

Vaccines Europe's response to the call for evidence on the EU cardiovascular health plan

As stated in the [mission letter](#) to Commissioner Várhelyi, “Investing in effective prevention measures will reduce the burden of noncommunicable diseases, helping to lighten the load on healthcare systems and supporting healthy longevity.” Incorporating immunisation as a core prevention measure is **crucial to realising this objective** and ensuring the EU Cardiovascular Health Plan succeeds.

Cardiovascular diseases (CVD) are **Europe's leading cause of death**, amounting to a staggering **5,000 daily deaths** every year. Around **62 million** Europeans live with CVD, which not only threatens their heart health but also **increases their vulnerability** to severe complications from respiratory infections like influenza, COVID-19, RSV, and pneumococcal. However, the relationship between CVD and respiratory infections is **bi-directional**, raising the risk of acute CV events even in people **without prior CVD**.

This dangerous health threat signals a worsening and untenable reality for Europe. Vulnerable groups and women are disproportionately affected, while the continent's ageing population is driving a **steady increase in CVD prevalence**. These trends highlight the urgent need to **strengthen prevention** to deliver a healthier, more sustainable Europe.

No prevention strategy for CVD is complete without immunisation. Vaccination programmes are instrumental to tackling the most detrimental consequences of respiratory infections. However, when it comes to CVD, they are **critically underused** as a prevention strategy despite documented impacts. Influenza vaccination can reduce the **severity of CVD by 51%** and **lower CVD-related deaths by 33%**. Similarly, receiving **two doses of a COVID-19 vaccine can decrease mortality in people with CVD by an impressive 60%**. These findings underscore the vital role of vaccination as a **powerful preventive tool** to protect vulnerable populations from the severe impacts of CVD, as well as contributing to the fight against AMR.

Importantly, older people living with CVD benefit extensively from vaccination, with **hospitalisation rates falling dramatically** for vaccinated CVD patients over 60 years old. Overall, **immunisation has saved 154 million lives in the last 50 years, 6 lives every minute**, while every €1 invested in adult vaccination **returns €19 over a lifetime**. However, despite the invaluable impact of life-course-immunisation on protecting the health of older

people with CVD, programmes across Europe have suffered from critical underfunding with 77% of EU countries spending less than 0.5% of their health budgets on immunisation programmes.

Bolstering immunisation investment as an effective prevention strategy is therefore essential to **reduce the most harmful consequences of CVD across Europe**. A newly published ESC Clinical Consensus Statement calls for vaccination to be considered as a **foundational pillar for cardiovascular prevention** alongside other established measures.

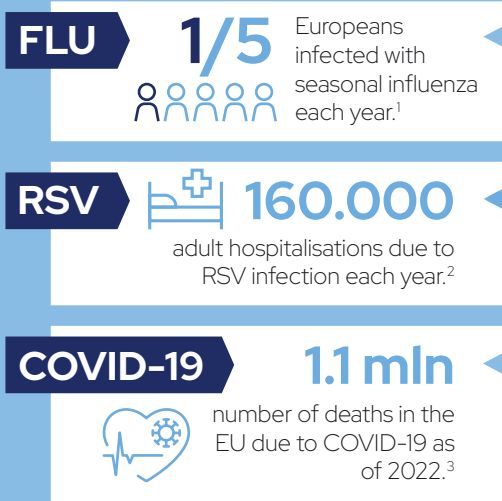
Integrating vaccination against respiratory infections into CVD prevention strategies would **reduce the health and economic burden** of CVD, help **address inequalities**, and support EU countries in **achieving their Sustainable Development Goals**. Building on the model of HPV and HBV actions within the EBCP, we call for a flagship EU initiative on respiratory infections to be embedded in the future Cardiovascular Health Strategy.

This must include an overdue update of vaccination coverage targets against respiratory infections for Member States, which have not been revised since 2009. Electronic immunisation records can also go further in enhancing vaccine effectiveness by improving uptake and adherence, giving citizens easy access to their vaccination history and keeping them informed and engaged.

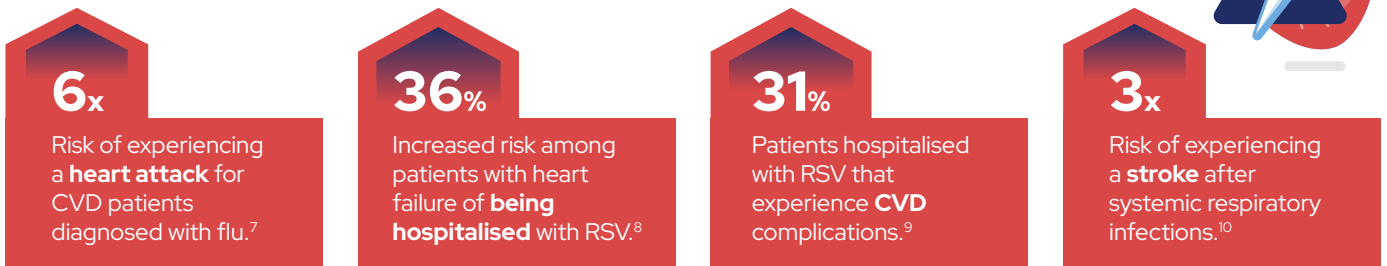
Embedding vaccination into the EU's cardiovascular health plan will **save lives and build a more resilient healthcare ecosystem for the future**.

Respiratory virus infections and cardiovascular disease (CVD)

Burden of disease in EU



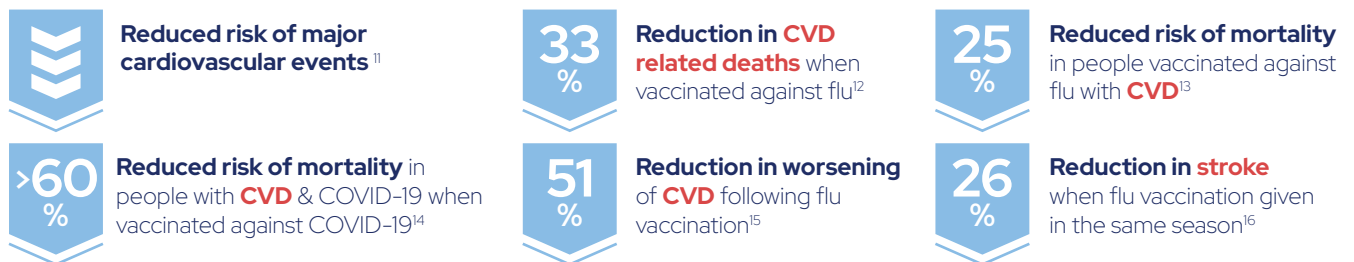
Respiratory virus infections can increase the risk of CVDs among all people



Vaccination against respiratory viruses can reduce the risk of complications associated with CVDs



Data on the benefits of RSV vaccination in relation to CVD, while in early stages, is expected to follow the positive outcomes seen with flu vaccination.



Call to action



- ▶ Include mention of the value of vaccination in reducing CVD complications in the Hungarian Presidency Council Conclusions.
- ▶ Harmonise recommendations for vaccination against respiratory viruses among patients with CVDs.
- ▶ Support the education of health workers on the value of vaccination for patients with CVDs to boost vaccination uptake.

1. ECDC
2. Osei-Yeboah et al. 2023
3. OECD, 2022

4. European Heart Network
5. European Heart Network
6. European Heart Network
7. Kwong et al. 2018

8. Branche et al. 2022, Prasad et al. 2021, Kujawski et al. 2022.
9. Falsley AR et al. 2021, Chuaychoo et al. 2019, Volling et al. 2014, DeMartino et al. 2023

10. Smeeth et al. 2004
12. Omid et al. 2023
11. 13. Yedlapati et al. 2021
14. Dashtban et al. 2023
15 & 16. Rademacher et al. 2024