



ADULT VACCINATION IN EU MEMBER STATES

Decision-making structures, financing and vaccine impact





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The CLCI is a European membership organisation dedicated to protecting health through advancing life-long protection from vaccine preventable diseases.

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KEY TAKEAWAYS

Typically, NITAGs recommend new vaccines to the MoH, which holds the authority to determine vaccine financing and inclusion in national programs. In decentralised systems, regional governments are responsible for financing vaccine delivery.

Governments or social insurance entities predominantly fund National Immunisation Programs (NIPs). Public-private partnerships (PPP) generally do not play a direct role in national vaccine financing but may contribute to early-stage research and development.

The Ministry of Finance's involvement in vaccine budgeting was reported by 50% (8) of countries, primarily during annual healthcare budget reviews. Direct MoF involvement in vaccine-specific budgeting was noted in five countries (Denmark, Greece, Italy, Poland, and Romania).

44% (7) of countries reported having ringfenced budgets for vaccination or prevention. Eastern European countries (5/7) reported ringfencing more frequently than Western European countries (2/9), and MoF involvement was positively associated with the presence of ringfencing mechanisms.

Sustainability mechanisms were reported by 6 out of 16 countries. These mechanisms include long-term vaccine contracts, split investments (e.g., public health insurance contributions), and dedicated vaccine budgets.

The most commonly cited barriers were:

- Budget limitations (9 countries)
- Political will (6 countries)
- Migration of unvaccinated individuals (2 countries)
- Process-related issues (2 countries).

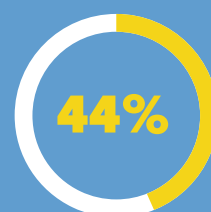
Higher prevention spending was associated with fewer adult vaccination recommendations.

MoF involvement was associated with less GDO allocation to healthcare. Countries with direct MoF involvement in healthcare and vaccine budgeting allocated, on average, 1% less of their GDP to healthcare (8.7%) compared to countries without MoF oversight (9.7%).

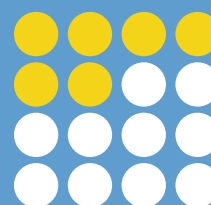
Countries with decentralised healthcare systems spent more on healthcare and had better adult vaccination coverage. They allocated more of their GDP to healthcare (10.3% vs 8.2%) and more of their healthcare budget to prevention (6.4% vs 4.9%) compared to countries with centralised systems. This was associated with higher influenza vaccine coverage for those over 65 in countries with a decentralised healthcare system (57%) than centralised healthcare systems (35%).



*Ministry of Finance
Involvement was
reported by 50% (8)
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*Ringfencing of the
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*Sustainability
mechanisms were
reported by 6/16
countries*

INTRODUCTION

This report examines the vaccination financing and decision-making structures of 16 European Union member states: Austria, Belgium, Cyprus, Czechia, Denmark, France, Germany, Greece, Hungary, Italy, Lithuania, Norway, Poland, Romania, Spain, and the Netherlands. These countries are categorised into seven Eastern European and nine Western European nations.

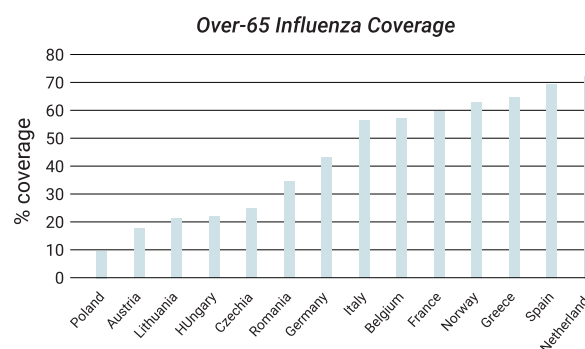
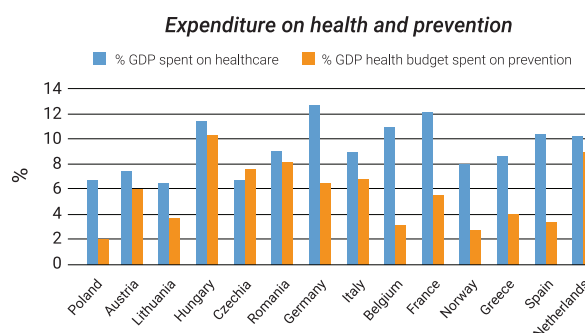
The research findings were generated from an online survey completed by country representatives and a cross-analysis with publicly available data, such as healthcare expenditure or vaccination coverage rates, to identify trends and relationships between financing, decision-making, and vaccination impact. The methodology and limitations are detailed in the Appendix.

Variable Prevention Expenditure

The proportion of the healthcare budget spent on prevention is highly variable, with expenditure in Austria being over 10% and Norway being 2.7%.

Increased spending on prevention does not always lead to broader vaccine coverage for adults. Higher prevention expenditure was weakly correlated (-0.24) with fewer recommended adult vaccines. This could imply that resources are allocated to other preventive measures due to different health priorities.

Direct financial oversight can influence the allocation of government spending on healthcare. Countries reporting Ministry of Finance (MoF) involvement in healthcare and vaccine budgeting spent, on average, 1% less of GDP on healthcare (8.7%) than countries without direct MoF oversight (9.7%).



East vs West Europe

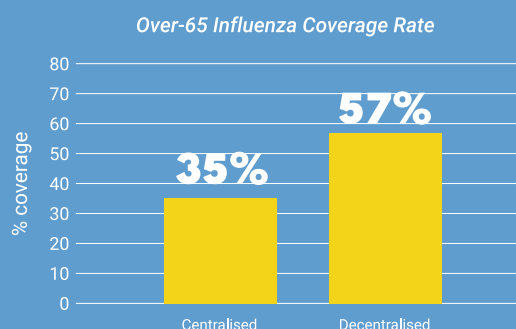
Eastern countries in this study had a lower over-65 influenza vaccination coverage rate than Western countries (33% vs 54%). They also spent less of their GDP on healthcare (4.6% vs 6.2%) and spent less of their healthcare budget on prevention (7.6% vs 10%). This could be associated with a significantly lower GDP per capita in Eastern Europe and different political priorities.

Decentralised Healthcare Systems

Countries with decentralised health systems allocated a higher percentage of their GDP to healthcare (10.3% vs. 8.2%) and a larger portion of their healthcare budget to prevention (6.4% vs. 4.9%) compared to centralised systems, resulting in improved influenza vaccine coverage for those over 65.

Challenges

Budget limitations: 9 countries
Political will: 6 countries
Migration of unvaccinated individuals: 2 countries
Process-related: 2 countries
Planning: 1 country
Decentralization: 1 country
Limited power of NITAG: 1 country



FINANCING MECHANISMS

Ringfencing of Vaccination Funds

7/16 countries reported ringfencing of funds for vaccination and prevention. Ringfencing was more commonly reported by countries that have MoF involvement in budgeting.

Split Investments with Social Insurance

The Austrian Ministry of Health, individual states, and social insurance share the cost of influenza vaccination, which distributes the financial burden and promotes shared responsibility. In Czechia, the public health insurance system plays a significant role in funding the national immunisation program. They are financed from regular contributions from employers, the self-employed, and state payments for specific groups (e.g., children and the unemployed).

Long-term Vaccine Contracts

Two countries reported using long-term, multi-year contracts to secure vaccine supply and stabilise financing.

Public Health Insurance Contributions

In Czechia, the public health insurance system plays a significant role in funding the national immunisation program. Regular contributions from employers, the self-employed, and state payments for specific groups (e.g., children, the unemployed) fund these initiatives.

Supplementary Budgets for Justifiable Needs

In Cyprus, the prevention fund is ringfenced according to the NIP needs. Funding can be increased with a supplementary budget if justifiable needs exist, allowing for flexibility and adaptability in response to emerging public health challenges.



INNOVATIVE FINANCING OF COVID VACCINATION

An example of what can happen with enough public and political will.

Centralised Vaccination Financing

In Germany, the government entirely financed the COVID-19 vaccines using the budget of health insurers, a departure from the usual mix of statutory and private health insurance funding. Similarly, Belgium funded COVID-19 vaccines entirely through state resources, diverging from its typical healthcare financing involving federal and regional budgets alongside the National Institute for Health and Disability Insurance. This approach facilitated free vaccination access during the pandemic, returning to conventional financing methods afterwards.

Expedited Processes

During the COVID-19 pandemic, Czechia implemented a special emergency legislative exemption to finance healthcare flexibly. This approach allowed the government to bypass some usual legislative constraints, enabling quicker allocation and utilisation of funds to manage the crisis effectively. The emergency facilitated rapid financial responses, critical for addressing the immediate needs posed by the pandemic, such as purchasing medical supplies, expanding healthcare facilities, and ensuring vaccine distribution.

Joint Procurement

The European Union's Joint Procurement Agreement (JPA) for COVID-19 vaccines was a strategic initiative to ensure equitable access and efficient distribution of vaccines among member states. Under this agreement, the European Commission, on behalf of the member states, negotiated and signed Advance Purchase Agreements (APAs) with vaccine manufacturers. These agreements secured the right to purchase predetermined vaccine doses within a specified timeframe and at agreed prices. The funding for these APAs was sourced from the EU's Emergency Support Instrument, which allocated €2.15 billion, with an additional €750 million contributed by member states, totalling €2.9 billion. This collaborative approach allowed for risk-sharing in vaccine development and ensured that all member states could access vaccines simultaneously, addressing supply and price disparities across the EU.



CONCLUSION

This study highlights the complex landscape of vaccine financing and decision-making across 16 European Union member states, with significant variations based on health system structures and regional economic capacities. In most countries, NITAGs provide recommendations to Ministries of Health, which can decide on vaccine financing and inclusion in national programs. However, decentralised systems assign the responsibility for financing vaccine delivery to regional governments. National Immunisation Programs (NIPs) are primarily funded by governments or social insurance entities, with limited involvement from public-private partnerships in direct financing.

Ministries of Finance play a notable role in healthcare budgeting, with half of countries reporting their involvement, particularly during annual budget reviews. Ringfenced budgets for vaccination were more prevalent in Eastern European countries and nations where the Ministry of Finance was involved. While some countries have implemented sustainability mechanisms, such as long-term contracts and split investments, budget limitations and political will remain significant barriers to expanding adult vaccination programs.

Decentralised health systems demonstrated higher healthcare spending and greater investment in prevention, leading to improved influenza vaccine coverage for older adults. However, increased prevention spending did not necessarily correlate with broader adult vaccine coverage. Finally, the COVID-19 pandemic underscored the importance of flexible financing mechanisms and joint procurement strategies, offering a model for future public health emergencies.

Given these insights, the report advocates for an EU-wide integrated approach to enhance the efficacy of national vaccination strategies for adults. It calls for further studies to address the gaps in direct vaccine financing data and suggests strengthening regional cooperation to mitigate disparities in vaccine coverage and financial mechanisms. Strengthening political commitment and enhancing budget allocations for vaccinations are recommended to achieve more comprehensive health outcomes across the EU. This study underscores the importance of effectively refining policy approaches and funding strategies to adapt to emerging health challenges.

Calls to Action

1

Strengthen Political Commitment and Sustainable Financing:

Enhance political will to prioritise vaccination funding and adopt sustainable financial mechanisms such as long-term contracts and collaborative funding models to ensure consistent vaccine supply and economic stability.

3

Enhance Understanding and Support for Vaccination:

Increase research efforts to highlight differences in vaccination approaches to professionals and the public, improving understanding and support for vaccination programs.

2

Increase Prevention Budgets and Foster Unity:

Advocate for higher allocation of healthcare budgets to prevention and promote greater unity and knowledge sharing between member states to improve the uniformity of vaccination decision-making and financing approaches.

4

Promote Comprehensive Immunization Programs:

Focus on integrating robust financial planning mechanisms and ensuring comprehensive immunisation programs that address emerging public health challenges and maintain high vaccination coverage rates.

A photograph of a modern glass building with many flags in front of it. The flags are on tall poles and are waving in the wind. The building has a grid-like structure of windows and balconies. The sky is blue and clear.

COUNTRY PROFILES

AUSTRIA

Decision-Making

Stakeholders: National Vaccination Committee (NITAG), the Ministry of Health (MoH) and Finance (MoF) and social insurance.

Introducing a new vaccine: The national government recommends vaccination for the regional states that manage the delivery. The organisation may, therefore, vary from state to state. Extensions and adaptations to the immunisation schedule decisions are based on evaluating the cost/benefit ratio, with scientific recommendations influencing but not solely determining inclusion in the vaccination program.

Ministry of Finance Involvement: Yes. In most cases, the MoF has already been involved, as it often requires funds for vaccination programmes.

Financing

Funding: The federal government covers 2/3 of the cost of vaccination, and the federal provinces and social insurance finance 1/3. Financing decisions are often influenced by politics and determined by what coalition the government is in. Budget increases to accommodate public health needs have been continuous but still need to be increased.

If immunisation takes place in the hospital, the federal states are usually responsible as hospital operators. If the vaccination is administered by a general practitioner, family doctor, or paediatrician, social insurance is generally accountable and financed differently.

Critical Financing Challenges: Budget limitations

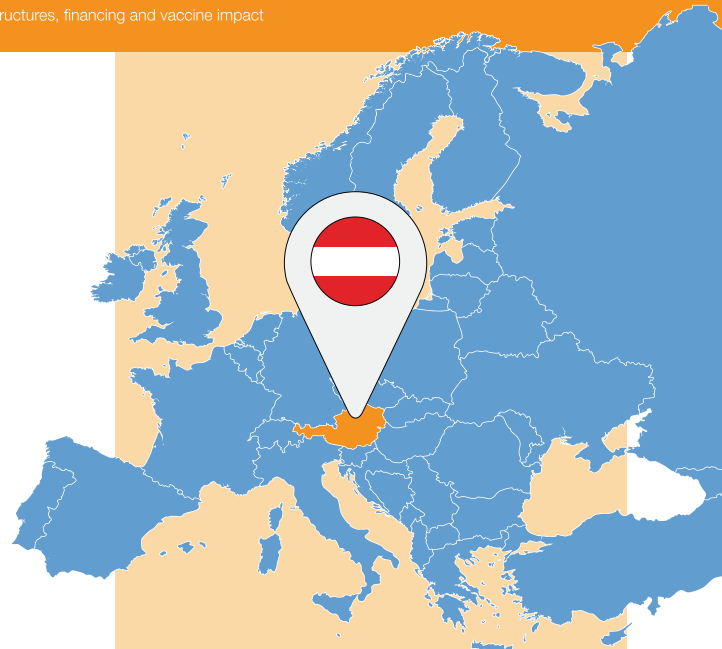
	Yes	No
Ministry of Finance Involvement	✓	
Ringfencing		✓
Financial Mechanisms for Sustainability		✓
External Funding Sources		✓
Influence of Public-Private Partnerships		✓

Landscape

History of Vaccination: Austria's vaccination program began in 1997 and has expanded incrementally based on vaccine availability and public health needs.

Most Funded Campaign: Pneumococcal and hexavalent vaccines due to their broad public health impact.

Looking ahead: During the 2023/24 season, influenza vaccinations were introduced with a deductible of 7 euros, alongside free access for specific demographics. Looking ahead to the 2024/2025 season, Austria is set to embark on a trial offering free influenza vaccines to all under a novel funding approach. This approach entails the MoH, individual states, and social insurance, each contributing one-third of the total cost.



Decentralised Health System



11.4%
of GDP spent
on healthcare



10.3%
of healthcare
budget is spent
on prevention

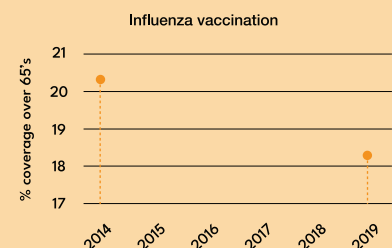


18.3%
Over-65 influenza
vaccination
coverage (2019)

Adult vaccination (18+) recommendation against 10 diseases:

COVID-19 *
RSV
Diphtheria
Tetanus
Pertussis
Pneumococcal disease
Influenza
Herpes Zoster
Tick-borne encephalitis

*1/10 are government funded



BELGIUM

Decision-Making

Technical Advisory Group (NITAG) and the National Institute for Health and Disability Insurance (NIHDI).

Introducing a new vaccine: The NITAG makes national recommendations that must be implemented at the regional level. Regional governments must add to funds provided by the federal government to introduce a new vaccine, or the vaccine schedule must be simplified to make the budget available for newly introduced vaccines. For instance, an extra budget was made available in Flanders for the RSV vaccination of pregnant women. It needs to be clarified whether this will happen in Wallonia.

Financing

Primary Funding Sources: National Institute for Health and Disability Insurance (NIHDI) and regional funds.

Financial Mechanisms for Sustainability: No. Other than some involvement in vaccine procurement negotiations.

Influence of Public-Private Partnerships: No. If there is, focus mainly on policy influence rather than direct funding.

Ringfencing: No. The regional budget is annually negotiated and ringfenced in the national budget, but prevention or vaccination financing is not.

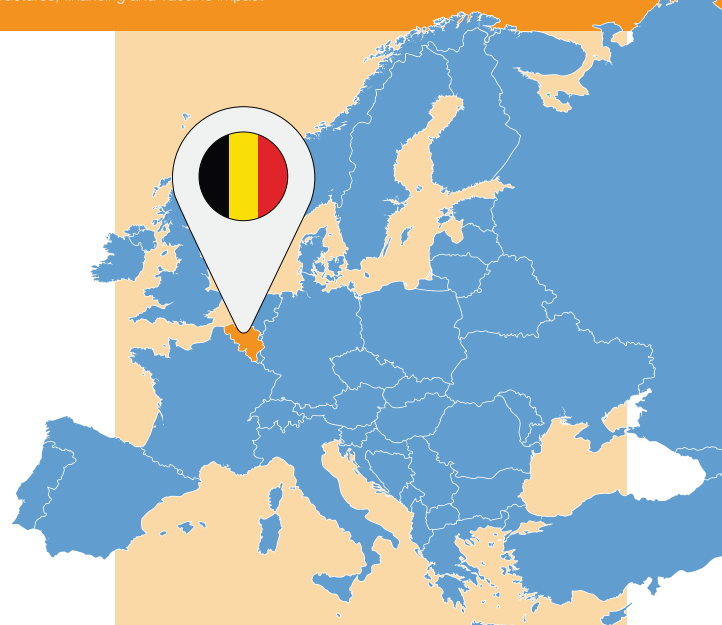
Critical Financing Challenges: Budget limitations and variability by region affect the uniformity and extent of vaccine coverage.

	Yes	No
Ministry of Finance Involvement	✓	
Ringfencing		✓
Financial Mechanisms for Sustainability		✓
External Funding Sources		✓
Influence of Public-Private Partnerships		✓

Landscape

Most funded vaccination campaigns: Universal infant and school child immunisation programs receive the most funding.

Future: Future funding strategies may shift towards a larger prevention budget depending on electoral outcomes. The COVID financing mechanism at the national level has not remained, but vaccination access has increased, supported by pharmacists who can now vaccinate.



Decentralised Health System



10.9%
of GDP spent
on healthcare



3.1%
of healthcare
budget is spent
on prevention

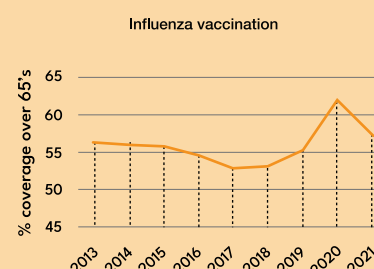


57%
Over-65 influenza
vaccination
coverage (2021)

Adult vaccination (18+) recommendation against 12 diseases:

COVID-19*
RSV
Diphtheria
Tetanus
Pertussis
Poliomyelitis*
Hepatitis B*
Pneumococcal disease*
Varicella
Influenza*
Herpes Zoster
Hepatitis A*

*6/12 are
government
funded



CYPRUS

Decision-Making

Stakeholders: National Immunization Advisory Committee, Epidemiological Surveillance and Infectious Disease Control Unit, Medical and Public Health Services of Ministry of Health (MoH).

Introducing a new vaccine: The National Immunization Advisory Committee reviews epidemiology and cost-effectiveness data, clinical protocols, manufacturer presentation and WHO/ECDC guidance to recommend vaccines to the MoH, who makes the final decision. The advisory committee (a form of the National Immunisation Technical Advisory Group – NITAG) is a multidisciplinary group that includes patient organisations, academics, the Cyprus Medical Council, public health, nursing, pharmacy, and the Director General of MoH.

Ministry of Finance Involvement: Yes. The Ministry of Finance participates in health budget discussions and debates in parliament.

Financing

Primary Funding Source: The MoH budget. Vaccinations that do not fall under this are paid out of pocket, with some exceptions, such as when the MoH accepts requests for consideration to cover costs.

Ringfencing: Yes. The MoH ringfenced budget includes the funds required to deliver the national immunisation program. Funding can be increased with a supplementary budget if there are justifiable needs.

Financial Mechanisms for Sustainability: Yes. The vaccination program is sustainable through stable government budget allocations.

Critical Financing Challenges: Expanding vaccination coverage in response to a growing number of unvaccinated migrants, refugees and asylum seekers.

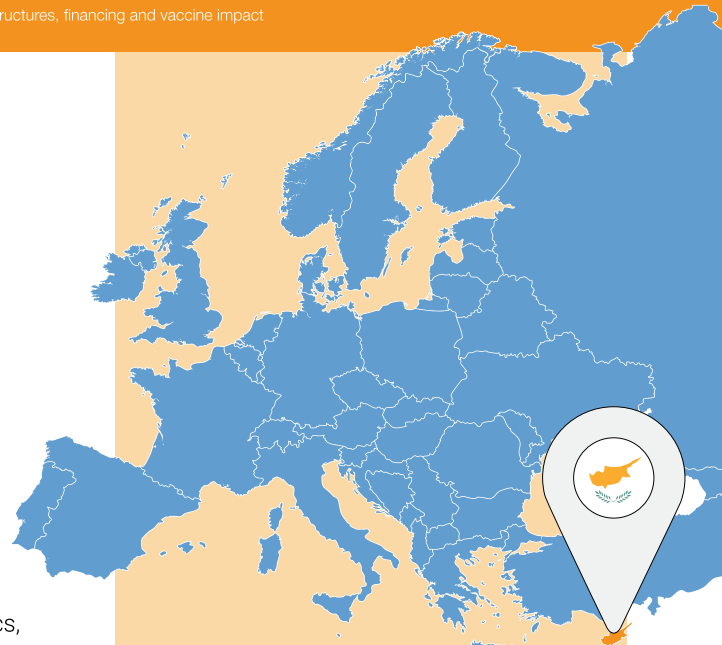
	Yes	No
Ministry of Finance Involvement	✓	
Ringfencing	✓	
Financial Mechanisms for Sustainability	✓	
External Funding Sources		✓
Influence of Public-Private Partnerships		✓

Landscape

History: Vaccinations for high-risk groups, including children and individuals with chronic conditions, are provided free. Vaccination costs have increased 10-fold since the National Immunisation Program was implemented under General Health System conditions.

Most funded campaign: Seasonal influenza, due to its importance in preventing illness and reducing healthcare burdens.

Future: The financial landscape for immunisation in Cyprus is stable, and no immediate changes are planned. COVID-19 financing followed EU collective procurement and was still applied for COVID-19 vaccines at the time of writing.



Centralised Health System



8.1%
of GDP spent
on healthcare



2.2%
of healthcare
budget is spent
on prevention

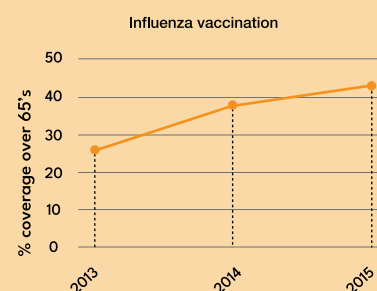


43%
Over-65 influenza
vaccination
coverage

Adult vaccination (18+) recommendation against 7 diseases:

Diphtheria*
Tetanus*
Pertussis*
Pneumococcal disease*
Meningococcal disease
Influenza*
Herpes Zoster*

*6/7 are
government
funded



CZECHIA

Decision-Making

Stakeholders: The National Immunisation Commission (NIKO) (a form of the National Immunisation Technical Advisory Group), the Ministry of Health (MoH), and public health insurance companies. NIKO representatives are from the MoH, scientific societies and public health insurance companies.

Introducing a new vaccine: The NIKO advises the MoH to implement a vaccination recommendation. The MoH issues a proposal for a legislation change to parliament, which takes the final decision on funding. Members of the Parliament may propose legislative changes regarding immunisation as well. The price for mandatory vaccinations is set through a national price contest managed by General Health Insurance Company and is valid for four years. The Health Technology Assessment agency set a maximum price for voluntary vaccination based on the average of the three lowest-cost vaccines.

Critical Financing Challenges: The Czech healthcare system relies heavily on public finances, posing risks during economic downturns and demographic shifts.

Financing

Primary Funding Sources: Public health insurance fund built from regular contributions from employers, self-employed and state payments for state-insured persons (prisoners, unemployed, retired, children, pregnant people). The state budget covers special and emergency vaccinations. Private sick funds sometimes cover the costs of non-reimbursed vaccinations.

Financial Mechanisms for Sustainability: Immunisation program funding is secured through legislation, covered partly by the state budget and partly by public health insurance.

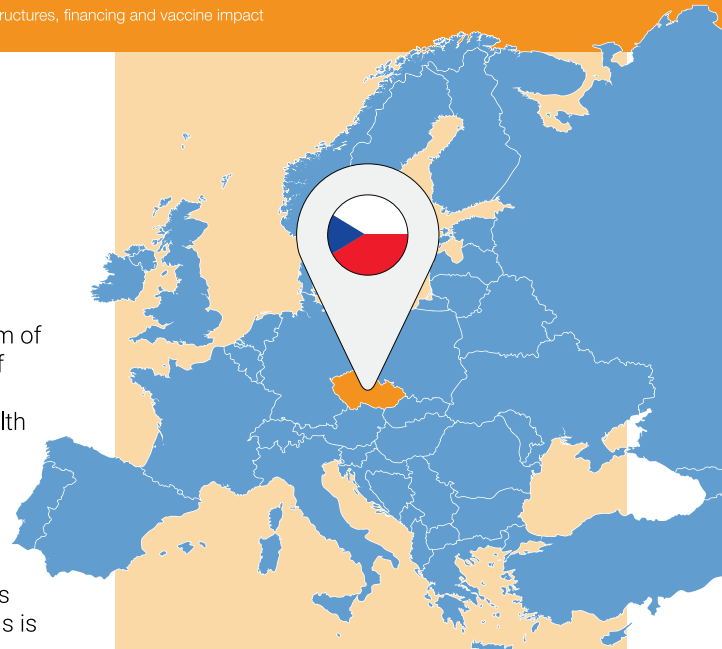
	Yes	No
Ministry of Finance Involvement		✓
Ringfencing (Specific to vaccination)	✓	
Financial Mechanisms for Sustainability	✓	
External Funding Sources		✓
Influence of Public-Private Partnerships		✓

Landscape

History: The current financing system has been stable for years. The government has not funded any large-scale campaigns. Campaigns are often funded and delivered by pharmaceutical companies.

Future: The reimbursement process for voluntary vaccination is expected to change from January 2025 due to a change in Health Technology Assessments, which will consider the socio-economic value of immunisation in decision-making.

Politicians know the changes necessary because of the ageing population but are concerned about this political decision. In the spring of 2024, Czechia experienced a wave of pertussis, leading to media support for pertussis vaccination and schools being proactive in checking pertussis vaccination status and recommending vaccination. The tuberculosis burden is expected to increase due to a high influx of refugees in 2023 and 2024.



Centralised Health System



7.8%
of GDP spent
on healthcare



8%
of healthcare
budget is spent
on prevention



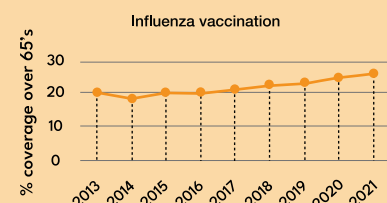
25%
Over-65 influenza
vaccination
coverage (2021)

Adult vaccination (18+) recommendation against 14 diseases:

COVID-19*
Tetanus**
Pertussis
Haemophilus influenzae type B
Hepatitis B**
Pneumococcal disease
Measles**
Varicella
HPV
Influenza*
Herpes Zoster
Hepatitis A
Tick-borne encephalitis
Rabies

*6/14 are government funded

** Indicates mandatory vaccination



DENMARK

Decision-Making

Stakeholders: The National Board of Health, Statens Serum Institut (SSI) and Parliament

Introducing a new vaccine: First, funds must be released from the National Fiscal Budget for a vaccine evaluation, on average, every three years. The Statens Serum Institut evaluates population needs and vaccine cost-effectiveness before making a recommendation. The National Board of Health then approves and funds the delivery. There is a lack of formal processes for evaluating new vaccines, and resources are limited, so introducing new vaccines is conservative and slow.

Ministry of Finance Involvement: Yes. The Ministry of Finance must approve and allocate the budget, with recent cuts noted in the flu vaccination budget.

Financing

Primary Funding Sources: National Fiscal Budget.

Ringfencing: Yes, specific to various vaccination programs are committed within the national budget.

Critical Financing Challenges: Limited resources and competing national interests affect budget allocations for new vaccines and the lack of formal processes for evaluating new vaccines.

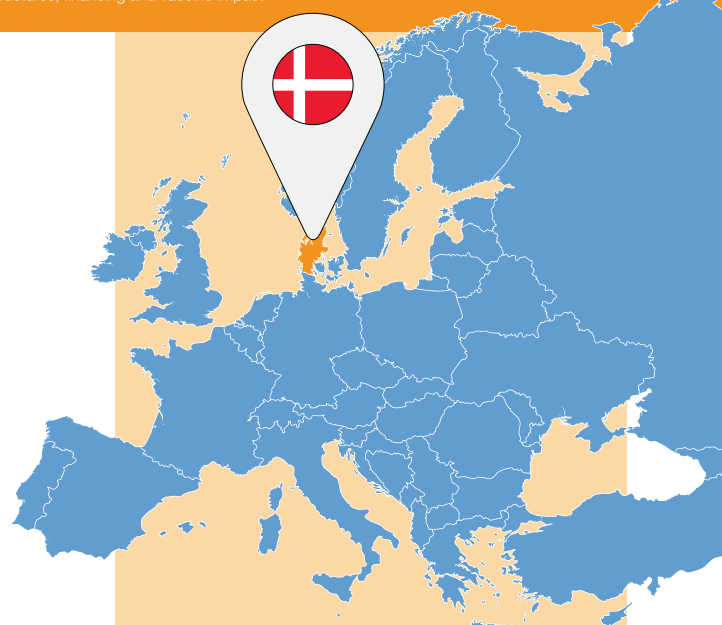
	Yes	No
Ministry of Finance Involvement	✓	
Ringfencing (Specific to vaccination)	✓	
Financial Mechanisms for Sustainability		✓
External Funding Sources		✓
Influence of Public-Private Partnerships		✓

Landscape

History: COVID-19 vaccine financing increased during the pandemic whilst the influenza budget decreased because the Ministry of Finance viewed this as a lesser priority while focusing on managing the COVID-19 pandemic.

Most funded campaign: Seasonal flu vaccination. In 2014-2016, HPV vaccinations were the most funded to address a drop in coverage resulting from negative media attention on adverse events.

The future: There are ongoing discussions about integrating vaccine processes with other drug pathways and returning to pre-pandemic funding levels. The Danish vaccine pathway is suffering from a lack of transparency and formal methods. There are currently different work streams looking at improving this. At the time of writing, the health care system is generally being evaluated on a political level.



Decentralised Health System



9.5%
of GDP spent
on healthcare



9%
of healthcare
budget is spent
on prevention

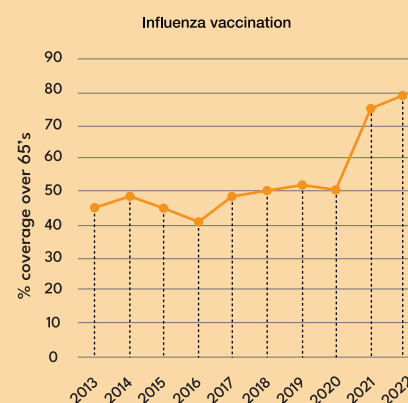


78%
Over-65 influenza
vaccination
coverage (2022)

Adult vaccination (18+) recommendation against 3 diseases:

COVID-19
Pertussis
Influenza

All are
government
funded



FRANCE

Decision-Making

Stakeholders: Expert working group, National Immunisation Technical Advisory Group (NITAG), social insurance, Ministry of Health

Introducing a new vaccine: The NITAG makes recommendations based on two primary criteria: medical service proven by the vaccine (SMR) and the added value brought to the medical service by the vaccine (ASMR). Once these two factors are estimated, the price is discussed and fixed within the medico-economic committee, including negotiation between the manufacturer and social security members.

Ministry of Finance Involvement: No. The Ministry of Finance is not directly involved in the public health and vaccination strategy to maintain operational independence.

Financing

Primary Funding Sources for NIP: Funded through the French public insurance system (Social Security), most vaccines are reimbursed up to 65%, and private insurance usually covers up to 95%.

Financial Mechanisms for Sustainability: Once a vaccination program is recommended and funded, it will not be stopped unless a significant issue arises.

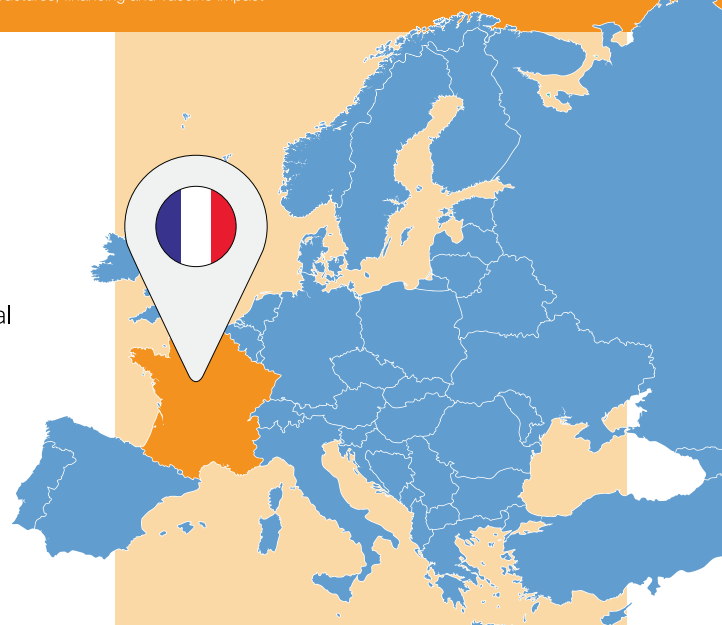
Influence of Public-Private Partnerships: While the private sector is involved in the early research stages, public authorities handle price negotiations for vaccines.

Critical Financing Challenges: Economic pressures, insufficient political and competing national priorities.

	Yes	No
Ministry of Finance Involvement		✓
Ringfencing		✓
Financial Mechanisms for Sustainability		✓
External Funding Sources		✓
Influence of Public-Private Partnerships		✓

Landscape

There are no immediate planned shifts in the funding strategy, but the economic situation and European requirements may influence future decisions. At the time of writing, the COVID-19 vaccination has not returned to national routine financing following the pandemic.



Centralised Health System



12%

of GDP spent on healthcare



5.5%

of healthcare budget is spent on prevention



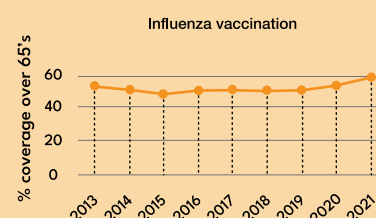
60%

Over-65 influenza vaccination coverage (2021)

Adult vaccination (18+) recommendation against 13 diseases:

COVID-19
Diphtheria
Tetanus
Pertussis
Poliomyelitis
Pneumococcal disease
Meningococcal disease
Measles
Mumps
Rubella
HPV
Influenza
Herpes Zoster

All are government funded



GERMANY

Decision-Making

Stakeholders: National Immunisation Technical Advisor Group (NITAG), federal states government, Public Health Institute, health insurers and licencing authority

Introducing a new vaccine: The NITAG guides the Ministry of Health and federal states in making vaccine policy decisions, with input from over 100 health insurers and the licensing authority. Funding for new vaccines is slow, with political intervention sometimes impeding the inclusion of innovative vaccines recommended by NITAG. NITAG recommendations (followed by financing within 3 months) may take years for new innovative products.

Financing

Primary funding source: Health insurance primarily and private financing for non-reimbursable vaccines eg. Travel vaccines.

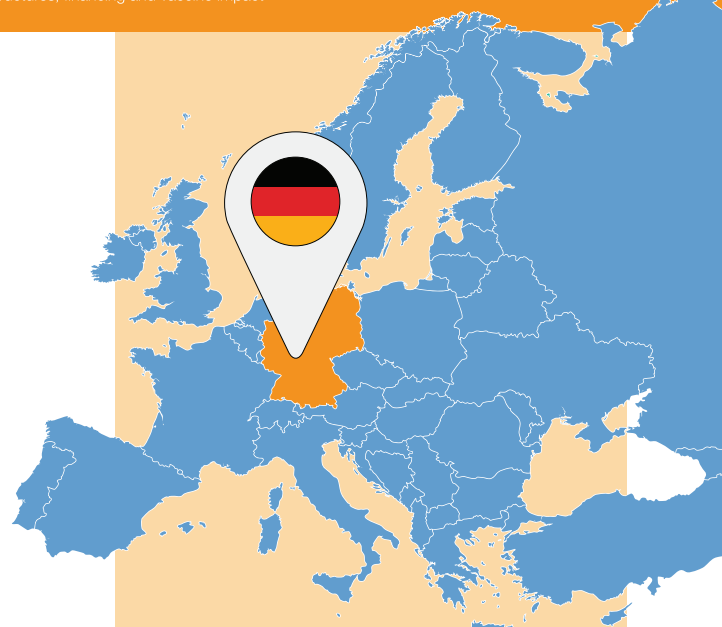
Critical Financing Challenges: Constraint on healthcare costs, which often overlooks the cost-effectiveness of vaccines.

	Yes	No
Ministry of Finance Involvement		✓
Ringfencing of Prevention and Vaccine Budget		✓
Financial Mechanisms for Sustainability		✓
External Funding Sources		✓
Influence of Public-Private Partnerships		✓

Landscape

The current vaccine funding and delivery system has been stable since 2000, with minimal changes over the decades.

Future: Although vaccine financing in Germany remains uncertain, no significant changes are anticipated in the funding approach. During the COVID pandemic, the COVID-19 vaccine was 100% paid for by the government, which was out of the budget of health insurers. However, this was unique and has yet to be implemented elsewhere.



Decentralised Health System



12.7%

of GDP spent
on healthcare



6.4%

of healthcare
budget is spent
on prevention



43%

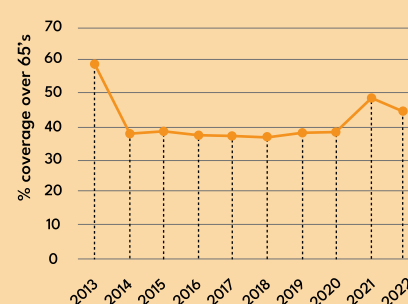
Over-65 influenza
vaccination
coverage (2022)

Adult vaccination (18+) recommendation against 9 diseases:

COVID-19
Diphtheria
Tetanus
Pertussis
Poliomyelitis
Pneumococcal disease
Measles
Mumps
Influenza
Herpes Zoster

All are
government
funded

Influenza vaccination



GREECE

Decision-Making

Decision-making Stakeholders: The Ministry of Health (MoH), Ministry of Finance (MoF), the National Vaccination Committee (NITAG), the National Organization for Public Health (EODY), Scientific Societies, Pharmacies

Introducing a new vaccine: The National Immunization Committee assesses new vaccines and updates the national vaccination schedule. The Health Technology Assessment Committee conducts scientific assessments of new vaccine products, and the Negotiation Committee conducts price negotiations. The MoH oversees the process and decides on vaccine inclusion and reimbursement.

Ministry of Finance Involvement: Yes. The MoF collaborates closely with the MoH to determine the vaccine budget.

Financing

Primary Funding Source: Government funding through a joint ministerial decision by the MoF and MoH to define the annual vaccine budget.

Financial Mechanisms for Sustainability: A separate vaccine budget has been established to provide financial stability.

Ringfencing: Yes. A designated budget for vaccines is incorporated into the national budget.

Critical Financing Challenges: Demographic changes, increasing health needs and adjusting the vaccine budget to the government priorities.

	Yes	No
Ministry of Finance Involvement	✓	
Ringfencing	✓	
External Funding Sources		✓
Influence of Public-Private Partnerships		✓

Landscape

History: Following economic crises, Greece implemented several reforms affecting pharmaceutical spending, including vaccines, with significant price controls and budget constraints. Currently, there is political will to include new technology/vaccines in the NIP and increase vaccine coverage rates.

Most funded campaigns: COVID-19 and seasonal influenza; the pharmaceutical industry typically finances other campaigns.

Future: Greece aims to maintain a separate vaccine budget post-COVID, with ongoing financing through European Commission purchasing agreements for COVID-19 vaccines.



Centralised Health System



8.6%

of GDP spent
on healthcare



4%

of healthcare
budget is spent
on prevention



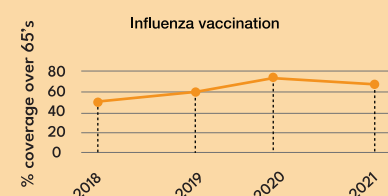
65%

Over-65 influenza
vaccination
coverage (2021)

Adult vaccination (18+) recommendation against 16 diseases:

COVID-19
Diphtheria
Tetanus
Pertussis
Poliomyelitis
Haemophilus influenzae
type B infection
Hepatitis B
Pneumococcal disease
Meningococcal disease
Measles
Mumps
Rubella
Varicella
Influenza
Herpes Zoster
Hepatitis A

All are
government
funded



HUNGARY

Decision-Making

Stakeholders: The National Centre for Public Health and the National Immunisation Technical Advisory Group (NITAG).

Introducing a new vaccine: NITAG meets quarterly, or on special request, to discuss and report on new vaccines, influencing decisions on preventive measures. New vaccines are introduced following pharmaceutical and economic evaluations of the costs and benefits and a review of epidemiological data.

Ministry of Finance Involvement: The Ministry of Finance is involved annually in healthcare and prevention budgeting.

Financing

Primary Funding Sources: Reimbursed vaccines funded from the national budget. Not all recommended vaccines are reimbursed, and some are reimbursed for certain high-risk groups, e.g. Seasonal flu for those over 65.

Ringfencing: Yes. The annual prevention budget is ringfenced, incorporating the costs of the national vaccination program.

Financial Mechanisms for Sustainability: No mechanisms are in place, but political commitment has been consistent for the National Immunisation Plan (NIP) to be budget-financed, providing a stable funding environment.

Influence of Public-Private Partnerships: Certain NGOs can make recommended vaccines that are not included in the NIP available.

Critical Financing Challenges: Budget constraints, competing healthcare needs and political will.

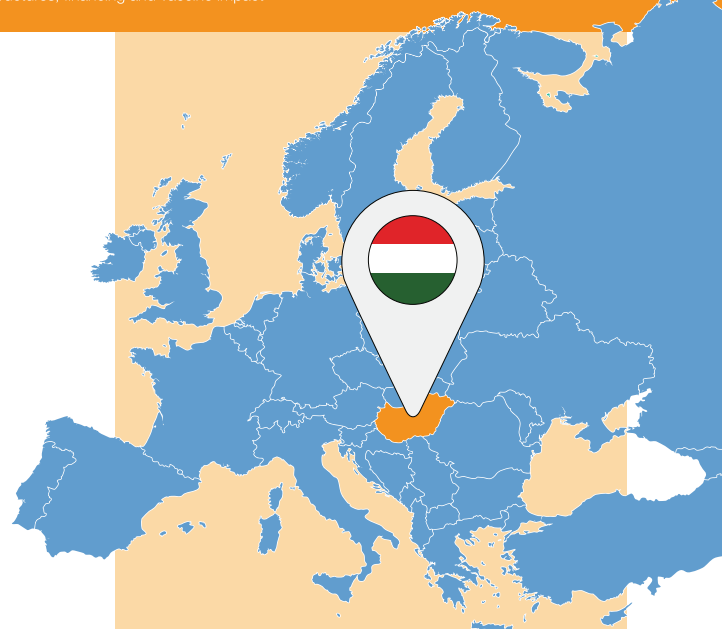
	Yes	No
Ministry of Finance Involvement	✓	
Ringfencing	✓	
External Funding Sources		✓

Landscape

History: The NIP has existed since the 1950s and is regularly updated to include new vaccines as recommended by health authorities.

Most Funded Campaign: Seasonal flu campaigns for high-risk groups

Future Landscape and Post-COVID Adaptation: No significant shifts in funding strategy are anticipated, although a catch-up program for HPV is planned. The mechanisms put in place for COVID have not remained.



Centralised Health System



6.7%

of GDP spent on healthcare



7.6%

of healthcare budget is spent on prevention



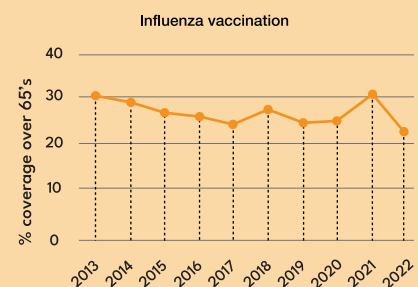
22.3%

Over-65 influenza vaccination coverage (2022)

Adult vaccination (18+) recommendation against 4 diseases:

COVID-19*
Pertussis*
Pneumococcal disease
Influenza*

*3/4 are government funded



ITALY

Decision-Making

Stakeholders: Ministry of Health and the 19 regions and 2 autonomous provinces

Introducing a new vaccine: New vaccines are evaluated and approved by the European Medicines Agency (EMA), then discussed at the Italian Agency for Drugs (AIFA) before the Ministry of Health, supported by NITAG, produces and updates the National Immunisation Plan (NIP).

Ministry of Finance Involvement: The Ministry of Finance is involved in the annual budgeting process for vaccines, influencing how funds are allocated across regions.

Financing

Primary Funding Sources: The government budget is based on general taxation, ensuring a minimum level of care accessible to all citizens.

Ringfencing: About 5% of the national funding is mandated to be spent on prevention, including vaccines.

Financial Mechanisms for Sustainability: No. Reliance on political decisions and public funding, with regional authorities playing a significant role.

External Funding Sources: No

Influence of Public-Private Partnerships: PPPs are limited to research initiatives, with little impact on the direct funding of vaccines.

Critical Financing Challenges: High public debt, which places significant scrutiny on public spending, including for vaccines.

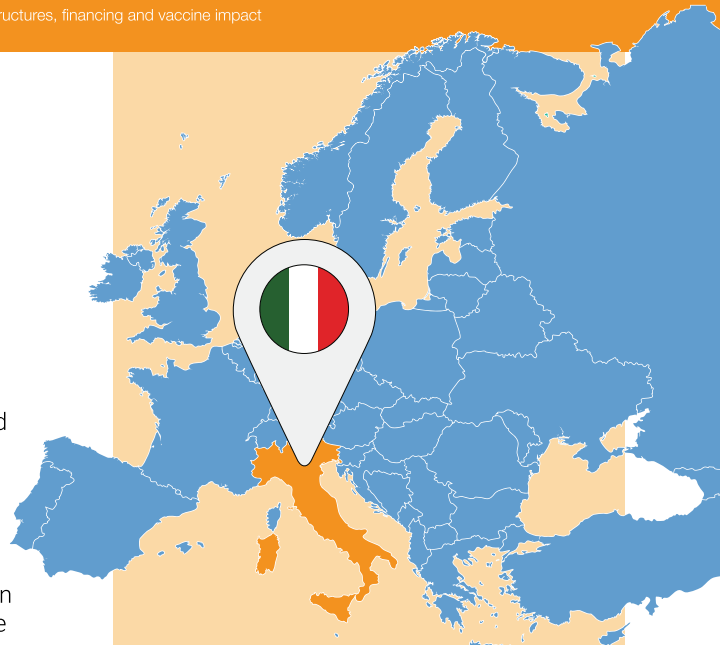
	Yes	No
Ministry of Finance Involvement	✓	
Financial Mechanisms for Sustainability		✓
External Funding Sources		✓

Landscape

History: Over the past decade, the NIP has been recognised as a critical component of public health, with stable funding and updates to include new vaccines.

Most Funded Campaign: Children's vaccinations receive the most funding.

Future: There are no planned changes. COVID mechanisms have not stayed.



Decentralised Health System



9%
of GDP spent
on healthcare



6.8%
of healthcare
budget is spent
on prevention

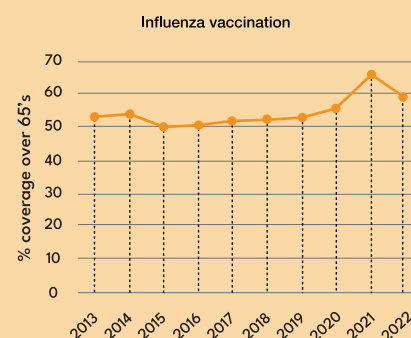


56.7%
Over-65 influenza
vaccination
coverage (2022)

Adult vaccination (18+) recommendation against 8 diseases:

COVID-19
Diphtheria
Tetanus
Pertussis
Pneumococcal disease
Meningococcal disease
Influenza
Herpes Zoster

All are
government
funded



LITHUANIA

Decision-Making

Stakeholders: Ministry of Health (MoH) and the National Immunisation Technical Advisory Group (NITAG).

Introducing a new vaccine: MoH will introduce new vaccines or delivery systems after negotiations between non-government organisations, NITAG, and MoH. NITAG serves as an advisory body to MOH. However, the influence of NITAG is minimal and political will is influenced by outbreaks of vaccine-preventable diseases, which can drive the introduction of new vaccines.

Ministry of Finance Involvement: No

Financing

Influence of Public-Private Partnerships: Only in the workplace, who sometimes pay for the vaccines and delivery, e.g., Superlandscapes and banks.

Critical Financing Challenges: anti-vaccine activities and the limited influence of NITAG. Political will is influenced by outbreaks of vaccine-preventable diseases, which can drive the introduction of new vaccines into the NIP.

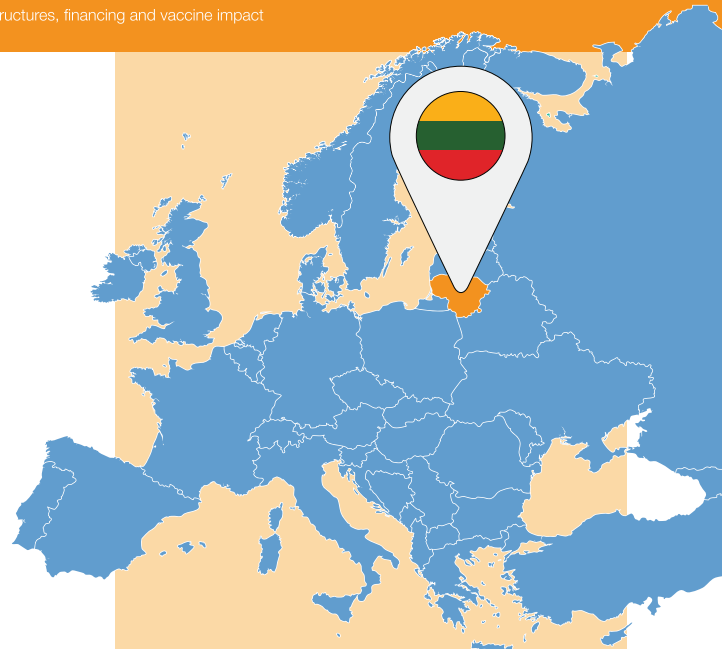
	Yes	No
Ministry of Finance Involvement		✓
Ringfencing of Prevention and Vaccine Budget		✓
Financial Mechanisms for Sustainability		✓
External Funding Sources		✓

Landscape

Future Landscape and Post-COVID Adaptation: There are no planned reforms or shifts in the funding strategy for the NIP in Lithuania. The financing mechanisms have not changed significantly post-COVID, except for adding the COVID-19 vaccine to the state-funded program.

History of Vaccination: Following Lithuania's independence in 1990, the country transitioned from using vaccines produced in the former USSR to those of European standards. Initially supported by the Danish Government, the Lithuanian state gradually took over the financing of the NIP. Steady economic growth in Lithuania has increased disposable incomes, enabling more significant investment in preventive healthcare, including vaccines.

Most Funded Campaign in the Past Decade (outside COVID): Outside of COVID-19, there has been no significantly funded national vaccination campaign in the past decade. In the early 1990s, a nationwide campaign vaccinated many adult risk group populations against diphtheria.



Centralised Health System



7.5%

of GDP spent
on healthcare



6%

of healthcare
budget is spent
on prevention



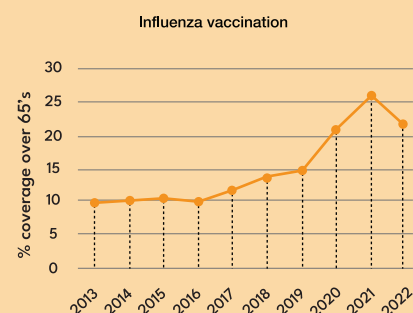
21.5%

Over-65 influenza
vaccination
coverage (2022)

Adult vaccination (18+) recommendation against 8 diseases:

COVID-19
Diphtheria
Tetanus
Pertussis
Human Papillomavirus
Influenza
Pneumococcal disease
Tick-borne encephalitis

All are
government
funded



NORWAY

Decision-Making

Stakeholders: Norwegian Institute of Public Health (NIPH), National Immunisation Technical Advisory Group (NITAG), Ministry of Health and Care Services.

Introducing a new vaccination: NITAG reviews horizon scanning reports to identify emerging vaccines and technologies, assessing their relevance to national health needs. They make recommendations to the NIPH, which decides what to submit to the Ministry of Health and Care Services. The decision-making considers innovative approaches, with tenders often weighing factors like quality (up to 60%) and price (40%). While funding for innovative methods is generally limited, the system signals an openness to recognising the value of new vaccines through this quality/price tendering model.

Financing

Primary Funding Sources: The government health budget ensures vaccines are accessible to targeted groups.

Sustainability: Yes. Long-term tenders (4 years +)

Critical Financing Challenges: Significant bureaucratic hurdles.

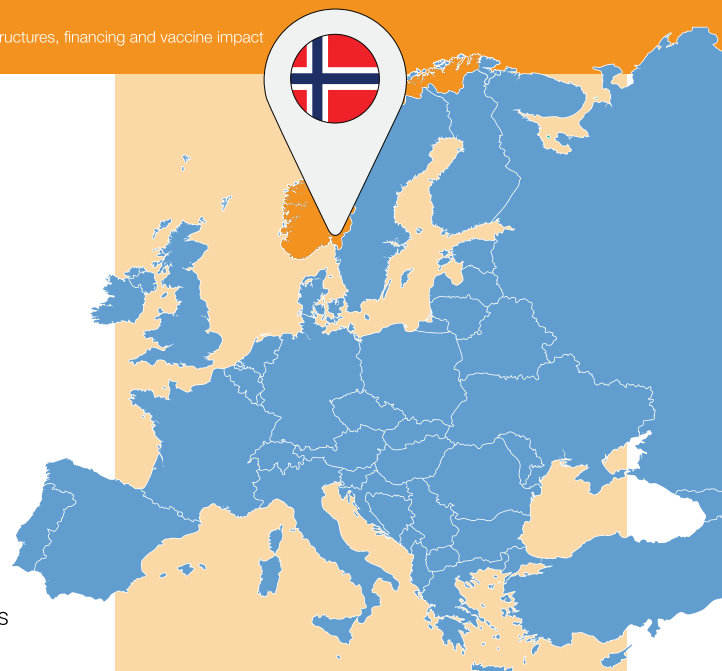
	Yes	No
Ministry of Finance Involvement		✓
Ringfencing		✓
Financial Mechanisms for Sustainability	✓	
External Funding Sources		✓
Influence of Public-Private Partnerships		✓

Landscape

History of Vaccination: Norway's vaccine program traditionally funds vaccines included in the paediatric program. Norway's robust healthcare system emphasises preventive care and provides free vaccines to high-risk groups, including children, pregnant women, and individuals with chronic conditions. The high public trust in healthcare professionals further enhances vaccine uptake nationwide.

Most Funded Campaign: The paediatric vaccination program

Future: Funding for COVID-19 vaccines is anticipated to continue, with potential funding expansions to include flu and pneumococcal vaccines for risk groups.



Decentralised Health System



7.9%
of GDP spent
on healthcare



2.7%
of healthcare
budget is spent
on prevention

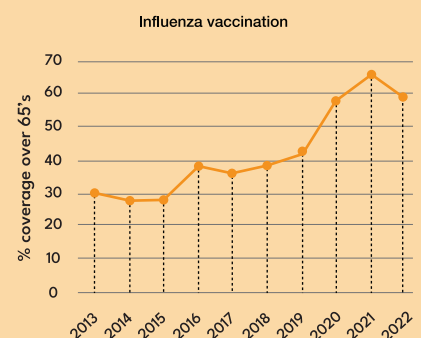


63.3%
Over-65 influenza
vaccination
coverage (2022)

Adult vaccination (18+) recommendation against 7 diseases:

COVID-19*
Diphtheria*
Tetanus*
Pertussis*
Poliomyelitis*
Influenza*
Pneumococcal disease

*6/7 are government funded



POLAND

Decision-Making

Decision-making Stakeholders: The Ministry of Health, the National Institute of Public Health, and the Main Sanitary Inspectorate are primary decision-makers in Poland's NIP. There is a NITAG, but it has limited power.

Funding of NIP Innovation: Poland shows low acceptance of innovative vaccine delivery methods, with a conservative approach to new vaccine technologies, e.g., Poland is the only country in Europe that has not combined 6-in-1 or 5-in-1 vaccines in the NIP. The NITAG is not supportive of this type of innovation.

Ministry of Finance Involvement: The Ministry of Finance is involved in the financial planning and approval of vaccine budgets

Financing

Primary Funding Sources: National Health Fund, Municipal Health Program and the President's Medical Fund

Ringfencing: Yes. However, since the expenditures are not reliably planned, the funds are insufficient, leading to annual negotiations with the Ministry of Finance.

Critical Financing Challenges: Strategic planning and budgeting are competing financial constraints, often leading to tough negotiations on vaccine prices.

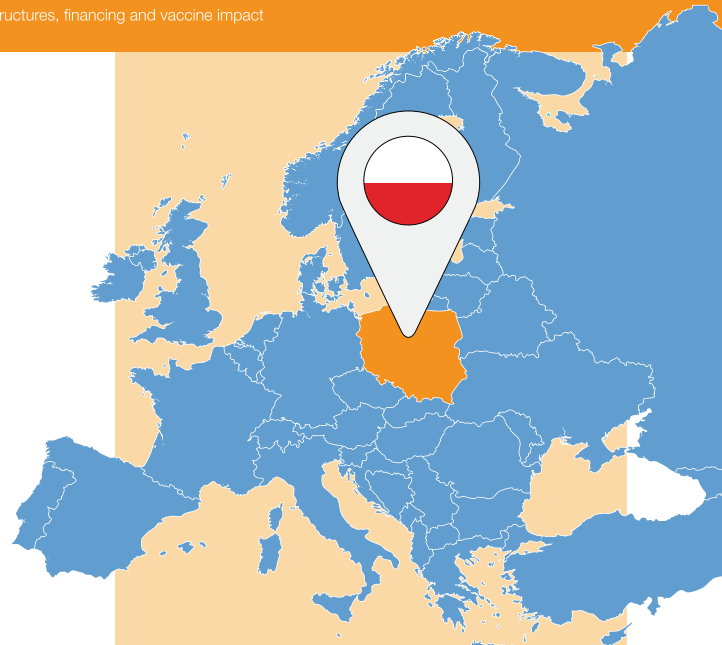
	Yes	No
Ministry of Finance Involvement	✓	
Ringfencing	✓	
Financial Mechanisms for Sustainability		✓
External Funding Sources		✓
Influence of Public-Private Partnerships		✓

Landscape

History: Before 2018, only mandatory vaccinations were reimbursed. Since 2018, recommended vaccines have been reimbursed by the National Health Fund, expanding the availability of vaccines beyond obligatory schedules. Vaccines can also be paid from the Municipal Health Programs and, since 2023, from the Medical Fund (a particular budget for medicines & prevention established by the President of Poland).

Most Funded Campaign: The HPV vaccination campaign was the most financially significant but struggled with low uptake due to poor organisation and public education.

Future: The recent change in government brings some hope for improvement, but the overall strategy for vaccine financing remains uncertain.



Centralised Health System



6.7%

of GDP spent
on healthcare



2.1%

of healthcare
budget is spent
on prevention



10%

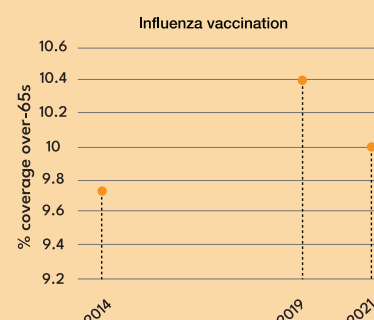
Over-65 influenza
vaccination
coverage (2022)

Adult vaccination (18+) recommendation against 11 diseases:

COVID-19*
Diphtheria**
Tetanus**
Pertussis*
Meningococcal disease
Influenza
Pneumococcal disease
Measles*
Mumps*
Rubella*
Varicella*

*8/11 are
government
funded

** Indicates
mandatory
vaccination



ROMANIA

Decision-Making

Stakeholders: The Ministry of Health, National Institute of Public Health (INSP) and National Immunisation Technical Advisory Group (NITAG)

Introducing a new vaccine: The NITAG reviews evidence and makes recommendations to the MoH but does not participate in financing decisions.

Financing

Primary Funding Sources: National budget

Critical Financing Challenges: Political will and limited budget flexibility.

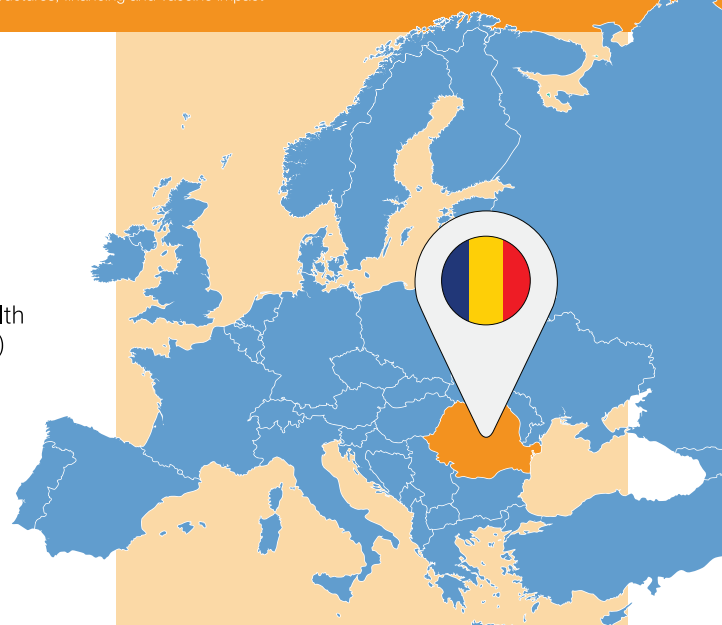
	Yes	No
Ministry of Finance Involvement	✓	
Ringfencing		✓
Financial Mechanisms for Sustainability		✓
External Funding Sources		✓
Influence of Public-Private Partnerships		✓

Landscape

History: Since the communist era, the government has fully supported the National Immunisation Plan (NIP), with recent changes introducing some co-financing for adult vaccines. The NITAG was only recently established in 2022.

Most Funded Campaign: The MMR vaccine for children has been highly funded due to its critical role in addressing disease outbreaks.

Future: Immunisation financing is uncertain; the recent COVID-19 vaccine overspending scandal involving the former prime minister and health minister has impacted political and public will.



Centralised Health System



6.5%

of GDP spent
on healthcare



3.7%

of healthcare
budget is spent
on prevention



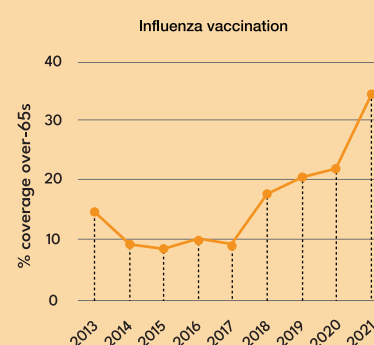
35%

Over-65 influenza
vaccination
coverage

Adult vaccination (18+) recommendation against 4 diseases:

COVID-19*
Pertussis*
Human Papilloma virus
Influenza

*2/4 are
government
funded



SPAIN

Decision-Making

Stakeholders: The Public Health Commission of the Ministry of Health, the National Immunisation Technical Advisory Group (NITAG), and regional health authorities

Introducing a new vaccine: New vaccines are evaluated by NITAG; based on this evaluation, the Public Health Commission recommends updates to the National Immunisation Plan (NIP) and final financing decisions made by regional Ministries of Finance based on recommendations. Thus, vaccination recommendations can vary between regions. For instance, in Madrid, Tetanus-Diphtheria and pneumococcal vaccines are administered at age 60, while in Catalunya, they are given at age 65. This variability reflects regional autonomy in public health decisions.

Ministry of Finance Involvement: Not directly involved in NIP budgeting, as funding is managed regionally.

Financing

Primary Funding Sources: Vaccines are funded by regional governments, with costs covered for all recommended vaccines in the NIP.

Financial Mechanisms for Sustainability: Yes, through diversified funding through national and EU mechanisms, long-term agreements and commitments

Influence of Public-Private Partnerships: Minimal, with industry negotiating some conditions at the national level.

Critical Financing Challenges: The high cost of new vaccines, a decentralised health system and insufficient political will

	Yes	No
Ministry of Finance Involvement		✓
Ringfencing	✓	
Financial Mechanisms for Sustainability	✓	
External Funding Sources		✓
Influence of Public-Private Partnerships		✓

Landscape

History: Since establishing the Spanish National Health System (SNS) in 1986, healthcare, including vaccination programs, has been publicly funded. Decentralisation in the late 20th century led to variability in vaccine program implementation, though national immunisation schedules aim to standardise recommendations. Despite economic challenges like the 2008 financial crisis, Spain firmly focused on vaccination as a cost-effective public health measure.

Most Funded Campaign: Seasonal influenza campaigns due to their public health and economic impact. Herpes Zoster, HPV, and meningococcal vaccination have also highly impacted regional health budgets.

Future Landscape: Spain is increasing investment in public health infrastructure by creating the Spanish Agency of Public Health and a national epidemiological surveillance network. Immunisation coverage will expand to include more diseases and eligible populations. The Spanish Association of Vaccinology have proposed a proposal to the Ministry of Health requesting the national budget support the introduction of new vaccines in their first year, aiding regional budget restructuring. Additionally, Spain is advancing digital transformation by developing national immunisation registries, enhanced data analytics for decision-making, and digital tools to improve vaccine uptake and surveillance.



Decentralised Health System



10.4%

of GDP spent on healthcare



3.5%

of healthcare budget is spent on prevention



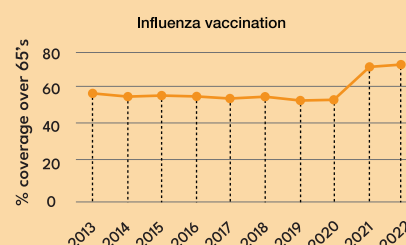
69.5%

Over-65 influenza vaccination coverage

Adult vaccination (18+) recommendation against 14 diseases:

COVID-19
Diphtheria
Tetanus
Pertussis
Hepatitis B
Pneumococcal disease
Meningococcal disease
Measles
Mumps
Rubella
Varicella
HPV
Influenza
Herpes Zoster

All are government funded



THE NETHERLANDS

Decision-Making

Stakeholders: The Health Council, Dutch National Institute for Public Health and the Environment (RIVM), Ministry of Health.

Introducing a new vaccine: New vaccine recommendations from the European Medical Agency (EMA) go via the Minister of Health and State Secretary, who asks the Health Council to evaluate before funding is considered. Once the Health Council recommends a vaccine, the MoH asks the RIVM to implement the vaccine in the National Immunisation Program (NIP).

Financing

Primary Funding Sources: Public funding supports the NIP, with no set budget allocated in advance. A budget must be found for each recommended new vaccine, which can slow the introduction of new vaccines.

Critical Financing Challenges: No set budget causes delays, economic pressures and healthcare budget constraints.

	Yes	No
Ministry of Finance Involvement	✓	
Ringfencing of Prevention and Vaccine Budget		✓
Financial Mechanisms for Sustainability		✓
External Funding Sources		✓
Influence of Public-Private Partnerships		✓

Landscape

History: In 1957, the Dutch National Immunization Program (Rijksvaccinatieprogramma, RVP) was established to provide free vaccines to all children, initially including vaccines for diphtheria, tetanus, and polio. The program expanded over the years, incorporating measles, mumps, rubella, and whooping cough vaccines.

Most Funded Campaign: The flu and children's vaccination programs receive the most consistent funding.

Future Landscape: During the COVID pandemic, the budget was allocated immediately, and advocates are trying to push more proactive allocated budgets to accommodate new vaccines more efficiently. Demographically, an ageing population drives vaccine demand.



Decentralised Health System



10.2%

of GDP spent on healthcare



9%

of healthcare budget is spent on prevention



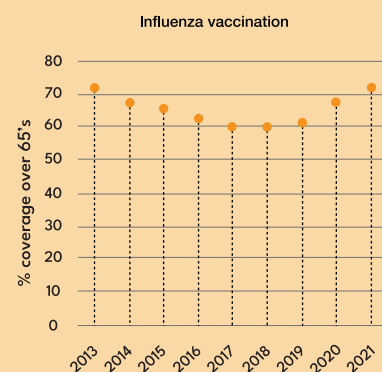
72.6%

Over-65 influenza vaccination coverage

Adult vaccination (18+) recommendation against 6 diseases:

COVID-19
Diphtheria
Tetanus
Pertussis
Pneumococcal disease
Influenza

All are government funded



APPENDIX

Objectives

- To analyse the decision-making and financial mechanisms underpinning national immunisation programs in EU member states.
 - To identify and evaluate primary funding sources for these programs and their sustainability
 - To explore the history and evolution of vaccine financing to understand current trends and potential future directions.
 - To study the role of external funding sources and public-private partnerships in supporting immunisation initiatives.
-

Methodology

1. Data Collection:

Primary data were collected via a structured survey using Google Forms, designed in alignment with the research objectives. The survey was distributed directly to members, sponsors, and affiliates of the CLCI network through email and broadly disseminated via CLCI social media platforms. The survey remained open for responses throughout March 2024. Desk-based research was conducted to complement survey findings, collecting relevant quantitative data such as vaccination coverage rates and healthcare expenditure as a proportion of GDP.

2. Analysis:

A single analyst conducted a mixed-method analysis, integrating quantitative and qualitative data. Thematic analysis was applied to qualitative survey responses where appropriate, and qualitative data were quantitatively categorised for further analysis using spending data. Quantitative data were processed using Excel Pivot tables and correlation analysis to identify patterns and relationships.

3. External Verification:

A secondary external analyst reviewed the analysis, providing suggestions on data presentation and interpretation. Additionally, all survey respondents were given two opportunities to give feedback on the report's content. Where possible, survey findings were corroborated through desk-based research for validation.

Limitations

Data Collection: Respondents were limited to those connected to the CLCI network, which may have introduced selection bias. The sample included individuals from diverse backgrounds and varying levels of expertise. The study only covered a subset of EU countries, and the method of outreach via the CLCI network, rather than a country-by-country approach, could have influenced which countries participated in the research.

Study Design and Bias: This study used a retrospective cross-sectional design combined with elements of an ecological survey for quantitative data analysis. Although steps were taken to mitigate bias, such as peer review and desk-based research, some degree of bias remains inherent in the study design. The data overview reflects responses from the countries where surveys were returned, which may not fully represent all EU countries.

Data Sources: Vaccine recommendations were obtained from reliable sources, such as EU or national databases; however, some may not have reflected the most up-to-date information. Additionally, due to the lack of specific data on vaccine spending, we reviewed broader healthcare and prevention budgets as a proxy to assess national expenditure trends.