



Time to Act Now: Joint declaration on the urgent need for policy action to address the burden of Chronic Obstructive Pulmonary Disease (COPD), a chronic lung disease

Today, on World COPD Day 2022, a coalition of advocates, clinicians and industry are calling on governments, healthcare system leaders and policymakers to recognise COPD as a public health priority and to prioritise policy action to address its growing burden across the world.

Why is COPD an important public health issue?

Chronic Obstructive Pulmonary Disease (COPD) is a growing and evolving global health emergency affecting people from all countries, socioeconomic status, and age groups.ⁱ COPD is a noncommunicable and progressive lung disease characterised by obstruction of air flow in the respiratory system and results in breathing difficulties. Defined by the Global Initiative for Chronic Obstructive Lung Disease (GOLD) as “a common, preventable and treatable disease”, it affects approximately 384 million peopleⁱⁱ and is the third leading cause of death worldwide.^{iii,iv} In total, 65% to 80% of patients with COPD remain undiagnosed.^v

Whilst the disease is often associated with smoking, many other factors have contributed to the escalating crisis, including exposure to environmental pollution and the ageing of the global population. A recent landmark report by a Lancet Commission challenges accepted stigma around the disease and advocates for a broader understanding of risk factors. The report recommends that COPD is classified into types based on five main risk factors: genetics, early-life events, pulmonary infections, tobacco smoke exposure, and pollution. The Commission notes that factors unrelated to tobacco are increasingly responsible for the global burden of COPD and are likely to overtake tobacco smoking as the leading cause of the disease.^{vi} Regardless of risk factors, we fundamentally believe all patients deserve access to quality care for their COPD.

There are also risks inherent with socioeconomic disparities and health inequality across countries and regions. COPD is currently more prevalent in higher income countries, yet it is also becoming increasingly prevalent in low- and middle-income countries (LMICs) in parallel with increased life expectancy in the majority of LMICs.^{vii} Increased exposure to the risk factors outlined above, such as malnutrition, indoor and outdoor air pollution, and smoking, is also associated with higher COPD prevalence in LMICs.^{viii}

Irrespective of socioeconomic disparities, COVID-19 put the importance of respiratory health into the spotlight for policymakers worldwide. As the world moves into the post-pandemic period it's more pertinent than ever to prioritise respiratory health and develop national respiratory strategies. We really need to act now to alleviate the burden of COPD on healthcare systems and reduce global mortality from respiratory diseases^{ix}.

Why should COPD be prioritised in the health policy agenda?

COPD has an enormous impact on public health and healthcare systems, individuals and the broader society. It is a leading cause of emergency hospital admissions in many countries^{x,xi} and these hospitalisations are a leading driver of COPD's burden on health services^{xii,xiii,xiv}.

Aside from the costs of hospitalisations and medical treatment, COPD has further economic impacts on healthcare systems due to its increasing prevalence in the working age population and therefore the financial burden associated with impaired productivity, early retirement and lost tax revenues.^{xv} The global cost associated with the disease is estimated to rise to US\$ 4.8 trillion in 2030, compared with the projected costs of cardiovascular disease at US\$ 1.04 trillion and diabetes at US\$ 745 billion.^{xvi} We can expect these costs to further increase given the estimated increased respiratory morbidity and mortality for patients with chronic lung diseases due to changes in climate and air quality.^{xvii}

The pain and suffering on an individual level is, of course, hard to quantify. Causing breathlessness and difficulty breathing even during normal everyday activities, COPD has a significant negative impact on patients' quality of life, professional life^{xviii} and mental wellbeing.^{xix} Patients often perceive and experience stigma, shame, blame and guilt, and therefore find it difficult to speak about their illness and share their personal struggles.^{xx,xxi}

The majority of COPD patients, up to 94%, also have comorbidities, such as cardiovascular disease, cancer, diabetes and depression.^{xxii,xxiii} For example, people suffering from COPD are two times more likely to have heart disease than the general population,^{xxiv} and even a single COPD exacerbation doubles the risk of a heart attack.^{xxv} More than two-thirds of those with obstructive sleep apnea also have COPD.^{xxvi} Panic disorder is approximately ten times more prevalent in people with COPD than in the general population and 40% of COPD patients are estimated to have depression.^{xxvii,xxviii} These comorbidities amplify patient risk and healthcare costs,^{xxix} and emphasise the need for a holistic approach to include COPD in existing successful policies for diseases with common risk factors.

A call to action to address COPD

The scale of the challenge for public health and health systems demands policy action to prevent COPD and deliver quality care for patients. Supporters of this Joint Declaration, thereby, are joining forces this World COPD Day to emphasise the urgency of addressing COPD and call on governmental institutions and policymakers to:

1. **Acknowledge** the significant burden that COPD places on patients, healthcare systems and the economy and recognise the need for COPD to be a public health priority, address risk factors and to improve the standard of care received by COPD patients.
2. **Undertake steps to**
 - **Recognise** that there are significant health and economic returns through investing in cost-effective interventions for noncommunicable diseases^{xxx};
 - **Radically reduce** exposure to risk factors, in line with the United Nations Sustainable Development Goals (SDGs)^{xxxi}, World Health Organization (WHO) Global Air Quality Guidelines^{xxxii}, and WHO Framework Convention on Tobacco Control (WHO FCTC)^{xxxiii};
 - **Invest** in quality COPD services, particularly in multi-disciplinary primary care, which is the most feasible and affordable way to deliver comprehensive COPD prevention and care services in low-, middle- and high-income countries^{xxxiv};
 - **Invest** in education of respiratory specialist nurses, which can play an important role supporting prevention, and improvements in care^{xxxv};
 - **Adopt** the [Global Quality Standard Position Statements for Health System Policy Changes in Diagnosis and Management of COPD](#).
3. **Establish and implement** national respiratory strategies, similar to national programmes for oncology and diabetes, to underpin and to support public health interventions and health service transformation, while measuring progress against the SDGs, WHO Global Air Quality

Guidelines, WHO Framework Convention on Tobacco Control (WHO FCTC), and Global Quality Standards for COPD.

4. **Implement** policy reforms aimed at optimising patient pathways in COPD and reducing COPD mortality by
 - **Advocating** the need for timely and accurate diagnosis of COPD to improve access to treatment;
 - **Strengthening** access to both pharmacological and non-pharmacological therapy solutions, including pulmonary rehabilitation and smoking cessation programmes;
 - **Incentivising** hospital discharge policies that ensure early follow up and treatment review for those who have been hospitalised and, thereby, reduce risk of repeated hospitalisation due to acute episodes (exacerbations);
 - **Improving** the coordination across specialists and primary care providers;
 - **Prioritising** investment to accelerate uptake of telemedicine and digital care to empower healthcare professionals (HCPs) and patients to connect more flexibly.

Accompanied by the systematic implementation of the latest public health and clinical guidelines and care standards, these policy interventions can also support the development of sustainable and resilient non-communicable disease management models that prepare healthcare systems to withstand future shocks caused by climate change, disasters, pandemics, and demographic changes.

To address the significant burden that COPD places on patients and societies across the world and to help ensure people living with COPD feel empowered to Speak Up, we call on policymakers at all levels of government, patient advocacy groups, non-governmental organisations, clinical experts and researchers to join us in endorsing this declaration.

Signed by:



AstraZeneca



Belgian Respiratory Society (BeRS)



Chiesi Farmaceutici



COPD Canada



COPD Foundation



Global Allergy and Airways Patient Platform (GAAPP)



International Coalition of Respiratory Nurses (ICRN)



International Federation on Ageing (IFA)



International Pharmaceutical Federation (FIP)



International Primary Care Respiratory Group (IPCRG)



Spanish National COPD Patient Association – Asociación de Pacientes con EPOC (APEPOC)

Liliya Belenko Gentet, Board member in charge of asthma and tobacco and European Respiratory Delegate, French Federation of Associations of Patients with Respiratory Insufficiency or Handicap (FFAAIR)

Dr. Jaime Correia de Sousa, MD, PhD, Associate Professor at the School of Medicine, Life and Health Sciences Research Institute (ICVS), University of Minho, Portugal

Dr. Kevin Gruffydd-Jones, GP Principal, Box Surgery, Wiltshire, United Kingdom

Dr. Meilan Han, MD MS, Professor of Medicine and Chief of the Division of Pulmonary and Critical Care, University of Michigan, United States

Dr. John Hurst, PhD FRCP FHEA, Professor of Respiratory Medicine, UCL Respiratory, University College London, United Kingdom

Debbie Roots, Cardiorespiratory Nurse Consultant, Adult Cardiorespiratory Enhanced and Responsive Service (ACERS), Homerton University Hospital, United Kingdom

Dr. Peché Rudi, Head of the Department of Pneumology, ISPPC CHU de Charleroi, Belgium

Dr. Daiana Stolz, MD MPH FCCP FERS, Associate Professor for Respiratory Medicine, Research Group Head, FMH Respiratory Medicine & FMH Internal Medicine, University Hospital Basel, Switzerland

Dr. Henrik Watz, PD, Managing Director and Specialist in Internal Medicine and Pneumology, Pulmonary Research Institute (PRI) at LungClinic Grosshansdorf, Germany

This call to action is part of the public policy awareness campaign, **Speak Up for COPD**, funded by AstraZeneca with support from Chiesi Farmaceutici, the International Federation on Ageing and the Global Allergy and Airways Patient Platform to elevate the voice of the patient to establish COPD as a public health priority.

¹ Stolz, D., Mkorombindo, T., Schumann, D., Agusti, Alvar., Ash, Samuel, Bafadhel, M., et al. Towards the elimination of chronic obstructive pulmonary disease: a *Lancet* Commission. The *Lancet* Commissions. Vol.400 Issue 10356 (Sept. 2022); pp.921-972. Available at: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(22\)01273-9/fulltext?utm_campaign=lancetcopd22&utm_content=220267898&utm_medium=social&utm_source=facebook&utm_hss_channel=fbp-374651963469](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)01273-9/fulltext?utm_campaign=lancetcopd22&utm_content=220267898&utm_medium=social&utm_source=facebook&utm_hss_channel=fbp-374651963469) [Accessed November 2022]

-
- ⁱⁱ GOLD. Global Strategy for the Diagnosis, Management and Prevention of COPD, Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2022. [Online]. Available at: <https://goldcopd.org/2022-gold-reports-2>
- ⁱⁱⁱ World Health Organization. The top 10 causes of death. Available at: <https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death> [Accessed November 2022]
- ^{iv} World Health Organization. Chronic Obstructive Pulmonary Disease (COPD). Available at: [https://www.who.int/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-\(copd\)](https://www.who.int/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-(copd)) [Accessed November 2022]
- ^v Diab, N, Gershon, A., et al., Underdiagnosis and Overdiagnosis of Chronic Obstructive Pulmonary Disease. *American Journal of Respiratory and Critical Care Medicine* Vol 198(9) 2018.
- ^{vi} Stolz, D., Mkorombindo, T., Schumann, D., Agusti, Alvar., Ash, Samuel, Bafadhel, M., et al. Towards the elimination of chronic obstructive pulmonary disease: a *Lancet* Commission. *The Lancet Commissions*. Vol.400 Issue 10356 (Sept. 2022); pp.921-972.
- ^{vii} Adeloye, D., Song, P., Zhu, Y., Campbell, H., Sheikh, A., Rudan, I. Global, regional, and national prevalence of, and risk factors for, chronic obstructive pulmonary disease (COPD) in 2019: a systematic review and modelling analysis. *The Lancet Respiratory Medicine*, Volume 10, Issue 5 (2022); pp. 447-458
- ^{viii} Rossaki, FM., Hurst, JR., van Gemert, F., Kirenga, BJ., Williams, S., Khoo, EM., Tsiligianni, I., Tabyshova, A., van Boven, JFM. Strategies for the prevention, diagnosis and treatment of COPD in low- and middle-income countries: the importance of primary care. *Expert Review of Respiratory Medicine*, 2021 15:12, 1563-1577
- ^{ix} International Respiratory Coalition. A new movement to transform respiratory outcomes in a post-pandemic world. Available at: https://www.ersnet.org/wp-content/uploads/2022/07/IRC_a-new-movement-to-transform-respiratory-outcomes-in-a-post-pandemic-world.pdf [Accessed November 2022].
- ^x Lane ND et al. Specialist emergency care and COPD outcomes. *BMJ Open Respir Res*. 2018;5:e000334
- ^{xi} Canadian Institute for Health Information. Hospital stays in Canada. 2021. Available at: <https://www.cihi.ca/en/hospital-stays-in-canada>. [Accessed November 2022]
- ^{xii} Kirsch, F., Schramm, A., Schwarzkopf, L. et al. Direct and indirect costs of COPD progression and its comorbidities in a structured disease management program: results from the LQ-DMP study. *Respir Res* **20**, 215 (2019). <https://doi.org/10.1186/s12931-019-1179-7>
- ^{xiii} Blasi F, Cesana G, Conti S, et al. The clinical and economic impact of exacerbations of chronic obstructive pulmonary disease: a cohort of hospitalized patients. *PLoS One*. 2014; 9(6): e101228.
- ^{xiv} Chen X, Wang N, Chen Y, et al. Costs of chronic obstructive pulmonary disease in urban areas of China: a cross-sectional study in four cities. *Int J COPD*. 2016; 11(5):2625-2632.
- ^{xv} J F M van Boven, S Vegter, T van der Molen, M J Postma. COPD in the working age population: the economic impact on both patients and government. *COPD: Journal of Chronic Obstructive Pulmonary Disease*, 10:6, 629-639. DOI: 10.3109/15412555.2013.813446
- ^{xvi} Bloom, D.E., et al. (2011). *The Global Economic Burden of Noncommunicable Diseases*. Geneva: World Economic Forum.
- ^{xvii} Bernstein AS, Rice MB. Lungs in a warming world: climate change and respiratory health. *Chest*. 2013; 143 (5): 1455 - 1459
- ^{xviii} Halpin D. Chronic Obstructive Pulmonary Disease and Work: Is It Time to Stop? *Am J Respir Crit Care Med*. 2019 Nov 15;200(10):1195-1197. doi: 10.1164/rccm.201908-1627ED. PMID: 31513746; PMCID: PMC6857494.
- ^{xix} Institute for Quality and Efficiency in Health Care (IQWiG); 2006-. Chronic obstructive pulmonary disease (COPD): What can help you to cope with COPD? 2015 Aug 12 [Updated 2019 Mar 14].
- ^{xx} Woo et al. Stigma Experiences in People with Chronic Obstructive Pulmonary Disease: An Integrative Review. *Int J Chron Obstruct Pulmon Dis*. 2021 Jun 4;16: 1647-1659
- ^{xxi} Rose et al. Stigma-related experiences in non-communicable respiratory diseases: A systematic review 7: *Chron Respir Dis*. 2017 Aug; 14(3): 199–216.
- ^{xxii} Yin et al. Prevalence of comorbidities in chronic obstructive pulmonary disease patients, *Medicine* (2017); 96(19), e6836
- ^{xxiii} Hillas, G., Perlikos, F. Tsiligianni, I., Tzanakis, N. Managing comorbidities in COPD. *Int J Chron Obstruct Pulmon Dis*. 2015; 10:95-109
- ^{xxiv} Morgan et al. Defining the relationship between COPD and CVD: what are the implications for clinical practice? *Therapeutic Advances in Respiratory Disease* (2018) Vol 12 1-16.
- ^{xxv} Putchá N, Drummond MB, Wise RA, Hansel NN. Comorbidities and chronic obstructive pulmonary disease: prevalence, influence on outcomes, and management. *Semin Respir Crit Care Med*. 2015;36(4):575-591.
- ^{xxvi} Zhang, P., Chen, B., Lou, H. et al. Predictors and outcomes of obstructive sleep apnea in patients with chronic obstructive pulmonary disease in China. *BMC Pulm Med* 22, 16 (2022). <https://doi.org/10.1186/s12890-021-01780-4>
- ^{xxvii} Yang, I. A. et al. The COPD-X Plan: Australian and New Zealand guidelines for the management of chronic obstructive pulmonary disease 2019. Version 2.61, February 2020
- ^{xxviii} Ivziku, D., Clari, M., Piredda, M., De Marinis, M. G. & Matarese, M. Anxiety, depression and quality of life in chronic obstructive pulmonary disease patients and caregivers: an actor-partner interdependence model analysis. *Qual. Life Res*. 28, 461–472 (2019).
- ^{xxix} GOLD. Global Strategy for the Diagnosis, Management and Prevention of COPD, Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2022. [Online]. Available at: <https://goldcopd.org/2022-gold-reports-2>

^{xxx} Saving lives, spending less: the case for investing in noncommunicable diseases. Geneva: World Health Organization; 2021. Licence: CC BY-NC-SA 3.0 IGO. <https://www.who.int/publications/i/item/9789240041059>

^{xxxi} United Nations Department of Economic and Social Affairs. Sustainable Development: The 17 Goals. Accessible at: <https://sdgs.un.org/goals> [Last accessed November 2022]

^{xxxii} WHO. New WHO Global Air Quality Guidelines aim to save millions of lives from air pollution. (September 2021) Accessible at: <https://www.who.int/news/item/22-09-2021-new-who-global-air-quality-guidelines-aim-to-save-millions-of-lives-from-air-pollution> [accessed November 2022]

^{xxxiii} WHO Framework Convention on Tobacco Control. The WHO Framework Convention on Tobacco Control: an overview. 5 March 2021. Accessible at: [https://fctc.who.int/publications/m/item/the-who-framework-convention-on-tobacco-control-an-overview#:~:text=The%20WHO%20Framework%20Convention%20on%20Tobacco%20Control%20\(WHO%20FCTC\)%20is,globalization%20of%20the%20tobacco%20epidemic](https://fctc.who.int/publications/m/item/the-who-framework-convention-on-tobacco-control-an-overview#:~:text=The%20WHO%20Framework%20Convention%20on%20Tobacco%20Control%20(WHO%20FCTC)%20is,globalization%20of%20the%20tobacco%20epidemic) [last accessed November 2022]

^{xxxiv} Rossaki, FM., Hurst, JR., van Gemert, F., Kirenga, BJ., Williams, S., Khoo, EM., Tsiligianni, I., Tabyshova, A., van Boven, JFM. Strategies for the prevention, diagnosis and treatment of COPD in low- and middle-income countries: the importance of primary care. *Expert Review of Respiratory Medicine*, 2021 15:12, 1563-1577

^{xxxv} Šajnić A, Kelly C, Smith S, Heslop-Marshall K, Axelsson M, Padilha JM, Roberts N, Hernandez C, Murray B, Poot B, Narsavage G. Need and baseline for harmonising nursing education in respiratory care: preliminary results of a global survey. *Breathe* 2022;18(3):210172.