



Greece Country Report 2022

Influencing Adult Pneumonia Vaccination Policy

Authors

Dr. Jane Barratt

Ms. Katrina Bouzanis

This project is supported by Pfizer.

Contents

Background	1
Pneumonia Vaccine Policy in Greece	1
Government Pneumonia Vaccine Information	2
Ministry of Health	2
National Vaccination Program and Calendar	2
National Organization of Public Health	2
Non-Government Pneumonia Vaccine Information	3
Hellenic Diabetes Federation	3
Panhellenic Federation of People with Diabetes	3
50+ Hellas	3
Status of National Pneumonia Vaccination Messaging	4
References	6

Background

Currently, in Greece, just under 30% of the population is over the age of 60 and this number is expected to rise to 42.5% by 2050.¹ Parallel to population ageing is the increased burden of noncommunicable diseases (NCDs). In Greece, NCDs account for 86% of all deaths with cardiovascular disease, chronic respiratory disease and diabetes attributable to 38%, 9% and 1% of all deaths, respectively.² Older people and those with chronic NCDs represent at-risk groups for contracting and experiencing increased morbidity and mortality due to vaccine preventable diseases (VPDs), such as pneumococcal pneumonia.³

Those aged 70 years and over in Italy have the greatest mortality rate due to pneumonia, with an incidence of approximately 229.21 per 100 000 people.^{4,5} Additionally, a 2014 study examining community-acquired pneumonia in Crete, Greece estimated an incidence of 236.7 cases per 100 000 persons aged 50 years and older.⁶

In Greece, pneumococcal vaccination is recommended for those 65 years and older and adults of any age with predisposing conditions.⁷ The PneuVUE study, which examined adult pneumonia vaccination across nine European countries finds that 47% of adults at high risk of pneumonia are aware of pneumonia vaccination, while only 21% of those at higher risk have been vaccinated.⁸

Pneumonia Vaccine Policy in Greece

The National Immunization Committee (Εθνική Επιτροπή Εμβολιασμών) advises the Ministry of Health and Social Solidarity on recommended vaccines and is responsible for drafting and updating the national vaccination programme.⁹ Joint ministerial decision by the Minister of Finance, the Minister of Labour and Social Security and the Minister of Health and Welfare makes the final determination of the national vaccination programme.⁹

Pneumococcal vaccination is recommended for those 65 years and older. This group is recommended to receive the 13-valent conjugate vaccine, followed by the 23-valent polysaccharide vaccine one year later.⁷

Adults with immune deficiencies, such as those experiencing chronic heart disease, chronic lung disease, diabetes or chronic liver disease, or immunocompromising conditions are also recommended to receive the 13-valent conjugate vaccine, followed by the 23-valent polysaccharide vaccine, with dosing and timing varying based on the predisposing condition.⁷



Government Pneumonia Vaccine Information

Ministry of Health

National Vaccination Program and Calendar

The National Adult Vaccination Program is detailed in an online document with vaccine schedules by age and by disease (Figure 1,2).⁷ The calendar indicates the recommended pneumococcal vaccination for older adults and adults with high-risk conditions, including who is considered high risk. The online document additionally outlines pneumococcal vaccination dosing and timing for all eligible groups.

National Organization of Public Health

The National Organization of Public Health is under the supervision of the Minister of Health.¹⁰ The objectives of the organization include monitoring population health, epidemiological surveillance of communicable diseases, preparation and execution of prevention measures to protect population health and well-being and promote actions to improve health.¹⁰

The National Organization of Public Health website provides printed and audiovisual material on various health promotion topics.¹¹ This material includes an infographic on how to protect against respiratory infections, however information on pneumococcal pneumonia and vaccination is omitted. Additionally, the website provides web pages on various diseases, under a heading titled “Index A – Z”.¹²

The website mentions some VPDs, however a web page on pneumococcal pneumonia is not included on the website.

Πίνακας 1. Εθνικό Πρόγραμμα Εμβολιασμών Ενηλίκων, ανά ηλικιακή ομάδα, 2020 - 2021

Εμβόλιο ▼	Ηλικία ►	18 έως 26 ετών	27 έως 59 ετών	60 έως 64 ετών	65 έως 75 ετών	άνω των 75 ετών
[1] Γρίπης		1 δόση ετησίως			1 δόση ετησίως	
[2] Τέτανος, Διφθερίαιδας, Κοκώση (Td ή Tdap ή Tdap-IPV)		Αναμνηστική δόση 18 με 25 ετών με Tdap ή Tdap-IPV και στη συνέχεια Td ή Tdap κάθε 10 χρόνια				
[3] Ιλαράς, Παρωτίτιδας, Ερυθράς (MMR)		1-2 δόσεις ανάλογα με το ιστορικό εμβολιασμών (για γεννηθέντες μετά το 1970)				
[4] Ανευμευλογιάς (VAR)		2 δόσεις (για γεννηθέντες μετά το 1990)		2 δόσεις		
[5] Έρπητα ζωστήρα (HZV)				1 δόση μεταξύ 60 και 75 ετών		
[6] Ιού ανθρώπινων θηλυμάτων (HPV)		3 δόσεις*				
[7] Πνευμονοκόκκου συζευγμένο (PCV13)		1 δόση				1 δόση
[7] Πνευμονοκόκκου Πολυσακχαριδικό (PPSV23)		1-2 δόσεις ανάλογα με τις ενδείξεις				1 δόση
[8] Ηπατίτιδας Α (HepA)		2 δόσεις				
[9] Ηπατίτιδας Β (HepB)		3 δόσεις				
[10] Μηνιγγιτιδόκοκκου οροσμάδων A,C,W135,Y συζευγμένο (MenACWY)		1,2 ή 3 δόσεις ανάλογα με τις ενδείξεις				
[11] Μηνιγγιτιδόκοκκου οροσμάδων Β Πρωτεϊνικό (MenB-4C ή MenB-HP)		2-3 δόσεις ανάλογα με το εμβόλιο				
[12] Αιμοφίλου υφλοκρινέντης τύπου b συζευγμένο(Hib)		1-3 δόσεις ανάλογα με τις ενδείξεις				

Συστήνονται για ενήλικες που πληρούν το ηλικιακό κριτήριο
Συστήνονται για ενήλικες με συνοδές ιατρικές καταστάσεις (ομάδες αυξημένου κινδύνου) ή άλλες ενδείξεις
Δεν συστήνονται

* Συστήνονται μεταξύ 18 και 26 ετών, ανεξαρτήτως φύλου, σε συγκεκριμένες ομάδες αυξημένου κινδύνου.

Figure 1. National adult vaccination program by age from Greece's Ministry of Health.

Πίνακας 2. Εθνικό Πρόγραμμα Εμβολιασμών Ενηλίκων, ανά νόσο ή άλλη ένδειξη, 2020 - 2021

Εμβόλιο ▼	Κύηση ή λοίμωξη	Ανασφατισμένη (παιδί HIV)	Λοίμωξη με HIV (CD4+ κύτταρα)	Ασπληνία, μόνιμη εξάλειψη του σπλήνα ή λειτουργική ασπληνία	Νεφρική ανεπάρκεια τελικού σταδίου σε αιμοδialysis	Χρόνιες καρδιοπνευμονικές, νεφρομυελικές, χρόνιες αιματολογικές	Χρόνιες παθήσεις του ήπατος	Σακχαρώδης διαβήτης	Υπερτασικό προσωπικό	MMR
[1] Γρίπης										1 δόση ετησίως
[2] Τέτανος ή Tdap-IPV ή Td										Μία δόση Tdap ή Tdap-IPV και στη συνέχεια αναμνηστική δόση Td ή Tdap κάθε 10 χρόνια
[3] MMR										Αντενδεδεικμένα 1-2 δόσεις ανάλογα με την περίπτωση
[4] VAR										Αντενδεδεικμένα 2 δόσεις
[5] HZV										Αντενδεδεικμένα 1 δόση
[6] HPV-γονιμότητες										3 δόσεις μέχρι την ηλικία των 26 ετών
[7] HPV-άνδρες										3 δόσεις μέχρι την ηλικία των 26 ετών 3 δόσεις μέχρι 26 ετών
[7] PCV13										1 δόση
[7] PPSV23										1,2 ή 3 δόσεις ανάλογα με τις ενδείξεις
[8] HepA										2 δόσεις
[9] MenACWY										1-4, περισσότερες δόσεις ανάλογα με τις ενδείξεις 2-3 δόσεις ανάλογα με το εμβόλιο
[10] MenB										2-3 δόσεις ανάλογα με το εμβόλιο
[12] Hib										3 δόσεις ανάλογα με το εμβόλιο 1 δόση

Συστήνονται για ενήλικες που πληρούν το ηλικιακό κριτήριο και δεν είναι αποδοκιματικά προαναφερθέντα εμβολιαστικά ή νόσους
Συστήνονται για ενήλικες με πρόσθετους παράγοντες κινδύνου ή άλλες ενδείξεις
Καθιστάται του εμβολιασμού έως και μετά την ανευαισθησία εάν ενδείκνυται το εμβόλιο
Αντενδεδεικμένα
Δεν συστήνονται
*Συστήνεται για το προσωπικό μακροβιολογικών ενοστρώσεων που είναι δυνατόν να εκτεθεί σε καλλυντικές υπεριώδεις ακτίνες

Figure 2. National adult vaccination program by disease from Greece's Ministry of Health.



Non-Government Pneumonia Vaccine Information

Hellenic Diabetes Federation

The Hellenic Diabetes Federation provides information to people with diabetes, and hosts events and webinars.¹³ A web page entitled “Diabetics should watch out for infections details common infections in people with diabetes. The web page briefly mentions that patients with diabetes are often at-risk of systemic infections such as pneumonia.¹⁴ The page also mentions that pneumococcal vaccination is available in those 65 years and older but does not mention adults of any age with diabetes are also eligible for pneumococcal vaccination.¹⁴

Panhellenic Federation of People with Diabetes

The Panhellenic Federation promotes the right of people with diabetes and aims to inform, prevent and educate people with diabetes and their families.¹⁵

A web page provides useful information for people with diabetes in a question and answer format (Figure 3). The web page explains that diabetes can make it difficult for the immune system to fight infections and that people with diabetes should be vaccinated against pneumococcus.¹⁶

Did you know that Diabetes can make it difficult for the immune system to fight infections?

It is generally accepted that hyperglycemia facilitates the onset of infections, mainly respiratory and urinary tract infections. It is estimated that 1/3 of people with diabetes who are treated for an infection have pneumonia. In addition, these infections often present with an atypical clinical picture, resulting in delayed diagnosis, more frequent complications of infections and therefore an increased risk of hospitalization.

Did you know that Greek and international organizations recommend a series of vaccinations to people with Diabetes to prevent their infections and complications?

According to the recommendations of the National Adult Vaccination Program (OP) and the Hellenic Diabetes Society, a person suffering from Diabetes should be vaccinated against pneumococcus, as well as annually against the flu. In addition, vaccination against hepatitis B, tetanus - diphtheria - pertussis - measles - rubella - mumps, chickenpox and shingles is recommended.

Figure 3. Web page on vaccination for people with diabetes from the Panhellenic Federation of People with Diabetes.

50+ Hellas

50+ Hellas is a non-profit organization with the goal of improving the life of people over 50.¹⁷ A web page highlights three vaccines to be given before winter to protect against pneumococcus, the flu and shingles.¹⁸ The web page indicates the vaccines are given for free for people 65 years and older with a doctor's prescription.



At a time when we are waiting for the new coronavirus vaccine to be discovered, it is more important than ever to look for vaccines to prevent other diseases that are particularly dangerous for the elderly. Vaccination Shields and SAVES LIVES!

The three main vaccines that need to be given now, before winter, are:

1. the **flu** - is repeated every year
2. of **pneumococcus** - is done in one or two doses
3. of **shingles** - occurs only once

The vaccines are given and become FREE for PEOPLE OVER 65 YEARS OLD with a doctor's prescription.

Figure 4. Web page on vaccination from 50+ Hellas.



Status of National Pneumonia Vaccination Messaging

Changing the Conversation on Adult Influenza Vaccination identifies seven components of effective adult influenza campaigns. These components are presented in Table 1 to evaluate pneumonia vaccination messaging in Greece.

Table 1. Status of pneumonia vaccination messaging in Greece.

■ Well-developed
 ■ Partially developed
 ■ Not yet developed/No evidence

	Description	Pneumonia Vaccination
Comprehensive policies and programs	Vaccination is recommended by government and advisory bodies for at-risk populations including older adults and people with chronic diseases.	■ Pneumococcal vaccination is recommended by the National Immunization Committee and government for those 65 years and older in addition to those with a chronic medical condition.
	Vaccination is funded under the National Immunization Program (NIP) and administered through the state program for at-risk populations including older adults and people with chronic disease.	■ Pneumococcal vaccination is included in the national vaccination plan and therefore free to recommended populations. ⁹
Clear communication strategy	Published context-specific communication strategy and action plan which defines communication goals, target audiences, expected roles of partner organizations, communication tools and timeline.	■ No evidence of published action plan for communication on pneumococcal vaccination for at-risk groups.
Well-defined audience	Universal message distributed to undifferentiated populations (general audiences regardless of age and underlying health condition).	■ Pneumococcal vaccination messaging is directed to at-risk groups, including older people and those with pre-existing conditions.
	Dedicated and tailored information for specific at-risk audience.	■
Multiple tools and channels	Online communication such as web content, digital technology, social media, online publications, email.	■ There is very little evidence of any type of messaging and campaigns on pneumococcal vaccination in Greece, from both government and civil society organizations.
	Messages are disseminated offline by TV, radio, printout (e.g. leaflet, poster, brochure, outdoor ads).	■
	Interactive communication including individual consultation, street campaign and face-to-face mobilization.	■



Realistic timeline

Timely vaccination reminder.

National/regional events scheduled for intensive awareness campaign such as national vaccination day/week/month.

50+ Hellas web page reminded older people to receive the pneumococcal vaccination for the winter season. Besides this web page, there is little evidence of timely vaccination reminders and or awareness campaigns around specific events.

Regular updates of information

Information is updated on a regular basis to reflect the most recent evidence and policy, such as recommending newly licensed vaccines for specific recipient.

Greece's national vaccination plan is updated annually.

Engagement of civil society

Communication by patient associations, ageing organizations and advocacy groups.

There is poor engagement from civil society organizations with only sparse web pages from organizations targeting people with diabetes and older people. There is no evidence of engagement from organizations serving other at-risk groups such as people with chronic cardiovascular diseases and chronic respiratory diseases.



References

1. World Health Organization. (2021). Percentage of total population aged 60 years or over. Retrieved March 15, 2021, from <https://www.who.int/data/maternal-newborn-child-adolescent-ageing/indicator-explorer-new/mca/percentage-of-total-population-aged-60-years-or-over>
2. World Health Organization. (2018). Noncommunicable Diseases (NCD) Country Profiles.
3. Chalmers, J., Campling, J., Ellsbury, G., Hawkey, P. M., Madhava, H., & Slack, M. (2017). Community-acquired pneumonia in the United Kingdom: a call to action. *Pneumonia*, 9(1), 15. <https://doi.org/10.1186/s41479-017-0039-9>
4. Dadonaite, B., & Roser, M. (2018). Pneumonia. Retrieved February 26, 2021, from <https://ourworldindata.org/pneumonia>
5. Global Burden of Disease Collaborative Network. (2018). Global Burden of Disease Study 2017 (GBD 2017) Results. Seattle, United States.
6. Bertsias, A., Tsiligianni, I. G., Duijker, G., Siafakas, N., Lionis, C., & Cretan CAP Research Group (2014). Studying the burden of community-acquired pneumonia in adults aged ≥50 years in primary health care: an observational study in rural Crete, Greece. *NPJ primary care respiratory medicine*, 24, 14017. <https://doi.org/10.1038/npjpcrm.2014.17>
7. Ministry of Health. (2020). National Adult Vaccination Program 2020-2021 - National Adult Vaccination Program (NEC). Retrieved June 25, 2021, from <https://www.moh.gov.gr/articles/health/dieythynsh-dhmosias-ygieinhs/emboliasmoi/ethniko-programma-emboliasmwn-epe-enhlikwn/7968-ethniko-programma-emboliasmwn-enhlikwn-2020-2021>
8. Ipsos Healthcare. (2016). PneuVUE report: a new view into pneumonia among older adult.
9. Rechel, B., Richardson, E., & McKee, M. (2019). The organization and delivery of vaccination services in the European Union (2018). World Health Organization. Retrieved from <https://www.euro.who.int/en/publications/abstracts/the-organization-and-delivery-of-vaccination-services-in-the-european-union-2018>
10. National Organization of Public Health. (n.d.). EODY - National Organization of Public Health. Retrieved June 25, 2021, from <https://eody.gov.gr/eody/>
11. National Public Health Organization. (n.d.). Available Material. Retrieved June 25, 2021, from <https://eody.gov.gr/diathesimo-yliko/>
12. National Organization of Public Health. (n.d.). Diseases. Retrieved June 25, 2021, from <https://eody.gov.gr/disease/?letter=allLetters>
13. Hellenic Diabetes Federation. (n.d.). Hellenic Diabetes Federation - ELODI. Retrieved June 25, 2021, from <https://www.elodi.org/>
14. Giamarellos-Bourboulis, E. I. (n.d.). Οι διαβητικοί να προσέχουν τις λοιμώξεις - ΕΛΛΗΝΙΚΗ ΟΜΟΣΠΟΝΔΙΑ ΓΙΑ ΤΟ ΔΙΑΒΗΤΗ - ΕΛΟΔΙ. Retrieved June 25, 2021, from <https://www.elodi.org/oi-diabhtiko-i-na-prosechoun-tis-loimwxi/>
15. Panhellenic Federation of Associations - Associations of People with Diabetes. (n.d.). History of Possasdia. Retrieved June 25, 2021, from <https://glikos-planitis.gr/index.php/possasdia-history/>
16. Panhellenic Federation of Associations - Associations of People with Diabetes. (2020). Useful information for Diabetes (Triponto 2020) Sweet Planet. Retrieved June 25, 2021, from <https://glikos-planitis.gr/index.php/useful-info-triponto-2020/>
17. 50plus Greece. (n.d.). The 50 and Greece - for a society friendly and fair for all ages. Retrieved June 25, 2021, from <https://www.50plus.gr/η-50και-ελλάς/>
18. 50plus Greece. (2020). STAY HEALTHY! STAY SAFE! Retrieved June 25, 2021, from <https://www.50plus.gr/2020/11/05/μεινε-υγιησμεινε-ασφαλης/>





International Federation on Ageing
1 Bridgepoint Drive, Suite G.238
Toronto, ON, M4M 2B5, Canada

www.vaccines4life.com

Published **April 2022** © Vaccines4Life