16 December, 2025

Safe Lungs mean Safe Hearts

The European Respiratory Society (ERS) and the European Lung Foundation (ELF) congratulate the European Commission for the "Safe Hearts" Cardiovascular Health Plan. There is a pressing need to address noncommunicable diseases (NCDs), including cardiovascular disease (CVD).

Respiratory health plays a critical role in cardiovascular outcomes. Both acute respiratory infections and chronic respiratory diseases (CRDs) increase the risk of cardiovascular events and mortality. ERS and ELF had advocated for their integration into the EU Cardiovascular Health Plan as essential to achieve a meaningful impact.

The proposed plan highlights the need to vaccinate against respiratory diseases as an effective prevention measure. The associated action to ensure reporting of vaccination coverage data for influenza, COVID-19, RSV, and pneumococcal in individuals with chronic conditions is a significant step in surveillance of chronic diseases and help prevent exacerbation of cardiovascular disease.

Including tobacco and nicotine use in the Plan is of particular importance to achieve the EU's goal of a tobacco free generation by 2040 and to modernise legislation to encompass rapidly growing nicotine use in the EU. Another important aspect of the plan is including environmental determinants into innovation of medicines as well as for risk prediction. However, the proposal is very limited in adequately addressing environmental determinants as risk factors. Poor air quality is attributed to around 300,000 premature deaths every year in Europe, costing an estimated €20 billion in direct costs to healthcare, lost working days and losses of crops. [1]

The ERS and ELF praise the inclusion of detection of obstructive sleep apnoea (OSA) into the scope of screening for CVDs. An estimated 30% of hypertension patients have OSA, whereas 50% of OSA patients have hypertension. OSA is observed in 80% of patients with resistant hypertension (RH) and is the most recognisable cause of RH in about two-thirds of these patients.[2]

However, a major pitfall of the proposal is the inexplicable omission of important chronic respiratory diseases such as asthma and bronchiectasis, and in particular chronic obstructive pulmonary disease (COPD). Prevention and early detection of these diseases would bring considerable co-benefits for the prevention, early detection, and management of CVDs. For example, asthma is associated with a 30% increased risk for coronary artery disease and uncontrolled asthma increases the risk of acute myocardial infraction by 29%.[3] Patients with bronchiectasis have been found to have three times the risk of suffering a cardiac ischemic event and five times a cerebral one as compared to the general population.[4]

---

[1] EC. Commission Staff Working Document. SWD (2022) 545. https://eur-lex.europa.eu/resource.html?uri=cellar:a5235624-55f8-11ed-92ed-01aa75ed71a1.0001.02/DOC_1&format=PDF

[2] F.Campos-Rodríguez, E.Chiner, D. de la Rosa-Carrillo et al. Respiratory Pathology and Cardiovascular Diseases: A Scoping Review. Open Respiratory Archives 2025 ; 7 :100392 https://doi.org/10.1016/j.opresp.2024.100392

[3] Argueta FA, Alviar CL, Peters JI, Maselli DJ. Chronic asthma and the risk of cardiovascular disease. In: Martínez-García MÁ, Pépin J-L, Cazzola M, eds. Cardiovascular Complications of Respiratory Disorders (ERS Monograph). Sheffield, European Respiratory Society, 2020; pp. 82–95 [https://doi.org/10. 1183/2312508X.10027519].

[4] F.Campos-Rodríguez, E.Chiner, D. de la Rosa-Carrillo et al. Respiratory Pathology and Cardiovascular Diseases: A Scoping Review. Open Respiratory Archives 2025 ; 7 :100392 https://doi.org/10.1016/j.opresp.2024.100392

COPD contributes to and frequently coexists with CVD and is included as a risk factor in the QR4, a tool to identify individuals at high risk of CVD. Studies have shown that following acute lung exacerbation in patients with COPD, the risk of major cardiovascular event was significantly increased within 30 days and up to one year.[5] Moreover, the Lung Health Study found that among COPD patients, CVD is a common cause of hospitalisation (42% for first admission, and 48% as a readmission).[6]

Prof. Barbara Hoffmann, Chair of the ERS Advocacy Council said:

"Disregarding the relationship between chronic respiratory diseases and CVDs within this proposal is a failure to holistically address the root causes of CVDs and exacerbations. In order to have safe hearts – in many incidences – you need to have safe lungs."

[5] Kunisaki KM, Dransfield MT, Anderson JA, et al. Exacerbations of chronic obstructive pulmonary disease and cardiac events. A post hoc cohort analysis from the SUMMIT randomized clinical trial. Am J Respir Crit Care Med 2018; 198: 51–57.
[6] Ramalho S H R, Shah A M,. Lung function and cardiovascular disease: a link. Trends Cardiovasc Med. 2021 February ; 31(2): 93–98. doi:10.1016/j.tcm.2019.12.009.