

A European Respiratory Society and European Lung Foundation statement on defending science and scientific integrity

The respiratory community is deeply concerned by the escalating threats to science and scientists in Europe and worldwide. Without urgent action, years of progress in health research will be lost, with detrimental impacts on health and wellbeing.¹ It is imperative that science remains independent, evidence-based and free from political manipulation.

Scientific evidence, which is responsible for countless life-saving breakthroughs, is being questioned in an irrational and unscientific manner. This undermines trust, posing direct threats to public^{2,3} such as the re-emergence of preventable communicable diseases, poor management of noncommunicable diseases - with consequences for the ageing population, pollution exposure and the mitigation of climate change.

These actions pose a direct threat to public health systems and their resilience. Confronting these challenges requires defending independent science, countering disinformation, and strengthening international collaboration.

Independent science is essential for health

Independent science provides the evidence base for advancing prevention, innovative treatments, addressing side effects, and critically examining ineffective existing solutions to disease and health threats. In times of crisis, independent science enables us to understand causes, anticipate evolution, and develop appropriate responses to emergencies like disease outbreaks and pandemics.

Scientific advancement has also helped eradicate and significantly transform outcomes for diseases that once caused widespread mortality. Preventive measures, such as air quality and tobacco control programmes, vaccination research,⁴ and cancer screening programmes, have reduced healthcare burdens and improved survival rates.

The integrity of evidence allows policymakers to make sound, informed decisions that translate into positive change for the public good, while also advancing socio-economic growth. Sustained, unbiased public investment in independent research is vital for strong economies, resilient healthcare systems, and long-term social progress.⁵

Tackling the dangers of disinformation

Disinformation campaigns threaten the fabric of society by distorting, dismissing, censoring and politicising scientific evidence.⁶ Amid health threats and growing climate-induced health risks, the digital age has enabled disinformation to spread widely and quickly.

This impacts patients and vulnerable populations, influencing them to make health decisions based on unreliable information, while eroding their trust in public health systems and institutions. For example, the World Health Organization (WHO) found that up to 60% of pandemic-related social media content contained misleading information, which was linked to greater vaccine hesitancy, delayed care and poorer mental health outcomes.⁷ We cannot allow

false information to undermine society's progress in tackling disease and supporting public health.⁸

The scientific community must respond decisively – communicating loudly and clearly the dangers of disinformation. Everyone has the right to trustworthy information. Although we cannot control the spread of harmful content, we have a responsibility to challenge it and ensure that accurate, evidence-based material is available. Information must be presented from diverse perspectives, ensuring that initiatives address culturally specific concerns and contexts of eroding trust.

The crucial role of international collaboration

We cannot hope to address global challenges such as pandemics, air pollution and climate change, and the rise of communicable and noncommunicable diseases, without international multistakeholder scientific cooperation.

The COVID-19 pandemic demonstrated that international collaboration delivered breakthrough progress in vaccine deployment just 326 days⁹ after the virus's genetic sequence was published. Restricting cross-border collaboration and programmes weakens innovation, increases costs and delays the solutions that save lives.^{10,11}

Science is strengthened by engaging with diverse voices and lived experiences. Including patients and communities ensures that research reflects real needs and helps translate findings into meaningful and impactful outcomes. Civil society plays a vital role in bridging science and the public, championing transparency and accountability.¹²

Our call to action: protect science and health

The erosion of science is not an abstract threat; it is happening now. There is a wave of mis- and dis- information across the world chipping at the very foundation of knowledge itself. We call on European institutions, national governments, policymakers, and the public to:

- Protect independent, collaborative, cross-border research and medical innovation
- Uphold policies that defend scientific integrity and transparency
- Challenge disinformation that undermines trust and puts public health at risk
- Guarantee funding for public health and research initiatives to ensure resilience and support the prosperity of public health and healthcare systems
- Invest in education and culturally sensitive health literacy initiatives, and ensure that trustworthy, evidence-based information is shared transparently and accessibly
- Ensure public health decisions are science-based and made in consultation with experts, people with lived experience and the wider public to build trust
- Support patient-led initiatives that counter misinformation and build public trust in science.

The European Respiratory Society and European Lung Foundation call on leaders to unite in defending science and advancing international collaboration, so that together we secure a healthier, more resilient future for all.

About the signatories

The European Respiratory Society (ERS) is an apolitical organisation representing more than 35,000 scientists and medical professionals in the respiratory community across more than 160 countries.

The European Lung Foundation (ELF) is a patient-led organisation that works with a volunteer patient network of over 350 people, and a patient organisation network of more than 200 respiratory organisations in Europe. Together, we represent people living with more than 40 different lung conditions.

¹ World Health Organization. Global surveillance, prevention and control of chronic respiratory diseases. <https://www.who.int/publications/i/item/global-surveillance-prevention-and-control-of-chronic-respiratory-diseases>. Date last updated: 25 August 2007. Date last accessed: August 21 2025.

² Nature. Coronavirus: three things all governments and their science advisers must do now. <https://www.nature.com/articles/d41586-020-00772-4>. Date last updated: March 17 2020. Date last accessed: August 21 2025.

³ World federation of Public Health Associations. Why an Assault on Science Anywhere Is a Threat to Public Health Everywhere. <https://www.wfpha.org/why-an-assault-on-science-anywhere-is-a-threat-to-public-health-everywhere/>. Date last updated: March 5 2025. Date last accessed: August 21 2025.

⁴ Alamah Z, AlSoussy I, Fakh A, The Role of International Research Collaboration and Faculty Related Factors in Publication Citations: Evidence from Lebanon. *Economies* 2023, 11(3), 90; <https://doi.org/10.3390/economies11030090>

⁵ European Commission. “Tackling Online Disinformation,” 2022. <https://digital-strategy.ec.europa.eu/en/policies/online-disinformation>. Date last updated: 15 October 2024. Date last accessed: August 21 2025.

⁶ EU4Health Civil Society Alliance. Joint Position Paper Towards meaningful engagement of health civil society organisations in EU public health policymaking. <https://eu4health.eu/towards-meaningful-engagement-of-health-civil-society-organisations-in-eu-public-health-policymaking-joint-position-paper/>. Date last updated: 15 December 2022. Date last accessed: August 21 2025.

⁷ World Health Organisation. Infodemics and misinformation negatively affect people’s health behaviours, new WHO review finds. <https://www.who.int/europe/news/item/01-09-2022-infodemics-and-misinformation-negatively-affect-people-s-health-behaviours--new-who-review-finds>. Date last updated September 1 2022. Date last accesses August 21 2025.

⁸ World Health Organisation. Chronic respiratory diseases in the WHO European Region. <https://www.who.int/europe/publications/i/item/WHO-EURO-2025-12340-52112-79990>. Date last updated: 12 June 2025. Date last accessed: August 21 2025.

⁹ World Health Organisation. Leading and partnering to deliver COVID-19 tools to the world. <https://www.who.int/about/accountability/results/who-results-report-2020-2021/leading-and-partnering-to-deliver-covid-19-tools-to-the-world>. Date last updated n.d. Date last accessed August 21 2025.

¹⁰ Jennifer Dusdal, Justin J W Powell, Benefits, Motivations, and Challenges of International Collaborative Research: A Sociology of Science Case Study. *Science and Public Policy*, Volume 48, Issue 2, April 2021, Pages 235–245, <https://doi.org/10.1093/scipol/scab010>.

¹¹ Scientific American, China-U.S. Science Collaborations Are Declining, Slowing Key Research. <https://www.scientificamerican.com/article/china-u-s-science-collaborations-are-declining-slowing-key-research/>. Date last updates July 24 2024. Date last accessed August 21 2025.

¹² Hume E, Jagesar V, van Boven J. F M et al, Multidisciplinary collaboration is key to advancement in respiratory medicine! Interview with the ECM award winner 2024. *Breathe* 21(3): 250148, Published: Jul 2025, DOI: 10.1183/20734735.0148-2025.