

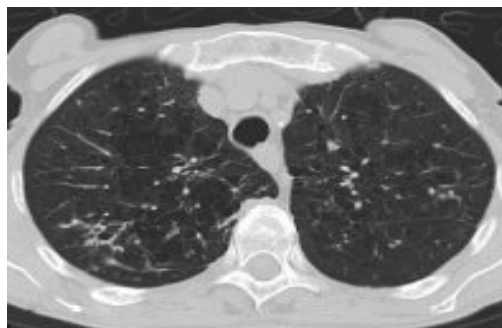
Exacerbations of COPD Accelerate Lung-Function Loss

Effect especially prominent in patients with mild disease

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SAN FRANCISCO, CA — Exacerbations of chronic obstructive pulmonary disease (COPD) accelerate the loss of lung function especially among patients with mild disease, according to researchers at National Jewish Health and other institutions. [Barry Make](#), MD, professor of medicine at National Jewish Health and his colleagues in the COPDGene study presented their [findings](#) at the 2016 American Thoracic Society International Meeting in San Francisco.

“These findings confirm our suspicions that exacerbations of COPD accelerate lung-function loss,” said Dr. Make, senior author of the study. “The surprise is that patients with mild disease suffer the greatest loss.”



The researchers analyzed data from 2,000 current or former smokers who had been followed for five years as part of the COPDGene study. Thirty-five percent of the study subjects had experienced at least one exacerbation or acute respiratory event requiring antibiotics, oral steroids and/or hospitalization.

Lung function was measured as the amount of air a person can forcefully exhale in one second (FEV1). Exacerbations were associated with additional decline in FEV1 in COPD patients beyond losses due to aging and COPD without exacerbations. The effect was especially prominent among patients with mild COPD, known as GOLD 1. Exacerbations requiring oral steroids or antibiotics resulted in an additional 21 milliliters of lost lung function per year. Exacerbations requiring hospitalization more than tripled that consequence to 75 milliliters per year, by far the largest loss of lung function among any group of COPD patients. Study participants who did not have COPD experienced no additional lung-function loss following exacerbations.

“These findings indicate that patients with mild COPD are particularly susceptible to lung-function loss following exacerbations,” said Dr. Make. “We need to include more patients with mild COPD in our clinical trials to potentially reduce the risk of advancing to more severe lung disease.”

National Jewish Health is the leading respiratory hospital in the nation. Founded 121 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit the [media resources page](#).

Media Contacts

Our team is available to arrange interviews, discuss events and story ideas.

William Allstetter
303.398.1002
allstetterw@njhealth.org

Adam Dormuth
303.398.1082
dormutha@njhealth.org