

# **COPD is an adult killer, but its origins may lie in childhood**

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(HealthDay)—COPD may seem like an adult disease, often tied to

smoking. But two new studies suggest it could have roots in life's earliest years.

Kids with issues such as asthma or those exposed to secondhand smoke may be more susceptible to chronic [obstructive pulmonary disease](#) (COPD) decades later—especially if they grow up to become smokers, researchers found.

COPD is a chronic, debilitating and largely incurable form of progressive lung disease affecting more than 11 million Americans, according to the American Lung Association. A combination of bronchitis and emphysema, COPD is the third biggest killer in the United States.

The new research "shows that [childhood](#) factors likely play an important role in our risk for [this] lung disease as adults," said Dr. Ann Tilley, a pulmonologist at Lenox Hill Hospital in New York City.

She wasn't involved in the studies, but said they show that, "keeping kids free of smoke, and making sure that childhood asthma is optimally treated, are two steps parents can take to improve their kids' lung health in the long run."

Both of the studies were published April 5 in *The Lancet Respiratory Medicine* journal.

One study included nearly 2,500 people in Australia who at ages 7, 13, 18, 45, 50 and 53 underwent [lung-function](#) tests and were assessed for lung function risk factors.

Researchers led by Shyamali Dharmage of the University of Melbourne found that three-quarters of COPD cases that developed in participants by age 53 originated in poor lung function that began in childhood. That

meant childhood issues such as asthma, bronchitis, pneumonia, allergic rhinitis ("hay fever"), eczema and exposure to secondhand smoke. Often, these conditions worsened in adulthood, the team noted.

Picking up the [smoking](#) habit is *the* main risk factor for COPD, but these findings show that childhood risk factors can also raise a person's odds for the illness.

"These findings highlight the importance of preventing both early life adverse exposures that could lead to poorer lung growth," Dharmage said in a journal news release.

In a second study, John Henderson and colleagues at the University of Bristol in England tracked the lung function of more than 2,600 people from birth to age 24.

They found that about three-quarters of babies born with impaired lung function made great improvements throughout childhood—showing that there's a "window of opportunity" to overcome these early respiratory deficits.

Tilley stressed that there's much parents can do to make sure their child avoids COPD and other respiratory issues later in life.

"One interesting finding from this study was that childhood cigarette smoke exposure seemed to predispose kids to even worse [lung disease](#) later if they smoked; in other words, being exposed to your mom's smoke heightens your own negative response to smoking later," she said.

Dr. Alan Mensch is a pulmonologist who helps direct medical affairs at Plainview and Syosset in Hospitals in Long Island, N.Y.

He noted that, "as children grow bigger and stronger from infancy to

their mid-20s, their organs, including their lungs, reach top performance. After reaching their peak functioning in the mid-20s, respiratory performance undergoes a steady decline throughout one's lifetime."

Mensch called the new studies "extremely important," because they help explain why some people develop COPD and others—even if they smoke —do not.

"Not all people that smoke cigarettes get COPD, but those who experience limited [lung](#) function growth in their childhood and teen years are prone to a higher incidence of COPD," he theorized.

"Our bodies are marvels of physiology," Mensch said, "which must be cared for beginning in early life to ensure that they will continue to function well into our later years."

**More information:** Alan Mensch, M.D., pulmonologist and senior vice president, medical affairs, Plainview and Syosset Hospitals, Long Island, N.Y.; Ann Tilley, M.D., pulmonologist, Lenox Hill Hospital, New York City; *The Lancet Respiratory Medicine*, news release, April 5, 2018

The U.S. National Heart, Lung, and Blood Institute has more on [COPD](#).

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