

Seasonal influenza vaccination programme country profile: United Kingdom – Scotland

2012–13 Season

Background information

Influenza immunisation policy and general facts about the United Kingdom	
Volume indices of GDP per capita in 2011 and 2013 (EU-28=100) Source: Eurostat ^a	106 and 109 respectively (UK)
Health costs as % of GDP 2011 Source: Eurostat ^b	8.0% (UK)
Total population of the country, 2011 Source: Eurostat ^c	UK: 63 182 180 Scotland: 5 295 403 (source: 2011 census: http://www.scotlandscensus.gov.uk/)
Population ≥65, 2011 Source: Eurostat ^c	UK: 10 377 125 (16.4% from the total population) Scotland: 890 334 (16.8% of the total population (source: 2011 census: http://www.scotlandscensus.gov.uk/)
Population with chronic medical conditions <65 years, 2006 Source: ECDC (based on methodology by Fleming and Eliot, 2006) ^d	UK: 5 051 000 (8.0% from the total population) Scotland: 560 544 (10.6% of the total population) based on denominator for aggregate level vaccine uptake in at-risk groups as of week 13 2011 (source: automated extracts from GP software)
Number of live births in 2011 ^e	UK: 807 776 (1.3% from the total population) Scotland: 58 590 (1.1% of the total population; Data source: National Records Scotland: http://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/general-publications/births-deaths-and-other-vital-events-preliminary-annual-figures)
National seasonal influenza recommendations (e.g. age and target group recommendations and guidelines)	UK: Recommendations available Scotland: Recommendations available in the annual seasonal flu letter issued by the Chief Medical Officer
URL link to Immunisation Guidelines for Scotland	http://www.hps.scot.nhs.uk/resp/seasonalInfluenza.aspx#vaccine
National Action Plan (NAP) as requested by EC	A plan was not developed, but a respective policy is in place.
URL link to NAP	http://www.sehd.scot.nhs.uk/cmo/CMO(2012)06.pdf (See above for the most recent CMO letter)

EUROSTAT links:

^aGDP 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

^bHealth expenditures 2011 (accessed 15.12.2014): http://ec.europa.eu/eurostat/statistics-explained/index.php/General_government_expenditure_on_social_protection_and_health

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

^d Population with chronic medical conditions 2006:

http://www.ecdc.europa.eu/en/publications/Publications/0808_GUI_Priority_Risk_Groups_for_Influenza_Vaccination.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)

^e 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"> - Pulmonary diseases; - Neurologic diseases; - Cardiovascular diseases; - Renal diseases; - Hepatic diseases; - Haematological disorders; - Metabolic disorders; - Immunosuppressed individuals; - HIV/AIDS.
	No recommendation: <ul style="list-style-type: none"> - Morbid obesity, - Long-term aspirin use (children <18 years).
Pregnancy-related vaccination (including post-partum women)	Recommended: <ul style="list-style-type: none"> - For all pregnant women at any stage during pregnancy.
	No recommendation: <ul style="list-style-type: none"> - Postpartum women if not vaccinated during pregnancy.
Healthcare workers	Recommended: <ul style="list-style-type: none"> - For all healthcare workers
Other occupational groups	-
Population groups in closed communities	Recommended: <ul style="list-style-type: none"> - For residents of long- term care facilities;
	No recommendation: <ul style="list-style-type: none"> - For prisoners; - For children in day care centers
Household contacts or carers of	Recommended: <ul style="list-style-type: none"> - Immunosuppressed individuals.
	No recommendation: <ul style="list-style-type: none"> - Infants <6months of age; - Individuals with chronic medical conditions; - ≥65 years of age.

Payment mechanism for vaccine and its administration for the population groups targeted by seasonal influenza vaccine		
	For vaccine	For administration
Overall population	na	na
Healthy children and adolescents	National health service	National health service
Older population groups (≥ 65 years of age) ^a	National health service	National health service
Chronic medical conditions groups (by group) ^a	National health service	National health service
Pregnancy-related vaccination (including post-partum women) ^a	National health service	National health service
Health care workers (including staff of long-stay care facilities) ^a	National health service	National health service
Other occupational groups ^a	National health service	National health service
Population groups in closed communities ^a	National health service	National health service
Household contacts or care givers ^a	National health service	National health service

na: not applicable

^a No co-payment for vaccine and vaccine administration.

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	na	na	na	na	na	na	na	na	na	na
Children/adolescents	na	na	na	na	na	na	na	na	na	na
Older population groups: ≥ 65 years of age	76.3	na	75	na	76.2	na	76.6	na	77.4	na
Chronic medical conditions groups	47.8	na	51.1	na	56.1	na	59.7	na	59.2	na
Pregnant women ^a	-	-	-	-	65.6	na	41.1	na	54.1	na
Healthcare workers	NA	na	NA	na	30.4	na	NA	na	33.7	na
Staff in long-stay care facilities ^b	-	-	-	-	-	-	NA	na	NA	na
Residents in long stay care facilities ^b	-	-	-	-	-	-	NA	na	NA	na

na: Not applicable

NA: Not available

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

^b 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 ≥ 65 years of age from the 2008–09 to the 2012–13 influenza season

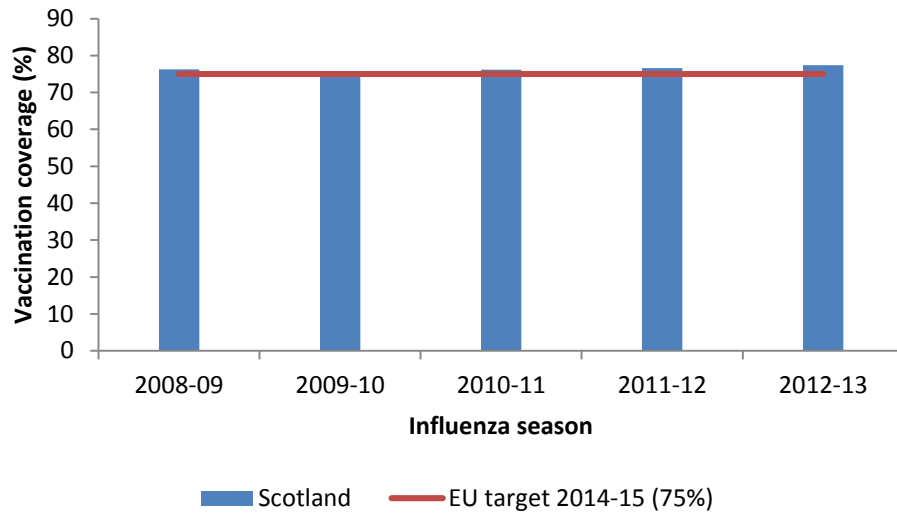


Figure 2. Seasonal influenza vaccination coverage among those with chronic medical conditions from the 2008–09 to the 2012–13 influenza season

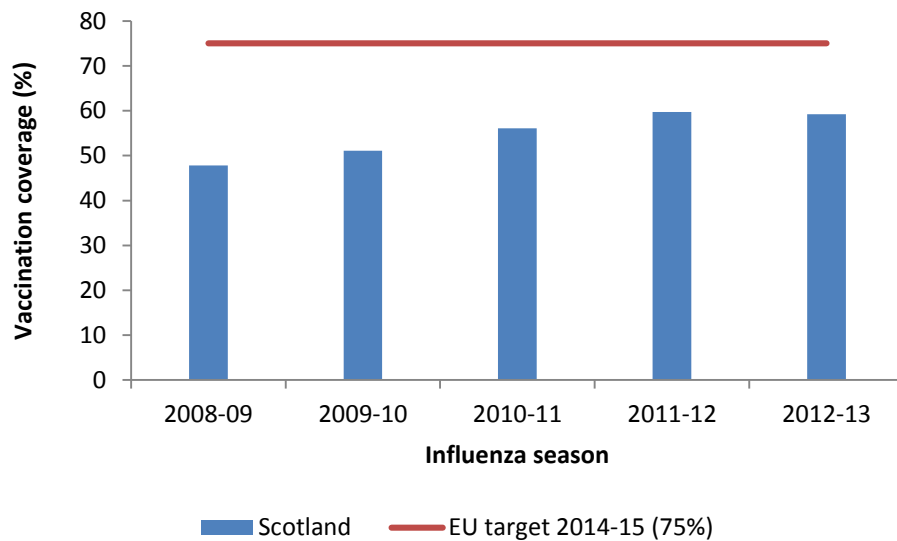
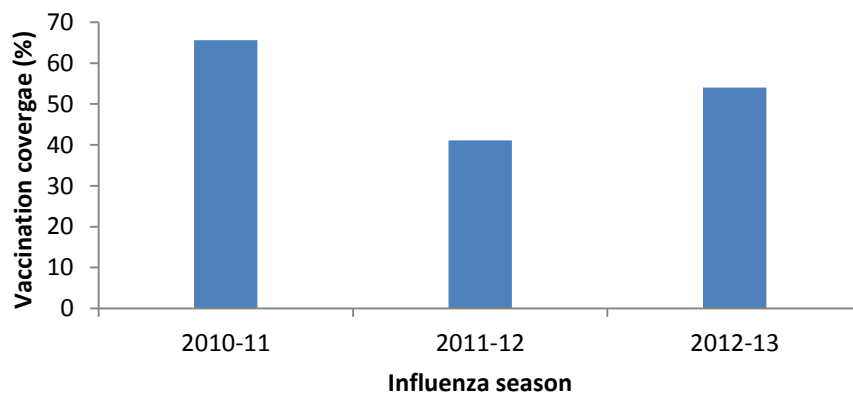
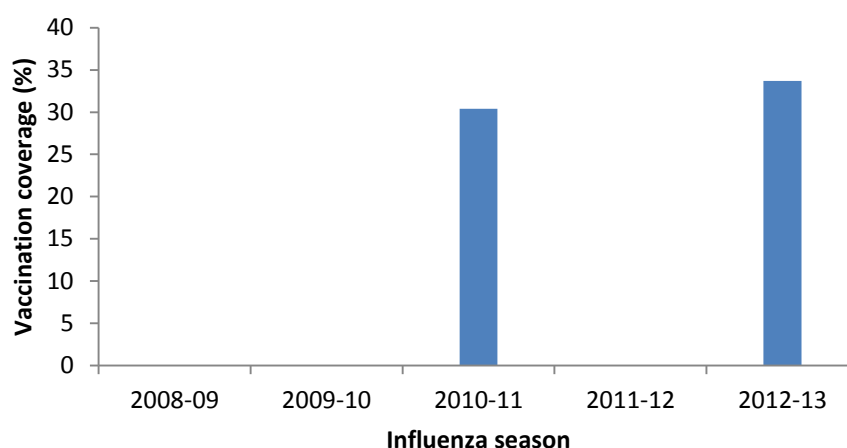


Figure 3. Seasonal influenza vaccination coverage among pregnant women from the 2010–11 to 2012–13 influenza season



Note: VENICE started to collect vaccination coverage data for pregnant women after the A(H1N1)pdm09 (2010–11 influenza season).

Figure 4. Seasonal influenza vaccination coverage among healthcare workers in the 2009–10 and the 2012–13 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	
Administrative method only	

Method used (administrative, survey) to monitor vaccination coverage by population group	
Administrative	Survey
Adults: aged ≥ 65 years old; Individuals with medical/risk conditions (clinical risk groups); Pregnant women; Health care workers; Household contact/Carer of: Immunosuppressed individuals	na

na: Not applicable

Details on administrative method used (medical records vs. immunisation registry; manual vs. electronic) by population group			
Medical records		Immunisation registry	
Manual	Electronic	Manual	Electronic
	Adults aged ≥ 65 years old; Individuals with medical/risk conditions (clinical risk groups); Pregnant women; Household contact/Carer of: Immunosuppressed individuals;	No	No

Numerator assessment		
Pharmaceutical data	Administrative data	Frequency of numerator assessment
Not used	Aggregate collection of number of vaccines administered	Weekly

Denominator assessment by population groups and data source	
Population group	Data source for population group
Entire population	na
Children and adolescents	na
Adults	Used. GP medical records (≥ 65)
Individuals with medical/risk conditions (clinical risk groups)	Used. GP medical records
Pregnant women	Used. GP medical records
Healthcare workers	Used. Staff records
Essential public sector workers	Not used
Prisoners	Not used
Residents of long-term care institutions	Not used
Educational institutions	Not used
Unpaid carers	Used. GP medical records

na: Not applicable

Details for survey method used for the 2012–13 influenza season			
Type of the survey	Survey mode	Sampling strategy	Sample size
na	na	na	na

na: Not applicable

Scientific studies conducted for vaccination coverage; vaccine safety and vaccine effectiveness
Performed: studies on influenza vaccine effectiveness http://www.ncbi.nlm.nih.gov/pubmed/25742433 http://www.ncbi.nlm.nih.gov/pubmed/25677050 http://www.ncbi.nlm.nih.gov/pubmed/25642510 http://www.ncbi.nlm.nih.gov/pubmed/23399421 http://www.ncbi.nlm.nih.gov/pubmed/23399424 http://www.ncbi.nlm.nih.gov/pubmed/23933371 http://www.ncbi.nlm.nih.gov/pubmed/23591102 http://www.ncbi.nlm.nih.gov/pubmed/21329644

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	Mandatory	MHRA Yellow Card Scheme

Monitoring of influenza vaccine break-through ^a infections in vaccinated individuals		
Data collected at the national and at the regional level	Data linkage with immunisation registry	Details collected
There is no such system	na	na

na: Not applicable

^a 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
1 156 463	NK	NK

NK: Not known

Type of vaccine/Product Name	Target groups
Trivalent inactivated non-adjuvanted vaccines (TIV)	
Used	
Abbott; GlaxoSmithKline; Pfizer/CSL Australia; Sanofi Pasteur; Novartis (non adjuvanted)	Older adults (e.g. ≥65 years); Those with medical condition/s; Pregnant women; Residents of long stay care facilities; Health Care Workers
Trivalent inactivated adjuvanted vaccines (aTIV)	
Used	
Crucell (virosomal vaccines)	Older adults (e.g. ≥65 years); Those with medical condition/s; Pregnant women; Residents of long stay care facilities; Health Care Workers
Trivalent live attenuated nasal vaccine (LAIV)	
Not used	
Quadrivalent attenuated nasal vaccine (LAIV)	
Not used	
Quadrivalent inactivated non-adjuvanted vaccine (QIV)	
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)
General public	
No	na
Population over 65	
Yes	Radio; TV; Newspapers; Leaflets; Posters; Website
Pregnant women	
Yes	Radio; TV; Newspapers; Leaflets; Posters; Website
Chronic medical conditions	
Yes	Radio; TV; Newspapers; Leaflets; Posters; Website
Healthcare workers	
Yes	Leaflets; Posters; Website; Other: flu champions

na: Not applicable

Use of antiviral agents for treatment and chemoprophylaxis of influenza

Recommendations and/or guidelines (policy document) on antiviral use	
Recommendations available: http://www.hps.scot.nhs.uk/resp/seasonalInfluenza.aspx#antivirals	

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"> - have severe, complicated influenza-like illness (ILI); - have progressive influenza-like illness; - require hospitalisation due to influenza-like illness. 	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"> - Children < 2 years; - Children < 5 years; - Adults aged ≥65 years; - Individuals belonging to risk groups. - Women who are pregnant or postpartum (within 6 weeks after delivery); - Residents of nursing homes and other chronic-care facilities. 	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;	Recommended
For unvaccinated healthcare workers with occupational exposure and who did not use personal protective equipment at the time of exposure	Recommended
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	Recommended
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	Recommended
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	Recommended
For all health care staff regardless of whether they received an influenza vaccination if the circulating influenza strain does not match the vaccine strains	Recommended
Prisoners	Recommended
Educational institutions	Recommended
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.