#) | [» Print This Page](#)

MORE NEWS

- [» Witness to war](#)
- [» Does that cellular phone tax ring a bell?](#)
- [» BOCES to probe fatal accident](#)

[More Stories](#) | [14-Day Archive](#) | [Complete Index](#)

MORE FROM THE POST-STANDARD

[Post-Standard Links & Archives](#)

[About Us](#) | [User Agreement](#) | [Privacy Policy](#) | [Help/Feedback](#) | [Advertise With Us](#)

© 2002 Syracuse.com. All Rights Reserved.

[Home](#) | [News+Biz](#) | [Local](#) | [Sports](#) | [Forums+Chat](#) | [Cams+Radio](#) | [Living](#) | [Entertainment](#)

[CLASSIFIEDS](#)

Get The Best Local...

[Jobs](#) | [Autos](#) | [Real Estate](#)
[All Classifieds](#) | [Place An Ad](#)