

# Seasonal influenza vaccination programme country profile: United Kingdom – Northern Ireland

## 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 <sup>a</sup>	106 and 109 respectively (UK)
Health costs as % of GDP 2011 Source: Eurostat <sup>b</sup>	8.0% (UK)
Total population of the country, 2011 Source: Eurostat <sup>c</sup>	63 182 180 (UK)
Population ≥65, 2011 Source: Eurostat <sup>c</sup>	10 377 125 (16.4% from the total population) (UK)
Population with chronic medical conditions <65 years, 2006 Source: ECDC (based on methodology by Fleming and Eliot, 2006) <sup>d</sup>	5 051 000 (8.0% from the total population) (UK)
Number of live births in 2011 <sup>e</sup>	807 776 (1.3% from the total population) (UK)
National seasonal influenza recommendations (e.g. age and target group recommendations and guidelines)	Recommendations available
URL link to Immunisation Guidelines for Northern Ireland	<a href="http://www.fluawareni.info/vaccination">http://www.fluawareni.info/vaccination</a>
National Action Plan (NAP) as requested by EC	Plan was developed previously and updated according to EC recommendation
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 for all over 65 years
Chronic medical conditions	Recommended for those under 65 years and over 6 months of age with: <ul style="list-style-type: none"> <li>- Chronic Pulmonary diseases;</li> <li>- Chronic Neurologic diseases;</li> <li>- Chronic Cardiovascular diseases;</li> <li>- Chronic Renal diseases;</li> <li>- Chronic Hepatic diseases;</li> <li>- Diabetes;</li> <li>- Immunosuppressed individuals;</li> <li>- E.g. HIV/AIDS.</li> </ul> Clinicians are also able to apply clinical judgement to need for vaccine based on other underlying conditions
	No recommendation: <ul style="list-style-type: none"> <li>- Haematological disorders;</li> <li>- Morbid obesity,</li> <li>- Long-term aspirin use (children &lt;18 years).</li> </ul>
Pregnancy-related vaccination (including post-partum women)	Recommended: <ul style="list-style-type: none"> <li>- For all pregnant women at any stage during pregnancy.</li> </ul>
	No recommendation: <ul style="list-style-type: none"> <li>- Postpartum women if not vaccinated during pregnancy.</li> </ul>
Healthcare workers	Recommended: <ul style="list-style-type: none"> <li>- To all healthcare workers <sup>a</sup></li> </ul>
Other occupational groups	No recommendation: <ul style="list-style-type: none"> <li>- Police &amp; Fire Service;</li> <li>- Military;</li> <li>- Border/Immigration control/ customs;</li> <li>- Public transport (e.g. ground, rail, air, marine);</li> <li>- Educational staff;</li> <li>- Community services (energy, electricity, water);</li> <li>- Postal service;</li> <li>- Social care workers;</li> <li>- Laboratory workers working in other laboratories (not medical/public health laboratories, but who may work with avian influenza viruses in the environmental/ academic sector);</li> <li>- Wildlife environmentalists (workers who work with birds directly e.g. bird ringing);</li> <li>- For those working in veterinary services;</li> <li>- Poultry and swine industry workers;</li> <li>- For families raising swine, poultry of geese.</li> </ul>
Population groups in closed communities	Recommended for: <ul style="list-style-type: none"> <li>- Residents of long-term care facilities;</li> <li>- Vulnerable children and adults with complex medical healthcare needs such as those attending special schools for severe learning disability and day care centres.</li> </ul>
	No recommendation for: <ul style="list-style-type: none"> <li>- Prisons/young offender institutions;</li> <li>- University halls of residence.</li> </ul>

Household contacts or carers of	Recommended: <ul style="list-style-type: none"> <li>- All carers of elderly or disabled people whose welfare may be at risk if the carer falls ill.</li> <li>- Recommended for household contacts if meet any of the criteria above</li> </ul>
	No recommendation: <ul style="list-style-type: none"> <li>- Infants &lt;6months of age.</li> </ul>

<sup>a</sup> Available to all healthcare workers but encouraged for frontline staff.

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	na	na
Older population groups (≥65 years of age) <sup>a</sup>	National health service	National health service
Chronic medical conditions groups (by group) <sup>a</sup>	National health service	National health service
Pregnancy-related vaccination (including post-partum women) <sup>a</sup>	National health service	National health service
Health care workers (including staff of long-stay care facilities) <sup>a</sup>	National health service	National health service
Other occupational groups <sup>a</sup>	National health service	National health service
Population groups in closed communities <sup>a</sup>	National health service	National health service
Household contacts or care givers <sup>a</sup>	National health service	National health service

na: Not applicable

<sup>a</sup> 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.

na: Not applicable

## 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	76.8	na	77	na	74.9	na	77	na	75	na
Chronic medical conditions groups	74.0	na	80.0	na	78.7	na	81.7	na	80.2	na
Pregnant women <sup>a</sup>	-	-	-	-		na	58.4	na	64.6	na
Healthcare workers	NA	na	18		NA	na	20.8	na	20.4	na
Staff in long-stay care facilities <sup>b</sup>	-	-	-	-	-	-	NA	na	NA	na
Residents in long stay care facilities <sup>b</sup>	-	-	-	-	-	-	NA	na	NA	na

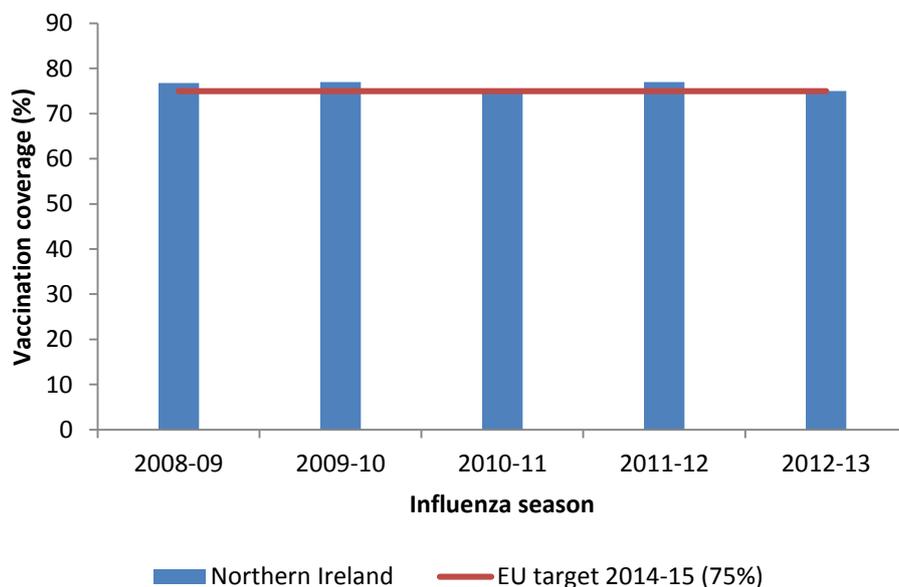
na: Not applicable

NA: Not available

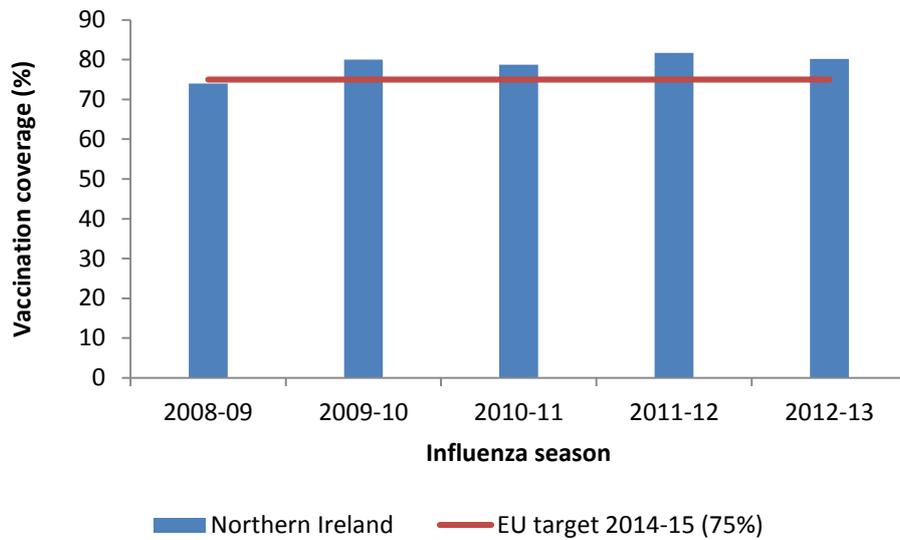
<sup>a</sup> VENICE started to collect vaccination coverage data for pregnant women after the A(H1N1)pdm09 (2010-11 influenza season).

<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.

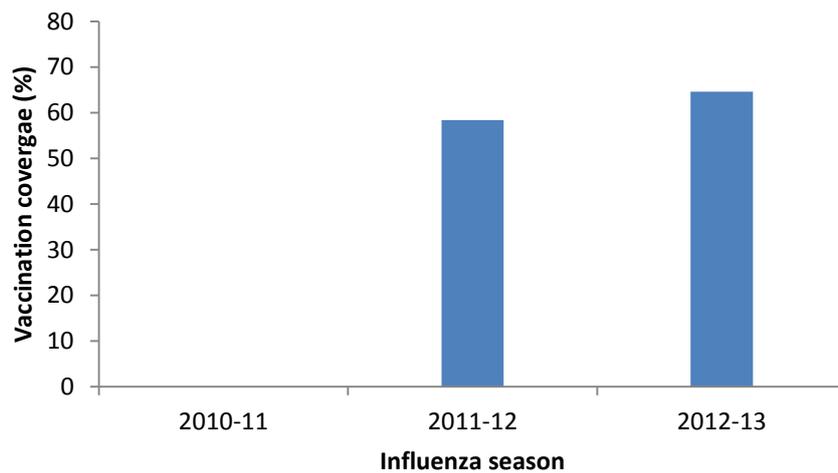
**Figure 1. Seasonal influenza vaccination coverage among those ≥65 years of age from the 2008–09 to the 2012–13 influenza season**



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

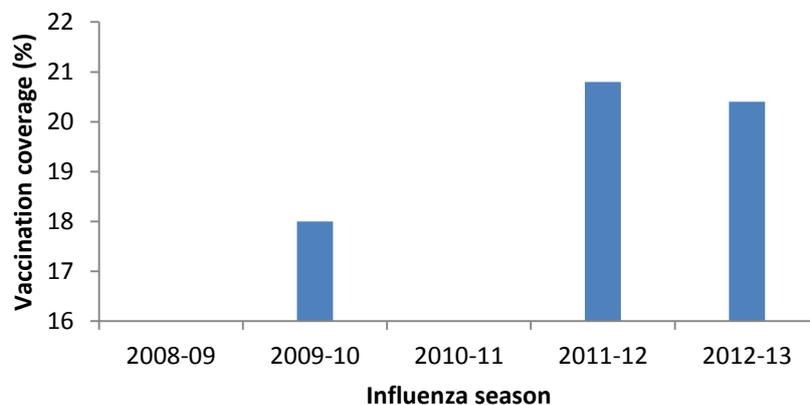


**Figure 3. Seasonal influenza vaccination coverage among pregnant women in the 2011–12 and 2012–13 influenza seasons**



*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 from the 2009–10 to 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	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);	Adults aged ≥65 years old; Individuals with medical/risk conditions (clinical risk groups);	No	No

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

Denominator assessment by population groups and data source	
Population group	Data source for population group
Entire population	Used. Registered Population
Children and adolescents	Used. Registered Population
Adults	Used. Registered Population
Individuals with medical/risk conditions (clinical risk groups)	Used. Registered Population
Pregnant women	Used. Registered Population
Healthcare workers	Used. Occupational Health
Essential public sector workers	Not used
Prisoners	Not used
Residents of long-term care institutions	Not used
Educational institutions	Not used
Other, please specify	Not used

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 (UK wide)

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 <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 no such system	na	na

na: Not applicable

<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
480 000 trivalent seasonal flu vaccine	NK	NK

NK: Not known

Type of vaccine/Product Name	Target groups
<b>Trivalent inactivated non-adjuvanted vaccines (TIV)</b>	
Used	
Sanofi Pasteur MSD (inactivated influenza vaccine) Novartis (Agrrippal) Novartis (Optaflu)	All adults over 65 years; Adults under 65 years in clinical risk group; All pregnant women; Residents of long stay care facilities; All healthcare workers; All carers of elderly or disabled people; Optaflu for those over 18 years with confirmed anaphylaxis to egg, egg allergy with uncontrolled asthma or all egg allergic individuals
<b>Trivalent inactivated adjuvanted vaccines (aTIV)</b>	
Not used	
<b>Trivalent live attenuated nasal vaccine (LAIV)</b>	
Used	
Astra Zeneca UK Ltd (Fluenz)	Children and adolescents (aged 2 years to less than 18 years) in clinical risk groups except those with contraindications such as immunodeficiency or severe asthma, active wheezing or egg allergy
<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	Leaflets; Posters; Website
<b>Population over 65</b>	
Yes	Leaflets; Posters; Website
<b>Pregnant women</b>	
Yes	Leaflets; Posters; Website
<b>Chronic medical conditions</b>	
Yes	Leaflets; Posters; Website
<b>Healthcare workers</b>	
Yes	Leaflets; Posters; Website

na: Not applicable

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

Recommendations and/or guidelines (policy document) on antiviral use
<p>Department of Health, Social Services and Public Safety (DHSSPS) issues guidance letter annually to advise that antivirals can be prescribed under the health service when flu surveillance shows that activity has reached sufficient levels</p> <p>Recommendations for prescribing are as per the National Institute of Clinical Excellence (NICE) technology appraisal guidance (UK wide)</p> <ul style="list-style-type: none"> <li>• Amantadine, oseltamivir and zanamivir for the treatment of influenza, TA 168, February 2009</li> <li>• Oseltamivir, amantadine (review) and zanamivir for the prophylaxis of influenza, TA 158, September 2008</li> </ul>

<b>Use of antiviral agents for treatment and chemoprophylaxis of influenza during the 2012–13 influenza season</b>	
<b>Use of antivirals for <u>treatment</u> for in-patients and out-patients who are at higher risk of developing influenza complications</b>	
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>- 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> <li>- Residents of nursing homes and other chronic-care facilities.</li> </ul>	Recommended
<b>Use of antivirals for <u>post-exposure</u> prophylaxis</b>	
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 if: <ul style="list-style-type: none"> <li>- Flu circulating and DHSSPS letter has been issued</li> <li>- Person in clinical at risk group</li> <li>- Been in contact with FLI and can start treatment within 48 hours</li> <li>- Has not been protected by vaccine</li> </ul>
For unvaccinated healthcare workers with occupational exposure and who did not use personal protective equipment at the time of exposure	Not universally recommended. Recommended to those: <ul style="list-style-type: none"> <li>- In clinical risk group</li> <li>- Been in contact with FLI and can start treatment within 48 hours</li> <li>- Has not been protected by vaccine</li> </ul>
<b>Use of antivirals for <u>pre-exposure</u> prophylaxis</b>	
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	Not recommended
<b>Use of antivirals for <u>control of influenza outbreaks</u></b>	
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 individuals living in long-term facilities/care homes if over 65 years or in clinical at-risk groups, whether or not they are vaccinated
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 universal recommendation. Recommended for health care staff that are pregnant or in clinical at-risk groups, whether or not they are vaccinated
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 universal recommendation. Recommended for health care staff that are pregnant or in clinical at-risk groups, whether or not they are vaccinated
Prisoners	No recommendation
Educational institutions	No recommendation
<b>Existence of antiviral resistance surveillance system</b>	
Antiviral resistance surveillance system	There is no 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.