



Final report

Seasonal influenza vaccination survey in EU/EEA, influenza season 2009-10

VENICE II Consortium

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Contents

Abbreviations.....	4
Acknowledgments	4
ISO 3166-1 Country Codes.....	4
VENICE National Gatekeepers and Contact Points.....	5
Summary	6
Background	7
Objectives	8
Aim of the study	8
Specific objectives	8
Methodology.....	8
Study Design	8
Data collection.....	9
Data handling.....	9
Data processing	9
Pilot study	9
Study time.....	9
Data analysis	9
Expected deliverables	10
Results.....	10
Response rate	10
Data validation.....	10
Action plans of member states	10
Groups recommended and payment scheme in 2009-10 influenza season	11
Age groups.....	11
Payment scheme applied for age groups	12
Medical conditions	13
Payment scheme applied for risk groups	15
Occupational settings	15

Health care workers (HCWs).....	15
Other occupational settings.....	16
Payment scheme applied for occupational settings.....	17
Other groups.....	17
Payment scheme applied for other groups.....	18
Monitoring vaccination coverage.....	19
Numerator assessment.....	21
Type of administrative method for numerator assessment.....	22
Denominator assessment.....	23
Vaccination coverage results.....	26
Measured by administrative method.....	26
Estimated by survey methods.....	28
Vaccine procurement.....	30
Vaccination sites.....	32
Promoting of seasonal influenza vaccination 2009-10 influenza season.....	33
Future changes for influenza seasons.....	35
Conclusions.....	36
Appendix 1. Questionnaire.....	38

Abbreviations

ECDC	European Centre for Disease Prevention and Control
EEA	European Economic Area
EMA	European Medicines Agency
EU	European Union
GPs	General Practitioners
HCWs	Health Care Workers
MSs	Member States
VENICE	Vaccine European New Integrated Collaboration Effort
CINECA	Consortium of University, Bologna, Italy
WHO	World Health Organization

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ISO 3166-1 Country Codes

AT	Austria
BE	Belgium
BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
DK	Denmark
EE	Estonia
FI	Finland
FR	France
DE	Germany
GR	Greece
HU	Hungary
IS	Iceland
IE	Ireland
IT	Italy
LV	Latvia
LT	Lithuania
LU	Luxembourg
MT	Malta
NL	The Netherlands
NO	Norway
PL	Poland
PT	Portugal
RO	Romania
SK	Slovakia
SI	Slovenia
ES	Spain
SE	Sweden
ENG	England

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Summary

Influenza illness causes substantial morbidity and mortality each year and has a direct and indirect cost for both society and individuals. It has been estimated that influenza results in between 40,000 -220,000 excess deaths annually in the EU member states, depending on the virulence of the strain in circulation and level of population immunity.

As part of the overall objective of VENICE project to improve understanding on vaccination programmes in EU members states VENICE II was asked to repeat a previously undertaken survey (in 2008 and 2009) and conduct the third influenza survey.

The objective of survey was to describe the seasonal influenza immunisation policy and to collect vaccination coverage in the European Union (EU) member states (MSs), Norway and Iceland for the 2009-10 pandemic influenza season. We also collected vaccination coverage data for the 2008-2009 influenza season if these data were not provided at the time of the 2008-2009 seasonal influenza survey which was conducted in 2009.

The third seasonal influenza vaccination survey for the 2009-2010 season was undertaken in April 2011. (A separate pandemic influenza vaccination survey for the 2009-2010 season was done and has been reported separately). The third seasonal influenza survey was a collaborative study between the European Centre for Disease Prevention and Control (ECDC), World Health Organization (WHO), VENICE Project and European Union (EU) and European Economic Area (EEA) Member States (MS). Each MS previously identified and enrolled gatekeepers, who are responsible for conducting all VENICE surveys inside their countries. The electronic questionnaire was developed on VENICE website. Data were entered directly on-line.

The response rate was 96% (28/29). All countries (100%) recommended seasonal influenza vaccination for the elderly population; six countries recommended vaccination for children (21%; 6/28). Most countries recommended influenza vaccination of health care workers in hospitals and long-term care facilities (82%; 23/28), out-patient clinics (22/28; 79%). One-third of MSs recommended vaccination for those working in essential, military services and for people working in the poultry industry.

All counties recommended seasonal influenza vaccine for individuals with chronic pulmonary, cardiovascular, haematological and renal diseases, individuals with metabolic and immunologic disorders (100%). Seventeen countries (17/28; 61%) had recommendations to vaccinate individuals with hepatic diseases and children and adolescents on long-term aspirin use. Sixteen countries (16/28; 57%) reported that they recommended vaccination to pregnant women.

Six countries did not have a mechanism for monitoring vaccination uptake in any risk group and seventeen were able to monitor vaccination uptake for some risk groups. Most countries had a mechanism to monitor vaccine coverage among older population groups (≥ 50 ; ≥ 55 ; ≥ 60 ; ≥ 65). 17 countries could monitor vaccine uptake among pregnant women.

All countries except two (AT, GR) used different methods (health records or pharmaceutical data, or surveys) for numerator measurement. The most common type of administrative methods used were the number of people vaccinated (11/28; 39%), or aggregate data on the number of vaccines administered (5/28; 18%). Twenty (20/28; 71%) countries reported that they estimate the numerator annually or at the end of influenza season. Approximately 20%

countries or less measure the denominator in occupational (6/28; 21%) or clinical risk groups (4/28; 14%) and two countries have mechanisms to measure the denominator for the number of residents of long-stay care facilities (7%).

Vaccination coverage for those aged 59 years and older was measured (using administrative or survey method) for 2008-09 influenza season by 20 countries (71%). Among these countries reported uptake for this age group varied from 1% to 82.5%. The coverage among health care workers was known in five countries (HU, RO, ES, DE, PT; 17%; 5/28), ranging from 20.4% to 97.8%, and for clinical risk groups in six countries (ENG, NL, PT, ES, DE, NO) with range from 15.68% to 47%.

Vaccination coverage for those aged 59 years and older measured (using administrative or survey method) for 2009-10 influenza season by 21 countries (75%). Among these countries reported uptake ranged from 1% to 81.1%. The coverage among health care workers was known in eight countries (HU, ES, PT, ENG, FR, DE, IE, NO; 28.5%; 8/28), ranging from 12% to 53.6%; and for clinical risk groups in eight countries (ES, NO, ENG, NL, DE, PT, FR, IE), ranging from 9.29% to 70.4%.

There were no major changes in seasonal influenza vaccination policy among most countries in comparison to the previous seasonal influenza vaccination survey for the 2008-2009 season, conducted in 2009). However, in BE the recommended age for influenza vaccination was lowered from 65 years in the previous seasons to 50 years and over for the 2009-2010 season and in MT seasonal influenza vaccine was recommended for children aged >6 months-4 years (was not recommended in previous season). The survey also found that more countries recommended seasonal influenza vaccine to pregnant women in the 2009-2010 season than previously (16 countries in 2009-10 influenza season versus 10 countries in 2008-09 influenza season). Previously reported findings of a substantial gap between official recommendations to vaccinate individuals at risk and actually achieving high vaccination coverage in these groups still exist. Reported vaccination coverage varied greatly between countries.

Background

Influenza has great economic impact; large numbers of mild to moderate cases can result in time off work and losses to production as well as pressure and costs on the health and social care services. Influenza can also cause severe disease and deaths. Disease burden varies from year to year, making it hard to estimate the annual number of deaths or economic impact. One study looking at excess deaths due to influenza found that in milder influenza seasons there were around 8 deaths per 100,000 population while in more severe but non-pandemic years the figure would be 44 per 100,000. Another study reported similar findings, estimating 25 per 100,000 excess deaths on average between 1989 and 1998.

In 2003, the World Health Assembly recommended (resolution 56.193) increasing seasonal influenza vaccination coverage of all people at high risk, with the goal of attaining at least 50% vaccination coverage of the elderly population by 2006 and 75% by 2010.

On July 13th 2009 the European Council of ministers recommended that EU Member States (MS) should adopt and implement a national action plan to achieve a vaccination coverage rate of 75% in all at risk groups by the winter season 2014/2015. At risk groups were defined as

individuals 65 years and older, and people with underlying medical conditions the following categories: chronic respiratory and cardiovascular diseases; chronic metabolic disorders; chronic renal and hepatic diseases; immune system dysfunctions (congenital or acquired). It was also recommended that MSs should undertake annual uptake surveys in all at risk groups in accordance with guidelines to be issued by the ECDC, and analysis of reasons for non-vaccination.

The VENICE I project carried out the first survey to describe seasonal influenza policy, to identify the country specific recommendations for different risk groups and to obtain most recent vaccine coverage in early 2008. The first EU wide survey provided baseline information on influenza vaccination programmes among MSs showing variability between countries with regard to groups for whom vaccine is recommended and vaccination coverage and at the same time identified common target groups for vaccination. The report from this survey was valuable and provided clear and detailed information relating to influenza programmes in the MSs, providing MSs with an opportunity to learn from each other. As part of the overall objective of VENICE project, to improve understanding on vaccination programmes in EU members states, VENICE II has been asked to conduct surveys on this subject (2008, 2009 and now this third survey in 2011). A separate and specific survey relating to the pandemic influenza vaccination programme was conducted in 2010 and is reported separately.

Objectives

Aim of the study

The aim of this survey was to describe the seasonal influenza immunisation policy and to obtain vaccination coverage data in the European Union (EU) member states (MSs), Norway and Iceland for 2009-10 pandemic influenza season.

Specific objectives

- To assess seasonal influenza immunisation programmes for the 2009-10 season;
- To identify country specific recommendations for different risk groups for the 2009-10 season;
- To define data sources that would allow for enhanced monitoring of seasonal influenza vaccine coverage;
- To obtain the most recent estimate of vaccine uptake (for 2009-10 influenza season and for 2008-09 season if not already provided) for risk groups and total population;
- To obtain information in relation to payment for seasonal influenza vaccine during the 2009-10 season;
- To identify policy changes in the MSs anticipated in the near future.

Methodology

Study Design

An electronic based design of the survey was undertaken. This survey was a collaborative study between the European Centre for Disease Prevention and Control (ECDC), World Health Organization Euro office (WHO), VENICE Project and European Union (EU) and European Economic Area (EEA) Member States (MS). Each MS previously identified and enrolled gatekeepers, who are responsible for conducting all VENICE surveys inside their countries.

Currently in the VENICE project there are 27 EU and two EEA (NO and IS) participating countries.

Data collection

A standardised questionnaire was developed using close-ended questions predominantly. Information was sought on population groups recommended influenza vaccination (age, occupation, medical risk or social situation), whether countries had mechanisms in place to monitor influenza vaccine uptake and whether uptake was monitored, the method used to monitor uptake, recent vaccination coverage results by population group, season, payment and administration costs for vaccine, health care setting where vaccine was typically administered, methodology used to promote influenza vaccines and how this activity is supported and finally, information was sought on planned policy or operational changes over the next couple of years (Appendix 1).

Data handling

The electronic questionnaire was developed on VENICE website in April 2011 by CINECA [8], which was available for all participating countries (<http://venice.cineca.org>). The electronic questionnaire was filled in by gatekeepers in each country and saved. Non-responders were followed up. The data was analysed in mid May beginning of June of 2011.

Data processing

Gatekeepers in each MS entered data directly on-line. Single data entry was introduced. The gatekeepers were asked to report vaccine coverage for the 2008-09 (if not already reported for the last survey) and 2009-10 influenza seasons.

Pilot study

The questionnaire was pilot tested by four VENICE project-leading partners: Italian Istituto Superiore di Sanità (ISS), the French Institut de la Veille Sanitaire (INVS), CINECA Consortium of University, Bologna, Italy and the Irish Health Protection Surveillance Centre (HPSC). The piloting of the study was undertaken in March 2011. After the pilot study, the questionnaire was reviewed and amended as necessary.

Study time

MSs were asked to complete the electronic questionnaire between 4th and 15th of April 2011. The accompanying letter to MSs explained the objectives and rationale of the study. Later the deadline due to low response rate was extended by the 4th May 2011.

Data analysis

The data were analysed using Excel.

The main indicators analysed included:

1. Description of population groups recommended influenza vaccination (age, occupation, medical or social condition risk);
2. Monitoring of influenza vaccine uptake (by country and methodology);
3. Vaccination coverage results by population group, season and method it was measured;
4. Costs associated with programme and who pays (state or individual) and how this impacts on uptake;
5. Usual venues for influenza vaccination;
6. Methodologies used to promote influenza vaccines and how and who supports this activity;

7. Planned policy or operational changes over the next couple of years.

Expected deliverables

The expected output of this survey is development of a technical report to inform policy makers at European, EU and national level as well as those working in the field of influenza vaccination programmes in the member states.

Results

Response rate

The response rate to the survey was 96% (28/29). UK provided vaccination coverage data for England.

Data validation

Sixteen countries validated data (BE,CZ,CY,EE,FR,GR,IS,IE,LV, LT,LU,NL,NO,RO,SK,ES) during data validation process; countries that did not validate data: AT,BG,DK,FI,DE,HU,IT, MT,PL,PT,SI,SE (n=12). In 2010

Action plans of member states

The European Commission issued the Council recommendation on seasonal influenza vaccination, which encouraged adopting and implementing national, regional or local action plans to improve vaccination coverage for seasonal vaccination in each MS (http://ec.europa.eu/health/ph_threats/com/Influenza/docs/seasonflu_rec2009_en.pdf). Of 28 survey responding countries 18 (64%) reported that an action plan was not developed in their country; five countries (18%) updated previously developed plans and one country (4%) reported that its national plan was being developed (Table 1).

Table 1. Action plan development to improve vaccination coverage for seasonal influenza among EU/EEA countries in 2009-10 pandemic influenza season.* Seasonal influenza vaccination survey, April 2011. (n=28)

Action plan	Countries	Total
Updated previously developed plan	IS,IE,DE,LT,PT	5
Developed plan		0
Plan under development	CZ	1
Plan not developed	AT,BE,BG,EE,FI,GR,HU,IT,LV,MT,NO,PL,RO,SK,SI,ES,SE, LU	18
Vaccination coverage meet WHO/EC targets	NL	1
No response	CY, DK,FR	3

* As requested by EC 08/07/2009:

http://ec.europa.eu/health/ph_threats/com/Influenza/docs/seasonflu_rec2009_en.pdf

Comments

IT-In the last vaccination plan was asked to the Regions to increase the vaccine coverage, but no specific national action plan was prepared.

Groups recommended and payment scheme in 2009-10 influenza season

Age groups

Of 28 responding countries six (21%) countries recommended seasonal influenza vaccine for children, although age groups recommended varied across countries (Table 2). In comparison to previously conducted VENICE studies, MT and AT reported changes in paediatric age groups for which vaccine was recommended. In MT seasonal vaccine was recommended to children aged ≥ 6 months-4 years; seasonal influenza vaccine was not recommended for children in previous seasons. AT reported that seasonal influenza vaccine was not recommended for children although it was indicated that vaccine was recommended for children previously.

All countries reported that they recommended seasonal influenza vaccine to the elderly population groups (note: elderly was defined differently among countries). Detailed information presented in the table 2.

Table 2. Age groups recommended for seasonal influenza vaccination without other risk indication among EU/EEA countries in 2009-10 pandemic influenza season. * Seasonal influenza vaccination survey, April 2011. (n=28)

Age groups	Countries	Total
Children		
Not recommended for children of any age	AT,BE,BG,CY,CZ,DK,FR,DE,GR,HU,IS,IE,IT,LT,LU,NL,NO,PL,PT,RO,ES,SE	22
Recommended for all children ≥ 6 months – 18 years	EE	1
Recommended for some age groups:	FI,LV,MT,SI, SK	5
≥ 6 months-2 years	SI	1
≥ 6 months-3 years	FI, LV	2
≥ 6 months-4 years	MT	1
≥ 6 months-12 years	SK	1
Adults		
Recommended for all adults >18 years	EE	1
Recommended for some age groups:	AT,BE,BG,CY,CZ,EE,DK,FI,DE,GR,HU,IS,IE,IT,LV,LT,LU,MT,NL,NO,PL,PT,SI,SK,SE,ES,FR,RO	28
≥ 50 years	BE,IE	2
≥ 55 years	MT,PL	2
≥ 60 years	AT,DE,GR,HU,IS,NL,SK	7
≥ 64 years	SI	1
≥ 65 years	BG,EE,CZ,CY,DK,FI,IT,LV,LT,LU,NO,PT,SE, ES, RO ,FR	16

Seasonal influenza vaccine was not included in the routine immunisation schedule during the 2009-10 influenza season in most countries (86%; 24/28). Details presented in table 3.

Table 3. Seasonal influenza vaccine inclusion in the ROUTINE immunisation schedule among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011.

	Country	Year specified if included	Total
Included in the 2009-10 immunisation program (n=28)			
Included both in adults' and childhood schedules	AT,FI,DE	AT-1998; DE-1990	3
Included only in adults' immunisation schedule	IT		1
Not included	LV,NL,PT,SK,HU,EE		6
Not included, only for at risk groups	BG, BE,CY,CZ,DK,GR,IS,IE,LT, LU,MT,NO,PL,SI,SE,ES, FR,RO	ES-before 1990;	18
Future inclusion to the national immunization schedule (n=22)			
Will not be included in the next five years	CY,MT,PL		3
Will be included in the next 5 years	CZ,ES		2
Not known	BE,DK,GR,IS,IE,LT,LU,NO,SI,SK,SE,EE,RO		13
No response	LV,NL,PT,HU		4

Payment scheme applied for age groups

Of six countries that recommended seasonal influenza vaccine for children (based on age group) three countries (50%) provided vaccine free to all, one country partly funded for some, one country partly funded for all and in one country full cost of vaccination was borne by pediatric recipients (table 4).

Of those 19 countries that recommended seasonal influenza vaccine for children in at risk categories (but not based solely on age group) 12 countries provided free vaccine for some recipients.

Of 24 countries that recommend seasonal influenza vaccine for elderly, 16 countries offered free vaccine for all elderly recipients (CY,DK,FI,DE, FR,IE*,IS,IT,MT,LT,LU,NO,SK,SE,ES,NL – see comments below table 4).

Table 4. Payment scheme for seasonal influenza vaccine by age group (children/adults) among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

Payment scheme	Countries		Total
Children			
	Recommended vaccine without other risk indication (n=6)	At risk (n=19)	
Full cost paid by recipient	EE	AT, PL	3
Partly funded for some	SI	BE, CZ	3
Partly funded for all	LV	HU, PT	3
Free for some	-	DK,DE,GR,IS,IE,LT,LU,ES, FR, NL, RO, NO	12
Free for all	MT,FI,SK	SE	4
Not applicable	CY, IT,BG		3
Adults			

Full cost paid by recipient	AT,EE	2
Partly funded for some	BE,CZ, SI	3
Partly funded for all	HU,LV,PT	3
Free for some	CY,DK,DE,GR,IS,IE,LT,LU,PL,SE,ES FR NL, RO, NO	15
Free for all	FI,IT,MT, SK	4
Not applicable	BG	1

Comments

LV-Partly funded only for age group 6 -36 months, ≥ 65 years and health risk groups. LV-50% of the vaccine cost is covered from state budget;

FR- The vaccination is free for the adults over 65 years old + adults less than 65 years old and children with targeted risk factors. The vaccination is free for some health professionals;

CY -Free for all 65 years of age and above, being vaccinated in the Public Sector In Q4.1 (regarding age recommendation group) the answer is from years 65 to year 00 (meaning above 65 with no limit);

DK- Seasonal vaccine free for all risk groups' incl. all persons above 65 yrs and for anyone on early retirement;

FI-Answer means free for all the groups specified above 6-35mo, 65 and older - NOT free for all others ;

DE- Seasonal influenza is recommended for >60 yrs old and people of all age groups with underlying diseases and for HCW- For these groups vaccination is free of charge. Vaccination for >60 yrs old is recommended since 1976;

IS-Vaccine was free for risk groups;

*IE-approximately 90% of adults > 70 years of age are entitled to free health services (including free vaccine and vaccination). For other age groups, recommended vaccine, the vaccine was free for anyone 65 years or older but administration charges would have applied to some individuals if they were not entitled to free services (income based). For individuals 50-64 years of age (recommended vaccine by National Immunisation Advisory Committee), vaccine was not free if they were healthy (but free if had health risk), and they would have had to pay for both vaccine and administration if not eligible for free health services (income dependent);

IT-The age group is 65 and more;

LT-Recommended vaccination is for free for all risk groups;

LU- Pregnant women have been included in the population at risk.Q4: Flu vaccine is recommended and free of charge for all adults above 65.Q6: vaccine is free of charge for all at risk population (see below), at any age;

NO- For the 2009/2010 season the seasonal influenza vaccine was free of charge for defined risk groups and persons 65 years of age and older. Administration costs had to be paid by the recipients;

PL-Full refund by local administration in several districts covering some 10% of the population;

PT-Vaccine recommended for risk groups >6 months age;

SK-The official policy is that the seasonal vaccination is fully paid only for some specific risk groups of population. The healthy individuals bear the costs for the vaccination themselves. Every year the health insurance companies revise the policy about the payment and could decide whether participate financially on the vaccination. So far the vaccination was free of charge for all individuals every year;

ES-Some groups such as morbidly obese persons and pregnant women have been included into the risk groups. Some other groups such as special groups have been described in a more explicit way;

SE-Free in most counties for 65+ age group;

ES-Included in adult's immunization schedules for those ≥ 65 years of age. Not included in childhood immunization schedules, only for risk groups;

ES-Free for every person of any age included in risk groups, and for every adult ≥ 65 years;

NL-Recommended vaccination is for free for defined risk groups.

Medical conditions

Seasonal influenza vaccine for patients with chronic pulmonary, cardiovascular diseases, haematological or metabolic, immunologic disorders and individuals with renal disease was recommended in all countries (100%). Sixteen countries (57%) recommended vaccine for pregnant women (6 countries had recommendation to vaccinate all women and 10 countries recommended it for some women) (tables 5 and 5a).

Table 5. Risk groups recommended seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

	Countries		
	Recommended	No recommendation	Recommended against
Chronic pulmonary (including asthma) disease	AT,BE,BG,CY,CZ,DK,EE,FI,FR,DE,GR,HU,IS,IE,IT,LV,LT,LU,MT,NL,NO,PL,PT,RO,SK,SI,ES,SE (n=28)		
Cardiovascular (except hypertension) disease	AT,BE,BG,CY,CZ,DK,EE,FI,FR,DE,GR,HU,IS,IE,IT,LV,LT,LU,MT,NL,NO,PL,PT,RO,SK,SI,ES,SE (n=28)		
Renal disease	AT,BE,BG,CY,CZ,DK,EE,FI,FR,DE,GR,HU,IS,IE,IT,LV,LT,LU,MT,NL,NO,PL,PT,RO,SK,SI,ES,SE (n=28)		
Hepatic disease	AT,BE,BG,CY,DK,EE,FI,DE,IS,IE,MT,PT,RO,SK,SI,ES,SE (n=17)	CZ,FR,GR,HU,IT,LV,LT,LU,NL,NO,PL (n=11)	
Haematological or metabolic disorders (including diabetes mellitus)	AT,BE,BG,CY,CZ,DK,EE,FI,FR,DE,GR,HU,IS,IE,IT,LV,LT,LU,MT,NL,NO,PL,PT,RO,SK,SI,ES,SE (n=28)		
Immunologic disorders other than HIV/AIDS	AT,BE,BG,CY,CZ,DK,EE,FI,FR,DE,GR,HU,IS,IE,IT,LV,LT,LU,MT,NL,NO,PL,PT,RO,SK,SI,ES,SE (n=28)		
HIV/AIDS	BE,BG,CY,CZ,DK,EE,FI,FR,DE,GR,HU,IS,IE,IT,LV,LT,LU,MT,NL,NO,PL,PT,RO,ES (n=24)	AT,SK,SI,SE (n=4)	
Long-term aspirin use (in children up to 18 years old)	BE,CY,EE,FR,GR,HU,IS,IE,IT,LV,LT,LU,NL,PT,RO,SI,ES (n=17)	AT,BG,CZ,DK,DE,MT,NO,PL,SK,SE (n=10)	FI (n=1)
Any condition affecting respiratory function	BE,CY,DK,EE,FI,DE,GR,IS,IE,IT,LU,MT,NL,PT,SK,SI,ES,SE (n=18)	AT,BG,CZ,FR,HU,LV,LT,NO,PL,RO (n=10)	

Table 5a. Seasonal influenza vaccine recommendation for pregnant women among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

Pregnant women	Countries	2nd and 3rd trimester	Only at risk
Recommended for some	BE,CY,DK,EE,DE,GR,IE,IT,LU,SI (n=10)	BE,CY,EE,GR,IT,LU (n=6)	DK,DE,SI,IE (n=4)
Recommended for all	HU,IS,LT,PT,ES,SE (n=6)		
No recommendation	AT,BG,CZ,FI,FR, LV,MT,NL*,NO,PL,RO,SK (n=12)		

Other:

DE-multiple sclerosis;

GR-transplant recipients; high risk groups due to living conditions i.e. dormitory students;

IT-Cancer;Haemopoietic disorders;

*NL-Institutionalised learning disability, during pregnancy recommended in case of medical indication;

PT- Transplants;

IE – pregnant women in risk groups were recommended at that time; With regard to condition that compromises respiratory function - recommendation specifically for children rather than adults.

Payment scheme applied for risk groups

Among the 28 participating countries, 14 (50%) indicated that vaccine was free to all for those with medical conditions; four countries (14%) reported that recipients from these groups must pay full cost for influenza vaccine (table 6).

Table 6. Payment scheme for seasonal influenza vaccine by risk groups among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

	Countries	Total
Free for all	DK,FI,FR,DE,HU,IS,IT,LT,MT,NL, NO,RO,SK,ES	14
Partly funded for all	BE,LV,SI,CZ, PT	5
Free for some	CY,GR,IE,LU,SE	5
Full cost paid by recipient	AT,BG,EE,PL	4

Comments

CY-The vaccine was free for all children at risk in the Public Sector. It was also administered free for all adults at risk that were being vaccinated in the Public Sector and were entitled free medical care based on their financial income;

IE-vaccine would have been free but payment for administration may have been applied to some, but not all, and would have been dependent on eligibility to free medical service (usually income dependent);

LU- Vaccine is free of charge for all at risk population (in addition to all population aged 65 and more) but pregnant women;

SE-In the unamended recommendations from 1996 specific conditions other than cardio-pulmonary are not distinctly specified, but renal etc. are given as examples of other risk condition. HIV per se not recommended, AIDS could be included since it is immune suppression. Pregnancy, neuromuscular disorders etc. are only for the H1N1-component;

LV-50% of the vaccine cost is covered from state budget;

NO-For the 2009/2010 season the seasonal influenza vaccine was free of charge for defined risk groups and persons 65 years of age and older. Administration costs had to be paid by the recipients;

LT-Vaccination was for free for all risk groups and those who were without other risk indication but where older than 65 years.

Occupational settings

Health care workers (HCWs)

Most countries indicated that influenza immunisation is recommended in occupational settings such as hospitals, long-term care facilities (82%) and outpatient care clinics (78%). Details presented in a table 7. Table 7. Occupational settings for HCWs recommended seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

	Recommended	No recommendation
Hospitals	AT,BE,BG,CY,EE,FR,DE,GR,HU,IS,IE,IT, LV, LT,LU,MT,NL,NO,PL,PT,SK,SI,ES (n=23)	CZ,DK,FI,RO,SE (n=5)
Out-patient care clinics	AT,BE,BG,CY,EE,FR,DE,GR,HU,IS,IE,IT, LV, LT,LU,MT,NO,PL,PT,SK,SI,ES (n=22)	CZ,DK,FI,NL,RO,SE (n=6)
Laboratory	AT,BG,CY,EE,FR,DE,GR,HU,IS,IE,LT, LU,MT,NL,PL,PT,SI,ES (n=18)	BE,CZ,DK,FI,IT, LV,NO,RO,SK,SE (n=10)
Long-term care facilities	AT,BE,BG,CY,CZ,EE,FR,DE,GR,HU,IS,IE,IT,LT, LU,MT,NL,NO,PL,PT,SK,SI,ES (n=23)	DK,FI,LV,RO,SE (n=5)

Comments

AT-Health care professionals working with risk groups;
 EE-School and children-garden staff;
 FR-All health professional;
 IT-GPs;
 ES-Persons who take care of people in the risk groups at home;
 IE- All health care workers (unspecified).

The payment scheme for HCWs is presented in a table 8. Vaccine is free for HCWs in 14 countries (54%; 14/26).

Table 8. Payment scheme for seasonal influenza vaccine for HCWs among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

	Countries	Total
Partly funded for some	BE, LV	2
Free for some	GR, LU, FR, IS	4
Partly funded for all	CZ	1
Free for all	DE, HU, IE, IT, LT, MT, CY, PT, ES	9
Full cost paid by recipient	SK	1
Employer	AT, EE, NL, NO, SI	5
Different schemes adopted	BG-Sometimes paid by the employer, sometimes by the recipient; PL-Some health care unit provide vaccine for free, in some - partial refund for employees.	2
Other	RO-For these groups pandemic vaccination was recommended SE-not recommended at all NL: GP	2
Not applicable	DK, FI	2

Comments

IE-Vaccine would have been free and administration would have been provided or paid by employers;
 LT-Influenza immunisation was for free for all HCWs;
 PT-Free of charge;
 SK-The influenza vaccination is recommended only for those HCW who are in the direct contact with the patients or in the foci of the infection. The vaccination is not reimbursed by the health insurance companies but should be fully reimbursed by the employer. There is no official recommendation supported by a legislative document but generally the vaccination is recommended for laboratory staff and should be paid by the employer.

Other occupational settings

Approximately one third of countries recommended vaccination for essential (28%), military services (32%) and for poultry industry workers (39%). Details are provided in a table 9.

Table 9. Other occupational settings recommended seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

	Recommended	No recommendation	Not responded
Essential services	IT, LU, MT, PL, HU, ES, BG, EE (n=8)	BE, CY, SI, SK, FR, DE, GR, IS, IE (n=9)	
Military	BG, EE, DE, GR, HU, LU, MT, SK, ES (n=9)	BE, CY, FR, IS, IE, PL, SI (n=7)	IT (n=1)
Poultry industry	BE, CY, DE, GR, HU, IS,	BG, EE, FR, LU, PL, SK (n=6)	

	IE,IT,MT,SI,ES (n=11)		
Families that raise pigs, poultry or waterfowl	BE,CY,DE,HU,IS,IE,IT,SI,ES (n=9)	BG,EE,FR,GR,LU,MT,PL,SK (n=8)	
Airline workers	FR,PL(n=2)	BE,BG,CY,EE,DE,GR,HU,IS,IE,IT,LU,MT,SK,SI,ES(n=15)	
None	AT,CZ,DK,FI,LV,LT,NL,NO,PT,RO,SE(n=11)		

Comments

FR-Crew members, tourist guides;

DE-Vaccination is recommended for all people in institutions or organization with public access;

LU-Categories eligible for socio-economic reasons (teachers, bus drivers,), organizations and industries willing to offer influenza vaccine to their employees (bank industry,);

PL-School personnel, transport personnel;

ES-Persons who work in penitentiaries and other judicial centers.

Payment scheme applied for occupational settings

The payment scheme applied for other occupational groups varied across countries with most common payment scheme providing vaccine free to all or some recipients (table 10).

Table 10. Payment scheme for seasonal influenza vaccine for HCWs among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=17)

	Countries	Total
Free for some	CY,EE,GR,IE,LU	5
Free for all	ES,DE,IT,MT	4
Full cost paid by recipient	PL,SK	2
Partly funded for all	BE,FR,HU,IS	4
Different schemes adopted	BG-Sometimes paid by the employer, sometimes by the recipient	1
Employer	SI	1

Comments

CY-The vaccine was free for all people being vaccinated in the Public Sector that were entitled free Medical care according to their financial income;

EE-Employer makes the risk analysis of the working places and decides the needs of vaccination. Employer normally pays for vaccination of the workers;

IE-Vaccine would have been free but payment for administration may have been applied to some, but not all, and would have been dependent on eligibility to free medical service (usually income dependent). Some employers may have covered administration cost for workers;

LU-Public servants and employees receive the vaccine free of charge. Self-employed support the full costs of the vaccine;

IT-Workers in essential services other than policeman and fireman should receive the vaccine paid by the employer. However the decision of the categories is delegated to the Regions;

SK-The vaccination for military is not reimbursed by the health insurance companies but should be fully reimbursed by the employer.

Other groups

Twenty-four participating countries (86%) recommended vaccination of residents of long-term care facilities. Four countries (14%) do not recommend vaccination for individuals in these groups (table 11).

Table 11. Other groups recommended seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

	Recommended	Not recommendet
Residents of long-term care facilities	AT,BE,BG,CY,CZ,DK,EE,FR,DE,GR, HU,IS,IE,IT,LT,LU,MT,NO,PT,RO,SK,SI,ES, NL (n=24)	FI, LV, PL, SE (n=4)
Household contacts* †	AT,BE,BG,CY,DK,GR,IS,IE,IT,LT,LU,NO, PT,ES (n=14)	CZ,EE,FR,DE,HU,MT, RO,SK,SI, FI, LV, PL, SE (n=13)
Contacts of individuals belonging to risk groups	AT,BE,CY,GR,IE,IT,LT,LU,NO,ES (n=10)	
Contacts of children < 6 months age	BE,CY,GR,PT‡,ES, LU (n=6)	
Contacts of immunosuppressed individuals	BE,CY,DK§ ,FR‡ IE, IS,LT,ES, LU (n=9)	
Elderly	CY,LT, LU, ES (n=4)	

* Household contacts is defined as individuals who share living accommodation on most days over the whole influenza period and therefore continuing close contact is unavoidable.

†NL-no data.

‡PT-Close contacts of children <6 months from risk groups;

§ DK-Household contacts to severely immunosuppressed patients may be offered vaccination in special situations;

Comments

DE-Recommended for travelers;

LU-recommended for day care facility employees; parents and siblings of infants and children aged less than 2 years.

Payment scheme applied for other groups

The payment scheme applied to residents of long-term care facilities and household contacts is presented in table 12. Of 24 countries that recommended influenza vaccine for residents of long-term care residents 12 (50%) offered vaccine free to all recipients. Of 14 countries where vaccine was recommended for household contacts in five of these countries (36%) recipients paid full cost for vaccine.

Table 12. Payment scheme for residents of long-term care facilities and household contacts for seasonal influenza vaccine for HCWs among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011.

	Countries	Total
Payment scheme for long-term residents (n=24)		
Free for all	CY,HU,IS,IT,MT,DE,DK,RO, NO,SK,ES,NL	12
Free for some	FR,GR,IE	3
Partly funded for all	AT,BE,CZ, PT,SI	5
Full cost paid by recipient	BG,EE,LU, LT	4
Payment scheme for household contacts (n=14)		
Full cost paid by recipient	AT,BG,IS,LU,NO, LT	6
Free for some	GR,IE	2
Free for all	IT,ES	2
Partly funded for all	BE,PT	2
Free for some	CY,DK	2

Comments

IE-Vaccine was free- but administration charge may have applied if individual was not entitled to free health services (income based usually);

LT-Vaccine was full cost paid by recipients (if they did not belong to a risk group);

CY-The vaccine was free for all people being vaccinated in the Public Sector that were entitled free medical care according to their financial income;

DK-Payment conditions are not clearly defined.

Monitoring vaccination coverage

Twenty one countries (75%) measure vaccine coverage among their entire population (BE,BG,CY,CZ,EE,FR,DE,IS,IE,IT,LV,LT,LU,MT,NO, NL,PL,PT,RO,SK,SI); the remaining seven countries (25%) do not measure vaccination coverage for entire population (AT,DK,FI,GR,HU, ES,SE).

The ability to monitor influenza vaccination coverage was variable; five countries reported that they had mechanisms to monitor coverage for all risk groups (SK, IT,EE,DE,HU); 17countries for some risk groups (LV,LT,LU,MT,NL,NO,IS, IE,PT,RO,DK,SI,ES,SE,CY,FI,FR); and six countries had no mechanisms to monitor coverage(AT,BE,BG,GR,CZ,PL). (detailed in table 13).

Table13. Mechanism to monitor vaccination coverage by population groups for seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=17)

Age group	Countries		
	Have mechanism to monitor vaccination coverage	Do not have mechanism to monitor vaccination coverage	Unknown
Age group			
≥60 yrs	IS, NL (n=2)		
≥65 yrs	FR,LV,LT,LU,MT, PT,RO,ES,IE (n=9)		
All age groups	FI (n=1)		
Any who have received a free vaccine	DK (n=1)		
Specific age groups(yrs); 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75+	NO(n=1)		
Specific age groups(yrs); 0-4, 5-18, 19-49, 50-64, >64	SI(n=1)		
Specific age groups(yrs); <15;15-44;45-64;>=65	PT(n=1)		
Specific age groups(yrs); <60;60-64;<=65	NL*(n=1)		
		SE,CY(n=2)	
Occupational setting			
Hospitals	CY,IS,MT,NO,PT(n=5)	DK,LV,LT,RO,SI,ES,SE,FR,NL, IE,LU (n=11)	FI (n=1)
Laboratory staff	CY(n=1)	IS,MT,NO,PT, DK,LV,LT,RO,SI,ES,SE,FR,NL, IE,LU (n=15)	FI(n=1)
Long-term care facilities (nursing homes and other chronic-care facilities)	CY,IS,MT,NO,PT(n=5)	DK,LV,LT,RO,SI,ES,SE,FR,NL, IE,LU(n=11)	FI(n=1)
Out-patient care clinics	NO,PT(n=2)	CY,IS,MT,DK,LV,LT,RO,SI,ES, SE,FR,NL,IE,LU(n=14)	FI (n=1)

Military	MT(n=1)	CY,IS,NO,PT,DK,LV,LT,RO,SI,ES,SE,IE (n=12)	FI,LU,FR,NL(n=4)
Essential services (police, firemen etc.)	MT (n=1)	CY,IS,NO,PT,DK,LV,LT,RO,SI,ES,SE,FR,NL,IE(n=14)	FI,LU(n=2)
Veterinary services	CY(n=1)	IS,NO,PT,MT,DK,LV,LT,RO,SI,ES,SE,FR,NL,IE,LU(n=15)	FI(n=1)
Poultry industry		CY,IS,NO,PT,MT,DK,LV,LT,RO,SI,ES,SE,FR,NL,IE,LU(n=16)	FI(n=1)
Pig industry		CY,IS,NO,PT,MT,DK,LV,LT,RO,SI,ES,SE,FR,NL,IE,LU(n=16)	FI(n=1)
Families that raise pigs/poultry/wild fowl (geese, ducks, swans)		CY,IS,NO,PT,MT,DK,LV,LT,RO,SI,ES,SE,FR,NL,IE,LU(n=16)	FI(n=1)
Airline workers		CY,IS,NO,PT,MT,DK,LV,LT,RO,SI,ES,SE,FR,NL,IE(n=15)	FI,LU(n=2)
Risk condition			
Chronic pulmonary (including asthma) disease	FR,PT,NL(n=3)	CY,DK,LV,LT,LU,MT,RO,SI,ES,SE,FI,NO,IS,IE (n=14)	
Cardiovascular (except hypertension) disease	FR,PT,NL(n=3)	CY,DK,LV,LT,LU,MT,RO,SI,ES,SE,FI,NO,IS,IE(n=14)	
Renal disease	FR,PT,NL(n=3)	CY,DK,LV,LT,LU,MT,RO,SI,ES,SE,FI,NO,IS,IE(n=14)	
Hepatic disease	PT(n=1)	CY,DK,LV,LT,LU,MT,RO,SI,ES,SE,FI,FR,NL,NO,IS,IE(n=16)	
Haematological or metabolic disorders (including diabetes mellitus)	FR,NL(n=2)	CY,DK,LV,LT,LU,MT,RO,SI,ES,SE,FI,PT,NO,IS,IE(n=15)	
Immunologic disorders other than HIV/AIDS	FR,NL (n=2)	CY,DK,LV,LT,LU,MT,RO,SI,ES,SE,FI,PT,NO,IS,IE(n=15)	
HIV/AIDS	FR,NL,IS(n=3)	CY,DK,LV,LT,LU,MT,RO,SI,ES,SE,FI,PT,NO,IE(n=14)	
Long-term aspirin use (in children up to 18 years old)		CY,DK,LV,LT,LU,MT,RO,SI,ES,SE,FR,PT,NL,NO,IS,IE(n=16)	FI(n=1)
Pregnancy		CY,DK,LV,LT,LU,MT,RO,SI,ES,SE,FI,FR,PT,NL,NO,IS,IE(n=17)	
Any condition	NO(n=1)	CY,DK,LV,LT,LU,MT,RO,SI,ES,SE,FI,FR,PT,NL,IS,IE(n=16)	
Other groups			
Residents of long-term care facilities (nursing homes and other chronic-care facilities)	CY,IS,MT,PT(n=4)	DK,FI,FR, LV,LT,LU, NL,NO,RO,SI,ES,SE,IE(n=13)	
Household contacts of persons for whom vaccination is recommended (cocooning strategy)		CY,DK,FI,FR,IS,LV,LT,LU,MT,NL,NO,PT,RO,SI,ES,SE,IE(n=17)	

* NL-All age groups with medical indication;

Comments

ES-Health care workers;

SE-+65 in some counties, full register of risk groups in some counties;

PT- Diabetes mellitus, cancer.

Numerator assessment

Twenty-six (93%) countries (PL,EE,DK,MT,ES,IT,PT,RO,HU,IE,SK,LU,FR,LV,SI,NL,LT,IS,FI,DE,BE,NO,CY,SE,CZ,BG) use administrative record data, surveys or pharmaceutical data to measure the numerator for assessing influenza vaccination coverage. The type of numerator used for assessment and the time when it was last conducted for each country is specified in table 14. AT, GR (7%) did not use any of methods described below in table 14.

Table14. Method/s to use for vaccination coverage assessment for seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=26)

	Countries	Last conducted
Administrative records		
	PL	Dec 2009
	EE	Dec 2010
	DK	Feb 2010
	MT,ES	Mar 2010
	IT,PT	Apr 2010
	RO,HU	May 2010
	IE,SK	Aug 2010
	LU	NK 2010
	FR	NK
Medical records (excluding computerised records)		
	LV	Dec 2010
	SI	May 2010
	SK	Aug 2010
Computerised medical records		
	ES	Mar 2010
	IT	April 2010
	NL	2010
Immunization registry (routinely collected information)		
	LV,LT	Dec 2010
	ES	Mar 2010
	IT,PT	Apr 2010
	DK,IS	NK
Immunisation survey (active collection of immunisation data)	FI	NK 2009
	DE	June 2010
	PT	Apr 2010
Survey type		
Household survey	-	-
Individual interview	BE	2009
Telephone survey	FR,IE,PT	Apr 2010
	DE,NO	Jun 2010

Mail survey	CY	May 2007
	SE	Mar 2009
Pharmaceutical data		
Pharmaceutical industry data (from industry)	IS	Apr 2010
	BE	Aug 2010
	SK	Jun 2010
	PT	Jun 2010
	CZ,LU	NK 2010
	SE	NK
Pharmaceutical national distributor data (from national purchaser)	BG,MT	Mar 2010
	CY	Jan 2010
	IS,NO	Apr 2010
	SK	JUN 2010
	DK	NK
Pharmaceutical sales data (from private pharmacies)	SI	Jun 2009
	CY	Jan 2010
	PT	Jun 2010
	BE	Aug 2010
	SK	June 2010
Prescription data	DE	Dec 2010
	LU	2010

Comments

AT, GR - Do not use any methods for numerator assessment;

CY – Unknown for prescription data;

ES -Most regions use administrative method and some computerised method.

Type of administrative method for numerator assessment

Nineteen (68%) countries reported that they use administrative methods to measure the numerator for assessing vaccine coverage. Ten of them (NL,DK,FR,IE,IT,EE,FI,PL,SI,ES) use one type of administrative method and nine countries use two (HU,LV,MT,RO,LU,SK,CY,LT,NO). The following nine countries reported that they do not routinely use administrative methods to measure the numerator (AT, BE, BG, CZ, DE, GR, IS, PT, SE) (table 15).

Table 15. Administrative methods used to measure the numerator in assessing vaccination coverage for seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

Administrative method used	Countries	Total
Aggregate collection of number of vaccines administered	HU,LV,MT,RO,NL	5
Aggregate collection of number of vaccines distributed (industry)	LU,SK	2
Aggregate collection of number of vaccines distributed (national purchaser)	CY,LT,NO	3
Aggregate collection of number of vaccines sales (private pharmacies)	CY	1
Payment/ reimbursement claims	DK,FR,IE,LV,LU	5
Number of people vaccinated	EE,FI,HU,IT,LT,MT,PL,RO,SK,SI,ES	11
From wholesalers	NO	1

No administrative method used	AT,BE,BG,CZ,DE,GR,IS, PT,SE	9
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Twenty countries (71%) collect data for numerator assessment annually or at the end of influenza season, most of them in spring (table 16).

Table 16. Interval of vaccination coverage assessment for seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

Interval for influenza vaccination coverage assessment	Countries	Comments	Total
Never	AT,GR,FR		3
Monthly	DK,HU,IE, MT		4
Other	BE	HIS each 4 years	1
Annually			
	PL	December	11
	EE	January	
	BG,ES	March-April	
	CZ,FI,IS,IT	April	
	NL	April-June	
	SE	In the spring	
	DE	Whole year	9
	CY,LV,LU,NO,PT,RO,SI,SK, LT	Once, at the end of flu season	

Denominator assessment

Six countries reported that they measure denominator data for occupational and four for medical conditions (21% and 14% respectively), two MSs (7%) assess denominator data in residents of long-term care facilities (nursing homes and other chronic-care facilities) (table 17).

Table 17. Denominator availability for seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

	Countries		
	Denominator available	Denominator not available	Unknown
Age group			
Any age (age group)	DK,FI,IS,IE,SI,LV, NO (n=7)	AT,BE,BG,CY,CZ,GR,PT (n=7)	
6 months – 1 year*		EE,FR,DE,HU,LV,LT,LU, NL,PL,RO,SK,ES,SE (n=13)	MT (n=1)
12 months - 23 months*		EE,FR,DE,HU,LT,LU,NL,PL,RO,SK,ES,SE (n=12)	MT(n=1)
2 years - 4 years*		EE,FR,DE,HU,LT,LU,NL,PL,RO,SK,ES,SE(n=12)	MT(n=1)
5 year - 17 years*		EE,FR,DE,HU,LT,LU,NL,PL,RO,SK,ES,SE(n=13)	MT(n=1)
18 year - 49 years*	DE(n=1)	EE,FR, HU,LT,LU,NL,PL,RO,SK,ES,SE(n=11)	MT(n=1)

50 years - 64 years*	DE,LU(n=2)	EE,FR, HU,LT,NL,PL,RO,SK,ES,SE(n=10)	MT(n=1)
≥ 65 years	MT, EE,FR, IE,LT, PL,RO,IT,NL,ES,SE(n=11)	HU,SK(n=2)	(n=0)
≥ 60 years	NL		
Occupation groups			
Occupation group data available:	CY,DE,HU,LU,PT,ES (n=6)	AT,BE,BG,CZ,DK,EE,FI,GR,IS,IE,IT,LV,LT,MT, NL,NO,PL,RO,SK,SI,SE(n=21)	
If yes, specify below:			
Hospital personnel	DE,LU,PT(n=3)	HU,CY, ES (n=3)	
Laboratory staff	DE(n=1)	HU,CY,LU,PT, ES (n=5)	
Long-term care facilities personnel (nursing homes and other chronic-care facilities)	CY,DE,PT(n=3)	HU,LU, ES (n=3)	
Outpatient care clinics personnel	DE,PT(n=2)	HU,CY,LU, ES (n=4)	
Essential services (police, firemen etc.) personnel	DE, LU (n=2)	HU, CY, PT, ES (n=4)	
Military personnel	DE,LU(n=2)	HU,CY,PT, ES (n=4)	
Poultry industry personnel		HU,CY,LU,PT, ES (n=5)	DE(n=1)
Pig industry personnel		HU,CY,LU,PT, ES (n=5)	DE(n=1)
Veterinary services personnel	CY(n=1)	HU,LU,PT, ES (n=4)	DE(n=1)
Families that raise pigs/poultry/wild fowl (geese, ducks, swans)		HU,CY,LU,PT, ES (n=5)	DE(n=1)
Airline workers	DE (n=1)	HU,CY,LU,PT, ES (n=5)	
Occupation group population data, other specify:	HU,ES(n=2)	All HCWs	
Medical condition categories			
Medical category data available:	FR,DE,HU,NL(n=4)	AT,BE,BG,CY,CZ,DK,EE,FI,GR,IS,IE,IT,LV,LT, LU,MT,NO†,PL,PT,RO,SK,SI,SE,ES(n=24)	
If yes, specify below:			
Chronic pulmonary (including asthma) disease patients	FR,DE,NL(n=3)	HU,(n=1)	
Cardiovascular (except hypertension) disease patients	FR,DE,NL(n=3)	HU(n=1)	
Renal disease patients	FR,DE,NL(n=3)	HU(n=1)	
Hepatic disease patients	DE(n=1)	FR,HU,NL(n=3)	
Hematological or metabolic disorders (including diabetes mellitus) patients	FR,DE,NL(n=3)	HU(n=1)	

Immunologic disorders other than HIV/AIDS patients	FR,NL(n=2)	DE,HU(n=2)	
HIV/AIDS patients	FR,NL(n=2)	DE,HU(n=2)	
Long-term aspirin users (in children up to 18 years old)		FR,DE,HU,NL(n=4)	
Pregnant women	DE,HU(n=2)	FR,NL(n=2)	
Patients with any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk for aspiration	NL(n=1)	FR,DE,HU(n=3)	
Medical category population other, specify:	ES(n=1)	Persons with risk medical conditions	
Other group categories			
Other group data available:	CY,SK(n=2)	AT,BE,BG,CZ,DK,EE,FI,FR,DE,GR,HU,IS,IE,IT, LV,LT, LU,MT,NL,PL,PT,RO,SI,ES,SE,NO (n=26)	
Population of residents of long-term care facilities (nursing homes and other chronic-care facilities)	CY,SK(n=2)		
Number of household <u>contacts</u> of persons for whom vaccination is recommended		CY,SK(n=2)	

*IT-did not specified

†NO- It has been estimated that persons belonging to the risk groups amount to about 19 % of the total population

Comment

IE- for all of the above, other than age group, denominator data for occupational, medical risk, and residents of long term care facilities was estimated during pandemic.

Other age groups specified for which denominator data available:

EE-Age groups: 0-4 y; 5-14 y; 15-49 y; 50-64 y; 65 and >;

FR-less than 65 years old;

HU-60 years and more;

IT->5; 5-14; 15-24; 25-64; 65 and more;

MT-Age groups in 5 years-intervals: 0-4, 5-9, 10-14, 15-19;

NL-60+, 60+/65-, 65+;

PL -0-4, 5-14, 15-64, 65+;

SK-There are three age group categories: 0 - 15 years, 16 - 58 years, 59 years and older;

LT- 0-17, 18-64, >=65 age groups.

Vaccination coverage results

Measured by administrative method

Overall 24 countries provided VC calculated using administrative methods:

BG,CZ,CY,DK,EE,FI,HU,IS,IE,IT,LV,LT,LU,MT,NL,NO,PL,PT,RO,SK,SI,ES,SE,ENG .

Influenza vaccination coverage among those aged older population (≥ 50 years) was measured in 19 countries in 2008-09 and in the season 2009-10. The range on uptake for this age group varied from 1% to 82.5% in 2008-09 and from 1% to 81.1% for the 2009-2010 season in EE and NL respectively. Vaccine uptake for clinical risk groups was reported by four countries and varied from 15.6% to 71.5% in 2008-09 and from 9.2% to 70.4% in 2009-10 season in ES and NL respectively. Estimates of coverage for residents in nursing homes were provided by two countries (PT, SK) and uptake reported was 87% and 82.9% respectively for 2009-10(table 18).

Table 18. Vaccination coverage **measured by administrative method** among EU/EEA countries in 2008-09 influenza and 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=23)

Country/ Population group	Vaccination coverage (%) 2008-09 influenza season	Vaccination coverage (%) 2009-10 influenza season
Age groups		
Children		
6 months – <3 years		
FI	-	32
6 months <5 years		
EE	1	1
PL	2	1
IT	-	6.1
SI	-	0.8
6 months -15 years		
SK	8.6	7.5
5-14 years		
EE	2	1
IT	-	5.1
PL	2.9	1.7
5-18 years		
SI	-	1.2
Other age groups		
15-24 years		
IT	-	3
15-49 years		
EE	3	1
15-64 years		
PL	3.1	2.2
16-58 years		
SK	6.3	6.3
19-49 years		
SI	-	4.1
25-65 years		
IT	-	8.8
50-64 years		
EE	3	2
Elderly		
Over 50 years		

LU	3.7	4.2
Over 59		
SK	35.5	30.5
Over 55 years		
LU	6.9	7.7
Over 60 years		
LU	12.9	13.3
HU	38.4	31.8
IS	21.2	42
NL	82.5	81.1
Over 65 years		
DK	53.7	52
EE	1	1
FI	51	46
IE	70.1	53.8
LV	2.4	2.1
IT	66.2	65.6
LT	11.2	10.3
LU	53.3	52.4
MT	51	-
NO**	47	51
PL	11.4	9.3
RO	49.40	28.5
SI	-	22.1
ES	-	65.7
SE	64†	43.9***
PT	50	-
ENG	74.1	72.4
HCWs		
HU	44	53.6
RO	97.82	-
ES	32.4	34.8
PT	32‡	43.5
ENG	-	26.4
Clinical risk groups*		
NO**	47	51
ES	15.6	9.29
ENG	47.1	51.6
NL	71.5	70.4
Total population		
BG	4.74	6.33
CY	11.8	16.1
CZ	7.2	7.8
IS	16.2	17.7
IT	19.1	19.6
LV	0.9	0.8
LT	7.8	4
LU	16.6	18.1
NL	21.9	22.4
NO	12	12
SK	12.8	12.4
SI	7.3	7.3

PL	4.1	3.1
PT	15	15
RO	-	5.2
Residents in nursing homes		
PT	80‡	87
SK	82.6	82.9
Staff in nursing homes		
PT	-	36

*Some clinical risk groups: NL: 2008-09 influenza season: pulmonary disease-74.3%; cardiovascular -82.3%; diabetes -85.1%. 2009-10 influenza season: pulmonary disease-73.1%; cardiovascular-80.7%; diabetes-83.3%.

**All at risk and persons aged 65 years or older.

***Reports were received for only around 60% of the population for 2009-10 influenza season. †These data on vaccination coverage for SE were provided 27/02/2012.

‡Data were not reported from one region. These data on vaccination coverage for PT were provided 07/03/2012.

Estimated by survey methods

Five countries estimated vaccination coverage using survey methods. Details on the type of survey and estimates of coverage among different age and risk groups for influenza seasons 2008-09 and 2009-10 are presented in tables 19 and 20.

Table 19. Survey details for vaccination coverage estimated using survey method among EU/EEA countries in 2008-09 influenza and 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=5)

Countries	Non probability sampling	Probability sampling	Sample size	Response rate
2008-09 influenza season				
Telephone (Computer assisted: CATI)				
DE	-	Simple random	21,262	29
2009-10 influenza season				
Telephone (Computer assisted: CATI)				
FR	-	Multistage	3399	56
DE	-	Simple random	13,164	55.8
IE	Quota		1700	22.3
Telephone (Not computer assisted: Not CATI)				
NO		Stratified (assessment, LQAS*)	2000	24
PT		Stratified†	1078	90

*Lot Quality Assessment Sampling;

†PT-Stratified - probability sample stratified by health region with homogenous allocation, using random digit dialing as selection procedure from a dual sample frame of landline and mobile phones.

Table 20. Vaccination coverage **estimated by survey method** of uptake assessment among EU/EEA countries in 2008-09 influenza and 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=5)

Countries/Population group	Vaccination coverage (%) 2008-09 influenza season	Vaccination coverage (%) 2009-10 influenza season
Age groups		
Children		
6 months-4 years		
FR	-	9.9
5-14 years		
FR	-	6.5
6 months-15 years		

PT	-	13
Other age groups		
15-29 years		
FR	-	8.9
30-64 years		
FR	-	15.9
15-44 years		
PT	-	16
45-64 years		
PT	-	16
Elderly		
Over 50 years		
DE	44.8	-
Over 55 years		
DE	50	-
Over 60 years		
DE	55.2	47.5
Over 65 years		
FR	-	62.7
DE	59.2	50.2
IE	-	63.5
PT	53	52.2
65-74 years		
NO	-	35
Over 75 years		
NO	-	51
HCWs		
DE	20.4	27.3
FR		24.9
IE	-	26.5
NO	-	12
Clinical risk groups		
FR	-	33.6 (<65 with medical condition)
DE	42.2	39.8
IE	-	28.9(<65 with medical condition)
NO	-	33
PT	35.5**	32.4**
Total population		
FR	-	20.6
DE	28.1	26.6
NO	-	13
PT	-	19

*Some clinical risk groups 2009-10 influenza season: PT: pulmonary disease-30%; cardiovascular-47%; diabetes-42%; renal disease-35%; hepatic disease-39%. IE: pulmonary disease-47.1%; cardiovascular-37%; diabetes-45.5%; weekend immune system-31.4%; asthma-16%.

**PT- season 2008-09 estimated without cancer; season 2009-10 estimated with cancer. These data were provided for PT on 17/02/2012.

Comments for 2008-09 influenza season:

LU-Vaccination coverage data is under-estimated in population < 65 years, as they do not include recipients who benefited from vaccination provided by their employer;

ES-Coverage data is requested to regions regarding at risk groups but this information was completed in a very inconsistent way;

DK-We do not have the precise denominator figures to calculate all coverage in percent. In the season 2008-09 547,514 persons accepted the offer of free vaccination, including 52,810 chronically ill, 36,592 early retirement pensioners and 457,412 > the age of 65 years. Among persons > 65 years of age, the coverage reached approx. 53.7%;

EE-All data provided for the year 2009.

Comments for 2009-10 influenza season:

DK- We does not have the precise denominator figures to calculate all coverage in percent. In the season 2009-10 587,897 persons accepted the offer of free vaccination, including 92,277 chronically ill, 35,860 early retirement pensioners and 459,760 > the age of 65 years. Among persons > 65 years of age, the coverage reached approx. 52%;

EE- All data provided for the year 2010;

FR- we do collect annual influenza coverage data through administrative methods in >65 and <65 with some specific conditions. However, no results were available in any of these groups for the 2008-2009 season;

LU- Vaccination coverage data is under-estimated in population < 65 years, as they do not include recipients who benefited from vaccination provided by their employer;

ES-Coverage for at risk groups was submitted by regions in a heterogeneous way;

SE- Different countries as usual used different methods for data collection. Data were reported only for 3/3 of the +65 in the country for seasonal vaccine since there was so much focus at the pandemic;

Vaccine procurement

The total number of doses of seasonal influenza vaccine purchased and distributed for influenza season 2008-09 and 2009-10 varied widely across countries and data are provided in a table 21.

Table 21. Vaccine procurement among EU/EEA countries in 2008-09 influenza and 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

Country	Influenza season			
	2008-09		2009-10	
	Purchased doses	Distributed doses	Purchased doses	Distributed doses
BG	360632	NK	478551	NK
BE	NK	NK	NK	NK
CY	108254	94614	130499	129309
FR	NK	11601793	NK	10492999
DE	NK	16526700	NK	NK
HU	1300000	NK	1300000	NK
IS	60000	51852	60000	56350
IE	797180	605210	708660	649520
IT	NK	12 640 362	NK	12 609 193
LT	110000	110000	138035	138035
LU	88450	80457	90936	89182
MT	85000	65000	110000	73000
NO	NK	579888	NK	599111
PL	NK	NK	NK	NK
PT	NK	1600000	NK	1800000
RO	3147500	3147500	1132800	1132800
SK	926643	692217	752615	669531
SI	199820	190529	221850	198272
NL	3935860	3800860	3994760	3987940

Not known (NK)	ES,SE,AT,CZ,DK,EE,FI,GR,LV
----------------	----------------------------

Nine countries were able to provide information on the cost of vaccine, with most countries not able to provide this information. Cost varied from 2.68 – 29 euro for the cost of vaccine provided in a syringe) Detailed information presented in a table 21.

Table 21. Cost paid for vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=27)

Countries	Cost single dose vial	Cost syringe inactivated	Cost 5 doses vial	Cost 10 doses vial	Cost other multi-dose vial	Cost syringe attenuated	Currency
AT	NK	NK	NK	NK	NK	NK	EUR
BE	NK	NK	NK	NK	NK	NK	EUR
BG	NK	NK	NA	NA	NA	NA	BGN
CY	NA	3.63	NA	NA	NA	NA	EUR
CZ	NK	NK	NA	NA	NA	NA	CZK
DK	NK	NK	NK	NK	NK	NK	dkr
EE	NK	NK	NK	NK	NK	NK	EUR
FR	NK	NK	NK	NK	NK	NK	EUR
DE	28	29	NA	195	389	NA	EUR
GR	NA	6.47	NA	NA	NA	NA	EUR
HU	NK	NA	NA	NA	NA	NA	EUR
IS	613 (3.8 Euro)	613 (3.8 Euro)	NK	NK	NK	NK	Icelandic kronur
IE	NA	3.53	NA	NA	NA	NA	EUR
IT	NK	NK	NK	NK	NK	NK	
LV	NK	NK	NA	NA	NA	NK	EUR
LT	NK	NK	NK	NK	NK	NK	LT
LU	NA	5.9	NA	NA	NA	NA	EUR
MT	NA	3.84	NA	NA	NA	NA	EUR
NL*	NA	NA	NA	NA	NA	NA	EUR
NO	NK	NK	NK	NK	NK	NK	NOK
PL	NA	8	NA	NA	NA	NA	EUR
PT	NA	7	NA	NA	NA	NA	EUR
RO	NK	NA	NA	NA	NA	NA	RON
SK	NK	NK	NK	NK	NK	NK	EUR
SI	NA	2.68	NA	NA	NA	NA	EUR
ES	NK	NK	NK	NK	NK	NK	EUR
SE	NK	NK	NK	NK	NK	NK	SKr

*NL- Known but not allowed to be public. FI-no data provided;
NK not known;
NA- not available.

Comments

FR-The figures are the number of doses distributed to the private offices which are the main provider of vaccines;
DE-Data are for prescribed doses.

Vaccination sites

Both public and private health sectors are used for vaccine administration in 24 countries (86%). In FI, IT, RO vaccination is administered only in the public sector and in EE vaccination is administered only in the private sector.

Table 22. Health sector(s) and proportion for administration of seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

Country	Health Sector	Proportion public (%)	Proportion private(%)
AT	Both public and private	NK	NK
BE	Both public and private	NK	NK
BG	Both public and private	NK	NK
CY	Both public and private	54	46
CZ	Both public and private	NK	NK
DK	Both public and private	NK	NK
EE	Private		100
FI	Public	NK	
FR	Both public and private	NK	NK
DE	Both public and private	NK	NK
GR	Both public and private	NK	NK
HU	Both public and private	NK	NK
IS	Both public and private	NK	NK
IE	Both public and private	NK	NK
IT	Public	NK	
LV	Both public and private	NK	NK
LT	Both public and private	NK	NK
LU	Both public and private	5	95
MT	Both public and private	NK	NK
NL	Both public and private	NK	NK
NO	Both public and private	NK	NK
PL	Both public and private	50	50
PT	Both public and private	50	50
RO	Public	98	
SK	Both public and private	NK	NK
SI	Both public and private	NK	NK
ES	Both public and private	95	5
SE	Both public and private	NK	NK

NK not known;
NA- not available.

Primary health care settings were most important outlets for seasonal influenza vaccination in 24 (86%) countries (table 22).

Table 22. Principal outlets for administration of seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

	Most important setting	Important setting	Average important setting	Not important setting	Least important setting
Primary health care settings	BE,BG,CY,DK, EE,FI,FR,DE, GR, HU,IS,IE,LV, LT,LU,MT, NL,NO,PL,RO ,SK,SI,ES,SE (n=24)	CZ,IT,PT(n=3)	AT(n=1)		
Hospital setting*	LT,HU(n=2)	CY,DE,MT,IS,IE (n=5)	AT,BE,EE,GR, NL,PL (n=6)	RO,SI,BG,C Z,DK,FI,FR,L V, LU(n=9)	NO,PT,SK, SE,ES(n=5)
Outpatient care clinics*	SK,CY, NO (n=3)	BG,CZ,DE,IS,LT, PL,PT,ES(n=8)	AT,EE,FI,GR, (n=4)	DK,FR,HU,L U,MT,NL,LV ,RO,SI,SE, IE (n=11)	BE (n=1)
Occupational health services*	HU,IE(n=2)	AT,BE,FI,DE,IS, LT,MT,PL,PT,ES, SE(n=11)	EE,GR,NL,NO ,SK(n=5)	BG,CY,CZ,D K,FR,LV,LU, RO,SI(n=9)	
Other					
GPs	AT (n=1)	IT (n=1)			
Private vaccination clinics	DK (n=1)	SE (n=1)		ES (n=1)	
Travel medicine				EE (n=1)	ES (n=1)
Nursing homes and other chronic-care facilities		LT,IE,NL (n=3)	ES (n=1)		
Pharmacies			PT (n=1)		

* -IT no answer

Promoting of seasonal influenza vaccination 2009-10 influenza season

Specific information materials (table 23) for public or health professionals regarding seasonal influenza vaccination (e.g. leaflets, posters) existed in 22 countries (79%) during the 2009-10 pandemic influenza season.

Table23. Specific information materials for the public or health professionals for the seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=28)

	Countries	Total
Specific information materials for the public or health professionals		
Specific information exist	BG,CY,CZ,DK,EE,FI,FR,DE,GR,HU,IE,IT,LV,LT,LU,MT,NL,PL,PT,SK,ES,SE	22
Specific information do not exist	AT,BE,IS,NO,RO,SI	6

Media campaigns (radio, TV or news papers) were used in 18 countries (64%) before and/or during 2009-10 influenza season (table24).

Table 24. Mass media campaigns to promote the seasonal influenza vaccine for seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=18)

Mass media campaigns to promote the seasonal influenza	
Used mass media campaigns	BG,CY,CZ,DK,EE,FR,DE,HU,IS,IE,LT,LU,MT,PT,RO,SK,ES,SE (n=18)
Did not use mass media campaigns	AT,BE,FI,GR,IT,LV,NL,NO,PL,SI (n=10)
Radio	
Specified media campaigns used	BG,CY,CZ,DK,EE,FR,HU,IS,IE,LT,LU,MT,PT,SK,ES,SE (n=16)
Specified media campaigns not used	DE,RO (n=2)
TV	
Specified media campaigns used	BG,CY,DK,EE,FR,DE,HU,IS,LT,LU,MT,PT,RO,SK,ES,SE (n=16)
Specified media campaigns not used	CZ,IE (n=2)
News papers	
Specified media campaigns used	BG,CY,DK,EE,FR,DE,IS,IE,LT,LU,MT,PT,RO,SK,ES,SE(n=16)
Specified media campaigns not used	CZ,HU (n=2)
Leaflets	
Specified media campaigns used	BG,CY,CZ,DK,EE,FR,DE,IE,LT,SK,ES (n=11)
Specified media campaigns not used	HU,IS,RO,SE,LU,MT,PT (n=7)
Posters	
Specified media campaigns used	BG,CY,CZ,DK,EE,FR,DE,IE,LT,LU,MT,SK,ES (n=13)
Specified media campaigns not used	HU,IS,RO,SE,PT (n=5)
Website	
Specified media campaigns used	CY,CZ,DK,EE,DE,HU,IS,IE,LT,LU,MT,PT,RO,SK,ES,SE (n=16)
Specified media campaigns not used	BG,FR (n=2)

Media campaigns were sponsored by the national health authorities in 14 countries (78%) and by the pharmaceutical sector in five countries (EE, LT, MT, ES, and SE). Details are presented in a table 25.

Table 25. Sponsors of the media campaign for seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=18)

	Countries	Total
National health authority	BG,CY,DK,EE,FR,DE,IS,IE,LT,LU,MT,SK,ES,SE	14
Pharmaceutical sector	EE,LT,MT,ES,SE	5
Public service announcement*	DK,MT,ES,HU,PT,RO	6
Unknown	CZ	1
Private vaccinations clinics	DK	1

* Advertisement content and production is provided by government or industry, including national health authority, with air time (radio, TV) or space (newspapers, magazines) provided by media company at no charge.

Of 28 responding countries 23 reported (AT,BE,CY,CZ,DK,FI,FR,DE,GR,HU,IS,IE,IT,LV,LU,NL, NO, PL, PT, SK, SI, ES, SE) that they had post marketing surveillance systems in place to collect data on vaccine related adverse events. The following five countries do not have these systems in place; BG, EE, LT, MT, RO

Future changes for influenza seasons

Significant policy or operational changes occurring in the near future are foreseen in five countries. Eleven countries requested some technical support from ECDC/WHO. Details are presented in a table 26 and table 27.

Table 26. Changes occurring in the near future for seasonal influenza vaccine among EU/EEA countries in 2009-10 pandemic influenza season. Seasonal influenza vaccination survey, April 2011. (n=5)

Countries	Future significant changes
CZ	Changes in national recommendation, currently under discussion
DK	Severe obesity (e.g. BMI > 40) and all pregnant women in their 2nd or 3rd trimesters
EE	The official immunization webpage opened www.vaktsineeri.ee
IE	In the 2010/2011 season we extended recommendations- to all pregnant women, morbidly obese individuals, pig workers
NO	From the season 2010/2011 also risk groups and persons 65 years or older must pay full vaccine and administration costs

Table 28. Assistance or technical support from ECDC or WHO for seasonal influenza. Seasonal influenza vaccination survey, April 2011. (n=11)

Countries	Areas for assistance from ECDC or WHO
CY	Protocol for influenza vaccination survey
CZ	Materials for campaigns; workshops.
EE	Consultations of experts
DE,NL	Up-to-date met analysis about vaccine effectiveness
GR	Administrative method in order to estimate coverage
IE	General updates and advice is always welcome
LV	European guidelines on coverage data collection and assessment
LU	Promoting influenza immunization
MT	To help set up a monitoring system to assess vaccination coverage within different groups
PT	Definition of new risk groups; less detailed questionnaire.

Conclusions

1. Seasonal influenza vaccine recommendations for the 2009-10 season:

- All countries recommend vaccination based on age specifically: 16 (57%) recommend for those aged 65 years and older; seven (AT,DE,GR,HU,IS,SK and NL) recommend for those aged 60 years and older; one (SI) recommends for those aged 64 years and older; two (MT, PL) for those aged 55 years and older; and two (BE and IE) for those aged 50 years and older.
- Six countries (21%) recommended seasonal influenza vaccine for children: EE recommend vaccine for all children ≥ 6 months- <18 years; SK recommend vaccine ≥ 6 months-12 years ; SI recommended vaccination of children aged ≥ 6 months-2 years; FI,LV –children ≥ 6 months-3 years and MT recommended vaccination of children of ≥ 6 months-4 years;
- In most countries vaccination was recommended for those working in hospitals, long-term care facilities (23/28; 82%) and outpatient clinics (22/28; 79%). Approximately one-third to the half of MSs recommended vaccination for those working in essential, military services and for people working in the poultry industry;
- In all counties (100%) individuals with chronic pulmonary, cardiovascular, haematological and renal diseases, individuals with metabolic and immunologic disorders were recommended influenza vaccine. Seventeen countries (61%) had recommendation to vaccinate individuals with hepatic diseases and children and adolescents on long-term aspirin use. Sixteen countries reported recommending vaccination to pregnant women.

2. Monitoring influenza vaccine coverage:

- Six countries did not have a mechanism to monitor uptake among any risk group; 17 countries could monitor uptake for some risk groups. Most countries had mechanisms to monitor vaccine coverage among the older age groups (≥ 50 ; ≥ 55 ; ≥ 60 ; ≥ 65). CY, PT, IS,MT,NO had mechanisms to monitor vaccine coverage in some risk settings; 17 countries could monitor vaccine uptake among pregnant women; and four countries (FR, PT,NL,NO) in some clinical risk condition groups;
- All countries except two (AT, GR) used different methods (health records or pharmaceutical data, or surveys) for numerator measurement. The most common type of administrative methods used was number of people vaccinated (11/28; 39%), aggregate data on the number of vaccines administered (5/28; 18%). Twenty (20/28; 71%) countries estimate the numerator annually or at the end of influenza season;
- One-fifth countries or less measured denominator in occupational (6/28; 21%) or clinical risk groups (4/28; 14%) and two countries had mechanism to measure denominator among residents of long-stay care facilities (7%).

3. Vaccination coverage measured by administrative or estimated by survey methods:

- 2008-09 season
 - Was known in 20 countries (71%) for those aged 59 years and older (range 1% - 82.5%);
 - The coverage among health care workers was known in five countries (HU,RO,ES,DE,PT) ranging from 20.4% to 97.8%;
 - Coverage for clinical risk groups was reported in six countries (ENG,NL,PT, ES, DE and NO) 15.68% to 71.5%.
- 2009-10 season
 - Was known in 21 countries (75%) for those aged 59 years and older and ranged from 1% to 81.1% between countries.
 - Coverage among health care workers was known in eight countries (HU,ES,PT,ENG,DE,FR,IE,NO; 28.5%), ranging from 12% to 53.6%;
 - Coverage for clinical risk groups was known in eight countries (ES, NO, ENG,NL,DE,PT,FR, IE) and varied from 9.29% to 70.4%.

- Estimates based on survey methods was provided by five countries (FR,PT,DE,IE,NO) for different age and risk groups;
5. Promoting vaccination in all countries:
- 79% (22/28) had specific information materials for public or health professionals.
 - 71% (20/28) used media campaigns which were sponsored by national health authority and/or pharmaceutical sector.
6. Future changes:
- Future changes for year 2011-12 were foreseen in five countries. The most commonly reported planned changes relate to inclusion of pregnant women and/or morbid obesity in to the recommended groups for seasonal vaccination.

Appendix 1. Questionnaire.

National seasonal influenza vaccination survey for 2009/2010 influenza season in EE/EEA, 2010

COUNTRY: _____ WHO#1.2
GATEKEEPER: _____ WHO#1.3 _____
Name of Person who fills questionnaire (if different from above): _____

Title: ___ WHO#1.4 _____

Contact email: _____

Contact Phone Number: _____

Questions in relation to the seasonal influenza vaccination policy refer to the 2009/2010 influenza season. In this survey we request that all EU countries, Norway and Iceland provide seasonal influenza vaccination coverage for the 2009/2010 influenza season. Those countries that were unable to provide seasonal influenza vaccination coverage data for the 2008/2009 season at the time of the last survey are requested to do so now. These countries are

AT, BE, BG, CY, CZ, DK, EE, FR, DE, GR, HU, IS, LV, LU, NL, PL, SI, ES, SE, UK.

The following countries (FI, IE, IT, LT, MT, NO, RO, SK, PT) previously submitted 2008/2009 data and are not required to re-submit it. However, if they wish to update data previously submitted they may of course do so. In some questions we refer to the "last survey conducted in July 2009" in which the data were provided for 2008/2009 influenza season.

This survey is being done in collaboration with WHO-Euro office to avoid member states in order to streamline surveys being done within Europe by member states. Non EU countries will be administered the same questionnaire via WHO-Euro office (with restricted access to the CINECA/VENICE portal).

Q1. Have been any changes in seasonal influenza vaccine policy since the last survey conducted in July 2009? NOTE: None of the none countries will have submitted

Yes

No

NOT APPLICABLE (for countries that have not participated in this survey previously)

Q2. Has your country developed or updated an action plan to improve vaccination coverage for seasonal vaccination as requested by EC 08/07/2009?

(http://ec.europa.eu/health/ph_threats/com/Influenza/docs/seasonflu_rec2009_en.pdf)

Yes, developed plan

Yes, updated previously developed plan

No

NOT APPLICABLE (for countries that have not participated in this survey previously and-or are not in EC)

Additional comment (specifying question it relates to) _____

GROUPS RECOMMENDED FOR SEASONAL INFLUENZA VACCINE in 2009/2010 influenza season

Q3. For which of the following age groups without other risk indication was influenza immunisation recommended, (tick all that applies)? WHO#2.6

Children

- Not recommended for children of any age
- Recommended for all children > 6 months - <18 years
- Recommended for following age groups (tick all that apply):
- >6 months – 1 year
- >1 year – 2 years
- >2 years – 3 years
- >3 years – 4 years
- >4 years – 5 years
- >5 years – 6 years
- >6 years – 7 years
- >7 years – 8 years
- >8 years – 9 years
- >9 years – 10 years
- >10 years – 11 years
- >11 years – 12 years
- >12 years – 13 years
- >13 years – 14 years
- >14 years – 15 years
- >15 years – 16 years
- >16 years – 17 years
- >17 years – <18 years
- Other: From ____ months to ____ months
- Other: From ____ years to ____ years
- Other: From ____ years to ____ years
- Other: From ____ years to ____ years

Adults

- Not recommended for adults of any age
- Recommended for all adults >18 years old
- >18 years – 20 years
- >20 years – 30 years
- >30 years – 40 years
- >40 years – 50 years
- >50 years – 55 years
- >55 years – 60 years
- >60 years – 65 years
- ≥ 65 years
- Other: From ____ years to ____ years
- Other: From ____ years to ____ years
- Other: From ____ years to ____ years

Q4. Was the seasonal influenza vaccine included in the ROUTINE immunisation schedule during the 2009/2010 influenza season? (tick all that apply) WHO#2.1

- Included in childhood immunisation schedule
- Included in adults' immunisation schedule
- Not included

Q4.a. If yes, in what year was seasonal influenza first included in the national immunization schedule:

Q4.b. If no, will your country include Seasonal Influenza Vaccine as part of recommended national immunization schedule within the next 5 years?

- Yes
- No
- Don't Know

Q5. What payment scheme was applied to seasonal influenza vaccine for each group (children/adults)? WHO#2.2.1

Children

- Free for all
- Free for some
- Partly funded for all
- Full cost paid by recipient
- Not applicable
 - Other

Other, specify_____

Adults

- Free for all
- Free for some
- Partly funded for all
- Full cost paid by recipient
- Not applicable
 - Other

Other, specify_____

Additional comment (specifying question it relates to) _____

Q6. For which of the following at risk groups was seasonal influenza immunisation recommended (without regard to age)? WHO#2.8

Chronic pulmonary (including asthma) disease

- Recommended No recommendation Recommended against

Cardiovascular (except hypertension) disease

- Recommended No recommendation Recommended against

Renal disease

- Recommended No recommendation Recommended against

Hepatic disease

- Recommended No recommendation Recommended against

Haematological or metabolic disorders (including diabetes mellitus)

- Recommended No recommendation Recommended against

Immunologic disorders other than HIV/AIDS

- Recommended No recommendation Recommended against

HIV/AIDS

- Recommended No recommendation Recommended against

Long-term aspirin use (in children up to 18 years old)

- Recommended No recommendation Recommended against

Pregnancy

- Recommended for all Recommended for some

- No recommendation Recommended against

If recommended for some, please specify_____

Any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk for aspiration

- Recommended No recommendation Recommended against
- None
- Other, specify: _____

Q7. For at risk children and adults specified above was vaccine recommendation limited to certain age groups?

- Yes
- No

If yes, please specify _____

Q8. What payment scheme was applied for these groups?

- Free for all
- Free for some
- Partly funded for all
- Full cost paid by recipient
- Not applicable
- Other

Other, specify _____

Q9. If different payment schemes were applied to these groups, please specify _____

Additional comment (specifying question it relates to) _____

Q10. In which occupational settings was influenza immunisation recommended for Health Care Workers (HCWs)? WHO#2.9.1

Hospitals

- Recommended No recommendation Recommended against

Out-patient care clinics

- Recommended No recommendation Recommended against

Laboratory

- Recommended No recommendation Recommended against

Long-term care facilities (nursing homes and other chronic-care facilities)

- Recommended No recommendation Recommended against

Other

- Recommended No recommendation Recommended against

If other, please specify: _____

Q11. What payment scheme was applied to HCWs? (tick all that apply)

- Free for all
- Free for some
- Partly funded for all
- Full cost paid by recipient
- Not applicable

Other

Other, specify_____

Q12. If different payment schemes were applied for some of these groups, please specify_____

Additional comment (specifying question it relates to) _____

Q13. In which other occupational settings was influenza immunisation recommended for workers?

Essential services (police, firemen etc.)

Recommended No recommendation Recommended against

Military

Recommended No recommendation Recommended against

Veterinary services

Recommended No recommendation Recommended against

Poultry industry

Recommended No recommendation Recommended against

Families that raise pigs, poultry or waterfowl (ducks, swans, geese)

Recommended No recommendation Recommended against

Airline workers

Recommended No recommendation Recommended against

None

Other, specify: _____

Q14. What payment scheme was applied to these occupational groups mentioned above? (tick all that apply)

Free for all

Free for some

Partly funded for all

Full cost paid by recipient

Not applicable

Other

Other, specify_____

Q15. If different payment schemes were applied for some of these groups, please specify_____

Additional comment (specifying question it relates to) _____

Q16. For which other groups was vaccine recommended? (tick all that apply)

Residents of long-term care facilities (nursing homes and other chronic-care facilities)

Recommended No recommendation Recommended against

Household contacts* of persons for whom vaccination is recommended (e.g. for household contacts of persons with underlying chronic conditions; immunosuppressed; the elderly, children < 6 months i.e. cocooning strategy**)

Recommended No recommendation Recommended against

If recommended, specify_____

None

Other, specify: _____

* Household contacts is defined as individuals who share living accommodation on most days over the whole influenza period and therefore continuing close contact is unavoidable.

** The concept of “cocooning”

Children younger than 6 months of age have little if any immunity to influenza for the first 12 months of life if their mothers were not vaccinated during pregnancy and are at higher risk of influenza-related complications and cannot be vaccinated. To ensure protection for the baby, immediate household contacts (representing its cocoon) are vaccinated against influenza so they won't transmit the virus to the baby.

The same concept applies to the immunocompromised persons (e.g., patients with hematopoietic stem cell transplants) since the immune response to the vaccine may be inadequate, vaccination of contacts (household members, health care workers, and other individuals) is recommended.

Q17. What payment scheme was applied to residents of long-term care facilities if vaccine was recommended?

- Free for all
- Free for some
- Partly funded for all
- Full cost paid by recipient
- Not applicable
- Other

Other, specify_____

Q18. What payment scheme was applied to household contacts if vaccine was recommended (as part of cocooning strategy)?

- Free for all
- Free for some
- Partly funded for all
- Full cost paid by recipient
- Not applicable
- Other

Other, specify_____

Additional comment (specifying question it relates to) _____

MONITORING VACCINATION COVERAGE

Q19. Have there been any changes in your country in relation to mechanisms for monitoring influenza vaccination coverage since the last survey conducted in July 2009?

- Yes
- No
- NOT APPLICABLE (for countries that have not participated in this survey previously)

Q20. For which groups for whom vaccination is recommended do you have a mechanism for monitoring influenza vaccination coverage? WHO#4.1

- All
- None
- Some

If some, please specify groups for which you do have mechanism to monitor uptake in the following table (answer yes or no for each sub-group within each category):

Age group	Yes/No
Any age (age group), if yes, specify age or age group _____	
Occupational setting	Yes/No
Hospitals	
Laboratory staff	
Long-term care facilities (nursing homes and other chronic-care facilities)	
Out-patient care clinics	
Military	
Essential services (police, firemen etc.)	
Veterinary services	
Poultry industry	
Pig industry	
Families that raise pigs/poultry/wild fowl (geese, ducks, swans)	
Airline workers	
Other, specify:	
Other, specify:	
Other, specify:	
Medical condition	Yes/No
Chronic pulmonary (including asthma) disease	
Cardiovascular (except hypertension) disease	
Renal disease	
Hepatic disease	
Haematological or metabolic disorders (including diabetes mellitus)	
Immunologic disorders other than HIV/AIDS	
HIV/AIDS	
Long-term aspirin use (in children up to 18 years old)	
Pregnancy	
Any condition	
Other, specify:	
Other, specify:	
Other, specify:	
Other groups	
Residents of long-term care facilities (nursing homes and other chronic-care facilities)	
Household contacts of persons for whom vaccination is recommended (cocooning strategy)	

Q21. Does your country measure vaccination coverage among the entire population (without regard to risk)?

- Yes
 No

Q22. Have there been any changes in your country in relation to numerator assessment for influenza vaccination coverage since the last survey conducted in July 2009?

- Yes
 No
 NOT APPLICABLE (for countries that have not participated in this survey previously)

Q23. Which of the following method/s does your country use to measure the numerator in assessing influenza vaccination coverage? (you can tick more than one)

Health record data

- Medical records (excluding computerised records)
Last conducted: MM/YYYY Never
- Computerised medical records (not specific to immunisation)
Last conducted: MM/YYYY Never
- Immunisation registry (routinely collected information)
Last conducted: MM/YYYY Never
- Immunisation survey (active collection of immunisation data)
Last conducted: MM/YYYY Never

Survey type

- Household survey, in person
Last conducted: MM/YYYY Never
- Individual interview, in person
Last conducted: MM/YYYY Never
- Telephone survey
Last conducted: MM/YYYY Never
- Mail survey
Last conducted: MM/YYYY Never

Pharmaceutical data

- Pharmaceutical distribution data (from industry)
Last conducted: MM/YYYY Never
- Pharmaceutical distribution data (from national purchaser)
Last conducted: MM/YYYY Never
- Pharmaceutical sales data (from private pharmacies)
Last conducted: MM/YYYY Never
- Prescription data
Last conducted: MM/YYYY Never

Other, specify: _____

Q24. If your country uses an administrative method for monitoring coverage please indicate which of the following are used to measure the numerator in assessing influenza vaccination coverage (you can tick more than one)

- Aggregate collection of number of vaccines administered
- Aggregate collection of number of vaccines distributed (industry)
- Aggregate collection of number of vaccines distributed (national purchaser)
- Aggregate collection of number of vaccines sales (private pharmacies)
- Payment/ reimbursement claims
- Number of people vaccinated
- Other

If other, specify: _____

Q25. Have there been any changes in your country in relation to interval (weekly, monthly etc.) at which numerator data are collected for influenza vaccination coverage since the last survey conducted in July 2009?

- Yes
- No
- NOT APPLICABLE (for countries that have not participated in this survey previously)

Q26. What is the most frequent interval at which numerator data for assessing influenza vaccination coverage is collected?

- Never
- Monthly
- Every two months
- Every three months
- Once, at the end of flu season
- Annually, specific date/time of year _____
- Other, specify: _____

Q27. Have there been any changes in your country in relation to assessment of populations/denominators data for influenza vaccination coverage since the last survey?

- Yes
- No
- NOT APPLICABLE (for countries that have not participated in this survey previously)

Q28. Which of the following population/denominator data does your country have to assess vaccination coverage?

Age group	Yes/No
Any age (age group)	
months – 1 year	
>1 year – 2 years	
>2 years – 5 years	
>5 years – 18 years	
> 18 – 49 years	
≥ 50 years	
≥ 65 years	
Other, specify:	
Other, specify:	
Occupation groups	Yes/No
Occupation group data available:	
If yes, specify below:	
Hospital personnel	
Laboratory staff	
Long-term care facilities personnel (nursing homes and other chronic-care facilities)	
Outpatient care clinics personnel	
Essential services (police, firemen etc.) personnel	
Military personnel	
Poultry industry personnel	
Pig industry personnel	
Veterinary services personnel	
Families that raise pigs/poultry/wild fowl (geese, ducks, swans)	
Airline workers	
Occupation group population data, other specify:	
Occupation group population data, other specify:	
Occupation group population data, other specify:	
Occupation group population data, other specify:	
Medical condition categories	Yes/No
Medical category data available:	
If yes, specify below:	

Chronic pulmonary (including asthma) disease patients	
Cardiovascular (except hypertension) disease patients	
Renal disease patients	
Hepatic disease patients	
Hematological or metabolic disorders (including diabetes mellitus) patients	
Immunologic disorders other than HIV/AIDS patients	
HIV/AIDS patients	
Long-term aspirin users (in children up to 18 years old)	
Pregnant women	
Patients with any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that can compromise respiratory function or the handling of respiratory secretions or that can increase the risk for aspiration	
Medical category population other, specify:	
Other group categories	Yes/No
Other group data available:	
If yes, specify below:	
Population of residents of long-term care facilities (nursing homes and other chronic-care facilities)	
Number of household contacts of persons for whom vaccination is recommended	
Population other category, specify:	

**VACCINATION COVERAGE 2008/2009 INFLUENZA SEASON
(THIS PART SHOULD BE COMPLETED ONLY BY EU COUNTRIES, NORWAY AND ICELAND)**

(The following countries that provided this information for seasonal influenza survey in July 2009 don't need to provide this info again: FI, IE, IT, LT, MT, NO, RO, SK, PT unless they need to update data previously provided)

For attention of those countries that recommend seasonal influenza vaccine for children - if vaccination coverage data are available for children please indicate it below as requested.

Q 29. Was coverage data for 2008/2009 season already provided?

- Yes, and does not need updating (these countries can skip to 2009/2010 section)
- Yes, but I wish to update the data previously submitted (these countries proceed in this section)
- No, I wish to submit them now
- No, but I do not have any data for the 2008/2009 season (skip to 2009/2010 section)

**Please indicate vaccination COVERAGE DATA 2008/2009 data measured by administrative method
Children**

- Vaccine not recommended for this group
- Vaccine recommended for some or all children but vaccination coverage was not measured for this group
- Vaccination coverage was measured for this group

Age group for which vaccination coverage measured (specify) _____
 Vaccination coverage (%) _____

Age group vaccination coverage measured (specify) _____
 Vaccination coverage (%) _____

Age group vaccination coverage measured (specify) _____
 Vaccination coverage (%) _____

Adults (countries should complete the following section based on data available to them)

≥50 year age group

Vaccination coverage was not measured for this specific age group
 Vaccination coverage (%) _____

≥55 year age group

Vaccination coverage (%) _____
 Vaccination coverage was not measured for this specific age group

≥60 year age group

Vaccination coverage (%) _____
 Vaccination coverage was not measured for this specific age group

≥65 year age group

Vaccination coverage (%) _____
 Vaccination coverage was not measured for this specific age group

Other specific age groups

Please indicate age group vaccination coverage measured _____
 Vaccination coverage (%) _____

Please indicate age group vaccination coverage measured _____
 Vaccination coverage (%) _____

Please indicate age group vaccination coverage measured _____
 Vaccination coverage (%) _____

Health care workers

Vaccination coverage (%) _____
 Vaccine is recommended but vaccination coverage was not measured for this group
 Vaccine not recommended for this group

At risk groups

Vaccination coverage was measured for all at risk
 Vaccination coverage (%) _____
 Vaccination coverage was measured for some at risk

Please specify group for which estimate made _____
 Vaccination coverage (%) _____

Please specify group for which estimate made _____
Vaccination coverage (%) _____

Please specify group for which estimate made _____
Vaccination coverage (%) _____

Vaccination coverage was not measured for at risk group

Entire population
Vaccination coverage (%) _____

Vaccination coverage was not measured for entire population

Q30. What was the vaccination coverage among other groups for which vaccination coverage data are available in your country but the groups was not mentioned above?

Please indicate group _____
Vaccination coverage (%) _____

Please indicate group _____
Vaccination coverage (%) _____

Please indicate group _____
Vaccination coverage (%) _____

Additional comment (specifying question it relates to) _____

Please indicate vaccination COVERAGE DATA 2008/2009 data estimated by survey methods

Q31. Was any survey(s) carried out in your country to estimate vaccination coverage for seasonal influenza?

Yes

No

Q.32. If survey method used, what survey method was used?

Telephone (Computer assisted: CATI)

Telephone (Not computer assisted: Not CATI)

In person (face-to face)

Distributed questionnaire (mail, email, handed out)

Other

Other, specify _____

Q.33. What sampling strategy was used?

Non probability sampling

Quotas

Convenience

Other

If other, please specify _____

Probability sampling (random)

Simple random

Systematic

Stratified (assessment, LQAS*)

Multistage

Cluster (EPI)

Other

Other, specify _____

*Lot Quality Assessment Sampling

Q.34. What was the sample size?

Number of respondents, specify _____

Q.35. What was response rate to the survey?

Specify (%) _____

If survey was carried out, please indicate estimated vaccination coverage for following groups:

Children

Vaccine not recommended this group, not applicable

Vaccination coverage was not estimated for this group

Vaccination coverage was estimated for this group

Age group vaccination coverage estimated (specify) _____

Vaccination coverage (%) _____

Age group vaccination coverage estimated (specify) _____

Vaccination coverage (%) _____

Age group vaccination coverage estimated (specify) _____

Vaccination coverage (%) _____

Adults

≥50 year age group

Vaccination coverage (%) _____

Vaccination coverage was not estimated for this specific age group

≥55 year age group

Vaccination coverage (%) _____

Vaccination coverage was not estimated for this specific age group

≥60 year age group

Vaccination coverage (%) _____

Vaccination coverage was not estimated for this specific age group

≥65 year age group

Vaccination coverage (%) _____

Vaccination coverage was not estimated for this specific age group

Other specific age groups

Please indicate age group vaccination coverage estimated _____

Vaccination coverage (%) _____

Please indicate age group vaccination coverage estimated _____

Vaccination coverage (%) _____

Please indicate age group vaccination coverage estimated _____
Vaccination coverage (%) _____

Health care workers
Vaccination coverage (%) _____

Vaccination coverage was not estimated for this group

At risk groups

Vaccination coverage was estimated for all at risk

Vaccination coverage (%) _____

Vaccination coverage was estimated for some at risk

Please specify group for which estimate made _____

Vaccination coverage (%) _____

Please specify group for which estimate made _____

Vaccination coverage (%) _____

Please specify group for which estimate made _____

Vaccination coverage (%) _____

Vaccination coverage was not estimated for this group

Entire population

Vaccination coverage (%) _____

Vaccination coverage was not estimated for entire population

Q36. What was the vaccination coverage among other groups for which vaccination coverage data are available in your country but the group was not mentioned above?

Please indicate group _____

Vaccination coverage (%) _____

Please indicate group _____

Vaccination coverage (%) _____

Please indicate group _____

Vaccination coverage (%) _____

Additional comment (specifying question it relates to) _____

**VACCINATION COVERAGE 2009/2010 INFLUENZA SEASON
(THIS PART SHOULD BE COMPLETED BY ALL COUNTRIES)**

For attention of those countries that recommend seasonal influenza vaccine for children - if vaccination coverage data are available for children please indicate it below as requested.

Please indicate vaccination COVERAGE DATA measured by administrative method

Children

Vaccine not recommended for this group

Vaccine recommended for some or all children but vaccination coverage was not measured for this group

Vaccination coverage was measured for this group

Age group for which vaccination coverage measured (specify) _____
Vaccination coverage (%) _____

Age group vaccination coverage measured (specify) _____
Vaccination coverage (%) _____

Age group vaccination coverage measured (specify) _____
Vaccination coverage (%) _____

Adults

≥50 year age group

Vaccination coverage was not measured for this specific age group

Vaccination coverage (%) _____

≥55 year age group

Vaccination coverage (%) _____

Vaccination coverage was not measured for this specific age group

≥60 year age group

Vaccination coverage (%) _____

Vaccination coverage was not measured for this specific age group

≥65 year age group

Vaccination coverage (%) _____

Vaccination coverage was not measured for this specific age group

Other specific age groups

Please indicate age group vaccination coverage measured _____

Vaccination coverage (%) _____

Please indicate age group vaccination coverage measured _____

Vaccination coverage (%) _____

Please indicate age group vaccination coverage measured _____

Vaccination coverage (%) _____

Health care workers

Vaccination coverage (%) _____

Vaccine is recommended but vaccination coverage was not measured for this group

Vaccine not recommended for this group

At risk groups

Vaccination coverage was measured for all at risk

Vaccination coverage (%) _____

Vaccination coverage was measured for some at risk

Please specify group for which estimate made _____

Vaccination coverage (%) _____

Please specify group for which estimate made _____

Vaccination coverage (%) _____

Please specify group for which estimate made _____

Vaccination coverage (%) _____

Vaccination coverage was not measured for at risk group

Entire population

Vaccination coverage (%) _____

Vaccination coverage was not measured for entire population

Q37. What was the vaccination coverage among other groups for which vaccination coverage data are available in your country but not mentioned above?

Please indicate group _____

Vaccination coverage (%) _____

Please indicate group _____

Vaccination coverage (%) _____

Please indicate group _____

Vaccination coverage (%) _____

Additional comment (specifying question it relates to) _____

**Please indicate vaccination COVERAGE DATA for 2009/2010 influenza season
estimated by survey methods**

Q38. Was any survey(s) carried out in your country to estimate vaccination coverage for seasonal influenza?

Yes

No

Q.39. If survey method used, what survey method was used?

Telephone (Computer assisted: CATI)

Telephone (Not computer assisted: Not CATI)

In person (face-to face)

Distributed questionnaire (mail, email, handed out)

Other

Other, specify _____

Q.40. What sampling strategy was used?

Non probability sampling

Quotas

Convenience

Other

If other, please specify _____

Probability sampling (random)

Simple random

Systematic

Stratified (assessment, LQAS*)

Multistage

Cluster (EPI)

Other

Other, specify _____

*Lot Quality Assessment Sampling

Q.41. What was the sample size?

Number of respondents, specify _____

Q.42. What was response rate to the survey?

Specify (%) _____

If survey was carried out, please indicate estimated vaccination coverage for following groups:

Children

Vaccine not recommended this group, not applicable

Vaccination coverage was not estimated for this group

Vaccination coverage was estimated for this group

Age group for which vaccination coverage estimated (specify) _____

Vaccination coverage (%) _____

Age group vaccination coverage estimated (specify) _____

Vaccination coverage (%) _____

Age group vaccination coverage estimated (specify) _____

Vaccination coverage (%) _____

Adults

≥50 year age group

Vaccination coverage (%) _____

Vaccination coverage was not estimated for this specific age group

≥55 year age group

Vaccination coverage (%) _____

Vaccination coverage was not estimated for this specific age group

≥60 year age group

Vaccination coverage (%) _____

Vaccination coverage was not estimated for this specific age group

≥65 year age group

Vaccination coverage (%) _____

Vaccination coverage was not estimated for this specific age group

Other age groups

Please indicate age group vaccination coverage estimated _____

Vaccination coverage (%) _____

Please indicate age group vaccination coverage estimated _____

Vaccination coverage (%) _____

Please indicate age group vaccination coverage estimated _____

Vaccination coverage (%) _____

Health care workers
Vaccination coverage (%) _____
 Vaccination coverage was not estimated for this group

At risk groups
 Vaccination coverage was estimated for all at risk
Vaccination coverage (%) _____
 Vaccination coverage was estimated for some at risk

Please specify group for which estimate made _____
Vaccination coverage (%) _____

Please specify group for which estimate made _____
Vaccination coverage (%) _____

Please specify group for which estimate made _____
Vaccination coverage (%) _____

Vaccination coverage was not estimated for this group

Entire population
Vaccination coverage (%) _____
 Vaccination coverage was not estimated for entire population

Q43. What was the vaccination coverage among other groups for which vaccination coverage data are available in your country but the group was not mentioned above?

Please indicate group _____
Vaccination coverage (%) _____

Please indicate group _____
Vaccination coverage (%) _____

Please indicate group _____
Vaccination coverage (%) _____

Additional comment (specifying question it relates to) _____

VACCINE PROCUREMENT

Q44. What was the total number of doses of seasonal influenza vaccine purchased in your country during the two seasons? WHO#3.2

For influenza season 2008/2009
Number doses _____
 Unknown

For influenza season 2009/2010
Number doses _____
 Unknown

Q45. What was the total number of doses of seasonal influenza vaccine distributed in your country?

For influenza season 2008/2009

Number doses _____

Unknown

For influenza season 2009/2010

Number doses _____

Unknown

Q46. For each presentation for seasonal influenza vaccine used in your country, please indicate estimated purchase cost paid for 2009/2010 season:

Cost/per dose

- a. Single dose vial- inactivated trivalent influenza vaccine
 - b. Prefilled syringe - inactivated trivalent influenza vaccine
 - c. Multi-dose vial - 5 doses - inactivated influenza vaccine
 - d. Multi-dose vial - 10 doses - inactivated trivalent influenza vaccine
 - e. Other Multi-dose vial - inactivated trivalent influenza vaccine
 - f. Prefilled syringe - live attenuated trivalent influenza vaccine

Please indicate currency used

Currency

USD

EURO

UKP

YEN

Ruble

Other (Please specify in the textbox below) _____

VACCINATION SITES

Q47. In what Health Sector(s) is seasonal influenza vaccine administered?

Check ALL that apply:

Public

Private

Q48. What proportion of influenza vaccinations administered were in the private or public sectors

a. (Estimated percentage of influenza vaccinations administered in the PUBLIC sector (The input is of type "number") _____ (or UNK if unknown)

b. Estimated Percentage of influenza vaccinations administered in the PRIVATE sector (The input is of type "number»)_____ (or UNK if unknown)

Q49. What were the principal outlets for seasonal influenza vaccination?

	Most important setting	Important setting	Average important setting	Not important setting	Least important setting
Primary health care settings					
Hospital					

setting					
Outpatient care clinics					
Occupational health services					
Other					

PROMOTING OF SEASONAL INFLUENZA VACCINATION 2009/2010 INFLUENZA SEASON

Q50. Did your country prepare specific information materials for the public? Or health professionals about seasonal influenza and vaccination for the 2009/2010 season (e.g. leaflets, posters)?

Yes

No

Q51. Did your country use mass media campaigns to promote the seasonal influenza vaccine for the 2009/2010 season (such as radio, TV or news papers) before and/or during flu season?

Yes

No

Q.52. If yes, which of the following did your country use for? (tick all that apply) (check list)

Radio

TV

News papers

Leaflets

Posters

Website

All of them

Other

Other, specify_____

Q53. If yes, who sponsored the media campaigns? (tick all that apply)

National health authority

Pharmaceutical sector

Public service announcement*

Unknown

Other _____

* Advertisement content and production is provided by government or industry, including national health authority, with air time (radio, TV) or space (newspapers, magazines) provided by media company at no charge.

Q54. Does your country have a functioning post marketing surveillance system in place today for collecting data on vaccine related events?

Yes

No

FUTURE CHANGES FOR INFLUENZA SEASONS 2010/2011 OR 2011/2012

Q55. Are there significant policy, operational or technical changes occurring in the near future (e.g., lowering the age at which immunisation is recommended for older persons, introducing immunisation of very young children etc.)?

Yes

2010-2011 season, specify: _____

2011-2012 season, specify: _____

No

Q56. Are there any areas where you would wish assistance or technical support from ECDC or WHO?

Yes

Specify: _____

Specify: _____

No

Thank you very much for your time. – If you have enquiries please contact Jolita Mereckiene (jolita.mereckiene@hse.ie)