Name: Henrique Lopes

Country: Portugal

Affiliation: NOVA University Lisbon – NOVA Center for Global Health (Director)

Function: Health Policy / Public Health / Health Education

Main expertise: Public Health Policy; Vaccination; Digital Health; Pandemic Preparedness; Health Education

Other roles
Mission Board Vaccination Europe; ASPHER Task Force on Health Emergencies; WHO collaborator; Board Member – World Committee on Lifelong Learning

Distinctions:
Cross of Saint George (Armed Forces) for contributions during COVID-19

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+Longevity

A Think Tank initiative dedicated to **adult vaccination**

Presentation of the Results of the +Longevity *think tank*

Henrique Lopes

Director of the NOVA Center for Global Health Lab

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Conflict of interests (last 3 years)

Company	Speaker	Consultant	Research
GSK	-------	-------	X
Gilead	-------	-------	X
Roche	-------	-------	X
Novartis	-------	-------	X

+ Longevity project was partially financed by GSK

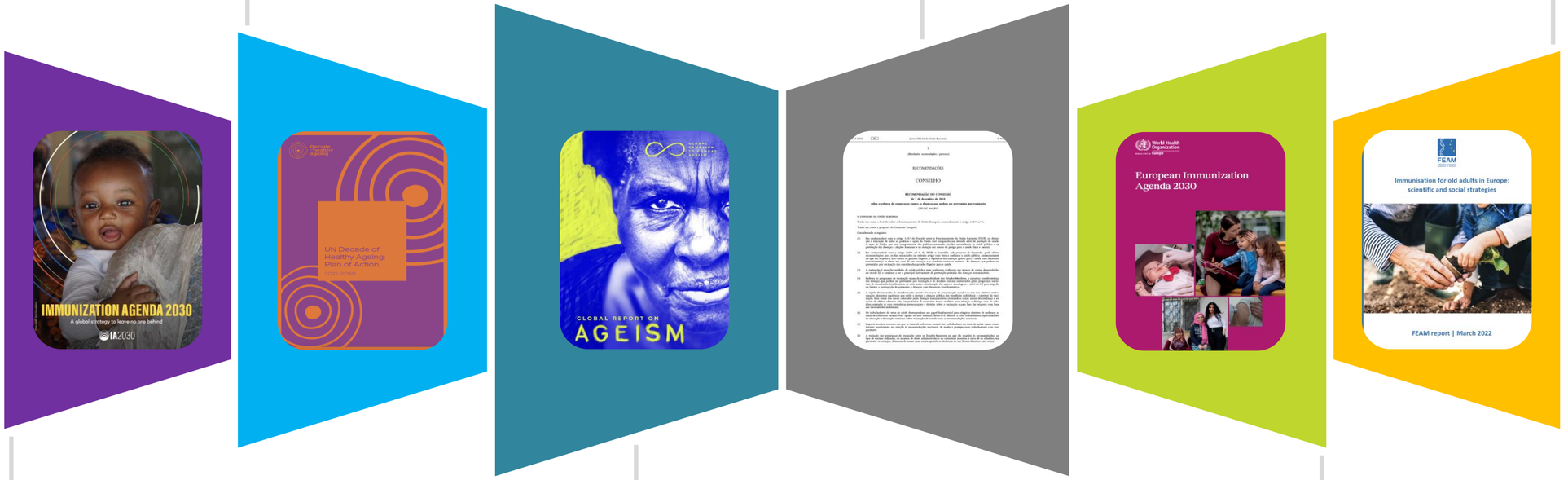
Vaccination as a priority in Global Health

The alignment of the project with major international health agencies

EU Council Recommendation (2018)

UN Decade of Healthy Ageing

FEAM Agenda for AV



WHO IA2030

WHO Global Report on Ageism

European IA2030

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The Participants

CHAIRMAN

FRANCISCO GEORGE

AMBASSADORS

ADALBERTO CAMPOS FERNANDES	FILIPE FROES	CÉU MATEUS

PARTICIPANTS

Ana Clara Silva	Luís Filipe Pereira
António Teixeira Rodrigues	Marta Valente Pinto
Cândida Abreu	Mónica Seidi
Carmen Garcia	Nuno Marques
Diana Costa	Raúl Pereira
Gustavo Tato Borges	Ricardo Mexia
Joana Costa	Rita Sá Machado
José Hermínio Gomes	Sara Cerdas
Klára Dimitrovová	Sofia Duque
Luís Mendão	

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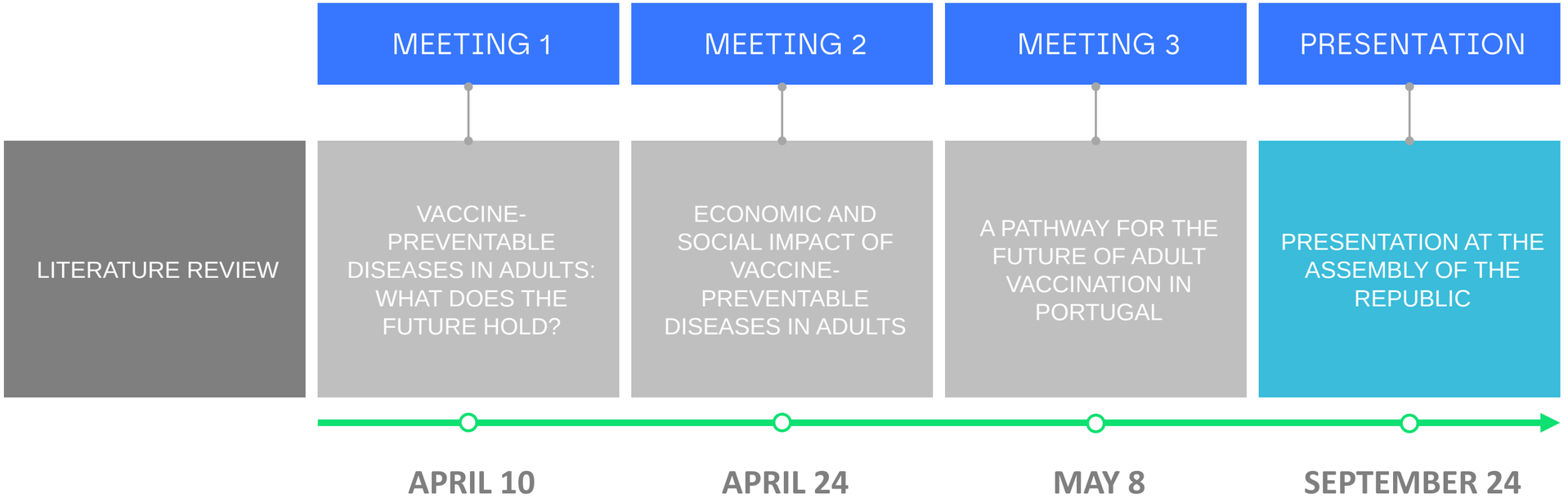
Methodology

OBJECTIVES

1. Assess the evidence related to the burden and impact of vaccine-preventable diseases in adults in Portugal
2. Promote a multidisciplinary reflection on the importance of reinforced action to optimize health gains through adult vaccination
3. Build a proposal for a reference framework for Adult Vaccination in Portugal



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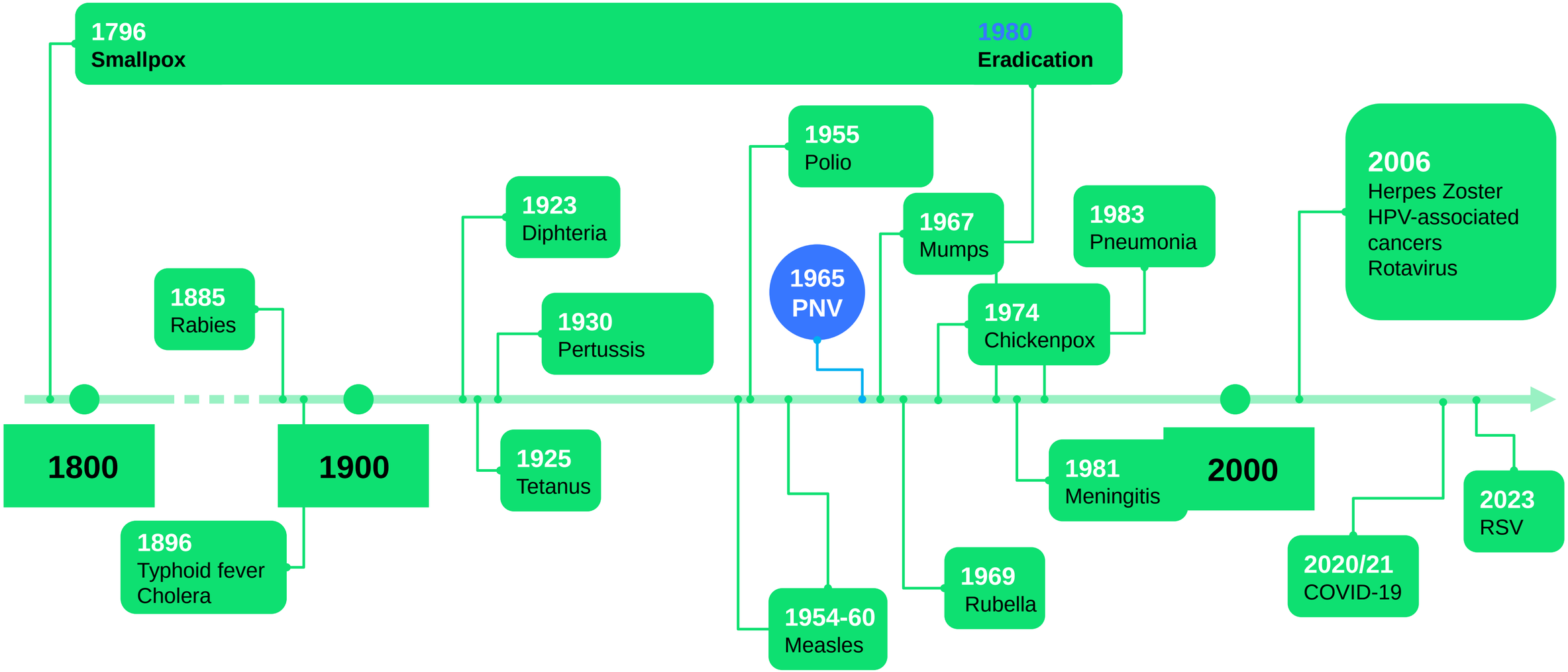
The achievements of vaccination



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The global demographic context

WORLDWIDE

The population **over 65 years** of age is **growing the fastest in the world.**[1]

By 2050, according to the World Population Prospects[2], it is expected that:

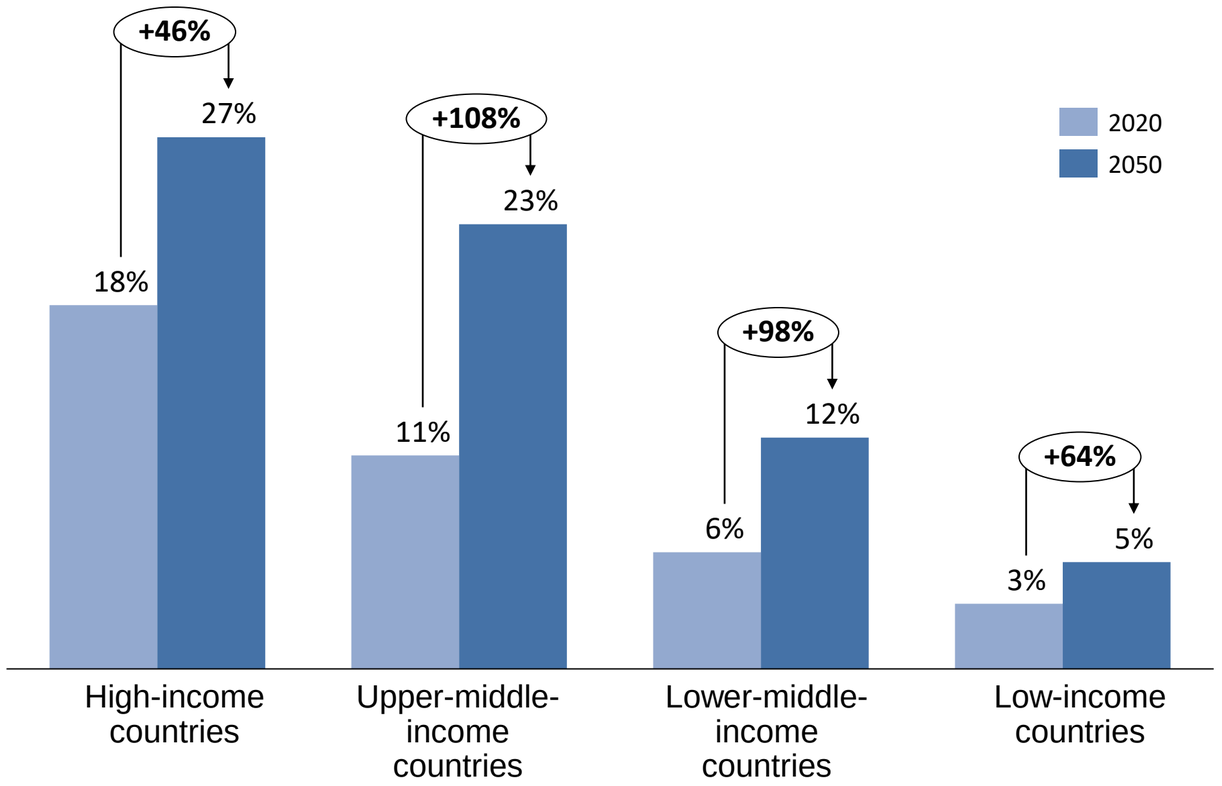
- **1 in 6 people** will be over 65 years of age;
- The number of people aged 80+ will **triple**.

EUROPE

Among OECD countries, over the last 5 decades, **life expectancy at age 65 has increased by an average of 5.7 years**[3].

In 2019, the population lived for around 20 more years beyond the age of 65, but **only 10 of them with quality of life**[3].

Perspective on the evolution of the population over 65 years old, in the world
(% of the total population)



Source: Nações Unidas, Perspetivas da População Mundial, 2019. Disponível em: https://population.un.org/wpp/publications/files/wpp2019_highlights.pdf 2 Nações Unidas, Perspetivas da População Mundial, 2022. Disponível em: https://population.un.org/wpp/3Estatísticas de Saúde da OCDE, 2021. Available in: https://www.oecd-ilibrary.org/sites/82ca511d-en/index.html?itemId=/content/component/82ca511d-en

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Barriers to vaccination in adults

ACCESS

- Geographic dispersion
- Socioeconomic contrasts
- Health care network

RESOURCES

- Financial (public and out-of-pocket)
- Technical
- Physical

LITERACY

- Misinformation and skepticism
- Health professionals
- Civil Society

INFORMATION

- Monitoring of vaccination coverage
- Epidemiological mapping
- Identification of at-risk population

HETEROGENEITY

- Vaccination recommendations
- Social and health profile of adults

Source: Gomensoro, E. et al. Challenges in adult vaccination.. Annals of Medicine, 2018. Privor-Dumm, L et al. A global agenda for older adult immunization in the COVID-19 era: roadmap for action. Elsevier Vaccine, 2020. Moving the needle: promoting vaccination uptake across the life course. RSPH. 2019. Lanza, T. et al. Barriers and strength factors of adult immunization plans in seven countries of the European region. JPH, 2023

Extrapolation of expenditures of countries similar to Portugal to the Portuguese context values for 2023

DISEASE	MEDICAL COSTS	INDIRECT COSTS AND/ OR SOCIAL BENEFITS	TOTAL COST
Influenza	13,725,552 €	137,802,240 €	151,527,792 €
Herpes Zoster	5,591,891€	794,305 €	6,385,196 €
COVID-19	1,980,038,051€	62,168,750 €	2,042,206,801€
Pneumococcal Disease	8,896,191€	23,995,168 €	32,891,359 €
RSV Infection	16,267,321€		16,267,321€
HPV Infection	38,380,712 €	N/ A	38,380,712 €
COVID-19 in 2020	1,980,038,051€	62,168,750 €	2,042,206,801€

Note: Includes productivity losses, hospitalizations and outpatient treatments.
Study developed by ENSP, in collaboration with the project.

Conclusion

Annual economic impact of these diseases of **€ 245M** between indirect clinical costs of productivity and social security.

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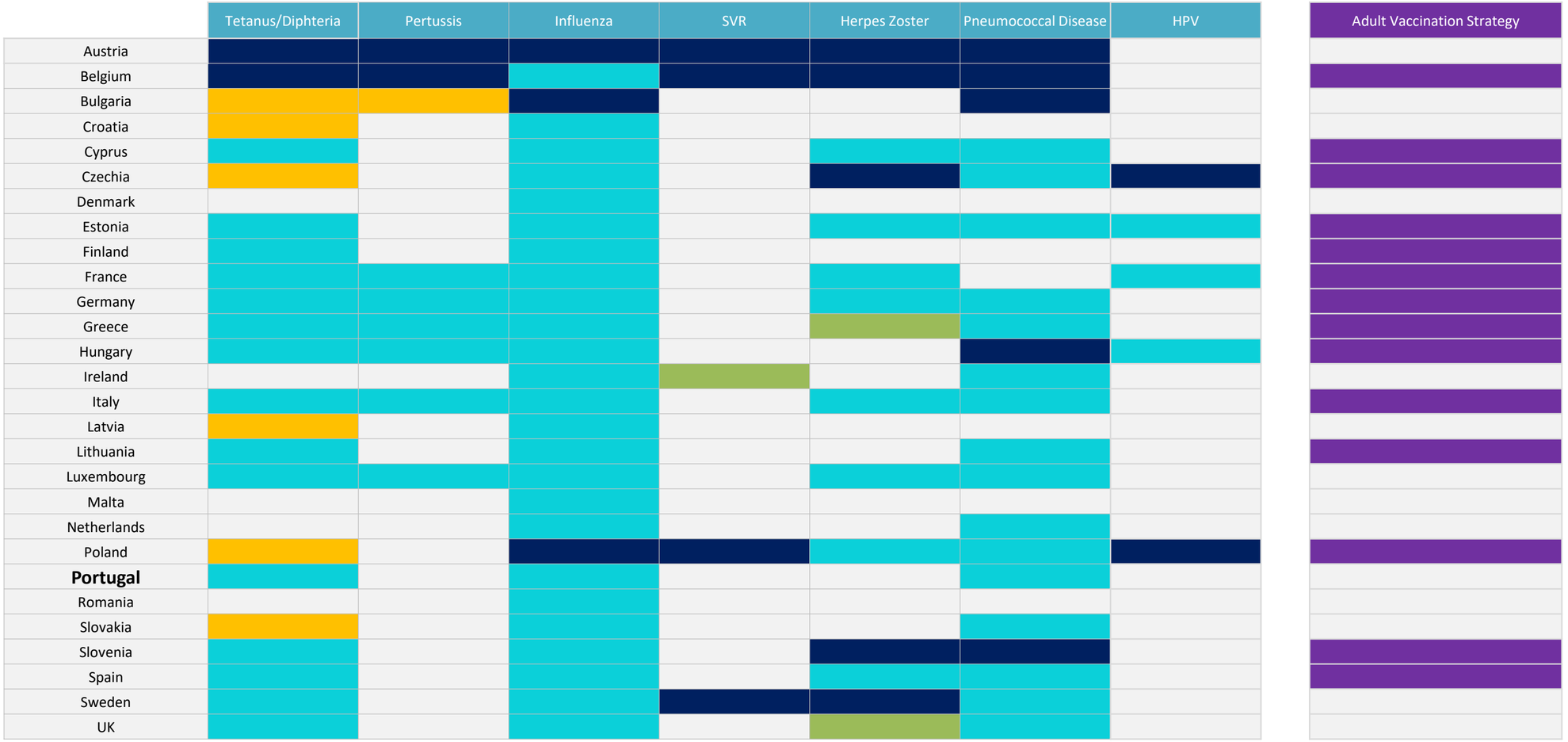
Barriers to vaccination in adults

Inclusion profile of the main vaccines indicated for adults in the various EU countries:



*Here, it includes catch-up indications or specific coverage only for at-risk groups

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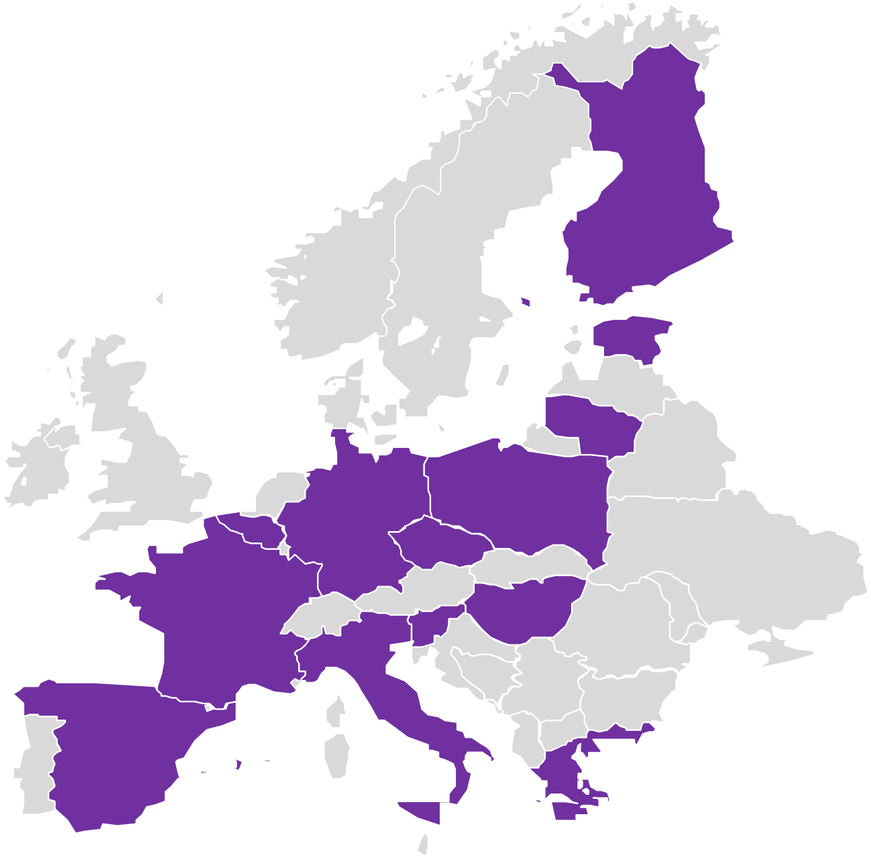
Fonte: ECDC Vaccine Scheduler; Each country's official NIP and Immunization sources of information. Accessed in March 2024

Adult vaccination in the EU



48%

of EU countries now have a specific **Vaccination Calendar** for **Adults**

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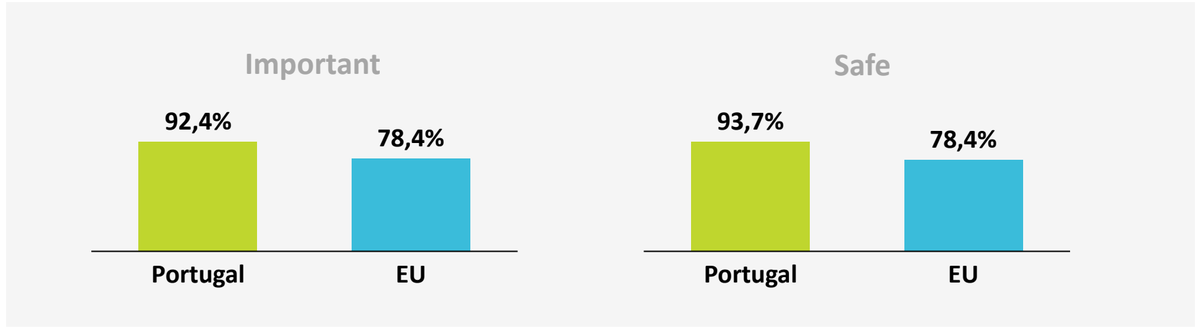
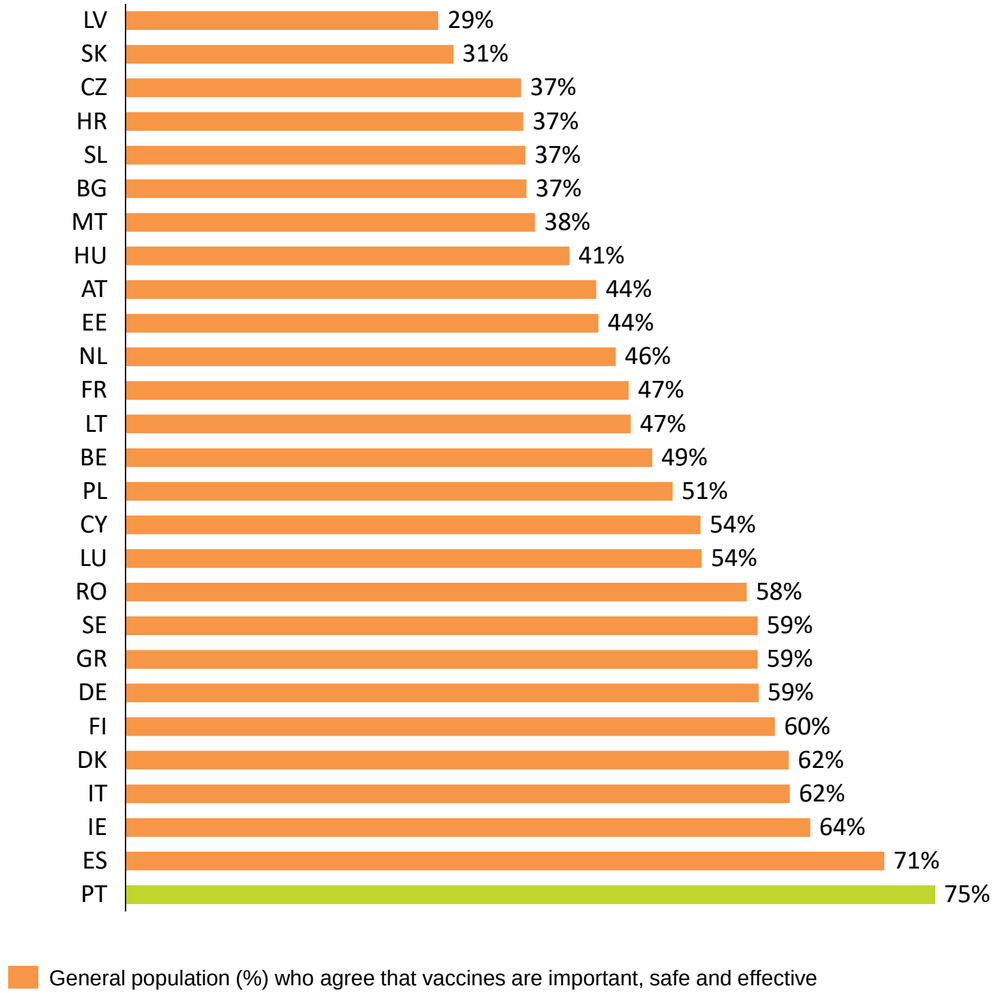
Fonte: ECDC Vaccine Scheduler; Each country's official NIP and Immunization sources of information. Acedido em Março 2024

Citizen perception regarding vaccination

In the general population, vaccines are:





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Source: European Commission. State of Vaccine Confidence in the EU 2022 e Factsheet Portugal

The Role of Adult Vaccination in Global Health

1 CHRONIC DISEASE

Protection of the body against the development or worsening of comorbidities associated with NCDs (Non-Communicable Diseases)

2 HEALTHY AGING

The recognized protective role of functionality and quality of life in the individual against the worsening of immunosenescence

3 ANTIMICROBIAL RESISTANCE

Prevention of infectious disease episodes, mitigating the individual's often incorrect exposure to antibiotic therapy

5 CLIMATE CHANGE

Safeguarding public health protection against expected outbreaks and changes in pathogen dynamics due to global warming

5 HEALTH EMERGENCIES

Clear leadership in protecting the community against future health threats

6 UNITED NATIONS SDGs

The contribution of vaccines to community health protection impacts directly or indirectly 14 out of the 17 United Nations Sustainable Development Goals

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Source: Gomensoro, E et al. Challenges in adult vaccination, 2018. Privor-Dumm, L et al. A global agenda for older adult immunization in the COVID-19 era: a roadmap for action. Elsevier Vaccine 2021. FEAM, Immunisation for old adults in Europe: scientific and social strategies, 2022. Decouttere, C. et al. Advancing SDG through immunization: a literature review. Glob and Health 2021. Vaccines Europe Pipeline Review 2023.

21 Recommendations from the +Longevity Think Tank

PILLAR	RECOMMENDATION	PRIORITY	IMPACT
INVESTMENT IN PREVENTION AND HEALTHY AGING	Adult Vaccination Program	8,8	8,9
	Literacy Narrative for Adult Vaccination and Longevity	8,6	8,4
	Integration of mechanisms in the preventive approach	8	7,9
	Evaluate the impact of vaccination in addressing Global Health challenges	7,9	8,4
	Redefinition of management indicators for the vaccination strategy	7,3	7,2
	Personalization in data collection and management	7,1	7,8
	Models to incentivize community prevention	6,9	7,2

Note: Average assessment by Think Tank members regarding the priority of each measure and the impact it can achieve. On a scale, 1 is the minimum and 10 is the maximum.

21 Recommendations from the +Longevity Think Tank

PILLAR	RECOMMENDATION	PRIORITY	IMPACT
HEALTH SYSTEM CAPACITY AND COMMUNITY SYNERGIES	Reinforcement of CCU and PHU intervention	7,9	8,1
	Reinforcement of installed capacity and synergies for surveillance	7,7	7,7
	Assessment study on barriers to adult vaccination access	7,7	7,3
	New financing models for vaccination	7,3	7,6
	Multiannual planning in vaccine procurement	7,1	6,7
	Platform for best practices in strategies and vaccination coverage management	7	7
	Co-financing of complementary interventions in vaccination coverage	6,9	6,7

Note: Average assessment by Think Tank members regarding the priority of each measure and the impact it can achieve. On a scale, 1 is the minimum and 10 is the maximum.

21 Recommendations from the +Longevity Think Tank

PILLAR	RECOMMENDATION	PRIORITY	IMPACT
ENSURING THE ADULT POPULATION'S COMMITMENT TO VACCINATION	Transparency and quality in communication and evidence dissemination	8,6	8,2
	Population segmentation of narratives and lines of action	8,1	7,2
	Simulation study and impact assessment of vaccination strategies in real life	7,9	7,7
	Multisectoral cooperation for literacy promotion	7,3	7,7
	Strategic alignment with the Action Plan for Active and Healthy Ageing (PAEAS)	7,1	7,6
	Investment in infodemiological management strategies	7,1	7,3
	Interventions supported by behavioral science algorithms	6,9	7,6

Note: Average assessment by Think Tank members regarding the priority of each measure and the impact it can achieve. On a scale, 1 is the minimum and 10 is the maximum.

A Proposal for an Adult Vaccination Calendar in Portugal

INFECTIOUS AGENT	VACCINATION COVERAGE ASSUMPTIONS
Influenza (seasonal flu)	Universal for individuals **aged 60 and older**
Influenza (HD, high dose)	Residents in nursing homes Individuals **aged 75 and older** (ideally extending to 65 and older) and/or with comorbidities placing them in risk groups
COVID-19	Universal (annual)
Pneumococcal disease	Universal for individuals **aged 65 and older** or with comorbidities placing them in risk groups
Respiratory Syncytial Virus (RSV)	Universal for individuals **aged 65 and older** or with comorbidities placing them in risk groups
Tetanus-Diphtheria-Pertussis	Universal **every 25 years** Universal every 10 years **starting at age 65**
Herpes Zoster	Universal **starting at age 50** or from age 18 for individuals in risk groups
HPV	Up to **age 46** for both sexes

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