



Report

on a Workshop of Vaccination Strategy

13-14 February 2008

Room M1, Jean Monnet Building, Luxembourg

INTRODUCTION

- **Aims and objectives of the workshop**

John-F Ryan (DG SANCO C3) opened the workshop with some explanation on its purpose. He gave the participants an overview of the legal framework laying down the competence of the European Union in public health, in order to explain the reasoning behind the involvement of the European Commission and the European Union in the discussion of vaccination policy.

The work already undertaken at EU level on the issue of HPV vaccination was recalled and the participants were informed of future initiatives of the European Commission, i.e. the development of a proposal for a Council Recommendation for Member States to reach 75% seasonal flu vaccination coverage in risk groups. Another planned initiative would be a proposal for a Council Recommendation to improve/maintain a high vaccination coverage against certain childhood diseases and to develop guidance to make it easier to switch from one national immunisation schedule to another when moving to another Member State. Having eliminated many other barriers to free circulation in the Internal Market, the facilitation of free movement through this initiative is important for citizens.

In other policy areas, the European Union is one of the major supporter of vaccine research globally, and as part of its pharmaceutical policy, the Union also evaluates and approves vaccines for market use.

- **Who does what in the EU on vaccines**

- **DG Research - Infectious Diseases, Health Directorate, Research Directorate General**

The DG Research representative could unfortunately not participate in the workshop as agreed with them. Michel Pletschette (Public Health Executive Agency) gave a short overview on the activities of DG Research in the field of vaccination on the basis of a slide set attached hereafter.

- **DG SANCO - C3, Health Threats, Public Health and Risk Assessment, Directorate General Health and Consumer Protection**

Antoon Gijsens (DG SANCO C3) gave an overview of the DG SANCO activities in the field of vaccination. He informed participants that DG SANCO looks into setting up a vaccination policy platform at EU level where national policy makers would meet e.g. 2x/year to exchange information and put common problems on the agenda; the aim would be to create an added value through cooperation, while respecting the Member States' autonomy in immunisation policies.

He touched upon on the work already undertaken at EU level on the issue of HPV vaccination and informed participants of future Commission initiatives, such as the development of a proposal for a Council Recommendation for Member States to reach 75% seasonal flu vaccination coverage in risk groups. His colleague, Vincent Houdry, was to expand on this initiative during the session dedicated to seasonal influenza on Day 2 of the workshop.

Another planned initiative is a proposal for a Council Recommendation to improve/maintain a high vaccination coverage against certain childhood diseases and to establish a scientifically substantiated immunisation schedule with the widest possible time margins in which a minimal set of childhood vaccines should be given. Such schedule should make it easier to switch from one national immunisation schedule to another when moving to another Member State. The proposal will focus on DTa/wP, MMR, polio, Hib and HepB. Having eliminated many other barriers to free circulation in the Internal Market, the facilitation of free movement through this initiative is important for citizens. Antoon Gijsens stressed that the initiative does not intend to harmonise the different national immunisation schedules since the differences truly reflect the differences in the way healthcare, education and childcare is organised in the Member States. Through its recommendation of improving/maintaining a high vaccination coverage for MMR, the Council Recommendation will also support the WHO Euro strategic plan on elimination of measles and rubella.

- **EMA - European Medicine Agency, Quality of Medicines Sector**

Peter Richardson (EMA) presented the structure of EMA and the possible options for marketing authorisations for vaccines. He explained briefly how the centralised procedure works and gave an overview of the EMA scientific committees and how they interact with each other. He expanded on the role of the Vaccine Working Party in the pre- and post-marketing authorisation phase of vaccines and the ongoing activities of this group on the development of guidance and specific issues such as pandemic influenza. He also described the interactions of the Vaccine Working Party with stakeholders such as other scientific committees, the European Commission, WHO, ECDC, FDA and the association of European Vaccine Manufacturers.

- **ECDC - European Centre of Disease Control, Unit of Scientific Advice**

Pier Luigi Lopalco (ECDC) gave overview on the current situation and the intrinsic variabilities with regard to vaccination in the EU, mentioning its strengths and weaknesses. He also illustrated how socio-economic factors can influence vaccination coverage. He expanded on the structure of ECDC and how it supports the Member States through scientific advice, surveillance, training and other activities. He concluded that, although national autonomy in the area of vaccination should prevail, European/international cooperation and sharing of

best practices is paramount in improving the overall performance and that scientifically sound decisions should lead to common policies in the future.

DISEASES ELIMINATION THROUGH VACCINATION

- **WHO European Region strategic plan 2005–2010 and Resolution EUR/RC55/R7 of the WHO Regional Committee for Europe, fifty-fifth session, 2005 on measles and rubella (Andrei Lobanov, WHO Euro)**

Andrei Lobanov provided an overview on the key components of the WHO European region strategic plan. Since 1999, the incidence of measles cases has decreased substantially and 98% of the Member States of the WHO European Region have implemented measles and rubella vaccination programme, through further efforts are needed. Challenges include further strengthening of immunisation programmes, reaching out to hard-to-reach populations and vaccination sceptics, give objective information to defeat adverse publicity and better handle outbreaks. He considered that the principal barrier to achieving measles and rubella elimination will be to reach difficult-to-access or hard-to-reach groups.

The key activities for 2008 will be to strengthen surveillance and use it as a primary tool to identify susceptible groups for measles and rubella, to start a regional certification process (as done for polio) and to develop information and advocacy initiatives.

- **Measles and rubella epidemiological situation in Europe with reference to the WHO elimination goal by 2010**
 - **Measles Epidemiology in Europe EUVAC.NET (Mark Muscat, Statens Serum Institut, Denmark)**

Mark Muscat gave a presentation on new aspects of the epidemiology of measles in Europe based on data collected by EUVAC.NET (<http://www.euvac.net>). The presentation focused on the years 2005-2007 and classified countries into incidence categories. While a number of countries have remained free of indigenous measles, others have shown to be in a high incidence band (such as Italy, Germany, Romania). The number of reported cases declined during the period 2005-2007 however, outbreaks continue to emerge, threatening the success of the elimination plan by 2010.

Data on age distribution, vaccination status, importation status, hospitalisation and fatalities were also presented. The specific groups acquiring measles more easily have also been identified.

The main recommendations are to continue with high measles vaccination coverage ($\geq 95\%$) of 2 MMR doses and to enhance surveillance of the disease.

- **WHO Regional Reference Centre for Measles and Rubella for Europe (Claude P. Muller, FEAM)**

Claude P. Muller gave a presentation on the molecular epidemiology of measles which is an important part of the control and elimination program of the WHO. As a result of copying mistakes during the replication process, RNA viruses

accumulate mutations which allow their separation into genetic groups (clades) and subgroups (genotypes) and genetic variants. These genetic characteristics of the measles virus help to identify viruses that are related to each other, to follow transmission routes and the interruption of circulation of indigenous strains, but also to monitor the effectiveness of vaccination strategies.

During 2005-2006, nine measles virus genotypes were identified throughout the WHO network of laboratories of the European region. All major epidemics were associated with genotypes D4, D6 and B3. Other genotypes (B2, D5, D8, D9, G2, and H1) were only found in limited numbers of cases after importation from other continents. The genetic diversity of endemic D6 strains decreased and genotypes C2 and D7, which are circulating in Europe until recently, could no longer be found. The transmission chains of these indigenous measles virus strains have been interrupted as a result of enhanced vaccination. On the other hand, multiple importations from Africa and Asia, and virus introduction into highly mobile and unvaccinated, hard-to-reach communities caused a massive spread of D4 and B3 strains throughout much of the region.

Thus, despite the reduction of endemic measles virus circulation, importation of measles virus from other continents caused prolonged circulation and large outbreaks, after their introduction into unvaccinated and highly mobile communities

- **Contribution of Epidemic Intelligence activities (Paula Vasconcelos, ECDC)**

Paula Vasconcelos gave a presentation on how epidemic intelligence activities contribute to the prevention and control of measles outbreaks. She provided an overview how the epidemic intelligence is structured at EU level and how these activities aim to speed up detection. She elaborated an inclusion criteria for potential communicable disease threats for the ECDC threat tracking tool and gave a few examples on how it had been instrumental in monitoring measles threats. The main sources of information are EWRS and media (which are scanned with by 'web crawlers').

- **Measles outbreak investigation (Sergei Deshevoi, WHO EURO)**

Sergei Deshevoi gave a presentation on measles outbreak investigation. He explained that the overall incidence has dropped dramatically and that measles is now predominantly a problem in hard-to-reach populations and vaccination sceptics. Sporadic cases are nevertheless also due to importation of measles from endemic countries outside Europe. He listed review and analysis of data, identification of risk factors for infection, assessment of vaccine effectiveness and development of recommendations for control strategies as the main objectives of outbreak investigation. He illustrated this with some outbreaks that have occurred in the period 2004-2006.

He stressed the importance of surveillance in disease elimination efforts and concluded that, once cases have been identified, thorough case investigation and/or outbreak investigation allows one to define high risk groups needing special attention and reasons for non-vaccination.

- **Public perception of the benefits of vaccines**
 - **Vaccine, Attitudes, Training and Communication, VACSATC project (Harald Heijbel, Smittskyddsinstitutet, Sweden)**

Harald Heijbel gave a presentation on the objectives of the VACSATC project (<http://www.vacsatc.eu/>), i.e. identifying knowledge and attitude to immunisations, improving training of health care providers and providing objective information on websites.

With regard to identifying knowledge and attitude to immunisations, it was found that the amount of enquiry and resources allocated to this activity vary widely between countries and no single methodology is used. Training of health care providers was found incomplete with regard to vaccination. In collaboration with the WHO Vaccine Safety Net project, a number of certified websites with objective information on vaccination has been established in different Member States.

- **Public Perception of the benefits of vaccines and the anti vaccination lobby - MMR in the United Kingdom (Joanne Yarwood, Department of Health)**

Joanne Yarwood gave a presentation on the public perception of the benefits of vaccines in the UK. A number of factors affect public confidence, including social change, suspicion of institutions, rejection of modern medicine, history, science, media influence, concerns about safety and professional confidence.

Vaccines are given to healthy individuals and their beneficial preventive effect is not fully appreciated by the public. Especially for childhood vaccines, the tolerance to side effects is low. As public health authorities, we need to better communicate with the public: we need to give clear, objective information that is evidence based. Before implementing a new vaccine in the schedule, the assessment of its safety is primordial in order not to jeopardise the whole immunisation programme.

The decrease in MMR coverage was set off by the publication by Wakefield et al. in the Lancet in 1998. This paper and the following sustained negative media coverage led to a marked decrease of parent's confidence and hence to a decrease in MMR vaccine uptake on the long term.

The UK Health Board performs tracking surveys on the public perception of the benefits of vaccines on a regular basis. These surveys show that the perceived safety of e.g. MMR improved over the last few years, but that at the same time the severity of diseases such as measles and mumps is underestimated by the public. These surveys also show that the public puts most trust in health professionals such as GPs; trust in information given by the government is rather low. Therefore, health professionals play a key role in advocacy and it is important to address any concerns health professionals may have regarding immunisation. The UK provides information on immunisation via public information campaigns, health professional information campaigns, seminars, information to the press, website and TV advertising.

- **Public Perception of the benefits of vaccines and the anti vaccination lobby, Germany (Günter Pfaff, Landesgesundheitsamt, Regierungspräsidium Stuttgart)**

Günter Pfaff gave a presentation on the public perception of the benefits of vaccines with a focus on the anti-vaccination lobby in Germany. He distinguished between vaccination sceptics and vaccination opponents. Vaccination sceptics do not reject vaccination as a general rule but constitute about 10% of the population in Germany. Vaccination opponents object to vaccination as a whole based on religious, philosophical or ideological convictions and constitute about 1-3% of the population in Germany.

Anthroposophical schools and medicine were given as an example where vaccinations are little supported; acute infections are seen to have a positive value as challenge and training of immunological capacity of children. Deniers of pathogenic viruses even question the existence of pathogens and infectious disease.

The fear aroused by vaccine sceptics and opponents and the acceptance of disease as an essential component of the child's development process were mentioned as issues of emerging importance for the existing deficits in immunisation coverage.

When performing a Google search for 'immunisation' and 'measles' in top-level .eu domains, Günter Pfaff found that vaccination critical websites were much prominent. The anti-vaccination lobby very effectively uses communication channels such as the internet to disseminate their ideas. In the experience gathered in Germany, it was found that communication with vaccination opponents is ineffective and time-consuming. It is therefore preferred to focus on vaccine sceptics and insecure parents.

Günter Pfaff concluded that maintaining or re-establishing the trust in the usefulness of vaccination is a major public health task requiring a comprehensive communication strategy on the benefits and safety of vaccines, an active and transparent surveillance of adverse events following immunisation, development of targeted prevention material, further training of advocates in the field of immunisation and gathering information on best practices and successful vaccination strategies.

- **Public Perception of the benefits of vaccines and the anti vaccination lobby, European Society for Paediatric Infectious Diseases (ESPID) (Vytautas Usonis, Vilnius University Centre of Paediatrics, Lithuania)**

Vytautas Usonis presented the value of vaccination for the individual and the society. He illustrated a typical scenario of introduction of a vaccine and the resulting rapid decrease in incidence of the disease and slow increase of adverse events. The increase of adverse events causes at some point a loss of confidence in the vaccine, with decreased vaccination coverage and a surge of disease incidence as a result. The surge causes the public to resume confidence in the vaccine, which (in an ideal case) may lead to eradication of the disease after which vaccination can be discontinued.

He further explained the fundamental differences between vaccines and medicines and the differences in perception of benefits and adverse events. He gave some examples of pseudo-arguments against vaccination and how many of these were unfortunately scientifically flawed.

He identified different target groups for the advocacy of vaccination for whom different strategies of vaccine advocacy should be applied, such as health care professionals (evidence based medicine), decision makers (cost-effectiveness), the public (emotional and rational approach), NGO's and the media (need for news value).

Vytautas Usonis recalled that vaccination is one of the most effective public health interventions. Health care professionals have an important duty and responsibility to advocate vaccination. Vaccination is not only the responsibility of health care professionals but also of parents and all members of society.

- Workgroup discussion: How can the EU support the Member States' efforts to reach the public health targets of the WHO strategic plan on measles and rubella?

Findings from the three working groups:

- Increase political commitment among MS, the EU, in collaboration with WHO (also linking to resources for neighbouring countries).
- Encourage the development of national action plans for measles and rubella elimination
- Ensure the delivery of free-of-charge 2 doses of MMR vaccine for routine vaccination, catch-up campaigns, supplementary vaccination for adults
- Ensure the maintenance of cold chain from point of manufacture to point of vaccination.
- Provide necessary resources for enhancing surveillance (staff, education, laboratory capacity, outbreak investigation).
- Improve communication tools for outbreaks.
- Better manage adverse events reports and improve communication policy
- Increase awareness of the WHO elimination plan with health care professionals (medical journals, seminars, workshops, training) and the general public (European Immunisation Week, parents, pregnant women, women of childbearing age) and engage health care professionals to advocate immunisation.
- Address hard-to-reach and migrant populations (regardless of residential status): actively involve minority/marginalised groups/associations (e.g. co-ordinators of medical care for Roma/Sinti communities); ensure same opportunities for access to health care and free vaccination; take every opportunity to advice on vaccination with every encounter with health services; implement vaccination

- programme for immigrants with short time of arrival; address the language barrier.
- Assist in the development of national vaccination registers (case-based data including vaccines given, batch numbers, dates of vaccination)
 - Travellers to endemic countries: offer routinely MMR as a pre-travel vaccine (Denmark) to previously unvaccinated and without history of confirmed measles/rubella.
 - Hospital staff: encourage vaccination prior to commencement of job (Occupational health legislation?)
 - Recommend vaccination of airport staff, border officers, teachers, kindergarten assistants, ...
 - Encourage research on public perception towards vaccination and on social factors influencing vaccination coverage.
 - At EU level, to identify bottlenecks in the individual countries and to convene expert groups on specific topics to identify and share best practices

Day 2: Thursday 14 February 2008

- **Seasonal Influenza vaccine**

- **WHA target, presentation of the EP Resolution and of the future recommendation on seasonal influenza vaccination (Vincent Houdry, DG SANCO C3)**

The importance of improving seasonal influenza vaccination coverage in people at risk has already been underlined at two major occasions:

On 28 May 2003, the fifty-sixth World Health Assembly (WHA) adopted resolution 56.19 on "**Prevention and control of influenza pandemics and annual epidemics**", recognizing that "influenza viruses are responsible for seasonal epidemics that sicken millions worldwide and cause fatal complications in up to one million people each year" and "that many of these deaths could be prevented through increased use, particularly in people at high risk, of existing vaccines, which are safe and highly effective";

The Resolution also notes that "better use of vaccines for seasonal influenza epidemics will help to ensure that manufacturing capacity meets demand in a future influenza pandemic".

Among other priorities, the resolution urges the Member States: "Where national influenza vaccination policies exist, to establish and implement strategies to increase vaccination coverage of all people at high risk, including the elderly and persons with underlying diseases, with the goal of attaining vaccination coverage of the elderly population of at least 50% by 2006 and 75% by 2010";

The European Parliament confirmed its support for WHA resolution 56.19 through adopting on 26 October 2005 the European Parliament "**Resolution on the strategy against an influenza pandemic**" (P6_TA(2005/0406) stating inter alia that "The European Parliament urges Member States to increase influenza vaccination coverage before a pandemic in accordance with WHO recommendations, which will also encourage industry to expand production capacity to meet the expected pandemic demand for vaccines".

Despite these two resolutions, the latest surveys showed that most of the EU countries are not going to meet the target settled in the resolutions until 2010. The Commission initiative is to build up a political commitment of the Member States to increase vaccination coverage in risk groups. Increasing the vaccination coverage to the levels recommended by WHA resolution 56.19 in the elderly and other risk groups defined by the ECDC, would not only bring down the mortality and overall disease burden of influenza, it would also increase the manufacturing capacity for producing life-saving pandemic influenza vaccines in case of a pandemic.

- **Survey results on uptake of seasonal influenza vaccine, drivers and barriers and cost/benefit (Patricia Blank, Institute for Social and Preventive Medicine, University of Zurich, CH)**

The objectives of the influenza coverage rate surveys, reported here were to identify the level of influenza vaccination coverage in eleven European countries (Austria, Czech Republic, Finland, France, Germany, Ireland, Italy, Poland, Portugal, Spain, UK) for the season 2006/07, to understand potential drivers and barriers to vaccination, to assess vaccination intentions for the winter 2007/08 as well as major encouraging factors for vaccination among the general population.

Vaccination coverage among those aged 65 years or older was 51% (range: 23% in Poland to 70% in Spain). The vaccination coverage observed among people under the age-defined limit suffering from chronic illnesses showed a rate of 29% (range 14% in Poland to 59% in Great Britain).

Of those vaccinated in 2006/07, the most frequently stated motivations across all countries were: avoiding the risk of contracting the serious illness influenza (46%), receiving advice from a family physician or a nurse (44%) and preventing the transmission of flu to family members or friends (30%). Overall, the main reasons for non-vaccination for those of the total survey population who had never been vaccinated, were feeling unlikely to catch flu (38%), never having considered vaccination before (30%) and the absence of family doctor's recommendation (26%). The survey also revealed that an advice from the family physician or nurse (59%), receiving further information about the vaccine regarding tolerance and efficacy (34%) and knowing more about the disease

- **Description of the main risk groups in Europe deserving influenza immunisation (Angus Nicoll, ECDC and Darina O'Flanagan, Health Protection Surveillance Centre, Ireland for the VENICE Project)**

The presentations have included scientific and public health knowledge about risk groups, outlined future work that needs to be done within Europe and presented the first results of the 2007 EU-Funded VENICE (Vaccine European New Integrated Collaboration Effort: <https://venice.cineca.org/index.html>) Project survey of influenza immunisation policies and practices in EU countries.

There is no comprehensive information routinely available to policy makers on the current status of influenza programmes, how they are implemented and monitored. The VENICE survey was performed at the request of ECDC to improve knowledge on which population groups are targeted for influenza vaccination, how programmes are resourced, which indicators are (or could be) used for monitoring vaccine uptake, and identify the policies that are in place to deal with pandemic influenza. The results demonstrated considerable convergence over the policies in Europe on seasonal influenza vaccination as a whole. The results show the similarities and differences between countries, especially in the uptake of vaccination in the elderly. The convergence supported the straightforward World Health Organization position and World Health Assembly targets which all EU countries have already intrinsically accepted. These highlight the elderly and those with underlying condition as target groups deserving seasonal influenza immunisation. At the same time the results on uptake show that many countries are not on track to achieve the WHO targets.

- **Seasonal Influenza vaccination - discussion session**

- **Immunisation policy and barriers to vaccine uptake**
 - **Immunisation policies of the MS (oriented to the Eradication of measles and rubella, the definition of target groups for influenza seasonal and HPV vaccines)**
 - **Immunisation policy in the Netherlands** (Marina Conyn van Spaendonck, RIVM)
 - **National immunization policy in the Czech Republic** (Roman Prymula, Faculty of Military Health Sciences, University of Defence, Hradec Králové)

The representatives of Netherlands and the Czech Republic gave an overview of the vaccination policy in their countries with a special focus on the topics related to the meeting: measles and rubella elimination, HPV and seasonal influenza vaccination.

- **Immunisation policy in the Netherlands (Marina Conyn van Spaendonck, RIVM)**

The Netherlands have a National Immunisation Programme (NIP) since 1957, which makes vaccines not mandatory but free of charge. Vaccines are delivered to neonates and toddlers through healthy baby clinics and to 4 to 9 years old through public health services as well as during mass campaigns and immunisation days. Vaccinees receive individual invitations and reminders if necessary.

The vaccination coverage reaches above 95%, with pockets of low coverage in some religious or follower of alternative medicine groups.

Regarding the decision making progress on vaccination in the Netherlands, RIVM (National Institute of Public Health and the environment) informs the Health Council and the Ministry of Health (MoH) on the possible impact of vaccines through surveillance, modelling, scenario analysis and cost-effectiveness studies. The Health Council advises the Minister of Health based on the state of science. The MoH decides on the introduction of a vaccine into the NIP. The Netherlands Vaccine Institute produces or purchases the vaccine. RIVM has the role to direct, implement and evaluate the NIP (<http://www.rivm.nl/en/preventionandcare/vaccinations/index.jsp>).

The criteria taken into consideration used by the Health Council (www.healthcouncil.nl) to include a vaccine in a public vaccination programme are: the burden of the disease, the effectiveness of the vaccine, its acceptability, efficiency and the urgency of the public health need.

In 1999/2000 a Measles outbreak occurred in a religious group. There were 3292 cases, 519 complications of which 3 fatal and 72 hospitalisations. Following this event, the foreseeable next outbreaks are anticipated with the help of a surveillance protocol and a plan for investigation.

The same religious group objecting vaccination was affected with an outbreak of Rubella in 2004/2005. There were 387 cases of which 32 were pregnant women, with 2 intra-uterine death, 11 congenital rubella syndrome and 3 congenital rubella infections. An outbreak occurred in Canada a few weeks later related to the same cluster.

The prevention of Seasonal influenza is targeted toward people with chronic conditions (heart, lung or kidney), immunocompromised patients, patients with diabetes and people over 65. the vaccination is free of charge and delivered through general practitioners and in nursing homes. The coverage is very high: 76% in primary care and 90% in nursing homes.

- **National Immunization Policy in the Czech Republic** (Roman Prymula)

In the Czech Republic, immunizations are performed by an efficient network of primary pediatric care centers (target population: 0 to 19 years). The Ministry of Health issues Directive on Immunization practices. All immunizations under the National immunization calendar are obligatory and free of charge, but recommended vaccines should be paid from private sources with sometimes partial reimbursement from insurance funds. Official Vaccine guidelines are presented by Chief Public Health officer depending on recommendations of Preventable diseases Board, Advisory Board of Chief Public Health officer for epidemiology and the Czech Vaccine Society.

Influenza immunization strategy is based on risk groups approach (respiratory disorders, cardiac diseases, chronic renal diseases, diabetes, cystic fibrosis, primary and secondary immunological disorders, hematological disorders), people over 65 not included in previous items, health care workers, people from critical infrastructure, people with higher risk of transmission. Free immunization against Flu is delivered to long-term care facilities, rest homes, social care facilities and for reimbursement in patients 65+ with comorbidities. However, total immunization coverage remains very low (5-8% only).

Cervical Cancer is a real problem in the Czech Republic with an incidence close to 20 per 100 000 females. Every woman can have comprehensive gynaecological examination once a year (colposcopy, cytology - PAP smear and gynecology examination). Two major problems are - low coverage of population (occasional screening) and low quality of conventional cytology without quality control. Recommendations for HPV immunization are still not official. Mass immunization of girls 12-13 years encounters economic limitations.

In conclusion: Strengths of the system is an excellent coverage in obligatory vaccinations, weakness is low coverage in recommended vaccinations (Flu 6-7%), because “recommended” is not perceived in the population as important.

- **Working groups: MS with the same kind of organisation will work together and try to identify barriers and ways to improve vaccine uptake in their country.**

The increase of vaccination uptake against seasonal influenza requires a holistic approach.

There is a need for clarification on the **target** of the vaccination. Who should be vaccinated? The question is still not clearly addressed and there is still work to be done to scientifically describe which are the at risk groups which would benefit from seasonal influenza vaccination.

The **health care workers (HCW)** are the central group. Studies show that most of the people in at risk groups would get vaccination if their doctor or nurse would recommend it. But HCW are sometimes reluctant to promote vaccination as their educational curriculum does not cover sufficiently the topic and because they are missing scientifically based evidence to do so. More studies are needed to evaluate the risk of at risk group to get the disease and to assess the efficacy of the vaccine.

HCW for example is an important group for which we are still lacking evidence. Does the vaccination of HCW decrease the risk for their patients to be sick? If we can provide evidence for this question, it will also have an influence on how they recommend or not other people to get vaccination.

To encourage at-risk groups to get vaccinated, several actions need to be taken. Studies on **drivers and barriers** must be performed at National levels and the results used in the implementation of the following activities:

- Organise **information** campaign on seasonal influenza vaccination among at risk groups and HCW;
- Improve **access** to the vaccines, on the financial level (free delivery or full or partial reimbursement) and on the practical side (multiply possibilities to be vaccinated: nurses, health centre/GP consultation, working place, day care, nursing homes, etc...);
- Assess the opportunity to put in place a specific **incentive** for HCW for performing vaccinations.

Finally, there is a need for a better monitoring of coverage, which might be done through immunisation registry, seroprevalence surveys, and improve pharmaco-vigilance to reassure HCW and vaccinees about vaccine effectiveness and safety.

As a conclusion, the participants have identified a role for EU, ECDC, Health Programme 2008-2013, FP7 and Member States to fill the gaps identified.

- **HPV** (*Follow up of a previous meeting organised in May 2007 on HPV*)
 - **Results of the survey conducted by Venice with input from DGSANCO C3 on the introduction of HPV vaccination in the EU (Daniel Lévy-Bruhl, VENICE)**

The first HPV vaccine was licensed in Europe in 2006. Although it comes with a good safety and efficacy profile, the integration into national immunisation programmes is not straightforward, mainly because of its cost and the difficulty of evaluating its added benefit to the screening programmes. As part of the VENICE project, a survey was conducted to monitor the decision-making process on HPV vaccination in Europe.

Twenty seven countries, out the 28 participating in VENICE, answered the questionnaire. As of 31st October 2007, five countries decided to include HPV vaccination in their immunisation schedules, with different target populations. Four of them supported the decision by mathematical models and/or economical assessment. Eleven countries indicated the issue as under examination by their Immunisation Advisory Body. Main drivers of the decision were the foreseen epidemiological impact on pre-cancer and cancer lesions and the social demand. In 12 countries, modelling or economical studies were on going while they were considered in 10 countries. The majority of countries were willing to share the methodology developed under certain rules.

This is the first time that a decision making process for introducing a new vaccine is monitored in real time at European level. An updated analysis will be performed during summer. The follow-up of the process will allow identifying the main elements influencing the decision and guide future European public health actions with a more homogeneous approach.

- **Guidance for the Introduction of HPV Vaccines in EU Countries (Francoise Hamers, ECDC)**

Two prophylactic human papillomavirus (HPV) vaccines have been licensed in Europe: Both vaccines protect against the high-risk HPV types 16 and 18, which cause an estimated 73% of cervical cancer cases in Europe. They have been shown to prevent more than 90% of precancerous lesions associated with types 16 or 18 among HPV naïve women in clinical trials.

Cervical cancer is the second most common cancer after breast cancer among women aged 15-44 years in the European Union (EU). Each year, there are around 33,000 cases of cervical cancer in the EU, and 15,000 deaths. The European Centre for Disease Prevention and Control (ECDC) has issued "[Guidance for the Introduction of HPV Vaccines in EU countries](#)" on 22 January 2008, at the request of the European Commission and several of the EU Member States. Coordinated by ECDC, a scientific panel of independent experts was set up to analyse scientific evidence for the introduction of HPV vaccines and list the policy options available to the Member States. The guidance document highlights the issues to be considered and attempts to lay down a scientific basis to support policy decisions across the EU.

- **Evaluation of the cancer screening recommendation and HPV aspects (Lawrence Von Karsa, ECCG, IARC)**

On 2 December 2003 the Health Ministers of the European Union unanimously adopted a recommendation on cancer screening based on major developments and the positive experience in the Europe Against Cancer programme. The Council Recommendation

spells out fundamental principles of best practice in early detection of cancer and invites Member States to take common action to implement national cancer screening programmes with a population-based approach and with appropriate quality assurance at all levels, taking into account European Quality Assurance Guidelines for Cancer Screening, where they exist.

A report has been prepared by the Commission services based on a questionnaire survey of the 27 member states conducted in the second half of 2007 and supplemented by information obtained in two ongoing pan-European projects dealing with monitoring, evaluation and quality assurance of cancer screening (European Cancer Network – ECN, and European Network for Information on Cancer - EUNICE).

23 Member States are currently running or establishing screening programmes but 10 of them are conducting or establishing screening programmes which do not follow the population-based approach.

Altogether 44 % of the 30-59-year-old female population in the EU are currently targeted by non population-based cervical cancer screening programmes. Although substantial efforts are currently underway to expand the coverage of population-based screening programmes in the EU, a significantly lower proportion of women in the above age group in the EU is targeted by cervical cancer screening programmes currently being rolled out, piloted or planned (28%).

It is also hoped that the recent publication of the updated and expanded second edition of [the European Guidelines for Quality Assurance in Cervical Cancer Screening](http://bookshop.europa.eu/eubookshop/FileCache/PUBPDF/ND7007117ENC/ND7007117ENC_002.pdf) (http://bookshop.europa.eu/eubookshop/FileCache/PUBPDF/ND7007117ENC/ND7007117ENC_002.pdf), will further promote the transition of Member States from the non-population-based to the more effective population-based approach to programme implementation.

For most Member States, efforts to establish population-based screening programmes where they are still lacking and to improve and maintain quality assurance are the most urgent option for improvement in cervical cancer control on the short and medium term.

- **Presentation of a draft info-booklet for the general public on HPV, vaccines and screening (Vincent Houdry, DG SANCO C3)**

Following the meeting organised in 2007 on HPV vaccination, it was decided that there was a need for independent information on HPV vaccination was given. The European Commission has prepared a brochure for the general public to explain "How screening and vaccination protect against cervical cancer". This document will be available on the EU public health portal and will be available for Member States to be used as a basis for a version adapted to their citizens.

- **Summary and closing remarks (John Ryan DG SANCO C3)**

- **Measles elimination and rubella control**

The discussions emphasised that elimination of measles and rubella in the WHO Euro region is not yet within reach. Especially for the second dose of MMR we need to step efforts to reach a sufficiently high coverage. There were some interesting presentations approaching surveillance from different angles:

- 'traditional' surveillance through standardised methods
- following the evolution and the spread of viruses through molecular epidemiology
- using epidemic intelligence to pick up outbreak signals in a rapid fashion

Outbreak investigations can help us to define risk groups such as hard-to-reach-communities and immigrants needing special attention and to identify the reasons for non-vaccination.

With regard to public perception, a number of factors affect public confidence, including social change, suspicion of institutions, rejection of modern medicine, history, science, media influence, concerns about safety and professional confidence. Vaccines are given to healthy individuals and their beneficial preventive effect is not fully appreciated by the public.

As public health authorities, we need to better communicate with the public: we need to give clear, objective information that is evidence based. Healthcare workers were identified as a key target group to promote the benefits of vaccination. Many surveys have shown that the public puts a lot of trust in the healthcare professionals.

We also have to be realistic and realise that there will always be groups that cannot be convinced of the benefits of vaccination. We should therefore rather focus our efforts at those who are worried or who are sceptic for one reason or another.

○ **Seasonal Influenza vaccination**

The objective set up in the WHA resolution 56.19 in 2003 to increase the vaccination coverage against seasonal influenza in at risk groups (the elderly and chronic sick) and to reach by 2010 a target of 75% of the elderly vaccinated, will be achieved only if there is a strong commitment from member states to tackle the barriers.

Most of the Member States are far from the target and participants of the workshop have expressed their need for additional studies and actions:

- A better definition of at risk groups;
- Studies on drivers and barriers in every Member States;
- More scientific studies on the impact of vaccination;
- Involvement of Health Care Workers in vaccination campaigns;
- Information campaigns towards at risk groups.

○ **HPV**

Following the first meeting held in 2007 convening representatives of Member States in charge of the vaccination policy, it was decided to organise regularly such meetings in order to enhance cooperation between Member States.

The representatives of the Member States agreed to cooperate at EU level by continuing to exchange information among themselves on (a) the implementation status of HPV immunisation and (b) all ongoing activities by different stakeholders in the HPV field, to avoid duplication of efforts.

During this current session, participants were given an update on:

- Results of a survey conducted by Venice with input from DGSANCO C3 on the introduction of HPV vaccination in the EU;
- Guidance for the Introduction of HPV Vaccines in EU Countries;
- Evaluation of the cancer screening recommendation and HPV aspects;
- Presentation of the draft of a booklet for the general public on HPV, vaccines and screening.

The satisfactory survey has shown that the most of the participants considered that the global organisation and logistics of the workshop was good.

The general assessment of the thematic sessions was considered very good for most of the participants, with the exception of the Introduction of who does what at the EU and the HPV vaccination, which were considered "good".

The working groups were seen as "good" for the majority of the participants, but some specific recommendations were given such as to allow more time for discussion, to cover particular issues of each MS, and to improve the briefing of the working group sessions.

In general the workshop was considered an appropriate eforum for discussion and exchange of knowledge, and the recommendations given were to provide the background documents and presentations, including the list of participants in advance, to have more time for presentations and discussions.,

Participants of the workshop agreed to participate in further meetings on vaccination policy in order to enhance cooperation and sharing of information on the best ways to increase/maintain the vaccination coverage of the citizens of the European Union.