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# COVID-19 and COPD

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**COPD patients have increased risk of severe pneumonia and poor outcomes when they develop COVID-19. This may be related to poor underlying lung reserves or increased expression of ACE-2 receptor in small airways.** <https://bit.ly/37dSB8l>

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As of 11 July, 2020, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus responsible for the coronavirus disease 2019 (COVID-19) pandemic has infected over 12.7 million people around the world and caused more than 560,000 deaths [1]. Given the devastating impact that COVID-19 can have on the lung, it is natural to fear for patients with underlying COPD. Estimating their excess risk for contracting COVID-19 and, in particular, its more severe respiratory manifestations has been a challenging exercise in this pandemic for various reasons. First, the reporting on cases has concentrated on hospitalised and intensive care unit (ICU) patients, rather than on mild, outpatient cases. This is in part also due to the variability in testing strategies across the world, where some nations with stricter testing requirements and scarce testing resources have focused on testing only those requiring hospitalisation. We have also not yet quantified how many COPD patients might have chosen never to present to a hospital in this pandemic, only to subsequently appear in the statistics for excess mortality during this time [2, 3]. Second, the underestimation of COPD in the general population is a problem that predates the COVID-19 era [4–6] and one that is likely to be exacerbated in overburdened hospitals where the precise ascertainment of comorbidities may be overlooked and spirometry cannot be performed. Moreover, how the diagnosis of COPD has been adjudicated in these studies has not been clearly delineated, possibly giving rise to variability in prevalence across the world.