**Asthma Symptoms Hinder Children’s Sleep and School Performance**

By [Alexandra Sifferlin](http://healthland.time.com/author/asifferlin/)May 22, 2013

Sneezing and wheezing can make children feel miserable, and that discomfort can hamper how well they do in school.

About 7.1 million children in the U.S. live with asthma, and its health consequences are well known; inflamed lung tissue can contribute to lasting lung damage as well as make breathing difficult. But the latest study shows that enduring these symptoms can take a toll on other aspects of children’s lives as well.

The data, which was presented at the annual meeting of the American Thoracic Society involved 170 parent-child pairs in greater Providence, [R.I.](http://topics.time.com/rhode-island/) The participants were from urban, African-American, [Latino](http://topics.time.com/latino/) and non-Latino white families. During three separate 30-day monitoring periods, the researchers measured the kids’ asthma and [sleep](http://topics.time.com/sleep/) symptoms.

The severity of the asthma symptoms was measured using spirometry, which tracks the speed and amount of air exhaled. The kids and their families also used diaries to report on their symptoms and how they controlled them.

To determine the association between a child’s asthma control and its effect on sleep and academic performance, the scientists also asked the parents about sleep quality and queried the children’s teachers about their school grades.

The kids with poorly controlled asthma showed lower-quality schoolwork, as reported by their teachers, compared with students who had a better handle on their asthma symptoms. The more asthma symptoms reported by the kids, the lower their academic performance. If the child had low sleep quality because their symptoms kept them up at night, their schoolwork also suffered.

The findings underscore the wide-ranging effects that asthma can have on children, particularly those who may already be suffering academically. Asthma rates tend to be higher among children in urban and lower socioeconomic areas, since they are more likely to live near environmental pollutants that can raise asthma risk, and less likely to take advantage of the cleaner air found near trees and parks. That means, however, that their health condition may make lower-income children more vulnerable to falling behind in school. “For urban children who are already at risk for high morbidity rates and exposed to urban poverty, this combination of risks has detrimental effects for their school functioning,” says Daphne Koinis-Mitchell, the study’s lead author and an associate professor of psychiatry and human behavior research at Brown University’s Alpert Medical School, in an e-mail response to TIME. “Disparities in academic, sleep and asthma outcomes are clearly evident in urban and ethnic-minority children. Intervening to control nighttime asthma and sleep can enhance school functioning in this group in meaningful ways.”

The researchers hope that their results will reinforce the importance of treating asthma symptoms — as early as possible, before they can spill over into problems in school. And teachers, too, can help by identifying kids who seem to be struggling to control their symptoms or are sleepy in class. If families and schools work together, they say, asthma doesn’t have to keep students from excelling academically.