Call to Action:

Ensuring Effective Immunisation Programmes for an Ageing Europe

There is an urgent need for policymakers to respond to the growing challenge of immunosenescence by ensuring older adults receive the vaccine that works best for them

Ageing and the immune system

Ageing is a natural part of life but brings with it a progressive decline in organ function and immune response. This, in turn, exacerbates pre-existing conditions and increases susceptibility to infectious diseases such as influenza, COVID-19, pneumococcal disease, herpes zoster (shingles) and respiratory syncytial virus (RSV), leading to severe health outcomes and mortality.[1,2] This gradual deterioration of the immune system – known as **immunosenescence** – affects all of us as we age, with immune function beginning to decline from as young as 20 years, and accelerating from around the age of 50.[3,4]

Immunosenescence has the double impact of making people more vulnerable to disease while at the same time reducing vaccine-induced immune responses.[2,4]

The consequences of immunosenescence are measurable, costly and often preventable, and place significant burden on individuals, families and healthcare systems.[4-6] For example, evidence suggests that the majority (62%) of people over 50 have at least one influenza risk factor and face increased chances of complications including hospitalisation, pneumonia, heart attacks, strokes and death.[7] The risk of invasive pneumococcal disease (IPD) and herpes zoster also rises sharply with age, with IPD rates in older adults more than ten times higher than in younger adults,[8] and adults aged ≥50 years accounting for two-thirds of herpes zoster cases.[9]

Protecting at-risk populations

Europe is ageing rapidly, with nearly 30% of the population expected to be aged 65 or over by 2050.[10] This demographic shift raises a crucial need to address the challenges posed by immunosenescence. Investing in adequate and tailored prevention will not only protect older adults from severe health outcomes, morbidity and mortality, but will also decrease healthcare expenditure, and deliver economic benefits by reducing dependency care requirements and days lost to sickness.[5,6,9,11]

EUR 34 bn*

Cost of lost working days owing to influenza in 2019 among people aged 50–64 in countries identified as having a high or high–mid social development index [6]

The mortality rate from influenza in 2010–2017 among people aged 50–64 (0.9 per 100,000) was

9-fold higher

than that of people aged 18–49[11]



>90%

of adult shingles cases can be prevented by immunisation[9]



Europe 2022

1 in 6

adults aged ≥65 with invasive pneumococcal disease died[8]

* USD $39,089,182,433.

Immunisation is an essential measure in preventing severe disease and keeping at-risk older populations protected against infectious illnesses.[1] Yet most European countries fail to meet the World Health Organization (WHO) target of 75% influenza vaccine coverage for older adults for example.[14] In addition, because immunosenescence reduces the immune system's response to immunisation, we see generally lower vaccine effectiveness in older adults than in younger age groups, meaning standard vaccines are not always sufficient.[1,14]

A smarter defence is needed to tackle immunosenescence

Addressing the challenge of immunosenescence in Europe demands a multifaceted, collaborative, timely and long-term strategic approach.

We call on policymakers

to prioritise opportunities to strengthen immunisation programmes to address the challenge of immunosenescence, and align national recommendations with the latest scientific evidence and global best practice.

CALL TO ACTION 1: **Include enhanced or improved vaccines in recommendations for older adults to boost protection and cost effectiveness**

Enhanced influenza vaccines, such as high-dose or adjuvanted formulations, were specifically designed to offer better protection for older people by boosting the immune response.[2] For influenza, enhanced vaccines demonstrated 20–59% greater effectiveness against hospitalisation, and more cost effectiveness than standard vaccines.[12-15] Yet, uptake varies widely, shaped by regional policies and accessibility.[14,15] It is crucial for policy makers to establish the right policies and funding to make enhanced or improved vaccines widely available for sustainable use by target populations.

CALL TO ACTION 2: **Consider adapting the age threshold for enhanced or improved vaccines to align with emerging evidence on effectiveness and value**

Several countries have already lowered the age threshold for enhanced vaccines in response to emerging evidence. Germany, Austria and the Netherlands all recommend enhanced influenza vaccines for adults over 60 years of age.[15,18] Enhanced pneumococcal and shingles vaccines are also being recommended at younger ages in some settings.[17,19,20] These countries have observed how enhanced or improved vaccines can reduce the demand for healthcare consultations and other associated costs that come with fewer hospitalisations and deaths and, subsequently, changed their healthcare policies to take advantage of this.[15,16,21]

CALL TO ACTION 3: **Support public health messaging to help older adults understand their options and ask for the best protection available**

A robust programme of transparent, evidence-driven, easy-to-understand communications about the benefits of immunisation in the context of immunosenescence will build confidence in immunisation efforts, and provide individuals and healthcare professionals with the tools and knowledge they need to improve voluntary uptake and trust in public health initiatives. Alignment of recommendation over the borders will support confidence in immunisation programmes.

CALL TO ACTION 4: **Prioritise access to the most effective vaccines for those most at risk, with a focus on equity**

Addressing health inequalities and structural barriers to achieve effective population-level immunity and healthy ageing is not just smart policy – it's a matter of health equity. Targeting immunisation policies and resource allocation for underserved regions and socioeconomic groups, including through the strategic use of financial and contractual levers, and the delivering of immunisations in easy-to-reach venues, ensures that our most vulnerable citizens are not left behind.

Conclusion

Immunisation can prevent severe illness and reduce hospital admissions, alleviating pressure on already strained healthcare systems – a pressure set to increase as European and global populations continue to age.

Investing in strategies that drive better protection upfront – such as using enhanced or improved vaccines, adapting the age threshold for these vaccines, based on scientific evidence, supporting educational campaigns and addressing equity and access challenges – can translate to savings in emergency care and in-patient stays, and reduce long-term complications and mortality.

Older adults deserve the best chance of staying healthy, which means having timely access to the most effective protection available; the vaccine that works best for them.

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For more information on immunosenescence and improving adult immunisation, please see report from ILC-UK or contact

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