# Building a Shingles Atlas for Adult Vaccination Poland

### **National Vaccine Recommendations Process**

In Poland, there are two National Immunization Technical Advisory Groups (NITAGs).<sup>1</sup> The first, established in 2019, is the Vaccination Team (VT), a subsidiary of the Polish Ministry of Health. The VT's responsibilities include preparing expert opinions on vaccinations at the request of the Minister or the Chairman, analyzing the current preventative vaccination program, providing opinions on the Protective Vaccination Program (PSO) each calendar year, and developing and reviewing proposals for changes in the field of vaccinations.<sup>2</sup> The PSO represents the vaccination calendar in Poland. Although the VT is tasked with preparing opinions on the vaccination calendar, the regulation of the Ministry of Health is announced annually in the Announcement of the Chief Sanitary Inspector in the Journal of Laws. The Chief Sanitary Inspector also considers opinions and recommendations from the advisory and consultative body known as the Sanitary and Epidemiological Council (SEC), which serves as the second NITAG. The SEC's scope extends beyond immunization to include works based on internal policy.<sup>3</sup>

Polish NITAGs do not have an established role in the healthcare system, and in most cases, their recommendations and statements are not publicly available. However, during the pandemic, the NITAGs were highly active, and there is public information available on their recommendations for the COVID-19 vaccine.<sup>1</sup>

The National Institute of Public Health PZH – PIB (NIZP PZH – PIB), along with the Polish Society of Vaccinology, created the Szczepenia.info portal to provide the public with information on vaccinations recommended by the Ministry of Health, including the yearly vaccination calendar.<sup>4</sup>

### **Shingles Vaccine Recommendations and Schedules**

In Poland, the inactivated recombinant vaccine (RZV) against shingles has been available since 2023.<sup>5</sup> The general recommendations in Poland, according to medical societies, are that individuals aged 50 years and older, as well as adults 18 years or older at increased risk of developing shingles, should receive the vaccine.<sup>6</sup> The schedule consists of 2 doses given 2 to 6 months apart.<sup>6</sup>

However, according to the official recommendations by the Ministry of Health in the 2024 Vaccination Calendar/ PSO, vaccination against shingles is recommended for adults who have had varicella virus infection, particularly<sup>7</sup>:

• Individuals with weakened immune system due to congenital or acquired immunodeficiency, immunosuppression caused by medical treatment, HIV infection, cancer or recipients of solid organ or hematopoietic stem cell transplants.

• Individuals with chronic diseases including chronic heart diseases, chronic liver diseases, chronic lung diseases, chronic kidney diseases.

- Individuals with autoimmune diseases.
- Individuals with diabetes.
- Individual experiencing depression.
- Individuals who are 50 years of age or older.

### **Adult Shingles Vaccine Funding**

The Shingles Vaccination in Poland is recommended by the Ministry of Health; however, it is not considered mandatory, and thus, it is not currently funded by national health insurance. Individuals are required to pay out-of-pocket for the vaccine at pharmacies.<sup>8</sup> However, starting in 2024, there is a 50% refund available for the RZV vaccine for individuals aged 65 and over who belong to specific risk groups. These groups include those with chronic heart disease, chronic lung disease, diabetes, chronic renal failure, congenital or acquired immunodeficiency, generalized cancer, HIV infection, Hodgkin's lymphoma, iatrogenic immunosuppression, leukemia, multiple myeloma, individuals post solid organ transplantation, rheumatoid arthritis, psoriasis, psoriatic arthritis, inflammatory bowel disease, ankylosing spondylitis, multiple sclerosis, and systemic lupus erythematosus.<sup>8</sup>

### Vaccine Coverage Rates

In Poland, there is currently no available information on the vaccine coverage rates for shingles vaccination. The National Institute of Public Health, specifically the Department of Epidemiology of the National Institute of Hygiene, prepares an annual bulletin on protective vaccinations in Poland, which serves as the official source of information on vaccination rates in the country.' However, the vaccination coverage rates included in the 2022 report mainly focus on mandatory children vaccination rates and COVID-19 vaccine rates.

### **Prevalence Rate on Burden of Shingles**

A study conducted in 2024 investigated hospitalizations of patients with herpes zoster (HZ) in Poland from 2012 to 2021. The mean annual rate of first-time hospitalizations for HZ in Poland was approximately 5.8 per 100,000 person-years.<sup>12</sup> The rates and number of hospitalizations remained stable from 2012 to 2019, but a decrease in frequency was observed between 2020 and 2021. The mean age at the time of hospitalization was 64 years, with a median age of 69 years.<sup>12</sup> Additionally, it was observed that 70% of patients hospitalized for HZ were 60 years and older. Throughout the analyzed period, the total recorded deaths accounted for 1.1% of all hospitalized HZ patients.<sup>12</sup>

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### **Monitoring Mechanisms for Vaccination Coverage**

In Poland, information about all vaccinations administered is recorded in two primary documents: the immunization card and the vaccination booklet.<sup>10</sup> The immunization card serves as an "internal document" within the healthcare system and is maintained by the healthcare provider responsible for providing preventative care to the individual.<sup>10</sup> In the case of uninsured persons, it is kept by the state district sanitary inspector. Healthcare providers administering vaccinations and maintaining immunization cards are required to submit reports to the state district sanitary inspectors, who then forward them to the state provincial sanitary inspectors.<sup>10</sup> These reports include the Mz-54 annual report on preventative vaccinations, quarterly reports on preventive vaccinations, and reports on the stock sizes of individual vaccine preparations. These reports undergo verification at the provincial sanitary and epidemiological stations before being submitted in accordance with the competences of the Chief Sanitary Inspectorate and the National Institute of Public Health of the National Institute of Hygiene in Warsaw.<sup>10</sup>

The National Institute of Public Health, specifically the Department of Epidemiology of the National Institute of Hygiene, compiles an annual bulletin on Protective Vaccinations in Poland based on the received annual reports (Mz-54).<sup>10</sup> This bulletin serves as the official source of information on vaccinations in Poland. It is accessible on the NIZP PZH – PIB website.<sup>11</sup>

### **Shingles Vaccination Pathway**

In Poland, individuals who wish to be vaccinated against shingles must visit their family doctor to obtain a prescription and schedule a vaccination appointment.<sup>8</sup> They can then purchase the vaccine from a pharmacy with the prescription. Individuals who are 65 years or older and belong to specific risk groups are eligible to receive a 50% reimbursement of the vaccine cost.<sup>8</sup>

### Barriers

In Poland, there is a significant delay in adopting vaccine policies compared to other countries. The National Immunization Technical Advisory Groups (NITAGs) and vaccination budgets are also comparatively low, creating a major barrier to including new vaccines in the National Immunization Program.<sup>1</sup>

While Poland includes adult vaccination in its immunization schedule, most are recommendations rather than mandates. As a result, they are not covered by national health insurance, and only specific cohorts of individuals are eligible for reimbursement, such as for the shingles vaccine.<sup>8</sup> The cost of vaccines can prevent individuals from getting vaccinated, even if they need it. Furthermore, there is a lack of easily digestible information about the prevalence of shingles and shingles vaccine coverage rates. This contributes to limited public awareness and lower vaccine uptake. Additionally, research shows that people living in rural areas are less likely to access medical services for herpes zoster related illness than those in urban areas.<sup>12</sup> This disparity suggests that there is greater availability and wider use of vaccinations among urban residents. In summary, the primary barriers to shingles vaccination in Poland include lack of mandatory coverage by national health insurance, insufficient public awareness, and disparities in access to medical services between rural and urban populations.

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