



Towards the elimination of COPD: a *Lancet* Commission review

Morbidity and mortality due to chronic obstructive pulmonary disease (COPD) continues to increase around the world, even as progress is made to reduce the impact of many other non-communicable diseases. The *Lancet* has published an ambitious vision with a view to generating debate and setting a course **towards the elimination of COPD**.

While recognising a need for additional scientific evidence to underpin some of its proposals, **the *Lancet* Commission on COPD proposes six core strategies to achieve its goal.**

1 First, to develop a broader understanding of the **multiple and interacting risk factors** for COPD. This would expand the debate beyond cigarette smoking as the primary risk factor by including underappreciated factors that are likely to drive rising prevalence in the coming decades, notably environmental pollutants, early-life infections and an aging population, alongside aggravating factors like poverty.

2 Second, to tackle the inadequacy of current diagnostic criteria and help to identify the variable pathophysiological mechanisms that are likely to drive COPD. The Commission recommends **classifying COPD based on underlying causative mechanisms**, including genetics, early-life events, respiratory infections, and tobacco and other environmental exposures. A similar approach revolutionised the treatment and understanding of pulmonary hypertension in the 1970s.

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Guidelines recommend only simplistic disease classification strategies, resulting in the same therapeutic approach for patients with widely differing conditions.

3 Third, to tackle weaknesses in current **diagnostic criteria and methodology**. This could be achieved through a more inclusive definition of COPD and the use of modern techniques, such as imaging, to enable mild disease to be detected before irreversible pathological changes have occurred. At present, diagnosis relies heavily on post-bronchodilator spirometry, which is underused, often misinterpreted, not predictive of symptoms, and insensitive to early pathological changes that might, with the right treatment, be interrupted or reversed.

4 Fourth, to develop **personalised prevention and treatment strategies** for both stable disease and exacerbations based on a holistic assessment of COPD pathophysiology and symptoms and patients' needs, capabilities and preferences. The Commission notes that, while exacerbations play a significant role in disease progression and treatment cost, they tend to be imprecisely defined, insufficiently investigated, and treated in ways that haven't changed in more than 30 years and may even be harmful.

5 Fifth, to invest in the development of **curative and regenerative therapies** that go beyond the largely symptomatic treatment options that are currently available. As the response to Covid-19 has shown, a coordinated international response to a disease can overcome existing barriers to treatment and yield rapid results.

6 Sixth, to deploy **public health preventive strategies** for banning smoking and maintaining clean air.

The Commission's bold statement and ambitious strategy seeks to catalyse momentum by generating discourse and debate and providing a framework and vision through which health authorities, regulatory agencies, corporations, medical professionals and the public can work together to reduce the incidence and impact of COPD and, eventually, eliminate this disease.