

# Seasonal influenza vaccination programme country profile: Portugal

## 2012–13 Season

### Background information

Influenza immunisation policy and general facts about Portugal	
Volume indices of GDP per capita in 2011 and 2013 (EU-28=100) Source: Eurostat <sup>a</sup>	78 and 79 respectively
Health costs as % of GDP 2011 Source: Eurostat <sup>b</sup>	6.8%
Total population of the country, 2011 Source: Eurostat <sup>c</sup>	10 562 178
Population ≥65, 2011 Source: Eurostat <sup>c</sup>	2 010 064 (19% from the total population)
Population with chronic medical conditions <65 years, 2006 Source: ECDC (based on methodology by Fleming and Eliot, 2006) <sup>d</sup>	879 000 (8.3% from the total population)
Number of live births in 2011 <sup>e</sup>	96 855 (0.9% from the total population)
National seasonal influenza recommendations (e.g. age and target group recommendations and guidelines)	Recommendations available
URL link to Immunisation Guidelines for Portugal	Link not available
National Action Plan (NAP) as requested by EC	A plan was not developed, but a respective policy is in place
URL link to NAP	na

na: Not applicable

EUROSTAT links:

<sup>a</sup>GDP per capita 2013 (accessed 15.12.2014): [http://ec.europa.eu/eurostat/statistics-explained/index.php/GDP\\_per\\_capita,\\_consumption\\_per\\_capita\\_and\\_price\\_level\\_indices](http://ec.europa.eu/eurostat/statistics-explained/index.php/GDP_per_capita,_consumption_per_capita_and_price_level_indices)

<sup>b</sup>Health expenditures 2011 (accessed 15.12.2014): [http://ec.europa.eu/eurostat/statistics-explained/index.php/General\\_government\\_expenditure\\_on\\_social\\_protection\\_and\\_health](http://ec.europa.eu/eurostat/statistics-explained/index.php/General_government_expenditure_on_social_protection_and_health)

<sup>c</sup>Total population and those > 65 years of age 2011 (accessed 15.12.2014): <https://ec.europa.eu/CensusHub2/intermediate.do?&method=forwardResult>

<sup>d</sup>Population with chronic medical conditions 2006: [http://www.ecdc.europa.eu/en/publications/Publications/0808\\_GUI\\_Priority\\_Risk\\_Groups\\_for\\_Influenza\\_Vaccination\\_on.pdf](http://www.ecdc.europa.eu/en/publications/Publications/0808_GUI_Priority_Risk_Groups_for_Influenza_Vaccination_on.pdf) (Fleming, D.M. and A.J. Elliot, Estimating the risk population in relation to influenza vaccination policy. 2006 May 15; 24(20):4378-85)

<sup>e</sup> Number of live births in 2011 (accessed 15.12.2014): <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tps00111&plugin=1>

## Seasonal influenza vaccination recommendations and payment mechanism for vaccination

Vaccination recommendations (population groups targeted by vaccination)	
Overall population	No recommendation
Healthy children and adolescents	No recommendation
Older population groups: ≥65 years of age	Recommended
Chronic medical conditions	Recommended: <ul style="list-style-type: none"> <li>- Respiratory/Pulmonary diseases;</li> <li>- Neurolomuscular diseases;</li> <li>- Cardiovascular diseases;</li> <li>- Renal diseases;</li> <li>- Hepatic diseases;</li> <li>- Haematological disorders;</li> <li>- Metabolic disorders;</li> <li>- Immunosuppressed individuals</li> <li>- HIV/AIDS;</li> <li>- Transplant recipients</li> <li>- Long-term aspirin use (children &lt;18 years).</li> <li>- BMI&gt;30</li> </ul>
Pregnancy-related vaccination (including post-partum women)	Recommended: For all pregnant women in the second or third pregnancy trimester.
	No recommendation: Postpartum women
Healthcare workers	Recommended: <ul style="list-style-type: none"> <li>- For some healthcare workers<sup>a</sup></li> </ul>
Other occupational groups	-
Population groups in closed communities	Recommended: <ul style="list-style-type: none"> <li>- For residents of long- term care facilities;</li> </ul>
	No recommendation: <ul style="list-style-type: none"> <li>- For prisoners;</li> <li>- For children in day care centres.</li> </ul>
Household contacts or carer of:	No recommendation: <ul style="list-style-type: none"> <li>- Recommended if infants &lt;6 months of age have a higher risk of complications</li> <li>- Immunosuppressed individuals;</li> <li>- Individuals with chronic medical conditions;</li> <li>- ≥65 years of age.</li> </ul>

<sup>a</sup> Some' means outpatient/inpatient/long-term care facility workers/ front line healthcare workers/ healthcare workers that have direct contact with patients.

\*Not all disorders recommended vaccine: for adults vaccine recommended only for those with diabetes. For children vaccine recommended for those with diabetes and other metabolic disorders.

\*\* Not recommended per se, but if the HIV/AIDS leads to immunosuppression, the individuals will be recommended vaccination accordingly.

Payment mechanism for vaccine and its administration for the population groups targeted by seasonal influenza vaccine		
	For vaccine	For administration
Overall population	37% reimbursement;	National Health Service; paid if administered in pharmacies
Healthy children and adolescents	37% reimbursement;	National Health Service; paid if administered in pharmacies
Older population groups ( $\geq 65$ years of age) <sup>a</sup>	Free	National health service; paid if administered in pharmacies
Chronic medical conditions groups (by each Chronic medical conditions group) <sup>a</sup>	37% reimbursement;	National health service; paid if administered in pharmacies
Pregnancy related vaccination (including post-partum women) <sup>a</sup>	37% reimbursement;	National health service; paid if administered in pharmacies
Health Care Workers (including staff of long-stay care facilities) <sup>a</sup>	Employer	Employer
Other occupational groups <sup>a</sup>	na	na
Population groups in closed communities <sup>a</sup>	Free for some groups	National health service
Household contacts or care givers	37% reimbursement;	National health service; paid if administered in pharmacies

na: Not applicable

<sup>a</sup> In some regions, the vaccine receiver is charged a symbolic amount (approximately €10) for vaccine & vaccination.

**National insurance scheme:** health contributions are paid to the insurance fund and then for this contribution there is a package of services received. It is not by default that you receive the services if you do not pay the insurance contributions.

**National health service:** taxes are paid by a citizen or resident of the country and this person is covered by the health service.

**Out of pocket:** not reimbursed, paid by receiver of vaccine.

## Vaccination coverage rates

Vaccination coverage (%) in population groups targeted by seasonal influenza vaccination the from 2008–09 to the 2012–13 influenza season by method of data collection (administrative and /or survey)

Population group	Influenza season									
	2008–09		2009–10		2010–11		2011–12		2012–13	
	Admin.	Surv.	Admin.	Surv.	Admin.	Surv.	Admin.	Surv.	Admin.	Surv.
Overall population	15	NA	15	19	NA	17.5	NA	16.4	NA	NA
Children/adolescents $\geq 6$ months –15 years	na	NA	na	13	na	9.6	na	NA	na	NA
Older population groups: $\geq 65$ years of age	50	53	NA	52.2	NA	48.3	NA	43.4	55	45
Chronic medical conditions groups	NA	35.5	NA	32.4	NA	29.4	NA	31	NA	28
Pregnant women <sup>a</sup>	-	-	-	-	NA	NA	NA	NA	NA	NA
Healthcare workers	32	na	43.5	na	34.1	na	32	na	28	na
Staff in long stay care facilities <sup>b</sup>	NA	-	36	-	27.3	-	28	NA	27	NA
Residents in long stay care facilities <sup>b</sup>	80	-	87	-	85.4	-	91	NA	89	NA

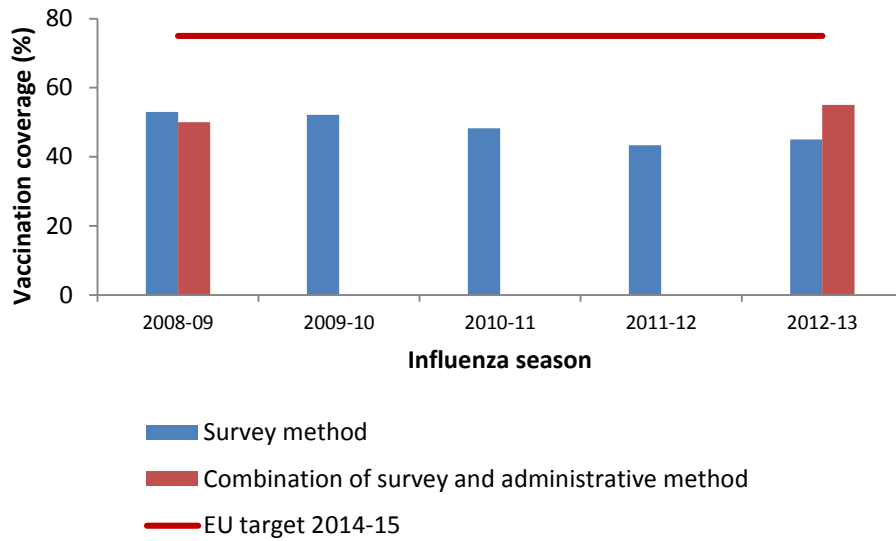
na: Not applicable

NA: Not available

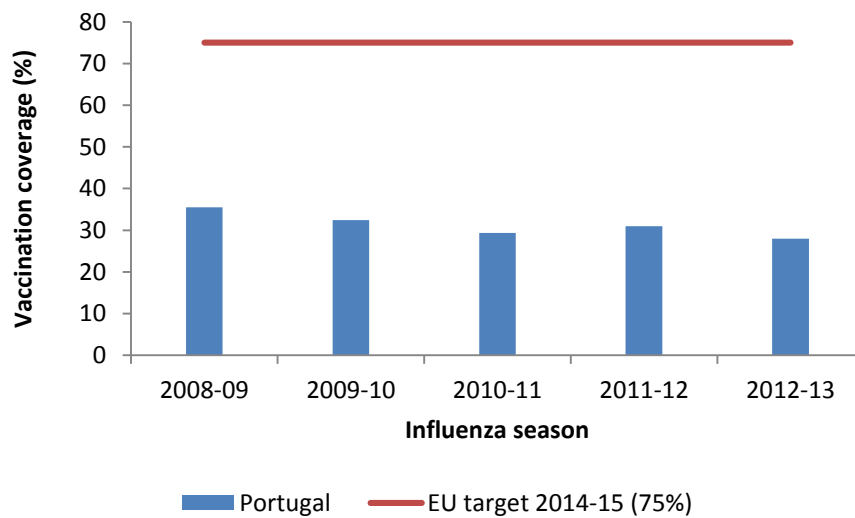
<sup>a</sup> VENICE started to collect vaccination coverage data for pregnant women after the A(H1N1)pdm09 (2010-11 influenza season).

<sup>b</sup> VENICE started to collect vaccination coverage data for staff and residents in long-stay care facilities for the influenza season 2011-12.

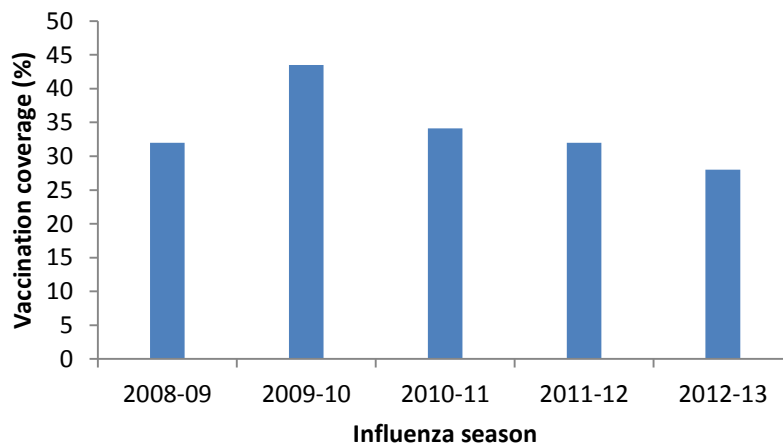
**Figure 1. Seasonal influenza vaccination coverage among those  $\geq 65$  years of age from the 2008–09 to the 2012–13 influenza season**



**Figure 2. Seasonal influenza vaccination coverage among those with chronic medical conditions from the 2008–09 to the 2012–13 influenza season**



**Figure 3. Seasonal influenza vaccination coverage among healthcare workers from the 2008–09 to the 2012–13 influenza season**



**Figure 4. Seasonal influenza vaccination coverage among residents and staff of long-stay care facilities, 2008–09 influenza season to 2012–13 season**



*Note: VENICE started to collect vaccination coverage data for staff and residents in long stay care facilities for the 2011–12 influenza season.*

## Methods to monitor vaccination coverage, safety and effectiveness

Monitoring of vaccination coverage during the 2012–13 influenza season			
Method used to monitor influenza vaccination coverage			
Combination of administrative and survey methods			
Method used (administrative, survey) to monitor vaccination coverage by population group			
Administrative		Survey	
Adults: aged ≥65 years old; Health care workers; Residents of long term care institutions		Adults: aged ≥65 years old; Individuals with medical/risk conditions (clinical risk groups);	
Details on administrative method used (medical records vs. immunisation registry; manual vs. electronic) by population group			
Medical records		Immunisation registry	
Manual	Electronic	Manual	Electronic
No	No	Residents of long term care	Adults aged ≥65 years old
Numerator assessment			
Pharmaceutical data	Administrative data		Frequency of numerator assessment
Vaccine distribution data from industry- entire population; Vaccine distribution data from national purchaser-entire population; Vaccine data by sales and distribution from pharmacies-entire population,	Aggregate collection of number of vaccines administered; Aggregate collection of number of vaccines distributed (national purchaser); Aggregate collection of number of vaccines distributed (industry); Aggregate collection of number of vaccines sales (private pharmacies)		Every two months

Denominator assessment by population groups and data source	
Population group	Data source for population group
Entire population	Used. National central statistical data
Children and adolescents	Not used
Adults	Not used
Individuals with medical/risk conditions (clinical risk groups)	Not used
Pregnant women	Not used
Health care workers	Used. Healthcare workers from NHS registries
Essential public sector workers	Not used
Prisoners	Not used
Residents of long term care institutions	Used. Aggregate number people in each institution
Educational institutions	Not used
Other	Not used

Details for survey method used for the 2012–13 influenza season			
Type of the survey	Survey mode	Sampling strategy	Sample size
Household	By telephone	Probability sampling; Stratified (assessment, LQAS <sup>a</sup> )	2 719

Scientific studies conducted for vaccination coverage; vaccine safety and vaccine effectiveness
I move: vaccine effectiveness for influenza

Vaccine safety monitoring (adverse events following immunisation AEFV)				
Data collected at the national and at the regional level	Data linkage with immunisation registry	Details collected	Status of reporting	AEFV reported to
Yes	Not possible	case based data including age, sex and suspected symptoms should be reported	Not mandatory	na

na: Not applicable

Monitoring of influenza vaccine break-through <sup>a</sup> infections in vaccinated individuals		
Data collected at the national and at the regional level	Data linkage with immunisation registry	Details collected
There is such system	Not possible	Case based data should be reported to the national level

<sup>a</sup> Break-through infection is defined as laboratory-confirmed influenza infection >14 days after seasonal influenza vaccination in the current season (i.e. vaccine failure).

## Vaccine procurement and delivery

Influenza vaccine procurement and delivery, 2012–13 influenza season		
Number of doses		
Purchased	Distributed	Used
2 000 000	2 000 000	NK

NK: Not known

Type of vaccine/Product Name	Target groups
<b>Trivalent inactivated non-adjuvanted vaccines (TIV)</b>	
Used	
Abbott; GlaxoSmithKline; Sanofi Pasteur	Children and adolescents; Healthy adults; Older adults (e.g. ≥60/65 years); Those with medical condition/s; Pregnant women; Residents of long stay care facilities; Health Care Workers; Other occupational groups
<b>Trivalent inactivated adjuvanted vaccines (aTIV)</b>	
Not used	
<b>Trivalent live attenuated nasal vaccine (LAIV)</b>	
Not used	
<b>Quadrivalent attenuated nasal vaccine (LAIV)</b>	
Not used	
<b>Quadrivalent inactivated non-adjuvanted vaccine (QIV)</b>	
Not used	

## Promoting seasonal influenza vaccination

Promoting seasonal influenza vaccination during the 2012–13 influenza season	
Promotion activities with the general public and healthcare workers	Source of information (if yes)
<b>General public</b>	
Yes	Radio; Newspapers; Website
<b>Population over 65</b>	
Yes	Radio; Newspapers; Website
<b>Pregnant women</b>	
Yes	Radio; Newspapers; Website
<b>Chronic medical conditions</b>	
Yes	Radio; Newspapers; Website
<b>Healthcare workers</b>	
No	na

na: Not applicable

## Use of antiviral agents for treatment and chemoprophylaxis of influenza

Recommendations and/or guidelines (policy document) on antiviral use	
Recommendations available	
Use of antiviral agents for treatment and chemoprophylaxis of influenza during the 2012–13 influenza season	
Use of antivirals for <u>treatment</u> for in-patients and out-patients who are at higher risk of developing influenza complications	
For in-patients who:	
<ul style="list-style-type: none"> <li>- have severe, complicated influenza-like illness (ILI);</li> <li>- have progressive influenza-like illness;</li> <li>- require hospitalisation due to influenza-like illness.</li> </ul>	Recommended
For out-patients who are at higher risk of developing influenza complications on the basis of their age or underlying medical conditions:	
<ul style="list-style-type: none"> <li>- Residents of nursing homes and other chronic-care facilities.</li> <li>- Children &lt; 2 years;</li> <li>- Children &lt; 5 years;</li> <li>- Adults aged ≥65 years;</li> <li>- Individuals belonging to risk groups.</li> <li>- Women who are pregnant or postpartum (within 6 weeks after delivery).</li> </ul>	Recommended
Use of antivirals for <u>post-exposure</u> prophylaxis	
For family or other close contacts of a person at higher risk for influenza complications who have not been vaccinated with influenza vaccine at the time of exposure.	No recommendation
For unvaccinated healthcare workers with occupational exposure and who did not use personal protective equipment at the time of exposure	No recommendation
Use of antivirals for <u>pre-exposure</u> prophylaxis	
For individuals who are at high risk (e.g. severely immunosuppressed patients) for influenza-related complications who cannot otherwise be protected during times when a high risk for exposure exists	No recommendation
Use of antivirals for <u>control of influenza outbreaks</u>	
For individuals in long-term care facilities/care for immunocompromised individuals if not vaccinated or if the circulating influenza strain does not match the vaccine strains	No recommendation
For unvaccinated healthcare staff who provide care to individuals at high risk of developing complications in long-term care facilities/ care for immunocompromised patients if not vaccinated or if the circulating influenza strain does not match the vaccine strains	No recommendation
For all health care staff regardless of whether they received an influenza vaccination if the circulating influenza strain does not match the vaccine strains	No recommendation
Prisoners	No recommendation
Educational institutions	No recommendation
Existence of antiviral resistance surveillance system	
Antiviral resistance surveillance system	There is an antiviral resistance surveillance system in place



Country profiles are based on the [Seasonal Influenza Vaccination in Europe](#) report produced by the European Centre for Disease Prevention and Control (ECDC) and the Vaccine European New Integrated Collaboration Effort III (VENICE III). The data are from the seasonal influenza vaccination survey for 2012–13 season in EU/EEA countries. During the validation process in June 2015, minor changes were introduced in some country profiles. Therefore, data may be different to those available in the report.