

Meta-analysis links smoking to COVID-19 disease progression

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sensitivity analysis of five studies of current smokers versus never smokers, the results were similar (odds ratio, 1.91), with no evidence of significant heterogeneity ($I^2 = 53.5$ percent) or publication bias (Harbord's P = 0.382; Peters' P = 0.512).

"Smoking is associated with COVID-19 disease progression," the authors write. "Physicians and public health professionals should collect data on smoking and, given the pulmonary effects of ecigarettes, e-cigarette use as part of clinical assessments and add smoking (and, to be health protective, e-cigarette) cessation to the list of practices to blunt the COVID-19 pandemic."

More information: Abstract/Full Text (subscription or payment may be required)

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(HealthDay)—Smokers have an increased likelihood of COVID-19 disease progression, according to research published online May 13 in *Nicotine & Tobacco Research*.

Roengrudee Patanavanich, M.D., Ph.D., and Stanton A. Glantz, Ph.D., from the University of California San Francisco, reviewed and summarized 19 papers presenting data on the link between smoking and severity of COVID-19.

The meta-analysis included 11,590 COVID-19 patients, 18.4 percent of whom experienced disease progression and 6.3 percent with a history of smoking. The researchers found that 29.8 versus 17.6 percent of patients with a history of smoking versus nonsmoking patients experienced disease progression. In the meta-analysis, an association was noted between smoking and COVID-19 progression (odds ratio, 1.91), with moderate heterogeneity among the studies ($I^2 = 38$ percent) and no significant evidence of publication bias (Harbord's P = 0.813; Peters' P = 0.941). In a



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