



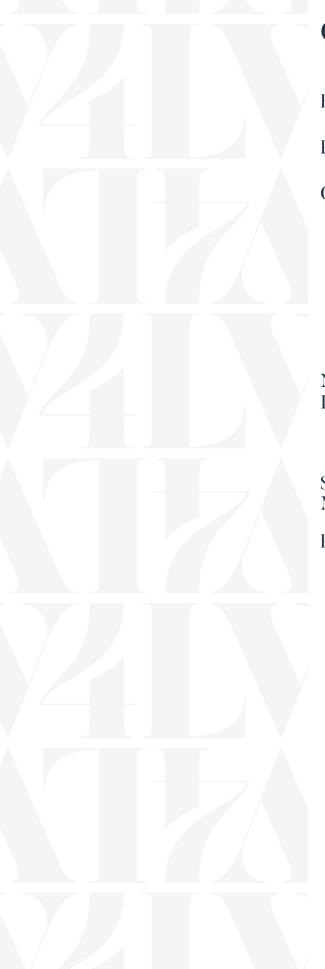


Influencing Adult Pneumonia Vaccination Policy

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Background

In Portugal, just under 30% of the population is aged 60 years or over and is expected to increase to just over 40% by 2050.¹ As the population ages, so does the burden of non-communicable diseases (NCDs). In Portugal, NCDs account for 86% of deaths, with cardiovascular diseases, chronic respiratory diseases and diabetes accounting for 29%, 7% and 4% of all deaths, respectively.² Older people and people with NCDs are at a greater risk of contracting and experiencing morbidity and mortality due to vaccine preventable diseases (VPDs), including pneumococcal pneumonia.³

According to Portugal's Directorate-General of Health, in Portugal, the mortality rate due to pneumonia is approximately 25 deaths per 100 000 people.^{4,5} According to the Global Burden of Disease Study, conducted in 2017, adults 70 years and older experience the highest mortality rates due to pneumonia, with an incidence of 396.66 per 100 000 people, followed by 50-69 year olds.^{6,7} A 2008 study in Portugal found that 93% of hospitalizations due to community-acquired pneumonia (CAP) occur in adults, resulting in significant healthcare costs which may be avoided through vaccination prevention strategies.⁸

In Portugal, pneumonia vaccination is recommended for children under 5 and adult at-risk groups, however there is no recommendation for older adults in general. The PneuVUE study, which examined adult pneumonia vaccination across nine European countries, found pneumonia vaccination uptake in Portugal is low, despite higher awareness of pneumonia vaccination than other European countries. 40% of adults surveyed are aware that it is possible to be vaccinated against pneumonia, while only 14% of those at high-risk of pneumonia have been vaccinated.

Pneumonia Vaccine Policy in Portugal

In Portugal, the Directorate-General of Health (Direção-Geral da Saúde [DGS]) oversees the national immunization program, proposes and revises vaccination strategies and monitors and evaluates strategies. The Technical Committee on Immunization (Comissão Técnica de Vacinação) serves as the immunization technical advisory group for Portugal. Regionally and locally public health departments and public health units respectively coordinate implementation of the national immunization program.

Pneumococcal vaccination is recommended for adult at-risk groups, but the recommendations do not include older adults without pre-existing conditions. In 2015, pneumococcal vaccination was integrated into the national immunization plan. Vaccination is available and free for certain adult at-risk groups based on a doctor's recommendation and with a medical prescription.¹³ These groups include people with chronic heart disease, chronic respiratory disease, chronic liver disease, diabetes, and immunocompromised people.¹⁴ Both the 13-valent conjugate and 23-valent polysaccharide pneumococcal vaccine are recommended, with different dosing and timing depending on the risk group.¹⁵

Government Pneumonia Vaccine Information

Directorate-General of Health

The Directorate-General of Health (DGS) provides information on Portugal's national vaccination program and general vaccination information, including the vaccination schedule, standards and guidelines and promotional materials.

Vaccination Calendar and Plan

Despite the recommendation for high-risk adults to receive pneumonia vaccination, Portugal's vaccination calendar does not indicate pneumococcal vaccination for any adult age groups (Figure 1).¹⁵

Web pages

A web page titled "Infections by Streptococcus pneumoniae" can be found under the heading "National Vaccination Program vaccines". This page explains why to vaccinate, however does not include reasons specific to recommended at-risk groups. The page indicates the recommended vaccination schedule for children. For adults, the page states, "this

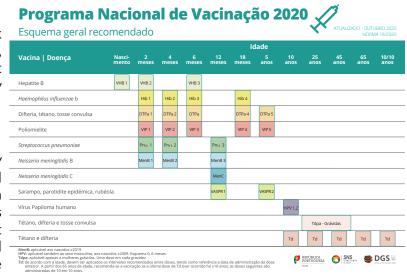


Figure 1. Vaccination schedule from the Directorate-General of Health.

vaccine is administered to people of any age belonging to groups at risk," however does not elaborate on who is considered at-risk. Additionally, the web page only mentions one of two types of pneumococcal vaccines available to prevent pneumococcal infection.

Brief information on pneumococcal vaccination and pneumococcal infection can also be found on a web page dedicated to questions and answers.¹⁶

A web page on health in the winter mentions that cold weather may facilitate the onset of influenza and other respiratory infections such as pneumonia, and the worsening of heart and respiratory diseases. ¹⁷ Vaccination is not mentioned on this page as a key measure to prevent disease. A linked document outlines a season health plan for the winter, which indicates the need to promote pneumococcal and influenza vaccination. ¹⁸

Standards and Guidelines

Standards and guidelines on vaccination can be found on the DGS website.¹⁹

Guidelines on pneumococcal vaccination, published in 2015, outline details on pneumococcal vaccination for adults, including who is defined as atrisk group, scheduling and dosing of the two pneumococcal vaccinations recommended. 13,14

A diagram illustrates the schedule and dosing based on the at-risk group (Figure 2).¹⁴

This guideline is the only identified source with details on at-risk groups, the type of vaccination to receive and when to receive the recommended vaccines.

Promotional Materials

3. Esquemas vacinais Os adultos pertencentes aos grupos com risco acrescido para DIP, sem qualquer dose anterior de Pn13 ou Pn23, devem ser vacinados de acordo com o seguinte esquema (ver as exceções no ponto 4. Situações especiais): 6-12 meses Pn23 Pn23 Pn13 Doentes do Grupo B do Quadro I Os adultos de risco para DIP, previamente vacinados com 1 ou 2 doses de Pn23 devem ser vacinados de acordo com o seguinte esquema (ver as exceções no ponto 4. Situações especiais): 6-12 meses (mínimo 8 semanas), desde que 12 meses após a última dose decorram 5 anos após Pn23 ≥1 Pn23 Pn23 entes do Grupo B do Quadro I Se os intervalos recomendados entre doses forem ultrapassados, a vacinação deve ser continuada seguindo o mesmo esquema, logo que possível. Os adultos que têm direito à vacina Pn13 gratuita podem ser vacinados no Serviço Nacional de Saúde, em cuidados de saúde primários e hospitais ou ainda em instituições de saúde privadas com protocolo com a respetiva Administração Regional de Saúde (ARS). Norma nº 011/2015 de 23/06/2015 atualizada a 06/11/2015

Figure 2. Guideline on pneumococcal vaccination from the Directorate-General of Health, illustrating scheduling and dosing of vaccination.

The DGS creates promotional material, such as posters and videos, for influenza and measles vaccination, however there are no promotional materials specific to pneumococcal vaccination. ^{20,21} The DGS also shares information about European Vaccination Week, and shares resources developed by the World Health Organization in Portuguese. There are no campaigns or promotional materials specifically on pneumococcal vaccination included in European Vaccination Week. ²²

Non-Government Pneumonia Vaccine Information

Portuguese Society of Cardiology

The Portuguese Society of Cardiology (Sociedade Portuguesa de Cardiologia) features a "Citizen's Area" on its web page which aims to educate on heart health and chronic health diseases. Featured here is a video series titled "Conversations of risk", which aims to educate on cardiovascular risk and prevention.²³ One episode of this video series covers vaccination but is not specific to pneumococcal vaccination (Figure 3).

The only other resource is a position paper from the Portuguese Society of Cardiology recommending influenza and pneumococcal vaccination for people with chronic heart diseases.²⁴

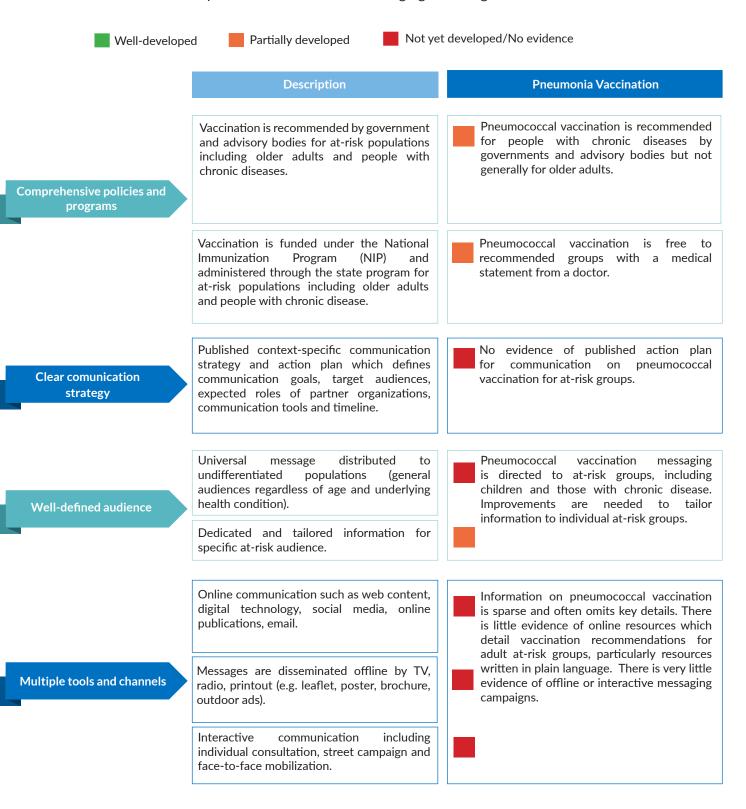


Figure 3. Video from the Portuguese Society of Cardiology on vaccination.

Status of National Pneumonia Vaccination Messaging

Changing the Conversation on Adult Influenza Vaccination (CCAV) identifies seven components of effective adult influenza campaigns.²⁵ These components are presented in Table 1 to evaluate pneumonia vaccination messaging in Portugal.

Table 1. Status of pneumonia vaccination messaging in Portugal.



Realistic timeline

Timely vaccination reminder.

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

Pneumococcal vaccination is not included in reminders on health in the winter, or intensive campaigns surrounding key awareness events, such as European Vaccination Week.

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.

Information on pneumococcal vaccination is evidence based, however does not reflect recent evidence and policy as the last comprehensive set of guidelines was issued in 2015.

Engagement of civil society

Communication by patient associations, ageing organizations and advocacy groups.

There is very little evidence of engagement from civil society organizations serving older people and people with chronic cardiovascular diseases, chronic respiratory diseases or diabetes.

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