WINTER RESPIRATORY VIRUSES IN EUROPE

POLICY BRIEF

COVID-19, Influenza, Respiratory Syncytial Virus (RSV), Pneumococcal disease, and Human Metapneumovirus (hMPV)

Coalition for Life Course Immunisation

ESWI
SCIENTISTS FIGHTING INFLUENZA AND OTHER ACUTE RESPIRATORY VIRUSES

Executive Summary

Europe's ageing and increasingly mobile population faces a persistent winter burden of respiratory viruses.

Influenza, COVID-19, RSV, and pneumococcal disease remain major causes of hospitalisation and death, particularly among adults aged ≥60 years and those with chronic cardiorespiratory, metabolic, or immune conditions [1–3]. Seasonal surges stretch hospitals, disrupt the workforce, and threaten older and clinically vulnerable citizens.

Vaccination is Europe's most effective and equitable preventive investment.

Influenza vaccination coverage in adults ≥65 years averaged 47% across EU/EEA countries in 2023, ranging from <20% to >75% [4]. During 2024/25, COVID-19 booster uptake among adults ≥60 years was only 7–9% across reporting Member States [5].

RSV vaccines are newly authorised for adult use [6], and pneumococcal schedules have simplified with single-visit PCV20 protection [7]. The European Respiratory Virus Surveillance Summary (ERVISS) platform now coordinates timing, performance, and transparent communication [8].

A single, coordinated autumn campaign – covering influenza and COVID-19 for all eligible adults, RSV for individuals aged 75 and older and those at risk aged 60–74, and opportunistic PCV20 – would deliver prevention at scale. Pharmacy delivery, long-term-care-facility (LTCF) in-reach, and mobile outreach can close equity gaps while maintaining subsidiarity.

Influenza vaccination coverage of 75% in at-risk adults in Europe could prevent more than 1.7 million influenza cases, 14,300 deaths, and save €226 million annually in healthcare costs and lost productivity. [9,10] Every percentage-point gain in uptake strengthens Europe's ability to manage future respiratory threats.

The Life Course Approach

Vaccination across the life course protects people at every stage of life and embeds prevention into routine care.

A life-course approach ensures continuity of protection as individuals age, move, or acquire new health conditions [11]. It protects those who cannot be vaccinated through sustained community immunity and recognises increasing migration and mobility across Europe [12].
Connecting data through the European Health Data Space (EHDS) unites coordination and independence.

The EHDS enables Member States to link national immunisation registries while retaining autonomy over financing and delivery [13]. Shared, interoperable data allows benchmarking, equity monitoring, and rapid outbreak response without centralisation.
Life-course immunisation strengthens Europe's workforce and economy.

Preventing influenza in adults reduces healthcare costs, absenteeism, and productivity losses, which can amount to €190-€226 million annually [14]. Healthier ageing reduces long-term care costs and dependency, delivering measurable fiscal and social benefits [15].

COVID-19

Seasonal COVID-19 vaccination is essential to protect Europe's ageing and mobile population. ECDC's multicounty analyses show that booster doses in older adults substantially reduce the risk of hospitalisation and death from COVID-19. [3] Integrating boosters within life-course programmes converts emergency responses into predictable prevention, preserving workforce stability and health system resilience.

COVID-19 remains a serious seasonal threat despite endemic circulation.

Older and multi-morbid adults continue to experience disproportionate morbidity and mortality. During 2024/25, median booster coverage among adults ≥60 years across EU/EEA countries was 7–9%, with considerable national variation [5]. The overlapping COVID-19 and influenza waves exacerbate hospital and ICU strain [1,8].

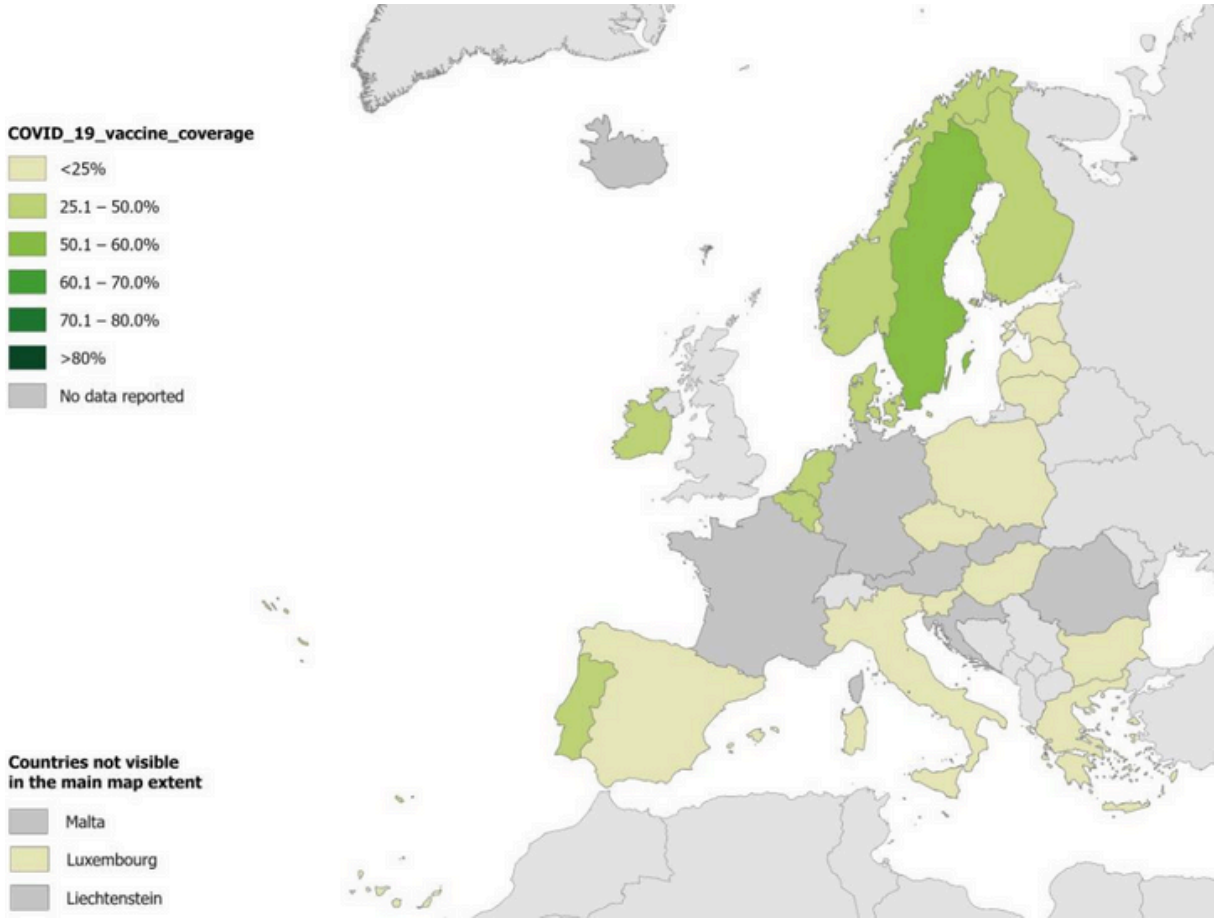
Normalising COVID-19 vaccination within life-course immunisation ensures continuity of protection.

Embedding boosters in the annual respiratory-virus offer – co-administered with influenza and RSV – simplifies access for ageing, mobile, and vulnerable populations [16]. Real-time registry uploads through pharmacies and LTCFs enable transparent monitoring and targeted outreach [8].

Recommendations

- Codify seasonal boosters for ≥65 and defined risk groups, with default co-administration alongside influenza (and RSV where indicated).
- Remunerate pharmacy vaccination and require real-time registry upload; conduct on-site LTCF clinics from September.
- Report weekly indicators (coverage, positivity, hospitalisations, ICU) and publish monthly plain-language vaccine-effectiveness and safety briefs.
- Use flexible procurement and agile strain updates to safeguard supply without over-ordering.

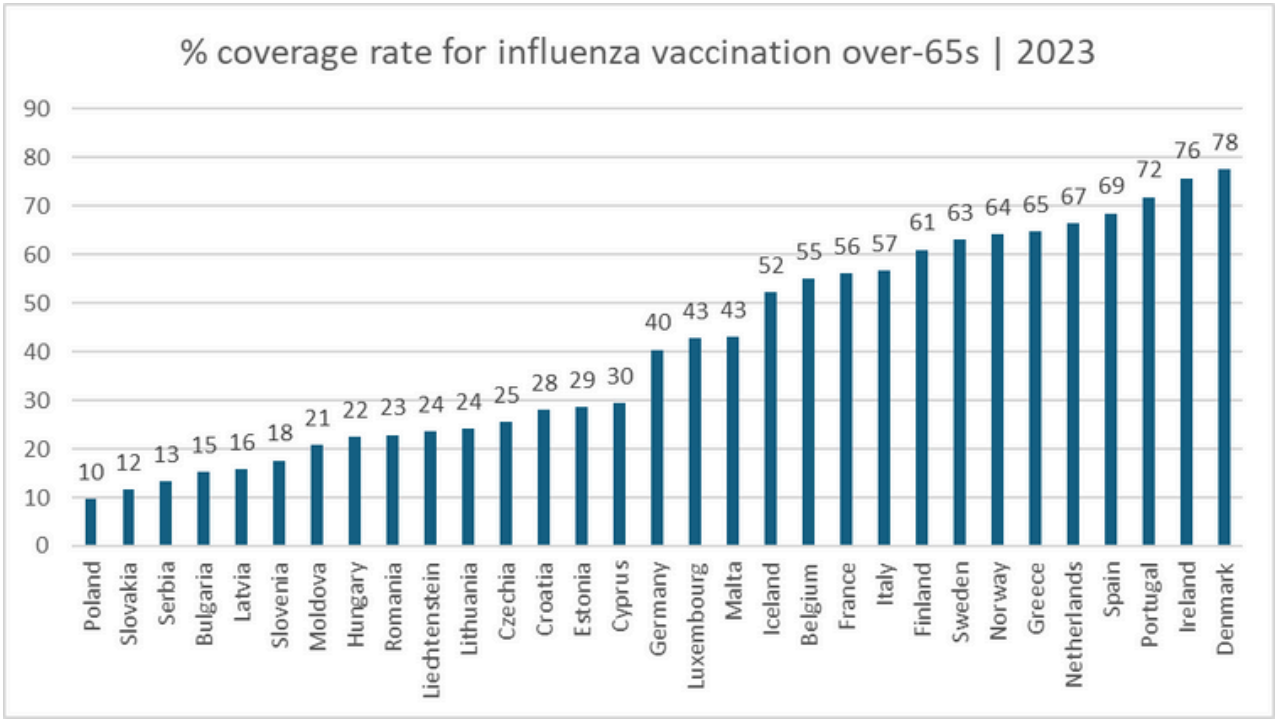
COVID-19



COVID-19 vaccination coverage over-60s across EU/EEA countries 1 August 2024-28 March 2025 | ECDC. 2025

Influenza

Vaccination coverage of 75% in at-risk adults in Europe could prevent more than 1.7 million influenza cases, 14,300 deaths, and save €226 million annually in healthcare costs and lost productivity. [9,10]. Influenza vaccination protects those who cannot be vaccinated, sustains independence in later life, and relieves winter pressure on Europe's healthcare workforce.



Over-65 Influenza Vaccination Coverage Rates in EU Member States | Eurostat 2024

Influenza remains a predictable, preventable, and under-controlled winter burden across Europe.

It causes roughly 27,600 respiratory deaths annually in the EU/EEA, mostly among older adults with chronic disease [4,17]. The average vaccination coverage among adults aged 65 years and above stands at 47%, far below the EU benchmark of 75% [4].

Influenza

Embedding influenza vaccination within routine adult and chronic-disease care ensures equitable protection.

Offering vaccinations during COPD, diabetes, and cardiovascular reviews in community pharmacies and at hospital discharge supports lifelong protection and convenience [18]. Co-administration with other adult vaccines (COVID-19, RSV, pneumococcal) should be the default. Digital reminders, multilingual materials, and trusted professional communication improve uptake among sedentary and mobile populations [19].

Recommendations

- Set and publish a ≥75% target for adults ≥65 years and track weekly progress using ECDC ERVISS data.
- Make GP/pharmacist-to-patient education the campaign backbone: brief consults, translated materials, targeted text reminders.
- Integrate influenza vaccination into chronic-disease reviews; recall if out of season.
- Remunerate pharmacists for administration and require real-time registry upload.
- Normalise co-administration with other indicated vaccines to minimise repeat visits.
- Advance EU-level uniformity in risk-group definitions, funding, and coverage metrics; progress toward a pan-EU digital vaccination record.

Respiratory Syncytial Virus (RSV)

Closing the adult RSV prevention gap protects Europe's frailest citizens and relieves winter pressure. Lowering paediatric transmission may delay but not eliminate adult cases; adult vaccination remains essential, especially for those at high risk.

RSV is a significant but historically under-recognised cause of severe adult respiratory disease.

Across the EU, modelling estimates about 158,000 RSV-associated hospitalisations in adults annually, with more than 90% occurring in those ≥65 years [21]. Hospitalised older adults have high ICU admission rates and substantial post-discharge mortality; systematic under-testing contributes to under-ascertainment [22].

Authorised adult RSV vaccines enable targeted protection.

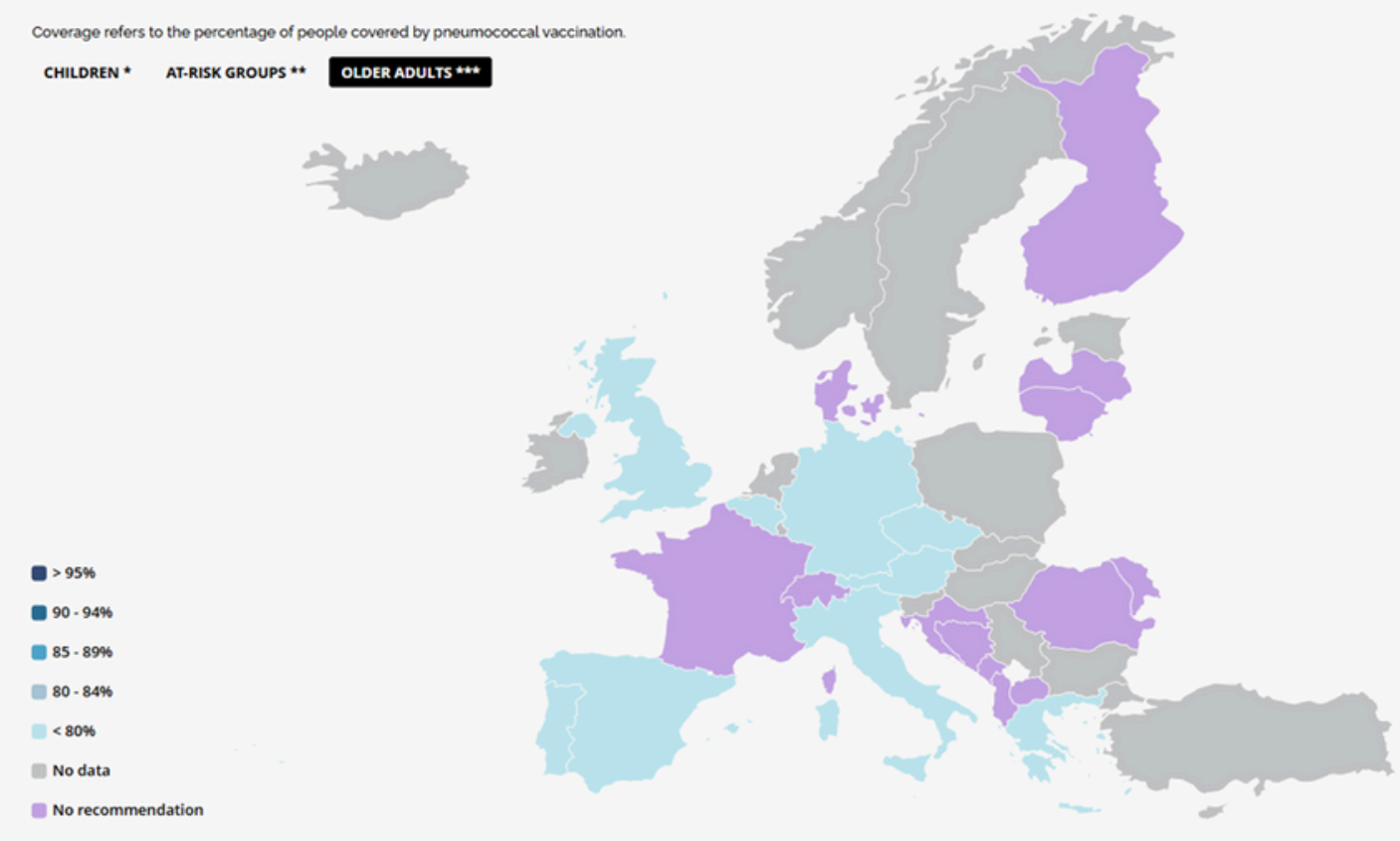
The EMA has approved RSV vaccines for older adults, and the European Commission extended the approval to risk groups aged 18–59 years in 2025 [23,24]. Germany's STIKO and France's HAS recommend vaccination for those ≥75 years and for 60–74 years at risk [25,26]. Early evidence from Scotland shows a reduction in older-adult hospitalisations following the rollout [27].

Recommendations

- Offer RSV vaccination to ≥75 years and 60–74 years with risk conditions; start each September with LTCF in-reach and pharmacy delivery.
- Co-administer with influenza/COVID-19 where indicated and communicate safety and effectiveness transparently.
- Publish monthly plain-language safety briefs and early real-world effectiveness summaries.
- Integrate adult RSV surveillance with age, comorbidity, ICU, ventilation, and mortality data to support annual cost-effectiveness reviews.

Pneumococcal Disease

Preventing pneumococcal complications reduces admissions, shortens stays, and cuts antibiotic exposure that drives AMR. [28-30].



Pneumococcal Vaccination Coverage for Adults (2023) | Pneumococcal Vaccination Atlas

Pneumococcal Disease

Streptococcus pneumoniae amplifies viral-season harm through secondary pneumonia and invasive disease in older and multimorbid adults.

Simplified adult schedules such as PCV20 enable single-visit protection and opportunistic delivery.

In a study in England alone, replacing PPV23 with PCV20 would prevent 12,536 hospitalisations and 1,414 deaths over 5 years from pnueumococcal disease, and would reduce medical care costs by £48.5 million. [29]

Multiple Member States recommend PCV20 for adults ≥60/65 years and at-risk groups, broadening serotype coverage and aligning with life-course principles [30-[30-32].

Recommendations

- Standardise simple adult schedules (PCV20 for ≥65 years and defined risk groups) with co-administration alongside influenza/COVID-19/RSV.
- Build prompts into chronic-disease reviews and discharge bundles; ensure registry reminders in GP/pharmacy systems.
- Use multi-year tenders with clear interchangeability to stabilise supply; publish adult coverage annually.

Human Metapneumovirus (hMPV)

Recognising and tracking hMPV now prevents future winter pressures and may shorten the path from future product authorisation to equitable access [31,32].

hMPV is an overlooked contributor to winter respiratory illness in older and immunocompromised adults.

ECDC reports hMPV peaks from late winter to spring and causes clinically significant disease; there is currently no vaccine or antiviral [33]. WHO and ECDC call for integrated surveillance to include hMPV alongside influenza, RSV, and SARS-CoV-2 [31-34].

Preparing now ensures rapid evaluation when vaccines or antivirals become available. Including hMPV in dashboards, outbreak protocols for LTCFs, and multiplex PCR testing frameworks positions Member States for rapid HTA and JCA once candidates progress [31,32].

Recommendations

- Include hMPV in national integrated respiratory surveillance with age-stratified positivity and severity metrics.
- Expand multiplex PCR testing for severe ARI in hospitals and LTCFs.
- Treat hMPV operationally like RSV/influenza in LTCF outbreak protocols.
- Prepare HTA/JCA templates in advance for future vaccine evaluation.

Conclusion

Prevention across the life course is Europe's route from seasonal crisis to sustainable winter resilience.

A connected, annual adult respiratory offer – covering influenza, COVID-19, RSV, and pneumococcal vaccination – protects ageing, mobile, and clinically vulnerable populations while safeguarding system capacity and the workforce [8,21,31,33].

Scaling adult vaccination now yields measurable returns: fewer admissions and deaths, reduced antimicrobial use, and stronger, steadier health-system performance each winter [9,21,30–34].

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